Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts
and New York

June 26, 2024

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**
Post Road (a/k/a 880 Post Road), Westport, 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 on an existing tower and related equipment on the ground, near the base of the tower. The tower and Cellco's use of the tower were approved by the Siting Council ("Council") in March of 1990 (Docket No. 123). A copy of the Council's Docket No. 123 Decision and Order is included in Attachment 1.

Cellco now intends to modify its facility by removing five (5) antennas and two (2) remote radio heads ("RRHs") and installing seven (7) new antennas and four (4) new RRHs on its existing antenna support structure. A set of project plans showing Cellco's proposed facility modifications and the specifications for Cellco's new antennas and RRHs 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 Westport's Chief Elected Official and Land Use Officer and the tower owner. A copy of this letter is being sent to the owner of the Property.

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

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's new antennas and RRHs will be installed at the same height on the tower.

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. Included in Attachment 3 is a Calculated Radio Frequency Emissions Report demonstrating that the proposed modified facility will comply with the FCC safety standards. 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 Report ("SA") and Antenna Mount Analysis Report ("MA"), the existing tower, tower foundation, antenna supports and antenna mounts, with certain modifications, 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).

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Jennifer Tooker, First Selectwoman
Mary Young, Planning and Zoning Director
State of Connecticut, Property Owner
Aleksey Tyurin

ATTACHMENT 1

An application of the Department of Public Safety, Division of State Police, for a Certificate of Environmental Compatibility and Public Need for the construction, operation, and maintenance of a telecommunications tower and associated equipment in the Town of Westport, Connecticut.	:	Docket 123 Connecticut Siting Council March 29, 1990

DECISION AND ORDER

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council finds that the effects associated with the construction, operation, and maintenance of a telecommunications tower, building, and associated equipment at the proposed Westport, Connecticut, site including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not significant either alone or cumulatively with other effects, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by Section 16-50k of the General Statutes of Connecticut (CGS), be issued to Department of Public Safety, Division of State Police, for the construction, operation, and maintenance of a telecommunications tower, associated equipment, and building at the proposed Troop "G" site in Westport, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this proceeding, and subject to the following conditions:

1. The self-supporting lattice tower shall be no taller than necessary to provide the proposed communications and in no event shall the Westport, Troop "G", tower exceed 180 feet above ground level, with antennas and all appurtenances.

2. The facility shall be constructed in accordance with the State of Connecticut Basic Building Code.

3. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of State Agencies. The D&M plan shall include detailed plans for the site's preparation including the tower and building foundation, site access, and erosion and sedimentation controls.

4. The Certificate Holder shall comply with any future radio frequency (RF) standards, promulgated by State or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facilities granted in this Decision and Order shall be brought into compliance with such standards.

5. The Certificate Holder shall provide the Council a recalculated report of power density if and when circumstances in operation cause a change in power density above the levels originally calculated and provided in the application.

6. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

7. If the facility does not initially provide, or permanently ceases to provide telecommunications service following completion of construction, this Decision and Order shall be void, and the tower and all associated equipment shall be dismantled and removed or reapplication for any new use shall be made to the Council before any such new use is made.

8. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the effective date of this Decision and Order.

Pursuant to Section 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below. A notice of issuance shall be published in the Bridgeport Post, The Hour, and the Advocate.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with section 16-50j-17 of the Regulations of State Agencies.

The parties or intervenors to this proceeding are:

Party	Its Representatives
Department of Public Safety Division of State Police	Captain Ronald P. Milkulka Commanding Officer Connecticut State Police Police Support Services 294 Colony Street Building No. 5 Meriden, Connecticut 06450 L.D. McCallum and Robert F. Vachelli Assistant Attorneys General MacKenzie Hall 110 Sherman Street Hartford, Connecticut 06105

Party	Its Representative
Metro Mobile CTS, of Fairfield County, Inc. 50 Rockland Road South Norwalk, Connecticut 06854	Henry H. Sprague, Esq. Robinson & Cole One Commercial Plaza Hartford, Connecticut 06105
Party	Its Representative
Metro Mobile CTS, of 110 East 59th Street New York, New York 10022	Henry H. Sprague, Esq. Robinson & Cole One Commercial Plaza Hartford, Connecticut 06105
Party	Its Representative
Town of Westport 110 Myrtle Avenue Westport, Connecticut 06880	Paul L. Brozdowski Office of Town Attorney 110 Myrtle Avenue Westport, Connecticut 06880

CERTIFICATION

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case in Docket No. 123 - An application of the Department of Public Safety, Division of State Police for a Certificate of Environmental Compatibility and Public Need for the construction, operation, and maintenance of a telecommunications tower and associated equipment in the Town of Westport, Connecticut or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut the 26th day of March, 1990.

Council Members	Vote Cast
Gloria Dibble Pond Chairperson	Yes
Commissioner Peter Boucher Designee: Mark Marcus	Abstain
Commissioner Leslie Carothers Designee: Brian Emerick	Yes
Harry E. Covey	Yes
Mortimer A. Gelston	Yes
Daniel P. Lynch, Jr.	Yes
Paulann H. Sheets	Abstain
William H. Smith	Yes
Colin C. Tait	Absent

4235E-2

ATTACHMENT 2

verizon

WESTPORT_CT

880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880

LOCATION CODE (PSLC): 469153
PROJECT ID: 16242132
2024 EQUIPMENT UPGRADE PROJECT
RFDS DATE: 11/08/23

SCOPE OF WORK

- REMOVE (E) (2) LTE PANEL ANTENNAS WITH DUAL ANTENNA MOUNTING BRACKETS
- REMOVE (E) (3) 850 CDMA PANEL ANTENNAS
- REMOVE (E) (1) DIPLEXER
- REMOVE (E) (2) RRH's
- REMOVE AND RELOCATE (E) (2) RRH
- LOWER (E) (1) SAMSUNG XXDWMM-12.5-65 ANTENNA
- REMOVE AND RELOCATE (E) (3) LEGACY PIPE AND REPLACE PIPE CROSSOVER PLATES
- (E) (2) SAMSUNG XXDWMM-12.5-65 ANTENNA TO REMAIN
- (E) (2) DIPLEXERS TO REMAIN
- (E) (2) RRH's TO REMAIN
- (E) (1) 12-OVP LARGE JUNCTION BOX TO REMAIN
- (E) (1) 12x24 HYBRID CABLE TO REMAIN
- (P) (1) VZWSMART-SFK1 TIE BACK ASSEMBLY
- (P) (6) VZWSMART-MSK1 CROSSOVER PLATES
- (P) (4) JMA MX06FRO640-02 ANTENNAS WITH DUAL ANTENNA MOUNTING BRACKETS
- (P) (3) SAMSUNG MT6413-77A ANTENNAS
- (P) (1) SAMSUNG B2/66A RRH ORAN (RF4439d-25A)
- (P) (3) SAMSUNG B5/B13 RRH's ORAN (RF4461d-13A)
- (P) (1) 6-OVP LARGE JUNCTION BOX
- (P) (1) 2" SCH40 OVP PIPE
- (P) (2) CROSSOVER CLAMP SETS, VALMONT SITE PRO 1 (P/N SSCK) FOR OVP PIPE
- (P) (1) 6x12 HYBRID CABLE

PROJECT SUMMARY

SCOPE OF WORK:	EXISTING TELECOMMUNICATIONS FACILITY EQUIPMENT ALTERATION
SITE NAME:	WESTPORT_CT
LOCATION CODE (PSLC):	469153
FUZE PROJECT ID:	16242132
SITE ADDRESS:	880 POST ROAD EAST UNIT 1 WESTPORT, CT 06880
LATITUDE:	41° 8' 14.91"± N (41.137475°± N) (RECORD VERIZON FUZE INFO)
LONGITUDE:	73° 20' 3.71"± W (-73.334364°± W) (RECORD VERIZON FUZE INFO)
GROUND ELEVATION:	65.0'± AMSL (RECORD VERIZON FUZE INFO)
HIGHEST APPURTENANCE:	199.0'± (RECORD VERIZON FUZE INFO) 190.0'± (FIELD MEASUREMENT)
FACILITY:	SELF-SUPPORT TOWER
FACILITY OWNER:	STATE OF CONNECTICUT CELL TOWER/WALGREENS
APPLICANT, LESSEE/LICENSEE, PROJECT OWNER:	CELLCO PARTNERSHIP dba VERIZON WIRELESS 20 ALEXANDER DRIVE 2ND FLOOR WALLINGFORD, CT 06492
SITE ENGINEER:	PROTERRA DESIGN GROUP, LLC 4 BAY ROAD BUILDING A, SUITE 200 HADLEY, MA 01035 (413)320-4918

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
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D-1	DETAIL	9
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LOCATION MAP

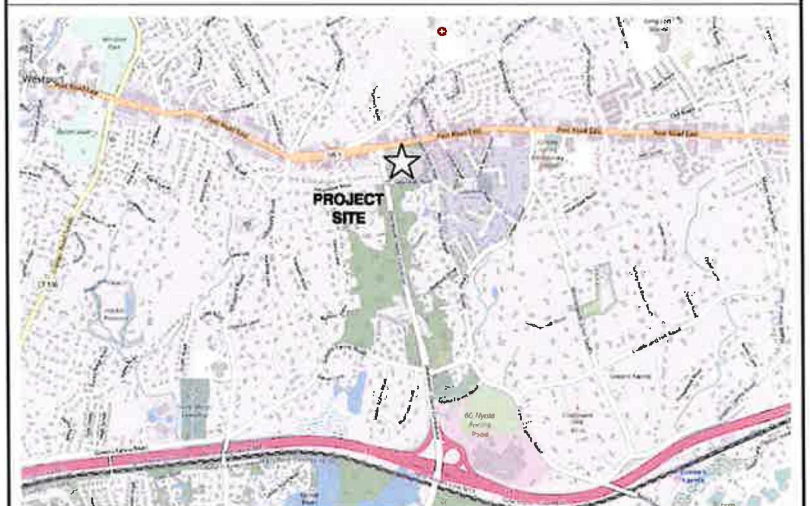


IMAGE SOURCE: OPENSTREETMAP

GENERAL NOTES

1. VERIFY COAX CONFIGURATION, ANTENNA CONFIGURATION, AND ANTENNA HEIGHT WITH LATEST RF DATA SHEET PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL SCHEDULE AND SEQUENCE ALL REQUIRED WORK WITH THE OWNER'S REPRESENTATIVE AND CONSTRUCTION MANAGER.
3. REPAIR ANY DAMAGE DURING CONSTRUCTION TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE CONSTRUCTION MANAGER.
4. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES FOR THE WORK.
5. ANTENNAS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS, GLOBAL STRUCTURAL ANALYSIS, AND LOCAL ANTENNA MOUNT ANALYSIS INCLUDING ANTENNA MOUNT MODIFICATIONS AND STRUCTURAL AUGMENTS AS APPLICABLE.
6. REPLACE AND/OR REUSE (E) MOUNTING HARDWARE, INSPECT FOR DAMAGE, AND REPLACE AS NECESSARY TO THE SATISFACTION OF THE ENGINEER.
7. EQUIPMENT LOCATIONS AND CONDITIONS TO BE FIELD VERIFIED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR BE RESPONSIBLE FOR THE SAME.
8. NORTH SHOWN IS APPROXIMATE. NOT ALL (E) OR (P) IMPROVEMENTS REQUIRED MAY BE SHOWN FOR CLARITY.
9. ANTENNA ELEVATIONS SHALL BE PER ZONING OR AS APPROVALS DICTATE.

STRUCTURAL NOTES

GLOBAL TOWER STRUCTURAL ANALYSIS REPORT:

PASSING REPORT – NO MODIFICATIONS REQUIRED BY CENTEK ENGINEERING DATED 06/11/24 REV6.

LOCAL ANTENNA MOUNT ANALYSIS REPORT:

MOUNT MODIFICATIONS REQUIRED – PER PASSING REPORT & MODIFICATION DRAWINGS BY COLLIERS ENGINEERING & DESIGN DATED 11/21/23.

- **REMOVE AND REPLACE TIE BACK WITH ADAPTER FOR PIPE CONNECTION (ALPHA SECTOR ONLY)**
- **RELOCATE ANTENNA PIPE AND REMOVE AND REPLACE ANTENNA PIPE MOUNTING BRACKETS IN POSITION 3, TYP. PER SECTOR (3 TOTAL)**
- **CONTRACTOR SHALL INSPECT CLIMBING FACILITIES AND SAFETY CLIMB TO ENSURE THEY ARE IN GOOD CONDITION. CONTRACTOR SHALL INSTALL SAFETY CLIMB WIRE ROPE GUIDES IN LOCATIONS WHERE WIRE ROPE IS RUBBING AGAINST THE MOUNT OR MOUNT-TO-TOWER CONNECTION STEEL. WIRE BRUSH CLEAN ANY OBSERVED CORROSION AND PROTECT WITH TWO (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC KOTE). CONTRACTOR SHALL PROVIDE PHOTOS OF WIRE ROPE GUIDE INSTALLATION AS PART OF PMI DOCUMENTS. CONTACT EOR IF ADDITIONAL GUIDANCE IS REQUIRED.**
- **THE RECENT MOUNT MAPPING REPORTED EXISTING OVP UNITS. IT IS ACCEPTABLE TO INSTALL UP TO ANY THREE (3) OF THE OVP MODEL NUMBERS LISTED BELOW AS REQUIRED AT ANY LOCATION OTHER THAN THE MOUNT FACE WITHOUT SUFFERING THE STRUCTURAL CAPACITY OF THE MOUNT. IF OVP UNITS ARE INSTALLED ON THE MOUNT FACE, A MOUNT RE-ANALYSIS MAY BE REQUIRED UNLESS REPLACING AN EXISTING OVP**

CONTRACTOR MOUNT POST MODIFICATION INSPECTION (PMI) REPORT REQUIREMENTS

PMI ONLINE ACCESS:	https://pmi.vzwsmart.com
SMART TOOL VENDOR PROJECT NUMBER:	10214355
FUZE ID #:	16242132

*** PMI AND REQUIREMENTS ALSO EMBEDDED IN ANTENNA MOUNT ANALYSIS REPORT BY COLLIERS ENGINEERING & DESIGN DATED 11/21/23.

MOUNT MODIFICATIONS REQUIRED (Y/N): **YES**

VZW APPROVED SMART KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VZW SMART KIT APPROVED VENDORS

Jesse Moreno, PE

Digitally signed by Jesse Moreno, PE Date: 2024.06.19

verizon

20 ALEXANDER DRIVE
2ND FLOOR
WALLINGFORD, CT 06492

PREPARED BY:

ProTerra
DESIGN GROUP, LLC
4 Bay Road, Bldg A
Suite 200
Hadley, MA 01035
Ph: (413)320-4918

REVISIONS

REV	DATE	DESCRIPTION	BY	CHK	APP'D
2	04/28/22	PER RFDS DATED 12/03/21	TBD	JWC	JMM
3	09/02/22	PER RFDS DATED 08/23/22	TBD	JWC	JMM
4	09/06/22	PER RFDS DATED 08/23/22	TBD	JWC	JMM
5	10/07/22	PER RFDS DATED 08/23/22	TBD	JWC	JMM
6	12/12/23	PER RFDS DATED 11/08/23	TBD	VVV	JMM
7	01/26/24	PER RFDS DATED 11/08/23	TBD	VVV	JMM
8	02/09/24	PER RFDS DATED 11/08/23	TBD	VVV	JMM
9	06/19/24	PER RFDS DATED 11/08/23	TBD	VVV	JMM

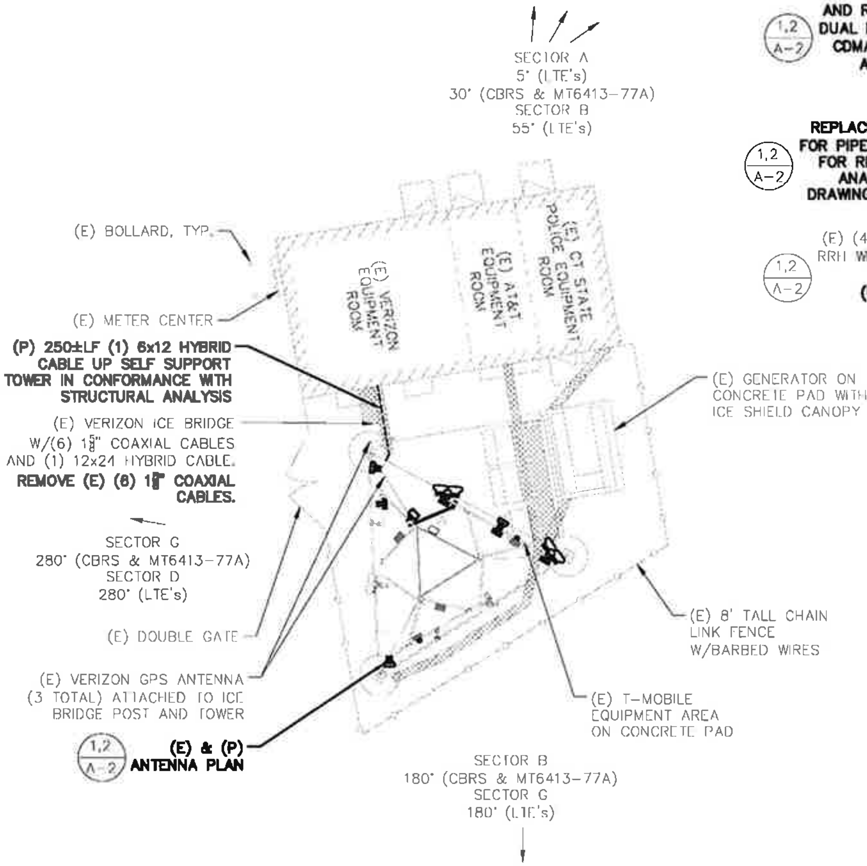
STATE OF CONNECTICUT
JESSE M. MORENO
No. 29389
LICENSED PROFESSIONAL ENGINEER

6-19-2024

WESTPORT_CT
880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
PROJECT ID: 16242132

T-1

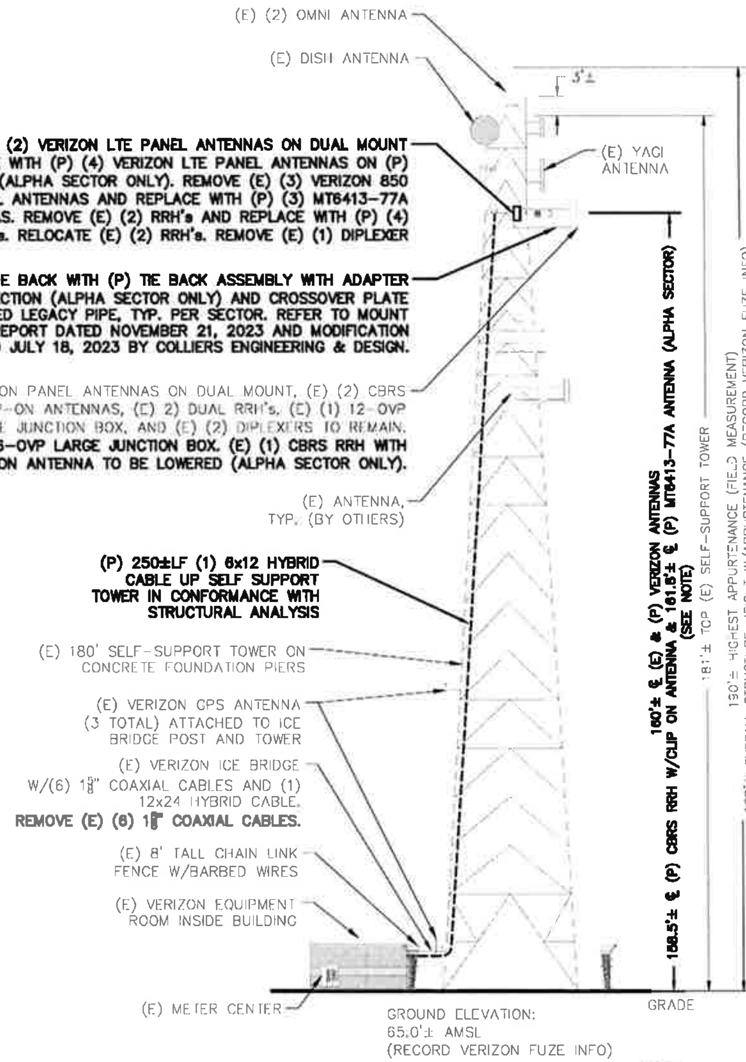
NOTE: AGL ELEVATIONS SHOWN HEREON FOR GENERAL REFERENCE ONLY, REFER TO LOCAL ANTENNA MOUNT ANALYSIS BY COLLIERS ENGINEERING & DESIGN AND SHEET X-1 FOR REQUIRED EQUIPMENT MOUNTING CONFIGURATION INCLUDING VERTICAL AND HORIZONTAL MOUNTING LOCATIONS LISTED IN TABLES. COORDINATE EQUIPMENT LOCATIONS AND ANY CONFLICTS WITH COLLIERS ENGINEERING & DESIGN.



COMPOUND PLAN (1 / A-1)

SCALE: 1"=15' (11x17)

15 7.5 0 15



WEST ELEVATION (2 / A-1)

SCALE: 1"=25' (11x17)

25 12.5 0 25

verizon

20 ALEXANDER DRIVE
2ND FLOOR
WALLINGFORD, CT 06492

PREPARED BY:

ProTerra DESIGN GROUP, LLC

4 Bay Road, Bldg A
Suite 200
Hadley, MA 01035
Ph:(413)320-4918

REVISIONS

REV	DATE	DESCRIPTION	BY	CHK	APP'D
2	04/08/22	PER RFDS DATED 12/03/21	TBD	MC	JMM
3	05/02/22	PER RFDS DATED 06/23/22	TBD	MC	JMM
4	07/06/22	PER RFDS DATED 06/23/22	TBD	MC	JMM
5	10/07/22	PER RFDS DATED 06/23/22	TBD	MC	JMM
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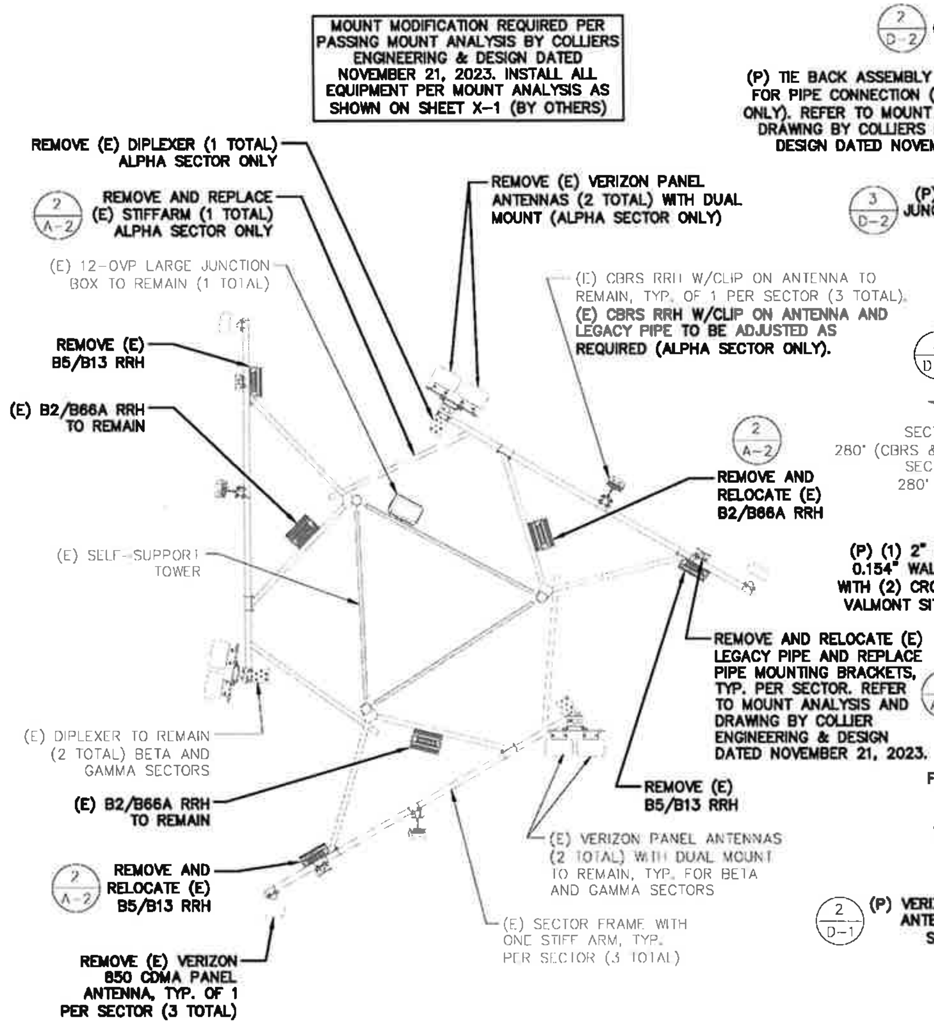
7	01/26/24	PER RFDS DATED 11/08/23	TBD	VV	JMM
8	02/09/24	PER RFDS DATED 11/08/23	TBD	VV	JMM
9	06/19/24	PER RFDS DATED 11/08/23	TBD	VV	JMM

STATE OF CONNECTICUT
JESSE M. MORENO
No. 24389
LICENSED PROFESSIONAL ENGINEER

6-19-2024

WESTPORT_CT
880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
PROJECT ID: 16RG138

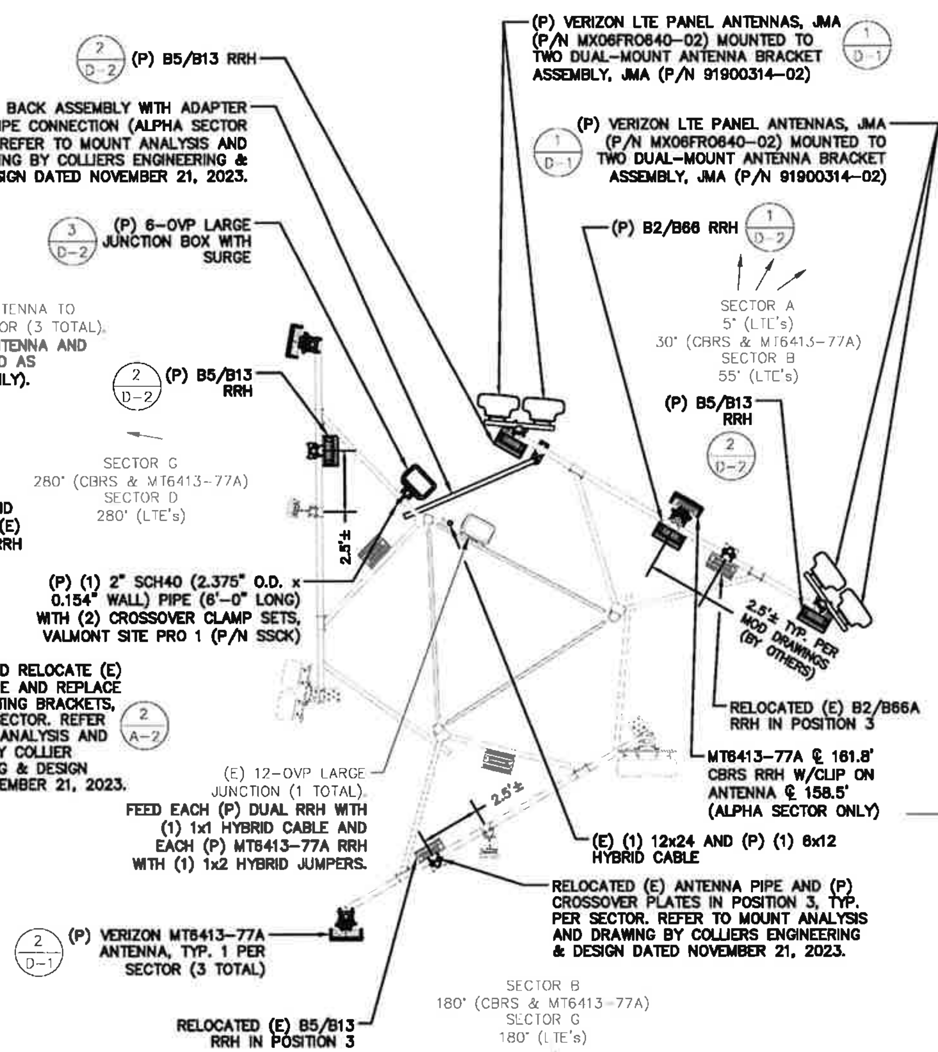
A-1



(E) ANTENNA PLAN (1/A-2)

SCALE: 1"=5'

5 2.5 0 5



(P) ANTENNA PLAN (2/A-2)

SCALE: 1"=5'

5 2.5 0 5

verizon✓
20 ALEXANDER DRIVE
2ND FLOOR
WALLINGFORD, CT 06492

PREPARED BY:
ProTerra DESIGN GROUP, LLC
4 Bay Road, Bldg A
Suite 200
Hadley, MA 01035
Ph:(413)320-4918

REVISIONS

REV	DATE	DESCRIPTION	BY	CHK	APP'D
2	04/08/22	PER RFDS DATED 12/03/21	TBD	WC	JMM
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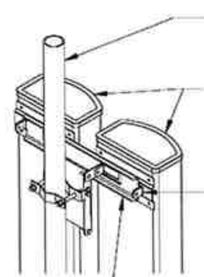
4	06/30/22	PER RFDS DATED 06/23/22	TBD	WC	JMM
5	10/07/22	PER RFDS DATED 08/25/22	TBD	WC	JMM
6	12/12/23	PER RFDS DATED 11/08/23	TBD	VV	JMM
7	01/26/24	PER RFDS DATED 11/08/23	TBD	VV	JMM
8	03/09/24	PER RFDS DATED 11/08/23	TBD	VV	JMM
9	06/10/24	PER RFDS DATED 11/08/23	TBD	VV	JMM

STATE OF CONNECTICUT
JESSE M. MORENO
No. 23389
LICENSED PROFESSIONAL ENGINEER
6-19-2024

WESTPORT, CT
880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
PROJECT ID: [illegible]

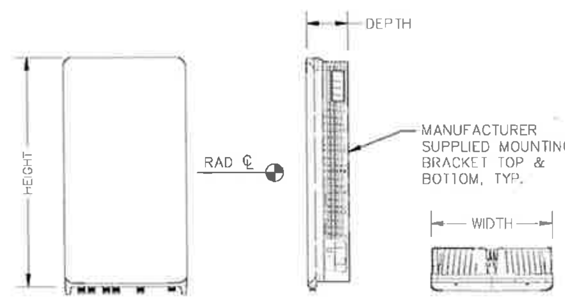
A-2

INSTALLATION NOTES:
1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS, AND HARDWARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES, AND RRHs IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. INSTALL EQUIPMENT AND MOUNTING BRACKETS TO PRESERVE CLIMBING ACCESS ON TOWER.
4. EQUIPMENT TO BE INSTALLED AT VERIZON RAD. CENTER IN ACCORDANCE WITH GLOBAL TOWER STRUCTURAL ANALYSIS AND MOUNT ANALYSIS (BY OTHERS).



MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT	MOUNT BRACKET KIT
JMA MX06FRO640-02	72.0"	19.8"	10.7"	69±lbs.	91900314-02

(P) PANEL ANTENNA DETAIL
1 / D-1
SCALE: NONE



MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
SAMSUNG - MT6413-77A	28.9"±	15.8"±	5.5"±	57±lbs.

(P) L-SUB6 ANTENNA DETAIL
2 / D-1
SCALE: NONE

verizon
20 ALEXANDER DRIVE
2ND FLOOR
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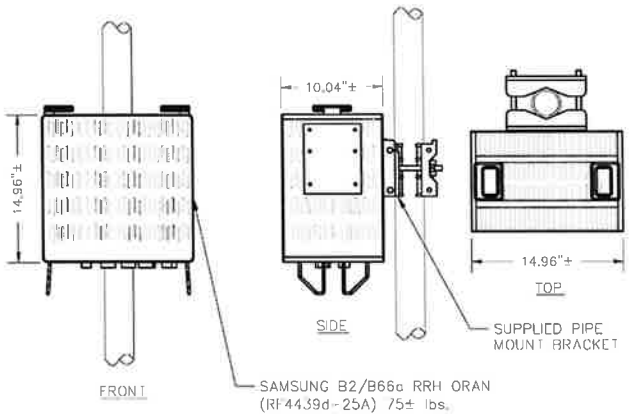
7	01/26/24	PER RFDS DATED 11/08/23	TBD	JVV	JMM
8	03/08/24	PER RFDS DATED 11/08/23	TBD	JVV	JMM
9	06/19/24	PER RFDS DATED 11/08/23	TBD	JVV	JMM

STATE OF CONNECTICUT
JESSE M. MORENO
No. 24389
LICENSED PROFESSIONAL ENGINEER
6-19-2024

WESTPORT, CT
880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
PROJECT ID: 16849138

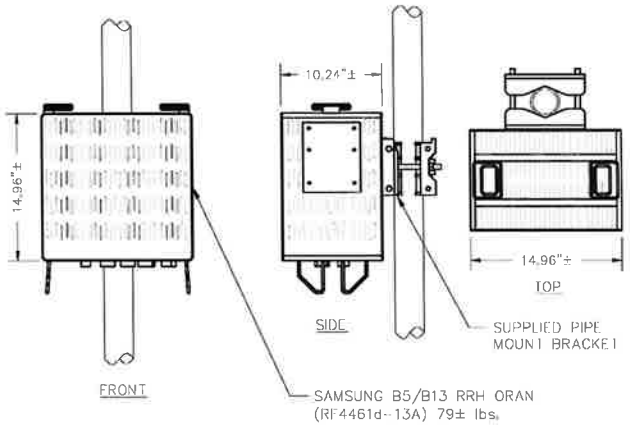
D-1



(P) AWS/PCS RRH MOUNTING DETAIL

1 D-2

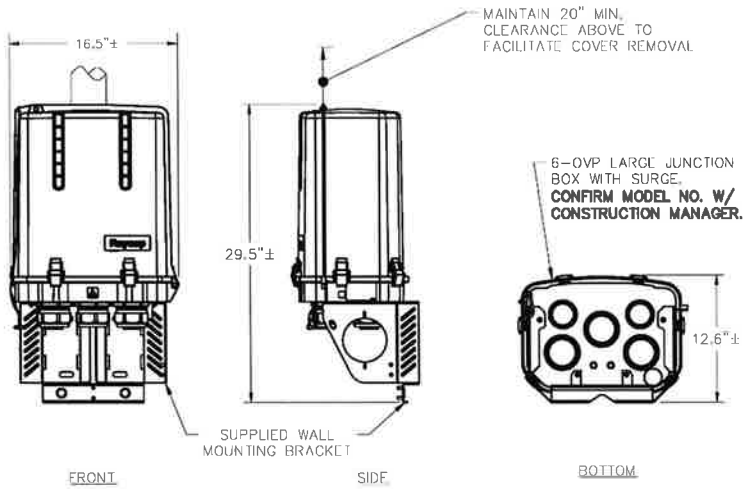
SCALE: NONE



(P) 700/850 RRH MOUNTING DETAIL

2 D-2

SCALE: NONE



(P) LARGE JUNCTION BOX MOUNTING DETAIL

3 D-2

SCALE: NONE

INSTALLATION NOTES:

1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS, AND HARDWARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES, AND RRHs IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. INSTALL EQUIPMENT AND MOUNTING BRACKETS TO PRESERVE CLIMBING ACCESS ON TOWER.
4. EQUIPMENT TO BE INSTALLED AT VERIZON RAD. CENTER IN ACCORDANCE WITH GLOBAL TOWER STRUCTURAL ANALYSIS AND MOUNT ANALYSIS (BY OTHERS).

verizon

20 ALEXANDER DRIVE
2ND FLOOR
WALLINGFORD, CT 06492

PREPARED BY:
ProTerra DESIGN GROUP, LLC
4 Bay Road, Bldg A
Suite 201
Hadley, MA 01035
ph:(413)320-4918

REVISIONS

REV	DATE	DESCRIPTION	BY	CHK	APP'D
2	04/08/22	PER RFDS DATED 12/03/21	TDD	MG	MW
3	04/08/22	PER RFDS DATED 08/23/22	TDD	MG	MW
4	04/06/22	PER RFDS DATED 08/23/22	TDD	MG	MW
5	11/01/22	PER RFDS DATED 08/23/22	TDD	MG	MW
6	04/01/23	PER RFDS DATED 11/28/23	TDD	MW	MW
7	05/09/24	PER RFDS DATED 11/28/23	TDD	MW	MW
8	06/19/24	PER RFDS DATED 11/28/23	TDD	MW	MW

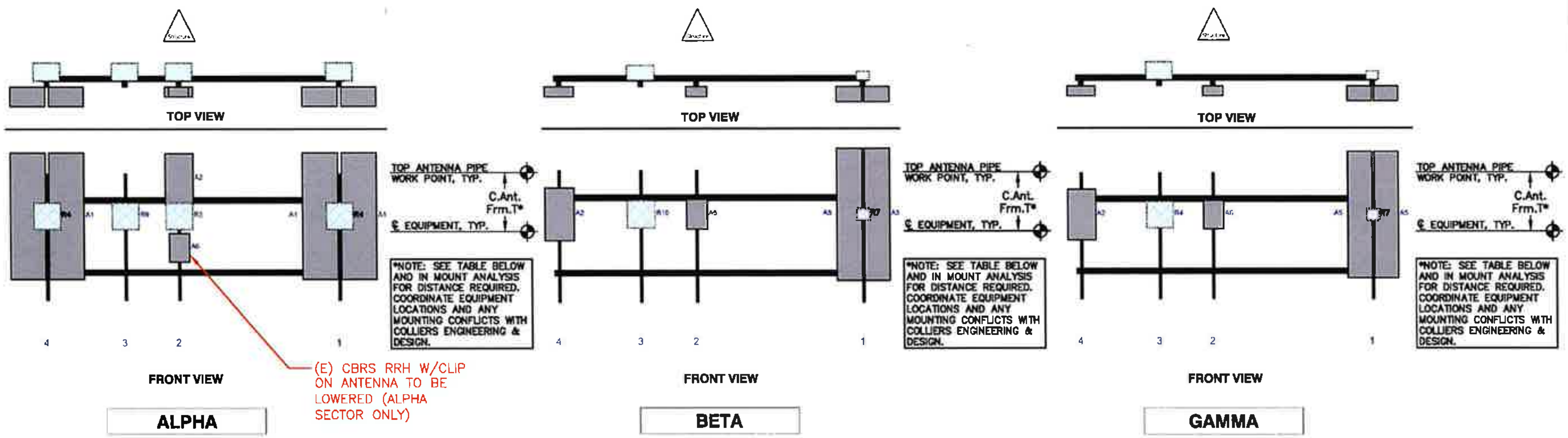
STATE OF CONNECTICUT
JESSE M. MORENO
No. 24389
LICENSED PROFESSIONAL ENGINEER
6-19-2024

WESTPORT, CT
880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
PROJECT ID: 16940128

D-2

ANTENNA LAYOUT SCHEMATIC RENDERINGS SHOWN HEREON PROVIDED BY OTHERS

REFER TO ANTENNA MOUNT ANALYSIS REPORT BY COLLIERS ENGINEERING & DESIGN DATED 11/21/23 AND MODIFICATION DRAWINGS DATED 07/18/23 FOR ADDITIONAL DETAIL



ALPHA | BETA | GAMMA

ALPHA

Ref#	Model	Height (in)	Width (in)	H Dist Frm L	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T	Ant H Off	Status	Validation
A1	MX06FRO640-02	72	19.8	169	1	a	Front	24	-11	Added	
A1	MX06FRO640-02	72	19.8	169	1	b	Front	24	11	Added	
R4	RF4461d-13A	15	15	169	1	a	Behind	24	0	Added	
A2	MT6413-77A	28.9	15.8	78	2	a	Front	3	0	Added	
A6	XXDWMM-12.5-65	18.2	11.4	78	2	a	Front	42	0	Retained	10/19/2021
R3	RF4439d-25A	15	15	78	2	a	Behind	24	0	Added	
R9	B2/B66A RRH-BR049	15	15	47.5	3	a	Behind	24	0	Retained	10/19/2021
A1	MX06FRO640-02	72	10.8	3	4	a	Front	24	-11	Added	
A1	MX06FRO640-02	72	19.8	3	4	b	Front	24	11	Added	
R4	RF4461d-13A	15	15	3	4	a	Behind	24	0	Added	

BETA

Ref#	Model	Height (in)	Width (in)	H Dist Frm L	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T	Ant H Off	Status	Validation
A5	JAHH-65B-R3B	72	13.8	169	1	a	Front	24	-7.5	Retained	10/19/2021
A5	JAHH-65B-R3B	72	13.8	169	1	b	Front	24	7.5	Retained	10/19/2021
R7	CBC78T-DS-43-2X	6.4	6.9	169	1	a	Behind	24	0	Retained	10/19/2021
A8	XXDWMM-12.5-65	18.2	11.4	78	2	a	Front	24	0	Retained	10/19/2021
R10	B5/B13 RRH-BR04C	15	15	47.5	3	a	Behind	24	0	Retained	10/19/2021
A2	MT6413-77A	28.9	15.8	3	4	a	Front	24	0	Added	
R9	B2/B66A RRH-BR049	15	15	Member						Retained	10/19/2021

GAMMA

Ref#	Model	Height (in)	Width (in)	H Dist Frm L	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T	Ant H Off	Status	Validation
A5	JAHH-65B-R3B	72	13.8	169	1	a	Front	24	-7.5	Retained	10/19/2021
A5	JAHH-65B-R3B	72	13.8	169	1	b	Front	24	7.5	Retained	10/19/2021
R7	CBC78T-DS-43-2X	6.4	6.9	169	1	a	Behind	24	0	Retained	10/19/2021
A6	XXDWMM-12.5-65	18.2	11.4	78	2	a	Front	24	0	Retained	10/19/2021
R4	RF4461d-13A	15	15	47.5	3	a	Behind	24	0	Added	
A2	MT6413-77A	28.9	15.8	3	4	a	Front	24	0	Added	
R9	B2/B66A RRH-BR049	15	15	Member						Retained	10/19/2021

CONTRACTOR MOUNT POST MODIFICATION INSPECTION (PMI) REPORT REQUIREMENTS

PMI ONLINE ACCESS:	https://pmi.vzwsmart.com
SMART TOOL VENDOR PROJECT NUMBER:	10214355
FUZE ID #:	16242132

*** PMI AND REQUIREMENTS ALSO EMBEDDED IN ANTENNA MOUNT ANALYSIS REPORT BY COLLIERS ENGINEERING & DESIGN DATED 11/21/23.

MOUNT MODIFICATIONS REQUIRED (Y/N): **YES**

VZW APPROVED SMART KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VZW SMART KIT APPROVED VENDORS

verizon

20 ALEXANDER DRIVE
2ND FLOOR
WALLINGFORD, CT 06492

PREPARED BY:

ProTerra DESIGN GROUP, LLC
4 Bay Road, Bldg A
Suite 200
Hadley, MA 01035
Ph: (413) 320-4918

REVISIONS

REV	DATE	DESCRIPTION	BY	CHK	APP'D
2	04/08/22	PER RFDS DATED 12/03/21	TBD	JWC	JWM
3	09/02/22	PER RFDS DATED 08/23/22	TBD	JWC	JWM
4	09/06/22	PER RFDS DATED 08/23/22	TBD	JWC	JWM
5	10/07/22	PER RFDS DATED 08/23/22	TBD	JWC	JWM
6	12/12/23	PER RFDS DATED 11/08/23	TBD	JVV	JWM
7	01/26/24	PER RFDS DATED 11/08/23	TBD	JVV	JWM
8	07/09/24	PER RFDS DATED 11/08/23	TBD	JVV	JWM
9	06/19/24	PER RFDS DATED 11/08/23	TBD	JVV	JWM

RENDERINGS BY:

COLLIERS ENGINEERING & DESIGN
MT. LAUREL OFFICE
2000 MIDLANTIC DRIVE - SUITE 100
MOUNT LAUREL, NJ 08054
Phone: 856-797-0412

WESTPORT CT
880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
PROJECT ID: 16242132

X-1

C-band 64T64R

SAMSUNG

Gen 2

Gen 2 : Higher conducted power radio with reduced size/volume/weight vs Gen 1 and also SOC embedded for flexibility to support new features

※ Preliminary Design: External appearance and mechanical design can be subject to change

Gen 2. 64T64R C-band MMU Dimensions	
Size (WxHxD)	**400 x 734 x 140 mm (15.75 x 28.90 x 5.51 inch)**
Weight	**26kg (57.3 lb)**

Item	Gen 2 64T64R (MT6413-77A)
Air Technology	NR n77/TDD
Frequency	3700 – 3980 MHz
IBW	200 MHz
OBW	200 MHz
Carrier Bandwidth	20(HW ready)/40/60/80/100 MHz
# of Carriers	2 carriers
Layer	DL : 16L, UL : 16RX (8L)
RF Chain	64T64R
Antenna Configuration	4V16H with 192 AE
EIRP	80.5 dBm @320W (55 dBm + 25.5 dBi)
Conductive Power	320W
Spectrum Analyzer	TX/RX support
RX Sensitivity	Typical -97.8dBm @(1Rx, 18.36MHz with 30kHz,51RBs)
Modulation	DL 256QAM support, (DL 1024QAM with 1~2dB power back-off)
Function Split	DL/UL option 7-2x
Input Power	-48 VDC (-38 VDC to -57 VDC)
Power Consumption	1,287W (100% load, room temp.)
Size (WHD)	**400 x 734 x 140 mm (15.75 x 28.90 x 5.51 inch)**
Volume	**41.1L**
Weight	**26kg (57.3 lb)**
Operating Temperature	-40℃ - 55℃ (w/o solar load)
Cooling	Natural convection
Unwanted Emission	3GPP 38.104 FCC 47 CFR 27.53 : < -13dBm/MHz < -40 dBm/MHz @ above 4 GHz <-50 dBm /MHz @ 4,040 ~ 4,050 MHz, <-60 dBm /MHz @ above 4,050 MHz
Optic Interface	15km, 4 ports (25Gbps x 4), SFP28, single mode, Bi-di (Option: Duplex)
Mounting Options	Pole, wall
NB-IoT	Not support
External Alarm	4RX
Fronthaul Interface	eCPRI

Product Specifications

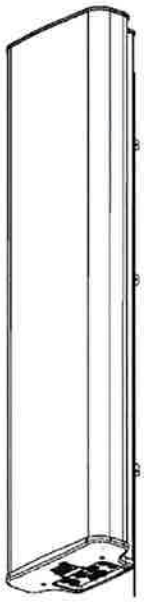
MX06FRO640-02

NWAV™ X-Pol Antenna | Hex-Port | 6 ft | 40°

JMA WIRELESS

X-Pol, Hex-Port 6 ft 40° Fast Roll-Off with Smart Bias-T

(2) 698–894 MHz & (4) 1695–2180 MHz



- Fast Roll-Off (FRO™) Azimuth beam pattern improves Intra- and Inter-cell SINR
- Excellent Passive Intermodulation (PIM) performance reduces harmful interference
- Fully integrated (iRETs) with *independent* RET control for low and high bands for ease of network optimization
- *SON-Ready* array spacing supports beamforming capabilities
- Suitable for LTE/CDMA/PCS/UMTS/GSM air interface technologies
- Integrated Smart BIAS-Ts reduces leasing costs

nwav technology

Electrical specification (minimum/ maximum)	**Ports 1,2**		**Ports 3,4,5,6**		
Frequency bands, MHz	698–798	824–894	1695–1880	1850–1990	1920–2180
Polarization	± 45°		± 45°		
Average gain over all tilts, dBi	16.3	17.2	19.3	20.1	20.4
Horizontal beamwidth (HBW), degrees[1]	42°	37°	40°	39°	37°
Front-to-back ratio, co-polar power @180° ± 30°, dB	>25.0	>25.0	>28.0	>28.0	>28.0
X-Pol discrimination (CPR) at boresight, dB	>18.0	>15.0	>18	>18	>15
Sector power ratio, percent	<4.5	<3.5	<3.7	<3.8	<3.6
Vertical beamwidth, (VBW), degrees[1]	13.1°	11.8°	6.0°	5.7°	5.3°
Electrical downtilt (EDT) range, degrees	2-14	2-14	0-9		
First upper side lobe (USLS) suppression, dB[1]	≤ -15.0	≤ -15.0	≤ -16.0	≤ -16.0	≤ -16.0
Minimum cross polar isolation, port-to-port, dB	25	25	25	25	25
Maximum VSWR/ return loss, dB	1.5/ -14.0	1.5/ -14.0	1.5/ -14.0	1.5/ -14.0	1.5/ -14.0
Maximum passive Intermodulation (PIM), 2x 20W carrier, dBc	-153	-153	-153		
Maximum input power per any port, watts	300		250		
Total composite power all ports, watts	1500				

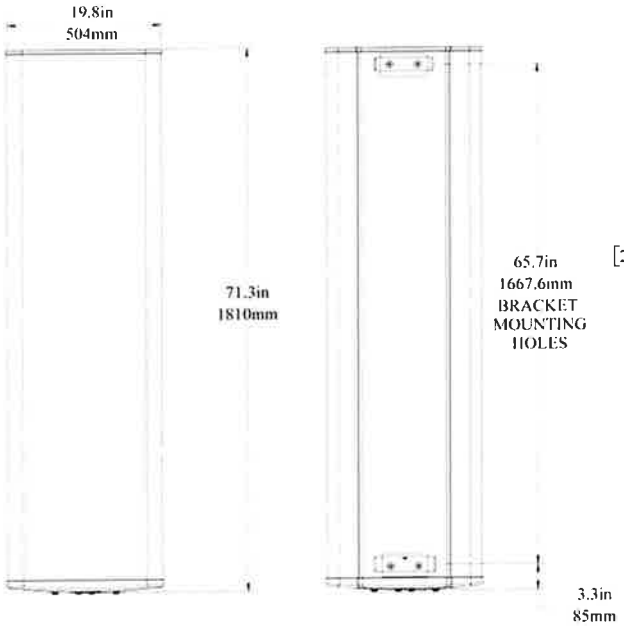
[1] Typical value over frequency and tilt

Product Specifications

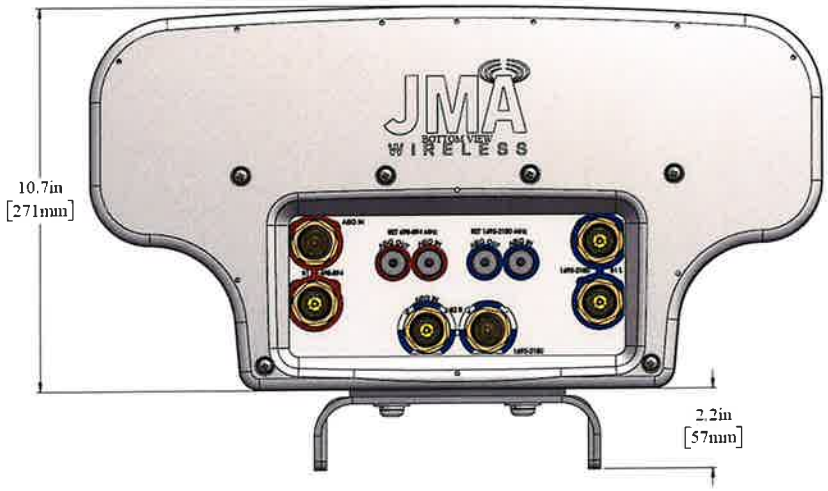
MX06FRO640-02

NWAV™ X-Pol Antenna | Hex-Port | 6 ft | 40°

Mechanical specifications	
Dimensions height/ width/ depth, inches (mm)	72/ 19.8/ 10.7 (1829/504/271)
Shipping dimensions length/ width/ height, inches (mm)	84/ 26/ 15 (2134/ 660/ 381)
No. of RF input ports, connector type & location	6 x 4.3-10 female, bottom
RF connector torque	96 lbf·in (10.85 N·m or 8 lbf·ft)
Net antenna weight, lb (kg)	70 (31.8)
Shipping weight, lb (kg)	100 (45.4)
Antenna mounting and downtilt kit included with antenna	91900318
Net weight of the mounting and downtilt kit, lb (kg)	18 (8.2)
Range of mechanical up/ down tilt	-2° to 14°
Rated wind survival speed, mph (km/h)	150 (241)
Frontal, lateral & rear wind loading @ 150 km/h, lbf (N)	263 (1170), 112 (498), 263 (1170)
Equivalent flat plate @100 mph and Cd=2, sq ft	6.03



Front view



Back view

Ordering information	
Antenna model	**Description**
MX06FRO640-02	6F X- Pol HEX FRO 40° 2-14°/ 0-9° RET, 4.3-10 & SBT
Optional accessories	
992100-CA030-SC	Optional AISG jumper cable, M/F, 3.0 meters
PCU-1000	Primary control unit, USB

MX06FRO640-02

NWAV™ X-Pol Antenna | Hex-Port | 6 ft | 40°

Remote Electrical Tilt (RET 1000) information	
RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9
RET interface connector quantity	2 pairs of AISG male/ female connectors
RET interface connector location	Bottom of the antenna
Total No. of internal RETs low bands	1
Total No. of internal RETs high bands	1
RET input operating voltage, vdc	10–30
RET max. power consumption, idle state, W	≤ 2.0
RET max. power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	AISG 2.0/ 3GPP

RET & RF connector topology

Each RET device can be controlled either via the designated external AISG connector or RF port as shown below

RET Device	Band	RF Port
1	698–894	1–2

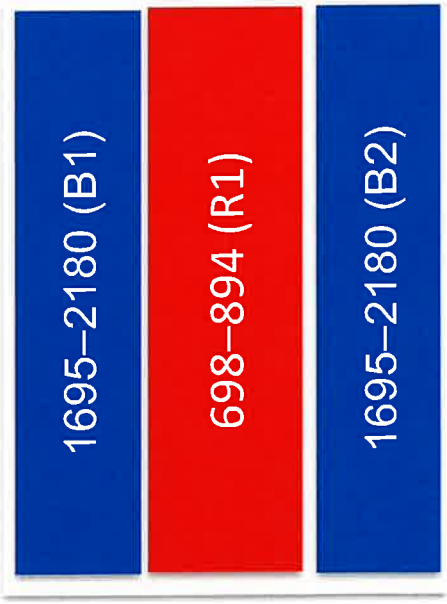
RET Device	Band	RF Port
2	1695–2180	3–6

Array topology

3 sets of radiating arrays

R1: 698–894 MHz
B1: 1695–2180 MHz
B2: 1695–2180 MHz

Band	RF Port
1695–2180	3–4
698–894	1–2
1695–2180	5–6



SAMSUNG

AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This AWS/PCS 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

Model Code RF4439d-25A

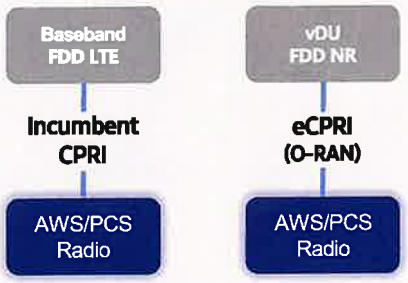
Homepage
samsungnetworks.com

Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

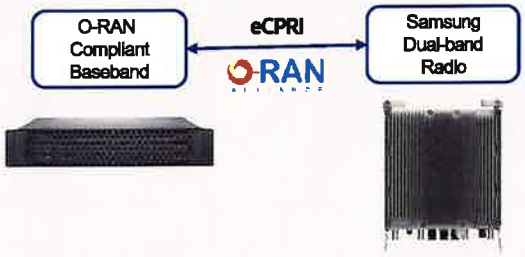
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

A standardized O-RAN radio can help in implementing cost-effective networks, which are capable of sending more data without compromising additional investments.

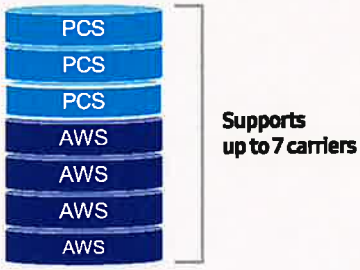
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

The number of required carriers varies according to site (region). Supporting many carriers is essential for using all frequencies that the operator has available.

The new AWS/PCS dual-band radio can support up to 3 carriers in the PCS (1.9GHz) band and 4 carriers in the AWS (2.1GHz) band, respectively.



Brand New Features in a Compact Size

Samsung's AWS/PCS macro radio offers several features, such as dual connectivity for baseband for both CDU and vDU, O-RAN capability, more carriers and an enlarged PCS spectrum, combined into an incumbent radio volume of 36.8L.

- **2 FH connectivity**
- **O-RAN capability**
- **More carriers and spectrum**

Same as an Incumbent radio volume

Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B25(PCS), B66(AWS)
Frequency Band	DL: 1930 – 1995MHz, UL: 1850 – 1915MHz DL: 2110 – 2200MHz, UL: 1710 – 1780MHz
RF Power	(B25) 4 × 40W or 2 × 60W (B66) 4 × 60W or 2 × 80W
IBW/OBW	(B25) 65MHz / 30MHz (B66) DL 90MHz, UL 70MHz / 60MHz
Installation	Pole, Wall
Size/ Weight	14.96 x 14.96 x 10.04inch (36.8L) / 74.7lb

700/850 4T4R Macro 320W ORU - New Filter (RF4461d-13A)

SAMSUNG

Specifications

Item	Specification	
Air Interface	LTE, NR(HW resource ready)	
Band	Band13 (700MHz)	Band5 (850MHz)
Frequency	DL: 746~756MHz UL: 777~787MHz	DL: 869~894MHz UL: 824~849MHz
IBW	10MHz	25MHz
OBW	10MHz	25MHz
Carrier Bandwidth	LTE/NR 5*/10MHz	LTE 5/10MHz NR 5/10/15/20MHz
# of carriers	2C*	3C
Total # of carriers	4C + B13 (SDL) 1C	
RF Chain	4T4R/2T4R/2T2R/1T2R 2T2R+2T2R bi-sector	
RF Output Power	Total : 320W 4 x 40W or 2 x 60W	4 x 40W or 2 x 60W
Spectrum Analyzer	TX/RX Support	
RX Sensitivity	Typ. -104.5dBm @1Rx (25RBs 5MHz)	
Modulation	256QAM support, (1024QAM with 1~2dB power back-off)	
Input Power	-48VDC (-38VDC to -57VDC)	
Power Consumption	1,165 Watt @ 100% RF load, room temperature	
Size (WHD)	380 x 380 x 260 mm (14.96 x 14.96 x 10.23 inch)	
Volume	37.5 L	
Weight (W/o Solar Shield & finger guard)	35.9 kg (79.1 lb)	
Operating Temperature	-40°C (-40°F) ~ 55°C (131°F) (Without solar load)	
Cooling	Natural convection	
Unwanted Emission	3GPP 36.104 FCC 47 CFR 27.53 c), f) -	3GPP 36.104 FCC 47 CFR 22.917 -69 dBm/100 kHz per path @ 896 ~901MHz
CPRI Cascade	Not supported	
Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP+, single mode, Duplex (Option: Bi-di)	
RET & TMA Interface	AISG 3.0	
Bias-T	4 ports (2 ports per band)	
Mounting Options	Pole, wall	
NB-IoT	2GB+2IB or 4IB	2SA+2GB or 2GB+2IB or 4GB
PIM Cancellation	Support	
# of antenna port	4	
External Alarm	4	
Fronthaul Interface	Opt. 8 CPRI / Opt. 7-2x selectable (not simultaneous support)	
CPRI compression	Not Support	

* 5MHz supporting in B13(700MHz) depends on 3GPP std. and UE capability.
External filters in interferer and victim sides for Mexican boarder to support 5MHz service need to be considered
** Finger guard is not needed.

ATTACHMENT 3

C Squared Systems, LLC
65 Dartmouth Drive
Auburn, NH 03032
(603) 644-2800
support@csquaredsystems.com

Calculated Radio Frequency Emissions Report

verizon

Westport

880 Post Road East Unit 1, Westport, CT

June 21, 2024

Table of Contents

List of Figures

List of Tables

1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed modification of Verizon's antenna arrays mounted at 160' on a transmission tower located at 880 Post Road East Unit 1 in Westport, CT. The coordinates of the tower are 41° 08' 14.91" N, 73° 20' 3.7" W.

Verizon is proposing the following:

1) Install fourteen (14) multi-band antennas to support its commercial LTE and 5G network.

This report considers the planned antenna configuration for Verizon[1] as well as existing antenna configuration for AT&T[2], DISH[3], T-Mobile[4], D&K and CSP[5] to derive the resulting % MPE of its proposed modification.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm^2). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment C of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment C contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

---

[1] As referenced to Verizon's Radio Frequency Design Sheet updated 11/08/2023.

[2] As referenced to AT&T's Connecticut Siting Council Notice of Exempt Modification – 880 Post Road East, Westport, Connecticut, dated 02/17/2023

[3] As referenced to DISH's Connecticut Siting Council Tower Share Application – 880 Post Road East, Westport, Connecticut, dated 01/19/2023

[4] As referenced to AT&T's Connecticut Siting Council Notice of Exempt Modification – 880 Post Road East, Westport, Connecticut, dated 02/17/2023

[5] As referenced to AT&T's Connecticut Siting Council Notice of Exempt Modification – 880 Post Road East, Westport, Connecticut, dated 02/17/2023

3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left(\frac{\text{GRF}^2 \times 1.64 \times \text{ERP}}{4\pi \times R^2}\right) \text{X Off Beam Loss}$$

Where:

EIRP = Effective Isotropic Radiated Power

R = Radial Distance = $\sqrt{(H^2 + V^2)}$

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Off Beam Loss is determined by the selected antenna patterns

Ground reflection factor (GRF) of 1.6

These calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. The calculations assume even terrain in the area of study and do not take into account actual terrain elevations which could attenuate the signal. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the final installations.

4. Antenna Inventory

Table 1 below outlines Verizon's proposed antenna configuration for the site. The associated data sheets and antenna patterns for these specific antenna models are included in Attachments C.

Operator	Sector / Azimuth	TX Freq (MHz)	Power at Antenna (Watts)	Ant Gain (dBi)	Power EIRP (Watts)	Antenna Model	Beam Width	Mech. Tilt	Length (ft)	Antenna Centerline Height (ft)
Verizon	Alpha / 5°	700	160	16.3	6825	MX06FRO640-02	42	0	6	160
		850	160	17.2	8397		37			
		1900	160	20.1	16373		39			
		2100	240	20.4	26315		37			
	Alpha / 30°	3500	20	12.5	356	XXDWMM-12.5-65	65			
		3700	320	25.5	113540	MT6413-77A	-	0	2.46	160
	Alpha / 55°	700	160	16.3	6825	MX06FRO640-02	42	0	6	160
		850	160	17.2	8397		37			
		1900	160	20.1	16373		39			
		2100	240	20.4	26315		37			
	Beta / 180°	700	160	14.5	4509	JAHH-65B-R3B	67	0	6	160
		850	160	15.8	6083		65			
		1900	160	18.4	11069		63			
		2100	240	18.5	16991		65			
		3500	20	12.5	356	XXDWMM-12.5-65	65	0	1	160
		3700	320	25.5	113540	MT6413-77A	-	0	2.46	160
	Gamma / 280°	700	160	14.5	4509	JAHH-65B-R3B	67	0	6	160
		850	160	15.8	6083		65			
		1900	160	18.4	11069		63			
		2100	240	18.5	16991		65			
		3500	20	12.5	356	XXDWMM-12.5-65	65			
		3700	320	25.5	113540	MT6413-77A	-	0	2.46	160

Table 1: Proposed Antenna Inventory[6] [7]

[6] Antenna heights are in reference to Verizon's Radio Frequency Design Sheet updated 11/08/2023.

[7] Transmit power assumes 0 dB of cable loss.

5. Calculation Results

The calculated power density results are shown in Figure 1 below. For completeness, the calculations for this analysis range from 0 feet horizontal distance (directly below the antennas) to a value of 3,000 feet horizontal distance from the site. In addition to the other worst-case scenario considerations that were previously mentioned, the power density calculations to each horizontal distance point away from the antennas was completed using a local maximum off beam antenna gain (within ± 5 degrees of the true mathematical angle) to incorporate a realistic worst-case scenario.

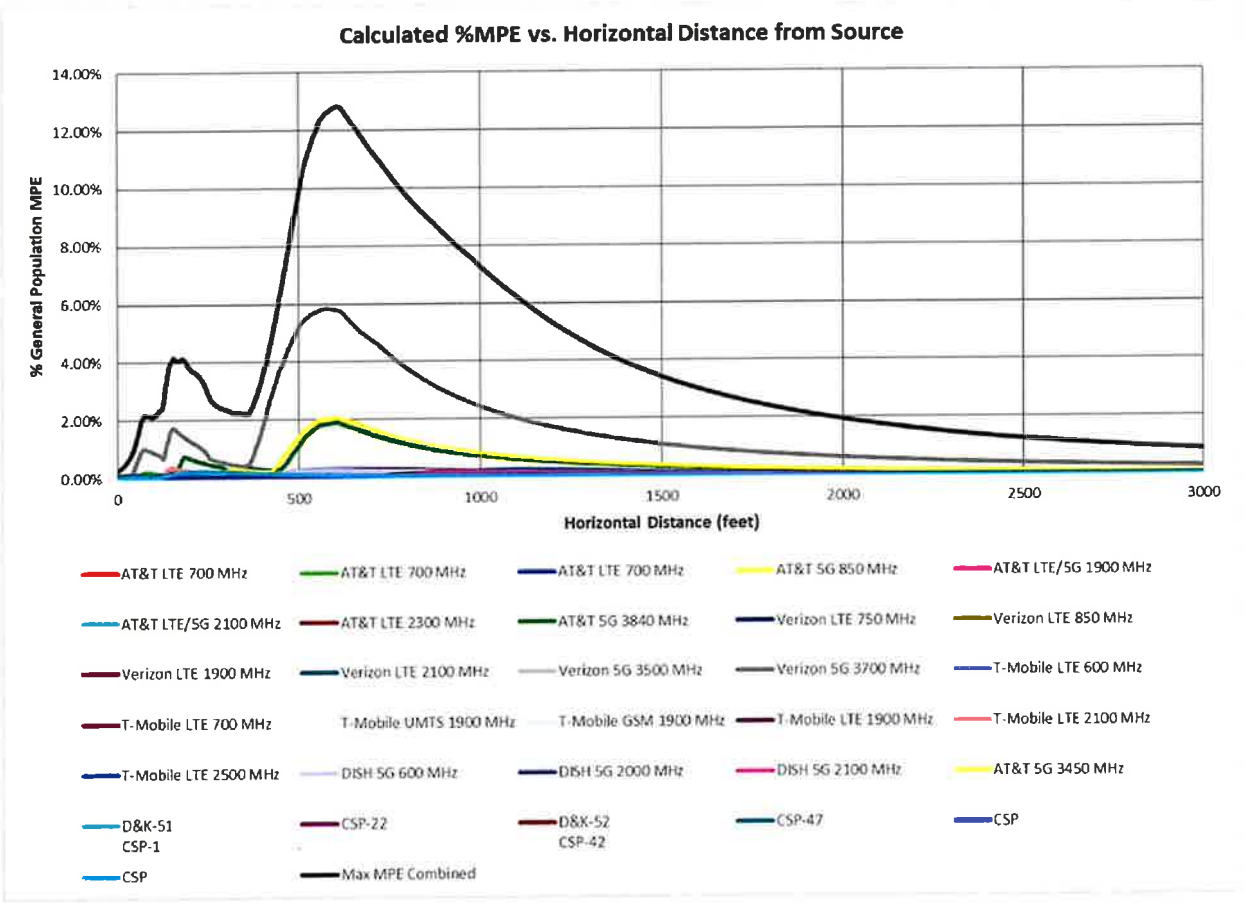


Figure 1: Graph of General Population % MPE vs. Distance

The highest percent of MPE (12.83% of the General Population limit) is calculated to occur at a horizontal distance of 606 feet from antennas. Please note that the percent of MPE calculations close to the site take into account off beam loss, which is determined from the vertical pattern of the antennas used. Therefore, RF power density levels may increase as the distance from the site increases. At distances of approximately 1500 feet and beyond, one would now be in the main beam of the antenna pattern and off beam loss is no longer considered. Beyond this point, RF levels become calculated solely on distance from the site and the percent of MPE decreases significantly as distance from the site increases.

Table 2 below lists percent of MPE values as well as the associated parameters that were included in the calculations. The highest percent of MPE value was calculated to occur at a horizontal distance of 606 feet from the site (reference Figure 1).

As stated in Section 3, all calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. In addition, a six foot height offset was considered in this analysis to account for average human height. As a result, the predicted signal levels are significantly higher than the actual signal levels will be from the final configuration. The results presented in Figure 1 and Table 2 assume level ground elevation from the base of the tower out to the horizontal distances calculated.

Carrier	Number of Transmitters	Power out of Base Station Per Transmitter (Watts)	Antenna Height (Feet)	Distance to the Base of Antennas (Feet)	Power Density (mW/cm^2)	Limit (mW/cm^2)	% MPE
AT&T 5G 3450 MHz	1	108.8	134.8	606	0.020681	1.000	2.07%
AT&T 5G 3840 MHz	1	108.4	134.8	606	0.019059	1.000	1.91%
AT&T 5G 850 MHz	1	120.0	133.0	606	0.000920	0.567	0.16%
AT&T LTE 2300 MHz	1	75.0	133.0	606	0.000480	1.000	0.05%
AT&T LTE 700 MHz	1	120.0	133.0	606	0.001114	0.467	0.24%
AT&T LTE 700 MHz	1	120.0	133.0	606	0.001162	0.467	0.25%
AT&T LTE 700 MHz	1	60.0	133.0	606	0.000551	0.467	0.12%
AT&T LTE/5G 1900 MHz	1	120.0	133.0	606	0.000653	1.000	0.07%
AT&T LTE/5G 2100 MHz	1	120.0	133.0	606	0.000892	1.000	0.09%
CSP	1	100.0	169.0	606	0.000097	0.300	0.03%
CSP	1	100.0	113.0	606	0.000161	0.200	0.08%
CSP-22	1	100.0	181.0	606	0.000066	0.300	0.02%
CSP-47	1	160.0	170.0	606	0.000089	0.567	0.02%
D&K-51 CSP-1	1	100.0	187.0	606	0.000053	0.300	0.02%
D&K-52 CSP-42	1	1.0	177.0	606	0.000000	1.000	0.00%
DISH 5G 2000 MHz	1	160.0	144.0	606	0.000266	1.000	0.03%
DISH 5G 2100 MHz	1	160.0	144.0	606	0.000239	1.000	0.02%
DISH 5G 600 MHz	1	120.0	144.0	606	0.000953	0.400	0.24%
T-Mobile GSM 1900 MHz	1	120.0	125.0	606	0.001511	1.000	0.15%
T-Mobile LTE 1900 MHz	1	120.0	125.0	606	0.001511	1.000	0.15%
T-Mobile LTE 2100 MHz	1	120.0	125.0	606	0.001064	1.000	0.11%
T-Mobile LTE 2500 MHz	1	240.0	125.0	606	0.000210	1.000	0.02%
T-Mobile LTE 600 MHz	1	120.0	125.0	606	0.001286	0.400	0.32%
T-Mobile LTE 700 MHz	1	120.0	125.0	606	0.001106	0.467	0.24%
T-Mobile UMTS 1900 MHz	1	60.0	125.0	606	0.000755	1.000	0.08%
Verizon 5G 3500 MHz	1	20.0	160.0	606	0.000202	1.000	0.02%
Verizon 5G 3700 MHz	1	320.0	160.0	606	0.057690	1.000	5.77%
Verizon LTE 1900 MHz	1	160.0	160.0	606	0.000234	1.000	0.02%
Verizon LTE 2100 MHz	1	240.0	160.0	606	0.000364	1.000	0.04%
Verizon LTE 750 MHz	1	160.0	160.0	606	0.001256	0.500	0.25%
Verizon LTE 850 MHz	1	160.0	160.0	606	0.001482	0.567	0.26%
						Total	12.83%

Table 2: Maximum Percent of General Population Exposure Values[8,9,10,11]

[8] Frequencies listed are representative of the operating band and are not the specific operating frequency.

[9] The total % MPE listed is a summation of each unrounded contribution. Therefore, summing each rounded value may not reflect the total value listed in the table.

[10] In the case where antenna pattern data was unavailable from the manufacturer, generic antenna pattern was used based on the frequency, bandwidth and gain of the antenna.

[11] Reasonable assumptions for the frequency and power were used in the calculation for absolute worst case %MPE for CSP and D&K.

6. Conclusion

The above analysis verifies that RF exposure levels from the site with Verizon's proposed antenna configuration will be well below the maximum permissible levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Using the conservative calculation methods and parameters detailed above, the maximum cumulative percent of MPE in consideration of all transmitters is calculated to be **12.83%** of the FCC limit (General Population/Uncontrolled). This maximum cumulative percent of MPE value is calculated to occur 606 feet away from the site.

7. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.

Report Prepared By: Ram Acharya
RF Engineer
C Squared Systems, LLC

June 20, 2024
Date

Reviewed/Approved By: Martin Lavin
Senior RF Engineer
C Squared Systems, LLC

June 21, 2024
Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

IEEE C95.1-2019, IEEE Standard Safety Levels With Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz IEEE-SA Standards Board

IEEE C95.3-2021, IEEE Recommended Practice for Measurements and Computations of Electric, Magnetic, and Electromagnetic Fields with Respect to Human Exposure to Such Fields, 0 Hz-300 GHz IEEE-SA Standards Board

Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure[12]

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $|E|^2$, $|H|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

(B) Limits for General Population/Uncontrolled Exposure[13]

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $|E|^2$, $|H|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz * Plane-wave equivalent power density

Table 3: FCC Limits for Maximum Permissible Exposure

[12] Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

[13] General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

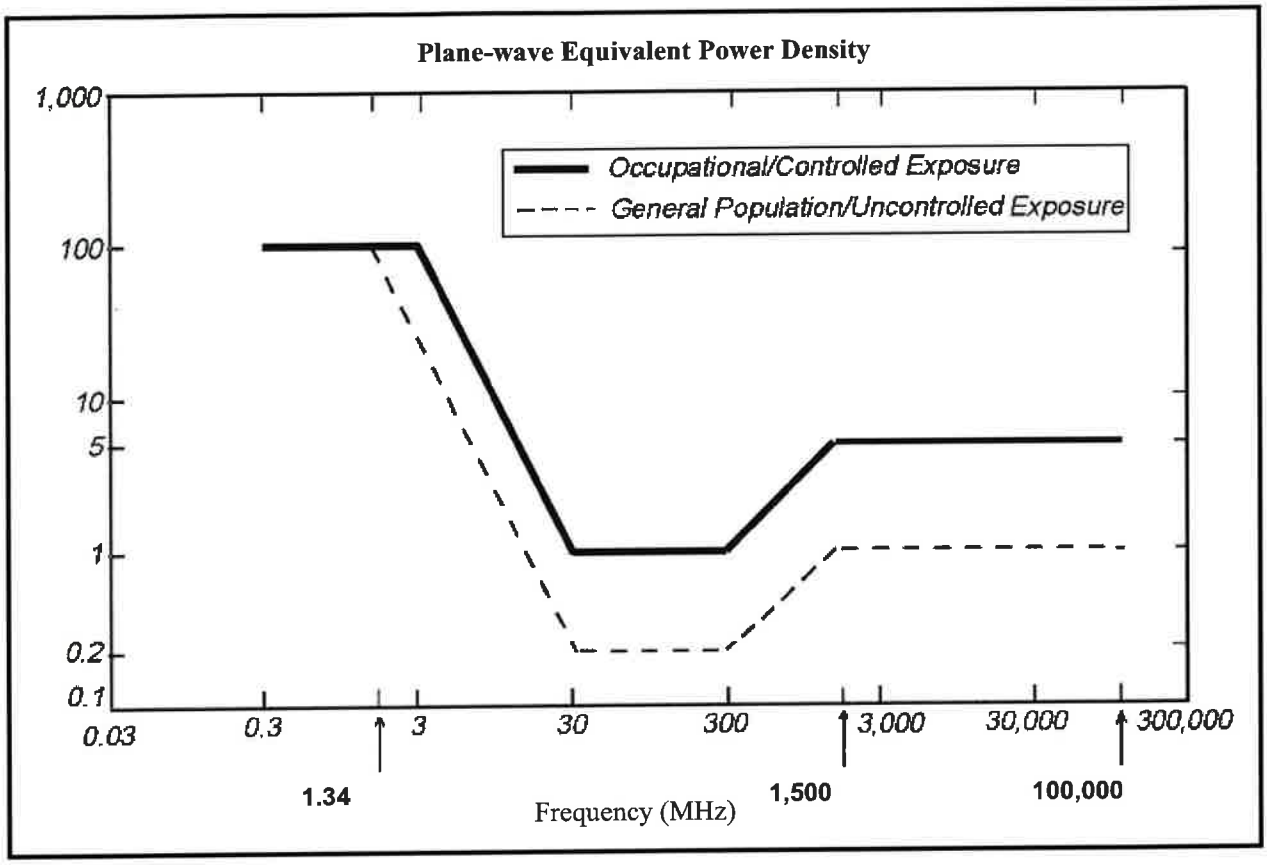
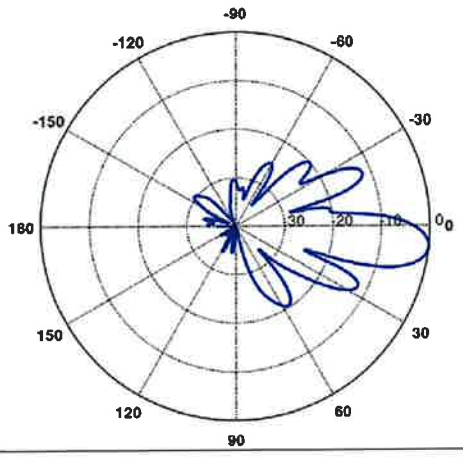


Figure 2: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: Verizon Antenna Model Data Sheets and Electrical Patterns

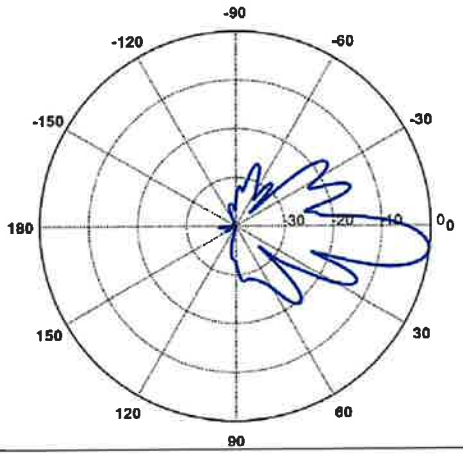
750 MHz

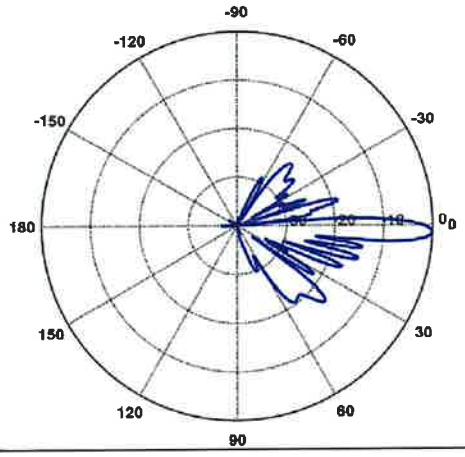
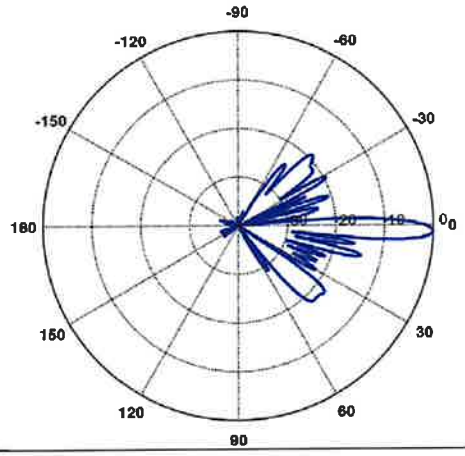
Manufacturer:	COMMSCOPE
Model #:	JAHH-65B-R3B
Frequency Band:	698-787 MHz
Gain:	14.5 dBi
Vertical Beamwidth:	12.1°
Horizontal Beamwidth:	67°
Polarization:	±45°
Dimensions (L x W x D):	71.9" x 13.78" x 8.2"



850 MHz

Manufacturer:	COMMSCOPE
Model #:	JAHH-65B-R3B
Frequency Band:	806-894 MHz
Gain:	15.8 dBi
Vertical Beamwidth:	10.5°
Horizontal Beamwidth:	65°
Polarization:	±45°
Dimensions (L x W x D):	71.9" x 13.78" x 8.2"



1900 MHz Manufacturer: COMMSCOPE Model #: JAHH-65B-R3B Frequency Band: 1850-1990 MHz Gain: 18.4 dBi Vertical Beamwidth: 5.2° Horizontal Beamwidth: 63° Polarization: ±45° Dimensions (L x W x D): 71.9" x 13.78" x 8.2"	
2100 MHz Manufacturer: COMMSCOPE Model #: JAHH-65B-R3B Frequency Band: 1920-2200 MHz Gain: 18.5 dBi Vertical Beamwidth: 5.5° Horizontal Beamwidth: 65° Polarization: ±45° Dimensions (L x W x D): 71.9" x 13.78" x 8.2"	

ATTACHMENT 4

CENTEK engineering

Centered on Solutions℠

Structural Analysis Report

180' Existing Lattice Tower

Verizon Antenna Upgrade

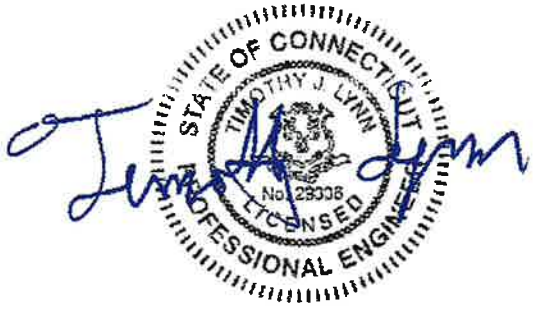
CSP Tower Ref: #32

880 Post Road East
Westport, CT

CENTEK Project No. 22027.01

~~Date: April 5, 2022~~
Rev 6: June 11, 2024

Max Stress Ratio = 94%



Prepared for:

Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492

63-2 North Branford Road, Branford, CT 06405 203.488.0580 Fax 203.488.8587 www.CentekEng.com

Table of Contents

Introduction

The purpose of this report is to summarize the results of the non-linear, P-Δ structural analysis of the antenna upgrade by Verizon on the existing lattice tower located in Westport, Connecticut.

The host tower is a 180-ft, three legged, lattice tower originally designed and manufactured by Rohn Industries. File no. 26263DL dated February 1, 1991. The tower geometry, structure member sizes and foundation information were taken from a previous structural analysis report prepared by Centek job no. 22089.02 dated May 1, 2023. The tower has been previously reinforced. All previous reinforcements are assumed to be installed. See Primary Assumptions Section below for detailed reinforcement reference reports.

Antenna and appurtenance inventory was taken from the aforementioned structural analysis and information provided by Verizon.

The tower consists of nine (9) vertical sections consisting of steel pipe legs conforming to ASTM A572-50 and steel pipe lateral bracing. The vertical tower sections are connected by bolted flange plates with the diagonal and horizontal bracing to pipe legs consisting of bolted connections. The width of the tower face is 8.5-ft at the top and 27.7-ft at the bottom.

