Robinson+Cole

KENNETH C. BALDWIN

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

Also admitted in Massachusetts
and New York

June 14, 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**
80 Lonetown Road, Redding, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains an existing wireless telecommunications facility at the above-referenced property address (the "Property"). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The tower was approved by the Town of Redding ("Town") in August of 1984. Cellco's use of the tower was approved by the Council in November 1993 (Petition No. 311). A copy of the Town's approval and the Council's Petition No. 311 Staff Report are included in Attachment 1.

Cellco now intends to modify its facility by replacing three (3) of its existing antennas with three (3) Samsung MT6407-77A antennas and six (6) remote radio heads ("RRHs") with six (6) new RRHs behind its antennas, all on Cellco's existing antenna mounting structure. A set of project plans showing Cellco's proposed facility modifications and new antennas and RRHs specifications are included in Attachment 2.

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

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

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

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 the 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 mounting device, with certain modifications, can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

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

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Julia Pemberton, Redding First Selectwoman
Aimee Pardee, Land Use Director
Andrew and Elizabeth Mound, Property Owner
Aleksey Tyurin

ATTACHMENT 1

TOWN OF REDDING

Redding Connecticut

Building Permits

Aug 22 19 84

No 4552

Permission is hereby granted to Francesco Giannisto owner of land

" owner of building

to erect Town

Located at No 80 on Lot Lonetown Rd Rd. or Street

Said building is to be described in application No 4552 and according to plans and specifications filed with the Building Inspector.

This permit is granted on condition that all town ordinances and building regulations and state laws shall be complied with, and is issued subject to the following conditions

Value of the building as estimated by Building Inspector $45,000

Building Fee	$ 235
Zone Fee	$ 98
Oil Burner Fee	$
Septic Tank Fee	$
Certificate of Occupancy Fee	$ 15
Total Fees	$ 348

S. Pietrangelo
Building Official

This permit expires six months from date if work is not commenced, which means that a reasonable amount of the structural work must be done of which the Building Official shall be the sole judge.

TOWN OF REDDING, CONNECTICUT

APPLICATION FOR ZONING PERMIT

FOR 120 FOOT STEEL TOWER WITH 26' DIAM. PROPELLER ON HORIZONTAL SHAFT AT TOP OF TOWER

THE UNDERSIGNED HEREBY APPLIES to the Zoning Commission for a permit to erect X, move ___, enlarge the width ___, length ___ (check one) of the structure herein described, in accordance with, and subject to, the zoning regulations of the Town of Redding, and the following statement of facts:

Name of property owner FRANCESCO A. GIANNINOTO

Location of property 80 LONETOWN ROAD REDDING, CT.

Proposed use of structure and premises GENERATE ELECTRICITY FROM WIND

Dimensions of plot: Frontage _____ Depth _____ Acreage 23.5

Distance of structure from street line, (*as defined in regulations*) 800 ± FEET (WEST)

Distance of structure from property lines:

Side line, (north) ~~or east~~ 160' EXACTLY

Side line, ~~south~~ or (west) 900' ±

(EAST) ~~Rear~~ line 300' ±

Other existing structures HOUSE, SHED, BARN

(*Give diagram showing plot size, existing structures, roads, and location of structure to be covered by this permit*)

Redding, Conn. AUGUST 22, 19 84

I hereby certify that the above statement of facts is correct, according to my best knowledge and belief, and I am familiar with the Zoning regulations applicable to this permit.

Gordon J. Giannunzio
Owner
attorney for FRANCESCO A. GIANNINOTO, OWN

Permit issued 4552 Aug 22, 19 84

Permit number 4552 S Pietrangelo Building Official

BUILDING OFFICE

REDDING, CONNECTICUT 06875
TEL. (203) 938-2558

CERTIFICATE OF OCCUPANCY

BUILDING PERMIT NO. 10204

AUTHORIZED BY: Jamm Heeney
BUILDING OFFICIAL

DATE CERTIFICATE ISSUED 4-20-06

DATE PERMIT ISSUED June 26, 2001

1. ASSESSOR'S MAP # 37 BLOCK # 68 LOT # G-5

2. PERMIT TO Work on Attennas (See Remarks) ( ) STORY Antennas NUMBER OF DWELLING UNITS None
(TYPE OF IMPROVEMENT) (NO.) (PROPOSED USE)

3. AT: (STREET & NO.) 80 Lonetown Rd.

4. PROPERTY OWNER MOUND, Andrew C. & Elizabeth C. ADDRESS Same

4A. PROPERTY OWNERS TEL. 938-2855 CONTRACTOR'S TEL. 203-314-1911

5. APPLICANT Chris Jardine, Proj. Mgr. LIC.# MCO-900576 PHONE 203-314-1911
Construction Services of Branford

6. ADDRESS 63-3 North Branford Rd. Branford CT 06405
(NO.) (STREET) (CITY) (STATE) (ZIP CODE)

7. BUILDING IS TO BE _____ FEET WIDE BY _____ FEET LONG AREA OR VOLUME _____ (CUBIC / SQ. FEET)

8. CONSTRUCTION TYPE Wireless Communication Facility USE GROUP _____

9. REMARKS Excavate for building foundation, electrical service, telco service, expose existing tower footing and reinforce foundation to tower, pour footing and wall for building.

10.

11. OWNER Andrew C. & Elizabeth C. Mound

12. ADDRESS 80 Lonetown Rd.
REdding, CT 06896

BUILDING DEPARTMENT
TOWN OF REDDING
Jamm Heeney
BUILDING OFFICIAL

DEPT. FILE COPY

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL
136 Main Street, Suite 401
New Britain, Connecticut 06051-4225
Phone: 827-7682

Petition No. 311
Metro Mobile CTS of Fairfield County, Inc.
Redding, Connecticut
Staff Report
November 9, 1993

Metro Mobile CTS of Fairfield County, Inc. (Metro Mobile) is petitioning the Connecticut Siting Council (Council) for a declaratory ruling that the proposed installation of cellular antennas on an existing 120-foot wind tower at 80 Lonetown Road in Redding, Connecticut would not have a substantial adverse environmental effect and therefore would not require a Certificate of Environmental Compatibility and Public Need from the Council. On November 8, 1993, Chairman Mortimer A. Gelston and Gloria Dibble Pond of the Council and Robert K. Erling of the Council staff reviewed this petition.

Metro Mobile proposes to install four whip type transmit/receive antennas, mounted on two side arms between 100 and 110 feet above ground level on the existing lattice tower. The attached antennas would not extend above the top of the tower. Metro Mobile would construct a 6-foot by 2.5-foot by 6-foot self-contained enclosure with radio equipment near the base of the existing tower. The enclosure would be surrounded by an eight-foot high security fence. A building permit would be obtained from the Town of Redding.

The wind power facility, constructed in the mid-1980s, produces power for the residence on the proposed site, with excess power being sold to Northeast Utilities. The proposed antennas would be mounted below the wooden blades of the wind power facility. Metro Mobile does not expect any interference with cellular communications from the operation of the wind-powered equipment.

Metro Mobile contends that this project would have no effect on the ecology of the site, maximum radio frequency power density levels would be well below state standards, the proposed installation would not increase noise levels at the site boundary by six decibels or more, and the boundaries of the site would not be extended by the project.

Robert K. Erling
Senior Siting Analyst

0270H

ATTACHMENT 2

VICINITY MAP

SCALE: N.T.S.

N

APPROXIMATE COORDINATES:	LATITUDE:	N41° 19' 04.02"
	LONGITUDE:	W73° 23' 00.03"

NOTE:

AN ANALYSIS OF THE CAPACITY OF THE EXISTING STRUCTURE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY HUDSON DESIGN GROUP, LLC.
DATED: APRIL 16, 2021 (REV.2)

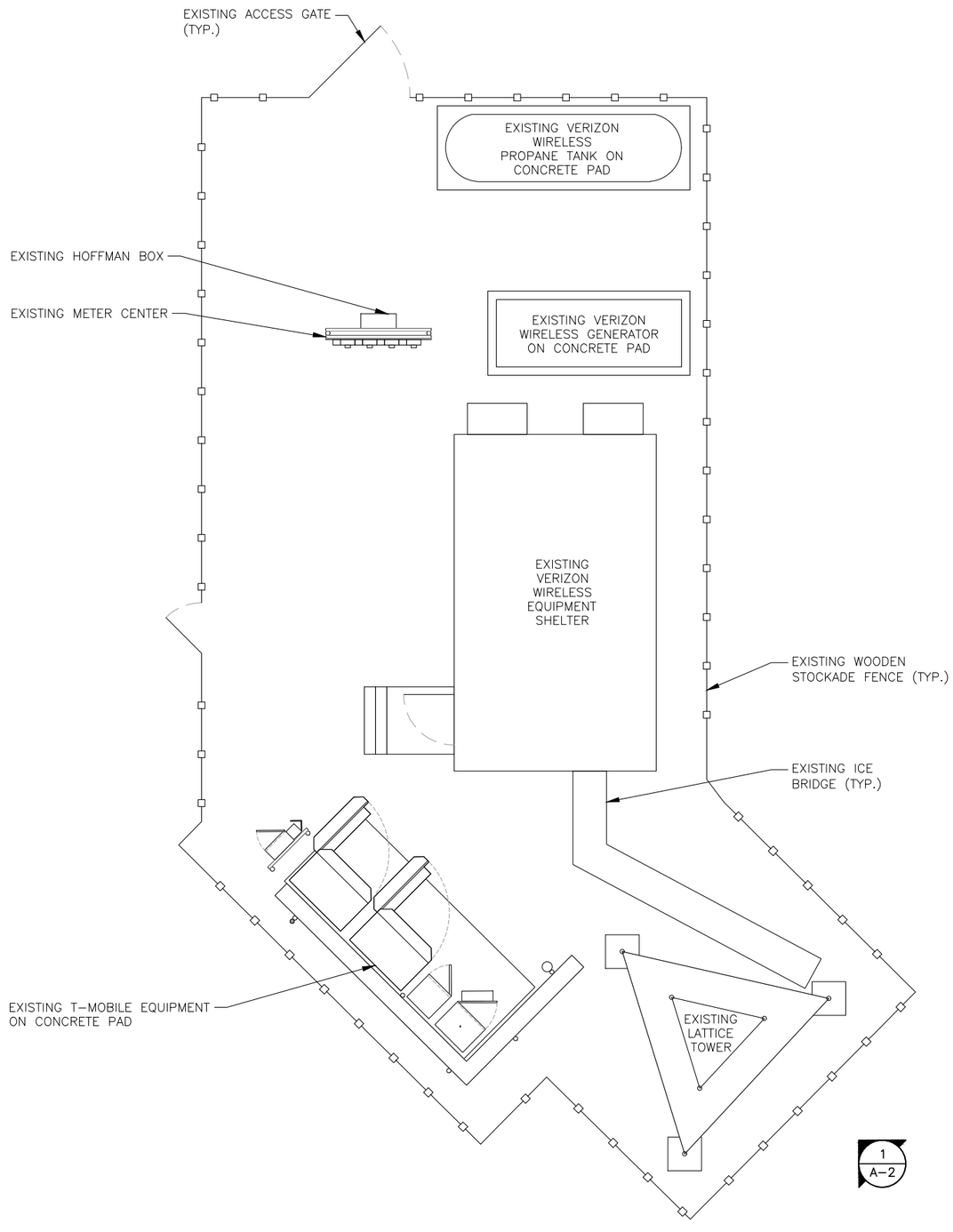
NOTE:

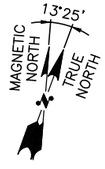
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING ANTENNA MOUNT TO SUPPORT THE PROPOSED LOADING IS BASED UPON THE LATEST MOUNT ASSESSMENT BY MASER CONSULTING CONNECTICUT

NOTE:

PROPOSED VZS01 ANTENNA SIZE AND WEIGHT ARE NOT TO EXCEED:

DIMENSIONS H35.12"XW16.06"XD5.51"
WEIGHT (INCLUDING INTEGRATED RRH) 87.1 LBS





COMPOUND PLAN 1 / A-1

22x34 SCALE: 1/4"=1'-0"
11x17 SCALE: 1/8"=1'-0"

GRAPHIC SCALE
0 2 4 8 12 FEET

FIELD INSPECTION DATE: 12-09-2020

SCOPE

1. EXISTING (3) ANTENNAS TO BE REMOVED, EXISTING (9) ANTENNAS TO REMAIN, INSTALL (3) PROPOSED ANTENNAS PER 'RF'.
2. EXISTING (6) RRH'S TO BE REMOVED, INSTALL (9) PROPOSED RRH'S PER 'RF'.
3. EXISTING (2) 6-OVP JUNCTION BOXES TO REMAIN PER 'RF'.
4. EXISTING (2) 6x12 HYBRID CABLES TO REMAIN PER 'RF'.
5. ALL EXISTING COAX CABLES TO REMAIN PER 'RF'.
6. ALL EXISTING DIPLEXERS TO BE REMOVED PER 'RF'.
7. ALL REPLACEMENT ANTENNAS TO MATCH EXISTING CONDITION & HEIGHTS.
8. RECONFIGURE/RELOCATE EXISTING ANTENNA MOUNTS AS NECESSARY TO ACCOMMODATE HORIZONTAL SEPARATION, PROPOSED AZIMUTHS, AND ANTENNAS CONFIGURATION.

NEW ANTENNA CONFIGURATION

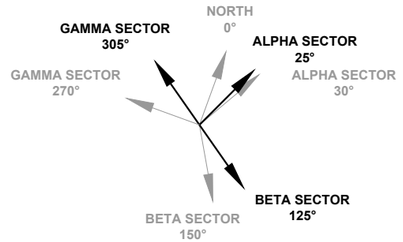
NOTE TO GENERAL CONTRACTOR:

'RF' DESIGN AND EQUIPMENT IS BASED UPON **RFDS ISSUED BY VZW DATED: 04/09/2021 REV3**
THE CONTRACTOR OF RECORD SHALL CONTACT VZW PRIOR TO ANY AND ALL ORDERING/PURCHASING/INSTALLATION OF EQUIPMENT TO VERIFY THAT THE 'RF' LISTED IN THE DRAWING SET IS CURRENT AND UP TO DATE.

NOTES

1. NORTH SHOWN AS APPROXIMATE.
2. SOME EXISTING & PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
3. ANTENNAS WILL BE CAMOUFLAGED WITH 3M WRAP, AS NEEDED, PER VERIZON WIRELESS AND BUILDING OWNER'S APPROVAL.
4. PRIOR TO COMMENCEMENT OF ANY WORK, PROPOSED ANTENNA INSTALLATION IS PURSUANT TO FINDINGS DICTATED IN STRUCTURAL ANALYSIS. STRUCTURAL ANALYSIS TO VERIFY CAPACITY OF EXISTING STRUCTURE TO ENSURE STRUCTURAL INTEGRITY FOLLOWING INSTALLATION OF PROPOSED ANTENNAS, COAX CABLES AND REQUIRED HARDWARE. COPY OF STRUCTURAL ANALYSIS TO BE SENT TO DESIGN ENGINEER.
5. CONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, VERIZON WIRELESS ANTENNA MOUNT LOCATION AND ANTENNAS TO BE INSTALLED.
6. CONTRACTOR SHALL NOTIFY ENGINEERS IF FIELD CONDITIONS DIFFER FROM DESIGN.
7. RAD CENTERS MEASURED IN THE FIELD WITH LASER BY HDG. RAD CENTERS MAY NOT MATCH RF ANTENNA DESIGN SHEET.

ANTENNA ORIENTATION



PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT
DANIEL P. HAMM
No. 24178
LICENSED PROFESSIONAL ENGINEER

CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER (IF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN

CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

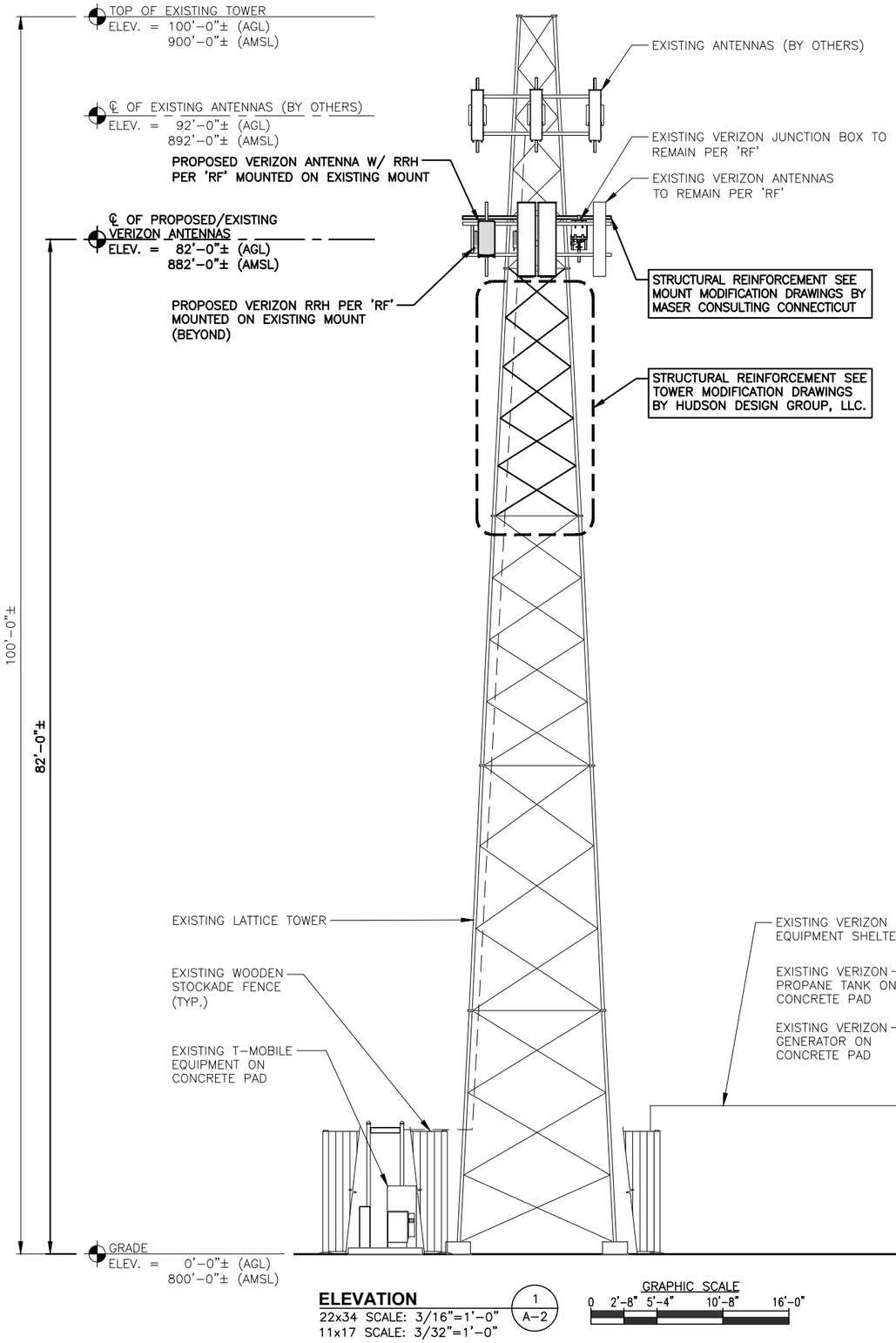
REV.	DATE	DESCRIPTION	BY
1	04/21/21	REV. FOR EQUIPMENT BY OTHERS	SLY
0	03/03/21	FOR CONSTRUCTION	OS

SITE NAME:
REDDING CT

SITE ADDRESS:
80 LONETOWN ROAD
REDDING, CT 06896

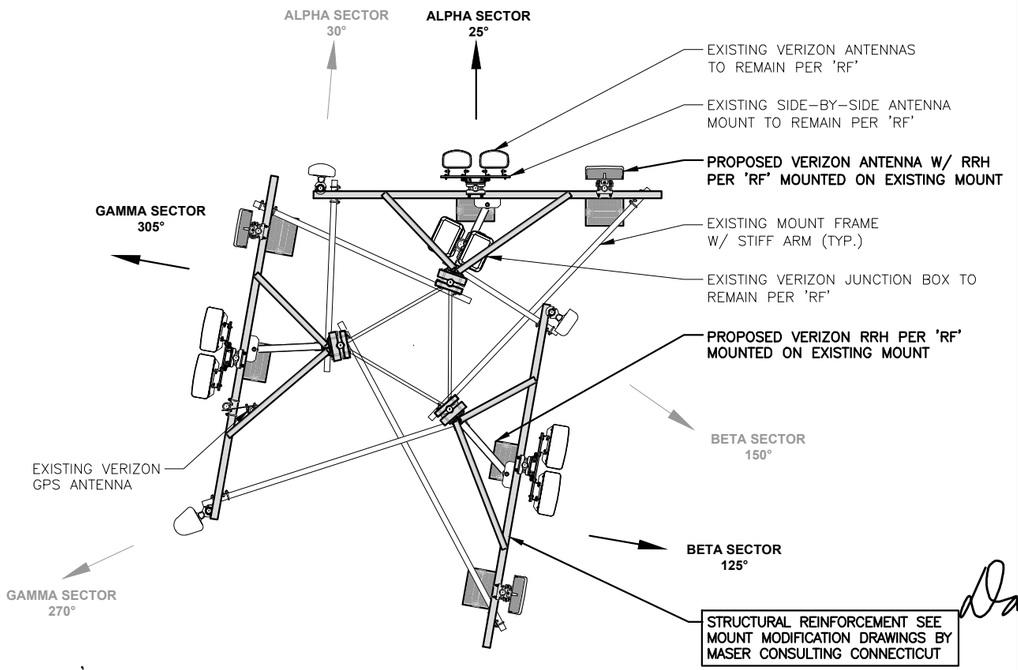
SHEET TITLE
COMPOUND PLAN

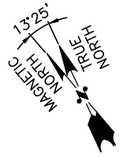
SHEET NUMBER
A-1



ELEVATION (1 / A-2)
22x34 SCALE: 3/16"=1'-0"
11x17 SCALE: 3/32"=1'-0"

GRAPHIC SCALE
0 2'-8" 5'-4" 10'-8" 16'-0"





PROPOSED/EXISTING ANTENNA PLAN (2 / A-2)
22x34 SCALE: 3/8"=1'-0"
11x17 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1'-4" 2'-8" 5'-4" 8'-0"

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DIMENSIONS H35.12"XW16.06"XD5.51"
WEIGHT (INCLUDING INTEGRATED RRH) 87.1 LBS

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon

HUDSON Design Group LLC
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STATE OF CONNECTICUT
DANIEL P. HAMM
No. 24178
LICENSED PROFESSIONAL ENGINEER

Daniel P. Hamm

CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER (IF) RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN

CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	04/21/21	REV. FOR EQUIPMENT BY OTHERS	SLY
0	03/03/21	FOR CONSTRUCTION	OS

SITE NAME:
REDDING CT

SITE ADDRESS:
80 LONETOWN ROAD
REDDING, CT 06896

SHEET TITLE
ELEVATION.
PROPOSED/EXISTING
ANTENNA PLAN

SHEET NUMBER
A-2

STRUCTURAL NOTES:

1. DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, INTERNATIONAL BUILDING CODE, EIA/TIA-222-H STRUCTURAL STANDARDS FOR STEEL ANTENNA, TOWERS AND ANTENNA SUPPORTING STRUCTURES.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER OF RECORD.
3. DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
4. STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 (Fy=50 ksi), MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE INDICATED.
5. STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE B, OR ASTM A53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.
6. STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 TYPE-X "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 3/4" DIA UON.
7. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
8. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
9. FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.
10. CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND DI.I. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL". 14TH EDITION.
11. INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
12. UNISTRUT SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP., WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1 5/8"x1 5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
13. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-270 AND OR HY-200 SYSTEMS (AS SPECIFIED IN DWG.) OR ENGINEERS APPROVED EQUAL.
14. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, HILTI KWIK BOLT III OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
15. LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.
16. WHERE ROOF PENETRATIONS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT AND COORDINATE RELATED WORK WITH THE BUILDING OWNER AND THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT VOID THE EXISTING ROOF WARRANTY. ROOF SHALL BE WATERTIGHT.
17. ALL FIBERGLASS MEMBERS USED ARE AS MANUFACTURED BY STRONGWELL COMPANY OF BRISTOL, VA 24203. ALL DESIGN CRITERIA FOR THESE MEMBERS IS BASED ON INFORMATION PROVIDED IN THE DESIGN MANUAL. ALL REQUIREMENTS PUBLISHED IN SAID MANUAL MUST BE STRICTLY ADHERED TO.
18. NO MATERIALS TO BE ORDERED AND NO WORK TO BE COMPLETED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED IN WRITING.
19. SUBCONTRACTOR SHALL FIREPROOF ALL STEEL TO PRE-EXISTING CONDITIONS.

