

KENNETH C. BALDWIN

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Hartford, CT 06103-3597
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Also admitted in Massachusetts
and New York

July 15, 2021

Via Electronic Mail

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

Re: **Notice of Exempt Modification – Facility Modification**
Long Ridge Fire Company
366 Old Long Ridge Road, Stamford, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains an existing wireless telecommunications facility at the above-referenced property address (the “Property”). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The tower and Property are owned by the City of Stamford (“City”) and operated by the Long Ridge Fire Company. Cellco’s consultants reached out to City Staff in an effort to obtain a copy of the original fire department tower approval. Staff was unable to locate a copy of the approval in their files. Cellco’s shared use of the tower was approved by the Council in February 2015 (TS-VER-135-150112). A copy of Cellco’s tower share approval is included in Attachment 1.

Cellco now intends to modify its facility by installing three (3) new Samsung MT6407-77A antennas on Cellco’s existing antenna mounts. A set of project plans showing Cellco’s proposed facility modifications and new antennas specifications are included in Attachment 2.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Stamford’s Chief Elected Official and Land Use Officer.

Melanie A. Bachman, Esq.

July 15, 2021

Page 2

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

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's antennas will be installed on its existing antenna mounts.

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

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

4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative general power density table for Cellco's modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.

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

6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna mounts can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 6.

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

Melanie A. Bachman, Esq.

July 15, 2021

Page 3

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

David Martin, Mayor for the City of Stamford

Ralph Blessing, Stamford Land Use Bureau Chief

Long Ridge Fire Company, the Property Owner

Aleksey Tyurin

ATTACHMENT 1



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

February 20, 2015

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

RE: **TS-VER-135-150112** - Cellco Partnership d/b/a Verizon Wireless request for an order to approve tower sharing at an existing telecommunications facility located at 366 Old Long Ridge Road, Stamford, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on February 19, 2015, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures with the following conditions:

- The tower shall be reinforced per the URS Corporation report dated June 13, 2013, and Nextel's equipment at 118-foot level of the tower shall be removed as referenced in the structural analysis report prepared by URS Corporation dated October 31, 2014 and stamped by Richard Sambor, prior to the installation of Cellco's equipment;
- Within 45 days following completion of the equipment installation, Cellco shall provide documentation certified by a professional engineer that its installation complied with the recommendations included in the Structural Analysis Report prepared by URS Corp. dated October 31, 2014 and stamped by Richard Sambor;
- Any deviation from the proposed installation as specified in the original tower share request and supporting materials with the Council shall render this decision invalid;
- Any material changes to the proposed installation as specified in the original tower share request and supporting materials filed with the Council shall require an explicit request for modification to the Council pursuant to Connecticut General Statutes § 16-50aa, including all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65;
- Not less than 45 days after completion of the proposed installation, the Council shall be notified in writing that the installation has been completed;
- Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by Cellco shall be removed within 60 days of the date the antenna ceased to function;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.



CONNECTICUT SITING COUNCIL

Affirmative Action / Equal Opportunity Employer

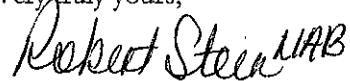
This decision is under the exclusive jurisdiction of the Council and applies only to this request for tower sharing dated January 12, 2015. This facility has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower. Any deviation from the approved tower sharing request is enforceable under the provisions of Connecticut General Statutes § 16-50u.

The proposed shared use is to be implemented as specified in your letter dated January 12, 2015, including the placement of all necessary equipment and shelters within the tower compound.

Please be advised that the validity of this action shall expire one year from the date of this letter.

Thank you for your attention and cooperation.

Very truly yours,

A handwritten signature in black ink, appearing to read "Robert Stein". To the right of the signature, the letters "NAB" are written vertically.

Robert Stein
Chairman

RS/MP/lm

c: The Honorable David Martin, Mayor, City of Stamford
Norman Cole, AICP, Land Use Bureau Chief, City of Stamford
Stuart Teitelbaum, Chief, Long Ridge Fire Company

ATTACHMENT 2



WIRELESS COMMUNICATIONS FACILITY

**SITE NAME:
STAMFORD NW CT**

**LONG RIDGE FIRE CO. INC.
366 OLD LONG RIDGE RD.
STAMFORD, CT 06903**

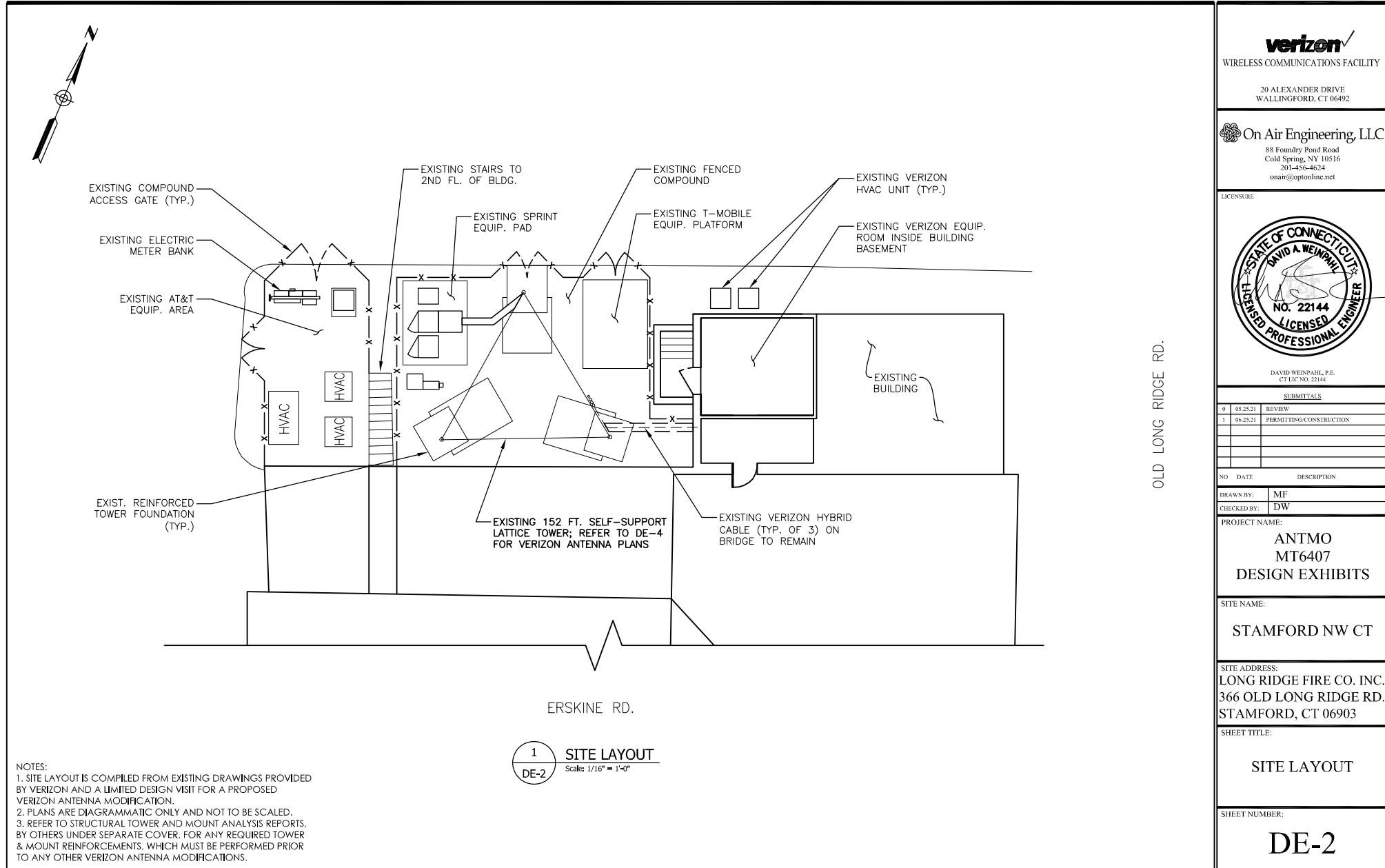
ANTENNA MODIFICATION

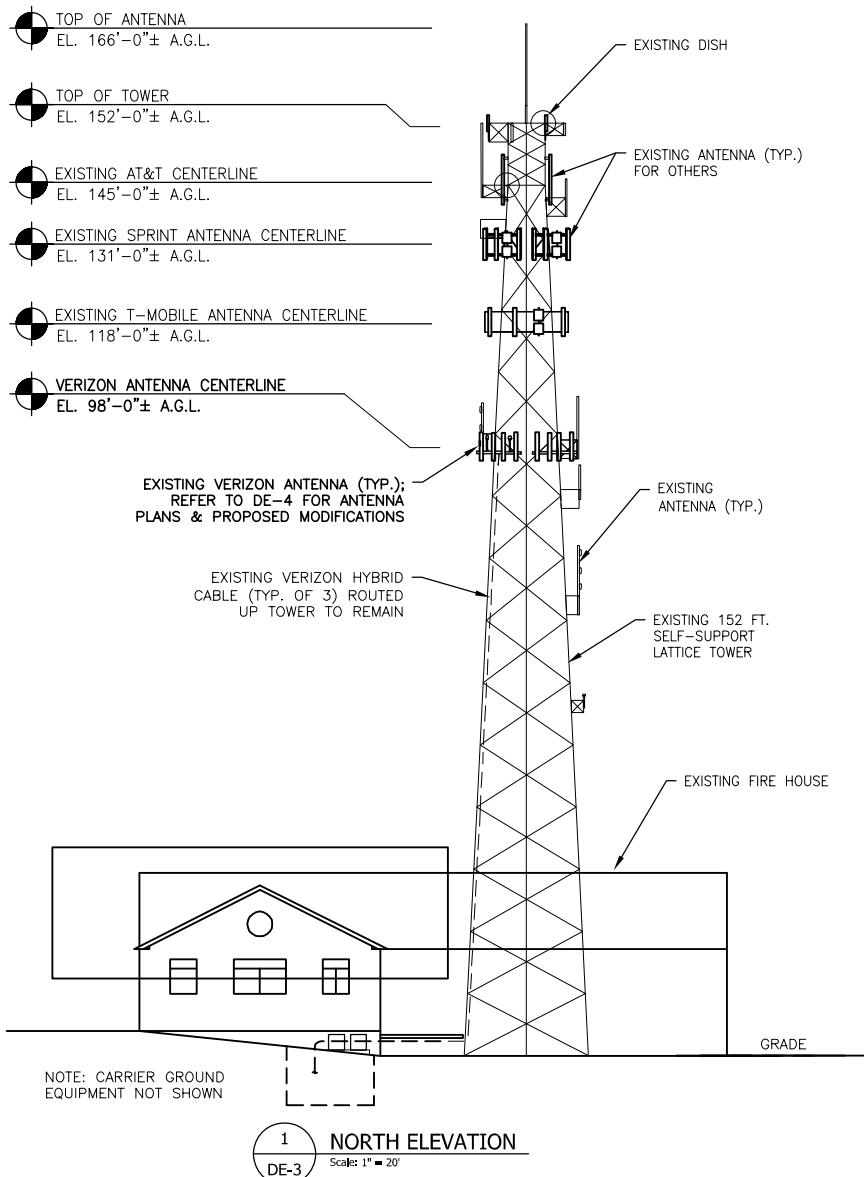
PROJECT SUMMARY	
SITE NAME:	STAMFORD NW CT
SITE ADDRESS:	366 OLD LONG RIDGE RD. STAMFORD, CT 06903
PROPERTY OWNER:	LONG RIDGE FIRE CO. INC. 366 OLD LONG RIDGE RD. STAMFORD, CT 06903
PARCEL ID:	002-6549
COORDINATES:	41° 09' 11.2" N 73° 35' 33.73" W
VERIZON CONSTRUCTION:	WALTER CHARCZYNSKI (860) 306-1806
VERIZON REAL ESTATE:	ALEX TYURIN (860) 550-3195



SHEET INDEX		
DE-1	TITLE SHEET	
DE-2	SITE LAYOUT	
DE-3	NORTH ELEVATION	
DE-4	ANTENNA PLANS & ELEVATION	
DE-5	RF PLUMBING DIAGRAM & B.O.M.	
DE-6	GENERAL CONSTRUCTION NOTES	

verizon WIRELESS COMMUNICATIONS FACILITY	
20 ALEXANDER DRIVE WALLINGFORD, CT 06492	
On Air Engineering, LLC 88 Foundry Pond Road Cold Spring, NY 10516 201-456-4624 onair@optonline.net	
LICENSURE	
 STATE OF CONNECTICUT DAVID A. WEINPAHL NO. 22144 LICENSED PROFESSIONAL ENGINEER <small>DAVID WEINPAHL, P.E. CT LIC NO. 22144</small>	
SUBMITTALS	
0	05.25.21 REVIEW
1	06.25.21 PERMITTING/CONSTRUCTION
NO DATE DESCRIPTION	
DRAWN BY:	MF
CHECKED BY:	DW
PROJECT NAME:	
ANTMO MT6407 DESIGN EXHIBITS	
SITE NAME:	
STAMFORD NW CT	
SITE ADDRESS:	
LONG RIDGE FIRE CO. INC. 366 OLD LONG RIDGE RD. STAMFORD, CT 06903	
SHEET TITLE:	
TITLE SHEET	
SHEET NUMBER:	
DE-1	



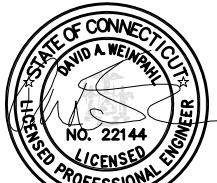


verizon
WIRELESS COMMUNICATIONS FACILITY

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

On Air Engineering, LLC
88 Foundry Pond Road
Cold Spring, NY 10516
201-456-4624
onair@optonline.net

LICENSURE



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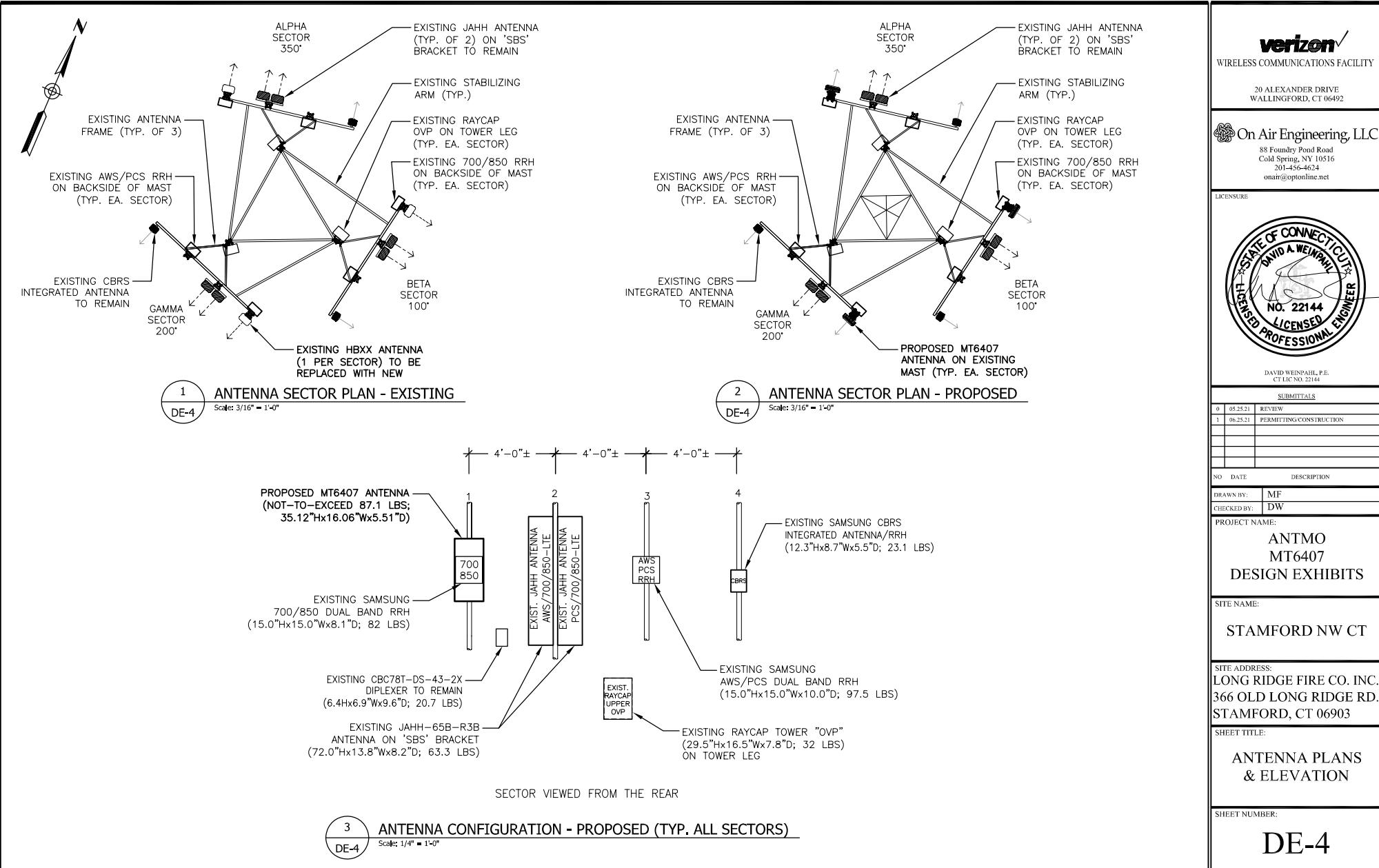
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DRAWN BY: MF
CHECKED BY: DW
PROJECT NAME:
ANTMO
MT6407
DESIGN EXHIBITS

SITE NAME:
STAMFORD NW CT

SITE ADDRESS:
LONG RIDGE FIRE CO. INC.
366 OLD LONG RIDGE RD.
STAMFORD, CT 06903

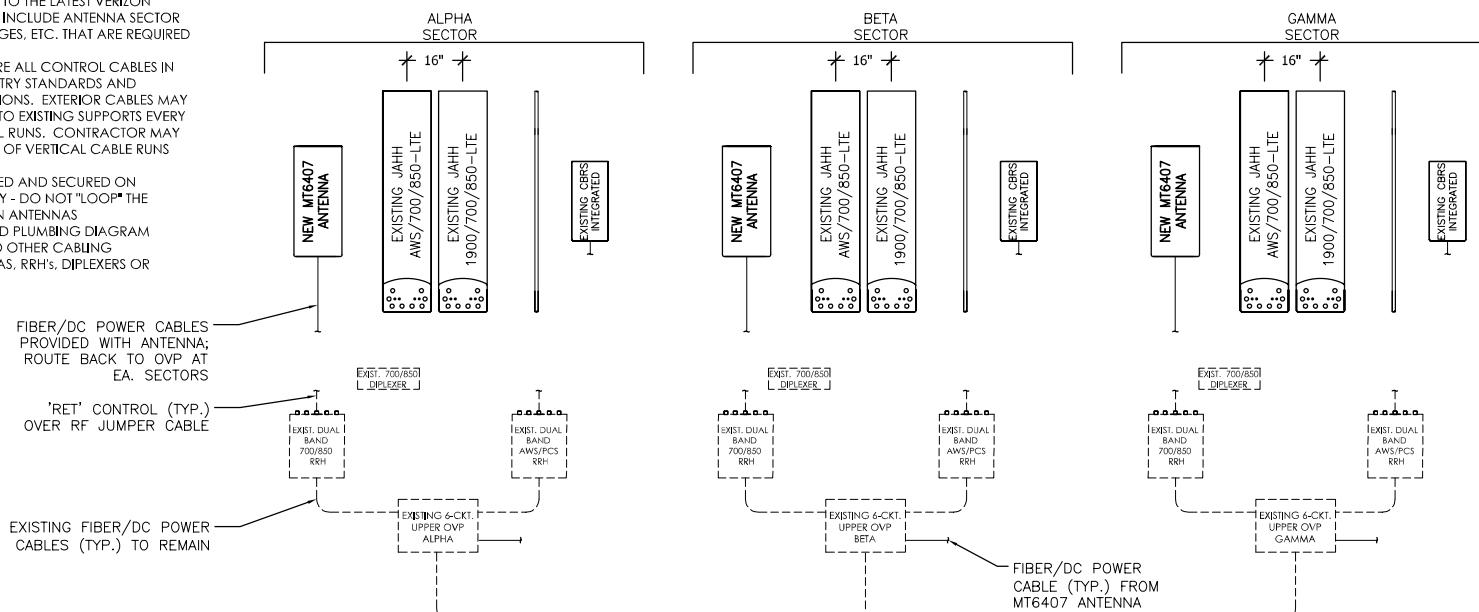
SHEET TITLE:
NORTH
ELEVATION

SHEET NUMBER:
DE-3



GENERAL NOTES:

- CONTRACTOR SHALL REFER TO THE LATEST VERIZON WIRELESS RFDS WHICH MAY INCLUDE ANTENNA SECTOR AZIMUTHS/ANTENNA CHANGES, ETC. THAT ARE REQUIRED AS PART OF THE PROJECT.
- CONTRACTOR SHALL SECURE ALL CONTROL CABLES IN ACCORDANCE WITH INDUSTRY STANDARDS AND MANUFACTURERS INSTRUCTIONS. EXTERIOR CABLES MAY BE TAPE OR TIE-WRAPPED TO EXISTING SUPPORTS EVERY 4 FT. MAX. FOR HORIZONTAL RUNS. CONTRACTOR MAY USE HOISTING GRIPS AT TOP OF VERTICAL CABLE RUNS WHEN REQUIRED.
- ALL CABLES SHALL BE ROUTED AND SECURED ON STRUCTURAL MEMBERS ONLY - DO NOT "LOOP" THE CABLES IN MID-AIR BETWEEN ANTENNAS
- REFER TO RFDS FOR DETAILED PLUMBING DIAGRAM SHOWING ALL JUMPER AND OTHER CABLING CONNECTIONS AT ANTENNAS, RRH'S, DIFLEXERS OR OTHER DEVICES.



1
DE-5
RF PLUMBING DIAGRAM
Scale: N.T.S.

BILL OF MATERIALS			
SITE NAME: STAMFORD NW CT		ANTMO MT6407	EMBEDDED BASE
DESCRIPTION	QTY	LENGTH	COMMENTS
LOWER OVP	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR - RACK MOUNT
6-CKT. UPPER OVP	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR
6x12 L.I. HYBRID CABLE	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR
RET CONTROL CABLE	-	-	NOT REQUIRED FOR JAHH ANTENNAS
1/2" JUMPER CABLE	-	-	SEE NOTE 2
AWS/PCS DUAL BAND RRH	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR
700/850 DUAL BAND RRH	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR
700/850 DIPLEXER	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR
MT6407 ANTENNA	3	-	SAMSUNG INTEGRATED
CBRS INTEGRATED ANTENNA	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR
JAHH AWS-700-850-LTE ANTENNA	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR
JAHH PCS-700-850-LTE ANTENNA	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR
SBS MOUNTING BRACKET	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR
850-CDMA ANTENNA	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR

NOTES:

- ITEMS SHOWN ARE FOR MAJOR DESIGN ELEMENTS ONLY. REFER TO VERIZON WIRELESS RFDS FOR ALL MANUFACTURER PART NUMBERS AND ACCESSORY ITEMS REQUIRED FOR A COMPLETE INSTALLATION.
- CONTRACTOR SHALL DETERMINE AND PROVIDE ALL REQUIRED PRE-FAB JUMPER QUANTITIES AND LENGTHS, KEEPING ALL LENGTHS TO A MINIMUM.

<p>20 ALEXANDER DRIVE WALLINGFORD, CT 06492</p>																			
<p>88 Foundry Pond Road Cold Spring, NY 10516 201-456-4624 onair@optonline.net</p>																			
<p>LICENSURE</p> <p>DAVID WEINPAHL, P.E. CT LIC NO. 22144</p>																			
<p>SUBMITTALS</p> <table border="1"> <tr> <td>0</td> <td>05.25.21</td> <td>REVIEW</td> </tr> <tr> <td>1</td> <td>06.25.21</td> <td>PERMITTING/CONSTRUCTION</td> </tr> <tr> <td colspan="3"> </td> </tr> </table>		0	05.25.21	REVIEW	1	06.25.21	PERMITTING/CONSTRUCTION												
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<p>PROJECT NAME: ANTMO MT6407 DESIGN EXHIBITS</p>																			
<p>SITE NAME: STAMFORD NW CT</p>																			
<p>SITE ADDRESS: LONG RIDGE FIRE CO. INC. 366 OLD LONG RIDGE RD. STAMFORD, CT 06903</p>																			
<p>SHEET TITLE: RF PLUMBING DIAGRAM & B.O.M.</p>																			
<p>SHEET NUMBER: DE-5</p>																			

GENERAL CONSTRUCTION NOTES:

1. CONTRACTOR SHALL NOT COMMENCE ANY WORK UNTIL HE OBTAINS, AT HIS OWN EXPENSE, ALL INSURANCE REQUIRED BY CELCO PARTNERSHIP d/b/a VERIZON, THE PROPERTY OWNER AND/OR PROPERTY MANAGEMENT COMPANY.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS AND ALL LOCAL LAWS AND REGULATIONS, CURRENT EDITIONS.
3. CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
4. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS AT THE SITE PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA AND SUBMIT TO THE ENGINEER ANY DISCREPANCIES FROM THE DRAWINGS.
5. CONTRACTOR IS TO REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUB-CONTRACTORS AND ALL RELATED PARTIES. THE SUB-CONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
6. CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON DRAWINGS OR WRITTEN IN SPECIFICATIONS.
7. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
8. CONTRACTOR SHALL OBTAIN AT HIS OWN EXPENSE ALL PERMITS AND ALL INSPECTIONS REQUIRED FROM FEDERAL AND STATE GOVERNMENTS, COUNTIES, MUNICIPALITIES AND OTHER REGULATORY AGENCIES WHICH MAY BE REQUIRED FOR THE PROJECT.
10. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
11. ALL MATERIAL PROVIDED BY CELCO PARTNERSHIP d/b/a VERIZON IS TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB-CONTRACTOR PRIOR TO INSTALLATION. ANY DEFICIENCIES TO PROVIDED MATERIALS SHALL BE BROUGHT TO THE CONSTRUCTION MANAGERS ATTENTION IMMEDIATELY.
12. THE MATERIALS INSTALLED IN THE WORK SHALL MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. NO SUBSTITUTIONS ARE ALLOWED.
13. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION, FOR SEQUENCES AND PROCEDURES TO BE USED, AND TO ENSURE THE SAFETY OF THE EXISTING BUILDING AND ITS COMPONENT DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY.
14. CONTRACTOR SHALL COORDINATE ALL CIVIL, STRUCTURAL AND ELECTRICAL DRAWINGS FOR THE LOCATION OF ALL OPENINGS, RECESSES, BUILT-IN WORK, ETC.
15. CONTRACTOR SHALL RECEIVE CLARIFICATION IN WRITING AND SHALL RECEIVE IN WRITING AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEMS NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
16. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND TO BE IN THE FIELD.
17. ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMEN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST-ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS, AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL O.S.H.A REQUIREMENTS.
19. CONTRACTOR SHALL COORDINATE HIS WORK AND SCHEDULE HIS ACTIVITIES AND WORKING HOURS IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROPERTY OWNER AND/OR PROPERTY MANAGEMENT COMPANY.
20. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE WORK OF OTHERS AS IT MAY RELATE TO RADIO EQUIPMENT, ANTENNAS AND ANY OTHER PORTIONS OF THE WORK.
21. CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OR WHERE LOCAL CODES OR REGULATIONS MAY TAKE PRECEDENCE.
22. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING, ANTENNA AND ANTENNA CABLES AND REPAIR ANY DAMAGE THAT OCCURS DURING CONSTRUCTION.
23. CONTRACTOR SHALL REPAIR ALL EXISTING SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND WITH ADJACENT SURFACES.
24. CONTRACTOR SHALL KEEP CONTRACT AREA CLEAN, HAZARD FREE AND DISPOSE OF ALL DEBRIS AND RUBBISH. EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OF THE OWNER SHALL BE REMOVED, LEAVE PREMISES IN CLEAN CONDITIONS AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ITEMS UNTIL COMPLETION OF CONSTRUCTION.
25. BEFORE FINAL ACCEPTANCE OF THE WORK, CONTRACTOR SHALL REMOVE ALL EQUIPMENT, TEMPORARY WORKS, UNUSED AND USELESS MATERIALS, RUBBISH AND TEMPORARY STRUCTURES.

verizon
WIRELESS COMMUNICATIONS FACILITY

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

 On Air Engineering, LLC
88 Foundry Pond Road
Cold Spring, NY 10516
201-456-4624
onair@optonline.net

LICENSURE



DAVID WEINPAHL, P.E.
C.L.I.C. NO. 22144

SUBMITTALS

0	05.25.21	REVIEW
1	06.25.21	PERMITTING/CONSTRUCTION

NO DATE DESCRIPTION

DRAWN BY: MF

CHECKED BY: DW

PROJECT NAME:
ANTMO
MT6407
DESIGN EXHIBITS

SITE NAME:
STAMFORD NW CT

SITE ADDRESS:
LONG RIDGE FIRE CO. INC.
366 OLD LONG RIDGE RD.
STAMFORD, CT 06903

SHEET TITLE:
GENERAL
CONSTRUCTION
NOTES

SHEET NUMBER:

DE-6

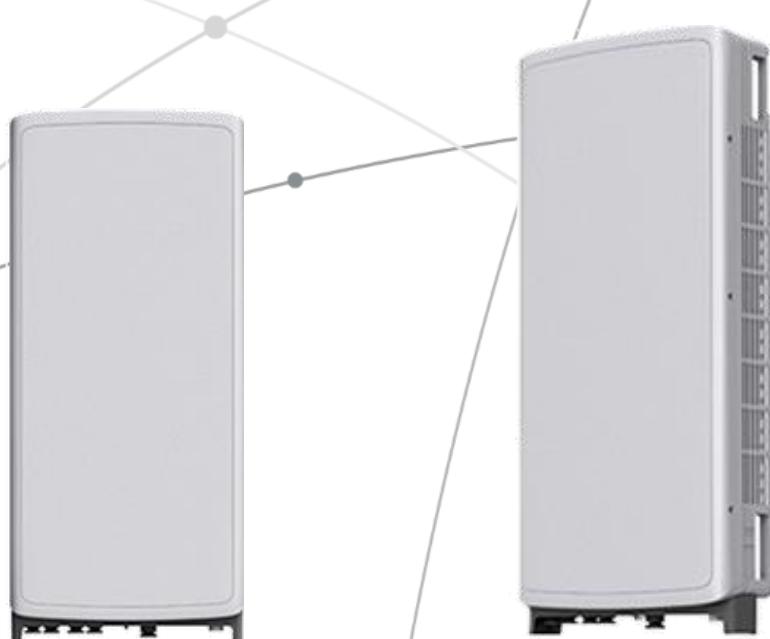
SAMSUNG

SAMSUNG C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

Samsung C-Band 64T64R Massive MIMO Radio enables mobile operators to increase coverage range, boost data speeds and ultimately offer enriched 5G experiences to users in the U.S..

Model Code : MT6407-77A

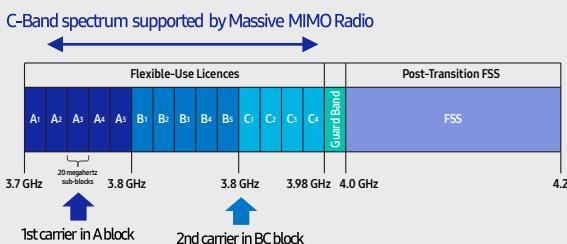


Points of Differentiation

Wide Bandwidth

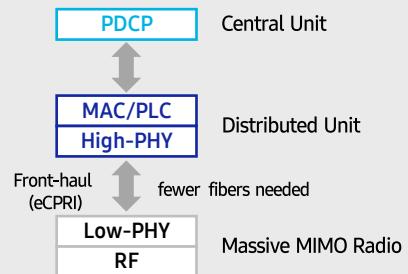
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks



Future Proof Product

Samsung C-Band 64T64R Massive MIMO radio supports not only CPRI but also eCPRI as front-haul interface. It enables operators can cut down on OPEX/CAPEX by reducing front-haul bandwidth through low layer split and using ethernet based higher efficient line.



Enhanced Performance

C-Band massive MIMO Radio creates sharp beams and extends networks' coverage on the critical mid-band spectrum using a large number of antenna elements and high output power to boost data speeds.

This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

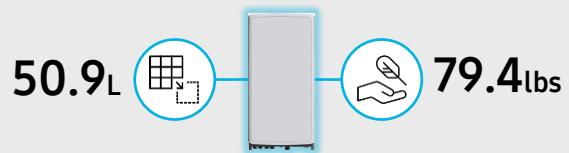
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO(Multi-user MIMO), it enables to increase user throughput by minimizing interference.



Well Matched Design

Samsung C-Band Massive MIMO radio utilizes 64 antennas, supports up to 280MHz bandwidth, and delivers a 200W output power. despite the above advanced performance, the Radio has a compact size of 50.9L and 79.4lbs. This makes it easy to install the Radio.

It is designed to look solid and compact, with a low profile appearance so that, when installed, harmonizes well with the surrounding environment..



Technical Specifications

Item	Specification
Tech	NR
Band	n77
Frequency Band	3700 - 3980 MHz
EIRP	78.5dBm (53.0 dBm+25.5 dBi)
IBW/OBW	280 MHz / 200 MHz
Installation	Pole/Wall
Size/Weight	16.06 x 35.06 x 5.51 inch (50.86L)/ 79.4 lbs

About Samsung Electronics Co., Ltd.

Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

129 Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, Korea

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ATTACHMENT 3

ATTACHMENT 4

Report Date: June 8, 2021

Client: On Air Engineering, LLC
88 Foundry Pond Road
Cold Spring, NY 10516
Attn: David Weinpahl, P.E.
(201) 456-4624
dweinpahl@onaireng.com

Structure: Existing 152-ft Self Support Tower
Site Name: Stamford NW CT - Long Ridge Fire Company
Site Address: 366 Old Long Ridge Road
City, County, State: Stamford, Fairfield County, CT
Latitude, Longitude: 41.15311111, -73.59270728

PJF Project: A42921-0015.001.8700

Paul J. Ford and Company is pleased to submit this "**Structural Analysis Report**" to determine the tower stress level.

Analysis Criteria:

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.

Proposed Appurtenance Loads:

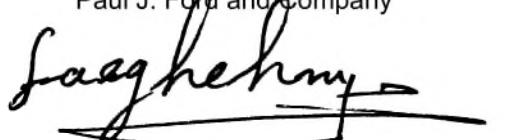
The structure was analyzed with the proposed loading configuration shown in Table 1 combined with the other considered equipment shown in Table 2 of this report.

Summary of Analysis Results:

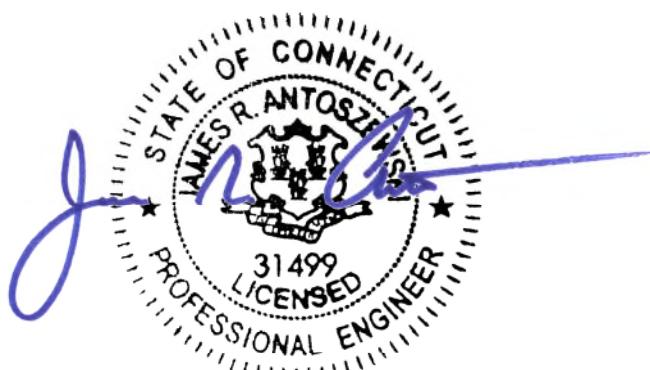
Existing Structure: Pass – 98.2%
Existing Foundation: Pass – 99.0%

We at Paul J. Ford and Company appreciate the opportunity of providing our continuing professional services to you and On Air Engineering, LLC. If you have any questions or need further assistance on this or any other projects, please give us a call.

Respectfully Submitted by:
Paul J. Ford and Company



Sara Mansoori
Structural Designer
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06/08/2021

250 E Broad St, Suite 600
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1) INTRODUCTION

This tower is a 152-ft Self Support tower designed by Rohn in May of 1989.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-G
Risk Category:	II
Wind Speed:	97 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	0.75 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)
98.0	98.0	3	samsung telecommunications	XXDWMM-12.5-65-8T-CBRS	3	1-5/8
		3	commscope	CBC78T-DS-43-2X		
		6	commscope	JAHH-65B-R3B w/ Mount Pipe		
		3	samsung telecommunications	B2/B66A RRH-BR049		
		3	samsung telecommunications	B5/B13 RRH-BR04C		
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe		
		3	raycap	6-ckt-OVP		
		3	tower mounts	Site Pro 1 VFA12-HD		

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)
152.0	152.0	1	antennae	20' 4-Bay Dipole	1 1	7/8 EW180
		1	miscl	TMA		
		1	tower mounts	6' x 4" Sch 40 Pipe Mount		
		1	microwave dishes	4 ft w/ HP		
		1	tower mounts	4' x 4.5" Pipe Mount		
150.0	150.0	1	decibel	DB563K w/Mount Pipe	1	1/2
		1	tower mounts	Generic 2' x 3' sidearm		
145.0	145.0	3	quintel technology	QS66512-2_TIA w/ Mount Pipe	12	1-5/8
		6	kaelus	TMA2117F00V1-1		
		3	tower mounts	Side Arm Mount		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
140.0	140.0	1	microwave dishes	4 ft w/ HP	1	EW180
		1	tower mounts	4' x 4.5" Pipe Mount		
135.0	135.0	1	generic	6 ft x 3" omni whip	2	1-5/8
		1	decibel	DB254		
		2	tower mounts	Generic 2' x 3' sidearm		
131.0	131.0	3	rfs celwave	APXVSPP18-C-A20 w/ Mount Pipe	3 1	1-1/4 7/8
		3	alcatel lucent	RRH2x50		
		3	alcatel lucent	RRH4X45		
		3	rfs celwave	APXVTM14-ALU-I20 w/ Mount Pipe		
		3	alcatel lucent	TD-RRH8x20		
		3	tower mounts	Sector Mount		
		3	ericsson	AIR32 KRD901146-1_B66_B2A w/ Mount Pipe		
115.0	118.0	3	ericsson	AIR6449 B41 w/ Mount Pipe	4	6x12
		3	ericsson	RADIO 4415 B25		
		3	ericsson	RRUS 11 B4		
		3	ericsson	RADIO 4449 B71+B85		
		3	rfs celwave	APXVAALL24_43-U-NA20_w/ Mount Pipe		
		3	tower mounts	Sector Mount		
		3	Site Pro 1	SFR-K Kit		
74.0	74.0	3	-	Horizontal 10.5'x2.5' std	1	7/8
		1	antennae	8' 4-Bay Dipole		
58.0	58.0	1	tower mounts	Generic 2' x 3' sidearm	1	1/2
		1	miscl	GPS		
		1	tower mounts	Generic 2' x 3' sidearm		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks
Previous Structural Analysis	Ramaker, 8/29/2017
Geotechnical Report	GZA, 12/14/1988
Geotechnical Report	Dr Clarence Welti, 12/12/2012
Structural Analysis Report	B+T Group, 11/13/2020
Verizon RFDs	Verizon, 3/16/2021
Verizon CD's	Verizon, 05/25/21

3.1) Analysis Method

tnxTower (version 8.0.9.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

- 1) Tower and structures were 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 existing base plate grout was considered in this analysis. Grout must be maintained and inspected periodically and must be replaced if damaged or cracked.
- 4) All geometry, foundation, and modification information was obtained from the previous structural analysis referenced in Table 2 of this report.

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	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T1	152 - 140	Leg	Pipe 2.375" x 0.154" (2 STD)	3	-5.2053	36.8422	14.1	Pass
T2	140 - 135	Leg	P2.875"x0.203" (2.5 STD)	27	-7.8701	57.1341	13.8	Pass
T3	135 - 130	Leg	P2.875"x0.203" (2.5 STD)	39	-12.0212	57.1341	21.0	Pass
T4	130 - 125	Leg	P2.875"x0.203" (2.5 STD)	48	-16.3260	57.1341	28.6	Pass
T5	125 - 120	Leg	P2.875"x0.203" (2.5 STD)	57	-21.9001	57.1364	38.3	Pass
T6	120 - 100	Leg	Pipe 2.875" x 0.276" (2.5 XS)	64	-48.4245	58.5119	82.8	Pass
T7	100 - 80	Leg	PJF 42919-0011 - Pipe 2.875 x 0.276 w/ 3.5x.3 half sleeve	85	-80.8189	124.4500	64.9	Pass
T8	80 - 73.333	Leg	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	115	-91.8961	160.2660	57.3	Pass
T9	73.333 - 66.667	Leg	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	127	-102.1010	160.3010	63.7	Pass
T10	66.667 - 60	Leg	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	139	-112.5930	160.3360	70.2	Pass
T11	60 - 50	Leg	Pipe 4.5" x 0.337" (4 XS)	151	-125.1600	174.2770	71.8	Pass
T12	50 - 40	Leg	Pipe 4.5" x 0.337" (4 XS)	163	-139.9710	174.3530	80.3	Pass
T13	40 - 30	Leg	PJF 42919-0011 - Pipe 4.5 x .337 w/ 5 x 0.25 half sleeve (60" Lu)	175	-154.8240	218.7270	70.8	Pass
T14	30 - 20	Leg	PJF 42919-0011 - Pipe 4.5 x .337 w/ 5 x 0.25 half sleeve (30" Lu)	187	-168.6900	244.7280	68.9	Pass
T15	20 - 15	Leg	PJF 42919-0011 - Pipe 5.5	229	-182.7830	186.1790	98.2	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
			x 0.259 w/ 6 x 0.25 half sleeve					
T16	15 - 10	Leg	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (60" Lu)	253	-184.0470	230.6210	79.8	Pass
T17	10 - 0	Leg	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (120" Lu)	262	-197.3530	230.6190	85.6	Pass
T1	152 - 140	Diagonal	L 1.5 x 1.5 x 1/8	11	-1.3636	3.7688	36.2 43.1 (b)	Pass
T2	140 - 135	Diagonal	L 1.5 x 1.5 x 3/16	31	-1.3253	4.1693	31.8	Pass
T3	135 - 130	Diagonal	L 1.5 x 1.5 x 3/16	40	-1.8261	3.8068	48.0	Pass
T4	130 - 125	Diagonal	L 1.5 x 1.5 x 1/4	49	-2.9111	4.4676	65.2	Pass
T5	125 - 120	Diagonal	L 1.5 x 1.5 x 1/4	58	-2.6393	4.0783	64.7	Pass
T6	120 - 100	Diagonal	L 2 x 2 x 1/4	67	-4.5847	6.1034	75.1	Pass
T7	100 - 80	Diagonal	L 2.5 x 2.5 x 1/4	88	-6.0113	9.1018	66.0	Pass
T8	80 - 73.333	Diagonal	L 2.5 x 2.5 x 1/4	118	-6.1316	8.4358	72.7	Pass
T9	73.333 - 66.667	Diagonal	L 2.5 x 2.5 x 5/16	131	-6.3681	9.4608	67.3	Pass
T10	66.667 - 60	Diagonal	L 2.5 x 2.5 x 5/16	142	-6.4098	8.7408	73.3 80.6 (b)	Pass
T11	60 - 50	Diagonal	L 3 x 3 x 1/4	154	-7.3175	9.4069	77.8	Pass
T12	50 - 40	Diagonal	L 3 x 3 x 5/16	166	-7.5926	10.5040	72.3	Pass
T13	40 - 30	Diagonal	L 3 x 3 x 3/8	178	-7.6513	11.3814	67.2	Pass
T14	30 - 20	Diagonal	L 3 x 3 x 5/16	191	-8.8521	21.9905	40.3 71.2 (b)	Pass
T15	20 - 15	Diagonal	L 3.5 x 3.5 x 1/4	236	-7.3168	27.0914	27.0 70.4 (b)	Pass
T16	15 - 10	Diagonal	L 3.5 x 3.5 x 1/4	256	-7.3903	11.6188	63.6 68.9 (b)	Pass
T17	10 - 0	Diagonal	L 3.5 x 3.5 x 5/16	265	-8.7421	12.6397	69.2	Pass
T14	30 - 20	Horizontal	L 3 x 3 x 1/4	204	-2.9256	9.9693	29.3	Pass
T7	100 - 80	Secondary Horizontal	L 2.5 x 2.5 x 1/4	96	-1.4016	12.4591	11.2	Pass
T8	80 - 73.333	Secondary Horizontal	L 2.5 x 2.5 x 1/4	126	-1.5937	11.2450	14.2	Pass
T9	73.333 - 66.667	Secondary Horizontal	L 2.5 x 2.5 x 1/4	138	-1.7707	10.1345	17.5	Pass
T10	66.667 - 60	Secondary Horizontal	L 2.5 x 2.5 x 1/4	150	-1.9527	9.1740	21.3	Pass
T11	60 - 50	Secondary Horizontal	L 2.5 x 2.5 x 1/4	162	-2.1706	8.2155	26.4	Pass
T12	50 - 40	Secondary Horizontal	L 3 x 3 x 1/4	174	-2.4275	12.6557	19.2	Pass
T13	40 - 30	Secondary Horizontal	L 3 x 3 x 1/4	186	-2.6850	11.2295	23.9	Pass
T1	152 - 140	Top Girt	L 2 x 2 x 1/8	5	-0.1238	3.2130	3.9	Pass
T2	140 - 135	Top Girt	L 2 x 2 x 1/8	29	-0.1365	3.2148	4.2	Pass
T14	30 - 20	Redund Horz 1 Bracing	L 2 x 2 x 1/4	192	-2.9256	11.8833	24.6	Pass
T15	20 - 15	Redund Horz 1 Bracing	L 2 x 2 x 1/4	234	-3.4323	10.7957	31.8	Pass
T14	30 - 20	Redund Diag 1 Bracing	L 2 x 2 x 1/4	213	-1.7044	8.7390	19.5	Pass
T15	20 - 15	Redund Diag 1 Bracing	L 2 x 2 x 1/4	252	-1.8360	8.1340	22.6	Pass
							Summary	

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
				Leg (T15)		98.2		Pass
				Diagonal (T10)		80.6		Pass
				Horizontal (T14)		29.3		Pass
				Secondary Horizontal (T11)		26.4		Pass
				Top Girt (T2)		4.2		Pass
				Redund Horz 1 Bracing (T15)		31.8		Pass
				Redund Diag 1 Bracing (T15)		22.6		Pass
				Bolt Checks		80.6		Pass
				Rating =		98.2		Pass

Table 5 - Tower Component Stresses vs. Capacity

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	-	86.7	Pass
1	Base Foundation Structural	-	17.6	Pass
1	Base Foundation Soil Interaction	-	99.0	Pass

Structure Rating (max from all components) =	99.0%
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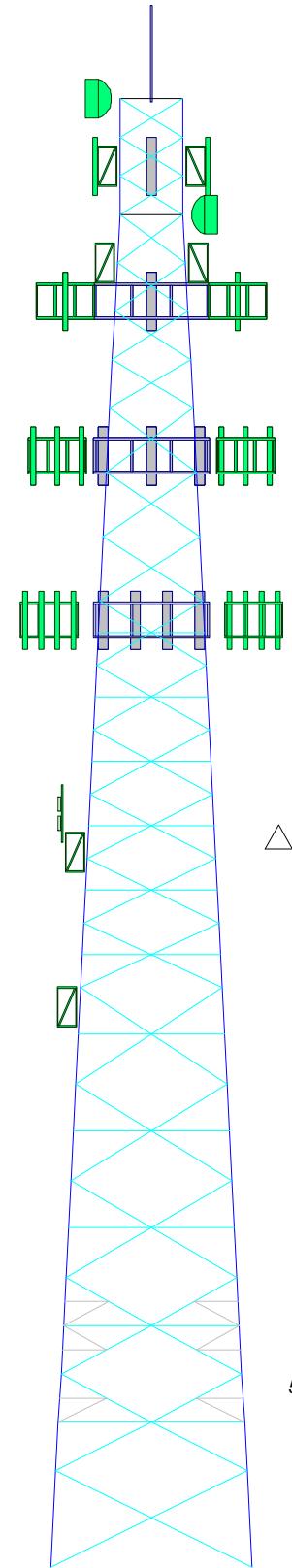
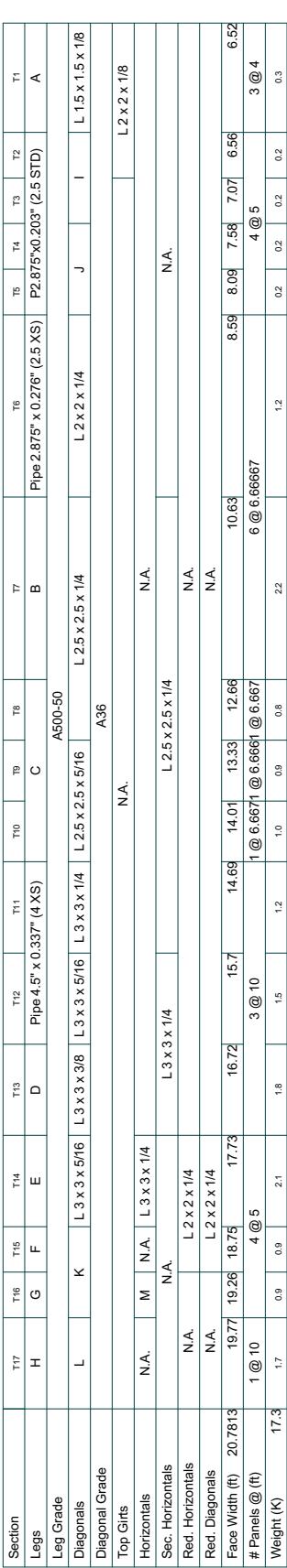
Notes:

- 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



SYMBOL LIST

MARK	SIZE
A	Pipe 2.375" x 0.154" (2 STD)
B	PJF 42919-0011 - Pipe 2.875 x 0.276 w/ 3.5x.3 half sleeve
C	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve
D	PJF 42919-0011 - Pipe 4.5 x .337 w/ 5 x 0.25 half sleeve (60° Lu)
E	PJF 42919-0011 - Pipe 4.5 x .337 w/ 5 x 0.25 half sleeve (30° Lu)

MARK	SIZE
H	PFJ 42919-0011 - Pipe 5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (120° Lu)
I	L 1.5 x 1.5 x 3/16
J	L 1.5 x 1.5 x 1/4
K	L 3.5 x 3.5 x 1/4
L	L 3.5 x 3.5 x 5/16
M	Zero Force Member

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A500-50	50 ksi	62 ksi	A36	36 ksi	58 ksi

TOWER DESIGN NOTES

1. Tower is located in Fairfield County, Connecticut.
 2. Tower designed for Exposure B to the TIA-222-G Standard.
 3. Tower designed for a 97 mph basic wind in accordance with the TIA-222-G Standard.
 4. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
 5. Deflections are based upon a 60 mph wind.
 6. Tower Structure Class II.
 7. Topographic Category 1 with Crest Height of 0.00 ft
 8. TOWER RATING: 98.2%

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE

DOWN: 205 K
SHEAR: 25 K

**UPLIFT: -172 K
SHEAR: 21 K**

The diagram shows a cross-section of a beam with the following labels:

- AXIAL**: A vertical arrow pointing upwards with the value **118 K**.
- SHEAR**: A vertical arrow pointing downwards with the value **12 K**.
- MOMENT**: A curved arrow indicating the bending moment distribution with the value **1041 kip-in.**

TORQUE 5 kip-ft
50 mph WIND - 0.750 in ICE

The diagram illustrates a beam section with three types of loading:

- AXIAL**: A vertical force of **42 K** acting downwards at the top center.
- SHEAR**: A vertical force of **41 K** acting downwards at the left end.
- MOMENT**: A clockwise moment of **3434 kip·ft** at the right end.