Antenna and Appurtenance Summary

The existing and proposed loads considered in the analysis consist of the following:

Antenna Type	***Carrier***	***Mount***	***Antenna Centerline Elevation***	***Cable***
(1) Telewave ANT490Y10-WR Yagi	D&K-51 CSP-1 (existing)	Leg Mounted	187'	(1) LDF5-50A
(1) Telewave ANT490Y10-WR Yagi	CSP-22 (existing)	Leg Mounted	181'	(1) LDF5-50A
(1) Celwave PA6-65 Dish	D&K-52 CSP-42 (existing)	Pipe Mounted to tower Leg	177'	(1) EW-63
(3) RFI BPA7496-180-14 Panel Antennas (1) Bird TTA unit	CSP-47,80-82 (existing)	(1) USF12-396 Sector Frame	170'	(3) AVA7-50A (1) LDF4-50A
(1) 3-ft Yagi	CSP (existing)	Pipe Mounted to tower Leg	169'	(1) LDF5-50A
(2) BXA-70063-4CF (1) BXA-70080-4CF (2) JAHH-65B-R3B (2) B5/B13 RRHs (1) CBC78T-DS-43	**VZW (existing to remove)**	**See Below Mount**	**160'**	**(6) 1 5/8" Coax Cables**

Antenna Type	Carrier	Mount	Antenna Centerline Elevation	Cable
(4) MX06FRO640-02 (3) MT6413-77A (1) 4439d-25A RRH (3) 4461d-13A RRH (1) OVP Unit	**VZW (Proposed)**	**See Below Mount**	**160'**	**(1) 12x24 Hybrid Cable**
(4) JAHH-65B-R3B (3) XXDWMM-12.5-65-8T (3) B2/B66A RRHs (1) B5/B13 RRHs (3) RT4401-48A RRHs (2) CBC78T-DS-43 (1) OVP Units	VZW (existing to remain)	(3) 15-ft Gate Booms	160'	(1) 12x24 Hybrid Cable
(3) FFVV-65B-R2 (3) TA08025-B605 (3) TA08025-B604 (3) RD1DC-9181-PF-48	Dish (Reserved)	Commscope MTC3975083	144'	(3) 12x24 Hybrid Cable
(3) QD6616-7 (3) DMP65R-BU6DA (3) AIR6419 (3) AIR6449 (3) 4478 B14 RRH Units (3) 4449 B5/12 RRH Units (9) RRUS-32 RRH Units (2) DC6-48-60-18-8F (1) DC9	AT&T (existing)	(3) 14-ft V Frames (p/n VFA14-H10-2120)	133'	(6) 1 1/4" Coax Cables (3) Fiber Cables (7) DC Cables
(6) Ericsson AIR21 (3) Andrew LNX-6515DS (3) RRUS-11 (3) TMAs	T-Mobile (existing)	(3) 12-ft T-Frames	125'	(18) 1 5/8" Coax Cables (1) 6x12 Hybrid Cables
(1) Telewave ANT150D Dipole	CSP (existing)	Pipe Mounted to tower Leg	113'	(1) LDF4-50A
(1) GPS Antenna	D&K-1 CSP-43 (existing)	Leg Mounted	61'	(1) LDF4-50A

Primary Assumptions Used in the Analysis

- The tower structure's theoretical capacity not including any assessment of the condition of the tower.
- The tower carries the horizontal and vertical loads due to the weight of antennas, ice load and wind.
- Tower is properly installed and maintained.
- Tower is in plumb condition.
- Tower loading for antennas and mounts as listed in this report.
- All bolts are appropriately tightened providing the necessary connection continuity.
- All welds are fabricated with ER-70S-6 electrodes.
- All members are assumed to be as specified in the original tower design documents.
- All members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
- All member protective coatings are in good condition.
- All tower members were properly designed, detailed, fabricated, installed and have been properly maintained since erection.
- Any deviation from the analyzed antenna loading will require a new analysis for verification of structural adequacy.
- All coax cables should be routed as specified in section 3 of this report.
- **All previous reinforcements per the below listed structural analysis and modification reports are assumed to be installed.**
  - **Structural report prepared by AECOM Corp for AT&T project no. SMK-004 / 60581632 dated 7/13/18.**
  - **Structural report prepared by AECOM Corp for Verizon project no. VZ5-224 / 60620140 dated 7/10/20.**
- **The Verizon antenna mount information was taken from the mount analysis report and modification drawings prepared by Maser Consulting job no. 21777772 dated November 20, 2023**

Analysis

The existing tower was analyzed using a comprehensive computer program entitled tnxTower. The program analyzes the tower, considering the worst case loading condition. The tower is considered as loaded by concentric forces along the tower, and the model assumes that the tower members are subjected to bending, axial, and shear forces.

The existing tower was analyzed for the controlling basic wind speed with no ice and the applicable wind and ice combination to determine stresses in members as per guidelines of TIA-222-H entitled "Structural Standard for Antenna Support Structures, Antennas and Small Wind Turbine Support Structures", the American Institute of Steel Construction (AISC) and the Manual of Steel Construction; Load and Resistance Factor Design (LRFD).

The controlling wind speed is determined by evaluating the local available wind speed data as provided in Appendix P of the CSBC[1] and the wind speed data available in the TIA-222-H Standard.

Tower Loading

Tower loading was determined by the basic wind speed as applied to projected surface areas with modification factors per TIA-222-H, gravity loads of the tower structure and its components, and the application of 1.0" radial ice on the tower structure and its components.

Load Cases:	Load Case 1; 130 mph (Risk Cat III) wind speed w/ no ice plus gravity load – used in calculation of tower stresses and rotation.	*[Appendix P of the 2022 CT Building Code]*
	Load Case 2; 50 mph wind speed w/ 1.00" radial ice plus gravity load – used in calculation of tower stresses.	*[Annex B of TIA-222-H]*
	Load Case 3; 90 mph wind speed w/ 0.5" radial ice plus gravity load – used in calculation of tower twist and sway.	*[TIA-222-F used for calculation of tower twist and sway per the requirements of the CSP]*

[1] The 2021 International Building Code as amended by the 2022 Connecticut State Building Code (CSBC).

Tower Capacity

- Calculated stresses **were found to be within allowable limits**.

Tower Section	Elevation	Stress Ratio (percentage of capacity)	Result
Leg (T12)	20.0' - 30.0'	62.6%	**PASS**
Diagonal (T12)	20.0' - 30.0'	93.8%	**PASS**
Horizontal (T11)	30.0' - 40.0'	87.0%	**PASS**

- The tower combined deflection **was found to be within allowable limits**.

Deflection Criteria	Proposed (degrees)	Allowable (degrees)	Result
Sway (Tilt)	0.4384	n/a	**n/a**
Twist	0.2765	n/a	**n/a**
Combined	0.7149	0.75	**PASS**

TIA-222-F standard used for calculation of tower twist and sway per the requirements of the CSP.

Foundation and Anchors

The existing foundation consists of three (3) 4.5-ft diameter x 27-ft long reinforced concrete caissons. The base of the tower is connected to the foundation by means of (10) 1.00"∅ anchor bolts per leg embedded into the concrete foundation structure.

- The tower reactions developed from the governing Load Case were used in the verification of the foundation and anchor bolts:

Load Effect	Proposed Tower Reactions
Leg Shear	50.4 kips
Leg Compression	353.6 kips
Leg Tension	308.5 kips
Base Moment	7,954 ft-kips
Base Shear	87.0 kips

- The anchor bolts **were found** to be within allowable limits.

Tower Section	Component	Stress Ratio (percentage of capacity)	Result
Anchor Bolts	Combined Compression and Shear	48%	**PASS**

- The foundation was found to be within allowable limits.

Foundation	Design Limit	(percentage of capacity)	Result
(3) Reinforced Concrete Caisson	Uplift	35%	**PASS**
	Bearing	47%	**PASS**

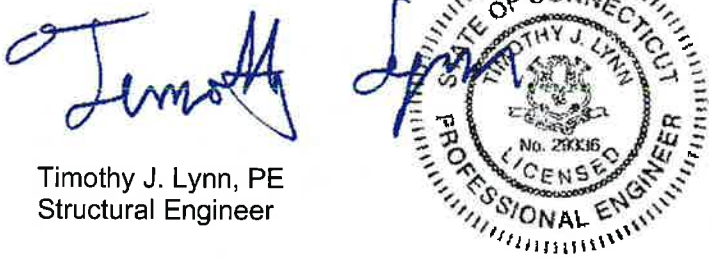
Conclusion

This analysis shows that the subject tower **is adequate** to support the proposed antenna configuration.

The analysis is based, in part, on the information provided to this office by Verizon and the CSP. If the existing conditions are different than the information in this report, Centek Engineering, Inc. must be contacted for resolution of any potential issues.

Please feel free to call with any questions or comments.

Respectfully Submitted by:



Timothy J. Lynn, PE
Structural Engineer

Standard Conditions for Furnishing of Professional Engineering Services on Existing Structures

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessarily limited to:

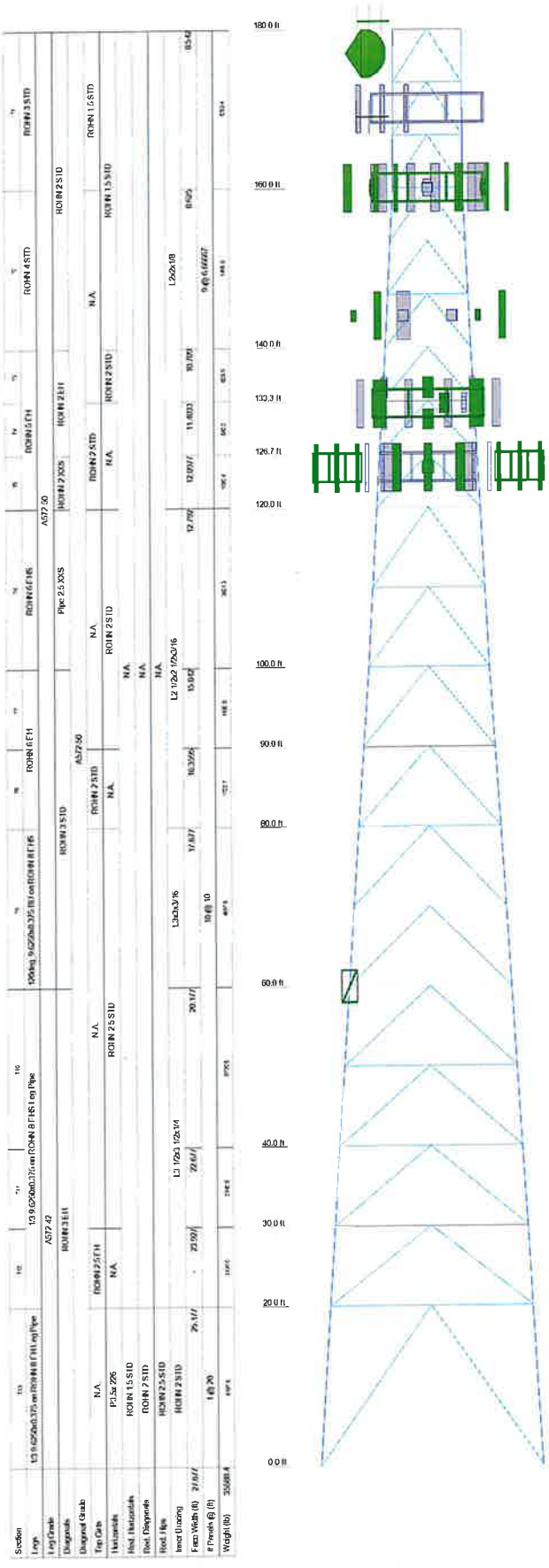
- Information supplied by the client regarding the structure itself, its foundations, the soil conditions, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from the field and/or drawings in the possession of Centek Engineering, Inc. or generated by field inspections or measurements of the structure.
- It is the responsibility of the client to ensure that the information provided to Centek Engineering, Inc. and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an un-corroded condition and have not deteriorated. It is therefore assumed that its capacity has not significantly changed from the "as new" condition.
- All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest revision of ANSI/ASCE10 & ANSI/EIA-222
- All services performed, results obtained, and recommendations made are in accordance with generally accepted engineering principles and practices. Centek Engineering, Inc. is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

GENERAL DESCRIPTION OF STRUCTURAL ANALYSIS PROGRAM

tnxTower, is an integrated structural analysis and design software package for Designed specifically for the telecommunications industry, tnxTower, formerly RISA Tower, automates much of the tower analysis and design required by the TIA/EIA 222 Standard.

tnxTower Features:

- tnxTower can analyze and design 3- and 4-sided guyed towers, 3- and 4-sided self-supporting towers and either round or tapered ground mounted poles with or without guys.
- The program analyzes towers using the TIA-222-H standard or any of the previous TIA/EIA standards back to RS-222 (1959). Steel design is checked using the AISC ASD or the AISC LRFD specifications.
- Linear and non-linear (P-delta) analyses can be used in determining displacements and forces in the structure. Wind pressures and forces are automatically calculated.
- Extensive graphics plots include material take-off, shear-moment, leg compression, displacement, twist, feed line, guy anchor and stress plots.
- tnxTower contains unique features such as True Cable behavior, hog rod take-up, foundation stiffness and much more.



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
ANT940Y10-WR (CSP)	167	Commscope MTC3975083 8 ft V-Frame (Dish - Reserved)	144
ANT940Y10-WR (CSP - Yagi Antenna)	161	AIR6449 (ATT)	133
PA6-65AC (DNK-52 / CSP-42)	177	DMP65R-BUD0 (ATT)	133
RR1BPS7496-180-14 Panel Antenna (CSP-80)	170	QD6616-7 (ATT)	133
RR1BPS7496-180-14 Panel Antenna (CSP-81)	170	AIR6419 (ATT)	133
RR1BPS7496-180-14 Panel Antenna (CSP-82)	170	AIR6449 (ATT)	133
SitePro1 USF 12-396-11 Mount Assembly w/ (3) 96" Mount Pipes (CSP-47, 80, 81, 82)	170	DMP65R-BU0D (ATT)	133
432F-B0-017 TTA Unit (Re-Located TMA (CSP))	170	RRUS-32 B66 (ATT)	133
3' Yagi (CSP)	160	RRUS-32 (ATT)	133
B2/B66A RRH (Verizon)	160	RRUS-32 (ATT)	133
B5/B13 RRH (Verizon)	160	RRUS-32 B66 (ATT)	133
CBRS RRH RT4401-48A (Verizon)	160	RRUS-32 (ATT)	133
RT4405d-25A (B2/B66A RRH) (Verizon)	160	RRUS-32 (ATT)	133
RT4461d-13A (Verizon)	160	RRUS-32 B66 (ATT)	133
JAHH-65B-R3B Panel Antenna (Verizon)	160	RRUS-32 (ATT)	133
JAHH-65D-R3D Panel Antenna (Verizon)	160	RRUS-32 (ATT)	133
XXDWMM-12.5-65-8T-CBRS Panel (Verizon)	160	4478 B14 (ATT)	133
MT6413-77A (Verizon)	160	4478 B14 (ATT)	133
CBC78T-DS-43-2X Diplexer (Verizon)	160	4478 B14 (ATT)	133
B2/B66A RRH (Verizon)	160	4449 B5/B12 (ATT)	133
RT4461d-13A (Verizon)	160	4449 B5/B12 (ATT)	133
CBRS RRH RT4401-48A (Verizon)	160	4449 B5/B12 (ATT)	133
JAHH-65D-R3D Panel Antenna (Verizon)	160	DC6-48-60-18-8F (Squid) Suppressor (ATT)	133
JAHH-65D-R3D Panel Antenna (Verizon)	160	DC6-48-60-18-8F (Squid) Suppressor (ATT)	133
XXDWMM-12.5-65-8T-CBRS Panel (Verizon)	160	DC9 (ATT)	133
MT6413-77A (Verizon)	160	SitePro VFA14-10 (ATT)	133
CBC78T-DS-43-2X Diplexer (Verizon)	160	SitePro VFA14-10 (ATT)	133
B2/B66A RRH (Verizon)	160	QD6616-7 (ATT)	133
RT4461d-13A (Verizon)	160	AIR6419 (ATT)	133
CBRS RRH RT4401-48A (Verizon)	160	AIR6449 (ATT)	133
DB-T1-6Z-8AB-0Z Distribution Box (Verizon)	160	DMP65R-BU0D (ATT)	133
DB-T1-6Z-8AB-0Z Distribution Box (Verizon)	160	QD6616-7 (ATT)	133
RDIDN 6'x15' Boom Gate (1) (Verizon)	160	AIR6419 (ATT)	133
RDIDN 6'x15' Boom Gate (1) (Verizon)	160	Generic Twin TMA unit (T-Mobile)	125
MX06FRO640-02 (Verizon)	160	Generic Twin TMA unit (T-Mobile)	125
XXDWMM-12.5-65-8T-CBRS Panel (Verizon)	160	AIR21 B2A/B4P (T-Mobile)	125
MT6413-77A (Verizon)	160	AIR21 B2A/B4P (T-Mobile)	125
MX06FRO640-02 (Verizon)	160	AIR21 B2A/B4P (T-Mobile)	125
MX06FRO640-02 (Verizon)	160	LNX-6515DS (T-Mobile)	125
RDIDN 6'x15' Boom Gate (1) (Verizon)	160	LNX-6515DS (T-Mobile)	125
FTVV-65B-R2 (Dish - Reserved)	144	LNX-6515DS (T-Mobile)	125
FTVV-65B-R2 (Dish - Reserved)	144	RRUS-11 (T-Mobile)	125
FTVV-65B-R2 (Dish - Reserved)	144	RRUS-11 (T-Mobile)	125
TA08025-B604 (Dish - Reserved)	144	RRUS-11 (T-Mobile)	125
TA08025-B604 (Dish - Reserved)	144	LTI 12-372 Sector Mount (1) (T-Mobile)	125
TA08025-B604 (Dish - Reserved)	144	LTI 12-372 Sector Mount (1) (T-Mobile)	125
TA08025-B605 (Dish - Reserved)	144	LTI 12-372 Sector Mount (1) (T-Mobile)	125
TA08025-B605 (Dish - Reserved)	144	AIR21 B4A/B2P (T-Mobile)	125
TA08025-B605 (Dish - Reserved)	144	AIR21 B4A/B2P (T-Mobile)	125
RDIDC-9181-PF-48 (Dish - Reserved)	144	AIR21 B4A/B2P (T-Mobile)	125
RDIDC-9181-PF-48 (Dish - Reserved)	144	Generic Twin TMA unit (T-Mobile)	125
RDIDC-9181-PF-48 (Dish - Reserved)	144	ANT1900 (CSP - 1-Bay Dipole)	113
Commscope MTC3975083 8 ft V-Frame (Dish - Reserved)	144	4' Standoff (DNK-1 / CPS)	60
		CPS (DNK-1 / CPS)	60
Commscope MTC3975083 8 ft V Frame (Dish Reserved)	144		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A572-42	42 ksi	60 ksi

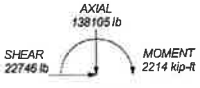
TOWER DESIGN NOTES

1. Tower designed for Exposure C to the TIA-222-H Standard.
2. Tower designed for a 130 mph basic wind in accordance with the TIA-222-H Standard.
3. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category III.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. P-Delta for analysis does not apply for this case - TIA-222-H Section 3.5
8. TOWER RATING: 93.8%

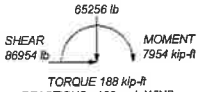
ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 353608 lb
SHEAR: 50370 lb

UPLIFT: -308495 lb
SHEAR: 45886 lb



TORQUE 46 kip-ft
50 mph WIND - 1.0000 in ICE



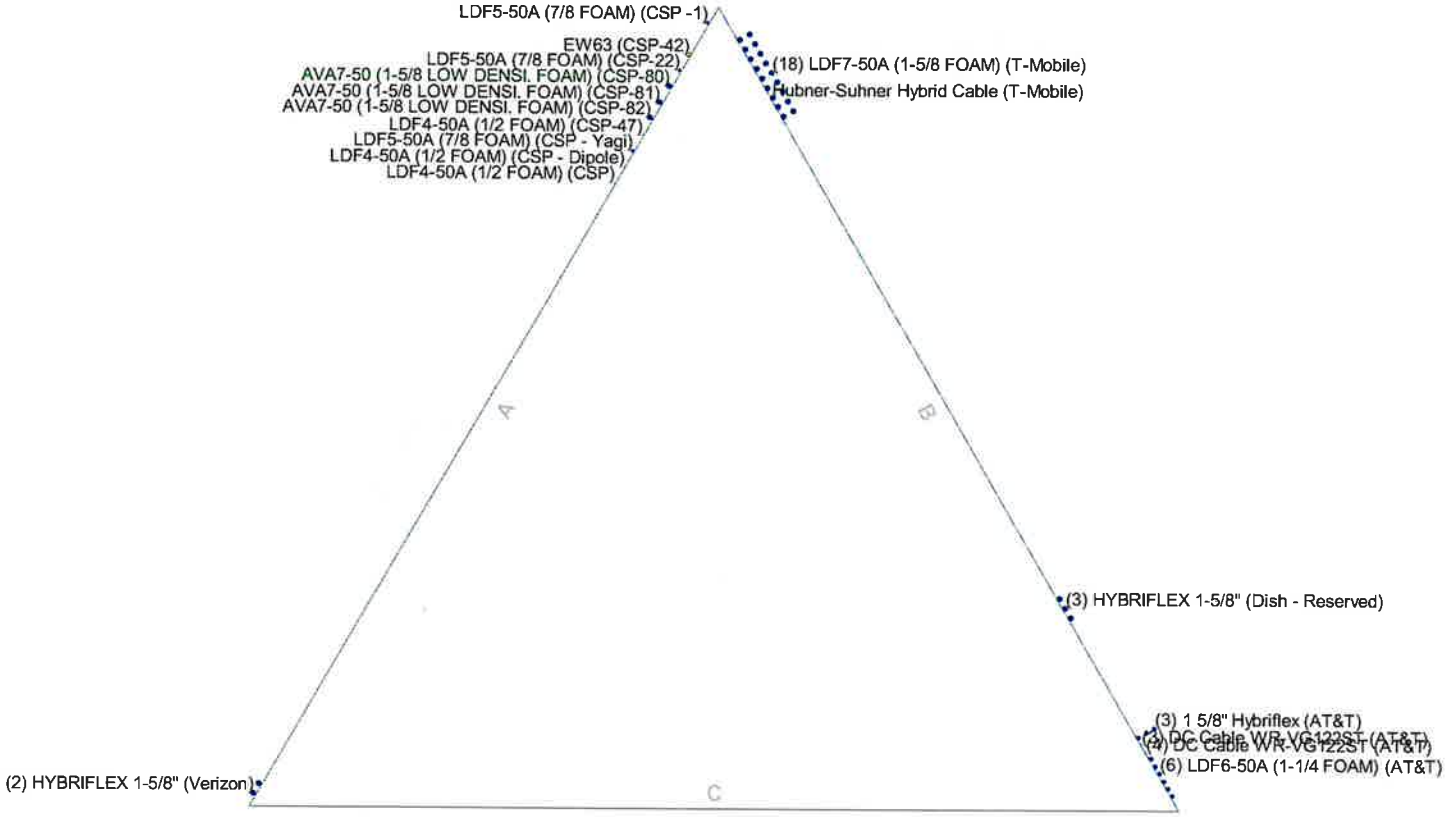
TORQUE 188 kip-ft
REACTIONS - 130 mph WIND

Centek Engineering Inc.
63-2 North Branford Rd.
Branford, CT 06405
Phone: (203) 488-0580
FAX: (203) 488-8587

Job:	22027.01 - Westport
Project:	180-ft Lattice Tower (CSP #32)
Client: Verizon	Drawn by: TJL / Appd:
Code: TIA-222-H	Date: 06/11/24 / Scale: NTS
Path:	Dwg No. E-1

Feed Line Plan

Round Flat App In Face App Out Face



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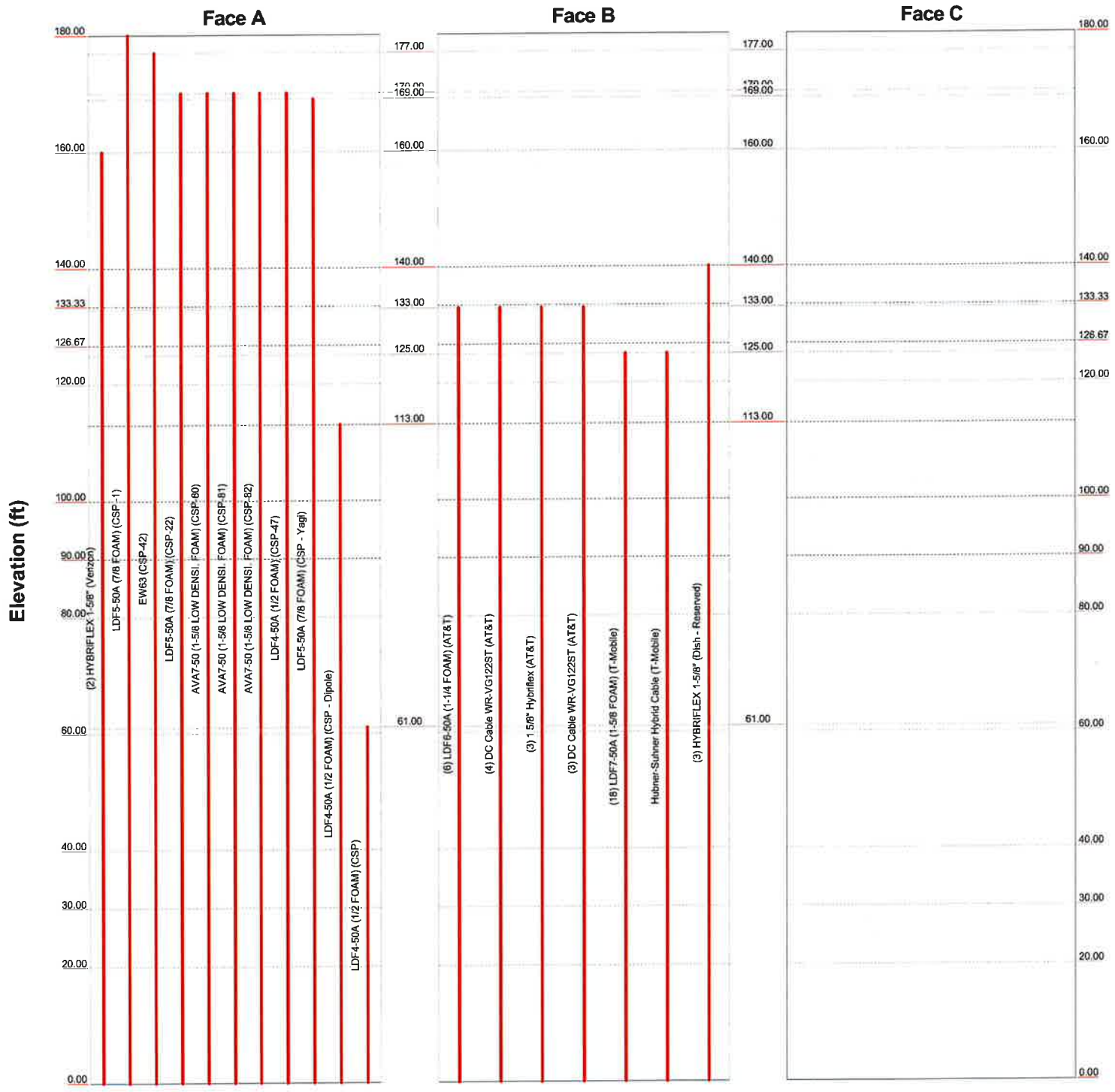
Job: 22027.01 - Westport			
Project: 180-ft Lattice Tower (CSP #32)			
Client: Verizon	Drawn by: TJL	App'd:	
Code: TIA-222-H	Date: 01/22/24	Scale: NTS	
Path:		Dwg No. E-7	

Feed Line Distribution Chart
0' - 180'

Round | Flat | App In Face | App Out Face | Truss Leg



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Branford, CT 06405
Phone: (203) 488-0580
FAX: (203) 488-8587

Job: 22027.01 - Westport			
Project: 180-ft Lattice Tower (CSP #32)			
Client: Verizon	Drawn by: TJL	App'd:	
Code: TIA-222-H	Date: 01/22/24	Scale: NTS	
Path:		Dwg No. E-7	

tnxTower	Job	Page
	22027.01 - Westport	1 of 73
Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	**Project** 180-ft Lattice Tower (CSP #32)	**Date** 15:45:34 06/11/24
	Client Verizon	**Designed by** TJL

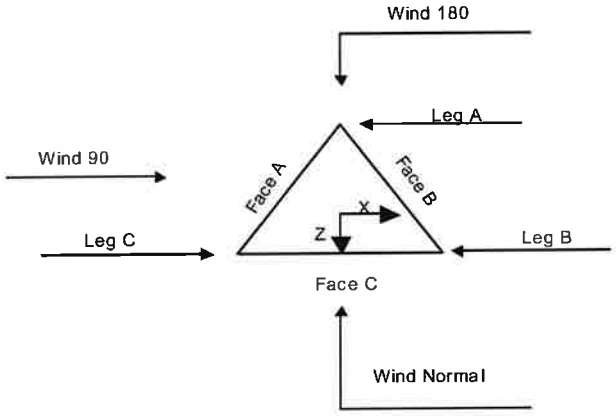
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 180.00 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 8.54 ft at the top and 27.68 ft at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower base elevation above sea level: 0.00 ft.
Basic wind speed of 130 mph.
Risk Category III.
Exposure Category C.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0.00 ft.
Nominal ice thickness of 1.0000 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.
P-Delta for analysis does not apply for this case - TIA-222-H Section 3.5.
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	Assume Legs Pinned	√ Calculate Redundant Bracing Forces
Consider Moments - Horizontals	Assume Rigid Index Plate	Ignore Redundant Members in FEA
Consider Moments - Diagonals	√ Use Clear Spans For Wind Area	√ SR Leg Bolts Resist Compression
Use Moment Magnification	√ Use Clear Spans For KL/r	√ All Leg Panels Have Same Allowable
√ Use Code Stress Ratios	Retension Guys To Initial Tension	Offset Girt At Foundation
√ Use Code Safety Factors - Guys	√ Bypass Mast Stability Checks	√ Consider Feed Line Torque
Escalate Ice	√ Use Azimuth Dish Coefficients	√ Include Angle Block Shear Check
Always Use Max Kz	√ Project Wind Area of Appurtenances	Use TIA-222-H Bracing Resist. Exemption
Use Special Wind Profile	Alternative Appurt. EPA Calculation	Use TIA-222-H Tension Splice Exemption
√ Include Bolts In Member Capacity	Autocalc Torque Arm Areas	**Poles**
√ Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	√ Include Shear-Torsion Interaction
√ Secondary Horizontal Braces Leg	√ Sort Capacity Reports By Component	Always Use Sub-Critical Flow
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Use Top Mounted Sockets
√ SR Members Have Cut Ends	Treat Feed Line Bundles As Cylinder	Pole Without Linear Attachments
SR Members Are Concentric	Ignore KL/ry For 60 Deg. Angle Legs	Pole With Shroud Or No Appurtenances
Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules	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	180.00-160.00			8.54	1	20.00
T2	160.00-140.00			8.63	1	20.00
T3	140.00-133.33			10.71	1	6.67
T4	133.33-126.67			11.40	1	6.67
T5	126.67-120.00			12.10	1	6.67
T6	120.00-100.00			12.79	1	20.00
T7	100.00-90.00			15.04	1	10.00
T8	90.00-80.00			16.36	1	10.00
T9	80.00-60.00			17.68	1	20.00
T10	60.00-40.00			20.18	1	20.00
T11	40.00-30.00			22.68	1	10.00
T12	30.00-20.00			23.93	1	10.00
T13	20.00-0.00			25.18	1	20.00

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	180.00-160.00	6.67	K Brace Down	No	Yes	0.0000	0.0000
T2	160.00-140.00	6.67	K Brace Down	No	Yes	0.0000	0.0000

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T3	140.00-133.33	6.67	K Brace Down	No	Yes	0.0000	0.0000
T4	133.33-126.67	6.67	K Brace Down	No	Yes	0.0000	0.0000
T5	126.67-120.00	6.67	K Brace Down	No	Yes	0.0000	0.0000
T6	120.00-100.00	10.00	K Brace Down	No	Yes	0.0000	0.0000
T7	100.00-90.00	10.00	K Brace Down	No	Yes	0.0000	0.0000
T8	90.00-80.00	10.00	K Brace Down	No	Yes	0.0000	0.0000
T9	80.00-60.00	10.00	K Brace Down	No	Yes	0.0000	0.0000
T10	60.00-40.00	10.00	K Brace Down	No	Yes	0.0000	0.0000
T11	40.00-30.00	10.00	K Brace Down	No	Yes	0.0000	0.0000
T12	30.00-20.00	10.00	K Brace Down	No	Yes	0.0000	0.0000
T13	20.00-0.00	20.00	K1 Down	No	Yes	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 180.00-160.00	Pipe	ROHN 3 STD	A572-50 (50 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T2 160.00-140.00	Pipe	ROHN 4 STD	A572-50 (50 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T3 140.00-133.33	Pipe	ROHN 5 EH	A572-50 (50 ksi)	Pipe	ROHN 2 EH	A572-50 (50 ksi)
T4 133.33-126.67	Pipe	ROHN 5 EH	A572-50 (50 ksi)	Pipe	ROHN 2 EH	A572-50 (50 ksi)
T5 126.67-120.00	Pipe	ROHN 5 EH	A572-50 (50 ksi)	Pipe	ROHN 2 XXS	A572-50 (50 ksi)
T6 120.00-100.00	Pipe	ROHN 6 EHS	A572-50 (50 ksi)	Pipe	Pipe 2.5 XXS	A572-50 (50 ksi)
T7 100.00-90.00	Pipe	ROHN 6 EH	A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)
T8 90.00-80.00	Pipe	ROHN 6 EH	A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)
T9 80.00-60.00	Arbitrary Shape	120deg_9.6250x0.375 BU on ROHN 8 EHS	A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)
T10 60.00-40.00	Arbitrary Shape	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	A572-42 (42 ksi)	Pipe	ROHN 3 EH	A572-50 (50 ksi)
T11 40.00-30.00	Arbitrary Shape	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	A572-42 (42 ksi)	Pipe	ROHN 3 EH	A572-50 (50 ksi)
T12 30.00-20.00	Arbitrary Shape	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	A572-42 (42 ksi)	Pipe	ROHN 3 EH	A572-50 (50 ksi)
T13 20.00-0.00	Arbitrary Shape	1/3 9.6250x0.375 on ROHN 8 EH Leg Pipe	A572-42 (42 ksi)	Pipe	ROHN 3 EH	A572-50 (50 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
T4 133.33-126.67	Pipe	ROHN 2 STD	A572-50 (50 ksi)	Solid Round		A36 (36 ksi)
T5 126.67-120.00	Pipe	ROHN 2 STD	A572-50	Solid Round		A36

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T8 90.00-80.00	Pipe	ROHN 2 STD	(50 ksi) A572-50 (50 ksi)	Single Angle		(36 ksi) A36 (36 ksi)
T12 30.00-20.00	Pipe	ROHN 2.5 EH	A572-50 (50 ksi)	Single Angle		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
T1 180.00-160.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 1.5 STD	A572-50 (50 ksi)
T2 160.00-140.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 1.5 STD	A572-50 (50 ksi)
T3 140.00-133.33	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T4 133.33-126.67	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T5 126.67-120.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T6 120.00-100.00	None	Single Angle		A36 (36 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T7 100.00-90.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T8 90.00-80.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T9 80.00-60.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)
T10 60.00-40.00	None	Single Angle		A36 (36 ksi)	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)
T11 40.00-30.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)
T12 30.00-20.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)
T13 20.00-0.00	None	Flat Bar		A36 (36 ksi)	Pipe	P3.5x.226	A572-50 (50 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
T1 180.00-160.00	Solid Round		A36 (36 ksi)	Single Angle	L2x2x1/8	A36 (36 ksi)
T2 160.00-140.00	Solid Round		A36 (36 ksi)	Single Angle	L2x2x1/8	A36 (36 ksi)
T3 140.00-133.33	Solid Round		A36 (36 ksi)	Single Angle	L2x2x1/8	A36 (36 ksi)

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T4 133.33-126.67	Solid Round		A36 (36 ksi)	Single Angle	L2x2x1/8	A36 (36 ksi)
T5 126.67-120.00	Solid Round		A36 (36 ksi)	Single Angle	L2x2x1/8	A36 (36 ksi)
T6 120.00-100.00	Single Angle		A36 (36 ksi)	Single Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T7 100.00-90.00	Solid Round		A36 (36 ksi)	Single Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T8 90.00-80.00	Solid Round		A36 (36 ksi)	Single Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T9 80.00-60.00	Solid Round		A36 (36 ksi)	Single Angle	L3x3x3/16	A36 (36 ksi)
T10 60.00-40.00	Single Angle		A36 (36 ksi)	Single Angle	L3 1/2x3 1/2x1/4	A572-50 (50 ksi)
T11 40.00-30.00	Single Angle		A572-50 (50 ksi)	Single Angle	L3 1/2x3 1/2x1/4	A572-50 (50 ksi)
T12 30.00-20.00	Single Angle		A572-50 (50 ksi)	Single Angle	L3 1/2x3 1/2x1/4	A572-50 (50 ksi)
T13 20.00-0.00	Solid Round		A36 (36 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Redundant Bracing Grade		Redundant Type	Redundant Size	K Factor
T13 20.00-0.00	A572-50 (50 ksi)	Horizontal (1)	Pipe	ROHN 1.5 STD	1
	A572-50 (50 ksi)	Diagonal (1)	Pipe	ROHN 2 STD	1
	A572-50 (50 ksi)	Hip (1)	Pipe	ROHN 2.5 STD	1

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1 180.00-160.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T2 160.00-140.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T3 140.00-133.33	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T4 133.33-126.67	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T5 126.67-120.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T6 120.00-100.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T7 100.00-90.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T8 90.00-80.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T9 80.00-60.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T10 60.00-40.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T11 40.00-30.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T12 30.00-20.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T13 20.00-0.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000

Tower Section Geometry (cont'd)

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X	X Brace Diags Y	K Single Diags X	K Single Diags Y	Girts X	Girts Y	Horiz. X	Horiz. Y	Sec. Horiz. X	Sec. Horiz. Y	Inner Brace X	Inner Brace Y
T1 180.00-160.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T2 160.00-140.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T3 140.00-133.33	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T4 133.33-126.67	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T5 126.67-120.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T6 120.00-100.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T7 100.00-90.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T8 90.00-80.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T9 80.00-60.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T10 60.00-40.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T11 40.00-30.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T12 30.00-20.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
T13 20.00-0.00	Yes	Yes	1	1	0.5	1	1	1	1	1	1	1	1	1	1

[1]*Note: 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	Net Width Deduct in	U
T1 180.00-160.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T2 160.00-140.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 140.00-133.33	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 133.33-126.67	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 126.67-120.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6 120.00-100.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T7 100.00-90.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T8 90.00-80.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T9 80.00-60.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T10 60.00-40.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T11 40.00-30.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T12 30.00-20.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T13 20.00-0.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	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 180.00-160.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T2 160.00-140.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T3 140.00-133.33	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)

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
T4 133.33-126.67	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T5 126.67-120.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T6 120.00-100.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T7 100.00-90.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T8 90.00-80.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T9 80.00-60.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T10 60.00-40.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)

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
T11 40.00-30.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T12 30.00-20.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T13 20.00-0.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)

Tower Section Geometry *(cont'd)*

Tower Elevation	Connection Offsets							
	Diagonal				K-Bracing			
	Vert. Top	Horiz. Top	Vert. Bot.	Horiz. Bot.	Vert. Top	Horiz. Top	Vert. Bot.	Horiz. Bot.
ft	in	in	in	in	in	in	in	in
T1 180.00-160.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T2 160.00-140.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T3 140.00-133.33	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T4 133.33-126.67	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T5 126.67-120.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000

Tower Elevation	Connection Offsets							
	Diagonal				K-Bracing			
	Vert. Top	Horiz. Top	Vert. Bot.	Horiz. Bot.	Vert. Top	Horiz. Top	Vert. Bot.	Horiz. Bot.
ft	in	in	in	in	in	in	in	in
T6 120.00-100.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T7 100.00-90.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T8 90.00-80.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T9 80.00-60.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T10 60.00-40.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T11 40.00-30.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T12 30.00-20.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000
T13 20.00-0.00	0.0000	3.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000

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.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 180.00-160.00	Flange	0.8750 A325N	0	0.6250 A325N	3	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T2 160.00-140.00	Flange	0.8750 A325N	4	0.6250 A325N	3	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T3 140.00-133.33	Flange	1.0000 A325N	4	0.6250 A325N	3	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T4 133.33-126.67	Flange	0.7500 A325N	0	0.6250 A325N	3	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T5 126.67-120.00	Flange	0.7500 A325N	0	0.6250 A325N	3	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T6 120.00-100.00	Flange	1.0000 A325N	6	0.6250 A325N	3	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T7 100.00-90.00	Flange	1.0000 A325N	6	0.6250 A325N	3	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T8 90.00-80.00	Flange	1.0000 A325N	0	0.6250 A325N	3	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T9 80.00-60.00	Flange	1.0000 A325N	8	0.6250 A325N	3	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T10 60.00-40.00	Flange	1.0000 A325N	8	0.6250 A325N	3	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T11 40.00-30.00	Flange	1.0000 A325N	8	0.6250 A325N	3	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T12 30.00-20.00	Flange	1.0000 A325N	0	0.6250 A325N	3	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T13 20.00-0.00	Flange	1.0000 A325N	8	0.6250 A325X	3	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0

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	Width or Diameter in	Perimeter in	Weight plf
*													
LDF6-50A (1-1/4 FOAM) (AT&T)	B	No	No	Ar (CaAa)	133.00 - 0.00	0.0000	0.46	6	6	1.5500	1.5500		0.66
DC Cable WR-VG122ST (AT&T)	B	No	No	Ar (CaAa)	133.00 - 0.00	0.0000	0.43	4	4	0.4000	0.4000		0.25
1 5/8" Hybriflex (AT&T)	B	No	No	Ar (CaAa)	133.00 - 0.00	0.0000	0.41	3	1	1.6250	1.6250		1.13
DC Cable WR-VG122ST (AT&T)	B	No	No	Ar (CaAa)	133.00 - 0.00	0.0000	0.42	3	3	0.4000	0.4000		0.25
*													
LDF7-50A (1-5/8 FOAM) (T-Mobile)	B	No	No	Ar (CaAa)	125.00 - 0.00	0.0000	-0.41	18	9	1.9800	1.9800		0.82
Hubner-Suhner Hybrid Cable (T-Mobile)	B	No	No	Ar (CaAa)	125.00 - 0.00	0.0000	-0.385	1	1	0.7087	0.7087		0.48
*													
HYBRIFLEX 1-5/8" (Verizon)	A	No	No	Ar (CaAa)	160.00 - 0.00	0.0000	-0.48	2	2	1.9800	1.9800		1.90
*													
LDF5-50A (7/8 FOAM) (CSP -1)	A	No	No	Ar (CaAa)	180.00 - 0.00	0.0000	0.48	1	1	1.0900	1.0900		0.33
EW63 (CSP-42)	A	No	No	Af (CaAa)	177.00 - 0.00	0.0000	0.44	1	1	1.5742	1.5742		0.51
LDF5-50A (7/8 FOAM) (CSP-22)	A	No	No	Ar (CaAa)	170.00 - 0.00	0.0000	0.42	1	1	1.0900	1.0900		0.33
AVA7-50 (1-5/8 LOW DENSI. FOAM) (CSP-80)	A	No	No	Ar (CaAa)	170.00 - 0.00	0.0000	0.4	1	1	1.9800	1.9800		0.72
AVA7-50 (1-5/8 LOW DENSI. FOAM) (CSP-81)	A	No	No	Ar (CaAa)	170.00 - 0.00	0.0000	0.38	1	1	1.9800	1.9800		0.72
AVA7-50 (1-5/8 LOW DENSI. FOAM) (CSP-82)	A	No	No	Ar (CaAa)	170.00 - 0.00	0.0000	0.36	1	1	1.9800	1.9800		0.72
LDF4-50A (1/2 FOAM) (CSP-47)	A	No	No	Ar (CaAa)	170.00 - 0.00	0.0000	0.34	1	1	0.6300	0.6300		0.15
LDF5-50A (7/8 FOAM) (CSP - Yagi)	A	No	No	Ar (CaAa)	169.00 - 0.00	0.0000	0.32	1	1	1.0900	1.0900		0.33
LDF4-50A	A	No	No	Ar (CaAa)	113.00 -	0.0000	0.3	1	1	0.6300	0.6300		0.15

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	Width or Diameter in	Perimeter in	Weight plf
(1/2 FOAM) (CSP - Dipole) LDF4-50A (1/2 FOAM) (CSP)	A	No	No	Ar (CaAa)	0.00 61.00 - 0.00	0.0000	0.28	1	1	0.6300	0.6300		0.15
HYBRIFLEX 1-5/8" (Dish - Reserved)	B	No	No	Ar (CaAa)	140.00 - 0.00	0.0000	0.25	3	3	1.9800	1.9800		1.90

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
T1	180.00-160.00	A	0.000	0.000	15.281	0.000	44.64
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
T2	160.00-140.00	A	0.000	0.000	32.847	0.000	152.20
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
T3	140.00-133.33	A	0.000	0.000	10.949	0.000	50.73
		B	0.000	0.000	3.960	0.000	38.00
		C	0.000	0.000	0.000	0.000	0.00
T4	133.33-126.67	A	0.000	0.000	10.949	0.000	50.73
		B	0.000	0.000	14.711	0.000	95.63
		C	0.000	0.000	0.000	0.000	0.00
T5	126.67-120.00	A	0.000	0.000	10.949	0.000	50.73
		B	0.000	0.000	33.451	0.000	174.87
		C	0.000	0.000	0.000	0.000	0.00
T6	120.00-100.00	A	0.000	0.000	33.666	0.000	154.15
		B	0.000	0.000	118.527	0.000	600.82
		C	0.000	0.000	0.000	0.000	0.00
T7	100.00-90.00	A	0.000	0.000	17.054	0.000	77.60
		B	0.000	0.000	59.264	0.000	300.41
		C	0.000	0.000	0.000	0.000	0.00
T8	90.00-80.00	A	0.000	0.000	17.054	0.000	77.60
		B	0.000	0.000	59.264	0.000	300.41
		C	0.000	0.000	0.000	0.000	0.00
T9	80.00-60.00	A	0.000	0.000	34.170	0.000	155.35
		B	0.000	0.000	118.527	0.000	600.82
		C	0.000	0.000	0.000	0.000	0.00
T10	60.00-40.00	A	0.000	0.000	35.367	0.000	158.20
		B	0.000	0.000	118.527	0.000	600.82
		C	0.000	0.000	0.000	0.000	0.00
T11	40.00-30.00	A	0.000	0.000	17.684	0.000	79.10
		B	0.000	0.000	59.264	0.000	300.41
		C	0.000	0.000	0.000	0.000	0.00
T12	30.00-20.00	A	0.000	0.000	17.684	0.000	79.10
		B	0.000	0.000	59.264	0.000	300.41
		C	0.000	0.000	0.000	0.000	0.00
T13	20.00-0.00	A	0.000	0.000	35.367	0.000	158.20
		B	0.000	0.000	118.527	0.000	600.82
		C	0.000	0.000	0.000	0.000	0.00

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
T1	180.00-160.00	A	1.355	0.000	0.000	41.294	0.000	492.24
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
T2	160.00-140.00	A	1.338	0.000	0.000	92.227	0.000	1113.48
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
T3	140.00-133.33	A	1.326	0.000	0.000	30.582	0.000	367.07
		B		0.000	0.000	11.149	0.000	152.82
		C		0.000	0.000	0.000	0.000	0.00
T4	133.33-126.67	A	1.319	0.000	0.000	30.497	0.000	364.90
		B		0.000	0.000	45.555	0.000	529.46
		C		0.000	0.000	0.000	0.000	0.00
T5	126.67-120.00	A	1.312	0.000	0.000	30.407	0.000	362.64
		B		0.000	0.000	72.258	0.000	1126.78
		C		0.000	0.000	0.000	0.000	0.00
T6	120.00-100.00	A	1.297	0.000	0.000	94.834	0.000	1114.98
		B		0.000	0.000	241.107	0.000	3932.80
		C		0.000	0.000	0.000	0.000	0.00
T7	100.00-90.00	A	1.278	0.000	0.000	48.142	0.000	558.82
		B		0.000	0.000	120.152	0.000	1949.05
		C		0.000	0.000	0.000	0.000	0.00
T8	90.00-80.00	A	1.264	0.000	0.000	47.840	0.000	551.47
		B		0.000	0.000	119.851	0.000	1936.11
		C		0.000	0.000	0.000	0.000	0.00
T9	80.00-60.00	A	1.240	0.000	0.000	94.951	0.000	1080.90
		B		0.000	0.000	238.670	0.000	3827.93
		C		0.000	0.000	0.000	0.000	0.00
T10	60.00-40.00	A	1.199	0.000	0.000	98.941	0.000	1092.92
		B		0.000	0.000	236.929	0.000	3753.77
		C		0.000	0.000	0.000	0.000	0.00
T11	40.00-30.00	A	1.157	0.000	0.000	48.489	0.000	524.08
		B		0.000	0.000	117.574	0.000	1839.30
		C		0.000	0.000	0.000	0.000	0.00
T12	30.00-20.00	A	1.119	0.000	0.000	47.594	0.000	504.11
		B		0.000	0.000	116.765	0.000	1805.39
		C		0.000	0.000	0.000	0.000	0.00
T13	20.00-0.00	A	1.021	0.000	0.000	90.613	0.000	909.68
		B		0.000	0.000	229.396	0.000	3440.18
		C		0.000	0.000	0.000	0.000	0.00

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	180.00-160.00	-1.5005	-14.6984	-1.9995	-19.2026
T2	160.00-140.00	-8.2189	-15.5796	-11.0579	-18.2466
T3	140.00-133.33	-3.9146	-14.4724	-5.5568	-16.6931
T4	133.33-126.67	14.9057	-2.5135	19.0686	-0.5551
T5	126.67-120.00	14.2056	-24.6943	18.6350	-14.7368
T6	120.00-100.00	15.0320	-32.6335	19.6790	-20.8751
T7	100.00-90.00	16.2759	-35.7700	21.4830	-23.2625

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
T8	90.00-80.00	17.3812	-38.3290	23.0292	-24.9242
T9	80.00-60.00	14.6908	-34.1820	22.6627	-25.3205
T10	60.00-40.00	15.9988	-38.1000	24.5231	-28.8962
T11	40.00-30.00	17.0827	-40.7788	26.3364	-30.9032
T12	30.00-20.00	17.7961	-42.5399	27.5472	-32.1898
T13	20.00-0.00	19.1837	-45.9657	29.8283	-34.4697

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	17	LDF5-50A (7/8 FOAM)	160.00 - 180.00	1.0000	1.0000
T1	19	EW63	160.00 - 177.00	1.0000	1.0000
T1	20	LDF5-50A (7/8 FOAM)	160.00 - 170.00	1.0000	1.0000
T1	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	160.00 - 170.00	1.0000	1.0000
T1	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	160.00 - 170.00	1.0000	1.0000
T1	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	160.00 - 170.00	1.0000	1.0000
T1	24	LDF4-50A (1/2 FOAM)	160.00 - 170.00	1.0000	1.0000
T1	25	LDF5-50A (7/8 FOAM)	160.00 - 169.00	1.0000	1.0000
T2	15	HYBRIFLEX 1-5/8"	140.00 - 160.00	1.0000	1.0000
T2	17	LDF5-50A (7/8 FOAM)	140.00 - 160.00	1.0000	1.0000
T2	19	EW63	140.00 - 160.00	1.0000	1.0000
T2	20	LDF5-50A (7/8 FOAM)	140.00 - 160.00	1.0000	1.0000
T2	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 - 160.00	1.0000	1.0000
T2	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 - 160.00	1.0000	1.0000
T2	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 - 160.00	1.0000	1.0000
T2	24	LDF4-50A (1/2 FOAM)	140.00 - 160.00	1.0000	1.0000
T2	25	LDF5-50A (7/8 FOAM)	140.00 - 160.00	1.0000	1.0000
T3	15	HYBRIFLEX 1-5/8"	133.33 - 140.00	1.0000	1.0000
T3	17	LDF5-50A (7/8 FOAM)	133.33 - 140.00	1.0000	1.0000
T3	19	EW63	133.33 - 140.00	1.0000	1.0000
T3	20	LDF5-50A (7/8 FOAM)	133.33 - 140.00	1.0000	1.0000
T3	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	133.33 - 140.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T3	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	133.33 - 140.00	1.0000	1.0000
T3	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	133.33 - 140.00	1.0000	1.0000
T3	24	LDF4-50A (1/2 FOAM)	133.33 - 140.00	1.0000	1.0000
T3	25	LDF5-50A (7/8 FOAM)	133.33 - 140.00	1.0000	1.0000
T3	28	HYBRIFLEX 1-5/8"	133.33 - 140.00	0.6000	0.6000
T4	2	LDF6-50A (1-1/4 FOAM)	126.67 - 133.00	1.0000	1.0000
T4	3	DC Cable WR-VG122ST	126.67 - 133.00	1.0000	1.0000
T4	4	1 5/8" Hybriflex	126.67 - 133.00	1.0000	1.0000
T4	6	DC Cable WR-VG122ST	126.67 - 133.00	1.0000	1.0000
T4	15	HYBRIFLEX 1-5/8"	126.67 - 133.33	1.0000	1.0000
T4	17	LDF5-50A (7/8 FOAM)	126.67 - 133.33	1.0000	1.0000
T4	19	EW63	126.67 - 133.33	1.0000	1.0000
T4	20	LDF5-50A (7/8 FOAM)	126.67 - 133.33	1.0000	1.0000
T4	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	126.67 - 133.33	1.0000	1.0000
T4	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	126.67 - 133.33	1.0000	1.0000
T4	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	126.67 - 133.33	1.0000	1.0000
T4	24	LDF4-50A (1/2 FOAM)	126.67 - 133.33	1.0000	1.0000
T4	25	LDF5-50A (7/8 FOAM)	126.67 - 133.33	1.0000	1.0000
T4	28	HYBRIFLEX 1-5/8"	126.67 - 133.33	0.6000	0.6000
T5	2	LDF6-50A (1-1/4 FOAM)	120.00 - 126.67	1.0000	1.0000
T5	3	DC Cable WR-VG122ST	120.00 - 126.67	1.0000	1.0000
T5	4	1 5/8" Hybriflex	120.00 - 126.67	1.0000	1.0000
T5	6	DC Cable WR-VG122ST	120.00 - 126.67	1.0000	1.0000
T5	10	LDF7-50A (1-5/8 FOAM)	120.00 - 125.00	1.0000	1.0000
T5	11	Hubner-Suhner Hybrid Cable	120.00 - 125.00	1.0000	1.0000
T5	15	HYBRIFLEX 1-5/8"	120.00 - 126.67	1.0000	1.0000
T5	17	LDF5-50A (7/8 FOAM)	120.00 - 126.67	1.0000	1.0000
T5	19	EW63	120.00 - 126.67	1.0000	1.0000
T5	20	LDF5-50A (7/8 FOAM)	120.00 - 126.67	1.0000	1.0000
T5	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	120.00 - 126.67	1.0000	1.0000
T5	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	120.00 - 126.67	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T5	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	120.00 - 126.67	1.0000	1.0000
T5	24	LDF4-50A (1/2 FOAM)	120.00 - 126.67	1.0000	1.0000
T5	25	LDF5-50A (7/8 FOAM)	120.00 - 126.67	1.0000	1.0000
T5	28	HYBRIFLEX 1-5/8"	120.00 - 126.67	0.6000	0.6000
T6	2	LDF6-50A (1-1/4 FOAM)	100.00 - 120.00	1.0000	1.0000
T6	3	DC Cable WR-VG122ST	100.00 - 120.00	1.0000	1.0000
T6	4	1 5/8" Hybriflex	100.00 - 120.00	1.0000	1.0000
T6	6	DC Cable WR-VG122ST	100.00 - 120.00	1.0000	1.0000
T6	10	LDF7-50A (1-5/8 FOAM)	100.00 - 120.00	1.0000	1.0000
T6	11	Hubner-Suhner Hybrid Cable	100.00 - 120.00	1.0000	1.0000
T6	15	HYBRIFLEX 1-5/8"	100.00 - 120.00	1.0000	1.0000
T6	17	LDF5-50A (7/8 FOAM)	100.00 - 120.00	1.0000	1.0000
T6	19	EW63	100.00 - 120.00	1.0000	1.0000
T6	20	LDF5-50A (7/8 FOAM)	100.00 - 120.00	1.0000	1.0000
T6	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	100.00 - 120.00	1.0000	1.0000
T6	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	100.00 - 120.00	1.0000	1.0000
T6	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	100.00 - 120.00	1.0000	1.0000
T6	24	LDF4-50A (1/2 FOAM)	100.00 - 120.00	1.0000	1.0000
T6	25	LDF5-50A (7/8 FOAM)	100.00 - 120.00	1.0000	1.0000
T6	26	LDF4-50A (1/2 FOAM)	100.00 - 113.00	1.0000	1.0000
T6	28	HYBRIFLEX 1-5/8"	100.00 - 120.00	0.6000	0.6000
T7	2	LDF6-50A (1-1/4 FOAM)	90.00 - 100.00	1.0000	1.0000
T7	3	DC Cable WR-VG122ST	90.00 - 100.00	1.0000	1.0000
T7	4	1 5/8" Hybriflex	90.00 - 100.00	1.0000	1.0000
T7	6	DC Cable WR-VG122ST	90.00 - 100.00	1.0000	1.0000
T7	10	LDF7-50A (1-5/8 FOAM)	90.00 - 100.00	1.0000	1.0000
T7	11	Hubner-Suhner Hybrid Cable	90.00 - 100.00	1.0000	1.0000
T7	15	HYBRIFLEX 1-5/8"	90.00 - 100.00	1.0000	1.0000
T7	17	LDF5-50A (7/8 FOAM)	90.00 - 100.00	1.0000	1.0000
T7	19	EW63	90.00 - 100.00	1.0000	1.0000
T7	20	LDF5-50A (7/8 FOAM)	90.00 - 100.00	1.0000	1.0000
T7	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	90.00 - 100.00	1.0000	1.0000
T7	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	90.00 - 100.00	1.0000	1.0000
T7	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	90.00 - 100.00	1.0000	1.0000
T7	24	LDF4-50A (1/2 FOAM)	90.00 - 100.00	1.0000	1.0000
T7	25	LDF5-50A (7/8 FOAM)	90.00 - 100.00	1.0000	1.0000
T7	26	LDF4-50A (1/2 FOAM)	90.00 - 100.00	1.0000	1.0000
T7	28	HYBRIFLEX 1-5/8"	90.00 - 100.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T8	2	LDF6-50A (1-1/4 FOAM)	80.00 - 90.00	1.0000	1.0000
T8	3	DC Cable WR-VG122ST	80.00 - 90.00	1.0000	1.0000
T8	4	1 5/8" Hybriflex	80.00 - 90.00	1.0000	1.0000
T8	6	DC Cable WR-VG122ST	80.00 - 90.00	1.0000	1.0000
T8	10	LDF7-50A (1-5/8 FOAM)	80.00 - 90.00	1.0000	1.0000
T8	11	Hubner-Suhner Hybrid Cable	80.00 - 90.00	1.0000	1.0000
T8	15	HYBRIFLEX 1-5/8"	80.00 - 90.00	1.0000	1.0000
T8	17	LDF5-50A (7/8 FOAM)	80.00 - 90.00	1.0000	1.0000
T8	19	EW63	80.00 - 90.00	1.0000	1.0000
T8	20	LDF5-50A (7/8 FOAM)	80.00 - 90.00	1.0000	1.0000
T8	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	80.00 - 90.00	1.0000	1.0000
T8	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	80.00 - 90.00	1.0000	1.0000
T8	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	80.00 - 90.00	1.0000	1.0000
T8	24	LDF4-50A (1/2 FOAM)	80.00 - 90.00	1.0000	1.0000
T8	25	LDF5-50A (7/8 FOAM)	80.00 - 90.00	1.0000	1.0000
T8	26	LDF4-50A (1/2 FOAM)	80.00 - 90.00	1.0000	1.0000
T8	28	HYBRIFLEX 1-5/8"	80.00 - 90.00	0.6000	0.6000
T9	2	LDF6-50A (1-1/4 FOAM)	60.00 - 80.00	1.0000	1.0000
T9	3	DC Cable WR-VG122ST	60.00 - 80.00	1.0000	1.0000
T9	4	1 5/8" Hybriflex	60.00 - 80.00	1.0000	1.0000
T9	6	DC Cable WR-VG122ST	60.00 - 80.00	1.0000	1.0000
T9	10	LDF7-50A (1-5/8 FOAM)	60.00 - 80.00	1.0000	1.0000
T9	11	Hubner-Suhner Hybrid Cable	60.00 - 80.00	1.0000	1.0000
T9	15	HYBRIFLEX 1-5/8"	60.00 - 80.00	1.0000	1.0000
T9	17	LDF5-50A (7/8 FOAM)	60.00 - 80.00	1.0000	1.0000
T9	19	EW63	60.00 - 80.00	1.0000	1.0000
T9	20	LDF5-50A (7/8 FOAM)	60.00 - 80.00	1.0000	1.0000
T9	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	60.00 - 80.00	1.0000	1.0000
T9	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	60.00 - 80.00	1.0000	1.0000
T9	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	60.00 - 80.00	1.0000	1.0000
T9	24	LDF4-50A (1/2 FOAM)	60.00 - 80.00	1.0000	1.0000
T9	25	LDF5-50A (7/8 FOAM)	60.00 - 80.00	1.0000	1.0000
T9	26	LDF4-50A (1/2 FOAM)	60.00 - 80.00	1.0000	1.0000
T9	27	LDF4-50A (1/2 FOAM)	60.00 - 61.00	1.0000	1.0000
T9	28	HYBRIFLEX 1-5/8"	60.00 - 80.00	0.6000	0.6000
T10	2	LDF6-50A (1-1/4 FOAM)	40.00 - 60.00	1.0000	1.0000
T10	3	DC Cable WR-VG122ST	40.00 - 60.00	1.0000	1.0000
T10	4	1 5/8" Hybriflex	40.00 - 60.00	1.0000	1.0000
T10	6	DC Cable WR-VG122ST	40.00 - 60.00	1.0000	1.0000
T10	10	LDF7-50A (1-5/8 FOAM)	40.00 - 60.00	1.0000	1.0000
T10	11	Hubner-Suhner Hybrid Cable	40.00 - 60.00	1.0000	1.0000
T10	15	HYBRIFLEX 1-5/8"	40.00 - 60.00	1.0000	1.0000
T10	17	LDF5-50A (7/8 FOAM)	40.00 - 60.00	1.0000	1.0000
T10	19	EW63	40.00 - 60.00	1.0000	1.0000
T10	20	LDF5-50A (7/8 FOAM)	40.00 - 60.00	1.0000	1.0000
T10	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	40.00 - 60.00	1.0000	1.0000
T10	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	40.00 - 60.00	1.0000	1.0000
T10	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	40.00 - 60.00	1.0000	1.0000
T10	24	LDF4-50A (1/2 FOAM)	40.00 - 60.00	1.0000	1.0000
T10	25	LDF5-50A (7/8 FOAM)	40.00 - 60.00	1.0000	1.0000
T10	26	LDF4-50A (1/2 FOAM)	40.00 - 60.00	1.0000	1.0000
T10	27	LDF4-50A (1/2 FOAM)	40.00 - 60.00	1.0000	1.0000
T10	28	HYBRIFLEX 1-5/8"	40.00 - 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	2	LDF6-50A (1-1/4 FOAM)	30.00 - 40.00	1.0000	1.0000
T11	3	DC Cable WR-VG122ST	30.00 - 40.00	1.0000	1.0000
T11	4	1 5/8" Hybriflex	30.00 - 40.00	1.0000	1.0000
T11	6	DC Cable WR-VG122ST	30.00 - 40.00	1.0000	1.0000
T11	10	LDF7-50A (1-5/8 FOAM)	30.00 - 40.00	1.0000	1.0000
T11	11	Hubner-Suhner Hybrid Cable	30.00 - 40.00	1.0000	1.0000
T11	15	HYBRIFLEX 1-5/8"	30.00 - 40.00	1.0000	1.0000
T11	17	LDF5-50A (7/8 FOAM)	30.00 - 40.00	1.0000	1.0000
T11	19	EW63	30.00 - 40.00	1.0000	1.0000
T11	20	LDF5-50A (7/8 FOAM)	30.00 - 40.00	1.0000	1.0000
T11	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	30.00 - 40.00	1.0000	1.0000
T11	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	30.00 - 40.00	1.0000	1.0000
T11	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	30.00 - 40.00	1.0000	1.0000
T11	24	LDF4-50A (1/2 FOAM)	30.00 - 40.00	1.0000	1.0000
T11	25	LDF5-50A (7/8 FOAM)	30.00 - 40.00	1.0000	1.0000
T11	26	LDF4-50A (1/2 FOAM)	30.00 - 40.00	1.0000	1.0000
T11	27	LDF4-50A (1/2 FOAM)	30.00 - 40.00	1.0000	1.0000
T11	28	HYBRIFLEX 1-5/8"	30.00 - 40.00	0.6000	0.6000
T12	2	LDF6-50A (1-1/4 FOAM)	20.00 - 30.00	1.0000	1.0000
T12	3	DC Cable WR-VG122ST	20.00 - 30.00	1.0000	1.0000
T12	4	1 5/8" Hybriflex	20.00 - 30.00	1.0000	1.0000
T12	6	DC Cable WR-VG122ST	20.00 - 30.00	1.0000	1.0000
T12	10	LDF7-50A (1-5/8 FOAM)	20.00 - 30.00	1.0000	1.0000
T12	11	Hubner-Suhner Hybrid Cable	20.00 - 30.00	1.0000	1.0000
T12	15	HYBRIFLEX 1-5/8"	20.00 - 30.00	1.0000	1.0000
T12	17	LDF5-50A (7/8 FOAM)	20.00 - 30.00	1.0000	1.0000
T12	19	EW63	20.00 - 30.00	1.0000	1.0000
T12	20	LDF5-50A (7/8 FOAM)	20.00 - 30.00	1.0000	1.0000
T12	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	20.00 - 30.00	1.0000	1.0000
T12	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	20.00 - 30.00	1.0000	1.0000
T12	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	20.00 - 30.00	1.0000	1.0000
T12	24	LDF4-50A (1/2 FOAM)	20.00 - 30.00	1.0000	1.0000
T12	25	LDF5-50A (7/8 FOAM)	20.00 - 30.00	1.0000	1.0000
T12	26	LDF4-50A (1/2 FOAM)	20.00 - 30.00	1.0000	1.0000
T12	27	LDF4-50A (1/2 FOAM)	20.00 - 30.00	1.0000	1.0000
T12	28	HYBRIFLEX 1-5/8"	20.00 - 30.00	0.6000	0.6000
T13	2	LDF6-50A (1-1/4 FOAM)	0.00 - 20.00	1.0000	1.0000
T13	3	DC Cable WR-VG122ST	0.00 - 20.00	1.0000	1.0000
T13	4	1 5/8" Hybriflex	0.00 - 20.00	1.0000	1.0000
T13	6	DC Cable WR-VG122ST	0.00 - 20.00	1.0000	1.0000
T13	10	LDF7-50A (1-5/8 FOAM)	0.00 - 20.00	1.0000	1.0000
T13	11	Hubner-Suhner Hybrid Cable	0.00 - 20.00	1.0000	1.0000
T13	15	HYBRIFLEX 1-5/8"	0.00 - 20.00	1.0000	1.0000
T13	17	LDF5-50A (7/8 FOAM)	0.00 - 20.00	1.0000	1.0000
T13	19	EW63	0.00 - 20.00	1.0000	1.0000
T13	20	LDF5-50A (7/8 FOAM)	0.00 - 20.00	1.0000	1.0000
T13	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	0.00 - 20.00	1.0000	1.0000
T13	22	AVA7-50 (1-5/8 LOW DENSI. FOAM)	0.00 - 20.00	1.0000	1.0000
T13	23	AVA7-50 (1-5/8 LOW DENSI. FOAM)	0.00 - 20.00	1.0000	1.0000
T13	24	LDF4-50A (1/2 FOAM)	0.00 - 20.00	1.0000	1.0000
T13	25	LDF5-50A (7/8 FOAM)	0.00 - 20.00	1.0000	1.0000
T13	26	LDF4-50A (1/2 FOAM)	0.00 - 20.00	1.0000	1.0000
T13	27	LDF4-50A (1/2 FOAM)	0.00 - 20.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T13	28	HYBRIFLEX 1-5/8"	0.00 - 20.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
*										
ROHN 6'x15' Boom Gate (1) (Verizon)	A	None			0.0000	160.00	No Ice	17.75	17.75	600.00
							1/2" Ice	21.10	21.10	75.00
							1" Ice	24.50	24.50	890.00
ROHN 6'x15' Boom Gate (1) (Verizon)	B	None			0.0000	160.00	No Ice	17.75	17.75	600.00
							1/2" Ice	21.10	21.10	75.00
							1" Ice	24.50	24.50	890.00
ROHN 6'x15' Boom Gate (1) (Verizon)	C	None			0.0000	160.00	No Ice	17.75	17.75	600.00
							1/2" Ice	21.10	21.10	75.00
							1" Ice	24.50	24.50	890.00
MX06FRO640-02 (Verizon)	A	From Leg	3.00	6.50	0.0000	160.00	No Ice	12.38	7.43	70.00
							1/2" Ice	12.88	7.88	151.39
				0.00			1" Ice	13.38	8.33	239.61
MX06FRO640-02 (Verizon)	A	From Leg	3.00	5.50	0.0000	160.00	No Ice	12.38	7.43	70.00
							1/2" Ice	12.88	7.88	151.39
				0.00			1" Ice	13.38	8.33	239.61
XXDWMM-12.5-65-8T-CBR S Panel (Verizon)	A	From Leg	3.00	1.00	0.0000	160.00	No Ice	4.80	2.40	20.00
							1/2" Ice	5.07	2.60	59.31
				0.00			1" Ice	5.35	2.81	102.70
MT6413-77A (Verizon)	A	From Leg	3.00	-2.00	0.0000	160.00	No Ice	3.79	1.46	60.00
							1/2" Ice	4.04	1.65	84.38
				0.00			1" Ice	4.30	1.85	112.21
MX06FRO640-02 (Verizon)	A	From Leg	3.00	-6.50	0.0000	160.00	No Ice	12.38	7.43	70.00
							1/2" Ice	12.88	7.88	151.39
				0.00			1" Ice	13.38	8.33	239.61
MX06FRO640-02 (Verizon)	A	From Leg	3.00	-5.50	0.0000	160.00	No Ice	12.38	7.43	70.00
							1/2" Ice	12.88	7.88	151.39
				0.00			1" Ice	13.38	8.33	239.61
B2/B66A RRH (Verizon)	A	From Leg	3.00	0.00	0.0000	160.00	No Ice	2.54	1.61	60.00
							1/2" Ice	2.75	1.79	80.12
				0.00			1" Ice	2.97	1.98	103.35
B5/B13 RRH (Verizon)	A	From Leg	3.00	0.00	0.0000	160.00	No Ice	1.87	1.02	70.00
							1/2" Ice	2.03	1.15	86.42
				0.00			1" Ice	2.21	1.29	105.50
CBRS RRH-RT4401-48A (Verizon)	A	From Leg	3.00	0.00	0.0000	160.00	No Ice	0.86	0.42	20.00
							1/2" Ice	0.98	0.51	26.90
				0.00			1" Ice	1.10	0.61	35.60
RF4439d-25A (B2/B66A RRH) (Verizon)	A	From Leg	3.00	0.00	0.0000	160.00	No Ice	1.88	1.25	75.00
							1/2" Ice	2.05	1.39	93.34
				0.00			1" Ice	2.22	1.54	114.47
RF4461d-13A (Verizon)	A	From Leg	3.00	0.00	0.0000	160.00	No Ice	1.87	1.28	80.00
							1/2" Ice	2.03	1.42	98.51
				0.00			1" Ice	2.21	1.57	119.81
JAHH-65B-R3B Panel	B	From Leg	3.00		0.0000	160.00	No Ice	9.66	7.71	130.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
Antenna			6.50			1/2" Ice	10.22	8.53	204.15
(Verizon)			0.00			1" Ice	10.79	9.37	289.72
JAHH-65B-R3B Panel	B	From Leg	3.00	0.0000	160.00	No Ice	9.66	7.71	130.00
Antenna			5.50			1/2" Ice	10.22	8.53	204.15
(Verizon)			0.00			1" Ice	10.79	9.37	289.72
XXDWMM-12.5-65-8T-CBR	B	From Leg	3.00	0.0000	160.00	No Ice	4.80	2.40	20.00
S Panel			-1.00			1/2" Ice	5.07	2.60	59.31
(Verizon)			0.00			1" Ice	5.35	2.81	102.70
MT6413-77A	B	From Leg	3.00	0.0000	160.00	No Ice	3.79	1.46	60.00
(Verizon)			-6.00			1/2" Ice	4.04	1.65	84.38
			0.00			1" Ice	4.30	1.85	112.21
CBC78T-DS-43-2X Diplexer	B	From Leg	3.00	0.0000	160.00	No Ice	0.37	0.51	22.00
(Verizon)			0.00			1/2" Ice	0.45	0.60	28.34
			0.00			1" Ice	0.53	0.70	36.37
B2/B66A RRH	B	From Leg	3.00	0.0000	160.00	No Ice	2.54	1.61	60.00
(Verizon)			0.00			1/2" Ice	2.75	1.79	80.12
			0.00			1" Ice	2.97	1.98	103.35
RF4461d-13A	B	From Leg	3.00	0.0000	160.00	No Ice	1.87	1.28	80.00
(Verizon)			0.00			1/2" Ice	2.03	1.42	98.51
			0.00			1" Ice	2.21	1.57	119.81
CBRS RRH-RT4401-48A	B	From Leg	3.00	0.0000	160.00	No Ice	0.86	0.42	20.00
(Verizon)			0.00			1/2" Ice	0.98	0.51	26.90
			0.00			1" Ice	1.10	0.61	35.60
JAHH-65B-R3B Panel	C	From Leg	3.00	0.0000	160.00	No Ice	9.66	7.71	130.00
Antenna			6.50			1/2" Ice	10.22	8.53	204.15
(Verizon)			0.00			1" Ice	10.79	9.37	289.72
JAHH-65B-R3B Panel	C	From Leg	3.00	0.0000	160.00	No Ice	9.66	7.71	130.00
Antenna			5.50			1/2" Ice	10.22	8.53	204.15
(Verizon)			0.00			1" Ice	10.79	9.37	289.72
XXDWMM-12.5-65-8T-CBR	C	From Leg	3.00	0.0000	160.00	No Ice	4.80	2.40	20.00
S Panel			-1.00			1/2" Ice	5.07	2.60	59.31
(Verizon)			0.00			1" Ice	5.35	2.81	102.70
MT6413-77A	C	From Leg	3.00	0.0000	160.00	No Ice	3.79	1.46	60.00
(Verizon)			-6.00			1/2" Ice	4.04	1.65	84.38
			0.00			1" Ice	4.30	1.85	112.21
CBC78T-DS-43-2X Diplexer	C	From Leg	3.00	0.0000	160.00	No Ice	0.37	0.51	22.00
(Verizon)			0.00			1/2" Ice	0.45	0.60	28.34
			0.00			1" Ice	0.53	0.70	36.37
B2/B66A RRH	C	From Leg	3.00	0.0000	160.00	No Ice	2.54	1.61	60.00
(Verizon)			0.00			1/2" Ice	2.75	1.79	80.12
			0.00			1" Ice	2.97	1.98	103.35
RF4461d-13A	C	From Leg	3.00	0.0000	160.00	No Ice	1.87	1.28	80.00
(Verizon)			0.00			1/2" Ice	2.03	1.42	98.51
			0.00			1" Ice	2.21	1.57	119.81
CBRS RRH-RT4401-48A	C	From Leg	3.00	0.0000	160.00	No Ice	0.86	0.42	20.00
(Verizon)			0.00			1/2" Ice	0.98	0.51	26.90
			0.00			1" Ice	1.10	0.61	35.60
DB-T1-6Z-8AB-0Z	A	From Leg	3.00	0.0000	160.00	No Ice	5.60	2.33	50.00
Distribution Box			0.00			1/2" Ice	5.92	2.56	81.13
(Verizon)			0.00			1" Ice	6.24	2.79	121.22
DB-T1-6Z-8AB-0Z	B	From Leg	3.00	0.0000	160.00	No Ice	5.60	2.33	50.00
Distribution Box			0.00			1/2" Ice	5.92	2.56	81.13
(Verizon)			0.00			1" Ice	6.24	2.79	121.22
LTF12=372 Sector Mount (1)	A	None		0.0000	125.00	No Ice	13.60	13.60	465.00
(T-Mobile)						1/2" Ice	18.40	18.40	600.00
						1" Ice	23.20	23.20	735.00
LTF12=372 Sector Mount (1)	B	None		0.0000	125.00	No Ice	13.60	13.60	465.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
(T-Mobile)						1/2" Ice	18.40	18.40	600.00
						1" Ice	23.20	23.20	735.00
LTF12=372 Sector Mount (1)	C	None		0.0000	125.00	No Ice	13.60	13.60	465.00
(T-Mobile)						1/2" Ice	18.40	18.40	600.00
						1" Ice	23.20	23.20	735.00
AIR21 B4A/B2P	A	From Face	3.00	0.0000	125.00	No Ice	6.05	4.36	83.00
(T-Mobile)			-4.00			1/2" Ice	6.42	4.70	124.90
			0.00			1" Ice	6.80	5.06	171.93
AIR21 B4A/B2P	B	From Face	3.00	0.0000	125.00	No Ice	6.05	4.36	83.00
(T-Mobile)			-4.00			1/2" Ice	6.42	4.70	124.90
			0.00			1" Ice	6.80	5.06	171.93
AIR21 B4A/B2P	C	From Face	3.00	0.0000	125.00	No Ice	6.05	4.36	83.00
(T-Mobile)			-4.00			1/2" Ice	6.42	4.70	124.90
			0.00			1" Ice	6.80	5.06	171.93
Generic Twin TMA unit	A	From Face	3.00	0.0000	125.00	No Ice	0.37	0.96	25.00
(T-Mobile)			0.00			1/2" Ice	0.46	1.09	32.19
			0.00			1" Ice	0.55	1.22	41.21
Generic Twin TMA unit	B	From Face	3.00	0.0000	125.00	No Ice	0.37	0.96	25.00
(T-Mobile)			0.00			1/2" Ice	0.46	1.09	32.19
			0.00			1" Ice	0.55	1.22	41.21
Generic Twin TMA unit	C	From Face	3.00	0.0000	125.00	No Ice	0.37	0.96	25.00
(T-Mobile)			0.00			1/2" Ice	0.46	1.09	32.19
			0.00			1" Ice	0.55	1.22	41.21
AIR21 B2A/B4P	A	From Face	3.00	0.0000	125.00	No Ice	6.05	4.36	83.00
(T-Mobile)			0.00			1/2" Ice	6.42	4.70	124.90
			0.00			1" Ice	6.80	5.06	171.93
AIR21 B2A/B4P	B	From Face	3.00	0.0000	125.00	No Ice	6.05	4.36	83.00
(T-Mobile)			0.00			1/2" Ice	6.42	4.70	124.90
			0.00			1" Ice	6.80	5.06	171.93
AIR21 B2A/B4P	C	From Face	3.00	0.0000	125.00	No Ice	6.05	4.36	83.00
(T-Mobile)			0.00			1/2" Ice	6.42	4.70	124.90
			0.00			1" Ice	6.80	5.06	171.93
LNX-6515DS	A	From Face	3.00	0.0000	125.00	No Ice	11.45	7.70	55.00
(T-Mobile)			4.00			1/2" Ice	12.06	8.29	120.87
			0.00			1" Ice	12.69	8.89	194.41
LNX-6515DS	B	From Face	3.00	0.0000	125.00	No Ice	11.45	7.70	55.00
(T-Mobile)			4.00			1/2" Ice	12.06	8.29	120.87
			0.00			1" Ice	12.69	8.89	194.41
LNX-6515DS	C	From Face	3.00	0.0000	125.00	No Ice	11.45	7.70	55.00
(T-Mobile)			4.00			1/2" Ice	12.06	8.29	120.87
			0.00			1" Ice	12.69	8.89	194.41
RRUS-11	A	From Face	3.00	0.0000	125.00	No Ice	2.57	1.07	50.00
(T-Mobile)			0.00			1/2" Ice	2.76	1.21	69.57
			0.00			1" Ice	2.97	1.36	92.08
RRUS-11	B	From Face	3.00	0.0000	125.00	No Ice	2.57	1.07	50.00
(T-Mobile)			0.00			1/2" Ice	2.76	1.21	69.57
			0.00			1" Ice	2.97	1.36	92.08
RRUS-11	C	From Face	3.00	0.0000	125.00	No Ice	2.57	1.07	50.00
(T-Mobile)			0.00			1/2" Ice	2.76	1.21	69.57
			0.00			1" Ice	2.97	1.36	92.08
QD6616-7	A	From Face	3.00	0.0000	133.00	No Ice	13.58	6.80	130.00
(AT&T)			-6.00			1/2" Ice	14.08	7.27	213.97
			0.00			1" Ice	14.60	7.72	304.84
AIR6419	A	From Face	3.00	0.0000	133.00	No Ice	4.17	2.02	56.00
(AT&T)			0.00			1/2" Ice	4.44	2.23	85.19
			2.00			1" Ice	4.71	2.44	118.11
AIR6449	A	From Face	3.00	0.0000	133.00	No Ice	4.05	2.74	96.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Vert ft	ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
(AT&T)			0.00					1/2" Ice	4.32	2.97	129.62
			-2.00					1" Ice	4.59	3.20	167.14
DMP65R-BU6D	A	From Face	3.00			0.0000	133.00	No Ice	12.71	5.62	96.00
(AT&T)			6.00					1/2" Ice	13.21	6.07	169.96
			0.00					1" Ice	13.71	6.53	250.56
QD6616-7	B	From Face	3.00			0.0000	133.00	No Ice	13.58	6.80	130.00
(AT&T)			-6.00					1/2" Ice	14.08	7.27	213.97
			0.00					1" Ice	14.60	7.72	304.84
AIR6419	B	From Face	3.00			0.0000	133.00	No Ice	4.17	2.02	56.00
(AT&T)			0.00					1/2" Ice	4.44	2.23	85.19
			2.00					1" Ice	4.71	2.44	118.11
AIR6449	B	From Face	3.00			0.0000	133.00	No Ice	4.05	2.74	96.00
(AT&T)			0.00					1/2" Ice	4.32	2.97	129.62
			-2.00					1" Ice	4.59	3.20	167.14
DMP65R-BU6D	B	From Face	3.00			0.0000	133.00	No Ice	12.71	5.62	96.00
(AT&T)			6.00					1/2" Ice	13.21	6.07	169.96
			0.00					1" Ice	13.71	6.53	250.56
QD6616-7	C	From Face	3.00			0.0000	133.00	No Ice	13.58	6.80	130.00
(AT&T)			-6.00					1/2" Ice	14.08	7.27	213.97
			0.00					1" Ice	14.60	7.72	304.84
AIR6419	C	From Face	3.00			0.0000	133.00	No Ice	4.17	2.02	56.00
(AT&T)			0.00					1/2" Ice	4.44	2.23	85.19
			2.00					1" Ice	4.71	2.44	118.11
AIR6449	C	From Face	3.00			0.0000	133.00	No Ice	4.05	2.74	96.00
(AT&T)			0.00					1/2" Ice	4.32	2.97	129.62
			-2.00					1" Ice	4.59	3.20	167.14
DMP65R-BU6D	C	From Face	3.00			0.0000	133.00	No Ice	12.71	5.62	96.00
(AT&T)			6.00					1/2" Ice	13.21	6.07	169.96
			0.00					1" Ice	13.71	6.53	250.56
RRUS-32 B66	A	From Face	3.00			0.0000	133.00	No Ice	3.20	1.85	60.00
(AT&T)			6.00					1/2" Ice	3.46	2.08	81.11
			0.00					1" Ice	3.73	2.31	105.42
RRUS-32	A	From Face	3.00			0.0000	133.00	No Ice	3.31	2.42	77.00
(AT&T)			-2.00					1/2" Ice	3.56	2.64	104.93
			0.00					1" Ice	3.81	2.86	136.47
RRUS-32	A	From Face	3.00			0.0000	133.00	No Ice	3.31	2.42	77.00
(AT&T)			-2.00					1/2" Ice	3.56	2.64	104.93
			0.00					1" Ice	3.81	2.86	136.47
RRUS-32 B66	B	From Face	3.00			0.0000	133.00	No Ice	3.20	1.85	60.00
(AT&T)			6.00					1/2" Ice	3.46	2.08	81.11
			0.00					1" Ice	3.73	2.31	105.42
RRUS-32	B	From Face	3.00			0.0000	133.00	No Ice	3.31	2.42	77.00
(AT&T)			-2.00					1/2" Ice	3.56	2.64	104.93
			0.00					1" Ice	3.81	2.86	136.47
RRUS-32	B	From Face	3.00			0.0000	133.00	No Ice	3.31	2.42	77.00
(AT&T)			-2.00					1/2" Ice	3.56	2.64	104.93
			0.00					1" Ice	3.81	2.86	136.47
RRUS-32 B66	C	From Face	3.00			0.0000	133.00	No Ice	3.20	1.85	60.00
(AT&T)			6.00					1/2" Ice	3.46	2.08	81.11
			0.00					1" Ice	3.73	2.31	105.42
RRUS-32	C	From Face	3.00			0.0000	133.00	No Ice	3.31	2.42	77.00
(AT&T)			-2.00					1/2" Ice	3.56	2.64	104.93
			0.00					1" Ice	3.81	2.86	136.47
RRUS-32	C	From Face	3.00			0.0000	133.00	No Ice	3.31	2.42	77.00
(AT&T)			-2.00					1/2" Ice	3.56	2.64	104.93
			0.00					1" Ice	3.81	2.86	136.47
4478 B14	A	From Face	3.00			0.0000	133.00	No Ice	1.84	1.06	60.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
(AT&T)			-2.00			1/2" Ice	2.01	1.20	75.88
			0.00			1" Ice	2.19	1.34	94.39
4478 B14	B	From Face	3.00	0.0000	133.00	No Ice	1.84	1.06	60.00
(AT&T)			-2.00			1/2" Ice	2.01	1.20	75.88
			0.00			1" Ice	2.19	1.34	94.39
4478 B14	C	From Face	3.00	0.0000	133.00	No Ice	1.84	1.06	60.00
(AT&T)			-2.00			1/2" Ice	2.01	1.20	75.88
			0.00			1" Ice	2.19	1.34	94.39
4449 B5/B12	A	From Face	3.00	0.0000	133.00	No Ice	1.97	1.41	71.00
(AT&T)			-2.00			1/2" Ice	2.14	1.56	89.51
			0.00			1" Ice	2.33	1.73	110.84
4449 B5/B12	B	From Face	3.00	0.0000	133.00	No Ice	1.97	1.41	71.00
(AT&T)			-2.00			1/2" Ice	2.14	1.56	89.51
			0.00			1" Ice	2.33	1.73	110.84
4449 B5/B12	C	From Face	3.00	0.0000	133.00	No Ice	1.97	1.41	71.00
(AT&T)			-2.00			1/2" Ice	2.14	1.56	89.51
			0.00			1" Ice	2.33	1.73	110.84
DC6-48-60-18-8F (Squid)	C	From Face	3.00	0.0000	133.00	No Ice	1.27	1.27	20.00
Suppressor			0.00			1/2" Ice	1.46	1.46	35.12
(AT&T)			0.00			1" Ice	1.66	1.66	52.57
DC6-48-60-18-8F (Squid)	A	From Face	3.00	0.0000	133.00	No Ice	1.27	1.27	20.00
Suppressor			0.00			1/2" Ice	1.46	1.46	35.12
(AT&T)			0.00			1" Ice	1.66	1.66	52.57
DC9	B	From Leg	3.00	0.0000	133.00	No Ice	1.91	1.91	20.00
(AT&T)			-2.00			1/2" Ice	2.10	2.10	39.36
			0.00			1" Ice	2.29	2.29	61.70
SitePro VFA14-10	A	None		0.0000	133.00	No Ice	30.00	30.00	950.00
(AT&T)						1/2" Ice	35.00	35.00	1400.00
						1" Ice	40.00	40.00	1850.00
SitePro VFA14-10	B	None		0.0000	133.00	No Ice	30.00	30.00	950.00
(AT&T)						1/2" Ice	35.00	35.00	1400.00
						1" Ice	40.00	40.00	1850.00
SitePro VFA14-10	C	None		0.0000	133.00	No Ice	30.00	30.00	950.00
(AT&T)						1/2" Ice	35.00	35.00	1400.00
						1" Ice	40.00	40.00	1850.00
* CSP									
ANT940Y10-WR	A	From Leg	0.00	0.0000	187.00	No Ice	0.19	0.19	2.50
(CSP)			0.00			1/2" Ice	0.34	0.34	3.25
			0.00			1" Ice	0.49	0.49	4.00
ANT940Y10-WR	C	From Leg	0.50	0.0000	181.00	No Ice	0.19	0.19	2.50
(CSP - Yagi Antenna)			0.00			1/2" Ice	0.34	0.34	3.25
			0.00			1" Ice	0.49	0.49	4.00
RFI BPS7496-180-14 Panel	A	From Face	4.00	0.0000	170.00	No Ice	5.83	3.75	20.00
Antenna			-6.00			1/2" Ice	6.21	4.13	56.42
(CSP-80)			0.00			1" Ice	6.60	4.51	97.99
RFI BPS7496-180-14 Panel	A	From Face	4.00	0.0000	170.00	No Ice	5.83	3.75	20.00
Antenna			0.00			1/2" Ice	6.21	4.13	56.42
(CSP-81)			0.00			1" Ice	6.60	4.51	97.99
RFI BPS7496-180-14 Panel	A	From Face	4.00	0.0000	170.00	No Ice	5.83	3.75	20.00
Antenna			6.00			1/2" Ice	6.21	4.13	56.42
(CSP-82)			0.00			1" Ice	6.60	4.51	97.99
SiteProl USF12-396-U	A	From Leg	0.00	0.0000	170.00	No Ice	16.23	9.80	491.09
Mount Assembly w/ (3) 96"			0.00			1/2" Ice	22.18	13.27	630.09
Mount Pipes			0.00			1" Ice	28.15	16.68	815.09
(CSP 47, 80, 81, 82)									
432E-83I-01T TTA Unit	A	From Leg	4.00	0.0000	170.00	No Ice	2.85	0.97	25.00
(Re-Located TMA (CSP))			0.00			1/2" Ice	3.06	1.11	44.70