SPECIAL INSPECTIONS (REFERENCE IBC CHAPTER 17):

GENERAL: WHERE APPLICATION IS MADE FOR CONSTRUCTION, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE INSPECTION CHECKLIST ABOVE.

THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS THE SPECIAL INSPECTOR FOR THE WORK DESIGNED BY THEM, PROVIDED THOSE PERSONNEL MEET THE QUALIFICATION REQUIREMENTS.

STATEMENT OF SPECIAL INSPECTIONS: THE APPLICANT SHALL SUBMIT A STATEMENT OF SPECIAL INSPECTIONS PREPARED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 107.1 AS A CONDITION FOR ISSUANCE. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 1705.

REPORT REQUIREMENT: SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS SHALL BE SUBMITTED.

SPECIAL INSPECTION CHECKLIST

BEFORE CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
N/A	ENGINEER OF RECORD APPROVED SHOP DRAWINGS [1]
N/A	MATERIAL SPECIFICATIONS REPORT [2]
N/A	FABRICATOR NDE INSPECTION
REQUIRED	PACKING SLIPS [3]
ADDITIONAL TESTING AND INSPECTIONS:	
DURING CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	STEEL INSPECTIONS
N/A	HIGH STRENGTH BOLT INSPECTIONS
N/A	HIGH WIND ZONE INSPECTIONS [4]
N/A	FOUNDATION INSPECTIONS
N/A	CONCRETE COMP. STRENGTH, SLUMP TESTS AND PLACEMENT
N/A	POST INSTALLED ANCHOR VERIFICATION [5]
N/A	GROUT VERIFICATION
N/A	CERTIFIED WELD INSPECTION
N/A	EARTHWORK: LIFT AND DENSITY
N/A	ON SITE COLD GALVANIZING VERIFICATION
N/A	GUY WIRE TENSION REPORT
ADDITIONAL TESTING AND INSPECTIONS:	
AFTER CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	MODIFICATION INSPECTOR REDLINE OR RECORD DRAWINGS [6]
N/A	POST INSTALLED ANCHOR PULL-OUT TESTING
REQUIRED	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTES:

1. REQUIRED FOR ANY NEW SHOP FABRICATED FRP OR STEEL.
2. PROVIDED BY MANUFACTURER, REQUIRED IF HIGH STRENGTH BOLTS OR STEEL.
3. PROVIDED BY GENERAL CONTRACTOR; PROOF OF MATERIALS.
4. HIGH WIND ZONE INSPECTION CATB 120MPH OR CAT C,D 110MPH INSPECT FRAMING OF WALLS, ANCHORING, FASTENING SCHEDULE.
5. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-11 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-11 D.8.2.4.
6. AS REQUIRED; FOR ANY FIELD CHANGES TO THE ITEMS IN THIS TABLE.

NOTES:

1. ALL CONNECTIONS TO BE SHOP WELDED & FIELD BOLTED USING 3/4"ø A325-X BOLTS, UNLESS OTHERWISE NOTIFIED.
2. SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED BEFORE ORDERING MATERIAL.
3. SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED PRIOR TO STEEL FABRICATION.
4. VERIFICATION OF EXISTING ROOF CONSTRUCTION IS REQUIRED PRIOR TO THE INSTALLATION OF THE ROOF PLATFORM. ENGINEER OF RECORD IS TO APPROVE EXISTING CONDITIONS IN ORDER TO MOVE FORWARD.
5. CENTERLINE OF PROPOSED STEEL PLATFORM SUPPORT COLUMNS TO BE CENTRALLY LOCATED OVER THE EXISTING BUILDING COLUMNS.
6. EXISTING BRICK MASONRY COLUMNS/BEARING TO BE REPAIRED/REPLACED AT ALL PROPOSED PLATFORM SUPPORT POINTS. ENGINEER OF RECORD TO REVIEW AND APPROVE.

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT
DANIEL P. HAMM
No. 24178
LICENSED PROFESSIONAL ENGINEER

CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN

CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	04/21/21	REV. FOR EQUIPMENT BY OTHERS	SLY
0	03/03/21	FOR CONSTRUCTION	OS

SITE NAME:
REDDING CT

SITE ADDRESS:
80 LONETOWN ROAD
REDDING, CT 06896

SHEET TITLE
STRUCTURAL NOTES & SPECIAL INSPECTIONS

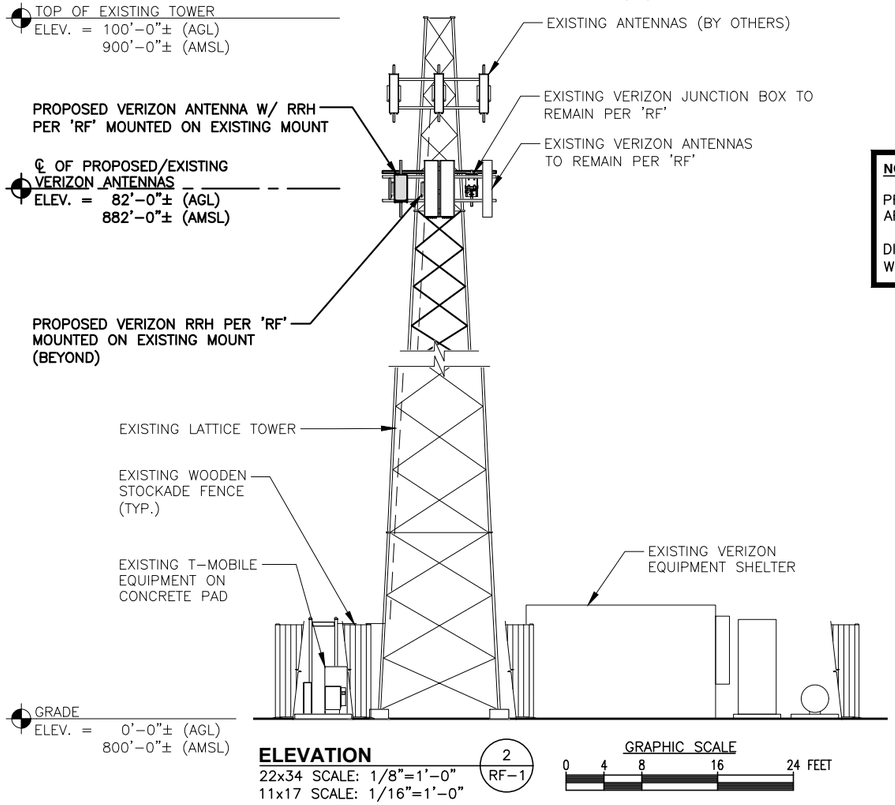
SHEET NUMBER
SN-1

BILL OF MATERIAL

SITE NAME: REDDING CT

ITEM	DESCRIPTION	QTY	LENGTH	COMMENTS
①	EXISTING BXA–80063/6CF ANTENNA	2		MOUNTED TO EXISTING PIPE MAST (ALPHA & BETA SECTORS)
①	EXISTING BXA–80080–4CF–EDIN–0 ANTENNA	1		MOUNTED TO EXISTING PIPE MAST (GAMMA SECTOR)
②	EXISTING NHH–65B–R2B ANTENNA	2		MOUNTED TO EXISTING PIPE MAST (ALPHA SECTOR)
②	EXISTING NHH–45B–R2B ANTENNA	4		MOUNTED TO EXISTING PIPE MAST (BETA & GAMMA SECTORS)
③	**PROPOSED VZS01 ANTENNA**	**3**		**MOUNTED TO EXISTING PIPE MAST**
④	EXISTING 1/2" TOP COAX JUMPERS	24	–	ROUTE FROM RRH TO ANTENNA
④	**PROPOSED 1/2" TOP COAX JUMPERS**	**12**	**6 FT.**	**ROUTE FROM RRH TO ANTENNA**
⑤	**PROPOSED SAMSUNG RRH B5/B13 RRH–BR04C**	**3**		**MOUNTED TO EXISTING PIPE MAST**
⑤	**PROPOSED SAMSUNG RRH B2/B66A RRH–BR049**	**3**		**MOUNTED TO EXISTING PIPE MAST**
⑥	**PROPOSED SAMSUNG FIBER JUMPER CABLES**	**9**	**14 FT.**	**ROUTE FROM OVP TO PROPOSED RRH**
⑥	**PROPOSED SAMSUNG POWER JUMPER CABLES**	**9**	**14 FT.**	**ROUTE FROM OVP TO PROPOSED RRH**
⑦	EXISTING UPPER 6 OVP	2		MOUNTED TO EXISTING PIPE MAST
⑧	EXISTING LI 6x12 HYBRID CABLE	2	–	ROUTE FROM EQUIPMENT TO OVP
⑨	EXISTING 1–5/8"ø COAX CABLE	6	–	ROUTE FROM EQUIPMENT TO ANTENNA SECTORS
⑩	EXISTING LOWER OVP	2		RACK MOUNTED INSIDE CABINET

THE ABOVE RF–BOM SHEET IS BASED ON INFORMATION LISTED ON ANTENNA RECOMMENDATION SHEET DATED 04/09/2021



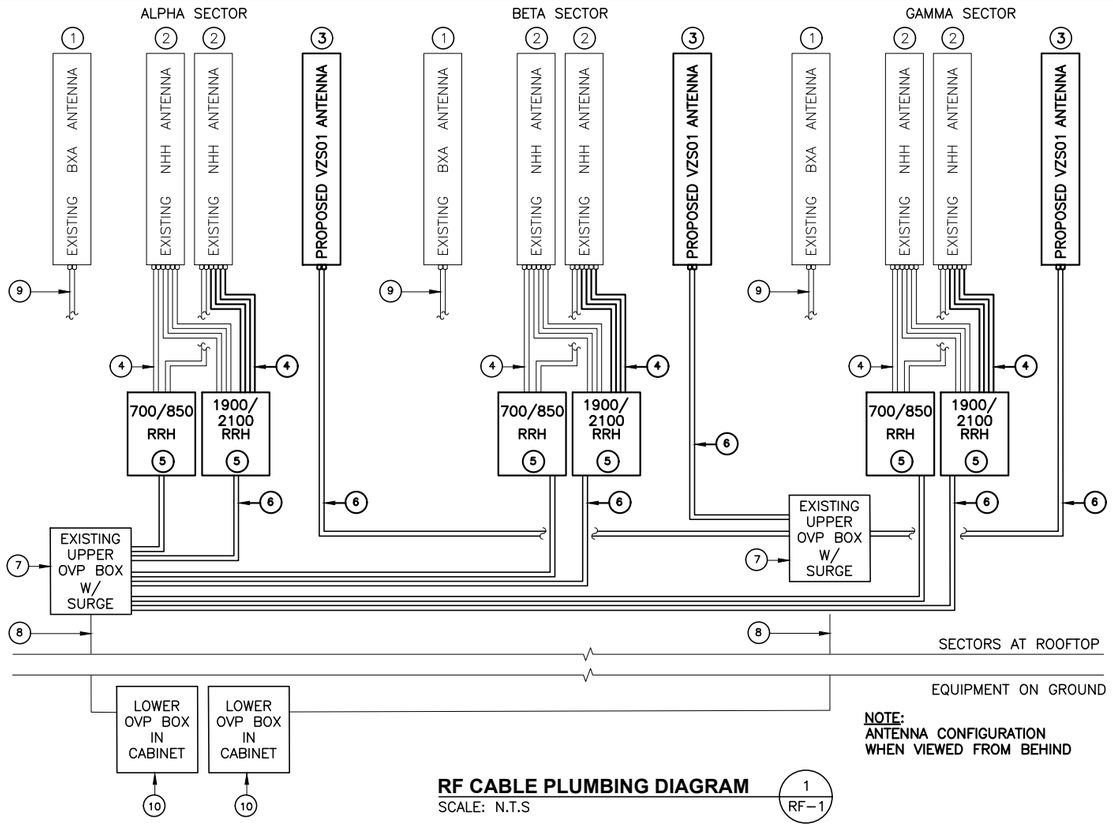
ELEVATION 2 RF–1
22x34 SCALE: 1/8"=1'–0"
11x17 SCALE: 1/16"=1'–0"

GRAPHIC SCALE
0 4 8 16 24 FEET

NOTE:

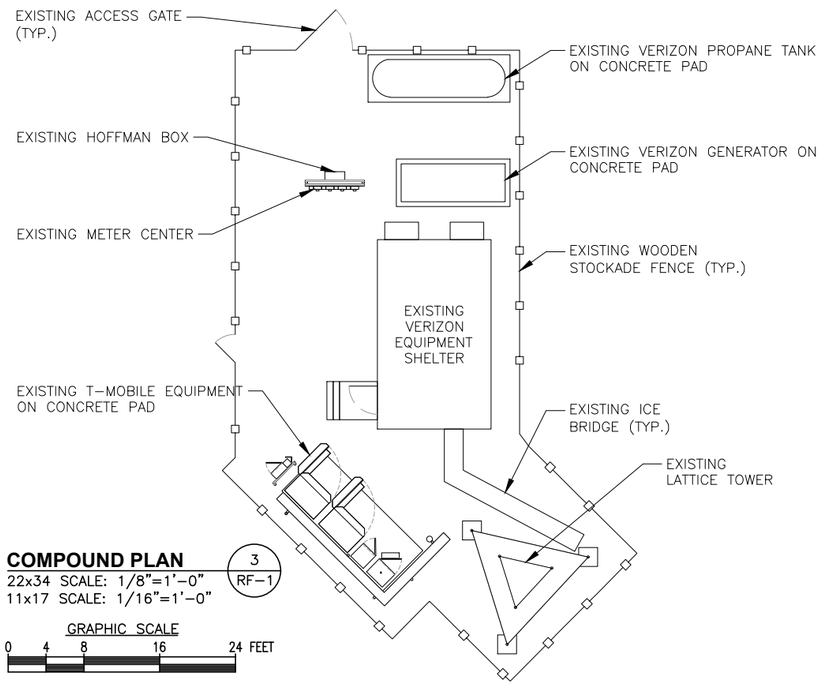
PROPOSED VZS01 ANTENNA SIZE AND WEIGHT ARE NOT TO EXCEED:

DIMENSIONS H35.12"XW16.06"XD5.51"
WEIGHT (INCLUDING INTEGRATED RRH) 87.1 LBS



NOTE:
ANTENNA CONFIGURATION WHEN VIEWED FROM BEHIND

RF CABLE PLUMBING DIAGRAM 1 RF–1
SCALE: N.T.S



COMPOUND PLAN 3 RF–1
22x34 SCALE: 1/8"=1'–0"
11x17 SCALE: 1/16"=1'–0"

GRAPHIC SCALE
0 4 8 16 24 FEET

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon

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CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
0	03/03/21	BILL OF MATERIAL	OS

SITE NAME:
REDDING CT

SITE ADDRESS:
80 LONETOWN ROAD
REDDING, CT 06896

SHEET TITLE
RF PLUMBING DIAGRAM & BILL OF MATERIAL

SHEET NUMBER
RF-1

SAMSUNG

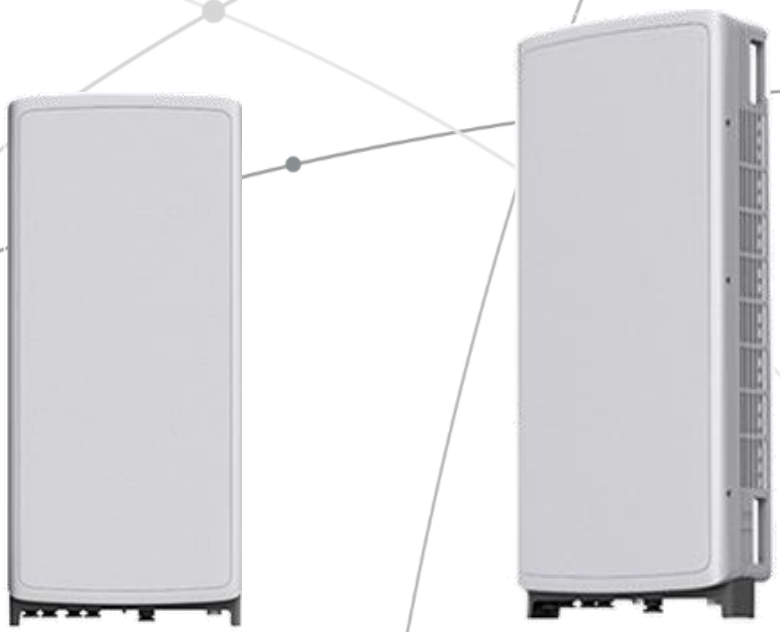
SAMSUNG

C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

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

Model Code : MT6407-77A

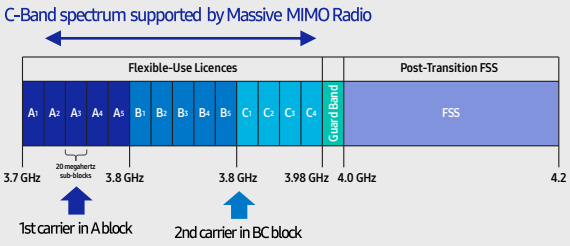


Points of Differentiation

Wide Bandwidth

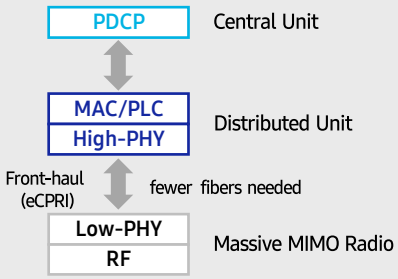
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

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



Future Proof Product

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



Enhanced Performance

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

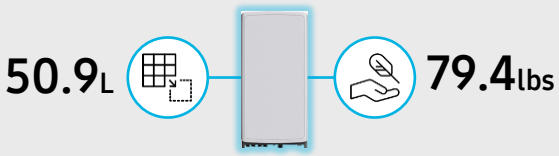
This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

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

Well Matched Design

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

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



Technical Specifications

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

SAMSUNG

About Samsung Electronics Co., Ltd.

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

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

SAMSUNG

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

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

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

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

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

Features and Benefits

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

Key Technical Specifications

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

SAMSUNG

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

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

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

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

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

Features and Benefits

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

Key Technical Specifications

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

ATTACHMENT 3

	General	Power	Density					
Site Name: Redding								
Tower Height: Verizon @ 82ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**CALC. POWER DENS**	**FREQ.**	**MAX. PERMISS. EXP.**	**FRACTION MPE**	**Total**
*T-Mobile	2	2334	92	2100	0.2270	1.0000	2.27%	
*T-Mobile	2	470	92	600	0.0457	0.4000	1.14%	
*T-Mobile	1	1253	92	600	0.0609	0.4000	1.52%	
*T-Mobile	2	515	92	700	0.0501	0.4667	1.07%	
*T-Mobile	2	1833	92	1900	0.1783	1.0000	1.78%	
*T-Mobile	2	1077	92	2100	0.1047	1.0000	1.05%	
*T-Mobile	2	6413	92	2500	0.6236	1.0000	6.24%	
*T-Mobile	2	6413	92	2500	0.6236	1.0000	6.24%	
VZW 700	**4**	**1146**	**82**	**0.0245**	**751**	**0.5007**	**4.89%**	
VZW CDMA	**2**	**493**	**82**	**0.0053**	**877.26**	**0.5848**	**0.90%**	
VZW Cellular	**4**	**897**	**82**	**0.0192**	**874**	**0.5827**	**3.30%**	
VZW PCS	**4**	**2312**	**82**	**0.0495**	**1980**	**1.0000**	**4.95%**	
VZW AWS	**4**	**2594**	**82**	**0.0555**	**2120**	**1.0000**	**5.55%**	
VZW CBAND	**4**	**6531**	**82**	**0.1397**	**3730.005**	**1.0000**	**13.97%**	
								54.87%
* Source: Siting Council								

ATTACHMENT 4

(REVISED)
STRUCTURAL ANALYSIS REPORT

For

SITE NAME: REDDING CT

80 Lonetown Road
Redding, CT 06896

Antennas Mounted on the Tower

Prepared for:

verizon

20 Alexander Drive
Wallingford CT 06492

Dated: April 16, 2021 (Rev. 2)
February 10, 2021 (Rev. 1)
January 19, 2021

Prepared by:

HDG | HUDSON Design Group LLC

45 Beechwood Drive
North Andover, MA 01845
(P) 978.557.5553 (F) 978.336.5586
www.hudsondesigngroupllc.com

SCOPE OF WORK:

Hudson Design Group, LLC (HDG) has been authorized by Verizon to conduct a structural evaluation of the 100' self-supporting tower supporting the proposed Verizon's antennas located at elevation 82' above the ground level.

This report represents this office's findings, conclusions and recommendations pertaining to the support of Verizon's existing and proposed antennas listed below.

Record drawings of the existing tower were not available for our use. The following documents were used for our reference:

- Structural analysis report prepared by Centek Engineering, dated July 20, 2020.
- HDG Structural Analysis report dated March 7, 2018.
- Tower Mapping data provided by ProVertic LLC, dated January 25, 2021.
- Mount Modification Drawings prepared by Maser Consulting – Connecticut dated December 31, 2020.
- Antenna Mount Analysis report prepared by Maser Consulting – Connecticut dated December 31, 2020.

CONCLUSION SUMMARY:

HDG performed structural analysis of the existing tower with the following proposed modifications:

1. **Replace diagonals at EL.60' to EL.80'.**

Based on our evaluation, we have determined that the existing tower **is in conformance** with the ANSI/TIA-222-G Standard for the loading considered under the criteria listed in this report. The tower structure is rated at **79.0 %** - (Diagonal at Tower Section T4 from EL.20' to EL.40' Controlling).

Based on our evaluation, we have determined that the existing foundation **is in conformance** with the ANSI/TIA-222-G Standard for the loading considered under the criteria listed in this report. The foundation is rated at **89.0 %** - (Overturning Controlling).

HUDSON Design Group LLC

APPURTENANCES CONFIGURATION:

Tenant	Appurtenances	Elev.	Mount
T-Mobile	(3) APX16DWV-16DWV-S Antennas	92'	SitePro1 VFA12-HD***
T-Mobile	(3) APXVAARR18_43-U-NA20 Antennas	92'	SitePro1 VFA12-HD***
T-Mobile	(3) AIR6449 B41 Antennas	92'	SitePro1 VFA12-HD***
T-Mobile	(3) 4424 25 RRH's	92'	SitePro1 VFA12-HD***
T-Mobile	(3) 4449 B71+B12 RRH's	92'	SitePro1 VFA12-HD***
T-Mobile	(3) 4415 B25 RRH's	92'	SitePro1 VFA12-HD***
T-Mobile	(3) RRUS-11 RRH's	92'	SitePro1 VFA12-HD***
T-Mobile	(3) SDX1926Q-43 Diplexers	92'	SitePro1 VFA12-HD***
Verizon	**(3) MT6407-77A Antennas**	82'	T - Frame w/ Reinforcement Kit**
Verizon	**(3) B2/B66A RRH-BR049 RRH's**	82'	T - Frame w/ Reinforcement Kit**
Verizon	**(3) B5/B13 RRH-BR04C RRH's**	82'	T - Frame w/ Reinforcement Kit**
Verizon	(1) BXA-80080-4CF Antennas	82'	T - Frame w/ Reinforcement Kit**
Verizon	(2) NHH-65B-R2B Antennas	82'	T - Frame w/ Reinforcement Kit**
Verizon	(2) BXA-80063-6CF Antennas	82'	T - Frame w/ Reinforcement Kit**
Verizon	(4) NHH-45B-R2B Antennas	82'	T - Frame w/ Reinforcement Kit**
Verizon	(2) Junction Boxes	82'	T - Frame w/ Reinforcement Kit**

Proposed Verizon Appurtenances shown in Bold.

****Mount Modification proposed by Maser Consulting – Connecticut dated December 31, 2020.***

***** T-Mobile Loading from Structural Analysis report prepared by Centek Engineering dated July 20, 2020.***

VERIZON EXISTING/PROPOSED COAX CABLES:

Tenant	Coax Cables	Elev.	Mount
T-Mobile	(4) 1 5/8" Hybrid Cables	92'	Tower Face
Verizon	(2) 1 5/8" Hybrid Cables	82'	Tower Face
Verizon	(12) 1 5/8" Coaxial Cables	82'	Tower Face

Proposed Verizon Coax Cables shown in Bold.