*TORQUE 20 kip-ft
REACTIONS - 97 mph WIND*



Paul J. Ford and Company

250 E. Broad St., Ste 600

200 E. Broad St., Ste.

Phone: 614-22

inv Job: 152' SST / Stamford, CT

Project: BIE-10010-001

Project: PJF 42919-0011 Client: _____ Drawn by: _____ App'd: _____

Client: On Air Engineering, LLC Drawn by: Sara Mansoor App'd:
Code: Date: Scale:

Code: TIA-222-G Date: 06/08/21 Scale: NTS

Path: G:\TOWER\ERI429 On Air Engineering\2021\42921-0015_Stamford NW CT\42921-0015.001.8700 SAI\Trx\42921-0015.001.8700.erf Dwg No. E-1

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Tower Input Data

The main tower is a 3x free standing tower with an overall height of 152.00 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.

The face width of the tower is 6.52 ft at the top and 20.78 ft at the base.

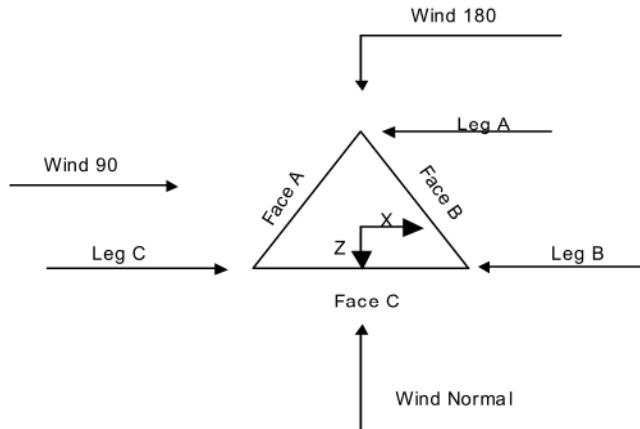
This tower is designed using the TIA-222-G standard.

The following design criteria apply:

- Tower is located in Fairfield County, Connecticut.
- ASCE 7-10 Wind Data is used (wind speeds converted to nominal values).
- Basic wind speed of 97 mph.
- Structure Class II.
- Exposure Category B.
- Topographic Category 1.
- Crest Height 0.00 ft.
- Nominal ice thickness of 0.750 in.
- Ice thickness is considered to increase with height.
- Ice density of 56 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Deflections calculated using a wind speed of 60 mph.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in tower member design is 1.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

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



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	152.00-140.00			6.52	1	12.00
T2	140.00-135.00			6.56	1	5.00
T3	135.00-130.00			7.07	1	5.00
T4	130.00-125.00			7.58	1	5.00
T5	125.00-120.00			8.09	1	5.00
T6	120.00-100.00			8.59	1	20.00
T7	100.00-80.00			10.63	1	20.00
T8	80.00-73.33			12.66	1	6.67
T9	73.33-66.67			13.33	1	6.67
T10	66.67-60.00			14.01	1	6.67
T11	60.00-50.00			14.69	1	10.00
T12	50.00-40.00			15.70	1	10.00
T13	40.00-30.00			16.72	1	10.00
T14	30.00-20.00			17.73	1	10.00
T15	20.00-15.00			18.75	1	5.00
T16	15.00-10.00			19.26	1	5.00
T17	10.00-0.00			19.77	1	10.00

Tower Section Geometry (cont'd)

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	152.00-140.00	4.00	X Brace	No	Yes	0.000	0.000
T2	140.00-135.00	5.00	X Brace	No	Yes	0.000	0.000
T3	135.00-130.00	5.00	X Brace	No	No	0.000	0.000
T4	130.00-125.00	5.00	X Brace	No	No	0.000	0.000
T5	125.00-120.00	5.00	X Brace	No	No	0.000	0.000
T6	120.00-100.00	6.67	X Brace	No	No	0.000	0.000

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T7	100.00-80.00	6.67	X Brace	No	Yes	0.000	0.000
T8	80.00-73.33	6.67	X Brace	No	Yes	0.000	0.000
T9	73.33-66.67	6.67	X Brace	No	Yes	0.000	0.000
T10	66.67-60.00	6.67	X Brace	No	Yes	0.000	0.000
T11	60.00-50.00	10.00	X Brace	No	Yes	0.000	0.000
T12	50.00-40.00	10.00	X Brace	No	Yes	0.000	0.000
T13	40.00-30.00	10.00	X Brace	No	Yes	0.000	0.000
T14	30.00-20.00	5.00	Double K1	No	Yes	0.000	0.000
T15	20.00-15.00	5.00	K1 Up	No	Yes	0.000	0.000
T16	15.00-10.00	5.00	K Brace Down	No	Yes	0.000	0.000
T17	10.00-0.00	10.00	X Brace	No	No	0.000	0.000

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 152.00-140.00	Pipe	Pipe 2.375" x 0.154" (2 STD)	A500-50 (50 ksi)	Equal Angle	L 1.5 x 1.5 x 1/8	A36 (36 ksi)
T2 140.00-135.00	Pipe	P2.875"x0.203" (2.5 STD)	A500-50 (50 ksi)	Equal Angle	L 1.5 x 1.5 x 3/16	A36 (36 ksi)
T3 135.00-130.00	Pipe	P2.875"x0.203" (2.5 STD)	A500-50 (50 ksi)	Equal Angle	L 1.5 x 1.5 x 3/16	A36 (36 ksi)
T4 130.00-125.00	Pipe	P2.875"x0.203" (2.5 STD)	A500-50 (50 ksi)	Equal Angle	L 1.5 x 1.5 x 1/4	A36 (36 ksi)
T5 125.00-120.00	Pipe	P2.875"x0.203" (2.5 STD)	A500-50 (50 ksi)	Equal Angle	L 1.5 x 1.5 x 1/4	A36 (36 ksi)
T6 120.00-100.00	Pipe	Pipe 2.875" x 0.276" (2.5 XS)	A500-50 (50 ksi)	Equal Angle	L 2 x 2 x 1/4	A36 (36 ksi)
T7 100.00-80.00	Arbitrary Shape	PJF 42919-0011 - Pipe 2.875 x 0.276 w/ 3.5x.3 half sleeve	A500-50 (50 ksi)	Equal Angle	L 2.5 x 2.5 x 1/4	A36 (36 ksi)
T8 80.00-73.33	Arbitrary Shape	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	A500-50 (50 ksi)	Equal Angle	L 2.5 x 2.5 x 1/4	A36 (36 ksi)
T9 73.33-66.67	Arbitrary Shape	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	A500-50 (50 ksi)	Equal Angle	L 2.5 x 2.5 x 5/16	A36 (36 ksi)
T10 66.67-60.00	Arbitrary Shape	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	A500-50 (50 ksi)	Equal Angle	L 2.5 x 2.5 x 5/16	A36 (36 ksi)
T11 60.00-50.00	Pipe	Pipe 4.5" x 0.337" (4 XS)	A500-50 (50 ksi)	Equal Angle	L 3 x 3 x 1/4	A36 (36 ksi)
T12 50.00-40.00	Pipe	Pipe 4.5" x 0.337" (4 XS)	A500-50 (50 ksi)	Equal Angle	L 3 x 3 x 5/16	A36 (36 ksi)
T13 40.00-30.00	Arbitrary Shape	PJF 42919-0011 - Pipe 4.5 x .337 w/ 5 x 0.25 half sleeve (60" Lu)	A500-50 (50 ksi)	Equal Angle	L 3 x 3 x 3/8	A36 (36 ksi)
T14 30.00-20.00	Arbitrary Shape	PJF 42919-0011 - Pipe 4.5 x .337 w/ 5 x 0.25 half sleeve (30" Lu)	A500-50 (50 ksi)	Equal Angle	L 3 x 3 x 5/16	A36 (36 ksi)
T15 20.00-15.00	Arbitrary Shape	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ 6 x 0.25 half sleeve	A500-50 (50 ksi)	Equal Angle	L 3.5 x 3.5 x 1/4	A36 (36 ksi)
T16 15.00-10.00	Arbitrary Shape	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (60" Lu)	A500-50 (50 ksi)	Equal Angle	L 3.5 x 3.5 x 1/4	A36 (36 ksi)
T17 10.00-0.00	Arbitrary Shape	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (120" Lu)	A500-50 (50 ksi)	Equal Angle	L 3.5 x 3.5 x 5/16	A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 152.00-140.00	Equal Angle	L 2 x 2 x 1/8	A36 (36 ksi)	Solid Round		A36 (36 ksi)
T2 140.00-135.00	Equal Angle	L 2 x 2 x 1/8	A36 (36 ksi)	Solid Round		A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T14 30.00-20.00	None	Flat Bar		A36 (36 ksi)	Equal Angle	L 3 x 3 x 1/4	A36 (36 ksi)
T15 20.00-15.00	None	Flat Bar		A36 (36 ksi)	Arbitrary Shape	Zero Force Member	A36 (36 ksi)
T16 15.00-10.00	None	Flat Bar		A36 (36 ksi)	Arbitrary Shape	Zero Force Member	A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T7 100.00-80.00	Equal Angle	L 2.5 x 2.5 x 1/4	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T8 80.00-73.33	Equal Angle	L 2.5 x 2.5 x 1/4	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T9 73.33-66.67	Equal Angle	L 2.5 x 2.5 x 1/4	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T10 66.67-60.00	Equal Angle	L 2.5 x 2.5 x 1/4	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T11 60.00-50.00	Equal Angle	L 2.5 x 2.5 x 1/4	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T12 50.00-40.00	Equal Angle	L 3 x 3 x 1/4	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T13 40.00-30.00	Equal Angle	L 3 x 3 x 1/4	A36 (36 ksi)	Equal Angle		A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Redundant Bracing Grade	Redundant Type	Redundant Size	K Factor
T14 30.00-20.00	A36 (36 ksi)	Horizontal (1)	Equal Angle	L 2 x 2 x 1/4
		Diagonal (1)	Equal Angle	L 2 x 2 x 1/4
T15 20.00-15.00	A36 (36 ksi)	Horizontal (1)	Equal Angle	L 2 x 2 x 1/4
		Diagonal (1)	Equal Angle	L 2 x 2 x 1/4

Tower Section Geometry (cont'd)

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_r	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in				in	in	in	in
T1 152.00-140.00	0.00	0.188	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T2 140.00-135.00	0.00	0.188	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T3 135.00-130.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T4 130.00-125.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T5 125.00-120.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T6 120.00-100.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T7 100.00-80.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T8 80.00-73.33	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T9 73.33-66.67	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T10 66.67-60.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T11 60.00-50.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T12 50.00-40.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T13 40.00-30.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T14 30.00-20.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T15 20.00-15.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T16 15.00-10.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T17 10.00-0.00	0.00	0.250	A36 (36 ksi)	1	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt

Tower Section Geometry (cont'd)

Tower Elevation	Calc K Single Angles	Calc K Solid Rounds	K Factors ¹								
			Legs		X Brace Diags	K Brace Diags	Single Diags	Girts	Horiz.	Sec. Horiz.	Inner Brace
			X	Y	X	Y	X	Y	X	Y	
ft											
T1 152.00-140.00	Yes	No	1	1	1	1	1	1	1	1	1
T2 140.00-135.00	Yes	No	1	1	1	1	1	1	1	1	1
T3 135.00-130.00	Yes	No	1	1	1	1	1	1	1	1	1
T4 130.00-125.00	Yes	No	1	1	1	1	1	1	1	1	1
T5 125.00-120.00	Yes	No	1	1	1	1	1	1	1	1	1
T6 120.00-100.00	Yes	No	1	1	1	1	1	1	1	1	1
T7 100.00-80.00	No	No	1	1	1	1	1	1	1	0.5	1
T8 80.00-73.33	No	No	1	1	1	1	1	1	1	1	1
T9 73.33-66.67	No	No	1	1	1	1	1	1	1	0.5	1
T10 66.67-60.00	No	No	1	1	1	1	1	1	1	1	1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Legs	K Factors ¹								
				X Brace Diags		K Brace Diags		Single Diags		Girts		Horiz.
				X	Y	X	Y	X	Y	X	Y	X
T11 60.00- 50.00	No	No	1	1	1	1	1	1	1	1	1	1
T12 50.00- 40.00	No	No	1	1	1	1	1	1	1	1	0.5	1
T13 40.00- 30.00	No	No	1	1	1	1	1	1	1	1	0.5	1
T14 30.00- 20.00	No	No	1	1	1	1	1	1	1	1	1	1
T15 20.00- 15.00	Yes	No	4	1	1	1	1	1	1	1	1	1
T16 15.00- 10.00	Yes	No	2	1	1	1	1	1	1	1	1	1
T17 10.00- 0.00	Yes	No	1	1	1	1	1	1	1	1	1	1

¹Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal	Short Horizontal
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 152.00- 140.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T2 140.00- 135.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T3 135.00- 130.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T4 130.00- 125.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 125.00- 120.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 120.00- 100.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 100.00- 80.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 80.00- 73.33	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T9 73.33- 66.67	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T10 66.67- 60.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T11 60.00- 50.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T12 50.00- 40.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T13 40.00- 30.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T14 30.00- 20.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T15 20.00- 15.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T16 15.00- 10.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T17 10.00- 0.00	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 152.00-140.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T2 140.00-135.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T3 135.00-130.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T4 130.00-125.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 125.00-120.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 120.00-100.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 100.00-80.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 80.00-73.33	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T9 73.33-66.67	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T10 66.67-60.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T11 60.00-50.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T12 50.00-40.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T13 40.00-30.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T14 30.00-20.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T15 20.00-15.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T16 15.00-10.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T17 10.00-0.00	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.								
T1 152.00-140.00	Flange	0.625	0	0.500	1	0.500	1	0.625	0	0.625	0	0.625	0	0.500	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T2 140.00-135.00	Flange	0.625	4	0.500	1	0.500	1	0.000	0	0.625	0	0.625	0	0.500	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T3 135.00-130.00	Flange	0.625	0	0.500	1	0.625	0	0.000	0	0.625	0	0.625	0	0.500	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T4 130.00-125.00	Flange	0.625	0	0.500	1	0.625	0	0.000	0	0.625	0	0.625	0	0.500	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T5 125.00-120.00	Flange	0.625	0	0.500	1	0.625	0	0.625	0	0.625	0	0.625	0	0.500	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T6 120.00-100.00	Flange	0.625	4	0.500	1	0.625	0	0.625	0	0.625	0	0.625	0	0.500	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T7 100.00-80.00	Flange	0.750	4	0.500	1	0.625	0	0.625	0	0.625	0	0.625	0	0.500	2
		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T8 80.00-73.33	Flange	0.875	4	0.500	1	0.625	0	0.000	0	0.625	0	0.625	0	0.500	2
		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T9 73.33-66.67	Flange	0.875	0	0.500	1	0.625	0	0.000	0	0.625	0	0.625	0	0.500	2
		A325N		A325X		A325N		A325N		A325N		A325N		A325N	

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.								
T10 66.67-60.00	Flange	0.875	0	0.500	1	0.625	0	0.625	0	0.625	0	0.625	0	0.500	2
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T11 60.00-50.00	Flange	0.875	4	0.625	1	0.625	0	0.000	0	0.625	0	0.625	0	0.500	2
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T12 50.00-40.00	Flange	0.875	0	0.625	1	0.625	0	0.625	0	0.625	0	0.625	0	0.500	2
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T13 40.00-30.00	Flange	1.000	4	0.625	1	0.625	0	0.000	0	0.625	0	0.625	0	0.500	2
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T14 30.00-20.00	Flange	1.000	0	0.625	1	0.625	0	0.625	0	0.625	0	0.500	2	0.500	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T15 20.00-15.00	Flange	1.000	4	0.625	1	0.625	0	0.000	0	0.625	0	0.625	1	0.500	0
		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T16 15.00-10.00	Flange	1.000	0	0.625	1	0.625	0	0.000	0	0.625	0	0.625	1	0.500	0
		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T17 10.00-0.00	Flange	1.000	0	0.625	1	0.625	0	0.625	0	0.625	0	0.625	0	0.500	0
		A325N		A325X		A325N		A325N		A325N		A325N		A325N	

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Diameter in	Width or Perimeter in	Weight plf
Face A													
LDF5-50A(7/8")	A	No	No	Ar (CaAa)	152.00 - 0.00	0.000	-0.05	1	1	1.090 0.500	1.090	1.090	0.33
LDF4-50A(1/2")	A	No	No	Ar (CaAa)	150.00 - 0.00	0.000	-0.03	1	1	0.630 0.500	0.630	0.630	0.15
1.5" flat Cable Ladder Rail	A	No	No	Af (CaAa)	150.00 - 0.00	0.000	0	2	2	24.000 0.500	1.500	1.500	1.80
Face B													
LDF7-50A(1-5/8")	B	No	No	Ar (CaAa)	145.00 - 0.00	0.000	0	12	12	0.500	1.980	1.980	0.82
1.5" flat Cable Ladder Rail	B	No	No	Af (CaAa)	145.00 - 0.00	0.000	0	2	2	24.000 0.500	1.500	1.500	1.80

EW180(ELLIPICAL)	B	No	No	Ar (CaAa)	152.00 - 0.00	0.000	0.25	1	1	0.780 0.500	0.780	0.780	0.15
EW180(ELLIPICAL)	B	No	No	Ar (CaAa)	140.00 - 0.00	0.000	0.22	1	1	0.780 0.500	0.780	0.780	0.15
LDF7-50A(1-5/8")	B	No	No	Ar (CaAa)	135.00 - 0.00	0.000	0.2	2	2	0.500	1.980	1.980	0.82
LDF7-50A(1-5/8")	B	No	No	Ar (CaAa)	98.00 - 0.00	0.000	0.18	3	3	0.500	1.980	1.980	0.82
LDF5-50A(7/8")	B	No	No	Ar (CaAa)	78.00 - 0.00	0.000	0.15	1	1	1.090 0.500	1.090	1.090	0.33
1.5" flat Cable Ladder Rail	B	No	No	Af (CaAa)	152.00 - 0.00	0.000	0.2	2	2	24.000 0.500	1.500	1.500	1.80
Face C													
LDF6-50A(1-1/4")	C	No	No	Ar (CaAa)	131.00 - 0.00	0.000	0.25	3	3	1.550 0.500	1.550	1.550	0.66
LDF5-50A(7/8")	C	No	No	Ar (CaAa)	131.00 - 0.00	0.000	0.23	1	1	1.090 0.500	1.090	1.090	0.33
LDF4-50A(1/2")	C	No	No	Ar (CaAa)	58.00 - 0.00	0.000	0.27	1	1	0.630 0.500	0.630	0.630	0.15
C4006L-NFNF(1-1/2")	C	No	No	Ar (CaAa)	115.00 - 0.00	0.000	0.17	4	4	1.000	1.280	1.280	0.56
1.5" flat Cable Ladder Rail	C	No	No	Af (CaAa)	115.00 - 0.00	0.000	0.2	2	2	24.000 0.500	1.500	1.500	1.80

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	# Per Row	# Spacing in	Clear Diameter in	Width or Perimeter in	Weight plf

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	$C_A A_A$	Weight
*****							ft^2/ft	plf

Feed Line/Linear Appurtenances Section Areas

Tower Section n	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	$C_A A_A$ In Face ft^2	$C_A A_A$ Out Face ft^2	Weight K
T1	152.00-140.00	A	0.000	0.000	6.938	0.000	0.0415
		B	0.000	0.000	21.316	0.000	0.1122
		C	0.000	0.000	0.000	0.000	0.0000
T2	140.00-135.00	A	0.000	0.000	3.360	0.000	0.0204
		B	0.000	0.000	17.660	0.000	0.0867
		C	0.000	0.000	0.000	0.000	0.0000
T3	135.00-130.00	A	0.000	0.000	3.360	0.000	0.0204
		B	0.000	0.000	19.640	0.000	0.0949
		C	0.000	0.000	0.574	0.000	0.0023
T4	130.00-125.00	A	0.000	0.000	3.360	0.000	0.0204
		B	0.000	0.000	19.640	0.000	0.0949
		C	0.000	0.000	2.870	0.000	0.0116
T5	125.00-120.00	A	0.000	0.000	3.360	0.000	0.0204
		B	0.000	0.000	19.640	0.000	0.0949
		C	0.000	0.000	2.870	0.000	0.0116
T6	120.00-100.00	A	0.000	0.000	13.440	0.000	0.0816
		B	0.000	0.000	78.560	0.000	0.3796
		C	0.000	0.000	26.660	0.000	0.1339
T7	100.00-80.00	A	0.000	0.000	13.440	0.000	0.0816
		B	0.000	0.000	89.252	0.000	0.4239
		C	0.000	0.000	31.720	0.000	0.1631
T8	80.00-73.33	A	0.000	0.000	4.480	0.000	0.0272
		B	0.000	0.000	30.657	0.000	0.1445
		C	0.000	0.000	10.574	0.000	0.0544
T9	73.33-66.67	A	0.000	0.000	4.480	0.000	0.0272
		B	0.000	0.000	30.870	0.000	0.1451
		C	0.000	0.000	10.572	0.000	0.0544
T10	66.67-60.00	A	0.000	0.000	4.480	0.000	0.0272
		B	0.000	0.000	30.875	0.000	0.1451
		C	0.000	0.000	10.574	0.000	0.0544
T11	60.00-50.00	A	0.000	0.000	6.720	0.000	0.0408
		B	0.000	0.000	46.310	0.000	0.2177
		C	0.000	0.000	16.364	0.000	0.0827
T12	50.00-40.00	A	0.000	0.000	6.720	0.000	0.0408
		B	0.000	0.000	46.310	0.000	0.2177
		C	0.000	0.000	16.490	0.000	0.0830
T13	40.00-30.00	A	0.000	0.000	6.720	0.000	0.0408
		B	0.000	0.000	46.310	0.000	0.2177
		C	0.000	0.000	16.490	0.000	0.0830
T14	30.00-20.00	A	0.000	0.000	6.720	0.000	0.0408
		B	0.000	0.000	46.310	0.000	0.2177
		C	0.000	0.000	16.490	0.000	0.0830
T15	20.00-15.00	A	0.000	0.000	3.360	0.000	0.0204

Tower Section	Tower Elevation ft	Face	A_R ft ²	A_F ft ²	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight
							K
T16	15.00-10.00	B	0.000	0.000	23.155	0.000	0.1089
		C	0.000	0.000	8.245	0.000	0.0415
		A	0.000	0.000	3.360	0.000	0.0204
		B	0.000	0.000	23.155	0.000	0.1089
T17	10.00-0.00	C	0.000	0.000	8.245	0.000	0.0415
		A	0.000	0.000	6.720	0.000	0.0408
		B	0.000	0.000	46.310	0.000	0.2177
		C	0.000	0.000	16.490	0.000	0.0830

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	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight
								K
T1	152.00-140.00	A	1.741	0.000	0.000	21.558	0.000	0.3345
		B		0.000	0.000	46.194	0.000	0.7296
		C		0.000	0.000	0.000	0.000	0.0000
T2	140.00-135.00	A	1.730	0.000	0.000	10.280	0.000	0.1596
		B		0.000	0.000	36.891	0.000	0.5705
		C		0.000	0.000	0.000	0.000	0.0000
T3	135.00-130.00	A	1.724	0.000	0.000	10.255	0.000	0.1588
		B		0.000	0.000	42.838	0.000	0.6358
		C		0.000	0.000	1.986	0.000	0.0257
T4	130.00-125.00	A	1.717	0.000	0.000	10.228	0.000	0.1579
		B		0.000	0.000	42.777	0.000	0.6332
		C		0.000	0.000	9.915	0.000	0.1280
T5	125.00-120.00	A	1.710	0.000	0.000	10.201	0.000	0.1571
		B		0.000	0.000	42.714	0.000	0.6306
		C		0.000	0.000	9.897	0.000	0.1274
T6	120.00-100.00	A	1.692	0.000	0.000	40.511	0.000	0.6191
		B		0.000	0.000	170.186	0.000	2.4947
		C		0.000	0.000	80.319	0.000	1.0920
T7	100.00-80.00	A	1.658	0.000	0.000	39.973	0.000	0.6024
		B		0.000	0.000	194.926	0.000	2.7618
		C		0.000	0.000	93.118	0.000	1.2600
T8	80.00-73.33	A	1.632	0.000	0.000	13.184	0.000	0.1965
		B		0.000	0.000	67.591	0.000	0.9443
		C		0.000	0.000	30.820	0.000	0.4128
T9	73.33-66.67	A	1.617	0.000	0.000	13.103	0.000	0.1941
		B		0.000	0.000	68.218	0.000	0.9469
		C		0.000	0.000	30.692	0.000	0.4087
T10	66.67-60.00	A	1.601	0.000	0.000	13.020	0.000	0.1915
		B		0.000	0.000	67.973	0.000	0.9374
		C		0.000	0.000	30.562	0.000	0.4043
T11	60.00-50.00	A	1.579	0.000	0.000	19.349	0.000	0.2819
		B		0.000	0.000	101.424	0.000	1.3861
		C		0.000	0.000	48.589	0.000	0.6326
T12	50.00-40.00	A	1.547	0.000	0.000	19.098	0.000	0.2745
		B		0.000	0.000	100.681	0.000	1.3585
		C		0.000	0.000	48.891	0.000	0.6274
T13	40.00-30.00	A	1.509	0.000	0.000	18.791	0.000	0.2656
		B		0.000	0.000	99.771	0.000	1.3250
		C		0.000	0.000	48.334	0.000	0.6104
T14	30.00-20.00	A	1.459	0.000	0.000	18.391	0.000	0.2542
		B		0.000	0.000	98.590	0.000	1.2820
		C		0.000	0.000	47.610	0.000	0.5886
T15	20.00-15.00	A	1.408	0.000	0.000	8.991	0.000	0.1214
		B		0.000	0.000	48.690	0.000	0.6194
		C		0.000	0.000	23.435	0.000	0.2834
T16	15.00-10.00	A	1.361	0.000	0.000	8.805	0.000	0.1164
		B		0.000	0.000	48.139	0.000	0.5999
		C		0.000	0.000	23.097	0.000	0.2736
T17	10.00-0.00	A	1.242	0.000	0.000	16.656	0.000	0.2080
		B		0.000	0.000	93.463	0.000	1.1030
		C		0.000	0.000	44.472	0.000	0.4986

Feed Line Center of Pressure

Section	Elevation	CP _x	CP _z	CP _x Ice	CP _z Ice
	ft	in	in	in	in
T1	152.00-140.00	3.268	-3.370	2.802	-3.029
T2	140.00-135.00	5.481	-5.194	5.113	-4.453
T3	135.00-130.00	7.280	-5.374	6.637	-4.304
T4	130.00-125.00	5.725	-4.659	4.202	-2.878
T5	125.00-120.00	5.979	-4.881	4.394	-3.016
T6	120.00-100.00	3.976	-4.138	2.089	-1.511
T7	100.00-80.00	4.360	-3.362	2.845	-0.923
T8	80.00-73.33	4.975	-3.507	3.772	-1.012
T9	73.33-66.67	5.223	-3.606	4.135	-1.065
T10	66.67-60.00	5.355	-3.705	4.246	-1.111
T11	60.00-50.00	5.717	-3.841	4.004	-0.550
T12	50.00-40.00	5.756	-3.868	3.953	-0.438
T13	40.00-30.00	5.898	-3.970	4.059	-0.509
T14	30.00-20.00	5.178	-3.561	3.657	-0.536
T15	20.00-15.00	5.574	-3.807	3.879	-0.653
T16	15.00-10.00	4.856	-3.440	3.538	-0.698
T17	10.00-0.00	5.594	-3.928	4.029	-1.033

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T1	2	LDF5-50A(7/8")	140.00 - 152.00	0.6000	0.5994
T1	3	LDF4-50A(1/2")	140.00 - 150.00	0.6000	0.5994
T1	4	1.5" flat Cable Ladder Rail	140.00 - 150.00	0.6000	0.5994
T1	6	LDF7-50A(1-5/8")	140.00 - 145.00	0.6000	0.5994
T1	7	1.5" flat Cable Ladder Rail	140.00 - 145.00	0.6000	0.5994
T1	9	EW180(ELLIPTICAL)	140.00 - 152.00	0.6000	0.5994
T1	15	1.5" flat Cable Ladder Rail	140.00 - 152.00	0.6000	0.5994
T2	2	LDF5-50A(7/8")	135.00 - 140.00	0.6000	0.5843
T2	3	LDF4-50A(1/2")	135.00 - 140.00	0.6000	0.5843
T2	4	1.5" flat Cable Ladder Rail	135.00 - 140.00	0.6000	0.5843
T2	6	LDF7-50A(1-5/8")	135.00 - 140.00	0.6000	0.5843
T2	7	1.5" flat Cable Ladder Rail	135.00 - 140.00	0.6000	0.5843
T2	9	EW180(ELLIPTICAL)	135.00 - 140.00	0.6000	0.5843
T2	10	EW180(ELLIPTICAL)	135.00 - 140.00	0.6000	0.5843
T2	15	1.5" flat Cable Ladder Rail	135.00 - 140.00	0.6000	0.5843
T3	2	LDF5-50A(7/8")	130.00 - 135.00	0.6000	0.6000
T3	3	LDF4-50A(1/2")	130.00 - 135.00	0.6000	0.6000
T3	4	1.5" flat Cable Ladder Rail	130.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T3	6	LDF7-50A(1-5/8")	135.00 130.00 - 135.00	0.6000	0.6000
T3	7	1.5" flat Cable Ladder Rail	130.00 - 135.00	0.6000	0.6000
T3	9	EW180(ELLIPTICAL)	130.00 - 135.00	0.6000	0.6000
T3	10	EW180(ELLIPTICAL)	130.00 - 135.00	0.6000	0.6000
T3	11	LDF7-50A(1-5/8")	130.00 - 135.00	0.6000	0.6000
T3	15	1.5" flat Cable Ladder Rail	130.00 - 135.00	0.6000	0.6000
T3	17	LDF6-50A(1-1/4")	130.00 - 131.00	0.6000	0.6000
T3	18	LDF5-50A(7/8")	130.00 - 131.00	0.6000	0.6000
T4	2	LDF5-50A(7/8")	125.00 - 130.00	0.6000	0.6000
T4	3	LDF4-50A(1/2")	125.00 - 130.00	0.6000	0.6000
T4	4	1.5" flat Cable Ladder Rail	125.00 - 130.00	0.6000	0.6000
T4	6	LDF7-50A(1-5/8")	125.00 - 130.00	0.6000	0.6000
T4	7	1.5" flat Cable Ladder Rail	125.00 - 130.00	0.6000	0.6000
T4	9	EW180(ELLIPTICAL)	125.00 - 130.00	0.6000	0.6000
T4	10	EW180(ELLIPTICAL)	125.00 - 130.00	0.6000	0.6000
T4	11	LDF7-50A(1-5/8")	125.00 - 130.00	0.6000	0.6000
T4	15	1.5" flat Cable Ladder Rail	125.00 - 130.00	0.6000	0.6000
T4	17	LDF6-50A(1-1/4")	125.00 - 130.00	0.6000	0.6000
T4	18	LDF5-50A(7/8")	125.00 - 130.00	0.6000	0.6000
T5	2	LDF5-50A(7/8")	120.00 - 125.00	0.6000	0.6000
T5	3	LDF4-50A(1/2")	120.00 - 125.00	0.6000	0.6000
T5	4	1.5" flat Cable Ladder Rail	120.00 - 125.00	0.6000	0.6000
T5	6	LDF7-50A(1-5/8")	120.00 - 125.00	0.6000	0.6000
T5	7	1.5" flat Cable Ladder Rail	120.00 - 125.00	0.6000	0.6000
T5	9	EW180(ELLIPTICAL)	120.00 - 125.00	0.6000	0.6000
T5	10	EW180(ELLIPTICAL)	120.00 - 125.00	0.6000	0.6000
T5	11	LDF7-50A(1-5/8")	120.00 - 125.00	0.6000	0.6000
T5	15	1.5" flat Cable Ladder Rail	120.00 - 125.00	0.6000	0.6000
T5	17	LDF6-50A(1-1/4")	120.00 - 125.00	0.6000	0.6000
T5	18	LDF5-50A(7/8")	120.00 - 125.00	0.6000	0.6000
T6	2	LDF5-50A(7/8")	100.00 - 120.00	0.6000	0.6000
T6	3	LDF4-50A(1/2")	100.00 - 120.00	0.6000	0.6000
T6	4	1.5" flat Cable Ladder Rail	100.00 - 120.00	0.6000	0.6000
T6	6	LDF7-50A(1-5/8")	100.00 - 120.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T6	7	1.5" flat Cable Ladder Rail	100.00 - 120.00	0.6000	0.6000
T6	9	EW180(ELLIPTICAL)	100.00 - 120.00	0.6000	0.6000
T6	10	EW180(ELLIPTICAL)	100.00 - 120.00	0.6000	0.6000
T6	11	LDF7-50A(1-5/8")	100.00 - 120.00	0.6000	0.6000
T6	15	1.5" flat Cable Ladder Rail	100.00 - 120.00	0.6000	0.6000
T6	17	LDF6-50A(1-1/4")	100.00 - 120.00	0.6000	0.6000
T6	18	LDF5-50A(7/8")	100.00 - 120.00	0.6000	0.6000
T6	20	C4006L-NFNF(1-1/2")	100.00 - 115.00	0.6000	0.6000
T6	21	1.5" flat Cable Ladder Rail	100.00 - 115.00	0.6000	0.6000
T7	2	LDF5-50A(7/8")	80.00 - 100.00	0.6000	0.6000
T7	3	LDF4-50A(1/2")	80.00 - 100.00	0.6000	0.6000
T7	4	1.5" flat Cable Ladder Rail	80.00 - 100.00	0.6000	0.6000
T7	6	LDF7-50A(1-5/8")	80.00 - 100.00	0.6000	0.6000
T7	7	1.5" flat Cable Ladder Rail	80.00 - 100.00	0.6000	0.6000
T7	9	EW180(ELLIPTICAL)	80.00 - 100.00	0.6000	0.6000
T7	10	EW180(ELLIPTICAL)	80.00 - 100.00	0.6000	0.6000
T7	11	LDF7-50A(1-5/8")	80.00 - 100.00	0.6000	0.6000
T7	12	LDF7-50A(1-5/8")	80.00 - 98.00	0.6000	0.6000
T7	15	1.5" flat Cable Ladder Rail	80.00 - 100.00	0.6000	0.6000
T7	17	LDF6-50A(1-1/4")	80.00 - 100.00	0.6000	0.6000
T7	18	LDF5-50A(7/8")	80.00 - 100.00	0.6000	0.6000
T7	20	C4006L-NFNF(1-1/2")	80.00 - 100.00	0.6000	0.6000
T7	21	1.5" flat Cable Ladder Rail	80.00 - 100.00	0.6000	0.6000
T8	2	LDF5-50A(7/8")	73.33 - 80.00	0.6000	0.6000
T8	3	LDF4-50A(1/2")	73.33 - 80.00	0.6000	0.6000
T8	4	1.5" flat Cable Ladder Rail	73.33 - 80.00	0.6000	0.6000
T8	6	LDF7-50A(1-5/8")	73.33 - 80.00	0.6000	0.6000
T8	7	1.5" flat Cable Ladder Rail	73.33 - 80.00	0.6000	0.6000
T8	9	EW180(ELLIPTICAL)	73.33 - 80.00	0.6000	0.6000
T8	10	EW180(ELLIPTICAL)	73.33 - 80.00	0.6000	0.6000
T8	11	LDF7-50A(1-5/8")	73.33 - 80.00	0.6000	0.6000
T8	12	LDF7-50A(1-5/8")	73.33 - 80.00	0.6000	0.6000
T8	14	LDF5-50A(7/8")	73.33 - 78.00	0.6000	0.6000
T8	15	1.5" flat Cable Ladder Rail	73.33 - 80.00	0.6000	0.6000
T8	17	LDF6-50A(1-1/4")	73.33 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T8	18	LDF5-50A(7/8")	80.00 73.33 - 80.00	0.6000	0.6000
T8	20	C4006L-NFNF(1-1/2")	80.00 73.33 - 80.00	0.6000	0.6000
T8	21	1.5" flat Cable Ladder Rail	73.33 - 80.00	0.6000	0.6000
T9	2	LDF5-50A(7/8")	66.67 - 73.33	0.6000	0.6000
T9	3	LDF4-50A(1/2")	66.67 - 73.33	0.6000	0.6000
T9	4	1.5" flat Cable Ladder Rail	66.67 - 73.33	0.6000	0.6000
T9	6	LDF7-50A(1-5/8")	66.67 - 73.33	0.6000	0.6000
T9	7	1.5" flat Cable Ladder Rail	66.67 - 73.33	0.6000	0.6000
T9	9	EW180(ELLIPTICAL)	66.67 - 73.33	0.6000	0.6000
T9	10	EW180(ELLIPTICAL)	66.67 - 73.33	0.6000	0.6000
T9	11	LDF7-50A(1-5/8")	66.67 - 73.33	0.6000	0.6000
T9	12	LDF7-50A(1-5/8")	66.67 - 73.33	0.6000	0.6000
T9	14	LDF5-50A(7/8")	66.67 - 73.33	0.6000	0.6000
T9	15	1.5" flat Cable Ladder Rail	66.67 - 73.33	0.6000	0.6000
T9	17	LDF6-50A(1-1/4")	66.67 - 73.33	0.6000	0.6000
T9	18	LDF5-50A(7/8")	66.67 - 73.33	0.6000	0.6000
T9	20	C4006L-NFNF(1-1/2")	66.67 - 73.33	0.6000	0.6000
T9	21	1.5" flat Cable Ladder Rail	66.67 - 73.33	0.6000	0.6000
T10	2	LDF5-50A(7/8")	60.00 - 66.67	0.6000	0.6000
T10	3	LDF4-50A(1/2")	60.00 - 66.67	0.6000	0.6000
T10	4	1.5" flat Cable Ladder Rail	60.00 - 66.67	0.6000	0.6000
T10	6	LDF7-50A(1-5/8")	60.00 - 66.67	0.6000	0.6000
T10	7	1.5" flat Cable Ladder Rail	60.00 - 66.67	0.6000	0.6000
T10	9	EW180(ELLIPTICAL)	60.00 - 66.67	0.6000	0.6000
T10	10	EW180(ELLIPTICAL)	60.00 - 66.67	0.6000	0.6000
T10	11	LDF7-50A(1-5/8")	60.00 - 66.67	0.6000	0.6000
T10	12	LDF7-50A(1-5/8")	60.00 - 66.67	0.6000	0.6000
T10	14	LDF5-50A(7/8")	60.00 - 66.67	0.6000	0.6000
T10	15	1.5" flat Cable Ladder Rail	60.00 - 66.67	0.6000	0.6000
T10	17	LDF6-50A(1-1/4")	60.00 - 66.67	0.6000	0.6000
T10	18	LDF5-50A(7/8")	60.00 - 66.67	0.6000	0.6000
T10	20	C4006L-NFNF(1-1/2")	60.00 - 66.67	0.6000	0.6000
T10	21	1.5" flat Cable Ladder Rail	60.00 - 66.67	0.6000	0.6000
T11	2	LDF5-50A(7/8")	50.00 - 60.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T11	3	LDF4-50A(1/2")	50.00 - 60.00	0.6000	0.6000
T11	4	1.5" flat Cable Ladder Rail	50.00 - 60.00	0.6000	0.6000
T11	6	LDF7-50A(1-5/8")	50.00 - 60.00	0.6000	0.6000
T11	7	1.5" flat Cable Ladder Rail	50.00 - 60.00	0.6000	0.6000
T11	9	EW180(ELLIPTICAL)	50.00 - 60.00	0.6000	0.6000
T11	10	EW180(ELLIPTICAL)	50.00 - 60.00	0.6000	0.6000
T11	11	LDF7-50A(1-5/8")	50.00 - 60.00	0.6000	0.6000
T11	12	LDF7-50A(1-5/8")	50.00 - 60.00	0.6000	0.6000
T11	14	LDF5-50A(7/8")	50.00 - 60.00	0.6000	0.6000
T11	15	1.5" flat Cable Ladder Rail	50.00 - 60.00	0.6000	0.6000
T11	17	LDF6-50A(1-1/4")	50.00 - 60.00	0.6000	0.6000
T11	18	LDF5-50A(7/8")	50.00 - 60.00	0.6000	0.6000
T11	19	LDF4-50A(1/2")	50.00 - 58.00	0.6000	0.6000
T11	20	C4006L-NFNF(1-1/2")	50.00 - 60.00	0.6000	0.6000
T11	21	1.5" flat Cable Ladder Rail	50.00 - 60.00	0.6000	0.6000
T12	2	LDF5-50A(7/8")	40.00 - 50.00	0.6000	0.6000
T12	3	LDF4-50A(1/2")	40.00 - 50.00	0.6000	0.6000
T12	4	1.5" flat Cable Ladder Rail	40.00 - 50.00	0.6000	0.6000
T12	6	LDF7-50A(1-5/8")	40.00 - 50.00	0.6000	0.6000
T12	7	1.5" flat Cable Ladder Rail	40.00 - 50.00	0.6000	0.6000
T12	9	EW180(ELLIPTICAL)	40.00 - 50.00	0.6000	0.6000
T12	10	EW180(ELLIPTICAL)	40.00 - 50.00	0.6000	0.6000
T12	11	LDF7-50A(1-5/8")	40.00 - 50.00	0.6000	0.6000
T12	12	LDF7-50A(1-5/8")	40.00 - 50.00	0.6000	0.6000
T12	14	LDF5-50A(7/8")	40.00 - 50.00	0.6000	0.6000
T12	15	1.5" flat Cable Ladder Rail	40.00 - 50.00	0.6000	0.6000
T12	17	LDF6-50A(1-1/4")	40.00 - 50.00	0.6000	0.6000
T12	18	LDF5-50A(7/8")	40.00 - 50.00	0.6000	0.6000
T12	19	LDF4-50A(1/2")	40.00 - 50.00	0.6000	0.6000
T12	20	C4006L-NFNF(1-1/2")	40.00 - 50.00	0.6000	0.6000
T12	21	1.5" flat Cable Ladder Rail	40.00 - 50.00	0.6000	0.6000
T13	2	LDF5-50A(7/8")	30.00 - 40.00	0.6000	0.6000
T13	3	LDF4-50A(1/2")	30.00 - 40.00	0.6000	0.6000
T13	4	1.5" flat Cable Ladder Rail	30.00 - 40.00	0.6000	0.6000
T13	6	LDF7-50A(1-5/8")	30.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T13	7	1.5" flat Cable Ladder Rail	40.00 30.00 - 40.00	0.6000	0.6000
T13	9	EW180(ELLIPTICAL)	30.00 - 40.00	0.6000	0.6000
T13	10	EW180(ELLIPTICAL)	30.00 - 40.00	0.6000	0.6000
T13	11	LDF7-50A(1-5/8")	30.00 - 40.00	0.6000	0.6000
T13	12	LDF7-50A(1-5/8")	30.00 - 40.00	0.6000	0.6000
T13	14	LDF5-50A(7/8")	30.00 - 40.00	0.6000	0.6000
T13	15	1.5" flat Cable Ladder Rail	30.00 - 40.00	0.6000	0.6000
T13	17	LDF6-50A(1-1/4")	30.00 - 40.00	0.6000	0.6000
T13	18	LDF5-50A(7/8")	30.00 - 40.00	0.6000	0.6000
T13	19	LDF4-50A(1/2")	30.00 - 40.00	0.6000	0.6000
T13	20	C4006L-NFNF(1-1/2")	30.00 - 40.00	0.6000	0.6000
T13	21	1.5" flat Cable Ladder Rail	30.00 - 40.00	0.6000	0.6000
T14	2	LDF5-50A(7/8")	20.00 - 30.00	0.6000	0.6000
T14	3	LDF4-50A(1/2")	20.00 - 30.00	0.6000	0.6000
T14	4	1.5" flat Cable Ladder Rail	20.00 - 30.00	0.6000	0.6000
T14	6	LDF7-50A(1-5/8")	20.00 - 30.00	0.6000	0.6000
T14	7	1.5" flat Cable Ladder Rail	20.00 - 30.00	0.6000	0.6000
T14	9	EW180(ELLIPTICAL)	20.00 - 30.00	0.6000	0.6000
T14	10	EW180(ELLIPTICAL)	20.00 - 30.00	0.6000	0.6000
T14	11	LDF7-50A(1-5/8")	20.00 - 30.00	0.6000	0.6000
T14	12	LDF7-50A(1-5/8")	20.00 - 30.00	0.6000	0.6000
T14	14	LDF5-50A(7/8")	20.00 - 30.00	0.6000	0.6000
T14	15	1.5" flat Cable Ladder Rail	20.00 - 30.00	0.6000	0.6000
T14	17	LDF6-50A(1-1/4")	20.00 - 30.00	0.6000	0.6000
T14	18	LDF5-50A(7/8")	20.00 - 30.00	0.6000	0.6000
T14	19	LDF4-50A(1/2")	20.00 - 30.00	0.6000	0.6000
T14	20	C4006L-NFNF(1-1/2")	20.00 - 30.00	0.6000	0.6000
T14	21	1.5" flat Cable Ladder Rail	20.00 - 30.00	0.6000	0.6000
T15	2	LDF5-50A(7/8")	15.00 - 20.00	0.6000	0.6000
T15	3	LDF4-50A(1/2")	15.00 - 20.00	0.6000	0.6000
T15	4	1.5" flat Cable Ladder Rail	15.00 - 20.00	0.6000	0.6000
T15	6	LDF7-50A(1-5/8")	15.00 - 20.00	0.6000	0.6000
T15	7	1.5" flat Cable Ladder Rail	15.00 - 20.00	0.6000	0.6000
T15	9	EW180(ELLIPTICAL)	15.00 - 20.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T15	10	EW180(ELLIPTICAL)	15.00 - 20.00	0.6000	0.6000
T15	11	LDF7-50A(1-5/8")	15.00 - 20.00	0.6000	0.6000
T15	12	LDF7-50A(1-5/8")	15.00 - 20.00	0.6000	0.6000
T15	14	LDF5-50A(7/8")	15.00 - 20.00	0.6000	0.6000
T15	15	1.5" flat Cable Ladder Rail	15.00 - 20.00	0.6000	0.6000
T15	17	LDF6-50A(1-1/4")	15.00 - 20.00	0.6000	0.6000
T15	18	LDF5-50A(7/8")	15.00 - 20.00	0.6000	0.6000
T15	19	LDF4-50A(1/2")	15.00 - 20.00	0.6000	0.6000
T15	20	C4006L-NFNF(1-1/2")	15.00 - 20.00	0.6000	0.6000
T15	21	1.5" flat Cable Ladder Rail	15.00 - 20.00	0.6000	0.6000
T16	2	LDF5-50A(7/8")	10.00 - 15.00	0.6000	0.6000
T16	3	LDF4-50A(1/2")	10.00 - 15.00	0.6000	0.6000
T16	4	1.5" flat Cable Ladder Rail	10.00 - 15.00	0.6000	0.6000
T16	6	LDF7-50A(1-5/8")	10.00 - 15.00	0.6000	0.6000
T16	7	1.5" flat Cable Ladder Rail	10.00 - 15.00	0.6000	0.6000
T16	9	EW180(ELLIPTICAL)	10.00 - 15.00	0.6000	0.6000
T16	10	EW180(ELLIPTICAL)	10.00 - 15.00	0.6000	0.6000
T16	11	LDF7-50A(1-5/8")	10.00 - 15.00	0.6000	0.6000
T16	12	LDF7-50A(1-5/8")	10.00 - 15.00	0.6000	0.6000
T16	14	LDF5-50A(7/8")	10.00 - 15.00	0.6000	0.6000
T16	15	1.5" flat Cable Ladder Rail	10.00 - 15.00	0.6000	0.6000
T16	17	LDF6-50A(1-1/4")	10.00 - 15.00	0.6000	0.6000
T16	18	LDF5-50A(7/8")	10.00 - 15.00	0.6000	0.6000
T16	19	LDF4-50A(1/2")	10.00 - 15.00	0.6000	0.6000
T16	20	C4006L-NFNF(1-1/2")	10.00 - 15.00	0.6000	0.6000
T16	21	1.5" flat Cable Ladder Rail	10.00 - 15.00	0.6000	0.6000
T17	2	LDF5-50A(7/8")	0.00 - 10.00	0.6000	0.6000
T17	3	LDF4-50A(1/2")	0.00 - 10.00	0.6000	0.6000
T17	4	1.5" flat Cable Ladder Rail	0.00 - 10.00	0.6000	0.6000
T17	6	LDF7-50A(1-5/8")	0.00 - 10.00	0.6000	0.6000
T17	7	1.5" flat Cable Ladder Rail	0.00 - 10.00	0.6000	0.6000
T17	9	EW180(ELLIPTICAL)	0.00 - 10.00	0.6000	0.6000
T17	10	EW180(ELLIPTICAL)	0.00 - 10.00	0.6000	0.6000
T17	11	LDF7-50A(1-5/8")	0.00 - 10.00	0.6000	0.6000
T17	12	LDF7-50A(1-5/8")	0.00 - 10.00	0.6000	0.6000
T17	14	LDF5-50A(7/8")	0.00 - 10.00	0.6000	0.6000
T17	15	1.5" flat Cable Ladder Rail	0.00 - 10.00	0.6000	0.6000
T17	17	LDF6-50A(1-1/4")	0.00 - 10.00	0.6000	0.6000
T17	18	LDF5-50A(7/8")	0.00 - 10.00	0.6000	0.6000
T17	19	LDF4-50A(1/2")	0.00 - 10.00	0.6000	0.6000
T17	20	C4006L-NFNF(1-1/2")	0.00 - 10.00	0.6000	0.6000
T17	21	1.5" flat Cable Ladder Rail	0.00 - 10.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t °	Placement ft	C _A A _A Front	C _A A _A Side	Weight K	
20' 4-Bay Dipole	C	From Face	1.00 0 10	0.000	152.00	No Ice 1/2" Ice 1" Ice	4.00 6.00 8.00	4.00 6.00 8.00	0.0550 0.1000 0.1450
TMA	C	From Leg	0.50 0 0	0.000	152.00	No Ice 1/2" Ice 1" Ice	1.50 2.00 3.00	1.50 2.00 3.00	0.0500 0.0650 0.0700
6' x 4" Sch 40 Pipe Mount	C	From Leg	0.50 0 0	0.000	152.00	No Ice 1/2" Ice 1" Ice	1.96 2.62 3.00	1.96 2.62 3.00	0.0648 0.0839 0.1073