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Offsets: Vert ft	Offsets: Horz ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
			0.00					1" Ice	3.28	1.26	67.39
3' Yagi (CSP)	C	From Leg	0.50			0.0000	169.00	No Ice	2.08	2.08	30.95
			0.00					1/2" Ice	3.79	3.79	52.87
			0.00					1" Ice	5.52	5.52	85.27
ANT150D (CSP - 1-Bay Dipole)	A	From Leg	0.00			0.0000	113.00	No Ice	0.80	0.80	5.50
			0.00					1/2" Ice	1.44	1.44	7.15
			0.00					1" Ice	2.08	2.08	8.80
GPS (DNK-1 / GPS)	C	From Leg	4.00			0.0000	60.00	No Ice	1.00	1.00	10.00
			0.00					1/2" Ice	1.50	1.50	15.00
			2.00					1" Ice	2.00	2.00	20.00
4' Standoff (DNK-1 / GPS)	C	From Leg	0.00			0.0000	60.00	No Ice	3.42	3.42	110.00
			0.00					1/2" Ice	3.67	3.67	147.19
			0.00					1" Ice	3.92	3.92	187.07
FFVV-65B-R2 (Dish - Reserved)	A	From Leg	3.00			0.0000	144.00	No Ice	12.27	5.72	75.00
			-3.00					1/2" Ice	12.76	6.18	147.00
			0.00					1" Ice	13.26	6.64	225.63
FFVV-65B-R2 (Dish - Reserved)	B	From Leg	3.00			0.0000	144.00	No Ice	12.27	5.72	75.00
			-3.00					1/2" Ice	12.76	6.18	147.00
			0.00					1" Ice	13.26	6.64	225.63
FFVV-65B-R2 (Dish - Reserved)	C	From Leg	3.00			0.0000	144.00	No Ice	12.27	5.72	75.00
			-3.00					1/2" Ice	12.76	6.18	147.00
			0.00					1" Ice	13.26	6.64	225.63
TA08025-B604 (Dish - Reserved)	A	From Leg	3.00			0.0000	144.00	No Ice	1.98	1.04	65.00
			-3.00					1/2" Ice	2.15	1.18	81.85
			0.00					1" Ice	2.33	1.32	101.41
TA08025-B604 (Dish - Reserved)	B	From Leg	3.00			0.0000	144.00	No Ice	1.98	1.04	65.00
			3.00					1/2" Ice	2.15	1.18	81.85
			0.00					1" Ice	2.33	1.32	101.41
TA08025-B604 (Dish - Reserved)	C	From Leg	3.00			0.0000	144.00	No Ice	1.98	1.04	65.00
			3.00					1/2" Ice	2.15	1.18	81.85
			0.00					1" Ice	2.33	1.32	101.41
TA08025-B605 (Dish - Reserved)	A	From Leg	3.00			0.0000	144.00	No Ice	1.98	1.20	75.00
			3.00					1/2" Ice	2.15	1.34	93.09
			0.00					1" Ice	2.33	1.49	113.96
TA08025-B605 (Dish - Reserved)	B	From Leg	3.00			0.0000	144.00	No Ice	1.98	1.20	75.00
			3.00					1/2" Ice	2.15	1.34	93.09
			0.00					1" Ice	2.33	1.49	113.96
TA08025-B605 (Dish - Reserved)	C	From Leg	3.00			0.0000	144.00	No Ice	1.98	1.20	75.00
			3.00					1/2" Ice	2.15	1.34	93.09
			0.00					1" Ice	2.33	1.49	113.96
RD1DC-9181-PF-48 (Dish - Reserved)	A	From Leg	3.00			0.0000	144.00	No Ice	1.87	1.07	22.00
			3.00					1/2" Ice	2.04	1.20	38.30
			0.00					1" Ice	2.21	1.35	57.26
RD1DC-9181-PF-48 (Dish - Reserved)	B	From Leg	3.00			0.0000	144.00	No Ice	1.87	1.07	22.00
			3.00					1/2" Ice	2.04	1.20	38.30
			0.00					1" Ice	2.21	1.35	57.26
RD1DC-9181-PF-48 (Dish - Reserved)	C	From Leg	3.00			0.0000	144.00	No Ice	1.87	1.07	22.00
			3.00					1/2" Ice	2.04	1.20	38.30
			0.00					1" Ice	2.21	1.35	57.26
Commscope MTC3975083 8-ft V-Frame (Dish - Reserved)	A	From Leg	3.00			0.0000	144.00	No Ice	12.00	12.00	360.00
			0.00					1/2" Ice	18.00	18.00	500.00
			0.00					1" Ice	24.00	24.00	640.00
Commscope MTC3975083 8-ft V-Frame (Dish - Reserved)	B	From Leg	3.00			0.0000	144.00	No Ice	12.00	12.00	360.00
			0.00					1/2" Ice	18.00	18.00	500.00
			0.00					1" Ice	24.00	24.00	640.00
Commscope MTC3975083 8-ft V-Frame	C	From Leg	3.00			0.0000	144.00	No Ice	12.00	12.00	360.00
			0.00					1/2" Ice	18.00	18.00	500.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft	C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
(Dish - Reserved)			0.00		1" Ice	24.00	24.00	640.00

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight lb
PA6-65AC (DNK-52 / CSP-42)	C	Paraboloid w/Radome	From Leg	1.00 0.00 0.00	-55.0000		177.00	6.00	No Ice 1/2" Ice 1" Ice	28.27 29.05 29.83	90.00 240.00 390.00

222-H Verification Constants

Constant	Value
K_d	0.85
Ice Thickness Importance Factor	1.15
Z_g	900
α	9.5
K_{zmin}	0.85
K_c	n/a
K_t	1
f	1
K_e	1

222-H Section Verification ArRr By Element

Section Elevation ft	Elem. Num.	Size	C	C w/Ice	Face	e	e w/Ice	A_r ft^2	A_r w/Ice ft^2	A_rR_r ft^2	A_rR_r w/Ice ft^2
T1 180.00-160.00	1	ROHN 3 STD	45.107	30.78	C	0.139	0.273	5.833	10.350	3.165	6.117
	1	ROHN 3 STD	45.107	30.78	A	0.139	0.273	5.833	10.350	3.165	6.117
	2	ROHN 3 STD	45.107	30.78	C	0.139	0.273	5.833	10.350	3.165	6.117
	2	ROHN 3 STD	45.107	30.78	B	0.139	0.273	5.833	10.350	3.165	6.117
	3	ROHN 3 STD	45.107	30.78	B	0.139	0.273	5.833	10.350	3.165	6.117
	3	ROHN 3 STD	45.107	30.78	A	0.139	0.273	5.833	10.350	3.165	6.117
	4	ROHN 1.5 STD	24.486	22.849	C	0.139	0.273	1.306	3.169	0.740	1.873
	5	ROHN 1.5 STD	24.486	22.849	B	0.139	0.273	1.306	3.169	0.740	1.873
	6	ROHN 1.5 STD	24.486	22.849	A	0.139	0.273	1.306	3.169	0.740	1.873
	7	ROHN 1.5 STD	24.486	22.849	C	0.139	0.273	1.315	3.191	0.745	1.886
	8	ROHN 2 STD	30.608	25.204	C	0.139	0.273	1.518	3.251	0.860	1.921
	9	ROHN 2 STD	30.608	25.204	C	0.139	0.273	1.518	3.251	0.860	1.921

tnxTower	Job: 22027.01 - Westport	Page: 26 of 73
Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	Project: 180-ft Lattice Tower (CSP #32)	Date: 15:45:34 06/11/24
	Client: Verizon	Designed by: TJL

Section Elevation ft	Elem. Num.	Size	C	C w/Ice	Face	e	e w/Ice	A_r ft²	A_r w/Ice ft²	A_rR_r ft²	A_rR_r w/Ice ft²
	10	ROHN 1.5 STD	24.486	22.849	B	0.139	0.273	1.315	3.191	0.745	1.886
	11	ROHN 2 STD	30.608	25.204	B	0.139	0.273	1.518	3.251	0.860	1.921
	12	ROHN 2 STD	30.608	25.204	B	0.139	0.273	1.518	3.251	0.860	1.921
	13	ROHN 1.5 STD	24.486	22.849	A	0.139	0.273	1.315	3.191	0.745	1.886
	14	ROHN 2 STD	30.608	25.204	A	0.139	0.273	1.518	3.251	0.860	1.921
	15	ROHN 2 STD	30.608	25.204	A	0.139	0.273	1.518	3.251	0.860	1.921
	19	ROHN 1.5 STD	24.486	22.849	C	0.139	0.273	1.311	3.180	0.743	1.879
	20	ROHN 2 STD	30.608	25.204	C	0.139	0.273	1.517	3.247	0.859	1.919
	21	ROHN 2 STD	30.608	25.204	C	0.139	0.273	1.517	3.247	0.859	1.919
	22	ROHN 1.5 STD	24.486	22.849	B	0.139	0.273	1.311	3.180	0.743	1.879
	23	ROHN 2 STD	30.608	25.204	B	0.139	0.273	1.517	3.247	0.859	1.919
	24	ROHN 2 STD	30.608	25.204	B	0.139	0.273	1.517	3.247	0.859	1.919
	25	ROHN 1.5 STD	24.486	22.849	A	0.139	0.273	1.311	3.180	0.743	1.879
	26	ROHN 2 STD	30.608	25.204	A	0.139	0.273	1.517	3.247	0.859	1.919
	27	ROHN 2 STD	30.608	25.204	A	0.139	0.273	1.517	3.247	0.859	1.919
	31	ROHN 2 STD	30.608	25.204	C	0.139	0.273	1.515	3.244	0.858	1.917
	32	ROHN 2 STD	30.608	25.204	C	0.139	0.273	1.515	3.244	0.858	1.917
	33	ROHN 2 STD	30.608	25.204	B	0.139	0.273	1.515	3.244	0.858	1.917
	34	ROHN 2 STD	30.608	25.204	B	0.139	0.273	1.515	3.244	0.858	1.917
	35	ROHN 2 STD	30.608	25.204	A	0.139	0.273	1.515	3.244	0.858	1.917
	36	ROHN 2 STD	30.608	25.204	A	0.139	0.273	1.515	3.244	0.858	1.917
					A		Sum:	24.699	49.722	13.713	29.387
					B			24.699	49.722	13.713	29.387
					C			24.699	49.722	13.713	29.387
T2	40	ROHN 4 STD	57.235	35.104	C	0.143	0.265	7.514	11.982	3.727	7.056
160.00-140.00											
	40	ROHN 4 STD	57.235	35.104	A	0.143	0.265	7.514	11.982	3.727	7.056
	41	ROHN 4 STD	57.235	35.104	C	0.143	0.265	7.514	11.982	3.727	7.056
	41	ROHN 4 STD	57.235	35.104	B	0.143	0.265	7.514	11.982	3.727	7.056
	42	ROHN 4 STD	57.235	35.104	B	0.143	0.265	7.514	11.982	3.727	7.056
	42	ROHN 4 STD	57.235	35.104	A	0.143	0.265	7.514	11.982	3.727	7.056
	43	ROHN 1.5 STD	24.166	22.385	C	0.143	0.265	1.526	3.676	0.865	2.165
	44	ROHN 2 STD	30.207	24.709	C	0.143	0.265	1.634	3.474	0.926	2.046
	45	ROHN 2 STD	30.207	24.709	C	0.143	0.265	1.634	3.474	0.926	2.046
	46	ROHN 1.5 STD	24.166	22.385	B	0.143	0.265	1.526	3.676	0.865	2.165
	47	ROHN 2 STD	30.207	24.709	B	0.143	0.265	1.634	3.474	0.926	2.046
	48	ROHN 2 STD	30.207	24.709	B	0.143	0.265	1.634	3.474	0.926	2.046
	49	ROHN 1.5 STD	24.166	22.385	A	0.143	0.265	1.526	3.676	0.865	2.165
	50	ROHN 2 STD	30.207	24.709	A	0.143	0.265	1.634	3.474	0.926	2.046
	51	ROHN 2 STD	30.207	24.709	A	0.143	0.265	1.634	3.474	0.926	2.046
	55	ROHN 1.5 STD	24.166	22.385	C	0.143	0.265	1.416	3.411	0.803	2.009
	56	ROHN 2 STD	30.207	24.709	C	0.143	0.265	1.589	3.379	0.901	1.990
	57	ROHN 2 STD	30.207	24.709	C	0.143	0.265	1.589	3.379	0.901	1.990
	58	ROHN 1.5 STD	24.166	22.385	B	0.143	0.265	1.416	3.411	0.803	2.009
	59	ROHN 2 STD	30.207	24.709	B	0.143	0.265	1.589	3.379	0.901	1.990
	60	ROHN 2 STD	30.207	24.709	B	0.143	0.265	1.589	3.379	0.901	1.990
	61	ROHN 1.5 STD	24.166	22.385	A	0.143	0.265	1.416	3.411	0.803	2.009
	62	ROHN 2 STD	30.207	24.709	A	0.143	0.265	1.589	3.379	0.901	1.990
	63	ROHN 2 STD	30.207	24.709	A	0.143	0.265	1.589	3.379	0.901	1.990
	67	ROHN 1.5 STD	24.166	22.385	C	0.143	0.265	1.306	3.146	0.741	1.853
	68	ROHN 2 STD	30.207	24.709	C	0.143	0.265	1.546	3.287	0.876	1.936
	69	ROHN 2 STD	30.207	24.709	C	0.143	0.265	1.546	3.287	0.876	1.936
	70	ROHN 1.5 STD	24.166	22.385	B	0.143	0.265	1.306	3.146	0.741	1.853
	71	ROHN 2 STD	30.207	24.709	B	0.143	0.265	1.546	3.287	0.876	1.936
	72	ROHN 2 STD	30.207	24.709	B	0.143	0.265	1.546	3.287	0.876	1.936
	73	ROHN 1.5 STD	24.166	22.385	A	0.143	0.265	1.306	3.146	0.741	1.853
	74	ROHN 2 STD	30.207	24.709	A	0.143	0.265	1.546	3.287	0.876	1.936
	75	ROHN 2 STD	30.207	24.709	A	0.143	0.265	1.546	3.287	0.876	1.936
					A		Sum:	28.812	54.476	15.269	32.082
					B			28.812	54.476	15.269	32.082

Section Elevation ft	Elem. Num.	Size	C	C w/Ice	Face	e	e w/Ice	A_r ft^2	A_r w/Ice ft^2	A_rR_r ft^2	A_rR_r w/Ice ft^2
					C			28.812	54.476	15.269	32.082
T3	79	ROHN 5 EH	70.065	39.791	C	0.151	0.262	3.096	4.572	1.391	2.688
140.00-133.33											
	79	ROHN 5 EH	70.065	39.791	A	0.151	0.262	3.096	4.572	1.391	2.688
	80	ROHN 5 EH	70.065	39.791	C	0.151	0.262	3.096	4.572	1.391	2.688
	80	ROHN 5 EH	70.065	39.791	B	0.151	0.262	3.096	4.572	1.391	2.688
	81	ROHN 5 EH	70.065	39.791	B	0.151	0.262	3.096	4.572	1.391	2.688
	81	ROHN 5 EH	70.065	39.791	A	0.151	0.262	3.096	4.572	1.391	2.688
	82	ROHN 2 STD	29.913	24.348	C	0.151	0.262	2.028	4.291	1.151	2.523
	83	ROHN 2 EH	29.976	24.372	C	0.151	0.262	1.670	3.529	0.948	2.075
	84	ROHN 2 EH	29.976	24.372	C	0.151	0.262	1.670	3.529	0.948	2.075
	85	ROHN 2 STD	29.913	24.348	B	0.151	0.262	2.028	4.291	1.151	2.523
	86	ROHN 2 EH	29.976	24.372	B	0.151	0.262	1.670	3.529	0.948	2.075
	87	ROHN 2 EH	29.976	24.372	B	0.151	0.262	1.670	3.529	0.948	2.075
	88	ROHN 2 STD	29.913	24.348	A	0.151	0.262	2.028	4.291	1.151	2.523
	89	ROHN 2 EH	29.976	24.372	A	0.151	0.262	1.670	3.529	0.948	2.075
	90	ROHN 2 EH	29.976	24.372	A	0.151	0.262	1.670	3.529	0.948	2.075
					A		Sum:	11.559	20.494	5.828	12.050
					B			11.559	20.494	5.828	12.050
					C			11.559	20.494	5.828	12.050
T4	94	ROHN 5 EH	69.697	39.518	C	0.145	0.253	3.096	4.564	1.388	2.673
133.33-126.67											
	94	ROHN 5 EH	69.697	39.518	A	0.145	0.253	3.096	4.564	1.388	2.673
	95	ROHN 5 EH	69.697	39.518	C	0.145	0.253	3.096	4.564	1.388	2.673
	95	ROHN 5 EH	69.697	39.518	B	0.145	0.253	3.096	4.564	1.388	2.673
	96	ROHN 5 EH	69.697	39.518	B	0.145	0.253	3.096	4.564	1.388	2.673
	96	ROHN 5 EH	69.697	39.518	A	0.145	0.253	3.096	4.564	1.388	2.673
	97	ROHN 2 STD	29.756	24.156	C	0.145	0.253	2.165	4.570	1.228	2.676
	98	ROHN 2 STD	29.756	24.156	B	0.145	0.253	2.165	4.570	1.228	2.676
	99	ROHN 2 STD	29.756	24.156	A	0.145	0.253	2.165	4.570	1.228	2.676
	100	ROHN 2 EH	29.818	24.18	C	0.145	0.253	1.717	3.621	0.974	2.121
	101	ROHN 2 EH	29.818	24.18	C	0.145	0.253	1.717	3.621	0.974	2.121
	102	ROHN 2 EH	29.818	24.18	B	0.145	0.253	1.717	3.621	0.974	2.121
	103	ROHN 2 EH	29.818	24.18	B	0.145	0.253	1.717	3.621	0.974	2.121
	104	ROHN 2 EH	29.818	24.18	A	0.145	0.253	1.717	3.621	0.974	2.121
	105	ROHN 2 EH	29.818	24.18	A	0.145	0.253	1.717	3.621	0.974	2.121
					A		Sum:	11.792	20.941	5.951	12.264
					B			11.792	20.941	5.951	12.264
					C			11.792	20.941	5.951	12.264
T5	109	ROHN 5 EH	69.312	39.234	C	0.14	0.244	3.096	4.557	1.386	2.659
126.67-120.00											
	109	ROHN 5 EH	69.312	39.234	A	0.14	0.244	3.096	4.557	1.386	2.659
	110	ROHN 5 EH	69.312	39.234	C	0.14	0.244	3.096	4.557	1.386	2.659
	110	ROHN 5 EH	69.312	39.234	B	0.14	0.244	3.096	4.557	1.386	2.659
	111	ROHN 5 EH	69.312	39.234	B	0.14	0.244	3.096	4.557	1.386	2.659
	111	ROHN 5 EH	69.312	39.234	A	0.14	0.244	3.096	4.557	1.386	2.659
	112	ROHN 2 STD	29.591	23.956	C	0.14	0.244	2.303	4.847	1.305	2.829
	113	ROHN 2 STD	29.591	23.956	B	0.14	0.244	2.303	4.847	1.305	2.829
	114	ROHN 2 STD	29.591	23.956	A	0.14	0.244	2.303	4.847	1.305	2.829
	115	ROHN 2 XXS	29.591	23.956	C	0.14	0.244	1.763	3.710	0.999	2.165
	116	ROHN 2 XXS	29.591	23.956	C	0.14	0.244	1.763	3.710	0.999	2.165
	117	ROHN 2 XXS	29.591	23.956	B	0.14	0.244	1.763	3.710	0.999	2.165
	118	ROHN 2 XXS	29.591	23.956	B	0.14	0.244	1.763	3.710	0.999	2.165
	119	ROHN 2 XXS	29.591	23.956	A	0.14	0.244	1.763	3.710	0.999	2.165
	120	ROHN 2 XXS	29.591	23.956	A	0.14	0.244	1.763	3.710	0.999	2.165
					A		Sum:	12.020	21.380	6.074	12.478
					B			12.020	21.380	6.074	12.478
					C			12.020	21.380	6.074	12.478
T6	124	ROHN 6 EHS	81.556	43.651	C	0.133	0.215	11.065	15.398	4.541	8.888
120.00-100.00											

Section Elevation ft	Elem. Num.	Size	C	C w/Ice	Face	e	e w/Ice	A_r ft²	A_r w/Ice ft²	A_rR_r ft²	A_rR_r w/Ice ft²
	124	ROHN 6 EHS	81.556	43.651	A	0.133	0.215	11.065	15.398	4.541	8.888
	125	ROHN 6 EHS	81.556	43.651	C	0.133	0.215	11.065	15.398	4.541	8.888
	125	ROHN 6 EHS	81.556	43.651	B	0.133	0.215	11.065	15.398	4.541	8.888
	126	ROHN 6 EHS	81.556	43.651	B	0.133	0.215	11.065	15.398	4.541	8.888
	126	ROHN 6 EHS	81.556	43.651	A	0.133	0.215	11.065	15.398	4.541	8.888
	127	ROHN 2 STD	29.237	23.528	C	0.133	0.215	2.645	5.534	1.497	3.195
	128	Pipe 2.5 XXS	35.392	25.896	C	0.133	0.215	2.889	5.496	1.635	3.172
	129	Pipe 2.5 XXS	35.392	25.896	C	0.133	0.215	2.889	5.496	1.635	3.172
	130	ROHN 2 STD	29.237	23.528	B	0.133	0.215	2.645	5.534	1.497	3.195
	131	Pipe 2.5 XXS	35.392	25.896	B	0.133	0.215	2.889	5.496	1.635	3.172
	132	Pipe 2.5 XXS	35.392	25.896	B	0.133	0.215	2.889	5.496	1.635	3.172
	133	ROHN 2 STD	29.237	23.528	A	0.133	0.215	2.645	5.534	1.497	3.195
	134	Pipe 2.5 XXS	35.392	25.896	A	0.133	0.215	2.889	5.496	1.635	3.172
	135	Pipe 2.5 XXS	35.392	25.896	A	0.133	0.215	2.889	5.496	1.635	3.172
	139	ROHN 2 STD	29.237	23.528	C	0.133	0.215	2.422	5.069	1.371	2.926
	140	Pipe 2.5 XXS	35.392	25.896	C	0.133	0.215	2.804	5.334	1.587	3.079
	141	Pipe 2.5 XXS	35.392	25.896	C	0.133	0.215	2.804	5.334	1.587	3.079
	142	ROHN 2 STD	29.237	23.528	B	0.133	0.215	2.422	5.069	1.371	2.926
	143	Pipe 2.5 XXS	35.392	25.896	B	0.133	0.215	2.804	5.334	1.587	3.079
	144	Pipe 2.5 XXS	35.392	25.896	B	0.133	0.215	2.804	5.334	1.587	3.079
	145	ROHN 2 STD	29.237	23.528	A	0.133	0.215	2.422	5.069	1.371	2.926
	146	Pipe 2.5 XXS	35.392	25.896	A	0.133	0.215	2.804	5.334	1.587	3.079
	147	Pipe 2.5 XXS	35.392	25.896	A	0.133	0.215	2.804	5.334	1.587	3.079
					A		Sum:	38.583	63.059	18.396	36.398
					B			38.583	63.059	18.396	36.398
					C			38.583	63.059	18.396	36.398
T7 100.00-90.00	151	ROHN 6 EH	80.307	42.807	C	0.131	0.206	5.537	7.673	2.265	4.416
	151	ROHN 6 EH	80.307	42.807	A	0.131	0.206	5.537	7.673	2.265	4.416
	152	ROHN 6 EH	80.307	42.807	C	0.131	0.206	5.537	7.673	2.265	4.416
	152	ROHN 6 EH	80.307	42.807	B	0.131	0.206	5.537	7.673	2.265	4.416
	153	ROHN 6 EH	80.307	42.807	B	0.131	0.206	5.537	7.673	2.265	4.416
	153	ROHN 6 EH	80.307	42.807	A	0.131	0.206	5.537	7.673	2.265	4.416
	154	ROHN 2 STD	28.789	22.992	C	0.131	0.206	2.868	5.955	1.623	3.427
	155	ROHN 3 STD	42.426	28.237	C	0.131	0.206	3.643	6.303	2.011	3.628
	156	ROHN 3 STD	42.426	28.237	C	0.131	0.206	3.643	6.303	2.011	3.628
	157	ROHN 2 STD	28.789	22.992	B	0.131	0.206	2.868	5.955	1.623	3.427
	158	ROHN 3 STD	42.426	28.237	B	0.131	0.206	3.643	6.303	2.011	3.628
	159	ROHN 3 STD	42.426	28.237	B	0.131	0.206	3.643	6.303	2.011	3.628
	160	ROHN 2 STD	28.789	22.992	A	0.131	0.206	2.868	5.955	1.623	3.427
	161	ROHN 3 STD	42.426	28.237	A	0.131	0.206	3.643	6.303	2.011	3.628
	162	ROHN 3 STD	42.426	28.237	A	0.131	0.206	3.643	6.303	2.011	3.628
					A		Sum:	21.227	33.908	10.175	19.516
					B			21.227	33.908	10.175	19.516
					C			21.227	33.908	10.175	19.516
T8 90.00-80.00	166	ROHN 6 EH	79.372	42.178	C	0.124	0.195	5.537	7.650	2.247	4.389
	166	ROHN 6 EH	79.372	42.178	A	0.124	0.195	5.537	7.650	2.247	4.389
	167	ROHN 6 EH	79.372	42.178	C	0.124	0.195	5.537	7.650	2.247	4.389
	167	ROHN 6 EH	79.372	42.178	B	0.124	0.195	5.537	7.650	2.247	4.389
	168	ROHN 6 EH	79.372	42.178	B	0.124	0.195	5.537	7.650	2.247	4.389
	168	ROHN 6 EH	79.372	42.178	A	0.124	0.195	5.537	7.650	2.247	4.389
	169	ROHN 2 STD	28.454	22.594	C	0.124	0.195	3.129	6.459	1.769	3.705
	170	ROHN 2 STD	28.454	22.594	B	0.124	0.195	3.129	6.459	1.769	3.705
	171	ROHN 2 STD	28.454	22.594	A	0.124	0.195	3.129	6.459	1.769	3.705
	172	ROHN 3 STD	41.933	27.778	C	0.124	0.195	3.773	6.498	2.088	3.728
	173	ROHN 3 STD	41.933	27.778	C	0.124	0.195	3.773	6.498	2.088	3.728
	174	ROHN 3 STD	41.933	27.778	B	0.124	0.195	3.773	6.498	2.088	3.728
	175	ROHN 3 STD	41.933	27.778	B	0.124	0.195	3.773	6.498	2.088	3.728
	176	ROHN 3 STD	41.933	27.778	A	0.124	0.195	3.773	6.498	2.088	3.728
	177	ROHN 3 STD	41.933	27.778	A	0.124	0.195	3.773	6.498	2.088	3.728
					A		Sum:	21.747	34.754	10.439	19.938

tnxTower	Job: 22027.01 - Westport	Page: 29 of 73
Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	Project: 180-ft Lattice Tower (CSP #32)	Date: 15:45:34 06/11/24
	Client: Verizon	Designed by: TJL

Section Elevation ft	Elem. Num.	Size	C	C w/Ice	Face	e	e w/Ice	A_r ft^2	A_r w/Ice ft^2	A_rR_r ft^2	A_rR_r w/Ice ft^2
					B			21.747	34.754	10.439	19.938
					C			21.747	34.754	10.439	19.938
T9 80.00-60.00	184	ROHN 2.5 STD	33.748	24.175	C	0.14	0.199	4.360	8.120	2.470	4.663
	185	ROHN 3 STD	41.084	26.997	C	0.14	0.199	3.995	6.825	2.231	3.919
	186	ROHN 3 STD	41.084	26.997	C	0.14	0.199	3.995	6.825	2.231	3.919
	187	ROHN 2.5 STD	33.748	24.175	B	0.14	0.199	4.360	8.120	2.470	4.663
	188	ROHN 3 STD	41.084	26.997	B	0.14	0.199	3.995	6.825	2.231	3.919
	189	ROHN 3 STD	41.084	26.997	B	0.14	0.199	3.995	6.825	2.231	3.919
	190	ROHN 2.5 STD	33.748	24.175	A	0.14	0.199	4.360	8.120	2.470	4.663
	191	ROHN 3 STD	41.084	26.997	A	0.14	0.199	3.995	6.825	2.231	3.919
	192	ROHN 3 STD	41.084	26.997	A	0.14	0.199	3.995	6.825	2.231	3.919
	196	ROHN 2.5 STD	33.748	24.175	C	0.14	0.199	4.060	7.562	2.301	4.343
	197	ROHN 3 STD	41.084	26.997	C	0.14	0.199	3.862	6.599	2.157	3.789
	198	ROHN 3 STD	41.084	26.997	C	0.14	0.199	3.862	6.599	2.157	3.789
	199	ROHN 2.5 STD	33.748	24.175	B	0.14	0.199	4.060	7.562	2.301	4.343
	200	ROHN 3 STD	41.084	26.997	B	0.14	0.199	3.862	6.599	2.157	3.789
	201	ROHN 3 STD	41.084	26.997	B	0.14	0.199	3.862	6.599	2.157	3.789
	202	ROHN 2.5 STD	33.748	24.175	A	0.14	0.199	4.060	7.562	2.301	4.343
	203	ROHN 3 STD	41.084	26.997	A	0.14	0.199	3.862	6.599	2.157	3.789
	204	ROHN 3 STD	41.084	26.997	A	0.14	0.199	3.862	6.599	2.157	3.789
					A		Sum:	24.135	42.530	13.546	24.424
					B			24.135	42.530	13.546	24.424
					C			24.135	42.530	13.546	24.424
T10 60.00-40.00	211	ROHN 2.5 STD	32.573	22.976	C	0.129	0.184	4.959	9.094	2.805	5.200
	212	ROHN 3 EH	39.655	25.7	C	0.129	0.184	4.269	7.193	2.404	4.113
	213	ROHN 3 EH	39.655	25.7	C	0.129	0.184	4.269	7.193	2.404	4.113
	214	ROHN 2.5 STD	32.573	22.976	B	0.129	0.184	4.959	9.094	2.805	5.200
	215	ROHN 3 EH	39.655	25.7	B	0.129	0.184	4.269	7.193	2.404	4.113
	216	ROHN 3 EH	39.655	25.7	B	0.129	0.184	4.269	7.193	2.404	4.113
	217	ROHN 2.5 STD	32.573	22.976	A	0.129	0.184	4.959	9.094	2.805	5.200
	218	ROHN 3 EH	39.655	25.7	A	0.129	0.184	4.269	7.193	2.404	4.113
	219	ROHN 3 EH	39.655	25.7	A	0.129	0.184	4.269	7.193	2.404	4.113
	223	ROHN 2.5 STD	32.573	22.976	C	0.129	0.184	4.659	8.545	2.636	4.886
	224	ROHN 3 EH	39.655	25.7	C	0.129	0.184	4.130	6.960	2.326	3.980
	225	ROHN 3 EH	39.655	25.7	C	0.129	0.184	4.130	6.960	2.326	3.980
	226	ROHN 2.5 STD	32.573	22.976	B	0.129	0.184	4.659	8.545	2.636	4.886
	227	ROHN 3 EH	39.655	25.7	B	0.129	0.184	4.130	6.960	2.326	3.980
	228	ROHN 3 EH	39.655	25.7	B	0.129	0.184	4.130	6.960	2.326	3.980
	229	ROHN 2.5 STD	32.573	22.976	A	0.129	0.184	4.659	8.545	2.636	4.886
	230	ROHN 3 EH	39.655	25.7	A	0.129	0.184	4.130	6.960	2.326	3.980
	231	ROHN 3 EH	39.655	25.7	A	0.129	0.184	4.130	6.960	2.326	3.980
					A		Sum:	26.417	45.945	14.901	26.273
					B			26.417	45.945	14.901	26.273
					C			26.417	45.945	14.901	26.273
T11 40.00-30.00	238	ROHN 2.5 STD	31.373	21.777	C	0.123	0.174	5.258	9.490	2.973	5.413
	239	ROHN 3 EH	38.193	24.4	C	0.123	0.174	4.410	7.326	2.493	4.179
	240	ROHN 3 EH	38.193	24.4	C	0.123	0.174	4.410	7.326	2.493	4.179
	241	ROHN 2.5 STD	31.373	21.777	B	0.123	0.174	5.258	9.490	2.973	5.413
	242	ROHN 3 EH	38.193	24.4	B	0.123	0.174	4.410	7.326	2.493	4.179
	243	ROHN 3 EH	38.193	24.4	B	0.123	0.174	4.410	7.326	2.493	4.179
	244	ROHN 2.5 STD	31.373	21.777	A	0.123	0.174	5.258	9.490	2.973	5.413
	245	ROHN 3 EH	38.193	24.4	A	0.123	0.174	4.410	7.326	2.493	4.179
	246	ROHN 3 EH	38.193	24.4	A	0.123	0.174	4.410	7.326	2.493	4.179
					A		Sum:	14.079	24.142	7.959	13.771
					B			14.079	24.142	7.959	13.771
					C			14.079	24.142	7.959	13.771
T12 30.00-20.00	253	ROHN 2.5 EH	30.281	20.709	C	0.119	0.168	5.558	9.882	3.141	5.629
	254	ROHN 2.5 EH	30.281	20.709	B	0.119	0.168	5.558	9.882	3.141	5.629
	255	ROHN 2.5 EH	30.281	20.709	A	0.119	0.168	5.558	9.882	3.141	5.629
	256	ROHN 3 EH	36.864	23.241	C	0.119	0.168	4.555	7.466	2.574	4.252

Section Elevation ft	Elem. Num.	Size	C	C w/Ice	Face	e	e w/Ice	A_r ft²	A_r w/Ice ft²	A_rR_r ft²	A_rR_r w/Ice ft²
	257	ROHN 3 EH	36.864	23.241	C	0.119	0.168	4.555	7.466	2.574	4.252
	258	ROHN 3 EH	36.864	23.241	B	0.119	0.168	4.555	7.466	2.574	4.252
	259	ROHN 3 EH	36.864	23.241	B	0.119	0.168	4.555	7.466	2.574	4.252
	260	ROHN 3 EH	36.864	23.241	A	0.119	0.168	4.555	7.466	2.574	4.252
	261	ROHN 3 EH	36.864	23.241	A	0.119	0.168	4.555	7.466	2.574	4.252
					A		Sum:	14.667	24.813	8.288	14.133
					B			14.667	24.813	8.288	14.133
					C			14.667	24.813	8.288	14.133
T13 20.00-0.00	268	P3.5x.226	39.951	23.207	C	0.108	0.148	8.153	12.313	4.570	6.986
	269	ROHN 3 EH	34.957	21.286	C	0.108	0.148	6.913	10.944	3.903	6.209
	270	ROHN 1.5 STD	18.977	15.14	C	0.108	0.148	0.940	1.949	0.531	1.106
	271	ROHN 2 STD	23.721	16.965	C	0.108	0.148	2.132	3.965	1.204	2.249
	272	ROHN 3 EH	34.957	21.286	C	0.108	0.148	6.913	10.944	3.903	6.209
	273	ROHN 1.5 STD	18.977	15.14	C	0.108	0.148	0.940	1.949	0.531	1.106
	274	ROHN 2 STD	23.721	16.965	C	0.108	0.148	2.132	3.965	1.204	2.249
	275	P3.5x.226	39.951	23.207	B	0.108	0.148	8.153	12.313	4.570	6.986
	276	ROHN 3 EH	34.957	21.286	B	0.108	0.148	6.913	10.944	3.903	6.209
	277	ROHN 1.5 STD	18.977	15.14	B	0.108	0.148	0.940	1.949	0.531	1.106
	278	ROHN 2 STD	23.721	16.965	B	0.108	0.148	2.132	3.965	1.204	2.249
	279	ROHN 3 EH	34.957	21.286	B	0.108	0.148	6.913	10.944	3.903	6.209
	280	ROHN 1.5 STD	18.977	15.14	B	0.108	0.148	0.940	1.949	0.531	1.106
	281	ROHN 2 STD	23.721	16.965	B	0.108	0.148	2.132	3.965	1.204	2.249
	283	P3.5x.226	39.951	23.207	A	0.108	0.148	8.153	12.313	4.570	6.986
	284	ROHN 3 EH	34.957	21.286	A	0.108	0.148	6.913	10.944	3.903	6.209
	285	ROHN 1.5 STD	18.977	15.14	A	0.108	0.148	0.940	1.949	0.531	1.106
	286	ROHN 2 STD	23.721	16.965	A	0.108	0.148	2.132	3.965	1.204	2.249
	287	ROHN 3 EH	34.957	21.286	A	0.108	0.148	6.913	10.944	3.903	6.209
	288	ROHN 1.5 STD	18.977	15.14	A	0.108	0.148	0.940	1.949	0.531	1.106
	289	ROHN 2 STD	23.721	16.965	A	0.108	0.148	2.132	3.965	1.204	2.249
					A		Sum:	28.122	46.029	15.844	26.114
					B			28.122	46.029	15.844	26.114
					C			28.122	46.029	15.844	26.114

222-H Section Verification Tables - No Ice

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	A_rR_r ft²
T1 180.00-160.00	170.00		1.415	1	1		52	A	0.139	13.713
								B	0.139	13.713
								C	0.139	13.713
T2 160.00-140.00	150.00		1.378	1	1		51	A	0.143	15.269
								B	0.143	15.269
								C	0.143	15.269
T3 140.00-133.33	136.67		1.352	1	1		50	A	0.151	5.828
								B	0.151	5.828
								C	0.151	5.828
T4 133.33-126.67	130.00		1.337	1	1		49	A	0.145	5.951
								B	0.145	5.951
								C	0.145	5.951
T5 126.67-120.00	123.33		1.323	1	1		49	A	0.14	6.074
								B	0.14	6.074

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	A_rR_r ft²
								C	0.14	6.074
T6 120.00-100.00	110.00		1.291	1	1		47	A	0.133	18.396
								B	0.133	18.396
								C	0.133	18.396
T7 100.00-90.00	95.00		1.252	1	1		46	A	0.131	10.175
								B	0.131	10.175
								C	0.131	10.175
T8 90.00-80.00	85.00		1.223	1	1		45	A	0.124	10.439
								B	0.124	10.439
								C	0.124	10.439
T9 80.00-60.00	70.00		1.174	1	1		43	A	0.14	13.546
								B	0.14	13.546
								C	0.14	13.546
T10 60.00-40.00	50.00		1.094	1	1		40	A	0.129	14.901
								B	0.129	14.901
								C	0.129	14.901
T11 40.00-30.00	35.00		1.015	1	1		37	A	0.123	7.959
								B	0.123	7.959
								C	0.123	7.959
T12 30.00-20.00	25.00		0.945	1	1		35	A	0.119	8.288
								B	0.119	8.288
								C	0.119	8.288
T13 20.00-0.00	10.00		0.85	1	1		31	A	0.108	15.844
								B	0.108	15.844
								C	0.108	15.844

222-H Section Verification Tables - Ice

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	A_rR_r ft²
T1 180.00-160.00	170.00	170.00	1.415	1	1	1.3549	8	A	0.273	29.387
								B	0.273	29.387
								C	0.273	29.387
T2 160.00-140.00	150.00	150.00	1.378	1	1	1.3380	7	A	0.265	32.082
								B	0.265	32.082
								C	0.265	32.082
T3 140.00-133.33	136.67	136.67	1.352	1	1	1.3256	7	A	0.262	12.050
								B	0.262	12.050
								C	0.262	12.050
T4 133.33-126.67	130.00	130.00	1.337	1	1	1.3190	7	A	0.253	12.264
								B	0.253	12.264
								C	0.253	12.264
T5 126.67-120.00	123.33	123.33	1.323	1	1	1.3121	7	A	0.244	12.478
								B	0.244	12.478
								C	0.244	12.478
T6 120.00-100.00	110.00	110.00	1.291	1	1	1.2971	7	A	0.215	36.398
								B	0.215	36.398
								C	0.215	36.398
T7 100.00-90.00	95.00	95.00	1.252	1	1	1.2783	7	A	0.206	19.516
								B	0.206	19.516
								C	0.206	19.516
T8 90.00-80.00	85.00	85.00	1.223	1	1	1.2641	7	A	0.195	19.938
								B	0.195	19.938
								C	0.195	19.938
T9 80.00-60.00	70.00	70.00	1.174	1	1	1.2398	6	A	0.199	24.424

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	A_rR_r ft²
								B	0.199	24.424
								C	0.199	24.424
T10 60.00-40.00	50.00	50.00	1.094	1	1	1.1988	6	A	0.184	26.273
								B	0.184	26.273
								C	0.184	26.273
T11 40.00-30.00	35.00	35.00	1.015	1	1	1.1568	6	A	0.174	13.771
								B	0.174	13.771
								C	0.174	13.771
T12 30.00-20.00	25.00	25.00	0.945	1	1	1.1185	5	A	0.168	14.133
								B	0.168	14.133
								C	0.168	14.133
T13 20.00-0.00	10.00	10.00	0.85	1	1	1.0206	5	A	0.148	26.114
								B	0.148	26.114
								C	0.148	26.114

222-H Section Verification Tables - Service

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	A_rR_r ft²
T1 180.00-160.00	170.00		1.415	1	1		11	A	0.139	13.993
								B	0.139	13.993
								C	0.139	13.993
T2 160.00-140.00	150.00		1.378	1	1		11	A	0.143	16.334
								B	0.143	16.334
								C	0.143	16.334
T3 140.00-133.33	136.67		1.352	1	1		11	A	0.151	6.561
								B	0.151	6.561
								C	0.151	6.561
T4 133.33-126.67	130.00		1.337	1	1		10	A	0.145	6.687
								B	0.145	6.687
								C	0.145	6.687
T5 126.67-120.00	123.33		1.323	1	1		10	A	0.14	6.810
								B	0.14	6.810
								C	0.14	6.810
T6 120.00-100.00	110.00		1.291	1	1		10	A	0.133	21.840
								B	0.133	21.840
								C	0.133	21.840
T7 100.00-90.00	95.00		1.252	1	1		10	A	0.131	12.011
								B	0.131	12.011
								C	0.131	12.011
T8 90.00-80.00	85.00		1.223	1	1		10	A	0.124	12.296
								B	0.124	12.296
								C	0.124	12.296
T9 80.00-60.00	70.00		1.174	1	1		9	A	0.14	13.674
								B	0.14	13.674
								C	0.14	13.674
T10 60.00-40.00	50.00		1.094	1	1		9	A	0.129	14.945
								B	0.129	14.945
								C	0.129	14.945
T11 40.00-30.00	35.00		1.015	1	1		8	A	0.123	7.959
								B	0.123	7.959
								C	0.123	7.959
T12 30.00-20.00	25.00		0.945	1	1		7	A	0.119	8.288
								B	0.119	8.288
								C	0.119	8.288

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	$A_r R_r$ ft²
T13 20.00-0.00	10.00		0.85	1	1		7	A	0.108	15.877
								B	0.108	15.877
								C	0.108	15.877

Tower Pressures - No Ice

$G_H = 0.850$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	$C_A A_A$ In Face ft²	$C_A A_A$ Out Face ft²
T1	170.00	1.415	52	177.503	A	0.000	24.699	11.667	47.24	15.281	0.000
180.00-160.00					B	0.000	24.699		47.24	0.000	0.000
					C	0.000	24.699		47.24	0.000	0.000
T2	150.00	1.378	51	200.850	A	0.000	28.812	15.027	52.16	32.847	0.000
160.00-140.00					B	0.000	28.812		52.16	0.000	0.000
					C	0.000	28.812		52.16	0.000	0.000
T3	136.67	1.352	50	76.803	A	0.000	11.559	6.192	53.57	10.949	0.000
140.00-133.33					B	0.000	11.559		53.57	3.960	0.000
					C	0.000	11.559		53.57	0.000	0.000
T4	130.00	1.337	49	81.431	A	0.000	11.792	6.192	52.51	10.949	0.000
133.33-126.67					B	0.000	11.792		52.51	14.711	0.000
					C	0.000	11.792		52.51	0.000	0.000
T5	123.33	1.323	49	86.060	A	0.000	12.020	6.192	51.52	10.949	0.000
126.67-120.00					B	0.000	12.020		51.52	33.451	0.000
					C	0.000	12.020		51.52	0.000	0.000
T6	110.00	1.291	47	289.399	A	0.000	38.583	22.130	57.36	33.666	0.000
120.00-100.00					B	0.000	38.583		57.36	118.527	0.000
					C	0.000	38.583		57.36	0.000	0.000
T7	95.00	1.252	46	162.540	A	0.000	21.227	11.074	52.17	17.054	0.000
100.00-90.00					B	0.000	21.227		52.17	59.264	0.000
					C	0.000	21.227		52.17	0.000	0.000
T8 90.00-80.00	85.00	1.223	45	175.715	A	0.000	21.747	11.074	50.92	17.054	0.000
					B	0.000	21.747		50.92	59.264	0.000
					C	0.000	21.747		50.92	0.000	0.000
T9 80.00-60.00	70.00	1.174	43	390.971	A	30.496	24.135	30.496	55.82	34.170	0.000
					B	30.496	24.135		55.82	118.527	0.000
					C	30.496	24.135		55.82	0.000	0.000
T10	50.00	1.094	40	440.971	A	30.496	26.417	30.496	53.58	35.367	0.000
60.00-40.00					B	30.496	26.417		53.58	118.527	0.000
					C	30.496	26.417		53.58	0.000	0.000
T11	35.00	1.015	37	239.236	A	15.248	14.079	15.248	51.99	17.684	0.000
40.00-30.00					B	15.248	14.079		51.99	59.264	0.000
					C	15.248	14.079		51.99	0.000	0.000
T12	25.00	0.945	35	251.736	A	15.248	14.667	15.248	50.97	17.684	0.000
30.00-20.00					B	15.248	14.667		50.97	59.264	0.000
					C	15.248	14.667		50.97	0.000	0.000
T13 20.00-0.00	10.00	0.85	31	541.368	A	30.078	28.122	30.078	51.68	35.367	0.000
					B	30.078	28.122		51.68	118.527	0.000
					C	30.078	28.122		51.68	0.000	0.000

Tower Pressure - With Ice

$G_H = 0.850$

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1 180.00-160.00	170.00	1.415	8	1.3549	182.020	A	0.000	49.722	20.699	41.63	41.294	0.000
						B	0.000	49.722		41.63	0.000	0.000
						C	0.000	49.722		41.63	0.000	0.000
T2 160.00-140.00	150.00	1.378	7	1.3380	205.316	A	0.000	54.476	23.963	43.99	92.227	0.000
						B	0.000	54.476		43.99	0.000	0.000
						C	0.000	54.476		43.99	0.000	0.000
T3 140.00-133.33	136.67	1.352	7	1.3256	78.277	A	0.000	20.494	9.143	44.62	30.582	0.000
						B	0.000	20.494		44.62	11.149	0.000
						C	0.000	20.494		44.62	0.000	0.000
T4 133.33-126.67	130.00	1.337	7	1.3190	82.899	A	0.000	20.941	9.129	43.59	30.497	0.000
						B	0.000	20.941		43.59	45.555	0.000
						C	0.000	20.941		43.59	0.000	0.000
T5 126.67-120.00	123.33	1.323	7	1.3121	87.520	A	0.000	21.380	9.113	42.62	30.407	0.000
						B	0.000	21.380		42.62	72.258	0.000
						C	0.000	21.380		42.62	0.000	0.000
T6 120.00-100.00	110.00	1.291	7	1.2971	293.730	A	0.000	63.059	30.796	48.84	94.834	0.000
						B	0.000	63.059		48.84	241.107	0.000
						C	0.000	63.059		48.84	0.000	0.000
T7 100.00-90.00	95.00	1.252	7	1.2783	164.675	A	0.000	33.908	15.347	45.26	48.142	0.000
						B	0.000	33.908		45.26	120.152	0.000
						C	0.000	33.908		45.26	0.000	0.000
T8 90.00-80.00	85.00	1.223	7	1.2641	177.827	A	0.000	34.754	15.299	44.02	47.840	0.000
						B	0.000	34.754		44.02	119.851	0.000
						C	0.000	34.754		44.02	0.000	0.000
T9 80.00-60.00	70.00	1.174	6	1.2398	395.112	A	36.020	42.530	36.020	45.86	94.951	0.000
						B	36.020	42.530		45.86	238.670	0.000
						C	36.020	42.530		45.86	0.000	0.000
T10 60.00-40.00	50.00	1.094	6	1.1988	444.975	A	35.838	45.945	35.838	43.82	98.941	0.000
						B	35.838	45.945		43.82	236.929	0.000
						C	35.838	45.945		43.82	0.000	0.000
T11 40.00-30.00	35.00	1.015	6	1.1568	241.167	A	17.825	24.142	17.825	42.47	48.489	0.000
						B	17.825	24.142		42.47	117.574	0.000
						C	17.825	24.142		42.47	0.000	0.000
T12 30.00-20.00	25.00	0.945	5	1.1185	253.603	A	17.740	24.813	17.740	41.69	47.594	0.000
						B	17.740	24.813		41.69	116.765	0.000
						C	17.740	24.813		41.69	0.000	0.000
T13 20.00-0.00	10.00	0.85	5	1.0206	544.777	A	34.626	46.029	34.626	42.93	90.613	0.000
						B	34.626	46.029		42.93	229.396	0.000
						C	34.626	46.029		42.93	0.000	0.000

Tower Pressure - Service

$G_H = 0.850$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1 180.00-160.00	170.00	1.415	11	177.503	A	0.000	24.699	11.667	47.24	15.281	0.000
					B	0.000	24.699		47.24	0.000	0.000
					C	0.000	24.699		47.24	0.000	0.000
T2 160.00-140.00	150.00	1.378	11	200.850	A	0.000	28.812	15.027	52.16	32.847	0.000
					B	0.000	28.812		52.16	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	0.000	28.812		52.16	0.000	0.000
T3	136.67	1.352	11	76.803	A	0.000	11.559	6.192	53.57	10.949	0.000
140.00-133.33					B	0.000	11.559		53.57	3.960	0.000
					C	0.000	11.559		53.57	0.000	0.000
T4	130.00	1.337	10	81.431	A	0.000	11.792	6.192	52.51	10.949	0.000
133.33-126.67					B	0.000	11.792		52.51	14.711	0.000
					C	0.000	11.792		52.51	0.000	0.000
T5	123.33	1.323	10	86.060	A	0.000	12.020	6.192	51.52	10.949	0.000
126.67-120.00					B	0.000	12.020		51.52	33.451	0.000
					C	0.000	12.020		51.52	0.000	0.000
T6	110.00	1.291	10	289.399	A	0.000	38.583	22.130	57.36	33.666	0.000
120.00-100.00					B	0.000	38.583		57.36	118.527	0.000
					C	0.000	38.583		57.36	0.000	0.000
T7	95.00	1.252	10	162.540	A	0.000	21.227	11.074	52.17	17.054	0.000
100.00-90.00					B	0.000	21.227		52.17	59.264	0.000
					C	0.000	21.227		52.17	0.000	0.000
T8 90.00-80.00	85.00	1.223	10	175.715	A	0.000	21.747	11.074	50.92	17.054	0.000
					B	0.000	21.747		50.92	59.264	0.000
					C	0.000	21.747		50.92	0.000	0.000
T9 80.00-60.00	70.00	1.174	9	390.971	A	30.496	24.135	30.496	55.82	34.170	0.000
					B	30.496	24.135		55.82	118.527	0.000
					C	30.496	24.135		55.82	0.000	0.000
T10	50.00	1.094	9	440.971	A	30.496	26.417	30.496	53.58	35.367	0.000
60.00-40.00					B	30.496	26.417		53.58	118.527	0.000
					C	30.496	26.417		53.58	0.000	0.000
T11	35.00	1.015	8	239.236	A	15.248	14.079	15.248	51.99	17.684	0.000
40.00-30.00					B	15.248	14.079		51.99	59.264	0.000
					C	15.248	14.079		51.99	0.000	0.000
T12	25.00	0.945	7	251.736	A	15.248	14.667	15.248	50.97	17.684	0.000
30.00-20.00					B	15.248	14.667		50.97	59.264	0.000
					C	15.248	14.667		50.97	0.000	0.000
T13 20.00-0.00	10.00	0.85	7	541.368	A	30.078	28.122	30.078	51.68	35.367	0.000
					B	30.078	28.122		51.68	118.527	0.000
					C	30.078	28.122		51.68	0.000	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	44.64	1250.43	A	0.139	2.812	52	1	1	13.713	2381.65	119.08	C
180.00-160.00			B	0.139	2.812		1	1	13.713			
			C	0.139	2.812		1	1	13.713			
T2	152.20	1495.62	A	0.143	2.796	51	1	1	15.269	3254.56	162.73	C
160.00-140.00			B	0.143	2.796		1	1	15.269			
			C	0.143	2.796		1	1	15.269			
T3	88.73	825.91	A	0.151	2.77	50	1	1	5.828	1244.94	186.74	C
140.00-133.33			B	0.151	2.77		1	1	5.828			
			C	0.151	2.77		1	1	5.828			
T4	146.37	842.18	A	0.145	2.791	49	1	1	5.951	1700.85	255.13	C
133.33-126.67			B	0.145	2.791		1	1	5.951			
			C	0.145	2.791		1	1	5.951			
T5	225.61	1080.40	A	0.14	2.81	49	1	1	6.074	2475.95	371.39	C
126.67-120.00			B	0.14	2.81		1	1	6.074			
			C	0.14	2.81		1	1	6.074			
T6	754.97	3821.31	A	0.133	2.834	47	1	1	18.396	8055.32	402.77	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
120.00-100.00			B	0.133	2.834		1	1	18.396			
			C	0.133	2.834		1	1	18.396			
T7	378.01	1682.80	A	0.131	2.844	46	1	1	10.175	4026.36	402.64	C
100.00-90.00			B	0.131	2.844		1	1	10.175			
			C	0.131	2.844		1	1	10.175			
T8	378.01	1722.73	A	0.124	2.87	45	1	1	10.439	3972.29	397.23	C
90.00-80.00			B	0.124	2.87		1	1	10.439			
			C	0.124	2.87		1	1	10.439			
T9	756.17	4897.54	A	0.14	2.81	43	1	1	44.041	9970.67	498.53	C
80.00-60.00			B	0.14	2.81		1	1	44.041			
			C	0.14	2.81		1	1	44.041			
T10	759.02	5700.46	A	0.129	2.85	40	1	1	45.397	9522.62	476.13	C
60.00-40.00			B	0.129	2.85		1	1	45.397			
			C	0.129	2.85		1	1	45.397			
T11	379.51	2942.46	A	0.123	2.875	37	1	1	23.207	4481.20	448.12	C
40.00-30.00			B	0.123	2.875		1	1	23.207			
			C	0.123	2.875		1	1	23.207			
T12	379.51	3139.03	A	0.119	2.889	35	1	1	23.536	4212.83	421.28	C
30.00-20.00			B	0.119	2.889		1	1	23.536			
			C	0.119	2.889		1	1	23.536			
T13	759.02	6187.56	A	0.108	2.934	31	1	1	45.922	7542.54	377.13	C
20.00-0.00			B	0.108	2.934		1	1	45.922			
			C	0.108	2.934		1	1	45.922			
Sum Weight:	5201.77	35588.43						OTM	4707.59 kip-ft	62841.79		

Tower Forces - No Ice - Wind 45 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	44.64	1250.43	A	0.139	2.812	52	0.825	1	13.713	2381.65	119.08	C
180.00-160.00			B	0.139	2.812		0.825	1	13.713			
			C	0.139	2.812		0.825	1	13.713			
T2	152.20	1495.62	A	0.143	2.796	51	0.825	1	15.269	3254.56	162.73	C
160.00-140.00			B	0.143	2.796		0.825	1	15.269			
			C	0.143	2.796		0.825	1	15.269			
T3	88.73	825.91	A	0.151	2.77	50	0.825	1	5.828	1244.94	186.74	C
140.00-133.33			B	0.151	2.77		0.825	1	5.828			
			C	0.151	2.77		0.825	1	5.828			
T4	146.37	842.18	A	0.145	2.791	49	0.825	1	5.951	1700.85	255.13	C
133.33-126.67			B	0.145	2.791		0.825	1	5.951			
			C	0.145	2.791		0.825	1	5.951			
T5	225.61	1080.40	A	0.14	2.81	49	0.825	1	6.074	2475.95	371.39	C
126.67-120.00			B	0.14	2.81		0.825	1	6.074			
			C	0.14	2.81		0.825	1	6.074			
T6	754.97	3821.31	A	0.133	2.834	47	0.825	1	18.396	8055.32	402.77	C
120.00-100.00			B	0.133	2.834		0.825	1	18.396			
			C	0.133	2.834		0.825	1	18.396			
T7	378.01	1682.80	A	0.131	2.844	46	0.825	1	10.175	4026.36	402.64	C
100.00-90.00			B	0.131	2.844		0.825	1	10.175			
			C	0.131	2.844		0.825	1	10.175			
T8	378.01	1722.73	A	0.124	2.87	45	0.825	1	10.439	3972.29	397.23	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
90.00-80.00			B	0.124	2.87		0.825	1	10.439			
			C	0.124	2.87		0.825	1	10.439			
T9	756.17	4897.54	A	0.14	2.81	43	0.825	1	38.705	9420.39	471.02	C
80.00-60.00			B	0.14	2.81		0.825	1	38.705			
			C	0.14	2.81		0.825	1	38.705			
T10	759.02	5700.46	A	0.129	2.85	40	0.825	1	40.060	9002.60	450.13	C
60.00-40.00			B	0.129	2.85		0.825	1	40.060			
			C	0.129	2.85		0.825	1	40.060			
T11	379.51	2942.46	A	0.123	2.875	37	0.825	1	20.539	4237.89	423.79	C
40.00-30.00			B	0.123	2.875		0.825	1	20.539			
			C	0.123	2.875		0.825	1	20.539			
T12	379.51	3139.03	A	0.119	2.889	35	0.825	1	20.868	3985.01	398.50	C
30.00-20.00			B	0.119	2.889		0.825	1	20.868			
			C	0.119	2.889		0.825	1	20.868			
T13	759.02	6187.56	A	0.108	2.934	31	0.825	1	40.659	7132.21	356.61	C
20.00-0.00			B	0.108	2.934		0.825	1	40.659			
			C	0.108	2.934		0.825	1	40.659			
Sum Weight:	5201.77	35588.43						OTM	4624.75 kip-ft	60890.03		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	44.64	1250.43	A	0.139	2.812	52	0.8	1	13.713	2381.65	119.08	C
180.00-160.00			B	0.139	2.812		0.8	1	13.713			
			C	0.139	2.812		0.8	1	13.713			
T2	152.20	1495.62	A	0.143	2.796	51	0.8	1	15.269	3254.56	162.73	C
160.00-140.00			B	0.143	2.796		0.8	1	15.269			
			C	0.143	2.796		0.8	1	15.269			
T3	88.73	825.91	A	0.151	2.77	50	0.8	1	5.828	1244.94	186.74	C
140.00-133.33			B	0.151	2.77		0.8	1	5.828			
			C	0.151	2.77		0.8	1	5.828			
T4	146.37	842.18	A	0.145	2.791	49	0.8	1	5.951	1700.85	255.13	C
133.33-126.67			B	0.145	2.791		0.8	1	5.951			
			C	0.145	2.791		0.8	1	5.951			
T5	225.61	1080.40	A	0.14	2.81	49	0.8	1	6.074	2475.95	371.39	C
126.67-120.00			B	0.14	2.81		0.8	1	6.074			
			C	0.14	2.81		0.8	1	6.074			
T6	754.97	3821.31	A	0.133	2.834	47	0.8	1	18.396	8055.32	402.77	C
120.00-100.00			B	0.133	2.834		0.8	1	18.396			
			C	0.133	2.834		0.8	1	18.396			
T7	378.01	1682.80	A	0.131	2.844	46	0.8	1	10.175	4026.36	402.64	C
100.00-90.00			B	0.131	2.844		0.8	1	10.175			
			C	0.131	2.844		0.8	1	10.175			
T8	378.01	1722.73	A	0.124	2.87	45	0.8	1	10.439	3972.29	397.23	C
90.00-80.00			B	0.124	2.87		0.8	1	10.439			
			C	0.124	2.87		0.8	1	10.439			
T9	756.17	4897.54	A	0.14	2.81	43	0.8	1	37.942	9341.78	467.09	C
80.00-60.00			B	0.14	2.81		0.8	1	37.942			
			C	0.14	2.81		0.8	1	37.942			
T10	759.02	5700.46	A	0.129	2.85	40	0.8	1	39.297	8928.31	446.42	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
60.00-40.00			B	0.129	2.85		0.8	1	39.297			
			C	0.129	2.85		0.8	1	39.297			
T11	379.51	2942.46	A	0.123	2.875	37	0.8	1	20.158	4203.14	420.31	C
40.00-30.00			B	0.123	2.875		0.8	1	20.158			
			C	0.123	2.875		0.8	1	20.158			
T12	379.51	3139.03	A	0.119	2.889	35	0.8	1	20.487	3952.47	395.25	C
30.00-20.00			B	0.119	2.889		0.8	1	20.487			
			C	0.119	2.889		0.8	1	20.487			
T13	759.02	6187.56	A	0.108	2.934	31	0.8	1	39.907	7073.60	353.68	C
20.00-0.00			B	0.108	2.934		0.8	1	39.907			
			C	0.108	2.934		0.8	1	39.907			
Sum Weight:	5201.77	35588.43						OTM	4612.92 kip-ft	60611.21		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	44.64	1250.43	A	0.139	2.812	52	0.85	1	13.713	2381.65	119.08	C
180.00-160.00			B	0.139	2.812		0.85	1	13.713			
			C	0.139	2.812		0.85	1	13.713			
T2	152.20	1495.62	A	0.143	2.796	51	0.85	1	15.269	3254.56	162.73	C
160.00-140.00			B	0.143	2.796		0.85	1	15.269			
			C	0.143	2.796		0.85	1	15.269			
T3	88.73	825.91	A	0.151	2.77	50	0.85	1	5.828	1244.94	186.74	C
140.00-133.33			B	0.151	2.77		0.85	1	5.828			
			C	0.151	2.77		0.85	1	5.828			
T4	146.37	842.18	A	0.145	2.791	49	0.85	1	5.951	1700.85	255.13	C
133.33-126.67			B	0.145	2.791		0.85	1	5.951			
			C	0.145	2.791		0.85	1	5.951			
T5	225.61	1080.40	A	0.14	2.81	49	0.85	1	6.074	2475.95	371.39	C
126.67-120.00			B	0.14	2.81		0.85	1	6.074			
			C	0.14	2.81		0.85	1	6.074			
T6	754.97	3821.31	A	0.133	2.834	47	0.85	1	18.396	8055.32	402.77	C
120.00-100.00			B	0.133	2.834		0.85	1	18.396			
			C	0.133	2.834		0.85	1	18.396			
T7	378.01	1682.80	A	0.131	2.844	46	0.85	1	10.175	4026.36	402.64	C
100.00-90.00			B	0.131	2.844		0.85	1	10.175			
			C	0.131	2.844		0.85	1	10.175			
T8	378.01	1722.73	A	0.124	2.87	45	0.85	1	10.439	3972.29	397.23	C
90.00-80.00			B	0.124	2.87		0.85	1	10.439			
			C	0.124	2.87		0.85	1	10.439			
T9	756.17	4897.54	A	0.14	2.81	43	0.85	1	39.467	9499.00	474.95	C
80.00-60.00			B	0.14	2.81		0.85	1	39.467			
			C	0.14	2.81		0.85	1	39.467			
T10	759.02	5700.46	A	0.129	2.85	40	0.85	1	40.822	9076.89	453.84	C
60.00-40.00			B	0.129	2.85		0.85	1	40.822			
			C	0.129	2.85		0.85	1	40.822			
T11	379.51	2942.46	A	0.123	2.875	37	0.85	1	20.920	4272.65	427.27	C
40.00-30.00			B	0.123	2.875		0.85	1	20.920			
			C	0.123	2.875		0.85	1	20.920			
T12	379.51	3139.03	A	0.119	2.889	35	0.85	1	21.249	4017.56	401.76	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
30.00-20.00			B	0.119	2.889		0.85	1	21.249			
			C	0.119	2.889		0.85	1	21.249			
T13	759.02	6187.56	A	0.108	2.934	31	0.85	1	41.411	7190.83	359.54	C
20.00-0.00			B	0.108	2.934		0.85	1	41.411			
			C	0.108	2.934		0.85	1	41.411			
Sum Weight:	5201.77	35588.43						OTM	4636.58 kip-ft	61168.85		

Tower Forces - With Ice - Wind Normal To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	492.24	3296.69	A	0.273	2.37	8	1	1	29.387	725.96	36.30	C
180.00-160.00			B	0.273	2.37		1	1	29.387			
			C	0.273	2.37		1	1	29.387			
T2	1113.48	3710.35	A	0.265	2.392	7	1	1	32.082	1077.01	53.85	C
160.00-140.00			B	0.265	2.392		1	1	32.082			
			C	0.265	2.392		1	1	32.082			
T3	519.89	1666.01	A	0.262	2.403	7	1	1	12.050	413.89	62.08	C
140.00-133.33			B	0.262	2.403		1	1	12.050			
			C	0.262	2.403		1	1	12.050			
T4	894.36	1704.37	A	0.253	2.43	7	1	1	12.264	627.08	94.06	C
133.33-126.67			B	0.253	2.43		1	1	12.264			
			C	0.253	2.43		1	1	12.264			
T5	1489.41	1963.86	A	0.244	2.455	7	1	1	12.478	788.09	118.21	C
126.67-120.00			B	0.244	2.455		1	1	12.478			
			C	0.244	2.455		1	1	12.478			
T6	5047.78	6329.32	A	0.215	2.548	7	1	1	36.398	2480.09	124.00	C
120.00-100.00			B	0.215	2.548		1	1	36.398			
			C	0.215	2.548		1	1	36.398			
T7	2507.87	3059.90	A	0.206	2.576	7	1	1	19.516	1227.03	122.70	C
100.00-90.00			B	0.206	2.576		1	1	19.516			
			C	0.206	2.576		1	1	19.516			
T8	2487.58	3136.47	A	0.195	2.611	7	1	1	19.938	1205.42	120.54	C
90.00-80.00			B	0.195	2.611		1	1	19.938			
			C	0.195	2.611		1	1	19.938			
T9	4908.83	8816.59	A	0.199	2.6	6	1	1	60.444	2592.92	129.65	C
80.00-60.00			B	0.199	2.6		1	1	60.444			
			C	0.199	2.6		1	1	60.444			
T10	4846.69	9758.08	A	0.184	2.651	6	1	1	62.111	2465.45	123.27	C
60.00-40.00			B	0.184	2.651		1	1	62.111			
			C	0.184	2.651		1	1	62.111			
T11	2363.38	4973.51	A	0.174	2.685	6	1	1	31.596	1146.80	114.68	C
40.00-30.00			B	0.174	2.685		1	1	31.596			
			C	0.174	2.685		1	1	31.596			
T12	2309.50	5147.00	A	0.168	2.707	5	1	1	31.873	1067.46	106.75	C
30.00-20.00			B	0.168	2.707		1	1	31.873			
			C	0.168	2.707		1	1	31.873			
T13	4349.86	9424.22	A	0.148	2.779	5	1	1	60.740	1871.60	93.58	C
20.00-0.00			B	0.148	2.779		1	1	60.740			
			C	0.148	2.779		1	1	60.740			
Sum Weight:	33330.89	62986.34						OTM	1402.40	17688.80		

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
									kip-ft			

Tower Forces - With Ice - Wind 45 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	492.24	3296.69	A	0.273	2.37	8	0.825	1	29.387	725.96	36.30	C
180.00-160.00			B	0.273	2.37		0.825	1	29.387			
			C	0.273	2.37		0.825	1	29.387			
T2	1113.48	3710.35	A	0.265	2.392	7	0.825	1	32.082	1077.01	53.85	C
160.00-140.00			B	0.265	2.392		0.825	1	32.082			
			C	0.265	2.392		0.825	1	32.082			
T3	519.89	1666.01	A	0.262	2.403	7	0.825	1	12.050	413.89	62.08	C
140.00-133.33			B	0.262	2.403		0.825	1	12.050			
			C	0.262	2.403		0.825	1	12.050			
T4	894.36	1704.37	A	0.253	2.43	7	0.825	1	12.264	627.08	94.06	C
133.33-126.67			B	0.253	2.43		0.825	1	12.264			
			C	0.253	2.43		0.825	1	12.264			
T5	1489.41	1963.86	A	0.244	2.455	7	0.825	1	12.478	788.09	118.21	C
126.67-120.00			B	0.244	2.455		0.825	1	12.478			
			C	0.244	2.455		0.825	1	12.478			
T6	5047.78	6329.32	A	0.215	2.548	7	0.825	1	36.398	2480.09	124.00	C
120.00-100.00			B	0.215	2.548		0.825	1	36.398			
			C	0.215	2.548		0.825	1	36.398			
T7	2507.87	3059.90	A	0.206	2.576	7	0.825	1	19.516	1227.03	122.70	C
100.00-90.00			B	0.206	2.576		0.825	1	19.516			
			C	0.206	2.576		0.825	1	19.516			
T8	2487.58	3136.47	A	0.195	2.611	7	0.825	1	19.938	1205.42	120.54	C
90.00-80.00			B	0.195	2.611		0.825	1	19.938			
			C	0.195	2.611		0.825	1	19.938			
T9	4908.83	8816.59	A	0.199	2.6	6	0.825	1	54.141	2503.95	125.20	C
80.00-60.00			B	0.199	2.6		0.825	1	54.141			
			C	0.199	2.6		0.825	1	54.141			
T10	4846.69	9758.08	A	0.184	2.651	6	0.825	1	55.839	2381.37	119.07	C
60.00-40.00			B	0.184	2.651		0.825	1	55.839			
			C	0.184	2.651		0.825	1	55.839			
T11	2363.38	4973.51	A	0.174	2.685	6	0.825	1	28.477	1107.50	110.75	C
40.00-30.00			B	0.174	2.685		0.825	1	28.477			
			C	0.174	2.685		0.825	1	28.477			
T12	2309.50	5147.00	A	0.168	2.707	5	0.825	1	28.769	1030.72	103.07	C
30.00-20.00			B	0.168	2.707		0.825	1	28.769			
			C	0.168	2.707		0.825	1	28.769			
T13	4349.86	9424.22	A	0.148	2.779	5	0.825	1	54.680	1805.42	90.27	C
20.00-0.00			B	0.148	2.779		0.825	1	54.680			
			C	0.148	2.779		0.825	1	54.680			
Sum Weight:	33330.89	62986.34						OTM	1389.02 kip-ft	17373.53		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	492.24	3296.69	A	0.273	2.37	8	0.8	1	29.387	725.96	36.30	C
180.00-160.00			B	0.273	2.37		0.8	1	29.387			
			C	0.273	2.37		0.8	1	29.387			
T2	1113.48	3710.35	A	0.265	2.392	7	0.8	1	32.082	1077.01	53.85	C
160.00-140.00			B	0.265	2.392		0.8	1	32.082			
			C	0.265	2.392		0.8	1	32.082			
T3	519.89	1666.01	A	0.262	2.403	7	0.8	1	12.050	413.89	62.08	C
140.00-133.33			B	0.262	2.403		0.8	1	12.050			
			C	0.262	2.403		0.8	1	12.050			
T4	894.36	1704.37	A	0.253	2.43	7	0.8	1	12.264	627.08	94.06	C
133.33-126.67			B	0.253	2.43		0.8	1	12.264			
			C	0.253	2.43		0.8	1	12.264			
T5	1489.41	1963.86	A	0.244	2.455	7	0.8	1	12.478	788.09	118.21	C
126.67-120.00			B	0.244	2.455		0.8	1	12.478			
			C	0.244	2.455		0.8	1	12.478			
T6	5047.78	6329.32	A	0.215	2.548	7	0.8	1	36.398	2480.09	124.00	C
120.00-100.00			B	0.215	2.548		0.8	1	36.398			
			C	0.215	2.548		0.8	1	36.398			
T7	2507.87	3059.90	A	0.206	2.576	7	0.8	1	19.516	1227.03	122.70	C
100.00-90.00			B	0.206	2.576		0.8	1	19.516			
			C	0.206	2.576		0.8	1	19.516			
T8	2487.58	3136.47	A	0.195	2.611	7	0.8	1	19.938	1205.42	120.54	C
90.00-80.00			B	0.195	2.611		0.8	1	19.938			
			C	0.195	2.611		0.8	1	19.938			
T9	4908.83	8816.59	A	0.199	2.6	6	0.8	1	53.240	2491.24	124.56	C
80.00-60.00			B	0.199	2.6		0.8	1	53.240			
			C	0.199	2.6		0.8	1	53.240			
T10	4846.69	9758.08	A	0.184	2.651	6	0.8	1	54.943	2369.35	118.47	C
60.00-40.00			B	0.184	2.651		0.8	1	54.943			
			C	0.184	2.651		0.8	1	54.943			
T11	2363.38	4973.51	A	0.174	2.685	6	0.8	1	28.031	1101.88	110.19	C
40.00-30.00			B	0.174	2.685		0.8	1	28.031			
			C	0.174	2.685		0.8	1	28.031			
T12	2309.50	5147.00	A	0.168	2.707	5	0.8	1	28.325	1025.48	102.55	C
30.00-20.00			B	0.168	2.707		0.8	1	28.325			
			C	0.168	2.707		0.8	1	28.325			
T13	4349.86	9424.22	A	0.148	2.779	5	0.8	1	53.815	1795.97	89.80	C
20.00-0.00			B	0.148	2.779		0.8	1	53.815			
			C	0.148	2.779		0.8	1	53.815			
Sum Weight:	33330.89	62986.34						OTM	1387.10 kip-ft	17328.49		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	492.24	3296.69	A	0.273	2.37	8	0.85	1	29.387	725.96	36.30	C
180.00-160.00			B	0.273	2.37		0.85	1	29.387			
			C	0.273	2.37		0.85	1	29.387			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T2	1113.48	3710.35	A	0.265	2.392	7	0.85	1	32.082	1077.01	53.85	C
160.00-140.00			B	0.265	2.392		0.85	1	32.082			
			C	0.265	2.392		0.85	1	32.082			
T3	519.89	1666.01	A	0.262	2.403	7	0.85	1	12.050	413.89	62.08	C
140.00-133.33			B	0.262	2.403		0.85	1	12.050			
			C	0.262	2.403		0.85	1	12.050			
T4	894.36	1704.37	A	0.253	2.43	7	0.85	1	12.264	627.08	94.06	C
133.33-126.67			B	0.253	2.43		0.85	1	12.264			
			C	0.253	2.43		0.85	1	12.264			
T5	1489.41	1963.86	A	0.244	2.455	7	0.85	1	12.478	788.09	118.21	C
126.67-120.00			B	0.244	2.455		0.85	1	12.478			
			C	0.244	2.455		0.85	1	12.478			
T6	5047.78	6329.32	A	0.215	2.548	7	0.85	1	36.398	2480.09	124.00	C
120.00-100.00			B	0.215	2.548		0.85	1	36.398			
			C	0.215	2.548		0.85	1	36.398			
T7	2507.87	3059.90	A	0.206	2.576	7	0.85	1	19.516	1227.03	122.70	C
100.00-90.00			B	0.206	2.576		0.85	1	19.516			
			C	0.206	2.576		0.85	1	19.516			
T8	2487.58	3136.47	A	0.195	2.611	7	0.85	1	19.938	1205.42	120.54	C
90.00-80.00			B	0.195	2.611		0.85	1	19.938			
			C	0.195	2.611		0.85	1	19.938			
T9	4908.83	8816.59	A	0.199	2.6	6	0.85	1	55.041	2516.66	125.83	C
80.00-60.00			B	0.199	2.6		0.85	1	55.041			
			C	0.199	2.6		0.85	1	55.041			
T10	4846.69	9758.08	A	0.184	2.651	6	0.85	1	56.735	2393.38	119.67	C
60.00-40.00			B	0.184	2.651		0.85	1	56.735			
			C	0.184	2.651		0.85	1	56.735			
T11	2363.38	4973.51	A	0.174	2.685	6	0.85	1	28.922	1113.11	111.31	C
40.00-30.00			B	0.174	2.685		0.85	1	28.922			
			C	0.174	2.685		0.85	1	28.922			
T12	2309.50	5147.00	A	0.168	2.707	5	0.85	1	29.212	1035.97	103.60	C
30.00-20.00			B	0.168	2.707		0.85	1	29.212			
			C	0.168	2.707		0.85	1	29.212			
T13	4349.86	9424.22	A	0.148	2.779	5	0.85	1	55.546	1814.88	90.74	C
20.00-0.00			B	0.148	2.779		0.85	1	55.546			
			C	0.148	2.779		0.85	1	55.546			
Sum Weight:	33330.89	62986.34						OTM	1390.93 kip-ft	17418.57		

Tower Forces - Service - Wind Normal To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	44.64	1250.43	A	0.139	2.812	11	1	1	13.993	514.75	25.74	C
180.00-160.00			B	0.139	2.812		1	1	13.993			
			C	0.139	2.812		1	1	13.993			
T2	152.20	1495.62	A	0.143	2.796	11	1	1	16.334	720.60	36.03	C
160.00-140.00			B	0.143	2.796		1	1	16.334			
			C	0.143	2.796		1	1	16.334			
T3	88.73	825.91	A	0.151	2.77	11	1	1	6.561	283.47	42.52	C
140.00-133.33			B	0.151	2.77		1	1	6.561			
			C	0.151	2.77		1	1	6.561			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T4	146.37	842.18	A	0.145	2.791	10	1	1	6.687	380.60	57.09	C
133.33-126.67			B	0.145	2.791		1	1	6.687			
			C	0.145	2.791		1	1	6.687			
T5	225.61	1080.40	A	0.14	2.81	10	1	1	6.810	545.65	81.85	C
126.67-120.00			B	0.14	2.81		1	1	6.810			
			C	0.14	2.81		1	1	6.810			
T6	754.97	3821.31	A	0.133	2.834	10	1	1	21.840	1799.85	89.99	C
120.00-100.00			B	0.133	2.834		1	1	21.840			
			C	0.133	2.834		1	1	21.840			
T7	378.01	1682.80	A	0.131	2.844	10	1	1	12.011	901.22	90.12	C
100.00-90.00			B	0.131	2.844		1	1	12.011			
			C	0.131	2.844		1	1	12.011			
T8	378.01	1722.73	A	0.124	2.87	10	1	1	12.296	889.58	88.96	C
90.00-80.00			B	0.124	2.87		1	1	12.296			
			C	0.124	2.87		1	1	12.296			
T9	756.17	4897.54	A	0.14	2.81	9	1	1	44.170	2126.75	106.34	C
80.00-60.00			B	0.14	2.81		1	1	44.170			
			C	0.14	2.81		1	1	44.170			
T10	759.02	5700.46	A	0.129	2.85	9	1	1	45.441	2029.41	101.47	C
60.00-40.00			B	0.129	2.85		1	1	45.441			
			C	0.129	2.85		1	1	45.441			
T11	379.51	2942.46	A	0.123	2.875	8	1	1	23.207	954.58	95.46	C
40.00-30.00			B	0.123	2.875		1	1	23.207			
			C	0.123	2.875		1	1	23.207			
T12	379.51	3139.03	A	0.119	2.889	7	1	1	23.536	897.41	89.74	C
30.00-20.00			B	0.119	2.889		1	1	23.536			
			C	0.119	2.889		1	1	23.536			
T13	759.02	6187.56	A	0.108	2.934	7	1	1	45.955	1607.24	80.36	C
20.00-0.00			B	0.108	2.934		1	1	45.955			
			C	0.108	2.934		1	1	45.955			
Sum Weight:	5201.77	35588.43						OTM	1032.59 kip-ft	13651.11		