HUDSON Design Group LLC

ANALYSIS RESULTS SUMMARY:

Component	Max. Stress Ratio	Elev. of Component (ft)	Pass/Fail	Comments
Legs	75.0 %	20 – 40	PASS	
Diagonals	**79.0 %**	20 – 40	PASS	**Controlling**
Top Girt	18.7 %	40 – 60	PASS	

FOUNDATION COMPARISON SUMMARY:

	Stress Ratio	Pass/Fail	Comments
Bearing	54.8 %	PASS	
Overturning	**89.0 %**	PASS	**Controlling**
Sliding	32.1 %	PASS	

HUDSON Design Group LLC

DESIGN CRITERIA:

1. EIA/TIA-222-G Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

   County: Fairfield
   Ultimate Wind Speed: 120 mph (3 second gust)
   Nominal Wind Speed: 93 mph
   Structural Class: II
   Exposure Category: B
   Topographic Category: 1
   Nominal Ice Thickness: 0.75 inch

2. Approximate height above grade to proposed antennas: 82'

***Calculations and referenced documents are attached.**

ASSUMPTIONS:

1. The appurtenances configuration is as stated in this report. All antennas, coax cables and waveguide cables are assumed to be properly installed and supported as per the manufacturer's requirements.

2. The tower and foundation are properly constructed and maintained. All structural members and their connections are assumed to be in good condition and are free from defects with no deterioration to its member capacities.

3. The support mounts and platforms are not analyzed and are considered adequate to support the loading. The analysis is limited to the primary support structure itself.

4. All prior structural modification, if any, are assumed to be as per the data supplied (if available), and installed properly.

SUPPORT RECOMMENDATIONS:

HDG recommends that the proposed antennas and RRHs be mounted on the existing T - frame w/ reinforcement kit supported by the tower.

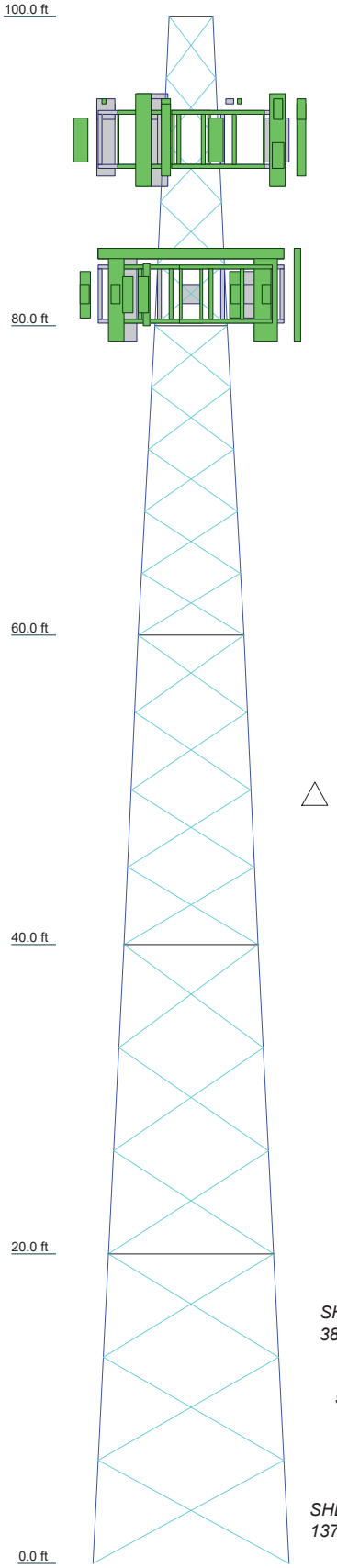
Reference HDG's Latest Construction Drawings for all component and connection requirements (attached).

Photo 1: Photo illustrating the Tower with Appurtenances shown.

HUDSON
Design Group LLC

CALCULATIONS

Section		T1	T2	T3	T4	T5
Legs		P3x.216		P3.5x.226		P4x.237
Leg Grade		A572-50				
Diagonals		L1 1/4x1 1/4x1/8	L2x2x1/4	L1 1/2x1 1/2x3/16	L2x2x1/8	L2 1/2x2 1/2x3/16
Diagonal Grade		A36				
Top Girts		L1 1/4x1 1/4x1/8		L1 1/2x1 1/2x3/16	L2x2x3/16	L2 1/2x2 1/2x3/8
Face Width (ft)	12.67	2.75	4.72	6.76	8.65	10.69
# Panels @ (ft)	5292.2	10 @ 4		4 @ 5	6 @ 6.66667	
Weight (lb)		630.4	1140.8	980.1	959.8	1581.1



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
SitePro1 VFA12-HD Mount	92	SDX1926Q-43	92
APX16DWV-16DWV-S w/ Mounting Pipe	92	12' T- Arm	82
APXVAARR18_43-U-NA20 Antennas w/ Mounting Pipe	92	Sector Stabilizer Kit , SitePro1 P/N SFS-V	82
AIR 6449 B41 w/Mounting Pipe	92	BXA-80080-4CF-EDIN-X w/Mounting Pipe	82
4424 B25 RRH	92	(2) NHH-65B-R2B w/Mounting Pipe	82
4449 B71+B12 RRH	92	MT6407-77A Antenna w/Mounting Pipe	82
4415 B25 RRH	92	B2/B66A RRH-BR049 RRH	82
RRUS-11 RRH	92	B5/B13 RRH-BR04C RRH	82
SDX1926Q-43	92	Junction Box	82
SitePro1 VFA12-HD Mount	92	Junction Box	82
APX16DWV-16DWV-S w/ Mounting Pipe	92	12' T- Arm	82
APXVAARR18_43-U-NA20 Antennas w/ Mounting Pipe	92	Sector Stabilizer Kit , SitePro1 P/N SFS-V	82
AIR 6449 B41 w/Mounting Pipe	92	BXA-80063/6 w/Mount Pipe	82
4424 B25 RRH	92	(2) NHH-45B-R2B w/Mounting Pipe	82
4449 B71+B12 RRH	92	MT6407-77A Antenna w/Mounting Pipe	82
4415 B25 RRH	92	B2/B66A RRH-BR049 RRH	82
RRUS-11 RRH	92	B5/B13 RRH-BR04C RRH	82
SDX1926Q-43	92	12' T- Arm	82
SitePro1 VFA12-HD Mount	92	Sector Stabilizer Kit , SitePro1 P/N SFS-V	82
APX16DWV-16DWV-S w/ Mounting Pipe	92	BXA-80063/6 w/Mount Pipe	82
APXVAARR18_43-U-NA20 Antennas w/ Mounting Pipe	92	(2) NHH-45B-R2B w/Mounting Pipe	82
AIR 6449 B41 w/Mounting Pipe	92	MT6407-77A Antenna w/Mounting Pipe	82
4424 B25 RRH	92	B2/B66A RRH-BR049 RRH	82
4449 B71+B12 RRH	92	B5/B13 RRH-BR04C RRH	82
4415 B25 RRH	92		
RRUS-11 RRH	92		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

TOWER DESIGN NOTES

1. Tower is located in Fairfield County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-G Standard.
3. Tower designed for a 93 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 79%

ALL ARE

MAX. CORNER REACTIONS AT BASE:

DOWN: 85719 lb
SHEAR: 9068 lb

UPLIFT: -74655 lb
SHEAR: 7912 lb

AXIAL
40713 lb

SHEAR
3894 lb

MOMENT
255816 lb-ft

TORQUE 1160 lb-ft
50 mph WIND - 0.7500 in ICE

AXIAL
15149 lb

SHEAR
13783 lb

MOMENT
889725 lb-ft

TORQUE 4296 lb-ft
REACTIONS - 93 mph WIND

Hudson Design Group LLC
45 Beechwood Drive
North Andover, MA 01845
Phone: (978) 557-5553
FAX: (978) 336-5586

Job: ***REDDING CT***			
Project: ***100 ft Self Supporting Tower***			
Client: VERIZON	Drawn by: RL	App'd:	
Code: TIA-222-G	Date: 04/16/21	Scale: NTS	
Path:		Dwg No. E-1	

Tower Input Data

The main tower is a 3x free standing tower with an overall height of 100.00 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 2.75 ft at the top and 12.67 ft at the base.
This tower is designed using the TIA-222-G standard.
The following design criteria apply:

Tower is located in Fairfield County, Connecticut.
Basic wind speed of 93 mph.
Structure Class II.
Exposure Category B.
Topographic Category 1.
Crest Height 0.00 ft.
Nominal ice thickness of 0.7500 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.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in tower member design is 1.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Tower Section Geometry

Tower Section	*Tower Elevation*	*Assembly Database*	*Description*	*Section Width*	*Number of Sections*	*Section Length*
	ft			*ft*		*ft*
T1	100.00-80.00			2.75	1	20.00
T2	80.00-60.00			4.72	1	20.00
T3	60.00-40.00			6.76	1	20.00
T4	40.00-20.00			8.65	1	20.00
T5	20.00-0.00			10.69	1	20.00

Tower Section Geometry *(cont'd)*

Tower Section	*Tower Elevation*	*Diagonal Spacing*	*Bracing Type*	*Has K Brace End Panels*	*Has Horizontals*	*Top Girt Offset*	*Bottom Girt Offset*
	ft	*ft*				*in*	*in*
T1	100.00-80.00	4.00	X Brace	No	No	0.0000	0.0000
T2	80.00-60.00	4.00	X Brace	No	No	0.0000	0.0000
T3	60.00-40.00	5.00	X Brace	No	No	0.0000	0.0000
T4	40.00-20.00	6.67	X Brace	No	No	0.0000	0.0000
T5	20.00-0.00	6.67	X Brace	No	No	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	*Leg Type*	*Leg Size*	*Leg Grade*	*Diagonal Type*	*Diagonal Size*	*Diagonal Grade*
T1 100.00-80.00	Pipe	P3x.216	A572-50 (50 ksi)	Equal Angle	L1 1/4x1 1/4x1/8	A36 (36 ksi)
T2 80.00-60.00	Pipe	P3x.216	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T3 60.00-40.00	Pipe	P3.5x.226	A572-50 (50 ksi)	Equal Angle	L1 1/2x1 1/2x3/16	A36 (36 ksi)
T4 40.00-20.00	Pipe	P3.5x.226	A572-50 (50 ksi)	Equal Angle	L2x2x1/8	A36 (36 ksi)
T5 20.00-0.00	Pipe	P4x.237	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	*Top Girt Type*	*Top Girt Size*	*Top Girt Grade*	*Bottom Girt Type*	*Bottom Girt Size*	*Bottom Girt Grade*
T1 100.00-80.00	Equal Angle	L1 1/4x1 1/4x1/8	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T2 80.00-60.00	Equal Angle	L1 1/4x1 1/4x1/8	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T3 60.00-40.00	Equal Angle	L1 1/2x1 1/2x3/16	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T4 40.00-20.00	Equal Angle	L2x2x3/16	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T5 20.00-0.00	Equal Angle	L2 1/2x2 1/2x3/8	A36 (36 ksi)	Equal Angle		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	*Gusset Area (per face) ft²*	*Gusset Thickness in*	*Gusset Grade*	*Adjust. Factor A_f*	*Adjust. Factor A_r*	*Weight Mult.*	*Double Angle Stitch Bolt Spacing Diagonals in*	*Double Angle Stitch Bolt Spacing Horizontals in*	*Double Angle Stitch Bolt Spacing Redundants in*
T1 100.00-80.00	0.00	0.6250	A36 (36 ksi)	1	1	1	0.0000	36.0000	36.0000
T2 80.00-60.00	0.00	0.6250	A36 (36 ksi)	1	1	1	0.0000	36.0000	36.0000
T3 60.00-40.00	0.00	0.6250	A36 (36 ksi)	1	1	1	0.0000	36.0000	36.0000
T4 40.00-20.00	0.00	0.6250	A36 (36 ksi)	1	1	1	0.0000	36.0000	36.0000
T5 20.00-0.00	0.00	0.6250	A36 (36 ksi)	1	1	1	0.0000	36.0000	36.0000

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
1 5/8 Fiber Cable	A	No	No	Ar (CaAa)	92.00 - 3.00	1	1	0.0000	1.9800		1.04
1 5/8 Fiber Cable *********	A	No	No	Ar (CaAa)	92.00 - 3.00	3	3	0.0000	1.9800		1.04
1 5/8 Fiber Cable	A	No	No	Ar (CaAa)	82.00 - 3.00	6	6	0.0000	1.6250		1.04
1 5/8 Fiber Cable	A	No	No	Ar (CaAa)	82.00 - 3.00	2	2	0.0000	1.6250		1.04
1 5/8 Fiber Cable	B	No	No	Ar (CaAa)	82.00 - 3.00	6	6	0.0000	1.6250		1.04

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
T1	100.00-80.00	A	0.000	0.000	12.104	0.000	66.56
		B	0.000	0.000	1.950	0.000	12.48
		C	0.000	0.000	0.000	0.000	0.00
T2	80.00-60.00	A	0.000	0.000	41.840	0.000	249.60
		B	0.000	0.000	19.500	0.000	124.80
		C	0.000	0.000	0.000	0.000	0.00
T3	60.00-40.00	A	0.000	0.000	41.840	0.000	249.60
		B	0.000	0.000	19.500	0.000	124.80
		C	0.000	0.000	0.000	0.000	0.00
T4	40.00-20.00	A	0.000	0.000	41.840	0.000	249.60
		B	0.000	0.000	19.500	0.000	124.80
		C	0.000	0.000	0.000	0.000	0.00
T5	20.00-0.00	A	0.000	0.000	35.564	0.000	212.16
		B	0.000	0.000	16.575	0.000	106.08
		C	0.000	0.000	0.000	0.000	0.00

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
SitePro1 VFA12-HD Mount	C	From Leg	0.00	0.0000	92.00	No Ice	13.20	9.20	658.00
			0.00			1/2" Ice	19.50	14.60	804.00
			0.00			1" Ice	25.80	19.50	1015.00
APX16DWV-16DWV-S w/ Mounting Pipe	C	From Leg	3.00	0.0000	92.00	No Ice	6.91	3.60	62.90
			-5.50			1/2" Ice	7.39	4.44	112.44
			0.00			1" Ice	7.86	5.15	168.54
APXVAARR18_43-U-NA20 Antennas w/ Mounting Pipe	C	From Leg	3.00	0.0000	92.00	No Ice	14.67	7.70	127.90
			-2.50			1/2" Ice	15.18	8.66	230.28
			0.00			1" Ice	15.71	9.50	341.32
AIR 6449 B41 w/Mounting Pipe	C	From Leg	3.00	0.0000	92.00	No Ice	6.42	3.89	124.90
			5.50			1/2" Ice	7.00	4.62	179.59
			0.00			1" Ice	7.50	5.22	240.17
4424 B25 RRH	C	From Leg	3.00	0.0000	92.00	No Ice	1.86	1.32	88.00
			-5.50			1/2" Ice	2.03	1.47	105.87
			2.00			1" Ice	2.20	1.62	126.50

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
4449 B71+B12 RRH	C	From Leg	3.00 -2.50 2.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	1.63 1.79 1.95	1.17 1.31 1.45	71.00 87.10 105.82
4415 B25 RRH	C	From Leg	3.00 -2.50 2.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	1.84 2.01 2.19	0.82 0.94 1.07	46.00 60.07 76.66
RRUS-11 RRH	C	From Leg	3.00 -2.50 -1.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	2.79 3.00 3.21	1.19 1.34 1.50	51.00 71.87 95.78
SDX1926Q-43	C	From Leg	3.00 2.50 2.50	0.0000	92.00	No Ice 1/2" Ice 1" Ice	0.24 0.31 0.38	0.10 0.14 0.20	6.00 8.47 12.04
SitePro1 VFA12-HD Mount	A	From Leg	0.00 0.00 0.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	13.20 19.50 25.80	9.20 14.60 19.50	658.00 804.00 1015.00
APX16DWV-16DWV-S w/ Mounting Pipe	A	From Leg	3.00 -5.50 0.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	6.91 7.39 7.86	3.60 4.44 5.15	62.90 112.44 168.54
APXVAARR18_43-U-NA20 Antennas w/ Mounting Pipe	A	From Leg	3.00 -2.50 0.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	14.67 15.18 15.71	7.70 8.66 9.50	127.90 230.28 341.32
AIR 6449 B41 w/Mounting Pipe	A	From Leg	3.00 5.50 0.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	6.42 7.00 7.50	3.89 4.62 5.22	124.90 179.59 240.17
4424 B25 RRH	A	From Leg	3.00 -5.50 2.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	1.86 2.03 2.20	1.32 1.47 1.62	88.00 105.87 126.50
4449 B71+B12 RRH	A	From Leg	3.00 -2.50 2.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	1.63 1.79 1.95	1.17 1.31 1.45	71.00 87.10 105.82
4415 B25 RRH	A	From Leg	3.00 -2.50 2.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	1.84 2.01 2.19	0.82 0.94 1.07	46.00 60.07 76.66
RRUS-11 RRH	A	From Leg	3.00 -2.50 -1.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	2.79 3.00 3.21	1.19 1.34 1.50	51.00 71.87 95.78
SDX1926Q-43	A	From Leg	3.00 2.50 2.50	0.0000	92.00	No Ice 1/2" Ice 1" Ice	0.24 0.31 0.38	0.10 0.14 0.20	6.00 8.47 12.04
SitePro1 VFA12-HD Mount	B	From Leg	0.00 0.00 0.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	13.20 19.50 25.80	9.20 14.60 19.50	658.00 804.00 1015.00
APX16DWV-16DWV-S w/ Mounting Pipe	B	From Leg	3.00 -5.50 0.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	6.91 7.39 7.86	3.60 4.44 5.15	62.90 112.44 168.54
APXVAARR18_43-U-NA20 Antennas w/ Mounting Pipe	B	From Leg	3.00 -2.50 0.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	14.67 15.18 15.71	7.70 8.66 9.50	127.90 230.28 341.32
AIR 6449 B41 w/Mounting Pipe	B	From Leg	3.00 5.50 0.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	6.42 7.00 7.50	3.89 4.62 5.22	124.90 179.59 240.17
4424 B25 RRH	B	From Leg	3.00 -5.50 2.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	1.86 2.03 2.20	1.32 1.47 1.62	88.00 105.87 126.50
4449 B71+B12 RRH	B	From Leg	3.00 -2.50 2.00	0.0000	92.00	No Ice 1/2" Ice 1" Ice	1.63 1.79 1.95	1.17 1.31 1.45	71.00 87.10 105.82

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
4415 B25 RRH	B	From Leg	3.00	0.0000	92.00	No Ice	1.84	0.82	46.00
			-2.50			1/2" Ice	2.01	0.94	60.07
			2.00			1" Ice	2.19	1.07	76.66
RRUS-11 RRH	B	From Leg	3.00	0.0000	92.00	No Ice	2.79	1.19	51.00
			-2.50			1/2" Ice	3.00	1.34	71.87
			-1.00			1" Ice	3.21	1.50	95.78
SDX1926Q-43	B	From Leg	3.00	0.0000	92.00	No Ice	0.24	0.10	6.00
			2.50			1/2" Ice	0.31	0.14	8.47
			2.50			1" Ice	0.38	0.20	12.04
**********									
12' T- Arm	C	From Leg	0.00	0.0000	82.00	No Ice	4.20	1.10	150.00
			0.00			1/2" Ice	5.40	2.70	225.00
			0.00			1" Ice	6.60	4.30	300.00
Sector Stabilizer Kit , SitePro1 P/N SFS-V	C	From Leg	0.00	0.0000	82.00	No Ice	2.84	2.67	66.00
			0.00			1/2" Ice	3.30	3.09	84.00
			3.00			1" Ice	3.84	3.58	113.00
BXA-80080-4CF-EDIN-X w/Mounting Pipe	C	From Leg	3.00	0.0000	82.00	No Ice	5.27	4.88	36.90
			-4.00			1/2" Ice	5.76	5.68	86.92
			0.00			1" Ice	6.21	6.36	143.15
(2) NHH-65B-R2B w/Mounting Pipe	C	From Leg	3.00	0.0000	82.00	No Ice	14.56	6.77	115.90
			0.00			1/2" Ice	15.07	7.72	212.73
			0.00			1" Ice	15.60	8.55	318.10
MT6407-77A Antenna w/Mounting Pipe	C	From Leg	3.00	0.0000	82.00	No Ice	5.43	3.27	109.00
			4.00			1/2" Ice	5.97	3.99	154.17
			0.00			1" Ice	6.46	4.59	204.90
B2/B66A RRH-BR049 RRH	C	From Leg	3.00	0.0000	82.00	No Ice	1.88	1.25	98.00
			0.00			1/2" Ice	2.05	1.39	116.34
			0.00			1" Ice	2.22	1.54	137.47
B5/B13 RRH-BR04C RRH	C	From Leg	3.00	0.0000	82.00	No Ice	1.88	1.01	82.00
			4.00			1/2" Ice	2.05	1.14	98.43
			0.00			1" Ice	2.22	1.28	117.53
Junction Box	C	From Leg	1.50	0.0000	82.00	No Ice	3.78	2.51	32.00
			1.00			1/2" Ice	4.03	2.72	63.40
			0.00			1" Ice	4.29	2.94	98.56
Junction Box	C	From Leg	1.50	0.0000	82.00	No Ice	3.78	2.51	32.00
			-1.00			1/2" Ice	4.03	2.72	63.40
			0.00			1" Ice	4.29	2.94	98.56
12' T- Arm	A	From Leg	0.00	0.0000	82.00	No Ice	4.20	1.10	150.00
			0.00			1/2" Ice	5.40	2.70	225.00
			0.00			1" Ice	6.60	4.30	300.00
Sector Stabilizer Kit , SitePro1 P/N SFS-V	A	From Leg	0.00	0.0000	82.00	No Ice	2.84	2.67	66.00
			0.00			1/2" Ice	3.30	3.09	84.00
			3.00			1" Ice	3.84	3.58	113.00
BXA-80063/6 w/Mount Pipe	A	From Leg	3.00	0.0000	82.00	No Ice	7.84	5.42	40.45
			-4.00			1/2" Ice	8.40	6.59	99.60
			0.00			1" Ice	8.92	7.46	166.44
(2) NHH-45B-R2B w/Mounting Pipe	A	From Leg	3.00	0.0000	82.00	No Ice	21.60	6.71	145.90
			0.00			1/2" Ice	22.20	7.66	274.05
			0.00			1" Ice	22.81	8.49	411.52
MT6407-77A Antenna w/Mounting Pipe	A	From Leg	3.00	0.0000	82.00	No Ice	5.43	3.27	109.00
			4.00			1/2" Ice	5.97	3.99	154.17
			0.00			1" Ice	6.46	4.59	204.90
B2/B66A RRH-BR049 RRH	A	From Leg	3.00	0.0000	82.00	No Ice	1.88	1.25	98.00
			0.00			1/2" Ice	2.05	1.39	116.34
			0.00			1" Ice	2.22	1.54	137.47
B5/B13 RRH-BR04C RRH	A	From Leg	3.00	0.0000	82.00	No Ice	1.88	1.01	82.00
			4.00			1/2" Ice	2.05	1.14	98.43

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
			0.00			1" Ice	2.22	1.28	117.53
12' T- Arm	B	From Leg	0.00	0.0000	82.00	No Ice	4.20	1.10	150.00
			0.00			1/2" Ice	5.40	2.70	225.00
			0.00			1" Ice	6.60	4.30	300.00
Sector Stabilizer Kit , SitePro1 P/N SFS-V	B	From Leg	0.00	0.0000	82.00	No Ice	2.84	2.67	66.00
			0.00			1/2" Ice	3.30	3.09	84.00
			3.00			1" Ice	3.84	3.58	113.00
BXA-80063/6 w/Mount Pipe	B	From Leg	3.00	0.0000	82.00	No Ice	7.84	5.42	40.45
			-4.00			1/2" Ice	8.40	6.59	99.60
			0.00			1" Ice	8.92	7.46	166.44
(2) NHH-45B-R2B w/Mounting Pipe	B	From Leg	3.00	0.0000	82.00	No Ice	21.60	6.71	145.90
			0.00			1/2" Ice	22.20	7.66	274.05
			0.00			1" Ice	22.81	8.49	411.52
MT6407-77A Antenna w/Mounting Pipe	B	From Leg	3.00	0.0000	82.00	No Ice	5.43	3.27	109.00
			4.00			1/2" Ice	5.97	3.99	154.17
			0.00			1" Ice	6.46	4.59	204.90
B2/B66A RRH-BR049 RRH	B	From Leg	3.00	0.0000	82.00	No Ice	1.88	1.25	98.00
			0.00			1/2" Ice	2.05	1.39	116.34
			0.00			1" Ice	2.22	1.54	137.47
B5/B13 RRH-BR04C RRH	B	From Leg	3.00	0.0000	82.00	No Ice	1.88	1.01	82.00
			4.00			1/2" Ice	2.05	1.14	98.43
			0.00			1" Ice	2.22	1.28	117.53

