

KENNETH C. BALDWIN

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

Also admitted in Massachusetts
and New York

December 7, 2021

Via Electronic Mail

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

**Re: Notice of Exempt Modification – Facility Modification
812 Providence Pike, Killingly, 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. Cellco refers to this site as its Danielson 2 facility. The tower was approved by the Town of Killingly. Cellco’s site acquisition consultant did reach out to the Town Officials in advance of this filing in an effort to obtain a copy of the Town’s original approval but was told that no copy of the Town’s approval could be located. Cellco’s shared use of the tower was approved by the Siting Council (“Council”) in February of 2014 (TS-VER-069-140117). A copy of the Council’s tower share approval is included in Attachment 1.

Cellco now intends to modify its facility by replacing three (3) existing antennas with three (3) new Samsung MT6407-77A antennas on Cellco’s existing antenna platform. Cellco also intends to replace nine (9) remote radio heads (“RRHs”) with six (6) new RRHs behind its antennas. A set of project plans showing Cellco’s proposed facility modifications and the specifications for Cellco’s new antennas and RRH 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 the Town’s Chief Elected Official and Land Use Officer.

Melanie A. Bachman, Esq.

December 7, 2021

Page 2

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

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

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 platform can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

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

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

Melanie A. Bachman, Esq.

December 7, 2021

Page 3

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

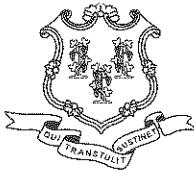
Mary Calorio, Killingly Town Manager

Ann-Marie Aubrey, Director of Planning and Development

Quinebaug Valley Emergency Communications Inc., Property Owners

Karla Hanna, Verizon Wireless

ATTACHMENT 1



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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

E-Mail: siting.council@ct.gov

www.ct.gov/csc

February 11, 2014

Kenneth C. Baldwin, Esq.

Robinson & Cole LLP

280 Trumbull Street

Hartford, CT 06103

RE: TS-VER-069-140117 - Cellco Partnership d/b/a Verizon Wireless request for an order to approve tower sharing at an existing telecommunications facility located at 812 Providence Pike, Killingly, Connecticut.

Dear Attorney Baldwin:

At a public meeting held February 6, 2014, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures with the following conditions:

- Prior to antenna installation, the tower reinforcements outlined in Section 5 of the report prepared by Centek Engineering dated December 6, 2013, and stamped by Carlo Centore, shall be implemented;
- Within 45 days following completion of the antenna installation, Cellco shall provide documentation certified by a professional engineer that its installation complied with the requirements of the structural analysis;
- Any deviation from the proposed installation as specified in the original tower share request and supporting materials with the Council shall render this decision invalid;
- Any material changes to the proposed installation as specified in the original tower share request and supporting materials filed with the Council shall require an explicit request for modification to the Council pursuant to Connecticut General Statutes § 16-50aa, including all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65;
- Not less than 45 days after completion of the proposed installation, the Council shall be notified in writing that the installation has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.



This decision is under the exclusive jurisdiction of the Council. This facility has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower. Any deviation from 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction. Please be advised that the validity of this action shall expire one year from the date of this letter.

The proposed shared use is to be implemented as specified in your letter dated January 17, 2014, including the placement of all necessary equipment and shelters within the tower compound.

Thank you for your attention and cooperation.

Very truly yours,



Robert Stein
Chairman

RS/MP/jb

c: The Honorable John Hallbergh, Chairman, Town of Killingly
Bruce E. Benway, Town Manager, Town of Killingly
Linda E. Walden, Director of Planning and Development, Town of Killingly
Quinebaug Valley Emergency Communications, Inc.

ATTACHMENT 2

verizon[®]

WIRELESS COMMUNICATIONS FACILITY

DANIELSON 2 CT 812 PROVIDENCE PIKE DANIELSON, CT 06239

DRAWING INDEX

T-1 TITLE SHEET

C-1 COMPOUND PLAN, TOWER ELEVATION, EQUIPMENT CONFIGURATION PLANS & ELEVATIONS.

B-1 RF BILL OF MATERIALS, MECHANICAL SPECIFICATIONS & EQUIPMENT DETAILS.

N-1 NOTES & SPECIFICATIONS

SITE DIRECTIONS

START: 20 ALEXANDER DRIVE
WALLINGFORD, CONNECTICUT 06492

END: 812 PROVIDENCE PIKE
DANIELSON, CT 06239

1. HEAD SOUTH TOWARDS ALEXANDER DRIVE
 2. SLIGHT RIGHT TOWARDS ALEXANDER DRIVE
 3. TURN RIGHT TOWARDS ALEXANDER DRIVE
 4. TURN RIGHT ONTO ALEXANDER DRIVE
 5. TURN RIGHT ONTO 5 INDUSTRIAL RD S.
 6. TURN RIGHT ONTO CT-68 S
 7. TURN RIGHT ONTO N. COLONY RD
 8. TURN RIGHT ONTO CT-15 N
 9. CONTINUE STRAIGHT TO STAY ON CT-68 E
 10. SHARP LEFT TO MERGE ONTO I-91 N TOWARD HARTFORD
 11. MERGE ONTO I-91 N
 12. TAKE THE EXIT ONTO CT-3 N TOWARD GLASTONBURY
 13. TAKE THE EXIT ONTO CT-2 E TOWARD NEW HAVEN
 14. HEAD EAST AT THE FORK IN THE ROAD OR E. FOLLOW SIGNS FOR 2 E
 15. TAKE EXIT 28N TO MERGE ONTO I-395 N TOWARD PROVIDENCE
 16. TAKE EXIT 35 TOWARD US-6E/PROVIDENCE
 17. CONTINUE ONTO CONNECTICUT TURNPIKE/GOVERNOR JOHN DAVIS LODGE TURNPIKE
 18. TAKE EXIT 1 FOR ROSS ROAD
 19. TURN LEFT ONTO ROSS ROAD
 20. TURN RIGHT ONTO S FRONTAGE ROAD
 21. TURN RIGHT ONTO US-6 E (DESTINATION WILL BE ON THE LEFT)
- | |
|---------|
| 279 FT |
| 289 FT |
| 167 FT |
| 0.3 MI |
| 0.1 MI |
| 0.4 MI |
| 0.3 MI |
| 1.6 MI |
| 0.2 MI |
| 0.3 MI |
| 17.2 MI |
| 2.4 MI |
| 20.0 MI |
| 12.7 MI |
| 21.9 MI |
| 0.6 MI |
| 1.0 MI |



SITE INFORMATION

VZ SITE NAME: DANIELSON 2 CT
VZ PROJ FLDG: 16272103
VZ LOCATION CODE: 20212234196
VZ PROJECT CODE: 20212234196
LOCATION: 812 PROVIDENCE PIKE
DANIELSON, CT 06239

PROJECT SCOPE: REFER TO NOTES ON DRAWING C-1 FOR SCOPE OF WORK.

MAP/BLOCK/LOT: 212-27

ZONING DISTRICT: RD (RURAL DEVELOPMENT)

LATITUDE: 41° 47' 29.0004" N (41.791389° N)

LONGITUDE: 72° 49' 20.3988" W (71.822333° W)

SITE COORDINATES AND GROUND ELEVATION
OBTAINED FROM VERIZON RFIDS & GOOGLE
EARTH.

GROUND ELEVATION: 664 ± AMSL

PROPERTY OWNER: QUINEBAUG VALLEY EMERGENCY COMMUNICATIONS INC.
1249 HARTFORD PIKE
KILLINGTON, CT 06239

APPLICANT: CELCO PARTNERSHIP
d/b/a VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

LEGAL/REGULATORY COUNSEL: ROBINSON & COLE, LLP
KENNETH C. BALDWIN, ESQ.
280 TRUMBULL STREET
HARTFORD, CT 06103

ENGINEER CONTACT: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385
(860) 663-1697

VERIZON SMART TOOL PROJECT #: 10046633; 10113888

Celco Partnership d/b/a

verizon[®]

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

**ALL-POINTS
TECHNOLOGY CORPORATION**

567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860) 663-1697
WWW.ALLPOINTSTECH.COM FAX: (860) 663-5997

CONSTRUCTION DOCUMENTS

NO	DATE	REVISION
0	09/14/21	FOR REVIEW: JRM
1	10/12/21	FOR FILING: JRM
2	10/16/21	FOR FILING: JRM
3	12/01/21	FOR FILING: JRM
4		
5		



DESIGN PROFESSIONALS OF RECORD

PROF: MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY
CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT.
SUITE 311
WATERFORD, CT 06385

OWNER: QUINEBAUG VALLEY
EMERGENCY
COMMUNICATIONS INC.
ADDRESS: 1249 HARTFORD PIKE
KILLINGTON, CT 06239

DANIELSON 2 CT

SITE: 812 PROVIDENCE PIKE
ADDRESS: DANIELSON, CT 06239

APT FILING NUMBER: CT141_12710
DRAWN BY: DRA

DATE: 09/14/21 CHECKED BY: JRM

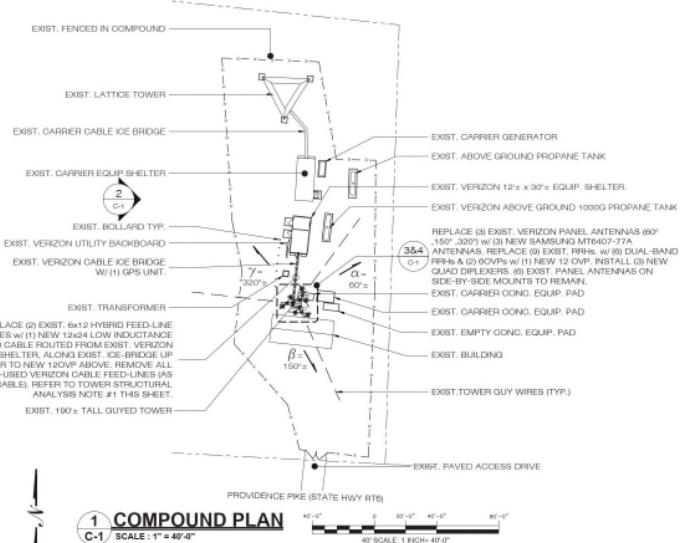
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VZ LOCATION CODE: 468921

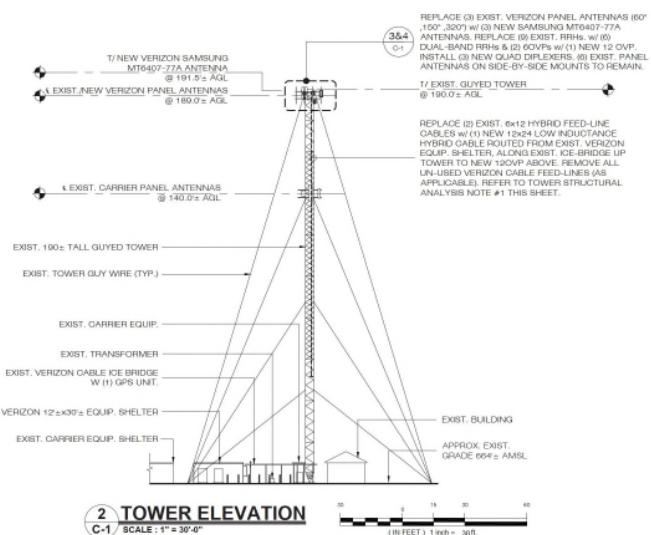
VZ FUZE ID: 16272103

SHEET TITLE: **TITLE SHEET**

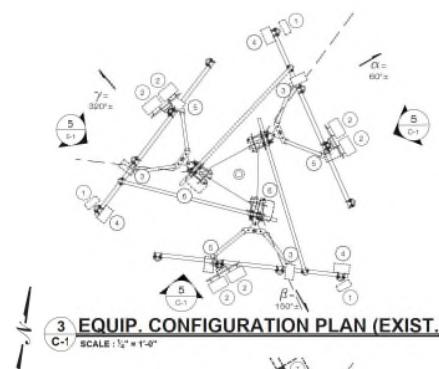
SHEET NUMBER: **T-1**



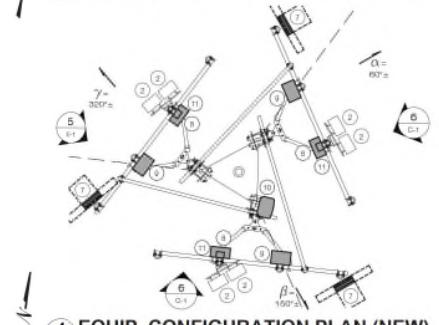
1 COMPUND PLAN



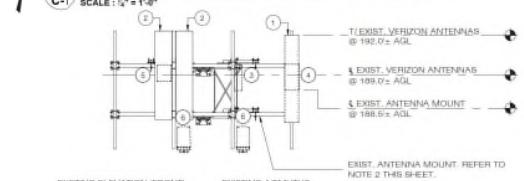
2 TOWER ELEVATION



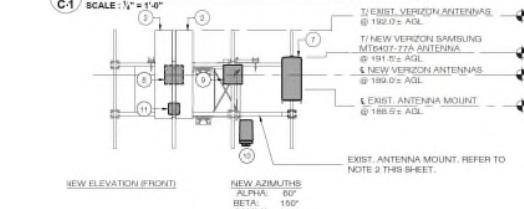
3 EQUIP. CONFIGURATION PLAN (EXIST.)



4 EQUIP. CONFIGURATION PLAN (NEW)



5 EQUIP. MOUNTING CONFIG. (EXIST.)



6 EQUIP. MOUNTING CONFIG. (NEW)

NOTES:
1. REFER TO TOWER STRUCTURAL ANALYSIS REPORT PREPARED BY ALL-POINT TECHNOLOGY CORPORATION INC. AMMENDMENT 2 DATED 12/10/2011, AVAILABLE UNDER SEPARATE COVER.
2. REFER TO MOUNT ANALYSIS REPORT PREPARED BY MASER CONSULTING, CONNECTICUT, PROJECT #21777314A MARKED REV1, DATED 12/09/2011 AVAILABLE UNDER SEPARATE COVER.

3. BASE MAPPING FROM FIELD MEASUREMENTS TAKEN BY ALL-POINTS TECH. CORPORATION, P.O. CN 0880621,
4. PROJECT SCOPE INCLUDES THE FOLLOWING:
▪ REPLACEMENT OF (2) EXIST. PANEL ANTENNAS w/ (3) NEW SAMSUNG MT407-77A ANTENNAS.
▪ REPLACEMENT OF (9) EXIST. RRHs w/ (6) NEW DUAL BAND RRHs.
▪ REPLACEMENT OF (2) EXIST. 6x12 OVP w/ (1) NEW 12x24 LOW INDUCTANCE HYBRID CABLES w/ (1) NEW 12x24 HYBRID FEED-LINE CABLES.
▪ INSTALLATION OF (3) NEW QUAD DIPLEXERS.
▪ REMOVAL OF ALL UNUSED VERIZON COAX CABLE FEED-LINES (AS APPLICABLE).

6. ALL EXPOSED STEEL AND HARDWARE TO BE HOT DIP GALVANIZED. PAINT TO MATCH EXIST. WHERE APPLICABLE.
7. CAP & WEATHERPROOF ALL UN-USED CABLE ENTRY PORTS (WHERE APPLICABLE).
8. MOUNT & GROUND ALL NEW EQUIPMENT IN ACCORDANCE WITH NEC (INFA-70), NESC AND MANUFACTURERS SPECIFICATION.
9. SECURE ALL NEW ANTENNA CABLES PER MANUFACTURER RECOMMENDATIONS.
10. BOND NEW ANTENNA MOUNTING RIGS TO ANTEENA SECTOR GROUND BAN # 2 AWG, BOW, (WHERE APPLICABLE).
11. EXIST. CARRIER EQUIP. SHALL INSTALL NEW BEAM-BEAM SIZE & DUAL-MOUNT BRACKETS PER ANTENNA MOUNT MANUFACTURER RECOMMENDATIONS, INCLUDING VERIFICATION OF MINIMUM PEI MARSH DIAMETER REQUIRED TO INTEGRATE NEW MOUNT BRACKETS. CONTRACTOR SHALL NOT INTEGRATE NEW MOUNT BRACKETS, PRIOR NASTS REQUIRE REPLACEMENT TO SUPPORT THE NEW MOUNT BRACKETS.
12. ANTENNA CONFIGURATIONS SHOWN HEREIN ARE FRONT ELEVATIONS (UNLESS NOTED OTHERWISE).
13. ANTENNA SPACING DIMENSIONS ARE TO THE CENTER OF THE EXIST. ANTENNA AND NEW ANTENNA FACE.

14. REFER TO THE FINAL RFDS PROVIDED BY VERIZON FOR THE LATEST INFORMATION REGARDING EQUIPMENT MODELS, REQUIRED CABLING & DOWN-TILT INFORMATION.
15. COORDINATE ALL LSUBA COLOR MATCHING (WHERE APPLICABLE) W/ LSUBA MANUFACTURER INSTALLATION REQUIREMENTS. VERIZON CONSTRUCTION MANAGER & OWNER.
16. PAINT ALL NEW LSUBA ANTENNAS & APPARATUSES TO MATCH EXIST. STRUCTURE, WHERE APPLICABLE. COORDINATE W/ VERIZON CONSTRUCTION MANAGER & BUILDING OWNER.

SCOPE OF WORK (ALL SECTORS)

- ① EXIST. ANTENNA (TO BE REPLACED) MODEL: ARHENROL BM-70063-8CF
- ② EXIST. ANTENNA (TO REMAIN) MODEL: ANDREW JAH-655-RB
- ③ EXIST. RRH (TO BE REPLACED) MODEL: NOKIA B141 RRH-4x30 700
- ④ EXIST. RRH (TO BE REPLACED) MODEL: NOKIA B161a RRH-4x45 AWS
- ⑤ EXIST. RRH (TO BE REPLACED) MODEL: NOKIA A141 RRH-16W 850 RRH
- ⑥ EXIST. 6 OVP (TO BE REPLACED) MODEL: RAYCAP RFIDC03315-PF-48 (V.I.F.)
- ⑦ NEW ANTENNA MODEL: SAMSUNG MT407-77A
- ⑧ NEW DUAL BAND RRH MODEL: SAMSUNG B131BS RRH (RF4440d-13A)
- ⑨ NEW DUAL BAND RRH MODEL: SAMSUNG B16/B2A RRH (RF4440d-25A)
- ⑩ NEW 120'V (BEITA ONLY) MODEL: RAYCAP RVZDC-8627-PF-48
- ⑪ NEW QUAD DIPLEXER MODEL: COMMSCOPE CBG787-03-42R

GENERAL ABBREVIATION LIST:

- ABP: ABOVE BASE PLATE
- AGL: ABOVE GROUND LEVEL
- AMSL: ABOVE MEAN SEA LEVEL
- AWP: ABOVE WORK POINT
- HDM: HOT DIP GALVANIZED
- OVP: OVER VOLTAGE PROTECTION
- RRH: REMOTE RADIO HEAD
- V.I.F.: VERTICAL INTEGRATED FEED
- W.P.: WORK POINT
- A.F.R.: ABOVE FINISH ROOF

Celco Partnership d/b/a

verizon

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

**ALL-POINTS
TECHNOLOGY CORPORATION**

BET VAUXHALL STREET EXTENSION - SUITE 210
WATERBURY, CT 06708
PHONE: (860) 463-1460
WWW.ALL-POINTS.COM FAX: (860) 463-5005

CONSTRUCTION DOCUMENTS

NO DATE / REVISION

1 091421 FOR REVIEW JRM

2 101521 FOR FILING: JRM

3 12/01/21 FOR FILING: JRM

4

5

6



DESIGN PROFESSIONALS OF RECORD

PROF: MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY
CORPORATION, P.C.
ADD: 507 VAUXHALL STREET EXT.
SUITE 311
WATERFORD, CT 06385

OWNER: HARRINGTON VALLEY
EMERGENCY COMMUNICATIONS INC.
ADDRESS: 1240 HARTFORD PIKE
KILLINGLY, CT 06239

DANIELSON 2 CT

SITE: #12 PROVIDENCE PIKE

ADDRESS: DANIELSON, CT 06239

APT FILING NUMBER: CT144_12710

DRAWN BY: DRA

DATE: 09/14/21

CHECKED BY: JRM

VZ PROJECT CODE: 2021224196

VZ LOCATION CODE: 46821

VZ FUZE ID: 16272103

SHEET TITLE:
**COMPOUND PLAN,
TOWER ELEVATION,
EQUIP. CONFIGURATION
PLANS & ELEVATIONS**

SHEET NUMBER:

C-1



567 VAUXHALL STREET EXTENSION - SUITE 310
WATERBURY, CT 06708 PHONE: (860) 463-1867
WWW.ALLPOINTS.TECH.COM FAX: (860) 463-3805

CONSTRUCTION DOCUMENTS

NO	DATE	REVISION
0	09/14/21	FOR REVIEW: JRM
1	10/15/21	FOR FILING: JRM
2	10/15/21	FOR FILING: JRM
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4		
5		
6		



DESIGN PROFESSIONALS OF RECORD

PROF: MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY
CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT.
SUITE 311
WATERBURY, CT 06708

OWNER:
EMERGENCY COMMUNICATIONS INC.
ADDRESS: 1240 HARTFORD PIKE
KILLINGLY, CT 06239

DANIELSON 2 CT

SITE #12 PROVIDENCE PIKE	DRAWN BY: DRA
ADDRESS: DANIELSON, CT 06239	
APT FILING NUMBER: CT141_12710	
	DATE: 09/14/21 CHECKED BY: JRM
	VZ PROJECT CODE: 2021234196
	VZ LOCATION CODE: 46921
	VZ FUZE ID: 16272103

UPPER SUPPORTING STRUCTURE
BASE EQUIPMENT

NOTE: ANTENNA CONFIGURATIONS SHOWN
WITHIN PLUMBING DIAGRAM ARE
VIEWED FROM BEHIND.

SHEET TITLE:

RF BILL OF MATERIALS,

MECHANICAL

SPECIFICATIONS &

EQUIPMENT DETAILS

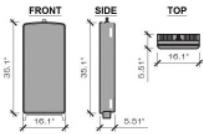
SHEET NUMBER:	B-1
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1 PLUMBING DIAGRAM

B-1 SCALE: 1/2" = 1'-0"

EQUIPMENT DATA							
EQUIPMENT SPECIFICATIONS							
SECTOR							
	ANTENNA MAKE/MODEL	QTY	AZIMUTH	EQUIPMENT STATUS	HEIGHT (IN)	WIDTH (IN)	DEPTH (IN)
ALPHA	SAMSUNG MT6407-77A	1	60°	NEW	35.45"	16.75"	5.55"
	700B850/900/2190-COMMSCOPE JAHH-60B-R3B	1	60°	ETR	72.0	13.8	8.2
	700B850/900/2190-COMMSCOPE JAHH-60B-R3B	1	60°	ETR	72.0	13.8	8.2
BETA	SAMSUNG MT6407-77A	1	150°	NEW	35.45"	16.75"	5.55"
	700B850/900/2190-COMMSCOPE JAHH-60B-R3B	1	150°	ETR	72.0	13.8	8.2
	700B850/900/2190-COMMSCOPE JAHH-60B-R3B	1	150°	ETR	72.0	13.8	8.2
GAMMA	SAMSUNG MT6407-77A	1	320°	NEW	35.45"	16.75"	5.55"
	700B850/900/2190-COMMSCOPE JAHH-60B-R3B	1	320°	ETR	72.0	13.8	8.2
	700B850/900/2190-COMMSCOPE JAHH-60B-R3B	1	320°	ETR	72.0	13.8	8.2
APPURANCE MAKE/MODEL							
	SAMSUNG B2/B906A RRH (RF4393-25A)	3	-	NEW	15.0	15.0	10.1
	SAMSUNG B9/B13 RRH (RF4406-13A)	3	-	NEW	15.0	15.0	9.1
	COMMSCOPE CB8T-43-2X QUAD DIPLEXERS	3	-	NEW	6.4	6.9	9.6
	RAYCAP RVZDC-6627-PF-48	1	-	NEW	29.5	16.5	12.6

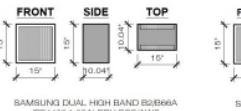
- (1) ETR DENOTES EXIST. TO REMAIN
- (2) WEIGHT WITHOUT MOUNTING BRACKET.
- (3) ANTEENA DATA BASED ON RFIDS MARKED REV2 DATED 10/04/21.
- (4) (5) INDICATES THE CONFIGURATION AS VIEWED FROM BEHIND.
- (6) NOT TO EXCEED



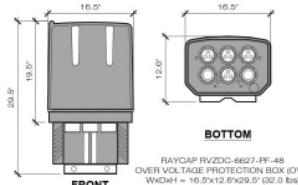
SAMSUNG MT6407-77A ANTENNA
HxWxD=35.1x16.1x5.1"
(NOT TO EXCEED)

2 NEW ANTENNA DETAIL

B-1 SCALE: 1/2" = 1'-0"



SAMSUNG DUAL HIGH BAND ANTENNA
(RF4393-25A) RRH PS/RRH
REMOTE RADIO HEAD (RRH)
WxDxH=15.0x15.0x10.1 (97.7 Lbs)



RAYCAP RVZDC-6627-PF-48
OVER VOLTAGE PROTECTION BOX (OVP)
WxDxH= 15.0x15.0x9.1 (92.0 Lbs)

NOTE: WEIGHTS INCLUDE SOLAR SHEILD & MOUNTING BRACKET

3 RRH EQUIPMENT DETAILS

B-1 SCALE: 1/2" = 1'-0"



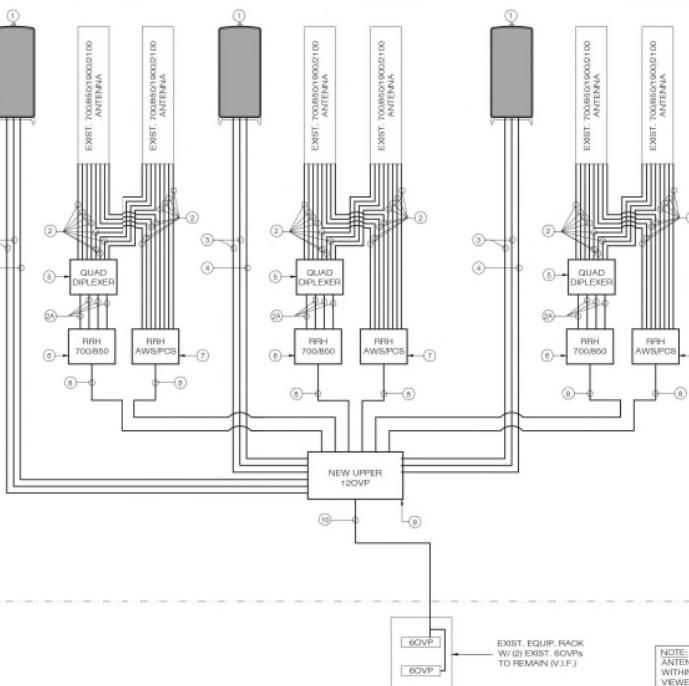
COMMSCOPE CB8T-43-2X
QUAD DIPLEXER
HxDxW=4.4x4.4x6.7 (23.7 Lbs)

4 QUAD DIPLEXER

B-1 SCALE: 1" = 1'-0"

BILL OF MATERIALS			
	QUANTITY	LENGTH	COMMENTS
① SAMSUNG MT6407-77A	3		MOUNTED TO EXIST. PIPE MAST
② 1/2" JUMPER CABLE	48	15 FT	ROUTE FROM RRH TO ANTENNAS
③ 1/2" JUMPER CABLE	12	6 FT	ROUTE FROM RRH TO ANTENNAS
④ ANTENNA LINK CABLES	6	15 M	ROUTE FROM UPPER OVP TO ANTENNAS
⑤ ANTENNA POWER CABLES	3	15 M	PROPRIETARY POWER CABLE FROM EXIST. OVP TO ANTENNAS
⑥ QUAD DIPLEXER	3		COMMSCOPE CB8T-43-2X
⑦ 700B850 RRH	3		SAMSUNG B5/B13 RRH (RF4406-13A)
⑧ AWS/POS RRH	3		SAMSUNG B2/B906A RRH (RF4393-25A)
⑨ RRH CABLES	6	15M	PROPRIETARY POWER & FIBER CABLES
⑩ UPPER 120VP	1		(RVZDC-6627-PF-48)
⑪ HYBRID CABLE	1	250± FT	12x24 LOW INDUCTANCE HYBRID CABLE

ALPHA SECTOR BETA SECTOR GAMMA SECTOR



60VPI



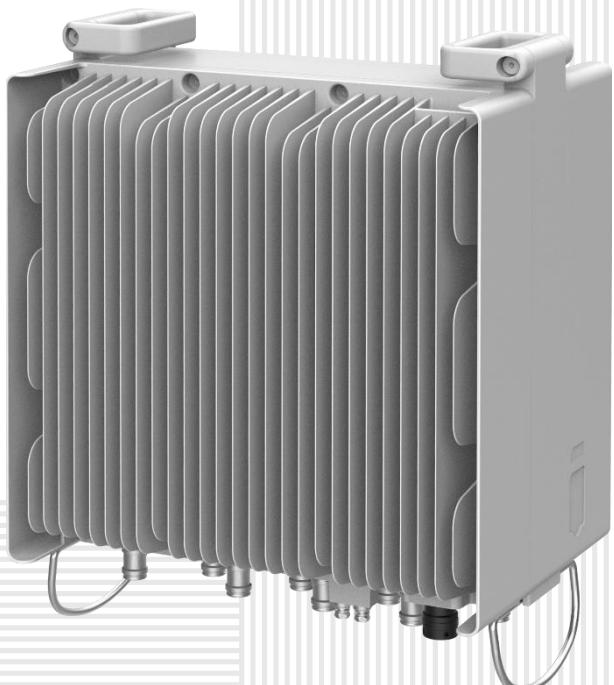
AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER
FOR MACRO COVERAGE

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

57196

Model Code RF4439d-25A



Homepage
samsungnetworks.com

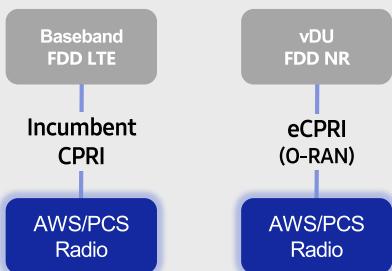


Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

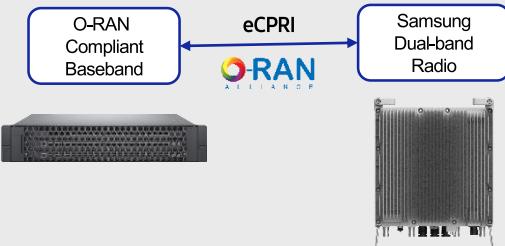
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

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

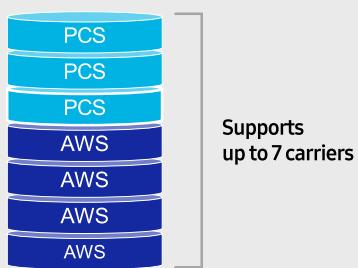
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

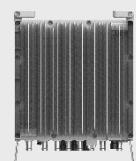
The number of required carriers varies according to site (region). Supporting many carriers is essential for using all frequencies that the operator has available.

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



Brand New Features in a Compact Size

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



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

Same as an incumbent radio volume

Technical Specifications

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

SAMSUNG

SAMSUNG C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

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

Model Code : MT6407-77A

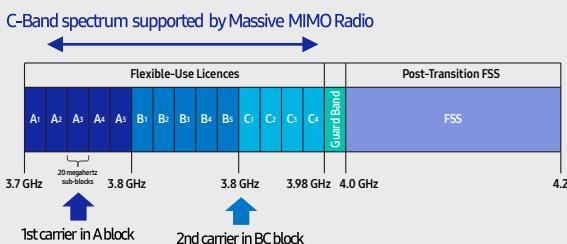


Points of Differentiation

Wide Bandwidth

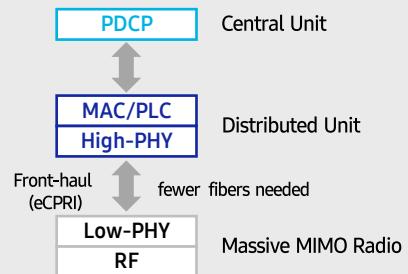
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

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



Future Proof Product

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



Enhanced Performance

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

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

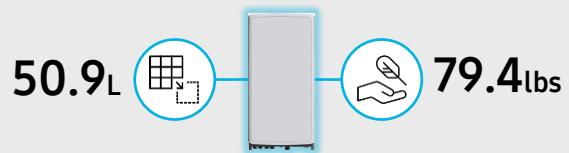
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO(Multi-user MIMO), it enables to increase user throughput by minimizing interference.



Well Matched Design

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

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



Technical Specifications

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

About Samsung Electronics Co., Ltd.

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

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

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SAMSUNG

700/850MHz MACRO RADIO

DUAL-BAND AND HIGH POWER
FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This 700/850MHz 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

57196

Model Code RF4440d-13A



Homepage
samsungnetworks.com

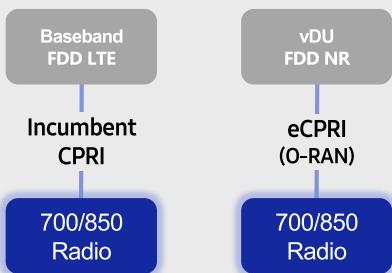


Youtube
www.youtube.com/samsung5g

● Points of Differentiation

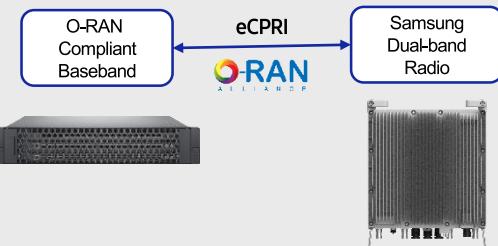
Continuous Migration

Samsung's 700/850MHz macro radio can support each incumbent CPRI interface as well as an advanced eCPRI interface. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

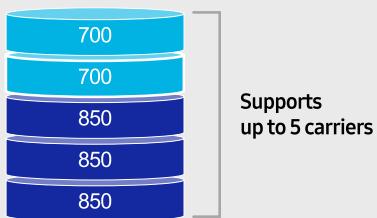
A standardized O-RAN radio can help when implementing cost-effective networks because it is capable of sending more data without compromising additional investments. Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

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

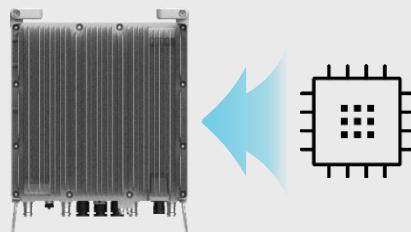
The new 700/850MHz dual-band radio can support up to 2 carriers in the B13 (700MHz) band and 3 carriers in the B5 (850MHz) band, respectively.



Secured Integrity

Access to sensitive data is allowed only to authorized software.

The Samsung radio's CPU can protect root of trust, which is credential information to verify SW integrity, and secure storage provides access control to sensitive data by using dedicated hardware (TPM).



● Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B13(700MHz), B5(850MHz)
Frequency Band	DL: 746 – 756MHz, UL: 777 – 787MHz DL: 869 – 894MHz, UL: 824 – 849MHz
RF Power	(B13) 4 × 40W or 2 × 60W (B5) 4 × 40W or 2 × 60W
IBW/OBW	(B13) 10MHz / 10MHz (B5) 25MHz / 25MHz
Installation	Pole, Wall
Size/ Weight	14.96 x 14.96 x 9.05inch (33.2L) / 70.33 lb

ATTACHMENT 3

* Source: Siting Council

ATTACHMENT 4



STRUCTURAL ANALYSIS REPORT
190-ft GUYED TOWER
DANIELSON, CONNECTICUT

Prepared for
Verizon Wireless

Verizon Site Ref.
468921; Danielson 2 CT

Site Address: 812 Providence Pike, Danielson, CT 06239

APT Filing No. CT141_12710

September 20, 2021
Rev1: October 19, 2021
Rev2: December 1, 2021



**STRUCTURAL ANALYSIS REPORT
190-ft GUYED TOWER
DANIELSON, CONNECTICUT
prepared for
Verizon Wireless**

EXECUTIVE SUMMARY:

All-Points Technology Corporation, P.C. (APT) performed a structural analysis of this 190-foot guyed tower structure to support a proposed Verizon equipment modification.