Tower Forces - Service - Wind 45 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	44.64	1250.43	A	0.139	2.812	11	0.825	1	13.993	514.75	25.74	C
180.00-160.00			B	0.139	2.812		0.825	1	13.993			
			C	0.139	2.812		0.825	1	13.993			
T2	152.20	1495.62	A	0.143	2.796	11	0.825	1	16.334	720.60	36.03	C
160.00-140.00			B	0.143	2.796		0.825	1	16.334			
			C	0.143	2.796		0.825	1	16.334			
T3	88.73	825.91	A	0.151	2.77	11	0.825	1	6.561	283.47	42.52	C
140.00-133.33			B	0.151	2.77		0.825	1	6.561			
			C	0.151	2.77		0.825	1	6.561			
T4	146.37	842.18	A	0.145	2.791	10	0.825	1	6.687	380.60	57.09	C
133.33-126.67			B	0.145	2.791		0.825	1	6.687			
			C	0.145	2.791		0.825	1	6.687			
T5	225.61	1080.40	A	0.14	2.81	10	0.825	1	6.810	545.65	81.85	C
126.67-120.00			B	0.14	2.81		0.825	1	6.810			
			C	0.14	2.81		0.825	1	6.810			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T6	754.97	3821.31	A	0.133	2.834	10	0.825	1	21.840	1799.85	89.99	C
120.00-100.00			B	0.133	2.834		0.825	1	21.840			
			C	0.133	2.834		0.825	1	21.840			
T7	378.01	1682.80	A	0.131	2.844	10	0.825	1	12.011	901.22	90.12	C
100.00-90.00			B	0.131	2.844		0.825	1	12.011			
			C	0.131	2.844		0.825	1	12.011			
T8	378.01	1722.73	A	0.124	2.87	10	0.825	1	12.296	889.58	88.96	C
90.00-80.00			B	0.124	2.87		0.825	1	12.296			
			C	0.124	2.87		0.825	1	12.296			
T9	756.17	4897.54	A	0.14	2.81	9	0.825	1	38.833	2009.53	100.48	C
80.00-60.00			B	0.14	2.81		0.825	1	38.833			
			C	0.14	2.81		0.825	1	38.833			
T10	759.02	5700.46	A	0.129	2.85	9	0.825	1	40.104	1918.63	95.93	C
60.00-40.00			B	0.129	2.85		0.825	1	40.104			
			C	0.129	2.85		0.825	1	40.104			
T11	379.51	2942.46	A	0.123	2.875	8	0.825	1	20.539	902.75	90.27	C
40.00-30.00			B	0.123	2.875		0.825	1	20.539			
			C	0.123	2.875		0.825	1	20.539			
T12	379.51	3139.03	A	0.119	2.889	7	0.825	1	20.868	848.88	84.89	C
30.00-20.00			B	0.119	2.889		0.825	1	20.868			
			C	0.119	2.889		0.825	1	20.868			
T13	759.02	6187.56	A	0.108	2.934	7	0.825	1	40.692	1519.84	75.99	C
20.00-0.00			B	0.108	2.934		0.825	1	40.692			
			C	0.108	2.934		0.825	1	40.692			
Sum Weight:	5201.77	35588.43						OTM	1014.94 kip-ft	13235.35		

Tower Forces - Service - Wind 60 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	44.64	1250.43	A	0.139	2.812	11	0.8	1	13.993	514.75	25.74	C
180.00-160.00			B	0.139	2.812		0.8	1	13.993			
			C	0.139	2.812		0.8	1	13.993			
T2	152.20	1495.62	A	0.143	2.796	11	0.8	1	16.334	720.60	36.03	C
160.00-140.00			B	0.143	2.796		0.8	1	16.334			
			C	0.143	2.796		0.8	1	16.334			
T3	88.73	825.91	A	0.151	2.77	11	0.8	1	6.561	283.47	42.52	C
140.00-133.33			B	0.151	2.77		0.8	1	6.561			
			C	0.151	2.77		0.8	1	6.561			
T4	146.37	842.18	A	0.145	2.791	10	0.8	1	6.687	380.60	57.09	C
133.33-126.67			B	0.145	2.791		0.8	1	6.687			
			C	0.145	2.791		0.8	1	6.687			
T5	225.61	1080.40	A	0.14	2.81	10	0.8	1	6.810	545.65	81.85	C
126.67-120.00			B	0.14	2.81		0.8	1	6.810			
			C	0.14	2.81		0.8	1	6.810			
T6	754.97	3821.31	A	0.133	2.834	10	0.8	1	21.840	1799.85	89.99	C
120.00-100.00			B	0.133	2.834		0.8	1	21.840			
			C	0.133	2.834		0.8	1	21.840			
T7	378.01	1682.80	A	0.131	2.844	10	0.8	1	12.011	901.22	90.12	C
100.00-90.00			B	0.131	2.844		0.8	1	12.011			
			C	0.131	2.844		0.8	1	12.011			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T8	378.01	1722.73	A	0.124	2.87	10	0.8	1	12.296	889.58	88.96	C
90.00-80.00			B	0.124	2.87		0.8	1	12.296			
			C	0.124	2.87		0.8	1	12.296			
T9	756.17	4897.54	A	0.14	2.81	9	0.8	1	38.071	1992.79	99.64	C
80.00-60.00			B	0.14	2.81		0.8	1	38.071			
			C	0.14	2.81		0.8	1	38.071			
T10	759.02	5700.46	A	0.129	2.85	9	0.8	1	39.342	1902.81	95.14	C
60.00-40.00			B	0.129	2.85		0.8	1	39.342			
			C	0.129	2.85		0.8	1	39.342			
T11	379.51	2942.46	A	0.123	2.875	8	0.8	1	20.158	895.34	89.53	C
40.00-30.00			B	0.123	2.875		0.8	1	20.158			
			C	0.123	2.875		0.8	1	20.158			
T12	379.51	3139.03	A	0.119	2.889	7	0.8	1	20.487	841.95	84.19	C
30.00-20.00			B	0.119	2.889		0.8	1	20.487			
			C	0.119	2.889		0.8	1	20.487			
T13	759.02	6187.56	A	0.108	2.934	7	0.8	1	39.940	1507.35	75.37	C
20.00-0.00			B	0.108	2.934		0.8	1	39.940			
			C	0.108	2.934		0.8	1	39.940			
Sum Weight:	5201.77	35588.43						OTM	1012.42 kip-ft	13175.95		

Tower Forces - Service - Wind 90 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T1	44.64	1250.43	A	0.139	2.812	11	0.85	1	13.993	514.75	25.74	C
180.00-160.00			B	0.139	2.812		0.85	1	13.993			
			C	0.139	2.812		0.85	1	13.993			
T2	152.20	1495.62	A	0.143	2.796	11	0.85	1	16.334	720.60	36.03	C
160.00-140.00			B	0.143	2.796		0.85	1	16.334			
			C	0.143	2.796		0.85	1	16.334			
T3	88.73	825.91	A	0.151	2.77	11	0.85	1	6.561	283.47	42.52	C
140.00-133.33			B	0.151	2.77		0.85	1	6.561			
			C	0.151	2.77		0.85	1	6.561			
T4	146.37	842.18	A	0.145	2.791	10	0.85	1	6.687	380.60	57.09	C
133.33-126.67			B	0.145	2.791		0.85	1	6.687			
			C	0.145	2.791		0.85	1	6.687			
T5	225.61	1080.40	A	0.14	2.81	10	0.85	1	6.810	545.65	81.85	C
126.67-120.00			B	0.14	2.81		0.85	1	6.810			
			C	0.14	2.81		0.85	1	6.810			
T6	754.97	3821.31	A	0.133	2.834	10	0.85	1	21.840	1799.85	89.99	C
120.00-100.00			B	0.133	2.834		0.85	1	21.840			
			C	0.133	2.834		0.85	1	21.840			
T7	378.01	1682.80	A	0.131	2.844	10	0.85	1	12.011	901.22	90.12	C
100.00-90.00			B	0.131	2.844		0.85	1	12.011			
			C	0.131	2.844		0.85	1	12.011			
T8	378.01	1722.73	A	0.124	2.87	10	0.85	1	12.296	889.58	88.96	C
90.00-80.00			B	0.124	2.87		0.85	1	12.296			
			C	0.124	2.87		0.85	1	12.296			
T9	756.17	4897.54	A	0.14	2.81	9	0.85	1	39.595	2026.28	101.31	C
80.00-60.00			B	0.14	2.81		0.85	1	39.595			
			C	0.14	2.81		0.85	1	39.595			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T10	759.02	5700.46	A	0.129	2.85	9	0.85	1	40.867	1934.46	96.72	C
60.00-40.00			B	0.129	2.85		0.85	1	40.867			
			C	0.129	2.85		0.85	1	40.867			
T11	379.51	2942.46	A	0.123	2.875	8	0.85	1	20.920	910.15	91.02	C
40.00-30.00			B	0.123	2.875		0.85	1	20.920			
			C	0.123	2.875		0.85	1	20.920			
T12	379.51	3139.03	A	0.119	2.889	7	0.85	1	21.249	855.81	85.58	C
30.00-20.00			B	0.119	2.889		0.85	1	21.249			
			C	0.119	2.889		0.85	1	21.249			
T13	759.02	6187.56	A	0.108	2.934	7	0.85	1	41.444	1532.32	76.62	C
20.00-0.00			B	0.108	2.934		0.85	1	41.444			
			C	0.108	2.934		0.85	1	41.444			
Sum Weight:	5201.77	35588.43						OTM	1017.46 kip-ft	13294.74		

Force Totals

Load Case	Vertical Forces lb	Sum of Forces X lb	Sum of Forces Z lb	Sum of Overturning Moments, M_x kip-ft	Sum of Overturning Moments, M_z kip-ft	Sum of Torques kip-ft
Leg Weight	17198.81					
Bracing Weight	18389.62					
Total Member Self-Weight	35588.43			-18.52	-9.48	
Total Weight	54379.73			-18.52	-9.48	
Wind 0 deg - No Ice		1.43	-86954.21	-8208.96	-9.74	59.45
Wind 30 deg - No Ice		42441.04	-73545.11	-6999.25	-4036.22	-40.17
Wind 45 deg - No Ice		59583.97	-59678.15	-5681.55	-5655.84	-86.03
Wind 60 deg - No Ice		72418.73	-41955.78	-4000.14	-6861.45	-125.86
Wind 90 deg - No Ice		83841.63	-179.39	-50.27	-7887.10	-179.68
Wind 120 deg - No Ice		74341.86	42852.20	3970.24	-6939.40	-187.89
Wind 135 deg - No Ice		60295.26	60328.31	5651.10	-5673.25	-172.36
Wind 150 deg - No Ice		42368.31	73459.32	6944.51	-4021.90	-144.49
Wind 180 deg - No Ice		19.18	84488.04	8035.55	-12.88	-60.27
Wind 210 deg - No Ice		-42285.64	73266.92	6912.97	3989.75	38.09
Wind 225 deg - No Ice		-59325.38	59379.32	5591.61	5591.10	83.97
Wind 240 deg - No Ice		-74094.35	42772.02	3957.50	6879.14	123.79
Wind 270 deg - No Ice		-83783.41	-146.87	-44.52	7857.83	177.93
Wind 300 deg - No Ice		-72534.78	-42064.33	-4017.90	6860.51	186.87
Wind 315 deg - No Ice		-59743.74	-59881.89	-5715.24	5662.78	171.29
Wind 330 deg - No Ice		-42542.27	-73788.58	-7039.83	4033.72	143.53
Member Ice	27397.91					
Total Weight Ice	127229.50			-156.82	-66.07	
Wind 0 deg - Ice		0.23	-22746.10	-2287.99	-66.11	26.51
Wind 30 deg - Ice		11200.75	-19405.80	-1982.83	-1119.76	4.19
Wind 45 deg - Ice		15762.05	-15776.89	-1640.48	-1547.11	-7.52
Wind 60 deg - Ice		19205.08	-11110.88	-1201.27	-1868.11	-18.69
Wind 90 deg - Ice		22199.76	-28.27	-161.82	-2139.34	-36.89
Wind 120 deg - Ice		19514.27	11255.68	888.80	-1880.47	-45.66
Wind 135 deg - Ice		15875.85	15881.06	1327.77	-1549.75	-45.41
Wind 150 deg - Ice		11188.43	19390.80	1666.15	-1117.35	-41.96
Wind 180 deg - Ice		3.02	22348.66	1952.48	-66.61	-26.64
Wind 210 deg - Ice		-11176.27	19361.96	1661.43	983.28	-4.52
Wind 225 deg - Ice		-15721.30	15729.80	1318.50	1407.75	7.19

Load Case	Vertical Forces lb	Sum of Forces X lb	Sum of Forces Z lb	Sum of Overturning Moments, M_x kip-ft	Sum of Overturning Moments, M_z kip-ft	Sum of Torques kip-ft
Wind 240 deg - Ice		-19476.76	11243.91	886.93	1742.07	18.36
Wind 270 deg - Ice		-22190.59	-23.14	-160.92	2005.57	36.61
Wind 300 deg - Ice		-19221.88	-11127.12	-1203.92	1738.55	45.50
Wind 315 deg - Ice		-15785.82	-15807.59	-1645.55	1418.80	45.24
Wind 330 deg - Ice		-11215.85	-19442.68	-1988.97	990.06	41.81
Total Weight	54379.73			-18.52	-9.48	
Wind 0 deg - Service		0.30	-18787.48	-1777.54	3.40	12.66
Wind 30 deg - Service		9173.04	-15895.64	-1515.86	-869.21	-8.56
Wind 45 deg - Service		12879.61	-12899.67	-1230.43	-1220.39	-18.33
Wind 60 deg - Service		15655.70	-9069.67	-866.09	-1481.94	-26.81
Wind 90 deg - Service		18124.45	-38.21	-9.81	-1704.41	-38.28
Wind 120 deg - Service		16065.36	9260.62	861.52	-1498.54	-40.02
Wind 135 deg - Service		13031.12	13038.17	1225.75	-1224.10	-36.72
Wind 150 deg - Service		9157.55	15877.37	1506.00	-866.16	-30.78
Wind 180 deg - Service		4.09	18262.14	1742.40	2.73	-12.84
Wind 210 deg - Service		-9139.94	15836.38	1499.28	870.25	8.11
Wind 225 deg - Service		-12824.52	12836.01	1213.08	1217.54	17.89
Wind 240 deg - Service		-16012.64	9243.54	858.81	1496.65	26.37
Wind 270 deg - Service		-18112.04	-31.28	-8.58	1709.11	37.90
Wind 300 deg - Service		-15680.42	-9092.79	-869.88	1492.68	39.81
Wind 315 deg - Service		-12913.64	-12943.07	-1237.61	1232.81	36.49
Wind 330 deg - Service		-9194.60	-15947.51	-1524.51	879.62	30.57

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 45 deg - No Ice
7	0.9 Dead+1.0 Wind 45 deg - No Ice
8	1.2 Dead+1.0 Wind 60 deg - No Ice
9	0.9 Dead+1.0 Wind 60 deg - No Ice
10	1.2 Dead+1.0 Wind 90 deg - No Ice
11	0.9 Dead+1.0 Wind 90 deg - No Ice
12	1.2 Dead+1.0 Wind 120 deg - No Ice
13	0.9 Dead+1.0 Wind 120 deg - No Ice
14	1.2 Dead+1.0 Wind 135 deg - No Ice
15	0.9 Dead+1.0 Wind 135 deg - No Ice
16	1.2 Dead+1.0 Wind 150 deg - No Ice
17	0.9 Dead+1.0 Wind 150 deg - No Ice
18	1.2 Dead+1.0 Wind 180 deg - No Ice
19	0.9 Dead+1.0 Wind 180 deg - No Ice
20	1.2 Dead+1.0 Wind 210 deg - No Ice
21	0.9 Dead+1.0 Wind 210 deg - No Ice
22	1.2 Dead+1.0 Wind 225 deg - No Ice
23	0.9 Dead+1.0 Wind 225 deg - No Ice
24	1.2 Dead+1.0 Wind 240 deg - No Ice
25	0.9 Dead+1.0 Wind 240 deg - No Ice
26	1.2 Dead+1.0 Wind 270 deg - No Ice
27	0.9 Dead+1.0 Wind 270 deg - No Ice
28	1.2 Dead+1.0 Wind 300 deg - No Ice
29	0.9 Dead+1.0 Wind 300 deg - No Ice

Comb. No.	Description
30	1.2 Dead+1.0 Wind 315 deg - No Ice
31	0.9 Dead+1.0 Wind 315 deg - No Ice
32	1.2 Dead+1.0 Wind 330 deg - No Ice
33	0.9 Dead+1.0 Wind 330 deg - No Ice
34	1.2 Dead+1.0 Ice
35	1.2 Dead+1.0 Wind 0 deg+1.0 Ice
36	1.2 Dead+1.0 Wind 30 deg+1.0 Ice
37	1.2 Dead+1.0 Wind 45 deg+1.0 Ice
38	1.2 Dead+1.0 Wind 60 deg+1.0 Ice
39	1.2 Dead+1.0 Wind 90 deg+1.0 Ice
40	1.2 Dead+1.0 Wind 120 deg+1.0 Ice
41	1.2 Dead+1.0 Wind 135 deg+1.0 Ice
42	1.2 Dead+1.0 Wind 150 deg+1.0 Ice
43	1.2 Dead+1.0 Wind 180 deg+1.0 Ice
44	1.2 Dead+1.0 Wind 210 deg+1.0 Ice
45	1.2 Dead+1.0 Wind 225 deg+1.0 Ice
46	1.2 Dead+1.0 Wind 240 deg+1.0 Ice
47	1.2 Dead+1.0 Wind 270 deg+1.0 Ice
48	1.2 Dead+1.0 Wind 300 deg+1.0 Ice
49	1.2 Dead+1.0 Wind 315 deg+1.0 Ice
50	1.2 Dead+1.0 Wind 330 deg+1.0 Ice
51	Dead+Wind 0 deg - Service
52	Dead+Wind 30 deg - Service
53	Dead+Wind 45 deg - Service
54	Dead+Wind 60 deg - Service
55	Dead+Wind 90 deg - Service
56	Dead+Wind 120 deg - Service
57	Dead+Wind 135 deg - Service
58	Dead+Wind 150 deg - Service
59	Dead+Wind 180 deg - Service
60	Dead+Wind 210 deg - Service
61	Dead+Wind 225 deg - Service
62	Dead+Wind 240 deg - Service
63	Dead+Wind 270 deg - Service
64	Dead+Wind 300 deg - Service
65	Dead+Wind 315 deg - Service
66	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	180 - 160	Leg	Max Tension	31	2515.64	-0.27	-0.18
			Max. Compression	2	-4183.04	-0.06	-0.02
			Max. Mx	14	-410.23	-0.53	-0.01
			Max. My	33	-144.55	-0.01	-0.92
			Max. Vy	3	328.07	0.52	0.33
			Max. Vx	32	-471.79	-0.01	0.74
		Diagonal	Max Tension	5	4061.67	0.00	0.00
			Max. Compression	4	-4128.96	0.00	0.00
			Max. Mx	34	-69.73	0.05	0.00
			Max. Vy	34	22.77	0.00	0.00
		Horizontal	Max Tension	4	2233.61	-0.01	-0.00
			Max. Compression	5	-2199.42	-0.01	-0.00
			Max. Mx	49	-126.51	-0.02	-0.00
			Max. My	3	-297.94	-0.00	0.00
			Max. Vy	49	23.92	-0.02	-0.00
			Max. Vx	3	-0.81	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Top Girt	Max Tension	33	324.64	-0.01	0.00
			Max. Compression	2	-352.97	-0.01	-0.00
			Max. Mx	49	15.92	-0.02	-0.00
			Max. My	3	-51.93	-0.00	0.00
			Max. Vy	49	-23.10	-0.02	-0.00
			Max. Vx	3	-0.13	0.00	0.00
		Inner Bracing	Max Tension	3	1.84	0.00	0.00
			Max. Compression	18	-1.84	0.00	0.00
			Max. Mx	34	-0.10	-0.02	0.00
			Max. Vy	34	19.13	0.00	0.00
T2	160 - 140	Leg	Max Tension	19	21755.95	-0.58	-0.03
			Max. Compression	2	-29174.98	0.79	0.08
			Max. Mx	8	19255.83	1.03	0.09
			Max. My	18	-15607.62	0.37	0.90
			Max. Vy	18	-2396.71	0.07	0.02
			Max. Vx	8	2301.54	-0.02	-0.08
		Diagonal	Max Tension	5	9263.08	0.00	0.00
			Max. Compression	4	-9339.82	0.00	0.00
			Max. Mx	34	-194.19	0.06	0.00
			Max. Vy	34	-28.02	0.00	0.00
		Horizontal	Max Tension	5	5811.45	-0.01	0.00
			Max. Compression	5	-5810.94	-0.01	0.00
			Max. Mx	49	22.05	-0.03	-0.00
			Max. My	2	2246.18	-0.01	0.01
			Max. Vy	49	-27.90	-0.03	-0.00
			Max. Vx	2	-2.40	-0.01	0.01
		Inner Bracing	Max Tension	3	4.62	0.00	0.00
			Max. Compression	18	-6.50	0.00	0.00
			Max. Mx	34	-3.22	-0.03	0.00
			Max. Vy	34	22.00	0.00	0.00
T3	140 - 133.333	Leg	Max Tension	19	30667.07	-0.84	-0.08
			Max. Compression	2	-39111.98	0.01	-0.04
			Max. Mx	18	29620.46	-0.85	-0.08
			Max. My	11	-3856.22	-0.02	0.86
			Max. Vy	18	-190.80	-0.85	-0.08
			Max. Vx	10	242.29	-0.03	0.86
		Diagonal	Max Tension	5	10037.79	0.00	0.00
			Max. Compression	4	-10147.34	0.00	0.00
			Max. Mx	34	-214.84	0.08	0.00
			Max. Vy	34	-34.37	0.00	0.00
		Horizontal	Max Tension	5	6544.21	-0.01	0.00
			Max. Compression	5	-6536.27	-0.01	0.00
			Max. Mx	48	-298.90	-0.04	-0.00
			Max. My	3	1361.43	-0.00	0.01
			Max. Vy	48	-36.05	-0.04	-0.00
			Max. Vx	3	2.59	0.00	0.00
		Inner Bracing	Max Tension	3	4.60	0.00	0.00
			Max. Compression	18	-7.43	0.00	0.00
			Max. Mx	34	-3.80	-0.03	0.00
			Max. Vy	34	-23.31	0.00	0.00
T4	133.333 - 126.667	Leg	Max Tension	19	40590.95	-0.01	0.04
			Max. Compression	2	-51882.14	1.17	-0.01
			Max. Mx	18	37448.23	-1.24	0.01
			Max. My	11	-5815.56	-0.03	1.30
			Max. Vy	28	-2430.43	-0.02	-0.02
			Max. Vx	4	-2536.18	-0.01	0.04
		Diagonal	Max Tension	5	12523.41	0.00	0.00
			Max. Compression	4	-12641.14	0.00	0.00
			Max. Mx	34	-208.92	0.08	0.00
			Max. Vy	34	-36.33	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Top Girt	Max Tension	7	8471.02	-0.01	0.01
			Max. Compression	4	-8463.67	-0.02	0.00
			Max. Mx	48	-537.67	-0.05	-0.00
			Max. My	2	726.75	-0.01	0.02
			Max. Vy	48	-38.40	-0.05	-0.00
			Max. Vx	2	3.57	0.00	0.00
		Inner Bracing	Max Tension	3	6.79	0.00	0.00
			Max. Compression	18	-9.77	0.00	0.00
			Max. Mx	34	-4.01	-0.04	0.00
			Max. Vy	34	-24.69	0.00	0.00
T5	126.667 - 120	Leg	Max Tension	19	52845.22	-1.23	0.01
			Max. Compression	2	-67259.41	0.80	-0.11
			Max. Mx	18	51119.68	-1.24	0.01
			Max. My	11	-6039.00	-0.03	1.30
			Max. Vy	18	-1147.74	-1.24	0.01
			Max. Vx	10	1237.84	-0.04	1.30
		Diagonal	Max Tension	5	14075.62	0.00	0.00
			Max. Compression	4	-14258.96	0.00	0.00
			Max. Mx	34	-229.10	0.12	0.00
			Max. Vy	34	53.61	0.00	0.00
		Top Girt	Max Tension	5	9772.94	-0.02	0.00
			Max. Compression	5	-9772.56	-0.02	0.00
			Max. Mx	48	-493.64	-0.06	-0.01
			Max. My	3	1653.27	-0.00	0.02
			Max. Vy	48	40.50	-0.06	-0.01
			Max. Vx	3	-3.56	-0.00	0.02
		Inner Bracing	Max Tension	3	6.17	0.00	0.00
			Max. Compression	18	-10.60	0.00	0.00
			Max. Mx	34	-4.93	-0.04	0.00
			Max. Vy	34	26.06	0.00	0.00
T6	120 - 100	Leg	Max Tension	19	90268.60	-0.56	0.17
			Max. Compression	2	-108254.33	0.28	-0.15
			Max. Mx	18	65668.44	-0.84	0.11
			Max. My	11	-7189.84	-0.01	1.09
			Max. Vy	18	-143.53	-0.84	0.11
			Max. Vx	28	-374.56	0.25	-0.90
		Diagonal	Max Tension	5	17940.66	0.00	0.00
			Max. Compression	4	-18251.70	0.00	0.00
			Max. Mx	34	-302.14	0.27	0.00
			Max. Vy	34	-86.80	0.00	0.00
		Horizontal	Max Tension	6	10966.10	-0.02	0.01
			Max. Compression	15	-10834.39	-0.03	-0.01
			Max. Mx	38	-543.37	-0.08	-0.01
			Max. My	18	-1058.17	-0.05	-0.02
			Max. Vy	38	46.35	-0.08	-0.01
			Max. Vx	18	-3.23	-0.05	-0.02
		Inner Bracing	Max Tension	3	3.56	0.00	0.00
			Max. Compression	18	-12.09	0.00	0.00
			Max. Mx	34	-8.55	-0.07	0.00
			Max. Vy	34	39.46	0.00	0.00
T7	100 - 90	Leg	Max Tension	19	112503.78	-0.31	0.15
			Max. Compression	2	-132360.06	0.64	-0.14
			Max. Mx	18	109516.59	-0.69	0.14
			Max. My	10	-11786.76	-0.02	0.91
			Max. Vy	18	151.79	-0.69	0.14
			Max. Vx	29	362.12	0.31	-0.87
		Diagonal	Max Tension	15	17223.83	0.00	0.00
			Max. Compression	14	-17456.40	0.00	0.00
			Max. Mx	34	-330.13	0.22	0.00
			Max. Vy	34	-67.81	0.00	0.00
		Horizontal	Max Tension	31	11196.15	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	14	-11222.23	-0.04	-0.00
			Max. Mx	38	-778.64	-0.08	-0.00
			Max. My	18	-958.32	-0.05	-0.02
			Max. Vy	38	48.84	-0.08	-0.00
			Max. Vx	18	2.53	0.00	0.00
		Inner Bracing	Max Tension	3	2.54	0.00	0.00
			Max. Compression	43	-10.24	0.00	0.00
			Max. Mx	34	-8.65	-0.08	0.00
			Max. Vy	34	-42.12	0.00	0.00
T8	90 - 80	Leg	Max Tension	19	132619.88	-0.68	0.14
			Max. Compression	2	-154045.60	0.59	-0.14
			Max. Mx	18	129829.48	-0.69	0.14
			Max. My	10	-12693.35	-0.03	1.05
			Max. Vy	18	-117.93	-0.69	0.14
			Max. Vx	12	-332.43	-0.33	1.00
		Diagonal	Max Tension	15	17808.28	0.00	0.00
			Max. Compression	14	-18058.72	0.00	0.00
			Max. Mx	34	-355.62	0.24	0.00
			Max. Vy	34	-72.80	0.00	0.00
		Top Girt	Max Tension	30	12042.99	0.00	0.00
			Max. Compression	15	-12002.68	-0.03	-0.00
			Max. Mx	38	-596.04	-0.09	-0.00
			Max. My	18	-1072.43	-0.06	-0.02
			Max. Vy	38	52.37	-0.09	-0.00
			Max. Vx	18	-2.18	-0.06	-0.02
		Inner Bracing	Max Tension	3	1.59	0.00	0.00
			Max. Compression	43	-10.47	0.00	0.00
			Max. Mx	34	-9.06	-0.09	0.00
			Max. Vy	34	45.38	0.00	0.00
T9	80 - 60	Leg	Max Tension	19	172100.21	-1.16	0.08
			Max. Compression	2	-197499.29	1.76	-0.17
			Max. Mx	18	168180.30	-1.77	0.18
			Max. My	10	-15037.39	-0.02	1.95
			Max. Vy	18	264.83	-1.77	0.18
			Max. Vx	13	-486.88	-0.89	1.81
		Diagonal	Max Tension	15	19772.08	0.00	0.00
			Max. Compression	14	-20108.08	0.00	0.00
			Max. Mx	34	-442.43	0.29	0.00
			Max. Vy	34	82.17	0.00	0.00
		Horizontal	Max Tension	30	14315.32	0.00	0.00
			Max. Compression	15	-14293.07	-0.07	-0.01
			Max. Mx	38	-561.42	-0.16	-0.01
			Max. My	3	374.99	-0.03	0.03
			Max. Vy	38	79.36	-0.16	-0.01
			Max. Vx	18	-2.89	-0.10	-0.03
		Inner Bracing	Max Tension	3	2.64	0.00	0.00
			Max. Compression	43	-12.32	0.00	0.00
			Max. Mx	34	-10.57	-0.14	0.00
			Max. Vy	34	60.35	0.00	0.00
T10	60 - 40	Leg	Max Tension	19	212123.82	-1.18	0.09
			Max. Compression	2	-242594.77	1.05	-0.10
			Max. Mx	18	188378.63	-1.77	0.18
			Max. My	10	-15615.57	-0.03	1.95
			Max. Vy	8	-306.27	-1.73	0.32
			Max. Vx	11	470.34	-0.02	1.95
		Diagonal	Max Tension	15	21552.49	0.00	0.00
			Max. Compression	14	-22044.13	0.00	0.00
			Max. Mx	34	-558.04	0.41	0.00
			Max. Vy	34	-108.89	0.00	0.00
		Horizontal	Max Tension	30	16442.28	0.00	0.00
			Max. Compression	15	-16397.63	-0.08	-0.01

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	38	-496.96	-0.20	-0.01
			Max. My	3	1814.20	-0.04	0.03
			Max. Vy	38	87.65	-0.20	-0.01
			Max. Vx	3	-2.65	0.00	0.00
		Inner Bracing	Max Tension	3	0.65	0.00	0.00
			Max. Compression	43	-14.71	0.00	0.00
			Max. Mx	34	-13.18	-0.23	0.00
			Max. Vy	34	85.20	0.00	0.00
T11	40 - 30	Leg	Max Tension	19	232115.95	-1.12	0.10
			Max. Compression	2	-265467.44	2.47	-0.07
			Max. Mx	2	-265467.44	2.47	-0.07
			Max. My	10	-18350.96	-0.06	1.31
			Max. Vy	3	-303.24	2.45	-0.07
			Max. Vx	12	376.65	-0.60	1.22
		Diagonal	Max Tension	15	22257.57	0.00	0.00
			Max. Compression	14	-22784.95	0.00	0.00
			Max. Mx	34	-594.85	0.44	0.00
			Max. Vy	34	-113.09	0.00	0.00
		Horizontal	Max Tension	30	17358.60	0.00	0.00
			Max. Compression	15	-17342.36	-0.09	-0.01
			Max. Mx	38	-533.50	-0.21	-0.01
			Max. My	3	2030.93	-0.06	0.03
			Max. Vy	38	90.67	-0.21	-0.01
			Max. Vx	3	-2.30	0.00	0.00
		Inner Bracing	Max Tension	1	0.00	0.00	0.00
			Max. Compression	43	-14.96	0.00	0.00
			Max. Mx	34	-13.53	-0.25	0.00
			Max. Vy	34	88.05	0.00	0.00
T12	30 - 20	Leg	Max Tension	19	251901.83	-2.27	0.08
			Max. Compression	2	-288285.84	-2.13	-0.32
			Max. Mx	2	-287621.09	2.47	-0.07
			Max. My	10	-20405.22	-0.55	4.79
			Max. Vy	2	605.97	2.47	-0.07
			Max. Vx	10	-692.47	-0.55	4.79
		Diagonal	Max Tension	15	22878.32	0.00	0.00
			Max. Compression	14	-23490.97	0.00	0.00
			Max. Mx	34	-650.13	0.47	0.00
			Max. Vy	34	-117.29	0.00	0.00
		Top Girt	Max Tension	14	18179.78	-0.17	-0.01
			Max. Compression	15	-18017.42	-0.13	-0.01
			Max. Mx	38	780.92	-0.28	-0.01
			Max. My	3	-459.89	-0.10	0.02
			Max. Vy	38	-110.82	-0.28	-0.01
			Max. Vx	3	1.98	0.00	0.00
		Inner Bracing	Max Tension	1	0.00	0.00	0.00
			Max. Compression	43	-15.80	0.00	0.00
			Max. Mx	34	-14.57	-0.27	0.00
			Max. Vy	34	90.88	0.00	0.00
T13	20 - 0	Leg	Max Tension	19	269969.01	1.23	0.33
			Max. Compression	2	-310698.07	0.00	0.00
			Max. Mx	2	-309913.34	7.16	0.40
			Max. My	10	-21456.57	-0.55	4.79
			Max. Vy	2	-1053.47	7.16	0.40
			Max. Vx	10	1169.73	-0.55	4.79
		Diagonal	Max Tension	31	33802.81	-0.14	0.04
			Max. Compression	14	-35039.49	0.00	0.00
			Max. Mx	30	13066.72	-0.24	-0.03
			Max. My	2	-27370.75	-0.03	0.05
			Max. Vy	50	-78.19	-0.19	0.00
			Max. Vx	2	3.72	0.00	0.00
		Horizontal	Max Tension	30	19348.68	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	15	-19566.81	-0.20	-0.01
			Max. Mx	38	-868.38	-0.40	-0.01
			Max. My	3	2719.97	-0.07	0.05
			Max. Vy	38	139.94	-0.40	-0.01
			Max. Vx	3	4.23	0.00	0.00
		Redund Horz 1 Bracing	Max Tension	4	1317.92	0.00	0.00
			Max. Compression	5	-1173.77	0.00	0.00
			Max. Mx	34	188.76	0.03	0.00
			Max. Vy	34	-21.73	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	4	1255.45	0.00	0.00
			Max. Compression	5	-1107.30	0.00	0.00
			Max. Mx	34	96.20	0.07	0.00
			Max. Vy	34	-24.49	0.00	0.00
		Redund Hip 1 Bracing	Max Tension	3	1.82	0.00	0.00
			Max. Compression	18	-17.58	0.00	0.00
			Max. Mx	34	-13.55	0.06	0.00
			Max. Vy	34	-37.18	0.00	0.00
		Inner Bracing	Max Tension	1	0.00	0.00	0.00
			Max. Compression	43	-14.23	0.00	0.00
			Max. Mx	34	-12.55	0.17	0.00
			Max. Vy	34	54.27	0.00	0.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
Leg C	Max. Vert	24	341930.23	41521.25	-26965.10
	Max. H_x	24	341930.23	41521.25	-26965.10
	Max. H_z	7	-296293.50	-36156.98	25662.94
	Min. Vert	9	-304452.43	-38001.64	24967.61
	Min. H_x	9	-304452.43	-38001.64	24967.61
	Min. H_z	22	330071.26	38699.33	-27096.56
Leg B	Max. Vert	12	344510.36	-40999.51	-28214.57
	Max. H_x	29	-304857.44	37442.63	26108.87
	Max. H_z	31	-297315.65	35390.74	27271.54
	Min. Vert	29	-304857.44	37442.63	26108.87
	Min. H_x	12	344510.36	-40999.51	-28214.57
	Min. H_z	14	334289.47	-38360.74	-29094.89
Leg A	Max. Vert	2	353608.21	1247.47	50354.54
	Max. H_x	26	23763.73	12843.11	1927.24
	Max. H_z	2	353608.21	1247.47	50354.54
	Min. Vert	19	-308494.80	-1251.87	-45868.48
	Min. H_x	11	18334.13	-12868.10	1489.60
	Min. H_z	19	-308494.80	-1251.87	-45868.48

Tower Mast Reaction Summary

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	kip-ft	kip-ft	kip-ft
Dead Only	54379.73	0.00	-0.00	-18.52	-9.48	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	65255.68	1.43	-86954.21	-7954.26	-11.63	59.45
0.9 Dead+1.0 Wind 0 deg - No Ice	48941.76	1.43	-86954.21	-7948.70	-8.79	59.45
1.2 Dead+1.0 Wind 30 deg - No Ice	65255.68	42441.04	-73545.11	-6783.28	-3911.29	-40.17
0.9 Dead+1.0 Wind 30 deg - No Ice	48941.76	42441.04	-73545.11	-6777.73	-3908.45	-40.17
1.2 Dead+1.0 Wind 45 deg - No Ice	65255.68	59583.97	-59678.15	-5506.45	-5478.94	-86.03
0.9 Dead+1.0 Wind 45 deg - No Ice	48941.76	59583.97	-59678.15	-5500.90	-5476.09	-86.03
1.2 Dead+1.0 Wind 60 deg - No Ice	65255.68	72418.73	-41955.78	-3877.81	-6645.05	-125.86
0.9 Dead+1.0 Wind 60 deg - No Ice	48941.76	72418.73	-41955.78	-3872.25	-6642.21	-125.86
1.2 Dead+1.0 Wind 90 deg - No Ice	65255.68	83841.63	-179.39	-53.98	-7635.34	-179.68
0.9 Dead+1.0 Wind 90 deg - No Ice	48941.76	83841.63	-179.39	-48.42	-7632.49	-179.68
1.2 Dead+1.0 Wind 120 deg - No Ice	65255.68	74341.86	42852.20	3837.33	-6717.50	-187.89
0.9 Dead+1.0 Wind 120 deg - No Ice	48941.76	74341.86	42852.20	3842.88	-6714.66	-187.89
1.2 Dead+1.0 Wind 135 deg - No Ice	65255.68	60295.26	60328.31	5466.35	-5494.10	-172.36
0.9 Dead+1.0 Wind 135 deg - No Ice	48941.76	60295.26	60328.31	5471.91	-5491.26	-172.36
1.2 Dead+1.0 Wind 150 deg - No Ice	65255.68	42368.31	73459.32	6721.13	-3896.97	-144.49
0.9 Dead+1.0 Wind 150 deg - No Ice	48941.76	42368.31	73459.32	6726.69	-3894.12	-144.49
1.2 Dead+1.0 Wind 180 deg - No Ice	65255.68	19.18	84488.04	7779.78	-14.78	-60.27
0.9 Dead+1.0 Wind 180 deg - No Ice	48941.76	19.18	84488.04	7785.34	-11.93	-60.27
1.2 Dead+1.0 Wind 210 deg - No Ice	65255.68	-42285.64	73266.92	6689.59	3861.03	38.08
0.9 Dead+1.0 Wind 210 deg - No Ice	48941.76	-42285.64	73266.92	6695.15	3863.87	38.08
1.2 Dead+1.0 Wind 225 deg - No Ice	65255.68	-59325.38	59379.32	5409.11	5410.41	83.97
0.9 Dead+1.0 Wind 225 deg - No Ice	48941.76	-59325.38	59379.32	5414.66	5413.25	83.97
1.2 Dead+1.0 Wind 240 deg - No Ice	65255.68	-74094.35	42772.02	3824.59	6653.45	123.79
0.9 Dead+1.0 Wind 240 deg - No Ice	48941.76	-74094.35	42772.02	3830.14	6656.29	123.79
1.2 Dead+1.0 Wind 270 deg - No Ice	65255.68	-83783.41	-146.87	-48.22	7602.27	177.93
0.9 Dead+1.0 Wind 270 deg - No Ice	48941.76	-83783.41	-146.87	-42.67	7605.12	177.93
1.2 Dead+1.0 Wind 300 deg - No Ice	65255.68	-72534.78	-42064.33	-3895.57	6640.31	186.86
0.9 Dead+1.0 Wind 300 deg - No Ice	48941.76	-72534.78	-42064.33	-3890.01	6643.16	186.86
1.2 Dead+1.0 Wind 315 deg - No Ice	65255.68	-59743.75	-59881.89	-5540.14	5482.09	171.29
0.9 Dead+1.0 Wind 315 deg - No Ice	48941.76	-59743.75	-59881.89	-5534.59	5484.93	171.29

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	kip-ft	kip-ft	kip-ft
1.2 Dead+1.0 Wind 330 deg - No Ice	65255.68	-42542.27	-73788.58	-6823.86	3905.00	143.53
0.9 Dead+1.0 Wind 330 deg - No Ice	48941.76	-42542.27	-73788.58	-6818.31	3907.84	143.53
1.2 Dead+1.0 Ice	138105.45	0.00	-0.00	-160.52	-67.97	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice	138105.45	0.23	-22746.10	-2213.02	-68.01	26.51
1.2 Dead+1.0 Wind 30 deg+1.0 Ice	138105.45	11200.76	-19405.80	-1919.20	-1082.78	4.20
1.2 Dead+1.0 Wind 45 deg+1.0 Ice	138105.45	15762.05	-15776.89	-1589.31	-1494.13	-7.52
1.2 Dead+1.0 Wind 60 deg+1.0 Ice	138105.45	19205.08	-11110.88	-1166.24	-1802.94	-18.69
1.2 Dead+1.0 Wind 90 deg+1.0 Ice	138105.45	22199.76	-28.27	-165.53	-2063.49	-36.89
1.2 Dead+1.0 Wind 120 deg+1.0 Ice	138105.45	19514.27	11255.68	845.76	-1814.23	-45.66
1.2 Dead+1.0 Wind 135 deg+1.0 Ice	138105.45	15875.85	15881.06	1268.76	-1496.34	-45.41
1.2 Dead+1.0 Wind 150 deg+1.0 Ice	138105.45	11188.43	19390.80	1595.11	-1080.37	-41.96
1.2 Dead+1.0 Wind 180 deg+1.0 Ice	138105.45	3.02	22348.66	1871.33	-68.51	-26.64
1.2 Dead+1.0 Wind 210 deg+1.0 Ice	138105.45	-11176.27	19361.96	1590.39	942.50	-4.52
1.2 Dead+1.0 Wind 225 deg+1.0 Ice	138105.45	-15721.30	15729.80	1259.93	1350.98	7.19
1.2 Dead+1.0 Wind 240 deg+1.0 Ice	138105.45	-19476.76	11243.91	843.89	1672.04	18.36
1.2 Dead+1.0 Wind 270 deg+1.0 Ice	138105.45	-22190.59	-23.14	-164.62	1925.92	36.61
1.2 Dead+1.0 Wind 300 deg+1.0 Ice	138105.45	-19221.88	-11127.12	-1168.90	1669.58	45.50
1.2 Dead+1.0 Wind 315 deg+1.0 Ice	138105.45	-15785.82	-15807.59	-1594.38	1362.03	45.24
1.2 Dead+1.0 Wind 330 deg+1.0 Ice	138105.45	-11215.85	-19442.68	-1925.34	949.28	41.81
Dead+Wind 0 deg - Service	54379.73	0.30	-18787.48	-1737.43	-9.54	12.66
Dead+Wind 30 deg - Service	54379.73	9173.04	-15895.64	-1484.07	-854.86	-8.56
Dead+Wind 45 deg - Service	54379.73	12879.61	-12899.67	-1207.44	-1194.85	-18.33
Dead+Wind 60 deg - Service	54379.73	15655.70	-9069.67	-854.45	-1447.90	-26.81
Dead+Wind 90 deg - Service	54379.73	18124.45	-38.21	-25.29	-1662.77	-38.28
Dead+Wind 120 deg - Service	54379.73	16065.36	9260.62	818.25	-1463.33	-40.02
Dead+Wind 135 deg - Service	54379.73	13031.12	13038.17	1171.32	-1198.08	-36.72
Dead+Wind 150 deg - Service	54379.73	9157.55	15877.37	1443.26	-851.80	-30.78
Dead+Wind 180 deg - Service	54379.73	4.09	18262.14	1672.69	-10.21	-12.84
Dead+Wind 210 deg - Service	54379.73	-9139.94	15836.38	1436.54	830.03	8.11
Dead+Wind 225 deg - Service	54379.73	-12824.52	12836.01	1159.13	1166.13	17.89
Dead+Wind 240 deg - Service	54379.73	-16012.64	9243.54	815.54	1435.57	26.37
Dead+Wind 270 deg - Service	54379.73	-18112.04	-31.28	-24.06	1641.60	37.90
Dead+Wind 300 deg - Service	54379.73	-15680.42	-9092.79	-858.24	1432.77	39.81
Dead+Wind 315 deg - Service	54379.73	-12913.64	-12943.07	-1214.62	1181.40	36.49
Dead+Wind 330 deg - Service	54379.73	-9194.60	-15947.51	-1492.72	839.40	30.57

Solution Summary

Load Comb.	Sum of Applied Forces PX lb	PY lb	PZ lb	Sum of Reactions PX lb	PY lb	PZ lb	% Error
1	0.00	-54379.73	0.00	-0.00	54379.73	0.00	0.000%
2	1.43	-65255.68	-86954.21	-1.43	65255.68	86954.21	0.000%
3	1.43	-48941.76	-86954.21	-1.43	48941.76	86954.21	0.000%
4	42441.04	-65255.68	-73545.11	-42441.04	65255.68	73545.11	0.000%
5	42441.04	-48941.76	-73545.11	-42441.04	48941.76	73545.11	0.000%
6	59583.97	-65255.68	-59678.15	-59583.97	65255.68	59678.15	0.000%
7	59583.97	-48941.76	-59678.15	-59583.97	48941.76	59678.15	0.000%
8	72418.73	-65255.68	-41955.78	-72418.73	65255.68	41955.78	0.000%
9	72418.73	-48941.76	-41955.78	-72418.73	48941.76	41955.78	0.000%
10	83841.63	-65255.68	-179.39	-83841.63	65255.68	179.39	0.000%
11	83841.63	-48941.76	-179.39	-83841.63	48941.76	179.39	0.000%
12	74341.86	-65255.68	42852.20	-74341.86	65255.68	-42852.20	0.000%
13	74341.86	-48941.76	42852.20	-74341.86	48941.76	-42852.20	0.000%
14	60295.26	-65255.68	60328.31	-60295.26	65255.68	-60328.31	0.000%
15	60295.26	-48941.76	60328.31	-60295.26	48941.76	-60328.31	0.000%
16	42368.31	-65255.68	73459.32	-42368.31	65255.68	-73459.32	0.000%
17	42368.31	-48941.76	73459.32	-42368.31	48941.76	-73459.32	0.000%
18	19.18	-65255.68	84488.04	-19.18	65255.68	-84488.04	0.000%
19	19.18	-48941.76	84488.04	-19.18	48941.76	-84488.04	0.000%
20	-42285.64	-65255.68	73266.92	42285.64	65255.68	-73266.92	0.000%
21	-42285.64	-48941.76	73266.92	42285.64	48941.76	-73266.92	0.000%
22	-59325.38	-65255.68	59379.32	59325.38	65255.68	-59379.32	0.000%
23	-59325.38	-48941.76	59379.32	59325.38	48941.76	-59379.32	0.000%
24	-74094.35	-65255.68	42772.02	74094.35	65255.68	-42772.02	0.000%
25	-74094.35	-48941.76	42772.02	74094.35	48941.76	-42772.02	0.000%
26	-83783.41	-65255.68	-146.87	83783.41	65255.68	146.87	0.000%
27	-83783.41	-48941.76	-146.87	83783.41	48941.76	146.87	0.000%
28	-72534.78	-65255.68	-42064.33	72534.78	65255.68	42064.33	0.000%
29	-72534.78	-48941.76	-42064.33	72534.78	48941.76	42064.33	0.000%
30	-59743.74	-65255.68	-59881.89	59743.75	65255.68	59881.89	0.000%
31	-59743.74	-48941.76	-59881.89	59743.75	48941.76	59881.89	0.000%
32	-42542.27	-65255.68	-73788.58	42542.27	65255.68	73788.58	0.000%
33	-42542.27	-48941.76	-73788.58	42542.27	48941.76	73788.58	0.000%
34	0.00	-138105.45	0.00	-0.00	138105.45	0.00	0.000%
35	0.23	-138105.45	-22746.10	-0.23	138105.45	22746.10	0.000%
36	11200.75	-138105.45	-19405.80	-11200.76	138105.45	19405.80	0.000%
37	15762.05	-138105.45	-15776.89	-15762.05	138105.45	15776.89	0.000%
38	19205.08	-138105.45	-11110.88	-19205.08	138105.45	11110.88	0.000%
39	22199.76	-138105.45	-28.27	-22199.76	138105.45	28.27	0.000%
40	19514.27	-138105.45	11255.68	-19514.27	138105.45	-11255.68	0.000%
41	15875.85	-138105.45	15881.06	-15875.85	138105.45	-15881.06	0.000%
42	11188.43	-138105.45	19390.80	-11188.43	138105.45	-19390.80	0.000%
43	3.02	-138105.45	22348.66	-3.02	138105.45	-22348.66	0.000%
44	-11176.27	-138105.45	19361.96	11176.27	138105.45	-19361.96	0.000%
45	-15721.30	-138105.45	15729.80	15721.30	138105.45	-15729.80	0.000%
46	-19476.76	-138105.45	11243.91	19476.76	138105.45	-11243.91	0.000%
47	-22190.59	-138105.45	-23.14	22190.59	138105.45	23.14	0.000%
48	-19221.88	-138105.45	-11127.12	19221.88	138105.45	11127.12	0.000%
49	-15785.82	-138105.45	-15807.59	15785.82	138105.45	15807.59	0.000%
50	-11215.85	-138105.45	-19442.68	11215.85	138105.45	19442.68	0.000%
51	0.30	-54379.73	-18787.48	-0.30	54379.73	18787.48	0.000%
52	9173.04	-54379.73	-15895.64	-9173.04	54379.73	15895.64	0.000%
53	12879.61	-54379.73	-12899.67	-12879.61	54379.73	12899.67	0.000%
54	15655.70	-54379.73	-9069.67	-15655.70	54379.73	9069.67	0.000%
55	18124.45	-54379.73	-38.21	-18124.45	54379.73	38.21	0.000%
56	16065.36	-54379.73	9260.62	-16065.36	54379.73	-9260.62	0.000%
57	13031.12	-54379.73	13038.17	-13031.12	54379.73	-13038.17	0.000%
58	9157.55	-54379.73	15877.37	-9157.55	54379.73	-15877.37	0.000%
59	4.09	-54379.73	18262.14	-4.09	54379.73	-18262.14	0.000%
60	-9139.94	-54379.73	15836.38	9139.94	54379.73	-15836.38	0.000%
61	-12824.52	-54379.73	12836.01	12824.52	54379.73	-12836.01	0.000%

Load Comb.	Sum of Applied Forces PX lb	PY lb	PZ lb	Sum of Reactions PX lb	PY lb	PZ lb	% Error
62	-16012.64	-54379.73	9243.54	16012.64	54379.73	-9243.54	0.000%
63	-18112.04	-54379.73	-31.28	18112.04	54379.73	31.28	0.000%
64	-15680.42	-54379.73	-9092.79	15680.42	54379.73	9092.79	0.000%
65	-12913.64	-54379.73	-12943.07	12913.64	54379.73	12943.07	0.000%
66	-9194.60	-54379.73	-15947.51	9194.60	54379.73	15947.51	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	180 - 160	1.991	51	0.0854	0.0575
T2	160 - 140	1.629	51	0.0839	0.0522
T3	140 - 133.333	1.267	51	0.0763	0.0440
T4	133.333 - 126.667	1.155	51	0.0740	0.0425
T5	126.667 - 120	1.044	51	0.0712	0.0407
T6	120 - 100	0.939	51	0.0675	0.0393
T7	100 - 90	0.672	51	0.0540	0.0351
T8	90 - 80	0.553	51	0.0475	0.0313
T9	80 - 60	0.449	51	0.0404	0.0273
T10	60 - 40	0.270	51	0.0312	0.0198
T11	40 - 30	0.135	51	0.0207	0.0133
T12	30 - 20	0.083	51	0.0152	0.0099
T13	20 - 0	0.044	62	0.0094	0.0069

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
187.00	ANT940Y10-WR	51	1.991	0.0854	0.0575	496094
181.00	ANT940Y10-WR	51	1.991	0.0854	0.0575	496094
177.00	PA6-65AC	51	1.937	0.0854	0.0572	496094
170.00	RFI BPS7496-180-14 Panel Antenna	51	1.812	0.0853	0.0560	248047
169.00	3' Yagi	51	1.794	0.0852	0.0558	225498
160.00	ROHN 6'x15' Boom Gate (1)	51	1.629	0.0839	0.0522	147218
144.00	FFVV-65B-R2	51	1.336	0.0779	0.0453	85493
133.00	QD6616-7	51	1.150	0.0739	0.0424	290354
125.00	LTF12=372 Sector Mount (1)	51	1.017	0.0704	0.0403	59362
113.00	ANT150D	51	0.839	0.0630	0.0381	76796
60.00	GPS	51	0.270	0.0312	0.0198	99661

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	180 - 160	9.082	2	0.3836	0.2700
T2	160 - 140	7.452	2	0.3787	0.2451
T3	140 - 133.333	5.799	2	0.3478	0.2065
T4	133.333 - 126.667	5.289	2	0.3374	0.1993
T5	126.667 - 120	4.778	2	0.3248	0.1910
T6	120 - 100	4.300	2	0.3083	0.1846
T7	100 - 90	3.077	2	0.2464	0.1647
T8	90 - 80	2.536	2	0.2167	0.1471
T9	80 - 60	2.058	2	0.1844	0.1282
T10	60 - 40	1.240	2	0.1422	0.0930
T11	40 - 30	0.623	2	0.0945	0.0624
T12	30 - 20	0.383	3	0.0692	0.0464
T13	20 - 0	0.204	3	0.0430	0.0322

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
187.00	ANT940Y10-WR	2	9.082	0.3836	0.2700	127393
181.00	ANT940Y10-WR	2	9.082	0.3836	0.2700	127393
177.00	PA6-65AC	2	8.841	0.3839	0.2684	127393
170.00	RFI BPS7496-180-14 Panel Antenna	2	8.275	0.3839	0.2631	63697
169.00	3' Yagi	2	8.194	0.3837	0.2620	57906
160.00	ROHN 6'x15' Boom Gate (1)	2	7.452	0.3787	0.2451	38442
144.00	FFVV-65B-R2	2	6.117	0.3545	0.2126	18961
133.00	QD6616-7	2	5.263	0.3368	0.1989	65720
125.00	LTF12=372 Sector Mount (1)	2	4.654	0.3211	0.1891	12908
113.00	ANT150D	2	3.843	0.2874	0.1786	16767
60.00	GPS	2	1.240	0.1422	0.0930	21884

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	180	Diagonal	A325N	0.6250	3	1376.32	13805.80	0.100 ✔	1	Bolt Shear
		Horizontal	A325N	0.6250	2	1116.80	13805.80	0.081 ✔	1	Bolt Shear
		Top Girt	A325N	0.6250	2	176.49	13805.80	0.013 ✔	1	Bolt Shear
T2	160	Leg	A325N	0.8750	4	1501.13	41556.00	0.036 ✔	1	Bolt Tension
		Diagonal	A325N	0.6250	3	3113.27	13805.80	0.226 ✔	1	Bolt Shear
		Horizontal	A325N	0.6250	2	2905.72	13805.80	0.210 ✔	1	Bolt Shear
T3	140	Leg	A325N	1.0000	4	7666.77	54517.00	0.141 ✔	1	Bolt Tension
		Diagonal	A325N	0.6250	3	3382.45	13805.80	0.245 ✔	1	Bolt Shear
		Horizontal	A325N	0.6250	2	3272.11	13805.80	0.237 ✔	1	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
T4	133.333	Diagonal	A325N	0.6250	3	4213.71	13805.80	0.305 ✓	1	Bolt Shear
		Top Girt	A325N	0.6250	2	4235.51	13805.80	0.307 ✓	1	Bolt Shear
T5	126.667	Diagonal	A325N	0.6250	3	4752.99	13805.80	0.344 ✓	1	Bolt Shear
		Top Girt	A325N	0.6250	2	4886.47	13805.80	0.354 ✓	1	Bolt Shear
T6	120	Leg	A325N	1.0000	6	11292.90	54517.00	0.207 ✓	1	Bolt Tension
		Diagonal	A325N	0.6250	3	6083.90	13805.80	0.441 ✓	1	Bolt Shear
		Horizontal	A325N	0.6250	2	5483.05	13805.80	0.397 ✓	1	Bolt Shear
T7	100	Leg	A325N	1.0000	6	18750.60	54517.00	0.344 ✓	1	Bolt Tension
		Diagonal	A325N	0.6250	3	5818.80	13805.80	0.421 ✓	1	Bolt Shear
		Horizontal	A325N	0.6250	2	5611.11	13805.80	0.406 ✓	1	Bolt Shear
T8	90	Diagonal	A325N	0.6250	3	6019.57	13805.80	0.436 ✓	1	Bolt Shear
		Top Girt	A325N	0.6250	2	6021.50	13805.80	0.436 ✓	1	Bolt Shear
T9	80	Leg	A325N	1.0000	8	19034.60	54517.00	0.349 ✓	1	Bolt Tension
		Diagonal	A325N	0.6250	3	6702.69	13805.80	0.485 ✓	1	Bolt Shear
		Horizontal	A325N	0.6250	2	7157.66	13805.80	0.518 ✓	1	Bolt Shear
T10	60	Leg	A325N	1.0000	8	23997.70	54517.00	0.440 ✓	1	Bolt Tension
		Diagonal	A325N	0.6250	3	7348.04	13805.80	0.532 ✓	1	Bolt Shear
		Horizontal	A325N	0.6250	2	8221.14	13805.80	0.595 ✓	1	Bolt Shear
T11	40	Leg	A325N	1.0000	8	29014.50	54517.00	0.532 ✓	1	Bolt Tension
		Diagonal	A325N	0.6250	3	7594.98	13805.80	0.550 ✓	1	Bolt Shear
		Horizontal	A325N	0.6250	2	8679.30	13805.80	0.629 ✓	1	Bolt Shear
T12	30	Diagonal	A325N	0.6250	3	7830.32	13805.80	0.567 ✓	1	Bolt Shear
		Top Girt	A325N	0.6250	2	9089.89	13805.80	0.658 ✓	1	Bolt Shear
T13	20	Leg	A325N	1.0000	8	33746.10	54517.00	0.619 ✓	1	Bolt Tension
		Diagonal	A325X	0.6250	3	11679.80	17257.30	0.677 ✓	1	Bolt Shear
		Horizontal	A325N	0.7500	2	9783.40	19880.40	0.492 ✓	1	Bolt Shear

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	ROHN 3 STD	20.00	6.67	68.8 K=1.00	2.2285	-4183.04	70976.40	0.059 [1] ✓
T2	160 - 140	ROHN 4 STD	20.04	6.68	53.1 K=1.00	3.1741	-29175.00	116229.00	0.251 [1] ✓

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T3	140 - 133.333	ROHN 5 EH	6.68	6.68	43.6 K=1.00	6.1120	-39112.00	239378.00	0.163 [1] ✔
T4	133.333 - 126.667	ROHN 5 EH	6.68	6.68	43.6 K=1.00	6.1120	-51882.10	239378.00	0.217 [1] ✔
T5	126.667 - 120	ROHN 5 EH	6.68	6.68	43.6 K=1.00	6.1120	-67259.40	239378.00	0.281 [1] ✔
T6	120 - 100	ROHN 6 EHS	20.04	10.02	54.0 K=1.00	6.7133	-108254.00	244017.00	0.444 [1] ✔
T7	100 - 90	ROHN 6 EH	10.03	10.03	54.8 K=1.00	8.4049	-132360.00	303585.00	0.436 [1] ✔
T8	90 - 80	ROHN 6 EH	10.03	10.03	54.8 K=1.00	8.4049	-154046.00	303585.00	0.507 [1] ✔
T9	80 - 60	120deg_9.6250x0.375 BU on ROHN 8 EHS	20.05	10.03	42.2 K=1.00	13.6005	-197499.00	537270.00	0.368 [1] ✔
T10	60 - 40	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	20.05	10.03	42.2 K=1.00	13.6005	-242595.00	460811.00	0.526 [1] ✔
T11	40 - 30	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	10.03	10.03	42.2 K=1.00	13.6005	-265467.00	460811.00	0.576 [1] ✔
T12	30 - 20	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	10.03	10.03	42.2 K=1.00	13.6005	-288286.00	460811.00	0.626 [1] ✔
T13	20 - 0	1/3 9.6250x0.375 on ROHN 8 EH Leg Pipe	20.05	10.03	42.9 K=1.00	16.6002	-310698.00	560408.00	0.554 [1] ✔

[1] $P_u / \phi P_n$ controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	ROHN 2 STD	7.94	7.67	117.0 K=1.00	1.0745	-4128.96	17747.50	0.233 [1] ✔
T2	160 - 140	ROHN 2 STD	8.55	8.25	125.8 K=1.00	1.0745	-9339.82	15331.30	0.609 [1] ✔
T3	140 - 133.333	ROHN 2 EH	8.77	8.42	131.5 K=1.00	1.4807	-10147.30	19347.50	0.524 [1] ✔
T4	133.333 - 126.667	ROHN 2 EH	9.00	8.66	135.3 K=1.00	1.4807	-12641.10	18285.10	0.691 [1] ✔
T5	126.667 - 120	ROHN 2 XXS	9.24	8.91	152.1 K=1.00	2.6559	-14259.00	25935.80	0.550 [1] ✔
T6	120 - 100	Pipe 2.5 XXS	12.52	12.06	171.4 K=1.00	4.0285	-18251.70	30977.00	0.589 [1] ✔
T7	100 - 90	ROHN 3 STD	12.92	12.49	128.8 K=1.00	2.2285	-17456.40	30346.40	0.575 [1] ✔
T8	90 - 80	ROHN 3 STD	13.35	12.93	133.4 K=1.00	2.2285	-18058.70	28290.90	0.638 [1] ✔
T9	80 - 60	ROHN 3 STD	14.21	13.70	141.2 K=1.00	2.2285	-20108.10	25233.20	0.797 [1] ✔
T10	60 - 40	ROHN 3 EH	15.12	14.64	154.6 K=1.00	3.0159	-22044.10	28518.80	0.773 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T11	40 - 30	ROHN 3 EH	15.60	15.12	159.7 K=1.00	3.0159	-22785.00	26718.70	0.853 [1]
T12	30 - 20	ROHN 3 EH	16.08	15.62	164.9 K=1.00	3.0159	-23491.00	25055.10	0.938 [1]
T13	20 - 0	ROHN 3 EH	24.33	23.70	125.1 K=0.50	3.0159	-35039.50	43506.30	0.805 [1]

[1] $P_u / \phi P_n$ controls

Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	ROHN 1.5 STD	8.60	4.15	80.0 K=1.00	0.7995	-2199.42	22519.90	0.098 [1]
T2	160 - 140	ROHN 1.5 STD	10.01	4.82	92.9 K=1.00	0.7995	-5810.94	19142.00	0.304 [1]
T3	140 - 133.333	ROHN 2 STD	10.71	5.12	78.1 K=1.00	1.0745	-6536.27	30956.80	0.211 [1]
T6	120 - 100	ROHN 2 STD	13.92	6.68	101.9 K=1.00	1.0745	-10834.40	22639.20	0.479 [1]
T7	100 - 90	ROHN 2 STD	15.04	7.24	110.5 K=1.00	1.0745	-11222.20	19817.20	0.566 [1]
T9	80 - 60	ROHN 2.5 STD	18.93	9.10	115.2 K=1.00	1.7040	-14293.10	28984.30	0.493 [1]
T10	60 - 40	ROHN 2.5 STD	21.43	10.35	131.1 K=1.00	1.7040	-16397.60	22405.40	0.732 [1]
T11	40 - 30	ROHN 2.5 STD	22.68	10.97	139.0 K=1.00	1.7040	-17342.40	19925.90	0.870 [1]
T13	20 - 0	P3.5x.226	25.18	12.23	109.8 K=1.00	2.6795	-19566.80	49951.20	0.392 [1]

[1] $P_u / \phi P_n$ controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	ROHN 1.5 STD	8.54	4.13	79.5 K=1.00	0.7995	-352.97	22660.50	0.016 [1]
T4	133.333 - 126.667	ROHN 2 STD	11.40	5.47	83.4 K=1.00	1.0745	-8463.67	29081.40	0.291 [1]
T5	126.667 - 120	ROHN 2 STD	12.10	5.82	88.7 K=1.00	1.0745	-9772.57	27207.90	0.359 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T8	90 - 80	ROHN 2 STD	16.36	7.90	120.5 K=1.00	1.0745	-12002.70	16719.60	0.718 [1] ✔
T12	30 - 20	ROHN 2.5 EH	23.93	11.60	150.6 K=1.00	2.2535	-18017.40	22438.80	0.803 [1] ✔

[1] $P_u / \phi P_n$ controls

Redundant Horizontal (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T13	20 - 0	ROHN 1.5 STD	6.29	5.93	114.4 K=1.00	0.7995	-5391.94	13802.80	0.391 [1] ✔

[1] $P_u / \phi P_n$ controls

Redundant Diagonal (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T13	20 - 0	ROHN 2 STD	11.50	10.77	164.2 K=1.00	1.0745	-4926.09	8998.85	0.547 [1] ✔

[1] $P_u / \phi P_n$ controls

Redundant Hip (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T13	20 - 0	ROHN 2.5 STD	6.29	6.29	79.7 K=1.00	1.7040	-17.58	48180.50	0.000 [1] ✔

[1] $P_u / \phi P_n$ controls

Inner Bracing Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	L2x2x1/8	4.30	4.30	129.8 K=1.00	0.4844	-1.84	8234.10	0.000 [1] ✔
T2	160 - 140	L2x2x1/8	5.01	5.01	151.1 K=1.00	0.4844	-4.87	6068.75	0.001 [1] ✔
T3	140 - 133.333	L2x2x1/8	5.35	5.35	161.6 K=1.00	0.4844	-7.43	5306.96	0.001 [1] ✔
T4	133.333 - 126.667	L2x2x1/8	5.70	5.70	172.1 K=1.00	0.4844	-9.77	4680.37	0.002 [1] ✔
T5	126.667 - 120	L2x2x1/8	6.05	6.05	182.6 K=1.00	0.4844	-10.60	4158.54	0.003 [1] ✔
T6	120 - 100	L2 1/2x2 1/2x3/16	6.96	6.96	168.7 K=1.00	0.9020	-11.49	9072.37	0.001 [1] ✔
T7	100 - 90	L2 1/2x2 1/2x3/16	7.52	7.52	182.3 K=1.00	0.9020	-10.24	7766.06	0.001 [1] ✔
T8	90 - 80	L2 1/2x2 1/2x3/16	8.18	8.18	198.3 K=1.00	0.9020	-10.47	6565.57	0.002 [1] ✔
T9	80 - 60	L3x3x3/16	9.46	9.46	190.5 K=1.00	1.0900	-12.32	8593.12	0.001 [1] ✔
T10	60 - 40	L3 1/2x3 1/2x1/4	10.71	10.71	185.2 K=1.00	1.6900	-14.71	14095.40	0.001 [1] ✔
T11	40 - 30	L3 1/2x3 1/2x1/4	11.34	11.34	196.1 K=1.00	1.6900	-14.96	12584.30	0.001 [1] ✔
T12	30 - 20	L3 1/2x3 1/2x1/4	11.96	11.96	206.9 K=1.00	1.6900	-15.80	11303.80	0.001 [1] ✔
T13	20 - 0	ROHN 2 STD	12.59	12.59	191.9 K=1.00	1.0745	-14.23	6590.81	0.002 [1] ✔

[1] $P_u / \phi P_n$ controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	ROHN 3 STD	20.00	6.67	68.8	1.6713	2515.64	81478.40	0.031 [1] ✔
T2	160 - 140	ROHN 4 STD	20.04	6.68	53.1	2.3805	21755.90	116051.00	0.187 [1] ✔
T3	140 - 133.333	ROHN 5 EH	6.68	6.68	43.6	4.5840	30667.10	223469.00	0.137 [1] ✔
T4	133.333 - 126.667	ROHN 5 EH	6.68	6.68	43.6	4.5840	40590.90	223469.00	0.182 [1] ✔
T5	126.667 - 120	ROHN 5 EH	6.68	6.68	43.6	4.5840	52845.20	223469.00	0.236 [1] ✔
T6	120 - 100	ROHN 6 EHS	20.04	10.02	54.0	5.0349	90268.60	245454.00	0.368 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T7	100 - 90	ROHN 6 EH	10.03	10.03	54.8	6.3037	112504.00	307306.00	0.366 [1] ✔
T8	90 - 80	ROHN 6 EH	10.03	10.03	54.8	6.3037	132620.00	307306.00	0.432 [1] ✔
T9	80 - 60	120deg_9.6250x0.375 BU on ROHN 8 EHS	20.05	10.03	42.2	13.6005	172100.00	612023.00	0.281 [1] ✔
T10	60 - 40	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	20.05	10.03	42.2	13.6005	212124.00	514099.00	0.413 [1] ✔
T11	40 - 30	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	10.03	10.03	42.2	13.6005	232116.00	514099.00	0.452 [1] ✔
T12	30 - 20	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	10.03	10.03	42.2	13.6005	251902.00	514099.00	0.490 [1] ✔
T13	20 - 0	1/3 9.6250x0.375 on ROHN 8 EH Leg Pipe	20.05	10.03	42.9	16.6002	269969.00	627488.00	0.430 [1] ✔

[1] $P_u / \phi P_n$ controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	ROHN 2 STD	7.94	7.67	117.0	0.6326	4061.67	30841.60	0.132 [1] ✔
T2	160 - 140	ROHN 2 STD	8.55	8.25	125.8	0.6326	9263.08	30841.60	0.300 [1] ✔
T3	140 - 133.333	ROHN 2 EH	8.77	8.42	131.5	0.8653	10037.80	42181.50	0.238 [1] ✔
T4	133.333 - 126.667	ROHN 2 EH	9.00	8.66	135.3	0.8653	12523.40	42181.50	0.297 [1] ✔
T5	126.667 - 120	ROHN 2 XXS	9.24	8.91	152.1	1.5014	14075.60	73195.00	0.192 [1] ✔
T6	120 - 100	Pipe 2.5 XXS	12.52	12.06	171.4	2.4003	17940.70	117017.00	0.153 [1] ✔
T7	100 - 90	ROHN 3 STD	12.92	12.49	128.8	1.4283	17223.80	69632.20	0.247 [1] ✔
T8	90 - 80	ROHN 3 STD	13.35	12.93	133.4	1.4283	17808.30	69632.20	0.256 [1] ✔
T9	80 - 60	ROHN 3 STD	14.21	13.70	141.2	1.4283	19772.10	69632.20	0.284 [1] ✔
T10	60 - 40	ROHN 3 EH	15.12	14.64	154.6	1.9245	21552.50	93816.80	0.230 [1] ✔
T11	40 - 30	ROHN 3 EH	15.60	15.12	159.7	1.9245	22257.60	93816.80	0.237 [1] ✔
T12	30 - 20	ROHN 3 EH	16.08	15.62	164.9	1.9245	22878.30	93816.80	0.244 [1] ✔
T13	20 - 0	ROHN 3 EH	24.33	23.70	250.3	1.9245	33802.80	93816.80	0.360 [1] ✔

[1] P_u / ϕP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	ROHN 1.5 STD	8.60	4.15	80.0	0.4365	2233.61	21277.80	0.105 [1] ✔
T2	160 - 140	ROHN 1.5 STD	10.01	4.82	92.9	0.4365	5811.45	21277.80	0.273 [1] ✔
T3	140 - 133.333	ROHN 2 STD	10.71	5.12	78.1	0.6326	6544.21	30841.60	0.212 [1] ✔
T6	120 - 100	ROHN 2 STD	13.92	6.68	101.9	0.6326	10966.10	30841.60	0.356 [1] ✔
T7	100 - 90	ROHN 2 STD	15.04	7.24	110.5	0.6326	11196.10	30841.60	0.363 [1] ✔
T9	80 - 60	ROHN 2.5 STD	18.93	9.10	115.2	1.0497	14315.30	51171.10	0.280 [1] ✔
T10	60 - 40	ROHN 2.5 STD	21.43	10.35	131.1	1.0497	16442.30	51171.10	0.321 [1] ✔
T11	40 - 30	ROHN 2.5 STD	22.68	10.97	139.0	1.0497	17358.60	51171.10	0.339 [1] ✔
T13	20 - 0	P3.5x.226	25.18	12.23	109.8	1.7130	19348.70	83510.20	0.232 [1] ✔

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	ROHN 1.5 STD	8.54	4.13	79.5	0.4365	324.64	21277.80	0.015 [1] ✔
T4	133.333 - 126.667	ROHN 2 STD	11.40	5.47	83.4	0.6326	8471.02	30841.60	0.275 [1] ✔
T5	126.667 - 120	ROHN 2 STD	12.10	5.82	88.7	0.6326	9772.94	30841.60	0.317 [1] ✔
T8	90 - 80	ROHN 2 STD	16.36	7.90	120.5	0.6326	12043.00	30841.60	0.390 [1] ✔
T12	30 - 20	ROHN 2.5 EH	23.93	11.60	150.6	1.3797	18179.80	67258.20	0.270 [1] ✔

[1] P_u / ϕP_n controls

Redundant Horizontal (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	lb	lb	
T13	20 - 0	ROHN 1.5 STD	6.29	5.93	114.4	0.5996	5391.94	29230.10	0.184 [1] ✔

[1] $P_u / \phi P_n$ 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	lb	lb	
T13	20 - 0	ROHN 2 STD	11.50	10.77	164.2	0.8059	4926.09	39287.60	0.125 [1] ✔

[1] $P_u / \phi P_n$ controls

Redundant Hip (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	lb	lb	
T13	20 - 0	ROHN 2.5 STD	6.29	6.29	79.7	1.2780	1.82	62304.30	0.000 [1] ✔

[1] $P_u / \phi P_n$ controls

Inner Bracing 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	lb	lb	
T1	180 - 160	L2x2x1/8	4.30	4.30	82.4	0.4844	1.84	15693.80	0.000 [1] ✔
T2	160 - 140	L2x2x1/8	4.31	4.31	82.6	0.4844	4.62	15693.80	0.000 [1] ✔
T3	140 - 133.333	L2x2x1/8	5.35	5.35	102.6	0.4844	4.60	15693.80	0.000 [1] ✔
T4	133.333 - 126.667	L2x2x1/8	5.70	5.70	109.3	0.4844	6.79	15693.80	0.000 [1] ✔
T5	126.667 - 120	L2x2x1/8	6.05	6.05	115.9	0.4844	6.17	15693.80	0.000 [1] ✔
T6	120 - 100	L2 1/2x2 1/2x3/16	6.40	6.40	98.7	0.9020	3.56	29224.80	0.000 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T7	100 - 90	L2 1/2x2 1/2x3/16	7.52	7.52	116.0	0.9020	2.54	29224.80	0.000 [1]
T8	90 - 80	L2 1/2x2 1/2x3/16	8.18	8.18	126.2	0.9020	1.59	29224.80	0.000 [1]
T9	80 - 60	L3x3x3/16	8.84	8.84	113.0	1.0900	2.64	35316.00	0.000 [1]
T10	60 - 40	L3 1/2x3 1/2x1/4	10.09	10.09	111.1	1.6900	0.65	76050.00	0.000 [1]

[1] $P_u / \phi P_n$ controls

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
T1	180 - 160	Leg	ROHN 3 STD	1	-2857.24	70976.40	4.0	Pass
		Leg	ROHN 3 STD	2	-2545.09	70976.40	3.6	Pass
		Leg	ROHN 3 STD	3	-4183.04	70976.40	5.9	Pass
T2	160 - 140	Leg	ROHN 4 STD	40	-25044.60	116229.00	21.5	Pass
		Leg	ROHN 4 STD	41	-24924.10	116229.00	21.4	Pass
		Leg	ROHN 4 STD	42	-29175.00	116229.00	25.1	Pass
T3	140 - 133.333	Leg	ROHN 5 EH	79	-34209.30	239378.00	14.3	Pass
		Leg	ROHN 5 EH	80	-34303.30	239378.00	14.3	Pass
		Leg	ROHN 5 EH	81	-39112.00	239378.00	16.3	Pass
T4	133.333 - 126.667	Leg	ROHN 5 EH	94	-46333.70	239378.00	19.4	Pass
		Leg	ROHN 5 EH	95	-46679.30	239378.00	19.5	Pass
		Leg	ROHN 5 EH	96	-51882.10	239378.00	21.7	Pass
T5	126.667 - 120	Leg	ROHN 5 EH	109	-61038.10	239378.00	25.5	Pass
		Leg	ROHN 5 EH	110	-61609.30	239378.00	25.7	Pass
		Leg	ROHN 5 EH	111	-67259.40	239378.00	28.1	Pass
T6	120 - 100	Leg	ROHN 6 EHS	124	-100520.00	244017.00	41.2	Pass
		Leg	ROHN 6 EHS	125	-101622.00	244017.00	41.6	Pass
		Leg	ROHN 6 EHS	126	-108254.00	244017.00	44.4	Pass
T7	100 - 90	Leg	ROHN 6 EH	151	-123919.00	303585.00	40.8	Pass
		Leg	ROHN 6 EH	152	-125267.00	303585.00	41.3	Pass
		Leg	ROHN 6 EH	153	-132360.00	303585.00	43.6	Pass
T8	90 - 80	Leg	ROHN 6 EH	166	-145096.00	303585.00	47.8	Pass
		Leg	ROHN 6 EH	167	-146647.00	303585.00	48.3	Pass
		Leg	ROHN 6 EH	168	-154046.00	303585.00	50.7	Pass
T9	80 - 60	Leg	120deg_9.6250x0.375 BU on ROHN 8 EHS	181	-187676.00	537270.00	34.9	Pass
		Leg	120deg_9.6250x0.375 BU on ROHN 8 EHS	182	-189579.00	537270.00	35.3	Pass
		Leg	120deg_9.6250x0.375 BU on ROHN 8 EHS	183	-197499.00	537270.00	36.8	Pass
T10	60 - 40	Leg	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	208	-232161.00	460811.00	50.4	Pass
		Leg	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	209	-234227.00	460811.00	50.8	Pass
		Leg	1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe	210	-242595.00	460811.00	52.6	Pass
T11	40 - 30	Leg	1/3 9.6250x0.375 on ROHN 8	235	-254697.00	460811.00	55.3	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Leg	EHS Leg Pipe 1/3 9.6250x0.375 on ROHN 8	236	-256907.00	460811.00	55.8	Pass
		Leg	EHS Leg Pipe 1/3 9.6250x0.375 on ROHN 8	237	-265467.00	460811.00	57.6	Pass
T12	30 - 20	Leg	EHS Leg Pipe 1/3 9.6250x0.375 on ROHN 8	250	-277211.00	460811.00	60.2	Pass
		Leg	EHS Leg Pipe 1/3 9.6250x0.375 on ROHN 8	251	-279554.00	460811.00	60.7	Pass
		Leg	EHS Leg Pipe 1/3 9.6250x0.375 on ROHN 8	252	-288286.00	460811.00	62.6	Pass
T13	20 - 0	Leg	EHS Leg Pipe 1/3 9.6250x0.375 on ROHN 8	265	-299204.00	560408.00	53.4 61.0 (b)	Pass
		Leg	EH Leg Pipe 1/3 9.6250x0.375 on ROHN 8	266	-301792.00	560408.00	53.9 61.1 (b)	Pass
		Leg	EH Leg Pipe 1/3 9.6250x0.375 on ROHN 8	267	-310698.00	560408.00	55.4 61.9 (b)	Pass
T1	180 - 160	Diagonal	EH Leg Pipe ROHN 2 STD	8	-2239.24	17747.50	12.6	Pass
		Diagonal	ROHN 2 STD	9	-1974.04	17747.50	11.1	Pass
		Diagonal	ROHN 2 STD	11	-2194.53	17747.50	12.4	Pass
		Diagonal	ROHN 2 STD	12	-2307.96	17747.50	13.0	Pass
		Diagonal	ROHN 2 STD	14	-4128.96	17747.50	23.3	Pass
		Diagonal	ROHN 2 STD	15	-3694.09	17747.50	20.8	Pass
		Diagonal	ROHN 2 STD	20	-1751.63	17782.20	9.9	Pass
		Diagonal	ROHN 2 STD	21	-1440.75	17782.20	8.1	Pass
		Diagonal	ROHN 2 STD	23	-995.30	17782.20	5.6	Pass
		Diagonal	ROHN 2 STD	24	-1130.12	17782.20	6.4	Pass
		Diagonal	ROHN 2 STD	26	-2799.69	17782.20	15.7	Pass
		Diagonal	ROHN 2 STD	27	-2295.38	17782.20	12.9	Pass
		Diagonal	ROHN 2 STD	31	-513.18	17817.00	2.9	Pass
		Diagonal	ROHN 2 STD	32	-387.54	17817.00	2.2	Pass
		Diagonal	ROHN 2 STD	33	-147.80	17817.00	0.8	Pass
		Diagonal	ROHN 2 STD	34	-143.01	17817.00	0.8	Pass
		Diagonal	ROHN 2 STD	35	-610.84	17817.00	3.4	Pass
		Diagonal	ROHN 2 STD	36	-503.56	17817.00	2.8	Pass
T2	160 - 140	Diagonal	ROHN 2 STD	44	-5804.58	15331.30	37.9	Pass
		Diagonal	ROHN 2 STD	45	-5698.12	15331.30	37.2	Pass
		Diagonal	ROHN 2 STD	47	-7242.62	15331.30	47.2	Pass
		Diagonal	ROHN 2 STD	48	-7227.16	15331.30	47.1	Pass
		Diagonal	ROHN 2 STD	50	-9339.82	15331.30	60.9	Pass
		Diagonal	ROHN 2 STD	51	-9063.79	15331.30	59.1	Pass
		Diagonal	ROHN 2 STD	56	-4744.41	16154.50	29.4	Pass
		Diagonal	ROHN 2 STD	57	-4618.93	16154.50	28.6	Pass
		Diagonal	ROHN 2 STD	59	-6249.70	16154.50	38.7	Pass
		Diagonal	ROHN 2 STD	60	-6238.97	16154.50	38.6	Pass
		Diagonal	ROHN 2 STD	62	-8431.80	16154.50	52.2	Pass
		Diagonal	ROHN 2 STD	63	-8124.77	16154.50	50.3	Pass
		Diagonal	ROHN 2 STD	68	-4997.30	17005.60	29.4	Pass
		Diagonal	ROHN 2 STD	69	-4850.52	17005.60	28.5	Pass
		Diagonal	ROHN 2 STD	71	-6483.43	17005.60	38.1	Pass
		Diagonal	ROHN 2 STD	72	-6468.25	17005.60	38.0	Pass
		Diagonal	ROHN 2 STD	74	-8808.71	17005.60	51.8	Pass
		Diagonal	ROHN 2 STD	75	-8454.92	17005.60	49.7	Pass
T3	140 - 133.333	Diagonal	ROHN 2 EH	83	-6644.98	19347.50	34.3	Pass
		Diagonal	ROHN 2 EH	84	-6551.42	19347.50	33.9	Pass
		Diagonal	ROHN 2 EH	86	-8093.81	19347.50	41.8	Pass
		Diagonal	ROHN 2 EH	87	-8073.65	19347.50	41.7	Pass
		Diagonal	ROHN 2 EH	89	-10147.30	19347.50	52.4	Pass
		Diagonal	ROHN 2 EH	90	-9896.12	19347.50	51.1	Pass
T4	133.333 - 126.667	Diagonal	ROHN 2 EH	100	-9539.68	18285.10	52.2	Pass