Load Combinations

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

Comb. No.	Description
25	0.9 Dead+1.6 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
Leg C	Max. Vert	18	84530.71	7628.10	-4562.38
	Max. H_x	18	84530.71	7628.10	-4562.38
	Max. H_z	7	-73070.87	-6621.64	3974.05
	Min. Vert	7	-73070.87	-6621.64	3974.05
	Min. H_x	7	-73070.87	-6621.64	3974.05
	Min. H_z	18	84530.71	7628.10	-4562.38
Leg B	Max. Vert	10	85719.43	-7809.86	-4607.49
	Max. H_x	23	-74654.87	6810.14	4027.61
	Max. H_z	23	-74654.87	6810.14	4027.61
	Min. Vert	23	-74654.87	6810.14	4027.61
	Min. H_x	10	85719.43	-7809.86	-4607.49
	Min. H_z	10	85719.43	-7809.86	-4607.49
Leg A	Max. Vert	2	82705.23	-51.79	8604.65
	Max. H_x	21	3941.38	765.68	342.40
	Max. H_z	2	82705.23	-51.79	8604.65
	Min. Vert	15	-70910.46	47.90	-7429.37
	Min. H_x	9	3941.47	-769.91	342.48
	Min. H_z	15	-70910.46	47.90	-7429.37

Tower Mast Reaction Summary

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	lb-ft	lb-ft	lb-ft
Dead Only	12624.32	-0.00	-0.00	-1857.08	1191.36	0.00
1.2 Dead+1.6 Wind 0 deg - No Ice	15149.18	-0.00	-12978.56	-852078.19	1438.53	-1086.58
0.9 Dead+1.6 Wind 0 deg - No Ice	11361.78	0.06	-12978.45	-850293.22	1077.05	-1084.54
1.2 Dead+1.6 Wind 30 deg - No Ice	15149.18	6279.97	-10877.23	-721968.73	-414098.78	-709.50
0.9 Dead+1.6 Wind 30 deg - No Ice	11361.89	6279.97	-10877.23	-720367.29	-413859.24	-706.32
1.2 Dead+1.6 Wind 60 deg - No Ice	15149.18	11116.68	-6418.22	-424566.04	-730037.16	-2928.73
0.9 Dead+1.6 Wind 60 deg - No Ice	11361.89	11116.68	-6418.22	-423395.88	-729345.27	-2925.68
1.2 Dead+1.6 Wind 90 deg - No Ice	15149.18	13780.18	-0.00	-2254.49	-886846.46	-4295.66
0.9 Dead+1.6 Wind 90 deg - No Ice	11361.89	13780.18	-0.00	-1691.67	-885943.22	-4293.55
1.2 Dead+1.6 Wind 120 deg - No Ice	15149.32	11936.55	6891.51	441511.84	-767177.59	-1841.00
0.9 Dead+1.6 Wind 120 deg - No Ice	11361.89	11936.42	6891.50	441441.76	-766441.87	-1838.70
1.2 Dead+1.6 Wind 150 deg - No Ice	15149.18	6528.08	11306.97	738835.50	-426418.68	1107.29
0.9 Dead+1.6 Wind 150 deg - No Ice	11361.89	6528.08	11306.97	738332.71	-426165.53	1107.45
1.2 Dead+1.6 Wind 180 deg - No Ice	15149.18	0.00	12344.10	820254.22	1439.26	1088.07
0.9 Dead+1.6 Wind 180 deg - No Ice	11361.89	0.00	12344.10	819624.25	1078.14	1086.30
1.2 Dead+1.6 Wind 210 deg - No Ice	15149.18	-6279.97	10877.23	717489.96	416972.84	709.51
0.9 Dead+1.6 Wind 210 deg - No Ice	11361.89	-6279.97	10877.23	717012.30	416012.07	706.33
1.2 Dead+1.6 Wind 240 deg - No Ice	15149.18	-11666.13	6735.45	433745.70	756600.88	2927.09
0.9 Dead+1.6 Wind 240 deg - No Ice	11361.89	-11666.13	6735.45	433683.61	755159.11	2924.00
1.2 Dead+1.6 Wind 270 deg - No Ice	15149.18	-13780.18	-0.00	-2253.24	889722.00	4295.67
0.9 Dead+1.6 Wind 270 deg - No Ice	11361.89	-13780.18	-0.00	-1690.73	888096.77	4293.55
1.2 Dead+1.6 Wind 300 deg - No Ice	15149.18	-11386.97	-6574.27	-432331.41	746366.10	1841.18
0.9 Dead+1.6 Wind 300 deg - No Ice	11361.89	-11386.97	-6574.27	-431152.31	744936.38	1839.89
1.2 Dead+1.6 Wind 330 deg - No Ice	15149.18	-6528.08	-11306.97	-743312.37	429298.99	-1107.32
0.9 Dead+1.6 Wind 330 deg - No Ice	11361.89	-6528.08	-11306.97	-741685.86	428322.99	-1107.46
1.2 Dead+1.0 Ice+1.0 Temp	40713.01	0.00	0.00	-8205.66	6344.30	0.18
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	40713.01	0.00	-3668.49	-247814.61	6377.37	-602.72
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	40713.01	1804.57	-3125.61	-213477.00	-112116.04	-671.37
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	40713.01	3207.68	-1851.95	-128954.35	-202701.86	-1057.54
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	40713.01	3834.68	-0.00	-8241.46	-241090.23	-1160.27

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	lb-ft	lb-ft	lb-ft
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	40713.01	3372.33	1947.02	116787.14	-210176.55	-454.88
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	40713.01	1852.95	3209.41	201082.36	-114473.52	372.57
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	40713.01	0.00	3575.13	227420.72	6379.13	602.86
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	40713.01	-1804.57	3125.61	196997.58	124871.66	671.40
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	40713.01	-3288.53	1898.63	114429.72	218847.43	1057.52
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	40713.01	-3834.68	-0.00	-8239.96	253845.36	1160.30
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	40713.01	-3291.48	-1900.34	-131311.80	219542.99	455.26
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	40713.01	-1852.95	-3209.41	-217561.11	127229.32	-372.63
Dead+Wind 0 deg - Service	12624.32	0.00	-3376.32	-222742.19	1197.88	-282.70
Dead+Wind 30 deg - Service	12624.32	1633.71	-2829.66	-188920.33	-106798.89	-184.47
Dead+Wind 60 deg - Service	12624.32	2891.96	-1669.67	-111626.21	-188913.66	-761.52
Dead+Wind 90 deg - Service	12624.32	3584.86	-0.00	-1866.14	-229670.86	-1116.91
Dead+Wind 120 deg - Service	12624.32	3105.21	1792.79	113468.80	-198567.85	-478.52
Dead+Wind 150 deg - Service	12624.32	1698.25	2941.46	190738.23	-110002.76	287.58
Dead+Wind 180 deg - Service	12624.32	-0.00	3211.27	211899.38	1197.22	282.62
Dead+Wind 210 deg - Service	12624.32	-1633.71	2829.66	185189.92	109193.71	184.47
Dead+Wind 240 deg - Service	12624.32	-3034.89	1752.20	111451.00	197468.81	761.24
Dead+Wind 270 deg - Service	12624.32	-3584.86	-0.00	-1865.86	232064.97	1116.91
Dead+Wind 300 deg - Service	12624.32	-2962.27	-1710.27	-113645.00	194804.90	478.89
Dead+Wind 330 deg - Service	12624.32	-1698.25	-2941.46	-194468.56	112396.30	-287.59

Maximum Tower Deflections - Service Wind

Section No.	Elevation	Horz. Deflection	Gov. Load Comb.	Tilt	Twist
	ft	in		°	°
T1	100 - 80	1.995	48	0.1546	0.0117
T2	80 - 60	1.338	48	0.1489	0.0105
T3	60 - 40	0.768	48	0.1148	0.0084
T4	40 - 20	0.344	48	0.0767	0.0051
T5	20 - 0	0.087	48	0.0355	0.0017

Critical Deflections and Radius of Curvature - Service Wind

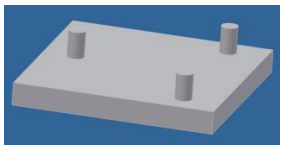
Elevation	Appurtenance	Gov. Load Comb.	Deflection	Tilt	Twist	Radius of Curvature
ft			in	°	°	ft
92.00	SitePro1 VFA12-HD Mount	48	1.727	0.1548	0.0112	131339
82.00	12' T- Arm	48	1.401	0.1507	0.0106	58531

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
T1	100 - 80	Leg	P3x.216	2	-12952.70	88513.00	14.6	Pass
T2	80 - 60	Leg	P3x.216	38	-37204.80	88510.40	42.0	Pass
T3	60 - 40	Leg	P3.5x.226	74	-55481.50	104017.00	53.3	Pass
T4	40 - 20	Leg	P3.5x.226	104	-69549.60	92712.30	75.0	Pass
T5	20 - 0	Leg	P4x.237	128	-83137.30	116238.00	71.5	Pass
T1	100 - 80	Diagonal	L1 1/4x1 1/4x1/8	9	-2072.00	3217.64	64.4	Pass
T2	80 - 60	Diagonal	L2x2x1/4	69	-2834.00	17552.00	16.1	Pass
T3	60 - 40	Diagonal	L1 1/2x1 1/2x3/16	81	-2302.98	3042.09	75.7	Pass
T4	40 - 20	Diagonal	L2x2x1/8	111	-2498.92	3164.51	79.0	Pass
T5	20 - 0	Diagonal	L2 1/2x2 1/2x3/16	135	-2911.62	7100.61	41.0	Pass
T1	100 - 80	Top Girt	L1 1/4x1 1/4x1/8	6	-61.41	4505.23	1.4	Pass
T2	80 - 60	Top Girt	L1 1/4x1 1/4x1/8	42	178.61	9618.75	1.9	Pass
T3	60 - 40	Top Girt	L1 1/2x1 1/2x3/16	78	-515.66	2756.83	18.7	Pass
T4	40 - 20	Top Girt	L2x2x3/16	108	-601.59	3959.43	15.2	Pass
T5	20 - 0	Top Girt	L2 1/2x2 1/2x3/8	132	-1082.88	9529.67	11.4	Pass
							Summary	
						Leg (T4)	75.0	Pass
						Diagonal (T4)	79.0	Pass
						Top Girt (T3)	18.7	Pass
						RATING =	**79.0**	**Pass**

Unit Base Foundation

Checks capacity of square mat foundation with raised piers for a self-supporting tower



BU#: REDDING CT
Site Name:
App Number:
TIA-222 Revision:

Design Reactions		
Shear, **S**:	13.8	kips
Moment, **M**:	889.7	ft-kips
Compression/leg, **Ca**:	85.7	kips
Uplift/leg, **Ua**:	74.7	kips
Tower Weight, **Wt**:	15.0	kips
Tower Height, **H**:	100	ft
Base Face Width, **w'**:	12.7	ft

Pad Properties		
Depth, **D**:	4.0	ft
Pad Width, **W**:	15.5	ft
Pad Thickness, **T**:	4.5	ft
Ext. Above Grade, **E**:	0.5	ft
Neglected Depth, **N**:	0.0	ft
Pad Rebar Size, **Sp**:		
Pad Rebar Quantity, **mp**:		#N/A

Pier Properties		
Pier Shape:	Square	
Pier Width, di:	2.0	ft
Pier Rebar Size, **Sc**:		
Pier Rebar Quantity, **mc**:		#N/A
Pier Tie Size, **St**:		
Tie Quantity, **mt**:		#N/A

Material Properties		
Rebar Tensile, **Fy**:	60000	psi
Concrete Strength, **F'c**:	3500	psi
Concrete Density, δ**c**:	150	pcf
Clear Cover, **cc**:	3	in

Soil Properties		
Soil Unit Weight, γ:	120	pcf
Ultimate Bearing: **Bc**:	6.000	ksf
Cohesion, **Co**:	0.000	ksf
Friction Angle, φ:	30	degrees
Base Sliding, **μ**:	0.35	

Design Checks	*Capacity/ Availability*	*Demand/ Limits*	*Check*
Base Sliding (kips):	42.91	13.78	**32.1%**
Overturning (k-ft):	999.78	889.73	**89.0%**
Bearing (ksf):	4.50	2.47	**54.8%**
1-way Shear (kips):	#N/A	#N/A	**#N/A**
2-way Shear (kips):	#N/A	85.72	**#N/A**
Pier concrete stress (ksf):	1048.32	85.72	**8.2%**
Pier moment capacity (k-ft):	117.40	0.00	**0.0%**
Pad moment capacity(k-ft):	#N/A	281.53	**#N/A**

☐ Tower centroid is offset from foundation centroid

STRUCTURAL NOTES:

1. DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, INTERNATIONAL BUILDING CODE, EIA/TIA-222-G STRUCTURAL STANDARDS FOR STEEL ANTENNA, TOWERS AND ANTENNA SUPPORTING STRUCTURES.

2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER OF RECORD.

3. DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".

4. STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 (Fy=50 ksi), MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE INDICATED.

5. STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE B, OR ASTM A53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.

6. STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 TYPE-X "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 3/4" DIA UON.

7. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.

8. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.

9. FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.

10. CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND DI.I. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL". 14TH EDITION.

11. INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.

12. UNISTRUT SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP., WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1 5/8"x1 5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.

13. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-270 AND OR HY-200 SYSTEMS (AS SPECIFIED IN DWG.) OR ENGINEERS APPROVED EQUAL.

14. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, HILTI KWIK BOLT III OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

15. LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.

16. WHERE ROOF PENETRATIONS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT AND COORDINATE RELATED WORK WITH THE BUILDING OWNER AND THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT VOID THE EXISTING ROOF WARRANTY. ROOF SHALL BE WATERTIGHT.

17. ALL FIBERGLASS MEMBERS USED ARE AS MANUFACTURED BY STRONGWELL COMPANY OF BRISTOL, VA 24203. ALL DESIGN CRITERIA FOR THESE MEMBERS IS BASED ON INFORMATION PROVIDED IN THE DESIGN MANUAL. ALL REQUIREMENTS PUBLISHED IN SAID MANUAL MUST BE STRICTLY ADHERED TO.

18. NO MATERIALS TO BE ORDERED AND NO WORK TO BE COMPLETED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED IN WRITING.

19. SUBCONTRACTOR SHALL FIREPROOF ALL STEEL TO PRE-EXISTING CONDITIONS.

SPECIAL INSPECTIONS (REFERENCE IBC CHAPTER 17):

GENERAL: WHERE APPLICATION IS MADE FOR CONSTRUCTION, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE INSPECTION CHECKLIST ABOVE.

THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS THE SPECIAL INSPECTOR FOR THE WORK DESIGNED BY THEM, PROVIDED THOSE PERSONNEL MEET THE QUALIFICATION REQUIREMENTS.

STATEMENT OF SPECIAL INSPECTIONS: THE APPLICANT SHALL SUBMIT A STATEMENT OF SPECIAL INSPECTIONS PREPARED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 107.1 AS A CONDITION FOR ISSUANCE. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 1705.

REPORT REQUIREMENT: SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS SHALL BE SUBMITTED.

SPECIAL INSPECTION CHECKLIST

BEFORE CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	ENGINEER OF RECORD APPROVED SHOP DRAWINGS [1]
REQUIRED	MATERIAL SPECIFICATIONS REPORT [2]
N/A	FABRICATOR NDE INSPECTION
N/A	PACKING SLIPS [3]
ADDITIONAL TESTING AND INSPECTIONS:	
DURING CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	STEEL INSPECTIONS
N/A	HIGH STRENGTH BOLT INSPECTIONS
N/A	HIGH WIND ZONE INSPECTIONS [4]
N/A	FOUNDATION INSPECTIONS
N/A	CONCRETE COMP. STRENGTH, SLUMP TESTS AND PLACEMENT
N/A	POST INSTALLED ANCHOR VERIFICATION [5]
N/A	GROUT VERIFICATION
N/A	CERTIFIED WELD INSPECTION
N/A	EARTHWORK: LIFT AND DENSITY
REQUIRED	ON SITE COLD GALVANIZING VERIFICATION
N/A	GUY WIRE TENSION REPORT
ADDITIONAL TESTING AND INSPECTIONS:	
AFTER CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	MODIFICATION INSPECTOR REDLINE OR RECORD DRAWINGS [6]
N/A	POST INSTALLED ANCHOR PULL-OUT TESTING
REQUIRED	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTES:

1. REQUIRED FOR ANY NEW SHOP FABRICATED FRP OR STEEL.
2. PROVIDED BY MANUFACTURER, REQUIRED IF HIGH STRENGTH BOLTS OR STEEL.
3. PROVIDED BY GENERAL CONTRACTOR; PROOF OF MATERIALS.
4. HIGH WIND ZONE INSPECTION CATB 120MPH OR CAT C,D 110MPH INSPECT FRAMING OF WALLS, ANCHORING, FASTENING SCHEDULE.
5. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-11 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-11 D.8.2.4.
6. AS REQUIRED; FOR ANY FIELD CHANGES TO THE ITEMS IN THIS TABLE.

NOTES:

1. ALL CONNECTIONS TO BE SHOP WELDED & FIELD BOLTED USING 3/4"ø A325-X BOLTS, UNLESS OTHERWISE NOTIFIED.
2. SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED BEFORE ORDERING MATERIAL.
3. SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED PRIOR TO STEEL FABRICATION.
4. VERIFICATION OF EXISTING ROOF CONSTRUCTION IS REQUIRED PRIOR TO THE INSTALLATION OF THE ROOF PLATFORM. ENGINEER OF RECORD IS TO APPROVE EXISTING CONDITIONS IN ORDER TO MOVE FORWARD.
5. CENTERLINE OF PROPOSED STEEL PLATFORM SUPPORT COLUMNS TO BE CENTRALLY LOCATED OVER THE EXISTING BUILDING COLUMNS.
6. EXISTING BRICK MASONRY COLUMNS/BEARING TO BE REPAIRED/REPLACED AT ALL PROPOSED PLATFORM SUPPORT POINTS. ENGINEER OF RECORD TO REVIEW AND APPROVE.

FOR CONSTRUCTION

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT
DANIEL P. HAMM
No. 24178
LICENSED PROFESSIONAL ENGINEER

Daniel P. Hamm

CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN

CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

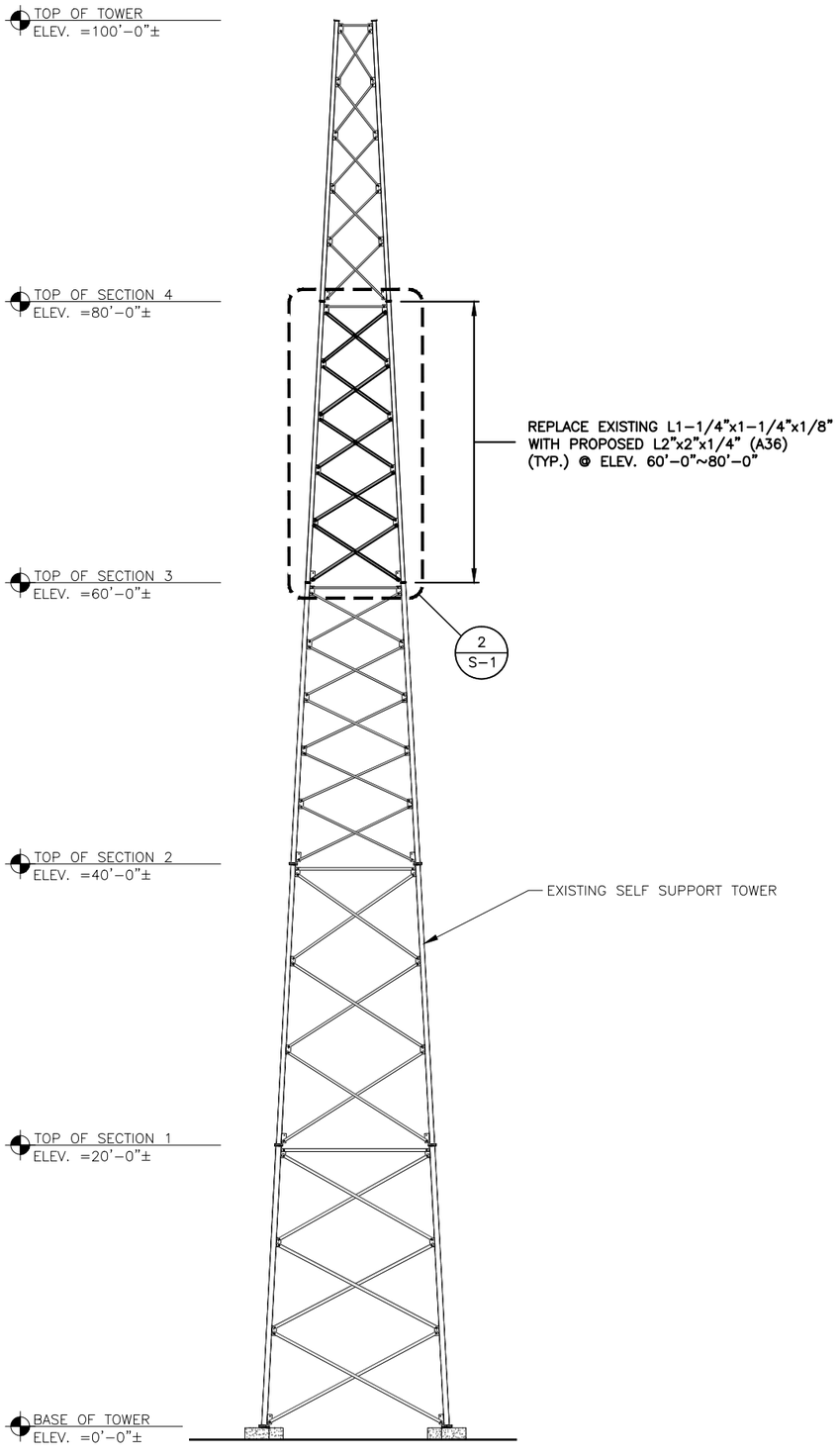
REV.	DATE	DESCRIPTION	BY
1	04/21/21	REV. FOR EQUIPMENT BY OTHERS	SLY
0	03/03/21	FOR CONSTRUCTION	OS

SITE NAME:
REDDING CT

SITE ADDRESS:
80 LONETOWN ROAD
REDDING, CT 06896

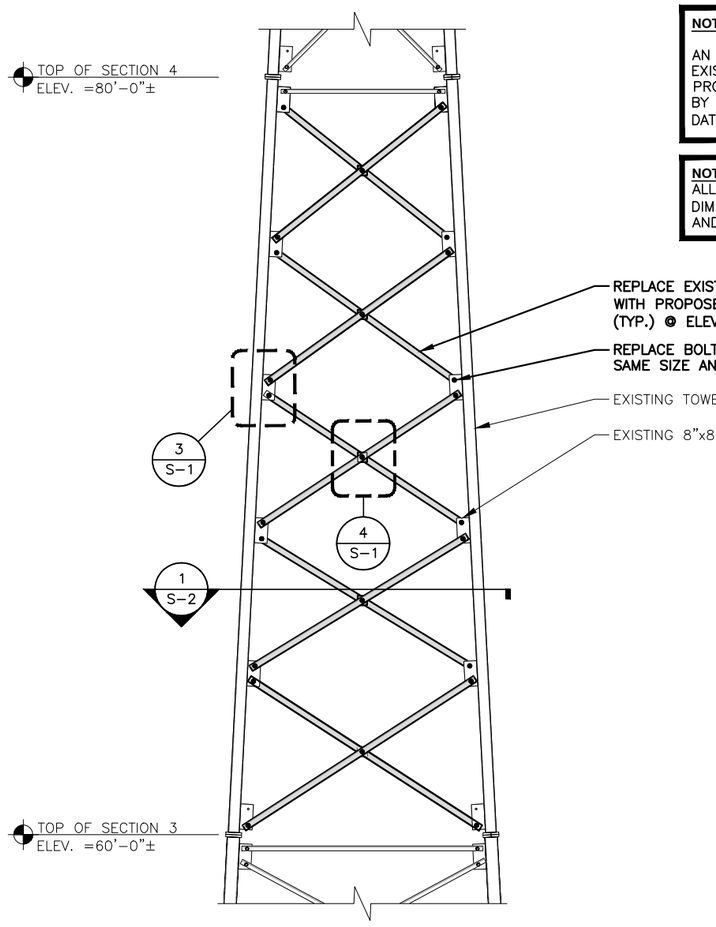
SHEET TITLE
STRUCTURAL NOTES & SPECIAL INSPECTIONS

SHEET NUMBER
SN-1



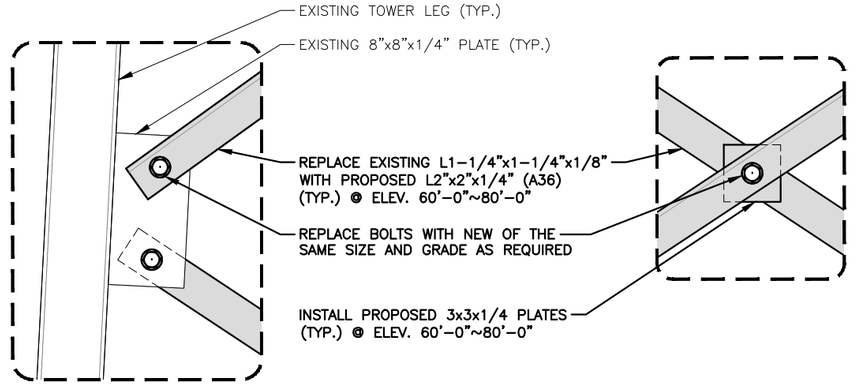
TOWER ELEVATION 1 / S-1
22x34 SCALE: 3/16"=1'-0"
11x17 SCALE: 3/32"=1'-0"

GRAPHIC SCALE
0 2'-8" 5'-4" 10'-8" 16'-0"



TOWER REINFORCEMENT ELEVATION
@ 60'-0" ~ 80'-0" 2 / S-1
22x34 SCALE: 1/2"=1'-0"
11x17 SCALE: 1/4"=1'-0"

GRAPHIC SCALE
0 1 2 4 6 FEET



CONNECTION DETAIL 3 / S-1
22x34 SCALE: 3"=1'-0"
11x17 SCALE: 1-1/2"=1'-0"

GRAPHIC SCALE
0 0'-2" 0'-4" 0'-8" 1'-0"

CONNECTION DETAIL 4 / S-1
22x34 SCALE: 3"=1'-0"
11x17 SCALE: 1-1/2"=1'-0"

NOTE:
AN ANALYSIS OF THE CAPACITY OF THE EXISTING STRUCTURE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY HUDSON DESIGN GROUP, LLC.
DATED: APRIL 16, 2021 (REV. 2)

NOTE:
ALL EXISTING MATERIAL SIZES, LOCATIONS AND DIM'S TO BE VERIFIED PRIOR TO FABRICATION AND INSTALLATION.

