Robinson+Cole

KENNETH C. BALDWIN

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Hartford, CT 06103-3597
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Direct (860) 275-8345

Also admitted in Massachusetts and New York

May 5, 2022

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**
846 Opening Hill Road, Madison, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains an existing wireless telecommunications facility at the above-referenced property address (the "Property"). The facility consists of antennas and remote radio heads attached to a tower and associated equipment on the ground near the base of the tower. The tower was approved by the Town of Madison ("Town") in April of 1997. Cellco's use of the tower were approved by the Siting Council ("Council") in July of 1997. A copy of the Town's and the Council's approvals are included in Attachment 1.

Cellco now intends to modify its facility by removing nine (9) existing antennas and installing three (3) new Samsung MT6407-77A antennas and six (6) MX06FRO660-03 antennas on its existing antenna mounts. Cellco also intends to remove three (3) remote radio heads ("RRHs') and install six (6) new RRHs behind its antennas. A set of project plans showing Cellco's proposed facility modifications and new antenna and RRH specifications are included in Attachment 2.

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

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 replacement antennas will be installed on its existing antenna platform mounts.

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

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

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

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

6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna mounts, 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:
Peggy Lyons, Madison First Selectwoman
Erin Mannix, Town Planner
North Madison Volunteer Fire Company Inc., Property Owner
Alex Tyurin, Verizon Wireless

ATTACHMENT 1

TOWN OF MADISON

CONNECTICUT

LAND USE OFFICE

8 CAMPUS DRIVE
MADISON, CONNECTICUT 06443-2563
(203) 245-5632
FAX (203) 245-5613

MADISON PLANNING AND ZONING COMMISSION

CERTIFICATION OF SPECIAL EXCEPTION PERMIT OR
MODIFICATION OF SPECIAL EXCEPTION PERMIT

APPL. NO.: 97-5D

DATE OF APPROVAL: April 17, 1997

This certifies that on the above date a MODIFICATION OF SPECIAL EXCEPTION PERMIT was granted by the Madison Planning and Zoning Commission to:

OWNER OF RECORD: North Madison Volunteer Fire Department

under the provisions of Sec. 4.7 of the Zoning Regulations of the Town of Madison on property located at:

STREET ADDRESS OR LOCATION: 864 OPENING HILL ROAD

TO ALLOW: Construction of a 180 ft. communications tower to replace existing tower, installation of equipment building and emergency back-up generator waiving requirements of 1) a traffic study; 2) a waste water report and engineering study; and 3) final floor plans for the equipment building. The temporary installation of the "Cell on Wheels" was also approved. This approval is conditioned on plastic slats being placed in the chain link fence to obscure the view of the materials enclosed.

In accordance with Section 4.6 of said Regulations, this approval and permit are conditioned upon completion of all proposed improvements in accordance with approved plans within five years from date of approval, and shall become null and void in the event of failure to complete such improvements within said five year period or any extension thereof granted by the Commission.

Appl.: Owner

William B. Bilcheck
Chairman, Planning and Zoning Commission

Received for Record _____, 19____

at _____ h _____ m

_____
Signature of Town Clerk

FRM.SEPERMIT 6/91

copy sent May 30, 1997

TOWN OF MADISON
CONNECTICUT
LAND USE OFFICE

8 CAMPUS DRIVE
MADISON, CONNECTICUT 06443-2563
(203) 245-5632
FAX (203) 245-5613

May 24, 1999

CERTIFIED MAIL

North Madison Volunteer Fire Company, Inc.
864 Opening Hill Road
Madison, CT 06443

Re: Application #99-26D: 864 OPENING HILL ROAD. Request for Modification of Special Exception Permit to allow relocation of the site for emergency generator, enlarge the fenced coumpound, change the style of the fence, add landscaping and permit Nextel Communications ands Sprint PCS to install radio equipment shelters inside the enlarged compound.

Gentlemen:

At their regular meeting on May 20, 1999, the Planning and Zoning Commission approved the application above referenced as presented at the meeting.

Before this Modification of Special Exception Permit will become effective, it is necessary to file a Certificate in the Land Records of the Town for which there is a $10.00 filing fee. At your earliest convenience, please forward this amount to our office so that we may file this Certificate in your behalf. Your check should be made payable to the Town of Madison.

When this Certificate is filed at the end of the appeal period, you may apply for building permits through normal Building Department procedures.

Very truly yours,

William McMinn
Planning and Zoning Administrator

: drk

Copy to: Ronald C. Clark, Nextel Communications

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

10 Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

July 1, 1997

Kenneth C. Baldwin
Robinson & Cole
One Commercial Plaza
280 Trumbull Street
Hartford, CT 06103-3597

Re: Cellco Partnership d/b/a Bell Atlantic NYNEX Mobile notice of intent to modify an existing telecommunications facility located at 864 Opening Hill Road in Madison, Connecticut.

Dear Mr. Baldwin:

At a public meeting held on June 30, 1997, the Connecticut Siting Council (Council) acknowledged your notice of intent to modify an existing telecommunications site in Madison, Connecticut, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified in your notice dated June 16, 1997. The modifications are in compliance with the exception criteria in Section 16-50j-72 (c)(1) of the Regulations of Connecticut State Agencies as changes to an existing non-facility site that would not cause a significant change or alteration in the physical and environmental characteristics of the site. This site has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequency now used on this tower. Any additional change to this site will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Science and Technology, Bulletin No. 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/ss

c: Honorable Thomas Rylander, First Selectman, Town of Madison

ATTACHMENT 2

verizon

WIRELESS COMMUNICATIONS FACILITY

SITE NAME:
MADISON CT

NORTH MADISON VOL. FIRE CO.
864 OPENING HILL RD.
MADISON, CT 06443

ANTENNA MODIFICATION

PROJECT SUMMARY	
SITE NAME:	MADISON CT
SITE ADDRESS:	864 OPENING HILL RD. MADISON, CT 06443
PROPERTY OWNER:	NORTH MADISON VOL. FIRE CO. 864 OPENING HILL RD. MADISON, CT 06443
PARCEL ID:	134-17
COORDINATES:	41° 21' 26.33" N 72° 38' 19.52" W
VERIZON CONSTRUCTION:	WALTER CHARCZYNSKI (860) 306-1806
VERIZON REAL ESTATE:	ALEX TYURIN (860) 550-3195

AERIAL MAP

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

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WIRELESS COMMUNICATIONS FACILITY
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

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

LICENSURE

STATE OF CONNECTICUT
DAVID A. WEINPAHL
NO. 22144
LICENSED PROFESSIONAL ENGINEER

DAVID WEINPAHL, P.E.
CT LIC NO. 22144

SUBMITTALS

NO	DATE	DESCRIPTION
0	08.03.21	REVIEW
1	08.09.21	PERMITTING/CONSTRUCTION
2	12.29.21	REVISED PER THIRD PARTY REVIEW

DRAWN BY:	MF
CHECKED BY:	DW

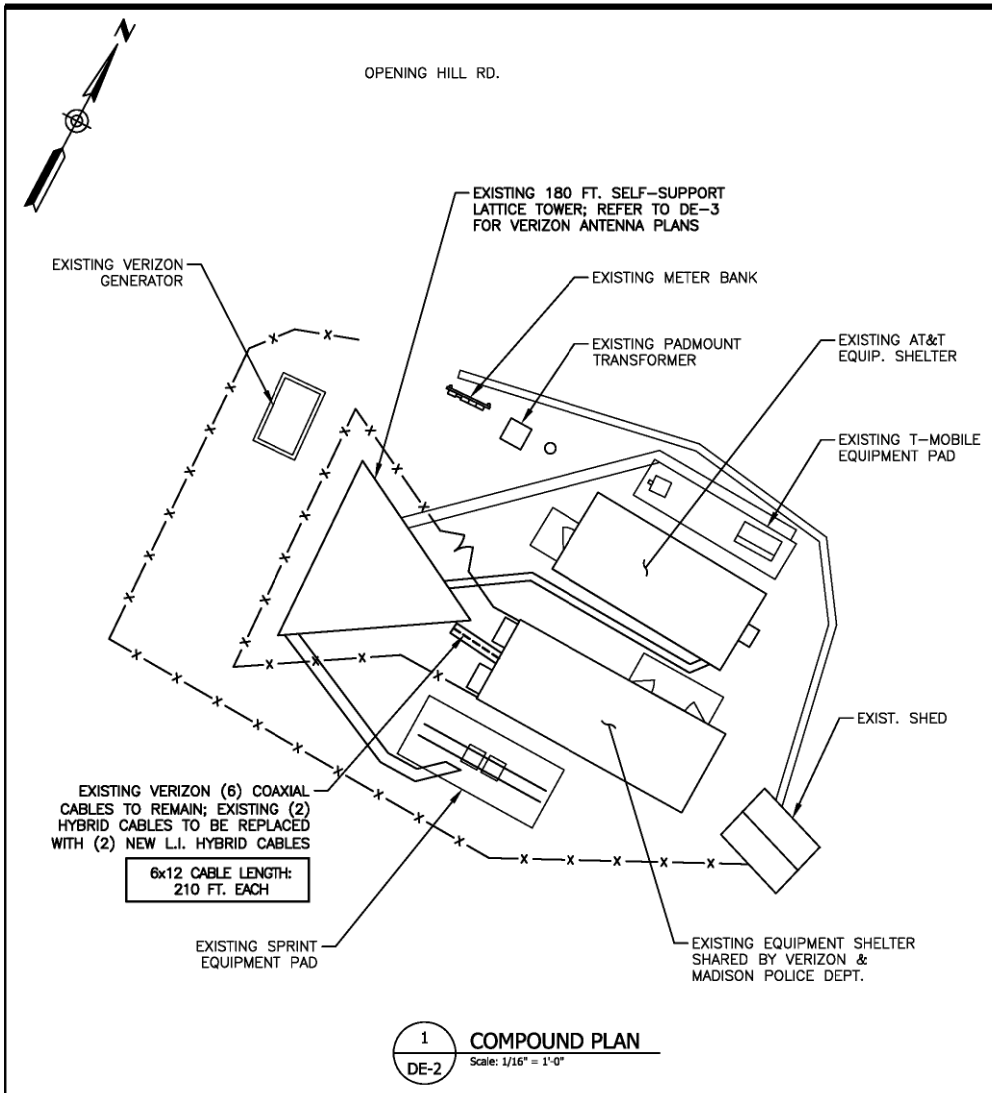
PROJECT NAME:
ANTMO
MT6407-850-LTE-PCS
DESIGN EXHIBITS

SITE NAME:
MADISON CT

SITE ADDRESS:
NORTH MADISON VOL. FIRE CO.
864 OPENING HILL RD.
MADISON, CT 06443

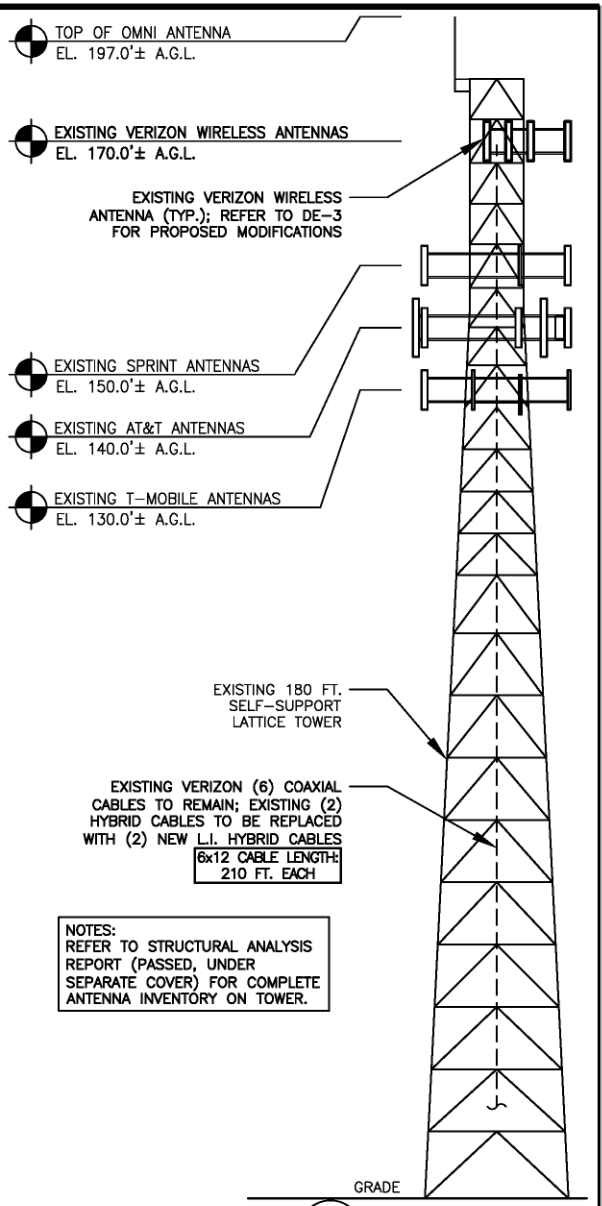
SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
DE-1



1 DE-2 **COMPOUND PLAN**
Scale: 1/16" = 1'-0"

NOTES:
1. SITE LAYOUT IS COMPILED FROM EXISTING DRAWINGS ON FILE WITH THE CT SITING COUNCIL AND A LIMITED DESIGN VISIT ON 04-26-21 FOR A PROPOSED VERIZON ANTENNA MODIFICATION.
2. PLANS ARE DIAGRAMMATIC ONLY AND NOT TO BE SCALED.
3. REFER TO STRUCTURAL TOWER AND MOUNT ANALYSIS REPORTS, BY OTHERS UNDER SEPARATE COVER, FOR ANY REQUIRED TOWER & MOUNT REINFORCEMENTS, WHICH MUST BE PERFORMED PRIOR TO ANY OTHER VERIZON ANTENNA MODIFICATIONS.
4. ELEVATION HEIGHTS ARE BASED ON A "CONDITION ASSESSMENT & STRUCTURAL ANALYSIS REPORT" BY ALL-POINTS TECHNOLOGY CORPORATION DATED 10-21-20.



NOTES:
REFER TO STRUCTURAL ANALYSIS REPORT (PASSED, UNDER SEPARATE COVER) FOR COMPLETE ANTENNA INVENTORY ON TOWER.

2 DE-2 **ELEVATION**
Scale: NTS

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20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

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PROJECT NAME:
ANTMO
MT6407-850-LTE-PCS
DESIGN EXHIBITS

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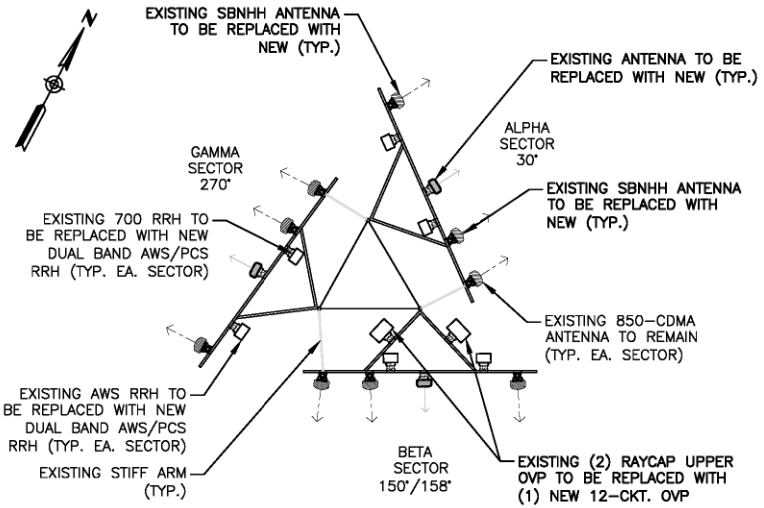
MADISON CT

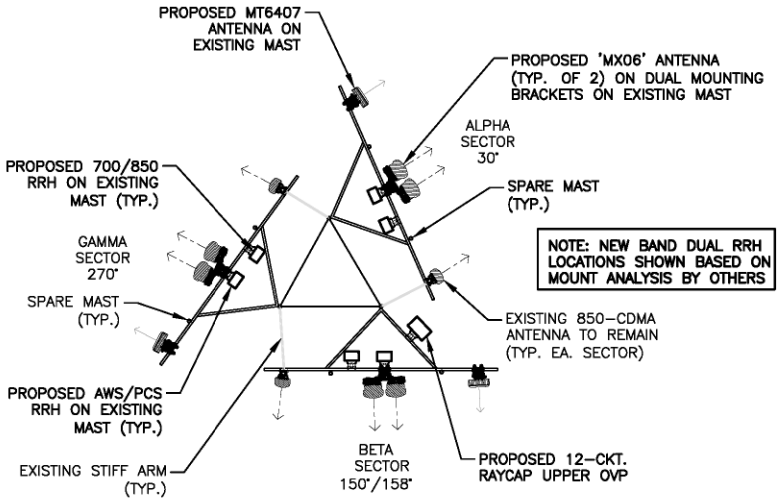
SITE ADDRESS:
NORTH MADISON VOL. FIRE CO.
864 OPENING HILL RD.
MADISON, CT 06443

SHEET TITLE:
COMPOUND PLAN & ELEVATION

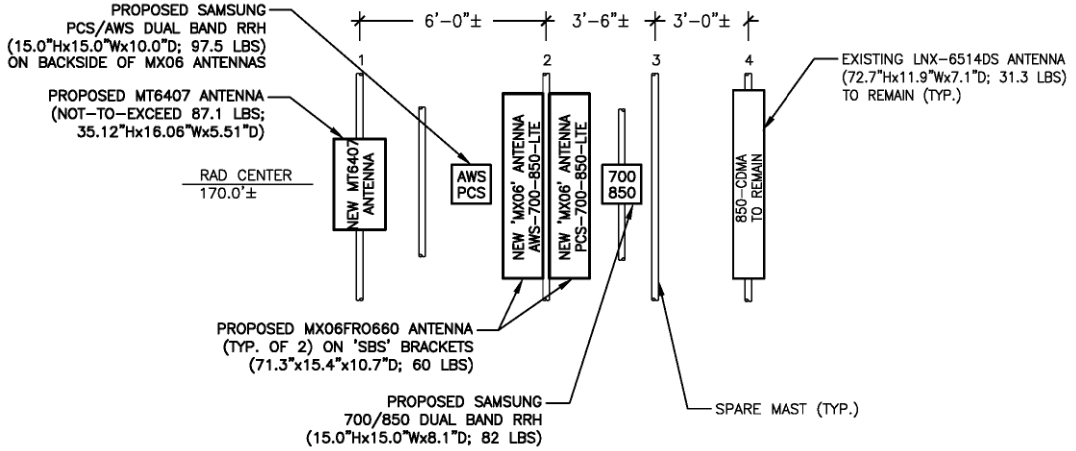
SHEET NUMBER:
DE-2



1 DE-3 **ANTENNA PLAN @ 170.0 FT. - EXISTING**
Scale: 1/8" = 1'-0"



2 DE-3 **ANTENNA PLAN @ 170.0 FT. - PROPOSED**
Scale: 1/8" = 1'-0"



(VIEWED FROM BEHIND SECTOR)

3 DE-3 **ANTENNA ELEVATION (TYP.) - PROPOSED**
Scale: 1/4" = 1'-0"

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MADISON CT

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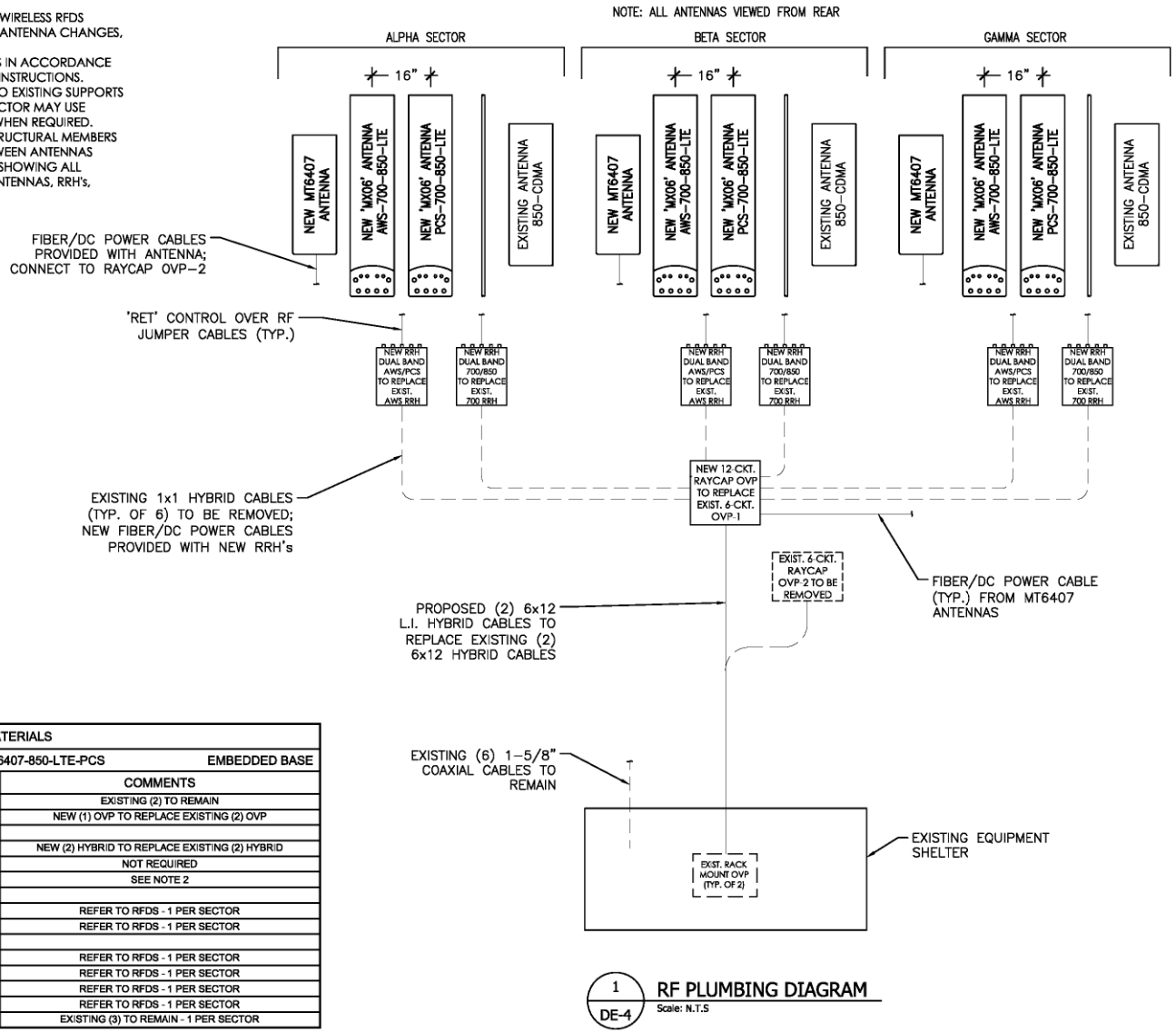
864 OPENING HILL RD.
MADISON, CT 06443

SHEET TITLE:
ANTENNA PLANS
& ELEVATION

SHEET NUMBER:
DE-3

GENERAL NOTES:

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



1 / DE-4 RF PLUMBING DIAGRAM
Scale: N.T.S

BILL OF MATERIALS			
SITE NAME: MADISON CT	ANTMO MT6407-850-LTE-PCS		EMBEDDED BASE
DESCRIPTION	QTY	LENGTH	COMMENTS
LOWER OVP	-	-	EXISTING (2) TO REMAIN
12-CKT. UPPER OVP	1	-	NEW (1) OVP TO REPLACE EXISTING (2) OVP
6x12 L.I. HYBRID CABLE	2	210 FT.	NEW (2) HYBRID TO REPLACE EXISTING (2) HYBRID
RET CONTROL CABLE	-	-	NOT REQUIRED
1/2" JUMPERS	-	-	SEE NOTE 2
AWS/PCS DUAL BAND RRH	3	-	REFER TO RFDS - 1 PER SECTOR
700/850 DUAL BAND RRH	3	-	REFER TO RFDS - 1 PER SECTOR
MT6407 INTEGRATED ANTENNA	3	-	REFER TO RFDS - 1 PER SECTOR
MX06 AWS-700-850-LTE ANTENNA	3	-	REFER TO RFDS - 1 PER SECTOR
MX06 PCS-700-850-LTE ANTENNA	3	-	REFER TO RFDS - 1 PER SECTOR
SBS MOUNTING BRACKET	3	-	REFER TO RFDS - 1 PER SECTOR
850-CDMA ANTENNA	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR

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

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DAVID WEINPAHL, P.E.
CT LIC NO. 22144

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CHECKED BY:	DW

PROJECT NAME:
ANTMO
MT6407-850-LTE-PCS
DESIGN EXHIBITS

SITE NAME:
MADISON CT

SITE ADDRESS:
NORTH MADISON VOL. FIRE CO.
864 OPENING HILL RD.
MADISON, CT 06443

SHEET TITLE:
RF PLUMBING DIAGRAM & B.O.M.

SHEET NUMBER:
DE-4

GENERAL CONSTRUCTION NOTES:

1. CONTRACTOR SHALL NOT COMMENCE ANY WORK UNTIL HE OBTAINS, AT HIS OWN EXPENSE, ALL INSURANCE REQUIRED BY *CELLCO PARTNERSHIP d/b/a VERIZON, THE PRO*PERTY OWNER AND/OR PROPERTY MANAGEMENT COMPANY.

2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS AND ALL LOCAL LAWS AND REGULATIONS, CURRENT EDITIONS.

3. CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

4. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS AT THE SITE PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA AND SUBMIT TO THE ENGINEER ANY DISCREPANCIES FROM THE DRAWINGS.

5. CONTRACTOR IS TO REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUB-CONTRACTORS AND ALL RELATED PARTIES. THE SUB-CONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.

6. CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON DRAWINGS OR WRITTEN IN SPECIFICATIONS.

7. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.

8. CONTRACTOR SHALL OBTAIN AT HIS OWN EXPENSE ALL PERMITS AND ALL INSPECTIONS REQUIRED FROM FEDERAL AND STATE GOVERNMENTS, COUNTIES, MUNICIPALITIES AND OTHER REGULATORY AGENCIES WHICH MAY BE REQUIRED FOR THE PROJECT.

10. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.

11. ALL MATERIAL PROVIDED BY *CELLCO PARTNERSHIP d/b/a VERIZON IS TO BE* REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB-CONTRACTOR PRIOR TO INSTALLATION. ANY DEFICIENCIES TO PROVIDED MATERIALS SHALL BE BROUGHT TO THE CONSTRUCTION MANAGERS ATTENTION IMMEDIATELY.

12. THE MATERIALS INSTALLED IN THE WORK SHALL MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. NO SUBSTITUTIONS ARE ALLOWED.

13. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION, FOR SEQUENCES AND PROCEDURES TO BE USED, AND TO ENSURE THE SAFETY OF THE EXISTING BUILDING AND ITS COMPONENT DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY.

14. CONTRACTOR SHALL COORDINATE ALL CIVIL, STRUCTURAL AND ELECTRICAL DRAWINGS FOR THE LOCATION OF ALL OPENINGS, RECESSES, BUILT-IN WORK, ETC.

15. CONTRACTOR SHALL RECEIVE CLARIFICATION IN WRITING AND SHALL RECEIVE IN WRITING AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEMS NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.

16. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND TO BE IN THE FIELD.

17. ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMEN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST-ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.

18. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS, AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL O.S.H.A REQUIREMENTS.

19. CONTRACTOR SHALL COORDINATE HIS WORK AND SCHEDULE HIS ACTIVITIES AND WORKING HOURS IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROPERTY OWNER AND/OR PROPERTY MANAGEMENT COMPANY.

20. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE WORK OF OTHERS AS IT MAY RELATE TO RADIO EQUIPMENT, ANTENNAS AND ANY OTHER PORTIONS OF THE WORK.

21. CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OR WHERE LOCAL CODES OR REGULATIONS MAY TAKE PRECEDENCE.

22. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING, ANTENNA AND ANTENNA CABLES AND REPAIR ANY DAMAGE THAT OCCURS DURING CONSTRUCTION.

23. CONTRACTOR SHALL REPAIR ALL EXISTING SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND WITH ADJACENT SURFACES.

24. CONTRACTOR SHALL KEEP CONTRACT AREA CLEAN, HAZARD FREE AND DISPOSE OF ALL DEBRIS AND RUBBISH. EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OF THE OWNER SHALL BE REMOVED. LEAVE PREMISES IN CLEAN CONDITIONS AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ITEMS UNTIL COMPLETION OF CONSTRUCTION.

25. BEFORE FINAL ACCEPTANCE OF THE WORK, CONTRACTOR SHALL REMOVE ALL EQUIPMENT, TEMPORARY WORKS, UNUSED AND USELESS MATERIALS, RUBBISH AND TEMPORARY STRUCTURES.

verizon

WIRELESS COMMUNICATIONS FACILITY

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864 OPENING HILL RD.
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SHEET TITLE:

GENERAL
CONSTRUCTION
NOTES

SHEET NUMBER:

DE-5

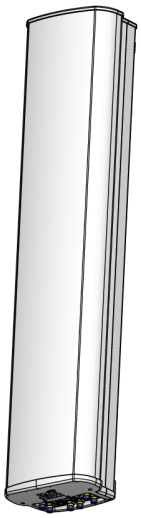
MX06FRO660-03

NWAV™ X-Pol Hex-Port Antenna

X-Pol Hex-Port 6 ft 60° Fast Roll Off antenna with independent tilt on 700 & 850 MHz:

2 ports 698-798, 824-894 MHz and 4 ports 1695-2180 MHz

- Fast Roll Off (FRO™) azimuth beam pattern improves Intra- and Inter-cell SINR
- Compatible with dual band 700/850 MHz radios with independent low band EDT without external diplexers
- 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 reduce leasing costs

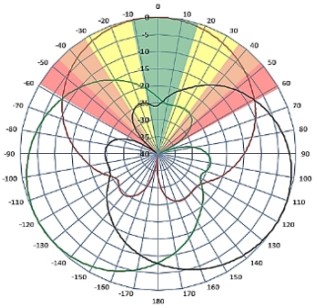


nwav

Fast Roll-Off antennas increase data throughput without compromising coverage

The horizontal beam produced by Fast Roll-Off (FRO) technology increases the Signal to Interference & Noise Ratio (SINR) by eliminating overlap between sectors .

Non-FRO antenna



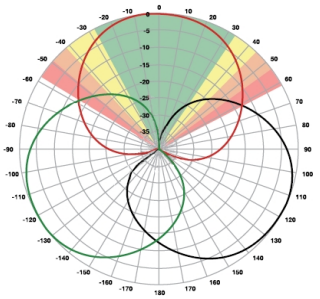
Large traditional antenna pattern overlap creates harmful interference.

JMA's FRO antenna pattern minimizes overlap, thereby minimizing interference.

LTE throughput	SINR	Speed (bps/Hz)	Speed increase	CQI
Excellent	>18	>4.5	333+%	8-10
Good	15-18	3.3-4.5	277%	6-7
Fair	10-15	2-3.3	160%	4-6
Poor	<10	<2	0%	1-3

The LTE radio automatically selects the best throughput based on measured SINR.

JMA FRO antenna



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	14.4	14.0	17.6	18.0	18.2
Horizontal beamwidth (HBW), degrees	60.5	53.0	55.0	55.0	55.5
Front-to-back ratio, co-polar power @180°± 30°, dB	>24	>24.0	>25.0	>25.0	>25.0
X-Pol discrimination (CPR) at boresight, dB	>15.0	>14.2	>18	>18	>15
Sector power ratio, percent	<3.5	<3.0	<3.7	<3.8	<3.6
Vertical beamwidth (VBW), degrees[1]	13.1	11.8	6.0	5.5	5.5
Electrical downtilt (EDT) range, degrees	2-14	2-14	0-9		
First upper side lobe (USLS) suppression, dB[1]	≤-15.0	≤-16.5	≤-16.0	≤-16.0	≤-16.0
Cross-polar isolation, port-to-port, dB[1]	25	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153		-153		
Max input power per any port, watts	300		250		
Total composite power all ports, watts	1500				

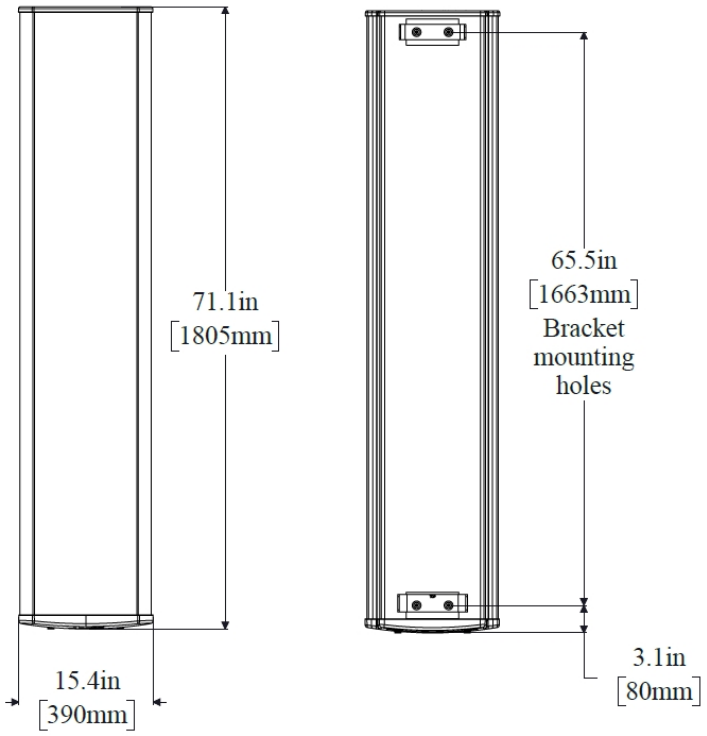
[1] Typical value over frequency and tilt

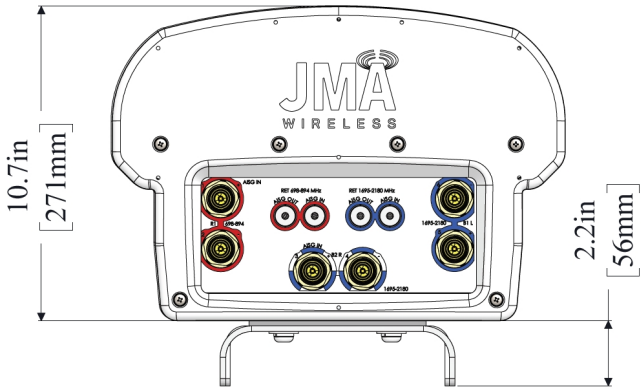
MX06FRO660-03

NWAV™ X-Pol Hex-Port Antenna

Mechanical specifications	
Dimensions height/width/depth, inches (mm)	71.3/ 15.4/ 10.7 (1811/ 392/ 273)
Shipping dimensions length/width/height, inches (mm)	82/ 20/ 15 (2083/ 508/ 381)
No. of RF input ports, connector type, and 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)	60 (27.0)
Shipping weight, lb (kg)	90 (41.0)
Antenna mounting and downtilt kit included with antenna	91900318
Net weight of the mounting and downtilt kit, lb (kg)	18 (8.18)
Range of mechanical up/down tilt	-2° to 14°
Rated wind survival speed, mph (km/h)	150 (241)
Frontal, lateral, and rear wind loading @ 150 km/h, lbf (N)	154 (685), 73 (325), 158 (703)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	2.6

Front view | **Back view** | **Bottom view**





Ordering information	
Antenna model	**Description**
MX06FRO660-03	6F X-Pol HEX FRO 60° independent tilt 700/850 RET, 4.3-10 & SBT
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations

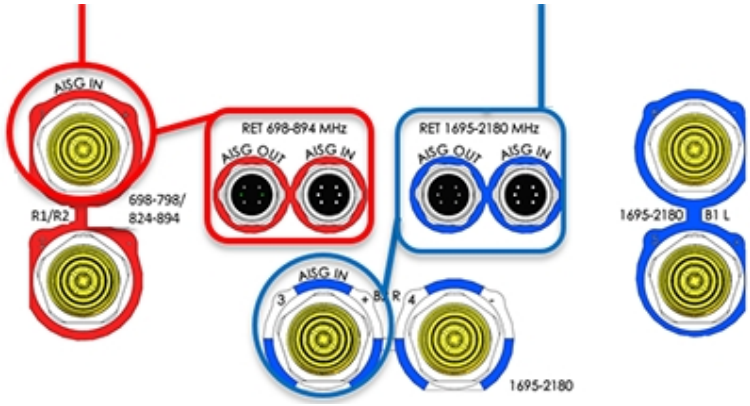
Remote electrical tilt (RET 1000) information	
RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	2 pairs of AISG male/female connectors
RET interface connector location	Bottom of the antenna
Total no. of internal RETs (low bands)	2
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 and 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
R1	698-798	1-2
R2	824-894	1-2

RET device	Band	RF port
B1/B2	1695-2180	3-6

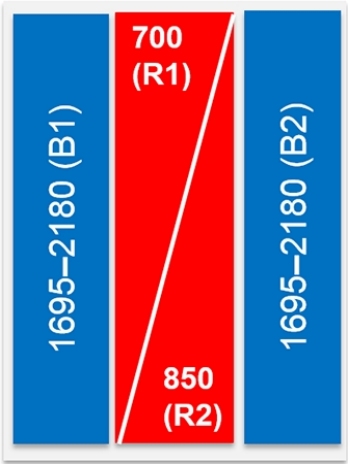


Array topology

3 sets of radiating arrays

R1/R2: 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

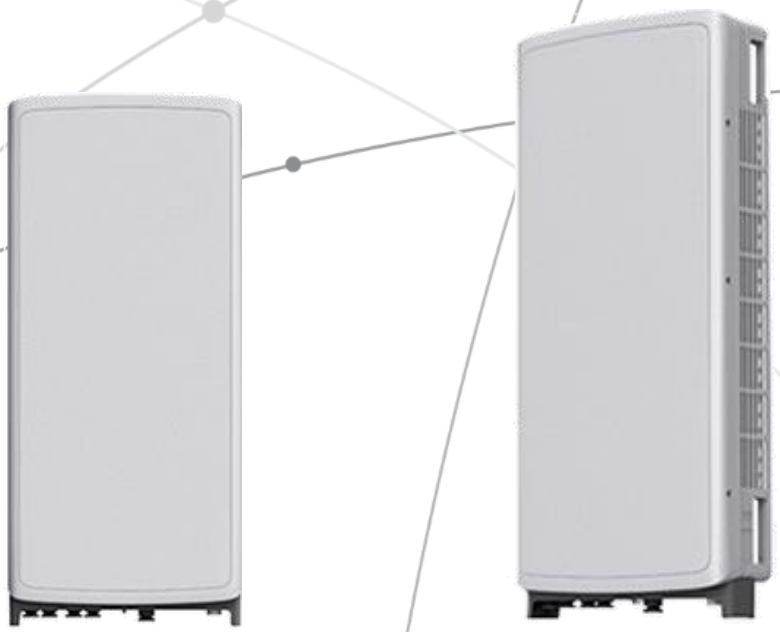
SAMSUNG

C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

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

Model Code : MT6407-77A

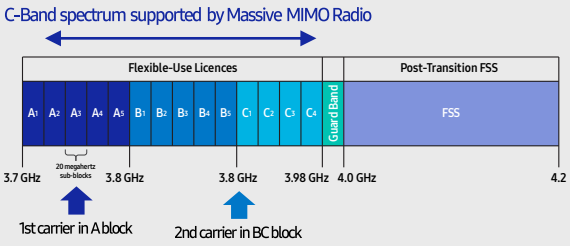


Points of Differentiation

Wide Bandwidth

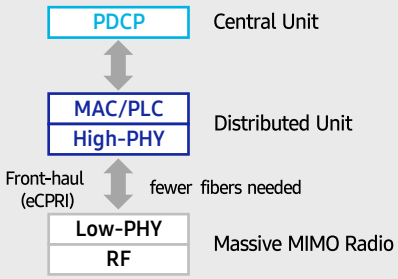
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

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



Future Proof Product

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



Enhanced Performance

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

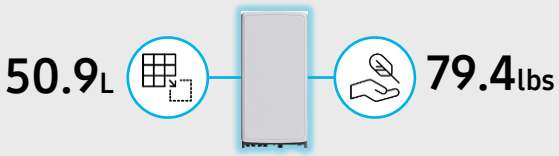
This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

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

Well Matched Design

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

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



Technical Specifications

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

SAMSUNG

About Samsung Electronics Co., Ltd.

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

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

SAMSUNG

Dual-Band Radio Unit
700/850MHz (B13/B5)
RFV01U-D2A

Samsung's RFV01U-D2A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.

The RFV01U-D2A RU targets dual-band support across Band 13 (700MHz) and Band 5 (850MHz), making it an ideal product for broad coverage footprints across multiple common low-end, long-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
B13: DL(746-756MHz)/UL(777-787MHz)
B5: DL(869-894MHz)/UL(824-849MHz)
Instantaneous Bandwidth: 10MHz(B13) + 25MHz(B5)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 207mm (29.9L)
Weight: 31.9kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

SAMSUNG

Dual-Band Radio Unit
AWS/PCS (B66/B2)
RFV01U-D1A

Samsung's RFV01U-D1A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.

The RFV01U-D1A RU targets dual-band support across Band 66 (AWS) and Band 2 (PCS), making it an ideal product for broad coverage footprints across multiple common mid-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation
- Built-in Broadcast Auxiliary Services (BAS) filter ensures compliant AWS operation without impacting footprint

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
    B66: DL(2,110-2,180MHz)/UL(1,710-1,780MHz)
    B2: DL(1,930-1,990MHz)/UL(1,850-1,910MHz)
Instantaneous Bandwidth:
    70MHz(B66) + 60MHz(B2)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 255mm (36.8L)
Weight: 38.3kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

ATTACHMENT 3

	General	Power	Density					
Site Name: Madison								
Tower Height: Verizon @ 170ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**FREQ.**	**CALC. POWER DENS**	**MAX. PERMISS.EXP.**	**FRACTION MPE**	**Total**
*T-Mobile	2	592	130	600	0.027691875	0.4	0.69%	
*T-Mobile	2	649	130	700	0.030358153	0.466666667	0.65%	
*T-Mobile	4	1102	130	1900	0.103096101	1	1.03%	
*T-Mobile	2	2204	130	1900	0.103096101	1	1.03%	
*T-Mobile	2	2589	130	2100	0.121105174	1	1.21%	
*Fire Company	1	100	180	46.06	0.001187806	0.2	0.06%	
*Police Dept	1	100	180	453.5	0.0012	0.3023	0.04%	
*AT&T	1	566	140	850	0.0113	0.5667	0.20%	
*AT&T	1	6311	140	1900	0.1264	1.0000	1.26%	
*AT&T	1	921	140	850	0.0184	0.5667	0.33%	
*AT&T	1	921	140	850	0.0184	0.5667	0.33%	
*AT&T	1	7114	140	2100	0.1425	1.0000	1.42%	
*AT&T	1	1423	140	737	0.0285	0.4913	0.58%	
*Sprint	1	438	150	850	0.0076	0.5667	0.13%	
*Sprint	2	438	150	850	0.0152	0.5667	0.27%	
*Sprint	5	623	150	1900	0.0540	1.0000	0.54%	
*Sprint	2	1556	150	1900	0.0540	1.0000	0.54%	
*Sprint	8	778	150	2500	0.1079	1.0000	1.08%	
*Nextel	9	100	160	851	0.0136	0.5673	0.24%	
VZW 700	**4**	**966**	**170**	**751**	**0.0048**	**0.5007**	**0.96%**	
VZW CDMA	**2**	**447**	**170**	**877.26**	**0.0011**	**0.5848**	**0.19%**	
VZW Cellular	**4**	**944**	**170**	**874**	**0.0047**	**0.5827**	**0.81%**	
VZW PCS	**4**	**1476**	**170**	**1975**	**0.0073**	**1.0000**	**0.73%**	
VZW AWS	**4**	**2316**	**170**	**2120**	**0.0115**	**1.0000**	**1.15%**	
VZW CBAND	**2**	**6531**	**170**	**3730.08**	**0.0325**	**1.0000**	**3.25%**	
								18.73%
* Source: Siting Council								

ATTACHMENT 4

PAUL J. FORD & COMPANY

Report Date: January 13, 2022

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

Structure: Existing 180-ft Self Support Tower
Verizon Site Name: MADISON CT
Site Address: 864 Opening Hill Rd
City, County, State: Madison, New Haven County, CT
Latitude, Longitude: 41.3573138, -72.638756

PJF Project: A42921-0018.003.8700

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

Analysis Criteria:
This analysis utilizes an ultimate 3-second gust wind speed of 140 mph (converted to an equivalent 108 mph nominal 3-second gust wind speed per Section 1609.3.1 for use with TIA-222 G) as required by the 2018 Connecticut State Building Code and Appendix N. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

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

Summary of Analysis Results:

Existing Structure:	Pass – 59.6%
Existing Foundation:	Pass – 46.0%

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

Respectfully Submitted by:
Paul J. Ford and Company

John M. Fawcett

John Fawcett
Structural Designer
jfawcett@pauljford.com AKT

01/13/2022

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 180-ft self-support tower design by Rohn per the last structural analysis by American Tower Corporation. All information regarding tower geometry and foundations were taken from this analysis as no manufacturer drawings or tower mapping were provided.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-G
Risk Category:	III
Ultimate Wind Speed:	140 mph
Nominal Wind Speed:	108 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	0.75 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
168.75	170.0	3	andrew	LNX-6514DS-A1M w/ Mount Pipe	6 2	1-5/8 1-1/4 hybrid
		3	jma wireless	91900314-02 SBS Bracket		
		6	jma wireless	MX06FRO660-03 w/ Mount Pipe		
		1	raycap	RVZDC-6627-PF-48		
		3	samsung telecommunications	B2/B66A RRH-BR049 (RFV01U-D1A)		
		3	samsung telecommunications	B5/B13 RRH-BR04C (RFV01U-D2A)		
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe		
		3	tower mounts	Rohn 6'x15' Boom Gate		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
180.0	186.0	1	miscl	12' 4-Bay Dipole	1	7/8
177.0	187.0	1	miscl	20' x 3" omni whip	2	7/8
	177.0	1	tower mount	6' sidearm (Vacant Mount)		
		1	tower mount	Side Arm Mount		
150.0	150.0	9	ericsson	RRUS-11	4	1-1/4
		3	rfs celwave	APXVSPP18-C-A20 w/ Mount Pipe		
		3	rfs celwave	APXVTM14-C-120 w/ Mount Pipe		
		3	tower mount	14' Sector Mount		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
140.0	140.0	3	cci antennas	HPA65R-BU6AA w/ Mount Pipe	2 12 4	3/8 1-1/4 3/4
		6	ericsson	RRUS-11		
		3	kathrein	80010965 w/ Mount Pipe		
		3	powerwave technologies	7770.00 w/ Mount Pipe		
		6	powerwave technologies	LGP1720X		
		2	raycap	DC6-48-60-18-8F		
		3	tower mount	14' Sector Mount		
130.0	130.0	3	ems wireless	RR90-17-DP	12 3	1-5/8 1-1/4
		3	ericsson	KRY 112 71/2		
		3	ericsson	RRUS-11		
		3	rfs celwave	APXVAARR24_43-U-NA20 w/ Mount Pipe		
		3	tower mount	12' sector mount		
120.0	122.0	1	miscl	4' x 1-3/4" omni whip	1	7/8
	120.0	1	tower mount	6' Side Arm Mount		
108.0	108.0	1	miscl	12" x 12" x 12" Junction Box	3	1-1/4
90.0	95.0	1	miscl	10' 4-bay dipole	1	7/8
	90.0	1	tower mount	6' Side Arm Mount		
86.0	88.0	1	miscl	4' x 1-3/4" omni whip	1	7/8
	86.0	1	tower mount	6' Side Arm Mount		
55.0	55.0	1	gps	GPS	1	1/2
		1	tower mount	3' Side Arm Mount		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
Structural Analysis Report	American Tower, 7/18/2019	383660	On Air Engineering
Structural Analysis Report	All-Points Technology, 10/21/2020	CT656100	On Air Engineering
RFDS	Verizon, 11/24/2021	16092583	On Air Engineering
FAA 2-C Survey Certification	Martinez Couch and Associates, LLC, 5/12/2021	-	On Air Engineering
Construction Drawings	On Air Engineering, 12/29/2021	-	On Air Engineering
Mount Analysis Report	Maser, 1/11/2022	21777866A Rev 2	On Air Engineering

3.1) Analysis Method

tnxTower (version 8.1.1.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

1) Tower and structures were maintained in accordance with the TIA-222 Standard.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
3) At the time of analysis, foundation information and a site-specific geotechnical report were not available. However, the structural analysis report, referenced in Table 3, referred to the original foundation design drawings and geotechnical report. Assuming the previous structural analysis is correct, we have analyzed the foundation.
4) Per assumption three, the original ROHN foundation design was not provided. If these documents are available, please provide them. The structural analysis by American Tower Corporation, dated 7/18/2019, specifically referenced the Rohn Foundation Drawings, hence, the foundation parameters from that analysis are assumed to be the most accurate and have been used in our analysis.
5) The APT Structural Analysis Report, dated 10/17/2020, only provides the tnx tower profile page, E-1 to provide member sizes. Based on that information, the tnx tower profile page, E-1, from our report utilized the same member sizes as the APT report. Any information not available in the APT report was obtained from the structural analysis from American Tower Corporation, dated 7/18/2019, which referenced the original Rohn tower drawings.