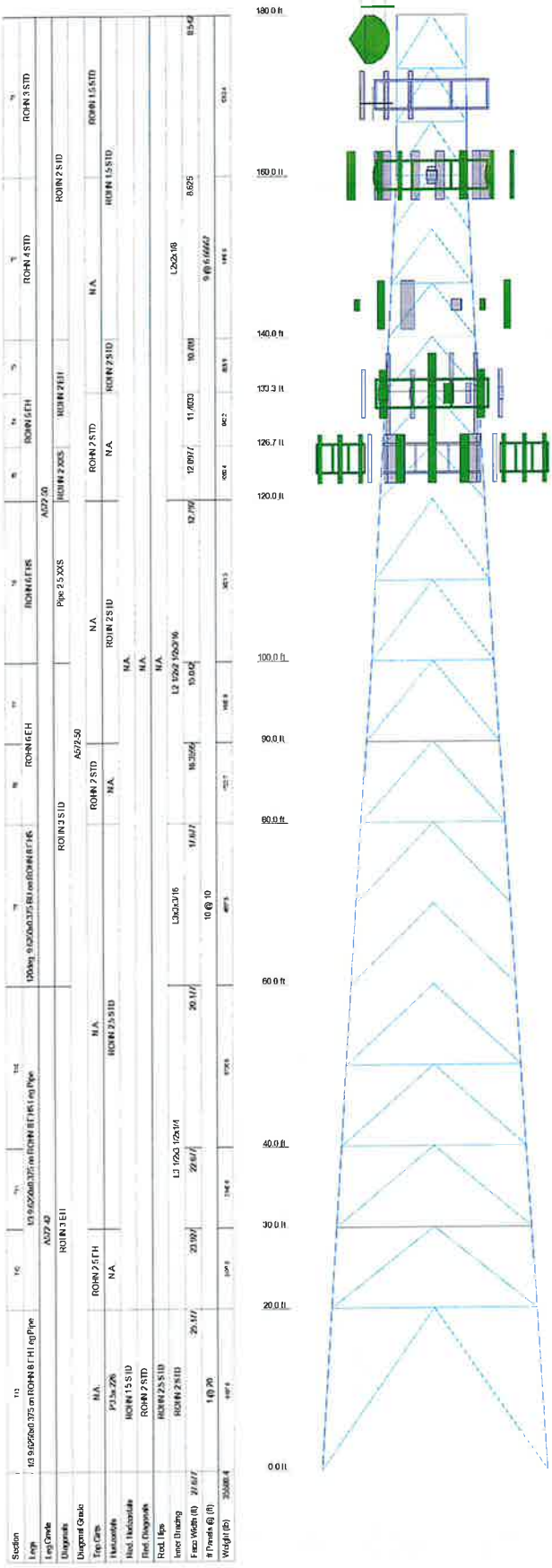
Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Diagonal	ROHN 2 EH	101	-9453.07	18285.10	51.7	Pass
		Diagonal	ROHN 2 EH	102	-10970.10	18285.10	60.0	Pass
		Diagonal	ROHN 2 EH	103	-10958.80	18285.10	59.9	Pass
		Diagonal	ROHN 2 EH	104	-12641.10	18285.10	69.1	Pass
		Diagonal	ROHN 2 EH	105	-12415.20	18285.10	67.9	Pass
T5	126.667 - 120	Diagonal	ROHN 2 XXS	115	-11320.40	25935.80	43.6	Pass
		Diagonal	ROHN 2 XXS	116	-11235.90	25935.80	43.3	Pass
		Diagonal	ROHN 2 XXS	117	-12992.10	25935.80	50.1	Pass
		Diagonal	ROHN 2 XXS	118	-12980.10	25935.80	50.0	Pass
		Diagonal	ROHN 2 XXS	119	-14259.00	25935.80	55.0	Pass
		Diagonal	ROHN 2 XXS	120	-14052.50	25935.80	54.2	Pass
T6	120 - 100	Diagonal	Pipe 2.5 XXS	128	-13840.00	30977.00	44.7	Pass
		Diagonal	Pipe 2.5 XXS	129	-13741.70	30977.00	44.4	Pass
		Diagonal	Pipe 2.5 XXS	131	-18108.10	30977.00	58.5	Pass
		Diagonal	Pipe 2.5 XXS	132	-18080.00	30977.00	58.4	Pass
		Diagonal	Pipe 2.5 XXS	134	-18251.70	30977.00	58.9	Pass
		Diagonal	Pipe 2.5 XXS	135	-18073.60	30977.00	58.3	Pass
		Diagonal	Pipe 2.5 XXS	140	-14148.70	32743.10	43.2	Pass
		Diagonal	Pipe 2.5 XXS	141	-14046.30	32743.10	42.9	Pass
		Diagonal	Pipe 2.5 XXS	143	-17280.50	32743.10	52.8	Pass
		Diagonal	Pipe 2.5 XXS	144	-17253.40	32743.10	52.7	Pass
		Diagonal	Pipe 2.5 XXS	146	-18173.10	32743.10	55.5	Pass
		Diagonal	Pipe 2.5 XXS	147	-17956.10	32743.10	54.8	Pass
T7	100 - 90	Diagonal	ROHN 3 STD	155	-12450.70	30346.40	41.0	Pass
		Diagonal	ROHN 3 STD	156	-12355.10	30346.40	40.7	Pass
		Diagonal	ROHN 3 STD	158	-17456.40	30346.40	57.5	Pass
		Diagonal	ROHN 3 STD	159	-17398.00	30346.40	57.3	Pass
		Diagonal	ROHN 3 STD	161	-17007.20	30346.40	56.0	Pass
		Diagonal	ROHN 3 STD	162	-16881.50	30346.40	55.6	Pass
T8	90 - 80	Diagonal	ROHN 3 STD	172	-12397.00	28290.90	43.8	Pass
		Diagonal	ROHN 3 STD	173	-12304.40	28290.90	43.5	Pass
		Diagonal	ROHN 3 STD	174	-18058.70	28290.90	63.8	Pass
		Diagonal	ROHN 3 STD	175	-18005.60	28290.90	63.6	Pass
		Diagonal	ROHN 3 STD	176	-17238.80	28290.90	60.9	Pass
		Diagonal	ROHN 3 STD	177	-17139.20	28290.90	60.6	Pass
T9	80 - 60	Diagonal	ROHN 3 STD	185	-13394.50	25233.20	53.1	Pass
		Diagonal	ROHN 3 STD	186	-13307.90	25233.20	52.7	Pass
		Diagonal	ROHN 3 STD	188	-20108.10	25233.20	79.7	Pass
		Diagonal	ROHN 3 STD	189	-19988.40	25233.20	79.2	Pass
		Diagonal	ROHN 3 STD	191	-18641.30	25233.20	73.9	Pass
		Diagonal	ROHN 3 STD	192	-18574.40	25233.20	73.6	Pass
		Diagonal	ROHN 3 STD	197	-12907.10	26922.60	47.9	Pass
		Diagonal	ROHN 3 STD	198	-12816.80	26922.60	47.6	Pass
		Diagonal	ROHN 3 STD	200	-19206.30	26922.60	71.3	Pass
		Diagonal	ROHN 3 STD	201	-19140.60	26922.60	71.1	Pass
		Diagonal	ROHN 3 STD	203	-18043.10	26922.60	67.0	Pass
		Diagonal	ROHN 3 STD	204	-17959.20	26922.60	66.7	Pass
T10	60 - 40	Diagonal	ROHN 3 EH	212	-14459.10	28518.80	50.7	Pass
		Diagonal	ROHN 3 EH	213	-14380.20	28518.80	50.4	Pass
		Diagonal	ROHN 3 EH	215	-22044.10	28518.80	77.3	Pass
		Diagonal	ROHN 3 EH	216	-21836.20	28518.80	76.6	Pass
		Diagonal	ROHN 3 EH	218	-20114.30	28518.80	70.5	Pass
		Diagonal	ROHN 3 EH	219	-20071.20	28518.80	70.4	Pass
		Diagonal	ROHN 3 EH	224	-14094.00	30411.50	46.3	Pass
		Diagonal	ROHN 3 EH	225	-14014.20	30411.50	46.1	Pass
		Diagonal	ROHN 3 EH	227	-21335.20	30411.50	70.2	Pass
		Diagonal	ROHN 3 EH	228	-21160.90	30411.50	69.6	Pass
		Diagonal	ROHN 3 EH	230	-19637.40	30411.50	64.6	Pass
		Diagonal	ROHN 3 EH	231	-19578.80	30411.50	64.4	Pass
T11	40 - 30	Diagonal	ROHN 3 EH	239	-14790.80	26718.70	55.4	Pass
		Diagonal	ROHN 3 EH	240	-14710.50	26718.70	55.1	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Diagonal	ROHN 3 EH	242	-22785.00	26718.70	85.3	Pass
		Diagonal	ROHN 3 EH	243	-22537.00	26718.70	84.3	Pass
		Diagonal	ROHN 3 EH	245	-20622.60	26718.70	77.2	Pass
		Diagonal	ROHN 3 EH	246	-20594.80	26718.70	77.1	Pass
T12	30 - 20	Diagonal	ROHN 3 EH	256	-15392.10	25055.10	61.4	Pass
		Diagonal	ROHN 3 EH	257	-15313.80	25055.10	61.1	Pass
		Diagonal	ROHN 3 EH	258	-23491.00	25055.10	93.8	Pass
		Diagonal	ROHN 3 EH	259	-23245.30	25055.10	92.8	Pass
		Diagonal	ROHN 3 EH	260	-21202.60	25055.10	84.6	Pass
		Diagonal	ROHN 3 EH	261	-21181.50	25055.10	84.5	Pass
T13	20 - 0	Diagonal	ROHN 3 EH	269	-22175.20	43506.30	51.0	Pass
		Diagonal	ROHN 3 EH	272	-22057.20	43506.30	50.7	Pass
		Diagonal	ROHN 3 EH	276	-35039.50	43506.30	80.5	Pass
		Diagonal	ROHN 3 EH	279	-34340.10	43506.30	78.9	Pass
		Diagonal	ROHN 3 EH	284	-30744.70	43506.30	70.7	Pass
		Diagonal	ROHN 3 EH	287	-31280.80	43506.30	71.9	Pass
T1	180 - 160	Horizontal	ROHN 1.5 STD	7	1433.26	21277.80	6.7	Pass
		Horizontal	ROHN 1.5 STD	10	1383.44	21277.80	6.5	Pass
		Horizontal	ROHN 1.5 STD	13	2233.61	21277.80	10.5	Pass
		Horizontal	ROHN 1.5 STD	19	1272.84	21277.80	6.0	Pass
		Horizontal	ROHN 1.5 STD	22	762.45	21277.80	3.6	Pass
		Horizontal	ROHN 1.5 STD	25	1505.69	21277.80	7.1	Pass
T2	160 - 140	Horizontal	ROHN 1.5 STD	43	-3597.22	19142.00	18.8	Pass
		Horizontal	ROHN 1.5 STD	46	-4621.62	19142.00	24.1	Pass
		Horizontal	ROHN 1.5 STD	49	-5810.94	19142.00	30.4	Pass
		Horizontal	ROHN 1.5 STD	55	-2803.40	20895.80	13.4	Pass
		Horizontal	ROHN 1.5 STD	58	-3749.47	20895.80	17.9	Pass
		Horizontal	ROHN 1.5 STD	61	-5017.79	20895.80	24.0	Pass
		Horizontal	ROHN 1.5 STD	67	3363.71	21277.80	15.8	Pass
		Horizontal	ROHN 1.5 STD	70	4001.11	21277.80	18.8	Pass
		Horizontal	ROHN 1.5 STD	73	5075.25	21277.80	23.9	Pass
T3	140 - 133.333	Horizontal	ROHN 2 STD	82	4269.22	30841.60	13.8 15.5 (b)	Pass
		Horizontal	ROHN 2 STD	85	5322.99	30841.60	17.3 19.3 (b)	Pass
		Horizontal	ROHN 2 STD	88	6544.21	30841.60	21.2 23.7 (b)	Pass
T6	120 - 100	Horizontal	ROHN 2 STD	127	-8116.83	22639.20	35.9	Pass
		Horizontal	ROHN 2 STD	130	-10834.40	22639.20	47.9	Pass
		Horizontal	ROHN 2 STD	133	-10771.90	22639.20	47.6	Pass
		Horizontal	ROHN 2 STD	139	-7920.03	25586.40	31.0	Pass
		Horizontal	ROHN 2 STD	142	-9833.30	25586.40	38.4	Pass
		Horizontal	ROHN 2 STD	145	-10222.10	25586.40	40.0	Pass
T7	100 - 90	Horizontal	ROHN 2 STD	154	-7762.68	19817.20	39.2	Pass
		Horizontal	ROHN 2 STD	157	-11222.20	19817.20	56.6	Pass
		Horizontal	ROHN 2 STD	160	-10854.80	19817.20	54.8	Pass
T9	80 - 60	Horizontal	ROHN 2.5 STD	184	-9291.23	28984.30	32.1 34.1 (b)	Pass
		Horizontal	ROHN 2.5 STD	187	-14293.10	28984.30	49.3 51.8 (b)	Pass
		Horizontal	ROHN 2.5 STD	190	-13192.60	28984.30	45.5 48.4 (b)	Pass
		Horizontal	ROHN 2.5 STD	196	-8664.40	33028.40	26.2 31.8 (b)	Pass
		Horizontal	ROHN 2.5 STD	199	-13155.60	33028.40	39.8 47.9 (b)	Pass
		Horizontal	ROHN 2.5 STD	202	-12293.90	33028.40	37.2 45.2 (b)	Pass
T10	60 - 40	Horizontal	ROHN 2.5 STD	211	-10489.00	22405.40	46.8	Pass
		Horizontal	ROHN 2.5 STD	214	-16397.60	22405.40	73.2	Pass
		Horizontal	ROHN 2.5 STD	217	-14907.10	22405.40	66.5	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Horizontal	ROHN 2.5 STD	223	-10007.90	25378.10	39.4	Pass
		Horizontal	ROHN 2.5 STD	226	-15557.50	25378.10	61.3	Pass
		Horizontal	ROHN 2.5 STD	229	-14264.80	25378.10	56.2	Pass
T11	40 - 30	Horizontal	ROHN 2.5 STD	238	-10965.50	19925.90	55.0	Pass
		Horizontal	ROHN 2.5 STD	241	-17342.40	19925.90	87.0	Pass
		Horizontal	ROHN 2.5 STD	244	-15650.20	19925.90	78.5	Pass
T13	20 - 0	Horizontal	P3.5x.226	268	-12111.80	49951.20	24.2 30.5 (b)	Pass
		Horizontal	P3.5x.226	275	-19566.80	49951.20	39.2 49.2 (b)	Pass
		Horizontal	P3.5x.226	283	-17443.80	49951.20	34.9 44.1 (b)	Pass
T1	180 - 160	Top Girt	ROHN 1.5 STD	4	324.64	21277.80	1.5	Pass
		Top Girt	ROHN 1.5 STD	5	-118.96	22660.50	0.5	Pass
		Top Girt	ROHN 1.5 STD	6	-352.97	22660.50	1.6	Pass
T4	133.333 - 126.667	Top Girt	ROHN 2 STD	97	-6429.58	29081.40	22.1 23.3 (b)	Pass
		Top Girt	ROHN 2 STD	98	-7645.62	29081.40	26.3 27.7 (b)	Pass
		Top Girt	ROHN 2 STD	99	-8463.67	29081.40	29.1 30.7 (b)	Pass
T5	126.667 - 120	Top Girt	ROHN 2 STD	112	-7739.11	27207.90	28.4	Pass
		Top Girt	ROHN 2 STD	113	-9083.31	27207.90	33.4	Pass
		Top Girt	ROHN 2 STD	114	-9772.57	27207.90	35.9	Pass
T8	90 - 80	Top Girt	ROHN 2 STD	169	-8053.45	16719.60	48.2	Pass
		Top Girt	ROHN 2 STD	170	-12002.70	16719.60	71.8	Pass
		Top Girt	ROHN 2 STD	171	-11391.30	16719.60	68.1	Pass
T12	30 - 20	Top Girt	ROHN 2.5 EH	253	-11575.40	22438.80	51.6	Pass
		Top Girt	ROHN 2.5 EH	254	-18017.40	22438.80	80.3	Pass
		Top Girt	ROHN 2.5 EH	255	-16199.90	22438.80	72.2	Pass
T13	20 - 0	Redund Horz 1 Bracing	ROHN 1.5 STD	270	-5192.47	13802.80	37.6	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	273	-5237.37	13802.80	37.9	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	277	-5237.37	13802.80	37.9	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	280	-5391.94	13802.80	39.1	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	285	-5391.94	13802.80	39.1	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	288	-5192.47	13802.80	37.6	Pass
T13	20 - 0	Redund Diag 1 Bracing	ROHN 2 STD	271	-4743.86	8998.85	52.7	Pass
		Redund Diag 1 Bracing	ROHN 2 STD	274	-4784.88	8998.85	53.2	Pass
		Redund Diag 1 Bracing	ROHN 2 STD	278	-4784.88	8998.85	53.2	Pass
		Redund Diag 1 Bracing	ROHN 2 STD	281	-4926.09	8998.85	54.7	Pass
		Redund Diag 1 Bracing	ROHN 2 STD	286	-4926.09	8998.85	54.7	Pass
		Redund Diag 1 Bracing	ROHN 2 STD	289	-4743.86	8998.85	52.7	Pass
T13	20 - 0	Redund Hip 1 Bracing	ROHN 2.5 STD	282	-17.44	48180.50	0.2	Pass
		Redund Hip 1 Bracing	ROHN 2.5 STD	290	-17.58	48180.50	0.2	Pass
		Redund Hip 1 Bracing	ROHN 2.5 STD	291	-17.46	48180.50	0.2	Pass
T1	180 - 160	Inner Bracing	L2x2x1/8	16	-1.80	8234.10	0.4	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Inner Bracing	L2x2x1/8	17	-1.84	8234.10	0.4	Pass
		Inner Bracing	L2x2x1/8	18	-1.71	8234.10	0.4	Pass
		Inner Bracing	L2x2x1/8	28	-1.40	8287.35	0.4	Pass
		Inner Bracing	L2x2x1/8	29	-1.41	8287.35	0.4	Pass
		Inner Bracing	L2x2x1/8	30	-1.38	8287.35	0.4	Pass
		Inner Bracing	L2x2x1/8	37	-0.29	8341.12	0.4	Pass
		Inner Bracing	L2x2x1/8	38	-0.28	8341.12	0.4	Pass
		Inner Bracing	L2x2x1/8	39	-0.32	8341.12	0.4	Pass
T2	160 - 140	Inner Bracing	L2x2x1/8	52	-4.71	6068.75	0.5	Pass
		Inner Bracing	L2x2x1/8	53	-4.87	6068.75	0.5	Pass
		Inner Bracing	L2x2x1/8	54	-4.69	6068.75	0.5	Pass
		Inner Bracing	L2x2x1/8	64	-4.25	7007.17	0.4	Pass
		Inner Bracing	L2x2x1/8	65	-4.44	7007.17	0.4	Pass
		Inner Bracing	L2x2x1/8	66	-4.22	7007.17	0.4	Pass
		Inner Bracing	L2x2x1/8	76	-6.18	8181.36	0.4	Pass
		Inner Bracing	L2x2x1/8	77	-6.50	8181.36	0.4	Pass
		Inner Bracing	L2x2x1/8	78	-6.12	8181.36	0.4	Pass
T3	140 - 133.333	Inner Bracing	L2x2x1/8	91	-7.23	5306.96	0.5	Pass
		Inner Bracing	L2x2x1/8	92	-7.43	5306.96	0.5	Pass
		Inner Bracing	L2x2x1/8	93	-7.20	5306.96	0.5	Pass
T4	133.333 - 126.667	Inner Bracing	L2x2x1/8	106	-9.60	4680.37	0.5	Pass
		Inner Bracing	L2x2x1/8	107	-9.77	4680.37	0.5	Pass
		Inner Bracing	L2x2x1/8	108	-9.58	4680.37	0.5	Pass
T5	126.667 - 120	Inner Bracing	L2x2x1/8	121	-10.46	4158.54	0.5	Pass
		Inner Bracing	L2x2x1/8	122	-10.60	4158.54	0.5	Pass
		Inner Bracing	L2x2x1/8	123	-10.44	4158.54	0.5	Pass
T6	120 - 100	Inner Bracing	L2 1/2x2 1/2x3/16	136	-11.40	9072.37	0.4	Pass
		Inner Bracing	L2 1/2x2 1/2x3/16	137	-11.49	9072.37	0.4	Pass
		Inner Bracing	L2 1/2x2 1/2x3/16	138	-11.39	9072.37	0.4	Pass
		Inner Bracing	L2 1/2x2 1/2x3/16	148	-11.97	10738.30	0.4	Pass
		Inner Bracing	L2 1/2x2 1/2x3/16	149	-12.09	10738.30	0.4	Pass
		Inner Bracing	L2 1/2x2 1/2x3/16	150	-11.96	10738.30	0.4	Pass
T7	100 - 90	Inner Bracing	L2 1/2x2 1/2x3/16	163	-10.15	7766.06	0.5	Pass
		Inner Bracing	L2 1/2x2 1/2x3/16	164	-10.24	7766.06	0.5	Pass
		Inner Bracing	L2 1/2x2 1/2x3/16	165	-10.13	7766.06	0.5	Pass
T8	90 - 80	Inner Bracing	L2 1/2x2 1/2x3/16	178	-10.38	6565.57	0.5	Pass
		Inner Bracing	L2 1/2x2 1/2x3/16	179	-10.47	6565.57	0.5	Pass
		Inner Bracing	L2 1/2x2 1/2x3/16	180	-10.36	6565.57	0.5	Pass
T9	80 - 60	Inner Bracing	L3x3x3/16	193	-12.22	8593.12	0.6	Pass
		Inner Bracing	L3x3x3/16	194	-12.32	8593.12	0.6	Pass
		Inner Bracing	L3x3x3/16	195	-12.18	8593.12	0.6	Pass
		Inner Bracing	L3x3x3/16	205	-11.79	9851.38	0.5	Pass
		Inner Bracing	L3x3x3/16	206	-11.90	9851.38	0.5	Pass
		Inner Bracing	L3x3x3/16	207	-11.75	9851.38	0.5	Pass
T10	60 - 40	Inner Bracing	L3 1/2x3 1/2x1/4	220	-14.62	14095.40	0.4	Pass
		Inner Bracing	L3 1/2x3 1/2x1/4	221	-14.71	14095.40	0.4	Pass
		Inner Bracing	L3 1/2x3 1/2x1/4	222	-14.58	14095.40	0.4	Pass
		Inner Bracing	L3 1/2x3 1/2x1/4	232	-14.16	15896.00	0.3	Pass
		Inner Bracing	L3 1/2x3 1/2x1/4	233	-14.25	15896.00	0.3	Pass
		Inner Bracing	L3 1/2x3 1/2x1/4	234	-14.11	15896.00	0.3	Pass
T11	40 - 30	Inner Bracing	L3 1/2x3 1/2x1/4	247	-14.88	12584.30	0.4	Pass
		Inner Bracing	L3 1/2x3 1/2x1/4	248	-14.96	12584.30	0.4	Pass
		Inner Bracing	L3 1/2x3 1/2x1/4	249	-14.83	12584.30	0.4	Pass
T12	30 - 20	Inner Bracing	L3 1/2x3 1/2x1/4	262	-15.72	11303.80	0.4	Pass
		Inner Bracing	L3 1/2x3 1/2x1/4	263	-15.80	11303.80	0.4	Pass
		Inner Bracing	L3 1/2x3 1/2x1/4	264	-15.68	11303.80	0.4	Pass
T13	20 - 0	Inner Bracing	ROHN 2 STD	292	-13.80	6590.81	0.4	Pass
		Inner Bracing	ROHN 2 STD	293	-14.23	6590.81	0.4	Pass
		Inner Bracing	ROHN 2 STD	294	-13.53	6590.81	0.4	Pass
							Summary	

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
						Leg (T12)	62.6	Pass
						Diagonal (T12)	93.8	Pass
						Horizontal (T11)	87.0	Pass
						Top Girt (T12)	80.3	Pass
						Redund Horz 1 Bracing (T13)	39.1	Pass
						Redund Diag 1 Bracing (T13)	54.7	Pass
						Redund Hip 1 Bracing (T13)	0.2	Pass
						Inner Bracing (T9)	0.6	Pass
						Bolt Checks	67.7	Pass
						RATING =	**93.8**	**Pass**



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
ANT940Y10WR (CSP)	187	Commscope MTC397508D 8 ft V-Frame (Dish - Reserved)	144
ANT940Y10WR (CSP - Yagi Antenna)	181	ABR6449 (ATI)	133
PA6-65AC (DNK-52 / CSP-42)	177	DMP65R-BU6D (ATI)	133
RFI BPS7496-180-14 Panel Antenna (CSP 80)	170	QD6616-7 (ATI)	133
RFI BPS7496-180-14 Panel Antenna (CSP 81)	170	ABR6419 (ATI)	133
RFI BPS7496-180-14 Panel Antenna (CSP 82)	170	ABR6449 (ATI)	133
SitePro1 USF12-396-U Mount Assembly w/ (3) 90° Mount Pipes (CSP 47, 80, 81, 82)	170	DMP65R-BU6D (ATI)	133
4326-B31 01T TTA Unit (Re-Located TMA (CSP))	170	RRUS-32 B66 (ATI)	133
3' Yagi (CSP)	169	RRUS-32 (ATI)	133
B2/B66A RRH (Verizon)	160	RRUS-32 (ATI)	133
B5/B13 RRH (Verizon)	160	RRUS-32 B66 (ATI)	133
CBRS RRH RT4401-48A (Verizon)	160	RRUS-32 (ATI)	133
RFS4356d-25A-B2/B66A RRH (Verizon)	160	RRUS-32 (ATI)	133
RFS4461d-13A (Verizon)	160	RRUS-32 B66 (ATI)	133
JAI81466-R3D Panel Antenna (Verizon)	160	RRUS-32 (ATI)	133
JAI81466-R3D Panel Antenna (Verizon)	160	RRUS-32 (ATI)	133
XXDWMM-12.5-65-8T-CBRS Panel (Verizon)	160	4478 B14 (ATI)	133
MT6413-77A (Verizon)	160	4478 B14 (ATI)	133
CBC78T-DS-43-2X Diplexer (Verizon)	160	4478 B14 (ATI)	133
B2/B66A RRH (Verizon)	160	4449 B5/B12 (ATI)	133
RFS4461d-13A (Verizon)	160	4449 B5/B12 (ATI)	133
CBRS RRH RT4401-48A (Verizon)	160	4449 B5/B12 (ATI)	133
JAI81466-R3D Panel Antenna (Verizon)	160	DC6-48-60-18-8F (Squid) Suppressor (ATI)	133
JAI81466-R3D Panel Antenna (Verizon)	160	DC6-48-60-18-8F (Squid) Suppressor (ATI)	133
XXDWMM-12.5-65-8T-CBRS Panel (Verizon)	160	DC9 (ATI)	133
MT6413-77A (Verizon)	160	SitePro VFA14-10 (ATI)	133
CBC78T-DS-43-2X Diplexer (Verizon)	160	SitePro VFA14-10 (ATI)	133
B2/B66A RRH (Verizon)	160	SitePro VFA14-10 (ATI)	133
RFS4461d-13A (Verizon)	160	QD6616-7 (ATI)	133
CBRS RRH RT4401-48A (Verizon)	160	ABR6419 (ATI)	133
DB-T1-6Z-8AB-0Z Distribution Box (Verizon)	160	ABR6449 (ATI)	133
DB-T1-6Z-8AB-0Z Distribution Box (Verizon)	160	DMP65R-BU6D (ATI)	133
ROHN 6'x15' Boom Gate (1) (Verizon)	160	QD6616-7 (AT1)	133
ROHN 6'x15' Boom Gate (1) (Verizon)	160	ABR6419 (AT1)	133
MX06FRO640-02 (Verizon)	160	Generic Twin TMA unit (T-Mobile)	125
MX06FRO640-02 (Verizon)	160	Generic Twin TMA unit (T-Mobile)	125
XXDWMM-12.5-65-8T-CBRS Panel (Verizon)	160	ABP21 B4A/B2P (T-Mobile)	125
MT6413-77A (Verizon)	160	ABP21 B4A/B2P (T-Mobile)	125
MX06FRO640-02 (Verizon)	160	ABP21 B4A/B2P (T-Mobile)	125
MX06FRO640-02 (Verizon)	160	LNX-6515DS (T-Mobile)	125
ROHN 6'x15' Boom Gate (1) (Verizon)	160	LNX-6515DS (T-Mobile)	125
FTVV-65B-R2 (Dish - Reserved)	144	LNX-6515DS (T-Mobile)	125
FTVV-65B-R2 (Dish - Reserved)	144	RRUS-11 (T-Mobile)	125
FTVV-65B-R2 (Dish - Reserved)	144	RRUS-11 (T-Mobile)	125
TA08025-B604 (Dish - Reserved)	144	RRUS-11 (T-Mobile)	125
TA08025-B604 (Dish - Reserved)	144	LTI-12-372 Sector Mount (1) (T-Mobile)	125
TA08025-B604 (Dish - Reserved)	144	LTI-12-372 Sector Mount (1) (T-Mobile)	125
TA08025-B605 (Dish - Reserved)	144	LTI-12-372 Sector Mount (1) (T-Mobile)	125
TA08025-B605 (Dish - Reserved)	144	ABP21 B2A/B4P (T-Mobile)	125
TA08025-B605 (Dish - Reserved)	144	ABP21 B2A/B4P (T-Mobile)	125
RDIDC-9181-PF-48 (Dish - Reserved)	144	ABP21 B2A/B4P (T-Mobile)	125
RDIDC-9181-PF-48 (Dish - Reserved)	144	Generic Twin TMA unit (T-Mobile)	125
RDIDC-9181-PF-48 (Dish - Reserved)	144	ANT150D (CSP - 1-Bay Dipole)	113
Commscope MTC397508D 8 ft V-Frame (Dish - Reserved)	144	GPS (DNK-1 / GPS)	60
Commscope MTC397508D 8 ft V-Frame (Dish - Reserved)	144		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A572-42	42 ksi	60 ksi

TOWER DESIGN NOTES

1. Tower designed for a 90 mph basic wind in accordance with the TIA/EIA-222-F Standard.
2. Tower is also designed for a 90 mph basic wind with 0.50 in ice.
3. Deflections are based upon a 90 mph wind.

Centek Engineering Inc.
63-2 North Branford Rd.
Branford, CT 06405
Phone: (203) 488-0580
FAX: (203) 488-8587

Job:	22027.01 - Westport
Project:	180-ft Lattice Tower (CSP #32)
Client: Verizon	Drawn by: TJL / App'd:
Code: TIA/EIA-222-F	Date: 06/11/24 / Scale: NTS
File:	Dwg No. E-1

tnxTower	Job	Page
	22027.01 - Westport	1 of 3
Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	Project 180-ft Lattice Tower (CSP #32)	Date 15:49:07 06/11/24
	Client Verizon	Designed by TJL

Load Combinations

Comb. No.	Description
1	Dead Only
2	Dead+Wind 0 deg - No Ice
3	Dead+Wind 30 deg - No Ice
4	Dead+Wind 45 deg - No Ice
5	Dead+Wind 60 deg - No Ice
6	Dead+Wind 90 deg - No Ice
7	Dead+Wind 120 deg - No Ice
8	Dead+Wind 135 deg - No Ice
9	Dead+Wind 150 deg - No Ice
10	Dead+Wind 180 deg - No Ice
11	Dead+Wind 210 deg - No Ice
12	Dead+Wind 225 deg - No Ice
13	Dead+Wind 240 deg - No Ice
14	Dead+Wind 270 deg - No Ice
15	Dead+Wind 300 deg - No Ice
16	Dead+Wind 315 deg - No Ice
17	Dead+Wind 330 deg - No Ice
18	Dead+Ice
19	Dead+Wind 0 deg+Ice
20	Dead+Wind 30 deg+Ice
21	Dead+Wind 45 deg+Ice
22	Dead+Wind 60 deg+Ice
23	Dead+Wind 90 deg+Ice
24	Dead+Wind 120 deg+Ice
25	Dead+Wind 135 deg+Ice
26	Dead+Wind 150 deg+Ice
27	Dead+Wind 180 deg+Ice
28	Dead+Wind 210 deg+Ice
29	Dead+Wind 225 deg+Ice
30	Dead+Wind 240 deg+Ice
31	Dead+Wind 270 deg+Ice
32	Dead+Wind 300 deg+Ice
33	Dead+Wind 315 deg+Ice
34	Dead+Wind 330 deg+Ice
35	Dead+Wind 0 deg - Service
36	Dead+Wind 30 deg - Service
37	Dead+Wind 45 deg - Service
38	Dead+Wind 60 deg - Service
39	Dead+Wind 90 deg - Service
40	Dead+Wind 120 deg - Service
41	Dead+Wind 135 deg - Service
42	Dead+Wind 150 deg - Service
43	Dead+Wind 180 deg - Service
44	Dead+Wind 210 deg - Service
45	Dead+Wind 225 deg - Service
46	Dead+Wind 240 deg - Service
47	Dead+Wind 270 deg - Service
48	Dead+Wind 300 deg - Service
49	Dead+Wind 315 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	180 - 160	8.354	35	0.3549	0.2410
T2	160 - 140	6.848	35	0.3507	0.2178
T3	140 - 133.333	5.311	35	0.3230	0.1695
T4	133.333 - 126.667	4.836	35	0.3133	0.1642
T5	126.667 - 120	4.361	35	0.3017	0.1575
T6	120 - 100	3.917	35	0.2862	0.1522
T7	100 - 90	2.782	35	0.2282	0.1360
T8	90 - 80	2.282	35	0.2003	0.1212
T9	80 - 60	1.842	35	0.1700	0.1054
T10	60 - 40	1.096	35	0.1305	0.0765
T11	40 - 30	0.541	35	0.0863	0.0512
T12	30 - 20	0.328	35	0.0630	0.0381
T13	20 - 0	0.173	35	0.0390	0.0265

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
187.00	ANT940Y10-WR	35	8.354	0.3549	0.2410	127179
181.00	ANT940Y10-WR	35	8.354	0.3549	0.2410	127179
177.00	PA6-65AC	35	8.131	0.3552	0.2397	127179
170.00	RFI BPS7496-180-14 Panel Antenna	35	7.609	0.3552	0.2348	63590
169.00	3' Yagi	35	7.534	0.3551	0.2336	57809
160.00	ROHN 6'x15' Boom Gate (1)	35	6.848	0.3507	0.2178	38281
144.00	FFVV-65B-R2	35	5.606	0.3291	0.1743	20225
133.00	QD6616-7	35	4.813	0.3128	0.1640	65414
125.00	LTF12=372 Sector Mount (1)	35	4.246	0.2982	0.1559	13679
113.00	ANT150D	35	3.492	0.2667	0.1479	17884
60.00	GPS	35	1.096	0.1305	0.0765	23035

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	180 - 160	10.393	19	0.4384	0.2765
T2	160 - 140	8.532	19	0.4334	0.2511
T3	140 - 133.333	6.638	19	0.3994	0.2094
T4	133.333 - 126.667	6.051	19	0.3878	0.2018
T5	126.667 - 120	5.465	19	0.3736	0.1943
T6	120 - 100	4.915	19	0.3548	0.1884
T7	100 - 90	3.504	19	0.2841	0.1672
T8	90 - 80	2.879	19	0.2499	0.1485
T9	80 - 60	2.328	19	0.2126	0.1288
T10	60 - 40	1.388	19	0.1637	0.0931
T11	40 - 30	0.687	19	0.1085	0.0621
T12	30 - 20	0.418	19	0.0793	0.0462
T13	20 - 0	0.221	30	0.0491	0.0321

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
187.00	ANT940Y10-WR	19	10.393	0.4384	0.2765	108684
181.00	ANT940Y10-WR	19	10.393	0.4384	0.2765	108684
177.00	PA6-65AC	19	10.117	0.4389	0.2751	108684
170.00	RFI BPS7496-180-14 Panel Antenna	19	9.471	0.4390	0.2700	54342
169.00	3' Yagi	19	9.378	0.4388	0.2689	49402
160.00	ROHN 6'x15' Boom Gate (1)	19	8.532	0.4334	0.2511	32610
144.00	FFVV-65B-R2	19	7.003	0.4068	0.2155	17631
133.00	QD6616-7	19	6.022	0.3871	0.2014	65414
125.00	LTF12=372 Sector Mount (1)	19	5.323	0.3693	0.1926	11577
113.00	ANT150D	19	4.388	0.3310	0.1825	14814
60.00	GPS	19	1.388	0.1637	0.0931	18432

CENTEK engineering
Centered on Solutions℠
63-2 North Branford Road
Branford, CT 06405
www.centekeng.com
P: (203) 488-0580
F: (203) 488-8587

Subject:		Anchor Bolt Analysis
Location:		180-ft Lattice Tower Westport, CT
Rev. 5: 1/22/24		Prepared by: T.J.L. Checked by: C.F.C. Job No. 22027.01

Anchor Bolt Analysis:

Input Data:

Tower Reactions:

Tension Force =	Tension := 309·kips	(Input From tnxTower)
Compression Force =	Compression := 355·kips	(Input From tnxTower)
Shear Force =	Shear := 51·kips	(Input From tnxTower)

Anchor Bolt Data:

ASTMA354 Grade BC

Number of Anchor Bolts =	N := 10	(User Input)
Bolt Ultimate Strength =	F_u := 125·ksi	(User Input)
Bolt Yield Strength =	F_y := 109·ksi	(User Input)
Bolt Modulus =	E := 29000·ksi	(User Input)
Diameter of Anchor Bolts =	D := 1.00·in	(User Input)
Threads per Inch =	n := 8	(User Input)
Length from Top of Pier to Bottom of Leveling Nut =	L_{ar} := 0·in	(User Input)

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Anchor Bolt Analysis:

Calculated Anchor Bolt Properties:

Gross Area of Bolt = $A_g := \frac{\pi}{4} \cdot D^2 = 0.785 \cdot in^2$

Net Area of Bolt = $A_n := \frac{\pi}{4} \cdot \left(D - \frac{0.9743 \cdot in}{n} \right)^2 = 0.606 \cdot in^2$

Net Diameter = $D_n := \frac{2 \cdot \sqrt{A_n}}{\sqrt{\pi}} = 0.878 \cdot in$

Radius of Gyration of Bolt = $r := \frac{D_n}{4} = 0.22 \cdot in$

Elastic Section Modulus of Bolt = $S_x := \frac{\pi \cdot D_n^3}{32} = 0.066 \cdot in^3$

Plastic Section Modulus of Bolt = $Z_x := \frac{D_n^3}{6} = 0.113 \cdot in^3$

Anchor Bolt Design Strength:

Resistance Factor for Flexure = $\phi_f := 0.9$

Resistance Factor for Compression = $\phi_c := 0.9$

Resistance Factor for Tension = $\phi_t := 0.75$

Resistance Factor for Shear = $\phi_v := 0.75$

Design Tensile Strength = $\Phi R_{nt} := \phi_t \cdot F_u \cdot A_n = 56.8 \cdot k$

Design Compression Strength = $\Phi R_{nc} := \phi_c \cdot F_y \cdot A_g = 77 \cdot k$

Design Shear Strength (Tension) = $\Phi R_{nv} := \phi_v \cdot 0.5 F_u \cdot A_g = 36.8 \cdot k$

Design Shear Strength (Compression) = $\Phi R_{nvc} := \phi_c \cdot 0.6 F_y \cdot A_g \cdot 0.75 = 34.7 \cdot k$

Check Anchor Bolt Tension Force:

Maximum Tensile Force =

$$P_{ut} := \frac{\text{Tension}}{N} = 30.9 \cdot \text{kips}$$

Maximum Compressive Force =

$$P_{uc} := \frac{\text{Compression}}{N} = 35.5 \cdot \text{kips}$$

Maximum Shear Force =

$$V_u := \frac{\text{Shear}}{N} = 5.1 \cdot \text{kips}$$

Condition1 =

$$\text{Condition1} := \text{if}\left[\left[\left(\frac{P_{ut}}{\Phi R_{nt}}\right)^2 + \left(\frac{V_u}{\Phi R_{nv}}\right)^2\right] \le 1.00, \text{"OK"}, \text{"Overstressed"}\right]$$

Condition1 = "OK"

Condition2 =

$$\text{Condition2} := \text{if}\left[\left[\left(\frac{P_{uc}}{\Phi R_{nc}}\right) + \left(\frac{V_u}{\Phi R_{nvc}}\right)^2\right] \le 1.00, \text{"OK"}, \text{"Overstressed"}\right]$$

Condition2 = "OK"

Bolt % of Capacity =

$$\max\left[\left(\frac{P_{ut}}{\Phi R_{nt}}\right)^2 + \left(\frac{V_u}{\Phi R_{nv}}\right)^2, \left(\frac{P_{uc}}{\Phi R_{nc}}\right) + \left(\frac{V_u}{\Phi R_{nvc}}\right)^2\right] = 48.2 \cdot \%$$

CENTEK engineering
Centered on Solutions℠ www.centekeng.com
63-2 North Branford Road P: (203) 488-0580
Branford, CT 06405 F: (203) 488-8587

Subject: FOUNDATION ANALYSIS

Location: 180-ft Lattice Tower
Westport, CT

Rev. 5: 1/22/24

Prepared by: T.J.L Checked by: C.F.C.
Job no. 22027.01

Caisson Foundation:

Input Data:

Tower Data

Uplift =	Uplift := 309·kips	(User Input)
Compression =	Comp := 355·kips	(User Input)
Shear Force =	Shear := 51·kips	(User Input)
Tower Height =	H_t := 180·ft	(User Input)

Footing Data:

Length of Caisson =	L_c := 27·ft	(User Input)
Extension of Caisson Above Grade =	L_{cag} := 1·ft	(User Input)
Diameter of Caisson =	d_c := 4.5·ft	(User Input)
Length of Caisson Above Wate Table =	$L_{c.AWT}$:= 27·ft	(User Input)
Length of Caisson Below Wate Table =	$L_{c.BWT}$:= 0·ft	(User Input)

Material Properties:

Concrete Compressive Strength =	f_c := 4000·psi	(User Input)
Steel Reinforcment Yield Strength =	f_y := 60000·psi	(User Input)
Ultimate Skin Friction (Above Water Table) =	μ_1 := 3.73·ksf	(User Input)
Ultimate Skin Friction (Below Water Table) =	μ_2 := 3.73·ksf	(User Input)
Ultimate Soil Bearing Capacity =	q_u := 6000·psf	(Assumed Conservative User Input)
Unit Weight of Soil =	γ_{soil} := 120·pcf	(User Input)
Unit Weight of Concrete =	γ_{conc} := 150·pcf	(User Input)
Depth to Neglect =	n := 5·ft	(User Input)
Resistance Factor for Bearing =	$\Phi_{sBearing}$:= 0.75	(TIA-222-H 9.7)
Resistance Factor for Friction =	$\Phi_{sFriction}$:= 0.75	(TIA-222-H 9.7)

Calculated Properties:

Adjusted Concrete Unit Weight = $\gamma_c := \gamma_{conc} - 62.4pcf = 87.6 \cdot pcf$

Weight of Concrete Caisson (no water) = $WT_{c.comp} := \frac{\pi}{4} \cdot \left(d_c^2 L_c\right) \cdot \gamma_{conc} = 64.412 \cdot kip$

Weight of Concrete Caisson (water) = $WT_{c.uplift} := \frac{\pi}{4} \cdot \left[\left(d_c^2 L_{c.AWT}\right) \cdot \gamma_{conc} + \left(d_c^2 L_{c.BWT}\right) \cdot \gamma_c\right] = 64.412 \cdot kip$

Check Uplift:

Uplift Resistance from Concrete Weight = $Uplift_{conc} := \left(WT_{c.uplift}\right) \cdot 0.9 = 57.971 \cdot kips$

Uplift Resistance from Skin Friction = $Uplift_{SF} := \Phi_{sFriction} \cdot \pi \cdot d_c \cdot \left[\left(L_{c.AWT} - L_{cag} - n\right) \cdot \mu_1 + L_{c.BWT} \cdot \mu_2\right] = 831 \cdot kips$

Total Uplift Resistance = $Uplift_R := Uplift_{conc} + Uplift_{SF} = 888.494 \cdot kips$

Uplift Check = $\frac{Uplift}{Uplift_R} = 34.78 \cdot \%$

$Uplift\_Check := if\left(\frac{Uplift_R}{Uplift} \geq 1.0, "Okay", "No\ Good"\right)$

Uplift_Check = "Okay"

Check Compression:

Total Compression Force = $Comp_{tot} := WT_{c.comp} + Comp = 419 \cdot kips$

Compression Resistance from Bearing = $Comp_{bearing} := \Phi_{sBearing} \cdot \left(\frac{\pi}{4} \cdot d_c^2 \cdot q_u\right) = 72 \cdot kips$

Compression Resistance from Skin Friction = $Comp_{SF} := \Phi_{sFriction} \cdot \pi \cdot d_c \cdot \left[\left(L_{c.AWT} - L_{cag} - n\right) \cdot \mu_1 + L_{c.BWT} \cdot \mu_2\right] = 831 \cdot kips$

Total Compression Resistance = $Comp_R := Comp_{bearing} + Comp_{SF} = 902 \cdot kips$

Compression Check = $\frac{Comp_{tot}}{Comp_R} = 46.49 \cdot \%$

$Compression\_Check := if\left(\frac{Comp_R}{Comp_{tot}} \geq 1.0, "Okay", "No\ Good"\right)$

Compression_Check = "Okay"

Colliers Engineering & Design,
Architecture, Landscape Architecture, Surveying, CT P.C.
1055 Washington Boulevard
Stamford, CT 06901
203.324.0800
peter.albano@collierseng.com

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis-VZW

SMART Tool Project #: 10214355
Colliers Engineering & Design Project #: 21777772 (Rev. 3)

November 20, 2023

Site Information	*Site ID:*	*5000104750-VZW / WESTPORT CT*
	Site Name:	*WESTPORT CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*880 Post Rd. East Unit 1* *Westport, Connecticut 06880* *Fairfield County*
	Latitude:	*41.137475°*
	Longitude:	*-73.334364°*
Structure Information	*Tower Type:*	*180-Ft Self Support*
	Mount Type:	*15.00-Ft Sector Frame*
	FUZE ID # 16242132	

Analysis Results

Sector Frame: **70.2% Pass w/ Modifications***

***Antennas and equipment to be installed in compliance with PMI Requirements of this mount analysis.**

******Contractor PMI Requirements:***
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

Report Prepared By: Prasanna Dhakal

STATE OF CONNECTICUT
DEJIAN XU
No. 33733
LICENSED PROFESSIONAL ENGINEER

11/21/2023

Executive Summary:

The objective of this report is to summarize the analysis results of the antenna support mount including the proposed modifications at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards.

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: 325126, dated November 8, 2023*
Mount Mapping Report	*Structural Components, Site ID: 16242132, dated October 19, 2021*
Previous Mount Analysis Report	*Maser Consulting Connecticut, Project #: 21777772A, dated November 2, 2021*
Mount Modification Drawings	*Colliers Engineering & Design Project #: 21777772A, dated July 18, 2023*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	120 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:	0.998
Seismic Parameters:	S_S:	0.232 g
	S_1:	0.056 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Load, Lv:	250 lbs.
	Maintenance Load, Lm:	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
159.00	161.80	1	Samsung	MT6413-77A	Added
	160.00	4	JMA	MX06FRO640-02	
		2	Samsung	MT6413-77A	
		1	Samsung	RF4439d-25A	
		3	Samsung	RF4461d-13A	
		4	Commscope	JAHH-65B-R3B	Retained
		2	Samsung	XXDWMM-12.5-65	
		2	Commscope	CBC78T-DS-43-2X	
		3	Samsung	B2/B66A RRH-BR049	
		1	Samsung	B5/B13 RRH-BR04C	
		1	Raycap	RHSDC-6627-PF-48*	
	158.50	1	Samsung	XXDWMM-12.5-65	

* Equipment is flush mounted directly to the Self Support. It is not mounted on Sector Frame mounts and is not included in this mount analysis.

The recent mount mapping reported existing OVP units. It is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required unless replacing an existing OVP.

Model Number	Ports	AKA
DB-B1-6C-12AB-0Z	6	OVP-6
RVZDC-6627-PF-48	12	OVP-12

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design 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 Colliers Engineering & Design 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 in accordance with the NSTD-446 Standard, 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. Colliers Engineering & Design 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:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - Bolts — ASTM A325

8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Colliers Engineering & Design.

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff Bar	*70.2%*	*Pass*
Face Horizontal	*34.4%*	*Pass*
Standoff Horizontal	*33.9%*	*Pass*
Standoff Diagonal	*31.8%*	*Pass*
Standoff Vertical	*3.1%*	*Pass*
Mount Pipe	*43.1%*	*Pass*
Unistrut	*11.2%*	*Pass*
Mod Tieback	*4.5%*	*Pass*
Mount Connection	*57.2%*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**70.2%**

Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	26.8	17.0	33.6	23.8
0.5	38.1	24.8	47.8	34.5
1	48.7	31.8	61.3	44.4

Notes:
- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 1 sector.
- Ka factors included in (EPA)a calculations

Requirements:

The existing mounts will be **SUFFICIENT** for the final loading configuration (attachment 2) after the modifications detailed in attachment 3 are successfully completed.

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. **Contractor Required PMI Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Modification Drawings
4. Mount Photos
5. Mount Mapping Report (for reference only)
6. Analysis Calculations

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Electronic pdf version of this can be downloaded at https://pmi.vzwsmart.com
For additional questions and support, please reach out to pmisupport@colliersengineering.com

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MDG #: 5000104750 SMART Project #: 10214355 Fuze Project ID: 16242132

Purpose – to upload the proper documentation to the SMART Tool in order to allow the SMART Tool engineering vendor 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 modification was completed in accordance with the modification drawings.
- Contractor shall relay any data that can impact the performance of the mount or the mount modification, this includes safety issues.

Base Requirements:

- If installation of the modification will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide "as built drawings" showing contractor's name, preparer's signature, and date. Any deviations from the drawings (proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the post-modification passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo shall be time and date stamped.
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is 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. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: **https://pmi.vzwsmart.com**

Photo Requirements:

- *Photos taken at ground level*
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation of the modifications.
  - Photos of the mount 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 the safety climb wire rope above and below the mount prior to modification.
  - Photos showing the climbing facility and safety climb if present.

- Photos showing each individual sector after installation of modifications. Each entire sector must be in one photo to show the interconnection of members.
    - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.
- Photos of each installed modification per the modification drawings; pictures shall also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
- Photos showing the distances (relative distance between collars) of the installed modifications from the appropriate reference locations shown in the modification drawings.
- Photos showing the installed modifications onto the tower (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, an elevation measurement shall be provided before the elevation change.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by the SMART Tool vendor.
    - If the materials are as specified on the drawings
        - The contractor shall provide the packing list, or the materials certifications for the materials utilized to perform the mount modification
        - Commscope, Metrosite, Perfect Vision, Sabre, and Site Pro have all agreed to support Verizon vendors with the necessary material certifications
    - If seeking permission to use an equivalent
        - It is required that the SMART Tool engineering vendor approval of such is included in the contractor submission package. There may be an additional charge for approval if the equivalent submission doesn't meet specifications as prescribed in the drawings.

☐ All hardware has been properly installed, and the existing hardware was inspected.

☐ The material utilized was as specified on the SMART Tool engineering vendor Mount Modification Drawings and included in the material certification folder is a packing list or invoice for these materials.

OR

☐ The material utilized was approved by a SMART Tool engineering vendor as an "equivalent" and this approval is included as part of the contractor submission.

Antenna & Equipment Placement and Geometry Confirmation:

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

☐ The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

Comments:

Was the mount modification completed in conjunction with the equipment change / installation?

☐ Yes ☐ No

Special Instructions / Validation as required from the MA or Mod Drawings:

Issue:

1. Contractor shall inspect climbing facilities and safety climb and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is rubbing against the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of cold galvanization (Zinga or Zinc Kote). Contractor shall provide photos of wire rope guide installation as part of PMI documents. Contact EOR if additional guidance is required.

Response:

Special Instruction Confirmation:

☐ The contractor has read and acknowledges the above special instructions.

Comments:

Contractor certifies that the climbing facility / safety climb was not damaged prior to starting work:

☐ Yes ☐ No

Contractor certifies no new damage created during the current installation:

☐ Yes ☐ No

Contractor to certify the condition of the safety climb and verify no damage when leaving the site:

☐ Safety Climb in Good Condition ☐ Safety Climb Damaged

Comments:

Certifying Individual:

Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

Structure: 5000104750-VZW - WESTPORT CT

Sector: **A**

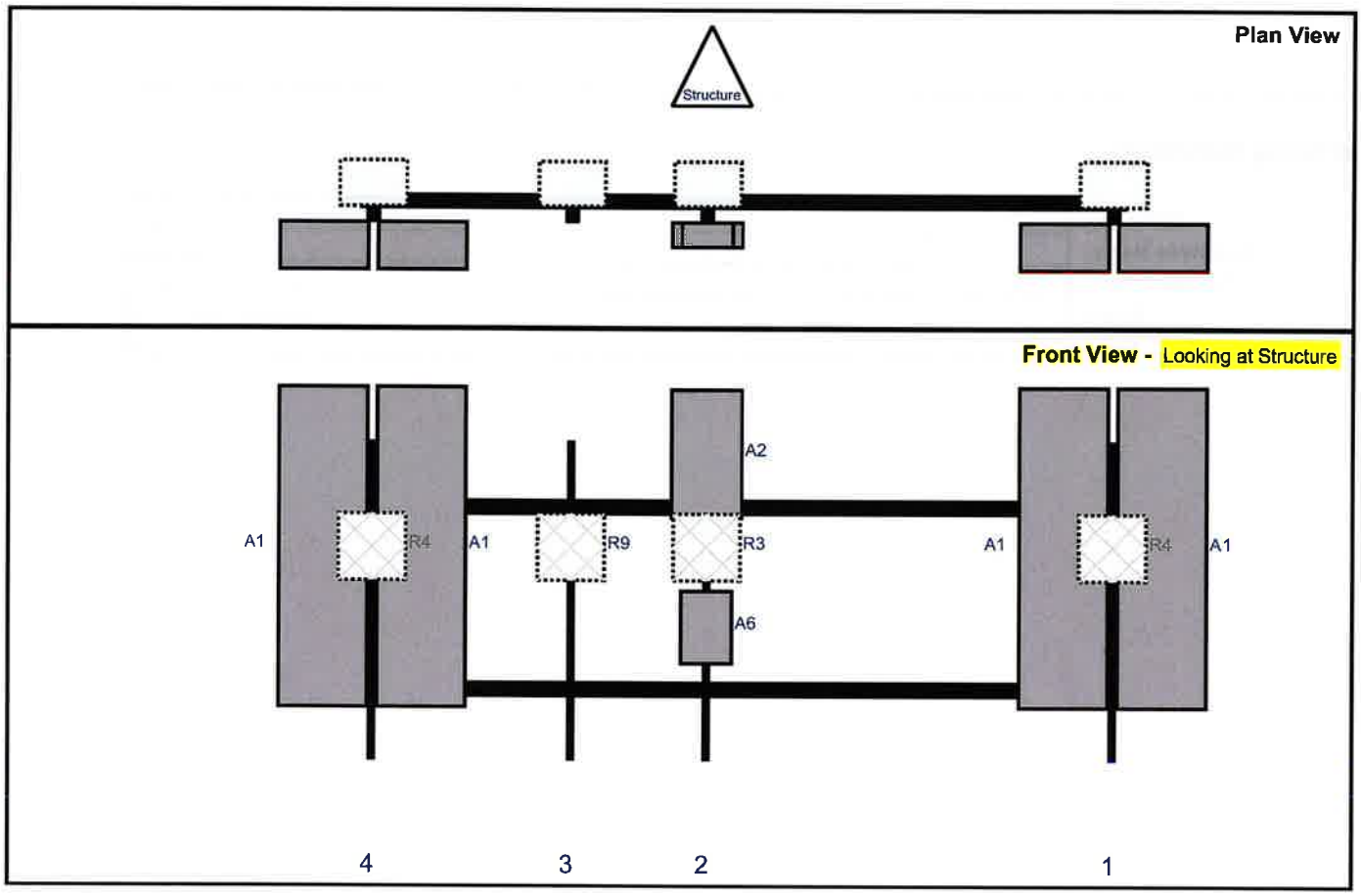
Structure Type: Self Support

Mount Elev: 159.00

10214355

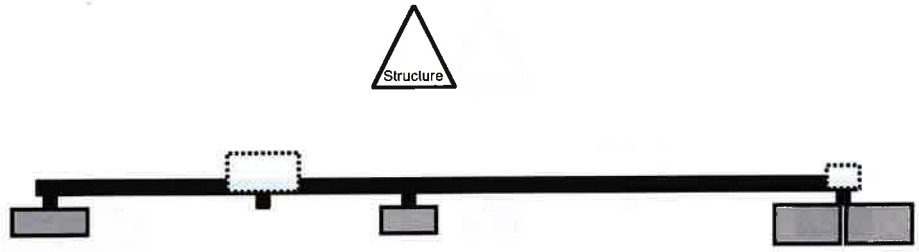
11/20/2023

Colliers Engineering & Design

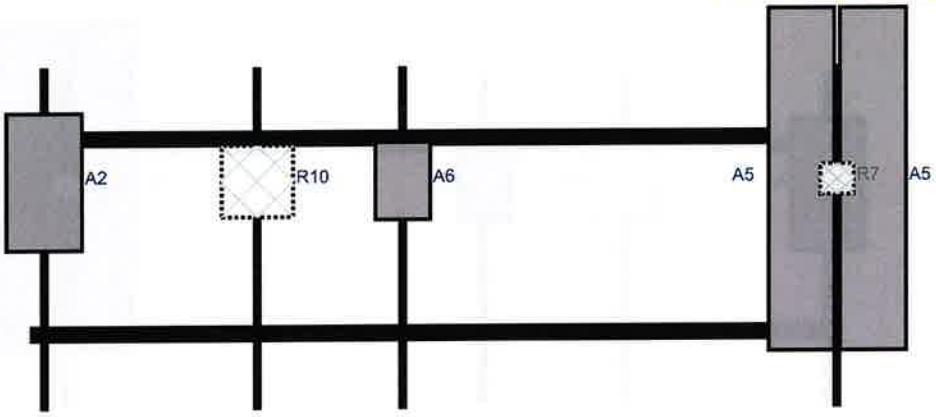


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	MX06FRO640-02	72	19.8	169	1	a	Front	24	-11	Added	
A1	MX06FRO640-02	72	19.8	169	1	b	Front	24	11	Added	
R4	RF4461d-13A	15	15	169	1	a	Behind	24	0	Added	
A2	MT6413-77A	28.9	15.8	78	2	a	Front	3	0	Added	
A6	XXDWMM-12.5-65	16.2	11.4	78	2	a	Front	42	0	Retained	10/19/2021
R3	RF4439d-25A	15	15	78	2	a	Behind	24	0	Added	
R9	B2/B66A RRH-BR049	15	15	47.5	3	a	Behind	24	0	Retained	10/19/2021
A1	MX06FRO640-02	72	19.8	3	4	a	Front	24	-11	Added	
A1	MX06FRO640-02	72	19.8	3	4	b	Front	24	11	Added	
R4	RF4461d-13A	15	15	3	4	a	Behind	24	0	Added	

Plan View



Front View - Looking at Structure



4 3 2 1

Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A5	JAHH-65B-R3B	72	13.8	169	1	a	Front	24	-7.5	Retained	10/19/2021
A5	JAHH-65B-R3B	72	13.8	169	1	b	Front	24	7.5	Retained	10/19/2021
R7	CBC78T-DS-43-2X	6.4	6.9	169	1	a	Behind	24	0	Retained	10/19/2021
A6	XXDWMM-12.5-65	16.2	11.4	78	2	a	Front	24	0	Retained	10/19/2021
R10	B5/B13 RRH-BR04C	15	15	47.5	3	a	Behind	24	0	Retained	10/19/2021
A2	MT6413-77A	28.9	15.8	3	4	a	Front	24	0	Added	
R9	B2/B66A RRH-BR049	15	15		Member					Retained	10/19/2021

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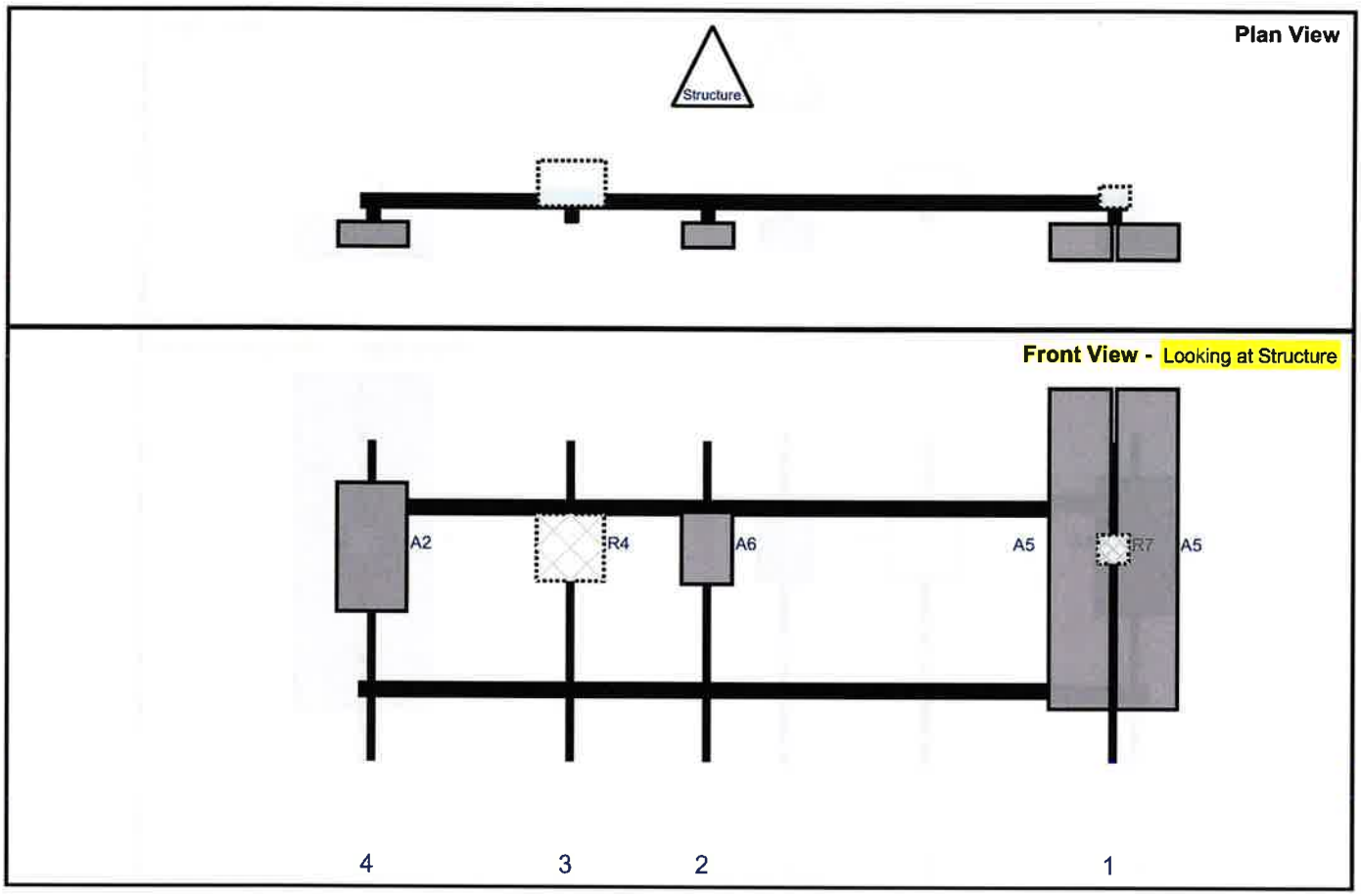

Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A5	JAHH-65B-R3B	72	13.8	169	1	a	Front	24	-7.5	Retained	10/19/2021
A5	JAHH-65B-R3B	72	13.8	169	1	b	Front	24	7.5	Retained	10/19/2021
R7	CBC78T-DS-43-2X	6.4	6.9	169	1	a	Behind	24	0	Retained	10/19/2021
A6	XXDWMM-12.5-65	16.2	11.4	78	2	a	Front	24	0	Retained	10/19/2021
R4	RF4461d-13A	15	15	47.5	3	a	Behind	24	0	Added	
A2	MT6413-77A	28.9	15.8	3	4	a	Front	24	0	Added	
R9	B2/B66A RRH-BR049	15	15		Member					Retained	10/19/2021

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MOUNT MODIFICATION DRAWINGS
EXISTING 15.00' SECTOR FRAME

TOWER OWNER: CSP CORPORATION
TOWER OWNER SITE NUMBER: N/A

CARRIER SITE NAME: WESTPORT CT
CARRIER SITE NUMBER: 5000104750
FUZE ID: 16242132

880 POST RD. EAST UNIT 1
WESTPORT, CT 06880
FAIRFIELD COUNTY

LATITUDE: 41.137475° N
LONGITUDE: 73.334364° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 120 MPH
EXPOSURE CATEGORY B
TOPOGRAPHIC CATEGORY 1
MEAN BASE ELEVATION (AMSL) = 63.27'

ICE LOADS

ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_S = .232
LONG TERM MCER GROUND MOTION, S_1 = .056

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

COMPANY: COLLIERS ENGINEERING & DESIGN CT, P.C.
CONTACT: PETER ALBANO
PHONE: 856-797-0412
E-MAIL: PETER.ALBANO@COLLIERSENG.COM

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10207445
VZW LOCATION CODE (MDG): 5000104750
ANALYSIS DATE: 7/18/2023

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

SHEET	DESCRIPTION
ST-1	TITLE SHEET
SBOM-1	BILL OF MATERIALS
SGN-1	GENERAL NOTES
SCF-1	CLIMBING FACILITY DETAIL
SS-1	MODIFICATION DETAILS
SS-2	MOUNT PHOTOS
	SPECIFICATION SHEETS

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REV	DATE	DESCRIPTION	DRAWN BY	CHK'D BY
3	07/19/23	ISSUED FOR CONSTRUCTION	JMC	DH
2	04/21/23	ISSUED FOR CONSTRUCTION	TF	DH
1	03/16/23	ISSUED FOR CONSTRUCTION	MTC	DH

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

SITE NAME:

WESTPORT CT
5000104750

880 POST RD. EAST UNIT 1
WESTPORT, CT 06880
FAIRFIELD COUNTY

Colliers Engineering & Design
STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.6800

TITLE SHEET

ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	VZWSMART	VZWSMART-SFK1	TIE BACK ASSEMBLY	CONNECT OTHER END TO ADJACENT TOWER LEG. PROPOSED TIE-BACK SHALL EXTEND NO MORE THAN 12" BEYOND THE TOWER LEG. CONTRACTOR SHALL TRIM AS REQUIRED AND PROTECT CUT END WITH TWO COATS OF ZINGA OR ZINC COTE.	84	84
6	VZWSMART	VZWSMART-MSK1	CROSSOVER PLATE			

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)

SECTION 3 - REQUIRED SAFETY CLIMB PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	PERFECT VISON	PV-CLAMP-LW-0106	CLAMP BRACKET	OR EOR APPROVED EQUIVALENT	-	-
1	PERFECT VISION	PV-CMX-CG SM	WIRE ROPE GUIDE	OR EOR APPROVED EQUIVALENT	-	-
					TOTAL:	84

NOTES:

1. THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
2. ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM

PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM

SITE PRO 1	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM

BETTER METAL, LLC	
CONTACT	DAVID STANSBERRY
PHONE	(615) 535-0990 (O), (615) 631-2520 (M)
EMAIL	DLS@BETTERMETAL.COM
WEBSITE	WWW.BETTERMETAL.COM

METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM

SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM

NEWAVE	
CONTACT	NEWAVE SALES TEAM
PHONE	(971) 239-4762
EMAIL	SALES@NEWAVETC.COM
WEBSITE	WWW.NEWAVETC.COM

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SITE NAME:

WESTPORT CT
5000104750
880 POST RD. EAST UNIT 1
WESTPORT, CT 06880
FAIRFIELD COUNTY

BILL OF MATERIALS

SBOM-1

PROJECT NOTES

1. SEE MODIFICATION NOTES

2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.

4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

6. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

7. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.

8. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

9. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.

10. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.

11. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).

GENERAL NOTES

1. THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H. MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.

2. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES. ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK, ORDERING MATERIAL, AND PREPARING OF SHOP DRAWINGS. ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.

4. IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.

5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.

6. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/TIA-322 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-322 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.

7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.

8. WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 30-MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.

9. ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSI/TIA-322.

10. CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOFABRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.

11. CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.

12. DO NOT SCALE DRAWINGS.

13. DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.

14. ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO ALTERED SIZE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.

15. THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

STRUCTURAL STEEL

1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
   a. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
   b. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
   c. AISC CODE OF STANDARD PRACTICE

2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN.

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE

3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.

4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
   a. SUBMIT SHOP DRAWINGS TO

      PETER.ALBANO@COLLIERSENG.COM

   b. PROVIDE MASER CONSULTING CONNECTICUT PROJECT # AND MASER CONSULTING CONNECTICUT PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.

5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.

6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.

7. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.

8. CONTRACTOR SHALL PROTECT CUT ENDS OF ALL FIELD-CUT STEEL WITH TWO (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC COTE).

9. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.

10. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.

11. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.

12. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.

13. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.

14. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINGA OR ZINC COTE), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).

15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

WELDING NOTES

1. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.0 (LATEST EDITION). THIS SHALL INCLUDE A CERTIFIED WELD INSPECTION (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE, DURING, AND POST INSTALLATION, USING THE ACCEPTANCE CRITERIA OF AWS D1.1.

2. CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING A THIRD PARTY CERTIFIED WELD INSPECTOR (CWI) THROUGHOUT THE ENTIRETY OF THE PROJECT. A PASSING CWI REPORT SHALL BE PROVIDED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.

3. THE CERTIFIED WELD INSPECTOR SHALL INDICATE, IN A WRITTEN CWI REPORT, THAT ALL WELDING OPERATIONS PRE, DURING, AND POST INSTALLATION WERE CONDUCTED IN ACCORDANCE WITH AWS D1.1 WITH PHOTOGRAPHS AND DOCUMENTATION SUPPORTING THE ACCEPTANCE OR REJECTION OF ALL WELDING. ALL CWI WELD INSPECTION DOCUMENTATION AND PHOTOS SHALL BE SUBMITTED DURING THE PMI.

4. IN CASES WHERE A WELD IS SPECIFIED BETWEEN TWO MEMBERS IN WHICH THERE IS A GAP IN BETWEEN, THE WELD IS TO BE BUILT-UP SUCH THAT THE SIZE OF WELD ON THE MEMBER IS EQUAL TO THAT SHOWN IN THE DRAWINGS.

5. OXY FUEL GAS WELDING OR BRAZING IS STRICTLY PROHIBITED. SPECIFICALLY, NO TORCH CUTTING IS PERMITTED ON SITE. ALL HOLES SHALL BE CUT WITH A GRINDER.

6. CONTRACTOR SHALL EXERCISE CAUTION WHEN WELDING A GALVANIZED SURFACE.

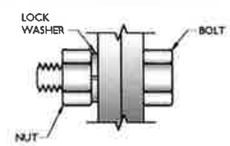
7. CONTRACTOR SHALL HAVE A FIRE PROTECTION PLAN IN PLACE THAT CONFORMS WITH ALL OSHA, ANSI/ASSP A10.48, ANSI Z49.1, AND LOCAL JURISDICTIONAL REQUIREMENTS.

BOLT SCHEDULE (IN.)

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 11/16	7/8	1 1/2
5/8	11/16	11/16 x 7/8	1 1/8	1 7/8
3/4	13/16	13/16 x 1	1 1/4	2 1/4
7/8	15/16	15/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)

LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



TYP. BOLT ASSEMBLY

NOTES:

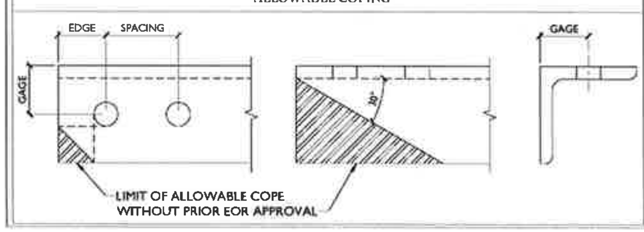
1. ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.

2. THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENTS.

3. SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS.

4. MATCH EXISTING GAGES WHEN APPLICABLE, UNLESS MINIMUM EDGE DISTANCES ARE COMPROMISED.

ALLOWABLE COPING



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SITE NAME:

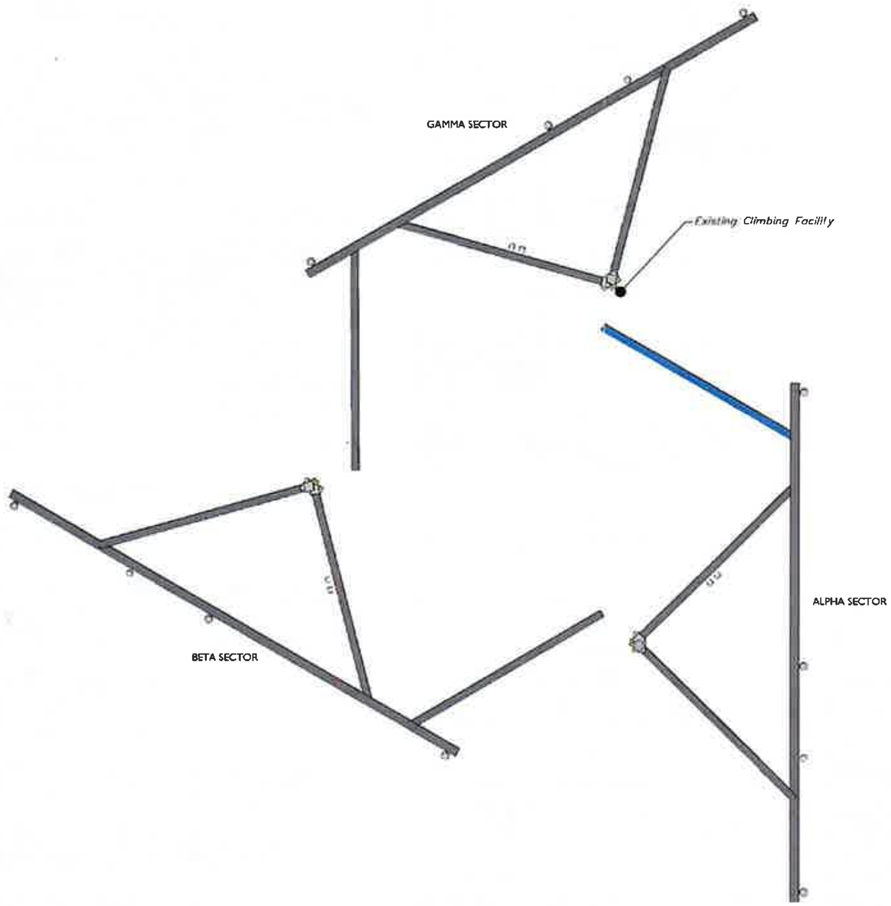
WESTPORT CT
5000104750

880 POST RD. EAST UNIT 1
WESTPORT, CT 06880
FAIRFIELD COUNTY

MODIFICATION NOTES

SGN-1

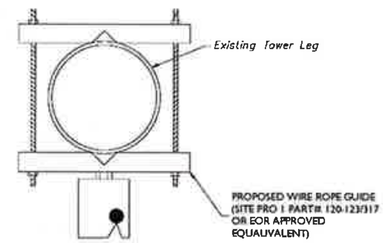
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



1 CLIMBING FACILITY LOCATION
SCALE : N.T.S.

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY STRUCTURAL COMPONENTS ON 10/19/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (159'-0") ARE IN GOOD CONDITION. MASER DOES NOT WARRANT THIS INFORMATION.
2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.



2 PROPOSED WIRE ROPE GUIDE ATTACHMENT - PLAN VIEW
SCALE : N.T.S.

CLIMBING FACILITY PHOTO

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STAMFORD

CLIMBING FACILITY DETAIL

SCF-1

LEGEND:

PROPOSED

RELOCATED

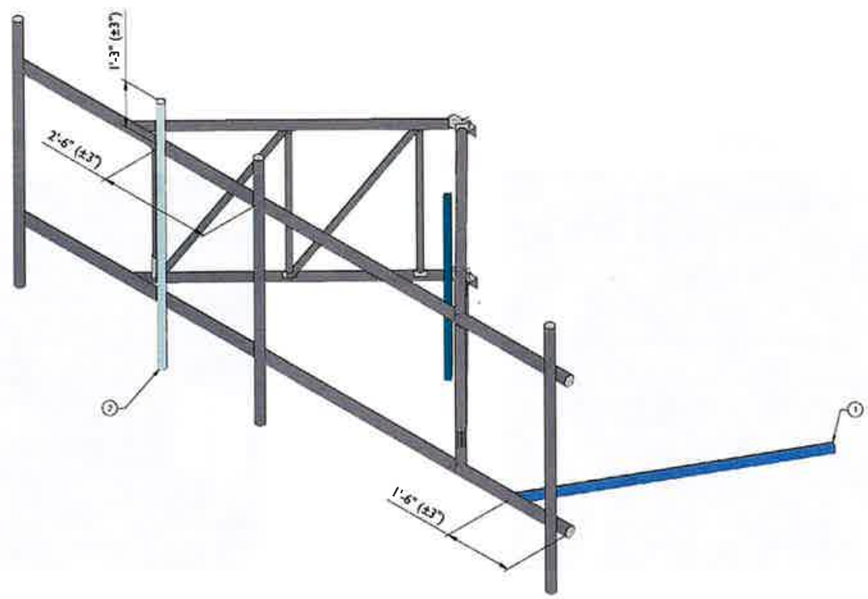
EXISTING

MOUNT MODIFICATION SCHEDULE

NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	159'-0"	1	PROPOSED TIEBACK ASSEMBLY (PART #: VZWSMART-SFK1)	CONNECT NEW TIE BACK TO EXISTING BOTTOM FACE HORIZONTAL. CONNECT OTHER END TO ADJACENT TOWER LEG. PROPOSED TIE-BACK SHALL EXTEND NO MORE THAN 12" BEYOND THE TOWER LEG. CONTRACTOR SHALL TRIM AS REQUIRED AND PROTECT CUT END WITH TWO COATS OF ZINGA OR ZINC COTE. (ALPHA SECTOR ONLY). SEE GENERAL NOTE A.
2		3	RELOCATED MOUNT PIPE	CONNECT RELOCATED MOUNT PIPE IN POSITION 3 TO EXISTING FACE HORIZONTALS WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1) AT EACH CONNECTION.

GENERAL NOTES:

A.THREADED ROD FROM PROPOSED KITS SHALL BE TRIMMED TO EXTEND NO MORE THAN 3" BEYOND THE LOCK NUT. TREAT ALL CUT ENDS WITH (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC KOTE).
B.REMOVE EXISTING TIE BACK AND ASSOCIATED CONNECTIONS (ALPHA SECTOR ONLY).
C.MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



1 PROPOSED ISOMETRIC VIEW (ALPHA SECTOR SHOWN, SIMILAR ON BETA AND GAMMA SECTORS)

SCALE : N.T.S.

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MODIFICATION DETAILS

SS-1

MOUNT PHOTO 1

MOUNT PHOTO 2

MOUNT PHOTO 3

MOUNT PHOTO 4

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FAIRFIELD COUNTY

STAMFORD

MOUNT PHOTOS

SS-2

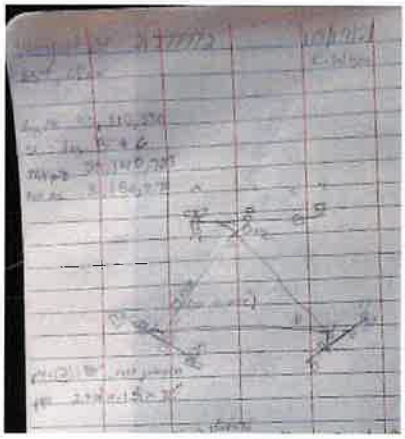

10/19/2021 14:48

V4.0 Updated on 3-31-2021

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

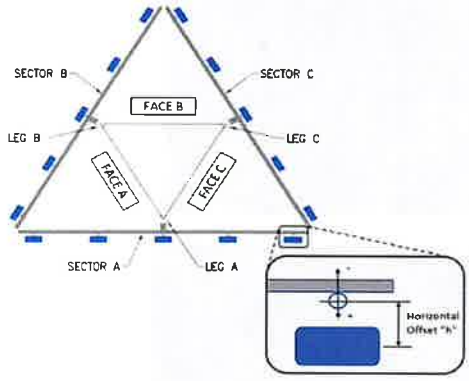
Tower Owner:	CSP	**Mapping Date:**	10/19/2021
Site Name:	WESTPORT_CT	**Tower Type:**	Self Support
Site Number or ID:	16242132	**Tower Height (Ft.):**	180
Mapping Contractor:	Structural Components	**Mount Elevation (Ft.):**	158

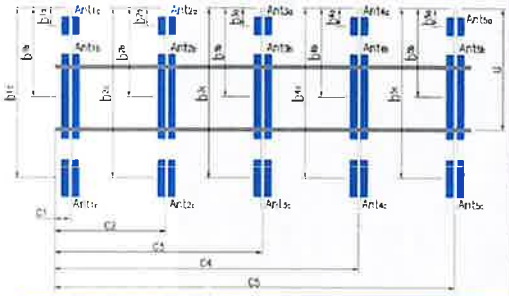


Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "d"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "d"	Horizontal Offset "C1, C2, C3, etc."
A1	2.375 x .154 x 72	56.00	3.00	C1	2.375 x .154 x 72	56.00	3.00
A2	2.375 x .154 x 72	56.00	94.00	C2	2.375 x .154 x 72	56.00	94.00
A3	2.375 x .154 x 72	56.00	148.50	C3	2.375 x .154 x 72	56.00	148.50
A4	2.375 x .154 x 72	56.00	169.00	C4	2.375 x .154 x 72	56.00	169.00
A5				C5			
A6				C6			
B1	2.375 x .154 x 72	56.00	3.00	D1			
B2	2.375 x .154 x 72	56.00	94.00	D2			
B3	2.375 x .154 x 72	56.00	148.50	D3			
B4	2.375 x .154 x 72	56.00	169.00	D4			
B5				D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	0.5
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	0
Please enter additional infomation or comments below.	
safety climb on all 3 legs, all obstructed	
Tower Face Width at Mount Elev. (ft.): 105 — Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	4.5
For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.	



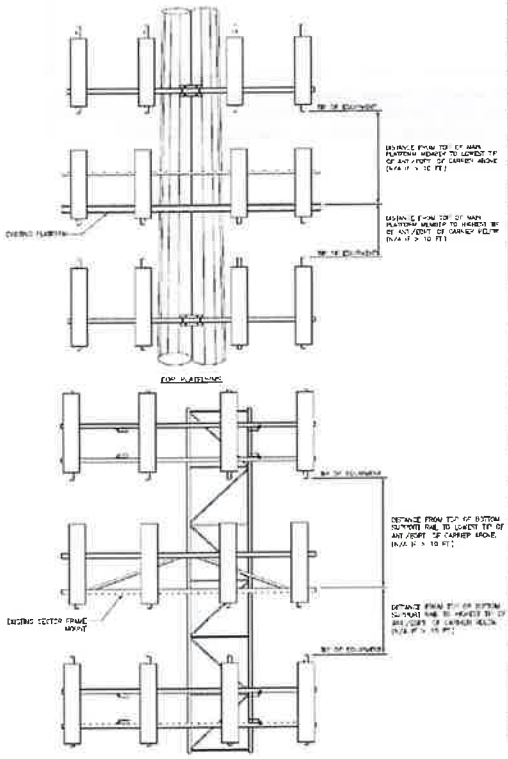


Antenna Layout (Looking Out From Tower)

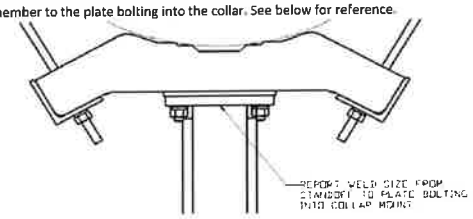
Ants. Items	Enter antenna model. If not labeled, enter "Unknown". Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Mounting Locations [Units are inches and degrees] Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photos of antennas Photo Numbers
	Sector A									
Ant_{1a}										
Ant_{1b}	(2) JAHH-65B-R3B	13.00	8.00	72.00	jumpers	161	20.00	14.00	30.00	63
Ant_{1c}	(2) CBC78TD5432X	6.50	9.75	8.00	jumpers	160.417	27.00	-7.00		63
Ant_{2a}										
Ant_{2b}	RT4408-48	8.50	5.50	16.00	jumpers	160.25	29.00	10.00	30.00	
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	RFV01U-D2A	16.00	10.00	15.00	jumpers	160.25	29.00	8.50	30.00	64
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	BXA-70063/4CFEDIN	11.00	5.00	47.00	(2) 1 5/8"	160.25	29.00	11.50	30.00	64
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	RFV01U-D1A	16.00	12.00	16.00	jumpers	160				64
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	20.00	Deg	Leg A:	90.00	Deg
Sector B:	140.00	Deg	Leg B:	210.00	Deg
Sector C:	260.00	Deg	Leg C:	330.00	Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	330.00	Deg	On Leg C
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was obstructed.
	Condition:		Loose hardware.



For T-Arms/Platforms on monopoles, record the weld size from the main standoff member to the plate bolting into the collar. See below for reference.



Sector B										
Ant_{1a}										
Ant_{1b}	(2) JAHH-65B-R3B	13.00	8.00	72.00	jumpers	161	20.00	14.00	150.00	71
Ant_{1c}	(2) CBC78TDS432X	6.50	9.75	8.00	jumpers	160.417	27.00	-7.00		71
Ant_{2a}										
Ant_{2b}	RT4408-48	8.50	5.50	16.00	jumpers	160.25	29.00	10.00	150.00	72
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	RFV01U-D2A	16.00	10.00	15.00	jumpers	160.25	29.00	8.50	150.00	73
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	BXA-70063/4CFEDIN	11.00	5.00	47.00	(2) 1 5/8"	160.25	29.00	11.50	150.00	73
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	RFV01U-D1A	16.00	12.00	16.00	jumpers	160				71, 72
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}										
Ant_{1b}	(2) JAHH-65B-R3B	13.00	8.00	72.00	jumpers	161	20.00	14.00	150.00	66
Ant_{1c}	(2) CBC78TDS432X	6.50	9.75	8.00	jumpers	160.417	27.00	-7.00		66
Ant_{2a}										
Ant_{2b}	RT4408-48	8.50	5.50	16.00	jumpers	160.25	29.00	10.00	150.00	67
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	RFV01U-D2A	16.00	10.00	15.00	jumpers	160.25	29.00	8.50	150.00	68
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	BXA-70063/4CFEDIN	11.00	5.00	47.00	(2) 1 5/8"	160.25	29.00	11.50	150.00	68
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	RFV01U-D1A	16.00	12.00	16.00	jumpers	160				65
Ant on Standoff										
Ant on Tower	RHSDC-6627-PF-48	14.00	9.00	19.00	1)2" hybrid					65
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #
1		
2		
3		
4		
5		
6		
7		
8		

Observed Obstructions to Tower Lighting System					
If the tower lighting system is being obstructed by the carrier's equipment (for example: a light nested by the antennas), please provide photos and fill in the information below.					Photo #
Description of Obstruction:					
Type of Light:		Photo #		Additional Comments:	
Lighting Technology:		Photo #			
Elevation (AGL) at base of light (Ft.):		Photo #			
Is a service loop available?		Photo #			
Is beacon installed on an extension?		Photo #			

Mapping Notes
1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.)
2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness.
3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab.
4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type.
5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required.
6. Please measure and report the size and length of all existing antenna mounting pipes.
7. Please measure and report the antenna information for all sectors.
8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.