FOR CONSTRUCTION

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.
verizon

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
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STATE OF CONNECTICUT
DANIEL P. HAMM
No. 24178
LICENSED PROFESSIONAL ENGINEER

CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN

CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

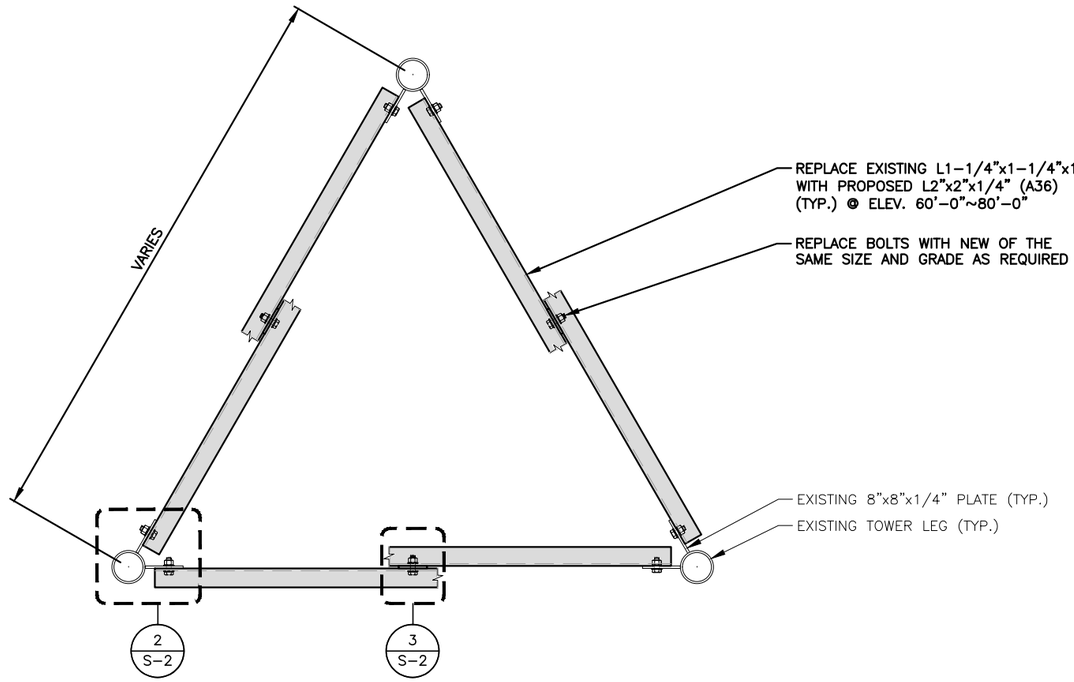
REV.	DATE	DESCRIPTION	BY
1	04/21/21	REV. FOR EQUIPMENT BY OTHERS	SLY
0	03/03/21	FOR CONSTRUCTION	OS

SITE NAME:
REDDING CT

SITE ADDRESS:
80 LONETOWN ROAD
REDDING, CT 06896

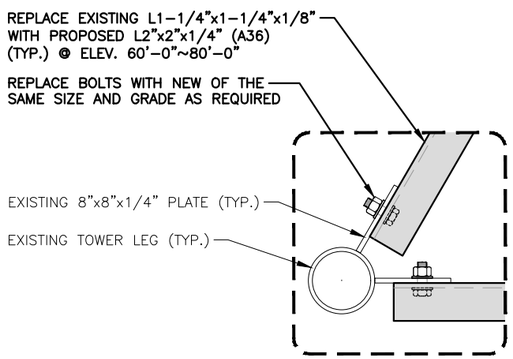
SHEET TITLE
TOWER MODIFICATION ELEVATION

SHEET NUMBER
S-1



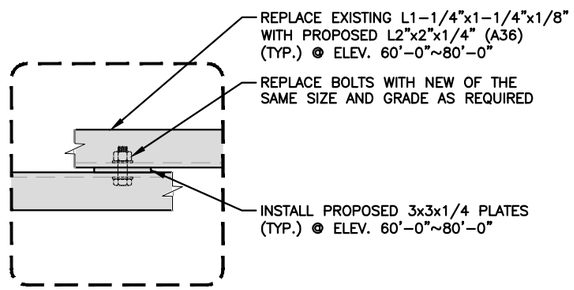
TOWER REINFORCEMENT PLAN VIEW (1 / S-2)
22x34 SCALE: 1-1/2"=1'-0"
11x17 SCALE: 3/4"=1'-0"

GRAPHIC SCALE
0 0'-4" 0'-8" 1'-4" 2'-0"



CONNECTION DETAIL (2 / S-2)
22x34 SCALE: 3"=1'-0"
11x17 SCALE: 1-1/2"=1'-0"

GRAPHIC SCALE
0 0'-2" 0'-4" 0'-8" 1'-0"



CONNECTION DETAIL (3 / S-2)
22x34 SCALE: 3"=1'-0"
11x17 SCALE: 1-1/2"=1'-0"

GRAPHIC SCALE
0 0'-2" 0'-4" 0'-8" 1'-0"

NOTE:
AN ANALYSIS OF THE CAPACITY OF THE EXISTING STRUCTURE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY HUDSON DESIGN GROUP, LLC.
DATED: APRIL 16, 2021 (REV. 2)

NOTE:
ALL EXISTING MATERIAL SIZES, LOCATIONS AND DIM'S TO BE VERIFIED PRIOR TO FABRICATION AND INSTALLATION.

FOR CONSTRUCTION

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.
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CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	04/21/21	REV. FOR EQUIPMENT BY OTHERS	SLY
0	03/03/21	FOR CONSTRUCTION	OS

SITE NAME:
REDDING CT

SITE ADDRESS:
80 LONETOWN ROAD
REDDING, CT 06896

SHEET TITLE
TOWER MODIFICATION PLAN

SHEET NUMBER
S-2

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

Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10026445
Maser Consulting Connecticut Project #: 20777382A

April 28, 2021

Site Information	*Site ID:*	*468848-VZW / Redding CT*
	Site Name:	*Redding CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*80 Lonetown Rd* *Redding, Connecticut 06896* *Fairfield County*
	Latitude:	*41.327833°*
	Longitude:	*-73.383306°*
Structure Information	*Tower Type:*	*100-Ft Self Support*
	Mount Type:	*12.33-Ft T-Frame*

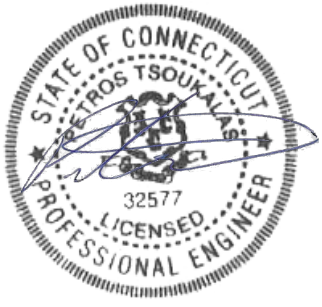
FUZE ID # 16244644

Analysis Results

T-Frame: **77.3% Pass**

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings

Report Prepared By: Nathan LaPorte



Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS Site ID: 324760, dated November 19, 2020*
Mount Mapping Report	*Tower Engineering Professionals Project #: 468848, dated November 17, 2020*
Previous Mount Analysis Report	*Maser Consulting Connecticut, Project #: 20777382A, dated December 30, 2020*
Mount Modification	*Maser Consulting Connecticut, Project #: 20777382A, dated December 30,*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	116 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.976
Seismic Parameters:	S_S:	0.224
	S_1:	0.056
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
81.00	82.00	3	Samsung	MT6407-77A	Added
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		1	Amphenol Antel	BXA-80080-4CF-EDIN-X	Retained
		4	Commscope	NHH-45B-R2B	
		2	Antel	BXA-80063/6CF	
		2	Commscope	NHH-65B-R2B	
		2	Raycap	RHSDC-3315-PF-48	

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.

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

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

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

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - Bolts — ASTM A325

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

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	*77.3%*	*Pass*
Mast Pipe	*26.6%*	*Pass*
Standoff Horizontal	*34.2%*	*Pass*
Standoff Vertical	*46.3%*	*Pass*
Face Vertical	*45.2%*	*Pass*
Antenna Pipe	*34.5%*	*Pass*
Tie Back	*22.5%*	*Pass*
MOD Horizontal	*48.4%*	*Pass*
MOD V-Brace	*10.6%*	*Pass*
Mount Connection	*62.7%*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**77.3%**

Recommendation:

The existing mounts will be **SUFFICIENT** for the final loading after the proposed modifications are successfully completed.

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

Attachments:

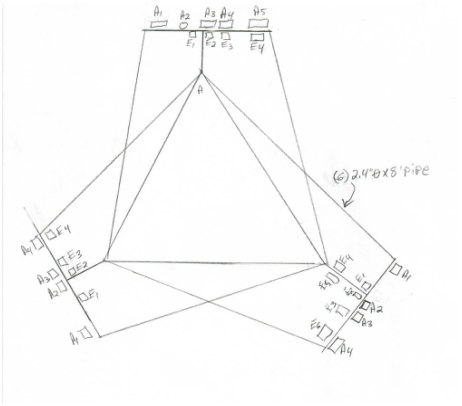
1. Mount Photos
2. Mount Mapping Report (for reference only)
3. Analysis Calculations
4. **Contractor Required PMI Report Deliverables**
5. Antenna Placement Diagrams
6. TIA Adoption and Wind Speed Usage Letter

V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	Unknown	**Mapping Date:**	11/17/2020
Site Name:	Redding CT	**Tower Type:**	Self Support
Site Number or ID:	468848	**Tower Height (Ft.):**	100
Mapping Contractor:	TEP	**Mount Elevation (Ft.):**	80

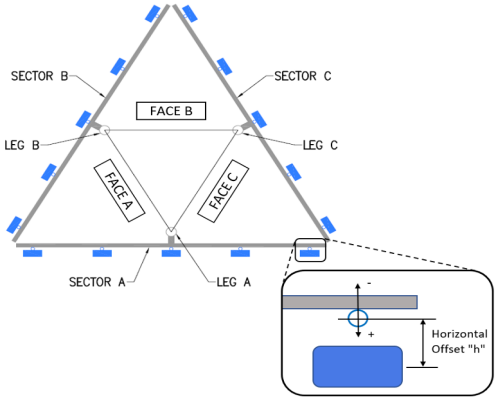


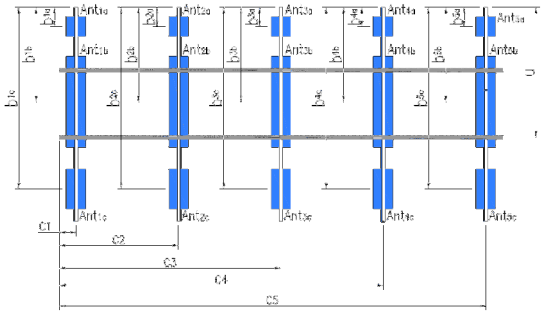
Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2.4"x6'-0"	56.00	3.00	C1	2.4"x6'-0"	56.00	3.00
A2	2.4"x6'-0"	56.00	51.00	C2	2.9"x7'-0"	61.50	75.00
A3	2.4"x7'-0"	61.50	75.00	C3	2.4"x6'-0"	56.00	126.00
A4	2.4"x6'-0"	56.00	126.00	C4			
A5				C5			
A6				C6			
B1	2.4"x6'-0"	56.00	3.00	D1			
B2	2.9"x7'-0"	61.50	75.00	D2			
B3	2.4"x6'-0"	56.00	126.00	D3			
B4				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. :	18.25
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	9.5
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.):	4.5	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	2.9



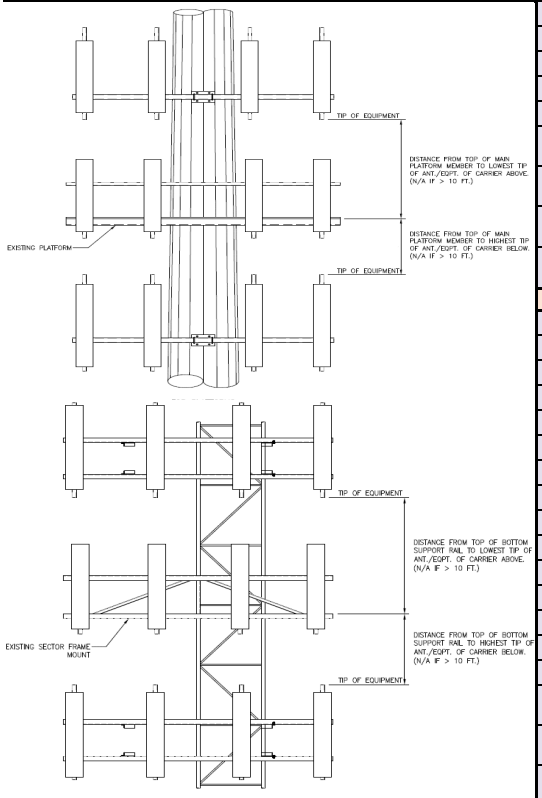


Antenna Layout (Looking Out From Tower)

Ants. Items	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
	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}										
Ant_{1b}	BXA-80080-4CF	11.20	5.90	48.20	) 1 5/8" F	80.4792	32.00	9.00	305.00	113
Ant_{1c}										
Ant_{2a}	GPS					83.1458				115
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	(2) NHH-45B-R2B	17.99	7.01	72.01	) 1 5/8" F	80.7292	34.50	13.00	305.00	117-119
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	BXA-171085-8BF	8.00	5.90	71.00	) 1 5/8" F	80.2292	35.00	8.50	305.00	127
Ant_{4c}	B66a RRH 4x45	11.80	7.20	25.80	er from R	80.1458	36.00	-7.00		128-130
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	(2) FD9R6004	6.50	1.50	5.80	er from Raycap					122-125
Ant on Standoff	B13 RRH 4x30	11.80	7.50	20.90	er from Raycap					120-121
Ant on Tower										
Ant on Tower										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	305.00	Deg	Leg A:	320.00	Deg
Sector B:	60.00	Deg	Leg B:	80.00	Deg
Sector C:	142.00	Deg	Leg C:	200.00	Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	320.00	Deg	On Leg A
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.



Sector B										
Ant_{1a}										
Ant_{1b}	BXA-80063-6CF	11.20	4.50	71.10	) 1 5/8" F	80.0625	37.00	8.50	60.00	133-134
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	(2) NHH-65B-R2B	11.85	7.09	71.97	) 1 5/8" F	80.9375	32.00	9.00	60.00	140-142
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	BXA-171063-12BF	6.10	4.10	72.50	) 1 5/8" F	80.2292	35.00	8.50	60.00	146
Ant_{3c}	B66a RRH 4x45	11.80	7.20	25.80	er from R	80.1458	36.00	-7.00		147-148
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	FD9R6004	6.50	1.50	5.80	er from Raycap					149-151
Ant on Standoff	B13 RRH 4x30	11.80	7.50	20.90	er from Raycap					143-144
Ant on Tower	(2) RHSDC-3315-PF-48	15.73	10.30	28.93	) 1 1/4" SM					135-138
Ant on Tower										
Sector C										
Ant_{1a}										
Ant_{1b}	BXA-80063-6CF	11.20	4.50	71.10	1 5/8" FH	80.0625	37.00	8.50	145.00	87-89
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	(2) NHH-45B-R2B	11.85	7.09	71.97	1 5/8" FH	80.7292	34.50	13.00	145.00	94-96
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	BXA-171063-12BF	6.10	4.10	72.50	1 5/8" FH	80.2292	35.00	8.50	145.00	106
Ant_{3c}	B66a RRH 4x45	11.80	7.20	25.80	er from R	80.1458	36.00	-7.00		107-108
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	FD9R6004	6.50	1.50	5.80	er from Raycap					101-104
Ant on Standoff	B13 RRH 4x30	11.80	7.50	20.90	er from Raycap					099-100
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #

1		
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.

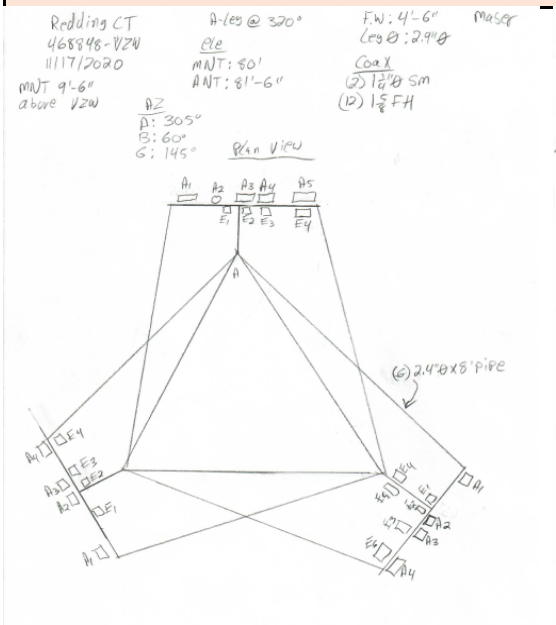
Standard Conditions
1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

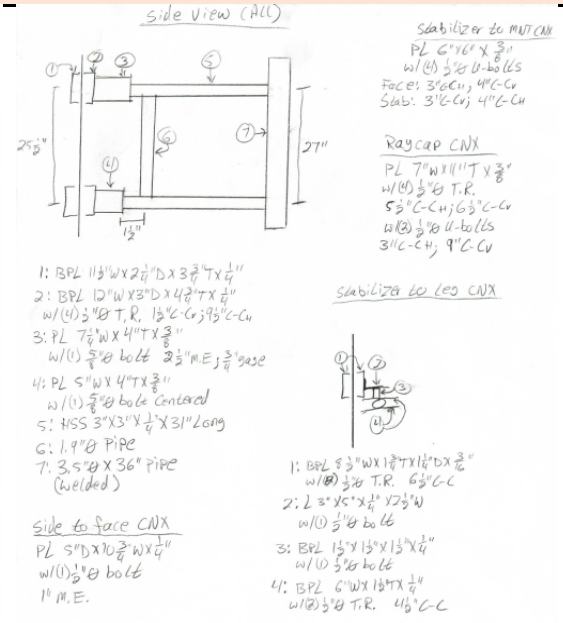
Antenna Mount Mapping Form (PATENT PENDING)

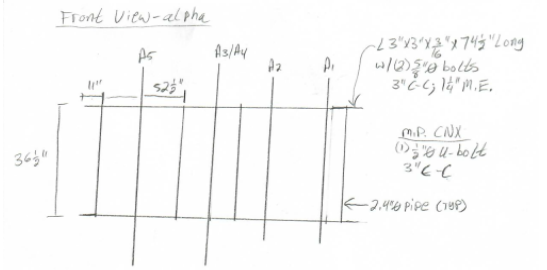
FCC #

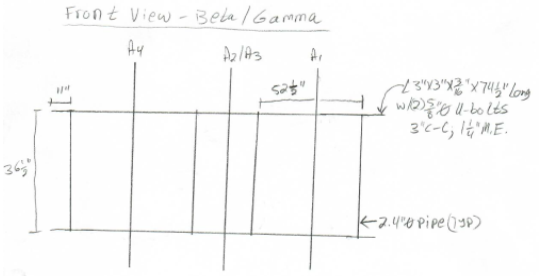
Tower Owner:	Unknown	**Mapping Date:**	11/17/2020
Site Name:	Redding CT	**Tower Type:**	Self Support
Site Number or ID:	468848	**Tower Height (Ft.):**	100
Mapping Contractor:	TEP	**Mount Elevation (Ft.):**	80

Please Insert Sketches of the Antenna Mount









M.P. CNX
(1) 1/2"Ø U-bolt
3"C-C

Alpha

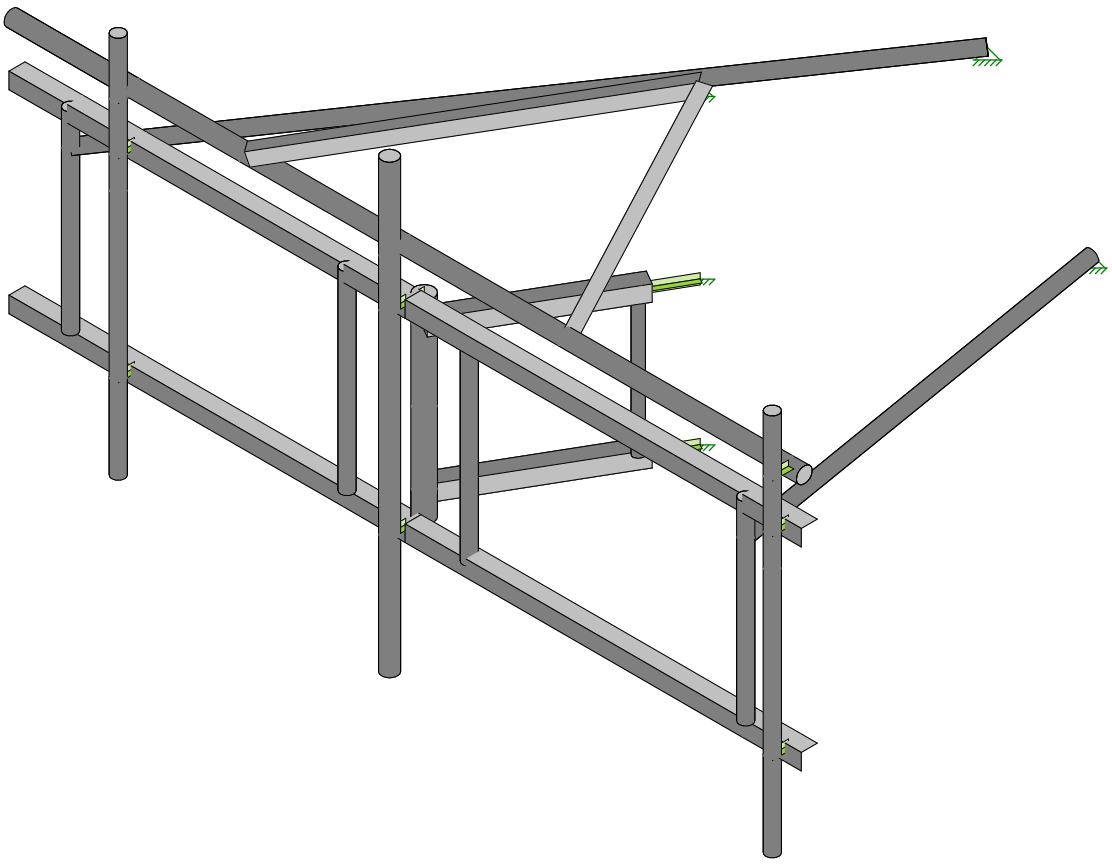
	M.P/location	U	b	H	C	model #
A1	2.4"Øx6'-0"	56"	32"	9"	3"	BXA-80080-4CF
A2	2.4"Øx6'-0"	56"	–	–	51"	GPS
A3	2.9"Øx7'-0"	61.5"	34.5"	13"	75"	NHH-45B-R2B
A4	2.9"Øx7'-0"	61.5"	34.5"	13"	75"	NHH-45B-R2B
A5	2.4"Øx6'-0"	56"	35"	8 1/2"	126"	BXA-171085-8BF
E1	MNT	–	–	–	–	FD9R6004
E2	MNT	–	–	–	–	FD9R6004
E3	MNT	–	–	–	–	B13 RRH 4X30
E4	behind A5	–	30	7"	–	B66a RRH 4X45