The proposed Verizon antenna and appurtenance modification consists of the proposed replacement of three (3) existing panel antennas, with three (3) Samsung MT6407-77A antennas, nine (9) existing Remote Radio Heads (RRHs) with six (6) dual-band RRHs, two (2) 6OVPs with one (1) 12OVP, and the installation of three (3) quad diplexers, in addition to the replacement of two (2) existing 6x12 hybrid feed-line cables with one (1) 12x24 Low-Inductance (LI) hybrid feed-line cable.

The equipment shall be installed on existing 12.5' sector mounts at 188.5' as detailed below.

Our analysis indicates that the subject tower structure meets the requirements of the 2015 International Building Code (IBC), as amended by the 2018 Connecticut State Building Code, and the ANSI/TIA-222-H standard with the existing and proposed equipment loading.

Evaluation of the existing base foundation and guy anchors was performed based on information provided in previous structural analysis reports as listed below. The base foundation and guy anchors were found to be adequately sized for the proposed and existing equipment configuration.

INTRODUCTION:

A structural analysis of this communications tower was performed by APT for Verizon Wireless. The tower is located at 812 Providence Pike in Danielson, Connecticut.

The following information was utilized in the preparation of this analysis:

- _) Field notes and photos from APT's previous site visits, most recent being 08/06/21. APT climbed the structure in its entirety to record information regarding physical and dimensional properties of the structure and its appurtenances.
- _) Structural Analysis Report prepared by Centek Engineering, (Centek Project No. 09059.000) marked Rev 1, dated 12/6/13.
- _) Structural Analysis Report prepared by EBI Consulting, (EBI Project No. 8115000099) dated 3/16/15.
- _) Structural Analysis Report prepared by APT, (APT Project No. CT1416060) dated 9/7/17.
- _) Structural Analysis Report prepared by Centek, (Centek Project No. 20074.28) dated 05/27/21.
- _) Antenna Mount Analysis Report and PMI Requirements prepared by Maser Consulting Connecticut, (Maser Project No. 21777314A) Marked Rev 1 dated 10/25/21.

- ✓ RFDS detailing Verizon's proposed equipment changes, marked Rev 2 dated 10/04/21.
- ✓ Construction Drawings prepared by APT, (APT Project No. CT141_12710), marked Rev 3 dated 12/01/21.

The structure is a 190-foot, Model 80 galvanized steel guyed tower manufactured by ROHN. The tower is comprised of galvanized pipe legs with angle steel and pipe bracing arranged in K-brace and X-brace configurations. The tower is guyed at four elevations, with a torque arm and double guy wires at the 137' attachment.

The analysis was conducted using the following antenna inventory (proposed equipment shown in **bold** text):

Carrier	Antenna and Appurtenance Make/Model	Elevation	Status	Mount Type	Coax/Feed-Line
Verizon Wireless	(6) Andrew JAHH-65B-R3B panel antennas & (3) Samsung MT6407-77A antennas, (3) Samsung RF4439d-25A RRHs, (3) Samsung RF4440d-13A RRHs, (3) Commscope CBC78T-DS-43-2X diplexers, (1) Raycap 12 OVP (leg mounted)	189'	ETR P P P P P	(3) 12' sector mounts (SitePro1 VFA12-HD)	12x24 LI hybrid
T-Mobile	(3) RFS APX16DMV-16DWVS-E-A20, (3) RFS APXVAARR24-43, & (3) Ericsson AIR6449 panel antennas, (3) Ericsson 4449 RRHs, (3) Ericsson 4415 RRHs, (3) Ericsson 4424 RRHs	140'	ETR	(3) 12' V-Frame sector mounts	(4) 6x12 hybrid

Notes:

1. ETR = Existing to Remain; ERL= Existing to be Relocated; P = Proposed.

STRUCTURAL ANALYSIS:

Methodology:

This structural analysis has been prepared in accordance with the ANSI/TIA-222-H standard entitled "Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures; American Institute of Steel Construction (AISC) Manual of Steel Construction", and the 2015 International Building Code (IBC), as amended by the 2018 Connecticut State Building Code.

Antenna, appurtenance and mount assembly loads were evaluated utilizing the ANSI TIA-222-H standard.

- Load Case 1: 130 mph (3-second gust), 0" ice
- Load Case 2: 50mph (3-second gust) w/ 1.0" ice thickness required
- Load Case 3: 60mph (3-second gust) (Service Load)
- Structure Class: II
- Exposure Category: B
- Topographic Category: 1

Analysis Results:

Analysis of the tower was conducted in accordance with the criteria outlined herein with antenna changes as previously described.

The following table summarizes the results of the analysis based on stresses of individual leg and bracing members:

Elevation	Legs ¹	Bracing ²
175'-190'	21%	33% ³
160'-175'	21%	37% ³
140'-160'	53%	35%
120'-140'	71%	73%
100'-120'	58%	19%
80'-100'	74%	24%
60'-80'	51%	14%
40'-60'	61%	30%
20'-40'	58%	25%
0'-20'	53%	69% ³

Notes:

1. Based on ASTM A572 Gr. 50 pipe legs. Leg diameter and thickness vary.
2. Based on ASTM A53-B Gr. 42 pipes.
3. Member connection controls.

Anchor Bolts:

Anchor bolts were evaluated under the proposed loading. All anchor bolts were found to be adequately sized to support the proposed equipment.

Bracing and Splice Bolts:

Connection bolts were evaluated under the proposed loading. All bolts were found to be adequately sized to support the proposed loads.

Guy Cables:

Our analysis indicates all guys are adequately sized to support the proposed equipment.

Guy Elevation	Capacity
189'	67%
137'	69%
87'	66%
45'	58%

Base Foundation and Guy Anchors:

Evaluation of the base foundation and guy anchors was performed from dimensions provided in the Centek and EBI structural analysis reports. The foundation was determined to be adequately sized for the proposed loading.

Factored base reactions imposed with the additional antennas were calculated as follows:

Location	Vertical	Horizontal
Base	91.3 k	0.6 k
Inner Guy Anchor	-9.5 k	9.5 k
Outer Guy Anchor	-30.2 k	18.8 k

Verizon Wireless
190' Guyed Tower, Danielson, CT
Verizon Site #468921; Danielson 2 CT

December 1, 2021
Page 4
APT Job #CT141_12710

CONCLUSIONS AND RECOMMENDATIONS:

In conclusion, our analysis indicates that the 190-foot guyed tower structure located at 812 Providence Pike in Danielson, Connecticut meets the requirements of the 2015 International Building Code (IBC), as amended by the 2018 Connecticut State Building Code, and the ANSI/TIA-222-H standard with Verizon's proposed equipment changes.

Sincerely,
All-Points Technology Corp. P.C.



Robert E. Adair, P.E.
Principal

Prepared by:
All-Points Technology Corp. P.C.



Ali M. Adair
Project Scientist



LIMITATIONS:

This report is based on the following:

1. Tower is properly installed and maintained.
2. All members are in an undeteriorated condition.
3. All required members are in place.
4. All bolts are in place and are properly tightened.
5. Tower is in plumb condition.
6. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.

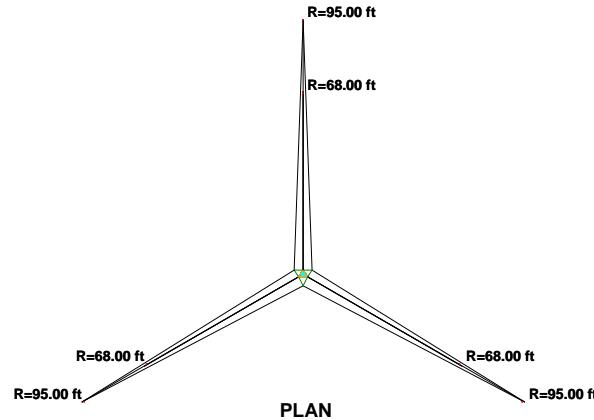
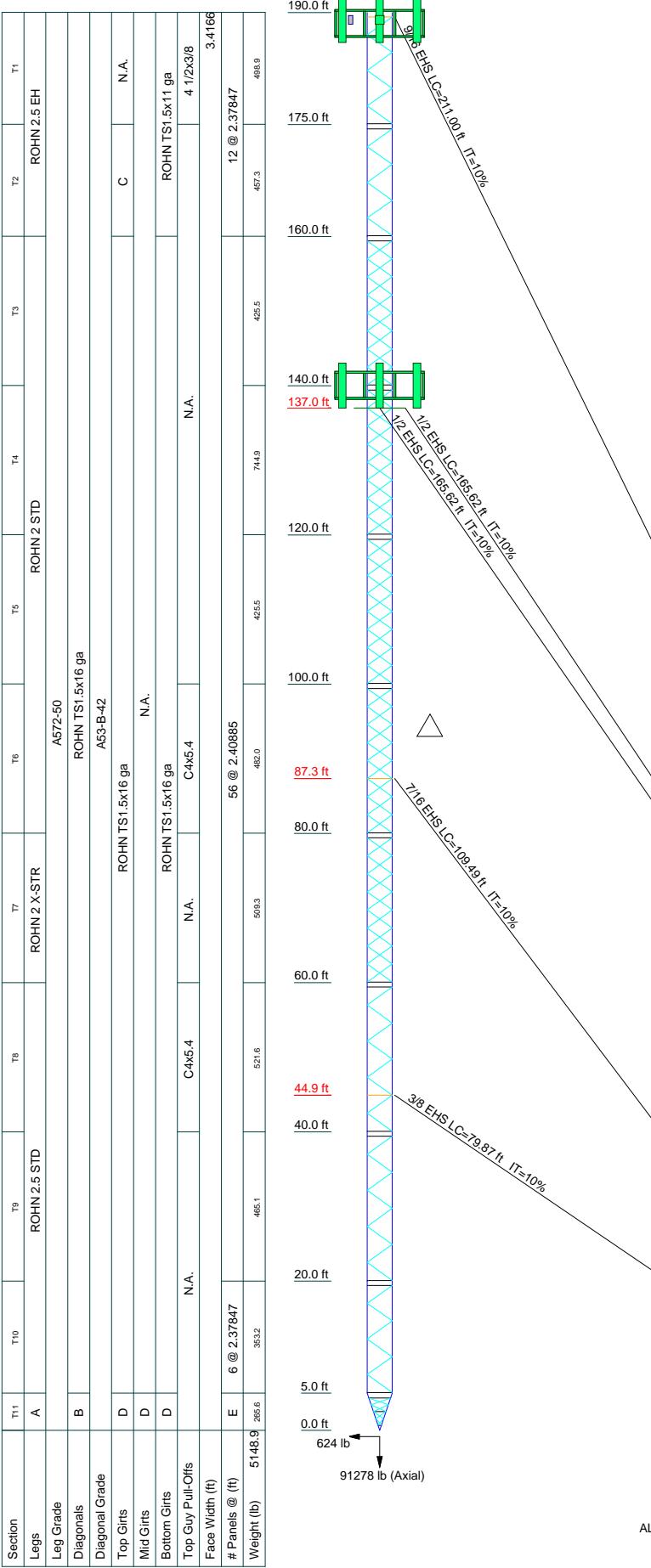
All-Points Technology Corporation, P.C. (APT) is not responsible for modifications completed prior to or hereafter which APT is not or was not directly involved. Modifications include but are not limited to:

1. Replacing or strengthening bracing members.
2. Reinforcing vertical members in any manner.
3. Adding or relocating torque arms or guys.
4. Installing antenna mounting gates or side arms or waveguide cables.
5. Extending tower.

APT hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon the information contained and set forth herein. If you are aware of any information which is contrary to that which is contained herein, or you are aware of any defects arising from the original design, material, fabrication and erection deficiencies, you should disregard this report and immediately contact APT. APT disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

Appendix A

Tower Schematic



DESIGNED APPURTENANCE LOADING

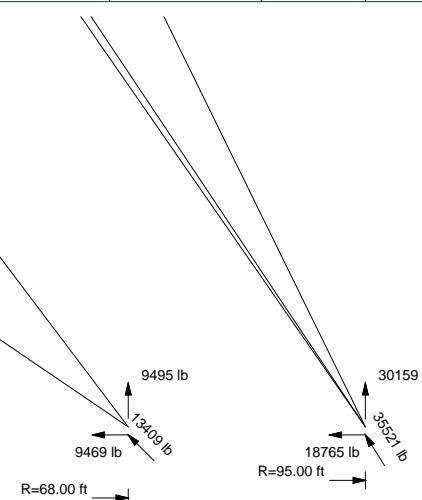
TYPE	ELEVATION	TYPE	ELEVATION
(2) JAHH-65B-R3B (Verizon)	189	SitePro VFA12-HD (Verizon)	188.5
(2) JAHH-65B-R3B (Verizon)	189	SitePro VFA12-HD (Verizon)	188.5
(2) JAHH-65B-R3B (Verizon)	189	APX16DWV-16DWVS (T-Mobile)	140
MT6407-77A (Verizon)	189	APX16DWV-16DWVS (T-Mobile)	140
MT6407-77A (Verizon)	189	APX16DWV-16DWVS (T-Mobile)	140
Samsung RF4439d-25A RRHs (Verizon)	189	APXVAARR24_43-U-NA20 (T-Mobile)	140
Samsung RF4439d-25A RRHs (Verizon)	189	APXVAARR24_43-U-NA20 (T-Mobile)	140
Samsung RF4439d-25A RRHs (Verizon)	189	APXVAARR24_43-U-NA20 (T-Mobile)	140
Samsung RF4439d-25A RRHs (Verizon)	189	AIR 6449 B41 (T-Mobile)	140
Samsung RF4439d-25A RRHs (Verizon)	189	AIR 6449 B41 (T-Mobile)	140
Samsung RF4440d-13A RRHs (Verizon)	189	Ericsson Radio 4449 (T-Mobile)	140
Samsung RF4440d-13A RRHs (Verizon)	189	Ericsson Radio 4449 (T-Mobile)	140
Samsung RF4440d-13A RRHs (Verizon)	189	Ericsson Radio 4415 (T-Mobile)	140
Ericsson Radio 4415 (T-Mobile)	140	Ericsson Radio 4415 (T-Mobile)	140
CBC78T-DS-43 Twin Diplexer (Verizon)	189	Ericsson Radio 4424 B25 (T-Mobile)	140
CBC78T-DS-43 Twin Diplexer (Verizon)	189	Ericsson Radio 4424 B25 (T-Mobile)	140
CBC78T-DS-43 Twin Diplexer (Verizon)	189	Ericsson Radio 4424 B25 (T-Mobile)	140
RCMDC-6627-PF-48 (12 OVP) (Verizon)	189	12' V-Frame sector mount (T-Mobile)	140
RCMDC-6627-PF-48 (12 OVP) (Verizon)	189	12' V-Frame sector mount (T-Mobile)	140
RCMDC-6627-PF-48 (12 OVP) (Verizon)	189	12' V-Frame sector mount (T-Mobile)	140

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	ROHN 2.5 X-STR	D	14x3/16
B	SR None	E	5 @ 0.916667
C	ROHN TS1.5x16 ga		

MATERIAL STRENGTH

GRADE	F _y	F _u	GRADE	F _y	F _u
A572-50	50 ksi	65 ksi	A53-B-42	42 ksi	63 ksi



ALL REACTIONS ARE FACORED

All Points Technology
567 Vauxhall St. Ext., Suite 300
Waterford, CT 06385
Phone: (860) 663-1697
FAX: (860) 663-0935

Job: **190' Guyed Tower**
Project: **CT141_12710 Danielson 2**
Client: VzW Site #468921 Drawn by: AMA App'd:
Code: TIA-222-H Date: 12/01/21 Scale: NTS
Path: C:\Users\User\Documents\APTT\obj\Verizon Wireless\CT141_12710 Danielson 2\Rev 2\CT141_12710 Danielson.zel Dwg No. E-1

Appendix B

Calculations

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	190' Guyed Tower	Page
	Project	CT141_12710 Danielson 2	Date 13:58:29 09/20/21
	Client	VzW Site #468921	Designed by M. Larson

Tower Input Data

The main tower is a 3x guyed tower with an overall height of 190.00 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 3.42 ft at the top and tapered at the base.

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

The following design criteria apply:

Tower base elevation above sea level: 0.00 ft.

Basic wind speed of 130 mph.

Risk Category II.

Exposure Category B.

Simplified Topographic Factor Procedure for wind speed-up calculations is used.

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 1.0000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 50 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

Pressures are calculated at each section.

Stress ratio used in tower member design is 1.

Safety factor used in guy design is 1.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Guy Data

Guy Elevation ft	Guy Grade	Guy Size	Initial Tension lb	%	Guy Modulus	Guy Weight plf	L _a ft	Anchor Radius ft	Anchor Azimuth Adj. °	Anchor Elevation ft	End Fitting Efficiency %
189.385	EHS	A	9/16	3500.00	10%	21000	0.671	210.82	95.00	0.0000	0.00
		B	9/16	3500.00	10%	21000	0.671	210.82	95.00	0.0000	0.00
		C	9/16	3500.00	10%	21000	0.671	210.82	95.00	0.0000	0.00
136.977	EHS	A	1/2	2690.00	10%	21000	0.517	165.47	95.00	0.0000	0.00
		B	1/2	2690.00	10%	21000	0.517	165.47	95.00	0.0000	0.00
		C	1/2	2690.00	10%	21000	0.517	165.47	95.00	0.0000	0.00
87.3411	EHS	A	7/16	2080.00	10%	21000	0.399	109.40	68.00	0.0000	0.00
		B	7/16	2080.00	10%	21000	0.399	109.40	68.00	0.0000	0.00
		C	7/16	2080.00	10%	21000	0.399	109.40	68.00	0.0000	0.00
44.9323	EHS	A	3/8	1540.00	10%	21000	0.273	79.79	68.00	0.0000	0.00
		B	3/8	1540.00	10%	21000	0.273	79.79	68.00	0.0000	0.00
		C	3/8	1540.00	10%	21000	0.273	79.79	68.00	0.0000	0.00

Guy Elevation ft	Mount Type	Torque-Arm Spread ft	Torque-Arm Leg Angle °	Torque-Arm Style	Torque-Arm Grade	Torque-Arm Type	Torque-Arm Size
189.385	Corner						
136.977	Torque Arm	6.83	0.0000	Channel	A36 (36 ksi)	Channel	C10x15.3
87.3411	Corner						
44.9323	Corner						

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job 190' Guyed Tower										Page 2 of 8
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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	# Spacing in	Clear Diameter in	Width or Perimeter in	Weight plf
Climbing Ladder	A	No	No	Ar (CaAa)	190.00 - 5.00	-2.0000	0	1	1	3.0000	3.0000	7.90
1-5/8" 12x24 LI Hybrid (VzW)	B	No	No	Ar (CaAa)	189.00 - 8.00	0.0000	0	1	1	0.5000	1.9800	3.20
Feedline Ladder (Af) (VzW)	B	No	No	Af (CaAa)	189.00 - 8.00	0.0000	0	1	1	3.0000	3.0000	8.40
6x12 hybrid (T-Mobile)	C	No	No	Ar (CaAa)	140.00 - 8.00	0.0000	0	4	4	0.5000	1.5500	1.88
Feedline Ladder (Af) (T-Mobile)	C	No	No	Af (CaAa)	140.00 - 8.00	0.0000	0	1	1	3.0000	3.0000	8.40

Discrete Tower Loads

Description		Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	CAA Front	CAA Side	Weight	
							ft ²	ft ²	lb	
(2) JAHH-65B-R3B (Verizon)	A	From Face		4.00 0.00 0.00	0.0000	189.00	No Ice 1/2" Ice 1" Ice	9.11 9.58 10.05	5.98 6.44 6.91	65.00 123.08 187.45
(2) JAHH-65B-R3B (Verizon)	B	From Face		4.00 0.00 0.00	0.0000	189.00	No Ice 1/2" Ice 1" Ice	9.11 9.58 10.05	5.98 6.44 6.91	65.00 123.08 187.45
(2) JAHH-65B-R3B (Verizon)	C	From Face		4.00 0.00 0.00	0.0000	189.00	No Ice 1/2" Ice 1" Ice	9.11 9.58 10.05	5.98 6.44 6.91	65.00 123.08 187.45
MT6407-77A (Verizon)	A	From Face		4.00 0.00 0.00	0.0000	189.00	No Ice 1/2" Ice 1" Ice	4.69 4.98 5.28	1.84 2.06 2.29	90.00 119.24 152.35
MT6407-77A (Verizon)	B	From Face		4.00 0.00 0.00	0.0000	189.00	No Ice 1/2" Ice 1" Ice	4.69 4.98 5.28	1.84 2.06 2.29	90.00 119.24 152.35
MT6407-77A (Verizon)	C	From Face		4.00 0.00 0.00	0.0000	189.00	No Ice 1/2" Ice 1" Ice	4.69 4.98 5.28	1.84 2.06 2.29	90.00 119.24 152.35
Samsung RF4439d-25A RRHs (Verizon)	A	From Face		3.50 0.00 0.00	0.0000	189.00	No Ice 1/2" Ice 1" Ice	1.87 2.03 2.21	1.25 1.39 1.54	100.00 118.32 139.42
Samsung RF4439d-25A RRHs (Verizon)	B	From Face		3.50 0.00 0.00	0.0000	189.00	No Ice 1/2" Ice 1" Ice	1.87 2.03 2.21	1.25 1.39 1.54	100.00 118.32 139.42
Samsung RF4439d-25A RRHs (Verizon)	C	From Face		3.50 0.00 0.00	0.0000	189.00	No Ice 1/2" Ice 1" Ice	1.87 2.03 2.21	1.25 1.39 1.54	100.00 118.32 139.42
Samsung RF4440d-13A RRHs (Verizon)	A	From Face		3.50 0.00 0.00	0.0000	189.00	No Ice 1/2" Ice 1" Ice	1.87 2.03 2.21	1.13 1.27 1.41	85.00 102.32 122.37
Samsung RF4440d-13A RRHs (Verizon)	B	From Face		3.50	0.0000	189.00	No Ice	1.87	1.13	85.00

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	CAA Front ft ²	CAA Side ft ²	Weight lb	
RRHs (Verizon)			0.00			1/2" Ice	2.03	1.27	102.32
Samsung RF4440d-13A	C	From Face	0.00			1" Ice	2.21	1.41	122.37
RRHs (Verizon)			3.50	0.0000	189.00	No Ice	1.87	1.13	85.00
CBC78T-DS-43 Twin Diplexer (Verizon)	A	From Face	0.00			1/2" Ice	2.03	1.27	102.32
CBC78T-DS-43 Twin Diplexer (Verizon)	B	From Face	0.00			1" Ice	2.21	1.41	122.37
CBC78T-DS-43 Twin Diplexer (Verizon)	C	From Face	0.00			No Ice	0.37	0.25	15.00
RCMDC-6627-PF-48 (12 OVP) (Verizon)			3.50	0.0000	189.00	1/2" Ice	0.45	0.32	19.10
SitePro VFA12-HD (Verizon)	A	None				1" Ice	0.53	0.39	24.57
SitePro VFA12-HD (Verizon)	B	None				No Ice	0.37	0.25	15.00
SitePro VFA12-HD (Verizon)	C	None				1/2" Ice	0.45	0.32	19.10
APX16DWV-16DWVS (T-Mobile)	A	From Face	0.00			1" Ice	0.53	0.39	24.57
APX16DWV-16DWVS (T-Mobile)	B	From Face	4.00	0.0000	140.00	No Ice	6.13	5.25	50.00
APX16DWV-16DWVS (T-Mobile)	C	From Face	0.00			1/2" Ice	6.44	5.55	108.92
APXVAARR24_43-U-NA20 (T-Mobile)	A	From Face	4.00	0.0000	140.00	1" Ice	6.76	5.85	172.82
APXVAARR24_43-U-NA20 (T-Mobile)	B	From Face	0.00			No Ice	13.20	9.20	658.00
APXVAARR24_43-U-NA20 (T-Mobile)	C	From Face	0.00			1/2" Ice	19.50	14.60	804.00
AIR 6449 B41 (T-Mobile)	A	From Face	4.00	0.0000	188.50	1" Ice	25.80	19.50	1015.00
AIR 6449 B41 (T-Mobile)	B	From Face	0.00			No Ice	13.20	9.20	658.00
AIR 6449 B41 (T-Mobile)	C	From Face	0.00			1/2" Ice	19.50	14.60	804.00
Ericsson Radio 4449 (T-Mobile)	A	From Face	4.00	0.0000	188.50	1" Ice	25.80	19.50	1015.00
Ericsson Radio 4449 (T-Mobile)	B	From Face	0.00			No Ice	13.20	9.20	658.00
Ericsson Radio 4449 (T-Mobile)	C	From Face	0.00			1/2" Ice	19.50	14.60	804.00
AIR 6449 B41 (T-Mobile)	A	From Face	4.00	0.0000	140.00	1" Ice	6.80	2.66	92.36
AIR 6449 B41 (T-Mobile)	B	From Face	0.00			No Ice	6.08	2.00	25.00
AIR 6449 B41 (T-Mobile)	C	From Face	0.00			1/2" Ice	6.44	2.33	56.34
AIR 6449 B41 (T-Mobile)	A	From Face	4.00	0.0000	140.00	1" Ice	6.80	2.66	92.36
AIR 6449 B41 (T-Mobile)	B	From Face	0.00			No Ice	6.08	2.00	25.00
AIR 6449 B41 (T-Mobile)	C	From Face	0.00			1/2" Ice	6.44	2.33	56.34
AIR 6449 B41 (T-Mobile)	A	From Face	4.00	0.0000	140.00	1" Ice	6.80	2.66	92.36
APXVAARR24_43-U-NA20 (T-Mobile)	A	From Face	4.00	0.0000	140.00	No Ice	20.24	8.89	155.00
APXVAARR24_43-U-NA20 (T-Mobile)	B	From Face	0.00			1/2" Ice	20.89	9.49	267.59
APXVAARR24_43-U-NA20 (T-Mobile)	C	From Face	0.00			1" Ice	21.54	10.09	388.72
APXVAARR24_43-U-NA20 (T-Mobile)	A	From Face	4.00	0.0000	140.00	No Ice	20.24	8.89	155.00
APXVAARR24_43-U-NA20 (T-Mobile)	B	From Face	0.00			1/2" Ice	20.89	9.49	267.59
APXVAARR24_43-U-NA20 (T-Mobile)	C	From Face	0.00			1" Ice	21.54	10.09	388.72
AIR 6449 B41 (T-Mobile)	A	From Face	4.00	0.0000	140.00	No Ice	20.24	8.89	155.00
AIR 6449 B41 (T-Mobile)	B	From Face	0.00			1/2" Ice	20.89	9.49	267.59
AIR 6449 B41 (T-Mobile)	C	From Face	0.00			1" Ice	21.54	10.09	388.72
AIR 6449 B41 (T-Mobile)	A	From Face	4.00	0.0000	140.00	No Ice	5.68	2.49	128.00
AIR 6449 B41 (T-Mobile)	B	From Face	0.00			1/2" Ice	5.98	2.72	167.12
AIR 6449 B41 (T-Mobile)	C	From Face	0.00			1" Ice	6.29	2.95	210.46
Ericsson Radio 4449 (T-Mobile)	A	From Face	3.00	0.0000	140.00	No Ice	5.68	2.49	128.00
Ericsson Radio 4449 (T-Mobile)	B	From Face	0.00			1/2" Ice	5.98	2.72	167.12
Ericsson Radio 4449 (T-Mobile)	C	From Face	0.00			1" Ice	6.29	2.95	210.46
Ericsson Radio 4449 (T-Mobile)	A	From Face	3.00	0.0000	140.00	No Ice	1.65	1.16	80.00
Ericsson Radio 4449 (T-Mobile)	B	From Face	0.00			1/2" Ice	1.81	1.30	96.16
Ericsson Radio 4449 (T-Mobile)	C	From Face	0.00			1" Ice	1.98	1.45	114.95
Ericsson Radio 4449	A	From Face	3.00	0.0000	140.00	No Ice	1.65	1.16	80.00

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	CAA Front ft ²	CAA Side ft ²	Weight lb
(T-Mobile)			0.00 0.00		1/2" Ice	1.81	1.30	96.16
Ericsson Radio 4449 (T-Mobile)	C	From Face	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.65 1.81 1.98	80.00 96.16 114.95
Ericsson Radio 4415 (T-Mobile)	A	From Face	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.64 1.80 1.98	50.00 62.41 77.18
Ericsson Radio 4415 (T-Mobile)	B	From Face	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.64 1.80 1.97	50.00 62.41 77.18
Ericsson Radio 4415 (T-Mobile)	C	From Face	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.64 1.80 1.97	50.00 62.41 77.18
Ericsson Radio 4424 B25 (T-Mobile)	A	From Face	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.86 2.03 2.20	90.00 107.87 128.50
Ericsson Radio 4424 B25 (T-Mobile)	B	From Face	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.86 2.03 2.20	90.00 107.87 128.50
Ericsson Radio 4424 B25 (T-Mobile)	C	From Face	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.86 2.03 2.20	90.00 107.87 128.50
12' V-Frame sector mount (T-Mobile)	A	None		0.0000	140.00	No Ice 1/2" Ice 1" Ice	10.20 13.80 17.40	465.00 600.00 735.00
12' V-Frame sector mount (T-Mobile)	B	None		0.0000	140.00	No Ice 1/2" Ice 1" Ice	10.20 13.80 17.40	465.00 600.00 735.00
12' V-Frame sector mount (T-Mobile)	C	None		0.0000	140.00	No Ice 1/2" Ice 1" Ice	10.20 13.80 17.40	465.00 600.00 735.00

Solution Summary

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	190 - 175	2.223	29	0.0563	0.0781
T2	175 - 160	2.036	29	0.0682	0.0751
T3	160 - 140	1.802	33	0.0782	0.0696
T4	140 - 120	1.478	33	0.0693	0.0669
T5	120 - 100	1.253	33	0.0522	0.0891
T6	100 - 80	1.022	33	0.0588	0.1142
T7	80 - 60	0.794	33	0.0475	0.1332
T8	60 - 40	0.593	33	0.0499	0.1470
T9	40 - 20	0.387	27	0.0434	0.1674
T10	20 - 5	0.215	27	0.0468	0.1773
T11	5 - 0	0.056	27	0.0522	0.2102

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Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
189.39	Guy	29	2.216	0.0568	0.0780	116360
189.00	(2) JAHH-65B-R3B	29	2.211	0.0571	0.0779	116360
188.50	SitePro VFA12-HD	29	2.200	0.0579	0.0778	116360
140.00	APX16DWV-16DWVS	33	1.478	0.0693	0.0669	28182
136.98	Guy	33	1.438	0.0661	0.0688	31316
87.34	Guy	33	0.874	0.0519	0.1270	120889
44.93	Guy	33	0.435	0.0450	0.1637	94473

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	190 - 175	25.197	6	0.7716	0.5407
T2	175 - 160	22.800	2	0.8260	0.5422
T3	160 - 140	20.168	2	0.8679	0.5214
T4	140 - 120	16.613	2	0.7975	0.4877
T5	120 - 100	13.697	2	0.6815	0.5409
T6	100 - 80	10.926	2	0.6642	0.6082
T7	80 - 60	8.342	2	0.5610	0.6587
T8	60 - 40	6.055	2	0.5363	0.6976
T9	40 - 20	3.895	2	0.4728	0.7736
T10	20 - 5	2.017	2	0.4678	0.8196
T11	5 - 0	0.513	2	0.4861	0.8830

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
189.39	Guy	6	25.098	0.7738	0.5409	24967
189.00	(2) JAHH-65B-R3B	2	25.037	0.7751	0.5411	24967
188.50	SitePro VFA12-HD	2	24.881	0.7787	0.5415	24967
140.00	APX16DWV-16DWVS	2	16.613	0.7975	0.4877	5092
136.98	Guy	2	16.134	0.7773	0.4903	5546
87.34	Guy	2	9.254	0.5969	0.6425	12153
44.93	Guy	2	4.401	0.4875	0.7570	11948

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load Allowable	Allowable Ratio	Criteria
T1	190	Leg	A325N	0.7500	4	1319.92	30101.40	0.044	✓	1
		Diagonal	A325N	0.5000	1	1367.95	4165.56	0.328	✓	1
		Bottom Girt	A325N	0.5000	1	278.14	8835.73	0.031	✓	1
T2	175	Leg	A325N	0.7500	4	991.38	30101.40	0.033	✓	1
		Diagonal	A325N	0.5000	1	1559.66	4165.56	0.374	✓	1

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Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load Allowable	Allowable Ratio	Criteria
T3	160	Top Girt	A325N	0.5000	1	274.48	8618.40	0.032 ✓	1	Member Bearing
		Bottom Girt	A325N	0.5000	1	732.27	8835.73	0.083 ✓	1	Bolt Shear
		Leg	A325N	0.7500	4	1913.96	30101.40	0.064 ✓	1	Bolt Tension
		Diagonal	A325N	0.5000	1	2070.75	7015.68	0.295 ✓	1	Member Bearing
		Top Girt	A325N	0.5000	1	397.81	7015.68	0.057 ✓	1	Member Bearing
T4	140	Bottom Girt	A325N	0.5000	1	397.81	7015.68	0.057 ✓	1	Member Bearing
		Leg	A325N	0.7500	4	1898.81	30101.40	0.063 ✓	1	Bolt Tension
		Diagonal	A325N	0.5000	1	4291.46	7015.68	0.612 ✓	1	Member Bearing
		Top Girt	A325N	0.5000	1	2204.84	7015.68	0.314 ✓	1	Member Bearing
T5	120	Bottom Girt	A325N	0.5000	1	538.68	7015.68	0.077 ✓	1	Member Bearing
		Leg	A325N	0.7500	4	2122.17	30101.40	0.071 ✓	1	Bolt Tension
		Diagonal	A325N	0.5000	1	1110.97	7015.68	0.158 ✓	1	Member Bearing
		Top Girt	A325N	0.5000	1	441.08	7015.68	0.063 ✓	1	Member Bearing
T6	100	Bottom Girt	A325N	0.5000	1	441.08	7015.68	0.063 ✓	1	Member Bearing
		Leg	A325N	0.7500	4	2534.98	30101.40	0.084 ✓	1	Bolt Tension
		Diagonal	A325N	0.5000	1	1431.85	7015.68	0.204 ✓	1	Member Bearing
		Top Girt	A325N	0.5000	1	561.70	7015.68	0.080 ✓	1	Member Bearing
T7	80	Bottom Girt	A325N	0.5000	1	561.70	7015.68	0.080 ✓	1	Member Bearing
		Leg	A325N	0.7500	4	2519.31	30101.40	0.084 ✓	1	Bolt Tension
		Diagonal	A325N	0.5000	1	816.34	7015.68	0.116 ✓	1	Member Bearing
		Top Girt	A325N	0.5000	1	526.99	7015.68	0.075 ✓	1	Member Bearing
T8	60	Bottom Girt	A325N	0.5000	1	526.99	4165.56	0.127 ✓	1	Member Bearing
		Leg	A325N	0.7500	4	2818.36	30101.40	0.094 ✓	1	Bolt Tension
		Diagonal	A325N	0.5000	1	1751.24	7015.68	0.250 ✓	1	Member Bearing
		Top Girt	A325N	0.5000	1	621.60	7015.68	0.089 ✓	1	Member Bearing
		Bottom Girt	A325N	0.5000	1	711.08	7015.68	0.101 ✓	1	Member Bearing
T9	40	Top Guy	A325N	0.6250	2	1358.87	11845.90	0.115 ✓	1	Member Bearing
		Pull-Off@44.932			3					
		Leg	A325N	0.7500	4	2579.44	30101.40	0.086 ✓	1	Bolt Tension
		Diagonal	A325N	0.5000	1	1460.55	7015.68	0.208 ✓	1	Member Bearing
		Top Girt	A325N	0.5000	1	585.90	7015.68	0.084 ✓	1	Member Bearing
T10	20	Bottom Girt	A325N	0.5000	1	585.90	7015.68	0.084 ✓	1	Member Bearing
		Leg	A325N	0.7500	4	2574.60	30101.40	0.086 ✓	1	Bolt Tension
		Diagonal	A325N	0.5000	1	570.43	7015.68	0.081 ✓	1	Member Bearing
		Top Girt	A325N	0.5000	1	540.57	7015.68	0.077 ✓	1	Member Bearing
		Bottom Girt	A325N	0.5000	1	4844.76	7015.68	0.691 ✓	1	Member Bearing