DB563K-TT w/Mount Pipe	A	From Leg	3.00 0 7	0.000	150.00	No Ice 1/2" Ice 1" Ice	19.19 20.22 21.27	4.03 6.95 9.91	0.1311 0.2320 0.3493
Generic 2' x 3' sidarm	A	From Leg	1.50 0 0	0.000	150.00	No Ice 1/2" Ice 1" Ice	1.50 2.50 3.50	3.00 4.00 5.00	0.1875 0.2750 0.3625

4' x 4.5" Pipe Mount	C	From Leg	0.50 0 0	0.000	152.00	No Ice 1/2" Ice 1" Ice	1.19 1.58 1.84	1.19 1.58 1.84	0.0430 0.0560 0.0720

QS66512-2_TIA w/ Mount Pipe	A	From Leg	3.00 0 0	0.000	145.00	No Ice 1/2" Ice 1" Ice	8.37 8.93 9.46	8.46 9.66 10.55	0.1366 0.2122 0.2961
QS66512-2_TIA w/ Mount Pipe	B	From Leg	3.00 0 0	0.000	145.00	No Ice 1/2" Ice 1" Ice	8.37 8.93 9.46	8.46 9.66 10.55	0.1366 0.2122 0.2961
QS66512-2_TIA w/ Mount Pipe	C	From Leg	3.00 0 0	0.000	145.00	No Ice 1/2" Ice 1" Ice	8.37 8.93 9.46	8.46 9.66 10.55	0.1366 0.2122 0.2961
(2) TMA2117F00V1-1	A	From Leg	3.00 0 0	0.000	145.00	No Ice 1/2" Ice 1" Ice	0.30 0.37 0.45	0.83 0.95 1.07	0.0260 0.0328 0.0414
(2) TMA2117F00V1-1	B	From Leg	3.00 0 0	0.000	145.00	No Ice 1/2" Ice 1" Ice	0.30 0.37 0.45	0.83 0.95 1.07	0.0260 0.0328 0.0414
(2) TMA2117F00V1-1	C	From Leg	3.00 0 0	0.000	145.00	No Ice 1/2" Ice 1" Ice	0.30 0.37 0.45	0.83 0.95 1.07	0.0260 0.0328 0.0414
Side Arm Mount [SO 202-1]	A	From Leg	1.50 0 0	0.000	145.00	No Ice 1/2" Ice 1" Ice	1.78 2.24 2.75	2.97 3.57 4.19	0.1100 0.1328 0.1632
Side Arm Mount [SO 202-1]	B	From Leg	1.50 0	0.000	145.00	No Ice 1/2"	1.78 2.24	2.97 3.57	0.1100 0.1328

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t °	Placement ft	C _A A _{Front}	C _A A _{Side}	Weight K	
			0			Ice 1" Ice No Ice 1/2" Ice 1" Ice	2.75	4.19	0.1632
Side Arm Mount [SO 202-1]	C	From Leg	1.50 0 0	0.000	145.00	1.78 2.24 2.75	2.97 3.57 4.19	0.1100 0.1328 0.1632	

4' x 4.5" Pipe Mount	B	From Leg	0.50 0 0	0.000	140.00	No Ice 1/2" Ice 1" Ice	1.20 1.58 1.84	1.20 1.58 1.84	0.0430 0.0560 0.0720

6 ft x 3" omni whip	B	From Leg	3.00 0 3	0.000	135.00	No Ice 1/2" Ice 1" Ice	1.77 2.13 2.50	1.77 2.13 2.50	0.0240 0.0372 0.0546
Generic 2' x 3' sidearm	B	From Leg	1.50 0 0	0.000	135.00	No Ice 1/2" Ice 1" Ice	1.50 2.50 3.50	3.00 4.00 5.00	0.1875 0.2750 0.3625

DB254-A	C	From Leg	3.00 0 0	0.000	135.00	No Ice 1/2" Ice 1" Ice	1.10 1.98 2.86	1.10 1.98 2.86	0.0100 0.0130 0.0160
Generic 2' x 3' sidearm	C	From Leg	1.50 0 0	0.000	135.00	No Ice 1/2" Ice 1" Ice	1.50 2.50 3.50	3.00 4.00 5.00	0.1875 0.2750 0.3625

APXVSPP18-C-A20_TIA w/ Mount Pipe	A	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	8.26 8.82 9.35	7.47 8.66 9.56	0.0951 0.1655 0.2440
APXVSPP18-C-A20_TIA w/ Mount Pipe	B	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	8.26 8.82 9.35	7.47 8.66 9.56	0.0951 0.1655 0.2440
APXVSPP18-C-A20_TIA w/ Mount Pipe	C	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	8.26 8.82 9.35	7.47 8.66 9.56	0.0951 0.1655 0.2440
RRH2x50-WCS	A	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	4.91 5.23 5.55	2.70 3.00 3.30	0.0774 0.1087 0.1444
RRH2x50-WCS	B	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	4.91 5.23 5.55	2.70 3.00 3.30	0.0774 0.1087 0.1444
RRH2x50-WCS	C	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	4.91 5.23 5.55	2.70 3.00 3.30	0.0774 0.1087 0.1444
RRH4X45-19	A	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	2.31 2.52 2.73	2.38 2.58 2.79	0.0595 0.0834 0.1106
RRH4X45-19	B	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	2.31 2.52 2.73	2.38 2.58 2.79	0.0595 0.0834 0.1106
RRH4X45-19	C	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	2.31 2.52 2.73	2.38 2.58 2.79	0.0595 0.0834 0.1106

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t °	Placement ft	C _A A _{Front}	C _A A _{Side}	Weight K
APXVTM14-ALU-I20_TIA w/ Mount Pipe	A	From Leg	4.00 0 0	0.000	131.00	1" Ice No Ice 1/2" Ice 1" Ice	6.58 7.03 5.75 6.47	4.96 5.75 0.1316 0.1929
APXVTM14-ALU-I20_TIA w/ Mount Pipe	B	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	6.58 7.03 5.75 6.47	4.96 5.75 0.1316 0.1929
APXVTM14-ALU-I20_TIA w/ Mount Pipe	C	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	6.58 7.03 5.75 6.47	4.96 5.75 0.1316 0.1929
TD-RRH8x20	C	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	3.70 3.95 4.20	1.29 1.46 0.0901 0.1174
TD-RRH8x20	B	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	3.70 3.95 4.20	1.29 1.46 0.0901 0.1174
TD-RRH8x20	C	From Leg	4.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	3.70 3.95 4.20	1.29 1.46 0.0901 0.1174
Sector Mount [SM 502-1]	A	From Leg	2.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	15.40 21.17 26.86	11.11 16.35 21.52
Sector Mount [SM 502-1]	B	From Leg	2.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	15.40 21.17 26.86	11.11 16.35 21.52
Sector Mount [SM 502-1]	C	From Leg	2.00 0 0	0.000	131.00	No Ice 1/2" Ice 1" Ice	15.40 21.17 26.86	11.11 16.35 21.52

AIR32 KRD901146-1_B66_B2A w/ Mount Pipe	A	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 1" Ice	11.39 11.86 12.33	5.90 6.56 7.24
AIR32 KRD901146-1_B66_B2A w/ Mount Pipe	B	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 1" Ice	11.39 11.86 12.33	5.90 6.56 7.24
AIR32 KRD901146-1_B66_B2A w/ Mount Pipe	C	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 1" Ice	11.39 11.86 12.33	5.90 6.56 7.24
AIR6449 B41_TIA w/ Mount Pipe	A	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 1" Ice	5.89 6.26 6.63	3.28 3.74 4.22
AIR6449 B41_TIA w/ Mount Pipe	B	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 1" Ice	5.89 6.26 6.63	3.28 3.74 4.22
AIR6449 B41_TIA w/ Mount Pipe	C	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 1" Ice	5.89 6.26 6.63	3.28 3.74 4.22
APXVAALL24_43-U-NA20_TIA w/ Mount Pipe	A	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 1" Ice	20.48 21.23 21.99	10.87 12.39 13.94

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t °	Placement ft	C _A A _{Front}	C _A A _{Side}	Weight K
APXVAALL24_43-U-NA20_TIA w/ Mount Pipe	B	From Leg	4.00 0 3	0.000	115.00	1" Ice No Ice 1/2" Ice 1" Ice	20.48 21.23 21.99 13.94	10.87 12.39 0.3182 0.4645
APXVAALL24_43-U-NA20_TIA w/ Mount Pipe	C	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 21.99 1" Ice	20.48 21.23 21.99 13.94	10.87 12.39 0.3182 0.4645
RRUS 11 B4	A	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 3.26 1" Ice	2.83 3.04 3.26 1.48	1.18 1.33 0.0716 0.0955
RRUS 11 B4	B	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 3.26 1" Ice	2.83 3.04 3.26 1.48	1.18 1.33 0.0716 0.0955
RRUS 11 B4	C	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 3.26 1" Ice	2.83 3.04 3.26 1.48	1.18 1.33 0.0716 0.0955
RADIO 4415 B25_TMO	A	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 2.20 1" Ice	1.86 2.03 2.20 1.13	0.87 1.00 0.0620 0.0791
RADIO 4415 B25_TMO	B	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 2.20 1" Ice	1.86 2.03 2.20 1.13	0.87 1.00 0.0620 0.0791
RADIO 4415 B25_TMO	C	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 2.20 1" Ice	1.86 2.03 2.20 1.13	0.87 1.00 0.0620 0.0791
Sector Mount [SM 502-1]	A	From Leg	2.00 0 0	0.000	115.00	No Ice 1/2" Ice 26.86 1" Ice	15.40 21.17 26.86	11.11 16.35 21.52 0.5577 0.7554 1.0172
Sector Mount [SM 502-1]	B	From Leg	2.00 0 0	0.000	115.00	No Ice 1/2" Ice 26.86 1" Ice	15.40 21.17 26.86	11.11 16.35 21.52 0.5577 0.7554 1.0172
Sector Mount [SM 502-1]	C	From Leg	2.00 0 0	0.000	115.00	No Ice 1/2" Ice 26.86 1" Ice	15.40 21.17 26.86	11.11 16.35 21.52 0.5577 0.7554 1.0172

XXDWMM-12.5-65-8T-CBRS	A	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 10.05 1" Ice	9.11 9.58 10.05	5.98 6.44 6.91 0.0633 0.1214 0.1857
XXDWMM-12.5-65-8T-CBRS	B	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 10.05 1" Ice	9.11 9.58 10.05	5.98 6.44 6.91 0.0633 0.1214 0.1857
XXDWMM-12.5-65-8T-CBRS	C	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 10.05 1" Ice	9.11 9.58 10.05	5.98 6.44 6.91 0.0633 0.1214 0.1857
(2) JAHH-65B-R3B_TIA w/ Mount Pipe	A	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 10.46 1" Ice	9.35 9.92 10.46	7.65 8.83 9.73 0.0889 0.1654 0.2502
(2) JAHH-65B-R3B_TIA w/ Mount Pipe	B	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 10.46 1" Ice	9.35 9.92 10.46	7.65 8.83 9.73 0.0889 0.1654 0.2502

Description	Face or Leg	Offset Type	Offsets: Horz ft Lateral ft Vert ft	Azimuth Adjustmen t °	Placement ft	C _A A _{Front}	C _A A _{Side}	Weight K
(2) JAHH-65B-R3B_TIA w/ Mount Pipe	C	From Leg	4.00 0 0	0.000	98.00	1" Ice No Ice 1/2" Ice 1" Ice	9.35 9.92 8.83 10.46 9.73	7.65 8.83 0.1654 0.2502
BSAMNT-SBS-2-2 (Mount Bracket)	A	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00 0.00	0.00 0.00 0.0876 0.1078
BSAMNT-SBS-2-2 (Mount Bracket)	B	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00 0.00	0.00 0.00 0.0876 0.1078
BSAMNT-SBS-2-2 (Mount Bracket)	C	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00 0.00	0.00 0.00 0.0876 0.1078
OVP	A	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	0.34 0.42 0.50 0.34	0.27 0.34 0.41 0.0050
OVP	B	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	0.34 0.42 0.50 0.34	0.27 0.34 0.41 0.0050
OVP	C	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	0.34 0.42 0.50 0.34	0.27 0.34 0.41 0.0050
B2/B66A RRH-BR049	A	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	1.88 2.05 2.22 1.88	1.01 1.14 1.28 0.0703
B2/B66A RRH-BR049	B	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	1.88 2.05 2.22 1.88	1.01 1.14 1.28 0.0703
B2/B66A RRH-BR049	C	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	1.88 2.05 2.22 1.88	1.01 1.14 1.28 0.0703
B5/B13 RRH-BR04C	A	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	1.88 2.05 2.22 1.88	1.01 1.14 1.28 0.0703
B5/B13 RRH-BR04C	B	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	1.88 2.05 2.22 1.88	1.01 1.14 1.28 0.0703
B5/B13 RRH-BR04C	C	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	1.88 2.05 2.22 1.88	1.01 1.14 1.28 0.0703
CBC78T-DS-43-2X	A	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	0.37 0.45 0.53 0.37	0.51 0.60 0.70 0.0207
CBC78T-DS-43-2X	B	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	0.37 0.45 0.53 0.37	0.51 0.60 0.70 0.0207
CBC78T-DS-43-2X	C	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1" Ice	0.37 0.45 0.53 0.37	0.51 0.60 0.70 0.0207

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t °	Placement ft	C _A A _{Front}	C _A A _{Side}	Weight K
Site Pro 1 VFA12-HD	A	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1"	13.20 19.50 25.80	9.20 14.60 19.50
Site Pro 1 VFA12-HD	B	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1"	13.20 19.50 25.80	9.20 14.60 19.50
Site Pro 1 VFA12-HD	C	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1"	13.20 19.50 25.80	9.20 14.60 19.50
MT6407-77A w/ Mount Pipe	A	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1"	4.91 5.26 5.61	2.68 3.14 3.62
MT6407-77A w/ Mount Pipe	B	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1"	4.91 5.26 5.61	2.68 3.14 3.62
MT6407-77A w/ Mount Pipe	C	From Leg	4.00 0 0	0.000	98.00	No Ice 1/2" Ice 1"	4.91 5.26 5.61	2.68 3.14 3.62

8' 4-Bay Dipole	C	From Leg	3.00 0 4	0.000	74.00	No Ice 1/2" Ice 1"	4.00 6.00 8.00	4.00 6.00 8.00
Generic 2' x 3' sidearm	C	From Leg	1.50 0 0	0.000	74.00	No Ice 1/2" Ice 1"	1.50 2.50 3.50	3.00 4.00 5.00

GPS	C	From Leg	3.00 0 0	0.000	58.00	No Ice 1/2" Ice 1"	0.15 0.24 0.31	0.15 0.24 0.31
Generic 2' x 3' sidearm	C	From Leg	1.50 0 0	0.000	58.00	No Ice 1/2" Ice 1"	1.50 2.50 3.50	3.00 4.00 5.00

(3) Site Pro 1	C	None		0.000	115.00	No Ice 1/2" Ice 1"	6.83 8.01 9.20	3.11 3.65 4.19
10'6"x2-21/2" Pipe Mount	C	From Leg	4.00 0 0	0.000	115.00	No Ice 1/2" Ice 1"	2.49 3.57 4.67	2.49 3.57 4.67
10'6"x2-21/2" Pipe Mount	C	From Leg	4.00 0 0	0.000	115.00	No Ice 1/2" Ice 1"	2.49 3.57 4.67	2.49 3.57 4.67
10'6"x2-21/2" Pipe Mount	C	From Leg	4.00 0 0	0.000	115.00	No Ice 1/2" Ice 1"	2.49 3.57 4.67	0.0360 0.0547 0.0803
RADIO 4449 B71 B85A	A	From Leg	4.00 0 3	0.000	115.00	No Ice 1/2" Ice 1"	1.97 2.15 2.33	0.0360 0.0547 0.0803
RADIO 4449 B71 B85A	B	From Leg	4.00	0.000	115.00	No Ice	1.97	1.59

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _A _A Front ft ²	C _A _A Side ft ²	Weight K	
RADIO 4449 B71 B85A	C	From Leg	4.00 0 3	0.000	115.00	1/2" Ice 1" Ice No Ice 1/2" Ice 1" Ice	2.15 2.33 2.33 1.97 2.15 2.33	1.75 1.92 1.92 1.59 1.75 1.92	0.0930 0.1156 0.0732 0.0930 0.1156

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft	Aperture Area ft ²	Weight K	
4 ft w/ HP	C	Paraboloid w/Shroud (HP)	From Leg	1.00 0 0	0.000		152.00	4.00	No Ice 1/2" Ice 1" Ice	12.57 13.10 13.62	0.1200 0.1900 0.2600
4 ft w/ HP	B	Paraboloid w/Shroud (HP)	From Leg	1.00 0 0	0.000		140.00	4.00	No Ice 1/2" Ice 1" Ice	12.57 13.10 13.62	0.1200 0.1900 0.2600

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.6 Wind 0 deg - No Ice
3	0.9 Dead+1.6 Wind 0 deg - No Ice
4	1.2 Dead+1.6 Wind 30 deg - No Ice
5	0.9 Dead+1.6 Wind 30 deg - No Ice
6	1.2 Dead+1.6 Wind 60 deg - No Ice
7	0.9 Dead+1.6 Wind 60 deg - No Ice
8	1.2 Dead+1.6 Wind 90 deg - No Ice
9	0.9 Dead+1.6 Wind 90 deg - No Ice
10	1.2 Dead+1.6 Wind 120 deg - No Ice
11	0.9 Dead+1.6 Wind 120 deg - No Ice
12	1.2 Dead+1.6 Wind 150 deg - No Ice
13	0.9 Dead+1.6 Wind 150 deg - No Ice
14	1.2 Dead+1.6 Wind 180 deg - No Ice
15	0.9 Dead+1.6 Wind 180 deg - No Ice
16	1.2 Dead+1.6 Wind 210 deg - No Ice
17	0.9 Dead+1.6 Wind 210 deg - No Ice
18	1.2 Dead+1.6 Wind 240 deg - No Ice
19	0.9 Dead+1.6 Wind 240 deg - No Ice
20	1.2 Dead+1.6 Wind 270 deg - No Ice
21	0.9 Dead+1.6 Wind 270 deg - No Ice
22	1.2 Dead+1.6 Wind 300 deg - No Ice
23	0.9 Dead+1.6 Wind 300 deg - No Ice
24	1.2 Dead+1.6 Wind 330 deg - No Ice
25	0.9 Dead+1.6 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice

Comb. No.	Description
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	204.6169	21.6576	-12.1814
	Max. H _x	18	204.6169	21.6576	-12.1814
	Max. H _z	7	-172.2535	-18.7111	10.4830
	Min. Vert	7	-172.2535	-18.7111	10.4830
	Min. H _x	7	-172.2535	-18.7111	10.4830
	Min. H _z	18	204.6169	21.6576	-12.1814
Leg B	Max. Vert	10	191.1869	-19.9718	-11.5125
	Max. H _x	23	-158.4448	17.0144	9.8031
	Max. H _z	23	-158.4448	17.0144	9.8031
	Min. Vert	23	-158.4448	17.0144	9.8031
	Min. H _x	10	191.1869	-19.9718	-11.5125
	Min. H _z	10	191.1869	-19.9718	-11.5125
Leg A	Max. Vert	2	194.2006	0.2043	23.4024
	Max. H _x	20	13.6502	3.2299	1.0962
	Max. H _z	2	194.2006	0.2043	23.4024
	Min. Vert	15	-161.3221	-0.2002	-19.9275
	Min. H _x	8	14.0221	-3.2240	1.0999
	Min. H _z	15	-161.3221	-0.2002	-19.9275

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overspinning Moment, M _x kip-ft	Overspinning Moment, M _z kip-ft	Torque kip-ft
Dead Only	34.5909	-0.0000	-0.0000	4	-1	0
1.2 Dead+1.6 Wind 0 deg - No Ice	41.5089	-0.0011	-38.0881	-3246	-7	7
0.9 Dead+1.6 Wind 0 deg - No Ice	31.1317	-0.0011	-38.0923	-3244	-6	7
1.2 Dead+1.6 Wind 30 deg - No Ice	41.5089	19.3160	-33.4340	-2867	-1662	20
0.9 Dead+1.6 Wind 30 deg - No Ice	31.1316	19.3181	-33.4375	-2865	-1660	20
1.2 Dead+1.6 Wind 60 deg - No Ice	41.5090	33.0624	-19.1217	-1648	-2849	10
0.9 Dead+1.6 Wind 60 deg -	31.1317	33.0558	-19.1177	-1647	-2844	10

Load Combination	Vertical	Shear_x	Shear_z	Overspinning Moment, M_x kip-ft	Overspinning Moment, M_z kip-ft	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
No Ice						
1.2 Dead+1.6 Wind 90 deg -	41.5089	37.5244	-0.0250	-3	-3238	-5
No Ice						
0.9 Dead+1.6 Wind 90 deg -	31.1317	37.5286	-0.0250	-4	-3235	-5
No Ice						
1.2 Dead+1.6 Wind 120 deg - No Ice	41.5089	32.4993	18.6935	1589	-2768	0
- No Ice						
0.9 Dead+1.6 Wind 120 deg - No Ice	31.1317	32.5029	18.6955	1587	-2765	0
- No Ice						
1.2 Dead+1.6 Wind 150 deg - No Ice	41.5089	16.1734	28.2086	2468	-1404	11
- No Ice						
0.9 Dead+1.6 Wind 150 deg - No Ice	31.1317	16.1752	28.2118	2464	-1402	11
- No Ice						
1.2 Dead+1.6 Wind 180 deg - No Ice	41.5090	0.0034	35.5455	3096	2	-7
- No Ice						
0.9 Dead+1.6 Wind 180 deg - No Ice	31.1317	0.0035	35.5383	3090	2	-7
- No Ice						
1.2 Dead+1.6 Wind 210 deg - No Ice	41.5089	-19.1706	33.4058	2871	1637	-20
- No Ice						
0.9 Dead+1.6 Wind 210 deg - No Ice	31.1317	-19.1726	33.4094	2867	1636	-20
- No Ice						
1.2 Dead+1.6 Wind 240 deg - No Ice	41.5089	-35.2070	20.2556	1716	2974	-10
- No Ice						
0.9 Dead+1.6 Wind 240 deg - No Ice	31.1317	-35.2108	20.2578	1713	2971	-10
- No Ice						
1.2 Dead+1.6 Wind 270 deg - No Ice	41.5089	-37.5222	-0.0323	3	3233	5
- No Ice						
0.9 Dead+1.6 Wind 270 deg - No Ice	31.1317	-37.5263	-0.0322	2	3230	5
- No Ice						
1.2 Dead+1.6 Wind 300 deg - No Ice	41.5090	-30.3506	-17.5600	-1522	2634	-1
- No Ice						
0.9 Dead+1.6 Wind 300 deg - No Ice	31.1317	-30.3444	-17.5564	-1521	2630	-1
- No Ice						
1.2 Dead+1.6 Wind 330 deg - No Ice	41.5089	-16.3189	-28.2341	-2463	1422	-11
- No Ice						
0.9 Dead+1.6 Wind 330 deg - No Ice	31.1317	-16.3207	-28.2373	-2461	1421	-11
- No Ice						
1.2 Dead+1.0 Ice	118.3951	-0.0000	-0.0000	15	-24	0
1.2 Dead+1.0 Wind 0 deg+1.0 Ice	118.3951	0.0003	-11.2960	-971	-25	1
1.2 Dead+1.0 Wind 30 deg+1.0 Ice	118.3951	5.7366	-9.8910	-852	-529	5
1.2 Dead+1.0 Wind 60 deg+1.0 Ice	118.3951	10.1173	-5.8247	-497	-915	4
1.2 Dead+1.0 Wind 90 deg+1.0 Ice	118.3951	11.1342	-0.0056	14	-1011	0
1.2 Dead+1.0 Wind 120 deg+1.0 Ice	118.3951	9.4837	5.4384	492	-859	1
1.2 Dead+1.0 Wind 150 deg+1.0 Ice	118.3951	5.0638	8.7685	794	-474	4
1.2 Dead+1.0 Wind 180 deg+1.0 Ice	118.3951	-0.0001	10.9261	980	-24	-1
1.2 Dead+1.0 Wind 210 deg+1.0 Ice	118.3951	-5.7090	9.8855	882	477	-5
1.2 Dead+1.0 Wind 240 deg+1.0 Ice	118.3951	-10.4270	5.9833	535	884	-3
1.2 Dead+1.0 Wind 270 deg+1.0 Ice	118.3951	-11.1340	-0.0057	15	962	0
1.2 Dead+1.0 Wind 300 deg+1.0 Ice	118.3951	-9.1737	-5.2799	-453	793	-1
1.2 Dead+1.0 Wind 330 deg+1.0 Ice	118.3951	-5.0918	-8.7734	-764	429	-4
Dead+Wind 0 deg - Service	34.5909	-0.0003	-9.1186	-774	-3	2
Dead+Wind 30 deg - Service	34.5909	4.6245	-8.0043	-683	-399	5
Dead+Wind 60 deg - Service	34.5909	7.9131	-4.5766	-392	-682	2
Dead+Wind 90 deg - Service	34.5909	8.9839	-0.0061	2	-776	-1
Dead+Wind 120 deg - Service	34.5909	7.7807	4.4754	383	-663	0
Dead+Wind 150 deg -	34.5909	3.8728	6.7547	593	-337	3

Load Combination	Vertical	Shear _x	Shear _z	Overspinning Moment, M _x kip-ft	Overspinning Moment, M _z kip-ft	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
Service						
Dead+Wind 180 deg - Service	34.5909	0.0008	8.5081	743	-1	-2
Dead+Wind 210 deg - Service	34.5909	-4.5895	7.9976	689	391	-5
Dead+Wind 240 deg - Service	34.5909	-8.4282	4.8489	413	710	-2
Dead+Wind 270 deg - Service	34.5909	-8.9834	-0.0079	3	772	1
Dead+Wind 300 deg - Service	34.5909	-7.2648	-4.2032	-361	629	0
Dead+Wind 330 deg - Service	34.5909	-3.9077	-6.7608	-587	339	-3

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.0000	-34.5909	0.0000	0.0000	34.5909	0.0000	0.000%
2	-0.0011	-41.5090	-38.1040	0.0011	41.5089	38.0881	0.028%
3	-0.0011	-31.1318	-38.1040	0.0011	31.1317	38.0923	0.024%
4	19.3251	-41.5090	-33.4486	-19.3160	41.5089	33.4340	0.030%
5	19.3251	-31.1318	-33.4486	-19.3181	31.1316	33.4375	0.026%
6	33.0676	-41.5090	-19.1249	-33.0624	41.5090	19.1217	0.011%
7	33.0676	-31.1318	-19.1249	-33.0558	31.1317	19.1177	0.028%
8	37.5413	-41.5090	-0.0258	-37.5244	41.5089	0.0250	0.030%
9	37.5413	-31.1318	-0.0258	-37.5286	31.1317	0.0250	0.026%
10	32.5129	-41.5090	18.7012	-32.4993	41.5089	-18.6935	0.028%
11	32.5129	-31.1318	18.7012	-32.5029	31.1317	-18.6955	0.024%
12	16.1803	-41.5090	28.2219	-16.1734	41.5089	-28.2086	0.028%
13	16.1803	-31.1318	28.2219	-16.1752	31.1317	-28.2118	0.025%
14	0.0033	-41.5090	35.5513	-0.0034	41.5090	-35.5455	0.011%
15	0.0033	-31.1318	35.5513	-0.0035	31.1317	-35.5383	0.028%
16	-19.1787	-41.5090	33.4210	19.1706	41.5089	-33.4058	0.030%
17	-19.1787	-31.1318	33.4210	19.1726	31.1317	-33.4094	0.026%
18	-35.2215	-41.5090	20.2637	35.2070	41.5089	-20.2556	0.029%
19	-35.2215	-31.1318	20.2637	35.2108	31.1317	-20.2578	0.024%
20	-37.5390	-41.5090	-0.0329	37.5222	41.5089	0.0323	0.030%
21	-37.5390	-31.1318	-0.0329	37.5263	31.1317	0.0322	0.026%
22	-30.3555	-41.5090	-17.5628	30.3506	41.5090	17.5600	0.010%
23	-30.3555	-31.1318	-17.5628	30.3444	31.1317	17.5564	0.027%
24	-16.3268	-41.5090	-28.2469	16.3189	41.5089	28.2341	0.028%
25	-16.3268	-31.1318	-28.2469	16.3207	31.1317	28.2373	0.025%
26	0.0000	-118.3951	0.0000	0.0000	118.3951	0.0000	0.000%
27	0.0004	-118.3951	-11.3010	-0.0003	118.3951	11.2960	0.004%
28	5.7393	-118.3951	-9.8953	-5.7366	118.3951	9.8910	0.004%
29	10.1220	-118.3951	-5.8273	-10.1173	118.3951	5.8247	0.004%
30	11.1394	-118.3951	-0.0055	-11.1342	118.3951	0.0056	0.004%
31	9.4881	-118.3951	5.4409	-9.4837	118.3951	-5.4384	0.004%
32	5.0662	-118.3951	8.7726	-5.0638	118.3951	-8.7685	0.004%
33	0.0000	-118.3951	10.9311	0.0001	118.3951	-10.9261	0.004%
34	-5.7115	-118.3951	9.8901	5.7090	118.3951	-9.8855	0.004%
35	-10.4315	-118.3951	5.9861	10.4270	118.3951	-5.9833	0.004%
36	-11.1390	-118.3951	-0.0057	11.1340	118.3951	0.0057	0.004%
37	-9.1779	-118.3951	-5.2822	9.1737	118.3951	5.2799	0.004%
38	-5.0941	-118.3951	-8.7774	5.0918	118.3951	8.7734	0.004%
39	-0.0003	-34.5909	-9.1218	0.0003	34.5909	9.1186	0.009%
40	4.6262	-34.5909	-8.0072	-4.6245	34.5909	8.0043	0.009%
41	7.9161	-34.5909	-4.5783	-7.9131	34.5909	4.5766	0.010%
42	8.9873	-34.5909	-0.0062	-8.9839	34.5909	0.0061	0.009%
43	7.7835	-34.5909	4.4770	-7.7807	34.5909	-4.4754	0.009%
44	3.8742	-34.5909	6.7574	-3.8728	34.5909	-6.7547	0.008%
45	0.0008	-34.5909	8.5114	-0.0008	34.5909	-8.5081	0.009%
46	-4.5912	-34.5909	8.0006	4.5895	34.5909	-7.9976	0.010%
47	-8.4312	-34.5909	4.8507	8.4282	34.5909	-4.8489	0.010%

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
48	-8.9867	-34.5909	-0.0079	8.9834	34.5909	0.0079	0.009%
49	-7.2676	-34.5909	-4.2048	7.2648	34.5909	4.2032	0.009%
50	-3.9092	-34.5909	-6.7633	3.9077	34.5909	6.7608	0.008%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.0005114
2	Yes	7	0.00052340	0.00094482
3	Yes	7	0.00042483	0.00070218
4	Yes	7	0.00061039	0.00097459
5	Yes	7	0.00053416	0.00073179
6	Yes	8	0.00031294	0.00045908
7	Yes	7	0.00061495	0.00076070
8	Yes	7	0.00059975	0.00097434
9	Yes	7	0.00052009	0.00073184
10	Yes	7	0.00052025	0.00094326
11	Yes	7	0.00042102	0.00070125
12	Yes	7	0.00057120	0.00097652
13	Yes	7	0.00048309	0.00073403
14	Yes	8	0.00029381	0.00045904
15	Yes	7	0.00058126	0.00076110
16	Yes	7	0.00060864	0.00097497
17	Yes	7	0.00053254	0.00073216
18	Yes	7	0.00053102	0.00094111
19	Yes	7	0.00043573	0.00069884
20	Yes	7	0.00059818	0.00097391
21	Yes	7	0.00051868	0.00073134
22	Yes	8	0.00029005	0.00045768
23	Yes	7	0.00057495	0.00075900
24	Yes	7	0.00057143	0.00097562
25	Yes	7	0.00048333	0.00073308
26	Yes	9	0.00000001	0.00005147
27	Yes	8	0.00069373	0.00091090
28	Yes	8	0.00068633	0.00093015
29	Yes	8	0.00067715	0.00095224
30	Yes	8	0.00068352	0.00093822
31	Yes	8	0.00068869	0.00092312
32	Yes	8	0.00070995	0.00089533
33	Yes	8	0.00069323	0.00092614
34	Yes	8	0.00068580	0.00093252
35	Yes	8	0.00067558	0.00094230
36	Yes	8	0.00069542	0.00091690
37	Yes	8	0.00071230	0.00089400
38	Yes	8	0.00072570	0.00086844
39	Yes	7	0.00000001	0.00074792
40	Yes	7	0.00000001	0.00075622
41	Yes	7	0.00000001	0.00076171
42	Yes	7	0.00000001	0.00075434
43	Yes	7	0.00000001	0.00074549
44	Yes	7	0.00000001	0.00074398
45	Yes	7	0.00000001	0.00076000
46	Yes	7	0.00000001	0.00075799
47	Yes	7	0.00000001	0.00075214
48	Yes	7	0.00000001	0.00075503
49	Yes	7	0.00000001	0.00075488
50	Yes	7	0.00000001	0.00074256

Maximum Tower Deflections - Service Wind

Section No.	Elevation	Horz. Deflection	Gov. Load Comb.	Tilt	Twist
	ft	in		°	°
T1	152 - 140	3.18	47	0.172	0.012
T2	140 - 135	2.75	47	0.169	0.011
T3	135 - 130	2.57	47	0.167	0.011
T4	130 - 125	2.39	47	0.164	0.010
T5	125 - 120	2.21	47	0.160	0.010
T6	120 - 100	2.04	47	0.155	0.009
T7	100 - 80	1.43	47	0.130	0.007
T8	80 - 73.333	0.91	47	0.103	0.005
T9	73.333 - 66.667	0.76	47	0.095	0.005
T10	66.667 - 60	0.63	47	0.085	0.004
T11	60 - 50	0.51	47	0.076	0.004
T12	50 - 40	0.35	47	0.062	0.003
T13	40 - 30	0.23	47	0.047	0.002
T14	30 - 20	0.14	47	0.035	0.002
T15	20 - 15	0.07	47	0.023	0.001
T16	15 - 10	0.04	47	0.017	0.001
T17	10 - 0	0.02	47	0.011	0.001

Critical Deflections and Radius of Curvature - Service Wind

Elevation	Appurtenance	Gov. Load Comb.	Deflection	Tilt	Twist	Radius of Curvature
ft			in	°	°	ft
152.00	4 ft w/ HP	47	3.18	0.172	0.012	256485
150.00	DB563K-TT w/Mount Pipe	47	3.11	0.172	0.011	256485
145.00	QS66512-2_TIA w/ Mount Pipe	47	2.93	0.171	0.011	183203
140.00	4 ft w/ HP	47	2.75	0.169	0.011	110511
135.00	6 ft x 3" omni whip	47	2.57	0.167	0.011	109334
131.00	APXVSPP18-C-A20_TIA w/ Mount Pipe	47	2.42	0.165	0.010	165319
115.00	AIR32 KRD901146-1_B66_B2A w/ Mount Pipe	47	1.88	0.149	0.008	51339
98.00	XXDWMM-12.5-65-8T-CBRS	47	1.37	0.127	0.007	44682
74.00	8' 4-Bay Dipole	47	0.78	0.096	0.005	42502
58.00	GPS	47	0.48	0.073	0.004	44797

Maximum Tower Deflections - Design Wind

Section No.	Elevation	Horz. Deflection	Gov. Load Comb.	Tilt	Twist
	ft	in		°	°
T1	152 - 140	13.25	18	0.715	0.049
T2	140 - 135	11.44	18	0.703	0.048
T3	135 - 130	10.69	18	0.695	0.046
T4	130 - 125	9.96	18	0.683	0.043
T5	125 - 120	9.23	18	0.666	0.041
T6	120 - 100	8.52	18	0.644	0.038
T7	100 - 80	5.94	18	0.541	0.030
T8	80 - 73.333	3.80	18	0.430	0.023
T9	73.333 - 66.667	3.19	18	0.395	0.020
T10	66.667 - 60	2.63	18	0.356	0.018
T11	60 - 50	2.13	18	0.315	0.016
T12	50 - 40	1.48	18	0.257	0.013
T13	40 - 30	0.97	18	0.196	0.010
T14	30 - 20	0.57	18	0.146	0.008
T15	20 - 15	0.28	18	0.095	0.005
T16	15 - 10	0.16	18	0.070	0.004
T17	10 - 0	0.08	19	0.046	0.002

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
152.00	4 ft w/ HP	18	13.25	0.715	0.049	72981
150.00	DB563K-TT w/Mount Pipe	18	12.94	0.713	0.047	72981
145.00	QS66512-2_TIA w/ Mount Pipe	18	12.19	0.709	0.047	52129
140.00	4 ft w/ HP	18	11.44	0.703	0.048	30324
135.00	6 ft x 3" omni whip	18	10.69	0.695	0.046	26859
131.00	APXVSPP18-C-A20_TIA w/ Mount Pipe	18	10.10	0.686	0.044	42273
115.00	AIR32 KRD901146-1_B66_B2A w/ Mount Pipe	18	7.84	0.620	0.035	12437
98.00	XXDWMM-12.5-65-8T-CBRS	18	5.71	0.529	0.029	10714
74.00	8' 4-Bay Dipole	18	3.25	0.398	0.020	10026
58.00	GPS	18	1.99	0.304	0.015	10565

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
T1	152	Diagonal	A325N	0.500	1	1.3474	3.1266	0.431 ✓	1	Member Block Shear
		Top Girt	A325N	0.500	1	0.1116	4.1325	0.027 ✓	1	Member Bearing
T2	140	Leg	A325N	0.625	4	1.4220	20.7087	0.069 ✓	1	Bolt Tension
		Diagonal	A325N	0.500	1	1.2939	4.6898	0.276 ✓	1	Member Block Shear
T3	135	Diagonal	A325N	0.500	1	1.7938	5.3965	0.332 ✓	1	Member Bearing
		Top Girt	A325N	0.500	1	0.1365	4.1325	0.033 ✓	1	Member Block Shear
T4	130	Diagonal	A325N	0.500	1	2.8282	7.1953	0.393 ✓	1	Member Block Shear
T5	125	Diagonal	A325N	0.500	1	2.7108	7.1953	0.377 ✓	1	Member Block Shear
T6	120	Leg	A325N	0.625	4	5.4944	20.7087	0.265 ✓	1	Bolt Tension
		Diagonal	A325N	0.500	1	4.7702	7.9522	0.600 ✓	1	Bolt Shear
T7	100	Leg	A325N	0.750	4	11.8963	29.8206	0.399 ✓	1	Bolt Tension
		Diagonal	A325X	0.500	1	6.0113	9.7193	0.618 ✓	1	Bolt Shear
T8	80	Secondary Horizontal	A325N	0.500	2	0.7008	7.9522	0.088 ✓	1	Bolt Shear
		Leg	A325N	0.875	4	18.9936	40.5891	0.468 ✓	1	Bolt Tension
T9	73.333	Diagonal	A325X	0.500	1	6.1316	9.7193	0.631 ✓	1	Bolt Shear
		Secondary Horizontal	A325N	0.500	2	0.7968	7.9522	0.100 ✓	1	Bolt Shear
T10	66.667	Diagonal	A325N	0.500	1	6.4098	7.9522	0.806 ✓	1	Bolt Shear
		Secondary Horizontal	A325N	0.500	2	0.9763	7.9522	0.123 ✓	1	Bolt Shear
T11	60	Secondary Horizontal	A325N	0.875	4	26.2560	40.5891	0.647 ✓	1	Bolt Tension
		Leg	A325N	0.625	1	6.9781	10.4400	0.668 ✓	1	Member Bearing
		Diagonal	A325N	0.500	2	1.0853	7.9522	0.136 ✓	1	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable		Allowable Ratio	Criteria
T12	50	Horizontal Diagonal	A325N	0.625	1	7.5926	12.4252	0.611 ✓	1	Bolt Shear	
		Secondary Horizontal Leg	A325N	0.500	2	1.2138	7.9522	0.153 ✓	1	Bolt Shear	
T13	40	Diagonal	A325N	1.000	4	32.6452	53.0144	0.616 ✓	1	Bolt Tension	
		Secondary Horizontal Leg	A325N	0.625	1	7.6513	12.4252	0.616 ✓	1	Bolt Shear	
T14	30	Diagonal	A325N	0.500	2	1.3425	7.9522	0.169 ✓	1	Bolt Shear	
		Horizontal	A325N	0.625	1	8.8521	12.4252	0.712 ✓	1	Bolt Shear	
T15	20	Leg	A325N	1.000	4	38.5425	53.0144	0.727 ✓	1	Bolt Tension	
		Diagonal	A325X	0.625	1	7.3527	10.4400	0.704 ✓	1	Member Bearing	
T16	15	Diagonal	A325X	0.625	1	7.1890	10.4400	0.689 ✓	1	Member Bearing	
T17	10	Diagonal	A325X	0.625	1	7.8506	13.0500	0.602 ✓	1	Member Bearing	

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio P_u / ϕP_n	
T1	152 - 140	Pipe 2.375" x 0.154" (2 STD)	12.00	4.00	61.0 K=1.00	1.075	-5.2053	36.8422	0.141 ✓	1
T2	140 - 135	P2.875"x0.203" (2.5 STD)	5.01	5.01	63.4 K=1.00	1.704	-7.8701	57.1341	0.138 ✓	1
T3	135 - 130	P2.875"x0.203" (2.5 STD)	5.01	5.01	63.4 K=1.00	1.704	-12.0212	57.1341	0.210 ✓	1
T4	130 - 125	P2.875"x0.203" (2.5 STD)	5.01	5.01	63.4 K=1.00	1.704	-16.3260	57.1341	0.286 ✓	1
T5	125 - 120	P2.875"x0.203" (2.5 STD)	5.01	5.01	63.4 K=1.00	1.704	-21.9001	57.1364	0.383 ✓	1
T6	120 - 100	Pipe 2.875" x 0.276" (2.5 XS)	20.03	6.68	86.7 K=1.00	2.254	-48.4245	58.5119	0.828 ✓	1
T7	100 - 80	PJF 42919-0011 - Pipe 2.875 x 0.276 w/ 3.5x3 half sleeve	20.03	3.43	47.4 K=1.00	3.259	-80.8189	124.4500	0.649 ✓	1
T8	80 - 73.333	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	6.68	3.43	39.0 K=1.00	3.980	-91.8961	160.2660	0.573 ✓	1
T9	73.333 - 66.667	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	6.68	3.42	38.9 K=1.00	3.980	-102.1010	160.3010	0.637 ✓	1
T10	66.667 - 60	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	6.68	3.42	38.9 K=1.00	3.980	-112.5930	160.3360	0.702 ✓	1
T11	60 - 50	Pipe 4.5" x 0.337" (4 XS)	10.02	5.17	42.1 K=1.00	4.407	-125.1600	174.2770	0.718 ✓	1
T12	50 - 40	Pipe 4.5" x 0.337" (4 XS)	10.02	5.17	42.0 K=1.00	4.407	-139.9710	174.3530	0.803 ✓	1
T13	40 - 30	PJF 42919-0011 - Pipe 4.5 x .337 w/ 5 x 0.25 half	10.02	5.16	45.4 K=1.00	5.651	-154.8240	218.7270	0.708 ✓	1