Beta

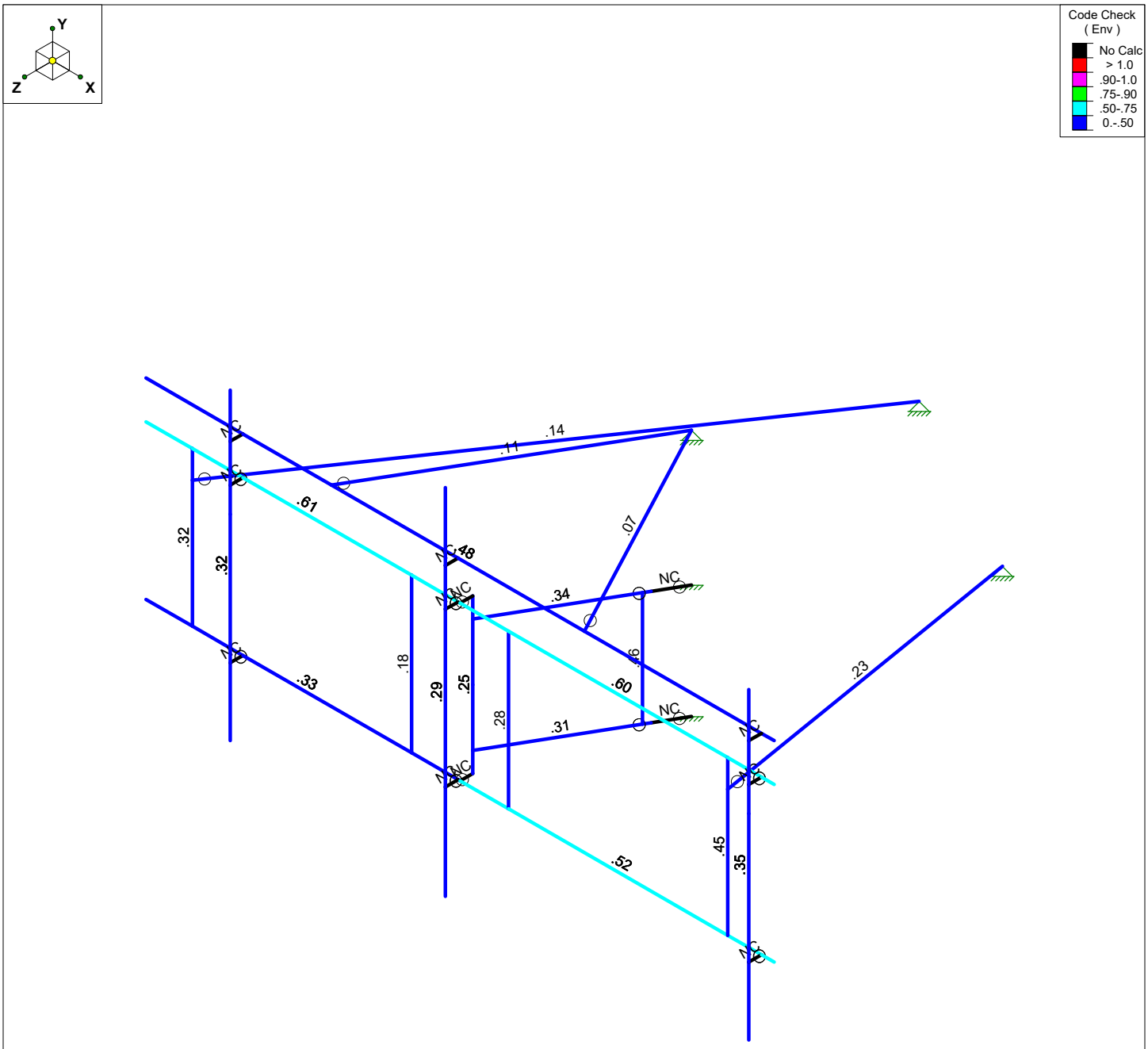
	M.P./location	U	b	H	C	model #
A1	2.4"Øx6'-0"	56"	37"	8 1/2"	3"	BXA-80063-6CF
A2/A3	2.9"Øx7'-0"	61.5"	32"	9"	75"	NHH-65B-R2B
A4	2.4"Øx6'-0"	56"	35"	8 1/2"	126"	BXA-171063-12BF
E1/E2	MNT	–	–	–	–	FD9R6004
E3	MNT	–	–	–	–	B13 RRH 4X30
E4/E5	2.4"Øx56"	–	–	–	–	RHSDC-3315-PF-48 - on MNT S.O.
E6	behind A4	–	36"	7"	–	B66a RRH 4X45

Gamma

	M.P./location	U	b	H	C	model #
A1	2.4"Øx6'-0"	56"	37"	8 1/2"	3"	BXA-80063-6CF
A2/A3	2.9"Øx7'-0"	61.5"	34 1/8"	13"	75"	NHH-45B-R2B
A4	2.4"Øx6'-0"	56"	35"	8 1/2"	126"	BXA-171063-12BF
E1/E2	MNT	–	–	–	–	FD9R6004
E3	MNT	–	–	–	–	B13 RRH 4X30
E4	behind A4	–	36"	7"	–	B66a RRH 4X45

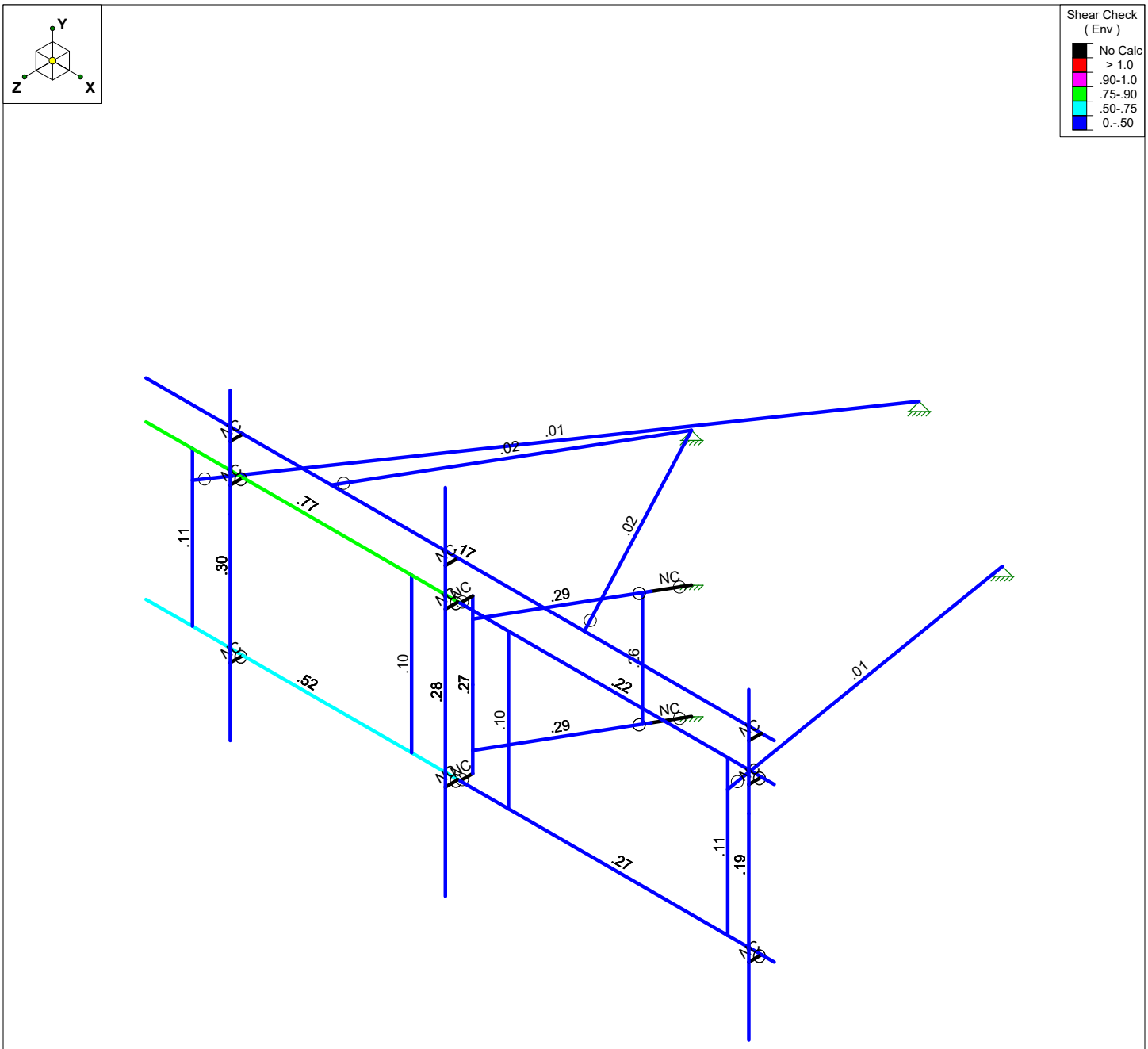


Maser Consulting	Antenna Mount Analysis	SK - 1
		Dec 31, 2020 at 11:38 AM
Project # 20777382A		Mod - Loaded - 468848-VZW_MT_...



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	Antenna Mount Analysis	SK - 2
		Dec 31, 2020 at 11:39 AM
Project # 20777382A		Mod - Loaded - 468848-VZW_MT_...



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	Antenna Mount Analysis	SK - 3
		Dec 31, 2020 at 11:39 AM
Project # 20777382A		Mod - Loaded - 468848-VZW_MT_...

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Member)	Surface(...
52	Structure Wo (330 ...	None						40		
53	Structure Wi (0 Deg)	None						40		
54	Structure Wi (30 D...	None						40		
55	Structure Wi (60 D...	None						40		
56	Structure Wi (90 D...	None						40		
57	Structure Wi (120 ...	None						40		
58	Structure Wi (150 ...	None						40		
59	Structure Wi (180 ...	None						40		
60	Structure Wi (210 ...	None						40		
61	Structure Wi (240 ...	None						40		
62	Structure Wi (270 ...	None						40		
63	Structure Wi (300 ...	None						40		
64	Structure Wi (330 ...	None						40		
65	Structure Wm (0 D...	None						40		
66	Structure Wm (30 ...	None						40		
67	Structure Wm (60 ...	None						40		
68	Structure Wm (90 ...	None						40		
69	Structure Wm (120...	None						40		
70	Structure Wm (150...	None						40		
71	Structure Wm (180...	None						40		
72	Structure Wm (210...	None						40		
73	Structure Wm (240...	None						40		
74	Structure Wm (270...	None						40		
75	Structure Wm (300...	None						40		
76	Structure Wm (330...	None						40		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			

Load Combinations

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
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 D...	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo (60 D...	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo (90 D...	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo (120 ...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo (150 ...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo (180 ...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo (210 ...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo (240 ...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo (270 ...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo (300 ...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo (330 ...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								

Load Combinations (Continued)

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
19	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1										
20	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1										
21	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1										
22	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1										
23	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1										
24	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1										
25	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1												
26	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1												
27	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1												
28	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1												
29	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1												
30	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1												
31	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1												
32	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1												
33	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1												
34	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1												
35	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1												
36	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1												
37	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1												
38	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1												
39	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1												
40	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1												
41	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1												
42	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1												
43	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1												
44	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1												
45	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1												
46	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1												
47	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1												
48	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1												
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5																
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5																
51	1.4D	Yes	Y		1	1.4	39	1.4																		

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	ALPHA	-1.291667	-0.395833	2.487235	0	
2	N2	-7.5	-0.395833	2.487235	0	
3	N3	4.916667	-0.395833	2.487235	0	
4	N4	-1.291667	2.645833	2.487235	0	
5	N5	-7.5	2.645833	2.487235	0	
6	N6	4.916667	2.645833	2.487235	0	
7	N7	-2.25	-0.395833	2.487235	0	
8	N8	-2.25	2.645833	2.487235	0	
9	N9	-0.333333	-0.395833	2.487235	0	
10	N10	-0.333333	2.645833	2.487235	0	
11	N11	-6.583333	-0.395833	2.487235	0	
12	N12	-6.583333	2.645833	2.487235	0	
13	N13	4	-0.395833	2.487235	0	
14	N14	4	2.645833	2.487235	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
15	N15	4.666667	-0.395833	2.487235	0	
16	N16	4.666667	2.645833	2.487235	0	
17	N19	-1.291667	-0.395833	2.237235	0	
18	N20	-1.291667	2.645833	2.237235	0	
19	N21	-1.291667	1.125	2.237235	0	
20	N22	-1.291667	2.25	2.237235	0	
21	N23	-1.291667	0	2.237235	0	
22	N24	0.000002	2.25	-0.	0	
23	N25	0.000002	0	-0.	0	
24	N26	-0.0625	2.25	0.108256	0	
25	N27	-0.0625	0	0.108256	0	
26	N30	4.666667	-0.395833	2.737235	0	
27	N31	4.666667	2.645833	2.737235	0	
28	N35	4.666667	4.270833	2.737235	0	
29	N37	4.666667	-1.729167	2.737235	0	
30	N54	-6.583333	2.104167	2.487235	0	
31	N55	4	2.104167	2.487235	0	
32	N42	-1.333333	-0.395833	2.487235	0	
33	N43	-1.333333	2.645833	2.487235	0	
34	N44	-1.333333	-0.395833	2.737235	0	
35	N45	-1.333333	2.645833	2.737235	0	
36	N46	-1.333333	4.729167	2.737235	0	
37	N47	-1.333333	-2.270833	2.737235	0	
38	N48	-5.583333	-0.395833	2.487235	0	
39	N49	-5.583333	2.645833	2.487235	0	
40	N50	-5.583333	-0.395833	2.737235	0	
41	N51	-5.583333	2.645833	2.737235	0	
42	N52	-5.583333	4.270833	2.737235	0	
43	N53	-5.583333	-1.729167	2.737235	0	
44	N54A	4.666667	2.145833	2.737235	0	
45	N59	-5.583333	2.145833	2.737235	0	
46	N48A	0.291668	2.25	-0.505182	0	
47	N49A	0.291668	0	-0.505182	0	
48	N50A	4.188783	3.395833	-2.755182	0	
49	N51A	0.291668	3.145833	-5.005182	0	
50	N50B	-7.5	3.395833	2.487235	0	
51	N51B	4.916667	3.395833	2.487235	0	
52	N52A	4.666667	3.395833	2.487235	0	
53	N53A	4.666667	3.395833	2.737235	0	
54	N54B	-1.333333	3.395833	2.487235	0	
55	N55A	-1.333333	3.395833	2.737235	0	
56	N56	-5.583333	3.395833	2.487235	0	
57	N57	-5.583333	3.395833	2.737235	0	
58	N58	0.291668	4.9	-0.505182	0	
59	N59A	1.166667	3.395833	2.487235	0	
60	N60	-3.833333	3.395833	2.487235	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Dish Pipe	PIPE_3.0	Column	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
3	Face Horizontal	L3X3X3	Beam	Single Angle	A36 Gr.36	Typical	1.09	.948	.948	.014
4	Face Veritcal	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
5	Standoff Horizontal	HSS3X3X4	Beam	SquareTube	A500 Gr. ...	Typical	2.44	3.02	3.02	5.08
6	Standoff Vertical	PIPE_1.5	Column	Pipe	A53 Gr. B	Typical	.749	.293	.293	.586
7	Mast Pipe	PIPE_3.0	Column	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
8	Tie Back	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
9	Antenna Pipe 2	PIPE_2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
10	Proposed Face Horizontal	PIPE_2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
11	Proposed Bracing	L2.5x2.5x4	Beam	Pipe	A36 Gr.36	Typical	1.19	.692	.692	.026

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N6	N4		90	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
2	M2	N4	N5		90	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
3	M3	N3	ALPHA		90	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
4	M4	ALPHA	N2		90	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
5	M5	N20	N4			RIGID	None	None	RIGID	Typical
6	M6	N19	ALPHA			RIGID	None	None	RIGID	Typical
7	M7	N19	N20			Mast Pipe	Column	Pipe	A53 Gr. B	Typical
8	M8	N24	N22			Standoff Horizontal	Beam	SquareTube	A500 Gr. ...	Typical
9	M9	N25	N23			Standoff Horizontal	Beam	SquareTube	A500 Gr. ...	Typical
10	M10	N27	N26			Standoff Vertical	Column	Pipe	A53 Gr. B	Typical
11	M11	N12	N11			Face Veritcal	Column	Pipe	A53 Gr. B	Typical
12	RRH1	N8	N7			Face Veritcal	Column	Pipe	A53 Gr. B	Typical
13	RRH2	N10	N9			Face Veritcal	Column	Pipe	A53 Gr. B	Typical
14	M14	N14	N13			Face Veritcal	Column	Pipe	A53 Gr. B	Typical
15	M15	N16	N31			RIGID	None	None	RIGID	Typical
16	M16	N15	N30			RIGID	None	None	RIGID	Typical
17	MP1A	N35	N37			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
18	M25	N54	N51A			Tie Back	Beam	Pipe	A53 Gr. B	Typical
19	M26	N55	N50A			Tie Back	Beam	Pipe	A53 Gr. B	Typical
20	M24	N43	N45			RIGID	None	None	RIGID	Typical
21	M25A	N42	N44			RIGID	None	None	RIGID	Typical
22	MP2A	N46	N47			Antenna Pipe 2	Beam	Pipe	A53 Gr. B	Typical
23	M27	N49	N51			RIGID	None	None	RIGID	Typical
24	M28	N48	N50			RIGID	None	None	RIGID	Typical
25	MP3A	N52	N53			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
26	M26A	N24	N48A			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
27	M27A	N25	N49A			RIGID	None	None	RIGID	Typical
28	M28A	N52A	N53A			RIGID	None	None	RIGID	Typical
29	M29	N54B	N55A			RIGID	None	None	RIGID	Typical
30	M30	N56	N57			RIGID	None	None	RIGID	Typical
31	M31	N50B	N51B			Proposed Face Ho...	Beam	Pipe	A53 Gr. B	Typical
32	M32	N60	N58		180	Proposed Bracing	Beam	Pipe	A36 Gr.36	Typical
33	M33	N59A	N58		90	Proposed Bracing	Beam	Pipe	A36 Gr.36	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	Default			None
3	M3						Yes				None
4	M4						Yes				None
5	M5	OOOOXO					Yes	** NA **			None
6	M6	OOOOXO					Yes	** NA **			None
7	M7						Yes	** NA **			None
8	M8	OOOOOX					Yes	Default			None
9	M9	OOOOOX					Yes	Default			None
10	M10						Yes	** NA **			None
11	M11						Yes	** NA **			None
12	RRH1						Yes	** NA **			None
13	RRH2						Yes	** NA **			None
14	M14						Yes	** NA **			None
15	M15		OOOXOO				Yes	** NA **			None
16	M16		OOOXOO				Yes	** NA **			None
17	MP1A						Yes	** NA **			None
18	M25	OOOOXO					Yes				None
19	M26	OOOOXO					Yes				None
20	M24		OOOXOO				Yes	** NA **			None
21	M25A		OOOXOO				Yes	** NA **			None
22	MP2A						Yes				None
23	M27		OOOXOO				Yes	** NA **			None
24	M28		OOOXOO				Yes	** NA **			None
25	MP3A						Yes	** NA **			None
26	M26A		OOOOOO				Yes	** NA **			None
27	M27A		OOOOOO				Yes	** NA **			None
28	M28A						Yes	** NA **			None
29	M29						Yes	** NA **			None
30	M30						Yes	** NA **			None
31	M31						Yes				None
32	M32	BenPIN					Yes				None
33	M33	BenPIN					Yes				None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	Y	-43.55	1.25
2	MP3A	My	-.022	1.25
3	MP3A	Mz	0	1.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP3A	Y	-43.55	3.25
5	MP3A	My	-.022	3.25
6	MP3A	Mz	0	3.25
7	RRH1	Y	-84.4	.75
8	RRH1	My	.042	.75
9	RRH1	Mz	0	.75
10	RRH2	Y	-70.3	.75
11	RRH2	My	.035	.75
12	RRH2	Mz	0	.75
13	MP2A	Y	-61.5	.75
14	MP2A	My	-.031	.75
15	MP2A	Mz	.051	.75
16	MP2A	Y	-61.5	4.75
17	MP2A	My	-.031	4.75
18	MP2A	Mz	.051	4.75
19	MP2A	Y	-61.5	.75
20	MP2A	My	-.031	.75
21	MP2A	Mz	-.051	.75
22	MP2A	Y	-61.5	4.75
23	MP2A	My	-.031	4.75
24	MP2A	Mz	-.051	4.75
25	MP1A	Y	-7.45	.25
26	MP1A	My	-.004	.25
27	MP1A	Mz	0	.25
28	MP1A	Y	-7.45	4.25
29	MP1A	My	-.004	4.25
30	MP1A	Mz	0	4.25