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Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
T1	190 - 175	Leg Diagonal	ROHN 2.5 EH	3	-16058.40	76718.10	20.9	Pass
			ROHN TS1.5x16 ga	26	-1370.24	5969.66	23.0	Pass
		Bottom Girt	ROHN TS1.5x11 ga	8	-278.14	15031.30	1.9	Pass
		Guy A@189.385	9/16	471	13923.70	21000.00	66.3	Pass
		Guy B@189.385	9/16	470	13965.70	21000.00	66.5	Pass
		Guy C@189.385	9/16	469	13993.00	21000.00	66.6	Pass
		Top Guy	4 1/2x3/8	4	3751.23	54675.00	6.9	Pass
		Pull-Off@189.385						
		Leg Diagonal	ROHN 2.5 EH	30	-15847.10	76718.10	20.7	Pass
			ROHN TS1.5x16 ga	38	-1598.69	5969.66	26.8	Pass
T2	175 - 160	Top Girt	ROHN TS1.5x11 ga	32	-274.48	13553.90	2.0	Pass
		Bottom Girt	ROHN TS1.5x11 ga	35	-703.99	15031.30	4.7	Pass
							8.3 (b)	
T3	160 - 140	Leg Diagonal	ROHN 2 STD	57	-22967.50	43696.10	52.6	Pass
			ROHN TS1.5x16 ga	66	-2070.75	5864.19	35.3	Pass
		Top Girt	ROHN TS1.5x16 ga	59	-397.81	6985.33	5.7	Pass
T4	140 - 120	Bottom Girt	ROHN TS1.5x16 ga	62	-397.81	6985.33	5.7	Pass
		Leg Diagonal	ROHN 2 STD	114	-31101.00	43813.40	71.0	Pass
			ROHN TS1.5x16 ga	166	-4291.46	5864.19	73.2	Pass
T5	120 - 100	Top Girt	ROHN TS1.5x16 ga	115	-2113.25	6985.33	30.3	Pass
							31.4 (b)	
		Bottom Girt	ROHN TS1.5x16 ga	119	-538.68	6985.33	7.7	Pass
		Guy A@136.977	1/2	480	11088.10	16140.00	68.7	Pass
		Guy B@136.977	1/2	477	10929.80	16140.00	67.7	Pass
		Guy C@136.977	1/2	473	11080.80	16140.00	68.7	Pass
		Torque Arm	C10x15.3	483	-3312.07	123455.00	74.6	Pass
T6	100 - 80	Top@136.977						
		Leg Diagonal	ROHN 2 STD	170	-25466.10	43813.40	58.1	Pass
			ROHN TS1.5x16 ga	183	-1110.97	5864.19	18.9	Pass
		Top Girt	ROHN TS1.5x16 ga	172	-441.08	6985.33	6.3	Pass
T7	80 - 60	Bottom Girt	ROHN TS1.5x16 ga	175	-441.08	6985.33	6.3	Pass
		Leg Diagonal	ROHN 2 STD	227	-32429.90	43813.40	74.0	Pass
			ROHN TS1.5x16 ga	258	-1431.85	5864.19	24.4	Pass
		Top Girt	ROHN TS1.5x16 ga	229	-561.70	6985.33	8.0	Pass
		Bottom Girt	ROHN TS1.5x16 ga	232	-561.70	6985.33	8.0	Pass
		Guy A@87.3411	7/16	489	8189.22	12480.00	65.6	Pass
		Guy B@87.3411	7/16	488	8176.77	12480.00	65.5	Pass
T8	60 - 40	Guy C@87.3411	7/16	484	8153.39	12480.00	65.3	Pass
		Top Guy	C4x5.4	485	3111.89	51516.00	6.0	Pass
		Pull-Off@87.3411						
		Leg Diagonal	ROHN 2 X-STR	284	-30425.80	59911.20	50.8	Pass
			ROHN TS1.5x16 ga	335	-816.34	5864.19	13.9	Pass
		Top Girt	ROHN TS1.5x16 ga	286	-526.99	6985.33	7.5	Pass
		Bottom Girt	ROHN TS1.5x16 ga	289	-526.99	6985.33	7.5	Pass
T9	40 - 20						12.7 (b)	
		Leg Diagonal	ROHN 2.5 STD	340	-35888.10	58405.60	61.4	Pass
			ROHN TS1.5x16 ga	350	-1751.24	5944.21	29.5	Pass
		Top Girt	ROHN TS1.5x16 ga	345	-621.60	7048.85	8.8	Pass
							8.9 (b)	
		Bottom Girt	ROHN TS1.5x16 ga	348	-621.60	7048.85	8.8	Pass
		Guy A@44.9323	3/8	495	5381.76	9240.00	58.2	Pass
T10	20 - 10	Guy B@44.9323	3/8	494	5380.30	9240.00	58.2	Pass
		Guy C@44.9323	3/8	490	5373.93	9240.00	58.2	Pass

<i>tnxTower</i> All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job 190' Guyed Tower	Page 8 of 8
	Project CT141_12710 Danielson 2	Date 13:58:29 09/20/21
	Client VzW Site #468921	Designed by M. Larson

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
T9	40 - 20	Top Guy	C4x5.4	491	2717.73	47371.50	5.7	Pass
		Pull-Off@44.9323					11.5 (b)	
		Leg	ROHN 2.5 STD	374	-33826.80	58405.60	57.9	Pass
		Diagonal	ROHN TS1.5x16 ga	404	-1460.55	5944.21	24.6	Pass
		Top Girt	ROHN TS1.5x16 ga	376	-585.90	7048.85	8.3	Pass
T10	20 - 5	Bottom Girt	ROHN TS1.5x16 ga	379	-585.90	7048.85	8.4 (b)	
		Leg	ROHN 2.5 STD	406	-31209.70	58805.60	53.1	Pass
		Diagonal	ROHN TS1.5x16 ga	417	570.43	9931.96	5.7	Pass
		Top Girt	ROHN TS1.5x16 ga	411	-540.57	7048.85	7.7	Pass
		Bottom Girt	ROHN TS1.5x16 ga	412	4844.76	9931.96	48.8	Pass
T11	5 - 0	Leg	ROHN 2.5 X-STR	433	-33478.20	96009.70	34.9	Pass
		Top Girt	14x3/16	438	-611.57	1629.00	37.5	Pass
		Bottom Girt	14x3/16	441	-77.82	75380.90	0.1	Pass
		Mid Girt	14x3/16	443	-251.69	5593.09	4.5	Pass
							Summary	
		Leg (T6)				74.0	Pass	
		Diagonal (T11)				73.2	Pass	
		Top Girt (T11)				37.5	Pass	
		Bottom Girt (T10)				69.1	Pass	
		Mid Girt (T11)				4.5	Pass	
		Guy A (T4)				68.7	Pass	
		Guy B (T4)				67.7	Pass	
		Guy C (T4)				68.7	Pass	
		Top Guy Pull-Off (T8)				11.5	Pass	
		Torque Arm Top (T4)				74.6	Pass	
		Bolt Checks				69.1	Pass	
		RATING =				74.0		Pass

All-Points Technology Corp., P.C.

567 Vauxhall St. Ext., Suite 311
Waterford, CT 06385
(860) 663-1697

Client: **Verizon Wireless** Site: **Danielson 2**
Job: **Danielson, CT** Job No.: **CT141_12710 Rev 2**
Calculated By: **A. Adair** Date: **1-Dec-21**

References: TIA-222, Structural Standards for Towers
Wang & Salmon, Reinforced Concrete Design, Chapter 20

TOWER PIER/FOOTING DESIGN

Program assumes:

Footing is square in plan view.
Pier above footing is cylindrical in shape.
Unit weight of concrete = 150 pcf
Submerged unit wt of concrete = 87.6 pcf
Unit weight of soil = 100 pcf
Submerged unit weight of soil = 37.6 pcf
Concrete strength = 3000 psi
Reinforcing strength = 60000 psi

Information to be provided:

C = Compression force to be resisted	C = 91.3 kips
q = Allowable bearing capacity	q = 20.00 ksf
H = Height from ground surface to bottom of footing	H = 4.00 feet
w = depth from ground surface to water table	w = 4.00 feet
y = Height of footing	y = 1.25 feet
x = Width of footing	x = 4.00 feet
s = average size of square pier	s = 4.00 feet
S.F. = Safety factor	S.F. = 1.0

Input satisfactory

OUTPUT:

Depth of footing =	d =	11 in.
Net Allowable Soil Pressure =		19.54 ksf
Factored Live & Dead Loads=		103.90 kips
Net Bearing Pressure=		6.49 ksf SATISFACTORY
Concrete Quantity =		2.0 c.y. per foundation

All-Points Technology Corp., P.C.
567 Vauxhall St. Ext., Suite 311
Waterford, CT 06385
(860) 663-1697

Client: Verizon Wireless Site: Danielson 2
Job: Danielson, CT Job No.: CT141_12710 Rev 2
Calculated By: A. Adair Date: 12/1/2021

FOOTING REINFORCEMENT DESIGN:

Shear Reinforcement - Two Way

Ultimate shear = $V_U = 22.30 \text{ kips}$
 $v_n = 10.10 \text{ psi}$
 $v_c = 219.09 \text{ psi}$ **No shear reinf. needed**

Shear Reinforcement - One Way

Ultimate shear = $V_U = -23.81 \text{ kips}$
 $v_n = -53.05 \text{ psi}$
 $v_c = 109.54 \text{ psi}$ **No shear reinf. needed**

Transfer of Load at Base of Column

Compressive design strength = 3230.06 kips **No dowels needed**
Area of Dowels Req'd = **None Required**

Calculate Required Footing Steel

Ultimate moment = $M_U = 0 \text{ ft-kips}$
 $R_U = 0 \text{ psi}$
Reinforcement ratio = $p = 0.00000$
Area of Steel Req'd = $A_s = 0.00 \text{ in}^2$ **or** **0.00 in**²/ft of width

 $C/a = 122 \text{ kips/in.}$
 $T = 0 \text{ kips}$
 $a = 0.00 \text{ in.}$
 $M_n = 0 \text{ ft-kips}$ **O.K.**

All-Points Technology Corp., P.C.

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Client: **Verizon Wireless**
Job: **Danielson, CT**
Calculated By: **A. Adair**

Site: **Danielson 2**
Job No.: **CT141_12710 Rev 2**
Date: **01-Dec-21**

References: Navy Design Manual DM 7.2, page 7.2-172
TIA-222, Structural Standards for Towers...

Inner Deadman Anchor Analysis

Program assumes:

Unit weight of concrete =	150 pcf
Submerged unit wt of concrete =	87.5 pcf
Unit weight of soil =	100 pcf
Submerged unit weight of soil =	37.6 pcf
K _p =	3.0

Information to be provided:

phi = Angle of internal friction	phi= 30.0 degrees (Table 1 Page 7.2-63)
H = Height from ground surface to bottom of anchor	H= 6.0 feet
w = Depth from ground surface to water table	w= 6.0 feet
y = Height of trial deadman block	y= 2.0 feet
x = Width of trial deadman block	x= 4.0 feet
z =Length of trial deadman block	z= 7.0 feet
R _H = Horizontal reaction to be resisted	R _H = 9.5 kips
R _V = Vertical reaction to be resisted	R _V = 9.5 kips
S.F.= Safety factor to be used	S.F.= 1.00

Input satisfactory

UPLIFT RESISTANCE:

Overburden Weight =	25.62 kips
Concrete Weight =	8.40 kips
Total Uplift Resistance =	34.02 kips Block Size Satisfactory

HORIZONTAL RESISTANCE:

Effective stress at top of block =	1200 psf
Effective stress at G.W.T =	1800 psf
Effective stress at bottom of block =	1800 psf
Total Horizontal Resistance=	21.00 kips Block Size Satisfactory

Volume of Concrete: (per anchor) **2.1 c.y.**

All-Points Technology Corp., P.C.

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Waterford, CT 06385
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Client: **Verizon Wireless**
Job: **Danielson, CT**
Calculated By: **A. Adair**

Site: **Danielson 2**
Job No.: **CT141_12710 Rev 2**
Date: **01-Dec-21**

References: Navy Design Manual DM 7.2, page 7.2-172
TIA-222, Structural Standards for Towers...

Outer Deadman Anchor Analysis

Program assumes:

Unit weight of concrete = 150 pcf
Submerged unit wt of concrete = 87.5 pcf
Unit weight of soil = 100 pcf
Submerged unit weight of soil = 37.6 pcf
K_p = 3.0

Information to be provided:

phi = Angle of internal friction	phi= 30.0 degrees (Table 1 Page 7.2-63)
H = Height from ground surface to bottom of anchor	H= 10.0 feet
w = Depth from ground surface to water table	w= 10.0 feet
y = Height of trial deadman block	y= 2.0 feet
x = Width of trial deadman block	x= 4.0 feet
z =Length of trial deadman block	z= 7.0 feet
R _H = Horizontal reaction to be resisted	R _H = 18.8 kips
R _V = Vertical reaction to be resisted	R _V = 30.2 kips
S.F.= Safety factor to be used	S.F.= 1.00

Input satisfactory

UPLIFT RESISTANCE:

Overburden Weight = 97.11 kips
Concrete Weight = 8.40 kips
Total Uplift Resistance = 105.51 kips Block Size Satisfactory

HORIZONTAL RESISTANCE:

Effective stress at top of block = 2400 psf
Effective stress at G.W.T = 3000 psf
Effective stress at bottom of block = 3000 psf
Total Horizontal Resistance= 37.80 kips Block Size Satisfactory

Volume of Concrete: (per anchor) 2.1 c.y.



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

Antenna Mount Analysis Report and PMI Requirements

Mount Analysis

SMART Tool Project #: 10113888
Maser Consulting Connecticut Project #: 21777314A (Rev 1)

October 25, 2021

Site Information

Site ID: 468921-VZW / DANIELSON 2 CT
Site Name: DANIELSON 2 CT
Carrier Name: Verizon Wireless
Address: 812 Providence Pike
Danielson, Connecticut 06239
Windham County
Latitude: 41.791389°
Longitude: -71.822333°

Structure Information

Tower Type: Guyed
Mount Type: 12.50-Ft Sector Mount

FUZE ID # 16272103

Analysis Results

Sector Mount: 87.3% Pass

***Contractor PMI Requirements:

Included at the end of this MA report

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

Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements may also be Noted on A & E drawings

Report Prepared By: Frank Centone



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
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS, Site ID: 1893268, dated October 4, 2021</i>
<i>Mount Mapping Report</i>	<i>Roaming Networks Inc., Site ID: PSLC468921, dated March 25, 2021</i>

Analysis Criteria:

Codes and Standards: ANSI/TIA-222-H

Wind Parameters: Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 123 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 : 0.976

Seismic Parameters: S_S : 0.186
 S_1 : 0.054

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

Analysis Software: RISA-3D (V17)

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
188.50	189.00	3	Samsung	MT6407-77A	Added
		3	Commscope	CBC78T-DS-43	
		3	Samsung	RF4439d-25A	
		3	Samsung	RF4440d-13A	
		1	Raycap	RVZDC-6627-PF-48	
		6	Commscope	JAHH-65B-R3B	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 and field observations. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

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

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

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

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	87.3%	Pass
Standoff Plate	54.6%	Pass
Standoff Horizontal	53.1%	Pass
Standoff Diagonal	8.0 %	Pass
Antenna Pipe	38.4%	Pass
Standoff Vertical	6.1%	Pass
Tieback	8.5%	Pass
Connection Check	18.8%	Pass

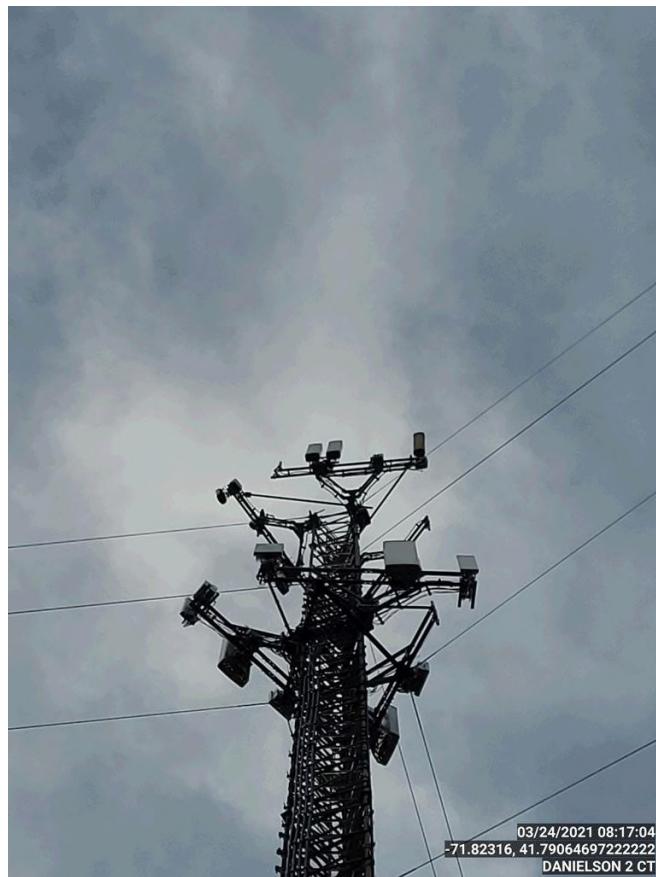
Recommendation:

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

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

Attachments:

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





Antenna Mount Mapping Form (PATENT PENDING)

Tower Owner:	OTHER	Mapping Date:	3/25/2021
Site Name:	DANIELSON 2 CT	Tower Type:	Self Support
Site Number or ID:	PSLC468921	Tower Height (Ft.):	N/A
Mapping Contractor:	Roaming Networks Inc.	Mount Elevation (Ft.):	188.3

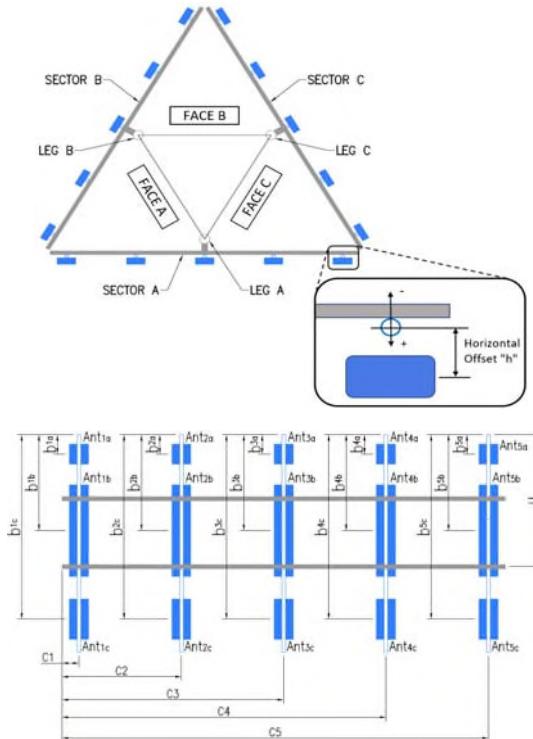
This antenna mapping form is the property of TES and under **PATENT PENDING**. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.

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	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	5.00	C1	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	5.00
A2	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	52.00	C2	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	52.00
A3	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	99.00	C3	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	99.00
A4	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	147.00	C4	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	147.00
A5				C5			
A6				C6			
B1	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	5.00	D1			
B2	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	52.00	D2			
B3	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	99.00	D3			
B4	PIPE 2.4"Ø X 0.13" X 96" LONG	74.00	147.00	D4			
B5				D5			
B6				D6			
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details.: 20.00							
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.):	3.5	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	2.9
--	-----	---	-----

Enter antenna model. If not labeled, enter "Unknown".		Mounting Locations [Units are inches and degrees]				Photos of antennas				
Ant. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} , ..., " (Inches)	Horiz. Offset "h" (Use "—" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant _{1a}	AMPHENOL	12.20	4.50	71.00		188.883	47.00	15.00		11
Ant _{1b}	B66A RRH4x45	11.80	7.20	25.80		188.633	50.00			13
Ant _{1c}										
Ant _{2a}	B13 RRH 4x30	12.00	9.00	21.60		188.55	51.00			15
Ant _{2b}	B13 RRH 4x30	12.00	9.00	21.60		189.217	43.00			16
Ant _{2c}										
Ant _{3a}	RRH AHCA	12.76	5.31	13.25		189.217	43.00			5
Ant _{3b}	JAHH-65B-R3B	13.78	8.20	72.00		188.883	47.00	15.00		7
Ant _{3c}	JAHH-65B-R3B	13.78	8.20	72.00		188.883	47.00	15.00		8
Ant _{4a}										
Ant _{4b}										
Ant _{4c}										
Ant _{5a}										
Ant _{5b}										
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Antenna Layout (Looking Out From Tower)



Mount Azimuth (Degree) for Each Sector			Tower Leg Azimuth (Degree) for Each Sector			Sector B						
Sector A:	Deg	Leg A:	Ant _{1a}	AMPHENOL	12.20	4.50	71.00		192.8			
Sector B:	Deg	Leg B:	Ant _{1b}	B66A RRH4x45	11.80	7.20	25.80		192.8			
Sector C:	Deg	Leg C:	Ant _{1c}									
Sector D:	Deg	Leg D:	Ant _{2a}	B13 RRH 4x30	12.00	9.00	21.60		192.8			
Climbing Facility Information			Ant _{2b}	B13 RRH 4x30	12.00	9.00	21.60		192.8			
Location:	Deg	Sector A	Ant _{2c}									
Climbing Facility	Corrosion Type:	Good condition.	Ant _{3a}	RRH AHCA	12.76	5.31	13.25		192.8			
	Access:	Climbing path was unobstructed.	Ant _{3b}	JAHH-65B-R3B	13.78	8.20	72.00		192.8			
	Condition:	Good condition.	Ant _{3c}	JAHH-65B-R3B	13.78	8.20	72.00		192.8			
			Ant _{4a}									
			Ant _{4b}									
			Ant _{4c}									
			Ant _{5a}									
			Ant _{5b}									
			Ant _{5c}									
Sector C												
Ant _{1a}	AMPHENOL	12.20	4.50	71.00		192.8						
Ant _{1b}	B66A RRH4x45	11.80	7.20	25.80		192.8						
Ant _{1c}												
Ant _{2a}	B13 RRH 4x30	12.00	9.00	21.60		192.8						
Ant _{2b}	B13 RRH 4x30	12.00	9.00	21.60		192.8						
Ant _{2c}												
Ant _{3a}	RRH AHCA	12.76	5.31	13.25		192.8						
Ant _{3b}	JAHH-65B-R3B	13.78	8.20	72.00		192.8						
Ant _{3c}	JAHH-65B-R3B	13.78	8.20	72.00		192.8						
Ant _{4a}												
Ant _{4b}												
Ant _{4c}												
Ant _{5a}												
Ant _{5b}												
Ant _{5c}												
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}												

Observed Safety and Structural Issues During the Mount Mapping

Issue #	Description of Issue	Photo #
---------	----------------------	---------

1	
2	
3	
4	
5	
6	
7	
8	

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.

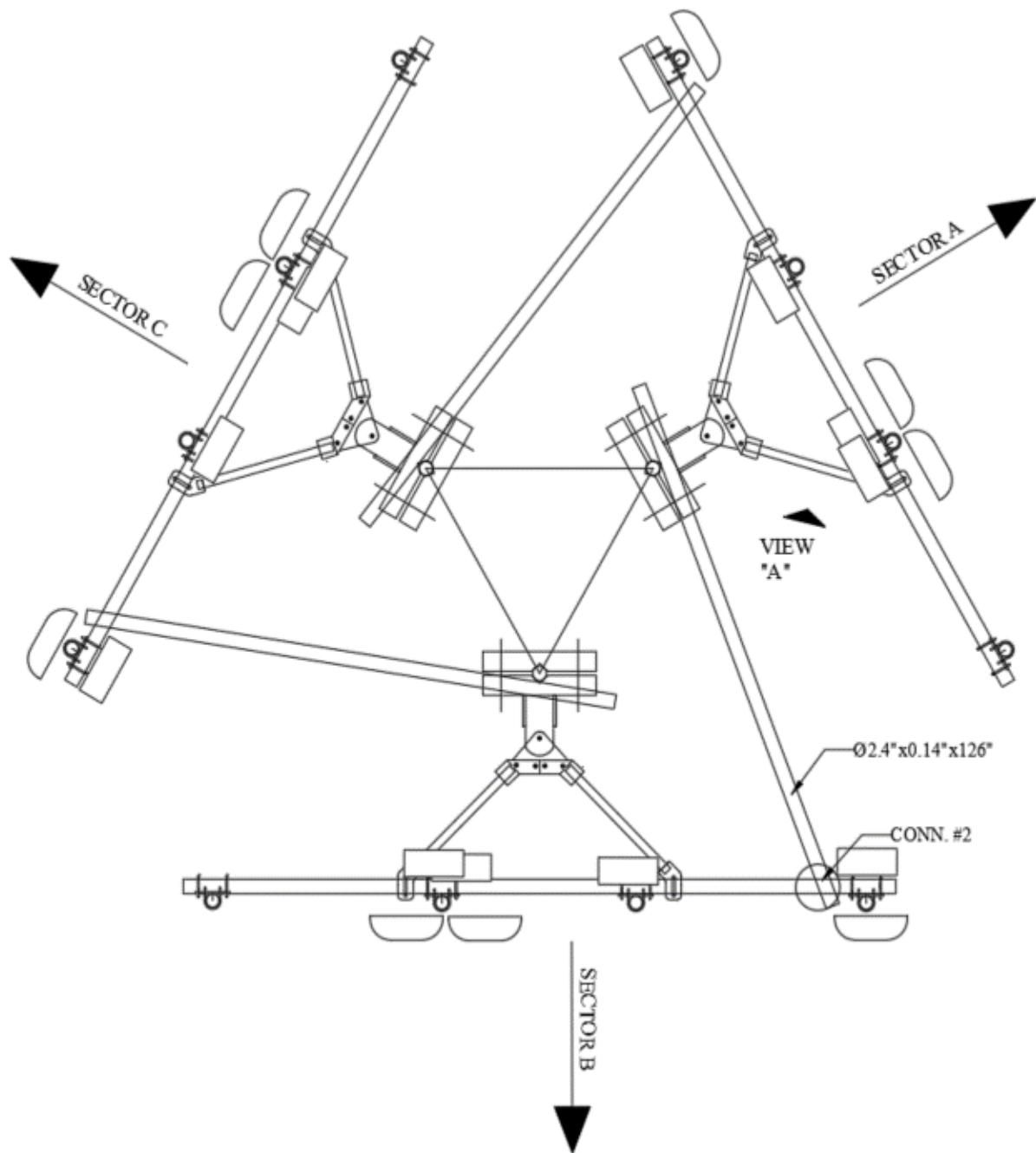
Standard Conditions

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.

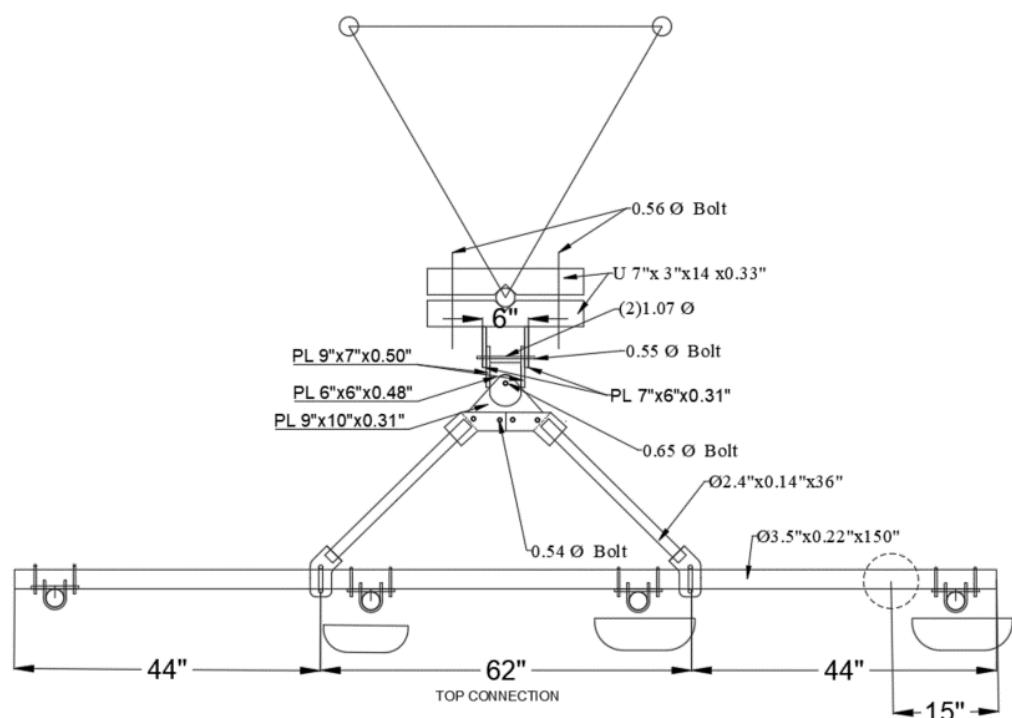
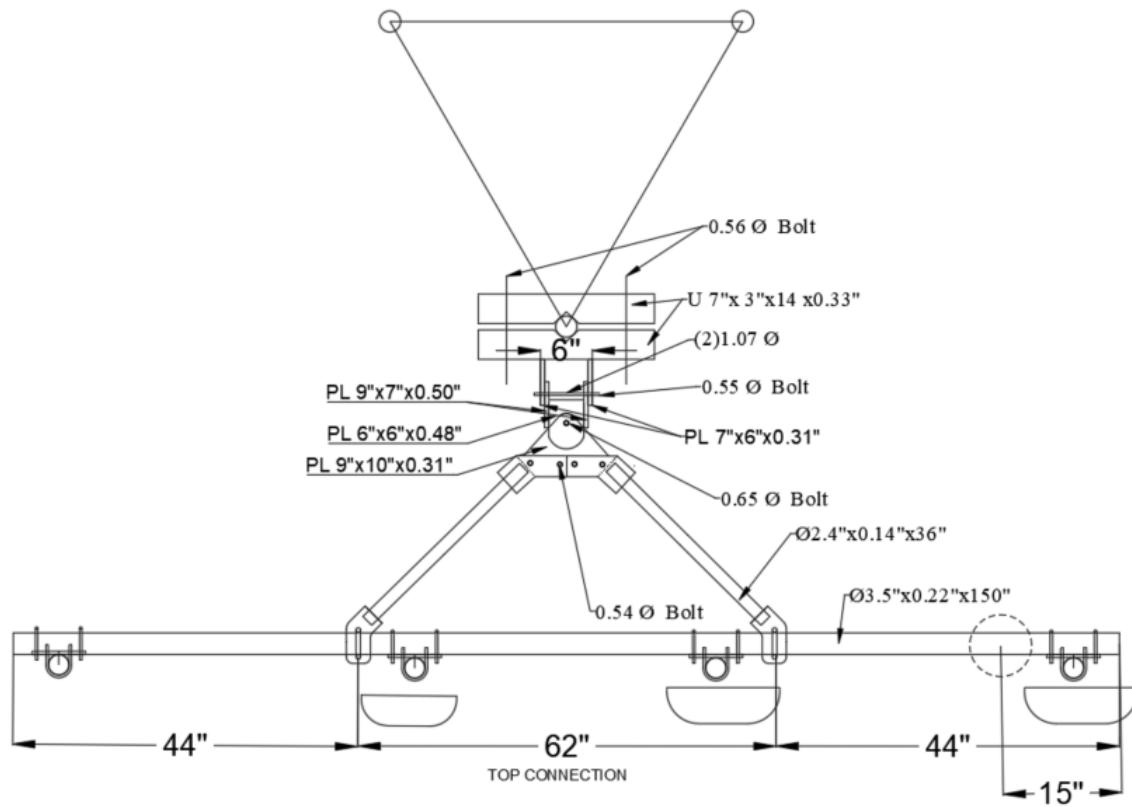
PJF PAUL J. FORD & COMPANY
Antenna Mount Mapping Form (PATENT PENDING)

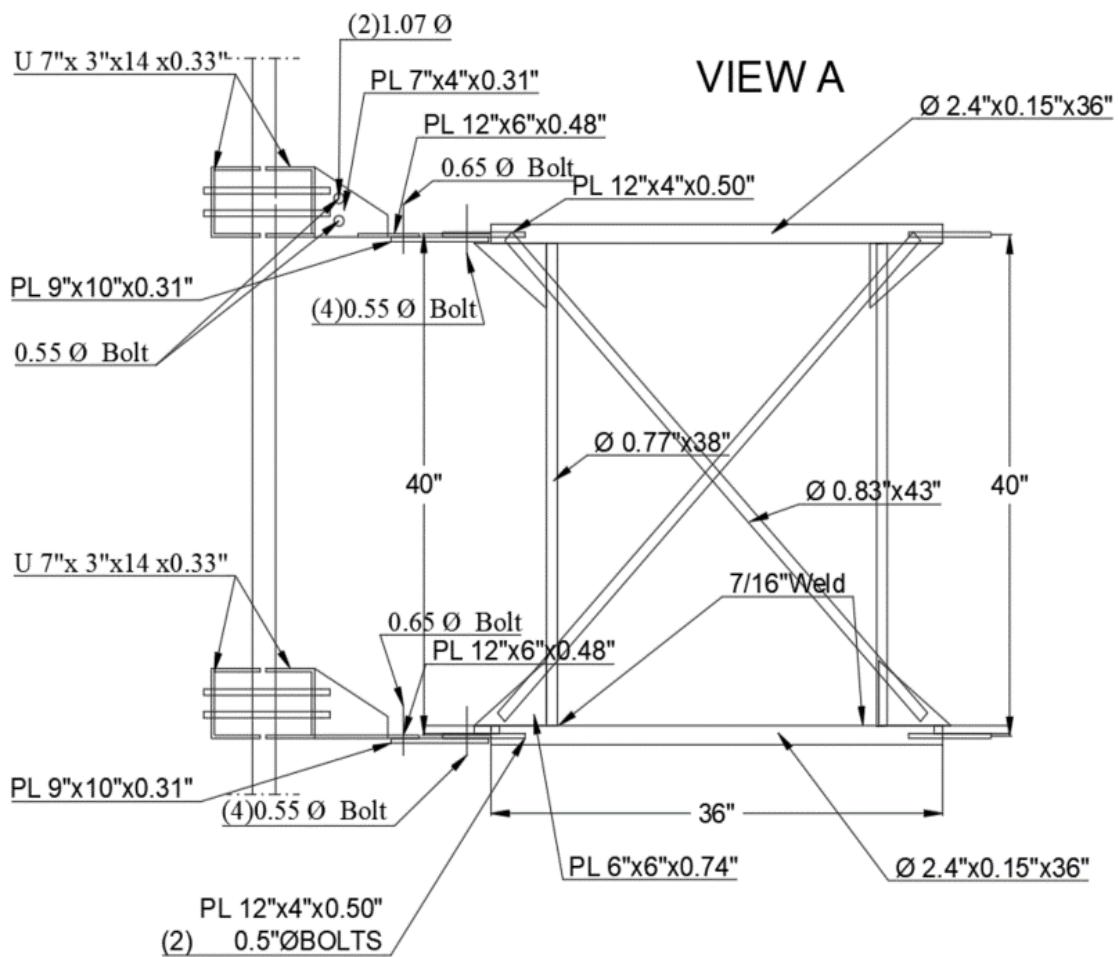
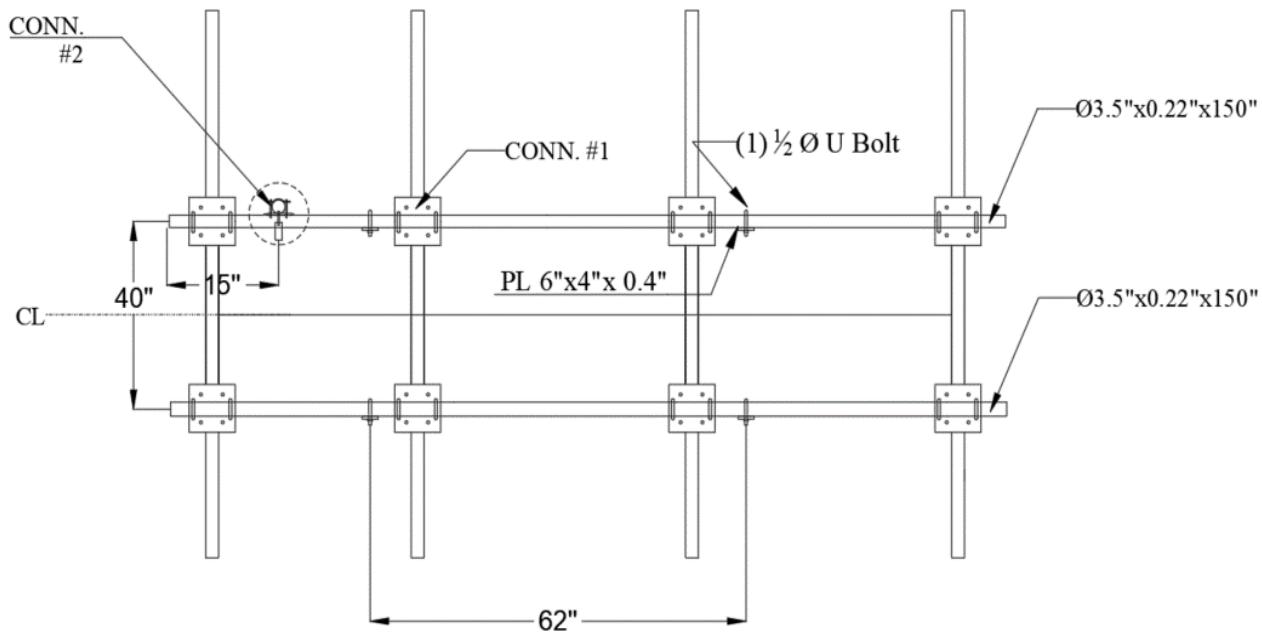
Tower Owner:	OTHER	Mapping Date:	3/25/2021
Site Name:	DANIELSON 2 CT	Tower Type:	Self Support
Site Number or ID:	PSLC468921	Tower Height (Ft.):	N/A
Mapping Contractor:	Roaming Networks Inc.	Mount Elevation (Ft.):	188.3