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T1	180 - 160	Leg	Pipe 3.5" x 0.216" (3 STD)	3	-7.73	75.60	10.2	Pass
T2	160 - 140	Leg	Pipe 4.5" x 0.337" (4 XS)	42	-26.63	169.40	15.7	Pass
T3	140 - 120	Leg	Pipe 5.563" x 0.375" (5 EH)	80	-60.29	252.79	23.8	Pass
T4	120 - 100	Leg	Pipe 6.625" x 0.340" (6 EHS)	119	-97.36	289.63	33.6	Pass
T5	100 - 80	Leg	Pipe 8.625" x 0.375" (8 EHS)	158	-127.29	407.78	31.2	Pass
T6	80 - 60	Leg	Pipe 8.625" x 0.500" (8 XS)	184	-162.37	533.61	30.4 33.4 (b)	Pass
T7	60 - 40	Leg	Pipe 8.625" x 0.500" (8 XS)	211	-197.80	533.61	37.1	Pass
T8	40 - 20	Leg	Pipe 10.75" x 0.500" (10 XS)	238	-232.85	704.40	33.1	Pass
T9	20 - 0	Leg	Pipe 10.75" x 0.500" (10 XS)	265	-267.30	704.40	37.9	Pass
T1	180 - 160	Diagonal	Pipe 2.375" x 0.154" (2 STD)	11	-4.81	19.32	24.9	Pass
T2	160 - 140	Diagonal	Pipe 2.375" x 0.218" (2 XS)	47	-6.50	21.65	30.0	Pass
T3	140 - 120	Diagonal	Pipe 2.375" x 0.218" (2 XS)	86	-9.80	18.50	53.0	Pass
T4	120 - 100	Diagonal	Pipe 2.875" x 0.203" (2.5 STD)	125	-9.73	27.83	35.0	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T5	100 - 80	Diagonal	Pipe 3.5" x 0.216" (3 STD)	164	-12.16	32.33	37.6	Pass
T6	80 - 60	Diagonal	Pipe 3.5" x 0.216" (3 STD)	191	-12.52	28.78	43.5	Pass
T7	60 - 40	Diagonal	Pipe 3.5" x 0.216" (3 STD)	218	-12.88	25.65	50.2	Pass
T8	40 - 20	Diagonal	Pipe 3.5" x 0.216" (3 STD)	249	-13.20	23.29	56.7	Pass
T9	20 - 0	Diagonal	Pipe 3.5" x 0.300" (3 XS)	276	-13.66	26.89	50.8	Pass
T1	180 - 160	Horizontal	Pipe 1.9" x 0.145" (1.5 STD)	10	-2.71	23.80	11.4	Pass
T2	160 - 140	Horizontal	Pipe 1.9" x 0.145" (1.5 STD)	46	-4.05	20.26	20.0	Pass
T3	140 - 120	Horizontal	Pipe 1.9" x 0.145" (1.5 STD)	85	-6.77	15.17	44.6	Pass
T4	120 - 100	Horizontal	Pipe 2.375" x 0.154" (2 STD)	124	-7.22	23.14	31.2	Pass
T5	100 - 80	Horizontal	Pipe 2.375" x 0.154" (2 STD)	163	-8.06	19.01	42.4	Pass
T6	80 - 60	Horizontal	Pipe 2.375" x 0.154" (2 STD)	190	-8.75	14.68	59.6	Pass
T7	60 - 40	Horizontal	Pipe 2.875" x 0.203" (2.5 STD)	217	-9.38	26.82	35.0 38.3 (b)	Pass
T8	40 - 20	Horizontal	Pipe 2.875" x 0.203" (2.5 STD)	247	-9.94	22.20	44.8	Pass
T9	20 - 0	Horizontal	Pipe 3.5" x 0.216" (3 STD)	274	-10.52	36.29	29.0 43.5 (b)	Pass
T1	180 - 160	Top Girt	Pipe 1.9" x 0.145" (1.5 STD)	4	-0.16	23.80	0.7	Pass
T1	180 - 160	Inner Bracing	L 2 x 2 x 1/8	37	-0.00	6.84	0.7	Pass
T2	160 - 140	Inner Bracing	L 2 x 2 x 1/8	54	-0.01	5.09	0.8	Pass
T3	140 - 120	Inner Bracing	L 2 x 2 x 1/8	93	-0.01	3.47	0.9	Pass
T4	120 - 100	Inner Bracing	L 2 x 2 x 1/8	130	-0.01	2.52	1.0	Pass
T5	100 - 80	Inner Bracing	L 2 x 2 x 1/8	171	-0.01	1.99	1.1	Pass
T6	80 - 60	Inner Bracing	L 2.5 x 2.5 x 3/16	196	-0.01	4.49	0.8	Pass
T7	60 - 40	Inner Bracing	L 3 x 3 x 3/16	223	-0.01	6.32	0.9	Pass
T8	40 - 20	Inner Bracing	L 3.5 x 3.5 x 1/4	250	-0.02	10.88	0.7	Pass
T9	20 - 0	Inner Bracing	L 3.5 x 3.5 x 1/4	277	-0.02	9.08	0.7	Pass
							Summary	
						Leg (T9)	37.9	Pass
						Diagonal (T8)	56.7	Pass
						Horizontal (T6)	59.6	Pass
						Top Girt (T1)	0.7	Pass
						Inner Bracing (T5)	1.1	Pass
						Bolt Checks	41.4	Pass
						Rating =	59.6	Pass

Table 5 - Tower Component Stresses vs. Capacity

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	36.2	Pass
1	Base Foundation (Structure)	0	9.3	Pass
1	Base Foundation (Soil Interaction)	0	46.0	Pass

Structure Rating (max from all components) =	**59.6%**

Notes:
1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.

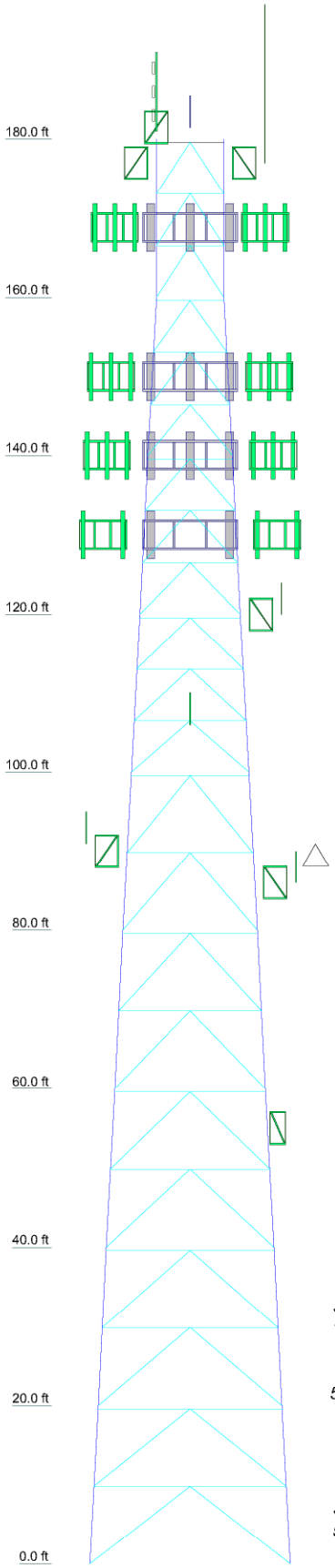
4.1) Recommendations

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

APPENDIX A

TNXTOWER OUTPUT

Section	T9	T8	T7	T6	T5	T4	T3	T2	T1	
Legs	Pipe 10.75" x 0.500" (10 XS)		Pipe 8.625" x 0.500" (8 XS)		D	C	B	Pipe 4.5" x 0.337" (4 XS)	A	
Leg Grade	A618-50									
Diagonals	Pipe 3.5" x 0.300" (3 XS)		Pipe 3.5" x 0.216" (3 STD)			F		Pipe 2.375" x 0.218" (2 XS)	E	
Diagonal Grade	A618-50									
Top Girts	N.A.								G	
Horizontals	A	Pipe 2.875" x 0.203" (2.5 STD)			Pipe 2.375" x 0.154" (2 STD)			Pipe 1.9" x 0.145" (1.5 STD)		
Inner Bracing	L 3.5 x 3.5 x 1/4		L 3 x 3 x 3/16		L 2.5 x 2.5 x 3/16		L 2 x 2 x 1/8			
Face Width (ft)	25.33	23.2312	21.1325	19.0338	16.935	14.8363	12.7375	10.6388	8.54	
# Panels @ (ft)	37.2	7.4	6.4	10 @ 9.79167	5.3	4.8	3.9	3.2	2.7	2.1	1.4	12 @ 6.52778
Weight (K)										



SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	Pipe 3.5" x 0.216" (3 STD)	E	Pipe 2.375" x 0.154" (2 STD)
B	Pipe 5.563" x 0.375" (5 EH)	F	Pipe 2.875" x 0.203" (2.5 STD)
C	Pipe 6.625" x 0.340" (6 EHS)	G	Pipe 1.9" x 0.145" (1.5 STD)
D	Pipe 8.625" x 0.375" (8 EHS)		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A618-50	50 ksi	70 ksi			

TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-G Standard.
3. Tower designed for a 108 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class III.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 59.6%

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 283 K
SHEAR: 34 K

UPLIFT: -246 K
SHEAR: 31 K

AXIAL 194 K
SHEAR 17 K *MOMENT 1840 kip-ft*
TORQUE 12 kip-ft
50 mph WIND - 0.75 in ICE

AXIAL 67 K
SHEAR 58 K *MOMENT 5811 kip-ft*
TORQUE 64 kip-ft
REACTIONS - 108 mph WIND

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

Job:	Existing 180-ft SST / Madison, CT		
Project:	PSLC 469121 / PJF 42921-0018		
Client: On Air Engineering	Drawn by: JMF		App'd:
Code: TIA-222-G	Date: 01/13/22		Scale: NTS
Path: G:\TOWER\429 On Air Engineering\42\42921-0018 Madison, CT\42921-0018.003.ttf\00 revised SA\tnx\42921-0018.003.ttf00.wt			Dwg No. E-1

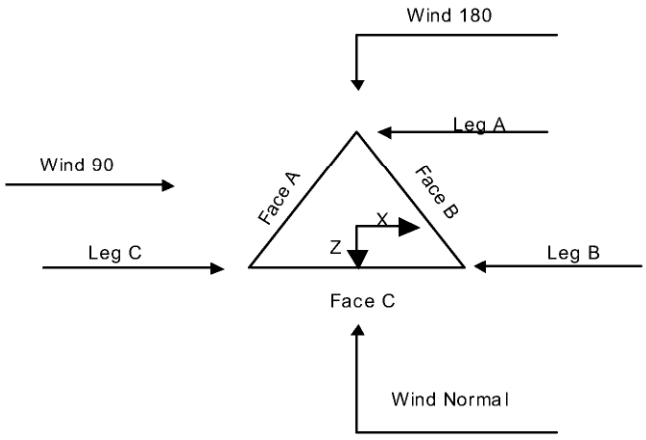
Tower Input Data

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 25.33 ft at the base.
This tower is designed using the TIA-222-G standard.
The following design criteria apply:

- Tower is located in New Haven County, Connecticut.
- ASCE 7-10 Wind Data is used (wind speeds converted to nominal values).
- Basic wind speed of 108 mph.
- Structure Class III.
- Exposure Category B.
- Topographic Category 1.
- Crest Height 0.00 ft.
- Nominal ice thickness of 0.75 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.
- Pressures are calculated at each section.
- Stress ratio used in tower member design is 1.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

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



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			8.54	1	20.00
T3	140.00-120.00			10.64	1	20.00
T4	120.00-100.00			12.74	1	20.00
T5	100.00-80.00			14.84	1	20.00
T6	80.00-60.00			16.94	1	20.00
T7	60.00-40.00			19.03	1	20.00
T8	40.00-20.00			21.13	1	20.00
T9	20.00-0.00			23.23	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	6.53	K Brace Down	No	Yes	5.00	0.00
T2	160.00-140.00	6.53	K Brace Down	No	Yes	5.00	0.00
T3	140.00-120.00	6.53	K Brace Down	No	Yes	5.00	0.00
T4	120.00-100.00	6.53	K Brace Down	No	Yes	5.00	0.00
T5	100.00-80.00	9.79	K Brace Down	No	Yes	5.00	0.00
T6	80.00-60.00	9.79	K Brace Down	No	Yes	5.00	0.00
T7	60.00-40.00	9.79	K Brace Down	No	Yes	5.00	0.00
T8	40.00-20.00	9.79	K Brace Down	No	Yes	5.00	0.00
T9	20.00-0.00	9.79	K Brace Down	No	Yes	5.00	0.00

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	Pipe 3.5" x 0.216" (3 STD)	A618-50 (50 ksi)	Pipe	Pipe 2.375" x 0.154" (2 STD)	A618-50 (50 ksi)
T2 160.00-140.00	Pipe	Pipe 4.5" x 0.337" (4 XS)	A618-50 (50 ksi)	Pipe	Pipe 2.375" x 0.218" (2 XS)	A618-50 (50 ksi)
T3 140.00-120.00	Pipe	Pipe 5.563" x 0.375" (5 EH)	A618-50 (50 ksi)	Pipe	Pipe 2.375" x 0.218" (2 XS)	A618-50 (50 ksi)
T4 120.00-100.00	Pipe	Pipe 6.625" x 0.340" (6 EHS)	A618-50 (50 ksi)	Pipe	Pipe 2.875" x 0.203" (2.5 STD)	A618-50 (50 ksi)
T5 100.00-80.00	Pipe	Pipe 8.625" x 0.375" (8 EHS)	A618-50 (50 ksi)	Pipe	Pipe 3.5" x 0.216" (3 STD)	A618-50 (50 ksi)
T6 80.00-60.00	Pipe	Pipe 8.625" x 0.500" (8 XS)	A618-50 (50 ksi)	Pipe	Pipe 3.5" x 0.216" (3 STD)	A618-50 (50 ksi)
T7 60.00-40.00	Pipe	Pipe 8.625" x 0.500" (8 XS)	A618-50 (50 ksi)	Pipe	Pipe 3.5" x 0.216" (3 STD)	A618-50 (50 ksi)
T8 40.00-20.00	Pipe	Pipe 10.75" x 0.500" (10 XS)	A618-50 (50 ksi)	Pipe	Pipe 3.5" x 0.216" (3 STD)	A618-50 (50 ksi)
T9 20.00-0.00	Pipe	Pipe 10.75" x 0.500" (10 XS)	A618-50 (50 ksi)	Pipe	Pipe 3.5" x 0.300" (3 XS)	A618-50 (50 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	Pipe		A618-50 (50 ksi)	Pipe	Pipe 1.9" x 0.145" (1.5 STD)	A618-50 (50 ksi)
T2 160.00-140.00	None	Pipe		A618-50 (50 ksi)	Pipe	Pipe 1.9" x 0.145" (1.5 STD)	A618-50 (50 ksi)
T3 140.00-120.00	None	Pipe		A618-50 (50 ksi)	Pipe	Pipe 1.9" x 0.145" (1.5 STD)	A618-50 (50 ksi)
T4 120.00-100.00	None	Pipe		A618-50 (50 ksi)	Pipe	Pipe 2.375" x 0.154" (2 STD)	A618-50 (50 ksi)
T5 100.00-80.00	None	Pipe		A618-50 (50 ksi)	Pipe	Pipe 2.375" x 0.154" (2 STD)	A618-50 (50 ksi)
T6 80.00-60.00	None	Pipe		A618-50 (50 ksi)	Pipe	Pipe 2.375" x 0.154" (2 STD)	A618-50 (50 ksi)
T7 60.00-40.00	None	Pipe		A618-50 (50 ksi)	Pipe	Pipe 2.875" x 0.203" (2.5 STD)	A618-50 (50 ksi)
T8 40.00-20.00	None	Pipe		A618-50 (50 ksi)	Pipe	Pipe 2.875" x 0.203" (2.5 STD)	A618-50 (50 ksi)
T9 20.00-0.00	None	Pipe		A618-50 (50 ksi)	Pipe	Pipe 3.5" x 0.216" (3 STD)	A618-50 (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	Pipe		A618-50 (50 ksi)	Single Angle	L 2 x 2 x 1/8	A36 (36 ksi)
T2 160.00-140.00	Pipe		A618-50 (50 ksi)	Single Angle	L 2 x 2 x 1/8	A36 (36 ksi)
T3 140.00-120.00	Pipe		A618-50 (50 ksi)	Single Angle	L 2 x 2 x 1/8	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 120.00-100.00	Pipe		A618-50 (50 ksi)	Single Angle	L 2 x 2 x 1/8	A36 (36 ksi)
T5 100.00-80.00	Pipe		A618-50 (50 ksi)	Single Angle	L 2 x 2 x 1/8	A36 (36 ksi)
T6 80.00-60.00	Pipe		A618-50 (50 ksi)	Single Angle	L 2.5 x 2.5 x 3/16	A36 (36 ksi)
T7 60.00-40.00	Pipe		A618-50 (50 ksi)	Single Angle	L 3 x 3 x 3/16	A36 (36 ksi)
T8 40.00-20.00	Pipe		A618-50 (50 ksi)	Single Angle	L 3.5 x 3.5 x 1/4	A36 (36 ksi)
T9 20.00-0.00	Pipe		A618-50 (50 ksi)	Single Angle	L 3.5 x 3.5 x 1/4	A36 (36 ksi)

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	0.38	A36 (36 ksi)	1	1	1.1	0.00	0.00	36.00
T2 160.00-140.00	0.00	0.38	A36 (36 ksi)	1	1	1.1	36.00	36.00	36.00
T3 140.00-120.00	0.00	0.38	A36 (36 ksi)	1	1	1.1	36.00	36.00	36.00
T4 120.00-100.00	0.00	0.38	A36 (36 ksi)	1	1	1.1	0.00	0.00	36.00
T5 100.00-80.00	0.00	0.38	A36 (36 ksi)	1	1	1.1	36.00	36.00	36.00
T6 80.00-60.00	0.00	0.38	A36 (36 ksi)	1	1	1.1	36.00	36.00	36.00
T7 60.00-40.00	0.00	0.38	A36 (36 ksi)	1	1	1.1	36.00	36.00	36.00
T8 40.00-20.00	0.00	0.38	A36 (36 ksi)	1	1	1.1	36.00	36.00	36.00
T9 20.00-0.00	0.00	0.38	A36 (36 ksi)	1	1	1.1	36.00	36.00	36.00

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1 180.00-160.00	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T2 160.00-140.00	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T3 140.00-120.00	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T4 120.00-100.00	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T5 100.00-80.00	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T6 80.00-60.00	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T7 60.00-40.00	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T8 40.00-20.00	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T9 20.00-0.00	Yes	No	1	1 1	1 1	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 Net Width Deduct in	U	Diagonal Net Width Deduct in	U	Top Girt Net Width Deduct in	U	Bottom Girt Net Width Deduct in	U	Mid Girt Net Width Deduct in	U	Long Horizontal Net Width Deduct in	U	Short Horizontal Net Width Deduct in	U
T1 180.00-160.00	0.00	1	0.00	1	0.00	1	0.00	1	0.00	0.75	0.00	1	0.00	0.75
T2 160.00-140.00	0.00	1	0.00	1	0.00	1	0.00	1	0.00	0.75	0.00	1	0.00	0.75
T3 140.00-120.00	0.00	1	0.00	1	0.00	1	0.00	1	0.00	1	0.00	1	0.00	1
T4 120.00-100.00	0.00	1	0.00	1	0.00	1	0.00	1	0.00	0.75	0.00	1	0.00	0.75
T5 100.00-80.00	0.00	1	0.00	1	0.00	1	0.00	1	0.00	0.75	0.00	1	0.00	0.75
T6 80.00-60.00	0.00	1	0.00	1	0.00	1	0.00	1	0.00	0.75	0.00	1	0.00	0.75
T7 60.00-40.00	0.00	1	0.00	1	0.00	1	0.00	1	0.00	0.75	0.00	1	0.00	0.75
T8 40.00-20.00	0.00	1	0.00	1	0.00	1	0.00	1	0.00	0.75	0.00	1	0.00	0.75
T9 20.00-0.00	0.00	1	0.00	1	0.00	1	0.00	1	0.00	0.75	0.00	1	0.00	0.75

Tower Elevation ft	Redundant Horizontal Net Width Deduct in	U	Redundant Diagonal Net Width Deduct in	U	Redundant Sub-Diagonal Net Width Deduct in	U	Redundant Sub-Horizontal Net Width Deduct in	U	Redundant Vertical Net Width Deduct in	U	Redundant Hip Net Width Deduct in	U	Redundant Hip Diagonal Net Width Deduct in	U
T1 180.00-160.00	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T2 160.00-140.00	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T3 140.00-120.00	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T4 120.00-100.00	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T5 100.00-80.00	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T6 80.00-60.00	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T7 60.00-40.00	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T8 40.00-20.00	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T9 20.00-0.00	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 180.00-160.00	Flange	0.88 A325N	4	0.63 A325N	3	0.00 A325N	0	0.00 A325N	0	0.00 A325N	0	0.63 A325N	2	0.00 A325N	0
T2 160.00-140.00	Flange	1.00 A325N	4	0.63 A325N	3	0.00 A325N	0	0.00 A325N	0	0.63 A325N	0	0.63 A325N	2	0.63 A325N	0
T3 140.00-120.00	Flange	1.00 A325N	6	0.63 A325N	3	0.00 A325N	0	0.00 A325N	0	0.00 A325N	0	0.63 A325N	2	0.00 A325N	0
T4 120.00-100.00	Flange	1.00 A325N	8	0.63 A325N	3	0.00 A325N	0	0.00 A325N	0	0.00 A325N	0	0.63 A325N	2	0.00 A325N	0
T5 100.00-80.00	Flange	1.00 A325N	8	0.63 A325N	3	0.00 A325N	0	0.00 A325N	0	0.63 A325N	0	0.63 A325N	2	0.63 A325N	0
T6 80.00-60.00	Flange	1.00 A325N	8	0.63 A325N	3	0.00 A325N	0	0.00 A325N	0	0.63 A325N	0	0.63 A325N	2	0.63 A325N	0
T7 60.00-40.00	Flange	1.00 A325N	12	0.63 A325N	3	0.00 A325N	0	0.00 A325N	0	0.63 A325N	0	0.63 A325N	2	0.63 A325N	0
T8 40.00-20.00	Flange	1.00 A325N	12	0.63 A325N	3	0.00 A325N	0	0.00 A325N	0	0.63 A325N	0	0.63 A325N	2	0.63 A325N	0
T9 20.00-0.00	Flange	1.00 A354-BC	0	0.63 A325N	3	0.00 A325N	0	0.00 A325N	0	0.63 A325N	0	0.63 A325N	2	0.63 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
First SA loading ***													
1.5" flat Cable Ladder Rail	A	No	No	Af (CaAa)	173.30 - 0.00	0.00	0.4	2	2	24.00 1.50	1.50		1.80
LDF7-50A (1 5/8" foam)	A	No	No	Ar (CaAa)	170.00 - 0.00	0.00	0.4	6	6	0.50 1.98	1.98		0.92
HYBRID(1-1/4)	A	No	No	Ar (CaAa)	170.00 - 0.00	0.00	0.4	2	2	1.25	1.25		1.00
***													
***													
***													
***													
***													
1.5" flat Cable Ladder Rail	A	No	No	Af (CaAa)	131.00 - 0.00	0.00	-0.4	2	2	24.00 1.50	1.50		1.80
***													
1.5" flat Cable Ladder Rail	B	No	No	Af (CaAa)	166.70 - 0.00	0.00	0.35	2	2	24.00 1.50	1.50		1.80
***													
1.5" flat Cable Ladder Rail	B	No	No	Af (CaAa)	166.70 - 0.00	0.00	-0.4	2	2	24.00 1.50	1.50		1.80
***													
1.5" flat Cable Ladder Rail	C	No	No	Af (CaAa)	160.00 - 0.00	0.00	-0.4	2	2	24.00 1.50	1.50		1.80

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
second SA loading*													
Safety Line 3/8	C	No	No	Ar (CaAa)	180.00 - 5.00	0.00	-0.5	1	1	0.38	0.38		0.22
LDF7-50A (1 5/8" foam)	B	No	No	Ar (CaAa)	130.00 - 5.00	0.00	-0.38	12	6	0.50	1.98		0.92
LDF6-50 (1 1/4" foam)	B	No	No	Ar (CaAa)	130.00 - 5.00	0.00	-0.42	3	3	0.75 1.55	1.55		0.66
LDF6-50 (1 1/4" foam)	B	No	No	Ar (CaAa)	140.00 - 5.00	0.00	0.3	12	12	0.75 1.55	1.55		0.66
3/4" power	B	No	No	Ar (CaAa)	140.00 - 5.00	0.00	0.36	4	4	0.71	0.71		0.30
LDF2-50 (3/8" foam)	B	No	No	Ar (CaAa)	140.00 - 5.00	6.00	0.36	2	2	0.44	0.44		0.08
LDF5-50A (7/8" foam)	A	No	No	Ar (CaAa)	86.00 - 5.00	0.00	-0.27	1	1	1.09	1.09		0.33
LDF5-50A (7/8" foam)	A	No	No	Ar (CaAa)	90.00 - 5.00	0.00	-0.29	1	1	1.09	1.09		0.33
LDF5-50A (7/8" foam)	A	No	No	Ar (CaAa)	120.00 - 5.00	0.00	-0.31	1	1	1.09	1.09		0.33
LDF5-50A (7/8" foam)	A	No	No	Ar (CaAa)	177.00 - 5.00	0.00	-0.37	2	2	1.09	1.09		0.33
LDF4-50A (1/2" foam)	A	No	No	Ar (CaAa)	55.00 - 5.00	3.00	-0.34	1	1	0.63	0.63		0.15
LDF5-50A (7/8" foam)	A	No	No	Ar (CaAa)	180.00 - 5.00	0.00	-0.4	1	1	1.09	1.09		0.33
LDF6-50 (1 1/4" foam)	A	No	No	Ar (CaAa)	150.00 - 5.00	0.00	-0.34	3	3	0.75 1.55	1.55		0.66
LDF6-50 (1 1/4" foam) ***	A	No	No	Ar (CaAa)	150.00 - 5.00	0.00	-0.25	1	1	0.75 1.55	1.55		0.66

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
2.375" x 7' Safety Climb Extension ***	A	From Leg	0.00 0.00 3.50	0.000	180.00	No Ice 1/2" Ice 1" Ice	1.72 2.48 2.96	1.72 2.48 2.96	0.02 0.04 0.05
2.375" OD x 3' Mount Pipe	C	From Leg	0.00 0.00 1.50	0.000	180.00	No Ice 1/2" Ice 1" Ice	0.58 0.77 0.97	0.58 0.77 0.97	0.03 0.03 0.04
12' 4-Bay Dipole	C	From Leg	0.00 0.00 6.00	0.000	180.00	No Ice 1/2" Ice 1" Ice	4.00 6.00 8.00	4.00 6.00 8.00	0.06 0.10 0.14
Side Arm Mount	B	From Leg	3.00 0.00 0.00	0.000	177.00	No Ice 1/2" Ice 1" Ice	0.41 0.81 1.23	3.06 5.10 7.20	0.05 0.08 0.12
20' x 3" omni whip	B	From Leg	6.00 0.00 10.00	0.000	177.00	No Ice 1/2" Ice 1" Ice	3.56 7.13 10.70	3.56 7.13 10.70	0.02 0.05 0.07
6' sidearm (Vacant Mount)	C	From Leg	3.00 0.00 0.00	0.000	177.00	No Ice 1/2" Ice	0.41 0.81 1.23	3.06 5.10 7.20	0.05 0.08 0.12

Description	*Face or Leg*	*Offset Type*	*Offsets: Horz Lateral Vert* *ft* *ft* *ft*	*Azimuth Adjustment* *°*	*Placement* *ft*		C_AA_A *Front* ft^2	C_AA_A *Side* ft^2	*Weight* *K*
***						1" Ice			
Rohn 6'x15' Boom Gate	A	From Leg	2.00	0.000	168.75	No Ice	19.20	14.80	0.36
			0.00			1/2" Ice	27.70	22.00	0.54
			0.00			1" Ice	36.20	29.20	0.71
Rohn 6'x15' Boom Gate	B	From Leg	2.00	0.000	168.75	No Ice	19.20	14.80	0.36
			0.00			1/2" Ice	27.70	22.00	0.54
			0.00			1" Ice	36.20	29.20	0.71
Rohn 6'x15' Boom Gate	C	From Leg	2.00	0.000	168.75	No Ice	19.20	14.80	0.36
			0.00			1/2" Ice	27.70	22.00	0.54
			0.00			1" Ice	36.20	29.20	0.71
(2) MX06FRO660-03 w/ Mount Pipe	A	From Leg	4.00	0.000	168.75	No Ice	10.11	8.99	0.10
			0.00			1/2" Ice	10.68	10.15	0.19
			1.25			1" Ice	11.22	11.03	0.29
(2) MX06FRO660-03 w/ Mount Pipe	B	From Leg	4.00	0.000	168.75	No Ice	10.11	8.99	0.10
			0.00			1/2" Ice	10.68	10.15	0.19
			1.25			1" Ice	11.22	11.03	0.29
(2) MX06FRO660-03 w/ Mount Pipe	C	From Leg	4.00	0.000	168.75	No Ice	10.11	8.99	0.10
			0.00			1/2" Ice	10.68	10.15	0.19
			1.25			1" Ice	11.22	11.03	0.29
MT6407-77A w/ Mount Pipe	A	From Leg	4.00	0.000	168.75	No Ice	4.91	2.68	0.10
			0.00			1/2" Ice	5.26	3.14	0.14
			1.25			1" Ice	5.61	3.62	0.18
MT6407-77A w/ Mount Pipe	B	From Leg	4.00	0.000	168.75	No Ice	4.91	2.68	0.10
			0.00			1/2" Ice	5.26	3.14	0.14
			1.25			1" Ice	5.61	3.62	0.18
MT6407-77A w/ Mount Pipe	C	From Leg	4.00	0.000	168.75	No Ice	4.91	2.68	0.10
			0.00			1/2" Ice	5.26	3.14	0.14
			1.25			1" Ice	5.61	3.62	0.18
LNX-6514DS-A1M w/ Mount Pipe	A	From Leg	4.00	0.000	168.75	No Ice	8.41	7.08	0.06
			0.00			1/2" Ice	8.97	8.27	0.13
			1.25			1" Ice	9.50	9.18	0.21
LNX-6514DS-A1M w/ Mount Pipe	B	From Leg	4.00	0.000	168.75	No Ice	8.41	7.08	0.06
			0.00			1/2" Ice	8.97	8.27	0.13
			1.25			1" Ice	9.50	9.18	0.21
LNX-6514DS-A1M w/ Mount Pipe	C	From Leg	4.00	0.000	168.75	No Ice	8.41	7.08	0.06
			0.00			1/2" Ice	8.97	8.27	0.13
			1.25			1" Ice	9.50	9.18	0.21
91900314-02 SBS Bracket	A	From Leg	4.00	0.000	168.75	No Ice	0.00	0.00	0.03
			0.00			1/2" Ice	0.00	0.00	0.05
			1.25			1" Ice	0.00	0.00	0.07
91900314-02 SBS Bracket	B	From Leg	4.00	0.000	168.75	No Ice	0.00	0.00	0.03
			0.00			1/2" Ice	0.00	0.00	0.05
			1.25			1" Ice	0.00	0.00	0.07
91900314-02 SBS Bracket	C	From Leg	4.00	0.000	168.75	No Ice	0.00	0.00	0.03
			0.00			1/2" Ice	0.00	0.00	0.05
			1.25			1" Ice	0.00	0.00	0.07
RVZDC-6627-PF-48	A	From Leg	4.00	0.000	168.75	No Ice	3.79	2.51	0.03
			0.00			1/2" Ice	4.04	2.73	0.06
			1.25			Ice	4.30	2.95	0.10

Description	*Face or Leg*	*Offset Type*	*Offsets: Horz Lateral Vert* ft ft ft	*Azimuth Adjustment* °	*Placement* ft		C_AA_A *Front* ft^2	C_AA_A *Side* ft^2	*Weight* K
						1" Ice			
B2/B66A RRH-BR049	A	From Leg	4.00	0.000	168.75	No Ice	1.88	1.25	0.08
(RFV01U-D1A)			0.00			1/2"	2.05	1.39	0.10
			1.25			Ice	2.22	1.54	0.12
						1" Ice			
B2/B66A RRH-BR049	B	From Leg	4.00	0.000	168.75	No Ice	1.88	1.25	0.08
(RFV01U-D1A)			0.00			1/2"	2.05	1.39	0.10
			1.25			Ice	2.22	1.54	0.12
						1" Ice			
B2/B66A RRH-BR049	C	From Leg	4.00	0.000	168.75	No Ice	1.88	1.25	0.08
(RFV01U-D1A)			0.00			1/2"	2.05	1.39	0.10
			1.25			Ice	2.22	1.54	0.12
						1" Ice			
B5/B13 RRH-BR04C	A	From Leg	4.00	0.000	168.75	No Ice	1.88	1.01	0.07
(RFV01U-D2A)			0.00			1/2"	2.05	1.14	0.09
			1.25			Ice	2.22	1.28	0.11
						1" Ice			
B5/B13 RRH-BR04C	B	From Leg	4.00	0.000	168.75	No Ice	1.88	1.01	0.07
(RFV01U-D2A)			0.00			1/2"	2.05	1.14	0.09
			1.25			Ice	2.22	1.28	0.11
						1" Ice			
B5/B13 RRH-BR04C	C	From Leg	4.00	0.000	168.75	No Ice	1.88	1.01	0.07
(RFV01U-D2A)			0.00			1/2"	2.05	1.14	0.09
			1.25			Ice	2.22	1.28	0.11
						1" Ice			
***									
APXVSPP18-C-A20 w/	A	From Leg	4.00	0.000	150.00	No Ice	8.26	7.47	0.09
Mount Pipe			0.00			1/2"	8.82	8.66	0.16
			0.00			Ice	9.35	9.56	0.24
						1" Ice			
APXVSPP18-C-A20 w/	B	From Leg	4.00	0.000	150.00	No Ice	8.26	7.47	0.09
Mount Pipe			0.00			1/2"	8.82	8.66	0.16
			0.00			Ice	9.35	9.56	0.24
						1" Ice			
APXVSPP18-C-A20 w/	C	From Leg	4.00	0.000	150.00	No Ice	8.26	7.47	0.09
Mount Pipe			0.00			1/2"	8.82	8.66	0.16
			0.00			Ice	9.35	9.56	0.24
						1" Ice			
APXVTM14-C-120 w/	A	From Leg	4.00	0.000	150.00	No Ice	6.58	4.96	0.08
Mount Pipe			0.00			1/2"	7.03	5.75	0.13
			0.00			Ice	7.47	6.47	0.19
						1" Ice			
APXVTM14-C-120 w/	B	From Leg	4.00	0.000	150.00	No Ice	6.58	4.96	0.08
Mount Pipe			0.00			1/2"	7.03	5.75	0.13
			0.00			Ice	7.47	6.47	0.19
						1" Ice			
APXVTM14-C-120 w/	C	From Leg	4.00	0.000	150.00	No Ice	6.58	4.96	0.08
Mount Pipe			0.00			1/2"	7.03	5.75	0.13
			0.00			Ice	7.47	6.47	0.19
						1" Ice			
(3) RRUS-11	A	From Leg	4.00	0.000	150.00	No Ice	2.79	1.19	0.05
			0.00			1/2"	3.00	1.34	0.07
			0.00			Ice	3.21	1.50	0.09
						1" Ice			
(3) RRUS-11	B	From Leg	4.00	0.000	150.00	No Ice	2.79	1.19	0.05
			0.00			1/2"	3.00	1.34	0.07
			0.00			Ice	3.21	1.50	0.09
						1" Ice			
(3) RRUS-11	C	From Leg	4.00	0.000	150.00	No Ice	2.79	1.19	0.05
			0.00			1/2"	3.00	1.34	0.07
			0.00			Ice	3.21	1.50	0.09
						1" Ice			
14' Sector Mount	A	From Leg	2.00	0.000	150.00	No Ice	17.35	13.30	0.35
			0.00			1/2"	25.55	20.35	0.50
			0.00			Ice	33.75	27.40	0.65

Description	*Face or Leg*	*Offset Type*	*Offsets: Horz Lateral Vert* *ft* *ft* *ft*	*Azimuth Adjustment* *°*	*Placement* *ft*		C_AA_A *Front* ft^2	C_AA_A *Side* ft^2	*Weight* *K*
						1" Ice			
14' Sector Mount	B	From Leg	2.00	0.000	150.00	No Ice	17.35	13.30	0.35
			0.00			1/2"	25.55	20.35	0.50
			0.00			Ice	33.75	27.40	0.65
						1" Ice			
14' Sector Mount	C	From Leg	2.00	0.000	150.00	No Ice	17.35	13.30	0.35
			0.00			1/2"	25.55	20.35	0.50
			0.00			Ice	33.75	27.40	0.65
						1" Ice			
***									
80010965 w/ Mount Pipe	A	From Leg	4.00	0.000	140.00	No Ice	14.05	7.63	0.14
			0.00			1/2"	14.69	8.90	0.23
			0.00			Ice	15.30	9.96	0.34
						1" Ice			
80010965 w/ Mount Pipe	B	From Leg	4.00	0.000	140.00	No Ice	14.05	7.63	0.14
			0.00			1/2"	14.69	8.90	0.23
			0.00			Ice	15.30	9.96	0.34
						1" Ice			
80010965 w/ Mount Pipe	C	From Leg	4.00	0.000	140.00	No Ice	14.05	7.63	0.14
			0.00			1/2"	14.69	8.90	0.23
			0.00			Ice	15.30	9.96	0.34
						1" Ice			
cci antennas HPA65R-BU6AA w/ Mount Pipe	A	From Leg	4.00	0.000	140.00	No Ice	8.09	7.19	0.08
			0.00			1/2"	8.64	8.36	0.15
			0.00			Ice	9.16	9.24	0.22
						1" Ice			
cci antennas HPA65R-BU6AA w/ Mount Pipe	B	From Leg	4.00	0.000	140.00	No Ice	8.09	7.19	0.08
			0.00			1/2"	8.64	8.36	0.15
			0.00			Ice	9.16	9.24	0.22
						1" Ice			
cci antennas HPA65R-BU6AA w/ Mount Pipe	C	From Leg	4.00	0.000	140.00	No Ice	8.09	7.19	0.08
			0.00			1/2"	8.64	8.36	0.15
			0.00			Ice	9.16	9.24	0.23
						1" Ice			
7770.00 w/ Mount Pipe	A	From Leg	4.00	0.000	140.00	No Ice	5.75	4.25	0.06
			0.00			1/2"	6.18	5.01	0.10
			0.00			Ice	6.61	5.71	0.16
						1" Ice			
7770.00 w/ Mount Pipe	B	From Leg	4.00	0.000	140.00	No Ice	5.75	4.25	0.06
			0.00			1/2"	6.18	5.01	0.10
			0.00			Ice	6.61	5.71	0.16
						1" Ice			
7770.00 w/ Mount Pipe	C	From Leg	4.00	0.000	140.00	No Ice	5.75	4.25	0.06
			0.00			1/2"	6.18	5.01	0.10
			0.00			Ice	6.61	5.71	0.16
						1" Ice			
(2) LGP1720X	A	From Leg	4.00	0.000	140.00	No Ice	1.67	0.45	0.03
			0.00			1/2"	1.83	0.55	0.04
			0.00			Ice	2.00	0.65	0.06
						1" Ice			
(2) LGP1720X	B	From Leg	4.00	0.000	140.00	No Ice	1.67	0.45	0.03
			0.00			1/2"	1.83	0.55	0.04
			0.00			Ice	2.00	0.65	0.06
						1" Ice			
(2) LGP1720X	C	From Leg	4.00	0.000	140.00	No Ice	1.67	0.45	0.03
			0.00			1/2"	1.83	0.55	0.04
			0.00			Ice	2.00	0.65	0.06
						1" Ice			
(2) RRUS-11	A	From Leg	4.00	0.000	140.00	No Ice	2.79	1.19	0.05
			0.00			1/2"	3.00	1.34	0.07
			0.00			Ice	3.21	1.50	0.09
						1" Ice			
(2) RRUS-11	B	From Leg	4.00	0.000	140.00	No Ice	2.79	1.19	0.05
			0.00			1/2"	3.00	1.34	0.07
			0.00			Ice	3.21	1.50	0.09

Description	*Face or Leg*	*Offset Type*	*Offsets: Horz Lateral Vert* *ft* *ft* *ft*	*Azimuth Adjustment* *°*	*Placement* *ft*		*C_AA_A Front* *ft^2*	*C_AA_A Side* *ft^2*	*Weight* *K*
						1" Ice			
(2) RRUS-11	C	From Leg	4.00	0.000	140.00	No Ice	2.79	1.19	0.05
			0.00			1/2"	3.00	1.34	0.07
			0.00			Ice	3.21	1.50	0.09
						1" Ice			
DC6-48-60-18-8F	A	From Leg	4.00	0.000	140.00	No Ice	1.21	1.21	0.03
			0.00			1/2"	1.89	1.89	0.05
			0.00			Ice	2.11	2.11	0.08
						1" Ice			
DC6-48-60-18-8F	C	From Leg	4.00	0.000	140.00	No Ice	1.21	1.21	0.03
			0.00			1/2"	1.89	1.89	0.05
			0.00			Ice	2.11	2.11	0.08
						1" Ice			
14' Sector Mount	A	From Leg	2.00	0.000	140.00	No Ice	17.35	13.30	0.35
			0.00			1/2"	25.55	20.35	0.50
			0.00			Ice	33.75	27.40	0.65
						1" Ice			
14' Sector Mount	B	From Leg	2.00	0.000	140.00	No Ice	17.35	13.30	0.35
			0.00			1/2"	25.55	20.35	0.50
			0.00			Ice	33.75	27.40	0.65
						1" Ice			
14' Sector Mount	C	From Leg	2.00	0.000	140.00	No Ice	17.35	13.30	0.35
			0.00			1/2"	25.55	20.35	0.50
			0.00			Ice	33.75	27.40	0.65
						1" Ice			
***									
APXVAARR24_43-U-NA20 w/ Mount Pipe	A	From Leg	4.00	0.000	130.00	No Ice	20.48	11.02	0.19
			0.00			1/2"	21.23	12.55	0.32
			0.00			Ice	21.99	14.10	0.47
						1" Ice			
APXVAARR24_43-U-NA20 w/ Mount Pipe	B	From Leg	4.00	0.000	130.00	No Ice	20.48	11.02	0.19
			0.00			1/2"	21.23	12.55	0.32
			0.00			Ice	21.99	14.10	0.47
						1" Ice			
APXVAARR24_43-U-NA20 w/ Mount Pipe	C	From Leg	4.00	0.000	130.00	No Ice	20.48	11.02	0.19
			0.00			1/2"	21.23	12.55	0.32
			0.00			Ice	21.99	14.10	0.47
						1" Ice			
RR90-17-DP	A	From Leg	4.00	0.000	130.00	No Ice	4.36	1.97	0.02
			0.00			1/2"	4.70	2.31	0.04
			0.00			Ice	5.06	2.66	0.07
						1" Ice			
RR90-17-DP	B	From Leg	4.00	0.000	130.00	No Ice	4.36	1.97	0.02
			0.00			1/2"	4.70	2.31	0.04
			0.00			Ice	5.06	2.66	0.07
						1" Ice			
RR90-17-DP	C	From Leg	4.00	0.000	130.00	No Ice	4.36	1.97	0.02
			0.00			1/2"	4.70	2.31	0.04
			0.00			Ice	5.06	2.66	0.07
						1" Ice			
RRUS-11	A	From Leg	4.00	0.000	130.00	No Ice	2.79	1.19	0.05
			0.00			1/2"	3.00	1.34	0.07
			0.00			Ice	3.21	1.50	0.09
						1" Ice			
RRUS-11	B	From Leg	4.00	0.000	130.00	No Ice	2.79	1.19	0.05
			0.00			1/2"	3.00	1.34	0.07
			0.00			Ice	3.21	1.50	0.09
						1" Ice			
RRUS-11	C	From Leg	4.00	0.000	130.00	No Ice	2.79	1.19	0.05
			0.00			1/2"	3.00	1.34	0.07
			0.00			Ice	3.21	1.50	0.09
						1" Ice			
KRY 112 71/2	A	From Leg	4.00	0.000	130.00	No Ice	0.58	0.45	0.01
			0.00			1/2"	0.69	0.54	0.02
			0.00			Ice	0.80	0.64	0.03