Standard Conditions
1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

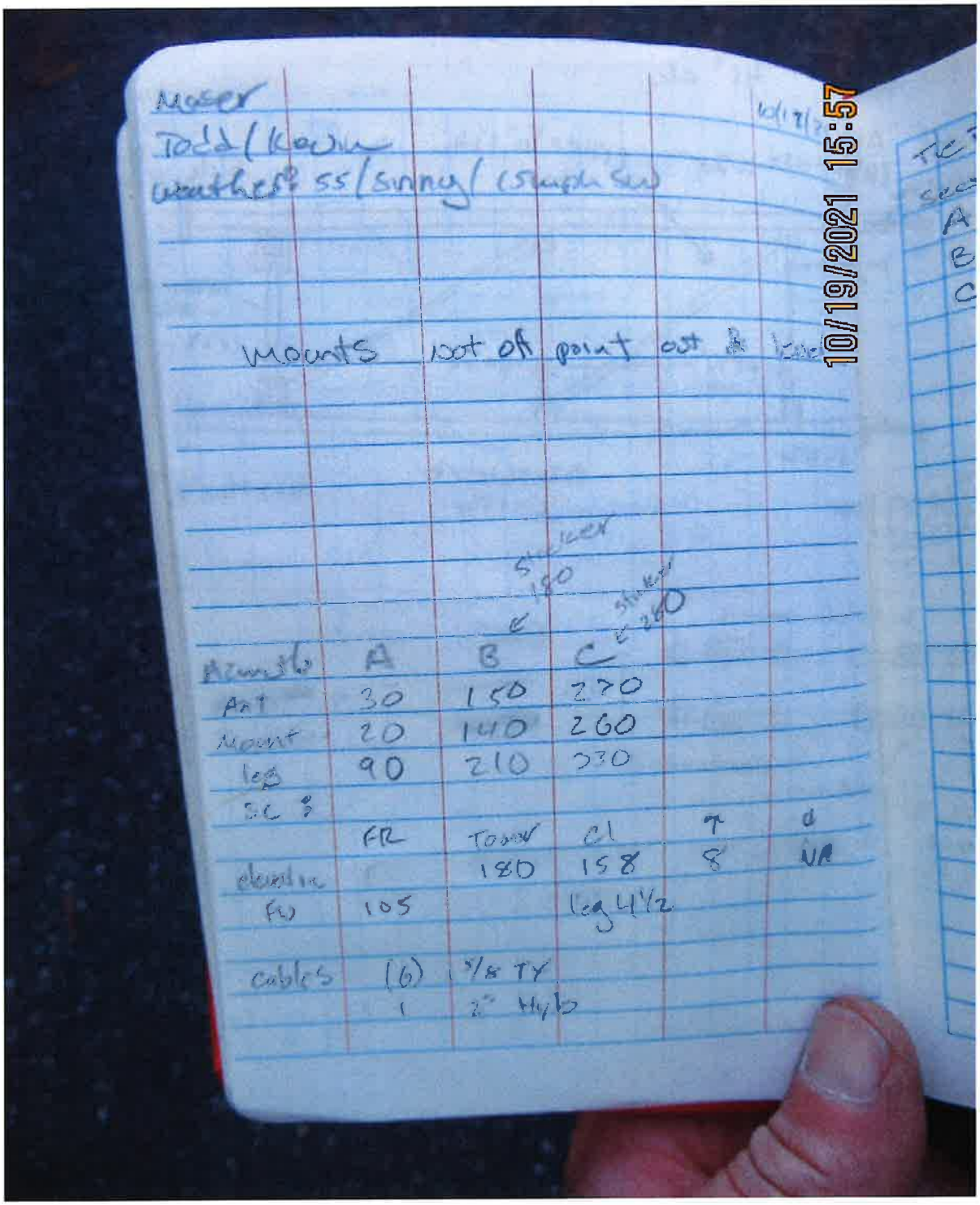
V4.0 Updated on 3-31-2021

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

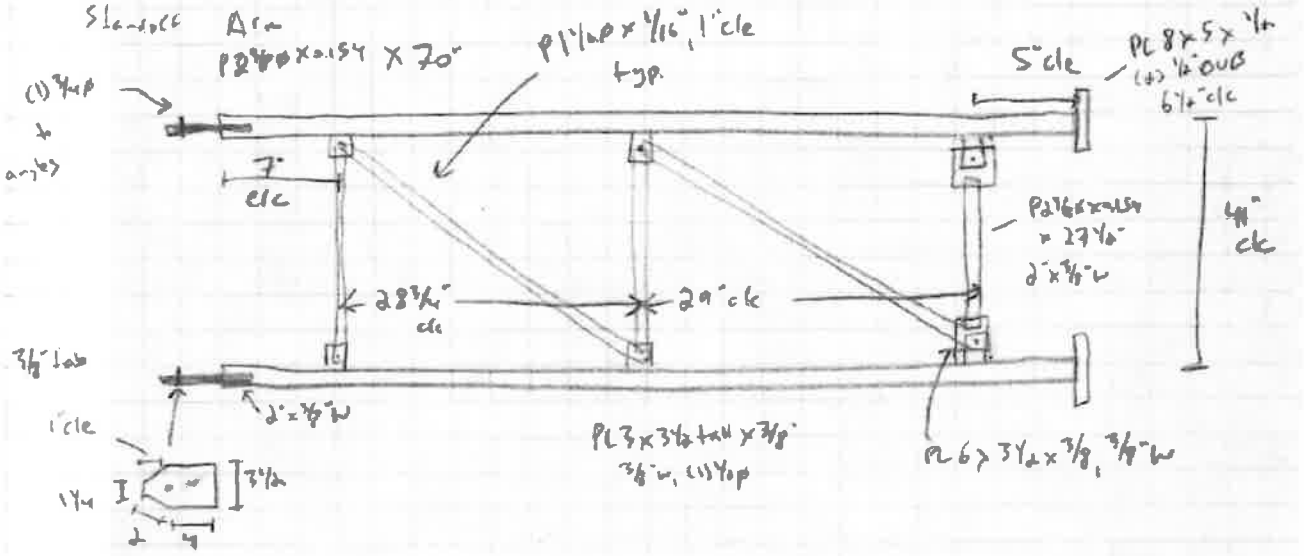
Tower Owner:	CSP	**Mapping Date:**	10/19/2021
Site Name:	WESTPORT_CT	**Tower Type:**	Self Support
Site Number or ID:	16242132	**Tower Height (Ft.):**	180
Mapping Contractor:	Structural Components	**Mount Elevation (Ft.):**	158

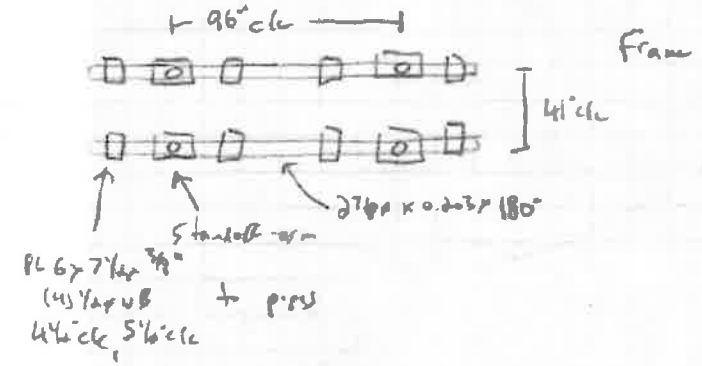
Please Insert Sketches of the Antenna Mount



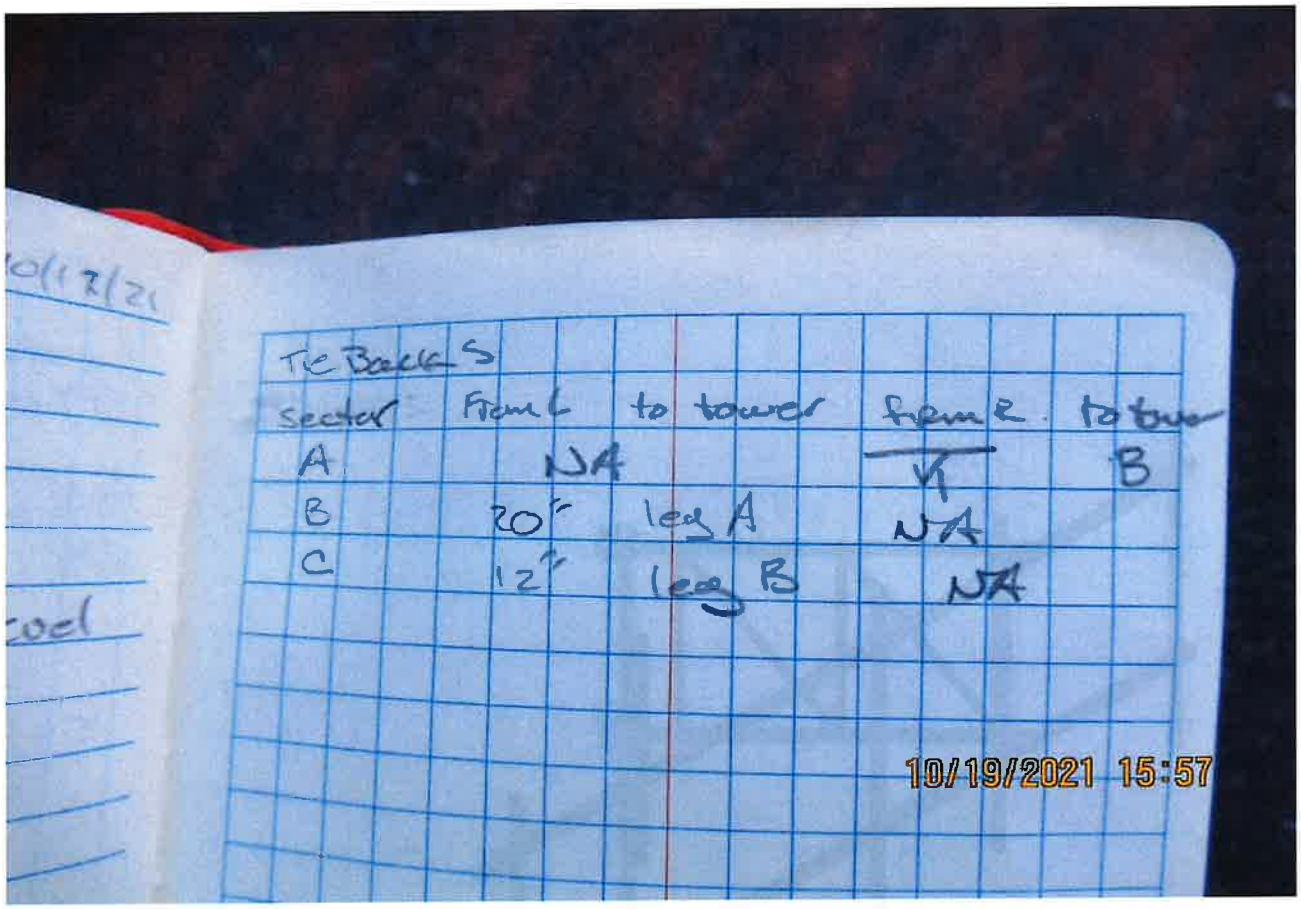
Please Insert Sketches of the Antenna Mount, cont'd

Leg Attach: L 4 x 3 x 3/8" x 5½ LLV
(2) ½" ØUB, 1 3/4" clc
41" clc



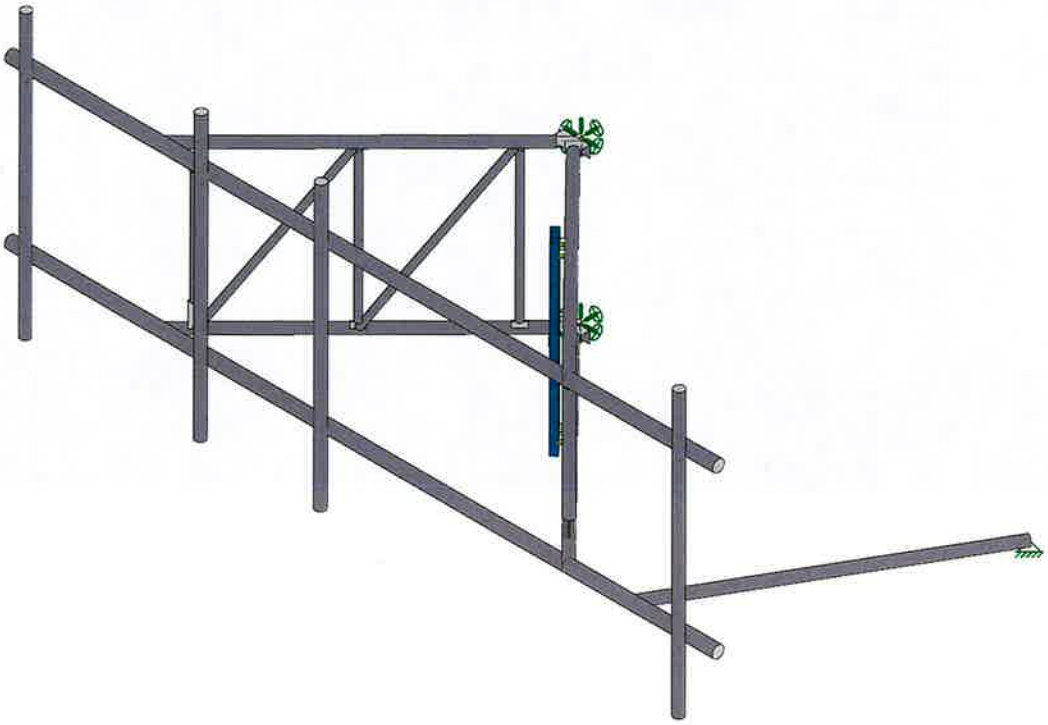


Please Insert Sketches of the Antenna Mount, cont'd



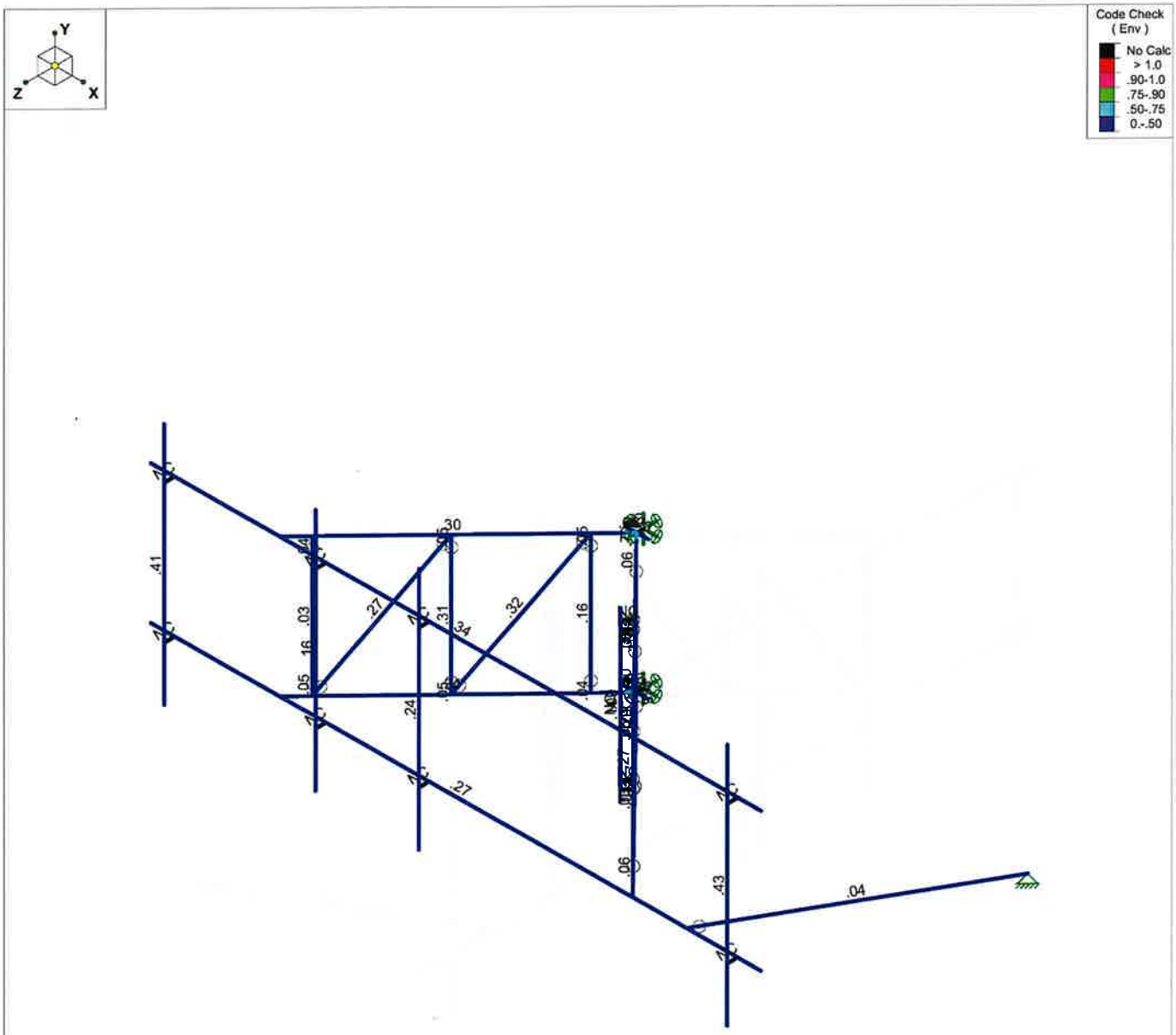
Tie Backs

Sector	From L	to tower	from R	to tower
A	NA		T	B
B	20'	leg A	NA	
C	12'	leg B	NA	



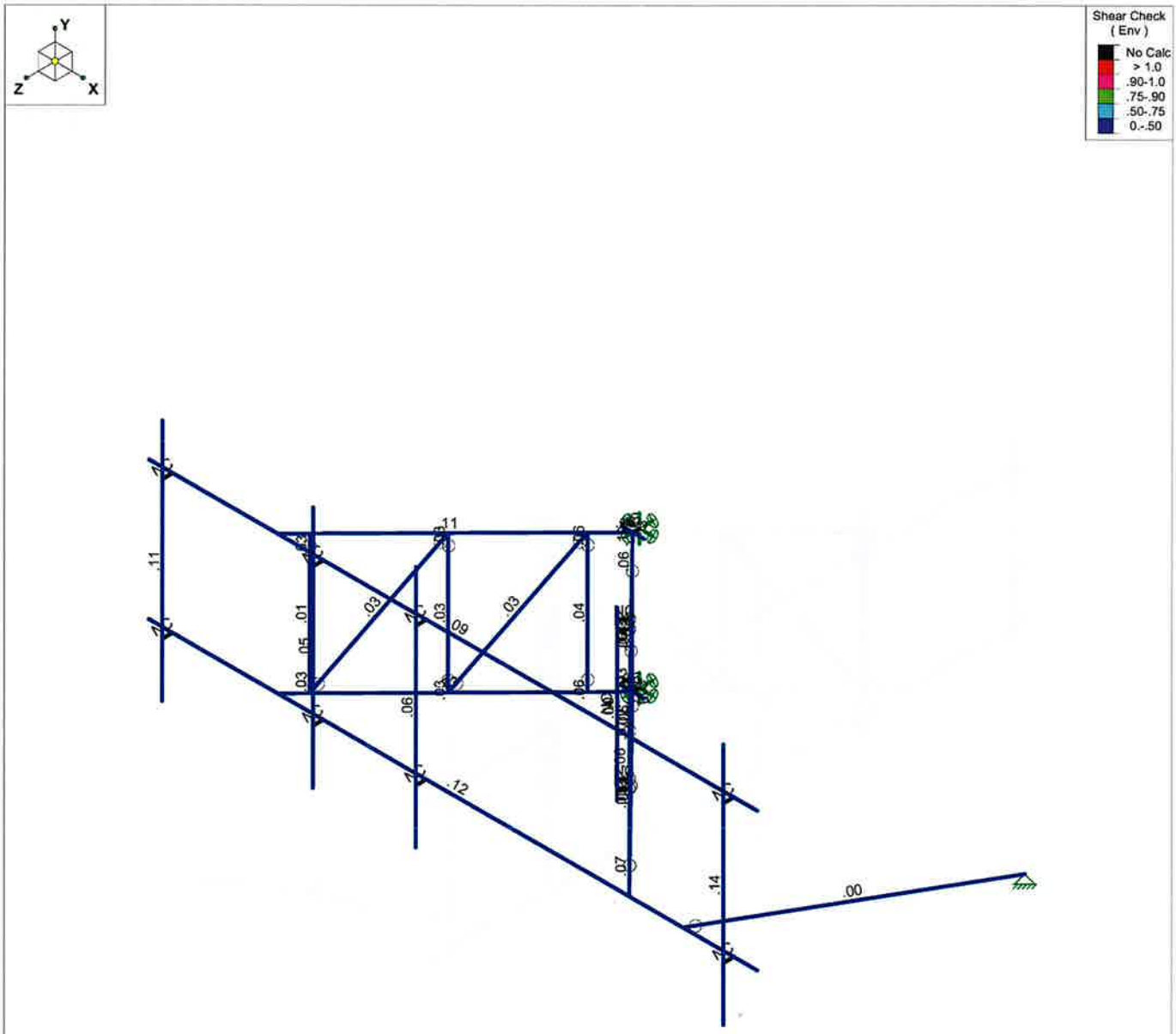
Envelope Only Solution

Colliers Engineering & De...	Colliers Engineering & Design	SK - 1
		Nov 20, 2023 at 11:39 AM
Project # 21777772		5000104750-VZW_MT_LOT_A_H....



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...	Colliers Engineering & Design	SK - 2
		Nov 20, 2023 at 11:40 AM
Project # 21777772		5000104750-VZW_MT_LOT_A_H....



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...	Colliers Engineering & Design	SK - 3
		Nov 20, 2023 at 11:41 AM
Project # 21777772		5000104750-VZW_MT_LOT_A_H....

Basic Load Cases

	BLC Description	Category	X Gr...	Y Gr...	Z Gr...	Joint	Point	Distributed	Area(Member)	Surfa...
1	Antenna D	None					45			
2	Antenna Di	None					45			
3	Antenna Wo (0 Deg)	None					45			
4	Antenna Wo (30 Deg)	None					45			
5	Antenna Wo (60 Deg)	None					45			
6	Antenna Wo (90 Deg)	None					45			
7	Antenna Wo (120 Deg)	None					45			
8	Antenna Wo (150 Deg)	None					45			
9	Antenna Wo (180 Deg)	None					45			
10	Antenna Wo (210 Deg)	None					45			
11	Antenna Wo (240 Deg)	None					45			
12	Antenna Wo (270 Deg)	None					45			
13	Antenna Wo (300 Deg)	None					45			
14	Antenna Wo (330 Deg)	None					45			
15	Antenna Wi (0 Deg)	None					45			
16	Antenna Wi (30 Deg)	None					45			
17	Antenna Wi (60 Deg)	None					45			
18	Antenna Wi (90 Deg)	None					45			
19	Antenna Wi (120 Deg)	None					45			
20	Antenna Wi (150 Deg)	None					45			
21	Antenna Wi (180 Deg)	None					45			
22	Antenna Wi (210 Deg)	None					45			
23	Antenna Wi (240 Deg)	None					45			
24	Antenna Wi (270 Deg)	None					45			
25	Antenna Wi (300 Deg)	None					45			
26	Antenna Wi (330 Deg)	None					45			
27	Antenna Wm (0 Deg)	None					45			
28	Antenna Wm (30 Deg)	None					45			
29	Antenna Wm (60 Deg)	None					45			
30	Antenna Wm (90 Deg)	None					45			
31	Antenna Wm (120 Deg)	None					45			
32	Antenna Wm (150 Deg)	None					45			
33	Antenna Wm (180 Deg)	None					45			
34	Antenna Wm (210 Deg)	None					45			
35	Antenna Wm (240 Deg)	None					45			
36	Antenna Wm (270 Deg)	None					45			
37	Antenna Wm (300 Deg)	None					45			
38	Antenna Wm (330 Deg)	None					45			
39	Structure D	None		-1						
40	Structure Di	None						41		
41	Structure Wo (0 Deg)	None						82		
42	Structure Wo (30 Deg)	None						82		
43	Structure Wo (60 Deg)	None						82		
44	Structure Wo (90 Deg)	None						82		
45	Structure Wo (120 Deg)	None						82		
46	Structure Wo (150 Deg)	None						82		
47	Structure Wo (180 Deg)	None						82		
48	Structure Wo (210 Deg)	None						82		
49	Structure Wo (240 Deg)	None						82		
50	Structure Wo (270 Deg)	None						82		
51	Structure Wo (300 Deg)	None						82		
52	Structure Wo (330 Deg)	None						82		
53	Structure Wi (0 Deg)	None						82		
54	Structure Wi (30 Deg)	None						82		
55	Structure Wi (60 Deg)	None						82		
56	Structure Wi (90 Deg)	None						82		

Basic Load Cases (Continued)

	BLC Description	Category	X Gr...	Y Gr...	Z Gr...	Joint	Point	Distributed	Area(Member)	Surfa...
57	Structure Wi (120 Deg)	None						82		
58	Structure Wi (150 Deg)	None						82		
59	Structure Wi (180 Deg)	None						82		
60	Structure Wi (210 Deg)	None						82		
61	Structure Wi (240 Deg)	None						82		
62	Structure Wi (270 Deg)	None						82		
63	Structure Wi (300 Deg)	None						82		
64	Structure Wi (330 Deg)	None						82		
65	Structure Wm (0 Deg)	None						82		
66	Structure Wm (30 Deg)	None						82		
67	Structure Wm (60 Deg)	None						82		
68	Structure Wm (90 Deg)	None						82		
69	Structure Wm (120 Deg)	None						82		
70	Structure Wm (150 Deg)	None						82		
71	Structure Wm (180 Deg)	None						82		
72	Structure Wm (210 Deg)	None						82		
73	Structure Wm (240 Deg)	None						82		
74	Structure Wm (270 Deg)	None						82		
75	Structure Wm (300 Deg)	None						82		
76	Structure Wm (330 Deg)	None						82		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					45			
82	Antenna Eh (0 Deg)	None					30			
83	Antenna Eh (90 Deg)	None					30			
84	Structure Ev	ELY		-.0495						
85	Structure Eh (0 Deg)	ELZ			-.1237					
86	Structure Eh (90 Deg)	ELX	.1237							

Load Combinations

	Description	S...	PDel...	SR...	BLC	Fa...	BLC	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo (30 Deg)	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo (60 Deg)	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo (90 Deg)	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo (120 De...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo (150 De...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo (180 De...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo (210 De...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo (240 De...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo (270 De...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo (300 De...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo (330 De...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								

Load Combinations (Continued)

	Description	S...	PDel...	SR...	BLC	Fa...	BLC	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
23	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																
52	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	1	83		ELZ	1	E...					
53	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	.5	ELZ	.866	E...	.5				
54	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	.866	ELZ	.5	E...	.866				
55	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	1	ELZ		E...	1				
56	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	.866	ELZ	-.5	E...	.866				
57	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.8...	83	.5	ELZ	-.8...	E...	.5				
58	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-1	83		ELZ	-1	E...					
59	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.8...	83	-.5	ELZ	-.8...	E...	-.5				
60	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	-.8...	ELZ	-.5	E...	-.8...				
61	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	-1	ELZ		E...	-1				
62	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	-.8...	ELZ	.5	E...	-.8...				
63	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	-.5	ELZ	.866	E...	-.5				
64	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	1	83		ELZ	1	E...					
65	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	.5	ELZ	.866	E...	.5				
66	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	.866	ELZ	.5	E...	.866				
67	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	1	ELZ		E...	1				
68	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	.866	ELZ	-.5	E...	.866				
69	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.8...	83	.5	ELZ	-.8...	E...	.5				
70	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-1	83		ELZ	-1	E...					
71	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.8...	83	-.5	ELZ	-.8...	E...	-.5				
72	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	-.8...	ELZ	-.5	E...	-.8...				
73	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	-1	ELZ		E...	-1				
74	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	-.8...	ELZ	.5	E...	-.8...				
75	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	-.5	ELZ	.866	E...	-.5				

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-0.166667	0	0.166667	0	
2	N2	-0.447917	0	0.166667	0	
3	N3	0.114583	0	0.166667	0	
4	N4	-0.166667	0	0	0	
5	N5	-0.209803	-3.416667	0.160988	0	
6	N6	-0.447917	-3.416667	0.166667	0	
7	N7	0.114583	-3.416667	0.166667	0	
8	N10	-4.5	0	4.583333	0	
9	N11	4.166667	0	4.583333	0	
10	N11A	-7.666667	0	4.583333	0	
11	N12	7.333333	0	4.583333	0	
12	N14	-4.5	-3.416667	4.583333	0	
13	N15	4.166667	-3.416667	4.583333	0	
14	N16	-7.666667	-3.416667	4.583333	0	
15	N17	7.333333	-3.416667	4.583333	0	
16	N17A	-0.341752	0	0.345119	0	
17	N18	0.008419	0	0.345119	0	
18	N19	-0.341752	-3.416667	0.345119	0	
19	N20	0.008419	-3.416667	0.345119	0	
20	N21	0.38777	0	0.731765	0	
21	N22	0.38777	-3.416667	0.731765	0	
22	N23	2.08026	0	2.456803	0	
23	N24	2.08026	-3.416667	2.456803	0	
24	N25	3.77275	0	4.181841	0	
25	N26	3.77275	-3.416667	4.181841	0	
26	N27	0.38777	-3.291667	0.731765	0	
27	N28	2.08026	-3.291667	2.456803	0	
28	N29	0.38777	-.125	0.731765	0	
29	N30	2.08026	-.125	2.456803	0	
30	N31	3.77275	-2.916667	4.181841	0	
31	N32	3.77275	-.5	4.181841	0	
32	N33	-0.721103	0	0.731765	0	
33	N34	-0.721103	-3.416667	0.731765	0	
34	N35	-2.413593	0	2.456803	0	
35	N36	-2.413593	-3.416667	2.456803	0	
36	N37	-4.106083	0	4.181841	0	
37	N38	-4.106083	-3.416667	4.181841	0	
38	N39	-0.721103	-3.291667	0.731765	0	
39	N40	-2.413593	-3.291667	2.456803	0	
40	N41	-0.721103	-.125	0.731765	0	
41	N42	-2.413593	-.125	2.456803	0	
42	N43	-4.106083	-2.916667	4.181841	0	
43	N44	-4.106083	-.5	4.181841	0	
44	N45	-7.083333	0	4.583333	0	
45	N46	-7.083333	-3.416667	4.583333	0	
46	N47	-7.083333	0	4.833333	0	
47	N48	-7.083333	-3.416667	4.833333	0	
48	N49	-7.083333	1.25	4.833333	0	
49	N50	-7.083333	-4.75	4.833333	0	
50	N51	-3.375	0	4.583333	0	
51	N52	-3.375	-3.416667	4.583333	0	
52	N53	-3.375	0	4.833333	0	
53	N54	-3.375	-3.416667	4.833333	0	
54	N55	-3.375	1.25	4.833333	0	
55	N56	-3.375	-4.75	4.833333	0	
56	N57	-0.833333	0	4.583333	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N58	-0.833333	-3.416667	4.583333	0	
58	N59	-0.833333	0	4.833333	0	
59	N60	-0.833333	-3.416667	4.833333	0	
60	N61	-0.833333	1.25	4.833333	0	
61	N62	-0.833333	-4.75	4.833333	0	
62	N65	-0.166667	-3.416667	0	0	
63	N65A	6.75	0	4.583333	0	
64	N66	6.75	-3.416667	4.583333	0	
65	N67	6.75	0	4.833333	0	
66	N68	6.75	-3.416667	4.833333	0	
67	N69	6.75	1.25	4.833333	0	
68	N70	6.75	-4.75	4.833333	0	
69	N71	8.550037	-3.416667	-0.762613	0	
70	N80	1.671718	0	2.040405	0	
71	N81	1.87963	0	2.252315	0	
72	N98	1.671718	-3.416667	2.040405	0	
73	N99	1.87963	-3.416667	2.252315	0	
74	N77	1.494941	0	2.217181	0	
75	N78	1.702853	0	2.429092	0	
76	N79	1.494941	-3.416667	2.217181	0	
77	N80A	1.702853	-3.416667	2.429092	0	
78	N81A	1.494941	-3.666667	2.217181	0	
79	N82	1.702853	-3.666667	2.429092	0	
80	N83	1.494941	.25	2.217181	0	
81	N84	1.702853	.25	2.429092	0	
82	N85	1.494941	-1.708333	2.217181	0	
83	N86	1.702853	-1.708333	2.429092	0	
84	N85A	5.5	-3.416667	4.583333	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Desig...	A [in2]	Iyy [i...	Izz [i...	J [in4]
1	Mount Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Standoff Horizontal	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
3	Standoff Vertical	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
4	Standoff Diagonal	1.5 w 0.06 th	Beam	Pipe	A53 Gr. B	Typical	.271	.07	.07	.141
5	TES Standoff Diagonal	PIPE_1.5	Beam	Pipe	A53 Gr. B	Typical	.749	.293	.293	.586
6	Face Horizontal	PIPE_2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
7	Mod Tieback	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
8	Standoff Bar	PL3/8x3	Beam	RECT	A36 Gr.36	Typical	1.125	.013	.844	.049
9	Mount Angle	L4X3X6	Beam	Single Angle	A36 Gr.36	Typical	2.49	1.89	3.94	.123

Cold Formed Steel Section Sets

	Label	Shape	Type	Design ...	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Unistrut	P1000	Column	CS	A570 Gr.33	Typical	.497	.1373	.213	.002

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

Hot Rolled Steel Properties (Continued)

	Label	E [ksi]	G [ksi]	Nu	Therm (/...	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
6	A500 Gr. B 46	29000	11154	.3	.65	.49	46	1.4	58	1.3

Cold Formed Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E5 F)	Density[k/ft^3]	Yield[ksi]	Fu[ksi]
1	A570 Gr.33	29500	11346	.3	.65	.49	33	52
2	A607 C1 Gr.55	29500	11346	.3	.65	.49	55	70

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
1	M1	N2	N3		90	Mount Angle	Beam	Single Angle	A36 Gr.36	Typical
2	M2	N1	N4			RIGID	None	None	RIGID	Typical
3	M3	N6	N7		90	Mount Angle	Beam	Single Angle	A36 Gr.36	Typical
4	M5	N1	N17A		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
5	M6	N1	N18		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
6	M7	N11A	N12			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
7	M8	N5	N19		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
8	M9	N5	N20		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
9	M10	N16	N17			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
10	M11	N17A	N10			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
11	M12	N18	N11			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
12	M13	N19	N14			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
13	M14	N20	N15			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
14	M15	N21	N29	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
15	M16	N21	N24		90	Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
16	M17	N23	N30	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
17	M18	N23	N26		90	Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
18	M19	N26	N31	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
19	M20	N27	N22	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
20	M21	N28	N24	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
21	M22	N29	N27	N1		Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
22	M23	N30	N28	N1		Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
23	M24	N31	N32	N1		Standoff Vertical	Beam	Pipe	A53 Gr. B	Typical
24	M25	N32	N25	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
25	M26	N33	N41	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
26	M27	N33	N36		90	Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
27	M28	N35	N42	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
28	M29	N35	N38		90	Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
29	M30	N38	N43	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
30	M31	N39	N34	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
31	M32	N40	N36	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
32	M33	N41	N39	N1		Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
33	M34	N42	N40	N1		Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
34	M35	N43	N44	N1		Standoff Vertical	Beam	Pipe	A53 Gr. B	Typical
35	M36	N44	N37	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
36	M37	N45	N47			RIGID	None	None	RIGID	Typical
37	M38	N46	N48			RIGID	None	None	RIGID	Typical
38	MP4A	N49	N50			Mount Pipe	Column	Pipe	A53 Gr. B	Typical
39	M40	N51	N53			RIGID	None	None	RIGID	Typical
40	M41	N52	N54			RIGID	None	None	RIGID	Typical
41	MP3A	N55	N56			Mount Pipe	Column	Pipe	A53 Gr. B	Typical
42	M43	N57	N59			RIGID	None	None	RIGID	Typical
43	M44	N58	N60			RIGID	None	None	RIGID	Typical
44	MP2A	N61	N62			Mount Pipe	Column	Pipe	A53 Gr. B	Typical
45	M46A	N5	N65			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
46	M47	N65A	N67			RIGID	None	None	RIGID	Typical
47	M48	N66	N68			RIGID	None	None	RIGID	Typical
48	MP1A	N69	N70			Mount Pipe	Column	Pipe	A53 Gr. B	Typical
49	EQUIP	N83	N81A		50	Unistrut	Column	CS	A570 Gr...	Typical
50	M51	N84	N82		50	Unistrut	Column	CS	A570 Gr...	Typical
51	M52	N98	N79			RIGID	None	None	RIGID	Typical
52	M53	N99	N80A			RIGID	None	None	RIGID	Typical
53	M54	N81	N78			RIGID	None	None	RIGID	Typical
54	M55	N80	N77			RIGID	None	None	RIGID	Typical
55	M55A	N85A	N71			Mod Tieback	Beam	Pipe	A53 Gr. B	Typical
56	OVP	N85	N86			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio Opti...	Analysis ...	Inactive	Seismi...
1	M1						Yes				None
2	M2						Yes	** NA **			None
3	M3						Yes				None
4	M5						Yes	Default			None
5	M6						Yes	Default			None
6	M7						Yes				None
7	M8						Yes	Default			None
8	M9						Yes	Default			None
9	M10						Yes				None
10	M11						Yes				None
11	M12						Yes				None
12	M13						Yes				None
13	M14						Yes				None
14	M15	OOOOOX					Yes				None
15	M16	BenPIN	BenPIN				Yes	Default			None
16	M17	OOOOOX					Yes				None
17	M18	BenPIN	BenPIN				Yes	Default			None
18	M19	OOOOOX					Yes				None
19	M20		OOOOOO				Yes				None
20	M21		OOOOOO				Yes				None
21	M22						Yes				None
22	M23						Yes				None
23	M24						Yes				None
24	M25		OOOOOO				Yes	Default			None
25	M26	OOOOOX					Yes				None
26	M27	BenPIN	BenPIN				Yes				None
27	M28	OOOOOX					Yes				None
28	M29	BenPIN	BenPIN				Yes				None
29	M30	OOOOOX					Yes				None
30	M31		OOOOOO				Yes				None
31	M32		OOOOOO				Yes				None
32	M33						Yes				None
33	M34						Yes				None
34	M35						Yes				None
35	M36		OOOOOO				Yes				None
36	M37						Yes	** NA **			None
37	M38						Yes	** NA **			None
38	MP4A						Yes	** NA **			None
39	M40						Yes	** NA **			None
40	M41						Yes	** NA **			None
41	MP3A						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio Opti...	Analysis ...	Inactive	Seismi...
42	M43						Yes	** NA **			None
43	M44						Yes	** NA **			None
44	MP2A						Yes	** NA **			None
45	M46A						Yes	** NA **			None
46	M47						Yes	** NA **			None
47	M48						Yes	** NA **			None
48	MP1A						Yes	** NA **			None
49	EQUIP						Yes	** NA **			None
50	M51						Yes	** NA **			None
51	M52		OOOXOO				Yes	** NA **			None
52	M53		OOOXOO				Yes	** NA **			None
53	M54		OOOXOO				Yes	** NA **			None
54	M55		OOOXOO				Yes	** NA **			None
55	M55A	BenPIN					Yes	Default			None
56	OVP						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-43.5	.5
2	MP1A	My	-.0464	.5
3	MP1A	Mz	-.0224	.5
4	MP1A	Y	-43.5	3.5
5	MP1A	My	-.0464	3.5
6	MP1A	Mz	-.0224	3.5
7	MP1A	Y	-43.5	.5
8	MP1A	My	-.0127	.5
9	MP1A	Mz	.0499	.5
10	MP1A	Y	-43.5	3.5
11	MP1A	My	-.0127	3.5
12	MP1A	Mz	.0499	3.5
13	MP4A	Y	-43.5	.5
14	MP4A	My	-.0127	.5
15	MP4A	Mz	-.0499	.5
16	MP4A	Y	-43.5	3.5
17	MP4A	My	-.0127	3.5
18	MP4A	Mz	-.0499	3.5
19	MP4A	Y	-43.5	.5
20	MP4A	My	-.0464	.5
21	MP4A	Mz	.0224	.5
22	MP4A	Y	-43.5	3.5
23	MP4A	My	-.0464	3.5
24	MP4A	Mz	.0224	3.5
25	MP2A	Y	-28.65	.25
26	MP2A	My	-.0143	.25
27	MP2A	Mz	0	.25
28	MP2A	Y	-28.65	1.25
29	MP2A	My	-.0143	1.25
30	MP2A	Mz	0	1.25
31	MP2A	Y	-74.7	2
32	MP2A	My	.0374	2
33	MP2A	Mz	0	2
34	MP1A	Y	-79.1	2
35	MP1A	My	.0396	2
36	MP1A	Mz	0	2
37	MP4A	Y	-79.1	2

Member Point Loads (BLC 1 : Antenna D) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
38	MP4A	My	.0396	2
39	MP4A	Mz	0	2
40	MP2A	Y	-23.2	3.5
41	MP2A	My	-.0116	3.5
42	MP2A	Mz	0	3.5
43	MP3A	Y	-84.4	2
44	MP3A	My	.0422	2
45	MP3A	Mz	0	2

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-98.5744	.5
2	MP1A	My	-.1052	.5
3	MP1A	Mz	-.0506	.5
4	MP1A	Y	-98.5744	3.5
5	MP1A	My	-.1052	3.5
6	MP1A	Mz	-.0506	3.5
7	MP1A	Y	-98.5744	.5
8	MP1A	My	-.0288	.5
9	MP1A	Mz	.1131	.5
10	MP1A	Y	-98.5744	3.5
11	MP1A	My	-.0288	3.5
12	MP1A	Mz	.1131	3.5
13	MP4A	Y	-98.5744	.5
14	MP4A	My	-.0288	.5
15	MP4A	Mz	-.1131	.5
16	MP4A	Y	-98.5744	3.5
17	MP4A	My	-.0288	3.5
18	MP4A	Mz	-.1131	3.5
19	MP4A	Y	-98.5744	.5
20	MP4A	My	-.1052	.5
21	MP4A	Mz	.0506	.5
22	MP4A	Y	-98.5744	3.5
23	MP4A	My	-.1052	3.5
24	MP4A	Mz	.0506	3.5
25	MP2A	Y	-30.2502	.25
26	MP2A	My	-.0151	.25
27	MP2A	Mz	0	.25
28	MP2A	Y	-30.2502	1.25
29	MP2A	My	-.0151	1.25
30	MP2A	Mz	0	1.25
31	MP2A	Y	-45.6168	2
32	MP2A	My	.0228	2
33	MP2A	Mz	0	2
34	MP1A	Y	-46.0998	2
35	MP1A	My	.0231	2
36	MP1A	Mz	0	2
37	MP4A	Y	-46.0998	2
38	MP4A	My	.0231	2
39	MP4A	Mz	0	2
40	MP2A	Y	-30.3553	3.5
41	MP2A	My	-.0152	3.5
42	MP2A	Mz	0	3.5
43	MP3A	Y	-45.6168	2
44	MP3A	My	.0228	2
45	MP3A	Mz	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	-116.192	.5
3	MP1A	Mx	.0597	.5
4	MP1A	X	0	3.5
5	MP1A	Z	-116.192	3.5
6	MP1A	Mx	.0597	3.5
7	MP1A	X	0	.5
8	MP1A	Z	-116.192	.5
9	MP1A	Mx	-.1334	.5
10	MP1A	X	0	3.5
11	MP1A	Z	-116.192	3.5
12	MP1A	Mx	-.1334	3.5
13	MP4A	X	0	.5
14	MP4A	Z	-116.192	.5
15	MP4A	Mx	.1334	.5
16	MP4A	X	0	3.5
17	MP4A	Z	-116.192	3.5
18	MP4A	Mx	.1334	3.5
19	MP4A	X	0	.5
20	MP4A	Z	-116.192	.5
21	MP4A	Mx	-.0597	.5
22	MP4A	X	0	3.5
23	MP4A	Z	-116.192	3.5
24	MP4A	Mx	-.0597	3.5
25	MP2A	X	0	.25
26	MP2A	Z	-67.233	.25
27	MP2A	Mx	0	.25
28	MP2A	X	0	1.25
29	MP2A	Z	-67.233	1.25
30	MP2A	Mx	0	1.25
31	MP2A	X	0	2
32	MP2A	Z	-54.993	2
33	MP2A	Mx	0	2
34	MP1A	X	0	2
35	MP1A	Z	-66.346	2
36	MP1A	Mx	0	2
37	MP4A	X	0	2
38	MP4A	Z	-66.346	2
39	MP4A	Mx	0	2
40	MP2A	X	0	3.5
41	MP2A	Z	-54.283	3.5
42	MP2A	Mx	0	3.5
43	MP3A	X	0	2
44	MP3A	Z	-54.993	2
45	MP3A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	42.198	.5
2	MP1A	Z	-73.09	.5
3	MP1A	Mx	-.0075	.5
4	MP1A	X	42.198	3.5
5	MP1A	Z	-73.09	3.5
6	MP1A	Mx	-.0075	3.5
7	MP1A	X	42.198	.5
8	MP1A	Z	-73.09	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP1A	Mx	-.0962	.5
10	MP1A	X	42.198	3.5
11	MP1A	Z	-73.09	3.5
12	MP1A	Mx	-.0962	3.5
13	MP4A	X	63.617	.5
14	MP4A	Z	-110.189	.5
15	MP4A	Mx	.1079	.5
16	MP4A	X	63.617	3.5
17	MP4A	Z	-110.189	3.5
18	MP4A	Mx	.1079	3.5
19	MP4A	X	63.617	.5
20	MP4A	Z	-110.189	.5
21	MP4A	Mx	-.1245	.5
22	MP4A	X	63.617	3.5
23	MP4A	Z	-110.189	3.5
24	MP4A	Mx	-.1245	3.5
25	MP2A	X	28.449	.25
26	MP2A	Z	-49.276	.25
27	MP2A	Mx	-.0142	.25
28	MP2A	X	28.449	1.25
29	MP2A	Z	-49.276	1.25
30	MP2A	Mx	-.0142	1.25
31	MP2A	X	25.235	2
32	MP2A	Z	-43.708	2
33	MP2A	Mx	.0126	2
34	MP1A	X	30.534	2
35	MP1A	Z	-52.887	2
36	MP1A	Mx	.0153	2
37	MP4A	X	30.534	2
38	MP4A	Z	-52.887	2
39	MP4A	Mx	.0153	2
40	MP2A	X	23.703	3.5
41	MP2A	Z	-41.056	3.5
42	MP2A	Mx	-.0119	3.5
43	MP3A	X	25.235	2
44	MP3A	Z	-43.708	2
45	MP3A	Mx	.0126	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	55.117	.5
2	MP1A	Z	-31.822	.5
3	MP1A	Mx	-.0425	.5
4	MP1A	X	55.117	3.5
5	MP1A	Z	-31.822	3.5
6	MP1A	Mx	-.0425	3.5
7	MP1A	X	55.117	.5
8	MP1A	Z	-31.822	.5
9	MP1A	Mx	-.0526	.5
10	MP1A	X	55.117	3.5
11	MP1A	Z	-31.822	3.5
12	MP1A	Mx	-.0526	3.5
13	MP4A	X	92.216	.5
14	MP4A	Z	-53.241	.5
15	MP4A	Mx	.0341	.5
16	MP4A	X	92.216	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP4A	Z	-53.241	3.5
18	MP4A	Mx	.0341	3.5
19	MP4A	X	92.216	.5
20	MP4A	Z	-53.241	.5
21	MP4A	Mx	-.1258	.5
22	MP4A	X	92.216	3.5
23	MP4A	Z	-53.241	3.5
24	MP4A	Mx	-.1258	3.5
25	MP2A	X	31.376	.25
26	MP2A	Z	-18.115	.25
27	MP2A	Mx	-.0157	.25
28	MP2A	X	31.376	1.25
29	MP2A	Z	-18.115	1.25
30	MP2A	Mx	-.0157	1.25
31	MP2A	X	35.873	2
32	MP2A	Z	-20.711	2
33	MP2A	Mx	.0179	2
34	MP1A	X	43.746	2
35	MP1A	Z	-25.257	2
36	MP1A	Mx	.0219	2
37	MP4A	X	43.746	2
38	MP4A	Z	-25.257	2
39	MP4A	Mx	.0219	2
40	MP2A	X	29.145	3.5
41	MP2A	Z	-16.827	3.5
42	MP2A	Mx	-.0146	3.5
43	MP3A	X	35.873	2
44	MP3A	Z	-20.711	2
45	MP3A	Mx	.0179	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	74.686	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	-.0797	.5
4	MP1A	X	74.686	3.5
5	MP1A	Z	0	3.5
6	MP1A	Mx	-.0797	3.5
7	MP1A	X	74.686	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	-.0218	.5
10	MP1A	X	74.686	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	-.0218	3.5
13	MP4A	X	74.686	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	-.0218	.5
16	MP4A	X	74.686	3.5
17	MP4A	Z	0	3.5
18	MP4A	Mx	-.0218	3.5
19	MP4A	X	74.686	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	-.0797	.5
22	MP4A	X	74.686	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	-.0797	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	25.895	.25
26	MP2A	Z	0	.25
27	MP2A	Mx	-.0129	.25
28	MP2A	X	25.895	1.25
29	MP2A	Z	0	1.25
30	MP2A	Mx	-.0129	1.25
31	MP2A	X	36.898	2
32	MP2A	Z	0	2
33	MP2A	Mx	.0184	2
34	MP1A	X	45.236	2
35	MP1A	Z	0	2
36	MP1A	Mx	.0226	2
37	MP4A	X	45.236	2
38	MP4A	Z	0	2
39	MP4A	Mx	.0226	2
40	MP2A	X	26.778	3.5
41	MP2A	Z	0	3.5
42	MP2A	Mx	-.0134	3.5
43	MP3A	X	36.898	2
44	MP3A	Z	0	2
45	MP3A	Mx	.0184	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	92.216	.5
2	MP1A	Z	53.241	.5
3	MP1A	Mx	-.1258	.5
4	MP1A	X	92.216	3.5
5	MP1A	Z	53.241	3.5
6	MP1A	Mx	-.1258	3.5
7	MP1A	X	92.216	.5
8	MP1A	Z	53.241	.5
9	MP1A	Mx	.0341	.5
10	MP1A	X	92.216	3.5
11	MP1A	Z	53.241	3.5
12	MP1A	Mx	.0341	3.5
13	MP4A	X	55.117	.5
14	MP4A	Z	31.822	.5
15	MP4A	Mx	-.0526	.5
16	MP4A	X	55.117	3.5
17	MP4A	Z	31.822	3.5
18	MP4A	Mx	-.0526	3.5
19	MP4A	X	55.117	.5
20	MP4A	Z	31.822	.5
21	MP4A	Mx	-.0425	.5
22	MP4A	X	55.117	3.5
23	MP4A	Z	31.822	3.5
24	MP4A	Mx	-.0425	3.5
25	MP2A	X	31.376	.25
26	MP2A	Z	18.115	.25
27	MP2A	Mx	-.0157	.25
28	MP2A	X	31.376	1.25
29	MP2A	Z	18.115	1.25
30	MP2A	Mx	-.0157	1.25
31	MP2A	X	35.873	2
32	MP2A	Z	20.711	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2A	Mx	.0179	2
34	MP1A	X	43.746	2
35	MP1A	Z	25.257	2
36	MP1A	Mx	.0219	2
37	MP4A	X	43.746	2
38	MP4A	Z	25.257	2
39	MP4A	Mx	.0219	2
40	MP2A	X	29.145	3.5
41	MP2A	Z	16.827	3.5
42	MP2A	Mx	-.0146	3.5
43	MP3A	X	35.873	2
44	MP3A	Z	20.711	2
45	MP3A	Mx	.0179	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	63.617	.5
2	MP1A	Z	110.189	.5
3	MP1A	Mx	-.1245	.5
4	MP1A	X	63.617	3.5
5	MP1A	Z	110.189	3.5
6	MP1A	Mx	-.1245	3.5
7	MP1A	X	63.617	.5
8	MP1A	Z	110.189	.5
9	MP1A	Mx	.1079	.5
10	MP1A	X	63.617	3.5
11	MP1A	Z	110.189	3.5
12	MP1A	Mx	.1079	3.5
13	MP4A	X	42.198	.5
14	MP4A	Z	73.09	.5
15	MP4A	Mx	-.0962	.5
16	MP4A	X	42.198	3.5
17	MP4A	Z	73.09	3.5
18	MP4A	Mx	-.0962	3.5
19	MP4A	X	42.198	.5
20	MP4A	Z	73.09	.5
21	MP4A	Mx	-.0075	.5
22	MP4A	X	42.198	3.5
23	MP4A	Z	73.09	3.5
24	MP4A	Mx	-.0075	3.5
25	MP2A	X	28.449	.25
26	MP2A	Z	49.276	.25
27	MP2A	Mx	-.0142	.25
28	MP2A	X	28.449	1.25
29	MP2A	Z	49.276	1.25
30	MP2A	Mx	-.0142	1.25
31	MP2A	X	25.235	2
32	MP2A	Z	43.708	2
33	MP2A	Mx	.0126	2
34	MP1A	X	30.534	2
35	MP1A	Z	52.887	2
36	MP1A	Mx	.0153	2
37	MP4A	X	30.534	2
38	MP4A	Z	52.887	2
39	MP4A	Mx	.0153	2
40	MP2A	X	23.703	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP2A	Z	41.056	3.5
42	MP2A	Mx	-.0119	3.5
43	MP3A	X	25.235	2
44	MP3A	Z	43.708	2
45	MP3A	Mx	.0126	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	116.192	.5
3	MP1A	Mx	-.0597	.5
4	MP1A	X	0	3.5
5	MP1A	Z	116.192	3.5
6	MP1A	Mx	-.0597	3.5
7	MP1A	X	0	.5
8	MP1A	Z	116.192	.5
9	MP1A	Mx	.1334	.5
10	MP1A	X	0	3.5
11	MP1A	Z	116.192	3.5
12	MP1A	Mx	.1334	3.5
13	MP4A	X	0	.5
14	MP4A	Z	116.192	.5
15	MP4A	Mx	-.1334	.5
16	MP4A	X	0	3.5
17	MP4A	Z	116.192	3.5
18	MP4A	Mx	-.1334	3.5
19	MP4A	X	0	.5
20	MP4A	Z	116.192	.5
21	MP4A	Mx	.0597	.5
22	MP4A	X	0	3.5
23	MP4A	Z	116.192	3.5
24	MP4A	Mx	.0597	3.5
25	MP2A	X	0	.25
26	MP2A	Z	67.233	.25
27	MP2A	Mx	0	.25
28	MP2A	X	0	1.25
29	MP2A	Z	67.233	1.25
30	MP2A	Mx	0	1.25
31	MP2A	X	0	2
32	MP2A	Z	54.993	2
33	MP2A	Mx	0	2
34	MP1A	X	0	2
35	MP1A	Z	66.346	2
36	MP1A	Mx	0	2
37	MP4A	X	0	2
38	MP4A	Z	66.346	2
39	MP4A	Mx	0	2
40	MP2A	X	0	3.5
41	MP2A	Z	54.283	3.5
42	MP2A	Mx	0	3.5
43	MP3A	X	0	2
44	MP3A	Z	54.993	2
45	MP3A	Mx	0	2

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-42.198	.5
2	MP1A	Z	73.09	.5
3	MP1A	Mx	.0075	.5
4	MP1A	X	-42.198	3.5
5	MP1A	Z	73.09	3.5
6	MP1A	Mx	.0075	3.5
7	MP1A	X	-42.198	.5
8	MP1A	Z	73.09	.5
9	MP1A	Mx	.0962	.5
10	MP1A	X	-42.198	3.5
11	MP1A	Z	73.09	3.5
12	MP1A	Mx	.0962	3.5
13	MP4A	X	-63.617	.5
14	MP4A	Z	110.189	.5
15	MP4A	Mx	-.1079	.5
16	MP4A	X	-63.617	3.5
17	MP4A	Z	110.189	3.5
18	MP4A	Mx	-.1079	3.5
19	MP4A	X	-63.617	.5
20	MP4A	Z	110.189	.5
21	MP4A	Mx	.1245	.5
22	MP4A	X	-63.617	3.5
23	MP4A	Z	110.189	3.5
24	MP4A	Mx	.1245	3.5
25	MP2A	X	-28.449	.25
26	MP2A	Z	49.276	.25
27	MP2A	Mx	.0142	.25
28	MP2A	X	-28.449	1.25
29	MP2A	Z	49.276	1.25
30	MP2A	Mx	.0142	1.25
31	MP2A	X	-25.235	2
32	MP2A	Z	43.708	2
33	MP2A	Mx	-.0126	2
34	MP1A	X	-30.534	2
35	MP1A	Z	52.887	2
36	MP1A	Mx	-.0153	2
37	MP4A	X	-30.534	2
38	MP4A	Z	52.887	2
39	MP4A	Mx	-.0153	2
40	MP2A	X	-23.703	3.5
41	MP2A	Z	41.056	3.5
42	MP2A	Mx	.0119	3.5
43	MP3A	X	-25.235	2
44	MP3A	Z	43.708	2
45	MP3A	Mx	-.0126	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-55.117	.5
2	MP1A	Z	31.822	.5
3	MP1A	Mx	.0425	.5
4	MP1A	X	-55.117	3.5
5	MP1A	Z	31.822	3.5
6	MP1A	Mx	.0425	3.5
7	MP1A	X	-55.117	.5
8	MP1A	Z	31.822	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP1A	Mx	.0526	.5
10	MP1A	X	-55.117	3.5
11	MP1A	Z	31.822	3.5
12	MP1A	Mx	.0526	3.5
13	MP4A	X	-92.216	.5
14	MP4A	Z	53.241	.5
15	MP4A	Mx	-.0341	.5
16	MP4A	X	-92.216	3.5
17	MP4A	Z	53.241	3.5
18	MP4A	Mx	-.0341	3.5
19	MP4A	X	-92.216	.5
20	MP4A	Z	53.241	.5
21	MP4A	Mx	.1258	.5
22	MP4A	X	-92.216	3.5
23	MP4A	Z	53.241	3.5
24	MP4A	Mx	.1258	3.5
25	MP2A	X	-31.376	.25
26	MP2A	Z	18.115	.25
27	MP2A	Mx	.0157	.25
28	MP2A	X	-31.376	1.25
29	MP2A	Z	18.115	1.25
30	MP2A	Mx	.0157	1.25
31	MP2A	X	-35.873	2
32	MP2A	Z	20.711	2
33	MP2A	Mx	-.0179	2
34	MP1A	X	-43.746	2
35	MP1A	Z	25.257	2
36	MP1A	Mx	-.0219	2
37	MP4A	X	-43.746	2
38	MP4A	Z	25.257	2
39	MP4A	Mx	-.0219	2
40	MP2A	X	-29.145	3.5
41	MP2A	Z	16.827	3.5
42	MP2A	Mx	.0146	3.5
43	MP3A	X	-35.873	2
44	MP3A	Z	20.711	2
45	MP3A	Mx	-.0179	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-74.686	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	.0797	.5
4	MP1A	X	-74.686	3.5
5	MP1A	Z	0	3.5
6	MP1A	Mx	.0797	3.5
7	MP1A	X	-74.686	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	.0218	.5
10	MP1A	X	-74.686	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	.0218	3.5
13	MP4A	X	-74.686	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	.0218	.5
16	MP4A	X	-74.686	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP4A	Z	0	3.5
18	MP4A	Mx	.0218	3.5
19	MP4A	X	-74.686	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	.0797	.5
22	MP4A	X	-74.686	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	.0797	3.5
25	MP2A	X	-25.895	.25
26	MP2A	Z	0	.25
27	MP2A	Mx	.0129	.25
28	MP2A	X	-25.895	1.25
29	MP2A	Z	0	1.25
30	MP2A	Mx	.0129	1.25
31	MP2A	X	-36.898	2
32	MP2A	Z	0	2
33	MP2A	Mx	-.0184	2
34	MP1A	X	-45.236	2
35	MP1A	Z	0	2
36	MP1A	Mx	-.0226	2
37	MP4A	X	-45.236	2
38	MP4A	Z	0	2
39	MP4A	Mx	-.0226	2
40	MP2A	X	-26.778	3.5
41	MP2A	Z	0	3.5
42	MP2A	Mx	.0134	3.5
43	MP3A	X	-36.898	2
44	MP3A	Z	0	2
45	MP3A	Mx	-.0184	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-92.216	.5
2	MP1A	Z	-53.241	.5
3	MP1A	Mx	.1258	.5
4	MP1A	X	-92.216	3.5
5	MP1A	Z	-53.241	3.5
6	MP1A	Mx	.1258	3.5
7	MP1A	X	-92.216	.5
8	MP1A	Z	-53.241	.5
9	MP1A	Mx	-.0341	.5
10	MP1A	X	-92.216	3.5
11	MP1A	Z	-53.241	3.5
12	MP1A	Mx	-.0341	3.5
13	MP4A	X	-55.117	.5
14	MP4A	Z	-31.822	.5
15	MP4A	Mx	.0526	.5
16	MP4A	X	-55.117	3.5
17	MP4A	Z	-31.822	3.5
18	MP4A	Mx	.0526	3.5
19	MP4A	X	-55.117	.5
20	MP4A	Z	-31.822	.5
21	MP4A	Mx	.0425	.5
22	MP4A	X	-55.117	3.5
23	MP4A	Z	-31.822	3.5
24	MP4A	Mx	.0425	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	-31.376	.25
26	MP2A	Z	-18.115	.25
27	MP2A	Mx	.0157	.25
28	MP2A	X	-31.376	1.25
29	MP2A	Z	-18.115	1.25
30	MP2A	Mx	.0157	1.25
31	MP2A	X	-35.873	2
32	MP2A	Z	-20.711	2
33	MP2A	Mx	-.0179	2
34	MP1A	X	-43.746	2
35	MP1A	Z	-25.257	2
36	MP1A	Mx	-.0219	2
37	MP4A	X	-43.746	2
38	MP4A	Z	-25.257	2
39	MP4A	Mx	-.0219	2
40	MP2A	X	-29.145	3.5
41	MP2A	Z	-16.827	3.5
42	MP2A	Mx	.0146	3.5
43	MP3A	X	-35.873	2
44	MP3A	Z	-20.711	2
45	MP3A	Mx	-.0179	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-63.617	.5
2	MP1A	Z	-110.189	.5
3	MP1A	Mx	.1245	.5
4	MP1A	X	-63.617	3.5
5	MP1A	Z	-110.189	3.5
6	MP1A	Mx	.1245	3.5
7	MP1A	X	-63.617	.5
8	MP1A	Z	-110.189	.5
9	MP1A	Mx	-.1079	.5
10	MP1A	X	-63.617	3.5
11	MP1A	Z	-110.189	3.5
12	MP1A	Mx	-.1079	3.5
13	MP4A	X	-42.198	.5
14	MP4A	Z	-73.09	.5
15	MP4A	Mx	.0962	.5
16	MP4A	X	-42.198	3.5
17	MP4A	Z	-73.09	3.5
18	MP4A	Mx	.0962	3.5
19	MP4A	X	-42.198	.5
20	MP4A	Z	-73.09	.5
21	MP4A	Mx	.0075	.5
22	MP4A	X	-42.198	3.5
23	MP4A	Z	-73.09	3.5
24	MP4A	Mx	.0075	3.5
25	MP2A	X	-28.449	.25
26	MP2A	Z	-49.276	.25
27	MP2A	Mx	.0142	.25
28	MP2A	X	-28.449	1.25
29	MP2A	Z	-49.276	1.25
30	MP2A	Mx	.0142	1.25
31	MP2A	X	-25.235	2
32	MP2A	Z	-43.708	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2A	Mx	-.0126	2
34	MP1A	X	-30.534	2
35	MP1A	Z	-52.887	2
36	MP1A	Mx	-.0153	2
37	MP4A	X	-30.534	2
38	MP4A	Z	-52.887	2
39	MP4A	Mx	-.0153	2
40	MP2A	X	-23.703	3.5
41	MP2A	Z	-41.056	3.5
42	MP2A	Mx	.0119	3.5
43	MP3A	X	-25.235	2
44	MP3A	Z	-43.708	2
45	MP3A	Mx	-.0126	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	-38.328	.5
3	MP1A	Mx	.0197	.5
4	MP1A	X	0	3.5
5	MP1A	Z	-38.328	3.5
6	MP1A	Mx	.0197	3.5
7	MP1A	X	0	.5
8	MP1A	Z	-38.328	.5
9	MP1A	Mx	-.044	.5
10	MP1A	X	0	3.5
11	MP1A	Z	-38.328	3.5
12	MP1A	Mx	-.044	3.5
13	MP4A	X	0	.5
14	MP4A	Z	-38.328	.5
15	MP4A	Mx	.044	.5
16	MP4A	X	0	3.5
17	MP4A	Z	-38.328	3.5
18	MP4A	Mx	.044	3.5
19	MP4A	X	0	.5
20	MP4A	Z	-38.328	.5
21	MP4A	Mx	-.0197	.5
22	MP4A	X	0	3.5
23	MP4A	Z	-38.328	3.5
24	MP4A	Mx	-.0197	3.5
25	MP2A	X	0	.25
26	MP2A	Z	-13.367	.25
27	MP2A	Mx	0	.25
28	MP2A	X	0	1.25
29	MP2A	Z	-13.367	1.25
30	MP2A	Mx	0	1.25
31	MP2A	X	0	2
32	MP2A	Z	-13.816	2
33	MP2A	Mx	0	2
34	MP1A	X	0	2
35	MP1A	Z	-13.816	2
36	MP1A	Mx	0	2
37	MP4A	X	0	2
38	MP4A	Z	-13.816	2
39	MP4A	Mx	0	2
40	MP2A	X	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP2A	Z	-11.578	3.5
42	MP2A	Mx	0	3.5
43	MP3A	X	0	2
44	MP3A	Z	-13.816	2
45	MP3A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	15.289	.5
2	MP1A	Z	-26.481	.5
3	MP1A	Mx	-.0027	.5
4	MP1A	X	15.289	3.5
5	MP1A	Z	-26.481	3.5
6	MP1A	Mx	-.0027	3.5
7	MP1A	X	15.289	.5
8	MP1A	Z	-26.481	.5
9	MP1A	Mx	-.0349	.5
10	MP1A	X	15.289	3.5
11	MP1A	Z	-26.481	3.5
12	MP1A	Mx	-.0349	3.5
13	MP4A	X	20.51	.5
14	MP4A	Z	-35.524	.5
15	MP4A	Mx	.0348	.5
16	MP4A	X	20.51	3.5
17	MP4A	Z	-35.524	3.5
18	MP4A	Mx	.0348	3.5
19	MP4A	X	20.51	.5
20	MP4A	Z	-35.524	.5
21	MP4A	Mx	-.0401	.5
22	MP4A	X	20.51	3.5
23	MP4A	Z	-35.524	3.5
24	MP4A	Mx	-.0401	3.5
25	MP2A	X	5.719	.25
26	MP2A	Z	-9.906	.25
27	MP2A	Mx	-.0029	.25
28	MP2A	X	5.719	1.25
29	MP2A	Z	-9.906	1.25
30	MP2A	Mx	-.0029	1.25
31	MP2A	X	6.383	2
32	MP2A	Z	-11.055	2
33	MP2A	Mx	.0032	2
34	MP1A	X	6.404	2
35	MP1A	Z	-11.092	2
36	MP1A	Mx	.0032	2
37	MP4A	X	6.404	2
38	MP4A	Z	-11.092	2
39	MP4A	Mx	.0032	2
40	MP2A	X	5.124	3.5
41	MP2A	Z	-8.875	3.5
42	MP2A	Mx	-.0026	3.5
43	MP3A	X	6.383	2
44	MP3A	Z	-11.055	2
45	MP3A	Mx	.0032	2

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	22.1	.5
2	MP1A	Z	-12.759	.5
3	MP1A	Mx	-.017	.5
4	MP1A	X	22.1	3.5
5	MP1A	Z	-12.759	3.5
6	MP1A	Mx	-.017	3.5
7	MP1A	X	22.1	.5
8	MP1A	Z	-12.759	.5
9	MP1A	Mx	-.0211	.5
10	MP1A	X	22.1	3.5
11	MP1A	Z	-12.759	3.5
12	MP1A	Mx	-.0211	3.5
13	MP4A	X	31.143	.5
14	MP4A	Z	-17.98	.5
15	MP4A	Mx	.0115	.5
16	MP4A	X	31.143	3.5
17	MP4A	Z	-17.98	3.5
18	MP4A	Mx	.0115	3.5
19	MP4A	X	31.143	.5
20	MP4A	Z	-17.98	.5
21	MP4A	Mx	-.0425	.5
22	MP4A	X	31.143	3.5
23	MP4A	Z	-17.98	3.5
24	MP4A	Mx	-.0425	3.5
25	MP2A	X	6.565	.25
26	MP2A	Z	-3.79	.25
27	MP2A	Mx	-.0033	.25
28	MP2A	X	6.565	1.25
29	MP2A	Z	-3.79	1.25
30	MP2A	Mx	-.0033	1.25
31	MP2A	X	9.237	2
32	MP2A	Z	-5.333	2
33	MP2A	Mx	.0046	2
34	MP1A	X	9.346	2
35	MP1A	Z	-5.396	2
36	MP1A	Mx	.0047	2
37	MP4A	X	9.346	2
38	MP4A	Z	-5.396	2
39	MP4A	Mx	.0047	2
40	MP2A	X	6.572	3.5
41	MP2A	Z	-3.794	3.5
42	MP2A	Mx	-.0033	3.5
43	MP3A	X	9.237	2
44	MP3A	Z	-5.333	2
45	MP3A	Mx	.0046	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	28.21	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	-.0301	.5
4	MP1A	X	28.21	3.5
5	MP1A	Z	0	3.5
6	MP1A	Mx	-.0301	3.5
7	MP1A	X	28.21	.5
8	MP1A	Z	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP1A	Mx	-.0082	.5
10	MP1A	X	28.21	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	-.0082	3.5
13	MP4A	X	28.21	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	-.0082	.5
16	MP4A	X	28.21	3.5
17	MP4A	Z	0	3.5
18	MP4A	Mx	-.0082	3.5
19	MP4A	X	28.21	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	-.0301	.5
22	MP4A	X	28.21	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	-.0301	3.5
25	MP2A	X	5.652	.25
26	MP2A	Z	0	.25
27	MP2A	Mx	-.0028	.25
28	MP2A	X	5.652	1.25
29	MP2A	Z	0	1.25
30	MP2A	Mx	-.0028	1.25
31	MP2A	X	9.616	2
32	MP2A	Z	0	2
33	MP2A	Mx	.0048	2
34	MP1A	X	9.784	2
35	MP1A	Z	0	2
36	MP1A	Mx	.0049	2
37	MP4A	X	9.784	2
38	MP4A	Z	0	2
39	MP4A	Mx	.0049	2
40	MP2A	X	6.258	3.5
41	MP2A	Z	0	3.5
42	MP2A	Mx	-.0031	3.5
43	MP3A	X	9.616	2
44	MP3A	Z	0	2
45	MP3A	Mx	.0048	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	31.143	.5
2	MP1A	Z	17.98	.5
3	MP1A	Mx	-.0425	.5
4	MP1A	X	31.143	3.5
5	MP1A	Z	17.98	3.5
6	MP1A	Mx	-.0425	3.5
7	MP1A	X	31.143	.5
8	MP1A	Z	17.98	.5
9	MP1A	Mx	.0115	.5
10	MP1A	X	31.143	3.5
11	MP1A	Z	17.98	3.5
12	MP1A	Mx	.0115	3.5
13	MP4A	X	22.1	.5
14	MP4A	Z	12.759	.5
15	MP4A	Mx	-.0211	.5
16	MP4A	X	22.1	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP4A	Z	12.759	3.5
18	MP4A	Mx	-.0211	3.5
19	MP4A	X	22.1	.5
20	MP4A	Z	12.759	.5
21	MP4A	Mx	-.017	.5
22	MP4A	X	22.1	3.5
23	MP4A	Z	12.759	3.5
24	MP4A	Mx	-.017	3.5
25	MP2A	X	6.565	.25
26	MP2A	Z	3.79	.25
27	MP2A	Mx	-.0033	.25
28	MP2A	X	6.565	1.25
29	MP2A	Z	3.79	1.25
30	MP2A	Mx	-.0033	1.25
31	MP2A	X	9.237	2
32	MP2A	Z	5.333	2
33	MP2A	Mx	.0046	2
34	MP1A	X	9.346	2
35	MP1A	Z	5.396	2
36	MP1A	Mx	.0047	2
37	MP4A	X	9.346	2
38	MP4A	Z	5.396	2
39	MP4A	Mx	.0047	2
40	MP2A	X	6.572	3.5
41	MP2A	Z	3.794	3.5
42	MP2A	Mx	-.0033	3.5
43	MP3A	X	9.237	2
44	MP3A	Z	5.333	2
45	MP3A	Mx	.0046	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	20.51	.5
2	MP1A	Z	35.524	.5
3	MP1A	Mx	-.0401	.5
4	MP1A	X	20.51	3.5
5	MP1A	Z	35.524	3.5
6	MP1A	Mx	-.0401	3.5
7	MP1A	X	20.51	.5
8	MP1A	Z	35.524	.5
9	MP1A	Mx	.0348	.5
10	MP1A	X	20.51	3.5
11	MP1A	Z	35.524	3.5
12	MP1A	Mx	.0348	3.5
13	MP4A	X	15.289	.5
14	MP4A	Z	26.481	.5
15	MP4A	Mx	-.0349	.5
16	MP4A	X	15.289	3.5
17	MP4A	Z	26.481	3.5
18	MP4A	Mx	-.0349	3.5
19	MP4A	X	15.289	.5
20	MP4A	Z	26.481	.5
21	MP4A	Mx	-.0027	.5
22	MP4A	X	15.289	3.5
23	MP4A	Z	26.481	3.5
24	MP4A	Mx	-.0027	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	5.719	.25
26	MP2A	Z	9.906	.25
27	MP2A	Mx	-.0029	.25
28	MP2A	X	5.719	1.25
29	MP2A	Z	9.906	1.25
30	MP2A	Mx	-.0029	1.25
31	MP2A	X	6.383	2
32	MP2A	Z	11.055	2
33	MP2A	Mx	.0032	2
34	MP1A	X	6.404	2
35	MP1A	Z	11.092	2
36	MP1A	Mx	.0032	2
37	MP4A	X	6.404	2
38	MP4A	Z	11.092	2
39	MP4A	Mx	.0032	2
40	MP2A	X	5.124	3.5
41	MP2A	Z	8.875	3.5
42	MP2A	Mx	-.0026	3.5
43	MP3A	X	6.383	2
44	MP3A	Z	11.055	2
45	MP3A	Mx	.0032	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	38.328	.5
3	MP1A	Mx	-.0197	.5
4	MP1A	X	0	3.5
5	MP1A	Z	38.328	3.5
6	MP1A	Mx	-.0197	3.5
7	MP1A	X	0	.5
8	MP1A	Z	38.328	.5
9	MP1A	Mx	.044	.5
10	MP1A	X	0	3.5
11	MP1A	Z	38.328	3.5
12	MP1A	Mx	.044	3.5
13	MP4A	X	0	.5
14	MP4A	Z	38.328	.5
15	MP4A	Mx	-.044	.5
16	MP4A	X	0	3.5
17	MP4A	Z	38.328	3.5
18	MP4A	Mx	-.044	3.5
19	MP4A	X	0	.5
20	MP4A	Z	38.328	.5
21	MP4A	Mx	.0197	.5
22	MP4A	X	0	3.5
23	MP4A	Z	38.328	3.5
24	MP4A	Mx	.0197	3.5
25	MP2A	X	0	.25
26	MP2A	Z	13.367	.25
27	MP2A	Mx	0	.25
28	MP2A	X	0	1.25
29	MP2A	Z	13.367	1.25
30	MP2A	Mx	0	1.25
31	MP2A	X	0	2
32	MP2A	Z	13.816	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2A	Mx	0	2
34	MP1A	X	0	2
35	MP1A	Z	13.816	2
36	MP1A	Mx	0	2
37	MP4A	X	0	2
38	MP4A	Z	13.816	2
39	MP4A	Mx	0	2
40	MP2A	X	0	3.5
41	MP2A	Z	11.578	3.5
42	MP2A	Mx	0	3.5
43	MP3A	X	0	2
44	MP3A	Z	13.816	2
45	MP3A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-15.289	.5
2	MP1A	Z	26.481	.5
3	MP1A	Mx	.0027	.5
4	MP1A	X	-15.289	3.5
5	MP1A	Z	26.481	3.5
6	MP1A	Mx	.0027	3.5
7	MP1A	X	-15.289	.5
8	MP1A	Z	26.481	.5
9	MP1A	Mx	.0349	.5
10	MP1A	X	-15.289	3.5
11	MP1A	Z	26.481	3.5
12	MP1A	Mx	.0349	3.5
13	MP4A	X	-20.51	.5
14	MP4A	Z	35.524	.5
15	MP4A	Mx	-.0348	.5
16	MP4A	X	-20.51	3.5
17	MP4A	Z	35.524	3.5
18	MP4A	Mx	-.0348	3.5
19	MP4A	X	-20.51	.5
20	MP4A	Z	35.524	.5
21	MP4A	Mx	.0401	.5
22	MP4A	X	-20.51	3.5
23	MP4A	Z	35.524	3.5
24	MP4A	Mx	.0401	3.5
25	MP2A	X	-5.719	.25
26	MP2A	Z	9.906	.25
27	MP2A	Mx	.0029	.25
28	MP2A	X	-5.719	1.25
29	MP2A	Z	9.906	1.25
30	MP2A	Mx	.0029	1.25
31	MP2A	X	-6.383	2
32	MP2A	Z	11.055	2
33	MP2A	Mx	-.0032	2
34	MP1A	X	-6.404	2
35	MP1A	Z	11.092	2
36	MP1A	Mx	-.0032	2
37	MP4A	X	-6.404	2
38	MP4A	Z	11.092	2
39	MP4A	Mx	-.0032	2
40	MP2A	X	-5.124	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP2A	Z	8.875	3.5
42	MP2A	Mx	.0026	3.5
43	MP3A	X	-6.383	2
44	MP3A	Z	11.055	2
45	MP3A	Mx	-.0032	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-22.1	.5
2	MP1A	Z	12.759	.5
3	MP1A	Mx	.017	.5
4	MP1A	X	-22.1	3.5
5	MP1A	Z	12.759	3.5
6	MP1A	Mx	.017	3.5
7	MP1A	X	-22.1	.5
8	MP1A	Z	12.759	.5
9	MP1A	Mx	.0211	.5
10	MP1A	X	-22.1	3.5
11	MP1A	Z	12.759	3.5
12	MP1A	Mx	.0211	3.5
13	MP4A	X	-31.143	.5
14	MP4A	Z	17.98	.5
15	MP4A	Mx	-.0115	.5
16	MP4A	X	-31.143	3.5
17	MP4A	Z	17.98	3.5
18	MP4A	Mx	-.0115	3.5
19	MP4A	X	-31.143	.5
20	MP4A	Z	17.98	.5
21	MP4A	Mx	.0425	.5
22	MP4A	X	-31.143	3.5
23	MP4A	Z	17.98	3.5
24	MP4A	Mx	.0425	3.5
25	MP2A	X	-6.565	.25
26	MP2A	Z	3.79	.25
27	MP2A	Mx	.0033	.25
28	MP2A	X	-6.565	1.25
29	MP2A	Z	3.79	1.25
30	MP2A	Mx	.0033	1.25
31	MP2A	X	-9.237	2
32	MP2A	Z	5.333	2
33	MP2A	Mx	-.0046	2
34	MP1A	X	-9.346	2
35	MP1A	Z	5.396	2
36	MP1A	Mx	-.0047	2
37	MP4A	X	-9.346	2
38	MP4A	Z	5.396	2
39	MP4A	Mx	-.0047	2
40	MP2A	X	-6.572	3.5
41	MP2A	Z	3.794	3.5
42	MP2A	Mx	.0033	3.5
43	MP3A	X	-9.237	2
44	MP3A	Z	5.333	2
45	MP3A	Mx	-.0046	2