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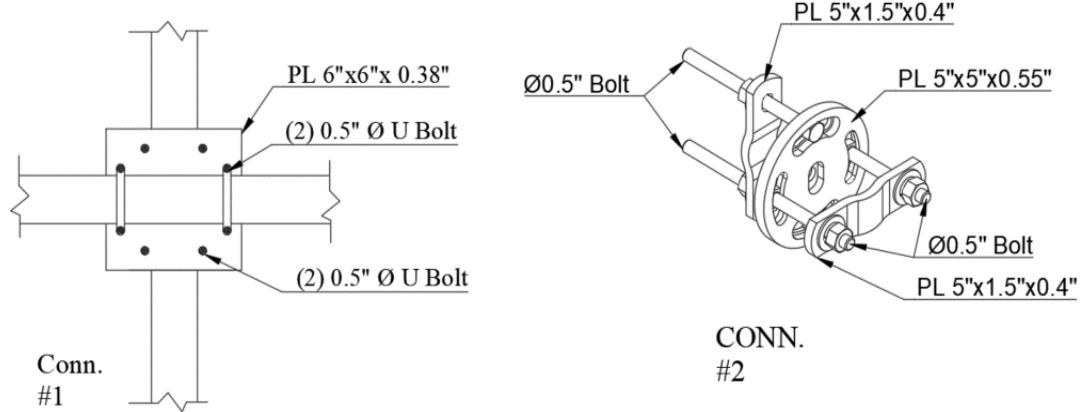
Please Insert Sketches of the Antenna Mount


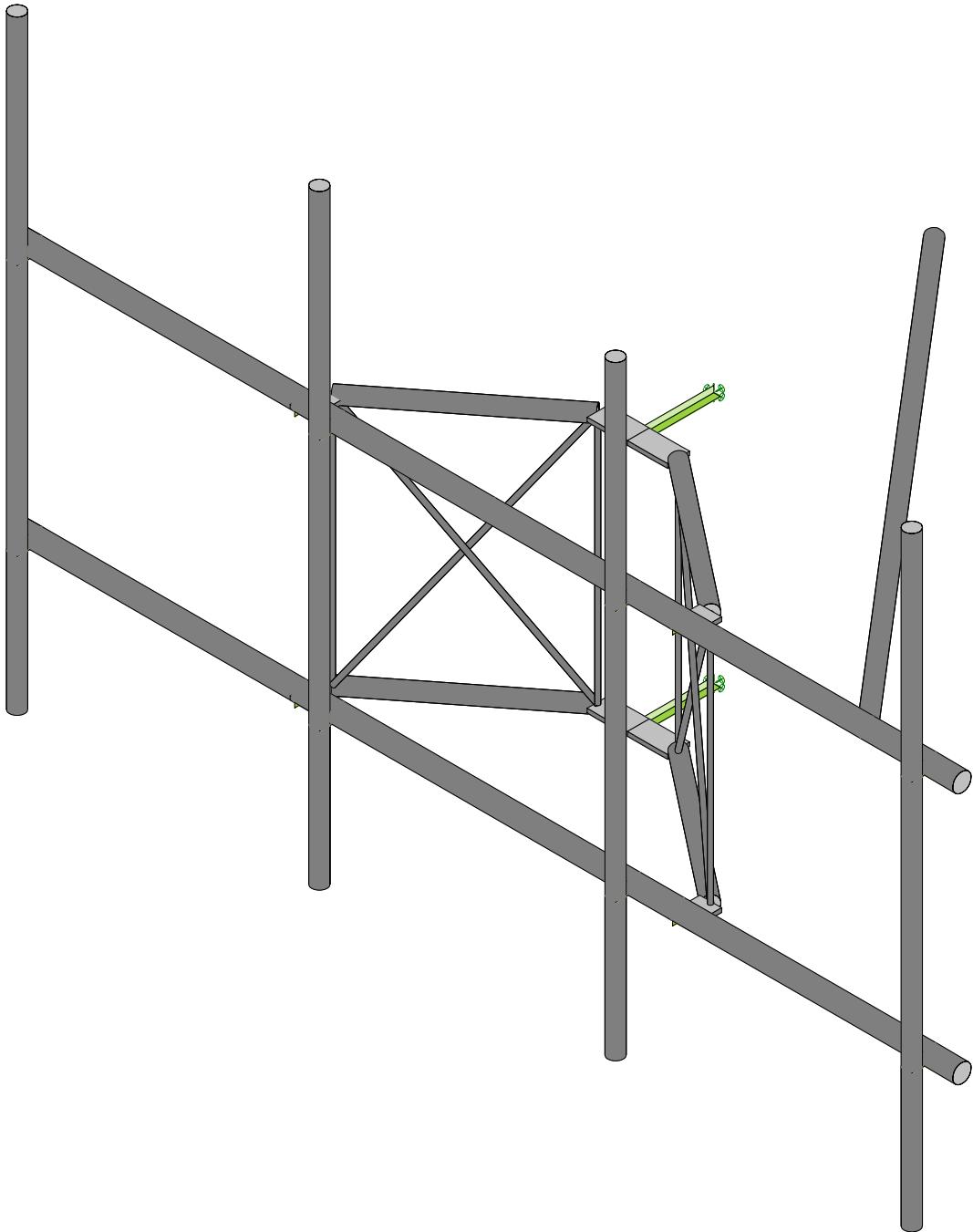
Please Insert Sketches of the Antenna Mount, cont'd





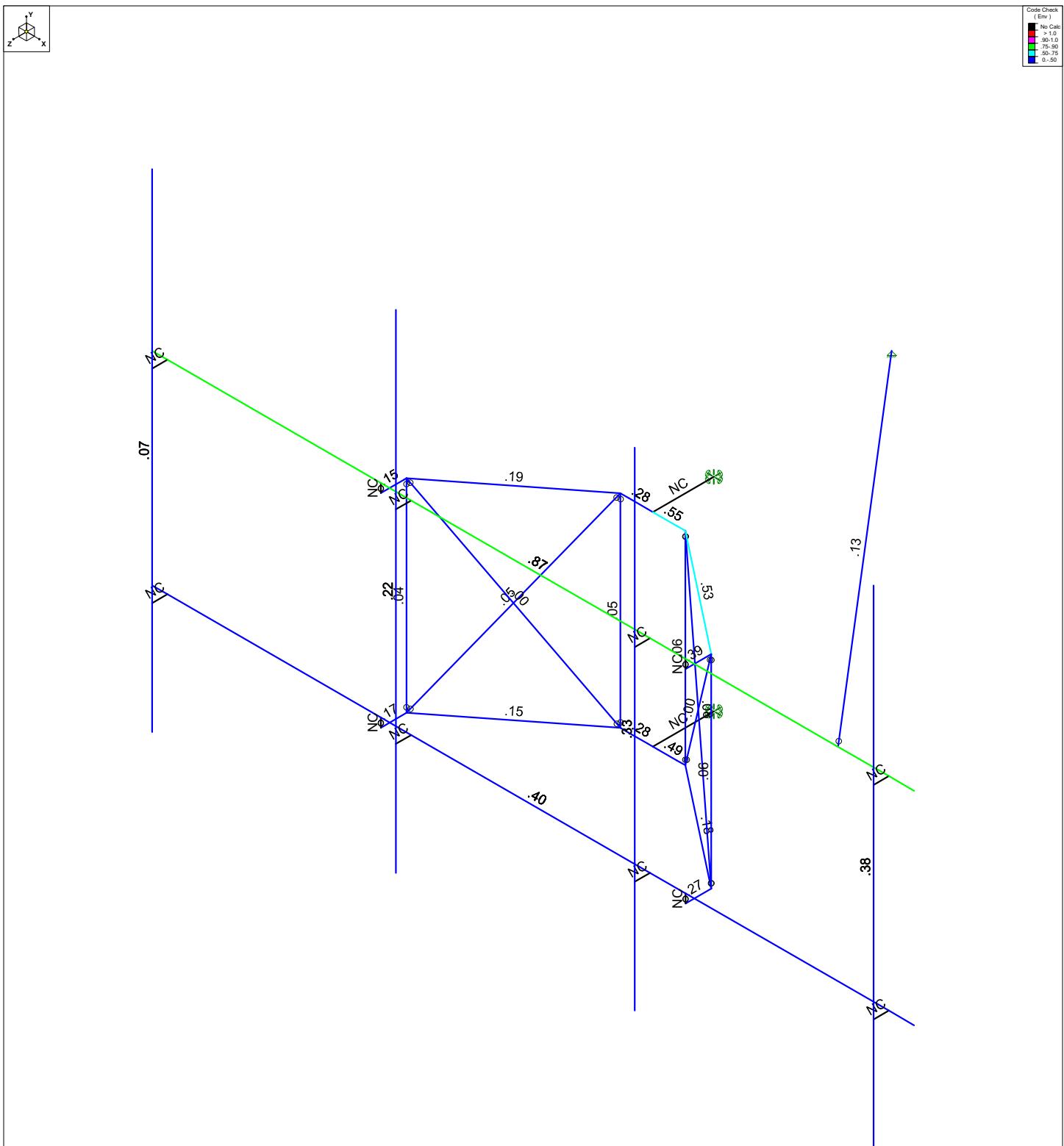
Please Insert Sketches of the Antenna Mount, cont'd





Loads: BLC 81,

		SK - 1
		Aug 5, 2021 at 11:24 AM
		468921-VZW_MT_LOT_A_H.r3d



Member Code Checks Displayed (Enveloped)

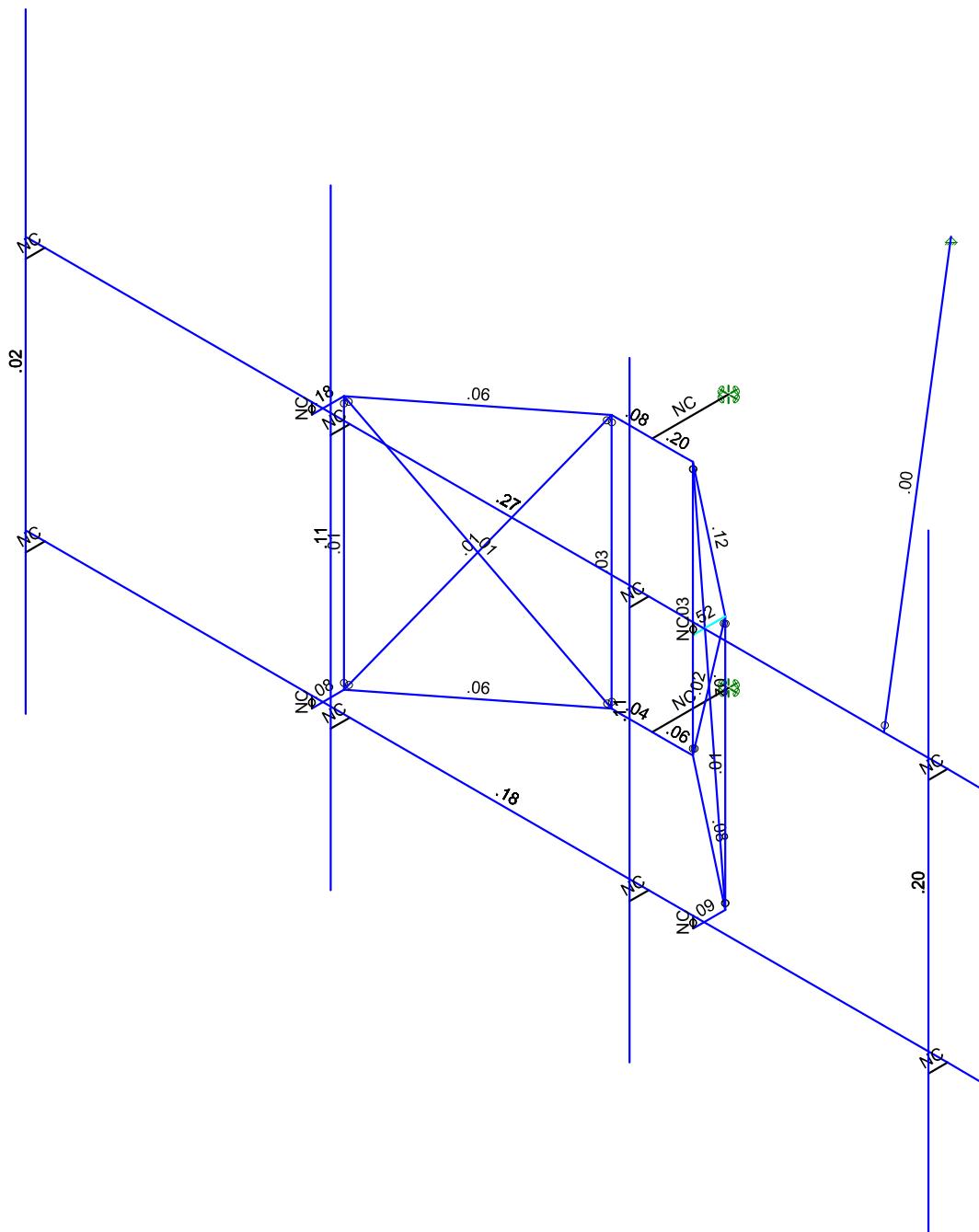
Loads: BLC 81,

Results for LC 1, 1.2D+1.0Wo (0 Deg)

SK - 2

Aug 5, 2021 at 11:25 AM

468921-VZW_MT_LOT_A_H.r3d



Member Shear Checks Displayed (Enveloped)

Loads: BLC 81,
Results for LC 1, 1.2D+1.0Wo (0 Deg)

SK - 3

Aug 5, 2021 at 11:26 AM

468921-VZW_MT_LOT_A_H.r3d



Company
Designer
Job Number
Model Name

Aug 5, 2021
11:28 AM
Checked By: _____

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...)	Surface(P...
57	Structure Wl (120 Deg)	None						54	
58	Structure Wl (150 Deg)	None						54	
59	Structure Wl (180 Deg)	None						54	
60	Structure Wl (210 Deg)	None						54	
61	Structure Wl (240 Deg)	None						54	
62	Structure Wl (270 Deg)	None						54	
63	Structure Wl (300 Deg)	None						54	
64	Structure Wl (330 Deg)	None						54	
65	Structure Wm (0 Deg)	None						54	
66	Structure Wm (30 Deg)	None						54	
67	Structure Wm (60 Deg)	None						54	
68	Structure Wm (90 Deg)	None						54	
69	Structure Wm (120 Deg)	None						54	
70	Structure Wm (150 Deg)	None						54	
71	Structure Wm (180 Deg)	None						54	
72	Structure Wm (210 Deg)	None						54	
73	Structure Wm (240 Deg)	None						54	
74	Structure Wm (270 Deg)	None						54	
75	Structure Wm (300 Deg)	None						54	
76	Structure Wm (330 Deg)	None						54	
77	Lm1	None					1		
78	Lm2	None					1		
79	Lv1	None					1		
80	Lv2	None					1		

Load Combinations

	Description	So...	P...	S...	BLCFac..									
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
14	1.2D + 1.0Di + 1.0Wi (3...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1
15	1.2D + 1.0Di + 1.0Wi (6...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1
16	1.2D + 1.0Di + 1.0Wi (9...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1
17	1.2D + 1.0Di + 1.0Wi (1...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1
18	1.2D + 1.0Di + 1.0Wi (1...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1
19	1.2D + 1.0Di + 1.0Wi (1...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1
20	1.2D + 1.0Di + 1.0Wi (2...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1
21	1.2D + 1.0Di + 1.0Wi (2...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1
22	1.2D + 1.0Di + 1.0Wi (2...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1
23	1.2D + 1.0Di + 1.0Wi (3...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1
24	1.2D + 1.0Di + 1.0Wi (3...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	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



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Load Combinations (Continued)

Joint Coordinates and Temperatures

Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	3.416667	0.145833	8.083333	0
2	N2	-9.083333	0.145833	8.083333	0
3	N3	3.416667	3.479167	8.083333	0
4	N4	-9.083333	3.479167	8.083333	0
5	N5	-8.833333	0.145833	8.083333	0
6	N6	-8.833333	3.479167	8.083333	0
7	N7	-4.833333	0.145833	8.083333	0
8	N8	-4.833333	3.479167	8.083333	0
9	N9	-0.916667	0.145833	8.083333	0
10	N10	-0.916667	3.479167	8.083333	0
11	N11	3	0.145833	8.083333	0
12	N12	3	3.479167	8.083333	0
13	N13	-8.833333	0.145833	8.333333	0
14	N14	-8.833333	3.479167	8.333333	0
15	N15	-4.833333	0.145833	8.333333	0
16	N16	-4.833333	3.479167	8.333333	0



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Joint Coordinates and Temperatures (Continued)

Label		X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
17	N17	-0.916667	0.145833	8.333333	0	
18	N18	-0.916667	3.479167	8.333333	0	
19	N19	3	0.145833	8.333333	0	
20	N20	3	3.479167	8.333333	0	
21	N21	-5.333333	0	8.083333	0	
22	N22	-5.333333	3.333333	8.083333	0	
23	N23	-0.333333	0	8.083333	0	
24	N24	-0.333333	3.333333	8.083333	0	
25	N25	-5.333333	0	7.661458	0	
26	N26	-5.333333	3.333333	7.661458	0	
27	N27	-0.333333	0	7.661458	0	
28	N28	-0.333333	3.333333	7.661458	0	
29	N29	-2.833333	0	6.119792	0	
30	N30	-2.833333	3.333333	6.119792	0	
31	N31	-3.364583	0	6.119792	0	
32	N32	-3.364583	3.333333	6.119792	0	
33	N33	-2.302083	0	6.119792	0	
34	N34	-2.302083	3.333333	6.119792	0	
35	N35	-2.833333	0	5.119792	0	
36	N36	-2.833333	3.333333	5.119792	0	
37	N39	-8.833333	6.3125	8.333333	0	
38	N40	-4.833333	6.3125	8.333333	0	
39	N41	-0.916667	6.3125	8.333333	0	
40	N42	3	6.3125	8.333333	0	
41	N43	-8.833333	-1.6875	8.333333	0	
42	N44	-4.833333	-1.6875	8.333333	0	
43	N45	-0.916667	-1.6875	8.333333	0	
44	N46	3	-1.6875	8.333333	0	
45	N58	-5.333333	3.333333	7.708333	0	
46	N76	-2.927083	0	6.119792	0	
47	N77	-3.229167	0	6.119792	0	
48	N78	-2.739583	0	6.119792	0	
49	N79	-2.4375	0	6.119792	0	
50	N80	-2.927083	3.333333	6.119792	0	
51	N81	-3.229167	3.333333	6.119792	0	
52	N82	-2.739583	3.333333	6.119792	0	
53	N83	-2.4375	3.333333	6.119792	0	
54	N58A	-2.833333	3.479167	8.083333	0	
55	N59	-5.333333	0.145833	8.083333	0	
56	N60	-5.333333	3.479167	8.083333	0	
57	N61	-0.333333	0.145833	8.083333	0	
58	N62	-0.333333	3.479167	8.083333	0	
59	N60A	0.166667	3.479167	8.083333	0	
60	N63	2.166667	3.479167	8.083333	0	
61	N63A	-2.833333	3.666667	2.203125	0	

Hot Rolled Steel Section Sets

Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]	
1	Antenna Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	.102	.627	.627	.125
2	Horizontal mount	PIPE_2.5	Beam	Pipe	A53 Gr. B	Typical	.161	.145	.145	.289
3	Standoff Horizontal	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	.102	.627	.627	.125
4	Standoff Diagonal	SR_0.75	Beam	BAR	A36 Gr.36	Typical	.442	.016	.016	.031
5	Tieback	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	.102	.627	.627	.125
6	Standoff Vertical	SR_0.625	Column	BAR	A36 Gr.36	Typical	.307	.007	.007	.015
7	Standoff Plate	PL5/8X3.5	Beam	BAR	A36 Gr.36	Typical	2.188	.071	2.233	.253



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Hot Rolled Steel Section Sets (Continued)

Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]	
8	tower pipe	PIPE_3.0	Column	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69

Hot Rolled Steel Properties

Label	E [ksi]	G [ksi]	Nu	Therm (/E..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
7 Q235	29000	11154	.3	.65	.49	35	1.5	58	1.2

Member Primary Data

Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N1		Horizontal mou..	Beam	Pipe	A53 Gr. B	Typical
2	M2	N4	N3		Horizontal mou..	Beam	Pipe	A53 Gr. B	Typical
3	M3	N5	N13		RIGID	None	None	RIGID	Typical
4	M4	N6	N14		RIGID	None	None	RIGID	Typical
5	M5	N8	N16		RIGID	None	None	RIGID	Typical
6	M6	N7	N15		RIGID	None	None	RIGID	Typical
7	M9	N10	N18		RIGID	None	None	RIGID	Typical
8	M10	N9	N17		RIGID	None	None	RIGID	Typical
9	M11	N12	N20		RIGID	None	None	RIGID	Typical
10	M12	N11	N19		RIGID	None	None	RIGID	Typical
11	M13	N22	N26	90	Standoff Plate	Beam	BAR	A36 Gr.36	Typical
12	M14	N21	N25	90	Standoff Plate	Beam	BAR	A36 Gr.36	Typical
13	M15	N23	N27	90	Standoff Plate	Beam	BAR	A36 Gr.36	Typical
14	M16	N24	N28	90	Standoff Plate	Beam	BAR	A36 Gr.36	Typical
15	M17	N26	N32		Standoff Horiz...	Beam	Pipe	A53 Gr. B	Typical
16	M18	N25	N31		Standoff Horiz...	Beam	Pipe	A53 Gr. B	Typical
17	M19	N27	N33		Standoff Horiz...	Beam	Pipe	A53 Gr. B	Typical
18	M20	N28	N34		Standoff Horiz...	Beam	Pipe	A53 Gr. B	Typical
19	M21	N32	N30	90	Standoff Plate	Beam	BAR	A36 Gr.36	Typical
20	M22	N34	N30	90	Standoff Plate	Beam	BAR	A36 Gr.36	Typical
21	M23	N31	N29	90	Standoff Plate	Beam	BAR	A36 Gr.36	Typical
22	M24	N33	N29	90	Standoff Plate	Beam	BAR	A36 Gr.36	Typical
23	M25	N31	N26		Standoff Diago..	Beam	BAR	A36 Gr.36	Typical
24	M26	N32	N25		Standoff Diago..	Beam	BAR	A36 Gr.36	Typical
25	M27	N33	N28		Standoff Diago..	Beam	BAR	A36 Gr.36	Typical
26	M28	N27	N34		Standoff Diago..	Beam	BAR	A36 Gr.36	Typical
27	M29	N29	N35		RIGID	None	None	RIGID	Typical
28	M30	N30	N36		RIGID	None	None	RIGID	Typical
29	MP4A	N39	N43		Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
30	MP3A	N40	N44		Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
31	MP2A	N41	N45		Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
32	MP1A	N42	N46		Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
33	M44	N25	N26		Standoff Vertical	Column	BAR	A36 Gr.36	Typical
34	M45	N31	N32		Standoff Vertical	Column	BAR	A36 Gr.36	Typical
35	M46	N33	N34		Standoff Vertical	Column	BAR	A36 Gr.36	Typical
36	M47	N27	N28		Standoff Vertical	Column	BAR	A36 Gr.36	Typical
37	M47B	N22	N60		RIGID	None	None	RIGID	Typical
38	M48A	N21	N59		RIGID	None	None	RIGID	Typical
39	M49A	N24	N62		RIGID	None	None	RIGID	Typical
40	M50A	N23	N61		RIGID	None	None	RIGID	Typical



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Member Primary Data (Continued)

Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
41	M51A	N30	N36		RIGID	None	None	RIGID	Typical
42	M52A	N29	N35		RIGID	None	None	RIGID	Typical
43	M44A	N63	N63A		Tieback	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				None
3	M3					Yes	** NA **			None
4	M4					Yes	** NA **			None
5	M5					Yes	** NA **			None
6	M6					Yes	** NA **			None
7	M9					Yes	** NA **			None
8	M10					Yes	** NA **			None
9	M11					Yes	** NA **			None
10	M12					Yes	** NA **			None
11	M13					Yes	Default			None
12	M14					Yes	Default			None
13	M15					Yes				None
14	M16					Yes				None
15	M17					Yes	Default			None
16	M18					Yes				None
17	M19					Yes				None
18	M20					Yes	Default			None
19	M21					Yes	Default			None
20	M22					Yes				None
21	M23					Yes				None
22	M24					Yes				None
23	M25	BenPIN	BenPIN		Euler Buc...	Yes	Default			None
24	M26	BenPIN	BenPIN		Euler Buc...	Yes	Default			None
25	M27	BenPIN	BenPIN		Euler Buc...	Yes				None
26	M28	BenPIN	BenPIN		Euler Buc...	Yes				None
27	M29					Yes	** NA **		Inactive	None
28	M30					Yes	** NA **		Inactive	None
29	MP4A					Yes	** NA **			None
30	MP3A					Yes	** NA **			None
31	MP2A					Yes	** NA **			None
32	MP1A					Yes	** NA **			None
33	M44	BenPIN	BenPIN			Yes	** NA **			None
34	M45	BenPIN	BenPIN			Yes	** NA **			None
35	M46	BenPIN	BenPIN			Yes	** NA **			None
36	M47	BenPIN	BenPIN			Yes	** NA **			None
37	M47B		OOOXOO			Yes	** NA **			None
38	M48A		OOOXOO			Yes	** NA **			None
39	M49A		OOOXOO			Yes	** NA **			None
40	M50A		OOOXOO			Yes	** NA **			None
41	M51A					Yes	** NA **			None
42	M52A					Yes	** NA **			None
43	M44A	BenPIN				Yes	Default			None

Member Point Loads (BLC 1 : Antenna D)

Member Label		Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	Y	-43.55	2.5
2	MP1A	My	.022	2.5



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

Member Label	Direction	Magnitude[lb,k-ft]	Location[%]
3	MP1A	Mz	0
4	MP1A	Y	-43.55
5	MP1A	My	-.022
6	MP1A	Mz	0
7	MP3A	Y	-10.4
8	MP3A	My	.005
9	MP3A	Mz	0
10	MP2A	Y	-74.7
11	MP2A	My	.037
12	MP2A	Mz	0
13	MP3A	Y	-70.3
14	MP3A	My	.035
15	MP3A	Mz	0
16	M17	Y	-32
17	M17	My	0
18	M17	Mz	0
19	MP3A	Y	-31.65
20	MP3A	My	-.016
21	MP3A	Mz	.016
22	MP3A	Y	-31.65
23	MP3A	My	-.016
24	MP3A	Mz	.016
25	MP3A	Y	-31.65
26	MP3A	My	-.016
27	MP3A	Mz	-.016
28	MP3A	Y	-31.65
29	MP3A	My	-.016
30	MP3A	Mz	-.016

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-36.813	2.5
2	MP1A	My	.018	2.5
3	MP1A	Mz	0	2.5
4	MP1A	Y	-36.813	4.5
5	MP1A	My	.018	4.5
6	MP1A	Mz	0	4.5
7	MP3A	Y	-11.154	6.5
8	MP3A	My	.006	6.5
9	MP3A	Mz	0	6.5
10	MP2A	Y	-46.435	4
11	MP2A	My	.023	4
12	MP2A	Mz	0	4
13	MP3A	Y	-44.225	4
14	MP3A	My	.022	4
15	MP3A	Mz	0	4
16	M17	Y	-90.822	1.25
17	M17	My	0	1.25
18	M17	Mz	0	1.25
19	MP3A	Y	-72.26	2
20	MP3A	My	-.036	2
21	MP3A	Mz	.036	2
22	MP3A	Y	-72.26	5
23	MP3A	My	-.036	5
24	MP3A	Mz	.036	5
25	MP3A	Y	-72.26	2



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
26	MP3A	My	-.036	2
27	MP3A	Mz	-.036	2
28	MP3A	Y	-72.26	5
29	MP3A	My	-.036	5
30	MP3A	Mz	-.036	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	0	2.5
2	MP1A	Z	-89.662	2.5
3	MP1A	Mx	0	2.5
4	MP1A	X	0	4.5
5	MP1A	Z	-89.662	4.5
6	MP1A	Mx	0	4.5
7	MP3A	X	0	6.5
8	MP3A	Z	-14.117	6.5
9	MP3A	Mx	0	6.5
10	MP2A	X	0	4
11	MP2A	Z	-71.348	4
12	MP2A	Mx	0	4
13	MP3A	X	0	4
14	MP3A	Z	-71.348	4
15	MP3A	Mx	0	4
16	M17	X	0	1.25
17	M17	Z	-127.363	1.25
18	M17	Mx	0	1.25
19	MP3A	X	0	2
20	MP3A	Z	-173.791	2
21	MP3A	Mx	-.087	2
22	MP3A	X	0	5
23	MP3A	Z	-173.791	5
24	MP3A	Mx	-.087	5
25	MP3A	X	0	2
26	MP3A	Z	-173.791	2
27	MP3A	Mx	.087	2
28	MP3A	X	0	5
29	MP3A	Z	-173.791	5
30	MP3A	Mx	.087	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	38.011	2.5
2	MP1A	Z	-65.837	2.5
3	MP1A	Mx	.019	2.5
4	MP1A	X	38.011	4.5
5	MP1A	Z	-65.837	4.5
6	MP1A	Mx	.019	4.5
7	MP3A	X	6.515	6.5
8	MP3A	Z	-11.284	6.5
9	MP3A	Mx	.003	6.5
10	MP2A	X	32.717	4
11	MP2A	Z	-56.667	4
12	MP2A	Mx	.016	4
13	MP3A	X	32.18	4
14	MP3A	Z	-55.738	4
15	MP3A	Mx	.016	4



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	M17	X	59.091	1.25
17	M17	Z	-102.348	1.25
18	M17	Mx	0	1.25
19	MP3A	X	79.44	2
20	MP3A	Z	-137.594	2
21	MP3A	Mx	.109	2
22	MP3A	X	79.44	5
23	MP3A	Z	-137.594	5
24	MP3A	Mx	.109	5
25	MP3A	X	79.44	2
26	MP3A	Z	-137.594	2
27	MP3A	Mx	.029	2
28	MP3A	X	79.44	5
29	MP3A	Z	-137.594	5
30	MP3A	Mx	.029	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	42.212	2.5
2	MP1A	Z	-24.371	2.5
3	MP1A	Mx	-.021	2.5
4	MP1A	X	42.212	4.5
5	MP1A	Z	-24.371	4.5
6	MP1A	Mx	-.021	4.5
7	MP3A	X	9.401	6.5
8	MP3A	Z	-5.427	6.5
9	MP3A	Mx	.005	6.5
10	MP2A	X	46.424	4
11	MP2A	Z	-26.803	4
12	MP2A	Mx	.023	4
13	MP3A	X	43.636	4
14	MP3A	Z	-25.194	4
15	MP3A	Mx	.022	4
16	M17	X	110.299	1.25
17	M17	Z	-63.681	1.25
18	M17	Mx	0	1.25
19	MP3A	X	111.765	2
20	MP3A	Z	-64.528	2
21	MP3A	Mx	-.088	2
22	MP3A	X	111.765	5
23	MP3A	Z	-64.528	5
24	MP3A	Mx	-.088	5
25	MP3A	X	111.765	2
26	MP3A	Z	-64.528	2
27	MP3A	Mx	-.024	2
28	MP3A	X	111.765	5
29	MP3A	Z	-64.528	5
30	MP3A	Mx	-.024	5

Member Point Loads (BLC 6 : Antenna W0 (90 Deg))

	Member Label	Direction	Magnitude [lb,k-ft]	Location [ft,%]
1	MP1A	X	35.102	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	-0.18	2.5
4	MP1A	X	35.102	4.5
5	MP1A	Z	0	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP1A	Mx	.018	4.5
7	MP3A	X	9.767	6.5
8	MP3A	Z	0	6.5
9	MP3A	Mx	.005	6.5
10	MP2A	X	47.692	4
11	MP2A	Z	0	4
12	MP2A	Mx	.024	4
13	MP3A	X	43.4	4
14	MP3A	Z	0	4
15	MP3A	Mx	.022	4
16	M17	X	145.724	1.25
17	M17	Z	0	1.25
18	M17	Mx	0	1.25
19	MP3A	X	114.144	2
20	MP3A	Z	0	2
21	MP3A	Mx	-.057	2
22	MP3A	X	114.144	5
23	MP3A	Z	0	5
24	MP3A	Mx	-.057	5
25	MP3A	X	114.144	2
26	MP3A	Z	0	2
27	MP3A	Mx	-.057	2
28	MP3A	X	114.144	5
29	MP3A	Z	0	5
30	MP3A	Mx	-.057	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	42.212	2.5
2	MP1A	Z	24.371	2.5
3	MP1A	Mx	-.021	2.5
4	MP1A	X	42.212	4.5
5	MP1A	Z	24.371	4.5
6	MP1A	Mx	-.021	4.5
7	MP3A	X	9.401	6.5
8	MP3A	Z	5.427	6.5
9	MP3A	Mx	.005	6.5
10	MP2A	X	46.424	4
11	MP2A	Z	26.803	4
12	MP2A	Mx	.023	4
13	MP3A	X	43.636	4
14	MP3A	Z	25.194	4
15	MP3A	Mx	.022	4
16	M17	X	134.152	1.25
17	M17	Z	77.452	1.25
18	M17	Mx	0	1.25
19	MP3A	X	111.765	2
20	MP3A	Z	64.528	2
21	MP3A	Mx	-.024	2
22	MP3A	X	111.765	5
23	MP3A	Z	64.528	5
24	MP3A	Mx	-.024	5
25	MP3A	X	111.765	2
26	MP3A	Z	64.528	2
27	MP3A	Mx	-.088	2
28	MP3A	X	111.765	5