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	ϕP _n	Ratio P _u / ϕP _n
	ft		ft	ft		in ²	K	K	
T14	30 - 20	sleeve (60" Lu) PJF 42919-0011 - Pipe 4.5 x .337 w/ 5 x 0.25 half sleeve (30" Lu)	10.02	2.50	22.9 K=1.00	5.651	-168.6900	244.7280	0.689 ¹
T15	20 - 15	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ 6 x 0.25 half sleeve	5.01	2.50	67.4 K=4.00	5.770	-182.7830	186.1790	0.982 ¹
T16	15 - 10	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (60" Lu)	5.01	5.01	57.3 K=2.00	6.514	-184.0470	230.6210	0.798 ¹
T17	10 - 0	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (120" Lu)	10.02	10.02	57.3 K=1.00	6.514	-197.3530	230.6190	0.856 ¹

¹ P_u / ϕP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	ϕP _n	Ratio P _u / ϕP _n
	ft		ft	ft		in ²	K	K	
T1	152 - 140	L 1.5 x 1.5 x 1/8	7.68	3.62	146.8 K=1.00	0.359	-1.3636	3.7688	0.362 ¹
T2	140 - 135	L 1.5 x 1.5 x 3/16	8.45	4.13	169.0 K=1.00	0.527	-1.3253	4.1693	0.318 ¹
T3	135 - 130	L 1.5 x 1.5 x 3/16	8.87	4.32	176.9 K=1.00	0.527	-1.8261	3.8068	0.480 ¹
T4	130 - 125	L 1.5 x 1.5 x 1/4	9.30	4.54	186.5 K=1.00	0.688	-2.9111	4.4676	0.652 ¹
T5	125 - 120	L 1.5 x 1.5 x 1/4	9.73	4.75	195.1 K=1.00	0.688	-2.6393	4.0783	0.647 ¹
T6	120 - 100	L 2 x 2 x 1/4	12.26	6.07	186.3 K=1.00	0.938	-4.5847	6.1034	0.751 ¹
T7	100 - 80	L 2.5 x 2.5 x 1/4	14.01	7.03	171.9 K=1.00	1.190	-6.0113	9.1018	0.660 ¹
T8	80 - 73.333	L 2.5 x 2.5 x 1/4	14.61	7.30	178.5 K=1.00	1.190	-6.1316	8.4358	0.727 ¹
T9	73.333 - 66.667	L 2.5 x 2.5 x 5/16	15.21	7.61	186.7 K=1.00	1.460	-6.3681	9.4608	0.673 ¹
T10	66.667 - 60	L 2.5 x 2.5 x 5/16	15.82	7.92	194.3 K=1.00	1.460	-6.4098	8.7408	0.733 ¹
T11	60 - 50	L 3 x 3 x 1/4	18.19	9.17	186.0 K=1.00	1.440	-7.3175	9.4069	0.778 ¹
T12	50 - 40	L 3 x 3 x 5/16	19.05	9.60	195.7 K=1.00	1.780	-7.5926	10.5040	0.723 ¹
T13	40 - 30	L 3 x 3 x 3/8	19.92	10.01	204.7 K=1.00	2.110	-7.6513	11.3814	0.672 ¹
T14	30 - 20	KL/R > 200 (C) - 178 L 3 x 3 x 5/16	10.63	10.39	135.2 K=1.00	1.780	-8.8521	21.9905	0.403 ¹
T15	20 - 15	L 3.5 x 3.5 x 1/4	10.63	10.10	115.6 K=1.04	1.690	-7.3168	27.0914	0.270 ¹
T16	15 - 10	L 3.5 x 3.5 x 1/4	11.08	10.48	181.3 K=1.00	1.690	-7.3903	11.6188	0.636 ¹
T17	10 - 0	L 3.5 x 3.5 x 5/16	22.61	11.11	193.3 K=1.00	2.090	-8.7421	12.6397	0.692 ¹

¹ $P_u / \phi P_n$ controls**Horizontal Design Data (Compression)**

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	K	K	
T14	30 - 20	L 3 x 3 x 1/4	18.24	13.37	180.6 K=0.50	1.440	-2.9256	9.9693	0.293 ¹ ✓

¹ $P_u / \phi P_n$ controls**Secondary Horizontal Design Data (Compression)**

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	K	K	
T7	100 - 80	L 2.5 x 2.5 x 1/4	12.31	6.01	146.9 K=1.00	1.190	-1.4016	12.4591	0.112 ¹ ✓
T8	80 - 73.333	L 2.5 x 2.5 x 1/4	12.99	6.33	154.6 K=1.00	1.190	-1.5937	11.2450	0.142 ¹ ✓
T9	73.333 - 66.667	L 2.5 x 2.5 x 1/4	13.66	6.66	162.9 K=1.00	1.190	-1.7707	10.1345	0.175 ¹ ✓
T10	66.667 - 60	L 2.5 x 2.5 x 1/4	14.34	7.00	171.2 K=1.00	1.190	-1.9527	9.1740	0.213 ¹ ✓
T11	60 - 50	L 2.5 x 2.5 x 1/4	15.18	7.40	180.9 K=1.00	1.190	-2.1706	8.2155	0.264 ¹ ✓
T12	50 - 40	L 3 x 3 x 1/4	16.19	7.91	160.3 K=1.00	1.440	-2.4275	12.6557	0.192 ¹ ✓
T13	40 - 30	L 3 x 3 x 1/4	17.21	8.40	170.2 K=1.00	1.440	-2.6850	11.2295	0.239 ¹ ✓

¹ $P_u / \phi P_n$ controls**Top Girt Design Data (Compression)**

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	K	K	
T1	152 - 140	L 2 x 2 x 1/8	6.52	6.11	184.5 K=1.00	0.484	-0.1238	3.2130	0.039 ¹ ✓
T2	140 - 135	L 2 x 2 x 1/8	6.56	6.11	184.5 K=1.00	0.484	-0.1365	3.2148	0.042 ¹ ✓

¹ $P_u / \phi P_n$ controls**Redundant Horizontal (1) Design Data (Compression)**

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	K	K	
T14	30 - 20	L 2 x 2 x 1/4	4.56	4.35	133.6	0.938	-2.9256	11.8833	0.246 ¹

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	ϕP _n	Ratio P _u / ϕP _n
	ft		ft	ft		in ²	K	K	
T15	20 - 15	L 2 x 2 x 1/4	4.81	4.56	K=1.00 140.1 K=1.00	0.938	-3.4323	10.7957	0.318 ¹

¹ P_u / ϕP_n controls

Redundant Diagonal (1) Design Data (Compression)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	ϕP _n	Ratio P _u / ϕP _n
	ft		ft	ft		in ²	K	K	
T14	30 - 20	L 2 x 2 x 1/4	5.31	5.07	155.7 K=1.00	0.938	-1.7044	8.7390	0.195 ¹
T15	20 - 15	L 2 x 2 x 1/4	5.54	5.26	161.4 K=1.00	0.938	-1.8360	8.1340	0.226 ¹

¹ P_u / ϕP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	ϕP _n	Ratio P _u / ϕP _n
	ft		ft	ft		in ²	K	K	
T1	152 - 140	Pipe 2.375" x 0.154" (2 STD)	12.00	4.00	61.0	1.075	3.3138	48.3539	0.069 ¹
T2	140 - 135	P2.875"x0.203" (2.5 STD)	5.01	5.01	63.4	1.704	5.6881	76.6823	0.074 ¹
T3	135 - 130	P2.875"x0.203" (2.5 STD)	5.01	5.01	63.4	1.704	8.4617	76.6823	0.110 ¹
T4	130 - 125	P2.875"x0.203" (2.5 STD)	5.01	5.01	63.4	1.704	11.8201	76.6823	0.154 ¹
T5	125 - 120	P2.875"x0.203" (2.5 STD)	5.01	5.01	63.4	1.704	16.7747	76.6823	0.219 ¹
T6	120 - 100	Pipe 2.875" x 0.276" (2.5 XS)	20.03	6.68	86.7	2.254	39.1363	101.4090	0.386 ¹
T7	100 - 80	PJF 42919-0011 - Pipe 2.875 x 0.276 w/ 3.5x.3 half sleeve	20.03	3.25	44.9	3.259	66.3698	146.6550	0.453 ¹
T8	80 - 73.333	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	6.68	3.25	37.0	3.980	75.9743	179.1000	0.424 ¹
T9	73.333 - 66.667	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	6.68	3.26	37.1	3.980	84.9318	179.1000	0.474 ¹
T10	66.667 - 60	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	6.68	3.26	37.1	3.980	94.1090	179.1000	0.525 ¹
T11	60 - 50	Pipe 4.5" x 0.337" (4 XS)	10.02	4.84	39.3	4.407	105.0240	198.3350	0.530 ¹
T12	50 - 40	Pipe 4.5" x 0.337" (4 XS)	10.02	4.85	39.4	4.407	117.9120	198.3350	0.595 ¹
T13	40 - 30	PJF 42919-0011 - Pipe	10.02	4.86	42.8	5.651	130.5810	254.2950	0.514 ¹

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	ϕP _n	Ratio P _u / ϕP _n
	ft		ft	ft		in ²	K	K	
T14	30 - 20	4.5 x .337 w/ 5 x 0.25 half sleeve (60" Lu) PJF 42919-0011 - Pipe	10.02	2.50	22.9	5.651	142.2430	254.2950	0.559 ¹
T15	20 - 15	4.5 x .337 w/ 5 x 0.25 half sleeve (30" Lu) PJF 42919-0011 - Pipe	5.01	2.50	16.9	5.770	154.1700	259.6500	0.594 ¹
T16	15 - 10	5.5 x 0.259 w/ 6 x 0.25 half sleeve PJF 42919-0011 - Pipe	5.01	5.01	28.6	6.514	154.8630	293.1300	0.528 ¹
T17	10 - 0	5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (60" Lu) PJF 42919-0011 - Pipe	10.02	10.02	57.3	6.514	166.4100	293.1300	0.568 ¹
		5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (120" Lu)							

¹ P_u / ϕP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	ϕP _n	Ratio P _u / ϕP _n
	ft		ft	ft		in ²	K	K	
T1	152 - 140	L 1.5 x 1.5 x 1/8	7.68	3.62	96.1	0.211	1.3474	9.1758	0.147 ¹
T2	140 - 135	L 1.5 x 1.5 x 3/16	8.45	4.13	111.3	0.308	1.2939	13.3814	0.097 ¹
T3	135 - 130	L 1.5 x 1.5 x 3/16	8.87	4.32	116.8	0.308	1.7938	13.3814	0.134 ¹
T4	130 - 125	L 1.5 x 1.5 x 1/4	9.30	4.54	124.5	0.398	2.8282	17.3320	0.163 ¹
T5	125 - 120	L 1.5 x 1.5 x 1/4	9.73	4.75	130.2	0.398	2.7108	17.3320	0.156 ¹
T6	120 - 100	L 2 x 2 x 1/4	11.70	5.79	116.5	0.586	4.7670	25.5046	0.187 ¹
T7	100 - 80	L 2.5 x 2.5 x 1/4	14.01	7.03	109.7	0.775	5.7860	33.7261	0.172 ¹
T8	80 - 73.333	L 2.5 x 2.5 x 1/4	14.61	7.30	114.0	0.775	5.9536	33.7261	0.177 ¹
T9	73.333 - 66.667	L 2.5 x 2.5 x 5/16	15.21	7.61	120.0	0.949	6.0376	41.2604	0.146 ¹
T10	66.667 - 60	L 2.5 x 2.5 x 5/16	15.82	7.92	124.8	0.949	6.2210	41.2604	0.151 ¹
T11	60 - 50	L 3 x 3 x 1/4	18.19	9.17	118.4	0.939	6.9781	40.8628	0.171 ¹
T12	50 - 40	L 3 x 3 x 5/16	19.05	9.60	125.0	1.159	7.0282	50.4260	0.139 ¹
T13	40 - 30	L 3 x 3 x 3/8	19.92	10.01	131.6	1.372	7.3117	59.6630	0.123 ¹
T14	30 - 20	L 3 x 3 x 5/16	10.63	10.39	135.2	1.159	7.8860	50.4260	0.156 ¹
T15	20 - 15	L 3.5 x 3.5 x 1/4	10.63	10.10	113.9	1.127	7.3527	49.0191	0.150 ¹
T16	15 - 10	L 3.5 x 3.5 x 1/4	11.08	10.48	118.1	1.127	7.1890	49.0191	0.147 ¹
T17	10 - 0	L 3.5 x 3.5 x 5/16	22.61	11.11	124.8	1.392	7.8506	60.5398	0.130 ¹

¹ $P_u / \phi P_n$ controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in ²	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T14	30 - 20	L 3 x 3 x 1/4	18.24	13.37	172.5	0.963	2.9256	41.8823	0.070 ¹ ✓

¹ $P_u / \phi P_n$ controls

Secondary Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in ²	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T7	100 - 80	L 2.5 x 2.5 x 1/4	12.31	6.01	187.6	0.775	1.4016	33.7261	0.042 ¹ ✓
T8	80 - 73.333	L 2.5 x 2.5 x 1/4	12.99	6.33	197.4	0.775	1.5937	33.7261	0.047 ¹ ✓
T9	73.333 - 66.667	L 2.5 x 2.5 x 1/4	13.66	6.66	208.0	0.775	1.7707	33.7261	0.053 ¹ ✓
T10	66.667 - 60	L 2.5 x 2.5 x 1/4	14.34	7.00	218.6	0.775	1.9527	33.7261	0.058 ¹ ✓
T11	60 - 50	L 2.5 x 2.5 x 1/4	15.18	7.40	231.0	0.775	2.1706	33.7261	0.064 ¹ ✓
T12	50 - 40	L 3 x 3 x 1/4	16.19	7.91	204.1	0.963	2.4275	41.8823	0.058 ¹ ✓
T13	40 - 30	L 3 x 3 x 1/4	17.21	8.40	216.7	0.963	2.6850	41.8823	0.064 ¹ ✓

¹ $P_u / \phi P_n$ controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in ²	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	152 - 140	L 2 x 2 x 1/8	6.52	6.11	121.1	0.305	0.1116	13.2539	0.008 ¹ ✓
T2	140 - 135	L 2 x 2 x 1/8	6.56	6.11	121.1	0.305	0.1365	13.2539	0.010 ¹ ✓

¹ $P_u / \phi P_n$ controls

Redundant Horizontal (1) Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in ²	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T14	30 - 20	L 2 x 2 x 1/4	4.56	4.35	85.7	0.938	2.9256	30.3912	0.096 ¹

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	ϕP _n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	K	K	
T15	20 - 15	L 2 x 2 x 1/4	4.81	4.56	90.0	0.938	3.4323	30.3912	0.113 ¹ ✓

¹ P_u / ϕP_n controls

Redundant Diagonal (1) Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	ϕP _n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	K	K	
T14	30 - 20	L 2 x 2 x 1/4	5.31	5.07	100.0	0.938	1.7044	30.3912	0.056 ¹ ✓
T15	20 - 15	L 2 x 2 x 1/4	5.54	5.26	103.6	0.938	1.8360	30.3912	0.060 ¹ ✓

¹ P_u / ϕP_n controls

Section Capacity Table

Section No.	Elevation	Component Type	Size	Critical Element	P K	ϕP _{allow} K	% Capacity	Pass Fail
	ft							
T1	152 - 140	Leg	Pipe 2.375" x 0.154" (2 STD)	3	-5.2053	36.8422	14.1	Pass
T2	140 - 135	Leg	P2.875"x0.203" (2.5 STD)	27	-7.8701	57.1341	13.8	Pass
T3	135 - 130	Leg	P2.875"x0.203" (2.5 STD)	39	-12.0212	57.1341	21.0	Pass
T4	130 - 125	Leg	P2.875"x0.203" (2.5 STD)	48	-16.3260	57.1341	28.6	Pass
T5	125 - 120	Leg	P2.875"x0.203" (2.5 STD)	57	-21.9001	57.1364	38.3	Pass
T6	120 - 100	Leg	Pipe 2.875" x 0.276" (2.5 XS)	64	-48.4245	58.5119	82.8	Pass
T7	100 - 80	Leg	PJF 42919-0011 - Pipe 2.875 x 0.276 w/ 3.5x.3 half sleeve	85	-80.8189	124.4500	64.9	Pass
T8	80 - 73.333	Leg	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	115	-91.8961	160.2660	57.3	Pass
T9	73.333 - 66.667	Leg	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	127	-102.1010	160.3010	63.7	Pass
T10	66.667 - 60	Leg	PJF 42919-0011 - Pipe 3.5 x 0.3 w/ 4 x 0.25 half sleeve	139	-112.5930	160.3360	70.2	Pass
T11	60 - 50	Leg	Pipe 4.5" x 0.337" (4 XS)	151	-125.1600	174.2770	71.8	Pass
T12	50 - 40	Leg	Pipe 4.5" x 0.337" (4 XS)	163	-139.9710	174.3530	80.3	Pass
T13	40 - 30	Leg	PJF 42919-0011 - Pipe 4.5 x .337 w/ 5 x 0.25 half sleeve (60" Lu)	175	-154.8240	218.7270	70.8	Pass
T14	30 - 20	Leg	PJF 42919-0011 - Pipe 4.5 x .337 w/ 5 x 0.25 half sleeve (30" Lu)	187	-168.6900	244.7280	68.9	Pass
T15	20 - 15	Leg	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ 6 x 0.25 half sleeve	229	-182.7830	186.1790	98.2	Pass
T16	15 - 10	Leg	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (60" Lu)	253	-184.0470	230.6210	79.8	Pass
T17	10 - 0	Leg	PJF 42919-0011 - Pipe 5.5 x 0.259 w/ (3) 1.5 x 0.5 bar (120" Lu)	262	-197.3530	230.6190	85.6	Pass
T1	152 - 140	Diagonal	L 1.5 x 1.5 x 1/8	11	-1.3636	3.7688	36.2	43.1 (b) Pass
T2	140 - 135	Diagonal	L 1.5 x 1.5 x 3/16	31	-1.3253	4.1693	31.8	Pass
T3	135 - 130	Diagonal	L 1.5 x 1.5 x 3/16	40	-1.8261	3.8068	48.0	Pass
T4	130 - 125	Diagonal	L 1.5 x 1.5 x 1/4	49	-2.9111	4.4676	65.2	Pass
T5	125 - 120	Diagonal	L 1.5 x 1.5 x 1/4	58	-2.6393	4.0783	64.7	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail	
T6	120 - 100	Diagonal	L 2 x 2 x 1/4	67	-4.5847	6.1034	75.1	Pass	
T7	100 - 80	Diagonal	L 2.5 x 2.5 x 1/4	88	-6.0113	9.1018	66.0	Pass	
T8	80 - 73.333	Diagonal	L 2.5 x 2.5 x 1/4	118	-6.1316	8.4358	72.7	Pass	
T9	73.333 - 66.667	Diagonal	L 2.5 x 2.5 x 5/16	131	-6.3681	9.4608	67.3	Pass	
T10	66.667 - 60	Diagonal	L 2.5 x 2.5 x 5/16	142	-6.4098	8.7408	73.3	Pass	
							80.6 (b)		
T11	60 - 50	Diagonal	L 3 x 3 x 1/4	154	-7.3175	9.4069	77.8	Pass	
T12	50 - 40	Diagonal	L 3 x 3 x 5/16	166	-7.5926	10.5040	72.3	Pass	
T13	40 - 30	Diagonal	L 3 x 3 x 3/8	178	-7.6513	11.3814	67.2	Pass	
T14	30 - 20	Diagonal	L 3 x 3 x 5/16	191	-8.8521	21.9905	40.3	Pass	
							71.2 (b)		
T15	20 - 15	Diagonal	L 3.5 x 3.5 x 1/4	236	-7.3168	27.0914	27.0	Pass	
T16	15 - 10	Diagonal	L 3.5 x 3.5 x 1/4	256	-7.3903	11.6188	63.6	Pass	
							68.9 (b)		
T17	10 - 0	Diagonal	L 3.5 x 3.5 x 5/16	265	-8.7421	12.6397	69.2	Pass	
T14	30 - 20	Horizontal	L 3 x 3 x 1/4	204	-2.9256	9.9693	29.3	Pass	
T7	100 - 80	Secondary Horizontal	L 2.5 x 2.5 x 1/4	96	-1.4016	12.4591	11.2	Pass	
T8	80 - 73.333	Secondary Horizontal	L 2.5 x 2.5 x 1/4	126	-1.5937	11.2450	14.2	Pass	
T9	73.333 - 66.667	Secondary Horizontal	L 2.5 x 2.5 x 1/4	138	-1.7707	10.1345	17.5	Pass	
T10	66.667 - 60	Secondary Horizontal	L 2.5 x 2.5 x 1/4	150	-1.9527	9.1740	21.3	Pass	
T11	60 - 50	Secondary Horizontal	L 2.5 x 2.5 x 1/4	162	-2.1706	8.2155	26.4	Pass	
T12	50 - 40	Secondary Horizontal	L 3 x 3 x 1/4	174	-2.4275	12.6557	19.2	Pass	
T13	40 - 30	Secondary Horizontal	L 3 x 3 x 1/4	186	-2.6850	11.2295	23.9	Pass	
T1	152 - 140	Top Girt	L 2 x 2 x 1/8	5	-0.1238	3.2130	3.9	Pass	
T2	140 - 135	Top Girt	L 2 x 2 x 1/8	29	-0.1365	3.2148	4.2	Pass	
T14	30 - 20	Redund Horz 1 Bracing	L 2 x 2 x 1/4	192	-2.9256	11.8833	24.6	Pass	
T15	20 - 15	Redund Horz 1 Bracing	L 2 x 2 x 1/4	234	-3.4323	10.7957	31.8	Pass	
T14	30 - 20	Redund Diag 1 Bracing	L 2 x 2 x 1/4	213	-1.7044	8.7390	19.5	Pass	
T15	20 - 15	Redund Diag 1 Bracing	L 2 x 2 x 1/4	252	-1.8360	8.1340	22.6	Pass	
							Summary		
							Leg (T15)	98.2	Pass
							Diagonal (T10)	80.6	Pass
							Horizontal (T14)	29.3	Pass
							Secondary Horizontal (T11)	26.4	Pass
							Top Girt (T2)	4.2	Pass
							Redund Horz 1 Bracing (T15)	31.8	Pass
							Redund Diag 1 Bracing (T15)	22.6	Pass
							Bolt Checks	80.6	Pass
							RATING =	98.2	Pass

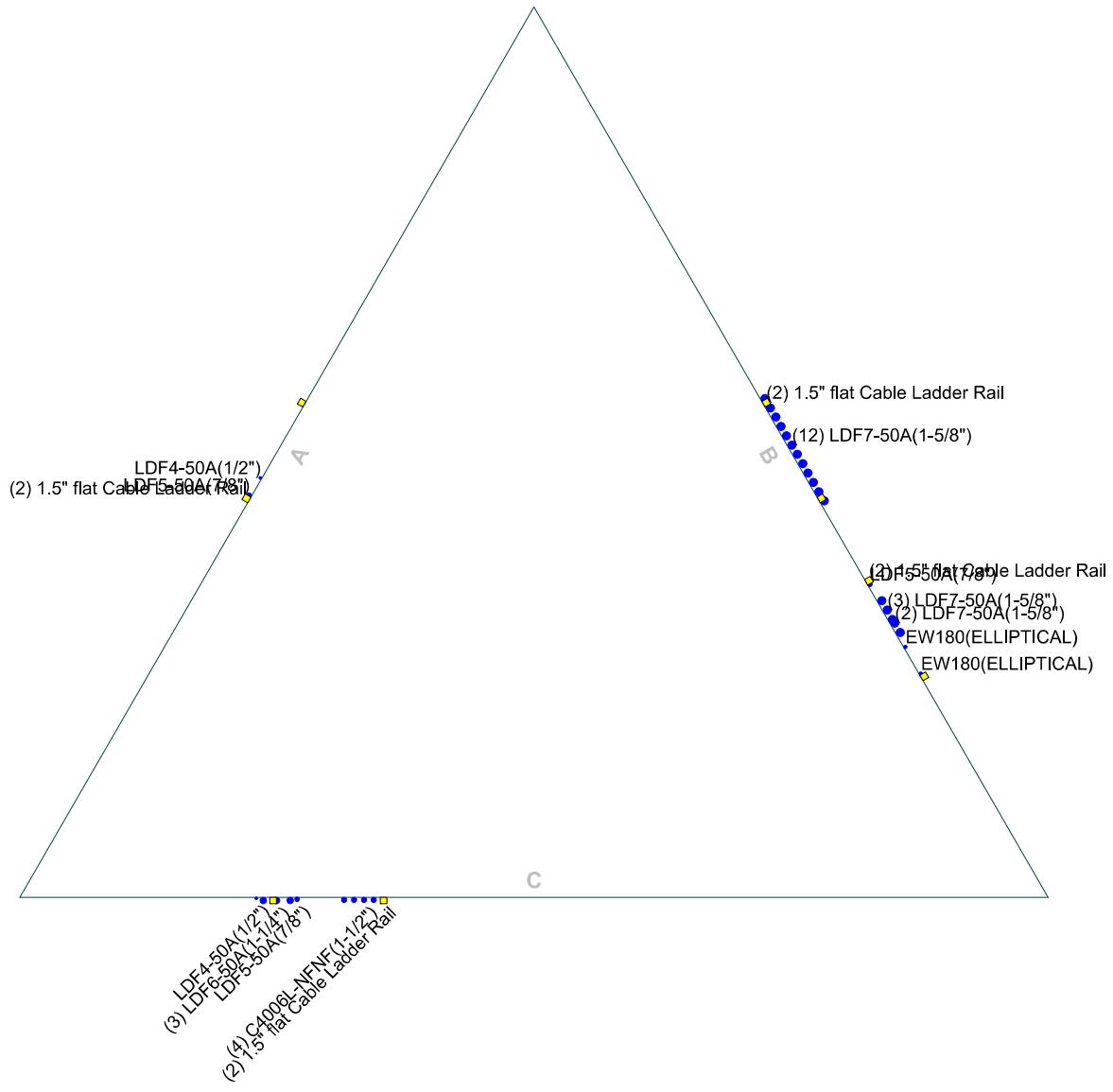
APPENDIX B
BASE LEVEL DRAWING

Feed Line Plan

10'

Round ————— Flat ————— App In Face ————— App Out Face

Section @ 10'



APPENDIX C
ADDITIONAL CALCULATIONS

Self-Support Tower Anchor Rod Capacity - TIA-G

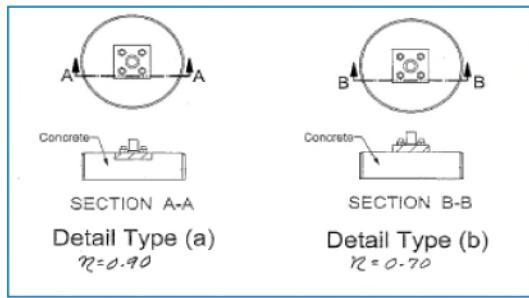
Loads

Compression :	<u>205</u>	kips	Tension :	<u>172</u>	kips
Comp. Shear :	<u>25</u>	kips	Ten. Shear :	<u>21</u>	kips

Code: TIA-G
 Maximum Ratio: 1.00

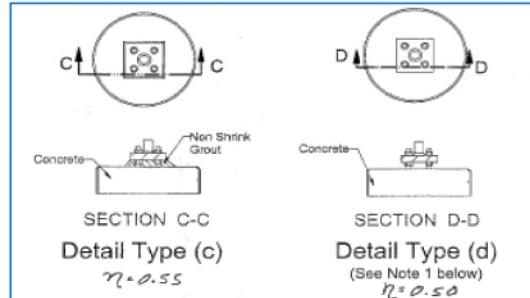
Existing Anchor Rods

Anchor Rod Condition (n) :	<u>0.55</u>	
Anchor Rod ø :	<u>1</u>	in
Anchor Rod Quantity :	<u>4</u>	
Anchor Rod Grade :	<u>F1554 Gr. 105</u>	
F_y :	105 ksi	
F_u :	125 ksi	
Threads per Inch	8	
Net Tensile Area	0.61 in ²	
ϕ_t :	0.80	
$\phi_t R_{nt}$:	242.30 kip	
Anchor Rod Ratio :	<u>0.867</u>	



Detail Type (a)
 $\eta_c = 0.90$

Detail Type (b)
 $\eta_c = 0.70$



Detail Type (c)
 $\eta_c = 0.55$

Detail Type (d)
 (See Note 1 below)
 $\eta_c = 0.50$

DRILLED PIER SOIL AND STEEL ANALYSIS - TIA-222-G

Factored Base Reactions from RISA

Moment, Mu =	Comp. (+)	Tension (-)	
Shear, Vu =	25.0	21.0	kips
Axial Load, Pu =	205.0	-172.0	kips
OTMu =	12.5	10.5	k-ft @ Ground

Safety Factors / Load Factors / ϕ Factors

Tower Type =	Self-Supported
ACI Code =	ACI 318-08
Seismic Design Category =	B
Reference Standard =	TIA-222-G
Use 1.3 Load Factor?	No
Load Factor =	1.00

Drilled Pier Parameters

Diameter =	4.5	ft
Height Above Grade =	0.5	ft
Depth Below Grade =	21	ft
f'c =	4	ksi
ec =	0.003	in/in
L / D Ratio =	4.78	
Mat Ftdn. Cap Width =		ft
Mat Ftdn. Cap Length =		ft
Depth Below Grade =		ft

Safety Factor	ϕ Factor
2.00	0.75
2.00	0.75
2.00	0.75
1.25	

Steel Parameters

Number of Bars =	15	
Rebar Size =	#8	
Rebar Fy =	60	ksi
Rebar MOE =	29000	ksi
Tie Size =	#4	
Side Clear Cover to Ties =	3	in

Soil Parameters

Water Table Depth =	8.00	ft
Depth to Ignore Soil =	5.00	ft
Depth to Full Cohesion =	0	ft
Full Cohesion Starts at?*	Ground	

Above Full Cohesion Lateral Resistance = $4(Cohesion)(Dia)(H)$
 Below Full Cohesion Lateral Resistance = $8(Cohesion)(Dia)(H)$

Direct Embed Pole Shaft Parameters

Dia @ Grade =		in
Dia @ Depth Below Grade =		in
Number of Sides =		
Thickness =		in
Fy =		ksi
Backfill Condition =		

Maximum Capacity Ratios

Maximum Soil Ratio =	110.0%
Maximum Steel Ratio =	105.0%

*Note: The drilled pier foundation was analyzed using the methodology in the software 'PLS-Caisson' (Version 8.10, or newer, by Power Line Systems, Inc.). Per the methods in PLS-Caisson, the soil reactions of cohesive soils are calculated using 8CD independent of the depth of the soil layer. The depth of soil to be ignored at the top of the drilled pier is based the recommendations of the site specific geotechnical report. In the absence of any recommendations, the frost depth at the site or one half of the drilled pier diameter (whichever is greater) shall be ignored.

Define Soil Layers

Note: Cohesion = Undrained Shear Strength = Unconfined Compressive Strength / 2

Layer	Thickness ft	Unit Weight pcf	Cohesion psf	Friction Angle degrees	Soil Type	Ultimate End Bearing psf	Comp. Ult. Skin Friction psf	Tension Ult. Skin Friction psf	Depth ft
1	5	120	0	0	Sand	0	0	0	5
2	3	120	0	30	Sand	0	820	820	8
3	5.5	120	0	30	Sand	0	820	820	13.5
4	7.5	130	0	36	Sand	10000	820	820	21
5									
6									
7									
8									
9									
10									
11									
12									

Soil Results: Overturning

Depth to COR =	16.70	ft, from Grade	Shear, Vu =	25.00	kips
Bending Moment, Mu =	429.98	k-ft, from COR	Resisting Shear, ΦV_n =	155.92	kips
Resisting Moment, ΦM_n =	2681.72	k-ft, from COR			

MOMENT RATIO = 16.0% OK

SHEAR RATIO = 16.0% OK

Soil Results: Uplift

Uplift, Tu =	172.00	kips
Uplift Capacity, ΦT_n =	173.66	kips

UPLIFT RATIO = 99.0% OK

Soil Results: Compression

Compression, Cu =	205.00	kips
Comp. Capacity, ΦC_n =	246.37	kips

COMPRESSION RATIO = 83.2% OK

Steel Results (ACI 318-08):

Minimum Steel Area =	7.63	sq in	Axial Load, Pu =	-108.29	kips @ 10.00 ft Below Grade
Actual Steel Area =	11.85	sq in	Moment, Mu =	179.93	k-ft @ 10.00 ft Below Grade
Axial, ΦP_n (min) =	-639.90	kips, Where $\Phi M_n = 0$ k-ft	Moment, ΦM_n =	1020.28	k-ft
Axial, ΦP_n (max) =	4397.88	kips, Where $\Phi M_n = 0$ k-ft	MOMENT RATIO = 17.6% OK		

**STANDARD CONDITIONS FOR FURNISHING OF PROFESSIONAL ENGINEERING SERVICES ON EXISTING
STRUCTURES BY PAUL J. FORD AND COMPANY**

- 1) Paul J. Ford and Company has not made a field inspection to verify the tower member sizes or the antenna/coax loading. If the existing conditions are not as represented on these drawings, we should be contacted immediately to evaluate the significance of the deviation.
- 2) No allowance was made for any damaged, missing, or rusted members. The analysis of this tower assumes that no physical deterioration has occurred in any of the structural components of the tower and that all the tower members have the same load carrying capacity as the day the tower was erected.
- 3) It is not possible to have all the detailed information to perform a thorough analysis of every structural sub-component of an existing tower. The structural analysis by Paul J. Ford and Company verifies the adequacy of the main structural members of the tower. Paul J. Ford and Company provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc.
- 4) This tower has been analyzed according to the minimum design wind loads recommended by the Telecommunications Industry Association Standard ANSI/TIA-222-G. If the owner or local or state agencies require a higher design wind load, Paul J. Ford and Company should be made aware of this requirement.
- 5) The enclosed sketches are a schematic representation of the tower that we have analyzed. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions and for the proper fit and clearance in the field.
- 6) Miscellaneous items such as antenna mounts etc. have not been designed or detailed as a part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.



Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
(856) 797-0412
peter.albano@colliersengineering.com

Antenna Mount Analysis Report and PMI Requirements

Mount Analysis

SMART Tool Project #: 10050757
Maser Consulting Connecticut Project #: 21777625A

May 11, 2021

Site Information

Site ID:	468119-VZW / STAMFORD NW CT
Site Name:	STAMFORD NW CT
Carrier Name:	Verizon Wireless
Address:	366 Old Long Ridge Rd Stamford, Connecticut 06903
Latitude:	Fairfield County 41.1531111°
Longitude:	-73.59270278°

Structure Information

Tower Type:	152-ft Self Support
Mount Type:	12.50-ft Sector Frame

FUZE ID # 16272279

Analysis Results

Sector Frame: **44.3% Pass**

***Contractor PMI Requirements:

Included at the end of this MA report

Available & Submitted via portal at <https://pmi.vzwsmart.com>

Contractor - Please Review Specific Site PMI Requirements Upon Award

Requirements also Noted on Mount Modification Drawings

Requirements may also be Noted on A & E drawings

Report Prepared By: Erin Towler



Digitally signed by Justin Linette
Date: 2021.05.12 11:21:49-04'00'

Executive Summary:

The objective of this report is to determine the capacity of the antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

This analysis is inclusive of the mount structure only and does not address the structural capacity of the supporting structure. This mounting frame was not analyzed as an anchor attachment point for fall protection. All climbing activities are required to have a fall protection plan completed by a competent person.

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS, Site ID: 1477020, dated March 16, 2021
Construction Drawings	On Air Engineering LLC, Site ID: STAMFORD NW CT, dated February 17, 2020
Mount Manufacturer Drawings	Site Pro 1, Part #: VFA12-HD
Closeout Photos	Photos dated September 1, 2020

Analysis Criteria:

Codes and Standards: ANSI/TIA-222-H

Wind Parameters: Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 116 mph
Ice Wind Speed (3-sec. Gust): 50 mph
Design Ice Thickness: 1.00 in
Risk Category: II
Exposure Category: B
Topographic Category: 1
Topographic Feature Considered: N/A
Topographic Method: N/A
Ground Elevation Factor, K_e : 0.984

Seismic Parameters: S_s : 0.267
 S_1 : 0.059

Maintenance Parameters: Wind Speed (3-sec. Gust): 30 mph
Maintenance Live Load, L_v : 250 lbs.
Maintenance Live Load, L_m : 500 lbs.

Analysis Software: RISA-3D (V17)

Final Loading Configuration:

The following equipment has been considered for the analysis of the mounts:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
96.75	98.00	3	Samsung	MT6407-77A	Added
		6	Commscope	JAHH-65B-R3B	Retained
		3	Samsung	XXDWMM-12.5-65-8T-CBRS	
		3	Samsung	B5/B13 RRH-BR04C	
		3	Samsung	B2/B66A RRH-BR049	
		3	Commscope	CBC78T-DS-43-2X	
		3	RFS Celwave	DB-T1-6Z-8AB-0Z *	

* Equipment to be flush mounted directly to the Self Support. They are not mounted on mounts and are not included in this mount analysis.

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:

- | | |
|--------------------------------------|---------------------|
| o Channel, Solid Round, Angle, Plate | ASTM A36 (Gr. 36) |
| o HSS (Rectangular) | ASTM 500 (Gr. B-46) |
| o Pipe | ASTM A53 (Gr. B-35) |
| o Threaded Rod | F1554 (Gr. 36) |
| o Bolts | ASTM A325 |

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	28.4 %	Pass
Standoff Horizontal	11.7 %	Pass
Standoff Diagonal	8.7 %	Pass
Standoff Vertical	7.6 %	Pass
Standoff Plate	43.0 %	Pass
Tieback	9.9 %	Pass
Antenna Pipe	44.3 %	Pass
Mount Connection	15.2 %	Pass

Structure Rating – (Controlling Utilization of all Components)	44.3%
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Recommendation:

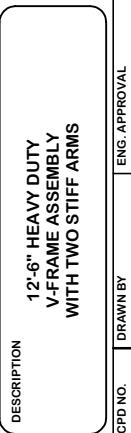
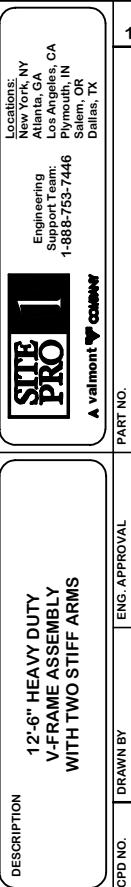
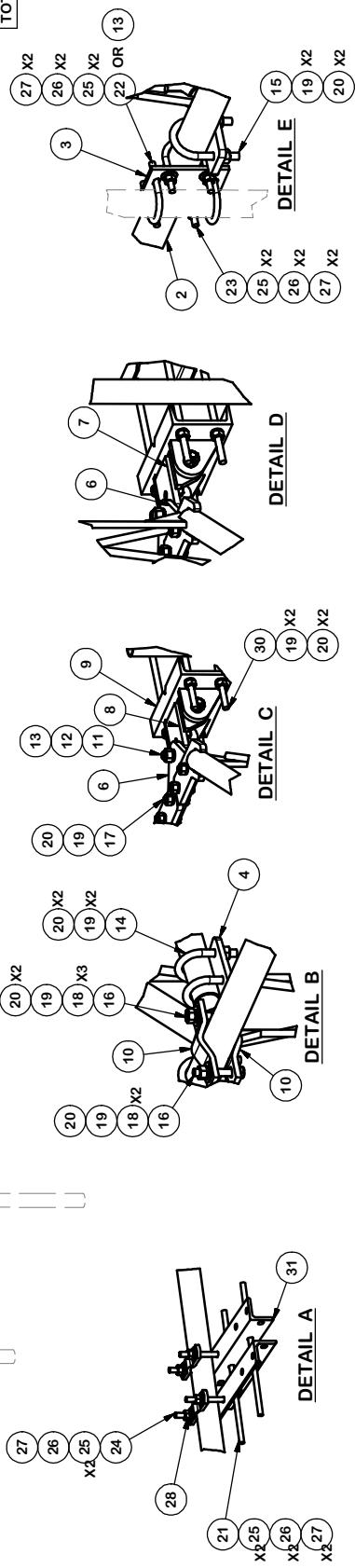
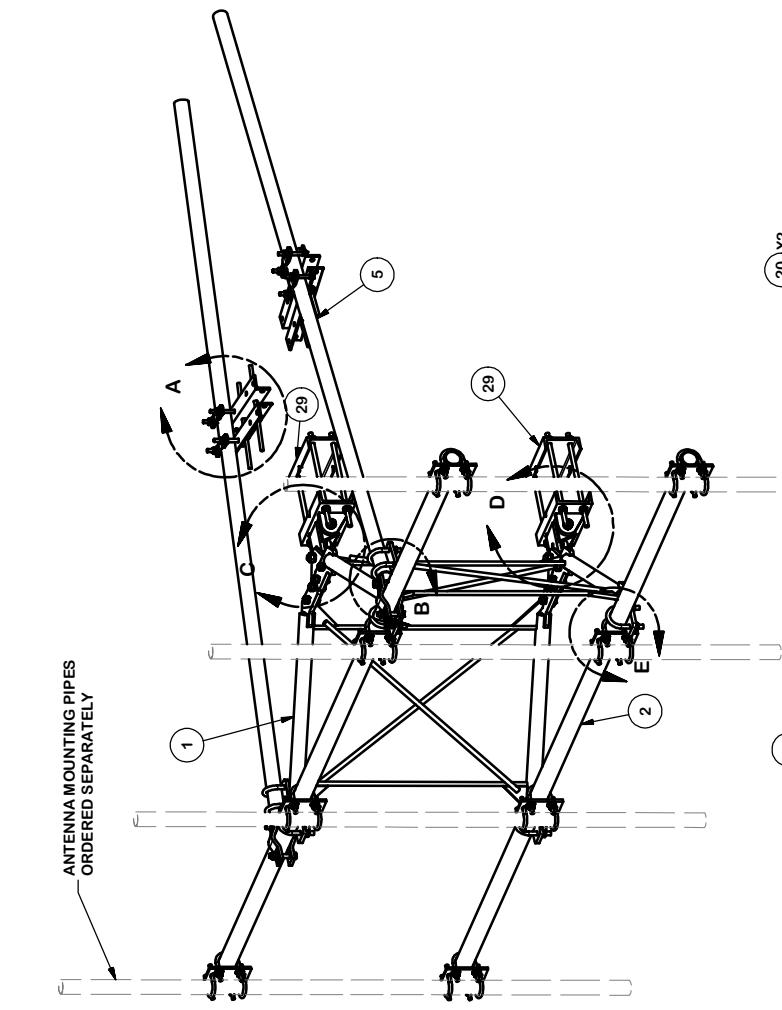
The existing mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

Attachments:

1. Mount Photos
2. Mount Manufacturer Drawings
3. Mount Geometry Verification Requirements
4. Analysis Calculations
5. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
6. Antenna Placement Diagrams
7. TIA Adoption and Wind Speed Usage Letter





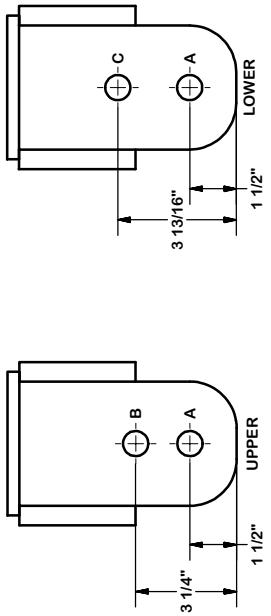
TOLERANCES ON DIMENSIONS

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES ($\pm 0.050"$) - NO CONING OF HOLES
LASER CUT EDGES AND HOLES ($\pm 0.010"$) - NO CONING OF HOLES
BENDS ARE ± 112 DEGREE
ALL OTHER MACHINING ($\pm 0.030"$)
ALL OTHER ASSEMBLY ($\pm 0.060"$)

PROPRIETARY NOTE.
THE INFORMATION AND TRADEMARKS CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VAMONT INDUSTRIES INC. AND IS A COMBINED TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VAMONT INDUSTRIES IS STRICTLY PROHIBITED.