Description	*Face or Leg*	*Offset Type*	*Offsets: Horz Lateral Vert* *ft* *ft* *ft*	*Azimuth Adjustment* *°*	*Placement* *ft*		C_AA_A *Front* ft^2	C_AA_A *Side* ft^2	*Weight* *K*
						1" Ice			
KRY 112 71/2	B	From Leg	4.00	0.000	130.00	No Ice	0.58	0.45	0.01
			0.00			1/2" Ice	0.69	0.54	0.02
			0.00			1" Ice	0.80	0.64	0.03
KRY 112 71/2	C	From Leg	4.00	0.000	130.00	No Ice	0.58	0.45	0.01
			0.00			1/2" Ice	0.69	0.54	0.02
			0.00			1" Ice	0.80	0.64	0.03
12' T-frame sector mount	A	From Leg	2.00	0.000	130.00	No Ice	13.20	9.20	0.66
			0.00			1/2" Ice	19.50	14.60	0.80
			0.00			1" Ice	25.80	19.50	1.01
12' T-frame sector mount	B	From Leg	2.00	0.000	130.00	No Ice	13.20	9.20	0.66
			0.00			1/2" Ice	19.50	14.60	0.80
			0.00			1" Ice	25.80	19.50	1.01
12' T-frame sector mount	C	From Leg	2.00	0.000	130.00	No Ice	13.20	9.20	0.66
			0.00			1/2" Ice	19.50	14.60	0.80
			0.00			1" Ice	25.80	19.50	1.01
2.375" OD x 8' Mount Pipe	A	From Leg	4.00	0.000	130.00	No Ice	1.90	1.90	0.03
			0.00			1/2" Ice	2.73	2.73	0.04
			0.00			1" Ice	3.40	3.40	0.06
2.375" OD x 8' Mount Pipe	B	From Leg	4.00	0.000	130.00	No Ice	1.90	1.90	0.03
			0.00			1/2" Ice	2.73	2.73	0.04
			0.00			1" Ice	3.40	3.40	0.06
2.375" OD x 8' Mount Pipe	C	From Leg	4.00	0.000	130.00	No Ice	1.90	1.90	0.03
			0.00			1/2" Ice	2.73	2.73	0.04
			0.00			1" Ice	3.40	3.40	0.06
***									
6' Side Arm Mount	B	From Leg	3.00	0.000	120.00	No Ice	0.41	3.06	0.05
			0.00			1/2" Ice	0.81	5.10	0.08
			0.00			1" Ice	1.23	7.20	0.12
4' x 1-3/4" omni whip	B	From Leg	6.00	0.000	120.00	No Ice	0.79	0.79	0.01
			0.00			1/2" Ice	1.03	1.03	0.01
			2.00			1" Ice	1.28	1.28	0.02
***									
12" x 12" x 12" Junction Box	B	None		0.000	108.00	No Ice	1.20	0.80	0.02
						1/2" Ice	1.34	0.91	0.03
						1" Ice	1.48	1.04	0.05
***									
6' Side Arm Mount	C	From Leg	3.00	0.000	90.00	No Ice	0.41	3.06	0.05
			0.00			1/2" Ice	0.81	5.10	0.08
			0.00			1" Ice	1.23	7.20	0.12
10' 4-bay dipole	C	From Leg	6.00	0.000	90.00	No Ice	0.79	0.79	0.02
			0.00			1/2" Ice	1.03	1.03	0.03
			3.00			1" Ice	1.28	1.28	0.04
***									
6' Side Arm Mount	B	From Leg	3.00	0.000	86.00	No Ice	0.41	3.06	0.05
			0.00			1/2" Ice	0.81	5.10	0.08
			0.00			1" Ice	1.23	7.20	0.12
4' x 1-3/4" omni whip	B	From Leg	6.00	0.000	86.00	No Ice	1.13	1.13	0.01
			0.00			1/2" Ice	1.65	1.65	0.02
			2.00			1" Ice	1.99	1.99	0.03

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
***									
3' Side Arm Mount	B	From Leg	1.50 0.00 0.00	0.000	55.00	No Ice 1/2" Ice 1" Ice	0.85 1.14 1.43	1.67 2.34 3.01	0.07 0.08 0.09
GPS	B	From Leg	3.00 0.00 0.00	0.000	55.00	No Ice 1/2" Ice 1" Ice	0.14 0.24 0.31	0.14 0.24 0.31	0.02 0.02 0.02
***									

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.6 Wind 0 deg - No Ice
3	0.9 Dead+1.6 Wind 0 deg - No Ice
4	1.2 Dead+1.6 Wind 30 deg - No Ice
5	0.9 Dead+1.6 Wind 30 deg - No Ice
6	1.2 Dead+1.6 Wind 60 deg - No Ice
7	0.9 Dead+1.6 Wind 60 deg - No Ice
8	1.2 Dead+1.6 Wind 90 deg - No Ice
9	0.9 Dead+1.6 Wind 90 deg - No Ice
10	1.2 Dead+1.6 Wind 120 deg - No Ice
11	0.9 Dead+1.6 Wind 120 deg - No Ice
12	1.2 Dead+1.6 Wind 150 deg - No Ice
13	0.9 Dead+1.6 Wind 150 deg - No Ice
14	1.2 Dead+1.6 Wind 180 deg - No Ice
15	0.9 Dead+1.6 Wind 180 deg - No Ice
16	1.2 Dead+1.6 Wind 210 deg - No Ice
17	0.9 Dead+1.6 Wind 210 deg - No Ice
18	1.2 Dead+1.6 Wind 240 deg - No Ice
19	0.9 Dead+1.6 Wind 240 deg - No Ice
20	1.2 Dead+1.6 Wind 270 deg - No Ice
21	0.9 Dead+1.6 Wind 270 deg - No Ice
22	1.2 Dead+1.6 Wind 300 deg - No Ice
23	0.9 Dead+1.6 Wind 300 deg - No Ice
24	1.2 Dead+1.6 Wind 330 deg - No Ice
25	0.9 Dead+1.6 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service

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

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	282.84	29.50	-17.78
	Max. H_x	18	282.84	29.50	-17.78
	Max. H_z	7	-245.96	-26.80	16.20
	Min. Vert	7	-245.96	-26.80	16.20
	Min. H_x	7	-245.96	-26.80	16.20
	Min. H_z	18	282.84	29.50	-17.78
Leg B	Max. Vert	10	277.14	-28.08	-17.55
	Max. H_x	23	-238.50	25.36	15.94
	Max. H_z	23	-238.50	25.36	15.94
	Min. Vert	23	-238.50	25.36	15.94
	Min. H_x	10	277.14	-28.08	-17.55
	Min. H_z	10	277.14	-28.08	-17.55
Leg A	Max. Vert	2	271.08	0.38	32.03
	Max. H_x	20	23.15	7.43	1.79
	Max. H_z	2	271.08	0.38	32.03
	Min. Vert	15	-230.15	-0.37	-28.84
	Min. H_x	9	17.78	-7.41	1.40
	Min. H_z	15	-230.15	-0.37	-28.84

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	55.45	0.00	0.00	-22	-11	0
1.2 Dead+1.6 Wind 0 deg - No Ice	66.54	0.05	-53.31	-5460	-18	17
0.9 Dead+1.6 Wind 0 deg - No Ice	49.91	0.05	-53.31	-5453	-15	17
1.2 Dead+1.6 Wind 30 deg - No Ice	66.54	26.61	-46.30	-4696	-2692	25
0.9 Dead+1.6 Wind 30 deg - No Ice	49.91	26.61	-46.30	-4690	-2689	25
1.2 Dead+1.6 Wind 60 deg - No Ice	66.54	50.02	-29.06	-2915	-4976	-28
0.9 Dead+1.6 Wind 60 deg - No Ice	49.91	50.02	-29.06	-2908	-4972	-28
1.2 Dead+1.6 Wind 90 deg - No Ice	66.54	58.33	-0.05	-32	-5811	-64
0.9 Dead+1.6 Wind 90 deg - No Ice	49.91	58.33	-0.05	-25	-5808	-64
1.2 Dead+1.6 Wind 120 deg - No Ice	66.54	47.83	27.73	2784	-4851	-50
0.9 Dead+1.6 Wind 120 deg - No Ice	49.91	47.83	27.73	2790	-4848	-50
1.2 Dead+1.6 Wind 150 deg - No Ice	66.54	24.91	43.45	4487	-2595	-9
0.9 Dead+1.6 Wind 150 deg - No Ice	49.91	24.91	43.45	4493	-2592	-9
1.2 Dead+1.6 Wind 180 deg - No Ice	66.54	-0.05	53.31	5407	-7	-17
0.9 Dead+1.6 Wind 180 deg - No Ice	49.91	-0.05	53.31	5414	-4	-17

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
1.2 Dead+1.6 Wind 210 deg - No Ice	66.54	-26.61	46.30	4643	2667	-25
0.9 Dead+1.6 Wind 210 deg - No Ice	49.91	-26.61	46.30	4650	2670	-25
1.2 Dead+1.6 Wind 240 deg - No Ice	66.54	-50.02	29.06	2862	4950	28
0.9 Dead+1.6 Wind 240 deg - No Ice	49.91	-50.02	29.06	2868	4953	28
1.2 Dead+1.6 Wind 270 deg - No Ice	66.54	-58.33	0.05	-21	5785	64
0.9 Dead+1.6 Wind 270 deg - No Ice	49.91	-58.33	0.05	-15	5789	64
1.2 Dead+1.6 Wind 300 deg - No Ice	66.54	-47.83	-27.73	-2837	4826	50
0.9 Dead+1.6 Wind 300 deg - No Ice	49.91	-47.83	-27.73	-2830	4829	50
1.2 Dead+1.6 Wind 330 deg - No Ice	66.54	-24.91	-43.45	-4540	2570	9
0.9 Dead+1.6 Wind 330 deg - No Ice	49.91	-24.91	-43.45	-4533	2573	9
1.2 Dead+1.0 Ice	194.38	0.00	0.00	-120	-56	0
1.2 Dead+1.0 Wind 0 deg+1.0 Ice	194.38	0.03	-16.00	-1763	-59	4
1.2 Dead+1.0 Wind 30 deg+1.0 Ice	194.38	8.03	-14.00	-1546	-872	7
1.2 Dead+1.0 Wind 60 deg+1.0 Ice	194.38	14.92	-8.70	-993	-1549	-2
1.2 Dead+1.0 Wind 90 deg+1.0 Ice	194.38	17.08	-0.03	-122	-1775	-12
1.2 Dead+1.0 Wind 120 deg+1.0 Ice	194.38	14.46	8.41	738	-1527	-10
1.2 Dead+1.0 Wind 150 deg+1.0 Ice	194.38	7.70	13.49	1278	-852	-2
1.2 Dead+1.0 Wind 180 deg+1.0 Ice	194.38	-0.03	16.00	1524	-54	-4
1.2 Dead+1.0 Wind 210 deg+1.0 Ice	194.38	-8.03	14.00	1307	759	-7
1.2 Dead+1.0 Wind 240 deg+1.0 Ice	194.38	-14.92	8.70	754	1437	2
1.2 Dead+1.0 Wind 270 deg+1.0 Ice	194.38	-17.08	0.03	-117	1663	12
1.2 Dead+1.0 Wind 300 deg+1.0 Ice	194.38	-14.46	-8.41	-977	1415	10
1.2 Dead+1.0 Wind 330 deg+1.0 Ice	194.38	-7.70	-13.49	-1517	739	2
Dead+Wind 0 deg - Service	55.45	0.01	-10.63	-1095	-12	3
Dead+Wind 30 deg - Service	55.45	5.31	-9.23	-945	-540	5
Dead+Wind 60 deg - Service	55.45	9.95	-5.78	-592	-990	-5
Dead+Wind 90 deg - Service	55.45	11.60	-0.01	-23	-1154	-12
Dead+Wind 120 deg - Service	55.45	9.53	5.52	533	-966	-10
Dead+Wind 150 deg - Service	55.45	4.98	8.68	870	-521	-2
Dead+Wind 180 deg - Service	55.45	-0.01	10.63	1051	-10	-3
Dead+Wind 210 deg - Service	55.45	-5.31	9.23	900	519	-5
Dead+Wind 240 deg - Service	55.45	-9.95	5.78	548	968	5
Dead+Wind 270 deg - Service	55.45	-11.60	0.01	-21	1133	12
Dead+Wind 300 deg - Service	55.45	-9.53	-5.52	-577	944	10
Dead+Wind 330 deg - Service	55.45	-4.98	-8.68	-914	500	2

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	180 - 160	1.55	42	0.063	0.023
T2	160 - 140	1.28	42	0.062	0.023
T3	140 - 120	1.01	42	0.058	0.021
T4	120 - 100	0.75	42	0.051	0.018
T5	100 - 80	0.53	42	0.041	0.015
T6	80 - 60	0.36	42	0.032	0.012
T7	60 - 40	0.21	42	0.024	0.008
T8	40 - 20	0.11	42	0.016	0.005
T9	20 - 0	0.04	48	0.008	0.002

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
180.00	2.375" x 7' Safety Climb Extension	42	1.55	0.063	0.023	Inf
177.00	Side Arm Mount	42	1.51	0.063	0.023	Inf
168.75	Rohn 6'x15' Boom Gate	42	1.39	0.063	0.023	860156
150.00	APXVSPP18-C-A20 w/ Mount Pipe	42	1.14	0.061	0.022	742748
140.00	80010965 w/ Mount Pipe	42	1.01	0.058	0.021	936516
130.00	APXVAARR24_43-U-NA20 w/ Mount Pipe	42	0.88	0.055	0.020	193540
120.00	6' Side Arm Mount	42	0.75	0.051	0.018	106967
108.00	12" x 12" x 12" Junction Box	42	0.61	0.045	0.016	98881
90.00	6' Side Arm Mount	42	0.44	0.036	0.013	131600
86.00	6' Side Arm Mount	42	0.41	0.035	0.013	154911
55.00	3' Side Arm Mount	42	0.19	0.022	0.008	119672

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	180 - 160	7.86	8	0.323	0.119
T2	160 - 140	6.46	8	0.318	0.119
T3	140 - 120	5.10	8	0.295	0.110
T4	120 - 100	3.80	8	0.261	0.095
T5	100 - 80	2.69	8	0.208	0.078
T6	80 - 60	1.81	8	0.163	0.061
T7	60 - 40	1.08	8	0.123	0.044
T8	40 - 20	0.55	8	0.078	0.028
T9	20 - 0	0.18	20	0.041	0.012

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
180.00	2.375" x 7' Safety Climb Extension	8	7.86	0.323	0.119	375890
177.00	Side Arm Mount	8	7.65	0.323	0.119	375890
168.75	Rohn 6'x15' Boom Gate	8	7.07	0.321	0.120	167063

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
150.00	APXVSPP18-C-A20 w/ Mount Pipe	8	5.78	0.308	0.116	152890
140.00	80010965 w/ Mount Pipe	8	5.10	0.295	0.110	199625
130.00	APXVAARR24_43-U-NA20 w/ Mount Pipe	8	4.44	0.280	0.103	38054
120.00	6' Side Arm Mount	8	3.80	0.261	0.095	20848
108.00	12" x 12" x 12" Junction Box	8	3.10	0.230	0.085	19333
90.00	6' Side Arm Mount	8	2.22	0.184	0.070	25805
86.00	6' Side Arm Mount	8	2.05	0.175	0.067	30398
55.00	3' Side Arm Mount	8	0.93	0.112	0.040	23594

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	180	Leg	A325N	0.88	4	0.65	40.59	0.016	1.05	Bolt Tension
		Diagonal	A325N	0.63	3	1.60	12.43	0.129	1.05	Bolt Shear
		Horizontal	A325N	0.63	2	1.37	12.43	0.111	1.05	Bolt Shear
T2	160	Leg	A325N	1.00	4	5.15	53.01	0.097	1.05	Bolt Tension
		Diagonal	A325N	0.63	3	2.17	12.43	0.174	1.05	Bolt Shear
		Horizontal	A325N	0.63	2	2.03	12.43	0.163	1.05	Bolt Shear
T3	140	Leg	A325N	1.00	6	8.07	53.01	0.152	1.05	Bolt Tension
		Diagonal	A325N	0.63	3	3.27	12.43	0.263	1.05	Bolt Shear
		Horizontal	A325N	0.63	2	3.39	12.43	0.273	1.05	Bolt Shear
T4	120	Leg	A325N	1.00	8	10.32	53.01	0.195	1.05	Bolt Tension
		Diagonal	A325N	0.63	3	3.28	12.43	0.264	1.05	Bolt Shear
		Horizontal	A325N	0.63	2	3.65	12.43	0.294	1.05	Bolt Shear
T5	100	Leg	A325N	1.00	8	13.68	53.01	0.258	1.05	Bolt Tension
		Diagonal	A325N	0.63	3	4.05	12.43	0.326	1.05	Bolt Shear
		Horizontal	A325N	0.63	2	4.05	12.43	0.326	1.05	Bolt Shear
T6	80	Leg	A325N	1.00	8	17.71	53.01	0.334	1.05	Bolt Tension
		Diagonal	A325N	0.63	3	4.17	12.43	0.336	1.05	Bolt Shear
		Horizontal	A325N	0.63	2	4.41	12.43	0.355	1.05	Bolt Shear
T7	60	Leg	A325N	1.00	12	14.42	53.01	0.272	1.05	Bolt Tension
		Diagonal	A325N	0.63	3	4.30	12.43	0.346	1.05	Bolt Shear
		Horizontal	A325N	0.63	2	4.76	12.43	0.383	1.05	Bolt Shear
T8	40	Leg	A325N	1.00	12	16.94	53.01	0.320	1.05	Bolt Tension
		Diagonal	A325N	0.63	3	4.43	12.43	0.356	1.05	Bolt Shear
		Horizontal	A325N	0.63	2	5.06	12.43	0.407	1.05	Bolt Shear
T9	20	Diagonal	A325N	0.63	3	4.61	12.43	0.371	1.05	Bolt Shear
		Horizontal	A325N	0.63	2	5.41	12.43	0.435	1.05	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 K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	Pipe 3.5" x 0.216" (3 STD)	20.00	6.53	67.3 K=1.00	2.23	-7.73	72.00	0.107 [1]
T2	160 - 140	Pipe 4.5" x 0.337" (4 XS)	20.04	6.54	53.1 K=1.00	4.41	-26.63	161.33	0.165 [1]
T3	140 - 120	Pipe 5.563" x 0.375" (5 EH)	20.04	6.54	42.7 K=1.00	6.11	-60.29	240.75	0.250 [1]

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T4	120 - 100	Pipe 6.625" x 0.340" (6 EHS)	20.04	6.54	35.3 K=1.00	6.71	-97.36	275.84	0.353 [1]
T5	100 - 80	Pipe 8.625" x 0.375" (8 EHS)	20.04	9.81	40.3 K=1.00	9.72	-127.29	388.36	0.328 [1]
T6	80 - 60	Pipe 8.625" x 0.500" (8 XS)	20.04	9.81	40.9 K=1.00	12.76	-162.37	508.20	0.319 [1]
T7	60 - 40	Pipe 8.625" x 0.500" (8 XS)	20.04	9.81	40.9 K=1.00	12.76	-197.80	508.20	0.389 [1]
T8	40 - 20	Pipe 10.75" x 0.500" (10 XS)	20.04	9.81	32.4 K=1.00	16.10	-232.85	670.86	0.347 [1]
T9	20 - 0	Pipe 10.75" x 0.500" (10 XS)	20.04	9.81	32.4 K=1.00	16.10	-267.30	670.86	0.398 [1]

[1] $P_u / \phi P_n$ controls

Diagonal Design Data (Compression)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	180 - 160	Pipe 2.375" x 0.154" (2 STD)	7.80	7.53	114.9 K=1.00	1.07	-4.81	18.40	0.261 [1]
T2	160 - 140	Pipe 2.375" x 0.218" (2 XS)	8.42	8.13	127.2 K=1.00	1.48	-6.50	20.62	0.315 [1]
T3	140 - 120	Pipe 2.375" x 0.218" (2 XS)	9.12	8.79	137.6 K=1.00	1.48	-9.80	17.62	0.556 [1]
T4	120 - 100	Pipe 2.875" x 0.203" (2.5 STD)	9.88	9.52	120.5 K=1.00	1.70	-9.73	26.50	0.367 [1]
T5	100 - 80	Pipe 3.5" x 0.216" (3 STD)	12.95	12.40	127.9 K=1.00	2.23	-12.16	30.79	0.395 [1]
T6	80 - 60	Pipe 3.5" x 0.216" (3 STD)	13.66	13.14	135.5 K=1.00	2.23	-12.52	27.41	0.457 [1]
T7	60 - 40	Pipe 3.5" x 0.216" (3 STD)	14.41	13.92	143.5 K=1.00	2.23	-12.88	24.43	0.527 [1]
T8	40 - 20	Pipe 3.5" x 0.216" (3 STD)	15.19	14.61	150.7 K=1.00	2.23	-13.20	22.18	0.595 [1]
T9	20 - 0	Pipe 3.5" x 0.300" (3 XS)	16.01	15.45	163.1 K=1.00	3.02	-13.66	25.61	0.533 [1]

[1] $P_u / \phi P_n$ controls

Horizontal Design Data (Compression)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	180 - 160	Pipe 1.9" x 0.145" (1.5 STD)	8.54	4.12	79.5 K=1.00	0.80	-2.71	22.67	0.120 [1]
T2	160 - 140	Pipe 1.9" x 0.145" (1.5 STD)	9.95	4.79	92.3 K=1.00	0.80	-4.05	19.29	0.210 [1]
T3	140 - 120	Pipe 1.9" x 0.145" (1.5 STD)	12.05	5.79	111.7 K=1.00	0.80	-6.77	14.45	0.468 [1]
T4	120 - 100	Pipe 2.375" x 0.154" (2 STD)	14.15	6.80	103.7 K=1.00	1.07	-7.22	22.04	0.328 [1]
T5	100 - 80	Pipe 2.375" x 0.154" (2 STD)	15.91	7.59	115.8 K=1.00	1.07	-8.06	18.11	0.445 [1]
T6	80 - 60	Pipe 2.375" x 0.154" (2 STD)	18.01	8.64	131.8 K=1.00	1.07	-8.75	13.98	0.626 [1]
T7	60 - 40	Pipe 2.875" x 0.203" (2.5 STD)	20.10	9.69	122.8 K=1.00	1.70	-9.38	25.54	0.367 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T8	40 - 20	Pipe 2.875" x 0.203" (2.5 STD)	22.20	10.65	134.9 K=1.00	1.70	-9.94	21.14	0.470 [1]
T9	20 - 0	Pipe 3.5" x 0.216" (3 STD)	24.30	11.70	120.7 K=1.00	2.23	-10.52	34.56	0.304 [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 K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	Pipe 1.9" x 0.145" (1.5 STD)	8.54	4.12	79.5 K=1.00	0.80	-0.16	22.67	0.007 [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 K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	L 2 x 2 x 1/8	4.27	4.27	128.9 K=1.00	0.48	-0.00	6.51	0.001 [1]
T2	160 - 140	L 2 x 2 x 1/8	4.98	4.98	150.2 K=1.00	0.48	-0.01	4.85	0.001 [1]
T3	140 - 120	L 2 x 2 x 1/8	6.03	6.03	181.9 K=1.00	0.48	-0.01	3.31	0.002 [1]
T4	120 - 100	L 2 x 2 x 1/8	7.08	7.08	213.6 K=1.00	0.48	-0.01	2.40	0.004 [1]
T5	100 - 80	L 2 x 2 x 1/8	7.95	7.95	240.1 K=1.00	0.48	-0.01	1.90	0.006 [1]
T6	80 - 60	L 2.5 x 2.5 x 3/16	9.00	9.00	218.3 K=1.00	0.90	-0.01	4.28	0.003 [1]
T7	60 - 40	L 3 x 3 x 3/16	10.05	10.05	202.3 K=1.00	1.09	-0.01	6.02	0.002 [1]
T8	40 - 20	L 3.5 x 3.5 x 1/4	11.10	11.10	192.0 K=1.00	1.69	-0.02	10.36	0.002 [1]
T9	20 - 0	L 3.5 x 3.5 x 1/4	12.15	12.15	210.1 K=1.00	1.69	-0.02	8.65	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 K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	Pipe 3.5" x 0.216" (3 STD)	20.00	6.53	67.3	2.23	2.62	100.28	0.026 [1]
T2	160 - 140	Pipe 4.5" x 0.337" (4 XS)	20.04	6.54	53.1	4.41	20.59	198.34	0.104 [1]

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T3	140 - 120	Pipe 5.563" x 0.375" (5 EH)	20.04	6.54	42.7	6.11	48.43	275.04	0.176 [1]
T4	120 - 100	Pipe 6.625" x 0.340" (6 EHS)	20.04	6.54	35.3	6.71	82.52	302.10	0.273 [1]
T5	100 - 80	Pipe 8.625" x 0.375" (8 EHS)	20.04	9.81	40.3	9.72	109.44	437.37	0.250 [1]
T6	80 - 60	Pipe 8.625" x 0.500" (8 XS)	20.04	9.81	40.9	12.76	141.68	574.32	0.247 [1]
T7	60 - 40	Pipe 8.625" x 0.500" (8 XS)	20.04	9.81	40.9	12.76	173.04	574.32	0.301 [1]
T8	40 - 20	Pipe 10.75" x 0.500" (10 XS)	20.04	9.81	32.4	16.10	203.33	724.53	0.281 [1]
T9	20 - 0	Pipe 10.75" x 0.500" (10 XS)	20.04	9.81	32.4	16.10	232.39	724.53	0.321 [1]

[1] $P_u / \phi P_n$ controls

Diagonal Design Data (Tension)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	180 - 160	Pipe 2.375" x 0.154" (2 STD)	7.80	7.53	114.9	1.07	4.73	48.35	0.098 [1]
T2	160 - 140	Pipe 2.375" x 0.218" (2 XS)	8.42	8.13	127.2	1.48	6.39	66.48	0.096 [1]
T3	140 - 120	Pipe 2.375" x 0.218" (2 XS)	9.12	8.79	137.6	1.48	9.67	66.48	0.145 [1]
T4	120 - 100	Pipe 2.875" x 0.203" (2.5 STD)	9.38	9.01	114.2	1.70	9.68	76.68	0.126 [1]
T5	100 - 80	Pipe 3.5" x 0.216" (3 STD)	12.95	12.40	127.9	2.23	11.92	100.28	0.119 [1]
T6	80 - 60	Pipe 3.5" x 0.216" (3 STD)	13.66	13.14	135.5	2.23	12.23	100.28	0.122 [1]
T7	60 - 40	Pipe 3.5" x 0.216" (3 STD)	14.04	13.55	139.7	2.23	12.52	100.28	0.125 [1]
T8	40 - 20	Pipe 3.5" x 0.216" (3 STD)	14.81	14.22	146.7	2.23	12.82	100.28	0.128 [1]
T9	20 - 0	Pipe 3.5" x 0.300" (3 XS)	15.61	15.04	158.8	3.02	13.19	135.72	0.097 [1]

[1] $P_u / \phi P_n$ controls

Horizontal Design Data (Tension)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	180 - 160	Pipe 1.9" x 0.145" (1.5 STD)	8.54	4.12	79.5	0.80	2.75	35.98	0.076 [1]
T2	160 - 140	Pipe 1.9" x 0.145" (1.5 STD)	9.95	4.79	92.3	0.80	4.06	35.98	0.113 [1]
T3	140 - 120	Pipe 1.9" x 0.145" (1.5 STD)	12.05	5.79	111.7	0.80	6.78	35.98	0.189 [1]
T4	120 - 100	Pipe 2.375" x 0.154" (2 STD)	14.15	6.80	103.7	1.07	7.30	48.35	0.151 [1]
T5	100 - 80	Pipe 2.375" x 0.154" (2 STD)	15.91	7.59	115.8	1.07	8.11	48.35	0.168 [1]
T6	80 - 60	Pipe 2.375" x 0.154" (2 STD)	18.01	8.64	131.8	1.07	8.83	48.35	0.183 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T7	60 - 40	Pipe 2.875" x 0.203" (2.5 STD)	20.10	9.69	122.8	1.70	9.53	76.68	0.124 [1]
T8	40 - 20	Pipe 2.875" x 0.203" (2.5 STD)	22.20	10.65	134.9	1.70	10.11	76.68	0.132 [1]
T9	20 - 0	Pipe 3.5" x 0.216" (3 STD)	23.27	11.19	115.4	2.23	10.81	100.28	0.108 [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 K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	Pipe 1.9" x 0.145" (1.5 STD)	8.54	4.12	79.5	0.80	0.16	35.98	0.004 [1]

[1] P_u / ϕP_n controls

Inner Bracing Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 160	L 2 x 2 x 1/8	4.27	4.27	81.8	0.48	0.00	15.69	0.000 [1]
T2	160 - 140	L 2 x 2 x 1/8	4.98	4.98	95.4	0.48	0.00	15.69	0.000 [1]
T3	140 - 120	L 2 x 2 x 1/8	5.34	5.34	102.3	0.48	0.00	15.69	0.000 [1]
T4	120 - 100	L 2 x 2 x 1/8	6.39	6.39	122.5	0.48	0.00	15.69	0.000 [1]
T5	100 - 80	L 2 x 2 x 1/8	7.44	7.44	142.6	0.48	0.00	15.69	0.000 [1]
T6	80 - 60	L 2.5 x 2.5 x 3/16	8.49	8.49	130.8	0.90	0.00	29.22	0.000 [1]
T7	60 - 40	L 3 x 3 x 3/16	9.54	9.54	121.9	1.09	0.00	35.31	0.000 [1]

[1] P_u / ϕP_n controls

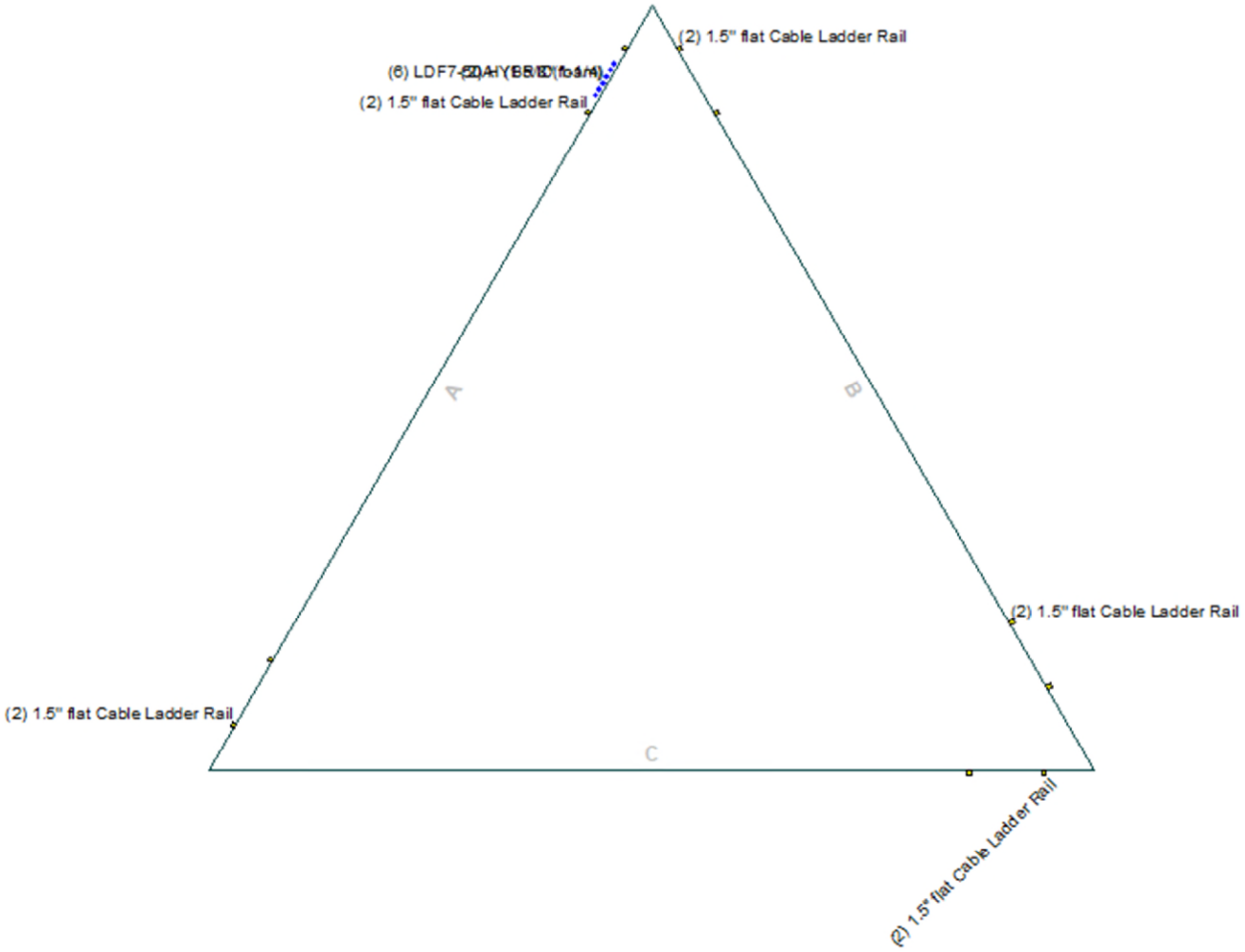
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	180 - 160	Leg	Pipe 3.5" x 0.216" (3 STD)	3	-7.73	75.60	10.2	Pass
T2	160 - 140	Leg	Pipe 4.5" x 0.337" (4 XS)	42	-26.63	169.40	15.7	Pass
T3	140 - 120	Leg	Pipe 5.563" x 0.375" (5 EH)	80	-60.29	252.79	23.8	Pass
T4	120 - 100	Leg	Pipe 6.625" x 0.340" (6 EHS)	119	-97.36	289.63	33.6	Pass
T5	100 - 80	Leg	Pipe 8.625" x 0.375" (8 EHS)	158	-127.29	407.78	31.2	Pass
T6	80 - 60	Leg	Pipe 8.625" x 0.500" (8 XS)	184	-162.37	533.61	30.4 33.4 (b)	Pass
T7	60 - 40	Leg	Pipe 8.625" x 0.500" (8 XS)	211	-197.80	533.61	37.1	Pass
T8	40 - 20	Leg	Pipe 10.75" x 0.500" (10 XS)	238	-232.85	704.40	33.1	Pass
T9	20 - 0	Leg	Pipe 10.75" x 0.500" (10 XS)	265	-267.30	704.40	37.9	Pass
T1	180 - 160	Diagonal	Pipe 2.375" x 0.154" (2 STD)	11	-4.81	19.32	24.9	Pass
T2	160 - 140	Diagonal	Pipe 2.375" x 0.218" (2 XS)	47	-6.50	21.65	30.0	Pass
T3	140 - 120	Diagonal	Pipe 2.375" x 0.218" (2 XS)	86	-9.80	18.50	53.0	Pass
T4	120 - 100	Diagonal	Pipe 2.875" x 0.203" (2.5 STD)	125	-9.73	27.83	35.0	Pass
T5	100 - 80	Diagonal	Pipe 3.5" x 0.216" (3 STD)	164	-12.16	32.33	37.6	Pass
T6	80 - 60	Diagonal	Pipe 3.5" x 0.216" (3 STD)	191	-12.52	28.78	43.5	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T7	60 - 40	Diagonal	Pipe 3.5" x 0.216" (3 STD)	218	-12.88	25.65	50.2	Pass
T8	40 - 20	Diagonal	Pipe 3.5" x 0.216" (3 STD)	249	-13.20	23.29	56.7	Pass
T9	20 - 0	Diagonal	Pipe 3.5" x 0.300" (3 XS)	276	-13.66	26.89	50.8	Pass
T1	180 - 160	Horizontal	Pipe 1.9" x 0.145" (1.5 STD)	10	-2.71	23.80	11.4	Pass
T2	160 - 140	Horizontal	Pipe 1.9" x 0.145" (1.5 STD)	46	-4.05	20.26	20.0	Pass
T3	140 - 120	Horizontal	Pipe 1.9" x 0.145" (1.5 STD)	85	-6.77	15.17	44.6	Pass
T4	120 - 100	Horizontal	Pipe 2.375" x 0.154" (2 STD)	124	-7.22	23.14	31.2	Pass
T5	100 - 80	Horizontal	Pipe 2.375" x 0.154" (2 STD)	163	-8.06	19.01	42.4	Pass
T6	80 - 60	Horizontal	Pipe 2.375" x 0.154" (2 STD)	190	-8.75	14.68	59.6	Pass
T7	60 - 40	Horizontal	Pipe 2.875" x 0.203" (2.5 STD)	217	-9.38	26.82	35.0 38.3 (b)	Pass
T8	40 - 20	Horizontal	Pipe 2.875" x 0.203" (2.5 STD)	247	-9.94	22.20	44.8	Pass
T9	20 - 0	Horizontal	Pipe 3.5" x 0.216" (3 STD)	274	-10.52	36.29	29.0 43.5 (b)	Pass
T1	180 - 160	Top Girt	Pipe 1.9" x 0.145" (1.5 STD)	4	-0.16	23.80	0.7	Pass
T1	180 - 160	Inner Bracing	L 2 x 2 x 1/8	37	-0.00	6.84	0.7	Pass
T2	160 - 140	Inner Bracing	L 2 x 2 x 1/8	54	-0.01	5.09	0.8	Pass
T3	140 - 120	Inner Bracing	L 2 x 2 x 1/8	93	-0.01	3.47	0.9	Pass
T4	120 - 100	Inner Bracing	L 2 x 2 x 1/8	130	-0.01	2.52	1.0	Pass
T5	100 - 80	Inner Bracing	L 2 x 2 x 1/8	171	-0.01	1.99	1.1	Pass
T6	80 - 60	Inner Bracing	L 2.5 x 2.5 x 3/16	196	-0.01	4.49	0.8	Pass
T7	60 - 40	Inner Bracing	L 3 x 3 x 3/16	223	-0.01	6.32	0.9	Pass
T8	40 - 20	Inner Bracing	L 3.5 x 3.5 x 1/4	250	-0.02	10.88	0.7	Pass
T9	20 - 0	Inner Bracing	L 3.5 x 3.5 x 1/4	277	-0.02	9.08	0.7	Pass
							Summary	
						Leg (T9)	37.9	Pass
						Diagonal (T8)	56.7	Pass
						Horizontal (T6)	59.6	Pass
						Top Girt (T1)	0.7	Pass
						Inner Bracing (T5)	1.1	Pass
						Bolt Checks	41.4	Pass
						RATING =	**59.6**	**Pass**

APPENDIX B

BASE LEVEL DRAWING


(2) 1.5" flat Cable Ladder Rail
(6) LDF7-50A (1 5/8" foam)
(2) 1.5" flat Cable Ladder Rail
A
B
(2) 1.5" flat Cable Ladder Rail
(2) 1.5" flat Cable Ladder Rail
C
(2) 1.5" flat Cable Ladder Rail

APPENDIX C

ADDITIONAL CALCULATIONS

PAUL J. FORD & COMPANY
250 E Broad St, Ste 600 • Columbus, OH 43215
Phone 614.221.6679 www.pauljford.com

By JMF Date 1/13/2022
Project # 42921-0018.003.8700

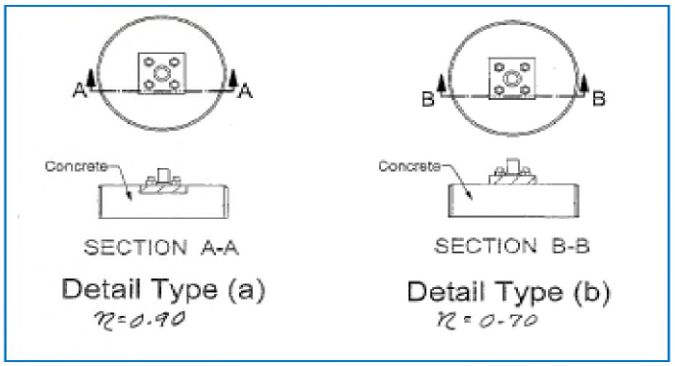
Self-Support Tower Anchor Rod Capacity - TIA-G

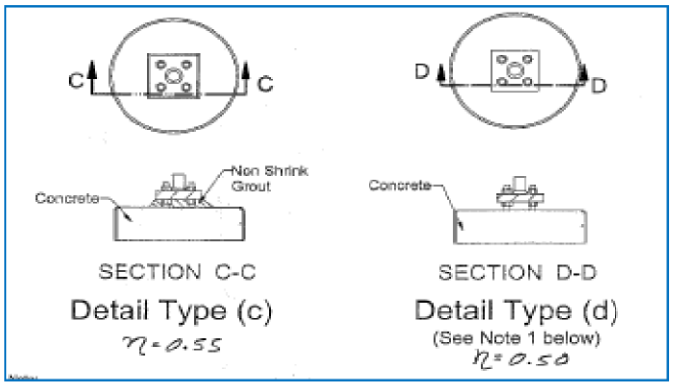
Loads

Compression :	283	kips	Tension :	246	kips	Code:	TIA-G
Comp. Shear :	34	kips	Ten.Shear :	31	kips	Maximum Ratio:	1.00

Existing Anchor Rods

Anchor Rod Condition (n) :	0.5				
Anchor Rod ø :	1	in	l_{ar} :	1	inches
Anchor Rod Quantity :	16		Comp. M_u :	22.10	k-in
Anchor Rod Grade :	A354 Gr. BC (1/4 to 2-1/2 incl.)				
F_y :	109	ksi	ϕ_v :	0.75	
F_u :	125	ksi	ϕ_f :	0.90	
Threads per Inch	8		$\phi_v R_{nv}$:	530.14	kips
Net Tensile Area	0.61	in^2	$\phi_f R_{nm}$:	167.00	k-in
ϕ_t :	0.80				
$\phi_t R_{nt}$:	969.19	kip			
Anchor Rod Ratio :	0.362				





PAUL J. FORD & COMPANY
250 E Broad St, Ste 600 • Columbus, OH 43215
Phone 614.221.6679 www.pauljford.com

Job Number:	42921-0018.003.8700	Page:	1
Site Number:	469141	By:	JMF
Site Name:	MADISON CT	Date:	1/13/2022

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

Factored Base Reactions from RISA

	Comp. (+)	Tension (-)	
Moment, Mu =	0.0	0.0	k-ft
Shear, Vu =	34.0	31.0	kips
Axial Load, Pu =	283.0	-246.0	kips
OTMu =	17.0	15.5	k-ft @ Ground

Safety Factors / Load Factors / Φ Factors

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

	Safety Factor	Φ Factor
Soil Lateral Resistance =	2.00	0.75
Skin Friction =	2.00	0.75
End Bearing =	2.00	0.75
Concrete Wt. Resist Uplift =	1.25	

Load Combinations Checked per TIA-222-G

1. (0.75) Ult. Skin Friction + (0.75) Ult. End Bearing + (0.75) Effective Soil Wt. - (1.2) Buoyant Conc. Wt. ≥ Comp.
2. (0.75) Ult. Skin Friction + (0.9) Buoyant Conc. Wt. ≥ Uplift

Drilled Pier Parameters

Diameter =	6	ft
Height Above Grade =	0.5	ft
Depth Below Grade =	18	ft
fc' =	4.5	ksi
εc =	0.003	in/in
L / D Ratio =	3.08	
Mat Ftdn. Cap Width =		ft
Mat Ftdn. Cap Length =		ft
Depth Below Grade =		ft

Soil Parameters

Water Table Depth =	2.50	ft
Depth to Ignore Soil =	3.33	ft
Depth to Full Cohesion =	0	ft
Full Cohesion Starts at?*	Ground	

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

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

Steel Parameters

	Rebar	Ties	
Number of Bars =	26		
Size =	#9	#5	
Fy =	60	60	ksi
MOE =	29000	29000	ksi
Side Clear Cover to Ties =		3	in
Top Clear Cover to Ties =		3	in
Tie Upper Spacing =			in
Tie Lower Spacing =		12	in
Upper Tie Spacing Depth:			ft Below Grade

Direct Embed Pole Shaft Parameters

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

Maximum Capacity Ratios

Maximum Soil Ratio =	110.0%
Maximum Steel Ratio =	105.0%
Apply 1.05 Normalization =	

Define Soil Layers

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

Layer	Thickness ft	Unit Weight pcf	Cohesion psf	Friction Angle degrees	Soil Type	Ultimate End Bearing psf	Comp. Ult. Skin Friction psf	Tension Ult. Skin Friction psf	Depth ft
1	2	125	0	0	Clay		0	0	2
2	8	125	625	0	Clay		313	313	10
3	4	135	6250	0	Clay		3125	3125	14
4	5	145	8000	0	Clay	36719	5000	5000	19
5									
6									
7									
8									
9									
10									
11									
12									

Soil Results: Overturning

Depth to COR =	14.78	ft, from Grade
Shear, Vu =	34.00	kips
Resisting Shear, ΦVn =	346.84	kips
Bending Moment, Mu =	519.49	k-ft, from COR
Resisting Moment, ΦMn =	5299.39	k-ft, from COR

MOMENT/SHEAR RATIO = 9.8% OK

Soil Results: Uplift & Compression

Uplift, Tu =	246.00	kips
Uplift Capacity, ΦTn =	534.96	kips

UPLIFT RATIO = 46.0% OK

Compression, Cu =	283.00	kips
Comp. Capacity, ΦCn =	1236.02	kips

COMPRESSION RATIO = 22.9% OK

Steel Results (ACI 318-08): Shear

Minimum Tie Size =	#4
Maximum Tie Spacing =	18.05
Maximum Shear Reinf. Spacing =	N/A
Minimum Tranverse Steel Area =	N/A

Shear, Vu =	31.00	kips
Shear, ΦVn =	367.27	kips

SHEAR RATIO = 8.4% OK

Steel Results (ACI 318-08): Moment/Axial

Minimum Steel Area =	13.66	sq in
Actual Steel Area =	26.00	sq in
Axial, ΦPn (min) =	-1404.00	kips, Where ΦMn = 0 k-ft
Axial, ΦPn (max) =	8857.71	kips, Where ΦMn = 0 k-ft

Axial Load, Pu =	-190.54	kips @ 10.75 ft Below Grade
Moment, Mu =	288.35	k-ft @ 10.75 ft Below Grade
Moment, ΦMn =	3112.10	k-ft

MOMENT RATIO = 9.3% OK

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Elevation: 297.61 ft (NAVD 88)
Latitude: 41.356126
Longitude: -72.63908

Wind

Results:

Wind Speed:	139 Vmph
10-year MRI	78 Vmph
25-year MRI	88 Vmph
50-year MRI	95 Vmph
100-year MRI	105 Vmph

Data Accessed: Wed Oct 13 2021

Date Source: ASCE/SEI 7-10, Fig. 26.5-1B and Figs. CC-1–CC-4, and Section 26.5.2, incorporating errata of March 12, 2014

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-10 Standard. Wind speeds correspond to approximately a 3% probability of exceedance in 50 years (annual exceedance probability = 0.000588, MRI = 1,700 years).

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

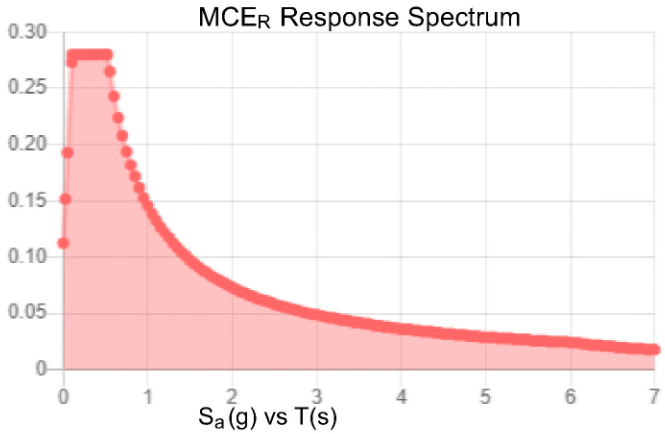
Seismic

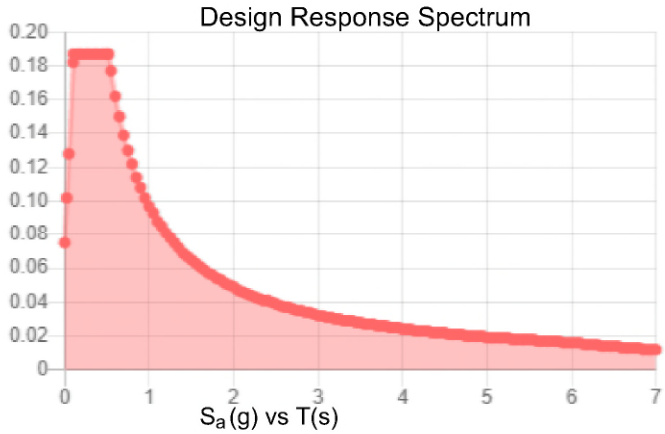
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.175	S_{DS} :	0.187
S_1 :	0.061	S_{D1} :	0.097
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.089
S_{MS} :	0.28	PGA_M :	0.142
S_{M1} :	0.146	F_{PGA} :	1.6
		I_e :	1.25

Seismic Design Category B





Data Accessed: Wed Oct 13 2021

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

Ice

Results:

Ice Thickness:	0.75 in.
Concurrent Temperature:	15 F
Gust Speed:	50 mph
Data Source:	Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8
Date Accessed:	Wed Oct 13 2021

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

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

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

1) Paul J. Ford and Company has not made a field inspection to verify the tower member sizes or the antenna/coax loading. If the existing conditions are not as represented on these drawings, we should be contacted immediately to evaluate the significance of the deviation.