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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP3A	Z	64.528
30	MP3A	Mx	-.088

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	38.011	2.5
2	MP1A	Z	65.837	2.5
3	MP1A	Mx	-.019	2.5
4	MP1A	X	38.011	4.5
5	MP1A	Z	65.837	4.5
6	MP1A	Mx	-.019	4.5
7	MP3A	X	6.515	6.5
8	MP3A	Z	11.284	6.5
9	MP3A	Mx	.003	6.5
10	MP2A	X	32.717	4
11	MP2A	Z	56.667	4
12	MP2A	Mx	.016	4
13	MP3A	X	32.18	4
14	MP3A	Z	55.738	4
15	MP3A	Mx	.016	4
16	M17	X	72.862	1.25
17	M17	Z	126.201	1.25
18	M17	Mx	0	1.25
19	MP3A	X	79.44	2
20	MP3A	Z	137.594	2
21	MP3A	Mx	.029	2
22	MP3A	X	79.44	5
23	MP3A	Z	137.594	5
24	MP3A	Mx	.029	5
25	MP3A	X	79.44	2
26	MP3A	Z	137.594	2
27	MP3A	Mx	-.109	2
28	MP3A	X	79.44	5
29	MP3A	Z	137.594	5
30	MP3A	Mx	-.109	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.5
2	MP1A	Z	89.662	2.5
3	MP1A	Mx	0	2.5
4	MP1A	X	0	4.5
5	MP1A	Z	89.662	4.5
6	MP1A	Mx	0	4.5
7	MP3A	X	0	6.5
8	MP3A	Z	14.117	6.5
9	MP3A	Mx	0	6.5
10	MP2A	X	0	4
11	MP2A	Z	71.348	4
12	MP2A	Mx	0	4
13	MP3A	X	0	4
14	MP3A	Z	71.348	4
15	MP3A	Mx	0	4
16	M17	X	0	1.25
17	M17	Z	127.363	1.25
18	M17	Mx	0	1.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP3A	X	0	2
20	MP3A	Z	173.791	2
21	MP3A	Mx	.087	2
22	MP3A	X	0	5
23	MP3A	Z	173.791	5
24	MP3A	Mx	.087	5
25	MP3A	X	0	2
26	MP3A	Z	173.791	2
27	MP3A	Mx	-.087	2
28	MP3A	X	0	5
29	MP3A	Z	173.791	5
30	MP3A	Mx	-.087	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-38.011	2.5
2	MP1A	Z	65.837	2.5
3	MP1A	Mx	.019	2.5
4	MP1A	X	-38.011	4.5
5	MP1A	Z	65.837	4.5
6	MP1A	Mx	.019	4.5
7	MP3A	X	-6.515	6.5
8	MP3A	Z	11.284	6.5
9	MP3A	Mx	-.003	6.5
10	MP2A	X	-32.717	4
11	MP2A	Z	56.667	4
12	MP2A	Mx	-.016	4
13	MP3A	X	-32.18	4
14	MP3A	Z	55.738	4
15	MP3A	Mx	-.016	4
16	M17	X	-59.091	1.25
17	M17	Z	102.348	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-79.44	2
20	MP3A	Z	137.594	2
21	MP3A	Mx	.109	2
22	MP3A	X	-79.44	5
23	MP3A	Z	137.594	5
24	MP3A	Mx	.109	5
25	MP3A	X	-79.44	2
26	MP3A	Z	137.594	2
27	MP3A	Mx	-.029	2
28	MP3A	X	-79.44	5
29	MP3A	Z	137.594	5
30	MP3A	Mx	-.029	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	-42.212	2.5
2	MP1A	Z	24.371	2.5
3	MP1A	Mx	.021	2.5
4	MP1A	X	-42.212	4.5
5	MP1A	Z	24.371	4.5
6	MP1A	Mx	.021	4.5
7	MP3A	X	-9.401	6.5
8	MP3A	Z	5.427	6.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP3A	Mx	.005	6.5
10	MP2A	X	-46.424	4
11	MP2A	Z	26.803	4
12	MP2A	Mx	-.023	4
13	MP3A	X	-43.636	4
14	MP3A	Z	25.194	4
15	MP3A	Mx	-.022	4
16	M17	X	-110.299	1.25
17	M17	Z	63.681	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-111.765	2
20	MP3A	Z	64.528	2
21	MP3A	Mx	.088	2
22	MP3A	X	-111.765	5
23	MP3A	Z	64.528	5
24	MP3A	Mx	.088	5
25	MP3A	X	-111.765	2
26	MP3A	Z	64.528	2
27	MP3A	Mx	.024	2
28	MP3A	X	-111.765	5
29	MP3A	Z	64.528	5
30	MP3A	Mx	.024	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-35.102	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	.018	2.5
4	MP1A	X	-35.102	4.5
5	MP1A	Z	0	4.5
6	MP1A	Mx	.018	4.5
7	MP3A	X	-9.767	6.5
8	MP3A	Z	0	6.5
9	MP3A	Mx	-.005	6.5
10	MP2A	X	-47.692	4
11	MP2A	Z	0	4
12	MP2A	Mx	-.024	4
13	MP3A	X	-43.4	4
14	MP3A	Z	0	4
15	MP3A	Mx	-.022	4
16	M17	X	-145.724	1.25
17	M17	Z	0	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-114.144	2
20	MP3A	Z	0	2
21	MP3A	Mx	.057	2
22	MP3A	X	-114.144	5
23	MP3A	Z	0	5
24	MP3A	Mx	.057	5
25	MP3A	X	-114.144	2
26	MP3A	Z	0	2
27	MP3A	Mx	.057	2
28	MP3A	X	-114.144	5
29	MP3A	Z	0	5
30	MP3A	Mx	.057	5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-42.212	2.5
2	MP1A	Z	-24.371	2.5
3	MP1A	Mx	.021	2.5
4	MP1A	X	-42.212	4.5
5	MP1A	Z	-24.371	4.5
6	MP1A	Mx	.021	4.5
7	MP3A	X	-9.401	6.5
8	MP3A	Z	-5.427	6.5
9	MP3A	Mx	-.005	6.5
10	MP2A	X	-46.424	4
11	MP2A	Z	-26.803	4
12	MP2A	Mx	-.023	4
13	MP3A	X	-43.636	4
14	MP3A	Z	-25.194	4
15	MP3A	Mx	-.022	4
16	M17	X	-134.152	1.25
17	M17	Z	-77.452	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-111.765	2
20	MP3A	Z	-64.528	2
21	MP3A	Mx	.024	2
22	MP3A	X	-111.765	5
23	MP3A	Z	-64.528	5
24	MP3A	Mx	.024	5
25	MP3A	X	-111.765	2
26	MP3A	Z	-64.528	2
27	MP3A	Mx	.088	2
28	MP3A	X	-111.765	5
29	MP3A	Z	-64.528	5
30	MP3A	Mx	.088	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-38.011	2.5
2	MP1A	Z	-65.837	2.5
3	MP1A	Mx	.019	2.5
4	MP1A	X	-38.011	4.5
5	MP1A	Z	-65.837	4.5
6	MP1A	Mx	.019	4.5
7	MP3A	X	-6.515	6.5
8	MP3A	Z	-11.284	6.5
9	MP3A	Mx	-.003	6.5
10	MP2A	X	-32.717	4
11	MP2A	Z	-56.667	4
12	MP2A	Mx	-.016	4
13	MP3A	X	-32.18	4
14	MP3A	Z	-55.738	4
15	MP3A	Mx	-.016	4
16	M17	X	-72.862	1.25
17	M17	Z	-126.201	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-79.44	2
20	MP3A	Z	-137.594	2
21	MP3A	Mx	-.029	2
22	MP3A	X	-79.44	5
23	MP3A	Z	-137.594	5



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

Member Label		Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP3A	Mx	.029	5
25	MP3A	X	-79.44	2
26	MP3A	Z	-137.594	2
27	MP3A	Mx	.109	2
28	MP3A	X	-79.44	5
29	MP3A	Z	-137.594	5
30	MP3A	Mx	.109	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.5
2	MP1A	Z	-16.797	2.5
3	MP1A	Mx	0	2.5
4	MP1A	X	0	4.5
5	MP1A	Z	-16.797	4.5
6	MP1A	Mx	0	4.5
7	MP3A	X	0	6.5
8	MP3A	Z	-3.463	6.5
9	MP3A	Mx	0	6.5
10	MP2A	X	0	4
11	MP2A	Z	-14.181	4
12	MP2A	Mx	0	4
13	MP3A	X	0	4
14	MP3A	Z	-14.181	4
15	MP3A	Mx	0	4
16	M17	X	0	1.25
17	M17	Z	-24.352	1.25
18	M17	Mx	0	1.25
19	MP3A	X	0	2
20	MP3A	Z	-31.556	2
21	MP3A	Mx	-.016	2
22	MP3A	X	0	5
23	MP3A	Z	-31.556	5
24	MP3A	Mx	-.016	5
25	MP3A	X	0	2
26	MP3A	Z	-31.556	2
27	MP3A	Mx	.016	2
28	MP3A	X	0	5
29	MP3A	Z	-31.556	5
30	MP3A	Mx	.016	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	7.196	2.5
2	MP1A	Z	-12.463	2.5
3	MP1A	Mx	.004	2.5
4	MP1A	X	7.196	4.5
5	MP1A	Z	-12.463	4.5
6	MP1A	Mx	.004	4.5
7	MP3A	X	1.624	6.5
8	MP3A	Z	-2.813	6.5
9	MP3A	Mx	.000812	6.5
10	MP2A	X	6.552	4
11	MP2A	Z	-11.349	4
12	MP2A	Mx	.003	4
13	MP3A	X	6.455	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
14	MP3A	Z	-11.181	4
15	MP3A	Mx	.003	4
16	M17	X	11.385	1.25
17	M17	Z	-19.719	1.25
18	M17	Mx	0	1.25
19	MP3A	X	14.527	2
20	MP3A	Z	-25.162	2
21	MP3A	Mx	-.02	2
22	MP3A	X	14.527	5
23	MP3A	Z	-25.162	5
24	MP3A	Mx	-.02	5
25	MP3A	X	14.527	2
26	MP3A	Z	-25.162	2
27	MP3A	Mx	.005	2
28	MP3A	X	14.527	5
29	MP3A	Z	-25.162	5
30	MP3A	Mx	.005	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	8.296	2.5
2	MP1A	Z	-4.79	2.5
3	MP1A	Mx	-.004	2.5
4	MP1A	X	8.296	4.5
5	MP1A	Z	-4.79	4.5
6	MP1A	Mx	-.004	4.5
7	MP3A	X	2.441	6.5
8	MP3A	Z	-1.409	6.5
9	MP3A	Mx	.001	6.5
10	MP2A	X	9.485	4
11	MP2A	Z	-5.476	4
12	MP2A	Mx	.005	4
13	MP3A	X	8.982	4
14	MP3A	Z	-5.185	4
15	MP3A	Mx	.004	4
16	M17	X	21.09	1.25
17	M17	Z	-12.176	1.25
18	M17	Mx	0	1.25
19	MP3A	X	20.829	2
20	MP3A	Z	-12.026	2
21	MP3A	Mx	-.016	2
22	MP3A	X	20.829	5
23	MP3A	Z	-12.026	5
24	MP3A	Mx	-.016	5
25	MP3A	X	20.829	2
26	MP3A	Z	-12.026	2
27	MP3A	Mx	-.004	2
28	MP3A	X	20.829	5
29	MP3A	Z	-12.026	5
30	MP3A	Mx	-.004	5

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

Member Label		Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	7.173	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	-.004	2.5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP1A	X	7.173
5	MP1A	Z	0
6	MP1A	Mx	-.004
7	MP3A	X	2.603
8	MP3A	Z	0
9	MP3A	Mx	.001
10	MP2A	X	9.876
11	MP2A	Z	0
12	MP2A	Mx	.005
13	MP3A	X	9.101
14	MP3A	Z	0
15	MP3A	Mx	.005
16	M17	X	27.517
17	M17	Z	0
18	M17	Mx	0
19	MP3A	X	21.55
20	MP3A	Z	0
21	MP3A	Mx	-.011
22	MP3A	X	21.55
23	MP3A	Z	0
24	MP3A	Mx	-.011
25	MP3A	X	21.55
26	MP3A	Z	0
27	MP3A	Mx	-.011
28	MP3A	X	21.55
29	MP3A	Z	0
30	MP3A	Mx	-.011

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	8.296
2	MP1A	Z	4.79
3	MP1A	Mx	-.004
4	MP1A	X	8.296
5	MP1A	Z	4.79
6	MP1A	Mx	-.004
7	MP3A	X	2.441
8	MP3A	Z	1.409
9	MP3A	Mx	.001
10	MP2A	X	9.485
11	MP2A	Z	5.476
12	MP2A	Mx	.005
13	MP3A	X	8.982
14	MP3A	Z	5.185
15	MP3A	Mx	.004
16	M17	X	25.2
17	M17	Z	14.549
18	M17	Mx	0
19	MP3A	X	20.829
20	MP3A	Z	12.026
21	MP3A	Mx	-.004
22	MP3A	X	20.829
23	MP3A	Z	12.026
24	MP3A	Mx	-.004
25	MP3A	X	20.829
26	MP3A	Z	12.026



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP3A	Mx	-.016	2
28	MP3A	X	20.829	5
29	MP3A	Z	12.026	5
30	MP3A	Mx	-.016	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	7.196	2.5
2	MP1A	Z	12.463	2.5
3	MP1A	Mx	-.004	2.5
4	MP1A	X	7.196	4.5
5	MP1A	Z	12.463	4.5
6	MP1A	Mx	-.004	4.5
7	MP3A	X	1.624	6.5
8	MP3A	Z	2.813	6.5
9	MP3A	Mx	.000812	6.5
10	MP2A	X	6.552	4
11	MP2A	Z	11.349	4
12	MP2A	Mx	.003	4
13	MP3A	X	6.455	4
14	MP3A	Z	11.181	4
15	MP3A	Mx	.003	4
16	M17	X	13.758	1.25
17	M17	Z	23.83	1.25
18	M17	Mx	0	1.25
19	MP3A	X	14.527	2
20	MP3A	Z	25.162	2
21	MP3A	Mx	.005	2
22	MP3A	X	14.527	5
23	MP3A	Z	25.162	5
24	MP3A	Mx	.005	5
25	MP3A	X	14.527	2
26	MP3A	Z	25.162	2
27	MP3A	Mx	-.02	2
28	MP3A	X	14.527	5
29	MP3A	Z	25.162	5
30	MP3A	Mx	-.02	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.5
2	MP1A	Z	16.797	2.5
3	MP1A	Mx	0	2.5
4	MP1A	X	0	4.5
5	MP1A	Z	16.797	4.5
6	MP1A	Mx	0	4.5
7	MP3A	X	0	6.5
8	MP3A	Z	3.463	6.5
9	MP3A	Mx	0	6.5
10	MP2A	X	0	4
11	MP2A	Z	14.181	4
12	MP2A	Mx	0	4
13	MP3A	X	0	4
14	MP3A	Z	14.181	4
15	MP3A	Mx	0	4
16	M17	X	0	1.25



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	M17	Z	24.352	1.25
18	M17	Mx	0	1.25
19	MP3A	X	0	2
20	MP3A	Z	31.556	2
21	MP3A	Mx	.016	2
22	MP3A	X	0	5
23	MP3A	Z	31.556	5
24	MP3A	Mx	.016	5
25	MP3A	X	0	2
26	MP3A	Z	31.556	2
27	MP3A	Mx	-.016	2
28	MP3A	X	0	5
29	MP3A	Z	31.556	5
30	MP3A	Mx	-.016	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-7.196	2.5
2	MP1A	Z	12.463	2.5
3	MP1A	Mx	.004	2.5
4	MP1A	X	-7.196	4.5
5	MP1A	Z	12.463	4.5
6	MP1A	Mx	.004	4.5
7	MP3A	X	-1.624	6.5
8	MP3A	Z	2.813	6.5
9	MP3A	Mx	-.000812	6.5
10	MP2A	X	-6.552	4
11	MP2A	Z	11.349	4
12	MP2A	Mx	-.003	4
13	MP3A	X	-6.455	4
14	MP3A	Z	11.181	4
15	MP3A	Mx	-.003	4
16	M17	X	-11.385	1.25
17	M17	Z	19.719	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-14.527	2
20	MP3A	Z	25.162	2
21	MP3A	Mx	.02	2
22	MP3A	X	-14.527	5
23	MP3A	Z	25.162	5
24	MP3A	Mx	.02	5
25	MP3A	X	-14.527	2
26	MP3A	Z	25.162	2
27	MP3A	Mx	-.005	2
28	MP3A	X	-14.527	5
29	MP3A	Z	25.162	5
30	MP3A	Mx	-.005	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-8.296	2.5
2	MP1A	Z	4.79	2.5
3	MP1A	Mx	.004	2.5
4	MP1A	X	-8.296	4.5
5	MP1A	Z	4.79	4.5
6	MP1A	Mx	.004	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
7	MP3A	X	-2.441	6.5
8	MP3A	Z	1.409	6.5
9	MP3A	Mx	.001	6.5
10	MP2A	X	-9.485	4
11	MP2A	Z	5.476	4
12	MP2A	Mx	.005	4
13	MP3A	X	-8.982	4
14	MP3A	Z	5.185	4
15	MP3A	Mx	.004	4
16	M17	X	-21.09	1.25
17	M17	Z	12.176	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-20.829	2
20	MP3A	Z	12.026	2
21	MP3A	Mx	.016	2
22	MP3A	X	-20.829	5
23	MP3A	Z	12.026	5
24	MP3A	Mx	.016	5
25	MP3A	X	-20.829	2
26	MP3A	Z	12.026	2
27	MP3A	Mx	.004	2
28	MP3A	X	-20.829	5
29	MP3A	Z	12.026	5
30	MP3A	Mx	.004	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	-7.173	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	.004	2.5
4	MP1A	X	-7.173	4.5
5	MP1A	Z	0	4.5
6	MP1A	Mx	.004	4.5
7	MP3A	X	-2.603	6.5
8	MP3A	Z	0	6.5
9	MP3A	Mx	-.001	6.5
10	MP2A	X	-9.876	4
11	MP2A	Z	0	4
12	MP2A	Mx	-.005	4
13	MP3A	X	-9.101	4
14	MP3A	Z	0	4
15	MP3A	Mx	-.005	4
16	M17	X	-27.517	1.25
17	M17	Z	0	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-21.55	2
20	MP3A	Z	0	2
21	MP3A	Mx	.011	2
22	MP3A	X	-21.55	5
23	MP3A	Z	0	5
24	MP3A	Mx	.011	5
25	MP3A	X	-21.55	2
26	MP3A	Z	0	2
27	MP3A	Mx	.011	2
28	MP3A	X	-21.55	5
29	MP3A	Z	0	5



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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	MP3A	Mx	.011

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-8.296	2.5
2	MP1A	Z	-4.79	2.5
3	MP1A	Mx	.004	2.5
4	MP1A	X	-8.296	4.5
5	MP1A	Z	-4.79	4.5
6	MP1A	Mx	.004	4.5
7	MP3A	X	-2.441	6.5
8	MP3A	Z	-1.409	6.5
9	MP3A	Mx	-.001	6.5
10	MP2A	X	-9.485	4
11	MP2A	Z	-5.476	4
12	MP2A	Mx	-.005	4
13	MP3A	X	-8.982	4
14	MP3A	Z	-5.185	4
15	MP3A	Mx	-.004	4
16	M17	X	-25.2	1.25
17	M17	Z	-14.549	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-20.829	2
20	MP3A	Z	-12.026	2
21	MP3A	Mx	.004	2
22	MP3A	X	-20.829	5
23	MP3A	Z	-12.026	5
24	MP3A	Mx	.004	5
25	MP3A	X	-20.829	2
26	MP3A	Z	-12.026	2
27	MP3A	Mx	.016	2
28	MP3A	X	-20.829	5
29	MP3A	Z	-12.026	5
30	MP3A	Mx	.016	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-7.196	2.5
2	MP1A	Z	-12.463	2.5
3	MP1A	Mx	.004	2.5
4	MP1A	X	-7.196	4.5
5	MP1A	Z	-12.463	4.5
6	MP1A	Mx	.004	4.5
7	MP3A	X	-1.624	6.5
8	MP3A	Z	-2.813	6.5
9	MP3A	Mx	-0.00812	6.5
10	MP2A	X	-6.552	4
11	MP2A	Z	-11.349	4
12	MP2A	Mx	-.003	4
13	MP3A	X	-6.455	4
14	MP3A	Z	-11.181	4
15	MP3A	Mx	-.003	4
16	M17	X	-13.758	1.25
17	M17	Z	-23.83	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-14.527	2



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP3A	Z	-25.162	2
21	MP3A	Mx	.005	2
22	MP3A	X	-14.527	5
23	MP3A	Z	-25.162	5
24	MP3A	Mx	.005	5
25	MP3A	X	-14.527	2
26	MP3A	Z	-25.162	2
27	MP3A	Mx	.02	2
28	MP3A	X	-14.527	5
29	MP3A	Z	-25.162	5
30	MP3A	Mx	.02	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.5
2	MP1A	Z	-5.334	2.5
3	MP1A	Mx	0	2.5
4	MP1A	X	0	4.5
5	MP1A	Z	-5.334	4.5
6	MP1A	Mx	0	4.5
7	MP3A	X	0	6.5
8	MP3A	Z	-.84	6.5
9	MP3A	Mx	0	6.5
10	MP2A	X	0	4
11	MP2A	Z	-4.244	4
12	MP2A	Mx	0	4
13	MP3A	X	0	4
14	MP3A	Z	-4.244	4
15	MP3A	Mx	0	4
16	M17	X	0	1.25
17	M17	Z	-7.577	1.25
18	M17	Mx	0	1.25
19	MP3A	X	0	2
20	MP3A	Z	-10.339	2
21	MP3A	Mx	-.005	2
22	MP3A	X	0	5
23	MP3A	Z	-10.339	5
24	MP3A	Mx	-.005	5
25	MP3A	X	0	2
26	MP3A	Z	-10.339	2
27	MP3A	Mx	.005	2
28	MP3A	X	0	5
29	MP3A	Z	-10.339	5
30	MP3A	Mx	.005	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	2.261	2.5
2	MP1A	Z	-3.917	2.5
3	MP1A	Mx	-.001	2.5
4	MP1A	X	2.261	4.5
5	MP1A	Z	-3.917	4.5
6	MP1A	Mx	-.001	4.5
7	MP3A	X	.388	6.5
8	MP3A	Z	-.671	6.5
9	MP3A	Mx	.000194	6.5



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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	MP2A	X	1.946
11	MP2A	Z	-3.371
12	MP2A	Mx	.000973
13	MP3A	X	1.914
14	MP3A	Z	-3.316
15	MP3A	Mx	.000957
16	M17	X	3.515
17	M17	Z	-6.089
18	M17	Mx	0
19	MP3A	X	4.726
20	MP3A	Z	-8.185
21	MP3A	Mx	-.006
22	MP3A	X	4.726
23	MP3A	Z	-8.185
24	MP3A	Mx	-.006
25	MP3A	X	4.726
26	MP3A	Z	-8.185
27	MP3A	Mx	.002
28	MP3A	X	4.726
29	MP3A	Z	-8.185
30	MP3A	Mx	.002

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP1A	X	2.511	2.5
2	MP1A	Z	-1.45	2.5
3	MP1A	Mx	-.001	2.5
4	MP1A	X	2.511	4.5
5	MP1A	Z	-1.45	4.5
6	MP1A	Mx	-.001	4.5
7	MP3A	X	.559	6.5
8	MP3A	Z	-.323	6.5
9	MP3A	Mx	.00028	6.5
10	MP2A	X	2.762	4
11	MP2A	Z	-1.594	4
12	MP2A	Mx	.001	4
13	MP3A	X	2.596	4
14	MP3A	Z	-1.499	4
15	MP3A	Mx	.001	4
16	M17	X	6.562	1.25
17	M17	Z	-3.788	1.25
18	M17	Mx	0	1.25
19	MP3A	X	6.649	2
20	MP3A	Z	-3.839	2
21	MP3A	Mx	-.005	2
22	MP3A	X	6.649	5
23	MP3A	Z	-3.839	5
24	MP3A	Mx	-.005	5
25	MP3A	X	6.649	2
26	MP3A	Z	-3.839	2
27	MP3A	Mx	-.001	2
28	MP3A	X	6.649	5
29	MP3A	Z	-3.839	5
30	MP3A	Mx	-.001	5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.088	2.5
2	MP1A	Z	0	2.5
3	MP1A	Mx	-.001	2.5
4	MP1A	X	2.088	4.5
5	MP1A	Z	0	4.5
6	MP1A	Mx	-.001	4.5
7	MP3A	X	.581	6.5
8	MP3A	Z	0	6.5
9	MP3A	Mx	.00029	6.5
10	MP2A	X	2.837	4
11	MP2A	Z	0	4
12	MP2A	Mx	.001	4
13	MP3A	X	2.582	4
14	MP3A	Z	0	4
15	MP3A	Mx	.001	4
16	M17	X	8.669	1.25
17	M17	Z	0	1.25
18	M17	Mx	0	1.25
19	MP3A	X	6.79	2
20	MP3A	Z	0	2
21	MP3A	Mx	-.003	2
22	MP3A	X	6.79	5
23	MP3A	Z	0	5
24	MP3A	Mx	-.003	5
25	MP3A	X	6.79	2
26	MP3A	Z	0	2
27	MP3A	Mx	-.003	2
28	MP3A	X	6.79	5
29	MP3A	Z	0	5
30	MP3A	Mx	-.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.511	2.5
2	MP1A	Z	1.45	2.5
3	MP1A	Mx	-.001	2.5
4	MP1A	X	2.511	4.5
5	MP1A	Z	1.45	4.5
6	MP1A	Mx	-.001	4.5
7	MP3A	X	.559	6.5
8	MP3A	Z	.323	6.5
9	MP3A	Mx	.00028	6.5
10	MP2A	X	2.762	4
11	MP2A	Z	1.594	4
12	MP2A	Mx	.001	4
13	MP3A	X	2.596	4
14	MP3A	Z	1.499	4
15	MP3A	Mx	.001	4
16	M17	X	7.98	1.25
17	M17	Z	4.608	1.25
18	M17	Mx	0	1.25
19	MP3A	X	6.649	2
20	MP3A	Z	3.839	2
21	MP3A	Mx	-.001	2
22	MP3A	X	6.649	5
23	MP3A	Z	3.839	5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP3A	Mx	-.001
25	MP3A	X	6.649
26	MP3A	Z	3.839
27	MP3A	Mx	-.005
28	MP3A	X	6.649
29	MP3A	Z	3.839
30	MP3A	Mx	-.005

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.261
2	MP1A	Z	3.917
3	MP1A	Mx	-.001
4	MP1A	X	2.261
5	MP1A	Z	3.917
6	MP1A	Mx	-.001
7	MP3A	X	.388
8	MP3A	Z	.671
9	MP3A	Mx	.000194
10	MP2A	X	1.946
11	MP2A	Z	3.371
12	MP2A	Mx	.000973
13	MP3A	X	1.914
14	MP3A	Z	3.316
15	MP3A	Mx	.000957
16	M17	X	4.334
17	M17	Z	7.507
18	M17	Mx	0
19	MP3A	X	4.726
20	MP3A	Z	8.185
21	MP3A	Mx	.002
22	MP3A	X	4.726
23	MP3A	Z	8.185
24	MP3A	Mx	.002
25	MP3A	X	4.726
26	MP3A	Z	8.185
27	MP3A	Mx	-.006
28	MP3A	X	4.726
29	MP3A	Z	8.185
30	MP3A	Mx	-.006

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0
2	MP1A	Z	5.334
3	MP1A	Mx	0
4	MP1A	X	0
5	MP1A	Z	5.334
6	MP1A	Mx	0
7	MP3A	X	0
8	MP3A	Z	.84
9	MP3A	Mx	0
10	MP2A	X	0
11	MP2A	Z	4.244
12	MP2A	Mx	0
13	MP3A	X	0



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
14	MP3A	Z	4.244	4
15	MP3A	Mx	0	4
16	M17	X	0	1.25
17	M17	Z	7.577	1.25
18	M17	Mx	0	1.25
19	MP3A	X	0	2
20	MP3A	Z	10.339	2
21	MP3A	Mx	.005	2
22	MP3A	X	0	5
23	MP3A	Z	10.339	5
24	MP3A	Mx	.005	5
25	MP3A	X	0	2
26	MP3A	Z	10.339	2
27	MP3A	Mx	-.005	2
28	MP3A	X	0	5
29	MP3A	Z	10.339	5
30	MP3A	Mx	-.005	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.261	2.5
2	MP1A	Z	3.917	2.5
3	MP1A	Mx	.001	2.5
4	MP1A	X	-2.261	4.5
5	MP1A	Z	3.917	4.5
6	MP1A	Mx	.001	4.5
7	MP3A	X	-.388	6.5
8	MP3A	Z	.671	6.5
9	MP3A	Mx	-.000194	6.5
10	MP2A	X	-1.946	4
11	MP2A	Z	3.371	4
12	MP2A	Mx	-.000973	4
13	MP3A	X	-1.914	4
14	MP3A	Z	3.316	4
15	MP3A	Mx	-.000957	4
16	M17	X	-3.515	1.25
17	M17	Z	6.089	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-4.726	2
20	MP3A	Z	8.185	2
21	MP3A	Mx	.006	2
22	MP3A	X	-4.726	5
23	MP3A	Z	8.185	5
24	MP3A	Mx	.006	5
25	MP3A	X	-4.726	2
26	MP3A	Z	8.185	2
27	MP3A	Mx	-.002	2
28	MP3A	X	-4.726	5
29	MP3A	Z	8.185	5
30	MP3A	Mx	-.002	5

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

Member Label		Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.511	2.5
2	MP1A	Z	1.45	2.5
3	MP1A	Mx	.001	2.5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP1A	X	-2.511
5	MP1A	Z	1.45
6	MP1A	Mx	.001
7	MP3A	X	-.559
8	MP3A	Z	.323
9	MP3A	Mx	-.00028
10	MP2A	X	-2.762
11	MP2A	Z	1.594
12	MP2A	Mx	-.001
13	MP3A	X	-2.596
14	MP3A	Z	1.499
15	MP3A	Mx	-.001
16	M17	X	-6.562
17	M17	Z	3.788
18	M17	Mx	0
19	MP3A	X	-6.649
20	MP3A	Z	3.839
21	MP3A	Mx	.005
22	MP3A	X	-6.649
23	MP3A	Z	3.839
24	MP3A	Mx	.005
25	MP3A	X	-6.649
26	MP3A	Z	3.839
27	MP3A	Mx	.001
28	MP3A	X	-6.649
29	MP3A	Z	3.839
30	MP3A	Mx	.001

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.088
2	MP1A	Z	0
3	MP1A	Mx	.001
4	MP1A	X	-2.088
5	MP1A	Z	0
6	MP1A	Mx	.001
7	MP3A	X	-.581
8	MP3A	Z	0
9	MP3A	Mx	-.00029
10	MP2A	X	-2.837
11	MP2A	Z	0
12	MP2A	Mx	-.001
13	MP3A	X	-2.582
14	MP3A	Z	0
15	MP3A	Mx	-.001
16	M17	X	-8.669
17	M17	Z	0
18	M17	Mx	0
19	MP3A	X	-6.79
20	MP3A	Z	0
21	MP3A	Mx	.003
22	MP3A	X	-6.79
23	MP3A	Z	0
24	MP3A	Mx	.003
25	MP3A	X	-6.79
26	MP3A	Z	0



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

Member Label		Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP3A	Mx	.003	2
28	MP3A	X	-6.79	5
29	MP3A	Z	0	5
30	MP3A	Mx	.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.511	2.5
2	MP1A	Z	-1.45	2.5
3	MP1A	Mx	.001	2.5
4	MP1A	X	-2.511	4.5
5	MP1A	Z	-1.45	4.5
6	MP1A	Mx	.001	4.5
7	MP3A	X	-.559	6.5
8	MP3A	Z	-.323	6.5
9	MP3A	Mx	-.00028	6.5
10	MP2A	X	-2.762	4
11	MP2A	Z	-1.594	4
12	MP2A	Mx	-.001	4
13	MP3A	X	-2.596	4
14	MP3A	Z	-1.499	4
15	MP3A	Mx	-.001	4
16	M17	X	-7.98	1.25
17	M17	Z	-4.608	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-6.649	2
20	MP3A	Z	-3.839	2
21	MP3A	Mx	.001	2
22	MP3A	X	-6.649	5
23	MP3A	Z	-3.839	5
24	MP3A	Mx	.001	5
25	MP3A	X	-6.649	2
26	MP3A	Z	-3.839	2
27	MP3A	Mx	.005	2
28	MP3A	X	-6.649	5
29	MP3A	Z	-3.839	5
30	MP3A	Mx	.005	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.261	2.5
2	MP1A	Z	-3.917	2.5
3	MP1A	Mx	.001	2.5
4	MP1A	X	-2.261	4.5
5	MP1A	Z	-3.917	4.5
6	MP1A	Mx	.001	4.5
7	MP3A	X	-.388	6.5
8	MP3A	Z	-.671	6.5
9	MP3A	Mx	-.000194	6.5
10	MP2A	X	-1.946	4
11	MP2A	Z	-3.371	4
12	MP2A	Mx	-.000973	4
13	MP3A	X	-1.914	4
14	MP3A	Z	-3.316	4
15	MP3A	Mx	-.000957	4
16	M17	X	-4.334	1.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	M17	Z	-7.507	1.25
18	M17	Mx	0	1.25
19	MP3A	X	-4.726	2
20	MP3A	Z	-8.185	2
21	MP3A	Mx	.002	2
22	MP3A	X	-4.726	5
23	MP3A	Z	-8.185	5
24	MP3A	Mx	.002	5
25	MP3A	X	-4.726	2
26	MP3A	Z	-8.185	2
27	MP3A	Mx	.006	2
28	MP3A	X	-4.726	5
29	MP3A	Z	-8.185	5
30	MP3A	Mx	.006	5

Member Point Loads (BLC 77 : Lm1)

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1 M1	Y	-500	%34

Member Point Loads (BLC 78 : Lm2)

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1 M1	Y	-500	%97

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

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

Member Distributed Loads (BLC 40 : Structure D)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-5.902	-5.902	0	%100
2	M2	Y	-5.902	-5.902	0	%100
3	M13	Y	-6.89	-6.89	0	%100
4	M14	Y	-6.89	-6.89	0	%100
5	M15	Y	-6.89	-6.89	0	%100
6	M16	Y	-6.89	-6.89	0	%100
7	M17	Y	-5.176	-5.176	0	%100
8	M18	Y	-5.176	-5.176	0	%100
9	M19	Y	-5.176	-5.176	0	%100
10	M20	Y	-5.176	-5.176	0	%100
11	M21	Y	-6.89	-6.89	0	%100
12	M22	Y	-6.89	-6.89	0	%100
13	M23	Y	-6.89	-6.89	0	%100
14	M24	Y	-6.89	-6.89	0	%100
15	M25	Y	-2.816	-2.816	0	%100
16	M26	Y	-2.816	-2.816	0	%100
17	M27	Y	-2.816	-2.816	0	%100
18	M28	Y	-2.816	-2.816	0	%100
19	MP4A	Y	-5.176	-5.176	0	%100
20	MP3A	Y	-5.176	-5.176	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
21	MP2A	Y	-5.176	-5.176	0 %100
22	MP1A	Y	-5.176	-5.176	0 %100
23	M44	Y	-2.634	-2.634	0 %100
24	M45	Y	-2.634	-2.634	0 %100
25	M46	Y	-2.634	-2.634	0 %100
26	M47	Y	-2.634	-2.634	0 %100
27	M44A	Y	-5.176	-5.176	0 %100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-10.969	-10.969	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-10.969	-10.969	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-4.331	-4.331	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-4.331	-4.331	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-4.331	-4.331	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-4.331	-4.331	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-2.385	-2.385	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-2.385	-2.385	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-2.385	-2.385	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-2.385	-2.385	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-2.47	-2.47	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-2.47	-2.47	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-2.47	-2.47	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-2.47	-2.47	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	-9.062	-9.062	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-9.062	-9.062	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-9.062	-9.062	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-9.062	-9.062	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-2.385	-2.385	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
47	M45	X	0	0	%100
48	M45	Z	-2.385	-2.385	0
49	M46	X	0	0	%100
50	M46	Z	-2.385	-2.385	0
51	M47	X	0	0	%100
52	M47	Z	-2.385	-2.385	0
53	M44A	X	0	0	%100
54	M44A	Z	-3.806	-3.806	0