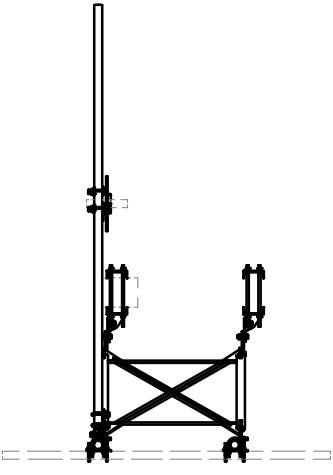
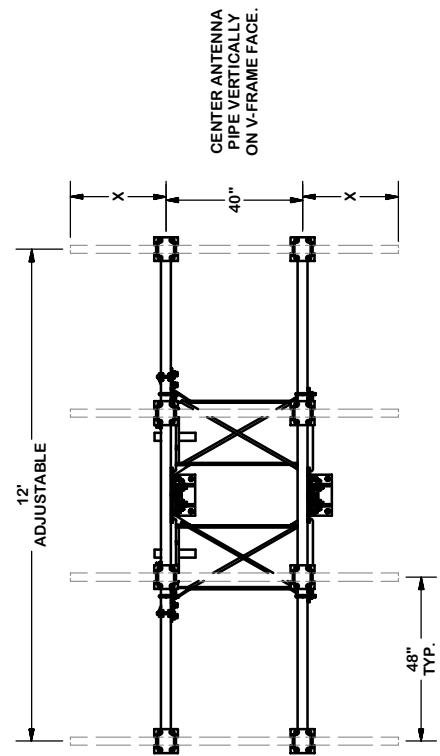
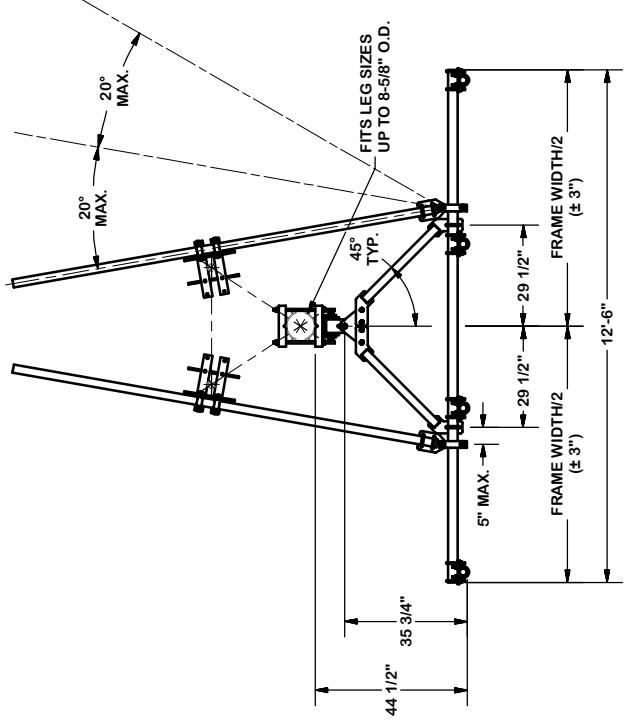
TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES ($\pm 0.030"$)
DRILLED AND GAS CUT HOLES ($\pm 0.030"$) - NO CONING OF HOLES
LASER CUT EDGES AND HOLES ($\pm 0.010"$) - NO CONING OF HOLES
BENDS ARE $\pm 1/2$ DEGREE
ALL OTHER MACHINING ($\pm 0.005"$)



NOTES:

1. USE HOLE "A" IN UPPER AND LOWER BRACKETS FOR STRAIGHT LEGS.
2. USE HOLE "A" IN UPPER BRACKET AND HOLE "C" IN LOWER BRACKET FOR 2" IN 20' TAPER LEGS (3.309")
3. USE HOLE "B" IN UPPER BRACKET AND HOLE "C" IN LOWER BRACKET FOR 6" IN 20' TAPER LEGS. (0.827")



TOLERANCE NOTES

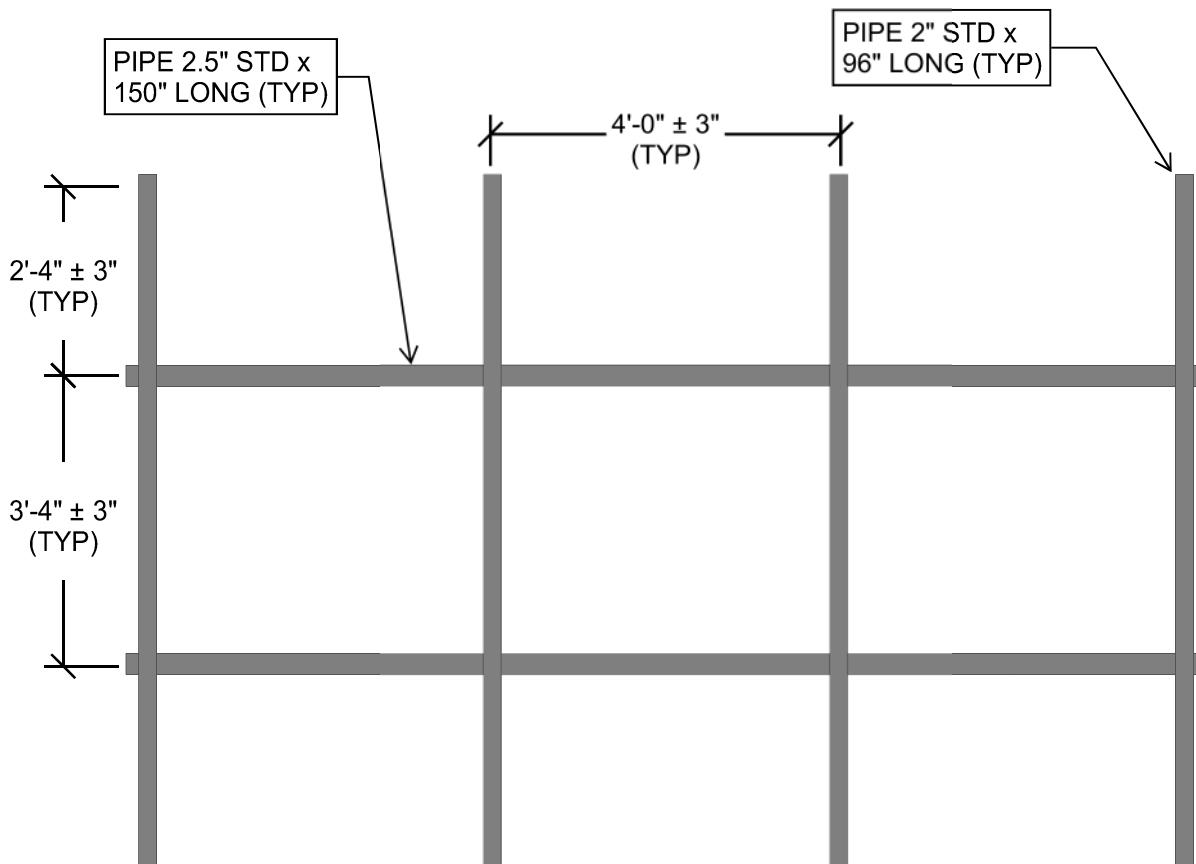
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 SAWED, SHEARED AND GAS CUT EDGES ($\pm 0.030"$)
 DRILLED AND GAS CUT HOLES ($\pm 0.030"$) - NO CONING OF HOLES
 LASER CUT EDGES AND HOLES ($\pm 0.010"$) - NO CONING OF HOLES
 BENDS ARE $\pm 1/2$ DEGREE
 ALL OTHER MACHINING ($\pm 0.030"$)
 ALL OTHER ASSEMBLY ($\pm 0.060"$)
PROPRIETARY NOTE:
 THE DATA AND TECHNIQUE CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT
 INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF
 VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

SITE PRO 1			
Engineering Support Team 1-888-753-7446			
Part No.	VFA12-HD	Dwg. No.	VFA12-HD
CRD NO.	DRAWN BY CEK	ENG. APPROVAL 6/1/2015	CHECKED BY BMC
CLASS	SUB	DRAWING USAGE CUSTOMER	DATE 2/2/2017

A	CHANGED TIE-BACK FRONT CONNECTION	DESCRIPTION OF REVISIONS	OPD	BY	DATE	CEK	2/2/2017
REV	REVISION HISTORY						

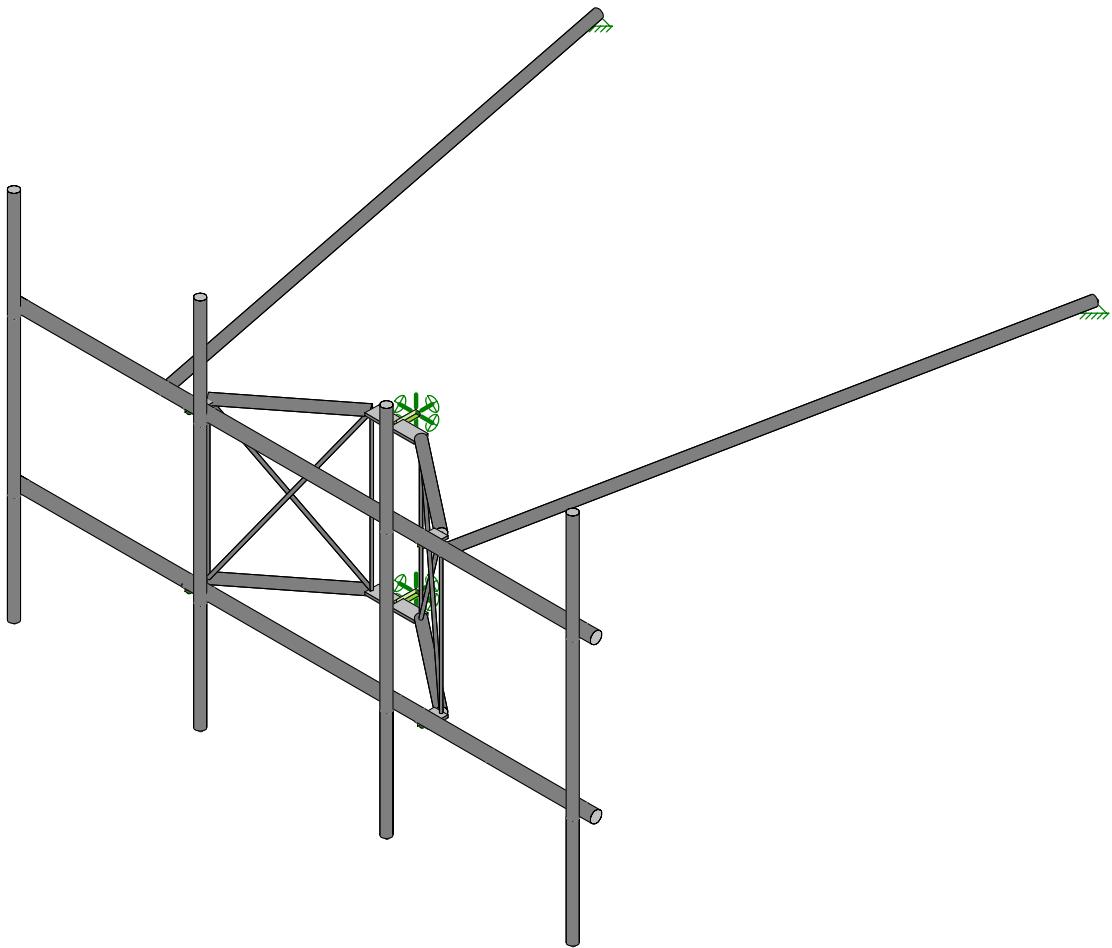
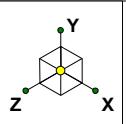


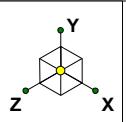
MOUNT FRONT VIEW



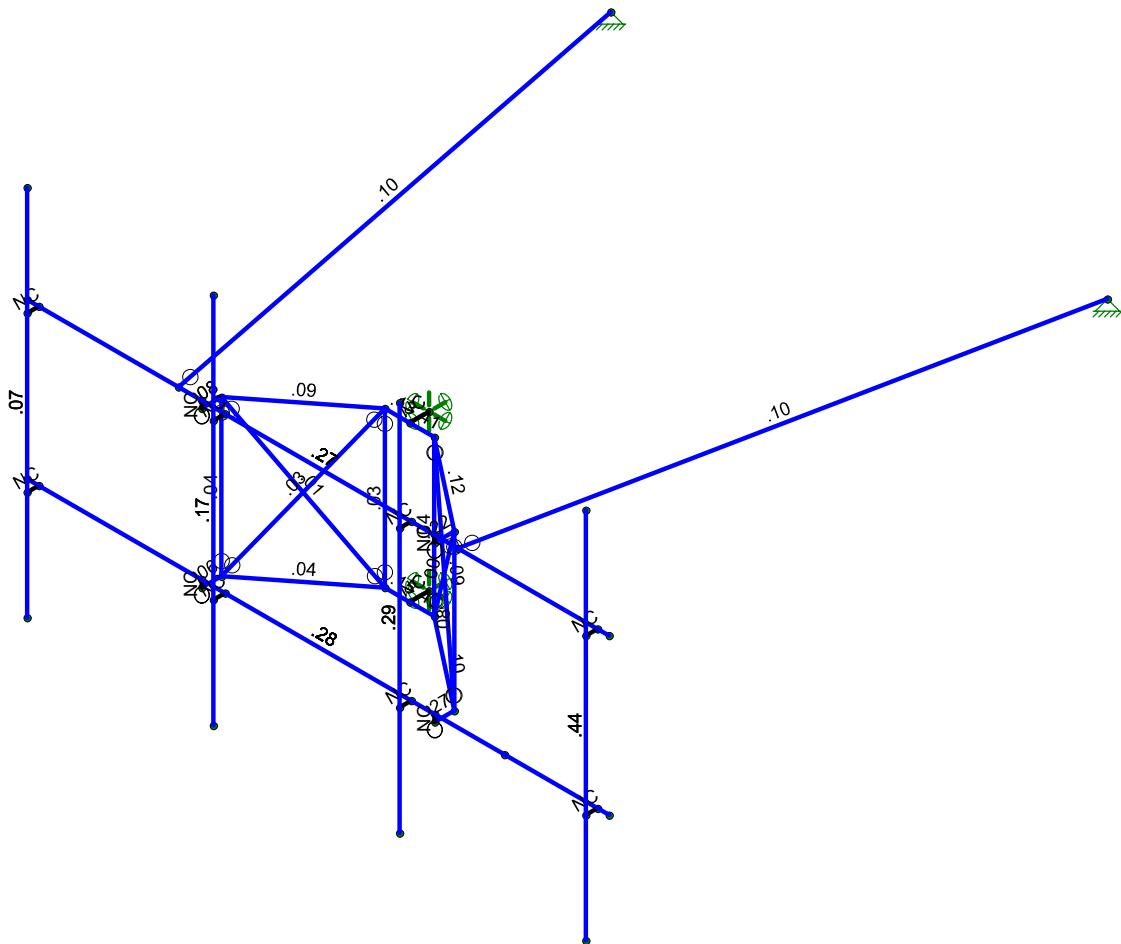
MOUNT GEOMETRY VERIFICATION

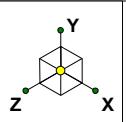
CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND MEMBER SIZES SHOWN IN THIS SKETCH. DOCUMENT ALL VARIATIONS OR DEVIATIONS VIA PHOTOS AND SKETCHES AND PROVIDE TO THE EOR FOR EVALUATION.



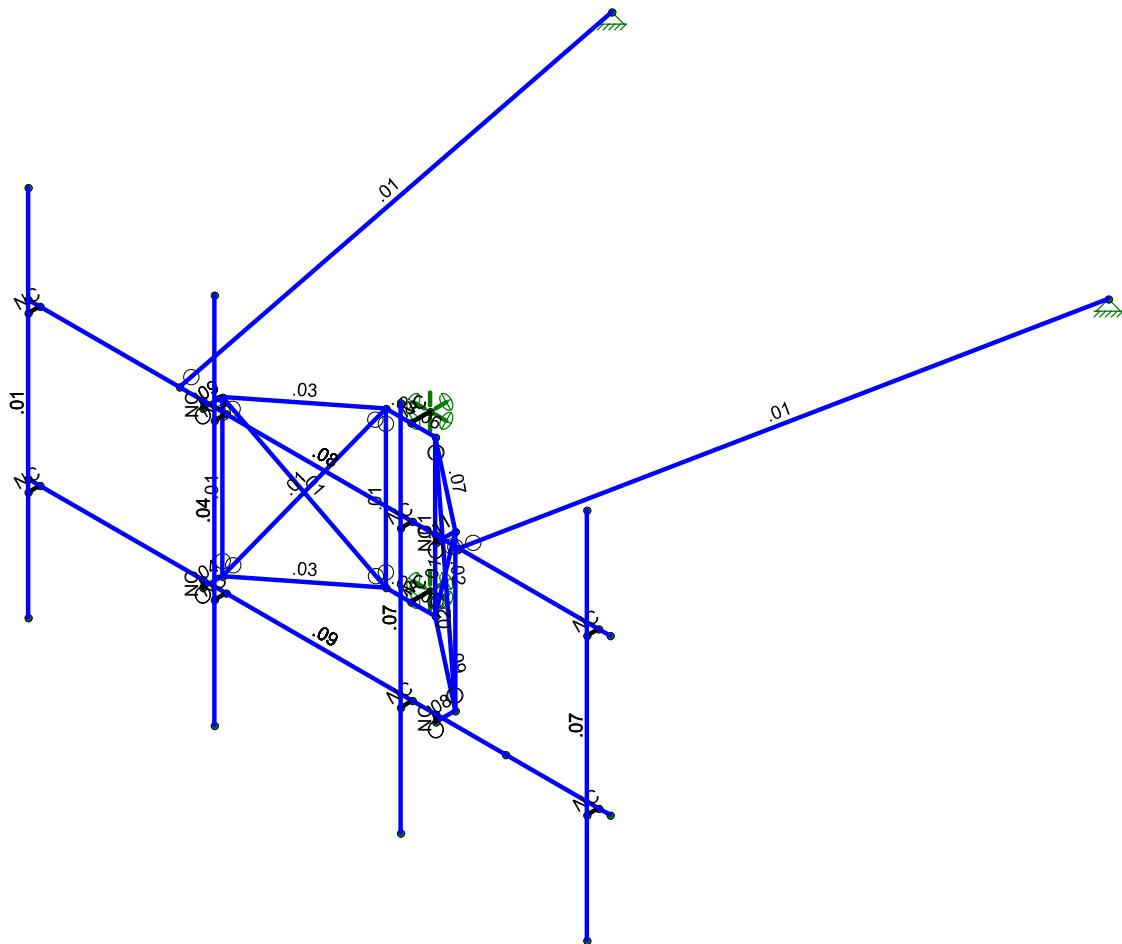


Code Check (Env)	
No Calc	
> 1.0	
.90-1.0	
.75-.90	
.50-.75	
0.-.50	





Shear Check (Env)	
No Calc	
> 1.0	
.90-1.0	
.75-.90	
.50-.75	
0.-.50	



Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...	Surface(...
1	Antenna D	None					30			
2	Antenna Di	None					30			
3	Antenna Wo (0 Deg)	None					30			
4	Antenna Wo (30 Deg)	None					30			
5	Antenna Wo (60 Deg)	None					30			
6	Antenna Wo (90 Deg)	None					30			
7	Antenna Wo (120 Deg)	None					30			
8	Antenna Wo (150 Deg)	None					30			
9	Antenna Wo (180 Deg)	None					30			
10	Antenna Wo (210 Deg)	None					30			
11	Antenna Wo (240 Deg)	None					30			
12	Antenna Wo (270 Deg)	None					30			
13	Antenna Wo (300 Deg)	None					30			
14	Antenna Wo (330 Deg)	None					30			
15	Antenna Wi (0 Deg)	None					30			
16	Antenna Wi (30 Deg)	None					30			
17	Antenna Wi (60 Deg)	None					30			
18	Antenna Wi (90 Deg)	None					30			
19	Antenna Wi (120 Deg)	None					30			
20	Antenna Wi (150 Deg)	None					30			
21	Antenna Wi (180 Deg)	None					30			
22	Antenna Wi (210 Deg)	None					30			
23	Antenna Wi (240 Deg)	None					30			
24	Antenna Wi (270 Deg)	None					30			
25	Antenna Wi (300 Deg)	None					30			
26	Antenna Wi (330 Deg)	None					30			
27	Antenna Wm (0 Deg)	None					30			
28	Antenna Wm (30 Deg)	None					30			
29	Antenna Wm (60 Deg)	None					30			
30	Antenna Wm (90 Deg)	None					30			
31	Antenna Wm (120 Deg)	None					30			
32	Antenna Wm (150 Deg)	None					30			
33	Antenna Wm (180 Deg)	None					30			
34	Antenna Wm (210 Deg)	None					30			
35	Antenna Wm (240 Deg)	None					30			
36	Antenna Wm (270 Deg)	None					30			
37	Antenna Wm (300 Deg)	None					30			
38	Antenna Wm (330 Deg)	None					30			
39	Structure D	None			-1					
40	Structure Di	None						28		
41	Structure Wo (0 Deg)	None							56	
42	Structure Wo (30 Deg)	None							56	
43	Structure Wo (60 Deg)	None							56	
44	Structure Wo (90 Deg)	None							56	
45	Structure Wo (120 Deg)	None							56	
46	Structure Wo (150 Deg)	None							56	
47	Structure Wo (180 Deg)	None							56	
48	Structure Wo (210 Deg)	None							56	
49	Structure Wo (240 Deg)	None							56	
50	Structure Wo (270 Deg)	None							56	
51	Structure Wo (300 Deg)	None							56	
52	Structure Wo (330 Deg)	None							56	
53	Structure Wi (0 Deg)	None							56	
54	Structure Wi (30 Deg)	None							56	
55	Structure Wi (60 Deg)	None							56	
56	Structure Wi (90 Deg)	None							56	
57	Structure Wi (120 Deg)	None							56	
58	Structure Wi (150 Deg)	None							56	
59	Structure Wi (180 Deg)	None							56	
60	Structure Wi (210 Deg)	None							56	
61	Structure Wi (240 Deg)	None							56	

Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distrib...	Area(Me...	Surface(...
62 Structure Wi (270 Deg)	None						56		
63 Structure Wi (300 Deg)	None						56		
64 Structure Wi (330 Deg)	None						56		
65 Structure Wm (0 Deg)	None						56		
66 Structure Wm (30 Deg)	None						56		
67 Structure Wm (60 Deg)	None						56		
68 Structure Wm (90 Deg)	None						56		
69 Structure Wm (120 Deg)	None						56		
70 Structure Wm (150 Deg)	None						56		
71 Structure Wm (180 Deg)	None						56		
72 Structure Wm (210 Deg)	None						56		
73 Structure Wm (240 Deg)	None						56		
74 Structure Wm (270 Deg)	None						56		
75 Structure Wm (300 Deg)	None						56		
76 Structure Wm (330 Deg)	None						56		
77 Lm1	None					1			
78 Lm2	None					1			
79 Lv1	None					1			
80 Lv2	None					1			

Load Combinations

Load Combinations (Continued)

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Di...
1	N1	0	0	0	0	
2	N2	0	3.333333	0	0	
3	N3	6.25	0.145833	2.380208	0	
4	N4	-6.25	0.145833	2.380208	0	
5	N5	6.25	3.479167	2.380208	0	
6	N6	-6.25	3.479167	2.380208	0	
7	N7	-6	0.145833	2.380208	0	
8	N8	-6	3.479167	2.380208	0	
9	N9	-2	0.145833	2.380208	0	
10	N10	-2	3.479167	2.380208	0	
11	N11	2	0.145833	2.380208	0	
12	N12	2	3.479167	2.380208	0	
13	N13	6	0.145833	2.380208	0	
14	N14	6	3.479167	2.380208	0	
15	N15	-6	0.145833	2.630208	0	
16	N16	-6	3.479167	2.630208	0	
17	N17	-2	0.145833	2.630208	0	
18	N18	-2	3.479167	2.630208	0	
19	N19	2	0.145833	2.630208	0	
20	N20	2	3.479167	2.630208	0	
21	N21	6	0.145833	2.630208	0	
22	N22	6	3.479167	2.630208	0	
23	N23	-2.5	0	2.380208	0	
24	N24	-2.5	3.333333	2.380208	0	
25	N25	2.5	0	2.380208	0	
26	N26	2.5	3.333333	2.380208	0	
27	N27	-2.5	0	1.958333	0	
28	N28	-2.5	3.333333	1.958333	0	
29	N29	2.5	0	1.958333	0	
30	N30	2.5	3.333333	1.958333	0	
31	N31	0	0	0.416667	0	

Joint Coordinates and Temperatures (Continued)

Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Di...
32	N32	0	3.333333	0.416667	0
33	N33	-0.53125	0	0.416667	0
34	N34	-0.53125	3.333333	0.416667	0
35	N35	0.53125	0	0.416667	0
36	N36	0.53125	3.333333	0.416667	0
37	N37	-6	5.8125	2.630208	0
38	N38	-2	5.8125	2.630208	0
39	N39	2	5.8125	2.630208	0
40	N40	6	5.8125	2.630208	0
41	N41	-6	-2.1875	2.630208	0
42	N42	-2	-2.1875	2.630208	0
43	N43	2	-2.1875	2.630208	0
44	N44	6	-2.1875	2.630208	0
45	N45	-2.5	3.333333	2.005208	0
46	N46	-2.5	0.145833	2.380208	0
47	N47	-2.5	3.479167	2.380208	0
48	N48	2.5	0.145833	2.380208	0
49	N49	2.5	3.479167	2.380208	0
50	N50	-3	3.479167	2.380208	0
51	N51	3	3.479167	2.380208	0
52	N54	4	0.145833	2.380208	0
53	N56	-5.333333	3.479167	-9.237604	0
54	N57	5.333333	3.479167	-9.237604	0

Hot Rolled Steel Section Sets

Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]	
1	Face Horizontal	PIPE_2.5	None	None	Q235	Typical	1.61	1.45	1.45	2.89
2	Standoff Horizontal	PIPE_2.0	None	None	Q235	Typical	1.02	.627	.627	1.25
3	Standoff Diagonal	SR_0.75	None	None	Q235	Typical	.442	.016	.016	.031
4	Standoff Vertical	SR_0.625	None	None	Q235	Typical	.307	.007	.007	.015
5	Standoff Plate	PL5/8X3.5	None	None	Q235	Typical	2.188	.071	2.233	.253
6	Tieback	PIPE_2.0	None	None	Q235	Typical	1.02	.627	.627	1.25
7	Antenna Pipe	PIPE_2.0	None	None	Q235	Typical	1.02	.627	.627	1.25

Hot Rolled Steel Properties

Label	E [ksi]	G [ksi]	Nu	Therm (/...)	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt	
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A53 Gr. B	29000	11154	.3	.65	.49	35	1.5	60	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
5	A500 Gr. B 42	29000	11154	.3	.65	.49	42	1.4	58	1.3
6	A500 Gr. B 46	29000	11154	.3	.65	.49	46	1.4	58	1.3
7	Q235	29000	11154	.3	.65	.49	35	1.5	58	1.2

Member Primary Data

Label	I Joint	J Joint	K J... Rot...	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N4	N3	Face Horizontal	None	None	Q235	Typical
2	M2	N6	N5	Face Horizontal	None	None	Q235	Typical
3	M3	N28	N34	Standoff Horizontal	None	None	Q235	Typical
4	M4	N27	N33	Standoff Horizontal	None	None	Q235	Typical
5	M5	N29	N35	Standoff Horizontal	None	None	Q235	Typical
6	M6	N30	N36	Standoff Horizontal	None	None	Q235	Typical
7	M7	N33	N28	Standoff Diagonal	None	None	Q235	Typical
8	M8	N34	N27	Standoff Diagonal	None	None	Q235	Typical
9	M9	N35	N30	Standoff Diagonal	None	None	Q235	Typical
10	M10	N29	N36	Standoff Diagonal	None	None	Q235	Typical
11	M11	N27	N28	Standoff Vertical	None	None	Q235	Typical

Member Primary Data (Continued)

Label	I Joint	J Joint	K J... Rot...	Section/Shape	Type	Design List	Material	Design Rules	
12	M12	N33	N34	Standoff Vertical	None	None	Q235	Typical	
13	M13	N35	N36	Standoff Vertical	None	None	Q235	Typical	
14	M14	N29	N30	Standoff Vertical	None	None	Q235	Typical	
15	M15	N24	N28	90	Standoff Plate	None	None	Q235	Typical
16	M16	N23	N27	90	Standoff Plate	None	None	Q235	Typical
17	M17	N25	N29	90	Standoff Plate	None	None	Q235	Typical
18	M18	N26	N30	90	Standoff Plate	None	None	Q235	Typical
19	M19	N34	N32	90	Standoff Plate	None	None	Q235	Typical
20	M20	N36	N32	90	Standoff Plate	None	None	Q235	Typical
21	M21	N33	N31	90	Standoff Plate	None	None	Q235	Typical
22	M22	N35	N31	90	Standoff Plate	None	None	Q235	Typical
23	M23	N50	N56	Tieback	None	None	Q235	Typical	
24	M24	N51	N57	Tieback	None	None	Q235	Typical	
25	MP1A	N40	N44	Antenna Pipe	None	None	Q235	Typical	
26	MP2A	N39	N43	Antenna Pipe	None	None	Q235	Typical	
27	MP3A	N38	N42	Antenna Pipe	None	None	Q235	Typical	
28	MP4A	N37	N41	Antenna Pipe	None	None	Q235	Typical	
29	M29	N7	N15	RIGID	None	None	RIGID	Typical	
30	M30	N8	N16	RIGID	None	None	RIGID	Typical	
31	M31	N10	N18	RIGID	None	None	RIGID	Typical	
32	M32	N9	N17	RIGID	None	None	RIGID	Typical	
33	M33	N12	N20	RIGID	None	None	RIGID	Typical	
34	M34	N11	N19	RIGID	None	None	RIGID	Typical	
35	M35	N14	N22	RIGID	None	None	RIGID	Typical	
36	M36	N13	N21	RIGID	None	None	RIGID	Typical	
37	M37	N31	N1	RIGID	None	None	RIGID	Typical	
38	M38	N32	N2	RIGID	None	None	RIGID	Typical	
39	M39	N24	N47	RIGID	None	None	RIGID	Typical	
40	M40	N23	N46	RIGID	None	None	RIGID	Typical	
41	M41	N26	N49	RIGID	None	None	RIGID	Typical	
42	M42	N25	N48	RIGID	None	None	RIGID	Typical	
43	M43	N32	N2	RIGID	None	None	RIGID	Typical	
44	M44	N31	N1	RIGID	None	None	RIGID	Typical	

Member Advanced Data

Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...Analysis ...	Inactive	Seismic...
1	M1					Yes	** NA **		None
2	M2					Yes	** NA **		None
3	M3					Yes	** NA **		None
4	M4					Yes	** NA **		None
5	M5					Yes	** NA **		None
6	M6					Yes	** NA **		None
7	M7	BenPIN	BenPIN		Euler Buc..	Yes	** NA **		None
8	M8	BenPIN	BenPIN		Euler Buc..	Yes	** NA **		None
9	M9	BenPIN	BenPIN		Euler Buc..	Yes	** NA **		None
10	M10	BenPIN	BenPIN		Euler Buc..	Yes	** NA **		None
11	M11	BenPIN	BenPIN			Yes	** NA **		None
12	M12	BenPIN	BenPIN			Yes	** NA **		None
13	M13	BenPIN	BenPIN			Yes	** NA **		None
14	M14	BenPIN	BenPIN			Yes	** NA **		None
15	M15					Yes	** NA **		None
16	M16					Yes	** NA **		None
17	M17					Yes	** NA **		None
18	M18					Yes	** NA **		None
19	M19					Yes	** NA **		None
20	M20					Yes	** NA **		None
21	M21					Yes	** NA **		None
22	M22					Yes	** NA **		None
23	M23	BenPIN				Yes	** NA **		None
24	M24	BenPIN				Yes	** NA **		None

Member Advanced Data (Continued)

Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...Analysis ...	Inactive	Seismic...
25	MP1A					Yes	** NA **		None
26	MP2A					Yes	** NA **		None
27	MP3A					Yes	** NA **		None
28	MP4A					Yes	** NA **		None
29	M29					Yes	** NA **		None
30	M30					Yes	** NA **		None
31	M31					Yes	** NA **		None
32	M32					Yes	** NA **		None
33	M33					Yes	** NA **		None
34	M34					Yes	** NA **		None
35	M35					Yes	** NA **		None
36	M36					Yes	** NA **		None
37	M37					Yes	** NA **	Inactive	None
38	M38					Yes	** NA **	Inactive	None
39	M39	OOOXOO				Yes	** NA **		None
40	M40	OOOXOO				Yes	** NA **		None
41	M41	OOOXOO				Yes	** NA **		None
42	M42	OOOXOO				Yes	** NA **		None
43	M43					Yes	** NA **		None
44	M44					Yes	** NA **		None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-43.55	2.5
2	MP1A	My	.004	2.5
3	MP1A	Mz	-.021	2.5
4	MP1A	Y	-43.55	4
5	MP1A	My	.004	4
6	MP1A	Mz	-.021	4
7	MP2A	Y	-31.65	.5
8	MP2A	My	-.017	.5
9	MP2A	Mz	-.019	.5
10	MP2A	Y	-31.65	6
11	MP2A	My	-.017	6
12	MP2A	Mz	-.019	6
13	MP2A	Y	-31.65	.5
14	MP2A	My	.022	.5
15	MP2A	Mz	-.012	.5
16	MP2A	Y	-31.65	6
17	MP2A	My	.022	6
18	MP2A	Mz	-.012	6
19	MP4A	Y	-4.4	3.25
20	MP4A	My	.000382	3.25
21	MP4A	Mz	-.002	3.25
22	MP1A	Y	-70.3	3.25
23	MP1A	My	.035	3.25
24	MP1A	Mz	0	3.25
25	MP3A	Y	-84.4	3.25
26	MP3A	My	.042	3.25
27	MP3A	Mz	0	3.25
28	M1	Y	-10.4	10.25
29	M1	My	0	10.25
30	M1	Mz	0	10.25

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-34.229	2.5
2	MP1A	My	.003	2.5
3	MP1A	Mz	-.017	2.5

Member Point Loads (BLC 2 : Antenna Di) (Continued)

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4 MP1A	Y	-34.229	4
5 MP1A	My	.003	4
6 MP1A	Mz	-.017	4
7 MP2A	Y	-67.274	.5
8 MP2A	My	-.036	.5
9 MP2A	Mz	-.04	.5
10 MP2A	Y	-67.274	6
11 MP2A	My	-.036	6
12 MP2A	Mz	-.04	6
13 MP2A	Y	-67.274	.5
14 MP2A	My	.047	.5
15 MP2A	Mz	-.026	.5
16 MP2A	Y	-67.274	6
17 MP2A	My	.047	6
18 MP2A	Mz	-.026	6
19 MP4A	Y	-12.861	3.25
20 MP4A	My	.001	3.25
21 MP4A	Mz	-.006	3.25
22 MP1A	Y	-38.775	3.25
23 MP1A	My	.019	3.25
24 MP1A	Mz	0	3.25
25 MP3A	Y	-43.129	3.25
26 MP3A	My	.022	3.25
27 MP3A	Mz	0	3.25
28 M1	Y	-10.267	10.25
29 M1	My	0	10.25
30 M1	Mz	0	10.25

Member Point Loads (BLC 3 : Antenna Wo (0 Deg))

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1 MP1A	X	0	2.5
2 MP1A	Z	-27.333	2.5
3 MP1A	Mx	.013	2.5
4 MP1A	X	0	4
5 MP1A	Z	-27.333	4
6 MP1A	Mx	.013	4
7 MP2A	X	0	.5
8 MP2A	Z	-86.239	.5
9 MP2A	Mx	.052	.5
10 MP2A	X	0	6
11 MP2A	Z	-86.239	6
12 MP2A	Mx	.052	6
13 MP2A	X	0	.5
14 MP2A	Z	-86.239	.5
15 MP2A	Mx	.033	.5
16 MP2A	X	0	6
17 MP2A	Z	-86.239	6
18 MP2A	Mx	.033	6
19 MP4A	X	0	3.25
20 MP4A	Z	-5.565	3.25
21 MP4A	Mx	.003	3.25
22 MP1A	X	0	3.25
23 MP1A	Z	-53.069	3.25
24 MP1A	Mx	0	3.25
25 MP3A	X	0	3.25
26 MP3A	Z	-53.069	3.25
27 MP3A	Mx	0	3.25
28 M1	X	0	10.25
29 M1	Z	-10.5	10.25
30 M1	Mx	0	10.25

Member Point Loads (BLC 4 : Antenna Wo (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	15.428	2.5
2	MP1A	Z	-26.723	2.5
3	MP1A	Mx	.014	2.5
4	MP1A	X	15.428	4
5	MP1A	Z	-26.723	4
6	MP1A	Mx	.014	4
7	MP2A	X	45.046	.5
8	MP2A	Z	-78.021	.5
9	MP2A	Mx	.023	.5
10	MP2A	X	45.046	6
11	MP2A	Z	-78.021	6
12	MP2A	Mx	.023	6
13	MP2A	X	45.046	.5
14	MP2A	Z	-78.021	.5
15	MP2A	Mx	.062	.5
16	MP2A	X	45.046	6
17	MP2A	Z	-78.021	6
18	MP2A	Mx	.062	6
19	MP4A	X	3.664	3.25
20	MP4A	Z	-6.347	3.25
21	MP4A	Mx	.003	3.25
22	MP1A	X	23.493	3.25
23	MP1A	Z	-40.691	3.25
24	MP1A	Mx	.012	3.25
25	MP3A	X	24.335	3.25
26	MP3A	Z	-42.15	3.25
27	MP3A	Mx	.012	3.25
28	M1	X	4.846	10.25
29	M1	Z	-8.393	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 5 : Antenna Wo (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	43.235	2.5
2	MP1A	Z	-24.962	2.5
3	MP1A	Mx	.016	2.5
4	MP1A	X	43.235	4
5	MP1A	Z	-24.962	4
6	MP1A	Mx	.016	4
7	MP2A	X	96.074	.5
8	MP2A	Z	-55.468	.5
9	MP2A	Mx	-.017	.5
10	MP2A	X	96.074	6
11	MP2A	Z	-55.468	6
12	MP2A	Mx	-.017	6
13	MP2A	X	96.074	.5
14	MP2A	Z	-55.468	.5
15	MP2A	Mx	.089	.5
16	MP2A	X	96.074	6
17	MP2A	Z	-55.468	6
18	MP2A	Mx	.089	6
19	MP4A	X	14.608	3.25
20	MP4A	Z	-8.434	3.25
21	MP4A	Mx	.005	3.25
22	MP1A	X	30.153	3.25
23	MP1A	Z	-17.409	3.25
24	MP1A	Mx	.015	3.25
25	MP3A	X	34.531	3.25
26	MP3A	Z	-19.936	3.25
27	MP3A	Mx	.017	3.25
28	M1	X	6.992	10.25

Member Point Loads (BLC 5 : Antenna Wo (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
29	M1	Z	-4.037	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 6 : Antenna Wo (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	65.467	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	.006	2.5
4	MP1A	X	65.467	4
5	MP1A	Z	0	4
6	MP1A	Mx	.006	4
7	MP2A	X	127.93	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	-.068	.5
10	MP2A	X	127.93	6
11	MP2A	Z	0	6
12	MP2A	Mx	-.068	6
13	MP2A	X	127.93	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	.09	.5
16	MP2A	X	127.93	6
17	MP2A	Z	0	6
18	MP2A	Mx	.09	6
19	MP4A	X	24.645	3.25
20	MP4A	Z	0	3.25
21	MP4A	Mx	.002	3.25
22	MP1A	X	28.734	3.25
23	MP1A	Z	0	3.25
24	MP1A	Mx	.014	3.25
25	MP3A	X	35.474	3.25
26	MP3A	Z	0	3.25
27	MP3A	Mx	.018	3.25
28	M1	X	7.265	10.25
29	M1	Z	0	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 7 : Antenna Wo (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	53.645	2.5
2	MP1A	Z	30.972	2.5
3	MP1A	Mx	-.011	2.5
4	MP1A	X	53.645	4
5	MP1A	Z	30.972	4
6	MP1A	Mx	-.011	4
7	MP2A	X	107.454	.5
8	MP2A	Z	62.039	.5
9	MP2A	Mx	-.094	.5
10	MP2A	X	107.454	6
11	MP2A	Z	62.039	6
12	MP2A	Mx	-.094	6
13	MP2A	X	107.454	.5
14	MP2A	Z	62.039	.5
15	MP2A	Mx	.052	.5
16	MP2A	X	107.454	6
17	MP2A	Z	62.039	6
18	MP2A	Mx	.052	6
19	MP4A	X	19.817	3.25
20	MP4A	Z	11.441	3.25
21	MP4A	Mx	-.004	3.25
22	MP1A	X	30.153	3.25

Member Point Loads (BLC 7 : Antenna Wo (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP1A	Z	17.409	3.25
24	MP1A	Mx	.015	3.25
25	MP3A	X	34.531	3.25
26	MP3A	Z	19.936	3.25
27	MP3A	Mx	.017	3.25
28	M1	X	6.992	10.25
29	M1	Z	4.037	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 8 : Antenna Wo (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	21.438	2.5
2	MP1A	Z	37.132	2.5
3	MP1A	Mx	-.016	2.5
4	MP1A	X	21.438	4
5	MP1A	Z	37.132	4
6	MP1A	Mx	-.016	4
7	MP2A	X	51.616	.5
8	MP2A	Z	89.402	.5
9	MP2A	Mx	-.081	.5
10	MP2A	X	51.616	6
11	MP2A	Z	89.402	6
12	MP2A	Mx	-.081	6
13	MP2A	X	51.616	.5
14	MP2A	Z	89.402	.5
15	MP2A	Mx	.002	.5
16	MP2A	X	51.616	6
17	MP2A	Z	89.402	6
18	MP2A	Mx	.002	6
19	MP4A	X	6.671	3.25
20	MP4A	Z	11.555	3.25
21	MP4A	Mx	-.005	3.25
22	MP1A	X	23.493	3.25
23	MP1A	Z	40.691	3.25
24	MP1A	Mx	.012	3.25
25	MP3A	X	24.335	3.25
26	MP3A	Z	42.15	3.25
27	MP3A	Mx	.012	3.25
28	M1	X	4.846	10.25
29	M1	Z	8.393	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 9 : Antenna Wo (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.5
2	MP1A	Z	27.333	2.5
3	MP1A	Mx	-.013	2.5
4	MP1A	X	0	4
5	MP1A	Z	27.333	4
6	MP1A	Mx	-.013	4
7	MP2A	X	0	.5
8	MP2A	Z	86.239	.5
9	MP2A	Mx	-.052	.5
10	MP2A	X	0	6
11	MP2A	Z	86.239	6
12	MP2A	Mx	-.052	6
13	MP2A	X	0	.5
14	MP2A	Z	86.239	.5
15	MP2A	Mx	-.033	.5
16	MP2A	X	0	6

Member Point Loads (BLC 9 : Antenna Wo (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
17	MP2A	Z	86.239	6
18	MP2A	Mx	-.033	6
19	MP4A	X	0	3.25
20	MP4A	Z	5.565	3.25
21	MP4A	Mx	-.003	3.25
22	MP1A	X	0	3.25
23	MP1A	Z	53.069	3.25
24	MP1A	Mx	0	3.25
25	MP3A	X	0	3.25
26	MP3A	Z	53.069	3.25
27	MP3A	Mx	0	3.25
28	M1	X	0	10.25
29	M1	Z	10.5	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 10 : Antenna Wo (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	-15.428	2.5
2	MP1A	Z	26.723	2.5
3	MP1A	Mx	-.014	2.5
4	MP1A	X	-15.428	4
5	MP1A	Z	26.723	4
6	MP1A	Mx	-.014	4
7	MP2A	X	-45.046	.5
8	MP2A	Z	78.021	.5
9	MP2A	Mx	-.023	.5
10	MP2A	X	-45.046	6
11	MP2A	Z	78.021	6
12	MP2A	Mx	-.023	6
13	MP2A	X	-45.046	.5
14	MP2A	Z	78.021	.5
15	MP2A	Mx	-.062	.5
16	MP2A	X	-45.046	6
17	MP2A	Z	78.021	6
18	MP2A	Mx	-.062	6
19	MP4A	X	-3.664	3.25
20	MP4A	Z	6.347	3.25
21	MP4A	Mx	-.003	3.25
22	MP1A	X	-23.493	3.25
23	MP1A	Z	40.691	3.25
24	MP1A	Mx	-.012	3.25
25	MP3A	X	-24.335	3.25
26	MP3A	Z	42.15	3.25
27	MP3A	Mx	-.012	3.25
28	M1	X	-4.846	10.25
29	M1	Z	8.393	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 11 : Antenna Wo (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	-43.235	2.5
2	MP1A	Z	24.962	2.5
3	MP1A	Mx	-.016	2.5
4	MP1A	X	-43.235	4
5	MP1A	Z	24.962	4
6	MP1A	Mx	-.016	4
7	MP2A	X	-96.074	.5
8	MP2A	Z	55.468	.5
9	MP2A	Mx	.017	.5
10	MP2A	X	-96.074	6

Member Point Loads (BLC 11 : Antenna Wo (240 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP2A	Z	55.468	6
12	MP2A	Mx	.017	6
13	MP2A	X	-96.074	.5
14	MP2A	Z	55.468	.5
15	MP2A	Mx	-.089	.5
16	MP2A	X	-96.074	6
17	MP2A	Z	55.468	6
18	MP2A	Mx	-.089	6
19	MP4A	X	-14.608	3.25
20	MP4A	Z	8.434	3.25
21	MP4A	Mx	-.005	3.25
22	MP1A	X	-30.153	3.25
23	MP1A	Z	17.409	3.25
24	MP1A	Mx	-.015	3.25
25	MP3A	X	-34.531	3.25
26	MP3A	Z	19.936	3.25
27	MP3A	Mx	-.017	3.25
28	M1	X	-6.992	10.25
29	M1	Z	4.037	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 12 : Antenna Wo (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-65.467	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	-.006	2.5
4	MP1A	X	-65.467	4
5	MP1A	Z	0	4
6	MP1A	Mx	-.006	4
7	MP2A	X	-127.93	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	.068	.5
10	MP2A	X	-127.93	6
11	MP2A	Z	0	6
12	MP2A	Mx	.068	6
13	MP2A	X	-127.93	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	-.09	.5
16	MP2A	X	-127.93	6
17	MP2A	Z	0	6
18	MP2A	Mx	-.09	6
19	MP4A	X	-24.645	3.25
20	MP4A	Z	0	3.25
21	MP4A	Mx	-.002	3.25
22	MP1A	X	-28.734	3.25
23	MP1A	Z	0	3.25
24	MP1A	Mx	-.014	3.25
25	MP3A	X	-35.474	3.25
26	MP3A	Z	0	3.25
27	MP3A	Mx	-.018	3.25
28	M1	X	-7.265	10.25
29	M1	Z	0	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 13 : Antenna Wo (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-53.645	2.5
2	MP1A	Z	-30.972	2.5
3	MP1A	Mx	.011	2.5
4	MP1A	X	-53.645	4

Member Point Loads (BLC 13 : Antenna Wo (300 Deg)) (Continued)

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5 MP1A	Z	-30.972	4
6 MP1A	Mx	.011	4
7 MP2A	X	-107.454	.5
8 MP2A	Z	-62.039	.5
9 MP2A	Mx	.094	.5
10 MP2A	X	-107.454	6
11 MP2A	Z	-62.039	6
12 MP2A	Mx	.094	6
13 MP2A	X	-107.454	.5
14 MP2A	Z	-62.039	.5
15 MP2A	Mx	-.052	.5
16 MP2A	X	-107.454	6
17 MP2A	Z	-62.039	6
18 MP2A	Mx	-.052	6
19 MP4A	X	-19.817	3.25
20 MP4A	Z	-11.441	3.25
21 MP4A	Mx	.004	3.25
22 MP1A	X	-30.153	3.25
23 MP1A	Z	-17.409	3.25
24 MP1A	Mx	-.015	3.25
25 MP3A	X	-34.531	3.25
26 MP3A	Z	-19.936	3.25
27 MP3A	Mx	-.017	3.25
28 M1	X	-6.992	10.25
29 M1	Z	-4.037	10.25
30 M1	Mx	0	10.25

Member Point Loads (BLC 14 : Antenna Wo (330 Deg))

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1 MP1A	X	-21.438	2.5
2 MP1A	Z	-37.132	2.5
3 MP1A	Mx	.016	2.5
4 MP1A	X	-21.438	4
5 MP1A	Z	-37.132	4
6 MP1A	Mx	.016	4
7 MP2A	X	-51.616	.5
8 MP2A	Z	-89.402	.5
9 MP2A	Mx	.081	.5
10 MP2A	X	-51.616	6
11 MP2A	Z	-89.402	6
12 MP2A	Mx	.081	6
13 MP2A	X	-51.616	.5
14 MP2A	Z	-89.402	.5
15 MP2A	Mx	-.002	.5
16 MP2A	X	-51.616	6
17 MP2A	Z	-89.402	6
18 MP2A	Mx	-.002	6
19 MP4A	X	-6.671	3.25
20 MP4A	Z	-11.555	3.25
21 MP4A	Mx	.005	3.25
22 MP1A	X	-23.493	3.25
23 MP1A	Z	-40.691	3.25
24 MP1A	Mx	-.012	3.25
25 MP3A	X	-24.335	3.25
26 MP3A	Z	-42.15	3.25
27 MP3A	Mx	-.012	3.25
28 M1	X	-4.846	10.25
29 M1	Z	-8.393	10.25
30 M1	Mx	0	10.25

Member Point Loads (BLC 15 : Antenna Wi (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.5
2	MP1A	Z	-6.162	2.5
3	MP1A	Mx	.003	2.5
4	MP1A	X	0	4
5	MP1A	Z	-6.162	4
6	MP1A	Mx	.003	4
7	MP2A	X	0	.5
8	MP2A	Z	-18.125	.5
9	MP2A	Mx	.011	.5
10	MP2A	X	0	6
11	MP2A	Z	-18.125	6
12	MP2A	Mx	.011	6
13	MP2A	X	0	.5
14	MP2A	Z	-18.125	.5
15	MP2A	Mx	.007	.5
16	MP2A	X	0	6
17	MP2A	Z	-18.125	6
18	MP2A	Mx	.007	6
19	MP4A	X	0	3.25
20	MP4A	Z	-1.88	3.25
21	MP4A	Mx	.000926	3.25
22	MP1A	X	0	3.25
23	MP1A	Z	-11.726	3.25
24	MP1A	Mx	0	3.25
25	MP3A	X	0	3.25
26	MP3A	Z	-11.726	3.25
27	MP3A	Mx	0	3.25
28	M1	X	0	10.25
29	M1	Z	-2.827	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 16 : Antenna Wi (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	3.429	2.5
2	MP1A	Z	-5.939	2.5
3	MP1A	Mx	.003	2.5
4	MP1A	X	3.429	4
5	MP1A	Z	-5.939	4
6	MP1A	Mx	.003	4
7	MP2A	X	9.425	.5
8	MP2A	Z	-16.325	.5
9	MP2A	Mx	.005	.5
10	MP2A	X	9.425	6
11	MP2A	Z	-16.325	6
12	MP2A	Mx	.005	6
13	MP2A	X	9.425	.5
14	MP2A	Z	-16.325	.5
15	MP2A	Mx	.013	.5
16	MP2A	X	9.425	6
17	MP2A	Z	-16.325	6
18	MP2A	Mx	.013	6
19	MP4A	X	1.126	3.25
20	MP4A	Z	-1.95	3.25
21	MP4A	Mx	.001	3.25
22	MP1A	X	5.245	3.25
23	MP1A	Z	-9.085	3.25
24	MP1A	Mx	.003	3.25
25	MP3A	X	5.415	3.25
26	MP3A	Z	-9.38	3.25
27	MP3A	Mx	.003	3.25
28	M1	X	1.325	10.25

Member Point Loads (BLC 16 : Antenna Wi (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
29	M1	Z	-2.294	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 17 : Antenna Wi (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	9.203	2.5
2	MP1A	Z	-5.313	2.5
3	MP1A	Mx	.003	2.5
4	MP1A	X	9.203	4
5	MP1A	Z	-5.313	4
6	MP1A	Mx	.003	4
7	MP2A	X	19.727	.5
8	MP2A	Z	-11.39	.5
9	MP2A	Mx	-.004	.5
10	MP2A	X	19.727	6
11	MP2A	Z	-11.39	6
12	MP2A	Mx	-.004	6
13	MP2A	X	19.727	.5
14	MP2A	Z	-11.39	.5
15	MP2A	Mx	.018	.5
16	MP2A	X	19.727	6
17	MP2A	Z	-11.39	6
18	MP2A	Mx	.018	6
19	MP4A	X	3.69	3.25
20	MP4A	Z	-2.13	3.25
21	MP4A	Mx	.001	3.25
22	MP1A	X	6.945	3.25
23	MP1A	Z	-4.01	3.25
24	MP1A	Mx	.003	3.25
25	MP3A	X	7.829	3.25
26	MP3A	Z	-4.52	3.25
27	MP3A	Mx	.004	3.25
28	M1	X	1.987	10.25
29	M1	Z	-1.147	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 18 : Antenna Wi (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	13.698	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	.001	2.5
4	MP1A	X	13.698	4
5	MP1A	Z	0	4
6	MP1A	Mx	.001	4
7	MP2A	X	25.982	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	-.014	.5
10	MP2A	X	25.982	6
11	MP2A	Z	0	6
12	MP2A	Mx	-.014	6
13	MP2A	X	25.982	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	.018	.5
16	MP2A	X	25.982	6
17	MP2A	Z	0	6
18	MP2A	Mx	.018	6
19	MP4A	X	5.899	3.25
20	MP4A	Z	0	3.25
21	MP4A	Mx	.000512	3.25
22	MP1A	X	6.784	3.25