2) No allowance was made for any damaged, missing, or rusted members. The analysis of this tower assumes that no physical deterioration has occurred in any of the structural components of the tower and that all the tower members have the same load carrying capacity as the day the tower was erected.

3) It is not possible to have all the detailed information to perform a thorough analysis of every structural sub-component of an existing tower. The structural analysis by Paul J. Ford and Company verifies the adequacy of the main structural members of the tower. Paul J. Ford and Company provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc.

4) The structural integrity of the existing tower foundation can only be verified if exact foundation sizes and soil conditions are known. Paul J. Ford and Company will not accept any responsibility for the adequacy of the existing foundations unless the foundation sizes and a soils report are provided.

5) This tower has been analyzed according to the minimum design wind loads recommended by the Telecommunications Industry Association Standard ANSI/TIA-222-G. If the owner or local or state agencies require a higher design wind load, Paul J. Ford and Company should be made aware of this requirement.

6) The enclosed sketches are a schematic representation of the tower that we have analyzed. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions and for the proper fit and clearance in the field.

7) Miscellaneous items such as antenna mounts etc. have not been designed or detailed as a part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

Maser Consulting Connecticut
1055 Washington Boulevard
Stamford, CT 06901
203.324.0800
peter.albano@colliersengineering.com

Antenna Mount Analysis Report with Hardware Upgrades and PMI Requirements

Mount ReAnalysis-VZW

SMART Tool Project #: 10126890
Maser Consulting Connecticut Project #: 21777866A (Rev. 2)

January 11, 2022

Site Information	*Site ID:*	*469141-VZW / MADISON CT*
	Site Name:	*MADISON CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*864 Opening Hill Rd.* *Madison, Connecticut 06443* *New Haven County*
	Latitude:	*41.356126°*
	Longitude:	*-72.639080°*
Structure Information	*Tower Type:*	*180-Ft Self Support*
	Mount Type:	*15.00-Ft Sector Frame*

FUZE ID # 16092583

Analysis Results

Sector Frame: **62.7% Pass w/ Hardware Upgrades***

*** 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: Nathan LaPorte

Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS, Site ID: 324276, dated November 24, 2021*
Mount Mapping Report	*Hudson Design Group, LLC, Site ID: 469141, dated May 3, 2021*
Construction Drawings	*On Air Engineering, LLC Site Name: Madison CT, dated December 29, 2021*
Previous Mount Analysis	*Maser Consulting Connecticut Project #: 21777866A, dated November 29, 2021*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	122 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:	0.989
Seismic Parameters:	S_S:	0.21 g
	S_1:	0.05 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	3 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live 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
168.75	170.00	6	JMA Wireless	MX06FRO660-03	Added
		3	Samsung	MT6407-77A	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		1	Raycap	RVZDC-6627-PF-48	
		3	CommScope	LNX-6514DS-A1M	Retained

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 Maser Consulting Connecticut and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.

2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

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

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

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped 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. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

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

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

Analysis Results:

Component	Utilization %	Pass/Fail
Tie Back	4.7%	Pass
Antenna Pipe	24.9%	Pass
Dual Mounted Pipe	18.6%	Pass
Standoff Bar	62.7%	Pass
Standoff Vertical	59.9%	Pass
Standoff Diagonal	27.7%	Pass
Standoff Horizontal	30.0%	Pass
Face Horizontal	20.8%	Pass
Mount Connection	26.0%	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**62.7%**

***** Results valid after hardware upgrades noted in the PMI Requirements are installed.

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	22.5	14.4	34.9	26.9
0.5	32.8	21.6	50.3	39.1
1	42.6	28.2	65.1	50.7

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(s).
- Ka factors included in (EPA)a calculations

Requirements:

The existing mounts will be **SUFFICIENT** for the final loading configuration shown in attachment 2 upon the completion of the requirements listed below.

Replace existing mount pipe in position 3 on all sectors (Position 1 being on the left side of mount when looking from behind) with new 84" long P2 1/2 STD mount pipe. Connect to all existing face horizontal members using new crossover plates (VZWSMART-MSK1). Proposed OVP to be placed on upper right-hand side of the standoff horizontal facing the tower, 48'' from the face horizontal connection.

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 Post Installation Inspection (PMI) Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Photos
4. Mount Mapping Report (for reference only)
5. Analysis Calculations
6. TIA Adoption and Wind Speed Usage Letter

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Passing Mount Analysis

Passing Mount Analysis requires a PMI due to a modification in loading.

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

---

PSLC #: 469141 SMART Project #: 10126890 Fuze Project ID: 16092583

Purpose – to provide SMART Tool structural vendor the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

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

Base Requirements:

- If installation 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 mount drawings" showing contractor's name, contact information, 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 passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo should be time and date stamped
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope. 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.
  - Photos of the mount after installation; if the mounts are at different rad elevations, pictures must be provided for all elevations that equipment was installed.
- *Photos taken at Mount Elevation*
  - Photos showing the safety climb wire rope above and below the mount prior to installation.
  - Photos showing the climbing facility and safety climb if present.
  - Photos showing each individual sector after installation. Each entire sector shall 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.

Antenna & equipment placement and Geometry Confirmation:

- The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below.

☐ 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.

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

Issue:

Replace existing mount pipe in position 3 on all sectors (Position 1 being on the left side of mount when looking from behind) with new 84" long P2 1/2 STD mount pipe. Connect to all existing face horizontal members using new crossover plates (VZWSMART-MSK1). Proposed OVP to be placed on upper right-hand side of the standoff horizontal facing the tower, 48" from the face horizontal connection.

Response:

Special Instruction Confirmation:

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

☐ All hardware listed in the Special Instructions above (if applicable) has been properly installed, and the existing hardware was inspected.

☐ The material utilized was as specified in the SMART Tool engineering vendor Special Instructions above (if applicable) 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.

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

Certifying Individual:

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

Structure: 469141-VZW - MADISON CT

Sector: **A**

Structure Type: Self Support

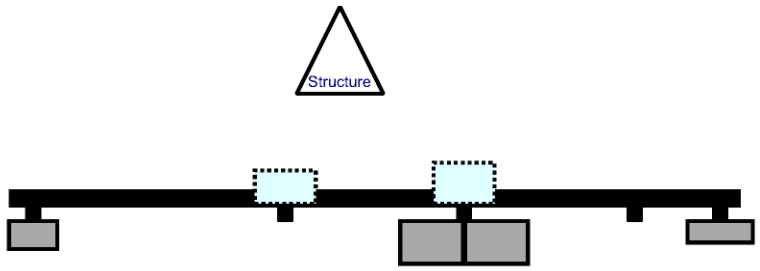
Mount Elev: 168.75

10126890

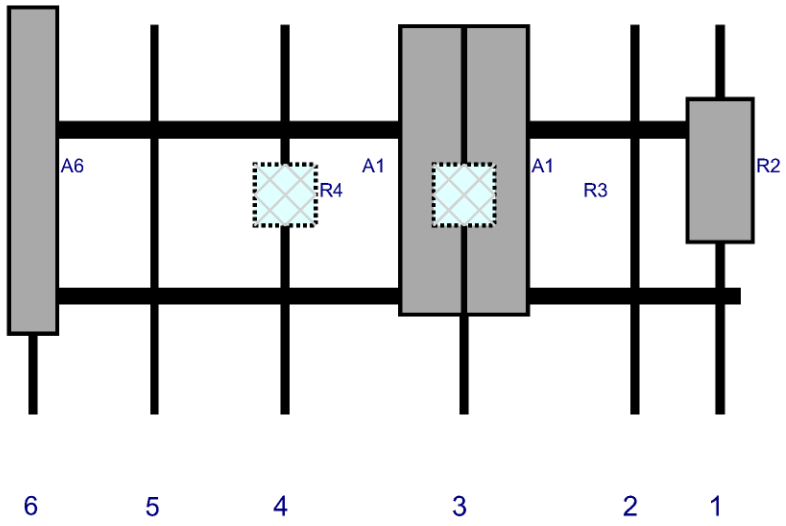
1/11/2022

Page: 1

Plan View

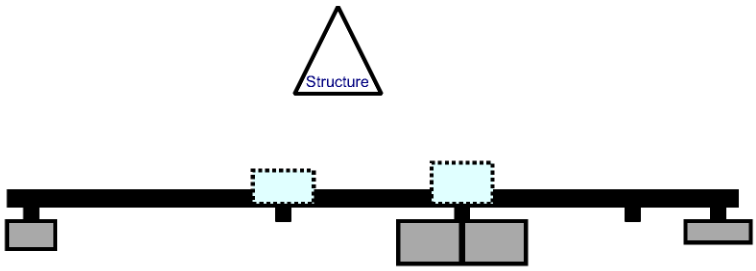


Front View - Looking at Structure

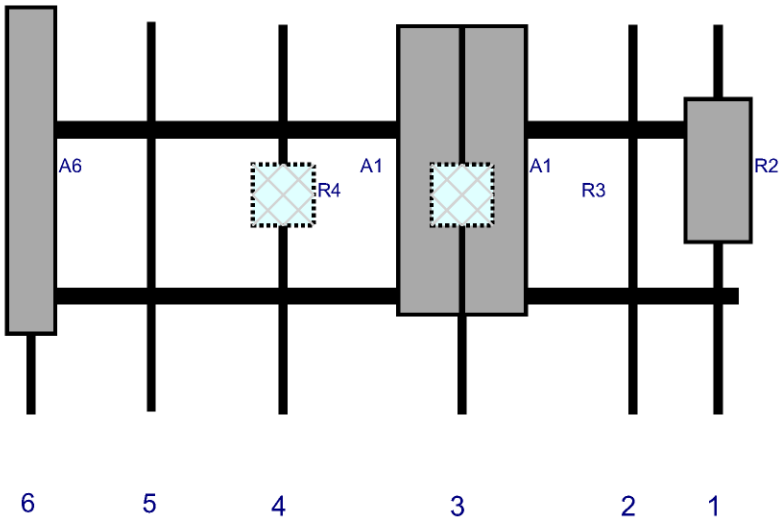


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	175	1	a	Front	36	0	Added	
A5	RVZDC-6627-PF-48	29.5	16.5	175	1	a	Front	36	0	Added	
A1	MX06FRO660-03	71.3	15.4	112	3	a	Front	36	8	Added	
A1	MX06FRO660-03	71.3	15.4	112	3	b	Front	36	-8	Added	
R3	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	112	3	a	Behind	42	0	Added	
R4	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	68	4	a	Behind	42	0	Added	
A6	LNX-6514DS-A1M	80.6	11.9	6	6	a	Front	36	0	Retained	05/04/2021
OVP	RVZDC-6627-PF-48	29.5	16.5		Member					Added	

Plan View

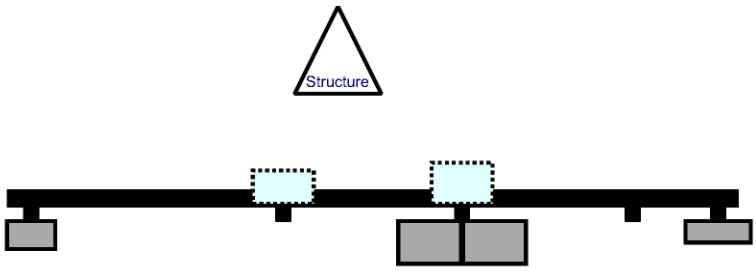


Front View - Looking at Structure

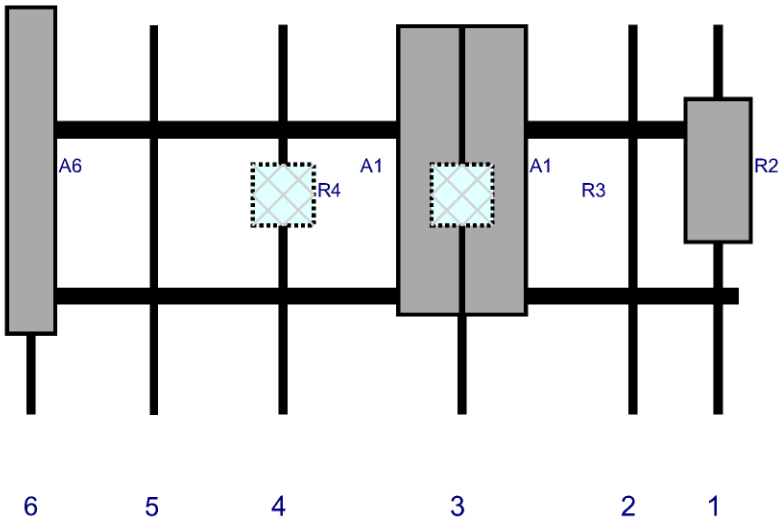


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	175	1	a	Front	36	0	Added	
A1	MX06FRO660-03	71.3	15.4	112	3	a	Front	36	8	Added	
A1	MX06FRO660-03	71.3	15.4	112	3	b	Front	36	-8	Added	
R3	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	112	3	a	Behind	42	0	Added	
R4	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	68	4	a	Behind	42	0	Added	
A6	LNX-6514DS-A1M	80.6	11.9	6	6	a	Front	36	0	Retained	05/04/2021

Plan View



Front View - Looking at Structure



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
R2	MT6407-77A	35.1	16.1	175	1	a	Front	36	0	Added	
A1	MX06FRO660-03	71.3	15.4	112	3	a	Front	36	8	Added	
A1	MX06FRO660-03	71.3	15.4	112	3	b	Front	36	-8	Added	
R3	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	112	3	a	Behind	42	0	Added	
R4	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	68	4	a	Behind	42	0	Added	
A6	LNX-6514DS-A1M	80.6	11.9	6	6	a	Front	36	0	Retained	05/04/2021

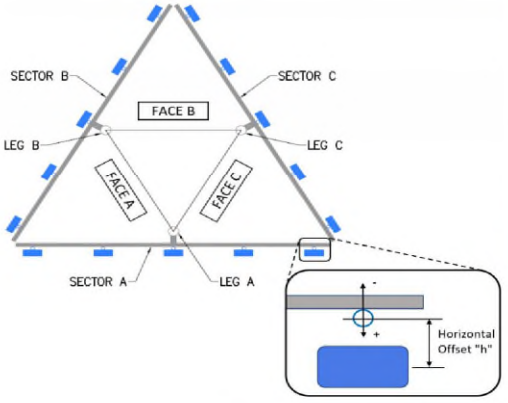
V4.0 Updated on 3-31-2021

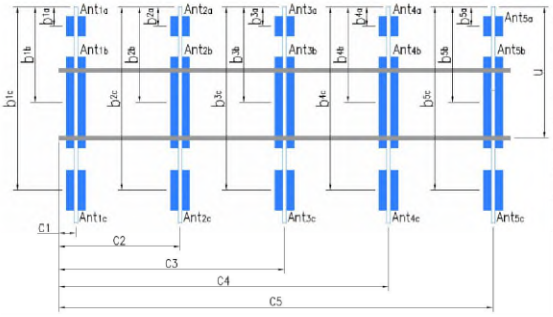
Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	AMERICAN TOWER CO.	**Mapping Date:**	5/3/2021
Site Name:	MADISON CT	**Tower Type:**	Self Support
Site Number or ID:	469141	**Tower Height (Ft.):**	180
Mapping Contractor:	HUDSON DESIGN GROUP, LLC	**Mount Elevation (Ft.):**	172.41

Please insert the sketches of the antenna mount from the "Sketches" tab with dimensions and members here.





Antenna Layout (Looking Out From Tower)

Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2" STD PIPE X 96" LONG	67.00	6.00	C1	2" STD PIPE X 96" LONG	67.00	6.00
A2	2" STD PIPE X 60" LONG	57.00	25.00	C2	2" STD PIPE X 60" LONG	57.00	25.00
A3	2" STD PIPE X 96" LONG	67.00	88.00	C3	2" STD PIPE X 96" LONG	67.00	88.00
A4	2" STD PIPE X 60" LONG	57.00	112.00	C4	2" STD PIPE X 60" LONG	57.00	112.00
A5	2" STD PIPE X 96" LONG	67.00	136.00	C5	2" STD PIPE X 96" LONG	67.00	136.00
A6	2" STD PIPE X 96" LONG	67.00	175.00	C6	2" STD PIPE X 96" LONG	67.00	175.00
B1	2" STD PIPE X 96" LONG	67.00	6.00	D1			
B2	2" STD PIPE X 60" LONG	57.00	25.00	D2			
B3	2" STD PIPE X 96" LONG	67.00	88.00	D3			
B4	2" STD PIPE X 60" LONG	57.00	112.00	D4			
B5	2" STD PIPE X 96" LONG	67.00	136.00	D5			
B6	2" STD PIPE X 96" LONG	67.00	175.00	D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	17.50
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	

Please enter additional infomation or comments below.

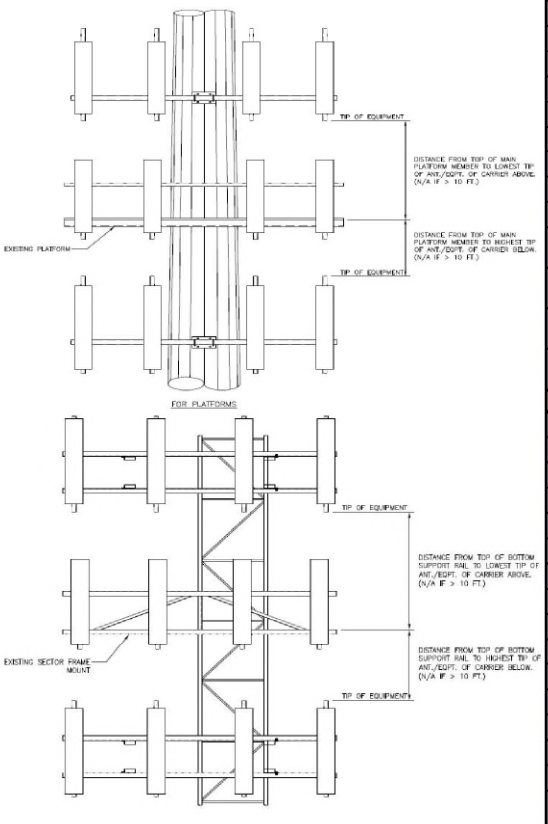
Tower Face Width at Mount Elev. (ft.):	8.83	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	3.5
For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.			

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}	SBNHH-1D65B	12.00	7.00	73.00		173.868	32.00	8.00	40.00	5,60
Ant_{1c}										
Ant_{2a}	B4 RRH 4X45	11.00	5.50	36.00		173.952	21.00	-7.00		5,60
Ant_{2b}	BXA-70063/6CF	11.00	5.00	71.00		173.035	32.00	8.00	40.00	6,61
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	SBNHH-1D65B	12.00	7.00	73.00		173.868	32.00	8.00	40.00	7,62
Ant_{3c}										
Ant_{4a}	B13 RRH 4X30	12.00	7.50	20.50		174.868	10.00	-7.00		7,62
Ant_{4b}	SBNHH-1D65B	12.00	7.00	73.00		173.035	32.00	8.00	40.00	7,63
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

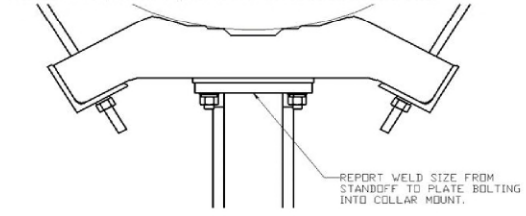
Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	40.00	Deg	Leg A:	0.00	Deg
Sector B:	170.00	Deg	Leg B:	120.00	Deg
Sector C:	280.00	Deg	Leg C:	240.00	Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	120.00	Deg	Sector B
Climbing Facility	Corrosion Type:		Minor corrosion observed.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.

Please insert a photo of the mount centerline measurement here.



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}	SBNHH-1D65B	12.00	7.00	73.00		173.868	32.00	8.00	170.00	9,64
Ant_{1c}										
Ant_{2a}	B4 RRH 4X45	11.00	5.50	36.00		173.952	21.00	-7.00		9,64
Ant_{2b}	BXA-70063/6CF	11.00	5.00	71.00		173.035	32.00	8.00	170.00	10,65
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	SBNHH-1D65B	12.00	7.00	73.00		173.868	32.00	8.00	170.00	11,66
Ant_{3c}										
Ant_{4a}	B13 RRH 4X30	12.00	7.50	20.50		174.868	10.00	-7.00		11,66
Ant_{4b}	SBNHH-1D65B	12.00	7.00	73.00		173.035	32.00	8.00	170.00	12,67
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}										
Ant_{1b}	SBNHH-1D65B	12.00	7.00	73.00		173.868	32.00	8.00	280.00	18,68
Ant_{1c}										
Ant_{2a}	B4 RRH 4X45	11.00	5.50	36.00		173.952	21.00	-7.00		18,68
Ant_{2b}	BXA-70063/6CF	11.00	5.00	71.00		173.035	32.00	8.00	280.00	19,69
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	SBNHH-1D65B	12.00	7.00	73.00		173.868	32.00	8.00	280.00	20,69
Ant_{3c}										
Ant_{4a}	B13 RRH 4X30	12.00	7.50	20.50		174.868	10.00	-7.00		20,69
Ant_{4b}	SBNHH-1D65B	12.00	7.00	73.00		173.035	32.00	8.00	280.00	20,69
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
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	Miner corrosion observed	65
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.

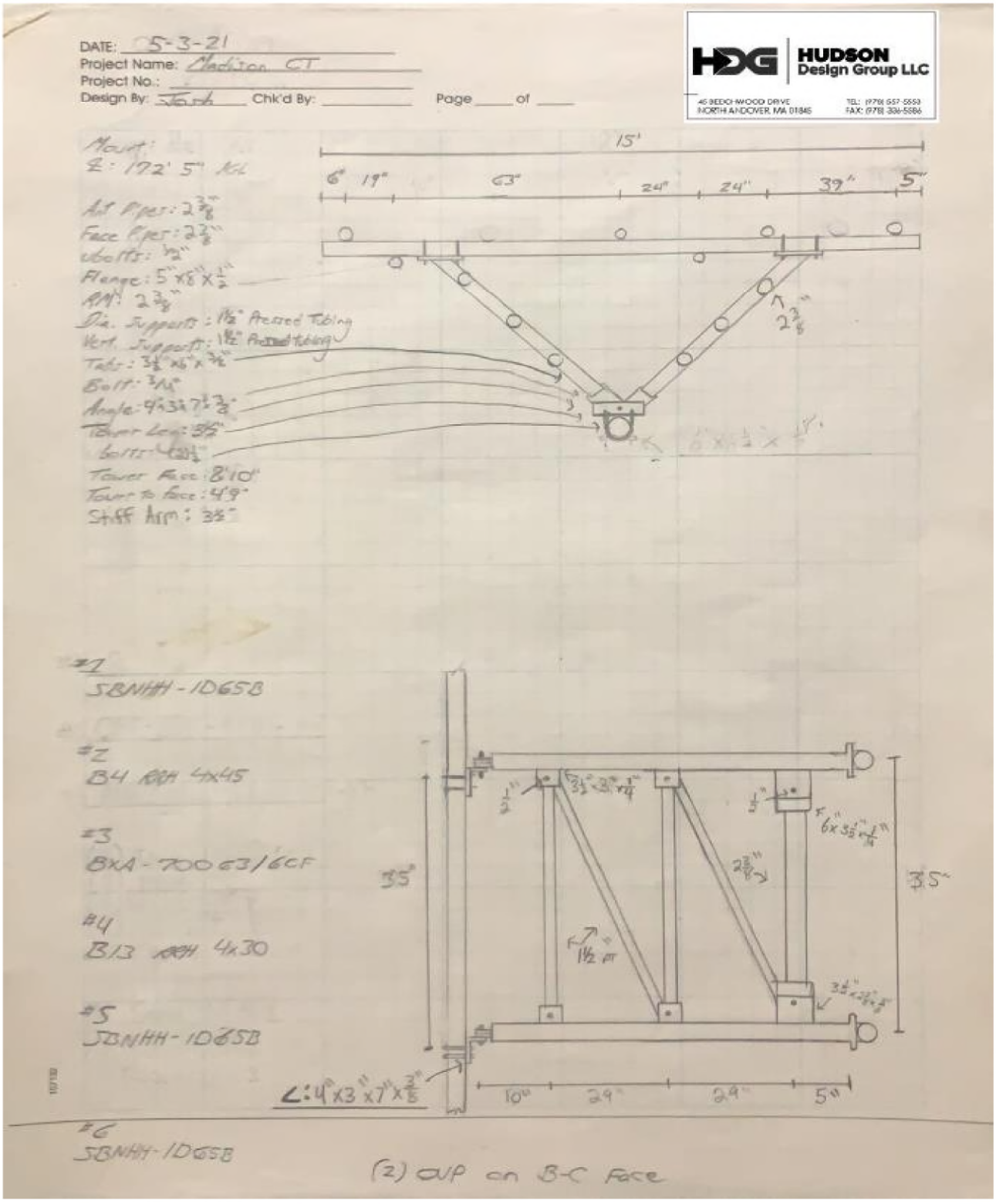
Standard Conditions
1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

Antenna Mount Mapping Form (PATENT PENDING)

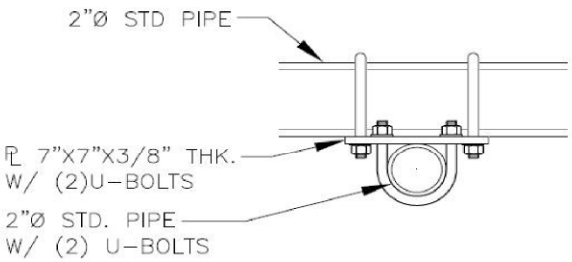
FCC #

Tower Owner:	AMERICAN TOWER CO.	**Mapping Date:**	5/3/2021
Site Name:	MADISON CT	**Tower Type:**	Self Support
Site Number or ID:	469141	**Tower Height (Ft.):**	180
Mapping Contractor:	HUDSON DESIGN GROUP, LLC	**Mount Elevation (Ft.):**	172.41

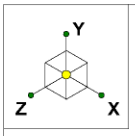
Please Insert Sketches of the Antenna Mount

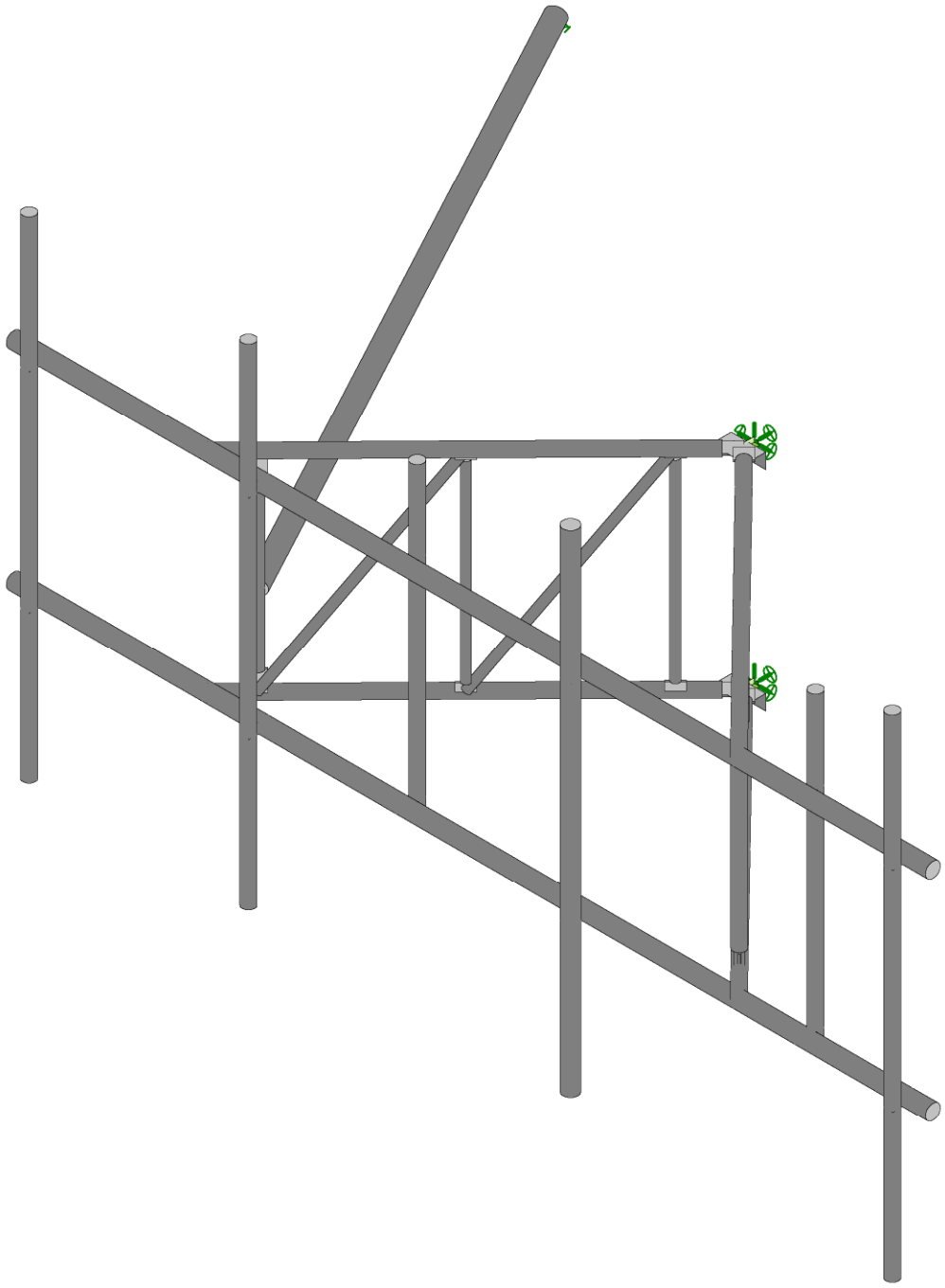


Please Insert Sketches of the Antenna Mount, cont'd



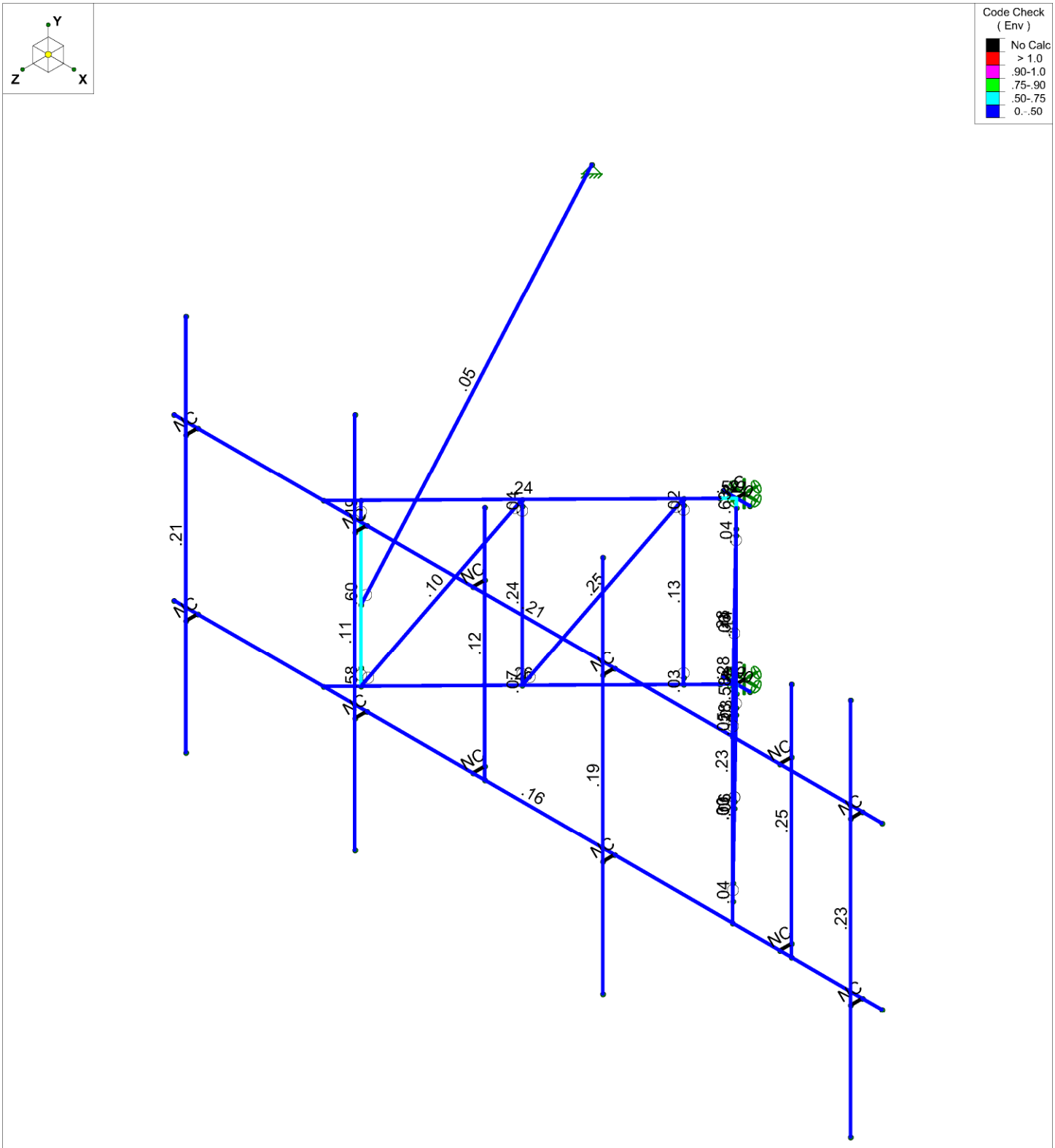
ANTENNA PIPE MAST MOUNT CONNECTION





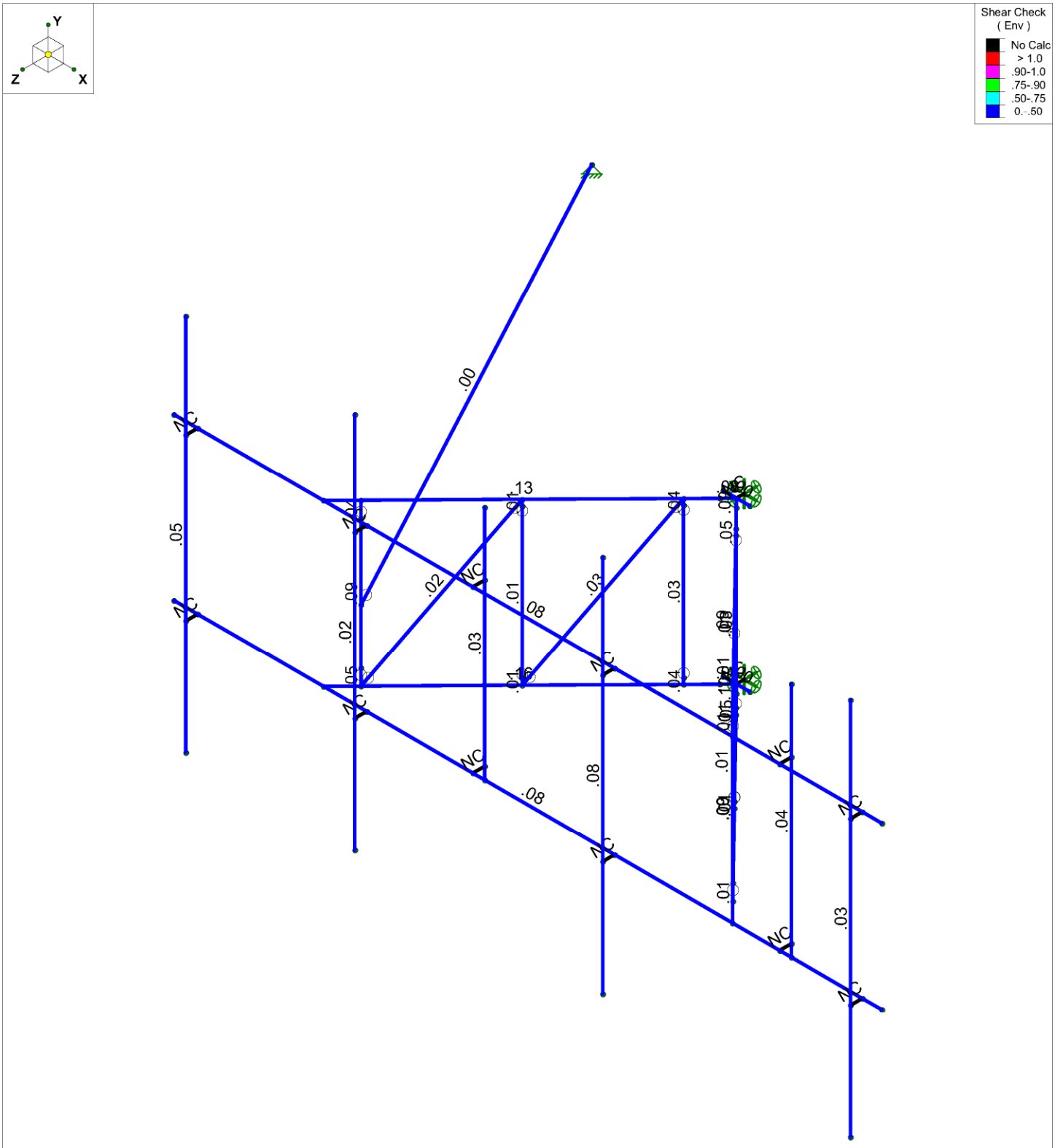
Envelope Only Solution

Maser Consulting	Mount Analysis	SK - 1
NL		Jan 11, 2022 at 1:32 PM
21777866A		469141-VZW_MT_LOT_A_H.r3d



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	Mount Analysis	SK - 2
NL		Jan 11, 2022 at 1:32 PM
21777866A		469141-VZW_MT_LOT_A_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	Mount Analysis	SK - 3
NL		Jan 11, 2022 at 1:32 PM
21777866A		469141-VZW_MT_LOT_A_H.r3d

Basic Load Cases

	BLC Description	Category	X Grav...	Y Grav...	Z Grav...	Joint	Point	Distrib...	Area(M...	Surfac...
1	Antenna D	None					33			
2	Antenna Di	None					33			
3	Antenna Wo (0 Deg)	None					33			
4	Antenna Wo (30 Deg)	None					33			
5	Antenna Wo (60 Deg)	None					33			
6	Antenna Wo (90 Deg)	None					33			
7	Antenna Wo (120 Deg)	None					33			
8	Antenna Wo (150 Deg)	None					33			
9	Antenna Wo (180 Deg)	None					33			
10	Antenna Wo (210 Deg)	None					33			
11	Antenna Wo (240 Deg)	None					33			
12	Antenna Wo (270 Deg)	None					33			
13	Antenna Wo (300 Deg)	None					33			
14	Antenna Wo (330 Deg)	None					33			
15	Antenna Wi (0 Deg)	None					33			
16	Antenna Wi (30 Deg)	None					33			
17	Antenna Wi (60 Deg)	None					33			
18	Antenna Wi (90 Deg)	None					33			
19	Antenna Wi (120 Deg)	None					33			
20	Antenna Wi (150 Deg)	None					33			
21	Antenna Wi (180 Deg)	None					33			
22	Antenna Wi (210 Deg)	None					33			
23	Antenna Wi (240 Deg)	None					33			
24	Antenna Wi (270 Deg)	None					33			
25	Antenna Wi (300 Deg)	None					33			
26	Antenna Wi (330 Deg)	None					33			
27	Antenna Wm (0 Deg)	None					33			
28	Antenna Wm (30 Deg)	None					33			
29	Antenna Wm (60 Deg)	None					33			
30	Antenna Wm (90 Deg)	None					33			
31	Antenna Wm (120 Deg)	None					33			
32	Antenna Wm (150 Deg)	None					33			
33	Antenna Wm (180 Deg)	None					33			
34	Antenna Wm (210 Deg)	None					33			
35	Antenna Wm (240 Deg)	None					33			
36	Antenna Wm (270 Deg)	None					33			
37	Antenna Wm (300 Deg)	None					33			
38	Antenna Wm (330 Deg)	None					33			
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 Grav...	Y Grav...	Z Grav...	Joint	Point	Distrib...	Area(M...	Surfac...
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					33			
82	Antenna Eh (0 Deg)	None					22			
83	Antenna Eh (90 Deg)	None					22			
84	Structure Ev	ELY		-.045						
85	Structure Eh (0 Deg)	ELZ			-.111					
86	Structure Eh (90 Deg)	ELX	.111							

Load Combinations

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

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
23	1.2D + 1.0Di + 1.0Wi (3...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di + 1.0Wi (3...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + 1.0W...	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 + 1.0Eh (0...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	1	83		ELZ	1	E...					
53	1.2D + 1.0Ev + 1.0Eh (3...	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 + 1.0Eh (6...	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 + 1.0Eh (9...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	1	ELZ		E...	1				
56	1.2D + 1.0Ev + 1.0Eh (1...	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 + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.866	83	.5	ELZ	-.866	E...	.5				
58	1.2D + 1.0Ev + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-1	83		ELZ	-1	E...					
59	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.866	83	-.5	ELZ	-.866	E...	-.5				
60	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	-.866	ELZ	-.5	E...	-.866				
61	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	-1	ELZ		E...	-1				
62	1.2D + 1.0Ev + 1.0Eh (3...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	-.866	ELZ	.5	E...	-.866				
63	1.2D + 1.0Ev + 1.0Eh (3...	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 (0 ...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	1	83		ELZ	1	E...					
65	0.9D - 1.0Ev + 1.0Eh (3...	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 (6...	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 (9...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	1	ELZ		E...	1				
68	0.9D - 1.0Ev + 1.0Eh (1...	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 (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.866	83	.5	ELZ	-.866	E...	.5				
70	0.9D - 1.0Ev + 1.0Eh (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-1	83		ELZ	-1	E...					
71	0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.866	83	-.5	ELZ	-.866	E...	-.5				
72	0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	-.866	ELZ	-.5	E...	-.866				
73	0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	-1	ELZ		E...	-1				
74	0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	-.866	ELZ	.5	E...	-.866				
75	0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	-.5	ELZ	.866	E...	-.5				

Joint Coordinates and Temperatures

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
1	N1	-2.	0	2.	0	
2	N2	-5.375	0	2.	0	
3	N3	1.375	0	2.	0	
4	N4	-2.	0	0	0	
5	N5	-2.	-41.	2.	0	
6	N6	-5.375	-41.	2.	0	
7	N7	1.375	-41.	2.	0	
8	N10	-54	0	55.	0	
9	N11	50.	0	55.	0	
10	N11A	-92.	0	55.	0	
11	N12	88.	0	55.	0	
12	N14	-54	-41.	55.	0	
13	N15	50.	-41.	55.	0	
14	N16	-92.	-41.	55.	0	
15	N17	88.	-41.	55.	0	
16	N17A	-4.101022	0	4.141426	0	
17	N18	0.101022	0	4.141426	0	
18	N19	-4.101022	-41.	4.141426	0	
19	N20	0.101022	-41.	4.141426	0	
20	N21	4.653236	0	8.781183	0	
21	N22	4.653236	-41.	8.781183	0	
22	N23	24.963116	0	29.481637	0	
23	N24	24.963116	-41.	29.481637	0	
24	N25	45.272995	0	50.182091	0	
25	N26	45.272995	-41.	50.182091	0	
26	N27	4.653236	-39.5	8.781183	0	
27	N28	24.963116	-39.5	29.481637	0	
28	N29	4.653236	-1.5	8.781183	0	
29	N30	24.963116	-1.5	29.481637	0	
30	N31	45.272995	-37.	50.182091	0	
31	N32	45.272995	-4.	50.182091	0	
32	N33	-8.653236	0	8.781183	0	
33	N34	-8.653236	-41.	8.781183	0	
34	N35	-28.963116	0	29.481637	0	
35	N36	-28.963116	-41.	29.481637	0	
36	N37	-49.272995	0	50.182091	0	
37	N38	-49.272995	-41.	50.182091	0	
38	N39	-8.653236	-39.5	8.781183	0	
39	N40	-28.963116	-39.5	29.481637	0	
40	N41	-8.653236	-1.5	8.781183	0	
41	N42	-28.963116	-1.5	29.481637	0	
42	N43	-49.272995	-37.	50.182091	0	
43	N44	-49.272995	-4.	50.182091	0	
44	N65	-2.	-41.	0	0	
45	N45	-43.	0	55.	0	
46	N46	-43.	-41.	55.	0	
47	N47	-86.	0	55.	0	
48	N48	-86.	-41.	55.	0	
49	N49	-16	0	55.	0	
50	N50	-16	-41.	55.	0	
51	N51	20.	0	55.	0	
52	N52	20.	-41.	55.	0	
53	N53	62.	0	55.	0	
54	N54	62.	-41.	55.	0	
55	N55	83.	0	55.	0	
56	N56	83.	-41.	55.	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
57	N57	-43.	0	58.	0	
58	N58	-43.	-41.	58.	0	
59	N59	-86.	0	58.	0	
60	N60	-86.	-41.	58.	0	
61	N61	-16	0	52.	0	
62	N62	-16	-41.	52.	0	
63	N63	20.	0	58.	0	
64	N64	20.	-41.	58.	0	
65	N65A	62.	0	52.	0	
66	N66	62.	-41.	52.	0	
67	N67	83.	0	58.	0	
68	N68	83.	-41.	58.	0	
69	N69	-43.	26.	58.	0	
70	N70	-86.	26.	58.	0	
71	N71	20.	26.	58.	0	
72	N72	83.	26.	58.	0	
73	N73	-43.	-70.	58.	0	
74	N74	-86.	-70.	58.	0	
75	N75	20.	-70.	58.	0	
76	N76	83.	-70.	58.	0	
77	N77	-16	16.	52.	0	
78	N78	62.	16.	52.	0	
79	N79	-16	-44.	52.	0	
80	N80	62.	-44.	52.	0	
81	N81	-49.272995	-23.	50.182091	0	
82	N84	-93.764052	0	-52.98	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Dual Mounted Pipe	PIPE_2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
3	Standoff Horizontal	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
4	Standoff Vertical	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
5	Standoff Diagonal	1.5" w 0.06"	Beam	Pipe	A53 Gr. B	Typical	.271	.07	.07	.141
6	Face Horizontal	PIPE_2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
7	Tie Back	PIPE_3.0	Beam	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
8	Standoff Bar	PL3/8X3_HRA	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
10	TES Standoff Diag	SR_1.25	Beam	Single Angle	A36 Gr.36	Typical	1.227	.12	.12	.24