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	Y	-33.913	1.25
2	MP3A	My	-.017	1.25
3	MP3A	Mz	0	1.25
4	MP3A	Y	-33.913	3.25
5	MP3A	My	-.017	3.25
6	MP3A	Mz	0	3.25
7	RRH1	Y	-42.726	.75
8	RRH1	My	.021	.75
9	RRH1	Mz	0	.75
10	RRH2	Y	-38.41	.75
11	RRH2	My	.019	.75
12	RRH2	Mz	0	.75
13	MP2A	Y	-75.04	.75
14	MP2A	My	-.038	.75
15	MP2A	Mz	.063	.75
16	MP2A	Y	-75.04	4.75
17	MP2A	My	-.038	4.75
18	MP2A	Mz	.063	4.75
19	MP2A	Y	-75.04	.75
20	MP2A	My	-.038	.75
21	MP2A	Mz	-.063	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
22	MP2A	Y	-75.04	4.75
23	MP2A	My	-.038	4.75
24	MP2A	Mz	-.063	4.75
25	MP1A	Y	-47.232	.25
26	MP1A	My	-.024	.25
27	MP1A	Mz	0	.25
28	MP1A	Y	-47.232	4.25
29	MP1A	My	-.024	4.25
30	MP1A	Mz	0	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	1.25
2	MP3A	Z	-64.547	1.25
3	MP3A	Mx	0	1.25
4	MP3A	X	0	3.25
5	MP3A	Z	-64.547	3.25
6	MP3A	Mx	0	3.25
7	RRH1	X	0	.75
8	RRH1	Z	-51.363	.75
9	RRH1	Mx	0	.75
10	RRH2	X	0	.75
11	RRH2	Z	-51.363	.75
12	RRH2	Mx	0	.75
13	MP2A	X	0	.75
14	MP2A	Z	-156.56	.75
15	MP2A	Mx	-.13	.75
16	MP2A	X	0	4.75
17	MP2A	Z	-156.56	4.75
18	MP2A	Mx	-.13	4.75
19	MP2A	X	0	.75
20	MP2A	Z	-156.56	.75
21	MP2A	Mx	.13	.75
22	MP2A	X	0	4.75
23	MP2A	Z	-156.56	4.75
24	MP2A	Mx	.13	4.75
25	MP1A	X	0	.25
26	MP1A	Z	-104.098	.25
27	MP1A	Mx	0	.25
28	MP1A	X	0	4.25
29	MP1A	Z	-104.098	4.25
30	MP1A	Mx	0	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	27.364	1.25
2	MP3A	Z	-47.395	1.25
3	MP3A	Mx	-.014	1.25
4	MP3A	X	27.364	3.25
5	MP3A	Z	-47.395	3.25
6	MP3A	Mx	-.014	3.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	RRH1	X	23.553	.75
8	RRH1	Z	-40.794	.75
9	RRH1	Mx	.012	.75
10	RRH2	X	22.737	.75
11	RRH2	Z	-39.382	.75
12	RRH2	Mx	.011	.75
13	MP2A	X	67.78	.75
14	MP2A	Z	-117.398	.75
15	MP2A	Mx	-.132	.75
16	MP2A	X	67.78	4.75
17	MP2A	Z	-117.398	4.75
18	MP2A	Mx	-.132	4.75
19	MP2A	X	67.78	.75
20	MP2A	Z	-117.398	.75
21	MP2A	Mx	.064	.75
22	MP2A	X	67.78	4.75
23	MP2A	Z	-117.398	4.75
24	MP2A	Mx	.064	4.75
25	MP1A	X	45.496	.25
26	MP1A	Z	-78.801	.25
27	MP1A	Mx	-.023	.25
28	MP1A	X	45.496	4.25
29	MP1A	Z	-78.801	4.25
30	MP1A	Mx	-.023	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	30.388	1.25
2	MP3A	Z	-17.545	1.25
3	MP3A	Mx	-.015	1.25
4	MP3A	X	30.388	3.25
5	MP3A	Z	-17.545	3.25
6	MP3A	Mx	-.015	3.25
7	RRH1	X	33.42	.75
8	RRH1	Z	-19.295	.75
9	RRH1	Mx	.017	.75
10	RRH2	X	29.183	.75
11	RRH2	Z	-16.849	.75
12	RRH2	Mx	.015	.75
13	MP2A	X	81.024	.75
14	MP2A	Z	-46.779	.75
15	MP2A	Mx	-.079	.75
16	MP2A	X	81.024	4.75
17	MP2A	Z	-46.779	4.75
18	MP2A	Mx	-.079	4.75
19	MP2A	X	81.024	.75
20	MP2A	Z	-46.779	.75
21	MP2A	Mx	-.002	.75
22	MP2A	X	81.024	4.75
23	MP2A	Z	-46.779	4.75
24	MP2A	Mx	-.002	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP1A	X	56.099	.25
26	MP1A	Z	-32.388	.25
27	MP1A	Mx	-.028	.25
28	MP1A	X	56.099	4.25
29	MP1A	Z	-32.388	4.25
30	MP1A	Mx	-.028	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	25.27	1.25
2	MP3A	Z	0	1.25
3	MP3A	Mx	-.013	1.25
4	MP3A	X	25.27	3.25
5	MP3A	Z	0	3.25
6	MP3A	Mx	-.013	3.25
7	RRH1	X	34.333	.75
8	RRH1	Z	0	.75
9	RRH1	Mx	.017	.75
10	RRH2	X	27.81	.75
11	RRH2	Z	0	.75
12	RRH2	Mx	.014	.75
13	MP2A	X	72.558	.75
14	MP2A	Z	0	.75
15	MP2A	Mx	-.036	.75
16	MP2A	X	72.558	4.75
17	MP2A	Z	0	4.75
18	MP2A	Mx	-.036	4.75
19	MP2A	X	72.558	.75
20	MP2A	Z	0	.75
21	MP2A	Mx	-.036	.75
22	MP2A	X	72.558	4.75
23	MP2A	Z	0	4.75
24	MP2A	Mx	-.036	4.75
25	MP1A	X	51.67	.25
26	MP1A	Z	0	.25
27	MP1A	Mx	-.026	.25
28	MP1A	X	51.67	4.25
29	MP1A	Z	0	4.25
30	MP1A	Mx	-.026	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	30.388	1.25
2	MP3A	Z	17.545	1.25
3	MP3A	Mx	-.015	1.25
4	MP3A	X	30.388	3.25
5	MP3A	Z	17.545	3.25
6	MP3A	Mx	-.015	3.25
7	RRH1	X	33.42	.75
8	RRH1	Z	19.295	.75
9	RRH1	Mx	.017	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	RRH2	X	29.183	.75
11	RRH2	Z	16.849	.75
12	RRH2	Mx	.015	.75
13	MP2A	X	81.024	.75
14	MP2A	Z	46.779	.75
15	MP2A	Mx	-.002	.75
16	MP2A	X	81.024	4.75
17	MP2A	Z	46.779	4.75
18	MP2A	Mx	-.002	4.75
19	MP2A	X	81.024	.75
20	MP2A	Z	46.779	.75
21	MP2A	Mx	-.079	.75
22	MP2A	X	81.024	4.75
23	MP2A	Z	46.779	4.75
24	MP2A	Mx	-.079	4.75
25	MP1A	X	56.099	.25
26	MP1A	Z	32.388	.25
27	MP1A	Mx	-.028	.25
28	MP1A	X	56.099	4.25
29	MP1A	Z	32.388	4.25
30	MP1A	Mx	-.028	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	27.364	1.25
2	MP3A	Z	47.395	1.25
3	MP3A	Mx	-.014	1.25
4	MP3A	X	27.364	3.25
5	MP3A	Z	47.395	3.25
6	MP3A	Mx	-.014	3.25
7	RRH1	X	23.553	.75
8	RRH1	Z	40.794	.75
9	RRH1	Mx	.012	.75
10	RRH2	X	22.737	.75
11	RRH2	Z	39.382	.75
12	RRH2	Mx	.011	.75
13	MP2A	X	67.78	.75
14	MP2A	Z	117.398	.75
15	MP2A	Mx	.064	.75
16	MP2A	X	67.78	4.75
17	MP2A	Z	117.398	4.75
18	MP2A	Mx	.064	4.75
19	MP2A	X	67.78	.75
20	MP2A	Z	117.398	.75
21	MP2A	Mx	-.132	.75
22	MP2A	X	67.78	4.75
23	MP2A	Z	117.398	4.75
24	MP2A	Mx	-.132	4.75
25	MP1A	X	45.496	.25
26	MP1A	Z	78.801	.25
27	MP1A	Mx	-.023	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1A	X	45.496	4.25
29	MP1A	Z	78.801	4.25
30	MP1A	Mx	-.023	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	1.25
2	MP3A	Z	64.547	1.25
3	MP3A	Mx	0	1.25
4	MP3A	X	0	3.25
5	MP3A	Z	64.547	3.25
6	MP3A	Mx	0	3.25
7	RRH1	X	0	.75
8	RRH1	Z	51.363	.75
9	RRH1	Mx	0	.75
10	RRH2	X	0	.75
11	RRH2	Z	51.363	.75
12	RRH2	Mx	0	.75
13	MP2A	X	0	.75
14	MP2A	Z	156.56	.75
15	MP2A	Mx	.13	.75
16	MP2A	X	0	4.75
17	MP2A	Z	156.56	4.75
18	MP2A	Mx	.13	4.75
19	MP2A	X	0	.75
20	MP2A	Z	156.56	.75
21	MP2A	Mx	-.13	.75
22	MP2A	X	0	4.75
23	MP2A	Z	156.56	4.75
24	MP2A	Mx	-.13	4.75
25	MP1A	X	0	.25
26	MP1A	Z	104.098	.25
27	MP1A	Mx	0	.25
28	MP1A	X	0	4.25
29	MP1A	Z	104.098	4.25
30	MP1A	Mx	0	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-27.364	1.25
2	MP3A	Z	47.395	1.25
3	MP3A	Mx	.014	1.25
4	MP3A	X	-27.364	3.25
5	MP3A	Z	47.395	3.25
6	MP3A	Mx	.014	3.25
7	RRH1	X	-23.553	.75
8	RRH1	Z	40.794	.75
9	RRH1	Mx	-.012	.75
10	RRH2	X	-22.737	.75
11	RRH2	Z	39.382	.75
12	RRH2	Mx	-.011	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	X	-67.78	.75
14	MP2A	Z	117.398	.75
15	MP2A	Mx	.132	.75
16	MP2A	X	-67.78	4.75
17	MP2A	Z	117.398	4.75
18	MP2A	Mx	.132	4.75
19	MP2A	X	-67.78	.75
20	MP2A	Z	117.398	.75
21	MP2A	Mx	-.064	.75
22	MP2A	X	-67.78	4.75
23	MP2A	Z	117.398	4.75
24	MP2A	Mx	-.064	4.75
25	MP1A	X	-45.496	.25
26	MP1A	Z	78.801	.25
27	MP1A	Mx	.023	.25
28	MP1A	X	-45.496	4.25
29	MP1A	Z	78.801	4.25
30	MP1A	Mx	.023	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-30.388	1.25
2	MP3A	Z	17.545	1.25
3	MP3A	Mx	.015	1.25
4	MP3A	X	-30.388	3.25
5	MP3A	Z	17.545	3.25
6	MP3A	Mx	.015	3.25
7	RRH1	X	-33.42	.75
8	RRH1	Z	19.295	.75
9	RRH1	Mx	-.017	.75
10	RRH2	X	-29.183	.75
11	RRH2	Z	16.849	.75
12	RRH2	Mx	-.015	.75
13	MP2A	X	-81.024	.75
14	MP2A	Z	46.779	.75
15	MP2A	Mx	.079	.75
16	MP2A	X	-81.024	4.75
17	MP2A	Z	46.779	4.75
18	MP2A	Mx	.079	4.75
19	MP2A	X	-81.024	.75
20	MP2A	Z	46.779	.75
21	MP2A	Mx	.002	.75
22	MP2A	X	-81.024	4.75
23	MP2A	Z	46.779	4.75
24	MP2A	Mx	.002	4.75
25	MP1A	X	-56.099	.25
26	MP1A	Z	32.388	.25
27	MP1A	Mx	.028	.25
28	MP1A	X	-56.099	4.25
29	MP1A	Z	32.388	4.25
30	MP1A	Mx	.028	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-25.27	1.25
2	MP3A	Z	0	1.25
3	MP3A	Mx	.013	1.25
4	MP3A	X	-25.27	3.25
5	MP3A	Z	0	3.25
6	MP3A	Mx	.013	3.25
7	RRH1	X	-34.333	.75
8	RRH1	Z	0	.75
9	RRH1	Mx	-.017	.75
10	RRH2	X	-27.81	.75
11	RRH2	Z	0	.75
12	RRH2	Mx	-.014	.75
13	MP2A	X	-72.558	.75
14	MP2A	Z	0	.75
15	MP2A	Mx	.036	.75
16	MP2A	X	-72.558	4.75
17	MP2A	Z	0	4.75
18	MP2A	Mx	.036	4.75
19	MP2A	X	-72.558	.75
20	MP2A	Z	0	.75
21	MP2A	Mx	.036	.75
22	MP2A	X	-72.558	4.75
23	MP2A	Z	0	4.75
24	MP2A	Mx	.036	4.75
25	MP1A	X	-51.67	.25
26	MP1A	Z	0	.25
27	MP1A	Mx	.026	.25
28	MP1A	X	-51.67	4.25
29	MP1A	Z	0	4.25
30	MP1A	Mx	.026	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-30.388	1.25
2	MP3A	Z	-17.545	1.25
3	MP3A	Mx	.015	1.25
4	MP3A	X	-30.388	3.25
5	MP3A	Z	-17.545	3.25
6	MP3A	Mx	.015	3.25
7	RRH1	X	-33.42	.75
8	RRH1	Z	-19.295	.75
9	RRH1	Mx	-.017	.75
10	RRH2	X	-29.183	.75
11	RRH2	Z	-16.849	.75
12	RRH2	Mx	-.015	.75
13	MP2A	X	-81.024	.75
14	MP2A	Z	-46.779	.75
15	MP2A	Mx	.002	.75
16	MP2A	X	-81.024	4.75
17	MP2A	Z	-46.779	4.75
18	MP2A	Mx	.002	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP2A	X	-81.024	.75
20	MP2A	Z	-46.779	.75
21	MP2A	Mx	.079	.75
22	MP2A	X	-81.024	4.75
23	MP2A	Z	-46.779	4.75
24	MP2A	Mx	.079	4.75
25	MP1A	X	-56.099	.25
26	MP1A	Z	-32.388	.25
27	MP1A	Mx	.028	.25
28	MP1A	X	-56.099	4.25
29	MP1A	Z	-32.388	4.25
30	MP1A	Mx	.028	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-27.364	1.25
2	MP3A	Z	-47.395	1.25
3	MP3A	Mx	.014	1.25
4	MP3A	X	-27.364	3.25
5	MP3A	Z	-47.395	3.25
6	MP3A	Mx	.014	3.25
7	RRH1	X	-23.553	.75
8	RRH1	Z	-40.794	.75
9	RRH1	Mx	-.012	.75
10	RRH2	X	-22.737	.75
11	RRH2	Z	-39.382	.75
12	RRH2	Mx	-.011	.75
13	MP2A	X	-67.78	.75
14	MP2A	Z	-117.398	.75
15	MP2A	Mx	-.064	.75
16	MP2A	X	-67.78	4.75
17	MP2A	Z	-117.398	4.75
18	MP2A	Mx	-.064	4.75
19	MP2A	X	-67.78	.75
20	MP2A	Z	-117.398	.75
21	MP2A	Mx	.132	.75
22	MP2A	X	-67.78	4.75
23	MP2A	Z	-117.398	4.75
24	MP2A	Mx	.132	4.75
25	MP1A	X	-45.496	.25
26	MP1A	Z	-78.801	.25
27	MP1A	Mx	.023	.25
28	MP1A	X	-45.496	4.25
29	MP1A	Z	-78.801	4.25
30	MP1A	Mx	.023	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	1.25
2	MP3A	Z	-13.479	1.25
3	MP3A	Mx	0	1.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP3A	X	0	3.25
5	MP3A	Z	-13.479	3.25
6	MP3A	Mx	0	3.25
7	RRH1	X	0	.75
8	RRH1	Z	-11.333	.75
9	RRH1	Mx	0	.75
10	RRH2	X	0	.75
11	RRH2	Z	-11.333	.75
12	RRH2	Mx	0	.75
13	MP2A	X	0	.75
14	MP2A	Z	-31.373	.75
15	MP2A	Mx	-.026	.75
16	MP2A	X	0	4.75
17	MP2A	Z	-31.373	4.75
18	MP2A	Mx	-.026	4.75
19	MP2A	X	0	.75
20	MP2A	Z	-31.373	.75
21	MP2A	Mx	.026	.75
22	MP2A	X	0	4.75
23	MP2A	Z	-31.373	4.75
24	MP2A	Mx	.026	4.75
25	MP1A	X	0	.25
26	MP1A	Z	-21.326	.25
27	MP1A	Mx	0	.25
28	MP1A	X	0	4.25
29	MP1A	Z	-21.326	4.25
30	MP1A	Mx	0	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	5.77	1.25
2	MP3A	Z	-9.993	1.25
3	MP3A	Mx	-.003	1.25
4	MP3A	X	5.77	3.25
5	MP3A	Z	-9.993	3.25
6	MP3A	Mx	-.003	3.25
7	RRH1	X	5.233	.75
8	RRH1	Z	-9.065	.75
9	RRH1	Mx	.003	.75
10	RRH2	X	5.069	.75
11	RRH2	Z	-8.78	.75
12	RRH2	Mx	.003	.75
13	MP2A	X	13.694	.75
14	MP2A	Z	-23.719	.75
15	MP2A	Mx	-.027	.75
16	MP2A	X	13.694	4.75
17	MP2A	Z	-23.719	4.75
18	MP2A	Mx	-.027	4.75
19	MP2A	X	13.694	.75
20	MP2A	Z	-23.719	.75
21	MP2A	Mx	.013	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
22	MP2A	X	13.694	4.75
23	MP2A	Z	-23.719	4.75
24	MP2A	Mx	.013	4.75
25	MP1A	X	9.42	.25
26	MP1A	Z	-16.315	.25
27	MP1A	Mx	-.005	.25
28	MP1A	X	9.42	4.25
29	MP1A	Z	-16.315	4.25
30	MP1A	Mx	-.005	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	6.634	1.25
2	MP3A	Z	-3.83	1.25
3	MP3A	Mx	-.003	1.25
4	MP3A	X	6.634	3.25
5	MP3A	Z	-3.83	3.25
6	MP3A	Mx	-.003	3.25
7	RRH1	X	7.565	.75
8	RRH1	Z	-4.368	.75
9	RRH1	Mx	.004	.75
10	RRH2	X	6.71	.75
11	RRH2	Z	-3.874	.75
12	RRH2	Mx	.003	.75
13	MP2A	X	16.818	.75
14	MP2A	Z	-9.71	.75
15	MP2A	Mx	-.017	.75
16	MP2A	X	16.818	4.75
17	MP2A	Z	-9.71	4.75
18	MP2A	Mx	-.017	4.75
19	MP2A	X	16.818	.75
20	MP2A	Z	-9.71	.75
21	MP2A	Mx	-.000317	.75
22	MP2A	X	16.818	4.75
23	MP2A	Z	-9.71	4.75
24	MP2A	Mx	-.000317	4.75
25	MP1A	X	12.009	.25
26	MP1A	Z	-6.934	.25
27	MP1A	Mx	-.006	.25
28	MP1A	X	12.009	4.25
29	MP1A	Z	-6.934	4.25
30	MP1A	Mx	-.006	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	5.72	1.25
2	MP3A	Z	0	1.25
3	MP3A	Mx	-.003	1.25
4	MP3A	X	5.72	3.25
5	MP3A	Z	0	3.25
6	MP3A	Mx	-.003	3.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	RRH1	X	7.869	.75
8	RRH1	Z	0	.75
9	RRH1	Mx	.004	.75
10	RRH2	X	6.553	.75
11	RRH2	Z	0	.75
12	RRH2	Mx	.003	.75
13	MP2A	X	15.435	.75
14	MP2A	Z	0	.75
15	MP2A	Mx	-.008	.75
16	MP2A	X	15.435	4.75
17	MP2A	Z	0	4.75
18	MP2A	Mx	-.008	4.75
19	MP2A	X	15.435	.75
20	MP2A	Z	0	.75
21	MP2A	Mx	-.008	.75
22	MP2A	X	15.435	4.75
23	MP2A	Z	0	4.75
24	MP2A	Mx	-.008	4.75
25	MP1A	X	11.381	.25
26	MP1A	Z	0	.25
27	MP1A	Mx	-.006	.25
28	MP1A	X	11.381	4.25
29	MP1A	Z	0	4.25
30	MP1A	Mx	-.006	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	6.634	1.25
2	MP3A	Z	3.83	1.25
3	MP3A	Mx	-.003	1.25
4	MP3A	X	6.634	3.25
5	MP3A	Z	3.83	3.25
6	MP3A	Mx	-.003	3.25
7	RRH1	X	7.565	.75
8	RRH1	Z	4.368	.75
9	RRH1	Mx	.004	.75
10	RRH2	X	6.71	.75
11	RRH2	Z	3.874	.75
12	RRH2	Mx	.003	.75
13	MP2A	X	16.818	.75
14	MP2A	Z	9.71	.75
15	MP2A	Mx	-.000317	.75
16	MP2A	X	16.818	4.75
17	MP2A	Z	9.71	4.75
18	MP2A	Mx	-.000317	4.75
19	MP2A	X	16.818	.75
20	MP2A	Z	9.71	.75
21	MP2A	Mx	-.017	.75
22	MP2A	X	16.818	4.75
23	MP2A	Z	9.71	4.75
24	MP2A	Mx	-.017	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP1A	X	12.009	.25
26	MP1A	Z	6.934	.25
27	MP1A	Mx	-.006	.25
28	MP1A	X	12.009	4.25
29	MP1A	Z	6.934	4.25
30	MP1A	Mx	-.006	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	5.77	1.25
2	MP3A	Z	9.993	1.25
3	MP3A	Mx	-.003	1.25
4	MP3A	X	5.77	3.25
5	MP3A	Z	9.993	3.25
6	MP3A	Mx	-.003	3.25
7	RRH1	X	5.233	.75
8	RRH1	Z	9.065	.75
9	RRH1	Mx	.003	.75
10	RRH2	X	5.069	.75
11	RRH2	Z	8.78	.75
12	RRH2	Mx	.003	.75
13	MP2A	X	13.694	.75
14	MP2A	Z	23.719	.75
15	MP2A	Mx	.013	.75
16	MP2A	X	13.694	4.75
17	MP2A	Z	23.719	4.75
18	MP2A	Mx	.013	4.75
19	MP2A	X	13.694	.75
20	MP2A	Z	23.719	.75
21	MP2A	Mx	-.027	.75
22	MP2A	X	13.694	4.75
23	MP2A	Z	23.719	4.75
24	MP2A	Mx	-.027	4.75
25	MP1A	X	9.42	.25
26	MP1A	Z	16.315	.25
27	MP1A	Mx	-.005	.25
28	MP1A	X	9.42	4.25
29	MP1A	Z	16.315	4.25
30	MP1A	Mx	-.005	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	1.25
2	MP3A	Z	13.479	1.25
3	MP3A	Mx	0	1.25
4	MP3A	X	0	3.25
5	MP3A	Z	13.479	3.25
6	MP3A	Mx	0	3.25
7	RRH1	X	0	.75
8	RRH1	Z	11.333	.75
9	RRH1	Mx	0	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	RRH2	X	0	.75
11	RRH2	Z	11.333	.75
12	RRH2	Mx	0	.75
13	MP2A	X	0	.75
14	MP2A	Z	31.373	.75
15	MP2A	Mx	.026	.75
16	MP2A	X	0	4.75
17	MP2A	Z	31.373	4.75
18	MP2A	Mx	.026	4.75
19	MP2A	X	0	.75
20	MP2A	Z	31.373	.75
21	MP2A	Mx	-.026	.75
22	MP2A	X	0	4.75
23	MP2A	Z	31.373	4.75
24	MP2A	Mx	-.026	4.75
25	MP1A	X	0	.25
26	MP1A	Z	21.326	.25
27	MP1A	Mx	0	.25
28	MP1A	X	0	4.25
29	MP1A	Z	21.326	4.25
30	MP1A	Mx	0	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-5.77	1.25
2	MP3A	Z	9.993	1.25
3	MP3A	Mx	.003	1.25
4	MP3A	X	-5.77	3.25
5	MP3A	Z	9.993	3.25
6	MP3A	Mx	.003	3.25
7	RRH1	X	-5.233	.75
8	RRH1	Z	9.065	.75
9	RRH1	Mx	-.003	.75
10	RRH2	X	-5.069	.75
11	RRH2	Z	8.78	.75
12	RRH2	Mx	-.003	.75
13	MP2A	X	-13.694	.75
14	MP2A	Z	23.719	.75
15	MP2A	Mx	.027	.75
16	MP2A	X	-13.694	4.75
17	MP2A	Z	23.719	4.75
18	MP2A	Mx	.027	4.75
19	MP2A	X	-13.694	.75
20	MP2A	Z	23.719	.75
21	MP2A	Mx	-.013	.75
22	MP2A	X	-13.694	4.75
23	MP2A	Z	23.719	4.75
24	MP2A	Mx	-.013	4.75
25	MP1A	X	-9.42	.25
26	MP1A	Z	16.315	.25
27	MP1A	Mx	.005	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1A	X	-9.42	4.25
29	MP1A	Z	16.315	4.25
30	MP1A	Mx	.005	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-6.634	1.25
2	MP3A	Z	3.83	1.25
3	MP3A	Mx	.003	1.25
4	MP3A	X	-6.634	3.25
5	MP3A	Z	3.83	3.25
6	MP3A	Mx	.003	3.25
7	RRH1	X	-7.565	.75
8	RRH1	Z	4.368	.75
9	RRH1	Mx	-.004	.75
10	RRH2	X	-6.71	.75
11	RRH2	Z	3.874	.75
12	RRH2	Mx	-.003	.75
13	MP2A	X	-16.818	.75
14	MP2A	Z	9.71	.75
15	MP2A	Mx	.017	.75
16	MP2A	X	-16.818	4.75
17	MP2A	Z	9.71	4.75
18	MP2A	Mx	.017	4.75
19	MP2A	X	-16.818	.75
20	MP2A	Z	9.71	.75
21	MP2A	Mx	.000317	.75
22	MP2A	X	-16.818	4.75
23	MP2A	Z	9.71	4.75
24	MP2A	Mx	.000317	4.75
25	MP1A	X	-12.009	.25
26	MP1A	Z	6.934	.25
27	MP1A	Mx	.006	.25
28	MP1A	X	-12.009	4.25
29	MP1A	Z	6.934	4.25
30	MP1A	Mx	.006	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-5.72	1.25
2	MP3A	Z	0	1.25
3	MP3A	Mx	.003	1.25
4	MP3A	X	-5.72	3.25
5	MP3A	Z	0	3.25
6	MP3A	Mx	.003	3.25
7	RRH1	X	-7.869	.75
8	RRH1	Z	0	.75
9	RRH1	Mx	-.004	.75
10	RRH2	X	-6.553	.75
11	RRH2	Z	0	.75
12	RRH2	Mx	-.003	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	X	-15.435	.75
14	MP2A	Z	0	.75
15	MP2A	Mx	.008	.75
16	MP2A	X	-15.435	4.75
17	MP2A	Z	0	4.75
18	MP2A	Mx	.008	4.75
19	MP2A	X	-15.435	.75
20	MP2A	Z	0	.75
21	MP2A	Mx	.008	.75
22	MP2A	X	-15.435	4.75
23	MP2A	Z	0	4.75
24	MP2A	Mx	.008	4.75
25	MP1A	X	-11.381	.25
26	MP1A	Z	0	.25
27	MP1A	Mx	.006	.25
28	MP1A	X	-11.381	4.25
29	MP1A	Z	0	4.25
30	MP1A	Mx	.006	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-6.634	1.25
2	MP3A	Z	-3.83	1.25
3	MP3A	Mx	.003	1.25
4	MP3A	X	-6.634	3.25
5	MP3A	Z	-3.83	3.25
6	MP3A	Mx	.003	3.25
7	RRH1	X	-7.565	.75
8	RRH1	Z	-4.368	.75
9	RRH1	Mx	-.004	.75
10	RRH2	X	-6.71	.75
11	RRH2	Z	-3.874	.75
12	RRH2	Mx	-.003	.75
13	MP2A	X	-16.818	.75
14	MP2A	Z	-9.71	.75
15	MP2A	Mx	.000317	.75
16	MP2A	X	-16.818	4.75
17	MP2A	Z	-9.71	4.75
18	MP2A	Mx	.000317	4.75
19	MP2A	X	-16.818	.75
20	MP2A	Z	-9.71	.75
21	MP2A	Mx	.017	.75
22	MP2A	X	-16.818	4.75
23	MP2A	Z	-9.71	4.75
24	MP2A	Mx	.017	4.75
25	MP1A	X	-12.009	.25
26	MP1A	Z	-6.934	.25
27	MP1A	Mx	.006	.25
28	MP1A	X	-12.009	4.25
29	MP1A	Z	-6.934	4.25
30	MP1A	Mx	.006	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-5.77	1.25
2	MP3A	Z	-9.993	1.25
3	MP3A	Mx	.003	1.25
4	MP3A	X	-5.77	3.25
5	MP3A	Z	-9.993	3.25
6	MP3A	Mx	.003	3.25
7	RRH1	X	-5.233	.75
8	RRH1	Z	-9.065	.75
9	RRH1	Mx	-.003	.75
10	RRH2	X	-5.069	.75
11	RRH2	Z	-8.78	.75
12	RRH2	Mx	-.003	.75
13	MP2A	X	-13.694	.75
14	MP2A	Z	-23.719	.75
15	MP2A	Mx	-.013	.75
16	MP2A	X	-13.694	4.75
17	MP2A	Z	-23.719	4.75
18	MP2A	Mx	-.013	4.75
19	MP2A	X	-13.694	.75
20	MP2A	Z	-23.719	.75
21	MP2A	Mx	.027	.75
22	MP2A	X	-13.694	4.75
23	MP2A	Z	-23.719	4.75
24	MP2A	Mx	.027	4.75
25	MP1A	X	-9.42	.25
26	MP1A	Z	-16.315	.25
27	MP1A	Mx	.005	.25
28	MP1A	X	-9.42	4.25
29	MP1A	Z	-16.315	4.25
30	MP1A	Mx	.005	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	1.25
2	MP3A	Z	-4.317	1.25
3	MP3A	Mx	0	1.25
4	MP3A	X	0	3.25
5	MP3A	Z	-4.317	3.25
6	MP3A	Mx	0	3.25
7	RRH1	X	0	.75
8	RRH1	Z	-3.435	.75
9	RRH1	Mx	0	.75
10	RRH2	X	0	.75
11	RRH2	Z	-3.435	.75
12	RRH2	Mx	0	.75
13	MP2A	X	0	.75
14	MP2A	Z	-10.471	.75
15	MP2A	Mx	-.009	.75
16	MP2A	X	0	4.75
17	MP2A	Z	-10.471	4.75
18	MP2A	Mx	-.009	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP2A	X	0	.75
20	MP2A	Z	-10.471	.75
21	MP2A	Mx	.009	.75
22	MP2A	X	0	4.75
23	MP2A	Z	-10.471	4.75
24	MP2A	Mx	.009	4.75
25	MP1A	X	0	.25
26	MP1A	Z	-6.963	.25
27	MP1A	Mx	0	.25
28	MP1A	X	0	4.25
29	MP1A	Z	-6.963	4.25
30	MP1A	Mx	0	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	1.83	1.25
2	MP3A	Z	-3.17	1.25
3	MP3A	Mx	-.000915	1.25
4	MP3A	X	1.83	3.25
5	MP3A	Z	-3.17	3.25
6	MP3A	Mx	-.000915	3.25
7	RRH1	X	1.575	.75
8	RRH1	Z	-2.729	.75
9	RRH1	Mx	.000787	.75
10	RRH2	X	1.521	.75
11	RRH2	Z	-2.634	.75
12	RRH2	Mx	.00076	.75
13	MP2A	X	4.533	.75
14	MP2A	Z	-7.852	.75
15	MP2A	Mx	-.009	.75
16	MP2A	X	4.533	4.75
17	MP2A	Z	-7.852	4.75
18	MP2A	Mx	-.009	4.75
19	MP2A	X	4.533	.75
20	MP2A	Z	-7.852	.75
21	MP2A	Mx	.004	.75
22	MP2A	X	4.533	4.75
23	MP2A	Z	-7.852	4.75
24	MP2A	Mx	.004	4.75
25	MP1A	X	3.043	.25
26	MP1A	Z	-5.271	.25
27	MP1A	Mx	-.002	.25
28	MP1A	X	3.043	4.25
29	MP1A	Z	-5.271	4.25
30	MP1A	Mx	-.002	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	2.032	1.25
2	MP3A	Z	-1.173	1.25
3	MP3A	Mx	-.001	1.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP3A	X	2.032	3.25
5	MP3A	Z	-1.173	3.25
6	MP3A	Mx	-.001	3.25
7	RRH1	X	2.235	.75
8	RRH1	Z	-1.291	.75
9	RRH1	Mx	.001	.75
10	RRH2	X	1.952	.75
11	RRH2	Z	-1.127	.75
12	RRH2	Mx	.000976	.75
13	MP2A	X	5.419	.75
14	MP2A	Z	-3.129	.75
15	MP2A	Mx	-.005	.75
16	MP2A	X	5.419	4.75
17	MP2A	Z	-3.129	4.75
18	MP2A	Mx	-.005	4.75
19	MP2A	X	5.419	.75
20	MP2A	Z	-3.129	.75
21	MP2A	Mx	-.000102	.75
22	MP2A	X	5.419	4.75
23	MP2A	Z	-3.129	4.75
24	MP2A	Mx	-.000102	4.75
25	MP1A	X	3.752	.25
26	MP1A	Z	-2.166	.25
27	MP1A	Mx	-.002	.25
28	MP1A	X	3.752	4.25
29	MP1A	Z	-2.166	4.25
30	MP1A	Mx	-.002	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	1.69	1.25
2	MP3A	Z	0	1.25
3	MP3A	Mx	-.000845	1.25
4	MP3A	X	1.69	3.25
5	MP3A	Z	0	3.25
6	MP3A	Mx	-.000845	3.25
7	RRH1	X	2.296	.75
8	RRH1	Z	0	.75
9	RRH1	Mx	.001	.75
10	RRH2	X	1.86	.75
11	RRH2	Z	0	.75
12	RRH2	Mx	.00093	.75
13	MP2A	X	4.853	.75
14	MP2A	Z	0	.75
15	MP2A	Mx	-.002	.75
16	MP2A	X	4.853	4.75
17	MP2A	Z	0	4.75
18	MP2A	Mx	-.002	4.75
19	MP2A	X	4.853	.75
20	MP2A	Z	0	.75
21	MP2A	Mx	-.002	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
22	MP2A	X	4.853	4.75
23	MP2A	Z	0	4.75
24	MP2A	Mx	-.002	4.75
25	MP1A	X	3.456	.25
26	MP1A	Z	0	.25
27	MP1A	Mx	-.002	.25
28	MP1A	X	3.456	4.25
29	MP1A	Z	0	4.25
30	MP1A	Mx	-.002	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	2.032	1.25
2	MP3A	Z	1.173	1.25
3	MP3A	Mx	-.001	1.25
4	MP3A	X	2.032	3.25
5	MP3A	Z	1.173	3.25
6	MP3A	Mx	-.001	3.25
7	RRH1	X	2.235	.75
8	RRH1	Z	1.291	.75
9	RRH1	Mx	.001	.75
10	RRH2	X	1.952	.75
11	RRH2	Z	1.127	.75
12	RRH2	Mx	.000976	.75
13	MP2A	X	5.419	.75
14	MP2A	Z	3.129	.75
15	MP2A	Mx	-.000102	.75
16	MP2A	X	5.419	4.75
17	MP2A	Z	3.129	4.75
18	MP2A	Mx	-.000102	4.75
19	MP2A	X	5.419	.75
20	MP2A	Z	3.129	.75
21	MP2A	Mx	-.005	.75
22	MP2A	X	5.419	4.75
23	MP2A	Z	3.129	4.75
24	MP2A	Mx	-.005	4.75
25	MP1A	X	3.752	.25
26	MP1A	Z	2.166	.25
27	MP1A	Mx	-.002	.25
28	MP1A	X	3.752	4.25
29	MP1A	Z	2.166	4.25
30	MP1A	Mx	-.002	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	1.83	1.25
2	MP3A	Z	3.17	1.25
3	MP3A	Mx	-.000915	1.25
4	MP3A	X	1.83	3.25
5	MP3A	Z	3.17	3.25
6	MP3A	Mx	-.000915	3.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	RRH1	X	1.575	.75
8	RRH1	Z	2.729	.75
9	RRH1	Mx	.000787	.75
10	RRH2	X	1.521	.75
11	RRH2	Z	2.634	.75
12	RRH2	Mx	.00076	.75
13	MP2A	X	4.533	.75
14	MP2A	Z	7.852	.75
15	MP2A	Mx	.004	.75
16	MP2A	X	4.533	4.75
17	MP2A	Z	7.852	4.75
18	MP2A	Mx	.004	4.75
19	MP2A	X	4.533	.75
20	MP2A	Z	7.852	.75
21	MP2A	Mx	-.009	.75
22	MP2A	X	4.533	4.75
23	MP2A	Z	7.852	4.75
24	MP2A	Mx	-.009	4.75
25	MP1A	X	3.043	.25
26	MP1A	Z	5.271	.25
27	MP1A	Mx	-.002	.25
28	MP1A	X	3.043	4.25
29	MP1A	Z	5.271	4.25
30	MP1A	Mx	-.002	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	1.25
2	MP3A	Z	4.317	1.25
3	MP3A	Mx	0	1.25
4	MP3A	X	0	3.25
5	MP3A	Z	4.317	3.25
6	MP3A	Mx	0	3.25
7	RRH1	X	0	.75
8	RRH1	Z	3.435	.75
9	RRH1	Mx	0	.75
10	RRH2	X	0	.75
11	RRH2	Z	3.435	.75
12	RRH2	Mx	0	.75
13	MP2A	X	0	.75
14	MP2A	Z	10.471	.75
15	MP2A	Mx	.009	.75
16	MP2A	X	0	4.75
17	MP2A	Z	10.471	4.75
18	MP2A	Mx	.009	4.75
19	MP2A	X	0	.75
20	MP2A	Z	10.471	.75
21	MP2A	Mx	-.009	.75
22	MP2A	X	0	4.75
23	MP2A	Z	10.471	4.75
24	MP2A	Mx	-.009	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP1A	X	0	.25
26	MP1A	Z	6.963	.25
27	MP1A	Mx	0	.25
28	MP1A	X	0	4.25
29	MP1A	Z	6.963	4.25
30	MP1A	Mx	0	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-1.83	1.25
2	MP3A	Z	3.17	1.25
3	MP3A	Mx	.000915	1.25
4	MP3A	X	-1.83	3.25
5	MP3A	Z	3.17	3.25
6	MP3A	Mx	.000915	3.25
7	RRH1	X	-1.575	.75
8	RRH1	Z	2.729	.75
9	RRH1	Mx	-.000787	.75
10	RRH2	X	-1.521	.75
11	RRH2	Z	2.634	.75
12	RRH2	Mx	-.00076	.75
13	MP2A	X	-4.533	.75
14	MP2A	Z	7.852	.75
15	MP2A	Mx	.009	.75
16	MP2A	X	-4.533	4.75
17	MP2A	Z	7.852	4.75
18	MP2A	Mx	.009	4.75
19	MP2A	X	-4.533	.75
20	MP2A	Z	7.852	.75
21	MP2A	Mx	-.004	.75
22	MP2A	X	-4.533	4.75
23	MP2A	Z	7.852	4.75
24	MP2A	Mx	-.004	4.75
25	MP1A	X	-3.043	.25
26	MP1A	Z	5.271	.25
27	MP1A	Mx	.002	.25
28	MP1A	X	-3.043	4.25
29	MP1A	Z	5.271	4.25
30	MP1A	Mx	.002	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-2.032	1.25
2	MP3A	Z	1.173	1.25
3	MP3A	Mx	.001	1.25
4	MP3A	X	-2.032	3.25
5	MP3A	Z	1.173	3.25
6	MP3A	Mx	.001	3.25
7	RRH1	X	-2.235	.75
8	RRH1	Z	1.291	.75
9	RRH1	Mx	-.001	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	RRH2	X	-1.952	.75
11	RRH2	Z	1.127	.75
12	RRH2	Mx	-.000976	.75
13	MP2A	X	-5.419	.75
14	MP2A	Z	3.129	.75
15	MP2A	Mx	.005	.75
16	MP2A	X	-5.419	4.75
17	MP2A	Z	3.129	4.75
18	MP2A	Mx	.005	4.75
19	MP2A	X	-5.419	.75
20	MP2A	Z	3.129	.75
21	MP2A	Mx	.000102	.75
22	MP2A	X	-5.419	4.75
23	MP2A	Z	3.129	4.75
24	MP2A	Mx	.000102	4.75
25	MP1A	X	-3.752	.25
26	MP1A	Z	2.166	.25
27	MP1A	Mx	.002	.25
28	MP1A	X	-3.752	4.25
29	MP1A	Z	2.166	4.25
30	MP1A	Mx	.002	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-1.69	1.25
2	MP3A	Z	0	1.25
3	MP3A	Mx	.000845	1.25
4	MP3A	X	-1.69	3.25
5	MP3A	Z	0	3.25
6	MP3A	Mx	.000845	3.25
7	RRH1	X	-2.296	.75
8	RRH1	Z	0	.75
9	RRH1	Mx	-.001	.75
10	RRH2	X	-1.86	.75
11	RRH2	Z	0	.75
12	RRH2	Mx	-.00093	.75
13	MP2A	X	-4.853	.75
14	MP2A	Z	0	.75
15	MP2A	Mx	.002	.75
16	MP2A	X	-4.853	4.75
17	MP2A	Z	0	4.75
18	MP2A	Mx	.002	4.75
19	MP2A	X	-4.853	.75
20	MP2A	Z	0	.75
21	MP2A	Mx	.002	.75
22	MP2A	X	-4.853	4.75
23	MP2A	Z	0	4.75
24	MP2A	Mx	.002	4.75
25	MP1A	X	-3.456	.25
26	MP1A	Z	0	.25
27	MP1A	Mx	.002	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1A	X	-3.456	4.25
29	MP1A	Z	0	4.25
30	MP1A	Mx	.002	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-2.032	1.25
2	MP3A	Z	-1.173	1.25
3	MP3A	Mx	.001	1.25
4	MP3A	X	-2.032	3.25
5	MP3A	Z	-1.173	3.25
6	MP3A	Mx	.001	3.25
7	RRH1	X	-2.235	.75
8	RRH1	Z	-1.291	.75
9	RRH1	Mx	-.001	.75
10	RRH2	X	-1.952	.75
11	RRH2	Z	-1.127	.75
12	RRH2	Mx	-.000976	.75
13	MP2A	X	-5.419	.75
14	MP2A	Z	-3.129	.75
15	MP2A	Mx	.000102	.75
16	MP2A	X	-5.419	4.75
17	MP2A	Z	-3.129	4.75
18	MP2A	Mx	.000102	4.75
19	MP2A	X	-5.419	.75
20	MP2A	Z	-3.129	.75
21	MP2A	Mx	.005	.75
22	MP2A	X	-5.419	4.75
23	MP2A	Z	-3.129	4.75
24	MP2A	Mx	.005	4.75
25	MP1A	X	-3.752	.25
26	MP1A	Z	-2.166	.25
27	MP1A	Mx	.002	.25
28	MP1A	X	-3.752	4.25
29	MP1A	Z	-2.166	4.25
30	MP1A	Mx	.002	4.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-1.83	1.25
2	MP3A	Z	-3.17	1.25
3	MP3A	Mx	.000915	1.25
4	MP3A	X	-1.83	3.25
5	MP3A	Z	-3.17	3.25
6	MP3A	Mx	.000915	3.25
7	RRH1	X	-1.575	.75
8	RRH1	Z	-2.729	.75
9	RRH1	Mx	-.000787	.75
10	RRH2	X	-1.521	.75
11	RRH2	Z	-2.634	.75
12	RRH2	Mx	-.00076	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	X	-4.533	.75
14	MP2A	Z	-7.852	.75
15	MP2A	Mx	-.004	.75
16	MP2A	X	-4.533	4.75
17	MP2A	Z	-7.852	4.75
18	MP2A	Mx	-.004	4.75
19	MP2A	X	-4.533	.75
20	MP2A	Z	-7.852	.75
21	MP2A	Mx	.009	.75
22	MP2A	X	-4.533	4.75
23	MP2A	Z	-7.852	4.75
24	MP2A	Mx	.009	4.75
25	MP1A	X	-3.043	.25
26	MP1A	Z	-5.271	.25
27	MP1A	Mx	.002	.25
28	MP1A	X	-3.043	4.25
29	MP1A	Z	-5.271	4.25
30	MP1A	Mx	.002	4.25