Member Point Loads (BLC 18 : Antenna Wi (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP1A	Z	0	3.25
24	MP1A	Mx	.003	3.25
25	MP3A	X	8.145	3.25
26	MP3A	Z	0	3.25
27	MP3A	Mx	.004	3.25
28	M1	X	2.116	10.25
29	M1	Z	0	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 19 : Antenna Wi (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	11.26	2.5
2	MP1A	Z	6.501	2.5
3	MP1A	Mx	-.002	2.5
4	MP1A	X	11.26	4
5	MP1A	Z	6.501	4
6	MP1A	Mx	-.002	4
7	MP2A	X	21.872	.5
8	MP2A	Z	12.628	.5
9	MP2A	Mx	-.019	.5
10	MP2A	X	21.872	6
11	MP2A	Z	12.628	6
12	MP2A	Mx	-.019	6
13	MP2A	X	21.872	.5
14	MP2A	Z	12.628	.5
15	MP2A	Mx	.011	.5
16	MP2A	X	21.872	6
17	MP2A	Z	12.628	6
18	MP2A	Mx	.011	6
19	MP4A	X	4.787	3.25
20	MP4A	Z	2.764	3.25
21	MP4A	Mx	-.000945	3.25
22	MP1A	X	6.945	3.25
23	MP1A	Z	4.01	3.25
24	MP1A	Mx	.003	3.25
25	MP3A	X	7.829	3.25
26	MP3A	Z	4.52	3.25
27	MP3A	Mx	.004	3.25
28	M1	X	1.987	10.25
29	M1	Z	1.147	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 20 : Antenna Wi (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	4.617	2.5
2	MP1A	Z	7.997	2.5
3	MP1A	Mx	-.004	2.5
4	MP1A	X	4.617	4
5	MP1A	Z	7.997	4
6	MP1A	Mx	-.004	4
7	MP2A	X	10.664	.5
8	MP2A	Z	18.47	.5
9	MP2A	Mx	-.017	.5
10	MP2A	X	10.664	6
11	MP2A	Z	18.47	6
12	MP2A	Mx	-.017	6
13	MP2A	X	10.664	.5
14	MP2A	Z	18.47	.5
15	MP2A	Mx	.000399	.5
16	MP2A	X	10.664	6

Member Point Loads (BLC 20 : Antenna Wi (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
17	MP2A	Z	18.47	6
18	MP2A	Mx	.000399	6
19	MP4A	X	1.759	3.25
20	MP4A	Z	3.047	3.25
21	MP4A	Mx	-.001	3.25
22	MP1A	X	5.245	3.25
23	MP1A	Z	9.085	3.25
24	MP1A	Mx	.003	3.25
25	MP3A	X	5.415	3.25
26	MP3A	Z	9.38	3.25
27	MP3A	Mx	.003	3.25
28	M1	X	1.325	10.25
29	M1	Z	2.294	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 21 : Antenna Wi (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	0	2.5
2	MP1A	Z	6.162	2.5
3	MP1A	Mx	-.003	2.5
4	MP1A	X	0	4
5	MP1A	Z	6.162	4
6	MP1A	Mx	-.003	4
7	MP2A	X	0	.5
8	MP2A	Z	18.125	.5
9	MP2A	Mx	-.011	.5
10	MP2A	X	0	6
11	MP2A	Z	18.125	6
12	MP2A	Mx	-.011	6
13	MP2A	X	0	.5
14	MP2A	Z	18.125	.5
15	MP2A	Mx	-.007	.5
16	MP2A	X	0	6
17	MP2A	Z	18.125	6
18	MP2A	Mx	-.007	6
19	MP4A	X	0	3.25
20	MP4A	Z	1.88	3.25
21	MP4A	Mx	-.000926	3.25
22	MP1A	X	0	3.25
23	MP1A	Z	11.726	3.25
24	MP1A	Mx	0	3.25
25	MP3A	X	0	3.25
26	MP3A	Z	11.726	3.25
27	MP3A	Mx	0	3.25
28	M1	X	0	10.25
29	M1	Z	2.827	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 22 : Antenna Wi (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	-3.429	2.5
2	MP1A	Z	5.939	2.5
3	MP1A	Mx	-.003	2.5
4	MP1A	X	-3.429	4
5	MP1A	Z	5.939	4
6	MP1A	Mx	-.003	4
7	MP2A	X	-9.425	.5
8	MP2A	Z	16.325	.5
9	MP2A	Mx	-.005	.5
10	MP2A	X	-9.425	6

Member Point Loads (BLC 22 : Antenna Wi (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP2A	Z	16.325	6
12	MP2A	Mx	-.005	6
13	MP2A	X	-9.425	.5
14	MP2A	Z	16.325	.5
15	MP2A	Mx	-.013	.5
16	MP2A	X	-9.425	6
17	MP2A	Z	16.325	6
18	MP2A	Mx	-.013	6
19	MP4A	X	-1.126	3.25
20	MP4A	Z	1.95	3.25
21	MP4A	Mx	-.001	3.25
22	MP1A	X	-5.245	3.25
23	MP1A	Z	9.085	3.25
24	MP1A	Mx	-.003	3.25
25	MP3A	X	-5.415	3.25
26	MP3A	Z	9.38	3.25
27	MP3A	Mx	-.003	3.25
28	M1	X	-1.325	10.25
29	M1	Z	2.294	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 23 : Antenna Wi (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-9.203	2.5
2	MP1A	Z	5.313	2.5
3	MP1A	Mx	-.003	2.5
4	MP1A	X	-9.203	4
5	MP1A	Z	5.313	4
6	MP1A	Mx	-.003	4
7	MP2A	X	-19.727	.5
8	MP2A	Z	11.39	.5
9	MP2A	Mx	.004	.5
10	MP2A	X	-19.727	6
11	MP2A	Z	11.39	6
12	MP2A	Mx	.004	6
13	MP2A	X	-19.727	.5
14	MP2A	Z	11.39	.5
15	MP2A	Mx	-.018	.5
16	MP2A	X	-19.727	6
17	MP2A	Z	11.39	6
18	MP2A	Mx	-.018	6
19	MP4A	X	-3.69	3.25
20	MP4A	Z	2.13	3.25
21	MP4A	Mx	-.001	3.25
22	MP1A	X	-6.945	3.25
23	MP1A	Z	4.01	3.25
24	MP1A	Mx	-.003	3.25
25	MP3A	X	-7.829	3.25
26	MP3A	Z	4.52	3.25
27	MP3A	Mx	-.004	3.25
28	M1	X	-1.987	10.25
29	M1	Z	1.147	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 24 : Antenna Wi (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-13.698	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	-.001	2.5
4	MP1A	X	-13.698	4

Member Point Loads (BLC 24 : Antenna Wi (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP1A	Z	0	4
6	MP1A	Mx	-.001	4
7	MP2A	X	-25.982	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	.014	.5
10	MP2A	X	-25.982	6
11	MP2A	Z	0	6
12	MP2A	Mx	.014	6
13	MP2A	X	-25.982	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	-.018	.5
16	MP2A	X	-25.982	6
17	MP2A	Z	0	6
18	MP2A	Mx	-.018	6
19	MP4A	X	-5.899	3.25
20	MP4A	Z	0	3.25
21	MP4A	Mx	-.000512	3.25
22	MP1A	X	-6.784	3.25
23	MP1A	Z	0	3.25
24	MP1A	Mx	-.003	3.25
25	MP3A	X	-8.145	3.25
26	MP3A	Z	0	3.25
27	MP3A	Mx	-.004	3.25
28	M1	X	-2.116	10.25
29	M1	Z	0	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 25 : Antenna Wi (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-11.26	2.5
2	MP1A	Z	-6.501	2.5
3	MP1A	Mx	.002	2.5
4	MP1A	X	-11.26	4
5	MP1A	Z	-6.501	4
6	MP1A	Mx	.002	4
7	MP2A	X	-21.872	.5
8	MP2A	Z	-12.628	.5
9	MP2A	Mx	.019	.5
10	MP2A	X	-21.872	6
11	MP2A	Z	-12.628	6
12	MP2A	Mx	.019	6
13	MP2A	X	-21.872	.5
14	MP2A	Z	-12.628	.5
15	MP2A	Mx	-.011	.5
16	MP2A	X	-21.872	6
17	MP2A	Z	-12.628	6
18	MP2A	Mx	-.011	6
19	MP4A	X	-4.787	3.25
20	MP4A	Z	-2.764	3.25
21	MP4A	Mx	.000945	3.25
22	MP1A	X	-6.945	3.25
23	MP1A	Z	-4.01	3.25
24	MP1A	Mx	-.003	3.25
25	MP3A	X	-7.829	3.25
26	MP3A	Z	-4.52	3.25
27	MP3A	Mx	-.004	3.25
28	M1	X	-1.987	10.25
29	M1	Z	-1.147	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 26 : Antenna Wi (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-4.617	2.5
2	MP1A	Z	-7.997	2.5
3	MP1A	Mx	.004	2.5
4	MP1A	X	-4.617	4
5	MP1A	Z	-7.997	4
6	MP1A	Mx	.004	4
7	MP2A	X	-10.664	.5
8	MP2A	Z	-18.47	.5
9	MP2A	Mx	.017	.5
10	MP2A	X	-10.664	6
11	MP2A	Z	-18.47	6
12	MP2A	Mx	.017	6
13	MP2A	X	-10.664	.5
14	MP2A	Z	-18.47	.5
15	MP2A	Mx	-.000399	.5
16	MP2A	X	-10.664	6
17	MP2A	Z	-18.47	6
18	MP2A	Mx	-.000399	6
19	MP4A	X	-1.759	3.25
20	MP4A	Z	-3.047	3.25
21	MP4A	Mx	.001	3.25
22	MP1A	X	-5.245	3.25
23	MP1A	Z	-9.085	3.25
24	MP1A	Mx	-.003	3.25
25	MP3A	X	-5.415	3.25
26	MP3A	Z	-9.38	3.25
27	MP3A	Mx	-.003	3.25
28	M1	X	-1.325	10.25
29	M1	Z	-2.294	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 27 : Antenna Wm (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.5
2	MP1A	Z	-1.828	2.5
3	MP1A	Mx	.0009	2.5
4	MP1A	X	0	4
5	MP1A	Z	-1.828	4
6	MP1A	Mx	.0009	4
7	MP2A	X	0	.5
8	MP2A	Z	-5.768	.5
9	MP2A	Mx	.003	.5
10	MP2A	X	0	6
11	MP2A	Z	-5.768	6
12	MP2A	Mx	.003	6
13	MP2A	X	0	.5
14	MP2A	Z	-5.768	.5
15	MP2A	Mx	.002	.5
16	MP2A	X	0	6
17	MP2A	Z	-5.768	6
18	MP2A	Mx	.002	6
19	MP4A	X	0	3.25
20	MP4A	Z	-.372	3.25
21	MP4A	Mx	.000183	3.25
22	MP1A	X	0	3.25
23	MP1A	Z	-3.55	3.25
24	MP1A	Mx	0	3.25
25	MP3A	X	0	3.25
26	MP3A	Z	-3.55	3.25
27	MP3A	Mx	0	3.25
28	M1	X	0	10.25

Member Point Loads (BLC 27 : Antenna Wm (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
29	M1	Z	-702	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 28 : Antenna Wm (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	1.032	2.5
2	MP1A	Z	-1.787	2.5
3	MP1A	Mx	.00097	2.5
4	MP1A	X	1.032	4
5	MP1A	Z	-1.787	4
6	MP1A	Mx	.00097	4
7	MP2A	X	3.013	.5
8	MP2A	Z	-5.218	.5
9	MP2A	Mx	.002	.5
10	MP2A	X	3.013	6
11	MP2A	Z	-5.218	6
12	MP2A	Mx	.002	6
13	MP2A	X	3.013	.5
14	MP2A	Z	-5.218	.5
15	MP2A	Mx	.004	.5
16	MP2A	X	3.013	6
17	MP2A	Z	-5.218	6
18	MP2A	Mx	.004	6
19	MP4A	X	.245	3.25
20	MP4A	Z	-424	3.25
21	MP4A	Mx	.00023	3.25
22	MP1A	X	1.571	3.25
23	MP1A	Z	-2.722	3.25
24	MP1A	Mx	.000786	3.25
25	MP3A	X	1.628	3.25
26	MP3A	Z	-2.819	3.25
27	MP3A	Mx	.000814	3.25
28	M1	X	.324	10.25
29	M1	Z	-561	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 29 : Antenna Wm (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	2.892	2.5
2	MP1A	Z	-1.67	2.5
3	MP1A	Mx	.001	2.5
4	MP1A	X	2.892	4
5	MP1A	Z	-1.67	4
6	MP1A	Mx	.001	4
7	MP2A	X	6.426	.5
8	MP2A	Z	-3.71	.5
9	MP2A	Mx	-.001	.5
10	MP2A	X	6.426	6
11	MP2A	Z	-3.71	6
12	MP2A	Mx	-.001	6
13	MP2A	X	6.426	.5
14	MP2A	Z	-3.71	.5
15	MP2A	Mx	.006	.5
16	MP2A	X	6.426	6
17	MP2A	Z	-3.71	6
18	MP2A	Mx	.006	6
19	MP4A	X	.977	3.25
20	MP4A	Z	-564	3.25
21	MP4A	Mx	.000363	3.25
22	MP1A	X	2.017	3.25

Member Point Loads (BLC 29 : Antenna Wm (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP1A	Z	-1.164	3.25
24	MP1A	Mx	.001	3.25
25	MP3A	X	2.31	3.25
26	MP3A	Z	-1.333	3.25
27	MP3A	Mx	.001	3.25
28	M1	X	.468	10.25
29	M1	Z	-.27	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 30 : Antenna Wm (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	4.379	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	.00038	2.5
4	MP1A	X	4.379	4
5	MP1A	Z	0	4
6	MP1A	Mx	.00038	4
7	MP2A	X	8.557	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	-.005	.5
10	MP2A	X	8.557	6
11	MP2A	Z	0	6
12	MP2A	Mx	-.005	6
13	MP2A	X	8.557	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	.006	.5
16	MP2A	X	8.557	6
17	MP2A	Z	0	6
18	MP2A	Mx	.006	6
19	MP4A	X	1.648	3.25
20	MP4A	Z	0	3.25
21	MP4A	Mx	.000143	3.25
22	MP1A	X	1.922	3.25
23	MP1A	Z	0	3.25
24	MP1A	Mx	.000961	3.25
25	MP3A	X	2.373	3.25
26	MP3A	Z	0	3.25
27	MP3A	Mx	.001	3.25
28	M1	X	.486	10.25
29	M1	Z	0	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 31 : Antenna Wm (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	3.588	2.5
2	MP1A	Z	2.072	2.5
3	MP1A	Mx	-.000709	2.5
4	MP1A	X	3.588	4
5	MP1A	Z	2.072	4
6	MP1A	Mx	-.000709	4
7	MP2A	X	7.187	.5
8	MP2A	Z	4.149	.5
9	MP2A	Mx	-.006	.5
10	MP2A	X	7.187	6
11	MP2A	Z	4.149	6
12	MP2A	Mx	-.006	6
13	MP2A	X	7.187	.5
14	MP2A	Z	4.149	.5
15	MP2A	Mx	.003	.5
16	MP2A	X	7.187	6

Member Point Loads (BLC 31 : Antenna Wm (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
17	MP2A	Z	4.149	6
18	MP2A	Mx	.003	6
19	MP4A	X	1.325	3.25
20	MP4A	Z	.765	3.25
21	MP4A	Mx	-.000262	3.25
22	MP1A	X	2.017	3.25
23	MP1A	Z	1.164	3.25
24	MP1A	Mx	.001	3.25
25	MP3A	X	2.31	3.25
26	MP3A	Z	1.333	3.25
27	MP3A	Mx	.001	3.25
28	M1	X	.468	10.25
29	M1	Z	.27	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 32 : Antenna Wm (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	1.434	2.5
2	MP1A	Z	2.484	2.5
3	MP1A	Mx	-.001	2.5
4	MP1A	X	1.434	4
5	MP1A	Z	2.484	4
6	MP1A	Mx	-.001	4
7	MP2A	X	3.452	.5
8	MP2A	Z	5.98	.5
9	MP2A	Mx	-.005	.5
10	MP2A	X	3.452	6
11	MP2A	Z	5.98	6
12	MP2A	Mx	-.005	6
13	MP2A	X	3.452	.5
14	MP2A	Z	5.98	.5
15	MP2A	Mx	.000129	.5
16	MP2A	X	3.452	6
17	MP2A	Z	5.98	6
18	MP2A	Mx	.000129	6
19	MP4A	X	.446	3.25
20	MP4A	Z	.773	3.25
21	MP4A	Mx	-.000342	3.25
22	MP1A	X	1.571	3.25
23	MP1A	Z	2.722	3.25
24	MP1A	Mx	.000786	3.25
25	MP3A	X	1.628	3.25
26	MP3A	Z	2.819	3.25
27	MP3A	Mx	.000814	3.25
28	M1	X	.324	10.25
29	M1	Z	.561	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 33 : Antenna Wm (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	0	2.5
2	MP1A	Z	1.828	2.5
3	MP1A	Mx	-.0009	2.5
4	MP1A	X	0	4
5	MP1A	Z	1.828	4
6	MP1A	Mx	-.0009	4
7	MP2A	X	0	.5
8	MP2A	Z	5.768	.5
9	MP2A	Mx	-.003	.5
10	MP2A	X	0	6

Member Point Loads (BLC 33 : Antenna Wm (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP2A	Z	5.768	6
12	MP2A	Mx	-.003	6
13	MP2A	X	0	.5
14	MP2A	Z	5.768	.5
15	MP2A	Mx	-.002	.5
16	MP2A	X	0	6
17	MP2A	Z	5.768	6
18	MP2A	Mx	-.002	6
19	MP4A	X	0	3.25
20	MP4A	Z	.372	3.25
21	MP4A	Mx	-.000183	3.25
22	MP1A	X	0	3.25
23	MP1A	Z	3.55	3.25
24	MP1A	Mx	0	3.25
25	MP3A	X	0	3.25
26	MP3A	Z	3.55	3.25
27	MP3A	Mx	0	3.25
28	M1	X	0	10.25
29	M1	Z	.702	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 34 : Antenna Wm (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-1.032	2.5
2	MP1A	Z	1.787	2.5
3	MP1A	Mx	-.00097	2.5
4	MP1A	X	-1.032	4
5	MP1A	Z	1.787	4
6	MP1A	Mx	-.00097	4
7	MP2A	X	-3.013	.5
8	MP2A	Z	5.218	.5
9	MP2A	Mx	-.002	.5
10	MP2A	X	-3.013	6
11	MP2A	Z	5.218	6
12	MP2A	Mx	-.002	6
13	MP2A	X	-3.013	.5
14	MP2A	Z	5.218	.5
15	MP2A	Mx	-.004	.5
16	MP2A	X	-3.013	6
17	MP2A	Z	5.218	6
18	MP2A	Mx	-.004	6
19	MP4A	X	-.245	3.25
20	MP4A	Z	.424	3.25
21	MP4A	Mx	-.00023	3.25
22	MP1A	X	-1.571	3.25
23	MP1A	Z	2.722	3.25
24	MP1A	Mx	-.000786	3.25
25	MP3A	X	-1.628	3.25
26	MP3A	Z	2.819	3.25
27	MP3A	Mx	-.000814	3.25
28	M1	X	-.324	10.25
29	M1	Z	.561	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 35 : Antenna Wm (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.892	2.5
2	MP1A	Z	1.67	2.5
3	MP1A	Mx	-.001	2.5
4	MP1A	X	-2.892	4

Member Point Loads (BLC 35 : Antenna Wm (240 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP1A	Z	1.67	4
6	MP1A	Mx	-.001	4
7	MP2A	X	-6.426	.5
8	MP2A	Z	3.71	.5
9	MP2A	Mx	.001	.5
10	MP2A	X	-6.426	6
11	MP2A	Z	3.71	6
12	MP2A	Mx	.001	6
13	MP2A	X	-6.426	.5
14	MP2A	Z	3.71	.5
15	MP2A	Mx	-.006	.5
16	MP2A	X	-6.426	6
17	MP2A	Z	3.71	6
18	MP2A	Mx	-.006	6
19	MP4A	X	-.977	3.25
20	MP4A	Z	.564	3.25
21	MP4A	Mx	-.000363	3.25
22	MP1A	X	-2.017	3.25
23	MP1A	Z	1.164	3.25
24	MP1A	Mx	-.001	3.25
25	MP3A	X	-2.31	3.25
26	MP3A	Z	1.333	3.25
27	MP3A	Mx	-.001	3.25
28	M1	X	-.468	10.25
29	M1	Z	.27	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 36 : Antenna Wm (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-4.379	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	-.00038	2.5
4	MP1A	X	-4.379	4
5	MP1A	Z	0	4
6	MP1A	Mx	-.00038	4
7	MP2A	X	-8.557	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	.005	.5
10	MP2A	X	-8.557	6
11	MP2A	Z	0	6
12	MP2A	Mx	.005	6
13	MP2A	X	-8.557	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	-.006	.5
16	MP2A	X	-8.557	6
17	MP2A	Z	0	6
18	MP2A	Mx	-.006	6
19	MP4A	X	-1.648	3.25
20	MP4A	Z	0	3.25
21	MP4A	Mx	-.000143	3.25
22	MP1A	X	-1.922	3.25
23	MP1A	Z	0	3.25
24	MP1A	Mx	-.000961	3.25
25	MP3A	X	-2.373	3.25
26	MP3A	Z	0	3.25
27	MP3A	Mx	-.001	3.25
28	M1	X	-.486	10.25
29	M1	Z	0	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 37 : Antenna Wm (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-3.588	2.5
2	MP1A	Z	-2.072	2.5
3	MP1A	Mx	.000709	2.5
4	MP1A	X	-3.588	4
5	MP1A	Z	-2.072	4
6	MP1A	Mx	.000709	4
7	MP2A	X	-7.187	.5
8	MP2A	Z	-4.149	.5
9	MP2A	Mx	.006	.5
10	MP2A	X	-7.187	6
11	MP2A	Z	-4.149	6
12	MP2A	Mx	.006	6
13	MP2A	X	-7.187	.5
14	MP2A	Z	-4.149	.5
15	MP2A	Mx	-.003	.5
16	MP2A	X	-7.187	6
17	MP2A	Z	-4.149	6
18	MP2A	Mx	-.003	6
19	MP4A	X	-1.325	3.25
20	MP4A	Z	-.765	3.25
21	MP4A	Mx	.000262	3.25
22	MP1A	X	-2.017	3.25
23	MP1A	Z	-1.164	3.25
24	MP1A	Mx	-.001	3.25
25	MP3A	X	-2.31	3.25
26	MP3A	Z	-1.333	3.25
27	MP3A	Mx	-.001	3.25
28	M1	X	-4.468	10.25
29	M1	Z	-.27	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 38 : Antenna Wm (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-1.434	2.5
2	MP1A	Z	-2.484	2.5
3	MP1A	Mx	.001	2.5
4	MP1A	X	-1.434	4
5	MP1A	Z	-2.484	4
6	MP1A	Mx	.001	4
7	MP2A	X	-3.452	.5
8	MP2A	Z	-5.98	.5
9	MP2A	Mx	.005	.5
10	MP2A	X	-3.452	6
11	MP2A	Z	-5.98	6
12	MP2A	Mx	.005	6
13	MP2A	X	-3.452	.5
14	MP2A	Z	-5.98	.5
15	MP2A	Mx	-.000129	.5
16	MP2A	X	-3.452	6
17	MP2A	Z	-5.98	6
18	MP2A	Mx	-.000129	6
19	MP4A	X	-.446	3.25
20	MP4A	Z	-.773	3.25
21	MP4A	Mx	.000342	3.25
22	MP1A	X	-1.571	3.25
23	MP1A	Z	-2.722	3.25
24	MP1A	Mx	-.000786	3.25
25	MP3A	X	-1.628	3.25
26	MP3A	Z	-2.819	3.25
27	MP3A	Mx	-.000814	3.25
28	M1	X	-.324	10.25

Member Point Loads (BLC 38 : Antenna Wm (330 Deg)) (Continued)

Member Label		Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	M1	Z	-561	10.25
30	M1	Mx	0	10.25

Member Point Loads (BLC 77 : Lm1)

Member Label		Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%98

Member Point Loads (BLC 78 : Lm2)

Member Label		Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%66

Member Point Loads (BLC 79 : Lv1)

Member Label		Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

Member Label		Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	%100

Member Distributed Loads (BLC 40 : Structure Di)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	Y	-5.426	-5.426	0	%100
2	Y	-5.426	-5.426	0	%100
3	Y	-4.746	-4.746	0	%100
4	Y	-4.746	-4.746	0	%100
5	Y	-4.746	-4.746	0	%100
6	Y	-4.746	-4.746	0	%100
7	Y	-2.535	-2.535	0	%100
8	Y	-2.535	-2.535	0	%100
9	Y	-2.535	-2.535	0	%100
10	Y	-2.535	-2.535	0	%100
11	Y	-2.365	-2.365	0	%100
12	Y	-2.365	-2.365	0	%100
13	Y	-2.365	-2.365	0	%100
14	Y	-2.365	-2.365	0	%100
15	Y	-6.352	-6.352	0	%100
16	Y	-6.352	-6.352	0	%100
17	Y	-6.352	-6.352	0	%100
18	Y	-6.352	-6.352	0	%100
19	Y	-6.352	-6.352	0	%100
20	Y	-6.352	-6.352	0	%100
21	Y	-6.352	-6.352	0	%100
22	Y	-6.352	-6.352	0	%100
23	Y	-4.746	-4.746	0	%100
24	Y	-4.746	-4.746	0	%100
25	Y	-4.746	-4.746	0	%100
26	Y	-4.746	-4.746	0	%100
27	Y	-4.746	-4.746	0	%100
28	Y	-4.746	-4.746	0	%100

Member Distributed Loads (BLC 41 : Structure Wo (0 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	X	0	0	0	%100
2	Z	-8.159	-8.159	0	%100
3	X	0	0	0	%100
4	Z	-8.159	-8.159	0	%100
5	X	0	0	0	%100

Member Distributed Loads (BLC 41 : Structure Wo (0 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
6	M3	Z	-3.221	-3.221	0 %100
7	M4	X	0	0	0 %100
8	M4	Z	-3.221	-3.221	0 %100
9	M5	X	0	0	0 %100
10	M5	Z	-3.221	-3.221	0 %100
11	M6	X	0	0	0 %100
12	M6	Z	-3.221	-3.221	0 %100
13	M7	X	0	0	0 %100
14	M7	Z	-1.837	-1.837	0 %100
15	M8	X	0	0	0 %100
16	M8	Z	-1.837	-1.837	0 %100
17	M9	X	0	0	0 %100
18	M9	Z	-1.837	-1.837	0 %100
19	M10	X	0	0	0 %100
20	M10	Z	-1.837	-1.837	0 %100
21	M11	X	0	0	0 %100
22	M11	Z	-1.774	-1.774	0 %100
23	M12	X	0	0	0 %100
24	M12	Z	-1.774	-1.774	0 %100
25	M13	X	0	0	0 %100
26	M13	Z	-1.774	-1.774	0 %100
27	M14	X	0	0	0 %100
28	M14	Z	-1.774	-1.774	0 %100
29	M15	X	0	0	0 %100
30	M15	Z	0	0	0 %100
31	M16	X	0	0	0 %100
32	M16	Z	0	0	0 %100
33	M17	X	0	0	0 %100
34	M17	Z	0	0	0 %100
35	M18	X	0	0	0 %100
36	M18	Z	0	0	0 %100
37	M19	X	0	0	0 %100
38	M19	Z	-1.774	-1.774	0 %100
39	M20	X	0	0	0 %100
40	M20	Z	-1.774	-1.774	0 %100
41	M21	X	0	0	0 %100
42	M21	Z	-1.774	-1.774	0 %100
43	M22	X	0	0	0 %100
44	M22	Z	-1.774	-1.774	0 %100
45	M23	X	0	0	0 %100
46	M23	Z	-261	-261	0 %100
47	M24	X	0	0	0 %100
48	M24	Z	-261	-261	0 %100
49	MP1A	X	0	0	0 %100
50	MP1A	Z	-6.74	-6.74	0 %100
51	MP2A	X	0	0	0 %100
52	MP2A	Z	-6.74	-6.74	0 %100
53	MP3A	X	0	0	0 %100
54	MP3A	Z	-6.74	-6.74	0 %100
55	MP4A	X	0	0	0 %100
56	MP4A	Z	-6.74	-6.74	0 %100

Member Distributed Loads (BLC 42 : Structure Wo (30 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.06	3.06	0 %100
2	M1	Z	-5.299	-5.299	0 %100
3	M2	X	3.06	3.06	0 %100
4	M2	Z	-5.299	-5.299	0 %100
5	M3	X	.363	.363	0 %100
6	M3	Z	-628	-628	0 %100
7	M4	X	.363	.363	0 %100

Member Distributed Loads (BLC 42 : Structure Wo (30 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
8	M4	Z	-.628	-.628	0 %100
9	M5	X	2.547	2.547	0 %100
10	M5	Z	-4.412	-4.412	0 %100
11	M6	X	2.547	2.547	0 %100
12	M6	Z	-4.412	-4.412	0 %100
13	M7	X	.734	.734	0 %100
14	M7	Z	-1.272	-1.272	0 %100
15	M8	X	.734	.734	0 %100
16	M8	Z	-1.272	-1.272	0 %100
17	M9	X	1.057	1.057	0 %100
18	M9	Z	-1.83	-1.83	0 %100
19	M10	X	1.057	1.057	0 %100
20	M10	Z	-1.83	-1.83	0 %100
21	M11	X	.887	.887	0 %100
22	M11	Z	-1.536	-1.536	0 %100
23	M12	X	.887	.887	0 %100
24	M12	Z	-1.536	-1.536	0 %100
25	M13	X	.887	.887	0 %100
26	M13	Z	-1.536	-1.536	0 %100
27	M14	X	.887	.887	0 %100
28	M14	Z	-1.536	-1.536	0 %100
29	M15	X	.222	.222	0 %100
30	M15	Z	-.384	-.384	0 %100
31	M16	X	.222	.222	0 %100
32	M16	Z	-.384	-.384	0 %100
33	M17	X	.222	.222	0 %100
34	M17	Z	-.384	-.384	0 %100
35	M18	X	.222	.222	0 %100
36	M18	Z	-.384	-.384	0 %100
37	M19	X	.665	.665	0 %100
38	M19	Z	-1.152	-1.152	0 %100
39	M20	X	.665	.665	0 %100
40	M20	Z	-1.152	-1.152	0 %100
41	M21	X	.665	.665	0 %100
42	M21	Z	-1.152	-1.152	0 %100
43	M22	X	.665	.665	0 %100
44	M22	Z	-1.152	-1.152	0 %100
45	M23	X	1.471	1.471	0 %100
46	M23	Z	-2.548	-2.548	0 %100
47	M24	X	.344	.344	0 %100
48	M24	Z	-.597	-.597	0 %100
49	MP1A	X	3.37	3.37	0 %100
50	MP1A	Z	-5.837	-5.837	0 %100
51	MP2A	X	3.37	3.37	0 %100
52	MP2A	Z	-5.837	-5.837	0 %100
53	MP3A	X	3.37	3.37	0 %100
54	MP3A	Z	-5.837	-5.837	0 %100
55	MP4A	X	3.37	3.37	0 %100
56	MP4A	Z	-5.837	-5.837	0 %100

Member Distributed Loads (BLC 43 : Structure Wo (60 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.766	1.766	0 %100
2	M1	Z	-1.02	-1.02	0 %100
3	M2	X	1.766	1.766	0 %100
4	M2	Z	-1.02	-1.02	0 %100
5	M3	X	.089	.089	0 %100
6	M3	Z	-.051	-.051	0 %100
7	M4	X	.089	.089	0 %100
8	M4	Z	-.051	-.051	0 %100
9	M5	X	3.872	3.872	0 %100

Member Distributed Loads (BLC 43 : Structure Wo (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
10	M5	Z	-2.236	-2.236	0	%100
11	M6	X	3.872	3.872	0	%100
12	M6	Z	-2.236	-2.236	0	%100
13	M7	X	1.193	1.193	0	%100
14	M7	Z	-.689	-.689	0	%100
15	M8	X	1.193	1.193	0	%100
16	M8	Z	-.689	-.689	0	%100
17	M9	X	1.751	1.751	0	%100
18	M9	Z	-1.011	-1.011	0	%100
19	M10	X	1.751	1.751	0	%100
20	M10	Z	-1.011	-1.011	0	%100
21	M11	X	1.536	1.536	0	%100
22	M11	Z	-.887	-.887	0	%100
23	M12	X	1.536	1.536	0	%100
24	M12	Z	-.887	-.887	0	%100
25	M13	X	1.536	1.536	0	%100
26	M13	Z	-.887	-.887	0	%100
27	M14	X	1.536	1.536	0	%100
28	M14	Z	-.887	-.887	0	%100
29	M15	X	1.152	1.152	0	%100
30	M15	Z	-.665	-.665	0	%100
31	M16	X	1.152	1.152	0	%100
32	M16	Z	-.665	-.665	0	%100
33	M17	X	1.152	1.152	0	%100
34	M17	Z	-.665	-.665	0	%100
35	M18	X	1.152	1.152	0	%100
36	M18	Z	-.665	-.665	0	%100
37	M19	X	.384	.384	0	%100
38	M19	Z	-.222	-.222	0	%100
39	M20	X	.384	.384	0	%100
40	M20	Z	-.222	-.222	0	%100
41	M21	X	.384	.384	0	%100
42	M21	Z	-.222	-.222	0	%100
43	M22	X	.384	.384	0	%100
44	M22	Z	-.222	-.222	0	%100
45	M23	X	5.241	5.241	0	%100
46	M23	Z	-3.026	-3.026	0	%100
47	M24	X	3.289	3.289	0	%100
48	M24	Z	-1.899	-1.899	0	%100
49	MP1A	X	5.837	5.837	0	%100
50	MP1A	Z	-3.37	-3.37	0	%100
51	MP2A	X	5.837	5.837	0	%100
52	MP2A	Z	-3.37	-3.37	0	%100
53	MP3A	X	5.837	5.837	0	%100
54	MP3A	Z	-3.37	-3.37	0	%100
55	MP4A	X	5.837	5.837	0	%100
56	MP4A	Z	-3.37	-3.37	0	%100

Member Distributed Loads (BLC 44 : Structure Wo (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	1.975	1.975	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	1.975	1.975	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	1.975	1.975	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	1.975	1.975	0	%100

Member Distributed Loads (BLC 44 : Structure Wo (90 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
12	M6	Z	0	0	%100
13	M7	X	1.653	1.653	0
14	M7	Z	0	0	%100
15	M8	X	1.653	1.653	0
16	M8	Z	0	0	%100
17	M9	X	1.653	1.653	0
18	M9	Z	0	0	%100
19	M10	X	1.653	1.653	0
20	M10	Z	0	0	%100
21	M11	X	1.774	1.774	0
22	M11	Z	0	0	%100
23	M12	X	1.774	1.774	0
24	M12	Z	0	0	%100
25	M13	X	1.774	1.774	0
26	M13	Z	0	0	%100
27	M14	X	1.774	1.774	0
28	M14	Z	0	0	%100
29	M15	X	1.774	1.774	0
30	M15	Z	0	0	%100
31	M16	X	1.774	1.774	0
32	M16	Z	0	0	%100
33	M17	X	1.774	1.774	0
34	M17	Z	0	0	%100
35	M18	X	1.774	1.774	0
36	M18	Z	0	0	%100
37	M19	X	0	0	0
38	M19	Z	0	0	%100
39	M20	X	0	0	0
40	M20	Z	0	0	%100
41	M21	X	0	0	0
42	M21	Z	0	0	%100
43	M22	X	0	0	0
44	M22	Z	0	0	%100
45	M23	X	6.479	6.479	0
46	M23	Z	0	0	0
47	M24	X	6.479	6.479	0
48	M24	Z	0	0	0
49	MP1A	X	6.74	6.74	0
50	MP1A	Z	0	0	0
51	MP2A	X	6.74	6.74	0
52	MP2A	Z	0	0	0
53	MP3A	X	6.74	6.74	0
54	MP3A	Z	0	0	0
55	MP4A	X	6.74	6.74	0
56	MP4A	Z	0	0	%100

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.766	1.766	0
2	M1	Z	1.02	1.02	0
3	M2	X	1.766	1.766	0
4	M2	Z	1.02	1.02	0
5	M3	X	3.872	3.872	0
6	M3	Z	2.236	2.236	0
7	M4	X	3.872	3.872	0
8	M4	Z	2.236	2.236	0
9	M5	X	.089	.089	0
10	M5	Z	.051	.051	0
11	M6	X	.089	.089	0
12	M6	Z	.051	.051	0
13	M7	X	1.751	1.751	0

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
14	M7	Z	1.011	1.011	0	%100
15	M8	X	1.751	1.751	0	%100
16	M8	Z	1.011	1.011	0	%100
17	M9	X	1.193	1.193	0	%100
18	M9	Z	.689	.689	0	%100
19	M10	X	1.193	1.193	0	%100
20	M10	Z	.689	.689	0	%100
21	M11	X	1.536	1.536	0	%100
22	M11	Z	.887	.887	0	%100
23	M12	X	1.536	1.536	0	%100
24	M12	Z	.887	.887	0	%100
25	M13	X	1.536	1.536	0	%100
26	M13	Z	.887	.887	0	%100
27	M14	X	1.536	1.536	0	%100
28	M14	Z	.887	.887	0	%100
29	M15	X	1.152	1.152	0	%100
30	M15	Z	.665	.665	0	%100
31	M16	X	1.152	1.152	0	%100
32	M16	Z	.665	.665	0	%100
33	M17	X	1.152	1.152	0	%100
34	M17	Z	.665	.665	0	%100
35	M18	X	1.152	1.152	0	%100
36	M18	Z	.665	.665	0	%100
37	M19	X	.384	.384	0	%100
38	M19	Z	.222	.222	0	%100
39	M20	X	.384	.384	0	%100
40	M20	Z	.222	.222	0	%100
41	M21	X	.384	.384	0	%100
42	M21	Z	.222	.222	0	%100
43	M22	X	.384	.384	0	%100
44	M22	Z	.222	.222	0	%100
45	M23	X	3.289	3.289	0	%100
46	M23	Z	1.899	1.899	0	%100
47	M24	X	5.241	5.241	0	%100
48	M24	Z	3.026	3.026	0	%100
49	MP1A	X	5.837	5.837	0	%100
50	MP1A	Z	3.37	3.37	0	%100
51	MP2A	X	5.837	5.837	0	%100
52	MP2A	Z	3.37	3.37	0	%100
53	MP3A	X	5.837	5.837	0	%100
54	MP3A	Z	3.37	3.37	0	%100
55	MP4A	X	5.837	5.837	0	%100
56	MP4A	Z	3.37	3.37	0	%100

Member Distributed Loads (BLC 46 : Structure Wo (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.06	3.06	0	%100
2	M1	Z	5.299	5.299	0	%100
3	M2	X	3.06	3.06	0	%100
4	M2	Z	5.299	5.299	0	%100
5	M3	X	2.547	2.547	0	%100
6	M3	Z	4.412	4.412	0	%100
7	M4	X	2.547	2.547	0	%100
8	M4	Z	4.412	4.412	0	%100
9	M5	X	.363	.363	0	%100
10	M5	Z	.628	.628	0	%100
11	M6	X	.363	.363	0	%100
12	M6	Z	.628	.628	0	%100
13	M7	X	1.057	1.057	0	%100
14	M7	Z	1.83	1.83	0	%100
15	M8	X	1.057	1.057	0	%100

Member Distributed Loads (BLC 46 : Structure Wo (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
16	M8	Z	1.83	1.83	0	%100
17	M9	X	.734	.734	0	%100
18	M9	Z	1.272	1.272	0	%100
19	M10	X	.734	.734	0	%100
20	M10	Z	1.272	1.272	0	%100
21	M11	X	.887	.887	0	%100
22	M11	Z	1.536	1.536	0	%100
23	M12	X	.887	.887	0	%100
24	M12	Z	1.536	1.536	0	%100
25	M13	X	.887	.887	0	%100
26	M13	Z	1.536	1.536	0	%100
27	M14	X	.887	.887	0	%100
28	M14	Z	1.536	1.536	0	%100
29	M15	X	.222	.222	0	%100
30	M15	Z	.384	.384	0	%100
31	M16	X	.222	.222	0	%100
32	M16	Z	.384	.384	0	%100
33	M17	X	.222	.222	0	%100
34	M17	Z	.384	.384	0	%100
35	M18	X	.222	.222	0	%100
36	M18	Z	.384	.384	0	%100
37	M19	X	.665	.665	0	%100
38	M19	Z	1.152	1.152	0	%100
39	M20	X	.665	.665	0	%100
40	M20	Z	1.152	1.152	0	%100
41	M21	X	.665	.665	0	%100
42	M21	Z	1.152	1.152	0	%100
43	M22	X	.665	.665	0	%100
44	M22	Z	1.152	1.152	0	%100
45	M23	X	.344	.344	0	%100
46	M23	Z	.597	.597	0	%100
47	M24	X	1.471	1.471	0	%100
48	M24	Z	2.548	2.548	0	%100
49	MP1A	X	3.37	3.37	0	%100
50	MP1A	Z	5.837	5.837	0	%100
51	MP2A	X	3.37	3.37	0	%100
52	MP2A	Z	5.837	5.837	0	%100
53	MP3A	X	3.37	3.37	0	%100
54	MP3A	Z	5.837	5.837	0	%100
55	MP4A	X	3.37	3.37	0	%100
56	MP4A	Z	5.837	5.837	0	%100

Member Distributed Loads (BLC 47 : Structure Wo (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	8.159	8.159	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	8.159	8.159	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	3.221	3.221	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	3.221	3.221	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	3.221	3.221	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	3.221	3.221	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	1.837	1.837	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	1.837	1.837	0	%100
17	M9	X	0	0	0	%100

Member Distributed Loads (BLC 47 : Structure Wo (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
18	M9	Z	1.837	1.837	0	%100
19	M10	X	0	0	0	%100
20	M10	Z	1.837	1.837	0	%100
21	M11	X	0	0	0	%100
22	M11	Z	1.774	1.774	0	%100
23	M12	X	0	0	0	%100
24	M12	Z	1.774	1.774	0	%100
25	M13	X	0	0	0	%100
26	M13	Z	1.774	1.774	0	%100
27	M14	X	0	0	0	%100
28	M14	Z	1.774	1.774	0	%100
29	M15	X	0	0	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	0	0	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	0	0	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	0	0	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	1.774	1.774	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	1.774	1.774	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	1.774	1.774	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	1.774	1.774	0	%100
45	M23	X	0	0	0	%100
46	M23	Z	.261	.261	0	%100
47	M24	X	0	0	0	%100
48	M24	Z	.261	.261	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	6.74	6.74	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	6.74	6.74	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	6.74	6.74	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	6.74	6.74	0	%100

Member Distributed Loads (BLC 48 : Structure Wo (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.06	-3.06	0	%100
2	M1	Z	5.299	5.299	0	%100
3	M2	X	-3.06	-3.06	0	%100
4	M2	Z	5.299	5.299	0	%100
5	M3	X	-.363	-.363	0	%100
6	M3	Z	.628	.628	0	%100
7	M4	X	-.363	-.363	0	%100
8	M4	Z	.628	.628	0	%100
9	M5	X	-2.547	-2.547	0	%100
10	M5	Z	4.412	4.412	0	%100
11	M6	X	-2.547	-2.547	0	%100
12	M6	Z	4.412	4.412	0	%100
13	M7	X	-.734	-.734	0	%100
14	M7	Z	1.272	1.272	0	%100
15	M8	X	-.734	-.734	0	%100
16	M8	Z	1.272	1.272	0	%100
17	M9	X	-1.057	-1.057	0	%100
18	M9	Z	1.83	1.83	0	%100
19	M10	X	-1.057	-1.057	0	%100

Member Distributed Loads (BLC 48 : Structure Wo (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
20	M10	Z	1.83	1.83	0	%100
21	M11	X	-.887	-.887	0	%100
22	M11	Z	1.536	1.536	0	%100
23	M12	X	-.887	-.887	0	%100
24	M12	Z	1.536	1.536	0	%100
25	M13	X	-.887	-.887	0	%100
26	M13	Z	1.536	1.536	0	%100
27	M14	X	-.887	-.887	0	%100
28	M14	Z	1.536	1.536	0	%100
29	M15	X	-.222	-.222	0	%100
30	M15	Z	.384	.384	0	%100
31	M16	X	-.222	-.222	0	%100
32	M16	Z	.384	.384	0	%100
33	M17	X	-.222	-.222	0	%100
34	M17	Z	.384	.384	0	%100
35	M18	X	-.222	-.222	0	%100
36	M18	Z	.384	.384	0	%100
37	M19	X	-.665	-.665	0	%100
38	M19	Z	1.152	1.152	0	%100
39	M20	X	-.665	-.665	0	%100
40	M20	Z	1.152	1.152	0	%100
41	M21	X	-.665	-.665	0	%100
42	M21	Z	1.152	1.152	0	%100
43	M22	X	-.665	-.665	0	%100
44	M22	Z	1.152	1.152	0	%100
45	M23	X	-1.471	-1.471	0	%100
46	M23	Z	2.548	2.548	0	%100
47	M24	X	-.344	-.344	0	%100
48	M24	Z	.597	.597	0	%100
49	MP1A	X	-3.37	-3.37	0	%100
50	MP1A	Z	5.837	5.837	0	%100
51	MP2A	X	-3.37	-3.37	0	%100
52	MP2A	Z	5.837	5.837	0	%100
53	MP3A	X	-3.37	-3.37	0	%100
54	MP3A	Z	5.837	5.837	0	%100
55	MP4A	X	-3.37	-3.37	0	%100
56	MP4A	Z	5.837	5.837	0	%100

Member Distributed Loads (BLC 49 : Structure Wo (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.766	-1.766	0	%100
2	M1	Z	1.02	1.02	0	%100
3	M2	X	-1.766	-1.766	0	%100
4	M2	Z	1.02	1.02	0	%100
5	M3	X	-.089	-.089	0	%100
6	M3	Z	.051	.051	0	%100
7	M4	X	-.089	-.089	0	%100
8	M4	Z	.051	.051	0	%100
9	M5	X	-3.872	-3.872	0	%100
10	M5	Z	2.236	2.236	0	%100
11	M6	X	-3.872	-3.872	0	%100
12	M6	Z	2.236	2.236	0	%100
13	M7	X	-1.193	-1.193	0	%100
14	M7	Z	.689	.689	0	%100
15	M8	X	-1.193	-1.193	0	%100
16	M8	Z	.689	.689	0	%100
17	M9	X	-1.751	-1.751	0	%100
18	M9	Z	1.011	1.011	0	%100
19	M10	X	-1.751	-1.751	0	%100
20	M10	Z	1.011	1.011	0	%100
21	M11	X	-1.536	-1.536	0	%100