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
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	OVP	N17A	N10			Standoff Horiz...	Beam	Pipe	A53 Gr. B	Typical
11	M12	N18	N11			Standoff Horiz...	Beam	Pipe	A53 Gr. B	Typical
12	M13	N19	N14			Standoff Horiz...	Beam	Pipe	A53 Gr. B	Typical
13	M14	N20	N15			Standoff Horiz...	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 Diago...	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 Diago...	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 Diago...	Beam	Pipe	A53 Gr. B	Typical
22	M23	N30	N28	N1		Standoff Diago...	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 Diago...	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 Diago...	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 Diago...	Beam	Pipe	A53 Gr. B	Typical
33	M34	N42	N40	N1		Standoff Diago...	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	M46A	N5	N65			RIGID	None	None	RIGID	Typical
37	M37	N45	N57			RIGID	None	None	RIGID	Typical
38	M38	N47	N59			RIGID	None	None	RIGID	Typical
39	M39	N49	N61			RIGID	None	None	RIGID	Typical
40	M40	N46	N58			RIGID	None	None	RIGID	Typical
41	M41	N48	N60			RIGID	None	None	RIGID	Typical
42	M42	N50	N62			RIGID	None	None	RIGID	Typical
43	M43	N51	N63			RIGID	None	None	RIGID	Typical
44	M44	N52	N64			RIGID	None	None	RIGID	Typical
45	M45	N53	N65A			RIGID	None	None	RIGID	Typical
46	M46	N54	N66			RIGID	None	None	RIGID	Typical
47	M47	N55	N67			RIGID	None	None	RIGID	Typical
48	M48	N56	N68			RIGID	None	None	RIGID	Typical
49	MP6A	N69	N73			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
50	MP5A	N70	N74			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
51	MP3A	N71	N75			Dual Mounted ...	Column	Pipe	A53 Gr. B	Typical
52	MP1A	N72	N76			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
53	MP4A	N77	N79			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
54	MP2A	N78	N80			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
55	M55	N81	N84			Tie Back	Beam	Pipe	A53 Gr. B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				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	OVP						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	Default			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	M46A						Yes	** NA **			None
37	M37						Yes	** NA **			None
38	M38						Yes	** NA **			None
39	M39						Yes	** NA **			None
40	M40						Yes	** NA **			None
41	M41						Yes	** NA **			None
42	M42						Yes	** NA **			None
43	M43						Yes	** NA **			None
44	M44						Yes	** NA **			None
45	M45						Yes	** NA **			None
46	M46						Yes	** NA **			None
47	M47						Yes	** NA **			None
48	M48						Yes	** NA **			None
49	MP6A						Yes	** NA **			None
50	MP5A						Yes	** NA **			None
51	MP3A						Yes	** NA **			None
52	MP1A						Yes	** NA **			None
53	MP4A						Yes	** NA **			None
54	MP2A						Yes	** NA **			None
55	M55	OOOOXO					Yes	Default			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	Y	-23	6
2	MP3A	My	-.011	6
3	MP3A	Mz	.015	6
4	MP3A	Y	-23	66
5	MP3A	My	-.011	66
6	MP3A	Mz	.015	66
7	MP3A	Y	-23	6
8	MP3A	My	-.011	6
9	MP3A	Mz	-.015	6
10	MP3A	Y	-23	66
11	MP3A	My	-.011	66
12	MP3A	Mz	-.015	66
13	MP1A	Y	-43.55	24
14	MP1A	My	-.022	24
15	MP1A	Mz	0	24
16	MP1A	Y	-43.55	48
17	MP1A	My	-.022	48
18	MP1A	Mz	0	48
19	MP3A	Y	-84.4	42
20	MP3A	My	.042	42
21	MP3A	Mz	0	42
22	MP4A	Y	-70.3	42
23	MP4A	My	.035	42
24	MP4A	Mz	0	42
25	OVP	Y	-32	24
26	OVP	My	0	24
27	OVP	Mz	0	24
28	MP5A	Y	-22.95	6
29	MP5A	My	-.011	6
30	MP5A	Mz	0	6
31	MP5A	Y	-22.95	66
32	MP5A	My	-.011	66
33	MP5A	Mz	0	66

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	Y	-84.267	6
2	MP3A	My	-.042	6
3	MP3A	Mz	.056	6
4	MP3A	Y	-84.267	66
5	MP3A	My	-.042	66
6	MP3A	Mz	.056	66
7	MP3A	Y	-84.267	6
8	MP3A	My	-.042	6
9	MP3A	Mz	-.056	6
10	MP3A	Y	-84.267	66
11	MP3A	My	-.042	66
12	MP3A	Mz	-.056	66
13	MP1A	Y	-36.415	24
14	MP1A	My	-.018	24
15	MP1A	Mz	0	24
16	MP1A	Y	-36.415	48
17	MP1A	My	-.018	48
18	MP1A	Mz	0	48
19	MP3A	Y	-45.925	42

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
20	MP3A	My	.023	42
21	MP3A	Mz	0	42
22	MP4A	Y	-41.308	42
23	MP4A	My	.021	42
24	MP4A	Mz	0	42
25	OVP	Y	-89.857	24
26	OVP	My	0	24
27	OVP	Mz	0	24
28	MP5A	Y	-68.787	6
29	MP5A	My	-.034	6
30	MP5A	Mz	0	6
31	MP5A	Y	-68.787	66
32	MP5A	My	-.034	66
33	MP5A	Mz	0	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	0	6
2	MP3A	Z	-182.524	6
3	MP3A	Mx	-.122	6
4	MP3A	X	0	66
5	MP3A	Z	-182.524	66
6	MP3A	Mx	-.122	66
7	MP3A	X	0	6
8	MP3A	Z	-182.524	6
9	MP3A	Mx	.122	6
10	MP3A	X	0	66
11	MP3A	Z	-182.524	66
12	MP3A	Mx	.122	66
13	MP1A	X	0	24
14	MP1A	Z	-86.916	24
15	MP1A	Mx	0	24
16	MP1A	X	0	48
17	MP1A	Z	-86.916	48
18	MP1A	Mx	0	48
19	MP3A	X	0	42
20	MP3A	Z	-69.163	42
21	MP3A	Mx	0	42
22	MP4A	X	0	42
23	MP4A	Z	-69.163	42
24	MP4A	Mx	0	42
25	OVP	X	0	24
26	OVP	Z	-118.727	24
27	OVP	Mx	0	24
28	MP5A	X	0	6
29	MP5A	Z	-170.688	6
30	MP5A	Mx	0	6
31	MP5A	X	0	66
32	MP5A	Z	-170.688	66
33	MP5A	Mx	0	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	85.409	6
2	MP3A	Z	-147.932	6
3	MP3A	Mx	-.141	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
4	MP3A	X	85.409	66
5	MP3A	Z	-147.932	66
6	MP3A	Mx	-.141	66
7	MP3A	X	85.409	6
8	MP3A	Z	-147.932	6
9	MP3A	Mx	.056	6
10	MP3A	X	85.409	66
11	MP3A	Z	-147.932	66
12	MP3A	Mx	.056	66
13	MP1A	X	36.847	24
14	MP1A	Z	-63.821	24
15	MP1A	Mx	-.018	24
16	MP1A	X	36.847	48
17	MP1A	Z	-63.821	48
18	MP1A	Mx	-.018	48
19	MP3A	X	31.715	42
20	MP3A	Z	-54.932	42
21	MP3A	Mx	.016	42
22	MP4A	X	30.617	42
23	MP4A	Z	-53.03	42
24	MP4A	Mx	.015	42
25	OVP	X	57.818	24
26	OVP	Z	-100.144	24
27	OVP	Mx	0	24
28	MP5A	X	78.202	6
29	MP5A	Z	-135.449	6
30	MP5A	Mx	-.039	6
31	MP5A	X	78.202	66
32	MP5A	Z	-135.449	66
33	MP5A	Mx	-.039	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	127.657	6
2	MP3A	Z	-73.703	6
3	MP3A	Mx	-.113	6
4	MP3A	X	127.657	66
5	MP3A	Z	-73.703	66
6	MP3A	Mx	-.113	66
7	MP3A	X	127.657	6
8	MP3A	Z	-73.703	6
9	MP3A	Mx	-.015	6
10	MP3A	X	127.657	66
11	MP3A	Z	-73.703	66
12	MP3A	Mx	-.015	66
13	MP1A	X	40.919	24
14	MP1A	Z	-23.625	24
15	MP1A	Mx	-.02	24
16	MP1A	X	40.919	48
17	MP1A	Z	-23.625	48
18	MP1A	Mx	-.02	48
19	MP3A	X	45.003	42
20	MP3A	Z	-25.982	42
21	MP3A	Mx	.023	42
22	MP4A	X	39.297	42
23	MP4A	Z	-22.688	42

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
24	MP4A	Mx	.02	42
25	OVP	X	111.952	24
26	OVP	Z	-64.636	24
27	OVP	Mx	0	24
28	MP5A	X	110.707	6
29	MP5A	Z	-63.917	6
30	MP5A	Mx	-.055	6
31	MP5A	X	110.707	66
32	MP5A	Z	-63.917	66
33	MP5A	Mx	-.055	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	135.699	6
2	MP3A	Z	0	6
3	MP3A	Mx	-.068	6
4	MP3A	X	135.699	66
5	MP3A	Z	0	66
6	MP3A	Mx	-.068	66
7	MP3A	X	135.699	6
8	MP3A	Z	0	6
9	MP3A	Mx	-.068	6
10	MP3A	X	135.699	66
11	MP3A	Z	0	66
12	MP3A	Mx	-.068	66
13	MP1A	X	34.027	24
14	MP1A	Z	0	24
15	MP1A	Mx	-.017	24
16	MP1A	X	34.027	48
17	MP1A	Z	0	48
18	MP1A	Mx	-.017	48
19	MP3A	X	46.232	42
20	MP3A	Z	0	42
21	MP3A	Mx	.023	42
22	MP4A	X	37.448	42
23	MP4A	Z	0	42
24	MP4A	Mx	.019	42
25	OVP	X	145.997	24
26	OVP	Z	0	24
27	OVP	Mx	0	24
28	MP5A	X	113.549	6
29	MP5A	Z	0	6
30	MP5A	Mx	-.057	6
31	MP5A	X	113.549	66
32	MP5A	Z	0	66
33	MP5A	Mx	-.057	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	127.657	6
2	MP3A	Z	73.703	6
3	MP3A	Mx	-.015	6
4	MP3A	X	127.657	66
5	MP3A	Z	73.703	66
6	MP3A	Mx	-.015	66
7	MP3A	X	127.657	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
8	MP3A	Z	73.703	6
9	MP3A	Mx	-.113	6
10	MP3A	X	127.657	66
11	MP3A	Z	73.703	66
12	MP3A	Mx	-.113	66
13	MP1A	X	40.919	24
14	MP1A	Z	23.625	24
15	MP1A	Mx	-.02	24
16	MP1A	X	40.919	48
17	MP1A	Z	23.625	48
18	MP1A	Mx	-.02	48
19	MP3A	X	45.003	42
20	MP3A	Z	25.982	42
21	MP3A	Mx	.023	42
22	MP4A	X	39.297	42
23	MP4A	Z	22.688	42
24	MP4A	Mx	.02	42
25	OVP	X	129.114	24
26	OVP	Z	74.544	24
27	OVP	Mx	0	24
28	MP5A	X	110.707	6
29	MP5A	Z	63.917	6
30	MP5A	Mx	-.055	6
31	MP5A	X	110.707	66
32	MP5A	Z	63.917	66
33	MP5A	Mx	-.055	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	85.409	6
2	MP3A	Z	147.932	6
3	MP3A	Mx	.056	6
4	MP3A	X	85.409	66
5	MP3A	Z	147.932	66
6	MP3A	Mx	.056	66
7	MP3A	X	85.409	6
8	MP3A	Z	147.932	6
9	MP3A	Mx	-.141	6
10	MP3A	X	85.409	66
11	MP3A	Z	147.932	66
12	MP3A	Mx	-.141	66
13	MP1A	X	36.847	24
14	MP1A	Z	63.821	24
15	MP1A	Mx	-.018	24
16	MP1A	X	36.847	48
17	MP1A	Z	63.821	48
18	MP1A	Mx	-.018	48
19	MP3A	X	31.715	42
20	MP3A	Z	54.932	42
21	MP3A	Mx	.016	42
22	MP4A	X	30.617	42
23	MP4A	Z	53.03	42
24	MP4A	Mx	.015	42
25	OVP	X	67.726	24
26	OVP	Z	117.306	24
27	OVP	Mx	0	24

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
28	MP5A	X	78.202	6
29	MP5A	Z	135.449	6
30	MP5A	Mx	-.039	6
31	MP5A	X	78.202	66
32	MP5A	Z	135.449	66
33	MP5A	Mx	-.039	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	0	6
2	MP3A	Z	182.524	6
3	MP3A	Mx	.122	6
4	MP3A	X	0	66
5	MP3A	Z	182.524	66
6	MP3A	Mx	.122	66
7	MP3A	X	0	6
8	MP3A	Z	182.524	6
9	MP3A	Mx	-.122	6
10	MP3A	X	0	66
11	MP3A	Z	182.524	66
12	MP3A	Mx	-.122	66
13	MP1A	X	0	24
14	MP1A	Z	86.916	24
15	MP1A	Mx	0	24
16	MP1A	X	0	48
17	MP1A	Z	86.916	48
18	MP1A	Mx	0	48
19	MP3A	X	0	42
20	MP3A	Z	69.163	42
21	MP3A	Mx	0	42
22	MP4A	X	0	42
23	MP4A	Z	69.163	42
24	MP4A	Mx	0	42
25	OVP	X	0	24
26	OVP	Z	118.727	24
27	OVP	Mx	0	24
28	MP5A	X	0	6
29	MP5A	Z	170.688	6
30	MP5A	Mx	0	6
31	MP5A	X	0	66
32	MP5A	Z	170.688	66
33	MP5A	Mx	0	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-85.409	6
2	MP3A	Z	147.932	6
3	MP3A	Mx	.141	6
4	MP3A	X	-85.409	66
5	MP3A	Z	147.932	66
6	MP3A	Mx	.141	66
7	MP3A	X	-85.409	6
8	MP3A	Z	147.932	6
9	MP3A	Mx	-.056	6
10	MP3A	X	-85.409	66
11	MP3A	Z	147.932	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
12	MP3A	Mx	-.056	66
13	MP1A	X	-36.847	24
14	MP1A	Z	63.821	24
15	MP1A	Mx	.018	24
16	MP1A	X	-36.847	48
17	MP1A	Z	63.821	48
18	MP1A	Mx	.018	48
19	MP3A	X	-31.715	42
20	MP3A	Z	54.932	42
21	MP3A	Mx	-.016	42
22	MP4A	X	-30.617	42
23	MP4A	Z	53.03	42
24	MP4A	Mx	-.015	42
25	OVP	X	-57.818	24
26	OVP	Z	100.144	24
27	OVP	Mx	0	24
28	MP5A	X	-78.202	6
29	MP5A	Z	135.449	6
30	MP5A	Mx	.039	6
31	MP5A	X	-78.202	66
32	MP5A	Z	135.449	66
33	MP5A	Mx	.039	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-127.657	6
2	MP3A	Z	73.703	6
3	MP3A	Mx	.113	6
4	MP3A	X	-127.657	66
5	MP3A	Z	73.703	66
6	MP3A	Mx	.113	66
7	MP3A	X	-127.657	6
8	MP3A	Z	73.703	6
9	MP3A	Mx	.015	6
10	MP3A	X	-127.657	66
11	MP3A	Z	73.703	66
12	MP3A	Mx	.015	66
13	MP1A	X	-40.919	24
14	MP1A	Z	23.625	24
15	MP1A	Mx	.02	24
16	MP1A	X	-40.919	48
17	MP1A	Z	23.625	48
18	MP1A	Mx	.02	48
19	MP3A	X	-45.003	42
20	MP3A	Z	25.982	42
21	MP3A	Mx	-.023	42
22	MP4A	X	-39.297	42
23	MP4A	Z	22.688	42
24	MP4A	Mx	-.02	42
25	OVP	X	-111.952	24
26	OVP	Z	64.636	24
27	OVP	Mx	0	24
28	MP5A	X	-110.707	6
29	MP5A	Z	63.917	6
30	MP5A	Mx	.055	6
31	MP5A	X	-110.707	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
32	MP5A	Z	63.917	66
33	MP5A	Mx	.055	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-135.699	6
2	MP3A	Z	0	6
3	MP3A	Mx	.068	6
4	MP3A	X	-135.699	66
5	MP3A	Z	0	66
6	MP3A	Mx	.068	66
7	MP3A	X	-135.699	6
8	MP3A	Z	0	6
9	MP3A	Mx	.068	6
10	MP3A	X	-135.699	66
11	MP3A	Z	0	66
12	MP3A	Mx	.068	66
13	MP1A	X	-34.027	24
14	MP1A	Z	0	24
15	MP1A	Mx	.017	24
16	MP1A	X	-34.027	48
17	MP1A	Z	0	48
18	MP1A	Mx	.017	48
19	MP3A	X	-46.232	42
20	MP3A	Z	0	42
21	MP3A	Mx	-.023	42
22	MP4A	X	-37.448	42
23	MP4A	Z	0	42
24	MP4A	Mx	-.019	42
25	OVP	X	-145.997	24
26	OVP	Z	0	24
27	OVP	Mx	0	24
28	MP5A	X	-113.549	6
29	MP5A	Z	0	6
30	MP5A	Mx	.057	6
31	MP5A	X	-113.549	66
32	MP5A	Z	0	66
33	MP5A	Mx	.057	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-127.657	6
2	MP3A	Z	-73.703	6
3	MP3A	Mx	.015	6
4	MP3A	X	-127.657	66
5	MP3A	Z	-73.703	66
6	MP3A	Mx	.015	66
7	MP3A	X	-127.657	6
8	MP3A	Z	-73.703	6
9	MP3A	Mx	.113	6
10	MP3A	X	-127.657	66
11	MP3A	Z	-73.703	66
12	MP3A	Mx	.113	66
13	MP1A	X	-40.919	24
14	MP1A	Z	-23.625	24
15	MP1A	Mx	.02	24

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
16	MP1A	X	-40.919	48
17	MP1A	Z	-23.625	48
18	MP1A	Mx	.02	48
19	MP3A	X	-45.003	42
20	MP3A	Z	-25.982	42
21	MP3A	Mx	-.023	42
22	MP4A	X	-39.297	42
23	MP4A	Z	-22.688	42
24	MP4A	Mx	-.02	42
25	OVP	X	-129.114	24
26	OVP	Z	-74.544	24
27	OVP	Mx	0	24
28	MP5A	X	-110.707	6
29	MP5A	Z	-63.917	6
30	MP5A	Mx	.055	6
31	MP5A	X	-110.707	66
32	MP5A	Z	-63.917	66
33	MP5A	Mx	.055	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-85.409	6
2	MP3A	Z	-147.932	6
3	MP3A	Mx	-.056	6
4	MP3A	X	-85.409	66
5	MP3A	Z	-147.932	66
6	MP3A	Mx	-.056	66
7	MP3A	X	-85.409	6
8	MP3A	Z	-147.932	6
9	MP3A	Mx	.141	6
10	MP3A	X	-85.409	66
11	MP3A	Z	-147.932	66
12	MP3A	Mx	.141	66
13	MP1A	X	-36.847	24
14	MP1A	Z	-63.821	24
15	MP1A	Mx	.018	24
16	MP1A	X	-36.847	48
17	MP1A	Z	-63.821	48
18	MP1A	Mx	.018	48
19	MP3A	X	-31.715	42
20	MP3A	Z	-54.932	42
21	MP3A	Mx	-.016	42
22	MP4A	X	-30.617	42
23	MP4A	Z	-53.03	42
24	MP4A	Mx	-.015	42
25	OVP	X	-67.726	24
26	OVP	Z	-117.306	24
27	OVP	Mx	0	24
28	MP5A	X	-78.202	6
29	MP5A	Z	-135.449	6
30	MP5A	Mx	.039	6
31	MP5A	X	-78.202	66
32	MP5A	Z	-135.449	66
33	MP5A	Mx	.039	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	0	6
2	MP3A	Z	-33.489	6
3	MP3A	Mx	-.022	6
4	MP3A	X	0	66
5	MP3A	Z	-33.489	66
6	MP3A	Mx	-.022	66
7	MP3A	X	0	6
8	MP3A	Z	-33.489	6
9	MP3A	Mx	.022	6
10	MP3A	X	0	66
11	MP3A	Z	-33.489	66
12	MP3A	Mx	.022	66
13	MP1A	X	0	24
14	MP1A	Z	-16.532	24
15	MP1A	Mx	0	24
16	MP1A	X	0	48
17	MP1A	Z	-16.532	48
18	MP1A	Mx	0	48
19	MP3A	X	0	42
20	MP3A	Z	-13.949	42
21	MP3A	Mx	0	42
22	MP4A	X	0	42
23	MP4A	Z	-13.949	42
24	MP4A	Mx	0	42
25	OVP	X	0	24
26	OVP	Z	-23.133	24
27	OVP	Mx	0	24
28	MP5A	X	0	6
29	MP5A	Z	-31.607	6
30	MP5A	Mx	0	6
31	MP5A	X	0	66
32	MP5A	Z	-31.607	66
33	MP5A	Mx	0	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	15.726	6
2	MP3A	Z	-27.239	6
3	MP3A	Mx	-.026	6
4	MP3A	X	15.726	66
5	MP3A	Z	-27.239	66
6	MP3A	Mx	-.026	66
7	MP3A	X	15.726	6
8	MP3A	Z	-27.239	6
9	MP3A	Mx	.01	6
10	MP3A	X	15.726	66
11	MP3A	Z	-27.239	66
12	MP3A	Mx	.01	66
13	MP1A	X	7.081	24
14	MP1A	Z	-12.265	24
15	MP1A	Mx	-.004	24
16	MP1A	X	7.081	48
17	MP1A	Z	-12.265	48
18	MP1A	Mx	-.004	48
19	MP3A	X	6.445	42
20	MP3A	Z	-11.162	42

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
21	MP3A	Mx	.003	42
22	MP4A	X	6.243	42
23	MP4A	Z	-10.814	42
24	MP4A	Mx	.003	42
25	OVP	X	11.296	24
26	OVP	Z	-19.565	24
27	OVP	Mx	0	24
28	MP5A	X	14.584	6
29	MP5A	Z	-25.26	6
30	MP5A	Mx	-.007	6
31	MP5A	X	14.584	66
32	MP5A	Z	-25.26	66
33	MP5A	Mx	-.007	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	23.712	6
2	MP3A	Z	-13.69	6
3	MP3A	Mx	-.021	6
4	MP3A	X	23.712	66
5	MP3A	Z	-13.69	66
6	MP3A	Mx	-.021	66
7	MP3A	X	23.712	6
8	MP3A	Z	-13.69	6
9	MP3A	Mx	-.003	6
10	MP3A	X	23.712	66
11	MP3A	Z	-13.69	66
12	MP3A	Mx	-.003	66
13	MP1A	X	8.161	24
14	MP1A	Z	-4.712	24
15	MP1A	Mx	-.004	24
16	MP1A	X	8.161	48
17	MP1A	Z	-4.712	48
18	MP1A	Mx	-.004	48
19	MP3A	X	9.327	42
20	MP3A	Z	-5.385	42
21	MP3A	Mx	.005	42
22	MP4A	X	8.281	42
23	MP4A	Z	-4.781	42
24	MP4A	Mx	.004	42
25	OVP	X	21.632	24
26	OVP	Z	-12.489	24
27	OVP	Mx	0	24
28	MP5A	X	21.036	6
29	MP5A	Z	-12.145	6
30	MP5A	Mx	-.011	6
31	MP5A	X	21.036	66
32	MP5A	Z	-12.145	66
33	MP5A	Mx	-.011	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	25.344	6
2	MP3A	Z	0	6
3	MP3A	Mx	-.013	6
4	MP3A	X	25.344	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
5	MP3A	Z	0	66
6	MP3A	Mx	-.013	66
7	MP3A	X	25.344	6
8	MP3A	Z	0	6
9	MP3A	Mx	-.013	6
10	MP3A	X	25.344	66
11	MP3A	Z	0	66
12	MP3A	Mx	-.013	66
13	MP1A	X	7.054	24
14	MP1A	Z	0	24
15	MP1A	Mx	-.004	24
16	MP1A	X	7.054	48
17	MP1A	Z	0	48
18	MP1A	Mx	-.004	48
19	MP3A	X	9.71	42
20	MP3A	Z	0	42
21	MP3A	Mx	.005	42
22	MP4A	X	8.1	42
23	MP4A	Z	0	42
24	MP4A	Mx	.004	42
25	OVP	X	27.908	24
26	OVP	Z	0	24
27	OVP	Mx	0	24
28	MP5A	X	21.851	6
29	MP5A	Z	0	6
30	MP5A	Mx	-.011	6
31	MP5A	X	21.851	66
32	MP5A	Z	0	66
33	MP5A	Mx	-.011	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	23.712	6
2	MP3A	Z	13.69	6
3	MP3A	Mx	-.003	6
4	MP3A	X	23.712	66
5	MP3A	Z	13.69	66
6	MP3A	Mx	-.003	66
7	MP3A	X	23.712	6
8	MP3A	Z	13.69	6
9	MP3A	Mx	-.021	6
10	MP3A	X	23.712	66
11	MP3A	Z	13.69	66
12	MP3A	Mx	-.021	66
13	MP1A	X	8.161	24
14	MP1A	Z	4.712	24
15	MP1A	Mx	-.004	24
16	MP1A	X	8.161	48
17	MP1A	Z	4.712	48
18	MP1A	Mx	-.004	48
19	MP3A	X	9.327	42
20	MP3A	Z	5.385	42
21	MP3A	Mx	.005	42
22	MP4A	X	8.281	42
23	MP4A	Z	4.781	42
24	MP4A	Mx	.004	42

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
25	OVP	X	24.637	24
26	OVP	Z	14.224	24
27	OVP	Mx	0	24
28	MP5A	X	21.036	6
29	MP5A	Z	12.145	6
30	MP5A	Mx	-.011	6
31	MP5A	X	21.036	66
32	MP5A	Z	12.145	66
33	MP5A	Mx	-.011	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	15.726	6
2	MP3A	Z	27.239	6
3	MP3A	Mx	.01	6
4	MP3A	X	15.726	66
5	MP3A	Z	27.239	66
6	MP3A	Mx	.01	66
7	MP3A	X	15.726	6
8	MP3A	Z	27.239	6
9	MP3A	Mx	-.026	6
10	MP3A	X	15.726	66
11	MP3A	Z	27.239	66
12	MP3A	Mx	-.026	66
13	MP1A	X	7.081	24
14	MP1A	Z	12.265	24
15	MP1A	Mx	-.004	24
16	MP1A	X	7.081	48
17	MP1A	Z	12.265	48
18	MP1A	Mx	-.004	48
19	MP3A	X	6.445	42
20	MP3A	Z	11.162	42
21	MP3A	Mx	.003	42
22	MP4A	X	6.243	42
23	MP4A	Z	10.814	42
24	MP4A	Mx	.003	42
25	OVP	X	13.031	24
26	OVP	Z	22.57	24
27	OVP	Mx	0	24
28	MP5A	X	14.584	6
29	MP5A	Z	25.26	6
30	MP5A	Mx	-.007	6
31	MP5A	X	14.584	66
32	MP5A	Z	25.26	66
33	MP5A	Mx	-.007	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	0	6
2	MP3A	Z	33.489	6
3	MP3A	Mx	.022	6
4	MP3A	X	0	66
5	MP3A	Z	33.489	66
6	MP3A	Mx	.022	66
7	MP3A	X	0	6
8	MP3A	Z	33.489	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
9	MP3A	Mx	-.022	6
10	MP3A	X	0	66
11	MP3A	Z	33.489	66
12	MP3A	Mx	-.022	66
13	MP1A	X	0	24
14	MP1A	Z	16.532	24
15	MP1A	Mx	0	24
16	MP1A	X	0	48
17	MP1A	Z	16.532	48
18	MP1A	Mx	0	48
19	MP3A	X	0	42
20	MP3A	Z	13.949	42
21	MP3A	Mx	0	42
22	MP4A	X	0	42
23	MP4A	Z	13.949	42
24	MP4A	Mx	0	42
25	OVP	X	0	24
26	OVP	Z	23.133	24
27	OVP	Mx	0	24
28	MP5A	X	0	6
29	MP5A	Z	31.607	6
30	MP5A	Mx	0	6
31	MP5A	X	0	66
32	MP5A	Z	31.607	66
33	MP5A	Mx	0	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-15.726	6
2	MP3A	Z	27.239	6
3	MP3A	Mx	.026	6
4	MP3A	X	-15.726	66
5	MP3A	Z	27.239	66
6	MP3A	Mx	.026	66
7	MP3A	X	-15.726	6
8	MP3A	Z	27.239	6
9	MP3A	Mx	-.01	6
10	MP3A	X	-15.726	66
11	MP3A	Z	27.239	66
12	MP3A	Mx	-.01	66
13	MP1A	X	-7.081	24
14	MP1A	Z	12.265	24
15	MP1A	Mx	.004	24
16	MP1A	X	-7.081	48
17	MP1A	Z	12.265	48
18	MP1A	Mx	.004	48
19	MP3A	X	-6.445	42
20	MP3A	Z	11.162	42
21	MP3A	Mx	-.003	42
22	MP4A	X	-6.243	42
23	MP4A	Z	10.814	42
24	MP4A	Mx	-.003	42
25	OVP	X	-11.296	24
26	OVP	Z	19.565	24
27	OVP	Mx	0	24
28	MP5A	X	-14.584	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
29	MP5A	Z	25.26	6
30	MP5A	Mx	.007	6
31	MP5A	X	-14.584	66
32	MP5A	Z	25.26	66
33	MP5A	Mx	.007	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-23.712	6
2	MP3A	Z	13.69	6
3	MP3A	Mx	.021	6
4	MP3A	X	-23.712	66
5	MP3A	Z	13.69	66
6	MP3A	Mx	.021	66
7	MP3A	X	-23.712	6
8	MP3A	Z	13.69	6
9	MP3A	Mx	.003	6
10	MP3A	X	-23.712	66
11	MP3A	Z	13.69	66
12	MP3A	Mx	.003	66
13	MP1A	X	-8.161	24
14	MP1A	Z	4.712	24
15	MP1A	Mx	.004	24
16	MP1A	X	-8.161	48
17	MP1A	Z	4.712	48
18	MP1A	Mx	.004	48
19	MP3A	X	-9.327	42
20	MP3A	Z	5.385	42
21	MP3A	Mx	-.005	42
22	MP4A	X	-8.281	42
23	MP4A	Z	4.781	42
24	MP4A	Mx	-.004	42
25	OVP	X	-21.632	24
26	OVP	Z	12.489	24
27	OVP	Mx	0	24
28	MP5A	X	-21.036	6
29	MP5A	Z	12.145	6
30	MP5A	Mx	.011	6
31	MP5A	X	-21.036	66
32	MP5A	Z	12.145	66
33	MP5A	Mx	.011	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-25.344	6
2	MP3A	Z	0	6
3	MP3A	Mx	.013	6
4	MP3A	X	-25.344	66
5	MP3A	Z	0	66
6	MP3A	Mx	.013	66
7	MP3A	X	-25.344	6
8	MP3A	Z	0	6
9	MP3A	Mx	.013	6
10	MP3A	X	-25.344	66
11	MP3A	Z	0	66
12	MP3A	Mx	.013	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
13	MP1A	X	-7.054	24
14	MP1A	Z	0	24
15	MP1A	Mx	.004	24
16	MP1A	X	-7.054	48
17	MP1A	Z	0	48
18	MP1A	Mx	.004	48
19	MP3A	X	-9.71	42
20	MP3A	Z	0	42
21	MP3A	Mx	-.005	42
22	MP4A	X	-8.1	42
23	MP4A	Z	0	42
24	MP4A	Mx	-.004	42
25	OVP	X	-27.908	24
26	OVP	Z	0	24
27	OVP	Mx	0	24
28	MP5A	X	-21.851	6
29	MP5A	Z	0	6
30	MP5A	Mx	.011	6
31	MP5A	X	-21.851	66
32	MP5A	Z	0	66
33	MP5A	Mx	.011	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-23.712	6
2	MP3A	Z	-13.69	6
3	MP3A	Mx	.003	6
4	MP3A	X	-23.712	66
5	MP3A	Z	-13.69	66
6	MP3A	Mx	.003	66
7	MP3A	X	-23.712	6
8	MP3A	Z	-13.69	6
9	MP3A	Mx	.021	6
10	MP3A	X	-23.712	66
11	MP3A	Z	-13.69	66
12	MP3A	Mx	.021	66
13	MP1A	X	-8.161	24
14	MP1A	Z	-4.712	24
15	MP1A	Mx	.004	24
16	MP1A	X	-8.161	48
17	MP1A	Z	-4.712	48
18	MP1A	Mx	.004	48
19	MP3A	X	-9.327	42
20	MP3A	Z	-5.385	42
21	MP3A	Mx	-.005	42
22	MP4A	X	-8.281	42
23	MP4A	Z	-4.781	42
24	MP4A	Mx	-.004	42
25	OVP	X	-24.637	24
26	OVP	Z	-14.224	24
27	OVP	Mx	0	24
28	MP5A	X	-21.036	6
29	MP5A	Z	-12.145	6
30	MP5A	Mx	.011	6
31	MP5A	X	-21.036	66
32	MP5A	Z	-12.145	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
33	MP5A	Mx	.011	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-15.726	6
2	MP3A	Z	-27.239	6
3	MP3A	Mx	-.01	6
4	MP3A	X	-15.726	66
5	MP3A	Z	-27.239	66
6	MP3A	Mx	-.01	66
7	MP3A	X	-15.726	6
8	MP3A	Z	-27.239	6
9	MP3A	Mx	.026	6
10	MP3A	X	-15.726	66
11	MP3A	Z	-27.239	66
12	MP3A	Mx	.026	66
13	MP1A	X	-7.081	24
14	MP1A	Z	-12.265	24
15	MP1A	Mx	.004	24
16	MP1A	X	-7.081	48
17	MP1A	Z	-12.265	48
18	MP1A	Mx	.004	48
19	MP3A	X	-6.445	42
20	MP3A	Z	-11.162	42
21	MP3A	Mx	-.003	42
22	MP4A	X	-6.243	42
23	MP4A	Z	-10.814	42
24	MP4A	Mx	-.003	42
25	OVP	X	-13.031	24
26	OVP	Z	-22.57	24
27	OVP	Mx	0	24
28	MP5A	X	-14.584	6
29	MP5A	Z	-25.26	6
30	MP5A	Mx	.007	6
31	MP5A	X	-14.584	66
32	MP5A	Z	-25.26	66
33	MP5A	Mx	.007	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	0	6
2	MP3A	Z	-.11	6
3	MP3A	Mx	-7.3e-5	6
4	MP3A	X	0	66
5	MP3A	Z	-.11	66
6	MP3A	Mx	-7.3e-5	66
7	MP3A	X	0	6
8	MP3A	Z	-.11	6
9	MP3A	Mx	7.3e-5	6
10	MP3A	X	0	66
11	MP3A	Z	-.11	66
12	MP3A	Mx	7.3e-5	66
13	MP1A	X	0	24
14	MP1A	Z	-.053	24
15	MP1A	Mx	0	24
16	MP1A	X	0	48

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
17	MP1A	Z	-.053	48
18	MP1A	Mx	0	48
19	MP3A	X	0	42
20	MP3A	Z	-.042	42
21	MP3A	Mx	0	42
22	MP4A	X	0	42
23	MP4A	Z	-.042	42
24	MP4A	Mx	0	42
25	OVP	X	0	24
26	OVP	Z	-.072	24
27	OVP	Mx	0	24
28	MP5A	X	0	6
29	MP5A	Z	-.103	6
30	MP5A	Mx	0	6
31	MP5A	X	0	66
32	MP5A	Z	-.103	66
33	MP5A	Mx	0	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	.052	6
2	MP3A	Z	-.089	6
3	MP3A	Mx	-8.5e-5	6
4	MP3A	X	.052	66
5	MP3A	Z	-.089	66
6	MP3A	Mx	-8.5e-5	66
7	MP3A	X	.052	6
8	MP3A	Z	-.089	6
9	MP3A	Mx	3.3e-5	6
10	MP3A	X	.052	66
11	MP3A	Z	-.089	66
12	MP3A	Mx	3.3e-5	66
13	MP1A	X	.022	24
14	MP1A	Z	-.039	24
15	MP1A	Mx	-1.1e-5	24
16	MP1A	X	.022	48
17	MP1A	Z	-.039	48
18	MP1A	Mx	-1.1e-5	48
19	MP3A	X	.019	42
20	MP3A	Z	-.033	42
21	MP3A	Mx	9e-6	42
22	MP4A	X	.019	42
23	MP4A	Z	-.032	42
24	MP4A	Mx	9e-6	42
25	OVP	X	.035	24
26	OVP	Z	-.061	24
27	OVP	Mx	0	24
28	MP5A	X	.047	6
29	MP5A	Z	-.082	6
30	MP5A	Mx	-2.4e-5	6
31	MP5A	X	.047	66
32	MP5A	Z	-.082	66
33	MP5A	Mx	-2.4e-5	66

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	.077	6
2	MP3A	Z	-.045	6
3	MP3A	Mx	-6.8e-5	6
4	MP3A	X	.077	66
5	MP3A	Z	-.045	66
6	MP3A	Mx	-6.8e-5	66
7	MP3A	X	.077	6
8	MP3A	Z	-.045	6
9	MP3A	Mx	-8e-6	6
10	MP3A	X	.077	66
11	MP3A	Z	-.045	66
12	MP3A	Mx	-8e-6	66
13	MP1A	X	.025	24
14	MP1A	Z	-.014	24
15	MP1A	Mx	-1.3e-5	24
16	MP1A	X	.025	48
17	MP1A	Z	-.014	48
18	MP1A	Mx	-1.3e-5	48
19	MP3A	X	.027	42
20	MP3A	Z	-.016	42
21	MP3A	Mx	1.4e-5	42
22	MP4A	X	.024	42
23	MP4A	Z	-.014	42
24	MP4A	Mx	1.2e-5	42
25	OVP	X	.068	24
26	OVP	Z	-.039	24
27	OVP	Mx	0	24
28	MP5A	X	.067	6
29	MP5A	Z	-.039	6
30	MP5A	Mx	-3.4e-5	6
31	MP5A	X	.067	66
32	MP5A	Z	-.039	66
33	MP5A	Mx	-3.4e-5	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	.082	6
2	MP3A	Z	0	6
3	MP3A	Mx	-4.1e-5	6
4	MP3A	X	.082	66
5	MP3A	Z	0	66
6	MP3A	Mx	-4.1e-5	66
7	MP3A	X	.082	6
8	MP3A	Z	0	6
9	MP3A	Mx	-4.1e-5	6
10	MP3A	X	.082	66
11	MP3A	Z	0	66
12	MP3A	Mx	-4.1e-5	66
13	MP1A	X	.021	24
14	MP1A	Z	0	24
15	MP1A	Mx	-1e-5	24
16	MP1A	X	.021	48
17	MP1A	Z	0	48
18	MP1A	Mx	-1e-5	48
19	MP3A	X	.028	42
20	MP3A	Z	0	42

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
21	MP3A	Mx	1.4e-5	42
22	MP4A	X	.023	42
23	MP4A	Z	0	42
24	MP4A	Mx	1.2e-5	42
25	OVP	X	.088	24
26	OVP	Z	0	24
27	OVP	Mx	0	24
28	MP5A	X	.069	6
29	MP5A	Z	0	6
30	MP5A	Mx	-3.5e-5	6
31	MP5A	X	.069	66
32	MP5A	Z	0	66
33	MP5A	Mx	-3.5e-5	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	.077	6
2	MP3A	Z	.045	6
3	MP3A	Mx	-8e-6	6
4	MP3A	X	.077	66
5	MP3A	Z	.045	66
6	MP3A	Mx	-8e-6	66
7	MP3A	X	.077	6
8	MP3A	Z	.045	6
9	MP3A	Mx	-6.8e-5	6
10	MP3A	X	.077	66
11	MP3A	Z	.045	66
12	MP3A	Mx	-6.8e-5	66
13	MP1A	X	.025	24
14	MP1A	Z	.014	24
15	MP1A	Mx	-1.3e-5	24
16	MP1A	X	.025	48
17	MP1A	Z	.014	48
18	MP1A	Mx	-1.3e-5	48
19	MP3A	X	.027	42
20	MP3A	Z	.016	42
21	MP3A	Mx	1.4e-5	42
22	MP4A	X	.024	42
23	MP4A	Z	.014	42
24	MP4A	Mx	1.2e-5	42
25	OVP	X	.078	24
26	OVP	Z	.045	24
27	OVP	Mx	0	24
28	MP5A	X	.067	6
29	MP5A	Z	.039	6
30	MP5A	Mx	-3.4e-5	6
31	MP5A	X	.067	66
32	MP5A	Z	.039	66
33	MP5A	Mx	-3.4e-5	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	.052	6
2	MP3A	Z	.089	6
3	MP3A	Mx	3.3e-5	6
4	MP3A	X	.052	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
5	MP3A	Z	.089	66
6	MP3A	Mx	3.3e-5	66
7	MP3A	X	.052	6
8	MP3A	Z	.089	6
9	MP3A	Mx	-8.5e-5	6
10	MP3A	X	.052	66
11	MP3A	Z	.089	66
12	MP3A	Mx	-8.5e-5	66
13	MP1A	X	.022	24
14	MP1A	Z	.039	24
15	MP1A	Mx	-1.1e-5	24
16	MP1A	X	.022	48
17	MP1A	Z	.039	48
18	MP1A	Mx	-1.1e-5	48
19	MP3A	X	.019	42
20	MP3A	Z	.033	42
21	MP3A	Mx	9e-6	42
22	MP4A	X	.019	42
23	MP4A	Z	.032	42
24	MP4A	Mx	9e-6	42
25	OVP	X	.041	24
26	OVP	Z	.071	24
27	OVP	Mx	0	24
28	MP5A	X	.047	6
29	MP5A	Z	.082	6
30	MP5A	Mx	-2.4e-5	6
31	MP5A	X	.047	66
32	MP5A	Z	.082	66
33	MP5A	Mx	-2.4e-5	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	0	6
2	MP3A	Z	.11	6
3	MP3A	Mx	7.3e-5	6
4	MP3A	X	0	66
5	MP3A	Z	.11	66
6	MP3A	Mx	7.3e-5	66
7	MP3A	X	0	6
8	MP3A	Z	.11	6
9	MP3A	Mx	-7.3e-5	6
10	MP3A	X	0	66
11	MP3A	Z	.11	66
12	MP3A	Mx	-7.3e-5	66
13	MP1A	X	0	24
14	MP1A	Z	.053	24
15	MP1A	Mx	0	24
16	MP1A	X	0	48
17	MP1A	Z	.053	48
18	MP1A	Mx	0	48
19	MP3A	X	0	42
20	MP3A	Z	.042	42
21	MP3A	Mx	0	42
22	MP4A	X	0	42
23	MP4A	Z	.042	42
24	MP4A	Mx	0	42

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
25	OVP	X	0	24
26	OVP	Z	.072	24
27	OVP	Mx	0	24
28	MP5A	X	0	6
29	MP5A	Z	.103	6
30	MP5A	Mx	0	6
31	MP5A	X	0	66
32	MP5A	Z	.103	66
33	MP5A	Mx	0	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-.052	6
2	MP3A	Z	.089	6
3	MP3A	Mx	8.5e-5	6
4	MP3A	X	-.052	66
5	MP3A	Z	.089	66
6	MP3A	Mx	8.5e-5	66
7	MP3A	X	-.052	6
8	MP3A	Z	.089	6
9	MP3A	Mx	-3.3e-5	6
10	MP3A	X	-.052	66
11	MP3A	Z	.089	66
12	MP3A	Mx	-3.3e-5	66
13	MP1A	X	-.022	24
14	MP1A	Z	.039	24
15	MP1A	Mx	1.1e-5	24
16	MP1A	X	-.022	48
17	MP1A	Z	.039	48
18	MP1A	Mx	1.1e-5	48
19	MP3A	X	-.019	42
20	MP3A	Z	.033	42
21	MP3A	Mx	-9e-6	42
22	MP4A	X	-.019	42
23	MP4A	Z	.032	42
24	MP4A	Mx	-9e-6	42
25	OVP	X	-.035	24
26	OVP	Z	.061	24
27	OVP	Mx	0	24
28	MP5A	X	-.047	6
29	MP5A	Z	.082	6
30	MP5A	Mx	2.4e-5	6
31	MP5A	X	-.047	66
32	MP5A	Z	.082	66
33	MP5A	Mx	2.4e-5	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-.077	6
2	MP3A	Z	.045	6
3	MP3A	Mx	6.8e-5	6
4	MP3A	X	-.077	66
5	MP3A	Z	.045	66
6	MP3A	Mx	6.8e-5	66
7	MP3A	X	-.077	6
8	MP3A	Z	.045	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
9	MP3A	Mx	8e-6	6
10	MP3A	X	-.077	66
11	MP3A	Z	.045	66
12	MP3A	Mx	8e-6	66
13	MP1A	X	-.025	24
14	MP1A	Z	.014	24
15	MP1A	Mx	1.3e-5	24
16	MP1A	X	-.025	48
17	MP1A	Z	.014	48
18	MP1A	Mx	1.3e-5	48
19	MP3A	X	-.027	42
20	MP3A	Z	.016	42
21	MP3A	Mx	-1.4e-5	42
22	MP4A	X	-.024	42
23	MP4A	Z	.014	42
24	MP4A	Mx	-1.2e-5	42
25	OVP	X	-.068	24
26	OVP	Z	.039	24
27	OVP	Mx	0	24
28	MP5A	X	-.067	6
29	MP5A	Z	.039	6
30	MP5A	Mx	3.4e-5	6
31	MP5A	X	-.067	66
32	MP5A	Z	.039	66
33	MP5A	Mx	3.4e-5	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-.082	6
2	MP3A	Z	0	6
3	MP3A	Mx	4.1e-5	6
4	MP3A	X	-.082	66
5	MP3A	Z	0	66
6	MP3A	Mx	4.1e-5	66
7	MP3A	X	-.082	6
8	MP3A	Z	0	6
9	MP3A	Mx	4.1e-5	6
10	MP3A	X	-.082	66
11	MP3A	Z	0	66
12	MP3A	Mx	4.1e-5	66
13	MP1A	X	-.021	24
14	MP1A	Z	0	24
15	MP1A	Mx	1e-5	24
16	MP1A	X	-.021	48
17	MP1A	Z	0	48
18	MP1A	Mx	1e-5	48
19	MP3A	X	-.028	42
20	MP3A	Z	0	42
21	MP3A	Mx	-1.4e-5	42
22	MP4A	X	-.023	42
23	MP4A	Z	0	42
24	MP4A	Mx	-1.2e-5	42
25	OVP	X	-.088	24
26	OVP	Z	0	24
27	OVP	Mx	0	24
28	MP5A	X	-.069	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
29	MP5A	Z	0	6
30	MP5A	Mx	3.5e-5	6
31	MP5A	X	-.069	66
32	MP5A	Z	0	66
33	MP5A	Mx	3.5e-5	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-.077	6
2	MP3A	Z	-.045	6
3	MP3A	Mx	8e-6	6
4	MP3A	X	-.077	66
5	MP3A	Z	-.045	66
6	MP3A	Mx	8e-6	66
7	MP3A	X	-.077	6
8	MP3A	Z	-.045	6
9	MP3A	Mx	6.8e-5	6
10	MP3A	X	-.077	66
11	MP3A	Z	-.045	66
12	MP3A	Mx	6.8e-5	66
13	MP1A	X	-.025	24
14	MP1A	Z	-.014	24
15	MP1A	Mx	1.3e-5	24
16	MP1A	X	-.025	48
17	MP1A	Z	-.014	48
18	MP1A	Mx	1.3e-5	48
19	MP3A	X	-.027	42
20	MP3A	Z	-.016	42
21	MP3A	Mx	-1.4e-5	42
22	MP4A	X	-.024	42
23	MP4A	Z	-.014	42
24	MP4A	Mx	-1.2e-5	42
25	OVP	X	-.078	24
26	OVP	Z	-.045	24
27	OVP	Mx	0	24
28	MP5A	X	-.067	6
29	MP5A	Z	-.039	6
30	MP5A	Mx	3.4e-5	6
31	MP5A	X	-.067	66
32	MP5A	Z	-.039	66
33	MP5A	Mx	3.4e-5	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	-.052	6
2	MP3A	Z	-.089	6
3	MP3A	Mx	-3.3e-5	6
4	MP3A	X	-.052	66
5	MP3A	Z	-.089	66
6	MP3A	Mx	-3.3e-5	66
7	MP3A	X	-.052	6
8	MP3A	Z	-.089	6
9	MP3A	Mx	8.5e-5	6
10	MP3A	X	-.052	66
11	MP3A	Z	-.089	66
12	MP3A	Mx	8.5e-5	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
13	MP1A	X	-.022	24
14	MP1A	Z	-.039	24
15	MP1A	Mx	1.1e-5	24
16	MP1A	X	-.022	48
17	MP1A	Z	-.039	48
18	MP1A	Mx	1.1e-5	48
19	MP3A	X	-.019	42
20	MP3A	Z	-.033	42
21	MP3A	Mx	-9e-6	42
22	MP4A	X	-.019	42
23	MP4A	Z	-.032	42
24	MP4A	Mx	-9e-6	42
25	OVP	X	-.041	24
26	OVP	Z	-.071	24
27	OVP	Mx	0	24
28	MP5A	X	-.047	6
29	MP5A	Z	-.082	6
30	MP5A	Mx	2.4e-5	6
31	MP5A	X	-.047	66
32	MP5A	Z	-.082	66
33	MP5A	Mx	2.4e-5	66