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.113	4.113	0	%100
2	M1	Z	-7.125	-7.125	0	%100
3	M2	X	4.113	4.113	0	%100
4	M2	Z	-7.125	-7.125	0	%100
5	M13	X	.298	.298	0	%100
6	M13	Z	-.516	-.516	0	%100
7	M14	X	.298	.298	0	%100
8	M14	Z	-.516	-.516	0	%100
9	M15	X	.298	.298	0	%100
10	M15	Z	-.516	-.516	0	%100
11	M16	X	.298	.298	0	%100
12	M16	Z	-.516	-.516	0	%100
13	M17	X	.488	.488	0	%100
14	M17	Z	-.844	-.844	0	%100
15	M18	X	.488	.488	0	%100
16	M18	Z	-.844	-.844	0	%100
17	M19	X	3.425	3.425	0	%100
18	M19	Z	-5.931	-5.931	0	%100
19	M20	X	3.425	3.425	0	%100
20	M20	Z	-5.931	-5.931	0	%100
21	M21	X	.894	.894	0	%100
22	M21	Z	-1.549	-1.549	0	%100
23	M22	X	.894	.894	0	%100
24	M22	Z	-1.549	-1.549	0	%100
25	M23	X	.894	.894	0	%100
26	M23	Z	-1.549	-1.549	0	%100
27	M24	X	.894	.894	0	%100
28	M24	Z	-1.549	-1.549	0	%100
29	M25	X	.987	.987	0	%100
30	M25	Z	-1.71	-1.71	0	%100
31	M26	X	.987	.987	0	%100
32	M26	Z	-1.71	-1.71	0	%100
33	M27	X	1.421	1.421	0	%100
34	M27	Z	-2.461	-2.461	0	%100
35	M28	X	1.421	1.421	0	%100
36	M28	Z	-2.461	-2.461	0	%100
37	MP4A	X	4.531	4.531	0	%100
38	MP4A	Z	-7.848	-7.848	0	%100
39	MP3A	X	4.531	4.531	0	%100
40	MP3A	Z	-7.848	-7.848	0	%100
41	MP2A	X	4.531	4.531	0	%100
42	MP2A	Z	-7.848	-7.848	0	%100
43	MP1A	X	4.531	4.531	0	%100
44	MP1A	Z	-7.848	-7.848	0	%100
45	M44	X	1.192	1.192	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[f, %]	End Location[f, %]	
46	M44	Z	-2.065	-2.065	0	%100
47	M45	X	1.192	1.192	0	%100
48	M45	Z	-2.065	-2.065	0	%100
49	M46	X	1.192	1.192	0	%100
50	M46	Z	-2.065	-2.065	0	%100
51	M47	X	1.192	1.192	0	%100
52	M47	Z	-2.065	-2.065	0	%100
53	M44A	X	4.02	4.02	0	%100
54	M44A	Z	-6.963	-6.963	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]	
1	M1	X	2.375	2.375	0	%100
2	M1	Z	-1.371	-1.371	0	%100
3	M2	X	2.375	2.375	0	%100
4	M2	Z	-1.371	-1.371	0	%100
5	M13	X	1.549	1.549	0	%100
6	M13	Z	-.894	-.894	0	%100
7	M14	X	1.549	1.549	0	%100
8	M14	Z	-.894	-.894	0	%100
9	M15	X	1.549	1.549	0	%100
10	M15	Z	-.894	-.894	0	%100
11	M16	X	1.549	1.549	0	%100
12	M16	Z	-.894	-.894	0	%100
13	M17	X	.119	.119	0	%100
14	M17	Z	-.069	-.069	0	%100
15	M18	X	.119	.119	0	%100
16	M18	Z	-.069	-.069	0	%100
17	M19	X	5.206	5.206	0	%100
18	M19	Z	-3.006	-3.006	0	%100
19	M20	X	5.206	5.206	0	%100
20	M20	Z	-3.006	-3.006	0	%100
21	M21	X	.516	.516	0	%100
22	M21	Z	-.298	-.298	0	%100
23	M22	X	.516	.516	0	%100
24	M22	Z	-.298	-.298	0	%100
25	M23	X	.516	.516	0	%100
26	M23	Z	-.298	-.298	0	%100
27	M24	X	.516	.516	0	%100
28	M24	Z	-.298	-.298	0	%100
29	M25	X	1.603	1.603	0	%100
30	M25	Z	-.926	-.926	0	%100
31	M26	X	1.603	1.603	0	%100
32	M26	Z	-.926	-.926	0	%100
33	M27	X	2.354	2.354	0	%100
34	M27	Z	-1.359	-1.359	0	%100
35	M28	X	2.354	2.354	0	%100
36	M28	Z	-1.359	-1.359	0	%100
37	MP4A	X	7.848	7.848	0	%100
38	MP4A	Z	-4.531	-4.531	0	%100
39	MP3A	X	7.848	7.848	0	%100
40	MP3A	Z	-4.531	-4.531	0	%100
41	MP2A	X	7.848	7.848	0	%100
42	MP2A	Z	-4.531	-4.531	0	%100
43	MP1A	X	7.848	7.848	0	%100
44	MP1A	Z	-4.531	-4.531	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]	
45	M44	X	2.065	2.065	0	%100
46	M44	Z	-1.192	-1.192	0	%100
47	M45	X	2.065	2.065	0	%100
48	M45	Z	-1.192	-1.192	0	%100
49	M46	X	2.065	2.065	0	%100
50	M46	Z	-1.192	-1.192	0	%100
51	M47	X	2.065	2.065	0	%100
52	M47	Z	-1.192	-1.192	0	%100
53	M44A	X	7.593	7.593	0	%100
54	M44A	Z	-4.384	-4.384	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	2.385	2.385	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	2.385	2.385	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	2.385	2.385	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	2.385	2.385	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	2.656	2.656	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	2.656	2.656	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	2.656	2.656	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	2.656	2.656	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	2.223	2.223	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	2.223	2.223	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	2.223	2.223	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	2.223	2.223	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	9.062	9.062	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	9.062	9.062	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	9.062	9.062	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	9.062	9.062	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
44	MP1A	Z	0	0	%100
45	M44	X	2.385	2.385	0
46	M44	Z	0	0	%100
47	M45	X	2.385	2.385	0
48	M45	Z	0	0	%100
49	M46	X	2.385	2.385	0
50	M46	Z	0	0	%100
51	M47	X	2.385	2.385	0
52	M47	Z	0	0	%100
53	M44A	X	5.261	5.261	0
54	M44A	Z	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.375	2.375	0	%100
2	M1	Z	1.371	1.371	0	%100
3	M2	X	2.375	2.375	0	%100
4	M2	Z	1.371	1.371	0	%100
5	M13	X	1.549	1.549	0	%100
6	M13	Z	.894	.894	0	%100
7	M14	X	1.549	1.549	0	%100
8	M14	Z	.894	.894	0	%100
9	M15	X	1.549	1.549	0	%100
10	M15	Z	.894	.894	0	%100
11	M16	X	1.549	1.549	0	%100
12	M16	Z	.894	.894	0	%100
13	M17	X	5.206	5.206	0	%100
14	M17	Z	3.006	3.006	0	%100
15	M18	X	5.206	5.206	0	%100
16	M18	Z	3.006	3.006	0	%100
17	M19	X	.119	.119	0	%100
18	M19	Z	.069	.069	0	%100
19	M20	X	.119	.119	0	%100
20	M20	Z	.069	.069	0	%100
21	M21	X	.516	.516	0	%100
22	M21	Z	.298	.298	0	%100
23	M22	X	.516	.516	0	%100
24	M22	Z	.298	.298	0	%100
25	M23	X	.516	.516	0	%100
26	M23	Z	.298	.298	0	%100
27	M24	X	.516	.516	0	%100
28	M24	Z	.298	.298	0	%100
29	M25	X	2.354	2.354	0	%100
30	M25	Z	1.359	1.359	0	%100
31	M26	X	2.354	2.354	0	%100
32	M26	Z	1.359	1.359	0	%100
33	M27	X	1.603	1.603	0	%100
34	M27	Z	.926	.926	0	%100
35	M28	X	1.603	1.603	0	%100
36	M28	Z	.926	.926	0	%100
37	MP4A	X	7.848	7.848	0	%100
38	MP4A	Z	4.531	4.531	0	%100
39	MP3A	X	7.848	7.848	0	%100
40	MP3A	Z	4.531	4.531	0	%100
41	MP2A	X	7.848	7.848	0	%100
42	MP2A	Z	4.531	4.531	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[ft,%]	End Location[ft,%]
43	MP1A	X	7.848	7.848	0 %100
44	MP1A	Z	4.531	4.531	0 %100
45	M44	X	2.065	2.065	0 %100
46	M44	Z	1.192	1.192	0 %100
47	M45	X	2.065	2.065	0 %100
48	M45	Z	1.192	1.192	0 %100
49	M46	X	2.065	2.065	0 %100
50	M46	Z	1.192	1.192	0 %100
51	M47	X	2.065	2.065	0 %100
52	M47	Z	1.192	1.192	0 %100
53	M44A	X	.889	.889	0 %100
54	M44A	Z	.513	.513	0 %100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.113	4.113	0	%100
2	M1	Z	7.125	7.125	0	%100
3	M2	X	4.113	4.113	0	%100
4	M2	Z	7.125	7.125	0	%100
5	M13	X	.298	.298	0	%100
6	M13	Z	.516	.516	0	%100
7	M14	X	.298	.298	0	%100
8	M14	Z	.516	.516	0	%100
9	M15	X	.298	.298	0	%100
10	M15	Z	.516	.516	0	%100
11	M16	X	.298	.298	0	%100
12	M16	Z	.516	.516	0	%100
13	M17	X	3.425	3.425	0	%100
14	M17	Z	5.931	5.931	0	%100
15	M18	X	3.425	3.425	0	%100
16	M18	Z	5.931	5.931	0	%100
17	M19	X	.488	.488	0	%100
18	M19	Z	.844	.844	0	%100
19	M20	X	.488	.488	0	%100
20	M20	Z	.844	.844	0	%100
21	M21	X	.894	.894	0	%100
22	M21	Z	1.549	1.549	0	%100
23	M22	X	.894	.894	0	%100
24	M22	Z	1.549	1.549	0	%100
25	M23	X	.894	.894	0	%100
26	M23	Z	1.549	1.549	0	%100
27	M24	X	.894	.894	0	%100
28	M24	Z	1.549	1.549	0	%100
29	M25	X	1.421	1.421	0	%100
30	M25	Z	2.461	2.461	0	%100
31	M26	X	1.421	1.421	0	%100
32	M26	Z	2.461	2.461	0	%100
33	M27	X	.987	.987	0	%100
34	M27	Z	1.71	1.71	0	%100
35	M28	X	.987	.987	0	%100
36	M28	Z	1.71	1.71	0	%100
37	MP4A	X	4.531	4.531	0	%100
38	MP4A	Z	7.848	7.848	0	%100
39	MP3A	X	4.531	4.531	0	%100
40	MP3A	Z	7.848	7.848	0	%100
41	MP2A	X	4.531	4.531	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
42	MP2A	Z	7.848	7.848	0 %100
43	MP1A	X	4.531	4.531	0 %100
44	MP1A	Z	7.848	7.848	0 %100
45	M44	X	1.192	1.192	0 %100
46	M44	Z	2.065	2.065	0 %100
47	M45	X	1.192	1.192	0 %100
48	M45	Z	2.065	2.065	0 %100
49	M46	X	1.192	1.192	0 %100
50	M46	Z	2.065	2.065	0 %100
51	M47	X	1.192	1.192	0 %100
52	M47	Z	2.065	2.065	0 %100
53	M44A	X	.15	.15	0 %100
54	M44A	Z	.259	.259	0 %100

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

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	10.969	10.969	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	10.969	10.969	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	4.331	4.331	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	4.331	4.331	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	4.331	4.331	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	4.331	4.331	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	2.385	2.385	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	2.385	2.385	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	2.385	2.385	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	2.385	2.385	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	2.47	2.47	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	2.47	2.47	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	2.47	2.47	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	2.47	2.47	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	9.062	9.062	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	9.062	9.062	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
41	MP2A	X	0	0	%100
42	MP2A	Z	9.062	9.062	%100
43	MP1A	X	0	0	%100
44	MP1A	Z	9.062	9.062	%100
45	M44	X	0	0	%100
46	M44	Z	2.385	2.385	%100
47	M45	X	0	0	%100
48	M45	Z	2.385	2.385	%100
49	M46	X	0	0	%100
50	M46	Z	2.385	2.385	%100
51	M47	X	0	0	%100
52	M47	Z	2.385	2.385	%100
53	M44A	X	0	0	%100
54	M44A	Z	3.806	3.806	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.113	-4.113	0
2	M1	Z	7.125	7.125	%100
3	M2	X	-4.113	-4.113	0
4	M2	Z	7.125	7.125	%100
5	M13	X	-.298	-.298	0
6	M13	Z	.516	.516	%100
7	M14	X	-.298	-.298	0
8	M14	Z	.516	.516	%100
9	M15	X	-.298	-.298	0
10	M15	Z	.516	.516	%100
11	M16	X	-.298	-.298	0
12	M16	Z	.516	.516	%100
13	M17	X	-.488	-.488	0
14	M17	Z	.844	.844	%100
15	M18	X	-.488	-.488	0
16	M18	Z	.844	.844	%100
17	M19	X	-3.425	-3.425	0
18	M19	Z	5.931	5.931	%100
19	M20	X	-3.425	-3.425	0
20	M20	Z	5.931	5.931	%100
21	M21	X	-.894	-.894	0
22	M21	Z	1.549	1.549	%100
23	M22	X	-.894	-.894	0
24	M22	Z	1.549	1.549	%100
25	M23	X	-.894	-.894	0
26	M23	Z	1.549	1.549	%100
27	M24	X	-.894	-.894	0
28	M24	Z	1.549	1.549	%100
29	M25	X	-.987	-.987	0
30	M25	Z	1.71	1.71	%100
31	M26	X	-.987	-.987	0
32	M26	Z	1.71	1.71	%100
33	M27	X	-1.421	-1.421	0
34	M27	Z	2.461	2.461	%100
35	M28	X	-1.421	-1.421	0
36	M28	Z	2.461	2.461	%100
37	MP4A	X	-4.531	-4.531	0
38	MP4A	Z	7.848	7.848	%100
39	MP3A	X	-4.531	-4.531	0