Member Distributed Loads (BLC 49 : Structure Wo (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
22	M11	Z	.887	.887	0	%100
23	M12	X	-1.536	-1.536	0	%100
24	M12	Z	.887	.887	0	%100
25	M13	X	-1.536	-1.536	0	%100
26	M13	Z	.887	.887	0	%100
27	M14	X	-1.536	-1.536	0	%100
28	M14	Z	.887	.887	0	%100
29	M15	X	-1.152	-1.152	0	%100
30	M15	Z	.665	.665	0	%100
31	M16	X	-1.152	-1.152	0	%100
32	M16	Z	.665	.665	0	%100
33	M17	X	-1.152	-1.152	0	%100
34	M17	Z	.665	.665	0	%100
35	M18	X	-1.152	-1.152	0	%100
36	M18	Z	.665	.665	0	%100
37	M19	X	-.384	-.384	0	%100
38	M19	Z	.222	.222	0	%100
39	M20	X	-.384	-.384	0	%100
40	M20	Z	.222	.222	0	%100
41	M21	X	-.384	-.384	0	%100
42	M21	Z	.222	.222	0	%100
43	M22	X	-.384	-.384	0	%100
44	M22	Z	.222	.222	0	%100
45	M23	X	-5.241	-5.241	0	%100
46	M23	Z	3.026	3.026	0	%100
47	M24	X	-3.289	-3.289	0	%100
48	M24	Z	1.899	1.899	0	%100
49	MP1A	X	-5.837	-5.837	0	%100
50	MP1A	Z	3.37	3.37	0	%100
51	MP2A	X	-5.837	-5.837	0	%100
52	MP2A	Z	3.37	3.37	0	%100
53	MP3A	X	-5.837	-5.837	0	%100
54	MP3A	Z	3.37	3.37	0	%100
55	MP4A	X	-5.837	-5.837	0	%100
56	MP4A	Z	3.37	3.37	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-1.975	-1.975	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	-1.975	-1.975	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	-1.975	-1.975	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	-1.975	-1.975	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	-1.653	-1.653	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	-1.653	-1.653	0	%100
16	M8	Z	0	0	0	%100
17	M9	X	-1.653	-1.653	0	%100
18	M9	Z	0	0	0	%100
19	M10	X	-1.653	-1.653	0	%100
20	M10	Z	0	0	0	%100
21	M11	X	-1.774	-1.774	0	%100
22	M11	Z	0	0	0	%100
23	M12	X	-1.774	-1.774	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
24	M12	Z	0	0	%100
25	M13	X	-1.774	-1.774	0
26	M13	Z	0	0	%100
27	M14	X	-1.774	-1.774	0
28	M14	Z	0	0	%100
29	M15	X	-1.774	-1.774	0
30	M15	Z	0	0	%100
31	M16	X	-1.774	-1.774	0
32	M16	Z	0	0	%100
33	M17	X	-1.774	-1.774	0
34	M17	Z	0	0	%100
35	M18	X	-1.774	-1.774	0
36	M18	Z	0	0	%100
37	M19	X	0	0	%100
38	M19	Z	0	0	%100
39	M20	X	0	0	%100
40	M20	Z	0	0	%100
41	M21	X	0	0	%100
42	M21	Z	0	0	%100
43	M22	X	0	0	%100
44	M22	Z	0	0	%100
45	M23	X	-6.479	-6.479	0
46	M23	Z	0	0	%100
47	M24	X	-6.479	-6.479	0
48	M24	Z	0	0	%100
49	MP1A	X	-6.74	-6.74	0
50	MP1A	Z	0	0	%100
51	MP2A	X	-6.74	-6.74	0
52	MP2A	Z	0	0	%100
53	MP3A	X	-6.74	-6.74	0
54	MP3A	Z	0	0	%100
55	MP4A	X	-6.74	-6.74	0
56	MP4A	Z	0	0	%100

Member Distributed Loads (BLC 51 : Structure Wo (300 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.766	-1.766	0
2	M1	Z	-1.02	-1.02	0
3	M2	X	-1.766	-1.766	0
4	M2	Z	-1.02	-1.02	0
5	M3	X	-3.872	-3.872	0
6	M3	Z	-2.236	-2.236	0
7	M4	X	-3.872	-3.872	0
8	M4	Z	-2.236	-2.236	0
9	M5	X	-.089	-.089	0
10	M5	Z	-.051	-.051	0
11	M6	X	-.089	-.089	0
12	M6	Z	-.051	-.051	0
13	M7	X	-1.751	-1.751	0
14	M7	Z	-1.011	-1.011	0
15	M8	X	-1.751	-1.751	0
16	M8	Z	-1.011	-1.011	0
17	M9	X	-1.193	-1.193	0
18	M9	Z	-.689	-.689	0
19	M10	X	-1.193	-1.193	0
20	M10	Z	-.689	-.689	0
21	M11	X	-1.536	-1.536	0
22	M11	Z	-.887	-.887	0
23	M12	X	-1.536	-1.536	0
24	M12	Z	-.887	-.887	0
25	M13	X	-1.536	-1.536	0

Member Distributed Loads (BLC 51 : Structure Wo (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
26	M13	Z	-.887	-.887	0	%100
27	M14	X	-1.536	-1.536	0	%100
28	M14	Z	-.887	-.887	0	%100
29	M15	X	-1.152	-1.152	0	%100
30	M15	Z	-.665	-.665	0	%100
31	M16	X	-1.152	-1.152	0	%100
32	M16	Z	-.665	-.665	0	%100
33	M17	X	-1.152	-1.152	0	%100
34	M17	Z	-.665	-.665	0	%100
35	M18	X	-1.152	-1.152	0	%100
36	M18	Z	-.665	-.665	0	%100
37	M19	X	-.384	-.384	0	%100
38	M19	Z	-.222	-.222	0	%100
39	M20	X	-.384	-.384	0	%100
40	M20	Z	-.222	-.222	0	%100
41	M21	X	-.384	-.384	0	%100
42	M21	Z	-.222	-.222	0	%100
43	M22	X	-.384	-.384	0	%100
44	M22	Z	-.222	-.222	0	%100
45	M23	X	-3.289	-3.289	0	%100
46	M23	Z	-1.899	-1.899	0	%100
47	M24	X	-5.241	-5.241	0	%100
48	M24	Z	-3.026	-3.026	0	%100
49	MP1A	X	-5.837	-5.837	0	%100
50	MP1A	Z	-3.37	-3.37	0	%100
51	MP2A	X	-5.837	-5.837	0	%100
52	MP2A	Z	-3.37	-3.37	0	%100
53	MP3A	X	-5.837	-5.837	0	%100
54	MP3A	Z	-3.37	-3.37	0	%100
55	MP4A	X	-5.837	-5.837	0	%100
56	MP4A	Z	-3.37	-3.37	0	%100

Member Distributed Loads (BLC 52 : Structure Wo (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.06	-3.06	0	%100
2	M1	Z	-5.299	-5.299	0	%100
3	M2	X	-3.06	-3.06	0	%100
4	M2	Z	-5.299	-5.299	0	%100
5	M3	X	-2.547	-2.547	0	%100
6	M3	Z	-4.412	-4.412	0	%100
7	M4	X	-2.547	-2.547	0	%100
8	M4	Z	-4.412	-4.412	0	%100
9	M5	X	-.363	-.363	0	%100
10	M5	Z	-.628	-.628	0	%100
11	M6	X	-.363	-.363	0	%100
12	M6	Z	-.628	-.628	0	%100
13	M7	X	-1.057	-1.057	0	%100
14	M7	Z	-1.83	-1.83	0	%100
15	M8	X	-1.057	-1.057	0	%100
16	M8	Z	-1.83	-1.83	0	%100
17	M9	X	-.734	-.734	0	%100
18	M9	Z	-1.272	-1.272	0	%100
19	M10	X	-.734	-.734	0	%100
20	M10	Z	-1.272	-1.272	0	%100
21	M11	X	-.887	-.887	0	%100
22	M11	Z	-1.536	-1.536	0	%100
23	M12	X	-.887	-.887	0	%100
24	M12	Z	-1.536	-1.536	0	%100
25	M13	X	-.887	-.887	0	%100
26	M13	Z	-1.536	-1.536	0	%100
27	M14	X	-.887	-.887	0	%100

Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
28	M14	Z	-1.536	-1.536	0	%100
29	M15	X	-.222	-.222	0	%100
30	M15	Z	-.384	-.384	0	%100
31	M16	X	-.222	-.222	0	%100
32	M16	Z	-.384	-.384	0	%100
33	M17	X	-.222	-.222	0	%100
34	M17	Z	-.384	-.384	0	%100
35	M18	X	-.222	-.222	0	%100
36	M18	Z	-.384	-.384	0	%100
37	M19	X	-.665	-.665	0	%100
38	M19	Z	-1.152	-1.152	0	%100
39	M20	X	-.665	-.665	0	%100
40	M20	Z	-1.152	-1.152	0	%100
41	M21	X	-.665	-.665	0	%100
42	M21	Z	-1.152	-1.152	0	%100
43	M22	X	-.665	-.665	0	%100
44	M22	Z	-1.152	-1.152	0	%100
45	M23	X	-.344	-.344	0	%100
46	M23	Z	-.597	-.597	0	%100
47	M24	X	-1.471	-1.471	0	%100
48	M24	Z	-2.548	-2.548	0	%100
49	MP1A	X	-3.37	-3.37	0	%100
50	MP1A	Z	-5.837	-5.837	0	%100
51	MP2A	X	-3.37	-3.37	0	%100
52	MP2A	Z	-5.837	-5.837	0	%100
53	MP3A	X	-3.37	-3.37	0	%100
54	MP3A	Z	-5.837	-5.837	0	%100
55	MP4A	X	-3.37	-3.37	0	%100
56	MP4A	Z	-5.837	-5.837	0	%100

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-2.69	-2.69	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-2.69	-2.69	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-1.171	-1.171	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-1.171	-1.171	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	-1.171	-1.171	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	-1.171	-1.171	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	-1.307	-1.307	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	-1.307	-1.307	0	%100
17	M9	X	0	0	0	%100
18	M9	Z	-1.307	-1.307	0	%100
19	M10	X	0	0	0	%100
20	M10	Z	-1.307	-1.307	0	%100
21	M11	X	0	0	0	%100
22	M11	Z	-1.351	-1.351	0	%100
23	M12	X	0	0	0	%100
24	M12	Z	-1.351	-1.351	0	%100
25	M13	X	0	0	0	%100
26	M13	Z	-1.351	-1.351	0	%100
27	M14	X	0	0	0	%100
28	M14	Z	-1.351	-1.351	0	%100
29	M15	X	0	0	0	%100

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
30	M15	Z	0	0	%100
31	M16	X	0	0	%100
32	M16	Z	0	0	%100
33	M17	X	0	0	%100
34	M17	Z	0	0	%100
35	M18	X	0	0	%100
36	M18	Z	0	0	%100
37	M19	X	0	0	%100
38	M19	Z	-1.022	-1.022	0
39	M20	X	0	0	%100
40	M20	Z	-1.022	-1.022	0
41	M21	X	0	0	%100
42	M21	Z	-1.022	-1.022	0
43	M22	X	0	0	%100
44	M22	Z	-1.022	-1.022	0
45	M23	X	0	0	%100
46	M23	Z	-.094	-.094	0
47	M24	X	0	0	%100
48	M24	Z	-.094	-.094	0
49	MP1A	X	0	0	%100
50	MP1A	Z	-2.427	-2.427	0
51	MP2A	X	0	0	%100
52	MP2A	Z	-2.427	-2.427	0
53	MP3A	X	0	0	%100
54	MP3A	Z	-2.427	-2.427	0
55	MP4A	X	0	0	%100
56	MP4A	Z	-2.427	-2.427	0

Member Distributed Loads (BLC 54 : Structure Wi (30 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.009	1.009	0
2	M1	Z	-1.747	-1.747	0
3	M2	X	1.009	1.009	0
4	M2	Z	-1.747	-1.747	0
5	M3	X	.132	.132	0
6	M3	Z	-.228	-.228	0
7	M4	X	.132	.132	0
8	M4	Z	-.228	-.228	0
9	M5	X	.926	.926	0
10	M5	Z	-1.604	-1.604	0
11	M6	X	.926	.926	0
12	M6	Z	-1.604	-1.604	0
13	M7	X	.523	.523	0
14	M7	Z	-.905	-.905	0
15	M8	X	.523	.523	0
16	M8	Z	-.905	-.905	0
17	M9	X	.752	.752	0
18	M9	Z	-1.302	-1.302	0
19	M10	X	.752	.752	0
20	M10	Z	-1.302	-1.302	0
21	M11	X	.675	.675	0
22	M11	Z	-1.17	-1.17	0
23	M12	X	.675	.675	0
24	M12	Z	-1.17	-1.17	0
25	M13	X	.675	.675	0
26	M13	Z	-1.17	-1.17	0
27	M14	X	.675	.675	0
28	M14	Z	-1.17	-1.17	0
29	M15	X	.127	.127	0
30	M15	Z	-.22	-.22	0
31	M16	X	.127	.127	0

Member Distributed Loads (BLC 54 : Structure Wi (30 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
32	M16	Z	.22	.22	0	%100
33	M17	X	.127	.127	0	%100
34	M17	Z	.22	.22	0	%100
35	M18	X	.127	.127	0	%100
36	M18	Z	.22	.22	0	%100
37	M19	X	.383	.383	0	%100
38	M19	Z	-.664	-.664	0	%100
39	M20	X	.383	.383	0	%100
40	M20	Z	-.664	-.664	0	%100
41	M21	X	.383	.383	0	%100
42	M21	Z	-.664	-.664	0	%100
43	M22	X	.383	.383	0	%100
44	M22	Z	-.664	-.664	0	%100
45	M23	X	.53	.53	0	%100
46	M23	Z	-.917	-.917	0	%100
47	M24	X	.124	.124	0	%100
48	M24	Z	-.215	-.215	0	%100
49	MP1A	X	1.213	1.213	0	%100
50	MP1A	Z	-2.101	-2.101	0	%100
51	MP2A	X	1.213	1.213	0	%100
52	MP2A	Z	-2.101	-2.101	0	%100
53	MP3A	X	1.213	1.213	0	%100
54	MP3A	Z	-2.101	-2.101	0	%100
55	MP4A	X	1.213	1.213	0	%100
56	MP4A	Z	-2.101	-2.101	0	%100

Member Distributed Loads (BLC 55 : Structure Wi (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.582	.582	0	%100
2	M1	Z	-.336	-.336	0	%100
3	M2	X	.582	.582	0	%100
4	M2	Z	-.336	-.336	0	%100
5	M3	X	.032	.032	0	%100
6	M3	Z	-.019	-.019	0	%100
7	M4	X	.032	.032	0	%100
8	M4	Z	-.019	-.019	0	%100
9	M5	X	1.408	1.408	0	%100
10	M5	Z	-.813	-.813	0	%100
11	M6	X	1.408	1.408	0	%100
12	M6	Z	-.813	-.813	0	%100
13	M7	X	.848	.848	0	%100
14	M7	Z	-.49	-.49	0	%100
15	M8	X	.848	.848	0	%100
16	M8	Z	-.49	-.49	0	%100
17	M9	X	1.246	1.246	0	%100
18	M9	Z	-.719	-.719	0	%100
19	M10	X	1.246	1.246	0	%100
20	M10	Z	-.719	-.719	0	%100
21	M11	X	1.17	1.17	0	%100
22	M11	Z	-.675	-.675	0	%100
23	M12	X	1.17	1.17	0	%100
24	M12	Z	-.675	-.675	0	%100
25	M13	X	1.17	1.17	0	%100
26	M13	Z	-.675	-.675	0	%100
27	M14	X	1.17	1.17	0	%100
28	M14	Z	-.675	-.675	0	%100
29	M15	X	.659	.659	0	%100
30	M15	Z	-.38	-.38	0	%100
31	M16	X	.659	.659	0	%100
32	M16	Z	-.38	-.38	0	%100
33	M17	X	.659	.659	0	%100

Member Distributed Loads (BLC 55 : Structure Wi (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
34	M17	Z	-.38	-.38	0	%100
35	M18	X	.659	.659	0	%100
36	M18	Z	-.38	-.38	0	%100
37	M19	X	.221	.221	0	%100
38	M19	Z	-.128	-.128	0	%100
39	M20	X	.221	.221	0	%100
40	M20	Z	-.128	-.128	0	%100
41	M21	X	.221	.221	0	%100
42	M21	Z	-.128	-.128	0	%100
43	M22	X	.221	.221	0	%100
44	M22	Z	-.128	-.128	0	%100
45	M23	X	1.887	1.887	0	%100
46	M23	Z	-1.089	-1.089	0	%100
47	M24	X	1.184	1.184	0	%100
48	M24	Z	-.684	-.684	0	%100
49	MP1A	X	2.101	2.101	0	%100
50	MP1A	Z	-1.213	-1.213	0	%100
51	MP2A	X	2.101	2.101	0	%100
52	MP2A	Z	-1.213	-1.213	0	%100
53	MP3A	X	2.101	2.101	0	%100
54	MP3A	Z	-1.213	-1.213	0	%100
55	MP4A	X	2.101	2.101	0	%100
56	MP4A	Z	-1.213	-1.213	0	%100

Member Distributed Loads (BLC 56 : Structure Wi (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	.718	.718	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	.718	.718	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	.718	.718	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	.718	.718	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	1.176	1.176	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	1.176	1.176	0	%100
16	M8	Z	0	0	0	%100
17	M9	X	1.176	1.176	0	%100
18	M9	Z	0	0	0	%100
19	M10	X	1.176	1.176	0	%100
20	M10	Z	0	0	0	%100
21	M11	X	1.351	1.351	0	%100
22	M11	Z	0	0	0	%100
23	M12	X	1.351	1.351	0	%100
24	M12	Z	0	0	0	%100
25	M13	X	1.351	1.351	0	%100
26	M13	Z	0	0	0	%100
27	M14	X	1.351	1.351	0	%100
28	M14	Z	0	0	0	%100
29	M15	X	1.015	1.015	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	1.015	1.015	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	1.015	1.015	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	1.015	1.015	0	%100

Member Distributed Loads (BLC 56 : Structure Wi (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	0	0	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	0	0	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	0	0	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	0	0	0	%100
45	M23	X	2.332	2.332	0	%100
46	M23	Z	0	0	0	%100
47	M24	X	2.332	2.332	0	%100
48	M24	Z	0	0	0	%100
49	MP1A	X	2.427	2.427	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	2.427	2.427	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	2.427	2.427	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	2.427	2.427	0	%100
56	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 57 : Structure Wi (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.582	.582	0	%100
2	M1	Z	.336	.336	0	%100
3	M2	X	.582	.582	0	%100
4	M2	Z	.336	.336	0	%100
5	M3	X	1.408	1.408	0	%100
6	M3	Z	.813	.813	0	%100
7	M4	X	1.408	1.408	0	%100
8	M4	Z	.813	.813	0	%100
9	M5	X	.032	.032	0	%100
10	M5	Z	.019	.019	0	%100
11	M6	X	.032	.032	0	%100
12	M6	Z	.019	.019	0	%100
13	M7	X	1.246	1.246	0	%100
14	M7	Z	.719	.719	0	%100
15	M8	X	1.246	1.246	0	%100
16	M8	Z	.719	.719	0	%100
17	M9	X	.848	.848	0	%100
18	M9	Z	.49	.49	0	%100
19	M10	X	.848	.848	0	%100
20	M10	Z	.49	.49	0	%100
21	M11	X	1.17	1.17	0	%100
22	M11	Z	.675	.675	0	%100
23	M12	X	1.17	1.17	0	%100
24	M12	Z	.675	.675	0	%100
25	M13	X	1.17	1.17	0	%100
26	M13	Z	.675	.675	0	%100
27	M14	X	1.17	1.17	0	%100
28	M14	Z	.675	.675	0	%100
29	M15	X	.659	.659	0	%100
30	M15	Z	.38	.38	0	%100
31	M16	X	.659	.659	0	%100
32	M16	Z	.38	.38	0	%100
33	M17	X	.659	.659	0	%100
34	M17	Z	.38	.38	0	%100
35	M18	X	.659	.659	0	%100
36	M18	Z	.38	.38	0	%100
37	M19	X	.221	.221	0	%100

Member Distributed Loads (BLC 57 : Structure Wi (120 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
38	M19	Z	.128	.128	0 %100
39	M20	X	.221	.221	0 %100
40	M20	Z	.128	.128	0 %100
41	M21	X	.221	.221	0 %100
42	M21	Z	.128	.128	0 %100
43	M22	X	.221	.221	0 %100
44	M22	Z	.128	.128	0 %100
45	M23	X	1.184	1.184	0 %100
46	M23	Z	.684	.684	0 %100
47	M24	X	1.887	1.887	0 %100
48	M24	Z	1.089	1.089	0 %100
49	MP1A	X	2.101	2.101	0 %100
50	MP1A	Z	1.213	1.213	0 %100
51	MP2A	X	2.101	2.101	0 %100
52	MP2A	Z	1.213	1.213	0 %100
53	MP3A	X	2.101	2.101	0 %100
54	MP3A	Z	1.213	1.213	0 %100
55	MP4A	X	2.101	2.101	0 %100
56	MP4A	Z	1.213	1.213	0 %100

Member Distributed Loads (BLC 58 : Structure Wi (150 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.009	1.009	0 %100
2	M1	Z	1.747	1.747	0 %100
3	M2	X	1.009	1.009	0 %100
4	M2	Z	1.747	1.747	0 %100
5	M3	X	.926	.926	0 %100
6	M3	Z	1.604	1.604	0 %100
7	M4	X	.926	.926	0 %100
8	M4	Z	1.604	1.604	0 %100
9	M5	X	.132	.132	0 %100
10	M5	Z	.228	.228	0 %100
11	M6	X	.132	.132	0 %100
12	M6	Z	.228	.228	0 %100
13	M7	X	.752	.752	0 %100
14	M7	Z	1.302	1.302	0 %100
15	M8	X	.752	.752	0 %100
16	M8	Z	1.302	1.302	0 %100
17	M9	X	.523	.523	0 %100
18	M9	Z	.905	.905	0 %100
19	M10	X	.523	.523	0 %100
20	M10	Z	.905	.905	0 %100
21	M11	X	.675	.675	0 %100
22	M11	Z	1.17	1.17	0 %100
23	M12	X	.675	.675	0 %100
24	M12	Z	1.17	1.17	0 %100
25	M13	X	.675	.675	0 %100
26	M13	Z	1.17	1.17	0 %100
27	M14	X	.675	.675	0 %100
28	M14	Z	1.17	1.17	0 %100
29	M15	X	.127	.127	0 %100
30	M15	Z	.22	.22	0 %100
31	M16	X	.127	.127	0 %100
32	M16	Z	.22	.22	0 %100
33	M17	X	.127	.127	0 %100
34	M17	Z	.22	.22	0 %100
35	M18	X	.127	.127	0 %100
36	M18	Z	.22	.22	0 %100
37	M19	X	.383	.383	0 %100
38	M19	Z	.664	.664	0 %100
39	M20	X	.383	.383	0 %100

Member Distributed Loads (BLC 58 : Structure Wi (150 Deg)) (Continued)

Member Label		Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
40	M20	Z	.664	.664	0	%100
41	M21	X	.383	.383	0	%100
42	M21	Z	.664	.664	0	%100
43	M22	X	.383	.383	0	%100
44	M22	Z	.664	.664	0	%100
45	M23	X	.124	.124	0	%100
46	M23	Z	.215	.215	0	%100
47	M24	X	.53	.53	0	%100
48	M24	Z	.917	.917	0	%100
49	MP1A	X	1.213	1.213	0	%100
50	MP1A	Z	2.101	2.101	0	%100
51	MP2A	X	1.213	1.213	0	%100
52	MP2A	Z	2.101	2.101	0	%100
53	MP3A	X	1.213	1.213	0	%100
54	MP3A	Z	2.101	2.101	0	%100
55	MP4A	X	1.213	1.213	0	%100
56	MP4A	Z	2.101	2.101	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg))

Member Label		Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	2.69	2.69	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	2.69	2.69	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	1.171	1.171	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	1.171	1.171	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	1.171	1.171	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	1.171	1.171	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	1.307	1.307	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	1.307	1.307	0	%100
17	M9	X	0	0	0	%100
18	M9	Z	1.307	1.307	0	%100
19	M10	X	0	0	0	%100
20	M10	Z	1.307	1.307	0	%100
21	M11	X	0	0	0	%100
22	M11	Z	1.351	1.351	0	%100
23	M12	X	0	0	0	%100
24	M12	Z	1.351	1.351	0	%100
25	M13	X	0	0	0	%100
26	M13	Z	1.351	1.351	0	%100
27	M14	X	0	0	0	%100
28	M14	Z	1.351	1.351	0	%100
29	M15	X	0	0	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	0	0	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	0	0	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	0	0	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	1.022	1.022	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	1.022	1.022	0	%100
41	M21	X	0	0	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
42	M21	Z	1.022	1.022	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	1.022	1.022	0	%100
45	M23	X	0	0	0	%100
46	M23	Z	.094	.094	0	%100
47	M24	X	0	0	0	%100
48	M24	Z	.094	.094	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	2.427	2.427	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	2.427	2.427	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	2.427	2.427	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	2.427	2.427	0	%100

Member Distributed Loads (BLC 60 : Structure Wi (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.009	-1.009	0	%100
2	M1	Z	1.747	1.747	0	%100
3	M2	X	-1.009	-1.009	0	%100
4	M2	Z	1.747	1.747	0	%100
5	M3	X	-.132	-.132	0	%100
6	M3	Z	.228	.228	0	%100
7	M4	X	-.132	-.132	0	%100
8	M4	Z	.228	.228	0	%100
9	M5	X	-.926	-.926	0	%100
10	M5	Z	1.604	1.604	0	%100
11	M6	X	-.926	-.926	0	%100
12	M6	Z	1.604	1.604	0	%100
13	M7	X	-.523	-.523	0	%100
14	M7	Z	.905	.905	0	%100
15	M8	X	-.523	-.523	0	%100
16	M8	Z	.905	.905	0	%100
17	M9	X	-.752	-.752	0	%100
18	M9	Z	1.302	1.302	0	%100
19	M10	X	-.752	-.752	0	%100
20	M10	Z	1.302	1.302	0	%100
21	M11	X	-.675	-.675	0	%100
22	M11	Z	1.17	1.17	0	%100
23	M12	X	-.675	-.675	0	%100
24	M12	Z	1.17	1.17	0	%100
25	M13	X	-.675	-.675	0	%100
26	M13	Z	1.17	1.17	0	%100
27	M14	X	-.675	-.675	0	%100
28	M14	Z	1.17	1.17	0	%100
29	M15	X	-.127	-.127	0	%100
30	M15	Z	.22	.22	0	%100
31	M16	X	-.127	-.127	0	%100
32	M16	Z	.22	.22	0	%100
33	M17	X	-.127	-.127	0	%100
34	M17	Z	.22	.22	0	%100
35	M18	X	-.127	-.127	0	%100
36	M18	Z	.22	.22	0	%100
37	M19	X	-.383	-.383	0	%100
38	M19	Z	.664	.664	0	%100
39	M20	X	-.383	-.383	0	%100
40	M20	Z	.664	.664	0	%100
41	M21	X	-.383	-.383	0	%100
42	M21	Z	.664	.664	0	%100
43	M22	X	-.383	-.383	0	%100

Member Distributed Loads (BLC 60 : Structure Wi (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
44	M22	Z	.664	.664	0	%100
45	M23	X	-.53	-.53	0	%100
46	M23	Z	.917	.917	0	%100
47	M24	X	-.124	-.124	0	%100
48	M24	Z	.215	.215	0	%100
49	MP1A	X	-1.213	-1.213	0	%100
50	MP1A	Z	2.101	2.101	0	%100
51	MP2A	X	-1.213	-1.213	0	%100
52	MP2A	Z	2.101	2.101	0	%100
53	MP3A	X	-1.213	-1.213	0	%100
54	MP3A	Z	2.101	2.101	0	%100
55	MP4A	X	-1.213	-1.213	0	%100
56	MP4A	Z	2.101	2.101	0	%100

Member Distributed Loads (BLC 61 : Structure Wi (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.582	-.582	0	%100
2	M1	Z	.336	.336	0	%100
3	M2	X	-.582	-.582	0	%100
4	M2	Z	.336	.336	0	%100
5	M3	X	-.032	-.032	0	%100
6	M3	Z	.019	.019	0	%100
7	M4	X	-.032	-.032	0	%100
8	M4	Z	.019	.019	0	%100
9	M5	X	-1.408	-1.408	0	%100
10	M5	Z	.813	.813	0	%100
11	M6	X	-1.408	-1.408	0	%100
12	M6	Z	.813	.813	0	%100
13	M7	X	-.848	-.848	0	%100
14	M7	Z	.49	.49	0	%100
15	M8	X	-.848	-.848	0	%100
16	M8	Z	.49	.49	0	%100
17	M9	X	-1.246	-1.246	0	%100
18	M9	Z	.719	.719	0	%100
19	M10	X	-1.246	-1.246	0	%100
20	M10	Z	.719	.719	0	%100
21	M11	X	-1.17	-1.17	0	%100
22	M11	Z	.675	.675	0	%100
23	M12	X	-1.17	-1.17	0	%100
24	M12	Z	.675	.675	0	%100
25	M13	X	-1.17	-1.17	0	%100
26	M13	Z	.675	.675	0	%100
27	M14	X	-1.17	-1.17	0	%100
28	M14	Z	.675	.675	0	%100
29	M15	X	-.659	-.659	0	%100
30	M15	Z	.38	.38	0	%100
31	M16	X	-.659	-.659	0	%100
32	M16	Z	.38	.38	0	%100
33	M17	X	-.659	-.659	0	%100
34	M17	Z	.38	.38	0	%100
35	M18	X	-.659	-.659	0	%100
36	M18	Z	.38	.38	0	%100
37	M19	X	-.221	-.221	0	%100
38	M19	Z	.128	.128	0	%100
39	M20	X	-.221	-.221	0	%100
40	M20	Z	.128	.128	0	%100
41	M21	X	-.221	-.221	0	%100
42	M21	Z	.128	.128	0	%100
43	M22	X	-.221	-.221	0	%100
44	M22	Z	.128	.128	0	%100
45	M23	X	-1.887	-1.887	0	%100

Member Distributed Loads (BLC 61 : Structure Wi (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
46	M23	Z	1.089	1.089	0	%100
47	M24	X	-1.184	-1.184	0	%100
48	M24	Z	.684	.684	0	%100
49	MP1A	X	-2.101	-2.101	0	%100
50	MP1A	Z	1.213	1.213	0	%100
51	MP2A	X	-2.101	-2.101	0	%100
52	MP2A	Z	1.213	1.213	0	%100
53	MP3A	X	-2.101	-2.101	0	%100
54	MP3A	Z	1.213	1.213	0	%100
55	MP4A	X	-2.101	-2.101	0	%100
56	MP4A	Z	1.213	1.213	0	%100

Member Distributed Loads (BLC 62 : Structure Wi (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-.718	-.718	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	-.718	-.718	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	-.718	-.718	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	-.718	-.718	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	-1.176	-1.176	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	-1.176	-1.176	0	%100
16	M8	Z	0	0	0	%100
17	M9	X	-1.176	-1.176	0	%100
18	M9	Z	0	0	0	%100
19	M10	X	-1.176	-1.176	0	%100
20	M10	Z	0	0	0	%100
21	M11	X	-1.351	-1.351	0	%100
22	M11	Z	0	0	0	%100
23	M12	X	-1.351	-1.351	0	%100
24	M12	Z	0	0	0	%100
25	M13	X	-1.351	-1.351	0	%100
26	M13	Z	0	0	0	%100
27	M14	X	-1.351	-1.351	0	%100
28	M14	Z	0	0	0	%100
29	M15	X	-1.015	-1.015	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	-1.015	-1.015	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	-1.015	-1.015	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	-1.015	-1.015	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	0	0	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	0	0	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	0	0	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	0	0	0	%100
45	M23	X	-2.332	-2.332	0	%100
46	M23	Z	0	0	0	%100
47	M24	X	-2.332	-2.332	0	%100

Member Distributed Loads (BLC 62 : Structure Wi (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
48	M24	Z	0	0	0	%100
49	MP1A	X	-2.427	-2.427	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	-2.427	-2.427	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	-2.427	-2.427	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	-2.427	-2.427	0	%100
56	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 63 : Structure Wi (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.582	-.582	0	%100
2	M1	Z	-.336	-.336	0	%100
3	M2	X	-.582	-.582	0	%100
4	M2	Z	-.336	-.336	0	%100
5	M3	X	-1.408	-1.408	0	%100
6	M3	Z	-.813	-.813	0	%100
7	M4	X	-1.408	-1.408	0	%100
8	M4	Z	-.813	-.813	0	%100
9	M5	X	-.032	-.032	0	%100
10	M5	Z	-.019	-.019	0	%100
11	M6	X	-.032	-.032	0	%100
12	M6	Z	-.019	-.019	0	%100
13	M7	X	-1.246	-1.246	0	%100
14	M7	Z	-.719	-.719	0	%100
15	M8	X	-1.246	-1.246	0	%100
16	M8	Z	-.719	-.719	0	%100
17	M9	X	-.848	-.848	0	%100
18	M9	Z	-.49	-.49	0	%100
19	M10	X	-.848	-.848	0	%100
20	M10	Z	-.49	-.49	0	%100
21	M11	X	-1.17	-1.17	0	%100
22	M11	Z	-.675	-.675	0	%100
23	M12	X	-1.17	-1.17	0	%100
24	M12	Z	-.675	-.675	0	%100
25	M13	X	-1.17	-1.17	0	%100
26	M13	Z	-.675	-.675	0	%100
27	M14	X	-1.17	-1.17	0	%100
28	M14	Z	-.675	-.675	0	%100
29	M15	X	-.659	-.659	0	%100
30	M15	Z	-.38	-.38	0	%100
31	M16	X	-.659	-.659	0	%100
32	M16	Z	-.38	-.38	0	%100
33	M17	X	-.659	-.659	0	%100
34	M17	Z	-.38	-.38	0	%100
35	M18	X	-.659	-.659	0	%100
36	M18	Z	-.38	-.38	0	%100
37	M19	X	-.221	-.221	0	%100
38	M19	Z	-.128	-.128	0	%100
39	M20	X	-.221	-.221	0	%100
40	M20	Z	-.128	-.128	0	%100
41	M21	X	-.221	-.221	0	%100
42	M21	Z	-.128	-.128	0	%100
43	M22	X	-.221	-.221	0	%100
44	M22	Z	-.128	-.128	0	%100
45	M23	X	-1.184	-1.184	0	%100
46	M23	Z	-.684	-.684	0	%100
47	M24	X	-1.887	-1.887	0	%100
48	M24	Z	-1.089	-1.089	0	%100
49	MP1A	X	-2.101	-2.101	0	%100

Member Distributed Loads (BLC 63 : Structure Wi (300 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]	
50	MP1A	Z	-1.213	-1.213	0	%100
51	MP2A	X	-2.101	-2.101	0	%100
52	MP2A	Z	-1.213	-1.213	0	%100
53	MP3A	X	-2.101	-2.101	0	%100
54	MP3A	Z	-1.213	-1.213	0	%100
55	MP4A	X	-2.101	-2.101	0	%100
56	MP4A	Z	-1.213	-1.213	0	%100

Member Distributed Loads (BLC 64 : Structure Wi (330 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]	
1	M1	X	-1.009	-1.009	0	%100
2	M1	Z	-1.747	-1.747	0	%100
3	M2	X	-1.009	-1.009	0	%100
4	M2	Z	-1.747	-1.747	0	%100
5	M3	X	-.926	-.926	0	%100
6	M3	Z	-1.604	-1.604	0	%100
7	M4	X	-.926	-.926	0	%100
8	M4	Z	-1.604	-1.604	0	%100
9	M5	X	-.132	-.132	0	%100
10	M5	Z	-.228	-.228	0	%100
11	M6	X	-.132	-.132	0	%100
12	M6	Z	-.228	-.228	0	%100
13	M7	X	-.752	-.752	0	%100
14	M7	Z	-1.302	-1.302	0	%100
15	M8	X	-.752	-.752	0	%100
16	M8	Z	-1.302	-1.302	0	%100
17	M9	X	-.523	-.523	0	%100
18	M9	Z	-.905	-.905	0	%100
19	M10	X	-.523	-.523	0	%100
20	M10	Z	-.905	-.905	0	%100
21	M11	X	-.675	-.675	0	%100
22	M11	Z	-1.17	-1.17	0	%100
23	M12	X	-.675	-.675	0	%100
24	M12	Z	-1.17	-1.17	0	%100
25	M13	X	-.675	-.675	0	%100
26	M13	Z	-1.17	-1.17	0	%100
27	M14	X	-.675	-.675	0	%100
28	M14	Z	-1.17	-1.17	0	%100
29	M15	X	-.127	-.127	0	%100
30	M15	Z	-.22	-.22	0	%100
31	M16	X	-.127	-.127	0	%100
32	M16	Z	-.22	-.22	0	%100
33	M17	X	-.127	-.127	0	%100
34	M17	Z	-.22	-.22	0	%100
35	M18	X	-.127	-.127	0	%100
36	M18	Z	-.22	-.22	0	%100
37	M19	X	-.383	-.383	0	%100
38	M19	Z	-.664	-.664	0	%100
39	M20	X	-.383	-.383	0	%100
40	M20	Z	-.664	-.664	0	%100
41	M21	X	-.383	-.383	0	%100
42	M21	Z	-.664	-.664	0	%100
43	M22	X	-.383	-.383	0	%100
44	M22	Z	-.664	-.664	0	%100
45	M23	X	-.124	-.124	0	%100
46	M23	Z	-.215	-.215	0	%100
47	M24	X	-.53	-.53	0	%100
48	M24	Z	-.917	-.917	0	%100
49	MP1A	X	-1.213	-1.213	0	%100
50	MP1A	Z	-2.101	-2.101	0	%100
51	MP2A	X	-1.213	-1.213	0	%100

Member Distributed Loads (BLC 64 : Structure Wi (330 Deg)) (Continued)

Member Label		Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
52	MP2A	Z	-2.101	-2.101	0	%100
53	MP3A	X	-1.213	-1.213	0	%100
54	MP3A	Z	-2.101	-2.101	0	%100
55	MP4A	X	-1.213	-1.213	0	%100
56	MP4A	Z	-2.101	-2.101	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg))

Member Label		Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.546	-.546	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.546	-.546	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-.215	-.215	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-.215	-.215	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	-.215	-.215	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	-.215	-.215	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	-.123	-.123	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	-.123	-.123	0	%100
17	M9	X	0	0	0	%100
18	M9	Z	-.123	-.123	0	%100
19	M10	X	0	0	0	%100
20	M10	Z	-.123	-.123	0	%100
21	M11	X	0	0	0	%100
22	M11	Z	-.119	-.119	0	%100
23	M12	X	0	0	0	%100
24	M12	Z	-.119	-.119	0	%100
25	M13	X	0	0	0	%100
26	M13	Z	-.119	-.119	0	%100
27	M14	X	0	0	0	%100
28	M14	Z	-.119	-.119	0	%100
29	M15	X	0	0	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	0	0	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	0	0	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	0	0	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	-.119	-.119	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	-.119	-.119	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	-.119	-.119	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	-.119	-.119	0	%100
45	M23	X	0	0	0	%100
46	M23	Z	-.017	-.017	0	%100
47	M24	X	0	0	0	%100
48	M24	Z	-.017	-.017	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	-.451	-.451	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	-.451	-.451	0	%100
53	MP3A	X	0	0	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
54	MP3A	Z	-.451	-.451	0 %100
55	MP4A	X	0	0	0 %100
56	MP4A	Z	-.451	-.451	0 %100

Member Distributed Loads (BLC 66 : Structure Wm (30 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.205	.205	0 %100
2	M1	Z	-.354	-.354	0 %100
3	M2	X	.205	.205	0 %100
4	M2	Z	-.354	-.354	0 %100
5	M3	X	.024	.024	0 %100
6	M3	Z	-.042	-.042	0 %100
7	M4	X	.024	.024	0 %100
8	M4	Z	-.042	-.042	0 %100
9	M5	X	.17	.17	0 %100
10	M5	Z	-.295	-.295	0 %100
11	M6	X	.17	.17	0 %100
12	M6	Z	-.295	-.295	0 %100
13	M7	X	.049	.049	0 %100
14	M7	Z	-.085	-.085	0 %100
15	M8	X	.049	.049	0 %100
16	M8	Z	-.085	-.085	0 %100
17	M9	X	.071	.071	0 %100
18	M9	Z	-.122	-.122	0 %100
19	M10	X	.071	.071	0 %100
20	M10	Z	-.122	-.122	0 %100
21	M11	X	.059	.059	0 %100
22	M11	Z	-.103	-.103	0 %100
23	M12	X	.059	.059	0 %100
24	M12	Z	-.103	-.103	0 %100
25	M13	X	.059	.059	0 %100
26	M13	Z	-.103	-.103	0 %100
27	M14	X	.059	.059	0 %100
28	M14	Z	-.103	-.103	0 %100
29	M15	X	.015	.015	0 %100
30	M15	Z	-.026	-.026	0 %100
31	M16	X	.015	.015	0 %100
32	M16	Z	-.026	-.026	0 %100
33	M17	X	.015	.015	0 %100
34	M17	Z	-.026	-.026	0 %100
35	M18	X	.015	.015	0 %100
36	M18	Z	-.026	-.026	0 %100
37	M19	X	.044	.044	0 %100
38	M19	Z	-.077	-.077	0 %100
39	M20	X	.044	.044	0 %100
40	M20	Z	-.077	-.077	0 %100
41	M21	X	.044	.044	0 %100
42	M21	Z	-.077	-.077	0 %100
43	M22	X	.044	.044	0 %100
44	M22	Z	-.077	-.077	0 %100
45	M23	X	.098	.098	0 %100
46	M23	Z	-.17	-.17	0 %100
47	M24	X	.023	.023	0 %100
48	M24	Z	-.04	-.04	0 %100
49	MP1A	X	.225	.225	0 %100
50	MP1A	Z	-.39	-.39	0 %100
51	MP2A	X	.225	.225	0 %100
52	MP2A	Z	-.39	-.39	0 %100
53	MP3A	X	.225	.225	0 %100
54	MP3A	Z	-.39	-.39	0 %100
55	MP4A	X	.225	.225	0 %100

Member Distributed Loads (BLC 66 : Structure Wm (30 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
56	MP4A	Z	-.39	-.39	0 %100

Member Distributed Loads (BLC 67 : Structure Wm (60 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.118	.118	0 %100
2	M1	Z	-.068	-.068	0 %100
3	M2	X	.118	.118	0 %100
4	M2	Z	-.068	-.068	0 %100
5	M3	X	.006	.006	0 %100
6	M3	Z	-.003	-.003	0 %100
7	M4	X	.006	.006	0 %100
8	M4	Z	-.003	-.003	0 %100
9	M5	X	.259	.259	0 %100
10	M5	Z	-.15	-.15	0 %100
11	M6	X	.259	.259	0 %100
12	M6	Z	-.15	-.15	0 %100
13	M7	X	.08	.08	0 %100
14	M7	Z	-.046	-.046	0 %100
15	M8	X	.08	.08	0 %100
16	M8	Z	-.046	-.046	0 %100
17	M9	X	.117	.117	0 %100
18	M9	Z	-.068	-.068	0 %100
19	M10	X	.117	.117	0 %100
20	M10	Z	-.068	-.068	0 %100
21	M11	X	.103	.103	0 %100
22	M11	Z	-.059	-.059	0 %100
23	M12	X	.103	.103	0 %100
24	M12	Z	-.059	-.059	0 %100
25	M13	X	.103	.103	0 %100
26	M13	Z	-.059	-.059	0 %100
27	M14	X	.103	.103	0 %100
28	M14	Z	-.059	-.059	0 %100
29	M15	X	.077	.077	0 %100
30	M15	Z	-.044	-.044	0 %100
31	M16	X	.077	.077	0 %100
32	M16	Z	-.044	-.044	0 %100
33	M17	X	.077	.077	0 %100
34	M17	Z	-.044	-.044	0 %100
35	M18	X	.077	.077	0 %100
36	M18	Z	-.044	-.044	0 %100
37	M19	X	.026	.026	0 %100
38	M19	Z	-.015	-.015	0 %100
39	M20	X	.026	.026	0 %100
40	M20	Z	-.015	-.015	0 %100
41	M21	X	.026	.026	0 %100
42	M21	Z	-.015	-.015	0 %100
43	M22	X	.026	.026	0 %100
44	M22	Z	-.015	-.015	0 %100
45	M23	X	.351	.351	0 %100
46	M23	Z	-.202	-.202	0 %100
47	M24	X	.22	.22	0 %100
48	M24	Z	-.127	-.127	0 %100
49	MP1A	X	.39	.39	0 %100
50	MP1A	Z	-.225	-.225	0 %100
51	MP2A	X	.39	.39	0 %100
52	MP2A	Z	-.225	-.225	0 %100
53	MP3A	X	.39	.39	0 %100
54	MP3A	Z	-.225	-.225	0 %100
55	MP4A	X	.39	.39	0 %100
56	MP4A	Z	-.225	-.225	0 %100

Member Distributed Loads (BLC 68 : Structure Wm (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	.132	.132	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	.132	.132	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	.132	.132	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	.132	.132	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	.111	.111	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	.111	.111	0	%100
16	M8	Z	0	0	0	%100
17	M9	X	.111	.111	0	%100
18	M9	Z	0	0	0	%100
19	M10	X	.111	.111	0	%100
20	M10	Z	0	0	0	%100
21	M11	X	.119	.119	0	%100
22	M11	Z	0	0	0	%100
23	M12	X	.119	.119	0	%100
24	M12	Z	0	0	0	%100
25	M13	X	.119	.119	0	%100
26	M13	Z	0	0	0	%100
27	M14	X	.119	.119	0	%100
28	M14	Z	0	0	0	%100
29	M15	X	.119	.119	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	.119	.119	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	.119	.119	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	.119	.119	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	0	0	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	0	0	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	0	0	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	0	0	0	%100
45	M23	X	.433	.433	0	%100
46	M23	Z	0	0	0	%100
47	M24	X	.433	.433	0	%100
48	M24	Z	0	0	0	%100
49	MP1A	X	.451	.451	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	.451	.451	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	.451	.451	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	.451	.451	0	%100
56	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 69 : Structure Wm (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.118	.118	0	%100
2	M1	Z	.068	.068	0	%100

Member Distributed Loads (BLC 69 : Structure Wm (120 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
3	M2	X	.118	.118	0 %100
4	M2	Z	.068	.068	0 %100
5	M3	X	.259	.259	0 %100
6	M3	Z	.15	.15	0 %100
7	M4	X	.259	.259	0 %100
8	M4	Z	.15	.15	0 %100
9	M5	X	.006	.006	0 %100
10	M5	Z	.003	.003	0 %100
11	M6	X	.006	.006	0 %100
12	M6	Z	.003	.003	0 %100
13	M7	X	.117	.117	0 %100
14	M7	Z	.068	.068	0 %100
15	M8	X	.117	.117	0 %100
16	M8	Z	.068	.068	0 %100
17	M9	X	.08	.08	0 %100
18	M9	Z	.046	.046	0 %100
19	M10	X	.08	.08	0 %100
20	M10	Z	.046	.046	0 %100
21	M11	X	.103	.103	0 %100
22	M11	Z	.059	.059	0 %100
23	M12	X	.103	.103	0 %100
24	M12	Z	.059	.059	0 %100
25	M13	X	.103	.103	0 %100
26	M13	Z	.059	.059	0 %100
27	M14	X	.103	.103	0 %100
28	M14	Z	.059	.059	0 %100
29	M15	X	.077	.077	0 %100
30	M15	Z	.044	.044	0 %100
31	M16	X	.077	.077	0 %100
32	M16	Z	.044	.044	0 %100
33	M17	X	.077	.077	0 %100
34	M17	Z	.044	.044	0 %100
35	M18	X	.077	.077	0 %100
36	M18	Z	.044	.044	0 %100
37	M19	X	.026	.026	0 %100
38	M19	Z	.015	.015	0 %100
39	M20	X	.026	.026	0 %100
40	M20	Z	.015	.015	0 %100
41	M21	X	.026	.026	0 %100
42	M21	Z	.015	.015	0 %100
43	M22	X	.026	.026	0 %100
44	M22	Z	.015	.015	0 %100
45	M23	X	.22	.22	0 %100
46	M23	Z	.127	.127	0 %100
47	M24	X	.351	.351	0 %100
48	M24	Z	.202	.202	0 %100
49	MP1A	X	.39	.39	0 %100
50	MP1A	Z	.225	.225	0 %100
51	MP2A	X	.39	.39	0 %100
52	MP2A	Z	.225	.225	0 %100
53	MP3A	X	.39	.39	0 %100
54	MP3A	Z	.225	.225	0 %100
55	MP4A	X	.39	.39	0 %100
56	MP4A	Z	.225	.225	0 %100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.205	.205	0 %100
2	M1	Z	.354	.354	0 %100
3	M2	X	.205	.205	0 %100
4	M2	Z	.354	.354	0 %100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
5	M3	X .17	.17	0	%100
6	M3	Z .295	.295	0	%100
7	M4	X .17	.17	0	%100
8	M4	Z .295	.295	0	%100
9	M5	X .024	.024	0	%100
10	M5	Z .042	.042	0	%100
11	M6	X .024	.024	0	%100
12	M6	Z .042	.042	0	%100
13	M7	X .071	.071	0	%100
14	M7	Z .122	.122	0	%100
15	M8	X .071	.071	0	%100
16	M8	Z .122	.122	0	%100
17	M9	X .049	.049	0	%100
18	M9	Z .085	.085	0	%100
19	M10	X .049	.049	0	%100
20	M10	Z .085	.085	0	%100
21	M11	X .059	.059	0	%100
22	M11	Z .103	.103	0	%100
23	M12	X .059	.059	0	%100
24	M12	Z .103	.103	0	%100
25	M13	X .059	.059	0	%100
26	M13	Z .103	.103	0	%100
27	M14	X .059	.059	0	%100
28	M14	Z .103	.103	0	%100
29	M15	X .015	.015	0	%100
30	M15	Z .026	.026	0	%100
31	M16	X .015	.015	0	%100
32	M16	Z .026	.026	0	%100
33	M17	X .015	.015	0	%100
34	M17	Z .026	.026	0	%100
35	M18	X .015	.015	0	%100
36	M18	Z .026	.026	0	%100
37	M19	X .044	.044	0	%100
38	M19	Z .077	.077	0	%100
39	M20	X .044	.044	0	%100
40	M20	Z .077	.077	0	%100
41	M21	X .044	.044	0	%100
42	M21	Z .077	.077	0	%100
43	M22	X .044	.044	0	%100
44	M22	Z .077	.077	0	%100
45	M23	X .023	.023	0	%100
46	M23	Z .04	.04	0	%100
47	M24	X .098	.098	0	%100
48	M24	Z .17	.17	0	%100
49	MP1A	X .225	.225	0	%100
50	MP1A	Z .39	.39	0	%100
51	MP2A	X .225	.225	0	%100
52	MP2A	Z .39	.39	0	%100
53	MP3A	X .225	.225	0	%100
54	MP3A	Z .39	.39	0	%100
55	MP4A	X .225	.225	0	%100
56	MP4A	Z .39	.39	0	%100