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	M10	Y	-500	%97

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	M10	Y	-500	%62

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

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

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	Y	-1.025	6
2	MP3A	My	-.000513	6
3	MP3A	Mz	.000684	6
4	MP3A	Y	-1.025	66
5	MP3A	My	-.000513	66
6	MP3A	Mz	.000684	66
7	MP3A	Y	-1.025	6
8	MP3A	My	-.000513	6
9	MP3A	Mz	-.000684	6
10	MP3A	Y	-1.025	66
11	MP3A	My	-.000513	66
12	MP3A	Mz	-.000684	66
13	MP1A	Y	-1.942	24
14	MP1A	My	-.000971	24

Member Point Loads (BLC 81 : Antenna Ev) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
15	MP1A	Mz	0	24
16	MP1A	Y	-1.942	48
17	MP1A	My	-.000971	48
18	MP1A	Mz	0	48
19	MP3A	Y	-3.763	42
20	MP3A	My	.002	42
21	MP3A	Mz	0	42
22	MP4A	Y	-3.134	42
23	MP4A	My	.002	42
24	MP4A	Mz	0	42
25	OVP	Y	-1.427	24
26	OVP	My	0	24
27	OVP	Mz	0	24
28	MP5A	Y	-1.023	6
29	MP5A	My	-.000512	6
30	MP5A	Mz	0	6
31	MP5A	Y	-1.023	66
32	MP5A	My	-.000512	66
33	MP5A	Mz	0	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	Z	-2.564	6
2	MP3A	Mx	-.002	6
3	MP3A	Z	-2.564	66
4	MP3A	Mx	-.002	66
5	MP3A	Z	-2.564	6
6	MP3A	Mx	.002	6
7	MP3A	Z	-2.564	66
8	MP3A	Mx	.002	66
9	MP1A	Z	-4.854	24
10	MP1A	Mx	0	24
11	MP1A	Z	-4.854	48
12	MP1A	Mx	0	48
13	MP3A	Z	-9.408	42
14	MP3A	Mx	0	42
15	MP4A	Z	-7.836	42
16	MP4A	Mx	0	42
17	OVP	Z	-3.567	24
18	OVP	Mx	0	24
19	MP5A	Z	-2.558	6
20	MP5A	Mx	0	6
21	MP5A	Z	-2.558	66
22	MP5A	Mx	0	66

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP3A	X	2.564	6
2	MP3A	Mx	-.001	6
3	MP3A	X	2.564	66
4	MP3A	Mx	-.001	66
5	MP3A	X	2.564	6
6	MP3A	Mx	-.001	6
7	MP3A	X	2.564	66
8	MP3A	Mx	-.001	66
9	MP1A	X	4.854	24

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
10	MP1A	Mx	-.002	24
11	MP1A	X	4.854	48
12	MP1A	Mx	-.002	48
13	MP3A	X	9.408	42
14	MP3A	Mx	.005	42
15	MP4A	X	7.836	42
16	MP4A	Mx	.004	42
17	OVP	X	3.567	24
18	OVP	Mx	0	24
19	MP5A	X	2.558	6
20	MP5A	Mx	-.001	6
21	MP5A	X	2.558	66
22	MP5A	Mx	-.001	66

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	Y	-8.885	-8.885	0	%100
2	M3	Y	-8.885	-8.885	0	%100
3	M5	Y	-6.042	-6.042	0	%100
4	M6	Y	-6.042	-6.042	0	%100
5	M7	Y	-5.828	-5.828	0	%100
6	M8	Y	-6.042	-6.042	0	%100
7	M9	Y	-6.042	-6.042	0	%100
8	M10	Y	-5.828	-5.828	0	%100
9	OVP	Y	-5.109	-5.109	0	%100
10	M12	Y	-5.109	-5.109	0	%100
11	M13	Y	-5.109	-5.109	0	%100
12	M14	Y	-5.109	-5.109	0	%100
13	M15	Y	-6.042	-6.042	0	%100
14	M16	Y	-3.491	-3.491	0	%100
15	M17	Y	-6.042	-6.042	0	%100
16	M18	Y	-3.491	-3.491	0	%100
17	M19	Y	-6.042	-6.042	0	%100
18	M20	Y	-6.042	-6.042	0	%100
19	M21	Y	-6.042	-6.042	0	%100
20	M22	Y	-3.491	-3.491	0	%100
21	M23	Y	-3.491	-3.491	0	%100
22	M24	Y	-5.109	-5.109	0	%100
23	M25	Y	-6.042	-6.042	0	%100
24	M26	Y	-6.042	-6.042	0	%100
25	M27	Y	-3.491	-3.491	0	%100
26	M28	Y	-6.042	-6.042	0	%100
27	M29	Y	-3.491	-3.491	0	%100
28	M30	Y	-6.042	-6.042	0	%100
29	M31	Y	-6.042	-6.042	0	%100
30	M32	Y	-6.042	-6.042	0	%100
31	M33	Y	-3.491	-3.491	0	%100
32	M34	Y	-3.491	-3.491	0	%100
33	M35	Y	-5.109	-5.109	0	%100
34	M36	Y	-6.042	-6.042	0	%100
35	MP6A	Y	-5.109	-5.109	0	%100
36	MP5A	Y	-5.109	-5.109	0	%100
37	MP3A	Y	-5.828	-5.828	0	%100
38	MP1A	Y	-5.109	-5.109	0	%100
39	MP4A	Y	-5.109	-5.109	0	%100