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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[f, %]	End Location[f, %]	
40	MP3A	Z	7.848	7.848	0	%100
41	MP2A	X	-4.531	-4.531	0	%100
42	MP2A	Z	7.848	7.848	0	%100
43	MP1A	X	-4.531	-4.531	0	%100
44	MP1A	Z	7.848	7.848	0	%100
45	M44	X	-1.192	-1.192	0	%100
46	M44	Z	2.065	2.065	0	%100
47	M45	X	-1.192	-1.192	0	%100
48	M45	Z	2.065	2.065	0	%100
49	M46	X	-1.192	-1.192	0	%100
50	M46	Z	2.065	2.065	0	%100
51	M47	X	-1.192	-1.192	0	%100
52	M47	Z	2.065	2.065	0	%100
53	M44A	X	-4.02	-4.02	0	%100
54	M44A	Z	6.963	6.963	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.375	-2.375	0	%100
2	M1	Z	1.371	1.371	0	%100
3	M2	X	-2.375	-2.375	0	%100
4	M2	Z	1.371	1.371	0	%100
5	M13	X	-1.549	-1.549	0	%100
6	M13	Z	.894	.894	0	%100
7	M14	X	-1.549	-1.549	0	%100
8	M14	Z	.894	.894	0	%100
9	M15	X	-1.549	-1.549	0	%100
10	M15	Z	.894	.894	0	%100
11	M16	X	-1.549	-1.549	0	%100
12	M16	Z	.894	.894	0	%100
13	M17	X	-.119	-.119	0	%100
14	M17	Z	.069	.069	0	%100
15	M18	X	-.119	-.119	0	%100
16	M18	Z	.069	.069	0	%100
17	M19	X	-5.206	-5.206	0	%100
18	M19	Z	3.006	3.006	0	%100
19	M20	X	-5.206	-5.206	0	%100
20	M20	Z	3.006	3.006	0	%100
21	M21	X	-.516	-.516	0	%100
22	M21	Z	.298	.298	0	%100
23	M22	X	-.516	-.516	0	%100
24	M22	Z	.298	.298	0	%100
25	M23	X	-.516	-.516	0	%100
26	M23	Z	.298	.298	0	%100
27	M24	X	-.516	-.516	0	%100
28	M24	Z	.298	.298	0	%100
29	M25	X	-1.603	-1.603	0	%100
30	M25	Z	.926	.926	0	%100
31	M26	X	-1.603	-1.603	0	%100
32	M26	Z	.926	.926	0	%100
33	M27	X	-2.354	-2.354	0	%100
34	M27	Z	1.359	1.359	0	%100
35	M28	X	-2.354	-2.354	0	%100
36	M28	Z	1.359	1.359	0	%100
37	MP4A	X	-7.848	-7.848	0	%100
38	MP4A	Z	4.531	4.531	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
39	MP3A	X	-7.848	-7.848	0 %100
40	MP3A	Z	4.531	4.531	0 %100
41	MP2A	X	-7.848	-7.848	0 %100
42	MP2A	Z	4.531	4.531	0 %100
43	MP1A	X	-7.848	-7.848	0 %100
44	MP1A	Z	4.531	4.531	0 %100
45	M44	X	-2.065	-2.065	0 %100
46	M44	Z	1.192	1.192	0 %100
47	M45	X	-2.065	-2.065	0 %100
48	M45	Z	1.192	1.192	0 %100
49	M46	X	-2.065	-2.065	0 %100
50	M46	Z	1.192	1.192	0 %100
51	M47	X	-2.065	-2.065	0 %100
52	M47	Z	1.192	1.192	0 %100
53	M44A	X	-7.593	-7.593	0 %100
54	M44A	Z	4.384	4.384	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0 %100
2	M1	Z	0	0	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	0	0	0 %100
5	M13	X	-2.385	-2.385	0 %100
6	M13	Z	0	0	0 %100
7	M14	X	-2.385	-2.385	0 %100
8	M14	Z	0	0	0 %100
9	M15	X	-2.385	-2.385	0 %100
10	M15	Z	0	0	0 %100
11	M16	X	-2.385	-2.385	0 %100
12	M16	Z	0	0	0 %100
13	M17	X	-2.656	-2.656	0 %100
14	M17	Z	0	0	0 %100
15	M18	X	-2.656	-2.656	0 %100
16	M18	Z	0	0	0 %100
17	M19	X	-2.656	-2.656	0 %100
18	M19	Z	0	0	0 %100
19	M20	X	-2.656	-2.656	0 %100
20	M20	Z	0	0	0 %100
21	M21	X	0	0	0 %100
22	M21	Z	0	0	0 %100
23	M22	X	0	0	0 %100
24	M22	Z	0	0	0 %100
25	M23	X	0	0	0 %100
26	M23	Z	0	0	0 %100
27	M24	X	0	0	0 %100
28	M24	Z	0	0	0 %100
29	M25	X	-2.223	-2.223	0 %100
30	M25	Z	0	0	0 %100
31	M26	X	-2.223	-2.223	0 %100
32	M26	Z	0	0	0 %100
33	M27	X	-2.223	-2.223	0 %100
34	M27	Z	0	0	0 %100
35	M28	X	-2.223	-2.223	0 %100
36	M28	Z	0	0	0 %100
37	MP4A	X	-9.062	-9.062	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
38	MP4A	Z	0	0	%100
39	MP3A	X	-9.062	-9.062	0
40	MP3A	Z	0	0	%100
41	MP2A	X	-9.062	-9.062	0
42	MP2A	Z	0	0	%100
43	MP1A	X	-9.062	-9.062	0
44	MP1A	Z	0	0	%100
45	M44	X	-2.385	-2.385	0
46	M44	Z	0	0	%100
47	M45	X	-2.385	-2.385	0
48	M45	Z	0	0	%100
49	M46	X	-2.385	-2.385	0
50	M46	Z	0	0	%100
51	M47	X	-2.385	-2.385	0
52	M47	Z	0	0	%100
53	M44A	X	-5.261	-5.261	0
54	M44A	Z	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.375	-2.375	0	%100
2	M1	Z	-1.371	-1.371	0	%100
3	M2	X	-2.375	-2.375	0	%100
4	M2	Z	-1.371	-1.371	0	%100
5	M13	X	-1.549	-1.549	0	%100
6	M13	Z	-.894	-.894	0	%100
7	M14	X	-1.549	-1.549	0	%100
8	M14	Z	-.894	-.894	0	%100
9	M15	X	-1.549	-1.549	0	%100
10	M15	Z	-.894	-.894	0	%100
11	M16	X	-1.549	-1.549	0	%100
12	M16	Z	-.894	-.894	0	%100
13	M17	X	-5.206	-5.206	0	%100
14	M17	Z	-3.006	-3.006	0	%100
15	M18	X	-5.206	-5.206	0	%100
16	M18	Z	-3.006	-3.006	0	%100
17	M19	X	-.119	-.119	0	%100
18	M19	Z	-.069	-.069	0	%100
19	M20	X	-.119	-.119	0	%100
20	M20	Z	-.069	-.069	0	%100
21	M21	X	-.516	-.516	0	%100
22	M21	Z	-.298	-.298	0	%100
23	M22	X	-.516	-.516	0	%100
24	M22	Z	-.298	-.298	0	%100
25	M23	X	-.516	-.516	0	%100
26	M23	Z	-.298	-.298	0	%100
27	M24	X	-.516	-.516	0	%100
28	M24	Z	-.298	-.298	0	%100
29	M25	X	-2.354	-2.354	0	%100
30	M25	Z	-1.359	-1.359	0	%100
31	M26	X	-2.354	-2.354	0	%100
32	M26	Z	-1.359	-1.359	0	%100
33	M27	X	-1.603	-1.603	0	%100
34	M27	Z	-.926	-.926	0	%100
35	M28	X	-1.603	-1.603	0	%100
36	M28	Z	-.926	-.926	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
37	MP4A	X	-7.848	-7.848	0 %100
38	MP4A	Z	-4.531	-4.531	0 %100
39	MP3A	X	-7.848	-7.848	0 %100
40	MP3A	Z	-4.531	-4.531	0 %100
41	MP2A	X	-7.848	-7.848	0 %100
42	MP2A	Z	-4.531	-4.531	0 %100
43	MP1A	X	-7.848	-7.848	0 %100
44	MP1A	Z	-4.531	-4.531	0 %100
45	M44	X	-2.065	-2.065	0 %100
46	M44	Z	-1.192	-1.192	0 %100
47	M45	X	-2.065	-2.065	0 %100
48	M45	Z	-1.192	-1.192	0 %100
49	M46	X	-2.065	-2.065	0 %100
50	M46	Z	-1.192	-1.192	0 %100
51	M47	X	-2.065	-2.065	0 %100
52	M47	Z	-1.192	-1.192	0 %100
53	M44A	X	-.889	-.889	0 %100
54	M44A	Z	-.513	-.513	0 %100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.113	-4.113	0	%100
2	M1	Z	-7.125	-7.125	0	%100
3	M2	X	-4.113	-4.113	0	%100
4	M2	Z	-7.125	-7.125	0	%100
5	M13	X	.298	.298	0	%100
6	M13	Z	.516	.516	0	%100
7	M14	X	.298	.298	0	%100
8	M14	Z	.516	.516	0	%100
9	M15	X	.298	.298	0	%100
10	M15	Z	.516	.516	0	%100
11	M16	X	.298	.298	0	%100
12	M16	Z	.516	.516	0	%100
13	M17	X	-3.425	-3.425	0	%100
14	M17	Z	-5.931	-5.931	0	%100
15	M18	X	-3.425	-3.425	0	%100
16	M18	Z	-5.931	-5.931	0	%100
17	M19	X	-.488	-.488	0	%100
18	M19	Z	-.844	-.844	0	%100
19	M20	X	-.488	-.488	0	%100
20	M20	Z	-.844	-.844	0	%100
21	M21	X	-.894	-.894	0	%100
22	M21	Z	-1.549	-1.549	0	%100
23	M22	X	-.894	-.894	0	%100
24	M22	Z	-1.549	-1.549	0	%100
25	M23	X	-.894	-.894	0	%100
26	M23	Z	-1.549	-1.549	0	%100
27	M24	X	-.894	-.894	0	%100
28	M24	Z	-1.549	-1.549	0	%100
29	M25	X	-1.421	-1.421	0	%100
30	M25	Z	-2.461	-2.461	0	%100
31	M26	X	-1.421	-1.421	0	%100
32	M26	Z	-2.461	-2.461	0	%100
33	M27	X	-.987	-.987	0	%100
34	M27	Z	-1.71	-1.71	0	%100
35	M28	X	-.987	-.987	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,F...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
36	M28	Z	-1.71	-1.71	0 %100
37	MP4A	X	-4.531	-4.531	0 %100
38	MP4A	Z	-7.848	-7.848	0 %100
39	MP3A	X	-4.531	-4.531	0 %100
40	MP3A	Z	-7.848	-7.848	0 %100
41	MP2A	X	-4.531	-4.531	0 %100
42	MP2A	Z	-7.848	-7.848	0 %100
43	MP1A	X	-4.531	-4.531	0 %100
44	MP1A	Z	-7.848	-7.848	0 %100
45	M44	X	-1.192	-1.192	0 %100
46	M44	Z	-2.065	-2.065	0 %100
47	M45	X	-1.192	-1.192	0 %100
48	M45	Z	-2.065	-2.065	0 %100
49	M46	X	-1.192	-1.192	0 %100
50	M46	Z	-2.065	-2.065	0 %100
51	M47	X	-1.192	-1.192	0 %100
52	M47	Z	-2.065	-2.065	0 %100
53	M44A	X	.15	.15	0 %100
54	M44A	Z	-.259	-.259	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,F...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0 %100
2	M1	Z	-3.312	-3.312	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	-3.312	-3.312	0 %100
5	M13	X	0	0	0 %100
6	M13	Z	0	0	0 %100
7	M14	X	0	0	0 %100
8	M14	Z	0	0	0 %100
9	M15	X	0	0	0 %100
10	M15	Z	0	0	0 %100
11	M16	X	0	0	0 %100
12	M16	Z	0	0	0 %100
13	M17	X	0	0	0 %100
14	M17	Z	-1.432	-1.432	0 %100
15	M18	X	0	0	0 %100
16	M18	Z	-1.432	-1.432	0 %100
17	M19	X	0	0	0 %100
18	M19	Z	-1.432	-1.432	0 %100
19	M20	X	0	0	0 %100
20	M20	Z	-1.432	-1.432	0 %100
21	M21	X	0	0	0 %100
22	M21	Z	-1.273	-1.273	0 %100
23	M22	X	0	0	0 %100
24	M22	Z	-1.273	-1.273	0 %100
25	M23	X	0	0	0 %100
26	M23	Z	-1.273	-1.273	0 %100
27	M24	X	0	0	0 %100
28	M24	Z	-1.273	-1.273	0 %100
29	M25	X	0	0	0 %100
30	M25	Z	-1.607	-1.607	0 %100
31	M26	X	0	0	0 %100
32	M26	Z	-1.607	-1.607	0 %100
33	M27	X	0	0	0 %100
34	M27	Z	-1.607	-1.607	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,Ft]	End Magnitude[lb/ft,Ft]	Start Location[ft,%]	End Location[ft,%]
35	M28	X	0	0	0	%100
36	M28	Z	-1.607	-1.607	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	-2.996	-2.996	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-2.996	-2.996	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-2.996	-2.996	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-2.996	-2.996	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-1.666	-1.666	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-1.666	-1.666	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-1.666	-1.666	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	-1.666	-1.666	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	-1.258	-1.258	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[ft,%]	End Location[ft,%]
1	M1	X	1.242	1.242	0	%100
2	M1	Z	-2.151	-2.151	0	%100
3	M2	X	1.242	1.242	0	%100
4	M2	Z	-2.151	-2.151	0	%100
5	M13	X	.159	.159	0	%100
6	M13	Z	-.275	-.275	0	%100
7	M14	X	.159	.159	0	%100
8	M14	Z	-.275	-.275	0	%100
9	M15	X	.159	.159	0	%100
10	M15	Z	-.275	-.275	0	%100
11	M16	X	.159	.159	0	%100
12	M16	Z	-.275	-.275	0	%100
13	M17	X	.161	.161	0	%100
14	M17	Z	-.279	-.279	0	%100
15	M18	X	.161	.161	0	%100
16	M18	Z	-.279	-.279	0	%100
17	M19	X	1.132	1.132	0	%100
18	M19	Z	-1.961	-1.961	0	%100
19	M20	X	1.132	1.132	0	%100
20	M20	Z	-1.961	-1.961	0	%100
21	M21	X	.478	.478	0	%100
22	M21	Z	-.827	-.827	0	%100
23	M22	X	.478	.478	0	%100
24	M22	Z	-.827	-.827	0	%100
25	M23	X	.478	.478	0	%100
26	M23	Z	-.827	-.827	0	%100
27	M24	X	.478	.478	0	%100
28	M24	Z	-.827	-.827	0	%100
29	M25	X	.642	.642	0	%100
30	M25	Z	-1.113	-1.113	0	%100
31	M26	X	.642	.642	0	%100
32	M26	Z	-1.113	-1.113	0	%100
33	M27	X	.924	.924	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]	
34	M27	Z	-1.601	-1.601	0	%100
35	M28	X	.924	.924	0	%100
36	M28	Z	-1.601	-1.601	0	%100
37	MP4A	X	1.498	1.498	0	%100
38	MP4A	Z	-2.595	-2.595	0	%100
39	MP3A	X	1.498	1.498	0	%100
40	MP3A	Z	-2.595	-2.595	0	%100
41	MP2A	X	1.498	1.498	0	%100
42	MP2A	Z	-2.595	-2.595	0	%100
43	MP1A	X	1.498	1.498	0	%100
44	MP1A	Z	-2.595	-2.595	0	%100
45	M44	X	.833	.833	0	%100
46	M44	Z	-1.443	-1.443	0	%100
47	M45	X	.833	.833	0	%100
48	M45	Z	-1.443	-1.443	0	%100
49	M46	X	.833	.833	0	%100
50	M46	Z	-1.443	-1.443	0	%100
51	M47	X	.833	.833	0	%100
52	M47	Z	-1.443	-1.443	0	%100
53	M44A	X	1.329	1.329	0	%100
54	M44A	Z	-2.302	-2.302	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.717	.717	0	%100
2	M1	Z	-.414	-.414	0	%100
3	M2	X	.717	.717	0	%100
4	M2	Z	-.414	-.414	0	%100
5	M13	X	.824	.824	0	%100
6	M13	Z	-.476	-.476	0	%100
7	M14	X	.824	.824	0	%100
8	M14	Z	-.476	-.476	0	%100
9	M15	X	.824	.824	0	%100
10	M15	Z	-.476	-.476	0	%100
11	M16	X	.824	.824	0	%100
12	M16	Z	-.476	-.476	0	%100
13	M17	X	.039	.039	0	%100
14	M17	Z	-.023	-.023	0	%100
15	M18	X	.039	.039	0	%100
16	M18	Z	-.023	-.023	0	%100
17	M19	X	1.721	1.721	0	%100
18	M19	Z	-.994	-.994	0	%100
19	M20	X	1.721	1.721	0	%100
20	M20	Z	-.994	-.994	0	%100
21	M21	X	.276	.276	0	%100
22	M21	Z	-.159	-.159	0	%100
23	M22	X	.276	.276	0	%100
24	M22	Z	-.159	-.159	0	%100
25	M23	X	.276	.276	0	%100
26	M23	Z	-.159	-.159	0	%100
27	M24	X	.276	.276	0	%100
28	M24	Z	-.159	-.159	0	%100
29	M25	X	1.043	1.043	0	%100
30	M25	Z	-.602	-.602	0	%100
31	M26	X	1.043	1.043	0	%100
32	M26	Z	-.602	-.602	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft, %]	End Magnitude[lb/ft, F...]	Start Location[ft, %]	End Location[ft, %]
33	M27	X	1.531	1.531	0	%100
34	M27	Z	-.884	-.884	0	%100
35	M28	X	1.531	1.531	0	%100
36	M28	Z	-.884	-.884	0	%100
37	MP4A	X	2.595	2.595	0	%100
38	MP4A	Z	-1.498	-1.498	0	%100
39	MP3A	X	2.595	2.595	0	%100
40	MP3A	Z	-1.498	-1.498	0	%100
41	MP2A	X	2.595	2.595	0	%100
42	MP2A	Z	-1.498	-1.498	0	%100
43	MP1A	X	2.595	2.595	0	%100
44	MP1A	Z	-1.498	-1.498	0	%100
45	M44	X	1.443	1.443	0	%100
46	M44	Z	-.833	-.833	0	%100
47	M45	X	1.443	1.443	0	%100
48	M45	Z	-.833	-.833	0	%100
49	M46	X	1.443	1.443	0	%100
50	M46	Z	-.833	-.833	0	%100
51	M47	X	1.443	1.443	0	%100
52	M47	Z	-.833	-.833	0	%100
53	M44A	X	2.511	2.511	0	%100
54	M44A	Z	-1.45	-1.45	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	1.268	1.268	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	1.268	1.268	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	1.268	1.268	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	1.268	1.268	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	.878	.878	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	.878	.878	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	.878	.878	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	.878	.878	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	1.446	1.446	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	1.446	1.446	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
32	M26	Z	0	0	%100
33	M27	X	1.446	1.446	0
34	M27	Z	0	0	%100
35	M28	X	1.446	1.446	0
36	M28	Z	0	0	%100
37	MP4A	X	2.996	2.996	0
38	MP4A	Z	0	0	%100
39	MP3A	X	2.996	2.996	0
40	MP3A	Z	0	0	%100
41	MP2A	X	2.996	2.996	0
42	MP2A	Z	0	0	%100
43	MP1A	X	2.996	2.996	0
44	MP1A	Z	0	0	%100
45	M44	X	1.666	1.666	0
46	M44	Z	0	0	%100
47	M45	X	1.666	1.666	0
48	M45	Z	0	0	%100
49	M46	X	1.666	1.666	0
50	M46	Z	0	0	%100
51	M47	X	1.666	1.666	0
52	M47	Z	0	0	%100
53	M44A	X	1.74	1.74	0
54	M44A	Z	0	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]	
1	M1	X	.717	.717	0	%100
2	M1	Z	.414	.414	0	%100
3	M2	X	.717	.717	0	%100
4	M2	Z	.414	.414	0	%100
5	M13	X	.824	.824	0	%100
6	M13	Z	.476	.476	0	%100
7	M14	X	.824	.824	0	%100
8	M14	Z	.476	.476	0	%100
9	M15	X	.824	.824	0	%100
10	M15	Z	.476	.476	0	%100
11	M16	X	.824	.824	0	%100
12	M16	Z	.476	.476	0	%100
13	M17	X	1.721	1.721	0	%100
14	M17	Z	.994	.994	0	%100
15	M18	X	1.721	1.721	0	%100
16	M18	Z	.994	.994	0	%100
17	M19	X	.039	.039	0	%100
18	M19	Z	.023	.023	0	%100
19	M20	X	.039	.039	0	%100
20	M20	Z	.023	.023	0	%100
21	M21	X	.276	.276	0	%100
22	M21	Z	.159	.159	0	%100
23	M22	X	.276	.276	0	%100
24	M22	Z	.159	.159	0	%100
25	M23	X	.276	.276	0	%100
26	M23	Z	.159	.159	0	%100
27	M24	X	.276	.276	0	%100
28	M24	Z	.159	.159	0	%100
29	M25	X	1.531	1.531	0	%100
30	M25	Z	.884	.884	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
31	M26	X	1.531	1.531	0	%100
32	M26	Z	.884	.884	0	%100
33	M27	X	1.043	1.043	0	%100
34	M27	Z	.602	.602	0	%100
35	M28	X	1.043	1.043	0	%100
36	M28	Z	.602	.602	0	%100
37	MP4A	X	2.595	2.595	0	%100
38	MP4A	Z	1.498	1.498	0	%100
39	MP3A	X	2.595	2.595	0	%100
40	MP3A	Z	1.498	1.498	0	%100
41	MP2A	X	2.595	2.595	0	%100
42	MP2A	Z	1.498	1.498	0	%100
43	MP1A	X	2.595	2.595	0	%100
44	MP1A	Z	1.498	1.498	0	%100
45	M44	X	1.443	1.443	0	%100
46	M44	Z	.833	.833	0	%100
47	M45	X	1.443	1.443	0	%100
48	M45	Z	.833	.833	0	%100
49	M46	X	1.443	1.443	0	%100
50	M46	Z	.833	.833	0	%100
51	M47	X	1.443	1.443	0	%100
52	M47	Z	.833	.833	0	%100
53	M44A	X	.294	.294	0	%100
54	M44A	Z	.17	.17	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft, %]	End Magnitude[lb/ft, F...]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	1.242	1.242	0	%100
2	M1	Z	2.151	2.151	0	%100
3	M2	X	1.242	1.242	0	%100
4	M2	Z	2.151	2.151	0	%100
5	M13	X	.159	.159	0	%100
6	M13	Z	.275	.275	0	%100
7	M14	X	.159	.159	0	%100
8	M14	Z	.275	.275	0	%100
9	M15	X	.159	.159	0	%100
10	M15	Z	.275	.275	0	%100
11	M16	X	.159	.159	0	%100
12	M16	Z	.275	.275	0	%100
13	M17	X	1.132	1.132	0	%100
14	M17	Z	1.961	1.961	0	%100
15	M18	X	1.132	1.132	0	%100
16	M18	Z	1.961	1.961	0	%100
17	M19	X	.161	.161	0	%100
18	M19	Z	.279	.279	0	%100
19	M20	X	.161	.161	0	%100
20	M20	Z	.279	.279	0	%100
21	M21	X	.478	.478	0	%100
22	M21	Z	.827	.827	0	%100
23	M22	X	.478	.478	0	%100
24	M22	Z	.827	.827	0	%100
25	M23	X	.478	.478	0	%100
26	M23	Z	.827	.827	0	%100
27	M24	X	.478	.478	0	%100
28	M24	Z	.827	.827	0	%100
29	M25	X	.924	.924	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]	
30	M25	Z	1.601	1.601	0	%100
31	M26	X	.924	.924	0	%100
32	M26	Z	1.601	1.601	0	%100
33	M27	X	.642	.642	0	%100
34	M27	Z	1.113	1.113	0	%100
35	M28	X	.642	.642	0	%100
36	M28	Z	1.113	1.113	0	%100
37	MP4A	X	1.498	1.498	0	%100
38	MP4A	Z	2.595	2.595	0	%100
39	MP3A	X	1.498	1.498	0	%100
40	MP3A	Z	2.595	2.595	0	%100
41	MP2A	X	1.498	1.498	0	%100
42	MP2A	Z	2.595	2.595	0	%100
43	MP1A	X	1.498	1.498	0	%100
44	MP1A	Z	2.595	2.595	0	%100
45	M44	X	.833	.833	0	%100
46	M44	Z	1.443	1.443	0	%100
47	M45	X	.833	.833	0	%100
48	M45	Z	1.443	1.443	0	%100
49	M46	X	.833	.833	0	%100
50	M46	Z	1.443	1.443	0	%100
51	M47	X	.833	.833	0	%100
52	M47	Z	1.443	1.443	0	%100
53	M44A	X	.049	.049	0	%100
54	M44A	Z	.086	.086	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	3.312	3.312	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	3.312	3.312	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	1.432	1.432	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	1.432	1.432	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	1.432	1.432	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	1.432	1.432	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	1.273	1.273	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	1.273	1.273	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	1.273	1.273	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	1.273	1.273	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
29	M25	X	0	0	%100
30	M25	Z	1.607	1.607	%100
31	M26	X	0	0	%100
32	M26	Z	1.607	1.607	%100
33	M27	X	0	0	%100
34	M27	Z	1.607	1.607	%100
35	M28	X	0	0	%100
36	M28	Z	1.607	1.607	%100
37	MP4A	X	0	0	%100
38	MP4A	Z	2.996	2.996	%100
39	MP3A	X	0	0	%100
40	MP3A	Z	2.996	2.996	%100
41	MP2A	X	0	0	%100
42	MP2A	Z	2.996	2.996	%100
43	MP1A	X	0	0	%100
44	MP1A	Z	2.996	2.996	%100
45	M44	X	0	0	%100
46	M44	Z	1.666	1.666	%100
47	M45	X	0	0	%100
48	M45	Z	1.666	1.666	%100
49	M46	X	0	0	%100
50	M46	Z	1.666	1.666	%100
51	M47	X	0	0	%100
52	M47	Z	1.666	1.666	%100
53	M44A	X	0	0	%100
54	M44A	Z	1.258	1.258	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.242	-1.242	0 %100
2	M1	Z	2.151	2.151	0 %100
3	M2	X	-1.242	-1.242	0 %100
4	M2	Z	2.151	2.151	0 %100
5	M13	X	-.159	-.159	0 %100
6	M13	Z	.275	.275	0 %100
7	M14	X	-.159	-.159	0 %100
8	M14	Z	.275	.275	0 %100
9	M15	X	-.159	-.159	0 %100
10	M15	Z	.275	.275	0 %100
11	M16	X	-.159	-.159	0 %100
12	M16	Z	.275	.275	0 %100
13	M17	X	-.161	-.161	0 %100
14	M17	Z	.279	.279	0 %100
15	M18	X	-.161	-.161	0 %100
16	M18	Z	.279	.279	0 %100
17	M19	X	-1.132	-1.132	0 %100
18	M19	Z	1.961	1.961	0 %100
19	M20	X	-1.132	-1.132	0 %100
20	M20	Z	1.961	1.961	0 %100
21	M21	X	-.478	-.478	0 %100
22	M21	Z	.827	.827	0 %100
23	M22	X	-.478	-.478	0 %100
24	M22	Z	.827	.827	0 %100
25	M23	X	-.478	-.478	0 %100
26	M23	Z	.827	.827	0 %100
27	M24	X	-.478	-.478	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft]	End Magnitude[lb/ft,F]	Start Location[ft,%]	End Location[ft,%]
28	M24	Z	.827	.827	0	%100
29	M25	X	-.642	-.642	0	%100
30	M25	Z	1.113	1.113	0	%100
31	M26	X	-.642	-.642	0	%100
32	M26	Z	1.113	1.113	0	%100
33	M27	X	-.924	-.924	0	%100
34	M27	Z	1.601	1.601	0	%100
35	M28	X	-.924	-.924	0	%100
36	M28	Z	1.601	1.601	0	%100
37	MP4A	X	-1.498	-1.498	0	%100
38	MP4A	Z	2.595	2.595	0	%100
39	MP3A	X	-1.498	-1.498	0	%100
40	MP3A	Z	2.595	2.595	0	%100
41	MP2A	X	-1.498	-1.498	0	%100
42	MP2A	Z	2.595	2.595	0	%100
43	MP1A	X	-1.498	-1.498	0	%100
44	MP1A	Z	2.595	2.595	0	%100
45	M44	X	-.833	-.833	0	%100
46	M44	Z	1.443	1.443	0	%100
47	M45	X	-.833	-.833	0	%100
48	M45	Z	1.443	1.443	0	%100
49	M46	X	-.833	-.833	0	%100
50	M46	Z	1.443	1.443	0	%100
51	M47	X	-.833	-.833	0	%100
52	M47	Z	1.443	1.443	0	%100
53	M44A	X	-1.329	-1.329	0	%100
54	M44A	Z	2.302	2.302	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.717	.717	0	%100
2	M1	Z	.414	.414	0	%100
3	M2	X	.717	.717	0	%100
4	M2	Z	.414	.414	0	%100
5	M13	X	-.824	-.824	0	%100
6	M13	Z	.476	.476	0	%100
7	M14	X	-.824	-.824	0	%100
8	M14	Z	.476	.476	0	%100
9	M15	X	-.824	-.824	0	%100
10	M15	Z	.476	.476	0	%100
11	M16	X	-.824	-.824	0	%100
12	M16	Z	.476	.476	0	%100
13	M17	X	-.039	-.039	0	%100
14	M17	Z	.023	.023	0	%100
15	M18	X	-.039	-.039	0	%100
16	M18	Z	.023	.023	0	%100
17	M19	X	-1.721	-1.721	0	%100
18	M19	Z	.994	.994	0	%100
19	M20	X	-1.721	-1.721	0	%100
20	M20	Z	.994	.994	0	%100
21	M21	X	-.276	-.276	0	%100
22	M21	Z	.159	.159	0	%100
23	M22	X	-.276	-.276	0	%100
24	M22	Z	.159	.159	0	%100
25	M23	X	-.276	-.276	0	%100
26	M23	Z	.159	.159	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
27	M24	X	-.276	-.276	0 %100
28	M24	Z	.159	.159	0 %100
29	M25	X	-1.043	-1.043	0 %100
30	M25	Z	.602	.602	0 %100
31	M26	X	-1.043	-1.043	0 %100
32	M26	Z	.602	.602	0 %100
33	M27	X	-1.531	-1.531	0 %100
34	M27	Z	.884	.884	0 %100
35	M28	X	-1.531	-1.531	0 %100
36	M28	Z	.884	.884	0 %100
37	MP4A	X	-2.595	-2.595	0 %100
38	MP4A	Z	1.498	1.498	0 %100
39	MP3A	X	-2.595	-2.595	0 %100
40	MP3A	Z	1.498	1.498	0 %100
41	MP2A	X	-2.595	-2.595	0 %100
42	MP2A	Z	1.498	1.498	0 %100
43	MP1A	X	-2.595	-2.595	0 %100
44	MP1A	Z	1.498	1.498	0 %100
45	M44	X	-1.443	-1.443	0 %100
46	M44	Z	.833	.833	0 %100
47	M45	X	-1.443	-1.443	0 %100
48	M45	Z	.833	.833	0 %100
49	M46	X	-1.443	-1.443	0 %100
50	M46	Z	.833	.833	0 %100
51	M47	X	-1.443	-1.443	0 %100
52	M47	Z	.833	.833	0 %100
53	M44A	X	-2.511	-2.511	0 %100
54	M44A	Z	1.45	1.45	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0 %100
2	M1	Z	0	0	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	0	0	0 %100
5	M13	X	-1.268	-1.268	0 %100
6	M13	Z	0	0	0 %100
7	M14	X	-1.268	-1.268	0 %100
8	M14	Z	0	0	0 %100
9	M15	X	-1.268	-1.268	0 %100
10	M15	Z	0	0	0 %100
11	M16	X	-1.268	-1.268	0 %100
12	M16	Z	0	0	0 %100
13	M17	X	-.878	-.878	0 %100
14	M17	Z	0	0	0 %100
15	M18	X	-.878	-.878	0 %100
16	M18	Z	0	0	0 %100
17	M19	X	-.878	-.878	0 %100
18	M19	Z	0	0	0 %100
19	M20	X	-.878	-.878	0 %100
20	M20	Z	0	0	0 %100
21	M21	X	0	0	0 %100
22	M21	Z	0	0	0 %100
23	M22	X	0	0	0 %100
24	M22	Z	0	0	0 %100
25	M23	X	0	0	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-1.446	-1.446	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-1.446	-1.446	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-1.446	-1.446	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-1.446	-1.446	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	-2.996	-2.996	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	-2.996	-2.996	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	-2.996	-2.996	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	-2.996	-2.996	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	-1.666	-1.666	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-1.666	-1.666	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-1.666	-1.666	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	-1.666	-1.666	0	%100
52	M47	Z	0	0	0	%100
53	M44A	X	-1.74	-1.74	0	%100
54	M44A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.717	.717	0	%100
2	M1	Z	.414	.414	0	%100
3	M2	X	.717	.717	0	%100
4	M2	Z	.414	.414	0	%100
5	M13	X	.824	.824	0	%100
6	M13	Z	.476	.476	0	%100
7	M14	X	.824	.824	0	%100
8	M14	Z	.476	.476	0	%100
9	M15	X	.824	.824	0	%100
10	M15	Z	.476	.476	0	%100
11	M16	X	.824	.824	0	%100
12	M16	Z	.476	.476	0	%100
13	M17	X	-1.721	-1.721	0	%100
14	M17	Z	-.994	-.994	0	%100
15	M18	X	-1.721	-1.721	0	%100
16	M18	Z	-.994	-.994	0	%100
17	M19	X	-.039	-.039	0	%100
18	M19	Z	-.023	-.023	0	%100
19	M20	X	-.039	-.039	0	%100
20	M20	Z	-.023	-.023	0	%100
21	M21	X	-.276	-.276	0	%100
22	M21	Z	-.159	-.159	0	%100
23	M22	X	-.276	-.276	0	%100
24	M22	Z	-.159	-.159	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
25	M23	X	-.276	-.276	0 %100
26	M23	Z	-.159	-.159	0 %100
27	M24	X	-.276	-.276	0 %100
28	M24	Z	-.159	-.159	0 %100
29	M25	X	-1.531	-1.531	0 %100
30	M25	Z	-.884	-.884	0 %100
31	M26	X	-1.531	-1.531	0 %100
32	M26	Z	-.884	-.884	0 %100
33	M27	X	-1.043	-1.043	0 %100
34	M27	Z	-.602	-.602	0 %100
35	M28	X	-1.043	-1.043	0 %100
36	M28	Z	-.602	-.602	0 %100
37	MP4A	X	-2.595	-2.595	0 %100
38	MP4A	Z	-1.498	-1.498	0 %100
39	MP3A	X	-2.595	-2.595	0 %100
40	MP3A	Z	-1.498	-1.498	0 %100
41	MP2A	X	-2.595	-2.595	0 %100
42	MP2A	Z	-1.498	-1.498	0 %100
43	MP1A	X	-2.595	-2.595	0 %100
44	MP1A	Z	-1.498	-1.498	0 %100
45	M44	X	-1.443	-1.443	0 %100
46	M44	Z	-.833	-.833	0 %100
47	M45	X	-1.443	-1.443	0 %100
48	M45	Z	-.833	-.833	0 %100
49	M46	X	-1.443	-1.443	0 %100
50	M46	Z	-.833	-.833	0 %100
51	M47	X	-1.443	-1.443	0 %100
52	M47	Z	-.833	-.833	0 %100
53	M44A	X	-.294	-.294	0 %100
54	M44A	Z	-.17	-.17	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.242	-1.242	0 %100
2	M1	Z	-2.151	-2.151	0 %100
3	M2	X	-1.242	-1.242	0 %100
4	M2	Z	-2.151	-2.151	0 %100
5	M13	X	-.159	-.159	0 %100
6	M13	Z	-.275	-.275	0 %100
7	M14	X	-.159	-.159	0 %100
8	M14	Z	-.275	-.275	0 %100
9	M15	X	-.159	-.159	0 %100
10	M15	Z	-.275	-.275	0 %100
11	M16	X	-.159	-.159	0 %100
12	M16	Z	-.275	-.275	0 %100
13	M17	X	-1.132	-1.132	0 %100
14	M17	Z	-1.961	-1.961	0 %100
15	M18	X	-1.132	-1.132	0 %100
16	M18	Z	-1.961	-1.961	0 %100
17	M19	X	-.161	-.161	0 %100
18	M19	Z	-.279	-.279	0 %100
19	M20	X	-.161	-.161	0 %100
20	M20	Z	-.279	-.279	0 %100
21	M21	X	-.478	-.478	0 %100
22	M21	Z	-.827	-.827	0 %100
23	M22	X	-.478	-.478	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
24	M22	Z	-.827	-.827	0 %100
25	M23	X	-.478	-.478	0 %100
26	M23	Z	-.827	-.827	0 %100
27	M24	X	-.478	-.478	0 %100
28	M24	Z	-.827	-.827	0 %100
29	M25	X	-.924	-.924	0 %100
30	M25	Z	-1.601	-1.601	0 %100
31	M26	X	-.924	-.924	0 %100
32	M26	Z	-1.601	-1.601	0 %100
33	M27	X	-.642	-.642	0 %100
34	M27	Z	-1.113	-1.113	0 %100
35	M28	X	-.642	-.642	0 %100
36	M28	Z	-1.113	-1.113	0 %100
37	MP4A	X	-1.498	-1.498	0 %100
38	MP4A	Z	-2.595	-2.595	0 %100
39	MP3A	X	-1.498	-1.498	0 %100
40	MP3A	Z	-2.595	-2.595	0 %100
41	MP2A	X	-1.498	-1.498	0 %100
42	MP2A	Z	-2.595	-2.595	0 %100
43	MP1A	X	-1.498	-1.498	0 %100
44	MP1A	Z	-2.595	-2.595	0 %100
45	M44	X	-.833	-.833	0 %100
46	M44	Z	-1.443	-1.443	0 %100
47	M45	X	-.833	-.833	0 %100
48	M45	Z	-1.443	-1.443	0 %100
49	M46	X	-.833	-.833	0 %100
50	M46	Z	-1.443	-1.443	0 %100
51	M47	X	-.833	-.833	0 %100
52	M47	Z	-1.443	-1.443	0 %100
53	M44A	X	-.049	-.049	0 %100
54	M44A	Z	-.086	-.086	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0 %100
2	M1	Z	-.653	-.653	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	-.653	-.653	0 %100
5	M13	X	0	0	0 %100
6	M13	Z	0	0	0 %100
7	M14	X	0	0	0 %100
8	M14	Z	0	0	0 %100
9	M15	X	0	0	0 %100
10	M15	Z	0	0	0 %100
11	M16	X	0	0	0 %100
12	M16	Z	0	0	0 %100
13	M17	X	0	0	0 %100
14	M17	Z	-.258	-.258	0 %100
15	M18	X	0	0	0 %100
16	M18	Z	-.258	-.258	0 %100
17	M19	X	0	0	0 %100
18	M19	Z	-.258	-.258	0 %100
19	M20	X	0	0	0 %100
20	M20	Z	-.258	-.258	0 %100
21	M21	X	0	0	0 %100
22	M21	Z	-.142	-.142	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
23	M22	X	0	0	%100
24	M22	Z	-.142	-.142	%100
25	M23	X	0	0	%100
26	M23	Z	-.142	-.142	%100
27	M24	X	0	0	%100
28	M24	Z	-.142	-.142	%100
29	M25	X	0	0	%100
30	M25	Z	-.147	-.147	%100
31	M26	X	0	0	%100
32	M26	Z	-.147	-.147	%100
33	M27	X	0	0	%100
34	M27	Z	-.147	-.147	%100
35	M28	X	0	0	%100
36	M28	Z	-.147	-.147	%100
37	MP4A	X	0	0	%100
38	MP4A	Z	-.539	-.539	%100
39	MP3A	X	0	0	%100
40	MP3A	Z	-.539	-.539	%100
41	MP2A	X	0	0	%100
42	MP2A	Z	-.539	-.539	%100
43	MP1A	X	0	0	%100
44	MP1A	Z	-.539	-.539	%100
45	M44	X	0	0	%100
46	M44	Z	-.142	-.142	%100
47	M45	X	0	0	%100
48	M45	Z	-.142	-.142	%100
49	M46	X	0	0	%100
50	M46	Z	-.142	-.142	%100
51	M47	X	0	0	%100
52	M47	Z	-.142	-.142	%100
53	M44A	X	0	0	%100
54	M44A	Z	-.226	-.226	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.245	.245	%100
2	M1	Z	-.424	-.424	%100
3	M2	X	.245	.245	%100
4	M2	Z	-.424	-.424	%100
5	M13	X	.018	.018	%100
6	M13	Z	-.031	-.031	%100
7	M14	X	.018	.018	%100
8	M14	Z	-.031	-.031	%100
9	M15	X	.018	.018	%100
10	M15	Z	-.031	-.031	%100
11	M16	X	.018	.018	%100
12	M16	Z	-.031	-.031	%100
13	M17	X	.029	.029	%100
14	M17	Z	-.05	-.05	%100
15	M18	X	.029	.029	%100
16	M18	Z	-.05	-.05	%100
17	M19	X	.204	.204	%100
18	M19	Z	-.353	-.353	%100
19	M20	X	.204	.204	%100
20	M20	Z	-.353	-.353	%100
21	M21	X	.053	.053	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
22	M21	Z	-.092	-.092	0 %100
23	M22	X	.053	.053	0 %100
24	M22	Z	-.092	-.092	0 %100
25	M23	X	.053	.053	0 %100
26	M23	Z	-.092	-.092	0 %100
27	M24	X	.053	.053	0 %100
28	M24	Z	-.092	-.092	0 %100
29	M25	X	.059	.059	0 %100
30	M25	Z	-.102	-.102	0 %100
31	M26	X	.059	.059	0 %100
32	M26	Z	-.102	-.102	0 %100
33	M27	X	.085	.085	0 %100
34	M27	Z	-.146	-.146	0 %100
35	M28	X	.085	.085	0 %100
36	M28	Z	-.146	-.146	0 %100
37	MP4A	X	.27	.27	0 %100
38	MP4A	Z	-.467	-.467	0 %100
39	MP3A	X	.27	.27	0 %100
40	MP3A	Z	-.467	-.467	0 %100
41	MP2A	X	.27	.27	0 %100
42	MP2A	Z	-.467	-.467	0 %100
43	MP1A	X	.27	.27	0 %100
44	MP1A	Z	-.467	-.467	0 %100
45	M44	X	.071	.071	0 %100
46	M44	Z	-.123	-.123	0 %100
47	M45	X	.071	.071	0 %100
48	M45	Z	-.123	-.123	0 %100
49	M46	X	.071	.071	0 %100
50	M46	Z	-.123	-.123	0 %100
51	M47	X	.071	.071	0 %100
52	M47	Z	-.123	-.123	0 %100
53	M44A	X	.239	.239	0 %100
54	M44A	Z	-.414	-.414	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.141	.141	0 %100
2	M1	Z	-.082	-.082	0 %100
3	M2	X	.141	.141	0 %100
4	M2	Z	-.082	-.082	0 %100
5	M13	X	.092	.092	0 %100
6	M13	Z	-.053	-.053	0 %100
7	M14	X	.092	.092	0 %100
8	M14	Z	-.053	-.053	0 %100
9	M15	X	.092	.092	0 %100
10	M15	Z	-.053	-.053	0 %100
11	M16	X	.092	.092	0 %100
12	M16	Z	-.053	-.053	0 %100
13	M17	X	.007	.007	0 %100
14	M17	Z	-.004	-.004	0 %100
15	M18	X	.007	.007	0 %100
16	M18	Z	-.004	-.004	0 %100
17	M19	X	.31	.31	0 %100
18	M19	Z	-.179	-.179	0 %100
19	M20	X	.31	.31	0 %100
20	M20	Z	-.179	-.179	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
21	M21	X .031	.031	0	%100
22	M21	Z -.018	-.018	0	%100
23	M22	X .031	.031	0	%100
24	M22	Z -.018	-.018	0	%100
25	M23	X .031	.031	0	%100
26	M23	Z -.018	-.018	0	%100
27	M24	X .031	.031	0	%100
28	M24	Z -.018	-.018	0	%100
29	M25	X .095	.095	0	%100
30	M25	Z -.055	-.055	0	%100
31	M26	X .095	.095	0	%100
32	M26	Z -.055	-.055	0	%100
33	M27	X .14	.14	0	%100
34	M27	Z -.081	-.081	0	%100
35	M28	X .14	.14	0	%100
36	M28	Z -.081	-.081	0	%100
37	MP4A	X .467	.467	0	%100
38	MP4A	Z -.27	-.27	0	%100
39	MP3A	X .467	.467	0	%100
40	MP3A	Z -.27	-.27	0	%100
41	MP2A	X .467	.467	0	%100
42	MP2A	Z -.27	-.27	0	%100
43	MP1A	X .467	.467	0	%100
44	MP1A	Z -.27	-.27	0	%100
45	M44	X .123	.123	0	%100
46	M44	Z -.071	-.071	0	%100
47	M45	X .123	.123	0	%100
48	M45	Z -.071	-.071	0	%100
49	M46	X .123	.123	0	%100
50	M46	Z -.071	-.071	0	%100
51	M47	X .123	.123	0	%100
52	M47	Z -.071	-.071	0	%100
53	M44A	X .452	.452	0	%100
54	M44A	Z -.261	-.261	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	%100
2	M1	Z	0	0	%100
3	M2	X	0	0	%100
4	M2	Z	0	0	%100
5	M13	X	.142	.142	0
6	M13	Z	0	0	%100
7	M14	X	.142	.142	0
8	M14	Z	0	0	%100
9	M15	X	.142	.142	0
10	M15	Z	0	0	%100
11	M16	X	.142	.142	0
12	M16	Z	0	0	%100
13	M17	X	.158	.158	0
14	M17	Z	0	0	%100
15	M18	X	.158	.158	0
16	M18	Z	0	0	%100
17	M19	X	.158	.158	0
18	M19	Z	0	0	%100
19	M20	X	.158	.158	0



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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
20	M20	Z	0	0	%100
21	M21	X	0	0	%100
22	M21	Z	0	0	%100
23	M22	X	0	0	%100
24	M22	Z	0	0	%100
25	M23	X	0	0	%100
26	M23	Z	0	0	%100
27	M24	X	0	0	%100
28	M24	Z	0	0	%100
29	M25	X	.132	.132	0
30	M25	Z	0	0	%100
31	M26	X	.132	.132	0
32	M26	Z	0	0	%100
33	M27	X	.132	.132	0
34	M27	Z	0	0	%100
35	M28	X	.132	.132	0
36	M28	Z	0	0	%100
37	MP4A	X	.539	.539	0
38	MP4A	Z	0	0	%100
39	MP3A	X	.539	.539	0
40	MP3A	Z	0	0	%100
41	MP2A	X	.539	.539	0
42	MP2A	Z	0	0	%100
43	MP1A	X	.539	.539	0
44	MP1A	Z	0	0	%100
45	M44	X	.142	.142	0
46	M44	Z	0	0	%100
47	M45	X	.142	.142	0
48	M45	Z	0	0	%100
49	M46	X	.142	.142	0
50	M46	Z	0	0	%100
51	M47	X	.142	.142	0
52	M47	Z	0	0	%100
53	M44A	X	.313	.313	0
54	M44A	Z	0	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]	
1	M1	X	.141	.141	0	%100
2	M1	Z	.082	.082	0	%100
3	M2	X	.141	.141	0	%100
4	M2	Z	.082	.082	0	%100
5	M13	X	.092	.092	0	%100
6	M13	Z	.053	.053	0	%100
7	M14	X	.092	.092	0	%100
8	M14	Z	.053	.053	0	%100
9	M15	X	.092	.092	0	%100
10	M15	Z	.053	.053	0	%100
11	M16	X	.092	.092	0	%100
12	M16	Z	.053	.053	0	%100
13	M17	X	.31	.31	0	%100
14	M17	Z	.179	.179	0	%100
15	M18	X	.31	.31	0	%100
16	M18	Z	.179	.179	0	%100
17	M19	X	.007	.007	0	%100
18	M19	Z	.004	.004	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	M20	X	.007	.007	0	%100
20	M20	Z	.004	.004	0	%100
21	M21	X	.031	.031	0	%100
22	M21	Z	.018	.018	0	%100
23	M22	X	.031	.031	0	%100
24	M22	Z	.018	.018	0	%100
25	M23	X	.031	.031	0	%100
26	M23	Z	.018	.018	0	%100
27	M24	X	.031	.031	0	%100
28	M24	Z	.018	.018	0	%100
29	M25	X	.14	.14	0	%100
30	M25	Z	.081	.081	0	%100
31	M26	X	.14	.14	0	%100
32	M26	Z	.081	.081	0	%100
33	M27	X	.095	.095	0	%100
34	M27	Z	.055	.055	0	%100
35	M28	X	.095	.095	0	%100
36	M28	Z	.055	.055	0	%100
37	MP4A	X	.467	.467	0	%100
38	MP4A	Z	.27	.27	0	%100
39	MP3A	X	.467	.467	0	%100
40	MP3A	Z	.27	.27	0	%100
41	MP2A	X	.467	.467	0	%100
42	MP2A	Z	.27	.27	0	%100
43	MP1A	X	.467	.467	0	%100
44	MP1A	Z	.27	.27	0	%100
45	M44	X	.123	.123	0	%100
46	M44	Z	.071	.071	0	%100
47	M45	X	.123	.123	0	%100
48	M45	Z	.071	.071	0	%100
49	M46	X	.123	.123	0	%100
50	M46	Z	.071	.071	0	%100
51	M47	X	.123	.123	0	%100
52	M47	Z	.071	.071	0	%100
53	M44A	X	.053	.053	0	%100
54	M44A	Z	.031	.031	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.245	.245	0	%100
2	M1	Z	.424	.424	0	%100
3	M2	X	.245	.245	0	%100
4	M2	Z	.424	.424	0	%100
5	M13	X	.018	.018	0	%100
6	M13	Z	.031	.031	0	%100
7	M14	X	.018	.018	0	%100
8	M14	Z	.031	.031	0	%100
9	M15	X	.018	.018	0	%100
10	M15	Z	.031	.031	0	%100
11	M16	X	.018	.018	0	%100
12	M16	Z	.031	.031	0	%100
13	M17	X	.204	.204	0	%100
14	M17	Z	.353	.353	0	%100
15	M18	X	.204	.204	0	%100
16	M18	Z	.353	.353	0	%100
17	M19	X	.029	.029	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
18	M19	Z	.05	.05	0 %100
19	M20	X	.029	.029	0 %100
20	M20	Z	.05	.05	0 %100
21	M21	X	.053	.053	0 %100
22	M21	Z	.092	.092	0 %100
23	M22	X	.053	.053	0 %100
24	M22	Z	.092	.092	0 %100
25	M23	X	.053	.053	0 %100
26	M23	Z	.092	.092	0 %100
27	M24	X	.053	.053	0 %100
28	M24	Z	.092	.092	0 %100
29	M25	X	.085	.085	0 %100
30	M25	Z	.146	.146	0 %100
31	M26	X	.085	.085	0 %100
32	M26	Z	.146	.146	0 %100
33	M27	X	.059	.059	0 %100
34	M27	Z	.102	.102	0 %100
35	M28	X	.059	.059	0 %100
36	M28	Z	.102	.102	0 %100
37	MP4A	X	.27	.27	0 %100
38	MP4A	Z	.467	.467	0 %100
39	MP3A	X	.27	.27	0 %100
40	MP3A	Z	.467	.467	0 %100
41	MP2A	X	.27	.27	0 %100
42	MP2A	Z	.467	.467	0 %100
43	MP1A	X	.27	.27	0 %100
44	MP1A	Z	.467	.467	0 %100
45	M44	X	.071	.071	0 %100
46	M44	Z	.123	.123	0 %100
47	M45	X	.071	.071	0 %100
48	M45	Z	.123	.123	0 %100
49	M46	X	.071	.071	0 %100
50	M46	Z	.123	.123	0 %100
51	M47	X	.071	.071	0 %100
52	M47	Z	.123	.123	0 %100
53	M44A	X	.009	.009	0 %100
54	M44A	Z	.015	.015	0 %100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	.653	.653	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.653	.653	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	.258	.258	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	.258	.258	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
17	M19	X	0	0	%100
18	M19	Z	.258	.258	%100
19	M20	X	0	0	%100
20	M20	Z	.258	.258	%100
21	M21	X	0	0	%100
22	M21	Z	.142	.142	%100
23	M22	X	0	0	%100
24	M22	Z	.142	.142	%100
25	M23	X	0	0	%100
26	M23	Z	.142	.142	%100
27	M24	X	0	0	%100
28	M24	Z	.142	.142	%100
29	M25	X	0	0	%100
30	M25	Z	.147	.147	%100
31	M26	X	0	0	%100
32	M26	Z	.147	.147	%100
33	M27	X	0	0	%100
34	M27	Z	.147	.147	%100
35	M28	X	0	0	%100
36	M28	Z	.147	.147	%100
37	MP4A	X	0	0	%100
38	MP4A	Z	.539	.539	%100
39	MP3A	X	0	0	%100
40	MP3A	Z	.539	.539	%100
41	MP2A	X	0	0	%100
42	MP2A	Z	.539	.539	%100
43	MP1A	X	0	0	%100
44	MP1A	Z	.539	.539	%100
45	M44	X	0	0	%100
46	M44	Z	.142	.142	%100
47	M45	X	0	0	%100
48	M45	Z	.142	.142	%100
49	M46	X	0	0	%100
50	M46	Z	.142	.142	%100
51	M47	X	0	0	%100
52	M47	Z	.142	.142	%100
53	M44A	X	0	0	%100
54	M44A	Z	.226	.226	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.245	-.245	%100
2	M1	Z	.424	.424	%100
3	M2	X	-.245	-.245	%100
4	M2	Z	.424	.424	%100
5	M13	X	-.018	-.018	%100
6	M13	Z	.031	.031	%100
7	M14	X	-.018	-.018	%100
8	M14	Z	.031	.031	%100
9	M15	X	-.018	-.018	%100
10	M15	Z	.031	.031	%100
11	M16	X	-.018	-.018	%100
12	M16	Z	.031	.031	%100
13	M17	X	-.029	-.029	%100
14	M17	Z	.05	.05	%100
15	M18	X	-.029	-.029	%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[ft,%]	End Location[ft,%]
16	M18	Z	.05	.05	0 %100
17	M19	X	-.204	-.204	0 %100
18	M19	Z	.353	.353	0 %100
19	M20	X	-.204	-.204	0 %100
20	M20	Z	.353	.353	0 %100
21	M21	X	-.053	-.053	0 %100
22	M21	Z	.092	.092	0 %100
23	M22	X	-.053	-.053	0 %100
24	M22	Z	.092	.092	0 %100
25	M23	X	-.053	-.053	0 %100
26	M23	Z	.092	.092	0 %100
27	M24	X	-.053	-.053	0 %100
28	M24	Z	.092	.092	0 %100
29	M25	X	-.059	-.059	0 %100
30	M25	Z	.102	.102	0 %100
31	M26	X	-.059	-.059	0 %100
32	M26	Z	.102	.102	0 %100
33	M27	X	-.085	-.085	0 %100
34	M27	Z	.146	.146	0 %100
35	M28	X	-.085	-.085	0 %100
36	M28	Z	.146	.146	0 %100
37	MP4A	X	-.27	-.27	0 %100
38	MP4A	Z	.467	.467	0 %100
39	MP3A	X	-.27	-.27	0 %100
40	MP3A	Z	.467	.467	0 %100
41	MP2A	X	-.27	-.27	0 %100
42	MP2A	Z	.467	.467	0 %100
43	MP1A	X	-.27	-.27	0 %100
44	MP1A	Z	.467	.467	0 %100
45	M44	X	-.071	-.071	0 %100
46	M44	Z	.123	.123	0 %100
47	M45	X	-.071	-.071	0 %100
48	M45	Z	.123	.123	0 %100
49	M46	X	-.071	-.071	0 %100
50	M46	Z	.123	.123	0 %100
51	M47	X	-.071	-.071	0 %100
52	M47	Z	.123	.123	0 %100
53	M44A	X	-.239	-.239	0 %100
54	M44A	Z	.414	.414	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.141	-.141	0 %100
2	M1	Z	.082	.082	0 %100
3	M2	X	-.141	-.141	0 %100
4	M2	Z	.082	.082	0 %100
5	M13	X	-.092	-.092	0 %100
6	M13	Z	.053	.053	0 %100
7	M14	X	-.092	-.092	0 %100
8	M14	Z	.053	.053	0 %100
9	M15	X	-.092	-.092	0 %100
10	M15	Z	.053	.053	0 %100
11	M16	X	-.092	-.092	0 %100
12	M16	Z	.053	.053	0 %100
13	M17	X	-.007	-.007	0 %100
14	M17	Z	.004	.004	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft, ...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
15	M18	X	-.007	-.007	0	%100
16	M18	Z	.004	.004	0	%100
17	M19	X	-.31	-.31	0	%100
18	M19	Z	.179	.179	0	%100
19	M20	X	-.31	-.31	0	%100
20	M20	Z	.179	.179	0	%100
21	M21	X	-.031	-.031	0	%100
22	M21	Z	.018	.018	0	%100
23	M22	X	-.031	-.031	0	%100
24	M22	Z	.018	.018	0	%100
25	M23	X	-.031	-.031	0	%100
26	M23	Z	.018	.018	0	%100
27	M24	X	-.031	-.031	0	%100
28	M24	Z	.018	.018	0	%100
29	M25	X	-.095	-.095	0	%100
30	M25	Z	.055	.055	0	%100
31	M26	X	-.095	-.095	0	%100
32	M26	Z	.055	.055	0	%100
33	M27	X	-.14	-.14	0	%100
34	M27	Z	.081	.081	0	%100
35	M28	X	-.14	-.14	0	%100
36	M28	Z	.081	.081	0	%100
37	MP4A	X	-.467	-.467	0	%100
38	MP4A	Z	.27	.27	0	%100
39	MP3A	X	-.467	-.467	0	%100
40	MP3A	Z	.27	.27	0	%100
41	MP2A	X	-.467	-.467	0	%100
42	MP2A	Z	.27	.27	0	%100
43	MP1A	X	-.467	-.467	0	%100
44	MP1A	Z	.27	.27	0	%100
45	M44	X	-.123	-.123	0	%100
46	M44	Z	.071	.071	0	%100
47	M45	X	-.123	-.123	0	%100
48	M45	Z	.071	.071	0	%100
49	M46	X	-.123	-.123	0	%100
50	M46	Z	.071	.071	0	%100
51	M47	X	-.123	-.123	0	%100
52	M47	Z	.071	.071	0	%100
53	M44A	X	-.452	-.452	0	%100
54	M44A	Z	.261	.261	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-142	-142	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-142	-142	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-142	-142	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-142	-142	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-158	-158	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[ft,%]	End Location[ft,%]
14	M17	Z	0	0	%100
15	M18	X	-.158	-.158	%100
16	M18	Z	0	0	%100
17	M19	X	-.158	-.158	%100
18	M19	Z	0	0	%100
19	M20	X	-.158	-.158	%100
20	M20	Z	0	0	%100
21	M21	X	0	0	%100
22	M21	Z	0	0	%100
23	M22	X	0	0	%100
24	M22	Z	0	0	%100
25	M23	X	0	0	%100
26	M23	Z	0	0	%100
27	M24	X	0	0	%100
28	M24	Z	0	0	%100
29	M25	X	-.132	-.132	%100
30	M25	Z	0	0	%100
31	M26	X	-.132	-.132	%100
32	M26	Z	0	0	%100
33	M27	X	-.132	-.132	%100
34	M27	Z	0	0	%100
35	M28	X	-.132	-.132	%100
36	M28	Z	0	0	%100
37	MP4A	X	-.539	-.539	%100
38	MP4A	Z	0	0	%100
39	MP3A	X	-.539	-.539	%100
40	MP3A	Z	0	0	%100
41	MP2A	X	-.539	-.539	%100
42	MP2A	Z	0	0	%100
43	MP1A	X	-.539	-.539	%100
44	MP1A	Z	0	0	%100
45	M44	X	-.142	-.142	%100
46	M44	Z	0	0	%100
47	M45	X	-.142	-.142	%100
48	M45	Z	0	0	%100
49	M46	X	-.142	-.142	%100
50	M46	Z	0	0	%100
51	M47	X	-.142	-.142	%100
52	M47	Z	0	0	%100
53	M44A	X	-.313	-.313	%100
54	M44A	Z	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[ft,%]	End Location[ft,%]
1	M1	X	-.141	-.141	%100
2	M1	Z	-.082	-.082	%100
3	M2	X	-.141	-.141	%100
4	M2	Z	-.082	-.082	%100
5	M13	X	-.092	-.092	%100
6	M13	Z	-.053	-.053	%100
7	M14	X	-.092	-.092	%100
8	M14	Z	-.053	-.053	%100
9	M15	X	-.092	-.092	%100
10	M15	Z	-.053	-.053	%100
11	M16	X	-.092	-.092	%100
12	M16	Z	-.053	-.053	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
13	M17	X	-.31	-.31	0 %100
14	M17	Z	-.179	-.179	0 %100
15	M18	X	-.31	-.31	0 %100
16	M18	Z	-.179	-.179	0 %100
17	M19	X	-.007	-.007	0 %100
18	M19	Z	-.004	-.004	0 %100
19	M20	X	-.007	-.007	0 %100
20	M20	Z	-.004	-.004	0 %100
21	M21	X	-.031	-.031	0 %100
22	M21	Z	-.018	-.018	0 %100
23	M22	X	-.031	-.031	0 %100
24	M22	Z	-.018	-.018	0 %100
25	M23	X	-.031	-.031	0 %100
26	M23	Z	-.018	-.018	0 %100
27	M24	X	-.031	-.031	0 %100
28	M24	Z	-.018	-.018	0 %100
29	M25	X	-.14	-.14	0 %100
30	M25	Z	-.081	-.081	0 %100
31	M26	X	-.14	-.14	0 %100
32	M26	Z	-.081	-.081	0 %100
33	M27	X	-.095	-.095	0 %100
34	M27	Z	-.055	-.055	0 %100
35	M28	X	-.095	-.095	0 %100
36	M28	Z	-.055	-.055	0 %100
37	MP4A	X	-.467	-.467	0 %100
38	MP4A	Z	-.27	-.27	0 %100
39	MP3A	X	-.467	-.467	0 %100
40	MP3A	Z	-.27	-.27	0 %100
41	MP2A	X	-.467	-.467	0 %100
42	MP2A	Z	-.27	-.27	0 %100
43	MP1A	X	-.467	-.467	0 %100
44	MP1A	Z	-.27	-.27	0 %100
45	M44	X	-.123	-.123	0 %100
46	M44	Z	-.071	-.071	0 %100
47	M45	X	-.123	-.123	0 %100
48	M45	Z	-.071	-.071	0 %100
49	M46	X	-.123	-.123	0 %100
50	M46	Z	-.071	-.071	0 %100
51	M47	X	-.123	-.123	0 %100
52	M47	Z	-.071	-.071	0 %100
53	M44A	X	-.053	-.053	0 %100
54	M44A	Z	-.031	-.031	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.245	-.245	0 %100
2	M1	Z	-.424	-.424	0 %100
3	M2	X	-.245	-.245	0 %100
4	M2	Z	-.424	-.424	0 %100
5	M13	X	-.018	-.018	0 %100
6	M13	Z	-.031	-.031	0 %100
7	M14	X	-.018	-.018	0 %100
8	M14	Z	-.031	-.031	0 %100
9	M15	X	-.018	-.018	0 %100
10	M15	Z	-.031	-.031	0 %100
11	M16	X	-.018	-.018	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[ft,%]	End Location[ft,%]
12	M16	Z	-.031	-.031	0 %100
13	M17	X	-.204	-.204	0 %100
14	M17	Z	-.353	-.353	0 %100
15	M18	X	-.204	-.204	0 %100
16	M18	Z	-.353	-.353	0 %100
17	M19	X	-.029	-.029	0 %100
18	M19	Z	-.05	-.05	0 %100
19	M20	X	-.029	-.029	0 %100
20	M20	Z	-.05	-.05	0 %100
21	M21	X	-.053	-.053	0 %100
22	M21	Z	-.092	-.092	0 %100
23	M22	X	-.053	-.053	0 %100
24	M22	Z	-.092	-.092	0 %100
25	M23	X	-.053	-.053	0 %100
26	M23	Z	-.092	-.092	0 %100
27	M24	X	-.053	-.053	0 %100
28	M24	Z	-.092	-.092	0 %100
29	M25	X	-.085	-.085	0 %100
30	M25	Z	-.146	-.146	0 %100
31	M26	X	-.085	-.085	0 %100
32	M26	Z	-.146	-.146	0 %100
33	M27	X	-.059	-.059	0 %100
34	M27	Z	-.102	-.102	0 %100
35	M28	X	-.059	-.059	0 %100
36	M28	Z	-.102	-.102	0 %100
37	MP4A	X	-.27	-.27	0 %100
38	MP4A	Z	-.467	-.467	0 %100
39	MP3A	X	-.27	-.27	0 %100
40	MP3A	Z	-.467	-.467	0 %100
41	MP2A	X	-.27	-.27	0 %100
42	MP2A	Z	-.467	-.467	0 %100
43	MP1A	X	-.27	-.27	0 %100
44	MP1A	Z	-.467	-.467	0 %100
45	M44	X	-.071	-.071	0 %100
46	M44	Z	-.123	-.123	0 %100
47	M45	X	-.071	-.071	0 %100
48	M45	Z	-.123	-.123	0 %100
49	M46	X	-.071	-.071	0 %100
50	M46	Z	-.123	-.123	0 %100
51	M47	X	-.071	-.071	0 %100
52	M47	Z	-.123	-.123	0 %100
53	M44A	X	-.009	-.009	0 %100
54	M44A	Z	-.015	-.015	0 %100