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-28.21	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	.0301	.5
4	MP1A	X	-28.21	3.5
5	MP1A	Z	0	3.5
6	MP1A	Mx	.0301	3.5
7	MP1A	X	-28.21	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	.0082	.5
10	MP1A	X	-28.21	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	.0082	3.5
13	MP4A	X	-28.21	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	.0082	.5
16	MP4A	X	-28.21	3.5
17	MP4A	Z	0	3.5
18	MP4A	Mx	.0082	3.5
19	MP4A	X	-28.21	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	.0301	.5
22	MP4A	X	-28.21	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	.0301	3.5
25	MP2A	X	-5.652	.25
26	MP2A	Z	0	.25
27	MP2A	Mx	.0028	.25
28	MP2A	X	-5.652	1.25
29	MP2A	Z	0	1.25
30	MP2A	Mx	.0028	1.25
31	MP2A	X	-9.616	2
32	MP2A	Z	0	2
33	MP2A	Mx	-.0048	2
34	MP1A	X	-9.784	2
35	MP1A	Z	0	2
36	MP1A	Mx	-.0049	2
37	MP4A	X	-9.784	2
38	MP4A	Z	0	2
39	MP4A	Mx	-.0049	2
40	MP2A	X	-6.258	3.5
41	MP2A	Z	0	3.5
42	MP2A	Mx	.0031	3.5
43	MP3A	X	-9.616	2
44	MP3A	Z	0	2
45	MP3A	Mx	-.0048	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-31.143	.5
2	MP1A	Z	-17.98	.5
3	MP1A	Mx	.0425	.5
4	MP1A	X	-31.143	3.5
5	MP1A	Z	-17.98	3.5
6	MP1A	Mx	.0425	3.5
7	MP1A	X	-31.143	.5
8	MP1A	Z	-17.98	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP1A	Mx	-.0115	.5
10	MP1A	X	-31.143	3.5
11	MP1A	Z	-17.98	3.5
12	MP1A	Mx	-.0115	3.5
13	MP4A	X	-22.1	.5
14	MP4A	Z	-12.759	.5
15	MP4A	Mx	.0211	.5
16	MP4A	X	-22.1	3.5
17	MP4A	Z	-12.759	3.5
18	MP4A	Mx	.0211	3.5
19	MP4A	X	-22.1	.5
20	MP4A	Z	-12.759	.5
21	MP4A	Mx	.017	.5
22	MP4A	X	-22.1	3.5
23	MP4A	Z	-12.759	3.5
24	MP4A	Mx	.017	3.5
25	MP2A	X	-6.565	.25
26	MP2A	Z	-3.79	.25
27	MP2A	Mx	.0033	.25
28	MP2A	X	-6.565	1.25
29	MP2A	Z	-3.79	1.25
30	MP2A	Mx	.0033	1.25
31	MP2A	X	-9.237	2
32	MP2A	Z	-5.333	2
33	MP2A	Mx	-.0046	2
34	MP1A	X	-9.346	2
35	MP1A	Z	-5.396	2
36	MP1A	Mx	-.0047	2
37	MP4A	X	-9.346	2
38	MP4A	Z	-5.396	2
39	MP4A	Mx	-.0047	2
40	MP2A	X	-6.572	3.5
41	MP2A	Z	-3.794	3.5
42	MP2A	Mx	.0033	3.5
43	MP3A	X	-9.237	2
44	MP3A	Z	-5.333	2
45	MP3A	Mx	-.0046	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-20.51	.5
2	MP1A	Z	-35.524	.5
3	MP1A	Mx	.0401	.5
4	MP1A	X	-20.51	3.5
5	MP1A	Z	-35.524	3.5
6	MP1A	Mx	.0401	3.5
7	MP1A	X	-20.51	.5
8	MP1A	Z	-35.524	.5
9	MP1A	Mx	-.0348	.5
10	MP1A	X	-20.51	3.5
11	MP1A	Z	-35.524	3.5
12	MP1A	Mx	-.0348	3.5
13	MP4A	X	-15.289	.5
14	MP4A	Z	-26.481	.5
15	MP4A	Mx	.0349	.5
16	MP4A	X	-15.289	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP4A	Z	-26.481	3.5
18	MP4A	Mx	.0349	3.5
19	MP4A	X	-15.289	.5
20	MP4A	Z	-26.481	.5
21	MP4A	Mx	.0027	.5
22	MP4A	X	-15.289	3.5
23	MP4A	Z	-26.481	3.5
24	MP4A	Mx	.0027	3.5
25	MP2A	X	-5.719	.25
26	MP2A	Z	-9.906	.25
27	MP2A	Mx	.0029	.25
28	MP2A	X	-5.719	1.25
29	MP2A	Z	-9.906	1.25
30	MP2A	Mx	.0029	1.25
31	MP2A	X	-6.383	2
32	MP2A	Z	-11.055	2
33	MP2A	Mx	-.0032	2
34	MP1A	X	-6.404	2
35	MP1A	Z	-11.092	2
36	MP1A	Mx	-.0032	2
37	MP4A	X	-6.404	2
38	MP4A	Z	-11.092	2
39	MP4A	Mx	-.0032	2
40	MP2A	X	-5.124	3.5
41	MP2A	Z	-8.875	3.5
42	MP2A	Mx	.0026	3.5
43	MP3A	X	-6.383	2
44	MP3A	Z	-11.055	2
45	MP3A	Mx	-.0032	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	-7.262	.5
3	MP1A	Mx	.0037	.5
4	MP1A	X	0	3.5
5	MP1A	Z	-7.262	3.5
6	MP1A	Mx	.0037	3.5
7	MP1A	X	0	.5
8	MP1A	Z	-7.262	.5
9	MP1A	Mx	-.0083	.5
10	MP1A	X	0	3.5
11	MP1A	Z	-7.262	3.5
12	MP1A	Mx	-.0083	3.5
13	MP4A	X	0	.5
14	MP4A	Z	-7.262	.5
15	MP4A	Mx	.0083	.5
16	MP4A	X	0	3.5
17	MP4A	Z	-7.262	3.5
18	MP4A	Mx	.0083	3.5
19	MP4A	X	0	.5
20	MP4A	Z	-7.262	.5
21	MP4A	Mx	-.0037	.5
22	MP4A	X	0	3.5
23	MP4A	Z	-7.262	3.5
24	MP4A	Mx	-.0037	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	0	.25
26	MP2A	Z	-4.202	.25
27	MP2A	Mx	0	.25
28	MP2A	X	0	1.25
29	MP2A	Z	-4.202	1.25
30	MP2A	Mx	0	1.25
31	MP2A	X	0	2
32	MP2A	Z	-3.437	2
33	MP2A	Mx	0	2
34	MP1A	X	0	2
35	MP1A	Z	-4.147	2
36	MP1A	Mx	0	2
37	MP4A	X	0	2
38	MP4A	Z	-4.147	2
39	MP4A	Mx	0	2
40	MP2A	X	0	3.5
41	MP2A	Z	-3.393	3.5
42	MP2A	Mx	0	3.5
43	MP3A	X	0	2
44	MP3A	Z	-3.437	2
45	MP3A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.637	.5
2	MP1A	Z	-4.568	.5
3	MP1A	Mx	-.000467	.5
4	MP1A	X	2.637	3.5
5	MP1A	Z	-4.568	3.5
6	MP1A	Mx	-.000467	3.5
7	MP1A	X	2.637	.5
8	MP1A	Z	-4.568	.5
9	MP1A	Mx	-.006	.5
10	MP1A	X	2.637	3.5
11	MP1A	Z	-4.568	3.5
12	MP1A	Mx	-.006	3.5
13	MP4A	X	3.976	.5
14	MP4A	Z	-6.887	.5
15	MP4A	Mx	.0067	.5
16	MP4A	X	3.976	3.5
17	MP4A	Z	-6.887	3.5
18	MP4A	Mx	.0067	3.5
19	MP4A	X	3.976	.5
20	MP4A	Z	-6.887	.5
21	MP4A	Mx	-.0078	.5
22	MP4A	X	3.976	3.5
23	MP4A	Z	-6.887	3.5
24	MP4A	Mx	-.0078	3.5
25	MP2A	X	1.778	.25
26	MP2A	Z	-3.08	.25
27	MP2A	Mx	-.000889	.25
28	MP2A	X	1.778	1.25
29	MP2A	Z	-3.08	1.25
30	MP2A	Mx	-.000889	1.25
31	MP2A	X	1.577	2
32	MP2A	Z	-2.732	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2A	Mx	.000788	2
34	MP1A	X	1.908	2
35	MP1A	Z	-3.305	2
36	MP1A	Mx	.000954	2
37	MP4A	X	1.908	2
38	MP4A	Z	-3.305	2
39	MP4A	Mx	.000954	2
40	MP2A	X	1.481	3.5
41	MP2A	Z	-2.566	3.5
42	MP2A	Mx	-.00074	3.5
43	MP3A	X	1.577	2
44	MP3A	Z	-2.732	2
45	MP3A	Mx	.000788	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	3.445	.5
2	MP1A	Z	-1.989	.5
3	MP1A	Mx	-.0027	.5
4	MP1A	X	3.445	3.5
5	MP1A	Z	-1.989	3.5
6	MP1A	Mx	-.0027	3.5
7	MP1A	X	3.445	.5
8	MP1A	Z	-1.989	.5
9	MP1A	Mx	-.0033	.5
10	MP1A	X	3.445	3.5
11	MP1A	Z	-1.989	3.5
12	MP1A	Mx	-.0033	3.5
13	MP4A	X	5.763	.5
14	MP4A	Z	-3.328	.5
15	MP4A	Mx	.0021	.5
16	MP4A	X	5.763	3.5
17	MP4A	Z	-3.328	3.5
18	MP4A	Mx	.0021	3.5
19	MP4A	X	5.763	.5
20	MP4A	Z	-3.328	.5
21	MP4A	Mx	-.0079	.5
22	MP4A	X	5.763	3.5
23	MP4A	Z	-3.328	3.5
24	MP4A	Mx	-.0079	3.5
25	MP2A	X	1.961	.25
26	MP2A	Z	-1.132	.25
27	MP2A	Mx	-.00098	.25
28	MP2A	X	1.961	1.25
29	MP2A	Z	-1.132	1.25
30	MP2A	Mx	-.00098	1.25
31	MP2A	X	2.242	2
32	MP2A	Z	-1.294	2
33	MP2A	Mx	.0011	2
34	MP1A	X	2.734	2
35	MP1A	Z	-1.579	2
36	MP1A	Mx	.0014	2
37	MP4A	X	2.734	2
38	MP4A	Z	-1.579	2
39	MP4A	Mx	.0014	2
40	MP2A	X	1.822	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP2A	Z	-1.052	3.5
42	MP2A	Mx	-.000911	3.5
43	MP3A	X	2.242	2
44	MP3A	Z	-1.294	2
45	MP3A	Mx	.0011	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	4.668	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	-.005	.5
4	MP1A	X	4.668	3.5
5	MP1A	Z	0	3.5
6	MP1A	Mx	-.005	3.5
7	MP1A	X	4.668	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	-.0014	.5
10	MP1A	X	4.668	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	-.0014	3.5
13	MP4A	X	4.668	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	-.0014	.5
16	MP4A	X	4.668	3.5
17	MP4A	Z	0	3.5
18	MP4A	Mx	-.0014	3.5
19	MP4A	X	4.668	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	-.005	.5
22	MP4A	X	4.668	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	-.005	3.5
25	MP2A	X	1.618	.25
26	MP2A	Z	0	.25
27	MP2A	Mx	-.000809	.25
28	MP2A	X	1.618	1.25
29	MP2A	Z	0	1.25
30	MP2A	Mx	-.000809	1.25
31	MP2A	X	2.306	2
32	MP2A	Z	0	2
33	MP2A	Mx	.0012	2
34	MP1A	X	2.827	2
35	MP1A	Z	0	2
36	MP1A	Mx	.0014	2
37	MP4A	X	2.827	2
38	MP4A	Z	0	2
39	MP4A	Mx	.0014	2
40	MP2A	X	1.674	3.5
41	MP2A	Z	0	3.5
42	MP2A	Mx	-.000837	3.5
43	MP3A	X	2.306	2
44	MP3A	Z	0	2
45	MP3A	Mx	.0012	2

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	5.763	.5
2	MP1A	Z	3.328	.5
3	MP1A	Mx	-.0079	.5
4	MP1A	X	5.763	3.5
5	MP1A	Z	3.328	3.5
6	MP1A	Mx	-.0079	3.5
7	MP1A	X	5.763	.5
8	MP1A	Z	3.328	.5
9	MP1A	Mx	.0021	.5
10	MP1A	X	5.763	3.5
11	MP1A	Z	3.328	3.5
12	MP1A	Mx	.0021	3.5
13	MP4A	X	3.445	.5
14	MP4A	Z	1.989	.5
15	MP4A	Mx	-.0033	.5
16	MP4A	X	3.445	3.5
17	MP4A	Z	1.989	3.5
18	MP4A	Mx	-.0033	3.5
19	MP4A	X	3.445	.5
20	MP4A	Z	1.989	.5
21	MP4A	Mx	-.0027	.5
22	MP4A	X	3.445	3.5
23	MP4A	Z	1.989	3.5
24	MP4A	Mx	-.0027	3.5
25	MP2A	X	1.961	.25
26	MP2A	Z	1.132	.25
27	MP2A	Mx	-.00098	.25
28	MP2A	X	1.961	1.25
29	MP2A	Z	1.132	1.25
30	MP2A	Mx	-.00098	1.25
31	MP2A	X	2.242	2
32	MP2A	Z	1.294	2
33	MP2A	Mx	.0011	2
34	MP1A	X	2.734	2
35	MP1A	Z	1.579	2
36	MP1A	Mx	.0014	2
37	MP4A	X	2.734	2
38	MP4A	Z	1.579	2
39	MP4A	Mx	.0014	2
40	MP2A	X	1.822	3.5
41	MP2A	Z	1.052	3.5
42	MP2A	Mx	-.000911	3.5
43	MP3A	X	2.242	2
44	MP3A	Z	1.294	2
45	MP3A	Mx	.0011	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	3.976	.5
2	MP1A	Z	6.887	.5
3	MP1A	Mx	-.0078	.5
4	MP1A	X	3.976	3.5
5	MP1A	Z	6.887	3.5
6	MP1A	Mx	-.0078	3.5
7	MP1A	X	3.976	.5
8	MP1A	Z	6.887	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP1A	Mx	.0067	.5
10	MP1A	X	3.976	3.5
11	MP1A	Z	6.887	3.5
12	MP1A	Mx	.0067	3.5
13	MP4A	X	2.637	.5
14	MP4A	Z	4.568	.5
15	MP4A	Mx	-.006	.5
16	MP4A	X	2.637	3.5
17	MP4A	Z	4.568	3.5
18	MP4A	Mx	-.006	3.5
19	MP4A	X	2.637	.5
20	MP4A	Z	4.568	.5
21	MP4A	Mx	-.000467	.5
22	MP4A	X	2.637	3.5
23	MP4A	Z	4.568	3.5
24	MP4A	Mx	-.000467	3.5
25	MP2A	X	1.778	.25
26	MP2A	Z	3.08	.25
27	MP2A	Mx	-.000889	.25
28	MP2A	X	1.778	1.25
29	MP2A	Z	3.08	1.25
30	MP2A	Mx	-.000889	1.25
31	MP2A	X	1.577	2
32	MP2A	Z	2.732	2
33	MP2A	Mx	.000788	2
34	MP1A	X	1.908	2
35	MP1A	Z	3.305	2
36	MP1A	Mx	.000954	2
37	MP4A	X	1.908	2
38	MP4A	Z	3.305	2
39	MP4A	Mx	.000954	2
40	MP2A	X	1.481	3.5
41	MP2A	Z	2.566	3.5
42	MP2A	Mx	-.00074	3.5
43	MP3A	X	1.577	2
44	MP3A	Z	2.732	2
45	MP3A	Mx	.000788	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	7.262	.5
3	MP1A	Mx	-.0037	.5
4	MP1A	X	0	3.5
5	MP1A	Z	7.262	3.5
6	MP1A	Mx	-.0037	3.5
7	MP1A	X	0	.5
8	MP1A	Z	7.262	.5
9	MP1A	Mx	.0083	.5
10	MP1A	X	0	3.5
11	MP1A	Z	7.262	3.5
12	MP1A	Mx	.0083	3.5
13	MP4A	X	0	.5
14	MP4A	Z	7.262	.5
15	MP4A	Mx	-.0083	.5
16	MP4A	X	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP4A	Z	7.262	3.5
18	MP4A	Mx	-.0083	3.5
19	MP4A	X	0	.5
20	MP4A	Z	7.262	.5
21	MP4A	Mx	.0037	.5
22	MP4A	X	0	3.5
23	MP4A	Z	7.262	3.5
24	MP4A	Mx	.0037	3.5
25	MP2A	X	0	.25
26	MP2A	Z	4.202	.25
27	MP2A	Mx	0	.25
28	MP2A	X	0	1.25
29	MP2A	Z	4.202	1.25
30	MP2A	Mx	0	1.25
31	MP2A	X	0	2
32	MP2A	Z	3.437	2
33	MP2A	Mx	0	2
34	MP1A	X	0	2
35	MP1A	Z	4.147	2
36	MP1A	Mx	0	2
37	MP4A	X	0	2
38	MP4A	Z	4.147	2
39	MP4A	Mx	0	2
40	MP2A	X	0	3.5
41	MP2A	Z	3.393	3.5
42	MP2A	Mx	0	3.5
43	MP3A	X	0	2
44	MP3A	Z	3.437	2
45	MP3A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.637	.5
2	MP1A	Z	4.568	.5
3	MP1A	Mx	.000467	.5
4	MP1A	X	-2.637	3.5
5	MP1A	Z	4.568	3.5
6	MP1A	Mx	.000467	3.5
7	MP1A	X	-2.637	.5
8	MP1A	Z	4.568	.5
9	MP1A	Mx	.006	.5
10	MP1A	X	-2.637	3.5
11	MP1A	Z	4.568	3.5
12	MP1A	Mx	.006	3.5
13	MP4A	X	-3.976	.5
14	MP4A	Z	6.887	.5
15	MP4A	Mx	-.0067	.5
16	MP4A	X	-3.976	3.5
17	MP4A	Z	6.887	3.5
18	MP4A	Mx	-.0067	3.5
19	MP4A	X	-3.976	.5
20	MP4A	Z	6.887	.5
21	MP4A	Mx	.0078	.5
22	MP4A	X	-3.976	3.5
23	MP4A	Z	6.887	3.5
24	MP4A	Mx	.0078	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	-1.778	.25
26	MP2A	Z	3.08	.25
27	MP2A	Mx	.000889	.25
28	MP2A	X	-1.778	1.25
29	MP2A	Z	3.08	1.25
30	MP2A	Mx	.000889	1.25
31	MP2A	X	-1.577	2
32	MP2A	Z	2.732	2
33	MP2A	Mx	-.000788	2
34	MP1A	X	-1.908	2
35	MP1A	Z	3.305	2
36	MP1A	Mx	-.000954	2
37	MP4A	X	-1.908	2
38	MP4A	Z	3.305	2
39	MP4A	Mx	-.000954	2
40	MP2A	X	-1.481	3.5
41	MP2A	Z	2.566	3.5
42	MP2A	Mx	.00074	3.5
43	MP3A	X	-1.577	2
44	MP3A	Z	2.732	2
45	MP3A	Mx	-.000788	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-3.445	.5
2	MP1A	Z	1.989	.5
3	MP1A	Mx	.0027	.5
4	MP1A	X	-3.445	3.5
5	MP1A	Z	1.989	3.5
6	MP1A	Mx	.0027	3.5
7	MP1A	X	-3.445	.5
8	MP1A	Z	1.989	.5
9	MP1A	Mx	.0033	.5
10	MP1A	X	-3.445	3.5
11	MP1A	Z	1.989	3.5
12	MP1A	Mx	.0033	3.5
13	MP4A	X	-5.763	.5
14	MP4A	Z	3.328	.5
15	MP4A	Mx	-.0021	.5
16	MP4A	X	-5.763	3.5
17	MP4A	Z	3.328	3.5
18	MP4A	Mx	-.0021	3.5
19	MP4A	X	-5.763	.5
20	MP4A	Z	3.328	.5
21	MP4A	Mx	.0079	.5
22	MP4A	X	-5.763	3.5
23	MP4A	Z	3.328	3.5
24	MP4A	Mx	.0079	3.5
25	MP2A	X	-1.961	.25
26	MP2A	Z	1.132	.25
27	MP2A	Mx	.00098	.25
28	MP2A	X	-1.961	1.25
29	MP2A	Z	1.132	1.25
30	MP2A	Mx	.00098	1.25
31	MP2A	X	-2.242	2
32	MP2A	Z	1.294	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2A	Mx	-.0011	2
34	MP1A	X	-2.734	2
35	MP1A	Z	1.579	2
36	MP1A	Mx	-.0014	2
37	MP4A	X	-2.734	2
38	MP4A	Z	1.579	2
39	MP4A	Mx	-.0014	2
40	MP2A	X	-1.822	3.5
41	MP2A	Z	1.052	3.5
42	MP2A	Mx	.000911	3.5
43	MP3A	X	-2.242	2
44	MP3A	Z	1.294	2
45	MP3A	Mx	-.0011	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-4.668	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	.005	.5
4	MP1A	X	-4.668	3.5
5	MP1A	Z	0	3.5
6	MP1A	Mx	.005	3.5
7	MP1A	X	-4.668	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	.0014	.5
10	MP1A	X	-4.668	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	.0014	3.5
13	MP4A	X	-4.668	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	.0014	.5
16	MP4A	X	-4.668	3.5
17	MP4A	Z	0	3.5
18	MP4A	Mx	.0014	3.5
19	MP4A	X	-4.668	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	.005	.5
22	MP4A	X	-4.668	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	.005	3.5
25	MP2A	X	-1.618	.25
26	MP2A	Z	0	.25
27	MP2A	Mx	.000809	.25
28	MP2A	X	-1.618	1.25
29	MP2A	Z	0	1.25
30	MP2A	Mx	.000809	1.25
31	MP2A	X	-2.306	2
32	MP2A	Z	0	2
33	MP2A	Mx	-.0012	2
34	MP1A	X	-2.827	2
35	MP1A	Z	0	2
36	MP1A	Mx	-.0014	2
37	MP4A	X	-2.827	2
38	MP4A	Z	0	2
39	MP4A	Mx	-.0014	2
40	MP2A	X	-1.674	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP2A	Z	0	3.5
42	MP2A	Mx	.000837	3.5
43	MP3A	X	-2.306	2
44	MP3A	Z	0	2
45	MP3A	Mx	-.0012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-5.763	.5
2	MP1A	Z	-3.328	.5
3	MP1A	Mx	.0079	.5
4	MP1A	X	-5.763	3.5
5	MP1A	Z	-3.328	3.5
6	MP1A	Mx	.0079	3.5
7	MP1A	X	-5.763	.5
8	MP1A	Z	-3.328	.5
9	MP1A	Mx	-.0021	.5
10	MP1A	X	-5.763	3.5
11	MP1A	Z	-3.328	3.5
12	MP1A	Mx	-.0021	3.5
13	MP4A	X	-3.445	.5
14	MP4A	Z	-1.989	.5
15	MP4A	Mx	.0033	.5
16	MP4A	X	-3.445	3.5
17	MP4A	Z	-1.989	3.5
18	MP4A	Mx	.0033	3.5
19	MP4A	X	-3.445	.5
20	MP4A	Z	-1.989	.5
21	MP4A	Mx	.0027	.5
22	MP4A	X	-3.445	3.5
23	MP4A	Z	-1.989	3.5
24	MP4A	Mx	.0027	3.5
25	MP2A	X	-1.961	.25
26	MP2A	Z	-1.132	.25
27	MP2A	Mx	.00098	.25
28	MP2A	X	-1.961	1.25
29	MP2A	Z	-1.132	1.25
30	MP2A	Mx	.00098	1.25
31	MP2A	X	-2.242	2
32	MP2A	Z	-1.294	2
33	MP2A	Mx	-.0011	2
34	MP1A	X	-2.734	2
35	MP1A	Z	-1.579	2
36	MP1A	Mx	-.0014	2
37	MP4A	X	-2.734	2
38	MP4A	Z	-1.579	2
39	MP4A	Mx	-.0014	2
40	MP2A	X	-1.822	3.5
41	MP2A	Z	-1.052	3.5
42	MP2A	Mx	.000911	3.5
43	MP3A	X	-2.242	2
44	MP3A	Z	-1.294	2
45	MP3A	Mx	-.0011	2

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-3.976	.5
2	MP1A	Z	-6.887	.5
3	MP1A	Mx	.0078	.5
4	MP1A	X	-3.976	3.5
5	MP1A	Z	-6.887	3.5
6	MP1A	Mx	.0078	3.5
7	MP1A	X	-3.976	.5
8	MP1A	Z	-6.887	.5
9	MP1A	Mx	-.0067	.5
10	MP1A	X	-3.976	3.5
11	MP1A	Z	-6.887	3.5
12	MP1A	Mx	-.0067	3.5
13	MP4A	X	-2.637	.5
14	MP4A	Z	-4.568	.5
15	MP4A	Mx	.006	.5
16	MP4A	X	-2.637	3.5
17	MP4A	Z	-4.568	3.5
18	MP4A	Mx	.006	3.5
19	MP4A	X	-2.637	.5
20	MP4A	Z	-4.568	.5
21	MP4A	Mx	.000467	.5
22	MP4A	X	-2.637	3.5
23	MP4A	Z	-4.568	3.5
24	MP4A	Mx	.000467	3.5
25	MP2A	X	-1.778	.25
26	MP2A	Z	-3.08	.25
27	MP2A	Mx	.000889	.25
28	MP2A	X	-1.778	1.25
29	MP2A	Z	-3.08	1.25
30	MP2A	Mx	.000889	1.25
31	MP2A	X	-1.577	2
32	MP2A	Z	-2.732	2
33	MP2A	Mx	-.000788	2
34	MP1A	X	-1.908	2
35	MP1A	Z	-3.305	2
36	MP1A	Mx	-.000954	2
37	MP4A	X	-1.908	2
38	MP4A	Z	-3.305	2
39	MP4A	Mx	-.000954	2
40	MP2A	X	-1.481	3.5
41	MP2A	Z	-2.566	3.5
42	MP2A	Mx	.00074	3.5
43	MP3A	X	-1.577	2
44	MP3A	Z	-2.732	2
45	MP3A	Mx	-.000788	2

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M38	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M48	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 79 : Lv1) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M10	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M10	Y	-250	0

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-2.153	.5
2	MP1A	My	-.0023	.5
3	MP1A	Mz	-.0011	.5
4	MP1A	Y	-2.153	3.5
5	MP1A	My	-.0023	3.5
6	MP1A	Mz	-.0011	3.5
7	MP1A	Y	-2.153	.5
8	MP1A	My	-.000629	.5
9	MP1A	Mz	.0025	.5
10	MP1A	Y	-2.153	3.5
11	MP1A	My	-.000629	3.5
12	MP1A	Mz	.0025	3.5
13	MP4A	Y	-2.153	.5
14	MP4A	My	-.000629	.5
15	MP4A	Mz	-.0025	.5
16	MP4A	Y	-2.153	3.5
17	MP4A	My	-.000629	3.5
18	MP4A	Mz	-.0025	3.5
19	MP4A	Y	-2.153	.5
20	MP4A	My	-.0023	.5
21	MP4A	Mz	.0011	.5
22	MP4A	Y	-2.153	3.5
23	MP4A	My	-.0023	3.5
24	MP4A	Mz	.0011	3.5
25	MP2A	Y	-1.418	.25
26	MP2A	My	-.000709	.25
27	MP2A	Mz	0	.25
28	MP2A	Y	-1.418	1.25
29	MP2A	My	-.000709	1.25
30	MP2A	Mz	0	1.25
31	MP2A	Y	-3.6972	2
32	MP2A	My	.0018	2
33	MP2A	Mz	0	2
34	MP1A	Y	-3.9149	2
35	MP1A	My	.002	2
36	MP1A	Mz	0	2
37	MP4A	Y	-3.9149	2
38	MP4A	My	.002	2
39	MP4A	Mz	0	2
40	MP2A	Y	-1.1482	3.5
41	MP2A	My	-.000574	3.5
42	MP2A	Mz	0	3.5
43	MP3A	Y	-4.1772	2
44	MP3A	My	.0021	2
45	MP3A	Mz	0	2

Member Point Loads (BLC 82 : Antenna Eh (0 Deg))

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

Member Point Loads (BLC 82 : Antenna Eh (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Z	-5.3824	.5
2	MP1A	Mx	.0028	.5
3	MP1A	Z	-5.3824	3.5
4	MP1A	Mx	.0028	3.5
5	MP1A	Z	-5.3824	.5
6	MP1A	Mx	-.0062	.5
7	MP1A	Z	-5.3824	3.5
8	MP1A	Mx	-.0062	3.5
9	MP4A	Z	-5.3824	.5
10	MP4A	Mx	.0062	.5
11	MP4A	Z	-5.3824	3.5
12	MP4A	Mx	.0062	3.5
13	MP4A	Z	-5.3824	.5
14	MP4A	Mx	-.0028	.5
15	MP4A	Z	-5.3824	3.5
16	MP4A	Mx	-.0028	3.5
17	MP2A	Z	-3.545	.25
18	MP2A	Mx	0	.25
19	MP2A	Z	-3.545	1.25
20	MP2A	Mx	0	1.25
21	MP2A	Z	-9.2429	2
22	MP2A	Mx	0	2
23	MP1A	Z	-9.7873	2
24	MP1A	Mx	0	2
25	MP4A	Z	-9.7873	2
26	MP4A	Mx	0	2
27	MP2A	Z	-2.8706	3.5
28	MP2A	Mx	0	3.5
29	MP3A	Z	-10.4431	2
30	MP3A	Mx	0	2

Member Point Loads (BLC 83 : Antenna Eh (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	5.3824	.5
2	MP1A	Mx	-.0057	.5
3	MP1A	X	5.3824	3.5
4	MP1A	Mx	-.0057	3.5
5	MP1A	X	5.3824	.5
6	MP1A	Mx	-.0016	.5
7	MP1A	X	5.3824	3.5
8	MP1A	Mx	-.0016	3.5
9	MP4A	X	5.3824	.5
10	MP4A	Mx	-.0016	.5
11	MP4A	X	5.3824	3.5
12	MP4A	Mx	-.0016	3.5
13	MP4A	X	5.3824	.5
14	MP4A	Mx	-.0057	.5
15	MP4A	X	5.3824	3.5
16	MP4A	Mx	-.0057	3.5
17	MP2A	X	3.545	.25
18	MP2A	Mx	-.0018	.25
19	MP2A	X	3.545	1.25
20	MP2A	Mx	-.0018	1.25
21	MP2A	X	9.2429	2
22	MP2A	Mx	.0046	2
23	MP1A	X	9.7873	2

Member Point Loads (BLC 83 : Antenna Eh (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP1A	Mx	.0049	2
25	MP4A	X	9.7873	2
26	MP4A	Mx	.0049	2
27	MP2A	X	2.8706	3.5
28	MP2A	Mx	-.0014	3.5
29	MP3A	X	10.4431	2
30	MP3A	Mx	.0052	2