Member Distributed Loads (BLC 71 : Structure Wm (180 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X 0	0	0	%100
2	M1	Z .546	.546	0	%100
3	M2	X 0	0	0	%100
4	M2	Z .546	.546	0	%100
5	M3	X 0	0	0	%100
6	M3	Z .215	.215	0	%100

Member Distributed Loads (BLC 71 : Structure Wm (180 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
7	M4	X	0	0	%100
8	M4	Z	.215	.215	0
9	M5	X	0	0	%100
10	M5	Z	.215	.215	0
11	M6	X	0	0	%100
12	M6	Z	.215	.215	0
13	M7	X	0	0	%100
14	M7	Z	.123	.123	0
15	M8	X	0	0	%100
16	M8	Z	.123	.123	0
17	M9	X	0	0	%100
18	M9	Z	.123	.123	0
19	M10	X	0	0	%100
20	M10	Z	.123	.123	0
21	M11	X	0	0	%100
22	M11	Z	.119	.119	0
23	M12	X	0	0	%100
24	M12	Z	.119	.119	0
25	M13	X	0	0	%100
26	M13	Z	.119	.119	0
27	M14	X	0	0	%100
28	M14	Z	.119	.119	0
29	M15	X	0	0	%100
30	M15	Z	0	0	%100
31	M16	X	0	0	%100
32	M16	Z	0	0	%100
33	M17	X	0	0	%100
34	M17	Z	0	0	%100
35	M18	X	0	0	%100
36	M18	Z	0	0	%100
37	M19	X	0	0	%100
38	M19	Z	.119	.119	0
39	M20	X	0	0	%100
40	M20	Z	.119	.119	0
41	M21	X	0	0	%100
42	M21	Z	.119	.119	0
43	M22	X	0	0	%100
44	M22	Z	.119	.119	0
45	M23	X	0	0	%100
46	M23	Z	.017	.017	0
47	M24	X	0	0	%100
48	M24	Z	.017	.017	0
49	MP1A	X	0	0	%100
50	MP1A	Z	.451	.451	0
51	MP2A	X	0	0	%100
52	MP2A	Z	.451	.451	0
53	MP3A	X	0	0	%100
54	MP3A	Z	.451	.451	0
55	MP4A	X	0	0	%100
56	MP4A	Z	.451	.451	0

Member Distributed Loads (BLC 72 : Structure Wm (210 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.205	-.205	0
2	M1	Z	.354	.354	0
3	M2	X	-.205	-.205	0
4	M2	Z	.354	.354	0
5	M3	X	-.024	-.024	0
6	M3	Z	.042	.042	0
7	M4	X	-.024	-.024	0
8	M4	Z	.042	.042	0

Member Distributed Loads (BLC 72 : Structure Wm (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
9	M5	X	-.17	-.17	0	%100
10	M5	Z	.295	.295	0	%100
11	M6	X	-.17	-.17	0	%100
12	M6	Z	.295	.295	0	%100
13	M7	X	-.049	-.049	0	%100
14	M7	Z	.085	.085	0	%100
15	M8	X	-.049	-.049	0	%100
16	M8	Z	.085	.085	0	%100
17	M9	X	-.071	-.071	0	%100
18	M9	Z	.122	.122	0	%100
19	M10	X	-.071	-.071	0	%100
20	M10	Z	.122	.122	0	%100
21	M11	X	-.059	-.059	0	%100
22	M11	Z	.103	.103	0	%100
23	M12	X	-.059	-.059	0	%100
24	M12	Z	.103	.103	0	%100
25	M13	X	-.059	-.059	0	%100
26	M13	Z	.103	.103	0	%100
27	M14	X	-.059	-.059	0	%100
28	M14	Z	.103	.103	0	%100
29	M15	X	-.015	-.015	0	%100
30	M15	Z	.026	.026	0	%100
31	M16	X	-.015	-.015	0	%100
32	M16	Z	.026	.026	0	%100
33	M17	X	-.015	-.015	0	%100
34	M17	Z	.026	.026	0	%100
35	M18	X	-.015	-.015	0	%100
36	M18	Z	.026	.026	0	%100
37	M19	X	-.044	-.044	0	%100
38	M19	Z	.077	.077	0	%100
39	M20	X	-.044	-.044	0	%100
40	M20	Z	.077	.077	0	%100
41	M21	X	-.044	-.044	0	%100
42	M21	Z	.077	.077	0	%100
43	M22	X	-.044	-.044	0	%100
44	M22	Z	.077	.077	0	%100
45	M23	X	-.098	-.098	0	%100
46	M23	Z	.17	.17	0	%100
47	M24	X	-.023	-.023	0	%100
48	M24	Z	.04	.04	0	%100
49	MP1A	X	-.225	-.225	0	%100
50	MP1A	Z	.39	.39	0	%100
51	MP2A	X	-.225	-.225	0	%100
52	MP2A	Z	.39	.39	0	%100
53	MP3A	X	-.225	-.225	0	%100
54	MP3A	Z	.39	.39	0	%100
55	MP4A	X	-.225	-.225	0	%100
56	MP4A	Z	.39	.39	0	%100

Member Distributed Loads (BLC 73 : Structure Wm (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.118	-.118	0	%100
2	M1	Z	.068	.068	0	%100
3	M2	X	-.118	-.118	0	%100
4	M2	Z	.068	.068	0	%100
5	M3	X	-.006	-.006	0	%100
6	M3	Z	.003	.003	0	%100
7	M4	X	-.006	-.006	0	%100
8	M4	Z	.003	.003	0	%100
9	M5	X	-.259	-.259	0	%100
10	M5	Z	.15	.15	0	%100

Member Distributed Loads (BLC 73 : Structure Wm (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
11	M6	X	-.259	-.259	0	%100
12	M6	Z	.15	.15	0	%100
13	M7	X	-.08	-.08	0	%100
14	M7	Z	.046	.046	0	%100
15	M8	X	-.08	-.08	0	%100
16	M8	Z	.046	.046	0	%100
17	M9	X	-.117	-.117	0	%100
18	M9	Z	.068	.068	0	%100
19	M10	X	-.117	-.117	0	%100
20	M10	Z	.068	.068	0	%100
21	M11	X	-.103	-.103	0	%100
22	M11	Z	.059	.059	0	%100
23	M12	X	-.103	-.103	0	%100
24	M12	Z	.059	.059	0	%100
25	M13	X	-.103	-.103	0	%100
26	M13	Z	.059	.059	0	%100
27	M14	X	-.103	-.103	0	%100
28	M14	Z	.059	.059	0	%100
29	M15	X	-.077	-.077	0	%100
30	M15	Z	.044	.044	0	%100
31	M16	X	-.077	-.077	0	%100
32	M16	Z	.044	.044	0	%100
33	M17	X	-.077	-.077	0	%100
34	M17	Z	.044	.044	0	%100
35	M18	X	-.077	-.077	0	%100
36	M18	Z	.044	.044	0	%100
37	M19	X	-.026	-.026	0	%100
38	M19	Z	.015	.015	0	%100
39	M20	X	-.026	-.026	0	%100
40	M20	Z	.015	.015	0	%100
41	M21	X	-.026	-.026	0	%100
42	M21	Z	.015	.015	0	%100
43	M22	X	-.026	-.026	0	%100
44	M22	Z	.015	.015	0	%100
45	M23	X	-.351	-.351	0	%100
46	M23	Z	.202	.202	0	%100
47	M24	X	-.22	-.22	0	%100
48	M24	Z	.127	.127	0	%100
49	MP1A	X	-.39	-.39	0	%100
50	MP1A	Z	.225	.225	0	%100
51	MP2A	X	-.39	-.39	0	%100
52	MP2A	Z	.225	.225	0	%100
53	MP3A	X	-.39	-.39	0	%100
54	MP3A	Z	.225	.225	0	%100
55	MP4A	X	-.39	-.39	0	%100
56	MP4A	Z	.225	.225	0	%100

Member Distributed Loads (BLC 74 : Structure Wm (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-.132	-.132	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	-.132	-.132	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	-.132	-.132	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	-.132	-.132	0	%100
12	M6	Z	0	0	0	%100

Member Distributed Loads (BLC 74 : Structure Wm (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
13	M7	X	-.111	-.111	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	-.111	-.111	0	%100
16	M8	Z	0	0	0	%100
17	M9	X	-.111	-.111	0	%100
18	M9	Z	0	0	0	%100
19	M10	X	-.111	-.111	0	%100
20	M10	Z	0	0	0	%100
21	M11	X	-.119	-.119	0	%100
22	M11	Z	0	0	0	%100
23	M12	X	-.119	-.119	0	%100
24	M12	Z	0	0	0	%100
25	M13	X	-.119	-.119	0	%100
26	M13	Z	0	0	0	%100
27	M14	X	-.119	-.119	0	%100
28	M14	Z	0	0	0	%100
29	M15	X	-.119	-.119	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	-.119	-.119	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	-.119	-.119	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	-.119	-.119	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	0	0	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	0	0	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	0	0	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	0	0	0	%100
45	M23	X	-.433	-.433	0	%100
46	M23	Z	0	0	0	%100
47	M24	X	-.433	-.433	0	%100
48	M24	Z	0	0	0	%100
49	MP1A	X	-.451	-.451	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	-.451	-.451	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	-.451	-.451	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	-.451	-.451	0	%100
56	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 75 : Structure Wm (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.118	-.118	0	%100
2	M1	Z	-.068	-.068	0	%100
3	M2	X	-.118	-.118	0	%100
4	M2	Z	-.068	-.068	0	%100
5	M3	X	-.259	-.259	0	%100
6	M3	Z	-.15	-.15	0	%100
7	M4	X	-.259	-.259	0	%100
8	M4	Z	-.15	-.15	0	%100
9	M5	X	-.006	-.006	0	%100
10	M5	Z	-.003	-.003	0	%100
11	M6	X	-.006	-.006	0	%100
12	M6	Z	-.003	-.003	0	%100
13	M7	X	-.117	-.117	0	%100
14	M7	Z	-.068	-.068	0	%100

Member Distributed Loads (BLC 75 : Structure Wm (300 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
15	M8	X	-.117	-.117	0 %100
16	M8	Z	-.068	-.068	0 %100
17	M9	X	-.08	-.08	0 %100
18	M9	Z	-.046	-.046	0 %100
19	M10	X	-.08	-.08	0 %100
20	M10	Z	-.046	-.046	0 %100
21	M11	X	-.103	-.103	0 %100
22	M11	Z	-.059	-.059	0 %100
23	M12	X	-.103	-.103	0 %100
24	M12	Z	-.059	-.059	0 %100
25	M13	X	-.103	-.103	0 %100
26	M13	Z	-.059	-.059	0 %100
27	M14	X	-.103	-.103	0 %100
28	M14	Z	-.059	-.059	0 %100
29	M15	X	-.077	-.077	0 %100
30	M15	Z	-.044	-.044	0 %100
31	M16	X	-.077	-.077	0 %100
32	M16	Z	-.044	-.044	0 %100
33	M17	X	-.077	-.077	0 %100
34	M17	Z	-.044	-.044	0 %100
35	M18	X	-.077	-.077	0 %100
36	M18	Z	-.044	-.044	0 %100
37	M19	X	-.026	-.026	0 %100
38	M19	Z	-.015	-.015	0 %100
39	M20	X	-.026	-.026	0 %100
40	M20	Z	-.015	-.015	0 %100
41	M21	X	-.026	-.026	0 %100
42	M21	Z	-.015	-.015	0 %100
43	M22	X	-.026	-.026	0 %100
44	M22	Z	-.015	-.015	0 %100
45	M23	X	-.22	-.22	0 %100
46	M23	Z	-.127	-.127	0 %100
47	M24	X	-.351	-.351	0 %100
48	M24	Z	-.202	-.202	0 %100
49	MP1A	X	-.39	-.39	0 %100
50	MP1A	Z	-.225	-.225	0 %100
51	MP2A	X	-.39	-.39	0 %100
52	MP2A	Z	-.225	-.225	0 %100
53	MP3A	X	-.39	-.39	0 %100
54	MP3A	Z	-.225	-.225	0 %100
55	MP4A	X	-.39	-.39	0 %100
56	MP4A	Z	-.225	-.225	0 %100

Member Distributed Loads (BLC 76 : Structure Wm (330 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.205	-.205	0 %100
2	M1	Z	-.354	-.354	0 %100
3	M2	X	-.205	-.205	0 %100
4	M2	Z	-.354	-.354	0 %100
5	M3	X	-.17	-.17	0 %100
6	M3	Z	-.295	-.295	0 %100
7	M4	X	-.17	-.17	0 %100
8	M4	Z	-.295	-.295	0 %100
9	M5	X	-.024	-.024	0 %100
10	M5	Z	-.042	-.042	0 %100
11	M6	X	-.024	-.024	0 %100
12	M6	Z	-.042	-.042	0 %100
13	M7	X	-.071	-.071	0 %100
14	M7	Z	-.122	-.122	0 %100
15	M8	X	-.071	-.071	0 %100
16	M8	Z	-.122	-.122	0 %100

Member Distributed Loads (BLC 76 : Structure Wm (330 Deg)) (Continued)

Member Label		Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
17	M9	X	-.049	-.049	0	%100
18	M9	Z	-.085	-.085	0	%100
19	M10	X	-.049	-.049	0	%100
20	M10	Z	-.085	-.085	0	%100
21	M11	X	-.059	-.059	0	%100
22	M11	Z	-.103	-.103	0	%100
23	M12	X	-.059	-.059	0	%100
24	M12	Z	-.103	-.103	0	%100
25	M13	X	-.059	-.059	0	%100
26	M13	Z	-.103	-.103	0	%100
27	M14	X	-.059	-.059	0	%100
28	M14	Z	-.103	-.103	0	%100
29	M15	X	-.015	-.015	0	%100
30	M15	Z	-.026	-.026	0	%100
31	M16	X	-.015	-.015	0	%100
32	M16	Z	-.026	-.026	0	%100
33	M17	X	-.015	-.015	0	%100
34	M17	Z	-.026	-.026	0	%100
35	M18	X	-.015	-.015	0	%100
36	M18	Z	-.026	-.026	0	%100
37	M19	X	-.044	-.044	0	%100
38	M19	Z	-.077	-.077	0	%100
39	M20	X	-.044	-.044	0	%100
40	M20	Z	-.077	-.077	0	%100
41	M21	X	-.044	-.044	0	%100
42	M21	Z	-.077	-.077	0	%100
43	M22	X	-.044	-.044	0	%100
44	M22	Z	-.077	-.077	0	%100
45	M23	X	-.023	-.023	0	%100
46	M23	Z	-.04	-.04	0	%100
47	M24	X	-.098	-.098	0	%100
48	M24	Z	-.17	-.17	0	%100
49	MP1A	X	-.225	-.225	0	%100
50	MP1A	Z	-.39	-.39	0	%100
51	MP2A	X	-.225	-.225	0	%100
52	MP2A	Z	-.39	-.39	0	%100
53	MP3A	X	-.225	-.225	0	%100
54	MP3A	Z	-.39	-.39	0	%100
55	MP4A	X	-.225	-.225	0	%100
56	MP4A	Z	-.39	-.39	0	%100

Envelope Joint Reactions

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N1	max	1534.335	34	931.381	22	1151.982	13	-.182	4	0	51	.293
2		min	4.598	4	443.151	4	115.004	7	-.396	13	0	1	.023
3	N2	max	348.791	10	937.869	16	-370.986	7	-.184	10	0	51	.283
4		min	-1558.205	28	446.414	10	-900.069	13	-.395	16	0	1	.024
5	N56	max	104.004	10	52.823	17	395.212	11	0	51	0	51	0
6		min	-118.274	4	24.659	12	-465.51	5	0	1	0	1	0
7	N57	max	148.953	9	52.871	20	584.109	3	0	51	0	51	0
8		min	-134.486	3	24.576	3	-655.652	9	0	1	0	1	0
9	Totals:	max	1181.949	10	1966.748	21	1037.945	1					
10		min	-1181.95	4	978.667	3	-1037.946	7					

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

Member	Shape	Code Check	Loc[ft]	LC	Shear ... Loc[ft]	Dir LC	phi*Pnc	[...phi*Pnt	[lb]	phi*Mn y...	phi*Mn z...	Cb	Eqn
1	M1	PIPE 2.5	.284	8.724	29	.085	8.724	42	14558.792	50715	3.596	3.596	2...
2	M2	PIPE 2.5	.274	8.724	34	.078	8.724	2	14558.792	50715	3.596	3.596	2...

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

Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [...]	phi*Pnt [lb]	phi*Mn y ...	phi*Mn z ...	Cb	Eqn
3	M3	PIPE 2.0	.087	0	4	.034	0	16	31128.25	32130	1.872	1.872	1...	H1-1b
4	M4	PIPE 2.0	.042	0	8	.030	0	13	31128.25	32130	1.872	1.872	2...	H1-1b
5	M5	PIPE 2.0	.099	2.501	33	.086	0	33	31128.25	32130	1.872	1.872	2...	H1-1b
6	M6	PIPE 2.0	.117	0	4	.074	0	36	31128.25	32130	1.872	1.872	2...	H1-1b
7	M7	SR 0.75	.005	4.167	33	.007	4.167	33	2863.936	13916.259	.174	.174	1...	H1-1b*
8	M8	SR 0.75	.027	0	15	.010	4.167	33	2863.936	13916.259	.174	.174	1...	H1-1b*
9	M9	SR 0.75	.000	0	51	.014	4.167	32	2863.936	13916.259	.174	.174	1...	H1-1a
10	M10	SR 0.75	.087	4.167	32	.018	0	34	2863.936	13916.259	.174	.174	1...	H1-1b*
11	M11	SR 0.625	.036	1.667	11	.014	0	32	2158.269	9664.074	.101	.101	1...	H1-1b
12	M12	SR 0.625	.028	1.667	9	.012	0	10	2158.269	9664.074	.101	.101	1...	H1-1b
13	M13	SR 0.625	.035	1.667	7	.011	0	3	2158.269	9664.074	.101	.101	1	H1-1b
14	M14	SR 0.625	.076	0	3	.016	0	33	2158.269	9664.074	.101	.101	1...	H1-1b*
15	M15	PL5/8X3.5	.078	0	3	.093	.422	y 4	66184.77	68906.25	.897	5.024	1...	H1-1b
16	M16	PL5/8X3.5	.060	.422	20	.041	.422	y 8	66184.77	68906.25	.897	5.024	1...	H1-1b
17	M17	PL5/8X3.5	.270	0	33	.077	.422	y 12	66184.77	68906.25	.897	5.024	1...	H1-1b
18	M18	PL5/8X3.5	.218	0	36	.105	.422	y 4	66184.77	68906.25	.897	5.024	1...	H1-1b
19	M19	PL5/8X3.5	.126	.531	13	.034	0	y 28	67591.76	68906.25	.897	5.024	1...	H1-1b
20	M20	PL5/8X3.5	.412	.531	28	.062	.531	y 29	67591.76	68906.25	.897	5.024	1...	H1-1b
21	M21	PL5/8X3.5	.149	.531	14	.020	.531	y 1	67591.76	68906.25	.897	5.024	1...	H1-1b
22	M22	PL5/8X3.5	.430	.531	35	.048	.531	y 36	67591.76	68906.25	.897	5.024	1...	H1-1b
23	M23	PIPE 2.0	.095	5.925	10	.006	11.85	22	7005.225	32130	1.872	1.872	1...	H1-1b
24	M24	PIPE 2.0	.099	5.925	4	.006	11.85	22	7005.225	32130	1.872	1.872	1...	H1-1b
25	MP1A	PIPE 2.0	.443	2.333	28	.067	2.333	27	14916.096	32130	1.872	1.872	4...	H1-1b
26	MP2A	PIPE 2.0	.288	2.333	10	.071	2.333	8	14916.096	32130	1.872	1.872	2...	H1-1b
27	MP3A	PIPE 2.0	.167	5.667	33	.041	3.333	10	14916.096	32130	1.872	1.872	4...	H1-1b
28	MP4A	PIPE 2.0	.065	5.667	32	.012	2.333	33	14916.096	32130	1.872	1.872	4...	H1-1b

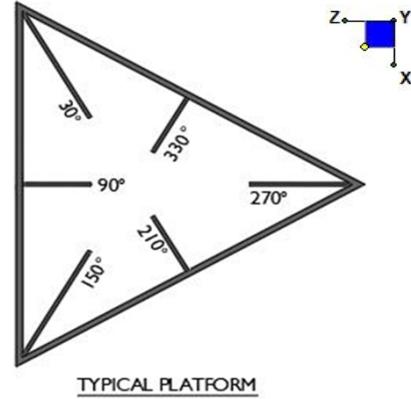


Client: Verizon Wireless Date: 5/11/2021
 Site Name: STAMFORD NW CT
 Project No. 21777625A
 Title: Mount Analysis Page: 1
 Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N1	90
N2	90



Tower Connection Bolt Checks

Any moment resistance?: yes

Bolt Quantity per Reaction: 4

d_x (in) (Delta X of typ. bolt config. sketch): 12

d_y (in) (Delta Y of typ. bolt config. sketch): 5

Bolt Type: A307

Bolt Diameter (in): 0.5

Required Tensile Strength (kips): 3.1

Required Shear Strength (kips): 2.3

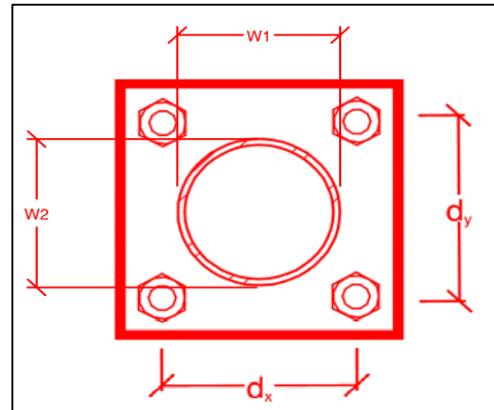
Tensile Strength / bolt (kips): 6.4

Shear Strength / bolt (kips): 3.8

Tensile Capacity Overall: 11.9%*

Shear Capacity Overall: 15.2%

yes
4
12
5
A307
0.5
3.1
2.3
6.4
3.8
11.9%*
15.2%



*Note: Tension reduction not required if tension or shear capacity < 30%

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – **Passing Mount Analysis**

Purpose – to provide Maser Consulting Connecticut the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the installation was completed in accordance with this Passing Mount Analysis.
- Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the passing MA
- Verification that loading is as communicated in the Passing Mount Analysis. NOTE If loading is different than what is conveyed contact Maser Consulting Connecticut immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded to <https://pmi.vzwsmart.com> as depicted on the drawings

Photo Requirements:

- Base and “During Installation Photos”
 - Base pictures include
 - Photo of Gate Signs showing the tower owner, site name, and number
 - Photo of carrier shelter showing the carrier site name and number if available
 - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
 - “During Installation Photos if provided - must be placed only in this folder
- Photos taken at ground level
 - Overall tower structure before and after installation of the equipment modifications
 - Photos of the appropriate mount before and after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed
- Photos taken at Mount Elevation
 - Photos showing each individual sector before and also after installation of equipment.

- These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
- Photos showing the safety climb wire rope above and below the mount prior to modification.
- Photos showing the climbing facility and safety climb if present.

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.
- The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.
- The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual: Company _____
 Name _____
 Signature _____

Special Instructions / Validation as required from the MA or any other information the contractor deems necessary to share that was identified:

Issue:

- | |
|---|
| <ul style="list-style-type: none">• Contractor to inspect climbing facilities at site and ensure that the safety climb is in good condition and that the wire rope does not or will not interfere with the existing or proposed mount connections. Contractor shall install safety climb wire rope guides around mount connections as needed.• Contractor shall field verify all necessary dimensions as detailed in the Mount Geometry Verification sheet in this report. Contractor shall supply photos for all necessary field verifications. |
|---|

Response:

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Schedule A – Photo & Document File Structure

- 📁 VzW Site Number / Name
 - 📁 Base & “During Installation” Photos
 - 📁 Pre-Installation Photos
 - 📁 Alpha
 - 📁 Beta
 - 📁 Gamma
 - 📁 Ground Level
 - 📁 Tape Drop
 - 📁 Post-Installation Photos
 - 📁 Alpha
 - 📁 Beta
 - 📁 Gamma
 - 📁 Ground Level
 - 📁 Tape Drop
 - 📁 Photos of climbing facility and safety climb – If Present
- 📁 Certifications – Submission of this document including certifications
- 📁 Specific Required Additional Photos

Sector: A

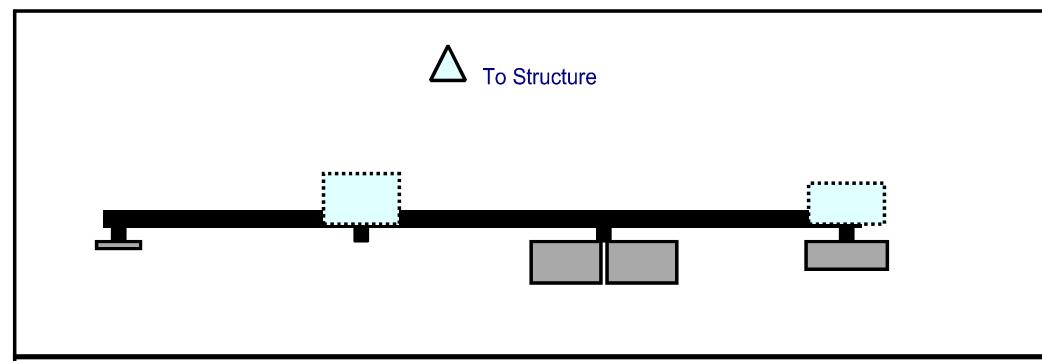
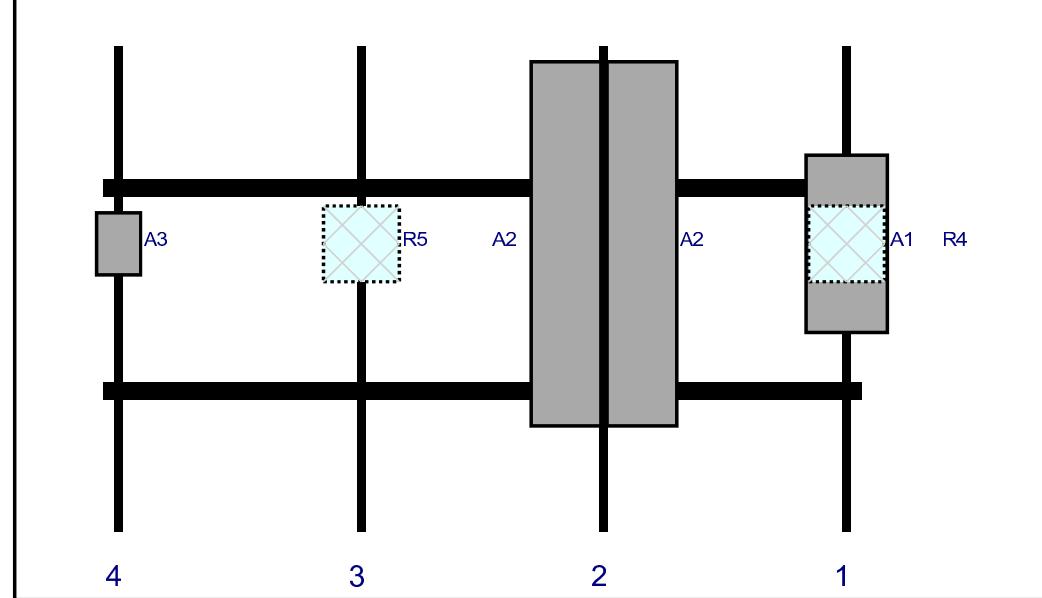
5/11/2021

Structure Type: Self Support



Mount Elev: 96.75

Page: 1

Plan View**Front View**
Looking at Structure

Ref#	Model	Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant	Status	Validation
		(in)	(in)	Frm L.	#	Pos V	Pos	Frm T.	H Off		
A1	MT6407-77A	35.1	16.1	147	1	a	Front	39	0	Added	
R4	B5/B13 RRH-BR04C	15	15	147	1	a	Behind	39	0	Retained	09/01/2020
A2	JAHH-65B-R3B	72	13.8	99	2	a	Front	39	7.5	Retained	09/01/2020
A2	JAHH-65B-R3B	72	13.8	99	2	b	Front	39	-7.5	Retained	09/01/2020
R5	B2/B66A RRH-BR049	15	15	51	3	a	Behind	39	0	Retained	09/01/2020
A3	XXDWMM-12.5-65	12.3	8.7	3	4	a	Front	39	0	Retained	09/01/2020

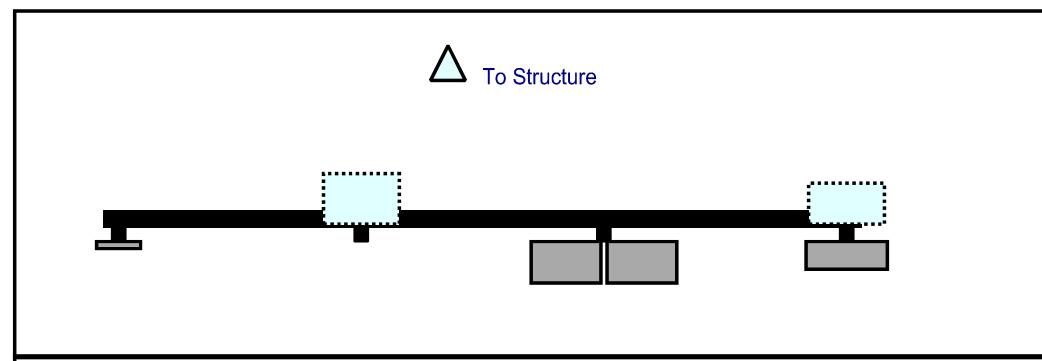
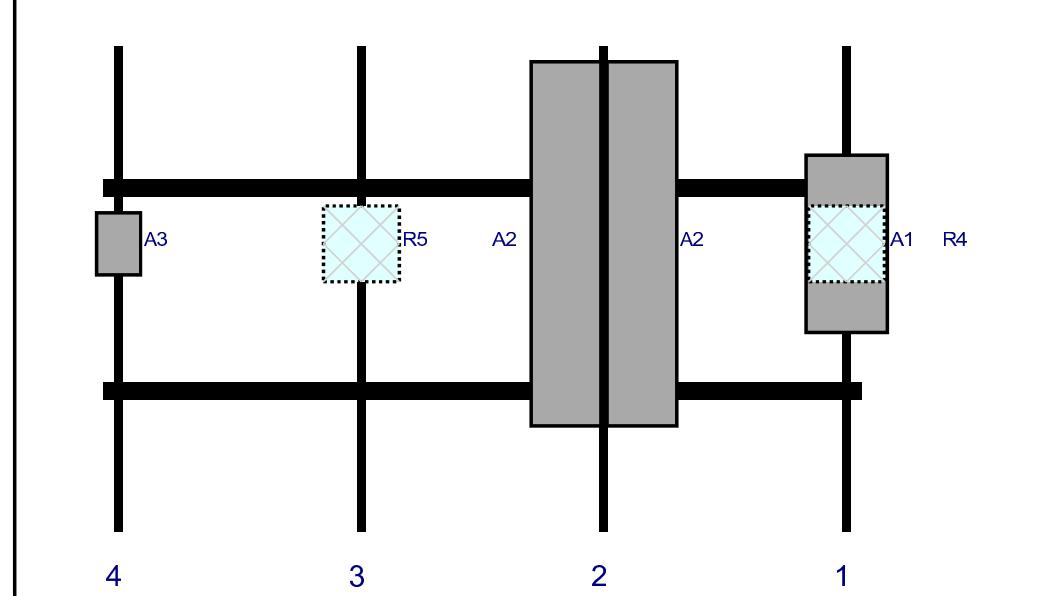
Sector: **B**

5/11/2021

Structure Type: Self Support

Mount Elev: 96.75

Page: 2

**Plan View****Front View**
Looking at Structure

Ref#	Model	Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant	Status	Validation
		(in)	(in)	Frm L.	#	Pos V	Pos	Frm T.	H Off		
A1	MT6407-77A	35.1	16.1	147	1	a	Front	39	0	Added	
R4	B5/B13 RRH-BR04C	15	15	147	1	a	Behind	39	0	Retained	09/01/2020
A2	JAHH-65B-R3B	72	13.8	99	2	a	Front	39	7.5	Retained	09/01/2020
A2	JAHH-65B-R3B	72	13.8	99	2	b	Front	39	-7.5	Retained	09/01/2020
R5	B2/B66A RRH-BR049	15	15	51	3	a	Behind	39	0	Retained	09/01/2020
A3	XXDWMM-12.5-65	12.3	8.7	3	4	a	Front	39	0	Retained	09/01/2020

Sector: C

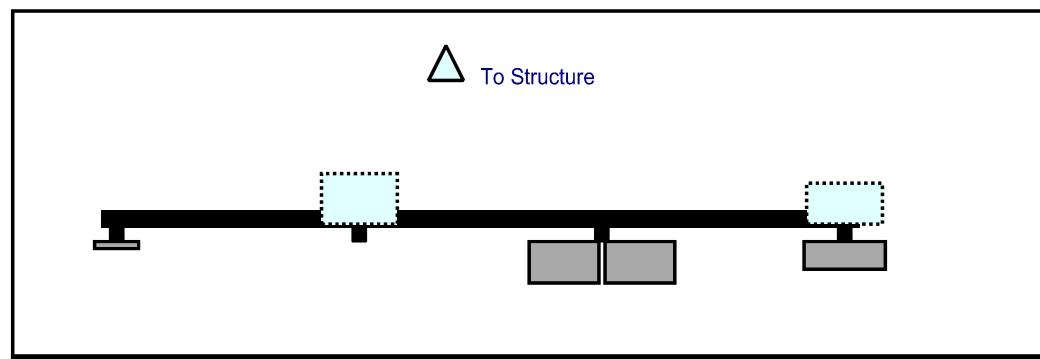
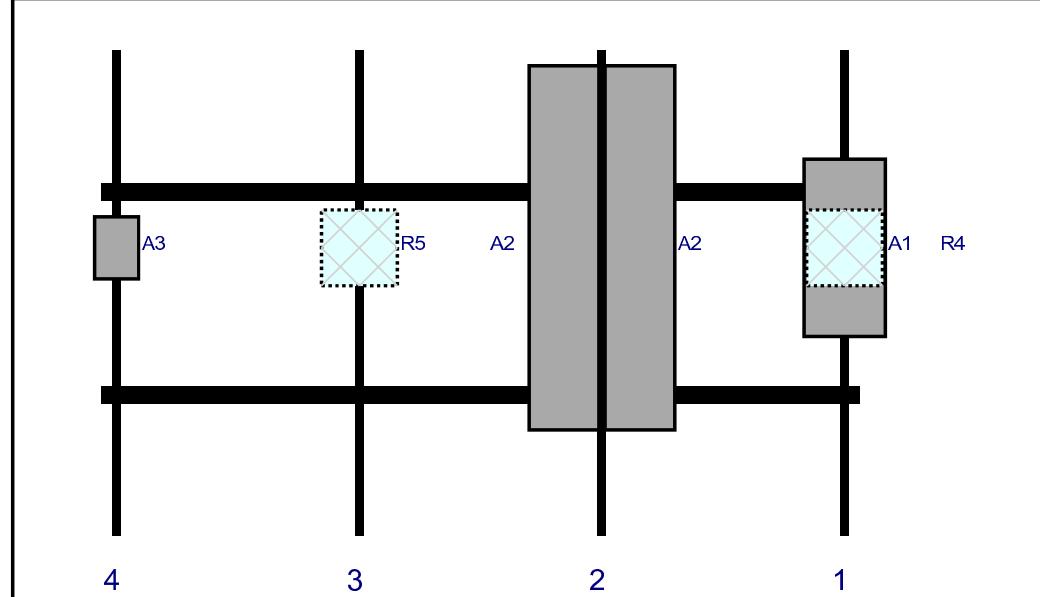
5/11/2021

Structure Type: Self Support



Mount Elev: 96.75

Page: 3

Plan View**Front View**
Looking at Structure

Ref#	Model	Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant	Status	Validation
		(in)	(in)	Frm L.	#	Pos V	Pos	Frm T.	H Off		
A1	MT6407-77A	35.1	16.1	147	1	a	Front	39	0	Added	
R4	B5/B13 RRH-BR04C	15	15	147	1	a	Behind	39	0	Retained	09/01/2020
A2	JAHH-65B-R3B	72	13.8	99	2	a	Front	39	7.5	Retained	09/01/2020
A2	JAHH-65B-R3B	72	13.8	99	2	b	Front	39	-7.5	Retained	09/01/2020
R5	B2/B66A RRH-BR049	15	15	51	3	a	Behind	39	0	Retained	09/01/2020
A3	XXDWMM-12.5-65	12.3	8.7	3	4	a	Front	39	0	Retained	09/01/2020

Maser Consulting Connecticut

<u>Subject</u>	TIA-222-H Usage	
<u>Site Information</u>	Site ID:	468119-VZW / STAMFORD NW CT
	Site Name:	STAMFORD NW CT
	Carrier Name:	Verizon Wireless
	Address:	366 Old Long Ridge Rd Stamford, Connecticut 06903 Fairfield County
	Latitude:	41.15311111°
	Longitude:	-73.59270278°
<u>Structure Information</u>	Tower Type:	152-ft Self Support
	Mount Type:	12.50-ft Sector Frame

To Whom It May Concern,

We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. The TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed maps by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,



Digitally signed by Justin Linette
Date: 2021.05.12 11:22:11-04'00'

Justin Linette, PE
Sr. Technical Manager

ATTACHMENT 5

366 OLD LONG RIDGE ROAD

Location 366 OLD LONG RIDGE ROAD

Mblu 002/ 6549/ / /

Acct# 002-6549

Owner LONG RIDGE FIRE CO INC

Assessment \$1,496,530

Appraisal \$2,137,900

PID 24275

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2019	\$1,817,440	\$320,460	\$2,137,900
Assessment			
Valuation Year	Improvements	Land	Total
2019	\$1,272,210	\$224,320	\$1,496,530

Owner of Record

Owner LONG RIDGE FIRE CO INC

Sale Price \$0

Co-Owner

Book & Page 0686/0581

Address 366 OLD LONG RIDGE RD
STAMFORD, CT 06903-1133

Sale Date 01/14/1953

Instrument 25

Ownership History

Ownership History				
Owner	Sale Price	Book & Page	Instrument	Sale Date
LONG RIDGE FIRE CO INC	\$0	0686/0581	25	01/14/1953

Building Information

Building 1 : Section 1

Year Built: 1956

Living Area: 8,569

Building Attributes	
Field	Description
STYLE	Fire Station
MODEL	Ind/Comm

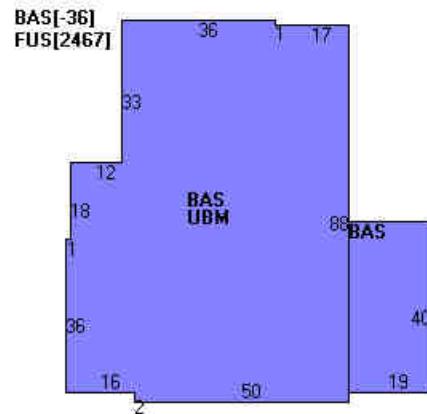
Grade	B
Stories:	1
Occupancy	1.00
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Wall 1	Minimum
Interior Wall 2	Drywall/Plaste
Interior Floor 1	Concrete Slab
Interior Floor 2	Vinyl/Asphalt
Heating Fuel	Oil
Heating Type	Forced Air-Duc
AC Type	Partial A/C
Struct Class	
Bldg Use	Exempt Comm MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
Usrfld 218	
Usrfld 219	
1st Floor Use:	902C
Heat/AC	Heat/AC Pkgs
Frame Type	FireProofSteel
Baths/Plumbing	Average
Ceiling/Wall	Ceil & Mn Wall
Rooms/Prnts	Average
Wall Height	11.00
% Comn Wall	

Building Photo



(http://images.vgsi.com/photos/StamfordCTPhotos//00\07\72\71.jpg)

Building Layout



(http://images.vgsi.com/photos/StamfordCTPhotos//Sketches/24275_24277.jpg)

Building Sub-Areas (sq ft)		Legend	
Code	Description	Gross Area	Living Area
BAS	First Floor	6,102	6,102
FUS	Upper Story, Finished	2,467	2,467
UBM	Basement, Unfinished	5,378	0
		13,947	8,569



Extra Features

Extra Features				Legend
Code	Description	Size	Value	Bldg #
OH1	Door Overhd Co	4.00 UNITS	\$11,100	1
H04	Air Con/Sfla	9620.00 S.F.	\$18,040	1

Land

Land Use

Land Line Valuation

Use Code	902C	Size (Acres)	0.49
Description	Exempt Comm MDL-94	Depth	
Zone	RA2	Assessed Value	\$224,320
Neighborhood	0100	Appraised Value	\$320,460
Alt Land Appr	No		
Category			

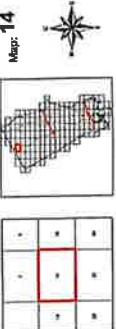
Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
LP6	Patio Asphalt			480.00 S.F.	\$1,310	1
FC1	Shed Wood			108.00 S.F.	\$1,300	1
FC1	Shed Wood			560.00 S.F.	\$6,720	1
RG4	Gar 1.0 Det			1008.00 S.F.	\$39,690	1
CEL1	Cell Tower			3.00 SITES	\$438,750	1
CSHD	Cell Equipment			56.00 S.F.	\$2,020	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2019	\$1,817,440	\$320,460	\$2,137,900
2018	\$1,817,440	\$320,460	\$2,137,900
2017	\$1,817,440	\$320,460	\$2,137,900

Assessment			
Valuation Year	Improvements	Land	Total
2019	\$1,272,210	\$224,320	\$1,496,530
2018	\$1,272,210	\$224,320	\$1,496,530
2017	\$1,272,210	\$224,320	\$1,496,530

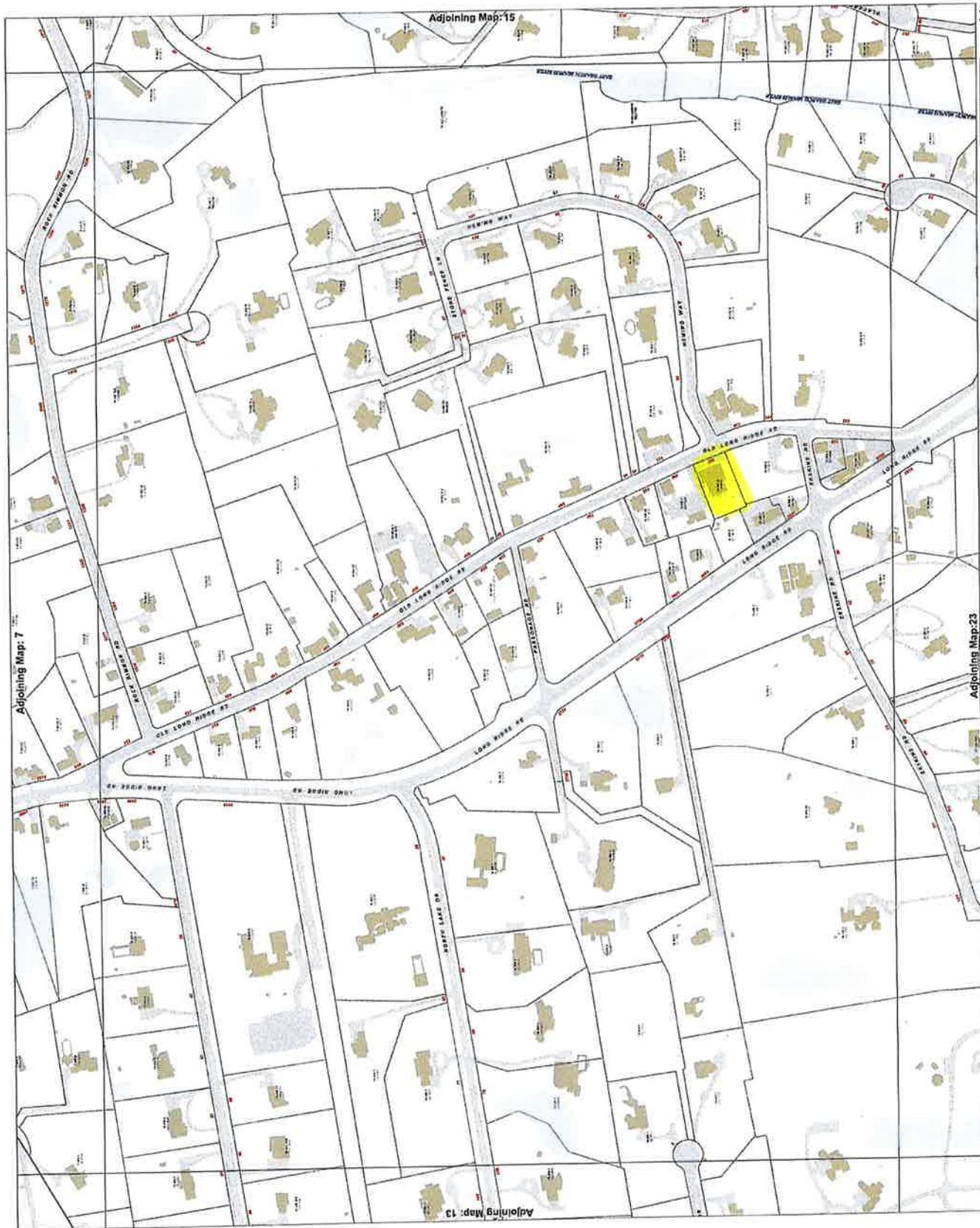


City of Stamford, Connecticut
Assessment Parcel Map

Project data current as of October 2015.
Assessment Data displayed on this map as of October 2015, except as noted.
Assessor's Office does not warrant the accuracy of the data displayed on this map.
Map Generated from Data on NAD 83 Connecticut StatePlane FIPS.



Map: 14



ATTACHMENT 6



STAMFORD NW
Certificate of Mailing — Firm

Name and Address of Sender		TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here <i>Postmark with Date of Receipt.</i>			
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103		3	3	 neopost® 07/15/2021 US POSTAGE \$002.89  ZIP 06103 041L12203987			
USPS® Tracking Number	Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)		Postage	Fee	Special Handling	Parcel Airlift
1.		David Martin, Mayor City of Stamford 888 Washington Boulevard Stamford, CT 06901					
2.		Ralph Blessing, Stamford Land Use Bureau Chief City of Stamford 888 Washington Boulevard Stamford, CT 06901					
3.		Long Ridge Fire Company 366 Old Long Ridge Road Stamford, CT 06903					
4.							
5.							
6.							