Member Area Loads

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	N35	max	1237.656	45	1033.319	17	1278.312	13	-.359	11	0	51	.31	41
2		min	-312.783	27	387.146	11	89.418	7	-1.052	17	0	1	-.1	35
3	N36	max	2322.741	11	960.19	24	2079.869	12	-.35	6	0	51	.306	41
4		min	-2472.366	5	414.299	6	-2957.524	6	-.978	24	0	1	-.097	35



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Envelope Joint Reactions (Continued)

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
5	N63A	max	1367.092	5	69.038	11	1554.651	5	0	51	0	51	0
6		min	-1385.708	11	-36.683	5	-1691.996	11	0	1	0	1	0
7	Totals:	max	1203.414	10	2002.138	21	1873.445	1					
8		min	-1203.415	4	933.597	3	-1873.443	7					

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

Member	Shape	Code ...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [...]	phi*Pnt [...]	phi*Mn y...	phi*Mn z...	Cb	Eqn
1	M16	PL5/8X3.5	.385	.422	5	.525	.422	y	5 67997.431	70875	.923	5.168	1...	H1-1b
2	M2	PIPE_2.5	.873	8.854	11	.267	8.724	y	5 14558.792	50715	3.596	3.596	1...	H1-1b
3	MP1A	PIPE_2.0	.384	2.833	47	.202	4.5		11 14916.096	32130	1.872	1.872	1...	H1-1b
4	M22	PL5/8X3.5	.546	.531	5	.199	.531	y	5 69484.705	70875	.923	5.168	1...	H1-1b
5	M13	PL5/8X3.5	.152	.422	8	.181	.422	y	8 67997.431	70875	.923	5.168	1...	H1-1b
6	M1	PIPE_2.5	.401	8.073	11	.179	8.854		11 14558.792	50715	3.596	3.596	1...	H1-1b
7	M20	PIPE_2.0	.531	0	5	.117	2.501		11 31128.25	32130	1.872	1.872	1...	H1-1b
8	MP2A	PIPE_2.0	.327	2.833	5	.113	4.083		11 14916.096	32130	1.872	1.872	1...	H1-1b
9	MP3A	PIPE_2.0	.218	2.833	6	.108	6.167		5 14916.096	32130	1.872	1.872	2...	H1-1b
10	M15	PL5/8X3.5	.268	0	48	.090	.422	y	12 67997.431	70875	.923	5.168	1...	H1-1b
11	M19	PIPE_2.0	.183	2.501	48	.082	0		40 31128.25	32130	1.872	1.872	2...	H1-1b
12	M14	PL5/8X3.5	.168	0	25	.081	.422	y	2 67997.431	70875	.923	5.168	1...	H1-1b
13	M21	PL5/8X3.5	.280	.531	32	.079	.531	y	8 69484.705	70875	.923	5.168	1...	H1-1b
14	M17	PIPE_2.0	.189	0	8	.061	2.501		2 31128.25	32130	1.872	1.872	2...	H1-1b
15	M18	PIPE_2.0	.148	2.501	44	.061	0		29 31128.25	32130	1.872	1.872	2...	H1-1b
16	M24	PL5/8X3.5	.485	.531	38	.055	.133	y	39 69484.705	70875	.923	5.168	1...	H1-1b
17	M23	PL5/8X3.5	.279	.531	25	.038	.133	y	27 69484.705	70875	.923	5.168	1...	H1-1b
18	M45	SR_0.625	.046	1.667	8	.030	0		41 2158.269	9940.19	.104	.104	1...	H1-1b
19	M46	SR_0.625	.057	1.667	5	.026	0		41 2158.269	9940.19	.104	.104	1...	H1-1b
20	M28	SR_0.75	.080	4.167	41	.020	4.167		41 2863.936	14313.866	.179	.179	1...	H1-1b*
21	MP4A	PIPE_2.0	.071	6.167	41	.019	6.167		6 14916.096	32130	1.872	1.872	1...	H1-1b
22	M27	SR_0.75	.000	0	51	.016	4.167		44 2863.936	14313.866	.179	.179	1...	H1-1a
23	M26	SR_0.75	.054	0	32	.011	0		41 2863.936	14313.866	.179	.179	1...	H1-1b*
24	M25	SR_0.75	.000	4.167	42	.010	4.167		47 2863.936	14313.866	.179	.179	1...	H1-1b*
25	M47	SR_0.625	.061	1.667	5	.010	0		5 2158.269	9940.19	.104	.104	1...	H1-1b
26	M44	SR_0.625	.043	1.667	8	.006	0		6 2158.269	9940.19	.104	.104	1...	H1-1b
27	M44A	PIPE_2.0	.132	0	5	.004	7.721		21 15721.861	32130	1.872	1.872	1...	H1-1b*

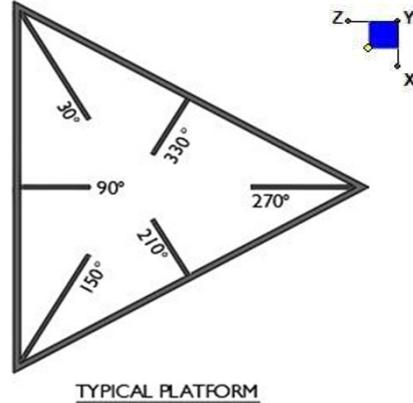


Client: Verizon Wireless Date: 8/5/2021
 Site Name: 21777314A
 Project No. DANIELSON 2 CT
 Title: Mount Analysis Report Page: 1
 Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N35	90
N36	90



Tower Connection Bolt Checks

Any moment resistance?: yes

Bolt Quantity per Reaction: 4

d_x (in) (*Delta X of typ. bolt config. sketch*): 11

d_y (in) (*Delta Y of typ. bolt config. sketch*): 4

Bolt Type: A307

Bolt Diameter (in): 0.625

Required Tensile Strength (kips): 7.5

Required Shear Strength (kips): 2.6

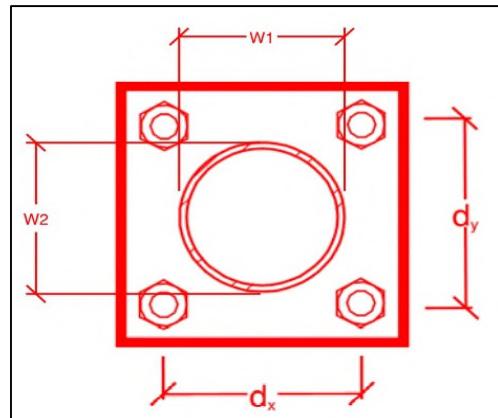
Tensile Strength / bolt (kips): 10.0

Shear Strength / bolt (kips): 6.0

Tensile Capacity Overall: 18.8%*

Shear Capacity Overall: 11.0%

yes
4
11
4
A307
0.625
7.5
2.6
10.0
6.0
18.8%*
11.0%



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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

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

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

Contractor is responsible for making certain the photos provided as noted below provide confirmation that the installation was completed in accordance with this Passing Mount Analysis.

Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

Any special photos outside of the standard requirements will be indicated on the passing MA Verification that loading is as communicated in the Passing Mount Analysis. NOTE If loading is different than what is conveyed contact Maser Consulting immediately.

Each photo should be time and date stamped

Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.

Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.

The photos in the file structure should be uploaded to <https://pmi.vzwsmart.com> as depicted on the drawings

Photo Requirements:

Base and "During Installation Photos"

- Base pictures include
 - Photo of Gate Signs showing the tower owner, site name, and number
 - Photo of carrier shelter showing the carrier site name and number if available
 - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
- "During Installation Photos if provided - must be placed only in this folder

Photos taken at ground level

- Overall tower structure before and after installation of the equipment modifications
- Photos of the appropriate mount before and after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed

Photos taken at Mount Elevation

- Photos showing each individual sector before and also after installation of equipment.

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

Antenna & equipment placement and Geometry Confirmation:

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

Certifying Individual: Company _____
 Name _____
 Signature _____

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

Issue:

Contractor is to install (1) proposed OVP directly onto top right (looking out from the tower) standoff arm in Alpha sector at 15" from standoff end close to tower leg.

Contractor shall inspect climbing facilities and ensure that the safety climb is in good condition. Contractor shall install safety climb wire rope guide in locations where the wire rope is rubbing against mount to tower attachments. Contractor shall provide photos of safety climb wire rope guide installation.

Response:

--

Schedule A – Photo & Document File Structure

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

Sector: A

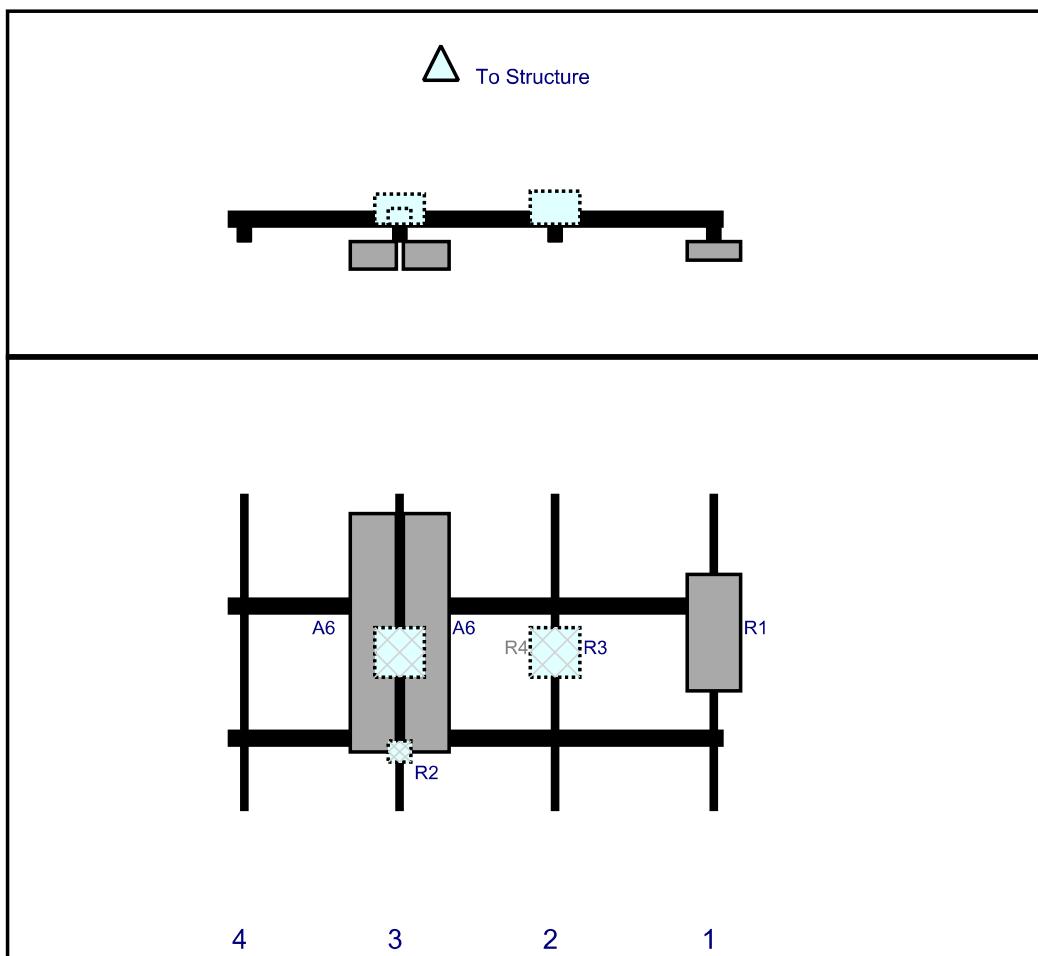
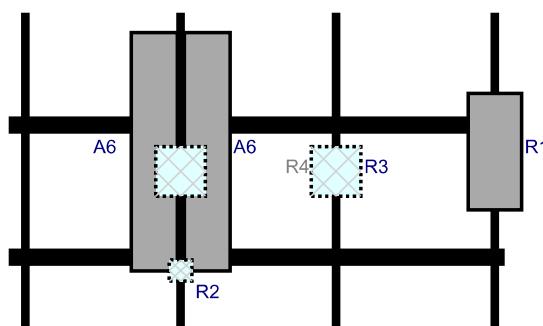
10/25/2021

Structure Type: Guyed

10113888

Mount Elev: 188.50

Page: 1

Plan View**Front View**
Looking at Structure

Ref#	Model	Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant	Status	Validation
		(in)	(in)	Frm L.	#	Pos V	Pos	Frm T.	H Off		
R1	MT6407-77A	35.1	16.1	147	1	a	Front	42	0	Added	
R3	RF4439d-25A	15	15	99	2	a	Behind	48	0	Added	
A6	JAHH-65B-R3B	72	13.8	52	3	a	Front	42	8	Retained	03/25/2021
A6	JAHH-65B-R3B	72	13.8	52	3	b	Front	42	-8	Retained	03/25/2021
R2	CBC78T-DS-43	6.4	6.9	52	3	a	Behind	78	0	Added	
R4	RF4440d-13A	15	15	52	3	b	Behind	48	0	Added	

Sector: B

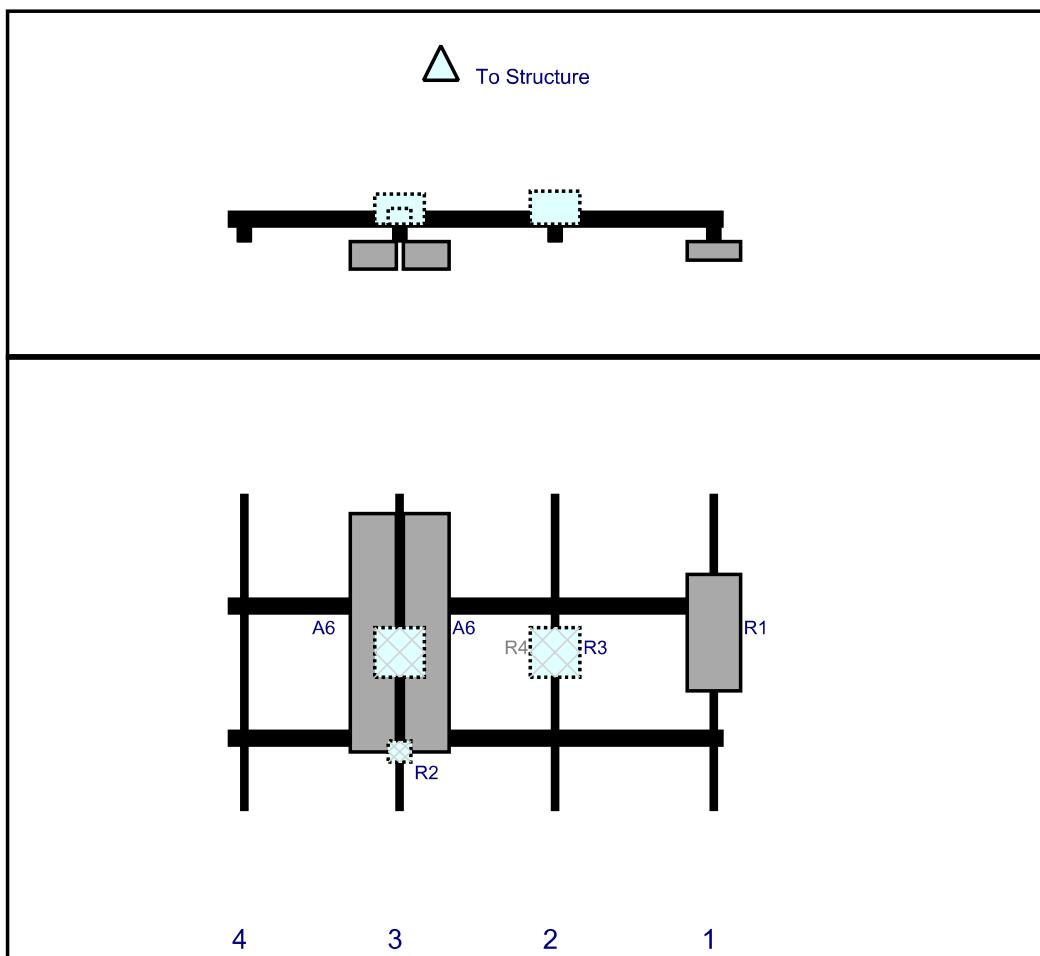
10/25/2021

Structure Type: Guyed

10113888

Mount Elev: 188.50

Page: 2

Plan View**Front View**
Looking at Structure

Ref#	Model	Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant	Status	Validation
		(in)	(in)	Frm L.	#	Pos V	Pos	Frm T.	H Off		
R1	MT6407-77A	35.1	16.1	147	1	a	Front	42	0	Added	
R3	RF4439d-25A	15	15	99	2	a	Behind	48	0	Added	
A6	JAHH-65B-R3B	72	13.8	52	3	a	Front	42	8	Retained	03/25/2021
A6	JAHH-65B-R3B	72	13.8	52	3	b	Front	42	-8	Retained	03/25/2021
R2	CBC78T-DS-43	6.4	6.9	52	3	a	Behind	78	0	Added	
R4	RF4440d-13A	15	15	52	3	b	Behind	48	0	Added	

Sector: C

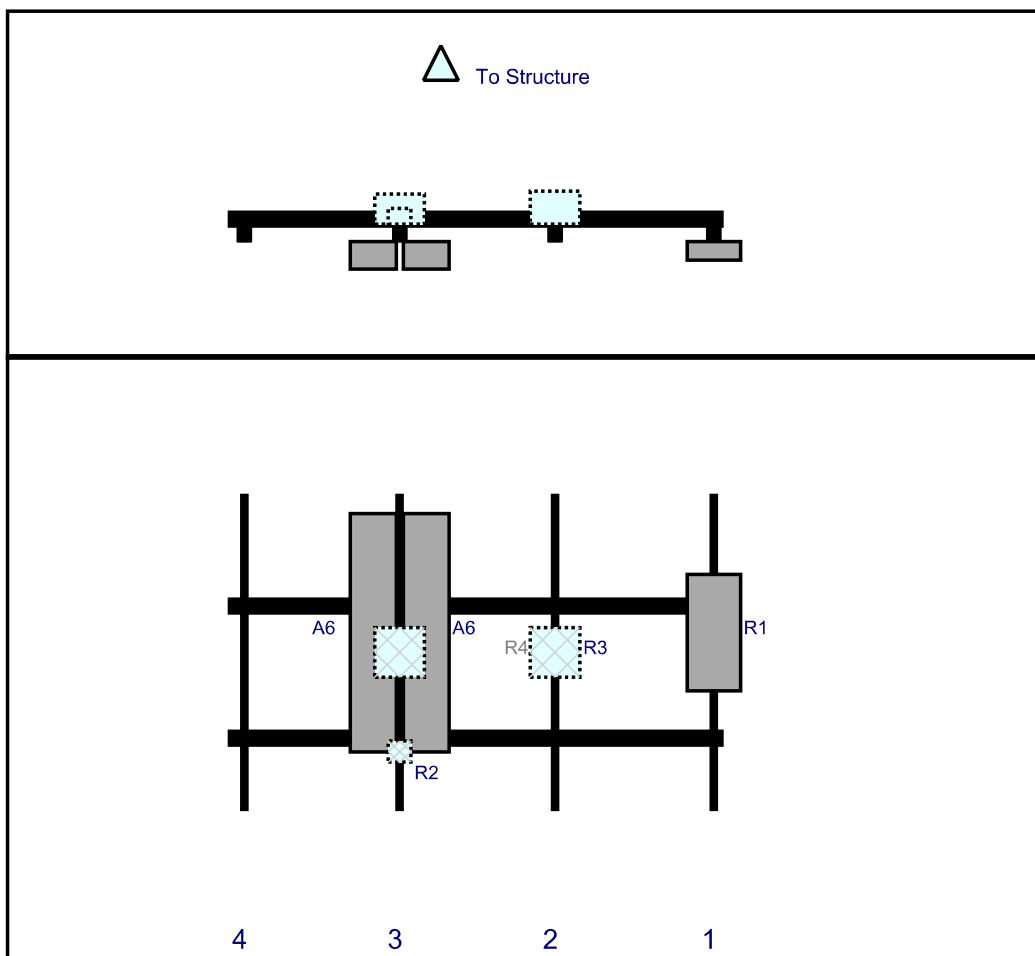
10/25/2021

Structure Type: Guyed

10113888

Mount Elev: 188.50

Page: 3

Plan View

Front View
Looking at Structure

Ref#	Model	Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant	Status	Validation
		(in)	(in)	Frm L.	#	Pos V	Pos	Frm T.	H Off		
R1	MT6407-77A	35.1	16.1	147	1	a	Front	42	0	Added	
R3	RF4439d-25A	15	15	99	2	a	Behind	48	0	Added	
A6	JAHH-65B-R3B	72	13.8	52	3	a	Front	42	8	Retained	03/25/2021
A6	JAHH-65B-R3B	72	13.8	52	3	b	Front	42	-8	Retained	03/25/2021
R2	CBC78T-DS-43	6.4	6.9	52	3	a	Behind	78	0	Added	
R4	RF4440d-13A	15	15	52	3	b	Behind	48	0	Added	

Maser Consulting Connecticut

<u>Subject</u>	TIA-222-H Usage	
<u>Site Information</u>	Site ID:	468921-VZW / DANIELSON 2 CT
	Site Name:	DANIELSON 2 CT
	Carrier Name:	Verizon Wireless
	Address:	812 Providence Pike Killingly, Connecticut 06239 Windham County
	Latitude:	41.791389°
	Longitude:	-71.822333°
<u>Structure Information</u>	Tower Type:	Self Support
	Mount Type:	12.50-Ft Sector Mount

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.

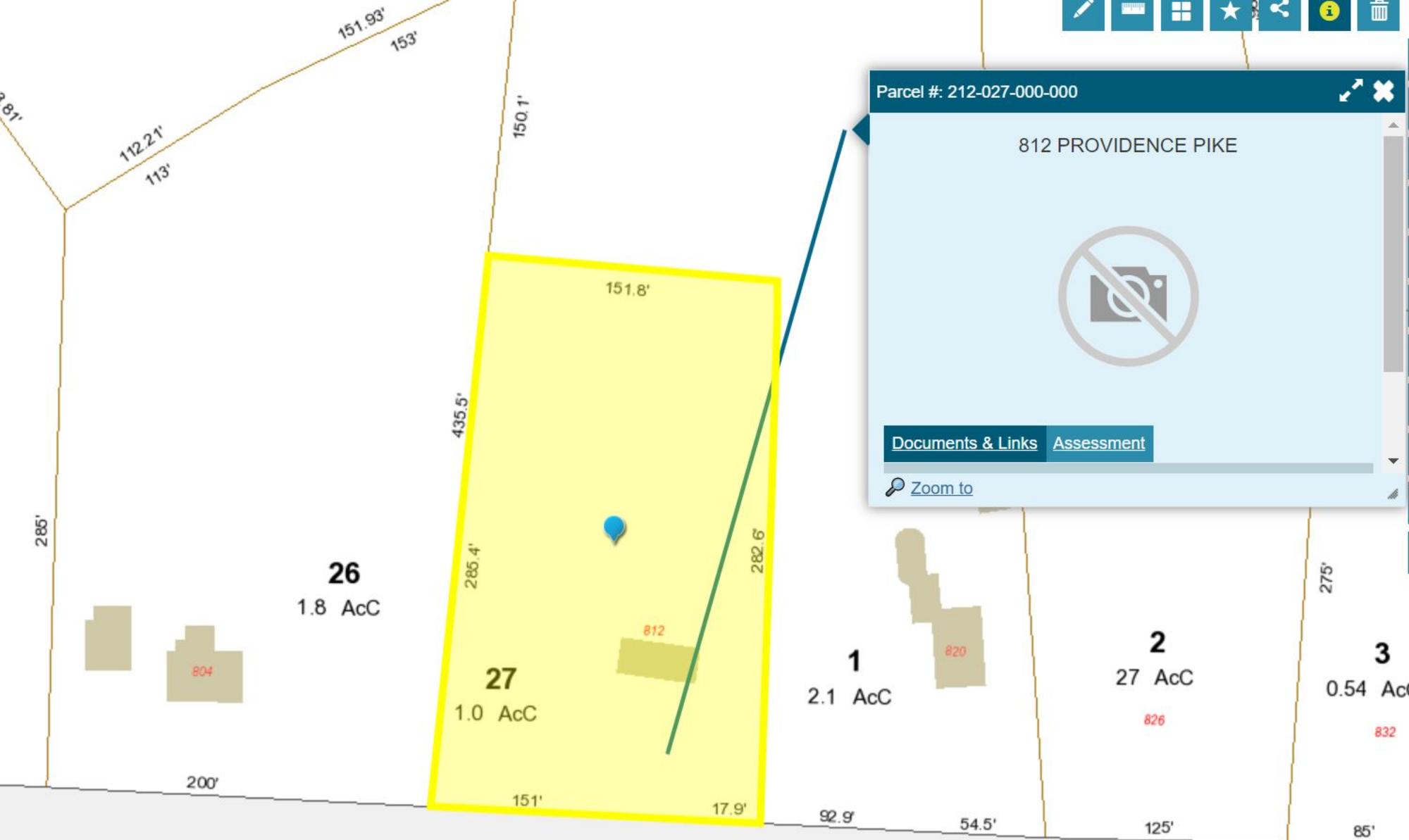
The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural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

Sincerely,



Peter Albano, PE
Project Manager

ATTACHMENT 5



The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2018.



Information on the Property Records for the Municipality of Killingly was last updated on 11/30/2021.

Property Summary Information

Parcel Data And Values Outbuildings Sales Permits

Parcel Information

Location:	812 PROVIDENCE PIKE	Property Use:	Cell Tower	Primary Use:	Cell Tower
Unique ID:	1389	Map Block Lot:	212-27	Acres:	1.00
490 Acres:	0.00	Zone:	RD	Volume / Page:	0652/0315
Developers Map / Lot:		Census:	9041-4007		

Value Information

	Appraised Value	Assessed Value
Land	16,200	11,340
Buildings	0	0
Detached Outbuildings	184,890	129,420
Total	201,090	140,760

Owner's Information

Owner's Data
QUINEBAUG VALLEY EMERGENCY COMMUNICATIONS INC 1249 HARTFORD PIKE KILLINGLY CT 06239

ATTACHMENT 6



DANIELSON 2
Certificate of Mailing — Firm

Name and Address of Sender Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103		TOTAL NO. of Pieces Listed by Sender 2	TOTAL NO. of Pieces Received at Post Office™ 3	Affix Stamp Here Postmark with Date of Receipt.		
		Postmaster, per (name of receiving employee) CH		 12/07/2021 US POSTAGE \$002.99  ZIP 06103 041L12203937		
USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)		Postage	Fee	Special Handling	Parcel Airlift
1.	Mary Calorio, Town Manager Town of Killingly 172 Main Street Killingly, CT 06239		  OLD STATE HOUSE DEC 07 2021			
2.	Ann-Marie Aubrey, Director of Planning and Development Town of Killingly 172 Main Street Killingly, CT 06239					
3.	Quinebaug Valley Emergency Communications Inc. 1249 Hartford Turnpike Killingly, CT 06239					
4.						
5.						
6.						