Member Distributed Loads (BLC 40 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
40	MP2A	Y	-5.109	-5.109	0	%100
41	M55	Y	-6.727	-6.727	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	0	0	0	%100
2	M1	Z	-11.096	-11.096	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	-11.096	-11.096	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	-.68	-.68	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-.68	-.68	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-10.633	-10.633	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-.68	-.68	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-.68	-.68	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	-10.633	-10.633	0	%100
17	OVP	X	0	0	0	%100
18	OVP	Z	-4.308	-4.308	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	-4.308	-4.308	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	-4.308	-4.308	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	-4.308	-4.308	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	-1.464	-1.464	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	-3.838	-3.838	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	-1.464	-1.464	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	-3.838	-3.838	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	-1.759	-1.759	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	-1.464	-1.464	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	-1.464	-1.464	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	-4.623	-4.623	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	-4.623	-4.623	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	-6.978	-6.978	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	-1.759	-1.759	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	-1.464	-1.464	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	-3.838	-3.838	0	%100
51	M28	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
52	M28	Z	-1.464	-1.464	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	-3.838	-3.838	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	-1.759	-1.759	0	%100
57	M31	X	0	0	0	%100
58	M31	Z	-1.464	-1.464	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	-1.464	-1.464	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	-4.623	-4.623	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	-4.623	-4.623	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	-6.978	-6.978	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	-1.759	-1.759	0	%100
69	MP6A	X	0	0	0	%100
70	MP6A	Z	-8.784	-8.784	0	%100
71	MP5A	X	0	0	0	%100
72	MP5A	Z	-8.784	-8.784	0	%100
73	MP3A	X	0	0	0	%100
74	MP3A	Z	-10.633	-10.633	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	-8.784	-8.784	0	%100
77	MP4A	X	0	0	0	%100
78	MP4A	Z	-8.784	-8.784	0	%100
79	MP2A	X	0	0	0	%100
80	MP2A	Z	-8.784	-8.784	0	%100
81	M55	X	0	0	0	%100
82	M55	Z	-2.469	-2.469	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	4.161	4.161	0	%100
2	M1	Z	-7.207	-7.207	0	%100
3	M3	X	4.161	4.161	0	%100
4	M3	Z	-7.207	-7.207	0	%100
5	M5	X	.043	.043	0	%100
6	M5	Z	-.075	-.075	0	%100
7	M6	X	.644	.644	0	%100
8	M6	Z	-1.115	-1.115	0	%100
9	M7	X	3.988	3.988	0	%100
10	M7	Z	-6.907	-6.907	0	%100
11	M8	X	.043	.043	0	%100
12	M8	Z	-.075	-.075	0	%100
13	M9	X	.644	.644	0	%100
14	M9	Z	-1.115	-1.115	0	%100
15	M10	X	3.988	3.988	0	%100
16	M10	Z	-6.907	-6.907	0	%100
17	OVP	X	.274	.274	0	%100
18	OVP	Z	-.474	-.474	0	%100
19	M12	X	4.077	4.077	0	%100
20	M12	Z	-7.061	-7.061	0	%100
21	M13	X	.274	.274	0	%100
22	M13	Z	-.474	-.474	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
23	M14	X	4.077	4.077	0	%100
24	M14	Z	-7.061	-7.061	0	%100
25	M15	X	1.936	1.936	0	%100
26	M15	Z	-3.353	-3.353	0	%100
27	M16	X	2.256	2.256	0	%100
28	M16	Z	-3.908	-3.908	0	%100
29	M17	X	1.936	1.936	0	%100
30	M17	Z	-3.353	-3.353	0	%100
31	M18	X	2.256	2.256	0	%100
32	M18	Z	-3.908	-3.908	0	%100
33	M19	X	2.047	2.047	0	%100
34	M19	Z	-3.545	-3.545	0	%100
35	M20	X	1.936	1.936	0	%100
36	M20	Z	-3.353	-3.353	0	%100
37	M21	X	1.936	1.936	0	%100
38	M21	Z	-3.353	-3.353	0	%100
39	M22	X	2.312	2.312	0	%100
40	M22	Z	-4.004	-4.004	0	%100
41	M23	X	2.312	2.312	0	%100
42	M23	Z	-4.004	-4.004	0	%100
43	M24	X	3.489	3.489	0	%100
44	M24	Z	-6.043	-6.043	0	%100
45	M25	X	2.047	2.047	0	%100
46	M25	Z	-3.545	-3.545	0	%100
47	M26	X	1.936	1.936	0	%100
48	M26	Z	-3.353	-3.353	0	%100
49	M27	X	1.589	1.589	0	%100
50	M27	Z	-2.752	-2.752	0	%100
51	M28	X	1.936	1.936	0	%100
52	M28	Z	-3.353	-3.353	0	%100
53	M29	X	1.589	1.589	0	%100
54	M29	Z	-2.752	-2.752	0	%100
55	M30	X	2.047	2.047	0	%100
56	M30	Z	-3.545	-3.545	0	%100
57	M31	X	1.936	1.936	0	%100
58	M31	Z	-3.353	-3.353	0	%100
59	M32	X	1.936	1.936	0	%100
60	M32	Z	-3.353	-3.353	0	%100
61	M33	X	2.312	2.312	0	%100
62	M33	Z	-4.004	-4.004	0	%100
63	M34	X	2.312	2.312	0	%100
64	M34	Z	-4.004	-4.004	0	%100
65	M35	X	3.489	3.489	0	%100
66	M35	Z	-6.043	-6.043	0	%100
67	M36	X	2.047	2.047	0	%100
68	M36	Z	-3.545	-3.545	0	%100
69	MP6A	X	4.392	4.392	0	%100
70	MP6A	Z	-7.607	-7.607	0	%100
71	MP5A	X	4.392	4.392	0	%100
72	MP5A	Z	-7.607	-7.607	0	%100
73	MP3A	X	5.317	5.317	0	%100
74	MP3A	Z	-9.209	-9.209	0	%100
75	MP1A	X	4.392	4.392	0	%100
76	MP1A	Z	-7.607	-7.607	0	%100
77	MP4A	X	4.392	4.392	0	%100
78	MP4A	Z	-7.607	-7.607	0	%100
79	MP2A	X	4.392	4.392	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
80	MP2A	Z	-7.607	-7.607	0	%100
81	M55	X	4.257	4.257	0	%100
82	M55	Z	-7.373	-7.373	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	2.402	2.402	0	%100
2	M1	Z	-1.387	-1.387	0	%100
3	M3	X	2.402	2.402	0	%100
4	M3	Z	-1.387	-1.387	0	%100
5	M5	X	.086	.086	0	%100
6	M5	Z	-.05	-.05	0	%100
7	M6	X	1.126	1.126	0	%100
8	M6	Z	-.65	-.65	0	%100
9	M7	X	2.302	2.302	0	%100
10	M7	Z	-1.329	-1.329	0	%100
11	M8	X	.086	.086	0	%100
12	M8	Z	-.05	-.05	0	%100
13	M9	X	1.126	1.126	0	%100
14	M9	Z	-.65	-.65	0	%100
15	M10	X	2.302	2.302	0	%100
16	M10	Z	-1.329	-1.329	0	%100
17	OVP	X	.546	.546	0	%100
18	OVP	Z	-.315	-.315	0	%100
19	M12	X	7.133	7.133	0	%100
20	M12	Z	-4.118	-4.118	0	%100
21	M13	X	.546	.546	0	%100
22	M13	Z	-.315	-.315	0	%100
23	M14	X	7.133	7.133	0	%100
24	M14	Z	-4.118	-4.118	0	%100
25	M15	X	7.524	7.524	0	%100
26	M15	Z	-4.344	-4.344	0	%100
27	M16	X	3.921	3.921	0	%100
28	M16	Z	-2.264	-2.264	0	%100
29	M17	X	7.524	7.524	0	%100
30	M17	Z	-4.344	-4.344	0	%100
31	M18	X	3.921	3.921	0	%100
32	M18	Z	-2.264	-2.264	0	%100
33	M19	X	7.588	7.588	0	%100
34	M19	Z	-4.381	-4.381	0	%100
35	M20	X	7.524	7.524	0	%100
36	M20	Z	-4.344	-4.344	0	%100
37	M21	X	7.524	7.524	0	%100
38	M21	Z	-4.344	-4.344	0	%100
39	M22	X	4.004	4.004	0	%100
40	M22	Z	-2.312	-2.312	0	%100
41	M23	X	4.004	4.004	0	%100
42	M23	Z	-2.312	-2.312	0	%100
43	M24	X	6.043	6.043	0	%100
44	M24	Z	-3.489	-3.489	0	%100
45	M25	X	7.588	7.588	0	%100
46	M25	Z	-4.381	-4.381	0	%100
47	M26	X	7.524	7.524	0	%100
48	M26	Z	-4.344	-4.344	0	%100
49	M27	X	2.765	2.765	0	%100
50	M27	Z	-1.596	-1.596	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
51	M28	X	7.524	7.524	0	%100
52	M28	Z	-4.344	-4.344	0	%100
53	M29	X	2.765	2.765	0	%100
54	M29	Z	-1.596	-1.596	0	%100
55	M30	X	7.588	7.588	0	%100
56	M30	Z	-4.381	-4.381	0	%100
57	M31	X	7.524	7.524	0	%100
58	M31	Z	-4.344	-4.344	0	%100
59	M32	X	7.524	7.524	0	%100
60	M32	Z	-4.344	-4.344	0	%100
61	M33	X	4.004	4.004	0	%100
62	M33	Z	-2.312	-2.312	0	%100
63	M34	X	4.004	4.004	0	%100
64	M34	Z	-2.312	-2.312	0	%100
65	M35	X	6.043	6.043	0	%100
66	M35	Z	-3.489	-3.489	0	%100
67	M36	X	7.588	7.588	0	%100
68	M36	Z	-4.381	-4.381	0	%100
69	MP6A	X	7.607	7.607	0	%100
70	MP6A	Z	-4.392	-4.392	0	%100
71	MP5A	X	7.607	7.607	0	%100
72	MP5A	Z	-4.392	-4.392	0	%100
73	MP3A	X	9.209	9.209	0	%100
74	MP3A	Z	-5.317	-5.317	0	%100
75	MP1A	X	7.607	7.607	0	%100
76	MP1A	Z	-4.392	-4.392	0	%100
77	MP4A	X	7.607	7.607	0	%100
78	MP4A	Z	-4.392	-4.392	0	%100
79	MP2A	X	7.607	7.607	0	%100
80	MP2A	Z	-4.392	-4.392	0	%100
81	M55	X	11.065	11.065	0	%100
82	M55	Z	-6.389	-6.389	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
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	.707	.707	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	.707	.707	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	.707	.707	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	.707	.707	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	OVP	X	4.476	4.476	0	%100
18	OVP	Z	0	0	0	%100
19	M12	X	4.476	4.476	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	4.476	4.476	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
22	M13	Z	0	0	0	%100
23	M14	X	4.476	4.476	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	11.096	11.096	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	3.867	3.867	0	%100
28	M16	Z	0	0	0	%100
29	M17	X	11.096	11.096	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	3.867	3.867	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	11.096	11.096	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	11.096	11.096	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	11.096	11.096	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	4.623	4.623	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	4.623	4.623	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	6.978	6.978	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	11.096	11.096	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	11.096	11.096	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	3.867	3.867	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	11.096	11.096	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	3.867	3.867	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	11.096	11.096	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	11.096	11.096	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	11.096	11.096	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	4.623	4.623	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	4.623	4.623	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	6.978	6.978	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	11.096	11.096	0	%100
68	M36	Z	0	0	0	%100
69	MP6A	X	8.784	8.784	0	%100
70	MP6A	Z	0	0	0	%100
71	MP5A	X	8.784	8.784	0	%100
72	MP5A	Z	0	0	0	%100
73	MP3A	X	10.633	10.633	0	%100
74	MP3A	Z	0	0	0	%100
75	MP1A	X	8.784	8.784	0	%100
76	MP1A	Z	0	0	0	%100
77	MP4A	X	8.784	8.784	0	%100
78	MP4A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
79	MP2A	X	8.784	8.784	0	%100
80	MP2A	Z	0	0	0	%100
81	M55	X	10.996	10.996	0	%100
82	M55	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	2.402	2.402	0	%100
2	M1	Z	1.387	1.387	0	%100
3	M3	X	2.402	2.402	0	%100
4	M3	Z	1.387	1.387	0	%100
5	M5	X	1.126	1.126	0	%100
6	M5	Z	.65	.65	0	%100
7	M6	X	.086	.086	0	%100
8	M6	Z	.05	.05	0	%100
9	M7	X	2.302	2.302	0	%100
10	M7	Z	1.329	1.329	0	%100
11	M8	X	1.126	1.126	0	%100
12	M8	Z	.65	.65	0	%100
13	M9	X	.086	.086	0	%100
14	M9	Z	.05	.05	0	%100
15	M10	X	2.302	2.302	0	%100
16	M10	Z	1.329	1.329	0	%100
17	OVP	X	7.133	7.133	0	%100
18	OVP	Z	4.118	4.118	0	%100
19	M12	X	.546	.546	0	%100
20	M12	Z	.315	.315	0	%100
21	M13	X	7.133	7.133	0	%100
22	M13	Z	4.118	4.118	0	%100
23	M14	X	.546	.546	0	%100
24	M14	Z	.315	.315	0	%100
25	M15	X	7.524	7.524	0	%100
26	M15	Z	4.344	4.344	0	%100
27	M16	X	2.765	2.765	0	%100
28	M16	Z	1.596	1.596	0	%100
29	M17	X	7.524	7.524	0	%100
30	M17	Z	4.344	4.344	0	%100
31	M18	X	2.765	2.765	0	%100
32	M18	Z	1.596	1.596	0	%100
33	M19	X	7.588	7.588	0	%100
34	M19	Z	4.381	4.381	0	%100
35	M20	X	7.524	7.524	0	%100
36	M20	Z	4.344	4.344	0	%100
37	M21	X	7.524	7.524	0	%100
38	M21	Z	4.344	4.344	0	%100
39	M22	X	4.004	4.004	0	%100
40	M22	Z	2.312	2.312	0	%100
41	M23	X	4.004	4.004	0	%100
42	M23	Z	2.312	2.312	0	%100
43	M24	X	6.043	6.043	0	%100
44	M24	Z	3.489	3.489	0	%100
45	M25	X	7.588	7.588	0	%100
46	M25	Z	4.381	4.381	0	%100
47	M26	X	7.524	7.524	0	%100
48	M26	Z	4.344	4.344	0	%100
49	M27	X	3.921	3.921	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
50	M27	Z	2.264	2.264	0	%100
51	M28	X	7.524	7.524	0	%100
52	M28	Z	4.344	4.344	0	%100
53	M29	X	3.921	3.921	0	%100
54	M29	Z	2.264	2.264	0	%100
55	M30	X	7.588	7.588	0	%100
56	M30	Z	4.381	4.381	0	%100
57	M31	X	7.524	7.524	0	%100
58	M31	Z	4.344	4.344	0	%100
59	M32	X	7.524	7.524	0	%100
60	M32	Z	4.344	4.344	0	%100
61	M33	X	4.004	4.004	0	%100
62	M33	Z	2.312	2.312	0	%100
63	M34	X	4.004	4.004	0	%100
64	M34	Z	2.312	2.312	0	%100
65	M35	X	6.043	6.043	0	%100
66	M35	Z	3.489	3.489	0	%100
67	M36	X	7.588	7.588	0	%100
68	M36	Z	4.381	4.381	0	%100
69	MP6A	X	7.607	7.607	0	%100
70	MP6A	Z	4.392	4.392	0	%100
71	MP5A	X	7.607	7.607	0	%100
72	MP5A	Z	4.392	4.392	0	%100
73	MP3A	X	9.209	9.209	0	%100
74	MP3A	Z	5.317	5.317	0	%100
75	MP1A	X	7.607	7.607	0	%100
76	MP1A	Z	4.392	4.392	0	%100
77	MP4A	X	7.607	7.607	0	%100
78	MP4A	Z	4.392	4.392	0	%100
79	MP2A	X	7.607	7.607	0	%100
80	MP2A	Z	4.392	4.392	0	%100
81	M55	X	4.289	4.289	0	%100
82	M55	Z	2.476	2.476	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	4.161	4.161	0	%100
2	M1	Z	7.207	7.207	0	%100
3	M3	X	4.161	4.161	0	%100
4	M3	Z	7.207	7.207	0	%100
5	M5	X	.644	.644	0	%100
6	M5	Z	1.115	1.115	0	%100
7	M6	X	.043	.043	0	%100
8	M6	Z	.075	.075	0	%100
9	M7	X	3.988	3.988	0	%100
10	M7	Z	6.907	6.907	0	%100
11	M8	X	.644	.644	0	%100
12	M8	Z	1.115	1.115	0	%100
13	M9	X	.043	.043	0	%100
14	M9	Z	.075	.075	0	%100
15	M10	X	3.988	3.988	0	%100
16	M10	Z	6.907	6.907	0	%100
17	OVP	X	4.077	4.077	0	%100
18	OVP	Z	7.061	7.061	0	%100
19	M12	X	.274	.274	0	%100
20	M12	Z	.474	.474	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
21	M13	X	4.077	4.077	0	%100
22	M13	Z	7.061	7.061	0	%100
23	M14	X	.274	.274	0	%100
24	M14	Z	.474	.474	0	%100
25	M15	X	1.936	1.936	0	%100
26	M15	Z	3.353	3.353	0	%100
27	M16	X	1.589	1.589	0	%100
28	M16	Z	2.752	2.752	0	%100
29	M17	X	1.936	1.936	0	%100
30	M17	Z	3.353	3.353	0	%100
31	M18	X	1.589	1.589	0	%100
32	M18	Z	2.752	2.752	0	%100
33	M19	X	2.047	2.047	0	%100
34	M19	Z	3.545	3.545	0	%100
35	M20	X	1.936	1.936	0	%100
36	M20	Z	3.353	3.353	0	%100
37	M21	X	1.936	1.936	0	%100
38	M21	Z	3.353	3.353	0	%100
39	M22	X	2.312	2.312	0	%100
40	M22	Z	4.004	4.004	0	%100
41	M23	X	2.312	2.312	0	%100
42	M23	Z	4.004	4.004	0	%100
43	M24	X	3.489	3.489	0	%100
44	M24	Z	6.043	6.043	0	%100
45	M25	X	2.047	2.047	0	%100
46	M25	Z	3.545	3.545	0	%100
47	M26	X	1.936	1.936	0	%100
48	M26	Z	3.353	3.353	0	%100
49	M27	X	2.256	2.256	0	%100
50	M27	Z	3.908	3.908	0	%100
51	M28	X	1.936	1.936	0	%100
52	M28	Z	3.353	3.353	0	%100
53	M29	X	2.256	2.256	0	%100
54	M29	Z	3.908	3.908	0	%100
55	M30	X	2.047	2.047	0	%100
56	M30	Z	3.545	3.545	0	%100
57	M31	X	1.936	1.936	0	%100
58	M31	Z	3.353	3.353	0	%100
59	M32	X	1.936	1.936	0	%100
60	M32	Z	3.353	3.353	0	%100
61	M33	X	2.312	2.312	0	%100
62	M33	Z	4.004	4.004	0	%100
63	M34	X	2.312	2.312	0	%100
64	M34	Z	4.004	4.004	0	%100
65	M35	X	3.489	3.489	0	%100
66	M35	Z	6.043	6.043	0	%100
67	M36	X	2.047	2.047	0	%100
68	M36	Z	3.545	3.545	0	%100
69	MP6A	X	4.392	4.392	0	%100
70	MP6A	Z	7.607	7.607	0	%100
71	MP5A	X	4.392	4.392	0	%100
72	MP5A	Z	7.607	7.607	0	%100
73	MP3A	X	5.317	5.317	0	%100
74	MP3A	Z	9.209	9.209	0	%100
75	MP1A	X	4.392	4.392	0	%100
76	MP1A	Z	7.607	7.607	0	%100
77	MP4A	X	4.392	4.392	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
78	MP4A	Z	7.607	7.607	0	%100
79	MP2A	X	4.392	4.392	0	%100
80	MP2A	Z	7.607	7.607	0	%100
81	M55	X	.344	.344	0	%100
82	M55	Z	.596	.596	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	0	0	0	%100
2	M1	Z	11.096	11.096	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	11.096	11.096	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	.68	.68	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	.68	.68	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	10.633	10.633	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	.68	.68	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	.68	.68	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	10.633	10.633	0	%100
17	OVP	X	0	0	0	%100
18	OVP	Z	4.308	4.308	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	4.308	4.308	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	4.308	4.308	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	4.308	4.308	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	1.464	1.464	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	3.838	3.838	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	1.464	1.464	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	3.838	3.838	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	1.759	1.759	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	1.464	1.464	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	1.464	1.464	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	4.623	4.623	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	4.623	4.623	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	6.978	6.978	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	1.759	1.759	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	1.464	1.464	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
49	M27	X	0	0	0	%100
50	M27	Z	3.838	3.838	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	1.464	1.464	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	3.838	3.838	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	1.759	1.759	0	%100
57	M31	X	0	0	0	%100
58	M31	Z	1.464	1.464	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	1.464	1.464	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	4.623	4.623	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	4.623	4.623	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	6.978	6.978	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	1.759	1.759	0	%100
69	MP6A	X	0	0	0	%100
70	MP6A	Z	8.784	8.784	0	%100
71	MP5A	X	0	0	0	%100
72	MP5A	Z	8.784	8.784	0	%100
73	MP3A	X	0	0	0	%100
74	MP3A	Z	10.633	10.633	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	8.784	8.784	0	%100
77	MP4A	X	0	0	0	%100
78	MP4A	Z	8.784	8.784	0	%100
79	MP2A	X	0	0	0	%100
80	MP2A	Z	8.784	8.784	0	%100
81	M55	X	0	0	0	%100
82	M55	Z	2.469	2.469	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-4.161	-4.161	0	%100
2	M1	Z	7.207	7.207	0	%100
3	M3	X	-4.161	-4.161	0	%100
4	M3	Z	7.207	7.207	0	%100
5	M5	X	-.043	-.043	0	%100
6	M5	Z	.075	.075	0	%100
7	M6	X	-.644	-.644	0	%100
8	M6	Z	1.115	1.115	0	%100
9	M7	X	-3.988	-3.988	0	%100
10	M7	Z	6.907	6.907	0	%100
11	M8	X	-.043	-.043	0	%100
12	M8	Z	.075	.075	0	%100
13	M9	X	-.644	-.644	0	%100
14	M9	Z	1.115	1.115	0	%100
15	M10	X	-3.988	-3.988	0	%100
16	M10	Z	6.907	6.907	0	%100
17	OVP	X	-.274	-.274	0	%100
18	OVP	Z	.474	.474	0	%100
19	M12	X	-4.077	-4.077	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
20	M12	Z	7.061	7.061	0	%100
21	M13	X	-.274	-.274	0	%100
22	M13	Z	.474	.474	0	%100
23	M14	X	-4.077	-4.077	0	%100
24	M14	Z	7.061	7.061	0	%100
25	M15	X	-1.936	-1.936	0	%100
26	M15	Z	3.353	3.353	0	%100
27	M16	X	-2.256	-2.256	0	%100
28	M16	Z	3.908	3.908	0	%100
29	M17	X	-1.936	-1.936	0	%100
30	M17	Z	3.353	3.353	0	%100
31	M18	X	-2.256	-2.256	0	%100
32	M18	Z	3.908	3.908	0	%100
33	M19	X	-2.047	-2.047	0	%100
34	M19	Z	3.545	3.545	0	%100
35	M20	X	-1.936	-1.936	0	%100
36	M20	Z	3.353	3.353	0	%100
37	M21	X	-1.936	-1.936	0	%100
38	M21	Z	3.353	3.353	0	%100
39	M22	X	-2.312	-2.312	0	%100
40	M22	Z	4.004	4.004	0	%100
41	M23	X	-2.312	-2.312	0	%100
42	M23	Z	4.004	4.004	0	%100
43	M24	X	-3.489	-3.489	0	%100
44	M24	Z	6.043	6.043	0	%100
45	M25	X	-2.047	-2.047	0	%100
46	M25	Z	3.545	3.545	0	%100
47	M26	X	-1.936	-1.936	0	%100
48	M26	Z	3.353	3.353	0	%100
49	M27	X	-1.589	-1.589	0	%100
50	M27	Z	2.752	2.752	0	%100
51	M28	X	-1.936	-1.936	0	%100
52	M28	Z	3.353	3.353	0	%100
53	M29	X	-1.589	-1.589	0	%100
54	M29	Z	2.752	2.752	0	%100
55	M30	X	-2.047	-2.047	0	%100
56	M30	Z	3.545	3.545	0	%100
57	M31	X	-1.936	-1.936	0	%100
58	M31	Z	3.353	3.353	0	%100
59	M32	X	-1.936	-1.936	0	%100
60	M32	Z	3.353	3.353	0	%100
61	M33	X	-2.312	-2.312	0	%100
62	M33	Z	4.004	4.004	0	%100
63	M34	X	-2.312	-2.312	0	%100
64	M34	Z	4.004	4.004	0	%100
65	M35	X	-3.489	-3.489	0	%100
66	M35	Z	6.043	6.043	0	%100
67	M36	X	-2.047	-2.047	0	%100
68	M36	Z	3.545	3.545	0	%100
69	MP6A	X	-4.392	-4.392	0	%100
70	MP6A	Z	7.607	7.607	0	%100
71	MP5A	X	-4.392	-4.392	0	%100
72	MP5A	Z	7.607	7.607	0	%100
73	MP3A	X	-5.317	-5.317	0	%100
74	MP3A	Z	9.209	9.209	0	%100
75	MP1A	X	-4.392	-4.392	0	%100
76	MP1A	Z	7.607	7.607	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
77	MP4A	X	-4.392	-4.392	0	%100
78	MP4A	Z	7.607	7.607	0	%100
79	MP2A	X	-4.392	-4.392	0	%100
80	MP2A	Z	7.607	7.607	0	%100
81	M55	X	-4.257	-4.257	0	%100
82	M55	Z	7.373	7.373	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-2.402	-2.402	0	%100
2	M1	Z	1.387	1.387	0	%100
3	M3	X	-2.402	-2.402	0	%100
4	M3	Z	1.387	1.387	0	%100
5	M5	X	-.086	-.086	0	%100
6	M5	Z	.05	.05	0	%100
7	M6	X	-1.126	-1.126	0	%100
8	M6	Z	.65	.65	0	%100
9	M7	X	-2.302	-2.302	0	%100
10	M7	Z	1.329	1.329	0	%100
11	M8	X	-.086	-.086	0	%100
12	M8	Z	.05	.05	0	%100
13	M9	X	-1.126	-1.126	0	%100
14	M9	Z	.65	.65	0	%100
15	M10	X	-2.302	-2.302	0	%100
16	M10	Z	1.329	1.329	0	%100
17	OVP	X	-.546	-.546	0	%100
18	OVP	Z	.315	.315	0	%100
19	M12	X	-7.133	-7.133	0	%100
20	M12	Z	4.118	4.118	0	%100
21	M13	X	-.546	-.546	0	%100
22	M13	Z	.315	.315	0	%100
23	M14	X	-7.133	-7.133	0	%100
24	M14	Z	4.118	4.118	0	%100
25	M15	X	-7.524	-7.524	0	%100
26	M15	Z	4.344	4.344	0	%100
27	M16	X	-3.921	-3.921	0	%100
28	M16	Z	2.264	2.264	0	%100
29	M17	X	-7.524	-7.524	0	%100
30	M17	Z	4.344	4.344	0	%100
31	M18	X	-3.921	-3.921	0	%100
32	M18	Z	2.264	2.264	0	%100
33	M19	X	-7.588	-7.588	0	%100
34	M19	Z	4.381	4.381	0	%100
35	M20	X	-7.524	-7.524	0	%100
36	M20	Z	4.344	4.344	0	%100
37	M21	X	-7.524	-7.524	0	%100
38	M21	Z	4.344	4.344	0	%100
39	M22	X	-4.004	-4.004	0	%100
40	M22	Z	2.312	2.312	0	%100
41	M23	X	-4.004	-4.004	0	%100
42	M23	Z	2.312	2.312	0	%100
43	M24	X	-6.043	-6.043	0	%100
44	M24	Z	3.489	3.489	0	%100
45	M25	X	-7.588	-7.588	0	%100
46	M25	Z	4.381	4.381	0	%100
47	M26	X	-7.524	-7.524	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
48	M26	Z	4.344	4.344	0	%100
49	M27	X	-2.765	-2.765	0	%100
50	M27	Z	1.596	1.596	0	%100
51	M28	X	-7.524	-7.524	0	%100
52	M28	Z	4.344	4.344	0	%100
53	M29	X	-2.765	-2.765	0	%100
54	M29	Z	1.596	1.596	0	%100
55	M30	X	-7.588	-7.588	0	%100
56	M30	Z	4.381	4.381	0	%100
57	M31	X	-7.524	-7.524	0	%100
58	M31	Z	4.344	4.344	0	%100
59	M32	X	-7.524	-7.524	0	%100
60	M32	Z	4.344	4.344	0	%100
61	M33	X	-4.004	-4.004	0	%100
62	M33	Z	2.312	2.312	0	%100
63	M34	X	-4.004	-4.004	0	%100
64	M34	Z	2.312	2.312	0	%100
65	M35	X	-6.043	-6.043	0	%100
66	M35	Z	3.489	3.489	0	%100
67	M36	X	-7.588	-7.588	0	%100
68	M36	Z	4.381	4.381	0	%100
69	MP6A	X	-7.607	-7.607	0	%100
70	MP6A	Z	4.392	4.392	0	%100
71	MP5A	X	-7.607	-7.607	0	%100
72	MP5A	Z	4.392	4.392	0	%100
73	MP3A	X	-9.209	-9.209	0	%100
74	MP3A	Z	5.317	5.317	0	%100
75	MP1A	X	-7.607	-7.607	0	%100
76	MP1A	Z	4.392	4.392	0	%100
77	MP4A	X	-7.607	-7.607	0	%100
78	MP4A	Z	4.392	4.392	0	%100
79	MP2A	X	-7.607	-7.607	0	%100
80	MP2A	Z	4.392	4.392	0	%100
81	M55	X	-11.065	-11.065	0	%100
82	M55	Z	6.389	6.389	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
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	-.707	-.707	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-.707	-.707	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	-.707	-.707	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-.707	-.707	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	OVP	X	-4.476	-4.476	0	%100
18	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
19	M12	X	-4.476	-4.476	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	-4.476	-4.476	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	-4.476	-4.476	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	-11.096	-11.096	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	-3.867	-3.867	0	%100
28	M16	Z	0	0	0	%100
29	M17	X	-11.096	-11.096	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	-3.867	-3.867	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	-11.096	-11.096	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-11.096	-11.096	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	-11.096	-11.096	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	-4.623	-4.623	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	-4.623	-4.623	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	-6.978	-6.978	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	-11.096	-11.096	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	-11.096	-11.096	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	-3.867	-3.867	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	-11.096	-11.096	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	-3.867	-3.867	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	-11.096	-11.096	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	-11.096	-11.096	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	-11.096	-11.096	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	-4.623	-4.623	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	-4.623	-4.623	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	-6.978	-6.978	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	-11.096	-11.096	0	%100
68	M36	Z	0	0	0	%100
69	MP6A	X	-8.784	-8.784	0	%100
70	MP6A	Z	0	0	0	%100
71	MP5A	X	-8.784	-8.784	0	%100
72	MP5A	Z	0	0	0	%100
73	MP3A	X	-10.633	-10.633	0	%100
74	MP3A	Z	0	0	0	%100
75	MP1A	X	-8.784	-8.784	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
76	MP1A	Z	0	0	0	%100
77	MP4A	X	-8.784	-8.784	0	%100
78	MP4A	Z	0	0	0	%100
79	MP2A	X	-8.784	-8.784	0	%100
80	MP2A	Z	0	0	0	%100
81	M55	X	-10.996	-10.996	0	%100
82	M55	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-2.402	-2.402	0	%100
2	M1	Z	-1.387	-1.387	0	%100
3	M3	X	-2.402	-2.402	0	%100
4	M3	Z	-1.387	-1.387	0	%100
5	M5	X	-1.126	-1.126	0	%100
6	M5	Z	-.65	-.65	0	%100
7	M6	X	-.086	-.086	0	%100
8	M6	Z	-.05	-.05	0	%100
9	M7	X	-2.302	-2.302	0	%100
10	M7	Z	-1.329	-1.329	0	%100
11	M8	X	-1.126	-1.126	0	%100
12	M8	Z	-.65	-.65	0	%100
13	M9	X	-.086	-.086	0	%100
14	M9	Z	-.05	-.05	0	%100
15	M10	X	-2.302	-2.302	0	%100
16	M10	Z	-1.329	-1.329	0	%100
17	OVP	X	-7.133	-7.133	0	%100
18	OVP	Z	-4.118	-4.118	0	%100
19	M12	X	-.546	-.546	0	%100
20	M12	Z	-.315	-.315	0	%100
21	M13	X	-7.133	-7.133	0	%100
22	M13	Z	-4.118	-4.118	0	%100
23	M14	X	-.546	-.546	0	%100
24	M14	Z	-.315	-.315	0	%100
25	M15	X	-7.524	-7.524	0	%100
26	M15	Z	-4.344	-4.344	0	%100
27	M16	X	-2.765	-2.765	0	%100
28	M16	Z	-1.596	-1.596	0	%100
29	M17	X	-7.524	-7.524	0	%100
30	M17	Z	-4.344	-4.344	0	%100
31	M18	X	-2.765	-2.765	0	%100
32	M18	Z	-1.596	-1.596	0	%100
33	M19	X	-7.588	-7.588	0	%100
34	M19	Z	-4.381	-4.381	0	%100
35	M20	X	-7.524	-7.524	0	%100
36	M20	Z	-4.344	-4.344	0	%100
37	M21	X	-7.524	-7.524	0	%100
38	M21	Z	-4.344	-4.344	0	%100
39	M22	X	-4.004	-4.004	0	%100
40	M22	Z	-2.312	-2.312	0	%100
41	M23	X	-4.004	-4.004	0	%100
42	M23	Z	-2.312	-2.312	0	%100
43	M24	X	-6.043	-6.043	0	%100
44	M24	Z	-3.489	-3.489	0	%100
45	M25	X	-7.588	-7.588	0	%100
46	M25	Z	-4.381	-4.381	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
47	M26	X	-7.524	-7.524	0	%100
48	M26	Z	-4.344	-4.344	0	%100
49	M27	X	-3.921	-3.921	0	%100
50	M27	Z	-2.264	-2.264	0	%100
51	M28	X	-7.524	-7.524	0	%100
52	M28	Z	-4.344	-4.344	0	%100
53	M29	X	-3.921	-3.921	0	%100
54	M29	Z	-2.264	-2.264	0	%100
55	M30	X	-7.588	-7.588	0	%100
56	M30	Z	-4.381	-4.381	0	%100
57	M31	X	-7.524	-7.524	0	%100
58	M31	Z	-4.344	-4.344	0	%100
59	M32	X	-7.524	-7.524	0	%100
60	M32	Z	-4.344	-4.344	0	%100
61	M33	X	-4.004	-4.004	0	%100
62	M33	Z	-2.312	-2.312	0	%100
63	M34	X	-4.004	-4.004	0	%100
64	M34	Z	-2.312	-2.312	0	%100
65	M35	X	-6.043	-6.043	0	%100
66	M35	Z	-3.489	-3.489	0	%100
67	M36	X	-7.588	-7.588	0	%100
68	M36	Z	-4.381	-4.381	0	%100
69	MP6A	X	-7.607	-7.607	0	%100
70	MP6A	Z	-4.392	-4.392	0	%100
71	MP5A	X	-7.607	-7.607	0	%100
72	MP5A	Z	-4.392	-4.392	0	%100
73	MP3A	X	-9.209	-9.209	0	%100
74	MP3A	Z	-5.317	-5.317	0	%100
75	MP1A	X	-7.607	-7.607	0	%100
76	MP1A	Z	-4.392	-4.392	0	%100
77	MP4A	X	-7.607	-7.607	0	%100
78	MP4A	Z	-4.392	-4.392	0	%100
79	MP2A	X	-7.607	-7.607	0	%100
80	MP2A	Z	-4.392	-4.392	0	%100
81	M55	X	-4.289	-4.289	0	%100
82	M55	Z	-2.476	-2.476	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-4.161	-4.161	0	%100
2	M1	Z	-7.207	-7.207	0	%100
3	M3	X	-4.161	-4.161	0	%100
4	M3	Z	-7.207	-7.207	0	%100
5	M5	X	-.644	-.644	0	%100
6	M5	Z	-1.115	-1.115	0	%100
7	M6	X	-.043	-.043	0	%100
8	M6	Z	-.075	-.075	0	%100
9	M7	X	-3.988	-3.988	0	%100
10	M7	Z	-6.907	-6.907	0	%100
11	M8	X	-.644	-.644	0	%100
12	M8	Z	-1.115	-1.115	0	%100
13	M9	X	-.043	-.043	0	%100
14	M9	Z	-.075	-.075	0	%100
15	M10	X	-3.988	-3.988	0	%100
16	M10	Z	-6.907	-6.907	0	%100
17	OVP	X	-4.077	-4.077	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
18	OVP	Z	-7.061	-7.061	0	%100
19	M12	X	-.274	-.274	0	%100
20	M12	Z	-.474	-.474	0	%100
21	M13	X	-4.077	-4.077	0	%100
22	M13	Z	-7.061	-7.061	0	%100
23	M14	X	-.274	-.274	0	%100
24	M14	Z	-.474	-.474	0	%100
25	M15	X	-1.936	-1.936	0	%100
26	M15	Z	-3.353	-3.353	0	%100
27	M16	X	-1.589	-1.589	0	%100
28	M16	Z	-2.752	-2.752	0	%100
29	M17	X	-1.936	-1.936	0	%100
30	M17	Z	-3.353	-3.353	0	%100
31	M18	X	-1.589	-1.589	0	%100
32	M18	Z	-2.752	-2.752	0	%100
33	M19	X	-2.047	-2.047	0	%100
34	M19	Z	-3.545	-3.545	0	%100
35	M20	X	-1.936	-1.936	0	%100
36	M20	Z	-3.353	-3.353	0	%100
37	M21	X	-1.936	-1.936	0	%100
38	M21	Z	-3.353	-3.353	0	%100
39	M22	X	-2.312	-2.312	0	%100
40	M22	Z	-4.004	-4.004	0	%100
41	M23	X	-2.312	-2.312	0	%100
42	M23	Z	-4.004	-4.004	0	%100
43	M24	X	-3.489	-3.489	0	%100
44	M24	Z	-6.043	-6.043	0	%100
45	M25	X	-2.047	-2.047	0	%100
46	M25	Z	-3.545	-3.545	0	%100
47	M26	X	-1.936	-1.936	0	%100
48	M26	Z	-3.353	-3.353	0	%100
49	M27	X	-2.256	-2.256	0	%100
50	M27	Z	-3.908	-3.908	0	%100
51	M28	X	-1.936	-1.936	0	%100
52	M28	Z	-3.353	-3.353	0	%100
53	M29	X	-2.256	-2.256	0	%100
54	M29	Z	-3.908	-3.908	0	%100
55	M30	X	-2.047	-2.047	0	%100
56	M30	Z	-3.545	-3.545	0	%100
57	M31	X	-1.936	-1.936	0	%100
58	M31	Z	-3.353	-3.353	0	%100
59	M32	X	-1.936	-1.936	0	%100
60	M32	Z	-3.353	-3.353	0	%100
61	M33	X	-2.312	-2.312	0	%100
62	M33	Z	-4.004	-4.004	0	%100
63	M34	X	-2.312	-2.312	0	%100
64	M34	Z	-4.004	-4.004	0	%100
65	M35	X	-3.489	-3.489	0	%100
66	M35	Z	-6.043	-6.043	0	%100
67	M36	X	-2.047	-2.047	0	%100
68	M36	Z	-3.545	-3.545	0	%100
69	MP6A	X	-4.392	-4.392	0	%100
70	MP6A	Z	-7.607	-7.607	0	%100
71	MP5A	X	-4.392	-4.392	0	%100
72	MP5A	Z	-7.607	-7.607	0	%100
73	MP3A	X	-5.317	-5.317	0	%100
74	MP3A	Z	-9.209	-9.209	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
75	MP1A	X	-4.392	-4.392	0	%100
76	MP1A	Z	-7.607	-7.607	0	%100
77	MP4A	X	-4.392	-4.392	0	%100
78	MP4A	Z	-7.607	-7.607	0	%100
79	MP2A	X	-4.392	-4.392	0	%100
80	MP2A	Z	-7.607	-7.607	0	%100
81	M55	X	-.344	-.344	0	%100
82	M55	Z	-.596	-.596	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	0	0	0	%100
2	M1	Z	-2.727	-2.727	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	-2.727	-2.727	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	-.533	-.533	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-.533	-.533	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-3.249	-3.249	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-.533	-.533	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-.533	-.533	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	-3.249	-3.249	0	%100
17	OVP	X	0	0	0	%100
18	OVP	Z	-1.441	-1.441	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	-1.441	-1.441	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	-1.441	-1.441	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	-1.441	-1.441	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	-1.099	-1.099	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	-1.776	-1.776	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	-1.099	-1.099	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	-1.776	-1.776	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	-1.149	-1.149	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	-1.099	-1.099	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	-1.099	-1.099	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	-1.999	-1.999	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	-1.999	-1.999	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	-2.337	-2.337	0	%100
45	M25	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
46	M25	Z	-1.149	-1.149	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	-1.099	-1.099	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	-1.776	-1.776	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	-1.099	-1.099	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	-1.776	-1.776	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	-1.149	-1.149	0	%100
57	M31	X	0	0	0	%100
58	M31	Z	-1.099	-1.099	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	-1.099	-1.099	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	-1.999	-1.999	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	-1.999	-1.999	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	-2.337	-2.337	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	-1.149	-1.149	0	%100
69	MP6A	X	0	0	0	%100
70	MP6A	Z	-2.938	-2.938	0	%100
71	MP5A	X	0	0	0	%100
72	MP5A	Z	-2.938	-2.938	0	%100
73	MP3A	X	0	0	0	%100
74	MP3A	Z	-3.249	-3.249	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	-2.938	-2.938	0	%100
77	MP4A	X	0	0	0	%100
78	MP4A	Z	-2.938	-2.938	0	%100
79	MP2A	X	0	0	0	%100
80	MP2A	Z	-2.938	-2.938	0	%100
81	M55	X	0	0	0	%100
82	M55	Z	-.694	-.694	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	1.023	1.023	0	%100
2	M1	Z	-1.771	-1.771	0	%100
3	M3	X	1.023	1.023	0	%100
4	M3	Z	-1.771	-1.771	0	%100
5	M5	X	.034	.034	0	%100
6	M5	Z	-.059	-.059	0	%100
7	M6	X	.504	.504	0	%100
8	M6	Z	-.873	-.873	0	%100
9	M7	X	1.218	1.218	0	%100
10	M7	Z	-2.11	-2.11	0	%100
11	M8	X	.034	.034	0	%100
12	M8	Z	-.059	-.059	0	%100
13	M9	X	.504	.504	0	%100
14	M9	Z	-.873	-.873	0	%100
15	M10	X	1.218	1.218	0	%100
16	M10	Z	-2.11	-2.11	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
17	OVP	X	.092	.092	0	%100
18	OVP	Z	-.159	-.159	0	%100
19	M12	X	1.364	1.364	0	%100
20	M12	Z	-2.362	-2.362	0	%100
21	M13	X	.092	.092	0	%100
22	M13	Z	-.159	-.159	0	%100
23	M14	X	1.364	1.364	0	%100
24	M14	Z	-2.362	-2.362	0	%100
25	M15	X	.752	.752	0	%100
26	M15	Z	-1.302	-1.302	0	%100
27	M16	X	1.044	1.044	0	%100
28	M16	Z	-1.809	-1.809	0	%100
29	M17	X	.752	.752	0	%100
30	M17	Z	-1.302	-1.302	0	%100
31	M18	X	1.044	1.044	0	%100
32	M18	Z	-1.809	-1.809	0	%100
33	M19	X	.77	.77	0	%100
34	M19	Z	-1.334	-1.334	0	%100
35	M20	X	.752	.752	0	%100
36	M20	Z	-1.302	-1.302	0	%100
37	M21	X	.752	.752	0	%100
38	M21	Z	-1.302	-1.302	0	%100
39	M22	X	1	1	0	%100
40	M22	Z	-1.731	-1.731	0	%100
41	M23	X	1	1	0	%100
42	M23	Z	-1.731	-1.731	0	%100
43	M24	X	1.169	1.169	0	%100
44	M24	Z	-2.024	-2.024	0	%100
45	M25	X	.77	.77	0	%100
46	M25	Z	-1.334	-1.334	0	%100
47	M26	X	.752	.752	0	%100
48	M26	Z	-1.302	-1.302	0	%100
49	M27	X	.735	.735	0	%100
50	M27	Z	-1.274	-1.274	0	%100
51	M28	X	.752	.752	0	%100
52	M28	Z	-1.302	-1.302	0	%100
53	M29	X	.735	.735	0	%100
54	M29	Z	-1.274	-1.274	0	%100
55	M30	X	.77	.77	0	%100
56	M30	Z	-1.334	-1.334	0	%100
57	M31	X	.752	.752	0	%100
58	M31	Z	-1.302	-1.302	0	%100
59	M32	X	.752	.752	0	%100
60	M32	Z	-1.302	-1.302	0	%100
61	M33	X	1	1	0	%100
62	M33	Z	-1.731	-1.731	0	%100
63	M34	X	1	1	0	%100
64	M34	Z	-1.731	-1.731	0	%100
65	M35	X	1.169	1.169	0	%100
66	M35	Z	-2.024	-2.024	0	%100
67	M36	X	.77	.77	0	%100
68	M36	Z	-1.334	-1.334	0	%100
69	MP6A	X	1.469	1.469	0	%100
70	MP6A	Z	-2.544	-2.544	0	%100
71	MP5A	X	1.469	1.469	0	%100
72	MP5A	Z	-2.544	-2.544	0	%100
73	MP3A	X	1.624	1.624	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
74	MP3A	Z	-2.813	-2.813	0	%100
75	MP1A	X	1.469	1.469	0	%100
76	MP1A	Z	-2.544	-2.544	0	%100
77	MP4A	X	1.469	1.469	0	%100
78	MP4A	Z	-2.544	-2.544	0	%100
79	MP2A	X	1.469	1.469	0	%100
80	MP2A	Z	-2.544	-2.544	0	%100
81	M55	X	1.196	1.196	0	%100
82	M55	Z	-2.072	-2.072	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	.59	.59	0	%100
2	M1	Z	-.341	-.341	0	%100
3	M3	X	.59	.59	0	%100
4	M3	Z	-.341	-.341	0	%100
5	M5	X	.068	.068	0	%100
6	M5	Z	-.039	-.039	0	%100
7	M6	X	.882	.882	0	%100
8	M6	Z	-.509	-.509	0	%100
9	M7	X	.703	.703	0	%100
10	M7	Z	-.406	-.406	0	%100
11	M8	X	.068	.068	0	%100
12	M8	Z	-.039	-.039	0	%100
13	M9	X	.882	.882	0	%100
14	M9	Z	-.509	-.509	0	%100
15	M10	X	.703	.703	0	%100
16	M10	Z	-.406	-.406	0	%100
17	OVP	X	.183	.183	0	%100
18	OVP	Z	-.106	-.106	0	%100
19	M12	X	2.386	2.386	0	%100
20	M12	Z	-1.378	-1.378	0	%100
21	M13	X	.183	.183	0	%100
22	M13	Z	-.106	-.106	0	%100
23	M14	X	2.386	2.386	0	%100
24	M14	Z	-1.378	-1.378	0	%100
25	M15	X	2.003	2.003	0	%100
26	M15	Z	-1.156	-1.156	0	%100
27	M16	X	1.815	1.815	0	%100
28	M16	Z	-1.048	-1.048	0	%100
29	M17	X	2.003	2.003	0	%100
30	M17	Z	-1.156	-1.156	0	%100
31	M18	X	1.815	1.815	0	%100
32	M18	Z	-1.048	-1.048	0	%100
33	M19	X	2.013	2.013	0	%100
34	M19	Z	-1.162	-1.162	0	%100
35	M20	X	2.003	2.003	0	%100
36	M20	Z	-1.156	-1.156	0	%100
37	M21	X	2.003	2.003	0	%100
38	M21	Z	-1.156	-1.156	0	%100
39	M22	X	1.731	1.731	0	%100
40	M22	Z	-1	-1	0	%100
41	M23	X	1.731	1.731	0	%100
42	M23	Z	-1	-1	0	%100
43	M24	X	2.024	2.024	0	%100
44	M24	Z	-1.169	-1.169	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
45	M25	X	2.013	2.013	0	%100
46	M25	Z	-1.162	-1.162	0	%100
47	M26	X	2.003	2.003	0	%100
48	M26	Z	-1.156	-1.156	0	%100
49	M27	X	1.28	1.28	0	%100
50	M27	Z	-.739	-.739	0	%100
51	M28	X	2.003	2.003	0	%100
52	M28	Z	-1.156	-1.156	0	%100
53	M29	X	1.28	1.28	0	%100
54	M29	Z	-.739	-.739	0	%100
55	M30	X	2.013	2.013	0	%100
56	M30	Z	-1.162	-1.162	0	%100
57	M31	X	2.003	2.003	0	%100
58	M31	Z	-1.156	-1.156	0	%100
59	M32	X	2.003	2.003	0	%100
60	M32	Z	-1.156	-1.156	0	%100
61	M33	X	1.731	1.731	0	%100
62	M33	Z	-1	-1	0	%100
63	M34	X	1.731	1.731	0	%100
64	M34	Z	-1	-1	0	%100
65	M35	X	2.024	2.024	0	%100
66	M35	Z	-1.169	-1.169	0	%100
67	M36	X	2.013	2.013	0	%100
68	M36	Z	-1.162	-1.162	0	%100
69	MP6A	X	2.544	2.544	0	%100
70	MP6A	Z	-1.469	-1.469	0	%100
71	MP5A	X	2.544	2.544	0	%100
72	MP5A	Z	-1.469	-1.469	0	%100
73	MP3A	X	2.813	2.813	0	%100
74	MP3A	Z	-1.624	-1.624	0	%100
75	MP1A	X	2.544	2.544	0	%100
76	MP1A	Z	-1.469	-1.469	0	%100
77	MP4A	X	2.544	2.544	0	%100
78	MP4A	Z	-1.469	-1.469	0	%100
79	MP2A	X	2.544	2.544	0	%100
80	MP2A	Z	-1.469	-1.469	0	%100
81	M55	X	3.109	3.109	0	%100
82	M55	Z	-1.795	-1.795	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
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	.553	.553	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	.553	.553	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	.553	.553	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	.553	.553	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
16	M10	Z	0	0	0	%100
17	OVP	X	1.497	1.497	0	%100
18	OVP	Z	0	0	0	%100
19	M12	X	1.497	1.497	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	1.497	1.497	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	1.497	1.497	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	2.717	2.717	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	1.79	1.79	0	%100
28	M16	Z	0	0	0	%100
29	M17	X	2.717	2.717	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	1.79	1.79	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	2.717	2.717	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	2.717	2.717	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	2.717	2.717	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	1.999	1.999	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	1.999	1.999	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	2.337	2.337	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	2.717	2.717	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	2.717	2.717	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	1.79	1.79	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	2.717	2.717	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	1.79	1.79	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	2.717	2.717	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	2.717	2.717	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	2.717	2.717	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	1.999	1.999	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	1.999	1.999	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	2.337	2.337	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	2.717	2.717	0	%100
68	M36	Z	0	0	0	%100
69	MP6A	X	2.938	2.938	0	%100
70	MP6A	Z	0	0	0	%100
71	MP5A	X	2.938	2.938	0	%100
72	MP5A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
73	MP3A	X	3.249	3.249	0	%100
74	MP3A	Z	0	0	0	%100
75	MP1A	X	2.938	2.938	0	%100
76	MP1A	Z	0	0	0	%100
77	MP4A	X	2.938	2.938	0	%100
78	MP4A	Z	0	0	0	%100
79	MP2A	X	2.938	2.938	0	%100
80	MP2A	Z	0	0	0	%100
81	M55	X	3.09	3.09	0	%100
82	M55	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	.59	.59	0	%100
2	M1	Z	.341	.341	0	%100
3	M3	X	.59	.59	0	%100
4	M3	Z	.341	.341	0	%100
5	M5	X	.882	.882	0	%100
6	M5	Z	.509	.509	0	%100
7	M6	X	.068	.068	0	%100
8	M6	Z	.039	.039	0	%100
9	M7	X	.703	.703	0	%100
10	M7	Z	.406	.406	0	%100
11	M8	X	.882	.882	0	%100
12	M8	Z	.509	.509	0	%100
13	M9	X	.068	.068	0	%100
14	M9	Z	.039	.039	0	%100
15	M10	X	.703	.703	0	%100
16	M10	Z	.406	.406	0	%100
17	OVP	X	2.386	2.386	0	%100
18	OVP	Z	1.378	1.378	0	%100
19	M12	X	.183	.183	0	%100
20	M12	Z	.106	.106	0	%100
21	M13	X	2.386	2.386	0	%100
22	M13	Z	1.378	1.378	0	%100
23	M14	X	.183	.183	0	%100
24	M14	Z	.106	.106	0	%100
25	M15	X	2.003	2.003	0	%100
26	M15	Z	1.156	1.156	0	%100
27	M16	X	1.28	1.28	0	%100
28	M16	Z	.739	.739	0	%100
29	M17	X	2.003	2.003	0	%100
30	M17	Z	1.156	1.156	0	%100
31	M18	X	1.28	1.28	0	%100
32	M18	Z	.739	.739	0	%100
33	M19	X	2.013	2.013	0	%100
34	M19	Z	1.162	1.162	0	%100
35	M20	X	2.003	2.003	0	%100
36	M20	Z	1.156	1.156	0	%100
37	M21	X	2.003	2.003	0	%100
38	M21	Z	1.156	1.156	0	%100
39	M22	X	1.731	1.731	0	%100
40	M22	Z	1	1	0	%100
41	M23	X	1.731	1.731	0	%100
42	M23	Z	1	1	0	%100
43	M24	X	2.024	2.024	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
44	M24	Z	1.169	1.169	0	%100
45	M25	X	2.013	2.013	0	%100
46	M25	Z	1.162	1.162	0	%100
47	M26	X	2.003	2.003	0	%100
48	M26	Z	1.156	1.156	0	%100
49	M27	X	1.815	1.815	0	%100
50	M27	Z	1.048	1.048	0	%100
51	M28	X	2.003	2.003	0	%100
52	M28	Z	1.156	1.156	0	%100
53	M29	X	1.815	1.815	0	%100
54	M29	Z	1.048	1.048	0	%100
55	M30	X	2.013	2.013	0	%100
56	M30	Z	1.162	1.162	0	%100
57	M31	X	2.003	2.003	0	%100
58	M31	Z	1.156	1.156	0	%100
59	M32	X	2.003	2.003	0	%100
60	M32	Z	1.156	1.156	0	%100
61	M33	X	1.731	1.731	0	%100
62	M33	Z	1	1	0	%100
63	M34	X	1.731	1.731	0	%100
64	M34	Z	1	1	0	%100
65	M35	X	2.024	2.024	0	%100
66	M35	Z	1.169	1.169	0	%100
67	M36	X	2.013	2.013	0	%100
68	M36	Z	1.162	1.162	0	%100
69	MP6A	X	2.544	2.544	0	%100
70	MP6A	Z	1.469	1.469	0	%100
71	MP5A	X	2.544	2.544	0	%100
72	MP5A	Z	1.469	1.469	0	%100
73	MP3A	X	2.813	2.813	0	%100
74	MP3A	Z	1.624	1.624	0	%100
75	MP1A	X	2.544	2.544	0	%100
76	MP1A	Z	1.469	1.469	0	%100
77	MP4A	X	2.544	2.544	0	%100
78	MP4A	Z	1.469	1.469	0	%100
79	MP2A	X	2.544	2.544	0	%100
80	MP2A	Z	1.469	1.469	0	%100
81	M55	X	1.205	1.205	0	%100
82	M55	Z	.696	.696	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	1.023	1.023	0	%100
2	M1	Z	1.771	1.771	0	%100
3	M3	X	1.023	1.023	0	%100
4	M3	Z	1.771	1.771	0	%100
5	M5	X	.504	.504	0	%100
6	M5	Z	.873	.873	0	%100
7	M6	X	.034	.034	0	%100
8	M6	Z	.059	.059	0	%100
9	M7	X	1.218	1.218	0	%100
10	M7	Z	2.11	2.11	0	%100
11	M8	X	.504	.504	0	%100
12	M8	Z	.873	.873	0	%100
13	M9	X	.034	.034	0	%100
14	M9	Z	.059	.059	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
15	M10	X	1.218	1.218	0	%100
16	M10	Z	2.11	2.11	0	%100
17	OVP	X	1.364	1.364	0	%100
18	OVP	Z	2.362	2.362	0	%100
19	M12	X	.092	.092	0	%100
20	M12	Z	.159	.159	0	%100
21	M13	X	1.364	1.364	0	%100
22	M13	Z	2.362	2.362	0	%100
23	M14	X	.092	.092	0	%100
24	M14	Z	.159	.159	0	%100
25	M15	X	.752	.752	0	%100
26	M15	Z	1.302	1.302	0	%100
27	M16	X	.735	.735	0	%100
28	M16	Z	1.274	1.274	0	%100
29	M17	X	.752	.752	0	%100
30	M17	Z	1.302	1.302	0	%100
31	M18	X	.735	.735	0	%100
32	M18	Z	1.274	1.274	0	%100
33	M19	X	.77	.77	0	%100
34	M19	Z	1.334	1.334	0	%100
35	M20	X	.752	.752	0	%100
36	M20	Z	1.302	1.302	0	%100
37	M21	X	.752	.752	0	%100
38	M21	Z	1.302	1.302	0	%100
39	M22	X	1	1	0	%100
40	M22	Z	1.731	1.731	0	%100
41	M23	X	1	1	0	%100
42	M23	Z	1.731	1.731	0	%100
43	M24	X	1.169	1.169	0	%100
44	M24	Z	2.024	2.024	0	%100
45	M25	X	.77	.77	0	%100
46	M25	Z	1.334	1.334	0	%100
47	M26	X	.752	.752	0	%100
48	M26	Z	1.302	1.302	0	%100
49	M27	X	1.044	1.044	0	%100
50	M27	Z	1.809	1.809	0	%100
51	M28	X	.752	.752	0	%100
52	M28	Z	1.302	1.302	0	%100
53	M29	X	1.044	1.044	0	%100
54	M29	Z	1.809	1.809	0	%100
55	M30	X	.77	.77	0	%100
56	M30	Z	1.334	1.334	0	%100
57	M31	X	.752	.752	0	%100
58	M31	Z	1.302	1.302	0	%100
59	M32	X	.752	.752	0	%100
60	M32	Z	1.302	1.302	0	%100
61	M33	X	1	1	0	%100
62	M33	Z	1.731	1.731	0	%100
63	M34	X	1	1	0	%100
64	M34	Z	1.731	1.731	0	%100
65	M35	X	1.169	1.169	0	%100
66	M35	Z	2.024	2.024	0	%100
67	M36	X	.77	.77	0	%100
68	M36	Z	1.334	1.334	0	%100
69	MP6A	X	1.469	1.469	0	%100
70	MP6A	Z	2.544	2.544	0	%100
71	MP5A	X	1.469	1.469	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
72	MP5A	Z	2.544	2.544	0	%100
73	MP3A	X	1.624	1.624	0	%100
74	MP3A	Z	2.813	2.813	0	%100
75	MP1A	X	1.469	1.469	0	%100
76	MP1A	Z	2.544	2.544	0	%100
77	MP4A	X	1.469	1.469	0	%100
78	MP4A	Z	2.544	2.544	0	%100
79	MP2A	X	1.469	1.469	0	%100
80	MP2A	Z	2.544	2.544	0	%100
81	M55	X	.097	.097	0	%100
82	M55	Z	.167	.167	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	0	0	0	%100
2	M1	Z	2.727	2.727	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	2.727	2.727	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	.533	.533	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	.533	.533	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	3.249	3.249	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	.533	.533	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	.533	.533	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	3.249	3.249	0	%100
17	OVP	X	0	0	0	%100
18	OVP	Z	1.441	1.441	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	1.441	1.441	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	1.441	1.441	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	1.441	1.441	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	1.099	1.099	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	1.776	1.776	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	1.099	1.099	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	1.776	1.776	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	1.149	1.149	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	1.099	1.099	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	1.099	1.099	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	1.999	1.999	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	1.999	1.999	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
43	M24	X	0	0	0	%100
44	M24	Z	2.337	2.337	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	1.149	1.149	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	1.099	1.099	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	1.776	1.776	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	1.099	1.099	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	1.776	1.776	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	1.149	1.149	0	%100
57	M31	X	0	0	0	%100
58	M31	Z	1.099	1.099	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	1.099	1.099	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	1.999	1.999	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	1.999	1.999	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	2.337	2.337	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	1.149	1.149	0	%100
69	MP6A	X	0	0	0	%100
70	MP6A	Z	2.938	2.938	0	%100
71	MP5A	X	0	0	0	%100
72	MP5A	Z	2.938	2.938	0	%100
73	MP3A	X	0	0	0	%100
74	MP3A	Z	3.249	3.249	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	2.938	2.938	0	%100
77	MP4A	X	0	0	0	%100
78	MP4A	Z	2.938	2.938	0	%100
79	MP2A	X	0	0	0	%100
80	MP2A	Z	2.938	2.938	0	%100
81	M55	X	0	0	0	%100
82	M55	Z	.694	.694	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-1.023	-1.023	0	%100
2	M1	Z	1.771	1.771	0	%100
3	M3	X	-1.023	-1.023	0	%100
4	M3	Z	1.771	1.771	0	%100
5	M5	X	-.034	-.034	0	%100
6	M5	Z	.059	.059	0	%100
7	M6	X	-.504	-.504	0	%100
8	M6	Z	.873	.873	0	%100
9	M7	X	-1.218	-1.218	0	%100
10	M7	Z	2.11	2.11	0	%100
11	M8	X	-.034	-.034	0	%100
12	M8	Z	.059	.059	0	%100
13	M9	X	-.504	-.504	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
14	M9	Z	.873	.873	0	%100
15	M10	X	-1.218	-1.218	0	%100
16	M10	Z	2.11	2.11	0	%100
17	OVP	X	-.092	-.092	0	%100
18	OVP	Z	.159	.159	0	%100
19	M12	X	-1.364	-1.364	0	%100
20	M12	Z	2.362	2.362	0	%100
21	M13	X	-.092	-.092	0	%100
22	M13	Z	.159	.159	0	%100
23	M14	X	-1.364	-1.364	0	%100
24	M14	Z	2.362	2.362	0	%100
25	M15	X	-.752	-.752	0	%100
26	M15	Z	1.302	1.302	0	%100
27	M16	X	-1.044	-1.044	0	%100
28	M16	Z	1.809	1.809	0	%100
29	M17	X	-.752	-.752	0	%100
30	M17	Z	1.302	1.302	0	%100
31	M18	X	-1.044	-1.044	0	%100
32	M18	Z	1.809	1.809	0	%100
33	M19	X	-.77	-.77	0	%100
34	M19	Z	1.334	1.334	0	%100
35	M20	X	-.752	-.752	0	%100
36	M20	Z	1.302	1.302	0	%100
37	M21	X	-.752	-.752	0	%100
38	M21	Z	1.302	1.302	0	%100
39	M22	X	-1	-1	0	%100
40	M22	Z	1.731	1.731	0	%100
41	M23	X	-1	-1	0	%100
42	M23	Z	1.731	1.731	0	%100
43	M24	X	-1.169	-1.169	0	%100
44	M24	Z	2.024	2.024	0	%100
45	M25	X	-.77	-.77	0	%100
46	M25	Z	1.334	1.334	0	%100
47	M26	X	-.752	-.752	0	%100
48	M26	Z	1.302	1.302	0	%100
49	M27	X	-.735	-.735	0	%100
50	M27	Z	1.274	1.274	0	%100
51	M28	X	-.752	-.752	0	%100
52	M28	Z	1.302	1.302	0	%100
53	M29	X	-.735	-.735	0	%100
54	M29	Z	1.274	1.274	0	%100
55	M30	X	-.77	-.77	0	%100
56	M30	Z	1.334	1.334	0	%100
57	M31	X	-.752	-.752	0	%100
58	M31	Z	1.302	1.302	0	%100
59	M32	X	-.752	-.752	0	%100
60	M32	Z	1.302	1.302	0	%100
61	M33	X	-1	-1	0	%100
62	M33	Z	1.731	1.731	0	%100
63	M34	X	-1	-1	0	%100
64	M34	Z	1.731	1.731	0	%100
65	M35	X	-1.169	-1.169	0	%100
66	M35	Z	2.024	2.024	0	%100
67	M36	X	-.77	-.77	0	%100
68	M36	Z	1.334	1.334	0	%100
69	MP6A	X	-1.469	-1.469	0	%100
70	MP6A	Z	2.544	2.544	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
71	MP5A	X	-1.469	-1.469	0	%100
72	MP5A	Z	2.544	2.544	0	%100
73	MP3A	X	-1.624	-1.624	0	%100
74	MP3A	Z	2.813	2.813	0	%100
75	MP1A	X	-1.469	-1.469	0	%100
76	MP1A	Z	2.544	2.544	0	%100
77	MP4A	X	-1.469	-1.469	0	%100
78	MP4A	Z	2.544	2.544	0	%100
79	MP2A	X	-1.469	-1.469	0	%100
80	MP2A	Z	2.544	2.544	0	%100
81	M55	X	-1.196	-1.196	0	%100
82	M55	Z	2.072	2.072	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-.59	-.59	0	%100
2	M1	Z	.341	.341	0	%100
3	M3	X	-.59	-.59	0	%100
4	M3	Z	.341	.341	0	%100
5	M5	X	-.068	-.068	0	%100
6	M5	Z	.039	.039	0	%100
7	M6	X	-.882	-.882	0	%100
8	M6	Z	.509	.509	0	%100
9	M7	X	-.703	-.703	0	%100
10	M7	Z	.406	.406	0	%100
11	M8	X	-.068	-.068	0	%100
12	M8	Z	.039	.039	0	%100
13	M9	X	-.882	-.882	0	%100
14	M9	Z	.509	.509	0	%100
15	M10	X	-.703	-.703	0	%100
16	M10	Z	.406	.406	0	%100
17	OVP	X	-.183	-.183	0	%100
18	OVP	Z	.106	.106	0	%100
19	M12	X	-2.386	-2.386	0	%100
20	M12	Z	1.378	1.378	0	%100
21	M13	X	-.183	-.183	0	%100
22	M13	Z	.106	.106	0	%100
23	M14	X	-2.386	-2.386	0	%100
24	M14	Z	1.378	1.378	0	%100
25	M15	X	-2.003	-2.003	0	%100
26	M15	Z	1.156	1.156	0	%100
27	M16	X	-1.815	-1.815	0	%100
28	M16	Z	1.048	1.048	0	%100
29	M17	X	-2.003	-2.003	0	%100
30	M17	Z	1.156	1.156	0	%100
31	M18	X	-1.815	-1.815	0	%100
32	M18	Z	1.048	1.048	0	%100
33	M19	X	-2.013	-2.013	0	%100
34	M19	Z	1.162	1.162	0	%100
35	M20	X	-2.003	-2.003	0	%100
36	M20	Z	1.156	1.156	0	%100
37	M21	X	-2.003	-2.003	0	%100
38	M21	Z	1.156	1.156	0	%100
39	M22	X	-1.731	-1.731	0	%100
40	M22	Z	1	1	0	%100
41	M23	X	-1.731	-1.731	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
42	M23	Z	1	1	0	%100
43	M24	X	-2.024	-2.024	0	%100
44	M24	Z	1.169	1.169	0	%100
45	M25	X	-2.013	-2.013	0	%100
46	M25	Z	1.162	1.162	0	%100
47	M26	X	-2.003	-2.003	0	%100
48	M26	Z	1.156	1.156	0	%100
49	M27	X	-1.28	-1.28	0	%100
50	M27	Z	.739	.739	0	%100
51	M28	X	-2.003	-2.003	0	%100
52	M28	Z	1.156	1.156	0	%100
53	M29	X	-1.28	-1.28	0	%100
54	M29	Z	.739	.739	0	%100
55	M30	X	-2.013	-2.013	0	%100
56	M30	Z	1.162	1.162	0	%100
57	M31	X	-2.003	-2.003	0	%100
58	M31	Z	1.156	1.156	0	%100
59	M32	X	-2.003	-2.003	0	%100
60	M32	Z	1.156	1.156	0	%100
61	M33	X	-1.731	-1.731	0	%100
62	M33	Z	1	1	0	%100
63	M34	X	-1.731	-1.731	0	%100
64	M34	Z	1	1	0	%100
65	M35	X	-2.024	-2.024	0	%100
66	M35	Z	1.169	1.169	0	%100
67	M36	X	-2.013	-2.013	0	%100
68	M36	Z	1.162	1.162	0	%100
69	MP6A	X	-2.544	-2.544	0	%100
70	MP6A	Z	1.469	1.469	0	%100
71	MP5A	X	-2.544	-2.544	0	%100
72	MP5A	Z	1.469	1.469	0	%100
73	MP3A	X	-2.813	-2.813	0	%100
74	MP3A	Z	1.624	1.624	0	%100
75	MP1A	X	-2.544	-2.544	0	%100
76	MP1A	Z	1.469	1.469	0	%100
77	MP4A	X	-2.544	-2.544	0	%100
78	MP4A	Z	1.469	1.469	0	%100
79	MP2A	X	-2.544	-2.544	0	%100
80	MP2A	Z	1.469	1.469	0	%100
81	M55	X	-3.109	-3.109	0	%100
82	M55	Z	1.795	1.795	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
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	-.553	-.553	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-.553	-.553	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	-.553	-.553	0	%100
12	M8	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
13	M9	X	-.553	-.553	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	OVP	X	-1.497	-1.497	0	%100
18	OVP	Z	0	0	0	%100
19	M12	X	-1.497	-1.497	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	-1.497	-1.497	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	-1.497	-1.497	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	-2.717	-2.717	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	-1.79	-1.79	0	%100
28	M16	Z	0	0	0	%100
29	M17	X	-2.717	-2.717	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	-1.79	-1.79	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	-2.717	-2.717	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-2.717	-2.717	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	-2.717	-2.717	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	-1.999	-1.999	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	-1.999	-1.999	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	-2.337	-2.337	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	-2.717	-2.717	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	-2.717	-2.717	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	-1.79	-1.79	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	-2.717	-2.717	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	-1.79	-1.79	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	-2.717	-2.717	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	-2.717	-2.717	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	-2.717	-2.717	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	-1.999	-1.999	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	-1.999	-1.999	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	-2.337	-2.337	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	-2.717	-2.717	0	%100
68	M36	Z	0	0	0	%100
69	MP6A	X	-2.938	-2.938	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
70	MP6A	Z	0	0	0	%100
71	MP5A	X	-2.938	-2.938	0	%100
72	MP5A	Z	0	0	0	%100
73	MP3A	X	-3.249	-3.249	0	%100
74	MP3A	Z	0	0	0	%100
75	MP1A	X	-2.938	-2.938	0	%100
76	MP1A	Z	0	0	0	%100
77	MP4A	X	-2.938	-2.938	0	%100
78	MP4A	Z	0	0	0	%100
79	MP2A	X	-2.938	-2.938	0	%100
80	MP2A	Z	0	0	0	%100
81	M55	X	-3.09	-3.09	0	%100
82	M55	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-.59	-.59	0	%100
2	M1	Z	-.341	-.341	0	%100
3	M3	X	-.59	-.59	0	%100
4	M3	Z	-.341	-.341	0	%100
5	M5	X	-.882	-.882	0	%100
6	M5	Z	-.509	-.509	0	%100
7	M6	X	-.068	-.068	0	%100
8	M6	Z	-.039	-.039	0	%100
9	M7	X	-.703	-.703	0	%100
10	M7	Z	-.406	-.406	0	%100
11	M8	X	-.882	-.882	0	%100
12	M8	Z	-.509	-.509	0	%100
13	M9	X	-.068	-.068	0	%100
14	M9	Z	-.039	-.039	0	%100
15	M10	X	-.703	-.703	0	%100
16	M10	Z	-.406	-.406	0	%100
17	OVP	X	-2.386	-2.386	0	%100
18	OVP	Z	-1.378	-1.378	0	%100
19	M12	X	-.183	-.183	0	%100
20	M12	Z	-.106	-.106	0	%100
21	M13	X	-2.386	-2.386	0	%100
22	M13	Z	-1.378	-1.378	0	%100
23	M14	X	-.183	-.183	0	%100
24	M14	Z	-.106	-.106	0	%100
25	M15	X	-2.003	-2.003	0	%100
26	M15	Z	-1.156	-1.156	0	%100
27	M16	X	-1.28	-1.28	0	%100
28	M16	Z	-.739	-.739	0	%100
29	M17	X	-2.003	-2.003	0	%100
30	M17	Z	-1.156	-1.156	0	%100
31	M18	X	-1.28	-1.28	0	%100
32	M18	Z	-.739	-.739	0	%100
33	M19	X	-2.013	-2.013	0	%100
34	M19	Z	-1.162	-1.162	0	%100
35	M20	X	-2.003	-2.003	0	%100
36	M20	Z	-1.156	-1.156	0	%100
37	M21	X	-2.003	-2.003	0	%100
38	M21	Z	-1.156	-1.156	0	%100
39	M22	X	-1.731	-1.731	0	%100
40	M22	Z	-1	-1	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
41	M23	X	-1.731	-1.731	0	%100
42	M23	Z	-1	-1	0	%100
43	M24	X	-2.024	-2.024	0	%100
44	M24	Z	-1.169	-1.169	0	%100
45	M25	X	-2.013	-2.013	0	%100
46	M25	Z	-1.162	-1.162	0	%100
47	M26	X	-2.003	-2.003	0	%100
48	M26	Z	-1.156	-1.156	0	%100
49	M27	X	-1.815	-1.815	0	%100
50	M27	Z	-1.048	-1.048	0	%100
51	M28	X	-2.003	-2.003	0	%100
52	M28	Z	-1.156	-1.156	0	%100
53	M29	X	-1.815	-1.815	0	%100
54	M29	Z	-1.048	-1.048	0	%100
55	M30	X	-2.013	-2.013	0	%100
56	M30	Z	-1.162	-1.162	0	%100
57	M31	X	-2.003	-2.003	0	%100
58	M31	Z	-1.156	-1.156	0	%100
59	M32	X	-2.003	-2.003	0	%100
60	M32	Z	-1.156	-1.156	0	%100
61	M33	X	-1.731	-1.731	0	%100
62	M33	Z	-1	-1	0	%100
63	M34	X	-1.731	-1.731	0	%100
64	M34	Z	-1	-1	0	%100
65	M35	X	-2.024	-2.024	0	%100
66	M35	Z	-1.169	-1.169	0	%100
67	M36	X	-2.013	-2.013	0	%100
68	M36	Z	-1.162	-1.162	0	%100
69	MP6A	X	-2.544	-2.544	0	%100
70	MP6A	Z	-1.469	-1.469	0	%100
71	MP5A	X	-2.544	-2.544	0	%100
72	MP5A	Z	-1.469	-1.469	0	%100
73	MP3A	X	-2.813	-2.813	0	%100
74	MP3A	Z	-1.624	-1.624	0	%100
75	MP1A	X	-2.544	-2.544	0	%100
76	MP1A	Z	-1.469	-1.469	0	%100
77	MP4A	X	-2.544	-2.544	0	%100
78	MP4A	Z	-1.469	-1.469	0	%100
79	MP2A	X	-2.544	-2.544	0	%100
80	MP2A	Z	-1.469	-1.469	0	%100
81	M55	X	-1.205	-1.205	0	%100
82	M55	Z	-.696	-.696	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-1.023	-1.023	0	%100
2	M1	Z	-1.771	-1.771	0	%100
3	M3	X	-1.023	-1.023	0	%100
4	M3	Z	-1.771	-1.771	0	%100
5	M5	X	-.504	-.504	0	%100
6	M5	Z	-.873	-.873	0	%100
7	M6	X	-.034	-.034	0	%100
8	M6	Z	-.059	-.059	0	%100
9	M7	X	-1.218	-1.218	0	%100
10	M7	Z	-2.11	-2.11	0	%100
11	M8	X	-.504	-.504	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
12	M8	Z	-.873	-.873	0	%100
13	M9	X	-.034	-.034	0	%100
14	M9	Z	-.059	-.059	0	%100
15	M10	X	-1.218	-1.218	0	%100
16	M10	Z	-2.11	-2.11	0	%100
17	OVP	X	-1.364	-1.364	0	%100
18	OVP	Z	-2.362	-2.362	0	%100
19	M12	X	-.092	-.092	0	%100
20	M12	Z	-.159	-.159	0	%100
21	M13	X	-1.364	-1.364	0	%100
22	M13	Z	-2.362	-2.362	0	%100
23	M14	X	-.092	-.092	0	%100
24	M14	Z	-.159	-.159	0	%100
25	M15	X	-.752	-.752	0	%100
26	M15	Z	-1.302	-1.302	0	%100
27	M16	X	-.735	-.735	0	%100
28	M16	Z	-1.274	-1.274	0	%100
29	M17	X	-.752	-.752	0	%100
30	M17	Z	-1.302	-1.302	0	%100
31	M18	X	-.735	-.735	0	%100
32	M18	Z	-1.274	-1.274	0	%100
33	M19	X	-.77	-.77	0	%100
34	M19	Z	-1.334	-1.334	0	%100
35	M20	X	-.752	-.752	0	%100
36	M20	Z	-1.302	-1.302	0	%100
37	M21	X	-.752	-.752	0	%100
38	M21	Z	-1.302	-1.302	0	%100
39	M22	X	-1	-1	0	%100
40	M22	Z	-1.731	-1.731	0	%100
41	M23	X	-1	-1	0	%100
42	M23	Z	-1.731	-1.731	0	%100
43	M24	X	-1.169	-1.169	0	%100
44	M24	Z	-2.024	-2.024	0	%100
45	M25	X	-.77	-.77	0	%100
46	M25	Z	-1.334	-1.334	0	%100
47	M26	X	-.752	-.752	0	%100
48	M26	Z	-1.302	-1.302	0	%100
49	M27	X	-1.044	-1.044	0	%100
50	M27	Z	-1.809	-1.809	0	%100
51	M28	X	-.752	-.752	0	%100
52	M28	Z	-1.302	-1.302	0	%100
53	M29	X	-1.044	-1.044	0	%100
54	M29	Z	-1.809	-1.809	0	%100
55	M30	X	-.77	-.77	0	%100
56	M30	Z	-1.334	-1.334	0	%100
57	M31	X	-.752	-.752	0	%100
58	M31	Z	-1.302	-1.302	0	%100
59	M32	X	-.752	-.752	0	%100
60	M32	Z	-1.302	-1.302	0	%100
61	M33	X	-1	-1	0	%100
62	M33	Z	-1.731	-1.731	0	%100
63	M34	X	-1	-1	0	%100
64	M34	Z	-1.731	-1.731	0	%100
65	M35	X	-1.169	-1.169	0	%100
66	M35	Z	-2.024	-2.024	0	%100
67	M36	X	-.77	-.77	0	%100
68	M36	Z	-1.334	-1.334	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
69	MP6A	X	-1.469	-1.469	0	%100
70	MP6A	Z	-2.544	-2.544	0	%100
71	MP5A	X	-1.469	-1.469	0	%100
72	MP5A	Z	-2.544	-2.544	0	%100
73	MP3A	X	-1.624	-1.624	0	%100
74	MP3A	Z	-2.813	-2.813	0	%100
75	MP1A	X	-1.469	-1.469	0	%100
76	MP1A	Z	-2.544	-2.544	0	%100
77	MP4A	X	-1.469	-1.469	0	%100
78	MP4A	Z	-2.544	-2.544	0	%100
79	MP2A	X	-1.469	-1.469	0	%100
80	MP2A	Z	-2.544	-2.544	0	%100
81	M55	X	-.097	-.097	0	%100
82	M55	Z	-.167	-.167	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.007	-.007	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	-.007	-.007	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	-.000411	-.000411	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-.000411	-.000411	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-.006	-.006	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-.000411	-.000411	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-.000411	-.000411	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	-.006	-.006	0	%100
17	OVP	X	0	0	0	%100
18	OVP	Z	-.003	-.003	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	-.003	-.003	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	-.003	-.003	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	-.003	-.003	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	-.000885	-.000885	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	-.002	-.002	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	-.000885	-.000885	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	-.002	-.002	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	-.001	-.001	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	-.000885	-.000885	0	%100
37	M21	X	0	0	0	%100
38	M21	Z	-.000885	-.000885	0	%100
39	M22	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
40	M22	Z	-.003	-.003	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	-.003	-.003	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	-.004	-.004	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	-.001	-.001	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	-.000885	-.000885	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	-.002	-.002	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	-.000885	-.000885	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	-.002	-.002	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	-.001	-.001	0	%100
57	M31	X	0	0	0	%100
58	M31	Z	-.000885	-.000885	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	-.000885	-.000885	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	-.003	-.003	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	-.003	-.003	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	-.004	-.004	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	-.001	-.001	0	%100
69	MP6A	X	0	0	0	%100
70	MP6A	Z	-.005	-.005	0	%100
71	MP5A	X	0	0	0	%100
72	MP5A	Z	-.005	-.005	0	%100
73	MP3A	X	0	0	0	%100
74	MP3A	Z	-.006	-.006	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	-.005	-.005	0	%100
77	MP4A	X	0	0	0	%100
78	MP4A	Z	-.005	-.005	0	%100
79	MP2A	X	0	0	0	%100
80	MP2A	Z	-.005	-.005	0	%100
81	M55	X	0	0	0	%100
82	M55	Z	-.001	-.001	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	.003	.003	0	%100
2	M1	Z	-.004	-.004	0	%100
3	M3	X	.003	.003	0	%100
4	M3	Z	-.004	-.004	0	%100
5	M5	X	2.6e-5	2.6e-5	0	%100
6	M5	Z	-4.5e-5	-4.5e-5	0	%100
7	M6	X	.000389	.000389	0	%100
8	M6	Z	-.000674	-.000674	0	%100
9	M7	X	.002	.002	0	%100
10	M7	Z	-.004	-.004	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
11	M8	X	2.6e-5	2.6e-5	0	%100
12	M8	Z	-4.5e-5	-4.5e-5	0	%100
13	M9	X	.000389	.000389	0	%100
14	M9	Z	-.000674	-.000674	0	%100
15	M10	X	.002	.002	0	%100
16	M10	Z	-.004	-.004	0	%100
17	OVP	X	.000165	.000165	0	%100
18	OVP	Z	-.000287	-.000287	0	%100
19	M12	X	.002	.002	0	%100
20	M12	Z	-.004	-.004	0	%100
21	M13	X	.000165	.000165	0	%100
22	M13	Z	-.000287	-.000287	0	%100
23	M14	X	.002	.002	0	%100
24	M14	Z	-.004	-.004	0	%100
25	M15	X	.001	.001	0	%100
26	M15	Z	-.002	-.002	0	%100
27	M16	X	.001	.001	0	%100
28	M16	Z	-.002	-.002	0	%100
29	M17	X	.001	.001	0	%100
30	M17	Z	-.002	-.002	0	%100
31	M18	X	.001	.001	0	%100
32	M18	Z	-.002	-.002	0	%100
33	M19	X	.001	.001	0	%100
34	M19	Z	-.002	-.002	0	%100
35	M20	X	.001	.001	0	%100
36	M20	Z	-.002	-.002	0	%100
37	M21	X	.001	.001	0	%100
38	M21	Z	-.002	-.002	0	%100
39	M22	X	.001	.001	0	%100
40	M22	Z	-.002	-.002	0	%100
41	M23	X	.001	.001	0	%100
42	M23	Z	-.002	-.002	0	%100
43	M24	X	.002	.002	0	%100
44	M24	Z	-.004	-.004	0	%100
45	M25	X	.001	.001	0	%100
46	M25	Z	-.002	-.002	0	%100
47	M26	X	.001	.001	0	%100
48	M26	Z	-.002	-.002	0	%100
49	M27	X	.000961	.000961	0	%100
50	M27	Z	-.002	-.002	0	%100
51	M28	X	.001	.001	0	%100
52	M28	Z	-.002	-.002	0	%100
53	M29	X	.000961	.000961	0	%100
54	M29	Z	-.002	-.002	0	%100
55	M30	X	.001	.001	0	%100
56	M30	Z	-.002	-.002	0	%100
57	M31	X	.001	.001	0	%100
58	M31	Z	-.002	-.002	0	%100
59	M32	X	.001	.001	0	%100
60	M32	Z	-.002	-.002	0	%100
61	M33	X	.001	.001	0	%100
62	M33	Z	-.002	-.002	0	%100
63	M34	X	.001	.001	0	%100
64	M34	Z	-.002	-.002	0	%100
65	M35	X	.002	.002	0	%100
66	M35	Z	-.004	-.004	0	%100
67	M36	X	.001	.001	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
68	M36	Z	-.002	-.002	0	%100
69	MP6A	X	.003	.003	0	%100
70	MP6A	Z	-.005	-.005	0	%100
71	MP5A	X	.003	.003	0	%100
72	MP5A	Z	-.005	-.005	0	%100
73	MP3A	X	.003	.003	0	%100
74	MP3A	Z	-.006	-.006	0	%100
75	MP1A	X	.003	.003	0	%100
76	MP1A	Z	-.005	-.005	0	%100
77	MP4A	X	.003	.003	0	%100
78	MP4A	Z	-.005	-.005	0	%100
79	MP2A	X	.003	.003	0	%100
80	MP2A	Z	-.005	-.005	0	%100
81	M55	X	.003	.003	0	%100
82	M55	Z	-.004	-.004	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	.001	.001	0	%100
2	M1	Z	-.000839	-.000839	0	%100
3	M3	X	.001	.001	0	%100
4	M3	Z	-.000839	-.000839	0	%100
5	M5	X	5.2e-5	5.2e-5	0	%100
6	M5	Z	-3e-5	-3e-5	0	%100
7	M6	X	.000681	.000681	0	%100
8	M6	Z	-.000393	-.000393	0	%100
9	M7	X	.001	.001	0	%100
10	M7	Z	-.000804	-.000804	0	%100
11	M8	X	5.2e-5	5.2e-5	0	%100
12	M8	Z	-3e-5	-3e-5	0	%100
13	M9	X	.000681	.000681	0	%100
14	M9	Z	-.000393	-.000393	0	%100
15	M10	X	.001	.001	0	%100
16	M10	Z	-.000804	-.000804	0	%100
17	OVP	X	.00033	.00033	0	%100
18	OVP	Z	-.000191	-.000191	0	%100
19	M12	X	.004	.004	0	%100
20	M12	Z	-.002	-.002	0	%100
21	M13	X	.00033	.00033	0	%100
22	M13	Z	-.000191	-.000191	0	%100
23	M14	X	.004	.004	0	%100
24	M14	Z	-.002	-.002	0	%100
25	M15	X	.005	.005	0	%100
26	M15	Z	-.003	-.003	0	%100
27	M16	X	.002	.002	0	%100
28	M16	Z	-.001	-.001	0	%100
29	M17	X	.005	.005	0	%100
30	M17	Z	-.003	-.003	0	%100
31	M18	X	.002	.002	0	%100
32	M18	Z	-.001	-.001	0	%100
33	M19	X	.005	.005	0	%100
34	M19	Z	-.003	-.003	0	%100
35	M20	X	.005	.005	0	%100
36	M20	Z	-.003	-.003	0	%100
37	M21	X	.005	.005	0	%100
38	M21	Z	-.003	-.003	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
39	M22	X	.002	.002	0	%100
40	M22	Z	-.001	-.001	0	%100
41	M23	X	.002	.002	0	%100
42	M23	Z	-.001	-.001	0	%100
43	M24	X	.004	.004	0	%100
44	M24	Z	-.002	-.002	0	%100
45	M25	X	.005	.005	0	%100
46	M25	Z	-.003	-.003	0	%100
47	M26	X	.005	.005	0	%100
48	M26	Z	-.003	-.003	0	%100
49	M27	X	.002	.002	0	%100
50	M27	Z	-.000965	-.000965	0	%100
51	M28	X	.005	.005	0	%100
52	M28	Z	-.003	-.003	0	%100
53	M29	X	.002	.002	0	%100
54	M29	Z	-.000965	-.000965	0	%100
55	M30	X	.005	.005	0	%100
56	M30	Z	-.003	-.003	0	%100
57	M31	X	.005	.005	0	%100
58	M31	Z	-.003	-.003	0	%100
59	M32	X	.005	.005	0	%100
60	M32	Z	-.003	-.003	0	%100
61	M33	X	.002	.002	0	%100
62	M33	Z	-.001	-.001	0	%100
63	M34	X	.002	.002	0	%100
64	M34	Z	-.001	-.001	0	%100
65	M35	X	.004	.004	0	%100
66	M35	Z	-.002	-.002	0	%100
67	M36	X	.005	.005	0	%100
68	M36	Z	-.003	-.003	0	%100
69	MP6A	X	.005	.005	0	%100
70	MP6A	Z	-.003	-.003	0	%100
71	MP5A	X	.005	.005	0	%100
72	MP5A	Z	-.003	-.003	0	%100
73	MP3A	X	.006	.006	0	%100
74	MP3A	Z	-.003	-.003	0	%100
75	MP1A	X	.005	.005	0	%100
76	MP1A	Z	-.003	-.003	0	%100
77	MP4A	X	.005	.005	0	%100
78	MP4A	Z	-.003	-.003	0	%100
79	MP2A	X	.005	.005	0	%100
80	MP2A	Z	-.003	-.003	0	%100
81	M55	X	.007	.007	0	%100
82	M55	Z	-.004	-.004	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
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	.000427	.000427	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	.000427	.000427	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
10	M7	Z	0	0	0	%100
11	M8	X	.000427	.000427	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	.000427	.000427	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	OVP	X	.003	.003	0	%100
18	OVP	Z	0	0	0	%100
19	M12	X	.003	.003	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	.003	.003	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	.003	.003	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	.007	.007	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	.002	.002	0	%100
28	M16	Z	0	0	0	%100
29	M17	X	.007	.007	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	.002	.002	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	.007	.007	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	.007	.007	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	.007	.007	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	.003	.003	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	.003	.003	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	.004	.004	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	.007	.007	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	.007	.007	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	.002	.002	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	.007	.007	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	.002	.002	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	.007	.007	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	.007	.007	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	.007	.007	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	.003	.003	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	.003	.003	0	%100
64	M34	Z	0	0	0	%100
65	M35	X	.004	.004	0	%100
66	M35	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
67	M36	X	.007	.007	0	%100
68	M36	Z	0	0	0	%100
69	MP6A	X	.005	.005	0	%100
70	MP6A	Z	0	0	0	%100
71	MP5A	X	.005	.005	0	%100
72	MP5A	Z	0	0	0	%100
73	MP3A	X	.006	.006	0	%100
74	MP3A	Z	0	0	0	%100
75	MP1A	X	.005	.005	0	%100
76	MP1A	Z	0	0	0	%100
77	MP4A	X	.005	.005	0	%100
78	MP4A	Z	0	0	0	%100
79	MP2A	X	.005	.005	0	%100
80	MP2A	Z	0	0	0	%100
81	M55	X	.007	.007	0	%100
82	M55	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	.001	.001	0	%100
2	M1	Z	.000839	.000839	0	%100
3	M3	X	.001	.001	0	%100
4	M3	Z	.000839	.000839	0	%100
5	M5	X	.000681	.000681	0	%100
6	M5	Z	.000393	.000393	0	%100
7	M6	X	5.2e-5	5.2e-5	0	%100
8	M6	Z	3e-5	3e-5	0	%100
9	M7	X	.001	.001	0	%100
10	M7	Z	.000804	.000804	0	%100
11	M8	X	.000681	.000681	0	%100
12	M8	Z	.000393	.000393	0	%100
13	M9	X	5.2e-5	5.2e-5	0	%100
14	M9	Z	3e-5	3e-5	0	%100
15	M10	X	.001	.001	0	%100
16	M10	Z	.000804	.000804	0	%100
17	OVP	X	.004	.004	0	%100
18	OVP	Z	.002	.002	0	%100
19	M12	X	.00033	.00033	0	%100
20	M12	Z	.000191	.000191	0	%100
21	M13	X	.004	.004	0	%100
22	M13	Z	.002	.002	0	%100
23	M14	X	.00033	.00033	0	%100
24	M14	Z	.000191	.000191	0	%100
25	M15	X	.005	.005	0	%100
26	M15	Z	.003	.003	0	%100
27	M16	X	.002	.002	0	%100
28	M16	Z	.000965	.000965	0	%100
29	M17	X	.005	.005	0	%100
30	M17	Z	.003	.003	0	%100
31	M18	X	.002	.002	0	%100
32	M18	Z	.000965	.000965	0	%100
33	M19	X	.005	.005	0	%100
34	M19	Z	.003	.003	0	%100
35	M20	X	.005	.005	0	%100
36	M20	Z	.003	.003	0	%100
37	M21	X	.005	.005	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
38	M21	Z	.003	.003	0	%100
39	M22	X	.002	.002	0	%100
40	M22	Z	.001	.001	0	%100
41	M23	X	.002	.002	0	%100
42	M23	Z	.001	.001	0	%100
43	M24	X	.004	.004	0	%100
44	M24	Z	.002	.002	0	%100
45	M25	X	.005	.005	0	%100
46	M25	Z	.003	.003	0	%100
47	M26	X	.005	.005	0	%100
48	M26	Z	.003	.003	0	%100
49	M27	X	.002	.002	0	%100
50	M27	Z	.001	.001	0	%100
51	M28	X	.005	.005	0	%100
52	M28	Z	.003	.003	0	%100
53	M29	X	.002	.002	0	%100
54	M29	Z	.001	.001	0	%100
55	M30	X	.005	.005	0	%100
56	M30	Z	.003	.003	0	%100
57	M31	X	.005	.005	0	%100
58	M31	Z	.003	.003	0	%100
59	M32	X	.005	.005	0	%100
60	M32	Z	.003	.003	0	%100
61	M33	X	.002	.002	0	%100
62	M33	Z	.001	.001	0	%100
63	M34	X	.002	.002	0	%100
64	M34	Z	.001	.001	0	%100
65	M35	X	.004	.004	0	%100
66	M35	Z	.002	.002	0	%100
67	M36	X	.005	.005	0	%100
68	M36	Z	.003	.003	0	%100
69	MP6A	X	.005	.005	0	%100
70	MP6A	Z	.003	.003	0	%100
71	MP5A	X	.005	.005	0	%100
72	MP5A	Z	.003	.003	0	%100
73	MP3A	X	.006	.006	0	%100
74	MP3A	Z	.003	.003	0	%100
75	MP1A	X	.005	.005	0	%100
76	MP1A	Z	.003	.003	0	%100
77	MP4A	X	.005	.005	0	%100
78	MP4A	Z	.003	.003	0	%100
79	MP2A	X	.005	.005	0	%100
80	MP2A	Z	.003	.003	0	%100
81	M55	X	.003	.003	0	%100
82	M55	Z	.001	.001	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	.003	.003	0	%100
2	M1	Z	.004	.004	0	%100
3	M3	X	.003	.003	0	%100
4	M3	Z	.004	.004	0	%100
5	M5	X	.000389	.000389	0	%100
6	M5	Z	.000674	.000674	0	%100
7	M6	X	2.6e-5	2.6e-5	0	%100
8	M6	Z	4.5e-5	4.5e-5	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
9	M7	X	.002	.002	0	%100
10	M7	Z	.004	.004	0	%100
11	M8	X	.000389	.000389	0	%100
12	M8	Z	.000674	.000674	0	%100
13	M9	X	2.6e-5	2.6e-5	0	%100
14	M9	Z	4.5e-5	4.5e-5	0	%100
15	M10	X	.002	.002	0	%100
16	M10	Z	.004	.004	0	%100
17	OVP	X	.002	.002	0	%100
18	OVP	Z	.004	.004	0	%100
19	M12	X	.000165	.000165	0	%100
20	M12	Z	.000287	.000287	0	%100
21	M13	X	.002	.002	0	%100
22	M13	Z	.004	.004	0	%100
23	M14	X	.000165	.000165	0	%100
24	M14	Z	.000287	.000287	0	%100
25	M15	X	.001	.001	0	%100
26	M15	Z	.002	.002	0	%100
27	M16	X	.000961	.000961	0	%100
28	M16	Z	.002	.002	0	%100
29	M17	X	.001	.001	0	%100
30	M17	Z	.002	.002	0	%100
31	M18	X	.000961	.000961	0	%100
32	M18	Z	.002	.002	0	%100
33	M19	X	.001	.001	0	%100
34	M19	Z	.002	.002	0	%100
35	M20	X	.001	.001	0	%100
36	M20	Z	.002	.002	0	%100
37	M21	X	.001	.001	0	%100
38	M21	Z	.002	.002	0	%100
39	M22	X	.001	.001	0	%100
40	M22	Z	.002	.002	0	%100
41	M23	X	.001	.001	0	%100
42	M23	Z	.002	.002	0	%100
43	M24	X	.002	.002	0	%100
44	M24	Z	.004	.004	0	%100
45	M25	X	.001	.001	0	%100
46	M25	Z	.002	.002	0	%100
47	M26	X	.001	.001	0	%100
48	M26	Z	.002	.002	0	%100
49	M27	X	.001	.001	0	%100
50	M27	Z	.002	.002	0	%100
51	M28	X	.001	.001	0	%100
52	M28	Z	.002	.002	0	%100
53	M29	X	.001	.001	0	%100
54	M29	Z	.002	.002	0	%100
55	M30	X	.001	.001	0	%100
56	M30	Z	.002	.002	0	%100
57	M31	X	.001	.001	0	%100
58	M31	Z	.002	.002	0	%100
59	M32	X	.001	.001	0	%100
60	M32	Z	.002	.002	0	%100
61	M33	X	.001	.001	0	%100
62	M33	Z	.002	.002	0	%100
63	M34	X	.001	.001	0	%100
64	M34	Z	.002	.002	0	%100
65	M35	X	.002	.002	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
66	M35	Z	.004	.004	0	%100
67	M36	X	.001	.001	0	%100
68	M36	Z	.002	.002	0	%100
69	MP6A	X	.003	.003	0	%100
70	MP6A	Z	.005	.005	0	%100
71	MP5A	X	.003	.003	0	%100
72	MP5A	Z	.005	.005	0	%100
73	MP3A	X	.003	.003	0	%100
74	MP3A	Z	.006	.006	0	%100
75	MP1A	X	.003	.003	0	%100
76	MP1A	Z	.005	.005	0	%100
77	MP4A	X	.003	.003	0	%100
78	MP4A	Z	.005	.005	0	%100
79	MP2A	X	.003	.003	0	%100
80	MP2A	Z	.005	.005	0	%100
81	M55	X	.000208	.000208	0	%100
82	M55	Z	.00036	.00036	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	0	0	0	%100
2	M1	Z	.007	.007	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	.007	.007	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	.000411	.000411	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	.000411	.000411	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	.006	.006	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	.000411	.000411	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	.000411	.000411	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	.006	.006	0	%100
17	OVP	X	0	0	0	%100
18	OVP	Z	.003	.003	0	%100
19	M12	X	0	0	0	%100
20	M12	Z	.003	.003	0	%100
21	M13	X	0	0	0	%100
22	M13	Z	.003	.003	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	.003	.003	0	%100
25	M15	X	0	0	0	%100
26	M15	Z	.000885	.000885	0	%100
27	M16	X	0	0	0	%100
28	M16	Z	.002	.002	0	%100
29	M17	X	0	0	0	%100
30	M17	Z	.000885	.000885	0	%100
31	M18	X	0	0	0	%100
32	M18	Z	.002	.002	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	.001	.001	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	.000885	.000885	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
37	M21	X	0	0	0	%100
38	M21	Z	.000885	.000885	0	%100
39	M22	X	0	0	0	%100
40	M22	Z	.003	.003	0	%100
41	M23	X	0	0	0	%100
42	M23	Z	.003	.003	0	%100
43	M24	X	0	0	0	%100
44	M24	Z	.004	.004	0	%100
45	M25	X	0	0	0	%100
46	M25	Z	.001	.001	0	%100
47	M26	X	0	0	0	%100
48	M26	Z	.000885	.000885	0	%100
49	M27	X	0	0	0	%100
50	M27	Z	.002	.002	0	%100
51	M28	X	0	0	0	%100
52	M28	Z	.000885	.000885	0	%100
53	M29	X	0	0	0	%100
54	M29	Z	.002	.002	0	%100
55	M30	X	0	0	0	%100
56	M30	Z	.001	.001	0	%100
57	M31	X	0	0	0	%100
58	M31	Z	.000885	.000885	0	%100
59	M32	X	0	0	0	%100
60	M32	Z	.000885	.000885	0	%100
61	M33	X	0	0	0	%100
62	M33	Z	.003	.003	0	%100
63	M34	X	0	0	0	%100
64	M34	Z	.003	.003	0	%100
65	M35	X	0	0	0	%100
66	M35	Z	.004	.004	0	%100
67	M36	X	0	0	0	%100
68	M36	Z	.001	.001	0	%100
69	MP6A	X	0	0	0	%100
70	MP6A	Z	.005	.005	0	%100
71	MP5A	X	0	0	0	%100
72	MP5A	Z	.005	.005	0	%100
73	MP3A	X	0	0	0	%100
74	MP3A	Z	.006	.006	0	%100
75	MP1A	X	0	0	0	%100
76	MP1A	Z	.005	.005	0	%100
77	MP4A	X	0	0	0	%100
78	MP4A	Z	.005	.005	0	%100
79	MP2A	X	0	0	0	%100
80	MP2A	Z	.005	.005	0	%100
81	M55	X	0	0	0	%100
82	M55	Z	.001	.001	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-.003	-.003	0	%100
2	M1	Z	.004	.004	0	%100
3	M3	X	-.003	-.003	0	%100
4	M3	Z	.004	.004	0	%100
5	M5	X	-2.6e-5	-2.6e-5	0	%100
6	M5	Z	4.5e-5	4.5e-5	0	%100
7	M6	X	-.000389	-.000389	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
8	M6	Z	.000674	.000674	0	%100
9	M7	X	-.002	-.002	0	%100
10	M7	Z	.004	.004	0	%100
11	M8	X	-2.6e-5	-2.6e-5	0	%100
12	M8	Z	4.5e-5	4.5e-5	0	%100
13	M9	X	-.000389	-.000389	0	%100
14	M9	Z	.000674	.000674	0	%100
15	M10	X	-.002	-.002	0	%100
16	M10	Z	.004	.004	0	%100
17	OVP	X	-.000165	-.000165	0	%100
18	OVP	Z	.000287	.000287	0	%100
19	M12	X	-.002	-.002	0	%100
20	M12	Z	.004	.004	0	%100
21	M13	X	-.000165	-.000165	0	%100
22	M13	Z	.000287	.000287	0	%100
23	M14	X	-.002	-.002	0	%100
24	M14	Z	.004	.004	0	%100
25	M15	X	-.001	-.001	0	%100
26	M15	Z	.002	.002	0	%100
27	M16	X	-.001	-.001	0	%100
28	M16	Z	.002	.002	0	%100
29	M17	X	-.001	-.001	0	%100
30	M17	Z	.002	.002	0	%100
31	M18	X	-.001	-.001	0	%100
32	M18	Z	.002	.002	0	%100
33	M19	X	-.001	-.001	0	%100
34	M19	Z	.002	.002	0	%100
35	M20	X	-.001	-.001	0	%100
36	M20	Z	.002	.002	0	%100
37	M21	X	-.001	-.001	0	%100
38	M21	Z	.002	.002	0	%100
39	M22	X	-.001	-.001	0	%100
40	M22	Z	.002	.002	0	%100
41	M23	X	-.001	-.001	0	%100
42	M23	Z	.002	.002	0	%100
43	M24	X	-.002	-.002	0	%100
44	M24	Z	.004	.004	0	%100
45	M25	X	-.001	-.001	0	%100
46	M25	Z	.002	.002	0	%100
47	M26	X	-.001	-.001	0	%100
48	M26	Z	.002	.002	0	%100
49	M27	X	-.000961	-.000961	0	%100
50	M27	Z	.002	.002	0	%100
51	M28	X	-.001	-.001	0	%100
52	M28	Z	.002	.002	0	%100
53	M29	X	-.000961	-.000961	0	%100
54	M29	Z	.002	.002	0	%100
55	M30	X	-.001	-.001	0	%100
56	M30	Z	.002	.002	0	%100
57	M31	X	-.001	-.001	0	%100
58	M31	Z	.002	.002	0	%100
59	M32	X	-.001	-.001	0	%100
60	M32	Z	.002	.002	0	%100
61	M33	X	-.001	-.001	0	%100
62	M33	Z	.002	.002	0	%100
63	M34	X	-.001	-.001	0	%100
64	M34	Z	.002	.002	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
65	M35	X	-.002	-.002	0	%100
66	M35	Z	.004	.004	0	%100
67	M36	X	-.001	-.001	0	%100
68	M36	Z	.002	.002	0	%100
69	MP6A	X	-.003	-.003	0	%100
70	MP6A	Z	.005	.005	0	%100
71	MP5A	X	-.003	-.003	0	%100
72	MP5A	Z	.005	.005	0	%100
73	MP3A	X	-.003	-.003	0	%100
74	MP3A	Z	.006	.006	0	%100
75	MP1A	X	-.003	-.003	0	%100
76	MP1A	Z	.005	.005	0	%100
77	MP4A	X	-.003	-.003	0	%100
78	MP4A	Z	.005	.005	0	%100
79	MP2A	X	-.003	-.003	0	%100
80	MP2A	Z	.005	.005	0	%100
81	M55	X	-.003	-.003	0	%100
82	M55	Z	.004	.004	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-.001	-.001	0	%100
2	M1	Z	.000839	.000839	0	%100
3	M3	X	-.001	-.001	0	%100
4	M3	Z	.000839	.000839	0	%100
5	M5	X	-5.2e-5	-5.2e-5	0	%100
6	M5	Z	3e-5	3e-5	0	%100
7	M6	X	-.000681	-.000681	0	%100
8	M6	Z	.000393	.000393	0	%100
9	M7	X	-.001	-.001	0	%100
10	M7	Z	.000804	.000804	0	%100
11	M8	X	-5.2e-5	-5.2e-5	0	%100
12	M8	Z	3e-5	3e-5	0	%100
13	M9	X	-.000681	-.000681	0	%100
14	M9	Z	.000393	.000393	0	%100
15	M10	X	-.001	-.001	0	%100
16	M10	Z	.000804	.000804	0	%100
17	OVP	X	-.00033	-.00033	0	%100
18	OVP	Z	.000191	.000191	0	%100
19	M12	X	-.004	-.004	0	%100
20	M12	Z	.002	.002	0	%100
21	M13	X	-.00033	-.00033	0	%100
22	M13	Z	.000191	.000191	0	%100
23	M14	X	-.004	-.004	0	%100
24	M14	Z	.002	.002	0	%100
25	M15	X	-.005	-.005	0	%100
26	M15	Z	.003	.003	0	%100
27	M16	X	-.002	-.002	0	%100
28	M16	Z	.001	.001	0	%100
29	M17	X	-.005	-.005	0	%100
30	M17	Z	.003	.003	0	%100
31	M18	X	-.002	-.002	0	%100
32	M18	Z	.001	.001	0	%100
33	M19	X	-.005	-.005	0	%100
34	M19	Z	.003	.003	0	%100
35	M20	X	-.005	-.005	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
36	M20	Z	.003	.003	0	%100
37	M21	X	-.005	-.005	0	%100
38	M21	Z	.003	.003	0	%100
39	M22	X	-.002	-.002	0	%100
40	M22	Z	.001	.001	0	%100
41	M23	X	-.002	-.002	0	%100
42	M23	Z	.001	.001	0	%100
43	M24	X	-.004	-.004	0	%100
44	M24	Z	.002	.002	0	%100
45	M25	X	-.005	-.005	0	%100
46	M25	Z	.003	.003	0	%100
47	M26	X	-.005	-.005	0	%100
48	M26	Z	.003	.003	0	%100
49	M27	X	-.002	-.002	0	%100
50	M27	Z	.000965	.000965	0	%100
51	M28	X	-.005	-.005	0	%100
52	M28	Z	.003	.003	0	%100
53	M29	X	-.002	-.002	0	%100
54	M29	Z	.000965	.000965	0	%100
55	M30	X	-.005	-.005	0	%100
56	M30	Z	.003	.003	0	%100
57	M31	X	-.005	-.005	0	%100
58	M31	Z	.003	.003	0	%100
59	M32	X	-.005	-.005	0	%100
60	M32	Z	.003	.003	0	%100
61	M33	X	-.002	-.002	0	%100
62	M33	Z	.001	.001	0	%100
63	M34	X	-.002	-.002	0	%100
64	M34	Z	.001	.001	0	%100
65	M35	X	-.004	-.004	0	%100
66	M35	Z	.002	.002	0	%100
67	M36	X	-.005	-.005	0	%100
68	M36	Z	.003	.003	0	%100
69	MP6A	X	-.005	-.005	0	%100
70	MP6A	Z	.003	.003	0	%100
71	MP5A	X	-.005	-.005	0	%100
72	MP5A	Z	.003	.003	0	%100
73	MP3A	X	-.006	-.006	0	%100
74	MP3A	Z	.003	.003	0	%100
75	MP1A	X	-.005	-.005	0	%100
76	MP1A	Z	.003	.003	0	%100
77	MP4A	X	-.005	-.005	0	%100
78	MP4A	Z	.003	.003	0	%100
79	MP2A	X	-.005	-.005	0	%100
80	MP2A	Z	.003	.003	0	%100
81	M55	X	-.007	-.007	0	%100
82	M55	Z	.004	.004	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
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	-.000427	-.000427	0	%100
6	M5	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
7	M6	X	-.000427	-.000427	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	-.000427	-.000427	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-.000427	-.000427	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	0	0	0	%100
17	OVP	X	-.003	-.003	0	%100
18	OVP	Z	0	0	0	%100
19	M12	X	-.003	-.003	0	%100
20	M12	Z	0	0	0	%100
21	M13	X	-.003	-.003	0	%100
22	M13	Z	0	0	0	%100
23	M14	X	-.003	-.003	0	%100
24	M14	Z	0	0	0	%100
25	M15	X	-.007	-.007	0	%100
26	M15	Z	0	0	0	%100
27	M16	X	-.002	-.002	0	%100
28	M16	Z	0	0	0	%100
29	M17	X	-.007	-.007	0	%100
30	M17	Z	0	0	0	%100
31	M18	X	-.002	-.002	0	%100
32	M18	Z	0	0	0	%100
33	M19	X	-.007	-.007	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-.007	-.007	0	%100
36	M20	Z	0	0	0	%100
37	M21	X	-.007	-.007	0	%100
38	M21	Z	0	0	0	%100
39	M22	X	-.003	-.003	0	%100
40	M22	Z	0	0	0	%100
41	M23	X	-.003	-.003	0	%100
42	M23	Z	0	0	0	%100
43	M24	X	-.004	-.004	0	%100
44	M24	Z	0	0	0	%100
45	M25	X	-.007	-.007	0	%100
46	M25	Z	0	0	0	%100
47	M26	X	-.007	-.007	0	%100
48	M26	Z	0	0	0	%100
49	M27	X	-.002	-.002	0	%100
50	M27	Z	0	0	0	%100
51	M28	X	-.007	-.007	0	%100
52	M28	Z	0	0	0	%100
53	M29	X	-.002	-.002	0	%100
54	M29	Z	0	0	0	%100
55	M30	X	-.007	-.007	0	%100
56	M30	Z	0	0	0	%100
57	M31	X	-.007	-.007	0	%100
58	M31	Z	0	0	0	%100
59	M32	X	-.007	-.007	0	%100
60	M32	Z	0	0	0	%100
61	M33	X	-.003	-.003	0	%100
62	M33	Z	0	0	0	%100
63	M34	X	-.003	-.003	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
64	M34	Z	0	0	0	%100
65	M35	X	-.004	-.004	0	%100
66	M35	Z	0	0	0	%100
67	M36	X	-.007	-.007	0	%100
68	M36	Z	0	0	0	%100
69	MP6A	X	-.005	-.005	0	%100
70	MP6A	Z	0	0	0	%100
71	MP5A	X	-.005	-.005	0	%100
72	MP5A	Z	0	0	0	%100
73	MP3A	X	-.006	-.006	0	%100
74	MP3A	Z	0	0	0	%100
75	MP1A	X	-.005	-.005	0	%100
76	MP1A	Z	0	0	0	%100
77	MP4A	X	-.005	-.005	0	%100
78	MP4A	Z	0	0	0	%100
79	MP2A	X	-.005	-.005	0	%100
80	MP2A	Z	0	0	0	%100
81	M55	X	-.007	-.007	0	%100
82	M55	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-.001	-.001	0	%100
2	M1	Z	-.000839	-.000839	0	%100
3	M3	X	-.001	-.001	0	%100
4	M3	Z	-.000839	-.000839	0	%100
5	M5	X	-.000681	-.000681	0	%100
6	M5	Z	-.000393	-.000393	0	%100
7	M6	X	-5.2e-5	-5.2e-5	0	%100
8	M6	Z	-3e-5	-3e-5	0	%100
9	M7	X	-.001	-.001	0	%100
10	M7	Z	-.000804	-.000804	0	%100
11	M8	X	-.000681	-.000681	0	%100
12	M8	Z	-.000393	-.000393	0	%100
13	M9	X	-5.2e-5	-5.2e-5	0	%100
14	M9	Z	-3e-5	-3e-5	0	%100
15	M10	X	-.001	-.001	0	%100
16	M10	Z	-.000804	-.000804	0	%100
17	OVP	X	-.004	-.004	0	%100
18	OVP	Z	-.002	-.002	0	%100
19	M12	X	-.00033	-.00033	0	%100
20	M12	Z	-.000191	-.000191	0	%100
21	M13	X	-.004	-.004	0	%100
22	M13	Z	-.002	-.002	0	%100
23	M14	X	-.00033	-.00033	0	%100
24	M14	Z	-.000191	-.000191	0	%100
25	M15	X	-.005	-.005	0	%100
26	M15	Z	-.003	-.003	0	%100
27	M16	X	-.002	-.002	0	%100
28	M16	Z	-.000965	-.000965	0	%100
29	M17	X	-.005	-.005	0	%100
30	M17	Z	-.003	-.003	0	%100
31	M18	X	-.002	-.002	0	%100
32	M18	Z	-.000965	-.000965	0	%100
33	M19	X	-.005	-.005	0	%100
34	M19	Z	-.003	-.003	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
35	M20	X	-.005	-.005	0	%100
36	M20	Z	-.003	-.003	0	%100
37	M21	X	-.005	-.005	0	%100
38	M21	Z	-.003	-.003	0	%100
39	M22	X	-.002	-.002	0	%100
40	M22	Z	-.001	-.001	0	%100
41	M23	X	-.002	-.002	0	%100
42	M23	Z	-.001	-.001	0	%100
43	M24	X	-.004	-.004	0	%100
44	M24	Z	-.002	-.002	0	%100
45	M25	X	-.005	-.005	0	%100
46	M25	Z	-.003	-.003	0	%100
47	M26	X	-.005	-.005	0	%100
48	M26	Z	-.003	-.003	0	%100
49	M27	X	-.002	-.002	0	%100
50	M27	Z	-.001	-.001	0	%100
51	M28	X	-.005	-.005	0	%100
52	M28	Z	-.003	-.003	0	%100
53	M29	X	-.002	-.002	0	%100
54	M29	Z	-.001	-.001	0	%100
55	M30	X	-.005	-.005	0	%100
56	M30	Z	-.003	-.003	0	%100
57	M31	X	-.005	-.005	0	%100
58	M31	Z	-.003	-.003	0	%100
59	M32	X	-.005	-.005	0	%100
60	M32	Z	-.003	-.003	0	%100
61	M33	X	-.002	-.002	0	%100
62	M33	Z	-.001	-.001	0	%100
63	M34	X	-.002	-.002	0	%100
64	M34	Z	-.001	-.001	0	%100
65	M35	X	-.004	-.004	0	%100
66	M35	Z	-.002	-.002	0	%100
67	M36	X	-.005	-.005	0	%100
68	M36	Z	-.003	-.003	0	%100
69	MP6A	X	-.005	-.005	0	%100
70	MP6A	Z	-.003	-.003	0	%100
71	MP5A	X	-.005	-.005	0	%100
72	MP5A	Z	-.003	-.003	0	%100
73	MP3A	X	-.006	-.006	0	%100
74	MP3A	Z	-.003	-.003	0	%100
75	MP1A	X	-.005	-.005	0	%100
76	MP1A	Z	-.003	-.003	0	%100
77	MP4A	X	-.005	-.005	0	%100
78	MP4A	Z	-.003	-.003	0	%100
79	MP2A	X	-.005	-.005	0	%100
80	MP2A	Z	-.003	-.003	0	%100
81	M55	X	-.003	-.003	0	%100
82	M55	Z	-.001	-.001	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
1	M1	X	-.003	-.003	0	%100
2	M1	Z	-.004	-.004	0	%100
3	M3	X	-.003	-.003	0	%100
4	M3	Z	-.004	-.004	0	%100
5	M5	X	-.000389	-.000389	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
6	M5	Z	-.000674	-.000674	0	%100
7	M6	X	-2.6e-5	-2.6e-5	0	%100
8	M6	Z	-4.5e-5	-4.5e-5	0	%100
9	M7	X	-.002	-.002	0	%100
10	M7	Z	-.004	-.004	0	%100
11	M8	X	-.000389	-.000389	0	%100
12	M8	Z	-.000674	-.000674	0	%100
13	M9	X	-2.6e-5	-2.6e-5	0	%100
14	M9	Z	-4.5e-5	-4.5e-5	0	%100
15	M10	X	-.002	-.002	0	%100
16	M10	Z	-.004	-.004	0	%100
17	OVP	X	-.002	-.002	0	%100
18	OVP	Z	-.004	-.004	0	%100
19	M12	X	-.000165	-.000165	0	%100
20	M12	Z	-.000287	-.000287	0	%100
21	M13	X	-.002	-.002	0	%100
22	M13	Z	-.004	-.004	0	%100
23	M14	X	-.000165	-.000165	0	%100
24	M14	Z	-.000287	-.000287	0	%100
25	M15	X	-.001	-.001	0	%100
26	M15	Z	-.002	-.002	0	%100
27	M16	X	-.000961	-.000961	0	%100
28	M16	Z	-.002	-.002	0	%100
29	M17	X	-.001	-.001	0	%100
30	M17	Z	-.002	-.002	0	%100
31	M18	X	-.000961	-.000961	0	%100
32	M18	Z	-.002	-.002	0	%100
33	M19	X	-.001	-.001	0	%100
34	M19	Z	-.002	-.002	0	%100
35	M20	X	-.001	-.001	0	%100
36	M20	Z	-.002	-.002	0	%100
37	M21	X	-.001	-.001	0	%100
38	M21	Z	-.002	-.002	0	%100
39	M22	X	-.001	-.001	0	%100
40	M22	Z	-.002	-.002	0	%100
41	M23	X	-.001	-.001	0	%100
42	M23	Z	-.002	-.002	0	%100
43	M24	X	-.002	-.002	0	%100
44	M24	Z	-.004	-.004	0	%100
45	M25	X	-.001	-.001	0	%100
46	M25	Z	-.002	-.002	0	%100
47	M26	X	-.001	-.001	0	%100
48	M26	Z	-.002	-.002	0	%100
49	M27	X	-.001	-.001	0	%100
50	M27	Z	-.002	-.002	0	%100
51	M28	X	-.001	-.001	0	%100
52	M28	Z	-.002	-.002	0	%100
53	M29	X	-.001	-.001	0	%100
54	M29	Z	-.002	-.002	0	%100
55	M30	X	-.001	-.001	0	%100
56	M30	Z	-.002	-.002	0	%100
57	M31	X	-.001	-.001	0	%100
58	M31	Z	-.002	-.002	0	%100
59	M32	X	-.001	-.001	0	%100
60	M32	Z	-.002	-.002	0	%100
61	M33	X	-.001	-.001	0	%100
62	M33	Z	-.002	-.002	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[in,%]	End Location[in,%]
63	M34	X	-.001	-.001	0	%100
64	M34	Z	-.002	-.002	0	%100
65	M35	X	-.002	-.002	0	%100
66	M35	Z	-.004	-.004	0	%100
67	M36	X	-.001	-.001	0	%100
68	M36	Z	-.002	-.002	0	%100
69	MP6A	X	-.003	-.003	0	%100
70	MP6A	Z	-.005	-.005	0	%100
71	MP5A	X	-.003	-.003	0	%100
72	MP5A	Z	-.005	-.005	0	%100
73	MP3A	X	-.003	-.003	0	%100
74	MP3A	Z	-.006	-.006	0	%100
75	MP1A	X	-.003	-.003	0	%100
76	MP1A	Z	-.005	-.005	0	%100
77	MP4A	X	-.003	-.003	0	%100
78	MP4A	Z	-.005	-.005	0	%100
79	MP2A	X	-.003	-.003	0	%100
80	MP2A	Z	-.005	-.005	0	%100
81	M55	X	-.000208	-.000208	0	%100
82	M55	Z	-.00036	-.00036	0	%100

Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
No Data to Print ...						

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N4	max	1118.145	10	1367.044	22	694.186	2	-.123	67	0	75	.106	28
2		min	-1575.371	28	401.926	67	-3391.893	20	-.416	22	0	1	-.051	49
3	N65	max	1574.482	29	1251.705	22	3192.457	14	-.114	67	0	75	.1	28
4		min	-630.138	49	372.978	67	273.982	8	-.385	21	0	1	-.049	49
5	N84	max	641.086	10	340.697	4	1367.276	10	0	75	0	75	0	75
6		min	-643.934	4	-268.723	10	-1368.825	4	0	1	0	1	0	1
7	Totals:	max	1851.01	10	2613.65	22	2509.179	1						
8		min	-1851.01	4	817.892	67	-2509.173	7						

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

	Member	Shape	Code Check	Loc[...	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
1	M1	L4X3X6	.000	3.375	18	.000	3.375	z	24	80199.0...	80676	2.686	7.063	1...	H2-1
2	M3	L4X3X6	.000	3.375	18	.000	3.375	z	24	80199.0...	80676	2.686	7.063	1...	H2-1
3	M5	PL3/8X3_H...	.520	0	21	.080	0	y	5	34985.7...	36450	.284	2.279	1...	H1-1b
4	M6	PL3/8X3_H...	.627	0	29	.093	0	z	28	34985.7...	36450	.284	2.279	1...	H1-1b
5	M7	PIPE_2.5	.208	140....	7	.083	140....		1	10110.2...	50715	3.596	3.596	1...	H1-1b
6	M8	PL3/8X3_H...	.482	0	21	.077	0	y	29	34985.7...	36450	.284	2.279	1...	H1-1b
7	M9	PL3/8X3_H...	.582	0	27	.096	0	z	27	34985.7...	36450	.284	2.279	1...	H1-1b
8	M10	PIPE_2.5	.165	140....	30	.079	142.5		29	10110.2...	50715	3.596	3.596	2...	H1-1b
9	OVP	PIPE_2.0	.239	5.937	21	.135	64.57		9	21054.34	32130	1.872	1.872	2...	H1-1b
10	M12	PIPE_2.0	.278	5.937	29	.092	0		28	21054.34	32130	1.872	1.872	2...	H1-1b
11	M13	PIPE_2.0	.257	6.68	23	.160	64.57		4	21054.34	32130	1.872	1.872	2...	H1-1b
12	M14	PIPE_2.0	.300	6.68	27	.087	0		28	21054.34	32130	1.872	1.872	2...	H1-1b
13	M15	PL3/8X3_H...	.036	0	43	.045	0	y	29	36078.2...	36450	.284	2.279	1	H1-1b
14	M16	1.5" w 0.06"	.277	24.5...	26	.015	50.22		3	5179.054	8536.5	.325	.325	1	H1-1a

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

	Member	Shape	Code Check	Loc[...	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
15	M17	PL3/8X3_H...	.057	0	42	.006	0	y	8	36078.2...	36450	.284	2.279	1	H1-1b
16	M18	1.5" w 0.06"	.227	24.5...	26	.015	50.22		8	5179.054	8536.5	.325	.325	1	H1-1a
17	M19	PL3/8X3_H...	.044	0	39	.009	0	y	12	33887.6	36450	.284	2.265	1	H1-1b
18	M20	PL3/8X3_H...	.035	1.5	40	.045	1.5	y	29	36078.2...	36450	.284	2.279	1	H1-1b
19	M21	PL3/8X3_H...	.056	1.5	40	.006	1.5	y	8	36078.2...	36450	.284	2.279	1	H1-1b
20	M22	1.5" w 0.06"	.143	38	28	.033	0		28	6412.349	8536.5	.325	.325	1	H1-1b*
21	M23	1.5" w 0.06"	.277	0	29	.007	0		7	6412.349	8536.5	.325	.325	1	H1-1a
22	M24	PIPE_2.0	.028	0	27	.002	33		12	29344.85	32130	1.872	1.872	1	H1-1b*
23	M25	PL3/8X3_H...	.046	4	42	.009	4	y	12	33887.6	36450	.284	2.265	1	H1-1b
24	M26	PL3/8X3_H...	.023	1.5	22	.043	0	y	29	36078.2...	36450	.284	2.279	1...	H1-1b*
25	M27	1.5" w 0.06"	.255	24.5...	23	.027	0		5	5179.054	8536.5	.325	.325	1...	H1-1a
26	M28	PL3/8X3_H...	.039	1.5	22	.006	0	y	8	36078.2...	36450	.284	2.279	1...	H1-1b*
27	M29	1.5" w 0.06"	.099	25.11	24	.015	50.22		5	5179.054	8536.5	.325	.325	1...	H1-1b
28	M30	PL3/8X3_H...	.579	0	10	.048	4	z	11	33887.6	36450	.284	2.279	1...	H1-1b
29	M31	PL3/8X3_H...	.033	1.5	11	.043	1.5	y	29	36078.2...	36450	.284	2.279	1...	H1-1b
30	M32	PL3/8X3_H...	.074	1.5	11	.006	1.5	y	8	36078.2...	36450	.284	2.279	1...	H1-1b
31	M33	1.5" w 0.06"	.131	38	22	.031	38		5	6412.349	8536.5	.325	.325	1...	H1-1b*
32	M34	1.5" w 0.06"	.235	38	23	.007	0		8	6412.349	8536.5	.325	.325	1...	H1-1a
33	M35	PIPE_2.0	.599	14.0...	4	.089	13.75		10	29344.85	32130	1.872	1.872	1...	H1-1b
34	M36	PL3/8X3_H...	.485	4	4	.039	0	z	11	33887.6	36450	.284	2.279	1...	H1-1b
35	MP6A	PIPE_2.0	.106	26	44	.020	26		8	14916.0...	32130	1.872	1.872	4...	H1-1b
36	MP5A	PIPE_2.0	.213	67	49	.055	67		5	14916.0...	32130	1.872	1.872	4...	H1-1b
37	MP3A	PIPE_2.5	.186	26	7	.077	67		5	30038.4...	50715	3.596	3.596	4...	H1-1b
38	MP1A	PIPE_2.0	.232	67	33	.031	67		8	14916.0...	32130	1.872	1.872	4...	H1-1b
39	MP4A	PIPE_2.0	.119	56.8...	46	.031	41.25		9	23808.54	32130	1.872	1.872	2...	H1-1b
40	MP2A	PIPE_2.0	.249	56.8...	34	.043	16.25		31	23808.54	32130	1.872	1.872	2...	H1-1b
41	M55	PIPE_3.0	.047	58.5...	9	.004	0		22	39991.26	65205	5.749	5.749	1...	H1-1b

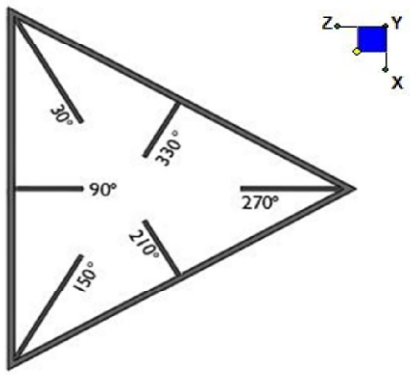
Client:	Verizon Wireless	Date:	1/11/2022
Site Name:	MADISON CT		
Project No.	21777866A (Rev. 2)		
Title:	Mount Analysis	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

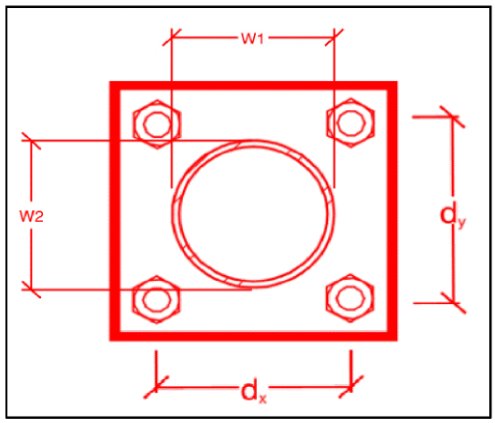
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N4	90
N65	90



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	2
d_x (in) *(Delta X of typ. bolt config. sketch)* :	3.5
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	2
Bolt Type:	U-Bolt
Bolt Diameter (in):	0.5
Required Tensile Strength (kips):	8.5
Required Shear Strength (kips):	2.6
Tensile Strength / bolt (kips):	16.3
Shear Strength / bolt (kips):	9.8
Tensile Capacity Overall:	**26.0%***
Shear Capacity Overall:	**13.1%**



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

Maser Consulting Connecticut

Subject	TIA-222-H Usage	
Site Information	*Site ID:*	*469141-VZW / MADISON CT*
	Site Name:	*MADISON CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*864 Opening Hill Rd.* *Madison, Connecticut 06443* *New Haven County*
	Latitude:	*41.356126°*
	Longitude:	*-72.639080°*
Structure Information	*Tower Type:*	*180-Ft Self Support*
	Mount Type:	*15.00-Ft Sector Frame*
	FUZE ID # 16092583	

To Whom It May Concern,

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

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

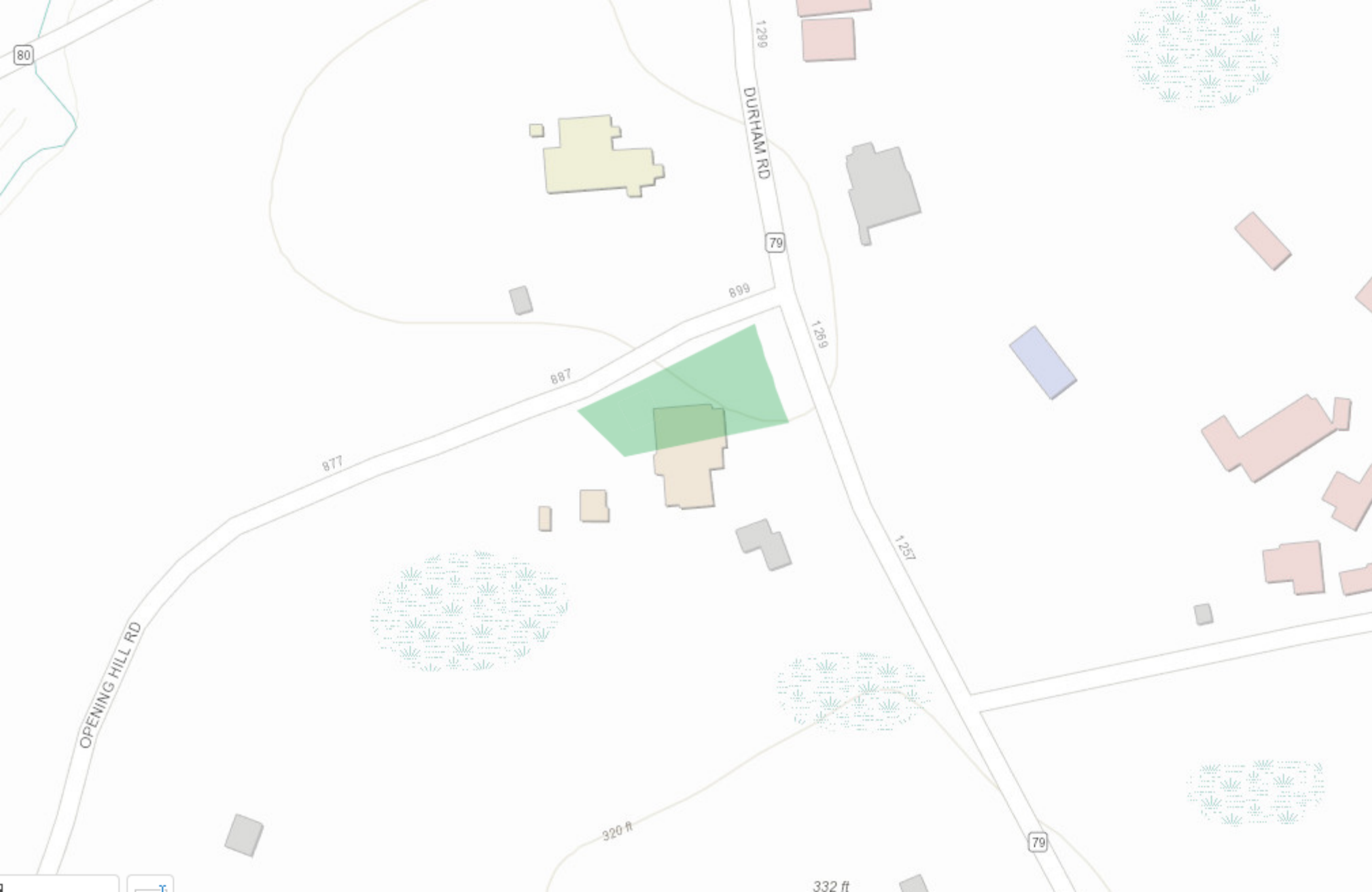
As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H Standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates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

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

Sincerely,

Derek Hartzell, PE
Technical Specialist

ATTACHMENT 5


80
DURHAM RD
79
1299
899
887
877
1269
1257
OPENING HILL RD
320 ft
332 ft

MADISON, CT

VISION
GOVERNMENT SOLUTIONS

864 OPENING HILL RD

Sales Print Map It

Location	864 OPENING HILL RD	**MBLU**	134/ 17/ / /
Unique ID#	00665700	**Owner**	NORTH MADISON VOLUNTEER FIRE COMPANY INC
Assessment	$938,700	**Appraisal**	$1,341,000
PID	7027	**Building Count**	1
Dev. Map			

Current Value

Appraisal					
Valuation Year	Building	Extra Features	Outbuildings	Land	Total
2021	$1,211,400	$0	$7,000	$122,600	$1,341,000

Assessment					
Valuation Year	Building	Extra Features	Outbuildings	Land	Total
2021	$848,000	$0	$4,900	$85,800	$938,700

Owner of Record

Owner	NORTH MADISON VOLUNTEER FIRE COMPANY INC	**Sale Price**	$0
Co-Owner		**Book & Page**	0044/0130
Care Of		**Sale Date**	

ATTACHMENT 6

UNITED STATES POSTAL SERVICE®

MADISON

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	3	3	neopost 05/05/2022 US POSTAGE $002.99 ZIP 06103 041L12203937
	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.	Peggy Lyons, First Selectwoman Town of Madison 8 Campus Drive Madison, CT 06443				
2.	Erin Mannix, Town Planner Town of Madison 8 Campus Drive Madison, CT 06443				
3.	North Madison Volunteer Fire Company, Inc. 864 Opening Hill Road Madison, CT 06443				
4.					
5.					
6.					

USPS MAY - 5 2022 OLD STATE HOUSE STATION 06103