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	Y	-8.822	-8.822	0	%100
2	M3	Y	-8.822	-8.822	0	%100
3	M5	Y	-5.9959	-5.9959	0	%100
4	M6	Y	-5.9959	-5.9959	0	%100
5	M7	Y	-5.7838	-5.7838	0	%100
6	M8	Y	-5.9959	-5.9959	0	%100
7	M9	Y	-5.9959	-5.9959	0	%100
8	M10	Y	-5.7838	-5.7838	0	%100
9	M11	Y	-5.0689	-5.0689	0	%100
10	M12	Y	-5.0689	-5.0689	0	%100
11	M13	Y	-5.0689	-5.0689	0	%100
12	M14	Y	-5.0689	-5.0689	0	%100
13	M15	Y	-5.9959	-5.9959	0	%100
14	M16	Y	-4.3898	-4.3898	0	%100
15	M17	Y	-5.9959	-5.9959	0	%100
16	M18	Y	-4.3898	-4.3898	0	%100
17	M19	Y	-5.9959	-5.9959	0	%100
18	M20	Y	-5.9959	-5.9959	0	%100
19	M21	Y	-5.9959	-5.9959	0	%100
20	M22	Y	-4.3898	-4.3898	0	%100
21	M23	Y	-4.3898	-4.3898	0	%100
22	M24	Y	-5.0689	-5.0689	0	%100
23	M25	Y	-5.9959	-5.9959	0	%100
24	M26	Y	-5.9959	-5.9959	0	%100
25	M27	Y	-4.3898	-4.3898	0	%100
26	M28	Y	-5.9959	-5.9959	0	%100
27	M29	Y	-4.3898	-4.3898	0	%100
28	M30	Y	-5.9959	-5.9959	0	%100
29	M31	Y	-5.9959	-5.9959	0	%100
30	M32	Y	-5.9959	-5.9959	0	%100
31	M33	Y	-4.3898	-4.3898	0	%100
32	M34	Y	-4.3898	-4.3898	0	%100
33	M35	Y	-5.0689	-5.0689	0	%100
34	M36	Y	-5.9959	-5.9959	0	%100
35	MP4A	Y	-5.0689	-5.0689	0	%100
36	MP3A	Y	-5.0689	-5.0689	0	%100
37	MP2A	Y	-5.0689	-5.0689	0	%100
38	MP1A	Y	-5.0689	-5.0689	0	%100
39	EQUIP	Y	-4.9589	-4.9589	0	%100
40	M51	Y	-4.9589	-4.9589	0	%100
41	M55A	Y	-5.0689	-5.0689	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft,...
2	M1	Z	-10.6438	-10.6438	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	-10.6438	-10.6438	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	-.6526	-.6526	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-.6526	-.6526	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-10.2003	-10.2003	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-.4514	-.4514	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-.7772	-.7772	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	-10.2003	-10.2003	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-4.1329	-4.1329	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	-4.1329	-4.1329	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	-4.1329	-4.1329	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	-4.1329	-4.1329	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	-1.4044	-1.4044	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	-5.5957	-5.5957	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	-1.4044	-1.4044	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	-5.5957	-5.5957	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	-1.8848	-1.8848	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	-1.4044	-1.4044	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	-1.4044	-1.4044	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	-6.1169	-6.1169	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	-6.1169	-6.1169	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	-6.4306	-6.4306	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	-1.8848	-1.8848	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	-1.4044	-1.4044	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	-5.5957	-5.5957	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	-1.4044	-1.4044	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	-5.5957	-5.5957	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	-1.8848	-1.8848	0	%100
57	M31	X	0	0	0	%100
58	M31	Z	-1.4044	-1.4044	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
59	M32	X	0	0	0	%100
60	M32	Z	-1.4044	-1.4044	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	-6.1169	-6.1169	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	-6.1169	-6.1169	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	-6.4306	-6.4306	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	-1.8848	-1.8848	0	%100
69	MP4A	X	0	0	0	%100
70	MP4A	Z	-8.4263	-8.4263	0	%100
71	MP3A	X	0	0	0	%100
72	MP3A	Z	-8.4263	-8.4263	0	%100
73	MP2A	X	0	0	0	%100
74	MP2A	Z	-8.4263	-8.4263	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	-8.4263	-8.4263	0	%100
77	EQUIP	X	0	0	0	%100
78	EQUIP	Z	-9.609	-9.609	0	%100
79	M51	X	0	0	0	%100
80	M51	Z	-9.609	-9.609	0	%100
81	M55A	X	0	0	0	%100
82	M55A	Z	-2.0693	-2.0693	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	3.9914	3.9914	0	%100
2	M1	Z	-6.9133	-6.9133	0	%100
3	M3	X	3.9914	3.9914	0	%100
4	M3	Z	-6.9133	-6.9133	0	%100
5	M5	X	.0414	.0414	0	%100
6	M5	Z	-.0718	-.0718	0	%100
7	M6	X	.6175	.6175	0	%100
8	M6	Z	-1.0695	-1.0695	0	%100
9	M7	X	3.8251	3.8251	0	%100
10	M7	Z	-6.6253	-6.6253	0	%100
11	M8	X	.0064	.0064	0	%100
12	M8	Z	-.0111	-.0111	0	%100
13	M9	X	.6445	.6445	0	%100
14	M9	Z	-1.1164	-1.1164	0	%100
15	M10	X	3.8251	3.8251	0	%100
16	M10	Z	-6.6253	-6.6253	0	%100
17	M11	X	.2625	.2625	0	%100
18	M11	Z	-.4547	-.4547	0	%100
19	M12	X	3.9105	3.9105	0	%100
20	M12	Z	-6.7733	-6.7733	0	%100
21	M13	X	.2625	.2625	0	%100
22	M13	Z	-.4547	-.4547	0	%100
23	M14	X	3.9105	3.9105	0	%100
24	M14	Z	-6.7733	-6.7733	0	%100
25	M15	X	1.8571	1.8571	0	%100
26	M15	Z	-3.2166	-3.2166	0	%100
27	M16	X	3.2898	3.2898	0	%100
28	M16	Z	-5.6981	-5.6981	0	%100
29	M17	X	1.8571	1.8571	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
30	M17	Z	-3.2166	-3.2166	0	%100
31	M18	X	3.2898	3.2898	0	%100
32	M18	Z	-5.6981	-5.6981	0	%100
33	M19	X	2.0373	2.0373	0	%100
34	M19	Z	-3.5287	-3.5287	0	%100
35	M20	X	1.8571	1.8571	0	%100
36	M20	Z	-3.2166	-3.2166	0	%100
37	M21	X	1.8571	1.8571	0	%100
38	M21	Z	-3.2166	-3.2166	0	%100
39	M22	X	3.0584	3.0584	0	%100
40	M22	Z	-5.2974	-5.2974	0	%100
41	M23	X	3.0584	3.0584	0	%100
42	M23	Z	-5.2974	-5.2974	0	%100
43	M24	X	3.2153	3.2153	0	%100
44	M24	Z	-5.5691	-5.5691	0	%100
45	M25	X	2.0373	2.0373	0	%100
46	M25	Z	-3.5287	-3.5287	0	%100
47	M26	X	1.8571	1.8571	0	%100
48	M26	Z	-3.2166	-3.2166	0	%100
49	M27	X	2.3166	2.3166	0	%100
50	M27	Z	-4.0125	-4.0125	0	%100
51	M28	X	1.8571	1.8571	0	%100
52	M28	Z	-3.2166	-3.2166	0	%100
53	M29	X	2.3166	2.3166	0	%100
54	M29	Z	-4.0125	-4.0125	0	%100
55	M30	X	2.0373	2.0373	0	%100
56	M30	Z	-3.5287	-3.5287	0	%100
57	M31	X	1.8571	1.8571	0	%100
58	M31	Z	-3.2166	-3.2166	0	%100
59	M32	X	1.8571	1.8571	0	%100
60	M32	Z	-3.2166	-3.2166	0	%100
61	M33	X	3.0584	3.0584	0	%100
62	M33	Z	-5.2974	-5.2974	0	%100
63	M34	X	3.0584	3.0584	0	%100
64	M34	Z	-5.2974	-5.2974	0	%100
65	M35	X	3.2153	3.2153	0	%100
66	M35	Z	-5.5691	-5.5691	0	%100
67	M36	X	2.0373	2.0373	0	%100
68	M36	Z	-3.5287	-3.5287	0	%100
69	MP4A	X	4.2132	4.2132	0	%100
70	MP4A	Z	-7.2974	-7.2974	0	%100
71	MP3A	X	4.2132	4.2132	0	%100
72	MP3A	Z	-7.2974	-7.2974	0	%100
73	MP2A	X	4.2132	4.2132	0	%100
74	MP2A	Z	-7.2974	-7.2974	0	%100
75	MP1A	X	4.2132	4.2132	0	%100
76	MP1A	Z	-7.2974	-7.2974	0	%100
77	EQUIP	X	4.8045	4.8045	0	%100
78	EQUIP	Z	-8.3216	-8.3216	0	%100
79	M51	X	4.8045	4.8045	0	%100
80	M51	Z	-8.3216	-8.3216	0	%100
81	M55A	X	.000111	.000111	0	%100
82	M55A	Z	-.000192	-.000192	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft....
1	M1	X	2.3044	2.3044	0	%100
2	M1	Z	-1.3305	-1.3305	0	%100
3	M3	X	2.3044	2.3044	0	%100
4	M3	Z	-1.3305	-1.3305	0	%100
5	M5	X	.0828	.0828	0	%100
6	M5	Z	-.0478	-.0478	0	%100
7	M6	X	1.0804	1.0804	0	%100
8	M6	Z	-.6238	-.6238	0	%100
9	M7	X	2.2084	2.2084	0	%100
10	M7	Z	-1.275	-1.275	0	%100
11	M8	X	.1962	.1962	0	%100
12	M8	Z	-.1133	-.1133	0	%100
13	M9	X	1.0195	1.0195	0	%100
14	M9	Z	-.5886	-.5886	0	%100
15	M10	X	2.2084	2.2084	0	%100
16	M10	Z	-1.275	-1.275	0	%100
17	M11	X	.5242	.5242	0	%100
18	M11	Z	-.3026	-.3026	0	%100
19	M12	X	6.8427	6.8427	0	%100
20	M12	Z	-3.9507	-3.9507	0	%100
21	M13	X	.5242	.5242	0	%100
22	M13	Z	-.3026	-.3026	0	%100
23	M14	X	6.8427	6.8427	0	%100
24	M14	Z	-3.9507	-3.9507	0	%100
25	M15	X	7.2174	7.2174	0	%100
26	M15	Z	-4.167	-4.167	0	%100
27	M16	X	5.7166	5.7166	0	%100
28	M16	Z	-3.3005	-3.3005	0	%100
29	M17	X	7.2174	7.2174	0	%100
30	M17	Z	-4.167	-4.167	0	%100
31	M18	X	5.7166	5.7166	0	%100
32	M18	Z	-3.3005	-3.3005	0	%100
33	M19	X	7.3214	7.3214	0	%100
34	M19	Z	-4.227	-4.227	0	%100
35	M20	X	7.2174	7.2174	0	%100
36	M20	Z	-4.167	-4.167	0	%100
37	M21	X	7.2174	7.2174	0	%100
38	M21	Z	-4.167	-4.167	0	%100
39	M22	X	5.2974	5.2974	0	%100
40	M22	Z	-3.0584	-3.0584	0	%100
41	M23	X	5.2974	5.2974	0	%100
42	M23	Z	-3.0584	-3.0584	0	%100
43	M24	X	5.5691	5.5691	0	%100
44	M24	Z	-3.2153	-3.2153	0	%100
45	M25	X	7.3214	7.3214	0	%100
46	M25	Z	-4.227	-4.227	0	%100
47	M26	X	7.2174	7.2174	0	%100
48	M26	Z	-4.167	-4.167	0	%100
49	M27	X	4.031	4.031	0	%100
50	M27	Z	-2.3273	-2.3273	0	%100
51	M28	X	7.2174	7.2174	0	%100
52	M28	Z	-4.167	-4.167	0	%100
53	M29	X	4.031	4.031	0	%100
54	M29	Z	-2.3273	-2.3273	0	%100
55	M30	X	7.3214	7.3214	0	%100
56	M30	Z	-4.227	-4.227	0	%100
57	M31	X	7.2174	7.2174	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	-4.167	-4.167	0	%100
59	M32	X	7.2174	7.2174	0	%100
60	M32	Z	-4.167	-4.167	0	%100
61	M33	X	5.2974	5.2974	0	%100
62	M33	Z	-3.0584	-3.0584	0	%100
63	M34	X	5.2974	5.2974	0	%100
64	M34	Z	-3.0584	-3.0584	0	%100
65	M35	X	5.5691	5.5691	0	%100
66	M35	Z	-3.2153	-3.2153	0	%100
67	M36	X	7.3214	7.3214	0	%100
68	M36	Z	-4.227	-4.227	0	%100
69	MP4A	X	7.2974	7.2974	0	%100
70	MP4A	Z	-4.2132	-4.2132	0	%100
71	MP3A	X	7.2974	7.2974	0	%100
72	MP3A	Z	-4.2132	-4.2132	0	%100
73	MP2A	X	7.2974	7.2974	0	%100
74	MP2A	Z	-4.2132	-4.2132	0	%100
75	MP1A	X	7.2974	7.2974	0	%100
76	MP1A	Z	-4.2132	-4.2132	0	%100
77	EQUIP	X	8.3216	8.3216	0	%100
78	EQUIP	Z	-4.8045	-4.8045	0	%100
79	M51	X	8.3216	8.3216	0	%100
80	M51	Z	-4.8045	-4.8045	0	%100
81	M55A	X	1.8569	1.8569	0	%100
82	M55A	Z	-1.0721	-1.0721	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M5	X	.6779	.6779	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	.6779	.6779	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	.8791	.8791	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	.5533	.5533	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	4.2934	4.2934	0	%100
18	M11	Z	0	0	0	%100
19	M12	X	4.2934	4.2934	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	4.2934	4.2934	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	4.2934	4.2934	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	10.6438	10.6438	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	5.6385	5.6385	0	%100
28	M16	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft,...
29	M17	X	10.6438	10.6438	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	5.6385	5.6385	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	10.6438	10.6438	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	10.6438	10.6438	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	10.6438	10.6438	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	6.1169	6.1169	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	6.1169	6.1169	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	6.4306	6.4306	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	10.6438	10.6438	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	10.6438	10.6438	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	5.6385	5.6385	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	10.6438	10.6438	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	5.6385	5.6385	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	10.6438	10.6438	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	10.6438	10.6438	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	10.6438	10.6438	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	6.1169	6.1169	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	6.1169	6.1169	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	6.4306	6.4306	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	10.6438	10.6438	0	%100
68	M36	Z	0	0	0	%100
69	MP4A	X	8.4263	8.4263	0	%100
70	MP4A	Z	0	0	0	%100
71	MP3A	X	8.4263	8.4263	0	%100
72	MP3A	Z	0	0	0	%100
73	MP2A	X	8.4263	8.4263	0	%100
74	MP2A	Z	0	0	0	%100
75	MP1A	X	8.4263	8.4263	0	%100
76	MP1A	Z	0	0	0	%100
77	EQUIP	X	9.609	9.609	0	%100
78	EQUIP	Z	0	0	0	%100
79	M51	X	9.609	9.609	0	%100
80	M51	Z	0	0	0	%100
81	M55A	X	6.3571	6.3571	0	%100
82	M55A	Z	0	0	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft,...
1	M1	X	2.3044	2.3044	0	%100
2	M1	Z	1.3305	1.3305	0	%100
3	M3	X	2.3044	2.3044	0	%100
4	M3	Z	1.3305	1.3305	0	%100
5	M5	X	1.0804	1.0804	0	%100
6	M5	Z	.6238	.6238	0	%100
7	M6	X	.0828	.0828	0	%100
8	M6	Z	.0478	.0478	0	%100
9	M7	X	2.2084	2.2084	0	%100
10	M7	Z	1.275	1.275	0	%100
11	M8	X	1.1412	1.1412	0	%100
12	M8	Z	.6588	.6588	0	%100
13	M9	X	.0358	.0358	0	%100
14	M9	Z	.0207	.0207	0	%100
15	M10	X	2.2084	2.2084	0	%100
16	M10	Z	1.275	1.275	0	%100
17	M11	X	6.8427	6.8427	0	%100
18	M11	Z	3.9507	3.9507	0	%100
19	M12	X	.5242	.5242	0	%100
20	M12	Z	.3026	.3026	0	%100
21	M13	X	6.8427	6.8427	0	%100
22	M13	Z	3.9507	3.9507	0	%100
23	M14	X	.5242	.5242	0	%100
24	M14	Z	.3026	.3026	0	%100
25	M15	X	7.2174	7.2174	0	%100
26	M15	Z	4.167	4.167	0	%100
27	M16	X	4.031	4.031	0	%100
28	M16	Z	2.3273	2.3273	0	%100
29	M17	X	7.2174	7.2174	0	%100
30	M17	Z	4.167	4.167	0	%100
31	M18	X	4.031	4.031	0	%100
32	M18	Z	2.3273	2.3273	0	%100
33	M19	X	7.3214	7.3214	0	%100
34	M19	Z	4.227	4.227	0	%100
35	M20	X	7.2174	7.2174	0	%100
36	M20	Z	4.167	4.167	0	%100
37	M21	X	7.2174	7.2174	0	%100
38	M21	Z	4.167	4.167	0	%100
39	M22	X	5.2974	5.2974	0	%100
40	M22	Z	3.0584	3.0584	0	%100
41	M23	X	5.2974	5.2974	0	%100
42	M23	Z	3.0584	3.0584	0	%100
43	M24	X	5.5691	5.5691	0	%100
44	M24	Z	3.2153	3.2153	0	%100
45	M25	X	7.3214	7.3214	0	%100
46	M25	Z	4.227	4.227	0	%100
47	M26	X	7.2174	7.2174	0	%100
48	M26	Z	4.167	4.167	0	%100
49	M27	X	5.7166	5.7166	0	%100
50	M27	Z	3.3005	3.3005	0	%100
51	M28	X	7.2174	7.2174	0	%100
52	M28	Z	4.167	4.167	0	%100
53	M29	X	5.7166	5.7166	0	%100
54	M29	Z	3.3005	3.3005	0	%100
55	M30	X	7.3214	7.3214	0	%100
56	M30	Z	4.227	4.227	0	%100
57	M31	X	7.2174	7.2174	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	4.167	4.167	0	%100
59	M32	X	7.2174	7.2174	0	%100
60	M32	Z	4.167	4.167	0	%100
61	M33	X	5.2974	5.2974	0	%100
62	M33	Z	3.0584	3.0584	0	%100
63	M34	X	5.2974	5.2974	0	%100
64	M34	Z	3.0584	3.0584	0	%100
65	M35	X	5.5691	5.5691	0	%100
66	M35	Z	3.2153	3.2153	0	%100
67	M36	X	7.3214	7.3214	0	%100
68	M36	Z	4.227	4.227	0	%100
69	MP4A	X	7.2974	7.2974	0	%100
70	MP4A	Z	4.2132	4.2132	0	%100
71	MP3A	X	7.2974	7.2974	0	%100
72	MP3A	Z	4.2132	4.2132	0	%100
73	MP2A	X	7.2974	7.2974	0	%100
74	MP2A	Z	4.2132	4.2132	0	%100
75	MP1A	X	7.2974	7.2974	0	%100
76	MP1A	Z	4.2132	4.2132	0	%100
77	EQUIP	X	8.3216	8.3216	0	%100
78	EQUIP	Z	4.8045	4.8045	0	%100
79	M51	X	8.3216	8.3216	0	%100
80	M51	Z	4.8045	4.8045	0	%100
81	M55A	X	7.2972	7.2972	0	%100
82	M55A	Z	4.2131	4.2131	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	3.9914	3.9914	0	%100
2	M1	Z	6.9133	6.9133	0	%100
3	M3	X	3.9914	3.9914	0	%100
4	M3	Z	6.9133	6.9133	0	%100
5	M5	X	.6175	.6175	0	%100
6	M5	Z	1.0695	1.0695	0	%100
7	M6	X	.0414	.0414	0	%100
8	M6	Z	.0718	.0718	0	%100
9	M7	X	3.8251	3.8251	0	%100
10	M7	Z	6.6253	6.6253	0	%100
11	M8	X	.5519	.5519	0	%100
12	M8	Z	.956	.956	0	%100
13	M9	X	.0766	.0766	0	%100
14	M9	Z	.1328	.1328	0	%100
15	M10	X	3.8251	3.8251	0	%100
16	M10	Z	6.6253	6.6253	0	%100
17	M11	X	3.9105	3.9105	0	%100
18	M11	Z	6.7733	6.7733	0	%100
19	M12	X	.2625	.2625	0	%100
20	M12	Z	.4547	.4547	0	%100
21	M13	X	3.9105	3.9105	0	%100
22	M13	Z	6.7733	6.7733	0	%100
23	M14	X	.2625	.2625	0	%100
24	M14	Z	.4547	.4547	0	%100
25	M15	X	1.8571	1.8571	0	%100
26	M15	Z	3.2166	3.2166	0	%100
27	M16	X	2.3166	2.3166	0	%100
28	M16	Z	4.0125	4.0125	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	1.8571	1.8571	0	%100
30	M17	Z	3.2166	3.2166	0	%100
31	M18	X	2.3166	2.3166	0	%100
32	M18	Z	4.0125	4.0125	0	%100
33	M19	X	2.0373	2.0373	0	%100
34	M19	Z	3.5287	3.5287	0	%100
35	M20	X	1.8571	1.8571	0	%100
36	M20	Z	3.2166	3.2166	0	%100
37	M21	X	1.8571	1.8571	0	%100
38	M21	Z	3.2166	3.2166	0	%100
39	M22	X	3.0584	3.0584	0	%100
40	M22	Z	5.2974	5.2974	0	%100
41	M23	X	3.0584	3.0584	0	%100
42	M23	Z	5.2974	5.2974	0	%100
43	M24	X	3.2153	3.2153	0	%100
44	M24	Z	5.5691	5.5691	0	%100
45	M25	X	2.0373	2.0373	0	%100
46	M25	Z	3.5287	3.5287	0	%100
47	M26	X	1.8571	1.8571	0	%100
48	M26	Z	3.2166	3.2166	0	%100
49	M27	X	3.2898	3.2898	0	%100
50	M27	Z	5.6981	5.6981	0	%100
51	M28	X	1.8571	1.8571	0	%100
52	M28	Z	3.2166	3.2166	0	%100
53	M29	X	3.2898	3.2898	0	%100
54	M29	Z	5.6981	5.6981	0	%100
55	M30	X	2.0373	2.0373	0	%100
56	M30	Z	3.5287	3.5287	0	%100
57	M31	X	1.8571	1.8571	0	%100
58	M31	Z	3.2166	3.2166	0	%100
59	M32	X	1.8571	1.8571	0	%100
60	M32	Z	3.2166	3.2166	0	%100
61	M33	X	3.0584	3.0584	0	%100
62	M33	Z	5.2974	5.2974	0	%100
63	M34	X	3.0584	3.0584	0	%100
64	M34	Z	5.2974	5.2974	0	%100
65	M35	X	3.2153	3.2153	0	%100
66	M35	Z	5.5691	5.5691	0	%100
67	M36	X	2.0373	2.0373	0	%100
68	M36	Z	3.5287	3.5287	0	%100
69	MP4A	X	4.2132	4.2132	0	%100
70	MP4A	Z	7.2974	7.2974	0	%100
71	MP3A	X	4.2132	4.2132	0	%100
72	MP3A	Z	7.2974	7.2974	0	%100
73	MP2A	X	4.2132	4.2132	0	%100
74	MP2A	Z	7.2974	7.2974	0	%100
75	MP1A	X	4.2132	4.2132	0	%100
76	MP1A	Z	7.2974	7.2974	0	%100
77	EQUIP	X	4.8045	4.8045	0	%100
78	EQUIP	Z	8.3216	8.3216	0	%100
79	M51	X	4.8045	4.8045	0	%100
80	M51	Z	8.3216	8.3216	0	%100
81	M55A	X	3.1411	3.1411	0	%100
82	M55A	Z	5.4406	5.4406	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	10.6438	10.6438	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	10.6438	10.6438	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	.6526	.6526	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	.6526	.6526	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	10.2003	10.2003	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	.4514	.4514	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	.7772	.7772	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	10.2003	10.2003	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	4.1329	4.1329	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	4.1329	4.1329	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	4.1329	4.1329	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	4.1329	4.1329	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	1.4044	1.4044	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	5.5957	5.5957	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	1.4044	1.4044	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	5.5957	5.5957	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	1.8848	1.8848	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	1.4044	1.4044	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	1.4044	1.4044	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	6.1169	6.1169	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	6.1169	6.1169	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	6.4306	6.4306	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	1.8848	1.8848	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	1.4044	1.4044	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	5.5957	5.5957	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	1.4044	1.4044	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	5.5957	5.5957	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	1.8848	1.8848	0	%100
57	M31	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	1.4044	1.4044	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	1.4044	1.4044	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	6.1169	6.1169	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	6.1169	6.1169	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	6.4306	6.4306	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	1.8848	1.8848	0	%100
69	MP4A	X	0	0	0	%100
70	MP4A	Z	8.4263	8.4263	0	%100
71	MP3A	X	0	0	0	%100
72	MP3A	Z	8.4263	8.4263	0	%100
73	MP2A	X	0	0	0	%100
74	MP2A	Z	8.4263	8.4263	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	8.4263	8.4263	0	%100
77	EQUIP	X	0	0	0	%100
78	EQUIP	Z	9.609	9.609	0	%100
79	M51	X	0	0	0	%100
80	M51	Z	9.609	9.609	0	%100
81	M55A	X	0	0	0	%100
82	M55A	Z	2.0693	2.0693	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	-3.9914	-3.9914	0	%100
2	M1	Z	6.9133	6.9133	0	%100
3	M3	X	-3.9914	-3.9914	0	%100
4	M3	Z	6.9133	6.9133	0	%100
5	M5	X	-.0414	-.0414	0	%100
6	M5	Z	.0718	.0718	0	%100
7	M6	X	-.6175	-.6175	0	%100
8	M6	Z	1.0695	1.0695	0	%100
9	M7	X	-3.8251	-3.8251	0	%100
10	M7	Z	6.6253	6.6253	0	%100
11	M8	X	-.0064	-.0064	0	%100
12	M8	Z	.0111	.0111	0	%100
13	M9	X	-.6445	-.6445	0	%100
14	M9	Z	1.1164	1.1164	0	%100
15	M10	X	-3.8251	-3.8251	0	%100
16	M10	Z	6.6253	6.6253	0	%100
17	M11	X	-.2625	-.2625	0	%100
18	M11	Z	.4547	.4547	0	%100
19	M12	X	-3.9105	-3.9105	0	%100
20	M12	Z	6.7733	6.7733	0	%100
21	M13	X	-.2625	-.2625	0	%100
22	M13	Z	.4547	.4547	0	%100
23	M14	X	-3.9105	-3.9105	0	%100
24	M14	Z	6.7733	6.7733	0	%100
25	M15	X	-1.8571	-1.8571	0	%100
26	M15	Z	3.2166	3.2166	0	%100
27	M16	X	-3.2898	-3.2898	0	%100
28	M16	Z	5.6981	5.6981	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	-1.8571	-1.8571	0	%100
30	M17	Z	3.2166	3.2166	0	%100
31	M18	X	-3.2898	-3.2898	0	%100
32	M18	Z	5.6981	5.6981	0	%100
33	M19	X	-2.0373	-2.0373	0	%100
34	M19	Z	3.5287	3.5287	0	%100
35	M20	X	-1.8571	-1.8571	0	%100
36	M20	Z	3.2166	3.2166	0	%100
37	M21	X	-1.8571	-1.8571	0	%100
38	M21	Z	3.2166	3.2166	0	%100
39	M22	X	-3.0584	-3.0584	0	%100
40	M22	Z	5.2974	5.2974	0	%100
41	M23	X	-3.0584	-3.0584	0	%100
42	M23	Z	5.2974	5.2974	0	%100
43	M24	X	-3.2153	-3.2153	0	%100
44	M24	Z	5.5691	5.5691	0	%100
45	M25	X	-2.0373	-2.0373	0	%100
46	M25	Z	3.5287	3.5287	0	%100
47	M26	X	-1.8571	-1.8571	0	%100
48	M26	Z	3.2166	3.2166	0	%100
49	M27	X	-2.3166	-2.3166	0	%100
50	M27	Z	4.0125	4.0125	0	%100
51	M28	X	-1.8571	-1.8571	0	%100
52	M28	Z	3.2166	3.2166	0	%100
53	M29	X	-2.3166	-2.3166	0	%100
54	M29	Z	4.0125	4.0125	0	%100
55	M30	X	-2.0373	-2.0373	0	%100
56	M30	Z	3.5287	3.5287	0	%100
57	M31	X	-1.8571	-1.8571	0	%100
58	M31	Z	3.2166	3.2166	0	%100
59	M32	X	-1.8571	-1.8571	0	%100
60	M32	Z	3.2166	3.2166	0	%100
61	M33	X	-3.0584	-3.0584	0	%100
62	M33	Z	5.2974	5.2974	0	%100
63	M34	X	-3.0584	-3.0584	0	%100
64	M34	Z	5.2974	5.2974	0	%100
65	M35	X	-3.2153	-3.2153	0	%100
66	M35	Z	5.5691	5.5691	0	%100
67	M36	X	-2.0373	-2.0373	0	%100
68	M36	Z	3.5287	3.5287	0	%100
69	MP4A	X	-4.2132	-4.2132	0	%100
70	MP4A	Z	7.2974	7.2974	0	%100
71	MP3A	X	-4.2132	-4.2132	0	%100
72	MP3A	Z	7.2974	7.2974	0	%100
73	MP2A	X	-4.2132	-4.2132	0	%100
74	MP2A	Z	7.2974	7.2974	0	%100
75	MP1A	X	-4.2132	-4.2132	0	%100
76	MP1A	Z	7.2974	7.2974	0	%100
77	EQUIP	X	-4.8045	-4.8045	0	%100
78	EQUIP	Z	8.3216	8.3216	0	%100
79	M51	X	-4.8045	-4.8045	0	%100
80	M51	Z	8.3216	8.3216	0	%100
81	M55A	X	-.000111	-.000111	0	%100
82	M55A	Z	.000192	.000192	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	-2.3044	-2.3044	0	%100
2	M1	Z	1.3305	1.3305	0	%100
3	M3	X	-2.3044	-2.3044	0	%100
4	M3	Z	1.3305	1.3305	0	%100
5	M5	X	-.0828	-.0828	0	%100
6	M5	Z	.0478	.0478	0	%100
7	M6	X	-1.0804	-1.0804	0	%100
8	M6	Z	.6238	.6238	0	%100
9	M7	X	-2.2084	-2.2084	0	%100
10	M7	Z	1.275	1.275	0	%100
11	M8	X	-.1962	-.1962	0	%100
12	M8	Z	.1133	.1133	0	%100
13	M9	X	-1.0195	-1.0195	0	%100
14	M9	Z	.5886	.5886	0	%100
15	M10	X	-2.2084	-2.2084	0	%100
16	M10	Z	1.275	1.275	0	%100
17	M11	X	-.5242	-.5242	0	%100
18	M11	Z	.3026	.3026	0	%100
19	M12	X	-6.8427	-6.8427	0	%100
20	M12	Z	3.9507	3.9507	0	%100
21	M13	X	-.5242	-.5242	0	%100
22	M13	Z	.3026	.3026	0	%100
23	M14	X	-6.8427	-6.8427	0	%100
24	M14	Z	3.9507	3.9507	0	%100
25	M15	X	-7.2174	-7.2174	0	%100
26	M15	Z	4.167	4.167	0	%100
27	M16	X	-5.7166	-5.7166	0	%100
28	M16	Z	3.3005	3.3005	0	%100
29	M17	X	-7.2174	-7.2174	0	%100
30	M17	Z	4.167	4.167	0	%100
31	M18	X	-5.7166	-5.7166	0	%100
32	M18	Z	3.3005	3.3005	0	%100
33	M19	X	-7.3214	-7.3214	0	%100
34	M19	Z	4.227	4.227	0	%100
35	M20	X	-7.2174	-7.2174	0	%100
36	M20	Z	4.167	4.167	0	%100
37	M21	X	-7.2174	-7.2174	0	%100
38	M21	Z	4.167	4.167	0	%100
39	M22	X	-5.2974	-5.2974	0	%100
40	M22	Z	3.0584	3.0584	0	%100
41	M23	X	-5.2974	-5.2974	0	%100
42	M23	Z	3.0584	3.0584	0	%100
43	M24	X	-5.5691	-5.5691	0	%100
44	M24	Z	3.2153	3.2153	0	%100
45	M25	X	-7.3214	-7.3214	0	%100
46	M25	Z	4.227	4.227	0	%100
47	M26	X	-7.2174	-7.2174	0	%100
48	M26	Z	4.167	4.167	0	%100
49	M27	X	-4.031	-4.031	0	%100
50	M27	Z	2.3273	2.3273	0	%100
51	M28	X	-7.2174	-7.2174	0	%100
52	M28	Z	4.167	4.167	0	%100
53	M29	X	-4.031	-4.031	0	%100
54	M29	Z	2.3273	2.3273	0	%100
55	M30	X	-7.3214	-7.3214	0	%100
56	M30	Z	4.227	4.227	0	%100
57	M31	X	-7.2174	-7.2174	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	4.167	4.167	0	%100
59	M32	X	-7.2174	-7.2174	0	%100
60	M32	Z	4.167	4.167	0	%100
61	M33	X	-5.2974	-5.2974	0	%100
62	M33	Z	3.0584	3.0584	0	%100
63	M34	X	-5.2974	-5.2974	0	%100
64	M34	Z	3.0584	3.0584	0	%100
65	M35	X	-5.5691	-5.5691	0	%100
66	M35	Z	3.2153	3.2153	0	%100
67	M36	X	-7.3214	-7.3214	0	%100
68	M36	Z	4.227	4.227	0	%100
69	MP4A	X	-7.2974	-7.2974	0	%100
70	MP4A	Z	4.2132	4.2132	0	%100
71	MP3A	X	-7.2974	-7.2974	0	%100
72	MP3A	Z	4.2132	4.2132	0	%100
73	MP2A	X	-7.2974	-7.2974	0	%100
74	MP2A	Z	4.2132	4.2132	0	%100
75	MP1A	X	-7.2974	-7.2974	0	%100
76	MP1A	Z	4.2132	4.2132	0	%100
77	EQUIP	X	-8.3216	-8.3216	0	%100
78	EQUIP	Z	4.8045	4.8045	0	%100
79	M51	X	-8.3216	-8.3216	0	%100
80	M51	Z	4.8045	4.8045	0	%100
81	M55A	X	-1.8569	-1.8569	0	%100
82	M55A	Z	1.0721	1.0721	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M5	X	-.6779	-.6779	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-.6779	-.6779	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	-.8791	-.8791	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-.5533	-.5533	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	-4.2934	-4.2934	0	%100
18	M11	Z	0	0	0	%100
19	M12	X	-4.2934	-4.2934	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	-4.2934	-4.2934	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	-4.2934	-4.2934	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	-10.6438	-10.6438	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	-5.6385	-5.6385	0	%100
28	M16	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	-10.6438	-10.6438	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	-5.6385	-5.6385	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	-10.6438	-10.6438	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-10.6438	-10.6438	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	-10.6438	-10.6438	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	-6.1169	-6.1169	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	-6.1169	-6.1169	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	-6.4306	-6.4306	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	-10.6438	-10.6438	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	-10.6438	-10.6438	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	-5.6385	-5.6385	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	-10.6438	-10.6438	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	-5.6385	-5.6385	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	-10.6438	-10.6438	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	-10.6438	-10.6438	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	-10.6438	-10.6438	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	-6.1169	-6.1169	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	-6.1169	-6.1169	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	-6.4306	-6.4306	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	-10.6438	-10.6438	0	%100
68	M36	Z	0	0	0	%100
69	MP4A	X	-8.4263	-8.4263	0	%100
70	MP4A	Z	0	0	0	%100
71	MP3A	X	-8.4263	-8.4263	0	%100
72	MP3A	Z	0	0	0	%100
73	MP2A	X	-8.4263	-8.4263	0	%100
74	MP2A	Z	0	0	0	%100
75	MP1A	X	-8.4263	-8.4263	0	%100
76	MP1A	Z	0	0	0	%100
77	EQUIP	X	-9.609	-9.609	0	%100
78	EQUIP	Z	0	0	0	%100
79	M51	X	-9.609	-9.609	0	%100
80	M51	Z	0	0	0	%100
81	M55A	X	-6.3571	-6.3571	0	%100
82	M55A	Z	0	0	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	-2.3044	-2.3044	0	%100
2	M1	Z	-1.3305	-1.3305	0	%100
3	M3	X	-2.3044	-2.3044	0	%100
4	M3	Z	-1.3305	-1.3305	0	%100
5	M5	X	-1.0804	-1.0804	0	%100
6	M5	Z	-.6238	-.6238	0	%100
7	M6	X	-.0828	-.0828	0	%100
8	M6	Z	-.0478	-.0478	0	%100
9	M7	X	-2.2084	-2.2084	0	%100
10	M7	Z	-1.275	-1.275	0	%100
11	M8	X	-1.1412	-1.1412	0	%100
12	M8	Z	-.6588	-.6588	0	%100
13	M9	X	-.0358	-.0358	0	%100
14	M9	Z	-.0207	-.0207	0	%100
15	M10	X	-2.2084	-2.2084	0	%100
16	M10	Z	-1.275	-1.275	0	%100
17	M11	X	-6.8427	-6.8427	0	%100
18	M11	Z	-3.9507	-3.9507	0	%100
19	M12	X	-.5242	-.5242	0	%100
20	M12	Z	-.3026	-.3026	0	%100
21	M13	X	-6.8427	-6.8427	0	%100
22	M13	Z	-3.9507	-3.9507	0	%100
23	M14	X	-.5242	-.5242	0	%100
24	M14	Z	-.3026	-.3026	0	%100
25	M15	X	-7.2174	-7.2174	0	%100
26	M15	Z	-4.167	-4.167	0	%100
27	M16	X	-4.031	-4.031	0	%100
28	M16	Z	-2.3273	-2.3273	0	%100
29	M17	X	-7.2174	-7.2174	0	%100
30	M17	Z	-4.167	-4.167	0	%100
31	M18	X	-4.031	-4.031	0	%100
32	M18	Z	-2.3273	-2.3273	0	%100
33	M19	X	-7.3214	-7.3214	0	%100
34	M19	Z	-4.227	-4.227	0	%100
35	M20	X	-7.2174	-7.2174	0	%100
36	M20	Z	-4.167	-4.167	0	%100
37	M21	X	-7.2174	-7.2174	0	%100
38	M21	Z	-4.167	-4.167	0	%100
39	M22	X	-5.2974	-5.2974	0	%100
40	M22	Z	-3.0584	-3.0584	0	%100
41	M23	X	-5.2974	-5.2974	0	%100
42	M23	Z	-3.0584	-3.0584	0	%100
43	M24	X	-5.5691	-5.5691	0	%100
44	M24	Z	-3.2153	-3.2153	0	%100
45	M25	X	-7.3214	-7.3214	0	%100
46	M25	Z	-4.227	-4.227	0	%100
47	M26	X	-7.2174	-7.2174	0	%100
48	M26	Z	-4.167	-4.167	0	%100
49	M27	X	-5.7166	-5.7166	0	%100
50	M27	Z	-3.3005	-3.3005	0	%100
51	M28	X	-7.2174	-7.2174	0	%100
52	M28	Z	-4.167	-4.167	0	%100
53	M29	X	-5.7166	-5.7166	0	%100
54	M29	Z	-3.3005	-3.3005	0	%100
55	M30	X	-7.3214	-7.3214	0	%100
56	M30	Z	-4.227	-4.227	0	%100
57	M31	X	-7.2174	-7.2174	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	-4.167	-4.167	0	%100
59	M32	X	-7.2174	-7.2174	0	%100
60	M32	Z	-4.167	-4.167	0	%100
61	M33	X	-5.2974	-5.2974	0	%100
62	M33	Z	-3.0584	-3.0584	0	%100
63	M34	X	-5.2974	-5.2974	0	%100
64	M34	Z	-3.0584	-3.0584	0	%100
65	M35	X	-5.5691	-5.5691	0	%100
66	M35	Z	-3.2153	-3.2153	0	%100
67	M36	X	-7.3214	-7.3214	0	%100
68	M36	Z	-4.227	-4.227	0	%100
69	MP4A	X	-7.2974	-7.2974	0	%100
70	MP4A	Z	-4.2132	-4.2132	0	%100
71	MP3A	X	-7.2974	-7.2974	0	%100
72	MP3A	Z	-4.2132	-4.2132	0	%100
73	MP2A	X	-7.2974	-7.2974	0	%100
74	MP2A	Z	-4.2132	-4.2132	0	%100
75	MP1A	X	-7.2974	-7.2974	0	%100
76	MP1A	Z	-4.2132	-4.2132	0	%100
77	EQUIP	X	-8.3216	-8.3216	0	%100
78	EQUIP	Z	-4.8045	-4.8045	0	%100
79	M51	X	-8.3216	-8.3216	0	%100
80	M51	Z	-4.8045	-4.8045	0	%100
81	M55A	X	-7.2972	-7.2972	0	%100
82	M55A	Z	-4.2131	-4.2131	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	-3.9914	-3.9914	0	%100
2	M1	Z	-6.9133	-6.9133	0	%100
3	M3	X	-3.9914	-3.9914	0	%100
4	M3	Z	-6.9133	-6.9133	0	%100
5	M5	X	-.6175	-.6175	0	%100
6	M5	Z	-1.0695	-1.0695	0	%100
7	M6	X	-.0414	-.0414	0	%100
8	M6	Z	-.0718	-.0718	0	%100
9	M7	X	-3.8251	-3.8251	0	%100
10	M7	Z	-6.6253	-6.6253	0	%100
11	M8	X	-.5519	-.5519	0	%100
12	M8	Z	-.956	-.956	0	%100
13	M9	X	-.0766	-.0766	0	%100
14	M9	Z	-.1328	-.1328	0	%100
15	M10	X	-3.8251	-3.8251	0	%100
16	M10	Z	-6.6253	-6.6253	0	%100
17	M11	X	-3.9105	-3.9105	0	%100
18	M11	Z	-6.7733	-6.7733	0	%100
19	M12	X	-.2625	-.2625	0	%100
20	M12	Z	-.4547	-.4547	0	%100
21	M13	X	-3.9105	-3.9105	0	%100
22	M13	Z	-6.7733	-6.7733	0	%100
23	M14	X	-.2625	-.2625	0	%100
24	M14	Z	-.4547	-.4547	0	%100
25	M15	X	-1.8571	-1.8571	0	%100
26	M15	Z	-3.2166	-3.2166	0	%100
27	M16	X	-2.3166	-2.3166	0	%100
28	M16	Z	-4.0125	-4.0125	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	-1.8571	-1.8571	0	%100
30	M17	Z	-3.2166	-3.2166	0	%100
31	M18	X	-2.3166	-2.3166	0	%100
32	M18	Z	-4.0125	-4.0125	0	%100
33	M19	X	-2.0373	-2.0373	0	%100
34	M19	Z	-3.5287	-3.5287	0	%100
35	M20	X	-1.8571	-1.8571	0	%100
36	M20	Z	-3.2166	-3.2166	0	%100
37	M21	X	-1.8571	-1.8571	0	%100
38	M21	Z	-3.2166	-3.2166	0	%100
39	M22	X	-3.0584	-3.0584	0	%100
40	M22	Z	-5.2974	-5.2974	0	%100
41	M23	X	-3.0584	-3.0584	0	%100
42	M23	Z	-5.2974	-5.2974	0	%100
43	M24	X	-3.2153	-3.2153	0	%100
44	M24	Z	-5.5691	-5.5691	0	%100
45	M25	X	-2.0373	-2.0373	0	%100
46	M25	Z	-3.5287	-3.5287	0	%100
47	M26	X	-1.8571	-1.8571	0	%100
48	M26	Z	-3.2166	-3.2166	0	%100
49	M27	X	-3.2898	-3.2898	0	%100
50	M27	Z	-5.6981	-5.6981	0	%100
51	M28	X	-1.8571	-1.8571	0	%100
52	M28	Z	-3.2166	-3.2166	0	%100
53	M29	X	-3.2898	-3.2898	0	%100
54	M29	Z	-5.6981	-5.6981	0	%100
55	M30	X	-2.0373	-2.0373	0	%100
56	M30	Z	-3.5287	-3.5287	0	%100
57	M31	X	-1.8571	-1.8571	0	%100
58	M31	Z	-3.2166	-3.2166	0	%100
59	M32	X	-1.8571	-1.8571	0	%100
60	M32	Z	-3.2166	-3.2166	0	%100
61	M33	X	-3.0584	-3.0584	0	%100
62	M33	Z	-5.2974	-5.2974	0	%100
63	M34	X	-3.0584	-3.0584	0	%100
64	M34	Z	-5.2974	-5.2974	0	%100
65	M35	X	-3.2153	-3.2153	0	%100
66	M35	Z	-5.5691	-5.5691	0	%100
67	M36	X	-2.0373	-2.0373	0	%100
68	M36	Z	-3.5287	-3.5287	0	%100
69	MP4A	X	-4.2132	-4.2132	0	%100
70	MP4A	Z	-7.2974	-7.2974	0	%100
71	MP3A	X	-4.2132	-4.2132	0	%100
72	MP3A	Z	-7.2974	-7.2974	0	%100
73	MP2A	X	-4.2132	-4.2132	0	%100
74	MP2A	Z	-7.2974	-7.2974	0	%100
75	MP1A	X	-4.2132	-4.2132	0	%100
76	MP1A	Z	-7.2974	-7.2974	0	%100
77	EQUIP	X	-4.8045	-4.8045	0	%100
78	EQUIP	Z	-8.3216	-8.3216	0	%100
79	M51	X	-4.8045	-4.8045	0	%100
80	M51	Z	-8.3216	-8.3216	0	%100
81	M55A	X	-3.1411	-3.1411	0	%100
82	M55A	Z	-5.4406	-5.4406	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	-2.6991	-2.6991	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	-2.6991	-2.6991	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	-.5258	-.5258	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-.5258	-.5258	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-3.2126	-3.2126	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-.3637	-.3637	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-.6262	-.6262	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	-3.2126	-3.2126	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-1.4246	-1.4246	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	-1.4246	-1.4246	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	-1.4246	-1.4246	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	-1.4246	-1.4246	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	-1.0848	-1.0848	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	-2.0897	-2.0897	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	-1.0848	-1.0848	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	-2.0897	-2.0897	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	-1.1699	-1.1699	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	-1.0848	-1.0848	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	-1.0848	-1.0848	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	-2.2696	-2.2696	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	-2.2696	-2.2696	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	-2.2215	-2.2215	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	-1.1699	-1.1699	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	-1.0848	-1.0848	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	-2.0897	-2.0897	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	-1.0848	-1.0848	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	-2.0897	-2.0897	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	-1.1699	-1.1699	0	%100
57	M31	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	-1.0848	-1.0848	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	-1.0848	-1.0848	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	-2.2696	-2.2696	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	-2.2696	-2.2696	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	-2.2215	-2.2215	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	-1.1699	-1.1699	0	%100
69	MP4A	X	0	0	0	%100
70	MP4A	Z	-2.9046	-2.9046	0	%100
71	MP3A	X	0	0	0	%100
72	MP3A	Z	-2.9046	-2.9046	0	%100
73	MP2A	X	0	0	0	%100
74	MP2A	Z	-2.9046	-2.9046	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	-2.9046	-2.9046	0	%100
77	EQUIP	X	0	0	0	%100
78	EQUIP	Z	-2.9786	-2.9786	0	%100
79	M51	X	0	0	0	%100
80	M51	Z	-2.9786	-2.9786	0	%100
81	M55A	X	0	0	0	%100
82	M55A	Z	-.7133	-.7133	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	1.0122	1.0122	0	%100
2	M1	Z	-1.7531	-1.7531	0	%100
3	M3	X	1.0122	1.0122	0	%100
4	M3	Z	-1.7531	-1.7531	0	%100
5	M5	X	.0334	.0334	0	%100
6	M5	Z	-.0578	-.0578	0	%100
7	M6	X	.4975	.4975	0	%100
8	M6	Z	-.8617	-.8617	0	%100
9	M7	X	1.2047	1.2047	0	%100
10	M7	Z	-2.0866	-2.0866	0	%100
11	M8	X	.0052	.0052	0	%100
12	M8	Z	-.0089	-.0089	0	%100
13	M9	X	.5193	.5193	0	%100
14	M9	Z	-.8995	-.8995	0	%100
15	M10	X	1.2047	1.2047	0	%100
16	M10	Z	-2.0866	-2.0866	0	%100
17	M11	X	.0905	.0905	0	%100
18	M11	Z	-.1567	-.1567	0	%100
19	M12	X	1.348	1.348	0	%100
20	M12	Z	-2.3348	-2.3348	0	%100
21	M13	X	.0905	.0905	0	%100
22	M13	Z	-.1567	-.1567	0	%100
23	M14	X	1.348	1.348	0	%100
24	M14	Z	-2.3348	-2.3348	0	%100
25	M15	X	.7429	.7429	0	%100
26	M15	Z	-1.2868	-1.2868	0	%100
27	M16	X	1.2286	1.2286	0	%100
28	M16	Z	-2.1279	-2.1279	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	.7429	.7429	0	%100
30	M17	Z	-1.2868	-1.2868	0	%100
31	M18	X	1.2286	1.2286	0	%100
32	M18	Z	-2.1279	-2.1279	0	%100
33	M19	X	.775	.775	0	%100
34	M19	Z	-1.3424	-1.3424	0	%100
35	M20	X	.7429	.7429	0	%100
36	M20	Z	-1.2868	-1.2868	0	%100
37	M21	X	.7429	.7429	0	%100
38	M21	Z	-1.2868	-1.2868	0	%100
39	M22	X	1.1348	1.1348	0	%100
40	M22	Z	-1.9656	-1.9656	0	%100
41	M23	X	1.1348	1.1348	0	%100
42	M23	Z	-1.9656	-1.9656	0	%100
43	M24	X	1.1107	1.1107	0	%100
44	M24	Z	-1.9238	-1.9238	0	%100
45	M25	X	.775	.775	0	%100
46	M25	Z	-1.3424	-1.3424	0	%100
47	M26	X	.7429	.7429	0	%100
48	M26	Z	-1.2868	-1.2868	0	%100
49	M27	X	.8651	.8651	0	%100
50	M27	Z	-1.4984	-1.4984	0	%100
51	M28	X	.7429	.7429	0	%100
52	M28	Z	-1.2868	-1.2868	0	%100
53	M29	X	.8651	.8651	0	%100
54	M29	Z	-1.4984	-1.4984	0	%100
55	M30	X	.775	.775	0	%100
56	M30	Z	-1.3424	-1.3424	0	%100
57	M31	X	.7429	.7429	0	%100
58	M31	Z	-1.2868	-1.2868	0	%100
59	M32	X	.7429	.7429	0	%100
60	M32	Z	-1.2868	-1.2868	0	%100
61	M33	X	1.1348	1.1348	0	%100
62	M33	Z	-1.9656	-1.9656	0	%100
63	M34	X	1.1348	1.1348	0	%100
64	M34	Z	-1.9656	-1.9656	0	%100
65	M35	X	1.1107	1.1107	0	%100
66	M35	Z	-1.9238	-1.9238	0	%100
67	M36	X	.775	.775	0	%100
68	M36	Z	-1.3424	-1.3424	0	%100
69	MP4A	X	1.4523	1.4523	0	%100
70	MP4A	Z	-2.5154	-2.5154	0	%100
71	MP3A	X	1.4523	1.4523	0	%100
72	MP3A	Z	-2.5154	-2.5154	0	%100
73	MP2A	X	1.4523	1.4523	0	%100
74	MP2A	Z	-2.5154	-2.5154	0	%100
75	MP1A	X	1.4523	1.4523	0	%100
76	MP1A	Z	-2.5154	-2.5154	0	%100
77	EQUIP	X	1.4893	1.4893	0	%100
78	EQUIP	Z	-2.5795	-2.5795	0	%100
79	M51	X	1.4893	1.4893	0	%100
80	M51	Z	-2.5795	-2.5795	0	%100
81	M55A	X	3.8e-5	3.8e-5	0	%100
82	M55A	Z	-6.6e-5	-6.6e-5	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	.5844	.5844	0	%100
2	M1	Z	-.3374	-.3374	0	%100
3	M3	X	.5844	.5844	0	%100
4	M3	Z	-.3374	-.3374	0	%100
5	M5	X	.0667	.0667	0	%100
6	M5	Z	-.0385	-.0385	0	%100
7	M6	X	.8705	.8705	0	%100
8	M6	Z	-.5026	-.5026	0	%100
9	M7	X	.6955	.6955	0	%100
10	M7	Z	-.4016	-.4016	0	%100
11	M8	X	.1581	.1581	0	%100
12	M8	Z	-.0913	-.0913	0	%100
13	M9	X	.8214	.8214	0	%100
14	M9	Z	-.4742	-.4742	0	%100
15	M10	X	.6955	.6955	0	%100
16	M10	Z	-.4016	-.4016	0	%100
17	M11	X	.1807	.1807	0	%100
18	M11	Z	-.1043	-.1043	0	%100
19	M12	X	2.3587	2.3587	0	%100
20	M12	Z	-1.3618	-1.3618	0	%100
21	M13	X	.1807	.1807	0	%100
22	M13	Z	-.1043	-.1043	0	%100
23	M14	X	2.3587	2.3587	0	%100
24	M14	Z	-1.3618	-1.3618	0	%100
25	M15	X	1.9813	1.9813	0	%100
26	M15	Z	-1.1439	-1.1439	0	%100
27	M16	X	2.1348	2.1348	0	%100
28	M16	Z	-1.2325	-1.2325	0	%100
29	M17	X	1.9813	1.9813	0	%100
30	M17	Z	-1.1439	-1.1439	0	%100
31	M18	X	2.1348	2.1348	0	%100
32	M18	Z	-1.2325	-1.2325	0	%100
33	M19	X	2.0009	2.0009	0	%100
34	M19	Z	-1.1552	-1.1552	0	%100
35	M20	X	1.9813	1.9813	0	%100
36	M20	Z	-1.1439	-1.1439	0	%100
37	M21	X	1.9813	1.9813	0	%100
38	M21	Z	-1.1439	-1.1439	0	%100
39	M22	X	1.9656	1.9656	0	%100
40	M22	Z	-1.1348	-1.1348	0	%100
41	M23	X	1.9656	1.9656	0	%100
42	M23	Z	-1.1348	-1.1348	0	%100
43	M24	X	1.9238	1.9238	0	%100
44	M24	Z	-1.1107	-1.1107	0	%100
45	M25	X	2.0009	2.0009	0	%100
46	M25	Z	-1.1552	-1.1552	0	%100
47	M26	X	1.9813	1.9813	0	%100
48	M26	Z	-1.1439	-1.1439	0	%100
49	M27	X	1.5053	1.5053	0	%100
50	M27	Z	-.8691	-.8691	0	%100
51	M28	X	1.9813	1.9813	0	%100
52	M28	Z	-1.1439	-1.1439	0	%100
53	M29	X	1.5053	1.5053	0	%100
54	M29	Z	-.8691	-.8691	0	%100
55	M30	X	2.0009	2.0009	0	%100
56	M30	Z	-1.1552	-1.1552	0	%100
57	M31	X	1.9813	1.9813	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	-1.1439	-1.1439	0	%100
59	M32	X	1.9813	1.9813	0	%100
60	M32	Z	-1.1439	-1.1439	0	%100
61	M33	X	1.9656	1.9656	0	%100
62	M33	Z	-1.1348	-1.1348	0	%100
63	M34	X	1.9656	1.9656	0	%100
64	M34	Z	-1.1348	-1.1348	0	%100
65	M35	X	1.9238	1.9238	0	%100
66	M35	Z	-1.1107	-1.1107	0	%100
67	M36	X	2.0009	2.0009	0	%100
68	M36	Z	-1.1552	-1.1552	0	%100
69	MP4A	X	2.5154	2.5154	0	%100
70	MP4A	Z	-1.4523	-1.4523	0	%100
71	MP3A	X	2.5154	2.5154	0	%100
72	MP3A	Z	-1.4523	-1.4523	0	%100
73	MP2A	X	2.5154	2.5154	0	%100
74	MP2A	Z	-1.4523	-1.4523	0	%100
75	MP1A	X	2.5154	2.5154	0	%100
76	MP1A	Z	-1.4523	-1.4523	0	%100
77	EQUIP	X	2.5795	2.5795	0	%100
78	EQUIP	Z	-1.4893	-1.4893	0	%100
79	M51	X	2.5795	2.5795	0	%100
80	M51	Z	-1.4893	-1.4893	0	%100
81	M55A	X	.6401	.6401	0	%100
82	M55A	Z	-.3695	-.3695	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M5	X	.5462	.5462	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	.5462	.5462	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	.7083	.7083	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	.4458	.4458	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	1.48	1.48	0	%100
18	M11	Z	0	0	0	%100
19	M12	X	1.48	1.48	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	1.48	1.48	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	1.48	1.48	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	2.6889	2.6889	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	2.1057	2.1057	0	%100
28	M16	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	2.6889	2.6889	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	2.1057	2.1057	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	2.6906	2.6906	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	2.6889	2.6889	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	2.6889	2.6889	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	2.2696	2.2696	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	2.2696	2.2696	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	2.2215	2.2215	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	2.6906	2.6906	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	2.6889	2.6889	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	2.1057	2.1057	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	2.6889	2.6889	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	2.1057	2.1057	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	2.6906	2.6906	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	2.6889	2.6889	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	2.6889	2.6889	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	2.2696	2.2696	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	2.2696	2.2696	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	2.2215	2.2215	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	2.6906	2.6906	0	%100
68	M36	Z	0	0	0	%100
69	MP4A	X	2.9046	2.9046	0	%100
70	MP4A	Z	0	0	0	%100
71	MP3A	X	2.9046	2.9046	0	%100
72	MP3A	Z	0	0	0	%100
73	MP2A	X	2.9046	2.9046	0	%100
74	MP2A	Z	0	0	0	%100
75	MP1A	X	2.9046	2.9046	0	%100
76	MP1A	Z	0	0	0	%100
77	EQUIP	X	2.9786	2.9786	0	%100
78	EQUIP	Z	0	0	0	%100
79	M51	X	2.9786	2.9786	0	%100
80	M51	Z	0	0	0	%100
81	M55A	X	2.1913	2.1913	0	%100
82	M55A	Z	0	0	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	.5844	.5844	0	%100
2	M1	Z	.3374	.3374	0	%100
3	M3	X	.5844	.5844	0	%100
4	M3	Z	.3374	.3374	0	%100
5	M5	X	.8705	.8705	0	%100
6	M5	Z	.5026	.5026	0	%100
7	M6	X	.0667	.0667	0	%100
8	M6	Z	.0385	.0385	0	%100
9	M7	X	.6955	.6955	0	%100
10	M7	Z	.4016	.4016	0	%100
11	M8	X	.9194	.9194	0	%100
12	M8	Z	.5308	.5308	0	%100
13	M9	X	.0289	.0289	0	%100
14	M9	Z	.0167	.0167	0	%100
15	M10	X	.6955	.6955	0	%100
16	M10	Z	.4016	.4016	0	%100
17	M11	X	2.3587	2.3587	0	%100
18	M11	Z	1.3618	1.3618	0	%100
19	M12	X	.1807	.1807	0	%100
20	M12	Z	.1043	.1043	0	%100
21	M13	X	2.3587	2.3587	0	%100
22	M13	Z	1.3618	1.3618	0	%100
23	M14	X	.1807	.1807	0	%100
24	M14	Z	.1043	.1043	0	%100
25	M15	X	1.9813	1.9813	0	%100
26	M15	Z	1.1439	1.1439	0	%100
27	M16	X	1.5053	1.5053	0	%100
28	M16	Z	.8691	.8691	0	%100
29	M17	X	1.9813	1.9813	0	%100
30	M17	Z	1.1439	1.1439	0	%100
31	M18	X	1.5053	1.5053	0	%100
32	M18	Z	.8691	.8691	0	%100
33	M19	X	2.0009	2.0009	0	%100
34	M19	Z	1.1552	1.1552	0	%100
35	M20	X	1.9813	1.9813	0	%100
36	M20	Z	1.1439	1.1439	0	%100
37	M21	X	1.9813	1.9813	0	%100
38	M21	Z	1.1439	1.1439	0	%100
39	M22	X	1.9656	1.9656	0	%100
40	M22	Z	1.1348	1.1348	0	%100
41	M23	X	1.9656	1.9656	0	%100
42	M23	Z	1.1348	1.1348	0	%100
43	M24	X	1.9238	1.9238	0	%100
44	M24	Z	1.1107	1.1107	0	%100
45	M25	X	2.0009	2.0009	0	%100
46	M25	Z	1.1552	1.1552	0	%100
47	M26	X	1.9813	1.9813	0	%100
48	M26	Z	1.1439	1.1439	0	%100
49	M27	X	2.1348	2.1348	0	%100
50	M27	Z	1.2325	1.2325	0	%100
51	M28	X	1.9813	1.9813	0	%100
52	M28	Z	1.1439	1.1439	0	%100
53	M29	X	2.1348	2.1348	0	%100
54	M29	Z	1.2325	1.2325	0	%100
55	M30	X	2.0009	2.0009	0	%100
56	M30	Z	1.1552	1.1552	0	%100
57	M31	X	1.9813	1.9813	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	1.1439	1.1439	0	%100
59	M32	X	1.9813	1.9813	0	%100
60	M32	Z	1.1439	1.1439	0	%100
61	M33	X	1.9656	1.9656	0	%100
62	M33	Z	1.1348	1.1348	0	%100
63	M34	X	1.9656	1.9656	0	%100
64	M34	Z	1.1348	1.1348	0	%100
65	M35	X	1.9238	1.9238	0	%100
66	M35	Z	1.1107	1.1107	0	%100
67	M36	X	2.0009	2.0009	0	%100
68	M36	Z	1.1552	1.1552	0	%100
69	MP4A	X	2.5154	2.5154	0	%100
70	MP4A	Z	1.4523	1.4523	0	%100
71	MP3A	X	2.5154	2.5154	0	%100
72	MP3A	Z	1.4523	1.4523	0	%100
73	MP2A	X	2.5154	2.5154	0	%100
74	MP2A	Z	1.4523	1.4523	0	%100
75	MP1A	X	2.5154	2.5154	0	%100
76	MP1A	Z	1.4523	1.4523	0	%100
77	EQUIP	X	2.5795	2.5795	0	%100
78	EQUIP	Z	1.4893	1.4893	0	%100
79	M51	X	2.5795	2.5795	0	%100
80	M51	Z	1.4893	1.4893	0	%100
81	M55A	X	2.5154	2.5154	0	%100
82	M55A	Z	1.4523	1.4523	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	1.0122	1.0122	0	%100
2	M1	Z	1.7531	1.7531	0	%100
3	M3	X	1.0122	1.0122	0	%100
4	M3	Z	1.7531	1.7531	0	%100
5	M5	X	.4975	.4975	0	%100
6	M5	Z	.8617	.8617	0	%100
7	M6	X	.0334	.0334	0	%100
8	M6	Z	.0578	.0578	0	%100
9	M7	X	1.2047	1.2047	0	%100
10	M7	Z	2.0866	2.0866	0	%100
11	M8	X	.4447	.4447	0	%100
12	M8	Z	.7702	.7702	0	%100
13	M9	X	.0618	.0618	0	%100
14	M9	Z	.107	.107	0	%100
15	M10	X	1.2047	1.2047	0	%100
16	M10	Z	2.0866	2.0866	0	%100
17	M11	X	1.348	1.348	0	%100
18	M11	Z	2.3348	2.3348	0	%100
19	M12	X	.0905	.0905	0	%100
20	M12	Z	.1567	.1567	0	%100
21	M13	X	1.348	1.348	0	%100
22	M13	Z	2.3348	2.3348	0	%100
23	M14	X	.0905	.0905	0	%100
24	M14	Z	.1567	.1567	0	%100
25	M15	X	.7429	.7429	0	%100
26	M15	Z	1.2868	1.2868	0	%100
27	M16	X	.8651	.8651	0	%100
28	M16	Z	1.4984	1.4984	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	.7429	.7429	0	%100
30	M17	Z	1.2868	1.2868	0	%100
31	M18	X	.8651	.8651	0	%100
32	M18	Z	1.4984	1.4984	0	%100
33	M19	X	.775	.775	0	%100
34	M19	Z	1.3424	1.3424	0	%100
35	M20	X	.7429	.7429	0	%100
36	M20	Z	1.2868	1.2868	0	%100
37	M21	X	.7429	.7429	0	%100
38	M21	Z	1.2868	1.2868	0	%100
39	M22	X	1.1348	1.1348	0	%100
40	M22	Z	1.9656	1.9656	0	%100
41	M23	X	1.1348	1.1348	0	%100
42	M23	Z	1.9656	1.9656	0	%100
43	M24	X	1.1107	1.1107	0	%100
44	M24	Z	1.9238	1.9238	0	%100
45	M25	X	.775	.775	0	%100
46	M25	Z	1.3424	1.3424	0	%100
47	M26	X	.7429	.7429	0	%100
48	M26	Z	1.2868	1.2868	0	%100
49	M27	X	1.2286	1.2286	0	%100
50	M27	Z	2.1279	2.1279	0	%100
51	M28	X	.7429	.7429	0	%100
52	M28	Z	1.2868	1.2868	0	%100
53	M29	X	1.2286	1.2286	0	%100
54	M29	Z	2.1279	2.1279	0	%100
55	M30	X	.775	.775	0	%100
56	M30	Z	1.3424	1.3424	0	%100
57	M31	X	.7429	.7429	0	%100
58	M31	Z	1.2868	1.2868	0	%100
59	M32	X	.7429	.7429	0	%100
60	M32	Z	1.2868	1.2868	0	%100
61	M33	X	1.1348	1.1348	0	%100
62	M33	Z	1.9656	1.9656	0	%100
63	M34	X	1.1348	1.1348	0	%100
64	M34	Z	1.9656	1.9656	0	%100
65	M35	X	1.1107	1.1107	0	%100
66	M35	Z	1.9238	1.9238	0	%100
67	M36	X	.775	.775	0	%100
68	M36	Z	1.3424	1.3424	0	%100
69	MP4A	X	1.4523	1.4523	0	%100
70	MP4A	Z	2.5154	2.5154	0	%100
71	MP3A	X	1.4523	1.4523	0	%100
72	MP3A	Z	2.5154	2.5154	0	%100
73	MP2A	X	1.4523	1.4523	0	%100
74	MP2A	Z	2.5154	2.5154	0	%100
75	MP1A	X	1.4523	1.4523	0	%100
76	MP1A	Z	2.5154	2.5154	0	%100
77	EQUIP	X	1.4893	1.4893	0	%100
78	EQUIP	Z	2.5795	2.5795	0	%100
79	M51	X	1.4893	1.4893	0	%100
80	M51	Z	2.5795	2.5795	0	%100
81	M55A	X	1.0828	1.0828	0	%100
82	M55A	Z	1.8754	1.8754	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	2.6991	2.6991	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	2.6991	2.6991	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	.5258	.5258	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	.5258	.5258	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	3.2126	3.2126	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	.3637	.3637	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	.6262	.6262	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	3.2126	3.2126	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	1.4246	1.4246	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	1.4246	1.4246	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	1.4246	1.4246	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	1.4246	1.4246	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	1.0848	1.0848	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	2.0897	2.0897	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	1.0848	1.0848	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	2.0897	2.0897	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	1.1699	1.1699	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	1.0848	1.0848	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	1.0848	1.0848	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	2.2696	2.2696	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	2.2696	2.2696	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	2.2215	2.2215	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	1.1699	1.1699	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	1.0848	1.0848	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	2.0897	2.0897	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	1.0848	1.0848	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	2.0897	2.0897	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	1.1699	1.1699	0	%100
57	M31	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	1.0848	1.0848	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	1.0848	1.0848	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	2.2696	2.2696	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	2.2696	2.2696	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	2.2215	2.2215	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	1.1699	1.1699	0	%100
69	MP4A	X	0	0	0	%100
70	MP4A	Z	2.9046	2.9046	0	%100
71	MP3A	X	0	0	0	%100
72	MP3A	Z	2.9046	2.9046	0	%100
73	MP2A	X	0	0	0	%100
74	MP2A	Z	2.9046	2.9046	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	2.9046	2.9046	0	%100
77	EQUIP	X	0	0	0	%100
78	EQUIP	Z	2.9786	2.9786	0	%100
79	M51	X	0	0	0	%100
80	M51	Z	2.9786	2.9786	0	%100
81	M55A	X	0	0	0	%100
82	M55A	Z	.7133	.7133	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	-1.0122	-1.0122	0	%100
2	M1	Z	1.7531	1.7531	0	%100
3	M3	X	-1.0122	-1.0122	0	%100
4	M3	Z	1.7531	1.7531	0	%100
5	M5	X	-.0334	-.0334	0	%100
6	M5	Z	.0578	.0578	0	%100
7	M6	X	-.4975	-.4975	0	%100
8	M6	Z	.8617	.8617	0	%100
9	M7	X	-1.2047	-1.2047	0	%100
10	M7	Z	2.0866	2.0866	0	%100
11	M8	X	-.0052	-.0052	0	%100
12	M8	Z	.0089	.0089	0	%100
13	M9	X	-.5193	-.5193	0	%100
14	M9	Z	.8995	.8995	0	%100
15	M10	X	-1.2047	-1.2047	0	%100
16	M10	Z	2.0866	2.0866	0	%100
17	M11	X	-.0905	-.0905	0	%100
18	M11	Z	.1567	.1567	0	%100
19	M12	X	-1.348	-1.348	0	%100
20	M12	Z	2.3348	2.3348	0	%100
21	M13	X	-.0905	-.0905	0	%100
22	M13	Z	.1567	.1567	0	%100
23	M14	X	-1.348	-1.348	0	%100
24	M14	Z	2.3348	2.3348	0	%100
25	M15	X	-.7429	-.7429	0	%100
26	M15	Z	1.2868	1.2868	0	%100
27	M16	X	-1.2286	-1.2286	0	%100
28	M16	Z	2.1279	2.1279	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	-.7429	-.7429	0	%100
30	M17	Z	1.2868	1.2868	0	%100
31	M18	X	-1.2286	-1.2286	0	%100
32	M18	Z	2.1279	2.1279	0	%100
33	M19	X	-.775	-.775	0	%100
34	M19	Z	1.3424	1.3424	0	%100
35	M20	X	-.7429	-.7429	0	%100
36	M20	Z	1.2868	1.2868	0	%100
37	M21	X	-.7429	-.7429	0	%100
38	M21	Z	1.2868	1.2868	0	%100
39	M22	X	-1.1348	-1.1348	0	%100
40	M22	Z	1.9656	1.9656	0	%100
41	M23	X	-1.1348	-1.1348	0	%100
42	M23	Z	1.9656	1.9656	0	%100
43	M24	X	-1.1107	-1.1107	0	%100
44	M24	Z	1.9238	1.9238	0	%100
45	M25	X	-.775	-.775	0	%100
46	M25	Z	1.3424	1.3424	0	%100
47	M26	X	-.7429	-.7429	0	%100
48	M26	Z	1.2868	1.2868	0	%100
49	M27	X	-.8651	-.8651	0	%100
50	M27	Z	1.4984	1.4984	0	%100
51	M28	X	-.7429	-.7429	0	%100
52	M28	Z	1.2868	1.2868	0	%100
53	M29	X	-.8651	-.8651	0	%100
54	M29	Z	1.4984	1.4984	0	%100
55	M30	X	-.775	-.775	0	%100
56	M30	Z	1.3424	1.3424	0	%100
57	M31	X	-.7429	-.7429	0	%100
58	M31	Z	1.2868	1.2868	0	%100
59	M32	X	-.7429	-.7429	0	%100
60	M32	Z	1.2868	1.2868	0	%100
61	M33	X	-1.1348	-1.1348	0	%100
62	M33	Z	1.9656	1.9656	0	%100
63	M34	X	-1.1348	-1.1348	0	%100
64	M34	Z	1.9656	1.9656	0	%100
65	M35	X	-1.1107	-1.1107	0	%100
66	M35	Z	1.9238	1.9238	0	%100
67	M36	X	-.775	-.775	0	%100
68	M36	Z	1.3424	1.3424	0	%100
69	MP4A	X	-1.4523	-1.4523	0	%100
70	MP4A	Z	2.5154	2.5154	0	%100
71	MP3A	X	-1.4523	-1.4523	0	%100
72	MP3A	Z	2.5154	2.5154	0	%100
73	MP2A	X	-1.4523	-1.4523	0	%100
74	MP2A	Z	2.5154	2.5154	0	%100
75	MP1A	X	-1.4523	-1.4523	0	%100
76	MP1A	Z	2.5154	2.5154	0	%100
77	EQUIP	X	-1.4893	-1.4893	0	%100
78	EQUIP	Z	2.5795	2.5795	0	%100
79	M51	X	-1.4893	-1.4893	0	%100
80	M51	Z	2.5795	2.5795	0	%100
81	M55A	X	-3.8e-5	-3.8e-5	0	%100
82	M55A	Z	6.6e-5	6.6e-5	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft,...
1	M1	X	-.5844	-.5844	0	%100
2	M1	Z	.3374	.3374	0	%100
3	M3	X	-.5844	-.5844	0	%100
4	M3	Z	.3374	.3374	0	%100
5	M5	X	-.0667	-.0667	0	%100
6	M5	Z	.0385	.0385	0	%100
7	M6	X	-.8705	-.8705	0	%100
8	M6	Z	.5026	.5026	0	%100
9	M7	X	-.6955	-.6955	0	%100
10	M7	Z	.4016	.4016	0	%100
11	M8	X	-.1581	-.1581	0	%100
12	M8	Z	.0913	.0913	0	%100
13	M9	X	-.8214	-.8214	0	%100
14	M9	Z	.4742	.4742	0	%100
15	M10	X	-.6955	-.6955	0	%100
16	M10	Z	.4016	.4016	0	%100
17	M11	X	-.1807	-.1807	0	%100
18	M11	Z	.1043	.1043	0	%100
19	M12	X	-2.3587	-2.3587	0	%100
20	M12	Z	1.3618	1.3618	0	%100
21	M13	X	-.1807	-.1807	0	%100
22	M13	Z	.1043	.1043	0	%100
23	M14	X	-2.3587	-2.3587	0	%100
24	M14	Z	1.3618	1.3618	0	%100
25	M15	X	-1.9813	-1.9813	0	%100
26	M15	Z	1.1439	1.1439	0	%100
27	M16	X	-2.1348	-2.1348	0	%100
28	M16	Z	1.2325	1.2325	0	%100
29	M17	X	-1.9813	-1.9813	0	%100
30	M17	Z	1.1439	1.1439	0	%100
31	M18	X	-2.1348	-2.1348	0	%100
32	M18	Z	1.2325	1.2325	0	%100
33	M19	X	-2.0009	-2.0009	0	%100
34	M19	Z	1.1552	1.1552	0	%100
35	M20	X	-1.9813	-1.9813	0	%100
36	M20	Z	1.1439	1.1439	0	%100
37	M21	X	-1.9813	-1.9813	0	%100
38	M21	Z	1.1439	1.1439	0	%100
39	M22	X	-1.9656	-1.9656	0	%100
40	M22	Z	1.1348	1.1348	0	%100
41	M23	X	-1.9656	-1.9656	0	%100
42	M23	Z	1.1348	1.1348	0	%100
43	M24	X	-1.9238	-1.9238	0	%100
44	M24	Z	1.1107	1.1107	0	%100
45	M25	X	-2.0009	-2.0009	0	%100
46	M25	Z	1.1552	1.1552	0	%100
47	M26	X	-1.9813	-1.9813	0	%100
48	M26	Z	1.1439	1.1439	0	%100
49	M27	X	-1.5053	-1.5053	0	%100
50	M27	Z	.8691	.8691	0	%100
51	M28	X	-1.9813	-1.9813	0	%100
52	M28	Z	1.1439	1.1439	0	%100
53	M29	X	-1.5053	-1.5053	0	%100
54	M29	Z	.8691	.8691	0	%100
55	M30	X	-2.0009	-2.0009	0	%100
56	M30	Z	1.1552	1.1552	0	%100
57	M31	X	-1.9813	-1.9813	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	1.1439	1.1439	0	%100
59	M32	X	-1.9813	-1.9813	0	%100
60	M32	Z	1.1439	1.1439	0	%100
61	M33	X	-1.9656	-1.9656	0	%100
62	M33	Z	1.1348	1.1348	0	%100
63	M34	X	-1.9656	-1.9656	0	%100
64	M34	Z	1.1348	1.1348	0	%100
65	M35	X	-1.9238	-1.9238	0	%100
66	M35	Z	1.1107	1.1107	0	%100
67	M36	X	-2.0009	-2.0009	0	%100
68	M36	Z	1.1552	1.1552	0	%100
69	MP4A	X	-2.5154	-2.5154	0	%100
70	MP4A	Z	1.4523	1.4523	0	%100
71	MP3A	X	-2.5154	-2.5154	0	%100
72	MP3A	Z	1.4523	1.4523	0	%100
73	MP2A	X	-2.5154	-2.5154	0	%100
74	MP2A	Z	1.4523	1.4523	0	%100
75	MP1A	X	-2.5154	-2.5154	0	%100
76	MP1A	Z	1.4523	1.4523	0	%100
77	EQUIP	X	-2.5795	-2.5795	0	%100
78	EQUIP	Z	1.4893	1.4893	0	%100
79	M51	X	-2.5795	-2.5795	0	%100
80	M51	Z	1.4893	1.4893	0	%100
81	M55A	X	-.6401	-.6401	0	%100
82	M55A	Z	.3695	.3695	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M5	X	-.5462	-.5462	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-.5462	-.5462	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	-.7083	-.7083	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-.4458	-.4458	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	-1.48	-1.48	0	%100
18	M11	Z	0	0	0	%100
19	M12	X	-1.48	-1.48	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	-1.48	-1.48	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	-1.48	-1.48	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	-2.6889	-2.6889	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	-2.1057	-2.1057	0	%100
28	M16	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	-2.6889	-2.6889	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	-2.1057	-2.1057	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	-2.6906	-2.6906	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-2.6889	-2.6889	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	-2.6889	-2.6889	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	-2.2696	-2.2696	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	-2.2696	-2.2696	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	-2.2215	-2.2215	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	-2.6906	-2.6906	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	-2.6889	-2.6889	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	-2.1057	-2.1057	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	-2.6889	-2.6889	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	-2.1057	-2.1057	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	-2.6906	-2.6906	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	-2.6889	-2.6889	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	-2.6889	-2.6889	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	-2.2696	-2.2696	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	-2.2696	-2.2696	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	-2.2215	-2.2215	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	-2.6906	-2.6906	0	%100
68	M36	Z	0	0	0	%100
69	MP4A	X	-2.9046	-2.9046	0	%100
70	MP4A	Z	0	0	0	%100
71	MP3A	X	-2.9046	-2.9046	0	%100
72	MP3A	Z	0	0	0	%100
73	MP2A	X	-2.9046	-2.9046	0	%100
74	MP2A	Z	0	0	0	%100
75	MP1A	X	-2.9046	-2.9046	0	%100
76	MP1A	Z	0	0	0	%100
77	EQUIP	X	-2.9786	-2.9786	0	%100
78	EQUIP	Z	0	0	0	%100
79	M51	X	-2.9786	-2.9786	0	%100
80	M51	Z	0	0	0	%100
81	M55A	X	-2.1913	-2.1913	0	%100
82	M55A	Z	0	0	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	-.5844	-.5844	0	%100
2	M1	Z	-.3374	-.3374	0	%100
3	M3	X	-.5844	-.5844	0	%100
4	M3	Z	-.3374	-.3374	0	%100
5	M5	X	-.8705	-.8705	0	%100
6	M5	Z	-.5026	-.5026	0	%100
7	M6	X	-.0667	-.0667	0	%100
8	M6	Z	-.0385	-.0385	0	%100
9	M7	X	-.6955	-.6955	0	%100
10	M7	Z	-.4016	-.4016	0	%100
11	M8	X	-.9194	-.9194	0	%100
12	M8	Z	-.5308	-.5308	0	%100
13	M9	X	-.0289	-.0289	0	%100
14	M9	Z	-.0167	-.0167	0	%100
15	M10	X	-.6955	-.6955	0	%100
16	M10	Z	-.4016	-.4016	0	%100
17	M11	X	-2.3587	-2.3587	0	%100
18	M11	Z	-1.3618	-1.3618	0	%100
19	M12	X	-.1807	-.1807	0	%100
20	M12	Z	-.1043	-.1043	0	%100
21	M13	X	-2.3587	-2.3587	0	%100
22	M13	Z	-1.3618	-1.3618	0	%100
23	M14	X	-.1807	-.1807	0	%100
24	M14	Z	-.1043	-.1043	0	%100
25	M15	X	-1.9813	-1.9813	0	%100
26	M15	Z	-1.1439	-1.1439	0	%100
27	M16	X	-1.5053	-1.5053	0	%100
28	M16	Z	-.8691	-.8691	0	%100
29	M17	X	-1.9813	-1.9813	0	%100
30	M17	Z	-1.1439	-1.1439	0	%100
31	M18	X	-1.5053	-1.5053	0	%100
32	M18	Z	-.8691	-.8691	0	%100
33	M19	X	-2.0009	-2.0009	0	%100
34	M19	Z	-1.1552	-1.1552	0	%100
35	M20	X	-1.9813	-1.9813	0	%100
36	M20	Z	-1.1439	-1.1439	0	%100
37	M21	X	-1.9813	-1.9813	0	%100
38	M21	Z	-1.1439	-1.1439	0	%100
39	M22	X	-1.9656	-1.9656	0	%100
40	M22	Z	-1.1348	-1.1348	0	%100
41	M23	X	-1.9656	-1.9656	0	%100
42	M23	Z	-1.1348	-1.1348	0	%100
43	M24	X	-1.9238	-1.9238	0	%100
44	M24	Z	-1.1107	-1.1107	0	%100
45	M25	X	-2.0009	-2.0009	0	%100
46	M25	Z	-1.1552	-1.1552	0	%100
47	M26	X	-1.9813	-1.9813	0	%100
48	M26	Z	-1.1439	-1.1439	0	%100
49	M27	X	-2.1348	-2.1348	0	%100
50	M27	Z	-1.2325	-1.2325	0	%100
51	M28	X	-1.9813	-1.9813	0	%100
52	M28	Z	-1.1439	-1.1439	0	%100
53	M29	X	-2.1348	-2.1348	0	%100
54	M29	Z	-1.2325	-1.2325	0	%100
55	M30	X	-2.0009	-2.0009	0	%100
56	M30	Z	-1.1552	-1.1552	0	%100
57	M31	X	-1.9813	-1.9813	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	-1.1439	-1.1439	0	%100
59	M32	X	-1.9813	-1.9813	0	%100
60	M32	Z	-1.1439	-1.1439	0	%100
61	M33	X	-1.9656	-1.9656	0	%100
62	M33	Z	-1.1348	-1.1348	0	%100
63	M34	X	-1.9656	-1.9656	0	%100
64	M34	Z	-1.1348	-1.1348	0	%100
65	M35	X	-1.9238	-1.9238	0	%100
66	M35	Z	-1.1107	-1.1107	0	%100
67	M36	X	-2.0009	-2.0009	0	%100
68	M36	Z	-1.1552	-1.1552	0	%100
69	MP4A	X	-2.5154	-2.5154	0	%100
70	MP4A	Z	-1.4523	-1.4523	0	%100
71	MP3A	X	-2.5154	-2.5154	0	%100
72	MP3A	Z	-1.4523	-1.4523	0	%100
73	MP2A	X	-2.5154	-2.5154	0	%100
74	MP2A	Z	-1.4523	-1.4523	0	%100
75	MP1A	X	-2.5154	-2.5154	0	%100
76	MP1A	Z	-1.4523	-1.4523	0	%100
77	EQUIP	X	-2.5795	-2.5795	0	%100
78	EQUIP	Z	-1.4893	-1.4893	0	%100
79	M51	X	-2.5795	-2.5795	0	%100
80	M51	Z	-1.4893	-1.4893	0	%100
81	M55A	X	-2.5154	-2.5154	0	%100
82	M55A	Z	-1.4523	-1.4523	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	-1.0122	-1.0122	0	%100
2	M1	Z	-1.7531	-1.7531	0	%100
3	M3	X	-1.0122	-1.0122	0	%100
4	M3	Z	-1.7531	-1.7531	0	%100
5	M5	X	-.4975	-.4975	0	%100
6	M5	Z	-.8617	-.8617	0	%100
7	M6	X	-.0334	-.0334	0	%100
8	M6	Z	-.0578	-.0578	0	%100
9	M7	X	-1.2047	-1.2047	0	%100
10	M7	Z	-2.0866	-2.0866	0	%100
11	M8	X	-.4447	-.4447	0	%100
12	M8	Z	-.7702	-.7702	0	%100
13	M9	X	-.0618	-.0618	0	%100
14	M9	Z	-.107	-.107	0	%100
15	M10	X	-1.2047	-1.2047	0	%100
16	M10	Z	-2.0866	-2.0866	0	%100
17	M11	X	-1.348	-1.348	0	%100
18	M11	Z	-2.3348	-2.3348	0	%100
19	M12	X	-.0905	-.0905	0	%100
20	M12	Z	-.1567	-.1567	0	%100
21	M13	X	-1.348	-1.348	0	%100
22	M13	Z	-2.3348	-2.3348	0	%100
23	M14	X	-.0905	-.0905	0	%100
24	M14	Z	-.1567	-.1567	0	%100
25	M15	X	-.7429	-.7429	0	%100
26	M15	Z	-1.2868	-1.2868	0	%100
27	M16	X	-.8651	-.8651	0	%100
28	M16	Z	-1.4984	-1.4984	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	-.7429	-.7429	0	%100
30	M17	Z	-1.2868	-1.2868	0	%100
31	M18	X	-.8651	-.8651	0	%100
32	M18	Z	-1.4984	-1.4984	0	%100
33	M19	X	-.775	-.775	0	%100
34	M19	Z	-1.3424	-1.3424	0	%100
35	M20	X	-.7429	-.7429	0	%100
36	M20	Z	-1.2868	-1.2868	0	%100
37	M21	X	-.7429	-.7429	0	%100
38	M21	Z	-1.2868	-1.2868	0	%100
39	M22	X	-1.1348	-1.1348	0	%100
40	M22	Z	-1.9656	-1.9656	0	%100
41	M23	X	-1.1348	-1.1348	0	%100
42	M23	Z	-1.9656	-1.9656	0	%100
43	M24	X	-1.1107	-1.1107	0	%100
44	M24	Z	-1.9238	-1.9238	0	%100
45	M25	X	-.775	-.775	0	%100
46	M25	Z	-1.3424	-1.3424	0	%100
47	M26	X	-.7429	-.7429	0	%100
48	M26	Z	-1.2868	-1.2868	0	%100
49	M27	X	-1.2286	-1.2286	0	%100
50	M27	Z	-2.1279	-2.1279	0	%100
51	M28	X	-.7429	-.7429	0	%100
52	M28	Z	-1.2868	-1.2868	0	%100
53	M29	X	-1.2286	-1.2286	0	%100
54	M29	Z	-2.1279	-2.1279	0	%100
55	M30	X	-.775	-.775	0	%100
56	M30	Z	-1.3424	-1.3424	0	%100
57	M31	X	-.7429	-.7429	0	%100
58	M31	Z	-1.2868	-1.2868	0	%100
59	M32	X	-.7429	-.7429	0	%100
60	M32	Z	-1.2868	-1.2868	0	%100
61	M33	X	-1.1348	-1.1348	0	%100
62	M33	Z	-1.9656	-1.9656	0	%100
63	M34	X	-1.1348	-1.1348	0	%100
64	M34	Z	-1.9656	-1.9656	0	%100
65	M35	X	-1.1107	-1.1107	0	%100
66	M35	Z	-1.9238	-1.9238	0	%100
67	M36	X	-.775	-.775	0	%100
68	M36	Z	-1.3424	-1.3424	0	%100
69	MP4A	X	-1.4523	-1.4523	0	%100
70	MP4A	Z	-2.5154	-2.5154	0	%100
71	MP3A	X	-1.4523	-1.4523	0	%100
72	MP3A	Z	-2.5154	-2.5154	0	%100
73	MP2A	X	-1.4523	-1.4523	0	%100
74	MP2A	Z	-2.5154	-2.5154	0	%100
75	MP1A	X	-1.4523	-1.4523	0	%100
76	MP1A	Z	-2.5154	-2.5154	0	%100
77	EQUIP	X	-1.4893	-1.4893	0	%100
78	EQUIP	Z	-2.5795	-2.5795	0	%100
79	M51	X	-1.4893	-1.4893	0	%100
80	M51	Z	-2.5795	-2.5795	0	%100
81	M55A	X	-1.0828	-1.0828	0	%100
82	M55A	Z	-1.8754	-1.8754	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	-.6652	-.6652	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	-.6652	-.6652	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	-.0408	-.0408	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-.0408	-.0408	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-.6375	-.6375	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-.0282	-.0282	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-.0486	-.0486	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	-.6375	-.6375	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-.2583	-.2583	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	-.2583	-.2583	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	-.2583	-.2583	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	-.2583	-.2583	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	-.0878	-.0878	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	-.3497	-.3497	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	-.0878	-.0878	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	-.3497	-.3497	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	-.1178	-.1178	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	-.0878	-.0878	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	-.0878	-.0878	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	-.3823	-.3823	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	-.3823	-.3823	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	-.4019	-.4019	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	-.1178	-.1178	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	-.0878	-.0878	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	-.3497	-.3497	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	-.0878	-.0878	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	-.3497	-.3497	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	-.1178	-.1178	0	%100
57	M31	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	-.0878	-.0878	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	-.0878	-.0878	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	-.3823	-.3823	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	-.3823	-.3823	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	-.4019	-.4019	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	-.1178	-.1178	0	%100
69	MP4A	X	0	0	0	%100
70	MP4A	Z	-.5266	-.5266	0	%100
71	MP3A	X	0	0	0	%100
72	MP3A	Z	-.5266	-.5266	0	%100
73	MP2A	X	0	0	0	%100
74	MP2A	Z	-.5266	-.5266	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	-.5266	-.5266	0	%100
77	EQUIP	X	0	0	0	%100
78	EQUIP	Z	-.6006	-.6006	0	%100
79	M51	X	0	0	0	%100
80	M51	Z	-.6006	-.6006	0	%100
81	M55A	X	0	0	0	%100
82	M55A	Z	-.1293	-.1293	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	.2495	.2495	0	%100
2	M1	Z	-.4321	-.4321	0	%100
3	M3	X	.2495	.2495	0	%100
4	M3	Z	-.4321	-.4321	0	%100
5	M5	X	.0026	.0026	0	%100
6	M5	Z	-.0045	-.0045	0	%100
7	M6	X	.0386	.0386	0	%100
8	M6	Z	-.0668	-.0668	0	%100
9	M7	X	.2391	.2391	0	%100
10	M7	Z	-.4141	-.4141	0	%100
11	M8	X	.0004	.0004	0	%100
12	M8	Z	-.000692	-.000692	0	%100
13	M9	X	.0403	.0403	0	%100
14	M9	Z	-.0698	-.0698	0	%100
15	M10	X	.2391	.2391	0	%100
16	M10	Z	-.4141	-.4141	0	%100
17	M11	X	.0164	.0164	0	%100
18	M11	Z	-.0284	-.0284	0	%100
19	M12	X	.2444	.2444	0	%100
20	M12	Z	-.4233	-.4233	0	%100
21	M13	X	.0164	.0164	0	%100
22	M13	Z	-.0284	-.0284	0	%100
23	M14	X	.2444	.2444	0	%100
24	M14	Z	-.4233	-.4233	0	%100
25	M15	X	.1161	.1161	0	%100
26	M15	Z	-.201	-.201	0	%100
27	M16	X	.2056	.2056	0	%100
28	M16	Z	-.3561	-.3561	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	.1161	.1161	0	%100
30	M17	Z	-.201	-.201	0	%100
31	M18	X	.2056	.2056	0	%100
32	M18	Z	-.3561	-.3561	0	%100
33	M19	X	.1273	.1273	0	%100
34	M19	Z	-.2205	-.2205	0	%100
35	M20	X	.1161	.1161	0	%100
36	M20	Z	-.201	-.201	0	%100
37	M21	X	.1161	.1161	0	%100
38	M21	Z	-.201	-.201	0	%100
39	M22	X	.1912	.1912	0	%100
40	M22	Z	-.3311	-.3311	0	%100
41	M23	X	.1912	.1912	0	%100
42	M23	Z	-.3311	-.3311	0	%100
43	M24	X	.201	.201	0	%100
44	M24	Z	-.3481	-.3481	0	%100
45	M25	X	.1273	.1273	0	%100
46	M25	Z	-.2205	-.2205	0	%100
47	M26	X	.1161	.1161	0	%100
48	M26	Z	-.201	-.201	0	%100
49	M27	X	.1448	.1448	0	%100
50	M27	Z	-.2508	-.2508	0	%100
51	M28	X	.1161	.1161	0	%100
52	M28	Z	-.201	-.201	0	%100
53	M29	X	.1448	.1448	0	%100
54	M29	Z	-.2508	-.2508	0	%100
55	M30	X	.1273	.1273	0	%100
56	M30	Z	-.2205	-.2205	0	%100
57	M31	X	.1161	.1161	0	%100
58	M31	Z	-.201	-.201	0	%100
59	M32	X	.1161	.1161	0	%100
60	M32	Z	-.201	-.201	0	%100
61	M33	X	.1912	.1912	0	%100
62	M33	Z	-.3311	-.3311	0	%100
63	M34	X	.1912	.1912	0	%100
64	M34	Z	-.3311	-.3311	0	%100
65	M35	X	.201	.201	0	%100
66	M35	Z	-.3481	-.3481	0	%100
67	M36	X	.1273	.1273	0	%100
68	M36	Z	-.2205	-.2205	0	%100
69	MP4A	X	.2633	.2633	0	%100
70	MP4A	Z	-.4561	-.4561	0	%100
71	MP3A	X	.2633	.2633	0	%100
72	MP3A	Z	-.4561	-.4561	0	%100
73	MP2A	X	.2633	.2633	0	%100
74	MP2A	Z	-.4561	-.4561	0	%100
75	MP1A	X	.2633	.2633	0	%100
76	MP1A	Z	-.4561	-.4561	0	%100
77	EQUIP	X	.3003	.3003	0	%100
78	EQUIP	Z	-.5201	-.5201	0	%100
79	M51	X	.3003	.3003	0	%100
80	M51	Z	-.5201	-.5201	0	%100
81	M55A	X	7e-6	7e-6	0	%100
82	M55A	Z	-1.2e-5	-1.2e-5	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	.144	.144	0	%100
2	M1	Z	-.0832	-.0832	0	%100
3	M3	X	.144	.144	0	%100
4	M3	Z	-.0832	-.0832	0	%100
5	M5	X	.0052	.0052	0	%100
6	M5	Z	-.003	-.003	0	%100
7	M6	X	.0675	.0675	0	%100
8	M6	Z	-.039	-.039	0	%100
9	M7	X	.138	.138	0	%100
10	M7	Z	-.0797	-.0797	0	%100
11	M8	X	.0123	.0123	0	%100
12	M8	Z	-.0071	-.0071	0	%100
13	M9	X	.0637	.0637	0	%100
14	M9	Z	-.0368	-.0368	0	%100
15	M10	X	.138	.138	0	%100
16	M10	Z	-.0797	-.0797	0	%100
17	M11	X	.0328	.0328	0	%100
18	M11	Z	-.0189	-.0189	0	%100
19	M12	X	.4277	.4277	0	%100
20	M12	Z	-.2469	-.2469	0	%100
21	M13	X	.0328	.0328	0	%100
22	M13	Z	-.0189	-.0189	0	%100
23	M14	X	.4277	.4277	0	%100
24	M14	Z	-.2469	-.2469	0	%100
25	M15	X	.4511	.4511	0	%100
26	M15	Z	-.2604	-.2604	0	%100
27	M16	X	.3573	.3573	0	%100
28	M16	Z	-.2063	-.2063	0	%100
29	M17	X	.4511	.4511	0	%100
30	M17	Z	-.2604	-.2604	0	%100
31	M18	X	.3573	.3573	0	%100
32	M18	Z	-.2063	-.2063	0	%100
33	M19	X	.4576	.4576	0	%100
34	M19	Z	-.2642	-.2642	0	%100
35	M20	X	.4511	.4511	0	%100
36	M20	Z	-.2604	-.2604	0	%100
37	M21	X	.4511	.4511	0	%100
38	M21	Z	-.2604	-.2604	0	%100
39	M22	X	.3311	.3311	0	%100
40	M22	Z	-.1912	-.1912	0	%100
41	M23	X	.3311	.3311	0	%100
42	M23	Z	-.1912	-.1912	0	%100
43	M24	X	.3481	.3481	0	%100
44	M24	Z	-.201	-.201	0	%100
45	M25	X	.4576	.4576	0	%100
46	M25	Z	-.2642	-.2642	0	%100
47	M26	X	.4511	.4511	0	%100
48	M26	Z	-.2604	-.2604	0	%100
49	M27	X	.2519	.2519	0	%100
50	M27	Z	-.1455	-.1455	0	%100
51	M28	X	.4511	.4511	0	%100
52	M28	Z	-.2604	-.2604	0	%100
53	M29	X	.2519	.2519	0	%100
54	M29	Z	-.1455	-.1455	0	%100
55	M30	X	.4576	.4576	0	%100
56	M30	Z	-.2642	-.2642	0	%100
57	M31	X	.4511	.4511	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	-.2604	-.2604	0	%100
59	M32	X	.4511	.4511	0	%100
60	M32	Z	-.2604	-.2604	0	%100
61	M33	X	.3311	.3311	0	%100
62	M33	Z	-.1912	-.1912	0	%100
63	M34	X	.3311	.3311	0	%100
64	M34	Z	-.1912	-.1912	0	%100
65	M35	X	.3481	.3481	0	%100
66	M35	Z	-.201	-.201	0	%100
67	M36	X	.4576	.4576	0	%100
68	M36	Z	-.2642	-.2642	0	%100
69	MP4A	X	.4561	.4561	0	%100
70	MP4A	Z	-.2633	-.2633	0	%100
71	MP3A	X	.4561	.4561	0	%100
72	MP3A	Z	-.2633	-.2633	0	%100
73	MP2A	X	.4561	.4561	0	%100
74	MP2A	Z	-.2633	-.2633	0	%100
75	MP1A	X	.4561	.4561	0	%100
76	MP1A	Z	-.2633	-.2633	0	%100
77	EQUIP	X	.5201	.5201	0	%100
78	EQUIP	Z	-.3003	-.3003	0	%100
79	M51	X	.5201	.5201	0	%100
80	M51	Z	-.3003	-.3003	0	%100
81	M55A	X	.1161	.1161	0	%100
82	M55A	Z	-.067	-.067	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M5	X	.0424	.0424	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	.0424	.0424	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	.0549	.0549	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	.0346	.0346	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	.2683	.2683	0	%100
18	M11	Z	0	0	0	%100
19	M12	X	.2683	.2683	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	.2683	.2683	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	.2683	.2683	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	.6652	.6652	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	.3524	.3524	0	%100
28	M16	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	.6652	.6652	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	.3524	.3524	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	.6652	.6652	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	.6652	.6652	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	.6652	.6652	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	.3823	.3823	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	.3823	.3823	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	.4019	.4019	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	.6652	.6652	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	.6652	.6652	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	.3524	.3524	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	.6652	.6652	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	.3524	.3524	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	.6652	.6652	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	.6652	.6652	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	.6652	.6652	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	.3823	.3823	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	.3823	.3823	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	.4019	.4019	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	.6652	.6652	0	%100
68	M36	Z	0	0	0	%100
69	MP4A	X	.5266	.5266	0	%100
70	MP4A	Z	0	0	0	%100
71	MP3A	X	.5266	.5266	0	%100
72	MP3A	Z	0	0	0	%100
73	MP2A	X	.5266	.5266	0	%100
74	MP2A	Z	0	0	0	%100
75	MP1A	X	.5266	.5266	0	%100
76	MP1A	Z	0	0	0	%100
77	EQUIP	X	.6006	.6006	0	%100
78	EQUIP	Z	0	0	0	%100
79	M51	X	.6006	.6006	0	%100
80	M51	Z	0	0	0	%100
81	M55A	X	.3973	.3973	0	%100
82	M55A	Z	0	0	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	.144	.144	0	%100
2	M1	Z	.0832	.0832	0	%100
3	M3	X	.144	.144	0	%100
4	M3	Z	.0832	.0832	0	%100
5	M5	X	.0675	.0675	0	%100
6	M5	Z	.039	.039	0	%100
7	M6	X	.0052	.0052	0	%100
8	M6	Z	.003	.003	0	%100
9	M7	X	.138	.138	0	%100
10	M7	Z	.0797	.0797	0	%100
11	M8	X	.0713	.0713	0	%100
12	M8	Z	.0412	.0412	0	%100
13	M9	X	.0022	.0022	0	%100
14	M9	Z	.0013	.0013	0	%100
15	M10	X	.138	.138	0	%100
16	M10	Z	.0797	.0797	0	%100
17	M11	X	.4277	.4277	0	%100
18	M11	Z	.2469	.2469	0	%100
19	M12	X	.0328	.0328	0	%100
20	M12	Z	.0189	.0189	0	%100
21	M13	X	.4277	.4277	0	%100
22	M13	Z	.2469	.2469	0	%100
23	M14	X	.0328	.0328	0	%100
24	M14	Z	.0189	.0189	0	%100
25	M15	X	.4511	.4511	0	%100
26	M15	Z	.2604	.2604	0	%100
27	M16	X	.2519	.2519	0	%100
28	M16	Z	.1455	.1455	0	%100
29	M17	X	.4511	.4511	0	%100
30	M17	Z	.2604	.2604	0	%100
31	M18	X	.2519	.2519	0	%100
32	M18	Z	.1455	.1455	0	%100
33	M19	X	.4576	.4576	0	%100
34	M19	Z	.2642	.2642	0	%100
35	M20	X	.4511	.4511	0	%100
36	M20	Z	.2604	.2604	0	%100
37	M21	X	.4511	.4511	0	%100
38	M21	Z	.2604	.2604	0	%100
39	M22	X	.3311	.3311	0	%100
40	M22	Z	.1912	.1912	0	%100
41	M23	X	.3311	.3311	0	%100
42	M23	Z	.1912	.1912	0	%100
43	M24	X	.3481	.3481	0	%100
44	M24	Z	.201	.201	0	%100
45	M25	X	.4576	.4576	0	%100
46	M25	Z	.2642	.2642	0	%100
47	M26	X	.4511	.4511	0	%100
48	M26	Z	.2604	.2604	0	%100
49	M27	X	.3573	.3573	0	%100
50	M27	Z	.2063	.2063	0	%100
51	M28	X	.4511	.4511	0	%100
52	M28	Z	.2604	.2604	0	%100
53	M29	X	.3573	.3573	0	%100
54	M29	Z	.2063	.2063	0	%100
55	M30	X	.4576	.4576	0	%100
56	M30	Z	.2642	.2642	0	%100
57	M31	X	.4511	.4511	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	.2604	.2604	0	%100
59	M32	X	.4511	.4511	0	%100
60	M32	Z	.2604	.2604	0	%100
61	M33	X	.3311	.3311	0	%100
62	M33	Z	.1912	.1912	0	%100
63	M34	X	.3311	.3311	0	%100
64	M34	Z	.1912	.1912	0	%100
65	M35	X	.3481	.3481	0	%100
66	M35	Z	.201	.201	0	%100
67	M36	X	.4576	.4576	0	%100
68	M36	Z	.2642	.2642	0	%100
69	MP4A	X	.4561	.4561	0	%100
70	MP4A	Z	.2633	.2633	0	%100
71	MP3A	X	.4561	.4561	0	%100
72	MP3A	Z	.2633	.2633	0	%100
73	MP2A	X	.4561	.4561	0	%100
74	MP2A	Z	.2633	.2633	0	%100
75	MP1A	X	.4561	.4561	0	%100
76	MP1A	Z	.2633	.2633	0	%100
77	EQUIP	X	.5201	.5201	0	%100
78	EQUIP	Z	.3003	.3003	0	%100
79	M51	X	.5201	.5201	0	%100
80	M51	Z	.3003	.3003	0	%100
81	M55A	X	.4561	.4561	0	%100
82	M55A	Z	.2633	.2633	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	.2495	.2495	0	%100
2	M1	Z	.4321	.4321	0	%100
3	M3	X	.2495	.2495	0	%100
4	M3	Z	.4321	.4321	0	%100
5	M5	X	.0386	.0386	0	%100
6	M5	Z	.0668	.0668	0	%100
7	M6	X	.0026	.0026	0	%100
8	M6	Z	.0045	.0045	0	%100
9	M7	X	.2391	.2391	0	%100
10	M7	Z	.4141	.4141	0	%100
11	M8	X	.0345	.0345	0	%100
12	M8	Z	.0597	.0597	0	%100
13	M9	X	.0048	.0048	0	%100
14	M9	Z	.0083	.0083	0	%100
15	M10	X	.2391	.2391	0	%100
16	M10	Z	.4141	.4141	0	%100
17	M11	X	.2444	.2444	0	%100
18	M11	Z	.4233	.4233	0	%100
19	M12	X	.0164	.0164	0	%100
20	M12	Z	.0284	.0284	0	%100
21	M13	X	.2444	.2444	0	%100
22	M13	Z	.4233	.4233	0	%100
23	M14	X	.0164	.0164	0	%100
24	M14	Z	.0284	.0284	0	%100
25	M15	X	.1161	.1161	0	%100
26	M15	Z	.201	.201	0	%100
27	M16	X	.1448	.1448	0	%100
28	M16	Z	.2508	.2508	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	.1161	.1161	0	%100
30	M17	Z	.201	.201	0	%100
31	M18	X	.1448	.1448	0	%100
32	M18	Z	.2508	.2508	0	%100
33	M19	X	.1273	.1273	0	%100
34	M19	Z	.2205	.2205	0	%100
35	M20	X	.1161	.1161	0	%100
36	M20	Z	.201	.201	0	%100
37	M21	X	.1161	.1161	0	%100
38	M21	Z	.201	.201	0	%100
39	M22	X	.1912	.1912	0	%100
40	M22	Z	.3311	.3311	0	%100
41	M23	X	.1912	.1912	0	%100
42	M23	Z	.3311	.3311	0	%100
43	M24	X	.201	.201	0	%100
44	M24	Z	.3481	.3481	0	%100
45	M25	X	.1273	.1273	0	%100
46	M25	Z	.2205	.2205	0	%100
47	M26	X	.1161	.1161	0	%100
48	M26	Z	.201	.201	0	%100
49	M27	X	.2056	.2056	0	%100
50	M27	Z	.3561	.3561	0	%100
51	M28	X	.1161	.1161	0	%100
52	M28	Z	.201	.201	0	%100
53	M29	X	.2056	.2056	0	%100
54	M29	Z	.3561	.3561	0	%100
55	M30	X	.1273	.1273	0	%100
56	M30	Z	.2205	.2205	0	%100
57	M31	X	.1161	.1161	0	%100
58	M31	Z	.201	.201	0	%100
59	M32	X	.1161	.1161	0	%100
60	M32	Z	.201	.201	0	%100
61	M33	X	.1912	.1912	0	%100
62	M33	Z	.3311	.3311	0	%100
63	M34	X	.1912	.1912	0	%100
64	M34	Z	.3311	.3311	0	%100
65	M35	X	.201	.201	0	%100
66	M35	Z	.3481	.3481	0	%100
67	M36	X	.1273	.1273	0	%100
68	M36	Z	.2205	.2205	0	%100
69	MP4A	X	.2633	.2633	0	%100
70	MP4A	Z	.4561	.4561	0	%100
71	MP3A	X	.2633	.2633	0	%100
72	MP3A	Z	.4561	.4561	0	%100
73	MP2A	X	.2633	.2633	0	%100
74	MP2A	Z	.4561	.4561	0	%100
75	MP1A	X	.2633	.2633	0	%100
76	MP1A	Z	.4561	.4561	0	%100
77	EQUIP	X	.3003	.3003	0	%100
78	EQUIP	Z	.5201	.5201	0	%100
79	M51	X	.3003	.3003	0	%100
80	M51	Z	.5201	.5201	0	%100
81	M55A	X	.1963	.1963	0	%100
82	M55A	Z	.34	.34	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	.6652	.6652	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	.6652	.6652	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	.0408	.0408	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	.0408	.0408	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	.6375	.6375	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	.0282	.0282	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	.0486	.0486	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	.6375	.6375	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	.2583	.2583	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	.2583	.2583	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	.2583	.2583	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	.2583	.2583	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	.0878	.0878	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	.3497	.3497	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	.0878	.0878	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	.3497	.3497	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	.1178	.1178	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	.0878	.0878	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	.0878	.0878	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	.3823	.3823	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	.3823	.3823	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	.4019	.4019	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	.1178	.1178	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	.0878	.0878	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	.3497	.3497	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	.0878	.0878	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	.3497	.3497	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	.1178	.1178	0	%100
57	M31	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	.0878	.0878	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	.0878	.0878	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	.3823	.3823	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	.3823	.3823	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	.4019	.4019	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	.1178	.1178	0	%100
69	MP4A	X	0	0	0	%100
70	MP4A	Z	.5266	.5266	0	%100
71	MP3A	X	0	0	0	%100
72	MP3A	Z	.5266	.5266	0	%100
73	MP2A	X	0	0	0	%100
74	MP2A	Z	.5266	.5266	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	.5266	.5266	0	%100
77	EQUIP	X	0	0	0	%100
78	EQUIP	Z	.6006	.6006	0	%100
79	M51	X	0	0	0	%100
80	M51	Z	.6006	.6006	0	%100
81	M55A	X	0	0	0	%100
82	M55A	Z	.1293	.1293	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	-.2495	-.2495	0	%100
2	M1	Z	.4321	.4321	0	%100
3	M3	X	-.2495	-.2495	0	%100
4	M3	Z	.4321	.4321	0	%100
5	M5	X	-.0026	-.0026	0	%100
6	M5	Z	.0045	.0045	0	%100
7	M6	X	-.0386	-.0386	0	%100
8	M6	Z	.0668	.0668	0	%100
9	M7	X	-.2391	-.2391	0	%100
10	M7	Z	.4141	.4141	0	%100
11	M8	X	-.0004	-.0004	0	%100
12	M8	Z	.000692	.000692	0	%100
13	M9	X	-.0403	-.0403	0	%100
14	M9	Z	.0698	.0698	0	%100
15	M10	X	-.2391	-.2391	0	%100
16	M10	Z	.4141	.4141	0	%100
17	M11	X	-.0164	-.0164	0	%100
18	M11	Z	.0284	.0284	0	%100
19	M12	X	-.2444	-.2444	0	%100
20	M12	Z	.4233	.4233	0	%100
21	M13	X	-.0164	-.0164	0	%100
22	M13	Z	.0284	.0284	0	%100
23	M14	X	-.2444	-.2444	0	%100
24	M14	Z	.4233	.4233	0	%100
25	M15	X	-.1161	-.1161	0	%100
26	M15	Z	.201	.201	0	%100
27	M16	X	-.2056	-.2056	0	%100
28	M16	Z	.3561	.3561	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	-.1161	-.1161	0	%100
30	M17	Z	.201	.201	0	%100
31	M18	X	-.2056	-.2056	0	%100
32	M18	Z	.3561	.3561	0	%100
33	M19	X	-.1273	-.1273	0	%100
34	M19	Z	.2205	.2205	0	%100
35	M20	X	-.1161	-.1161	0	%100
36	M20	Z	.201	.201	0	%100
37	M21	X	-.1161	-.1161	0	%100
38	M21	Z	.201	.201	0	%100
39	M22	X	-.1912	-.1912	0	%100
40	M22	Z	.3311	.3311	0	%100
41	M23	X	-.1912	-.1912	0	%100
42	M23	Z	.3311	.3311	0	%100
43	M24	X	-.201	-.201	0	%100
44	M24	Z	.3481	.3481	0	%100
45	M25	X	-.1273	-.1273	0	%100
46	M25	Z	.2205	.2205	0	%100
47	M26	X	-.1161	-.1161	0	%100
48	M26	Z	.201	.201	0	%100
49	M27	X	-.1448	-.1448	0	%100
50	M27	Z	.2508	.2508	0	%100
51	M28	X	-.1161	-.1161	0	%100
52	M28	Z	.201	.201	0	%100
53	M29	X	-.1448	-.1448	0	%100
54	M29	Z	.2508	.2508	0	%100
55	M30	X	-.1273	-.1273	0	%100
56	M30	Z	.2205	.2205	0	%100
57	M31	X	-.1161	-.1161	0	%100
58	M31	Z	.201	.201	0	%100
59	M32	X	-.1161	-.1161	0	%100
60	M32	Z	.201	.201	0	%100
61	M33	X	-.1912	-.1912	0	%100
62	M33	Z	.3311	.3311	0	%100
63	M34	X	-.1912	-.1912	0	%100
64	M34	Z	.3311	.3311	0	%100
65	M35	X	-.201	-.201	0	%100
66	M35	Z	.3481	.3481	0	%100
67	M36	X	-.1273	-.1273	0	%100
68	M36	Z	.2205	.2205	0	%100
69	MP4A	X	-.2633	-.2633	0	%100
70	MP4A	Z	.4561	.4561	0	%100
71	MP3A	X	-.2633	-.2633	0	%100
72	MP3A	Z	.4561	.4561	0	%100
73	MP2A	X	-.2633	-.2633	0	%100
74	MP2A	Z	.4561	.4561	0	%100
75	MP1A	X	-.2633	-.2633	0	%100
76	MP1A	Z	.4561	.4561	0	%100
77	EQUIP	X	-.3003	-.3003	0	%100
78	EQUIP	Z	.5201	.5201	0	%100
79	M51	X	-.3003	-.3003	0	%100
80	M51	Z	.5201	.5201	0	%100
81	M55A	X	-7e-6	-7e-6	0	%100
82	M55A	Z	1.2e-5	1.2e-5	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft,...
1	M1	X	-.144	-.144	0	%100
2	M1	Z	.0832	.0832	0	%100
3	M3	X	-.144	-.144	0	%100
4	M3	Z	.0832	.0832	0	%100
5	M5	X	-.0052	-.0052	0	%100
6	M5	Z	.003	.003	0	%100
7	M6	X	-.0675	-.0675	0	%100
8	M6	Z	.039	.039	0	%100
9	M7	X	-.138	-.138	0	%100
10	M7	Z	.0797	.0797	0	%100
11	M8	X	-.0123	-.0123	0	%100
12	M8	Z	.0071	.0071	0	%100
13	M9	X	-.0637	-.0637	0	%100
14	M9	Z	.0368	.0368	0	%100
15	M10	X	-.138	-.138	0	%100
16	M10	Z	.0797	.0797	0	%100
17	M11	X	-.0328	-.0328	0	%100
18	M11	Z	.0189	.0189	0	%100
19	M12	X	-.4277	-.4277	0	%100
20	M12	Z	.2469	.2469	0	%100
21	M13	X	-.0328	-.0328	0	%100
22	M13	Z	.0189	.0189	0	%100
23	M14	X	-.4277	-.4277	0	%100
24	M14	Z	.2469	.2469	0	%100
25	M15	X	-.4511	-.4511	0	%100
26	M15	Z	.2604	.2604	0	%100
27	M16	X	-.3573	-.3573	0	%100
28	M16	Z	.2063	.2063	0	%100
29	M17	X	-.4511	-.4511	0	%100
30	M17	Z	.2604	.2604	0	%100
31	M18	X	-.3573	-.3573	0	%100
32	M18	Z	.2063	.2063	0	%100
33	M19	X	-.4576	-.4576	0	%100
34	M19	Z	.2642	.2642	0	%100
35	M20	X	-.4511	-.4511	0	%100
36	M20	Z	.2604	.2604	0	%100
37	M21	X	-.4511	-.4511	0	%100
38	M21	Z	.2604	.2604	0	%100
39	M22	X	-.3311	-.3311	0	%100
40	M22	Z	.1912	.1912	0	%100
41	M23	X	-.3311	-.3311	0	%100
42	M23	Z	.1912	.1912	0	%100
43	M24	X	-.3481	-.3481	0	%100
44	M24	Z	.201	.201	0	%100
45	M25	X	-.4576	-.4576	0	%100
46	M25	Z	.2642	.2642	0	%100
47	M26	X	-.4511	-.4511	0	%100
48	M26	Z	.2604	.2604	0	%100
49	M27	X	-.2519	-.2519	0	%100
50	M27	Z	.1455	.1455	0	%100
51	M28	X	-.4511	-.4511	0	%100
52	M28	Z	.2604	.2604	0	%100
53	M29	X	-.2519	-.2519	0	%100
54	M29	Z	.1455	.1455	0	%100
55	M30	X	-.4576	-.4576	0	%100
56	M30	Z	.2642	.2642	0	%100
57	M31	X	-.4511	-.4511	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
58	M31	Z	.2604	.2604	0	%100
59	M32	X	-.4511	-.4511	0	%100
60	M32	Z	.2604	.2604	0	%100
61	M33	X	-.3311	-.3311	0	%100
62	M33	Z	.1912	.1912	0	%100
63	M34	X	-.3311	-.3311	0	%100
64	M34	Z	.1912	.1912	0	%100
65	M35	X	-.3481	-.3481	0	%100
66	M35	Z	.201	.201	0	%100
67	M36	X	-.4576	-.4576	0	%100
68	M36	Z	.2642	.2642	0	%100
69	MP4A	X	-.4561	-.4561	0	%100
70	MP4A	Z	.2633	.2633	0	%100
71	MP3A	X	-.4561	-.4561	0	%100
72	MP3A	Z	.2633	.2633	0	%100
73	MP2A	X	-.4561	-.4561	0	%100
74	MP2A	Z	.2633	.2633	0	%100
75	MP1A	X	-.4561	-.4561	0	%100
76	MP1A	Z	.2633	.2633	0	%100
77	EQUIP	X	-.5201	-.5201	0	%100
78	EQUIP	Z	.3003	.3003	0	%100
79	M51	X	-.5201	-.5201	0	%100
80	M51	Z	.3003	.3003	0	%100
81	M55A	X	-.1161	-.1161	0	%100
82	M55A	Z	.067	.067	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M5	X	-.0424	-.0424	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-.0424	-.0424	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	-.0549	-.0549	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-.0346	-.0346	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	-.2683	-.2683	0	%100
18	M11	Z	0	0	0	%100
19	M12	X	-.2683	-.2683	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	-.2683	-.2683	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	-.2683	-.2683	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	-.6652	-.6652	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	-.3524	-.3524	0	%100
28	M16	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	-.6652	-.6652	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	-.3524	-.3524	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	-.6652	-.6652	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-.6652	-.6652	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	-.6652	-.6652	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	-.3823	-.3823	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	-.3823	-.3823	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	-.4019	-.4019	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	-.6652	-.6652	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	-.6652	-.6652	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	-.3524	-.3524	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	-.6652	-.6652	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	-.3524	-.3524	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	-.6652	-.6652	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	-.6652	-.6652	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	-.6652	-.6652	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	-.3823	-.3823	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	-.3823	-.3823	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	-.4019	-.4019	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	-.6652	-.6652	0	%100
68	M36	Z	0	0	0	%100
69	MP4A	X	-.5266	-.5266	0	%100
70	MP4A	Z	0	0	0	%100
71	MP3A	X	-.5266	-.5266	0	%100
72	MP3A	Z	0	0	0	%100
73	MP2A	X	-.5266	-.5266	0	%100
74	MP2A	Z	0	0	0	%100
75	MP1A	X	-.5266	-.5266	0	%100
76	MP1A	Z	0	0	0	%100
77	EQUIP	X	-.6006	-.6006	0	%100
78	EQUIP	Z	0	0	0	%100
79	M51	X	-.6006	-.6006	0	%100
80	M51	Z	0	0	0	%100
81	M55A	X	-.3973	-.3973	0	%100
82	M55A	Z	0	0	0	%100

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

Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft,...
1	M1	X	-.144	-.144	0	%100
2	M1	Z	-.0832	-.0832	0	%100
3	M3	X	-.144	-.144	0	%100
4	M3	Z	-.0832	-.0832	0	%100
5	M5	X	-.0675	-.0675	0	%100
6	M5	Z	-.039	-.039	0	%100
7	M6	X	-.0052	-.0052	0	%100
8	M6	Z	-.003	-.003	0	%100
9	M7	X	-.138	-.138	0	%100
10	M7	Z	-.0797	-.0797	0	%100
11	M8	X	-.0713	-.0713	0	%100
12	M8	Z	-.0412	-.0412	0	%100
13	M9	X	-.0022	-.0022	0	%100
14	M9	Z	-.0013	-.0013	0	%100
15	M10	X	-.138	-.138	0	%100
16	M10	Z	-.0797	-.0797	0	%100
17	M11	X	-.4277	-.4277	0	%100
18	M11	Z	-.2469	-.2469	0	%100
19	M12	X	-.0328	-.0328	0	%100
20	M12	Z	-.0189	-.0189	0	%100
21	M13	X	-.4277	-.4277	0	%100
22	M13	Z	-.2469	-.2469	0	%100
23	M14	X	-.0328	-.0328	0	%100
24	M14	Z	-.0189	-.0189	0	%100
25	M15	X	-.4511	-.4511	0	%100
26	M15	Z	-.2604	-.2604	0	%100
27	M16	X	-.2519	-.2519	0	%100
28	M16	Z	-.1455	-.1455	0	%100
29	M17	X	-.4511	-.4511	0	%100
30	M17	Z	-.2604	-.2604	0	%100
31	M18	X	-.2519	-.2519	0	%100
32	M18	Z	-.1455	-.1455	0	%100
33	M19	X	-.4576	-.4576	0	%100
34	M19	Z	-.2642	-.2642	0	%100
35	M20	X	-.4511	-.4511	0	%100
36	M20	Z	-.2604	-.2604	0	%100
37	M21	X	-.4511	-.4511	0	%100
38	M21	Z	-.2604	-.2604	0	%100
39	M22	X	-.3311	-.3311	0	%100
40	M22	Z	-.1912	-.1912	0	%100
41	M23	X	-.3311	-.3311	0	%100
42	M23	Z	-.1912	-.1912	0	%100
43	M24	X	-.3481	-.3481	0	%100
44	M24	Z	-.201	-.201	0	%100
45	M25	X	-.4576	-.4576	0	%100
46	M25	Z	-.2642	-.2642	0	%100
47	M26	X	-.4511	-.4511	0	%100
48	M26	Z	-.2604	-.2604	0	%100
49	M27	X	-.3573	-.3573	0	%100
50	M27	Z	-.2063	-.2063	0	%100
51	M28	X	-.4511	-.4511	0	%100
52	M28	Z	-.2604	-.2604	0	%100
53	M29	X	-.3573	-.3573	0	%100
54	M29	Z	-.2063	-.2063	0	%100
55	M30	X	-.4576	-.4576	0	%100
56	M30	Z	-.2642	-.2642	0	%100
57	M31	X	-.4511	-.4511	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft,...
58	M31	Z	-.2604	-.2604	0	%100
59	M32	X	-.4511	-.4511	0	%100
60	M32	Z	-.2604	-.2604	0	%100
61	M33	X	-.3311	-.3311	0	%100
62	M33	Z	-.1912	-.1912	0	%100
63	M34	X	-.3311	-.3311	0	%100
64	M34	Z	-.1912	-.1912	0	%100
65	M35	X	-.3481	-.3481	0	%100
66	M35	Z	-.201	-.201	0	%100
67	M36	X	-.4576	-.4576	0	%100
68	M36	Z	-.2642	-.2642	0	%100
69	MP4A	X	-.4561	-.4561	0	%100
70	MP4A	Z	-.2633	-.2633	0	%100
71	MP3A	X	-.4561	-.4561	0	%100
72	MP3A	Z	-.2633	-.2633	0	%100
73	MP2A	X	-.4561	-.4561	0	%100
74	MP2A	Z	-.2633	-.2633	0	%100
75	MP1A	X	-.4561	-.4561	0	%100
76	MP1A	Z	-.2633	-.2633	0	%100
77	EQUIP	X	-.5201	-.5201	0	%100
78	EQUIP	Z	-.3003	-.3003	0	%100
79	M51	X	-.5201	-.5201	0	%100
80	M51	Z	-.3003	-.3003	0	%100
81	M55A	X	-.4561	-.4561	0	%100
82	M55A	Z	-.2633	-.2633	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft...	End Location[ft,...
1	M1	X	-.2495	-.2495	0	%100
2	M1	Z	-.4321	-.4321	0	%100
3	M3	X	-.2495	-.2495	0	%100
4	M3	Z	-.4321	-.4321	0	%100
5	M5	X	-.0386	-.0386	0	%100
6	M5	Z	-.0668	-.0668	0	%100
7	M6	X	-.0026	-.0026	0	%100
8	M6	Z	-.0045	-.0045	0	%100
9	M7	X	-.2391	-.2391	0	%100
10	M7	Z	-.4141	-.4141	0	%100
11	M8	X	-.0345	-.0345	0	%100
12	M8	Z	-.0597	-.0597	0	%100
13	M9	X	-.0048	-.0048	0	%100
14	M9	Z	-.0083	-.0083	0	%100
15	M10	X	-.2391	-.2391	0	%100
16	M10	Z	-.4141	-.4141	0	%100
17	M11	X	-.2444	-.2444	0	%100
18	M11	Z	-.4233	-.4233	0	%100
19	M12	X	-.0164	-.0164	0	%100
20	M12	Z	-.0284	-.0284	0	%100
21	M13	X	-.2444	-.2444	0	%100
22	M13	Z	-.4233	-.4233	0	%100
23	M14	X	-.0164	-.0164	0	%100
24	M14	Z	-.0284	-.0284	0	%100
25	M15	X	-.1161	-.1161	0	%100
26	M15	Z	-.201	-.201	0	%100
27	M16	X	-.1448	-.1448	0	%100
28	M16	Z	-.2508	-.2508	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude[l...	Start Location[ft,...	End Location[ft,...
29	M17	X	-.1161	-.1161	0	%100
30	M17	Z	-.201	-.201	0	%100
31	M18	X	-.1448	-.1448	0	%100
32	M18	Z	-.2508	-.2508	0	%100
33	M19	X	-.1273	-.1273	0	%100
34	M19	Z	-.2205	-.2205	0	%100
35	M20	X	-.1161	-.1161	0	%100
36	M20	Z	-.201	-.201	0	%100
37	M21	X	-.1161	-.1161	0	%100
38	M21	Z	-.201	-.201	0	%100
39	M22	X	-.1912	-.1912	0	%100
40	M22	Z	-.3311	-.3311	0	%100
41	M23	X	-.1912	-.1912	0	%100
42	M23	Z	-.3311	-.3311	0	%100
43	M24	X	-.201	-.201	0	%100
44	M24	Z	-.3481	-.3481	0	%100
45	M25	X	-.1273	-.1273	0	%100
46	M25	Z	-.2205	-.2205	0	%100
47	M26	X	-.1161	-.1161	0	%100
48	M26	Z	-.201	-.201	0	%100
49	M27	X	-.2056	-.2056	0	%100
50	M27	Z	-.3561	-.3561	0	%100
51	M28	X	-.1161	-.1161	0	%100
52	M28	Z	-.201	-.201	0	%100
53	M29	X	-.2056	-.2056	0	%100
54	M29	Z	-.3561	-.3561	0	%100
55	M30	X	-.1273	-.1273	0	%100
56	M30	Z	-.2205	-.2205	0	%100
57	M31	X	-.1161	-.1161	0	%100
58	M31	Z	-.201	-.201	0	%100
59	M32	X	-.1161	-.1161	0	%100
60	M32	Z	-.201	-.201	0	%100
61	M33	X	-.1912	-.1912	0	%100
62	M33	Z	-.3311	-.3311	0	%100
63	M34	X	-.1912	-.1912	0	%100
64	M34	Z	-.3311	-.3311	0	%100
65	M35	X	-.201	-.201	0	%100
66	M35	Z	-.3481	-.3481	0	%100
67	M36	X	-.1273	-.1273	0	%100
68	M36	Z	-.2205	-.2205	0	%100
69	MP4A	X	-.2633	-.2633	0	%100
70	MP4A	Z	-.4561	-.4561	0	%100
71	MP3A	X	-.2633	-.2633	0	%100
72	MP3A	Z	-.4561	-.4561	0	%100
73	MP2A	X	-.2633	-.2633	0	%100
74	MP2A	Z	-.4561	-.4561	0	%100
75	MP1A	X	-.2633	-.2633	0	%100
76	MP1A	Z	-.4561	-.4561	0	%100
77	EQUIP	X	-.3003	-.3003	0	%100
78	EQUIP	Z	-.5201	-.5201	0	%100
79	M51	X	-.3003	-.3003	0	%100
80	M51	Z	-.5201	-.5201	0	%100
81	M55A	X	-.1963	-.1963	0	%100
82	M55A	Z	-.34	-.34	0	%100

Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
No Data to Print ...						

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	L...	MZ [k-ft]	LC
1	N4	...	1633.575	34	1698.338	16	-220.109	1	-.155	74	0	75	.125	40
2		...	-1396.281	40	527.96	73	-4379.654	19	-.493	16	0	1	-.112	34
3	N65	...	1343.904	44	1440.366	22	4277.776	24	-.141	65	0	75	.058	40
4		...	-1581.798	27	460.935	67	650.575	6	-.437	19	0	1	-.151	34
5	N71	...	468.167	10	29.285	22	785.583	4	0	75	0	75	0	75
6		...	-467.086	4	8.999	67	-784.775	10	0	1	0	1	0	1
7	Totals:	...	1494.513	10	3151.206	21	2275.386	1						
8		...	-1494.512	4	1002.992	67	-2275.392	7						

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

	Member	Shape	Code Check	Lo...	LC	Shear Check	Lo.....		LC	phi*Pnc...	phi*Pnt [...	phi*Mn y...	phi*Mn...	Cb	Eqn
1	M1	L4X3X6	.000	.281	18	.000	.281	z	24	80199.0...	80676	2.686	7.063	1.563	H2-1
2	M3	L4X3X6	.000	.24	20	.000	.24	z	24	80199.0...	80676	2.686	7.063	1.869	H2-1
3	M5	PL3/8x3	.679	0	35	.161	.25	y	34	34985.7...	36450	.284	2.279	1.021	H1-...
4	M6	PL3/8x3	.702	0	40	.190	.25	y	40	34985.7...	36450	.284	2.279	1.014	H1-...
5	M7	PIPE_2.5	.344	11...	6	.091	11...		10	10110.2...	50715	3.596	3.596	1.516	H1-...
6	M8	PL3/8x3	.650	0	23	.247	.227	y	35	35243.3...	36450	.284	2.279	1.398	H1-...
7	M9	PL3/8x3	.632	0	40	.093	.286	y	10	34551.7...	36450	.284	2.279	1.21	H1-...
8	M10	PIPE_2.5	.273	11...	12	.120	11...		10	10110.2...	50715	3.596	3.596	1.931	H1-...
9	M11	PIPE_2.0	.301	.495	34	.111	5....		34	21054.34	32130	1.872	1.872	2.181	H1-...
10	M12	PIPE_2.0	.321	.495	41	.119	0		40	21054.34	32130	1.872	1.872	2.261	H1-...
11	M13	PIPE_2.0	.339	.557	35	.129	5....		35	21054.34	32130	1.872	1.872	2.095	H1-...
12	M14	PIPE_2.0	.301	.557	40	.132	5....		38	21054.34	32130	1.872	1.872	1.888	H1-...
13	M15	PL3/8x3	.059	0	38	.056	0	y	35	36078.2...	36450	.284	2.279	1.656	H1-...
14	M16	1.5 w 0.0...	.302	2....	15	.034	0		3	5179.054	8536.5	.325	.325	1.136	H1-...
15	M17	PL3/8x3	.083	0	36	.026	0	y	5	36078.2...	36450	.284	2.279	1.656	H1-...
16	M18	1.5 w 0.0...	.267	2....	38	.057	0		6	5179.054	8536.5	.325	.325	1.136	H1-...
17	M19	PL3/8x3	.058	0	11	.065	0	y	10	30936.41	36450	.284	2.279	1.572	H1-...
18	M20	PL3/8x3	.029	.125	37	.056	.125	y	35	36078.2...	36450	.284	2.279	1.663	H1-...
19	M21	PL3/8x3	.070	.125	36	.026	.125	y	5	36078.2...	36450	.284	2.279	1.656	H1-...
20	M22	1.5 w 0.0...	.134	3....	40	.041	3....		34	6412.349	8536.5	.325	.325	1.113	H1-...
21	M23	1.5 w 0.0...	.285	0	38	.023	3....		5	6412.349	8536.5	.325	.325	1.113	H1-...
22	M24	PIPE_2.0	.031	0	41	.010	0		10	29957.0...	32130	1.872	1.872	1.062	H1-...
23	M25	PL3/8x3	.060	.5	36	.065	.5	y	10	30936.41	36450	.284	2.279	1.614	H1-...
24	M26	PL3/8x3	.047	0	35	.059	0	y	34	36078.2...	36450	.284	2.279	1.645	H1-...
25	M27	1.5 w 0.0...	.318	2....	24	.031	4....		11	5179.054	8536.5	.325	.325	1.136	H1-...
26	M28	PL3/8x3	.054	.125	34	.034	0	y	4	36078.2...	36450	.284	2.279	1.641	H1-...
27	M29	1.5 w 0.0...	.270	2....	36	.035	0		1	5179.054	8536.5	.325	.325	1.136	H1-...
28	M30	PL3/8x3	.045	0	28	.030	0	y	5	30936.41	36450	.284	2.279	1.555	H1-...
29	M31	PL3/8x3	.038	.125	33	.059	.125	y	34	36078.2...	36450	.284	2.279	1.645	H1-...
30	M32	PL3/8x3	.054	.125	34	.034	.125	y	4	36078.2...	36450	.284	2.279	1.641	H1-...
31	M33	1.5 w 0.0...	.165	3....	34	.044	0		35	6412.349	8536.5	.325	.325	1.113	H1-...
32	M34	1.5 w 0.0...	.315	0	35	.028	3....		4	6412.349	8536.5	.325	.325	1.111	H1-...
33	M35	PIPE_2.0	.030	0	33	.005	0		5	29957.0...	32130	1.872	1.872	1.062	H1-...
34	M36	PL3/8x3	.043	.5	26	.030	.5	y	5	30936.41	36450	.284	2.279	1.614	H1-...
35	MP4A	PIPE_2.0	.412	1.25	33	.106	4....		6	20866.7...	32130	1.872	1.872	1.584	H1-...
36	MP3A	PIPE_2.0	.161	4....	4	.046	1....		10	20866.7...	32130	1.872	1.872	1.636	H1-...
37	MP2A	PIPE_2.0	.238	4....	4	.062	4....		4	20866.7...	32130	1.872	1.872	1.633	H1-...
38	MP1A	PIPE_2.0	.431	1.25	42	.137	4....		8	20866.7...	32130	1.872	1.872	1.582	H1-...

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

	Member	Shape	Code Check	Lo...	LC	Shear Check	Lo.....	LC	phi*Pnc...	phi*Pnt [..	phi*Mn y...	phi*Mn...	Cb	Eqn
39	M55A	PIPE_2.0	.045	6....	4	.003	0	23	20401.1...	32130	1.872	1.872	1.136	H1-...

Envelope AISI S100-16: LRFD Cold Formed Steel Code Checks

	Memb...	Shape	Code Check	Loc[...	LC	Shear Check	Loc.....	...	phi*P...	phi*T...	phi*M...	phi*M...	phi...	phi...	Cb	Eqn
1	EQUIP	P1000	.086	1.958	4	.013	3.6...	y	5	6976...	1475...	.334	.649	212..	425..	1.5...	H1.2...
2	M51	P1000	.112	1.958	4	.014	3.6...	y	5	6976...	1475...	.334	.649	212..	425..	1.5...	H1.2...

VzW SMART Tool© Vendor

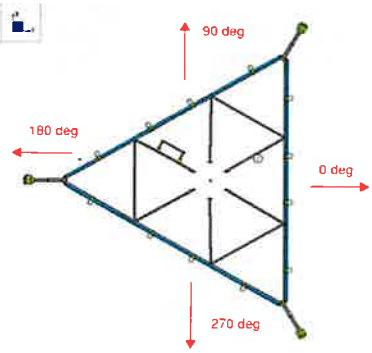
Client:	Verizon Wireless	Date:	11/20/2023
Site Name:	WESTPORT CT		
MDG #:	5000104750		
Fuze ID #:	16242132	Page:	1

Version 1.01

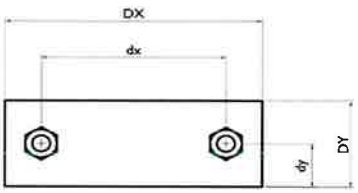
I. Mount-to-Tower Connection Check

Custom Orientation Required	Yes

Nodes (labeled per Risa)	Orientation (per graphic of typical platform)
N4	0
N65	0



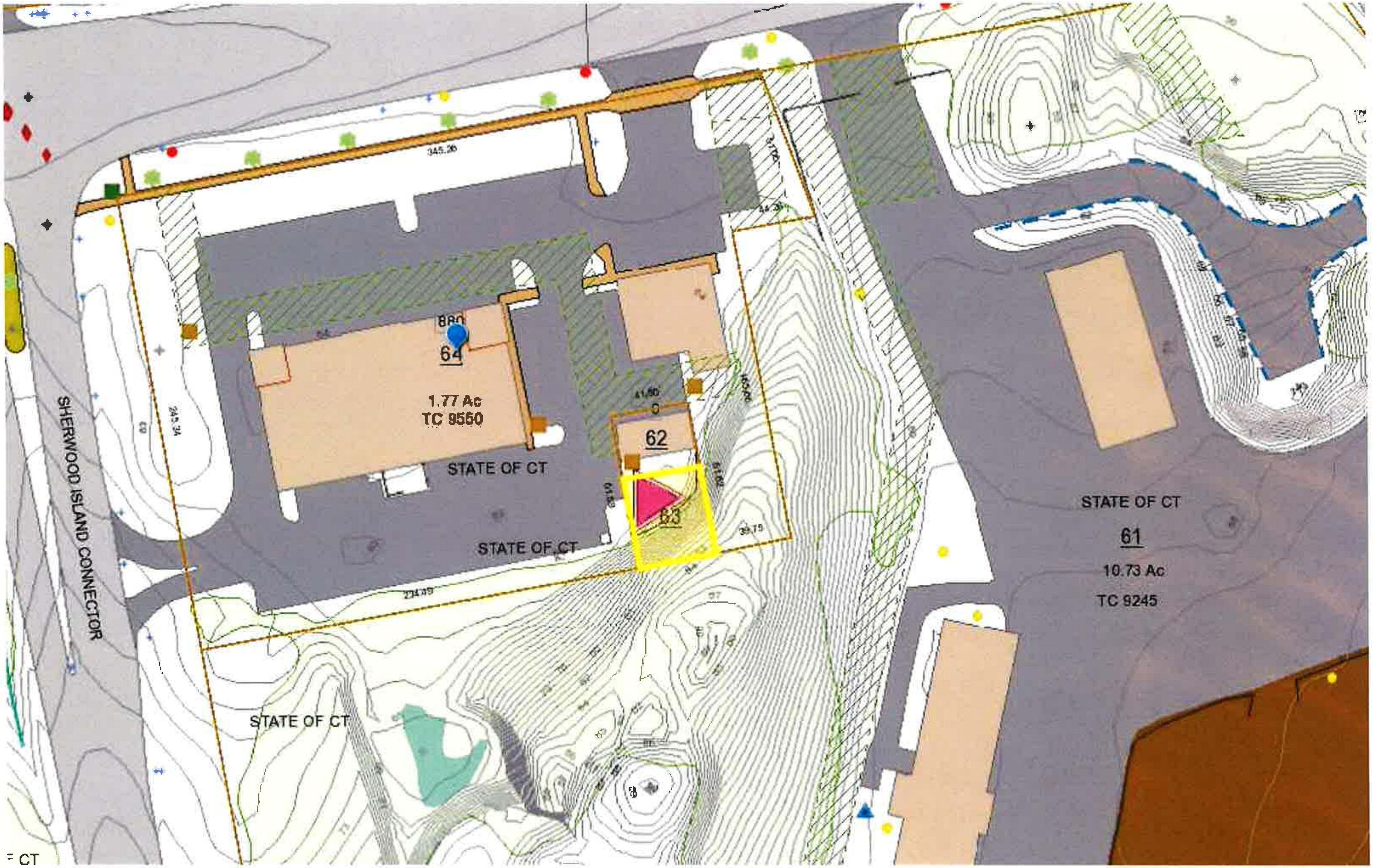
Tower Connection Bolt Checks	Yes
Bolt Orientation	Parallel



Bolt Quantity per Reaction:	2 (Horizontal)
d_x (in) *(Delta X of typ. bolt config. sketch)* :	6.5
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	2
Bolt Type:	A36
Bolt Diameter (in):	0.5
Required Tensile Strength / bolt (kips):	3.7
Required Shear Strength / bolt (kips):	0.9
Tensile Capacity / bolt (kips):	6.4
Shear Capacity / bolt (kips):	3.8
Bolt Overall Utilization:	57.2%

Tower Connection Baseplate Checks	No

ATTACHMENT 5


SHERWOOD ISLAND CONNECTOR
345.26
245.34
880
64
1.77 Ac
TC 9550
STATE OF CT
STATE OF CT
62
63
STATE OF CT
STATE OF CT
61
10.73 Ac
TC 9245

POST RD E

Location	POST RD E	**Mblu**	F09/ / 063/000 /
Acct#	29409	**Owner**	CONNECTICUT STATE OF
Assessment	$689,500	**Appraisal**	$985,000
PID	100302	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$985,000	$0	$985,000
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$689,500	$0	$689,500

Owner of Record

Owner	CONNECTICUT STATE OF
Co-Owner	CELL TOWER/WALGREENS
Address	30 TRINITY ST HARTFORD, CT 06106

Sale Price	$0
Certificate	
Book & Page	0000/0000
Sale Date	10/01/2005

Ownership History

Ownership History				
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Sale Date**
CONNECTICUT STATE OF	$0		0000/0000	10/01/2005

Building Information

Building 1 : Section 1

Year Built:
Living Area: 0
Replacement Cost: $0
Building Percent Good:
Replacement Cost Less Depreciation: $0

Building Attributes	
Field	**Description**

ATTACHMENT 6

Verizon/Westport

UNITED STATES POSTAL SERVICE®

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	4	4	quadient CORRECTION $004.00 US POSTAGE
	Postmaster, per *(name of receiving employee)*		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Jennifer Tooker, First Selectwoman Town of Westport 110 Myrtle Avenue Westport, CT 06880				
2.	Mary Young, Planning and Zoning Director Town of Westport 110 Myrtle Avenue Westport, CT 06880				
3.	State of Connecticut 30 Trinity Street Hartford, CT 06106				
4.	Department of Public Safety Connecticut State Police - c/o Brian Benito P.O. Box 2794 Middletown, CT 06457				
5.					
6.					

OLD STATE HOUSE STATION 06103 JUN 20 2024 USPS

PS Form **3665**, January 2017 (Page 1 of 1) PSN 7530-17-000-5549

See Reverse for Instructions