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M25A	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M16	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M3	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M4	Y	-250	%100

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-7.214	-7.214	0	%100
2	M2	Y	-7.214	-7.214	0	%100
3	M3	Y	-7.214	-7.214	0	%100
4	M4	Y	-7.214	-7.214	0	%100
5	M7	Y	-6.212	-6.212	0	%100
6	M8	Y	-7.214	-7.214	0	%100
7	M9	Y	-7.214	-7.214	0	%100
8	M10	Y	-4.053	-4.053	0	%100
9	M11	Y	-4.694	-4.694	0	%100
10	RRH1	Y	-4.694	-4.694	0	%100
11	RRH2	Y	-4.694	-4.694	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
12	M14	Y	-4.694	-4.694	0	%100
13	MP1A	Y	-4.694	-4.694	0	%100
14	M25	Y	-4.694	-4.694	0	%100
15	M26	Y	-4.694	-4.694	0	%100
16	MP2A	Y	-5.369	-5.369	0	%100
17	MP3A	Y	-4.694	-4.694	0	%100
18	M31	Y	-5.369	-5.369	0	%100
19	M32	Y	-6.26	-6.26	0	%100
20	M33	Y	-6.26	-6.26	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-13.695	-13.695	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-13.695	-13.695	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-13.695	-13.695	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-13.695	-13.695	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-6.382	-6.382	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-1.656	-1.656	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-1.656	-1.656	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	-3.748	-3.748	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-4.905	-4.905	0	%100
19	RRH1	X	0	0	0	%100
20	RRH1	Z	-4.905	-4.905	0	%100
21	RRH2	X	0	0	0	%100
22	RRH2	Z	-4.905	-4.905	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	-4.905	-4.905	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	-5.677	-5.677	0	%100
27	M25	X	0	0	0	%100
28	M25	Z	-3.014	-3.014	0	%100
29	M26	X	0	0	0	%100
30	M26	Z	-.333	-.333	0	%100
31	MP2A	X	0	0	0	%100
32	MP2A	Z	-6.782	-6.782	0	%100
33	MP3A	X	0	0	0	%100
34	MP3A	Z	-5.677	-5.677	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	-7.897	-7.897	0	%100
37	M32	X	0	0	0	%100
38	M32	Z	-7.637	-7.637	0	%100
39	M33	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
40	M33	Z	-1.6	-1.6	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	5.136	5.136	0	%100
2	M1	Z	-8.895	-8.895	0	%100
3	M2	X	5.136	5.136	0	%100
4	M2	Z	-8.895	-8.895	0	%100
5	M3	X	5.136	5.136	0	%100
6	M3	Z	-8.895	-8.895	0	%100
7	M4	X	5.136	5.136	0	%100
8	M4	Z	-8.895	-8.895	0	%100
9	M7	X	3.271	3.271	0	%100
10	M7	Z	-5.665	-5.665	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	1.928	1.928	0	%100
16	M10	Z	-3.339	-3.339	0	%100
17	M11	X	2.51	2.51	0	%100
18	M11	Z	-4.347	-4.347	0	%100
19	RRH1	X	2.51	2.51	0	%100
20	RRH1	Z	-4.347	-4.347	0	%100
21	RRH2	X	2.51	2.51	0	%100
22	RRH2	Z	-4.347	-4.347	0	%100
23	M14	X	2.51	2.51	0	%100
24	M14	Z	-4.347	-4.347	0	%100
25	MP1A	X	2.944	2.944	0	%100
26	MP1A	Z	-5.1	-5.1	0	%100
27	M25	X	.182	.182	0	%100
28	M25	Z	-.315	-.315	0	%100
29	M26	X	.843	.843	0	%100
30	M26	Z	-1.459	-1.459	0	%100
31	MP2A	X	3.53	3.53	0	%100
32	MP2A	Z	-6.114	-6.114	0	%100
33	MP3A	X	2.944	2.944	0	%100
34	MP3A	Z	-5.1	-5.1	0	%100
35	M31	X	2.961	2.961	0	%100
36	M31	Z	-5.129	-5.129	0	%100
37	M32	X	1.127	1.127	0	%100
38	M32	Z	-1.952	-1.952	0	%100
39	M33	X	2.745	2.745	0	%100
40	M33	Z	-4.755	-4.755	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.965	2.965	0	%100
2	M1	Z	-1.712	-1.712	0	%100
3	M2	X	2.965	2.965	0	%100
4	M2	Z	-1.712	-1.712	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
5	M3	X	2.965	2.965	0	%100
6	M3	Z	-1.712	-1.712	0	%100
7	M4	X	2.965	2.965	0	%100
8	M4	Z	-1.712	-1.712	0	%100
9	M7	X	5.941	5.941	0	%100
10	M7	Z	-3.43	-3.43	0	%100
11	M8	X	1.434	1.434	0	%100
12	M8	Z	-.828	-.828	0	%100
13	M9	X	1.434	1.434	0	%100
14	M9	Z	-.828	-.828	0	%100
15	M10	X	3.524	3.524	0	%100
16	M10	Z	-2.034	-2.034	0	%100
17	M11	X	4.543	4.543	0	%100
18	M11	Z	-2.623	-2.623	0	%100
19	RRH1	X	4.543	4.543	0	%100
20	RRH1	Z	-2.623	-2.623	0	%100
21	RRH2	X	4.543	4.543	0	%100
22	RRH2	Z	-2.623	-2.623	0	%100
23	M14	X	4.543	4.543	0	%100
24	M14	Z	-2.623	-2.623	0	%100
25	MP1A	X	5.466	5.466	0	%100
26	MP1A	Z	-3.156	-3.156	0	%100
27	M25	X	.555	.555	0	%100
28	M25	Z	-.32	-.32	0	%100
29	M26	X	4.137	4.137	0	%100
30	M26	Z	-2.388	-2.388	0	%100
31	MP2A	X	6.597	6.597	0	%100
32	MP2A	Z	-3.809	-3.809	0	%100
33	MP3A	X	5.466	5.466	0	%100
34	MP3A	Z	-3.156	-3.156	0	%100
35	M31	X	1.71	1.71	0	%100
36	M31	Z	-.987	-.987	0	%100
37	M32	X	.473	.473	0	%100
38	M32	Z	-.273	-.273	0	%100
39	M33	X	7.953	7.953	0	%100
40	M33	Z	-4.592	-4.592	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	0	0	0	%100
9	M7	X	7.019	7.019	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	4.969	4.969	0	%100
12	M8	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
13	M9	X	4.969	4.969	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	4.176	4.176	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	5.36	5.36	0	%100
18	M11	Z	0	0	0	%100
19	RRH1	X	5.36	5.36	0	%100
20	RRH1	Z	0	0	0	%100
21	RRH2	X	5.36	5.36	0	%100
22	RRH2	Z	0	0	0	%100
23	M14	X	5.36	5.36	0	%100
24	M14	Z	0	0	0	%100
25	MP1A	X	6.523	6.523	0	%100
26	MP1A	Z	0	0	0	%100
27	M25	X	3.568	3.568	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	6.515	6.515	0	%100
30	M26	Z	0	0	0	%100
31	MP2A	X	7.897	7.897	0	%100
32	MP2A	Z	0	0	0	%100
33	MP3A	X	6.523	6.523	0	%100
34	MP3A	Z	0	0	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	0	0	0	%100
37	M32	X	4.221	4.221	0	%100
38	M32	Z	0	0	0	%100
39	M33	X	8.984	8.984	0	%100
40	M33	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.965	2.965	0	%100
2	M1	Z	1.712	1.712	0	%100
3	M2	X	2.965	2.965	0	%100
4	M2	Z	1.712	1.712	0	%100
5	M3	X	2.965	2.965	0	%100
6	M3	Z	1.712	1.712	0	%100
7	M4	X	2.965	2.965	0	%100
8	M4	Z	1.712	1.712	0	%100
9	M7	X	5.941	5.941	0	%100
10	M7	Z	3.43	3.43	0	%100
11	M8	X	5.737	5.737	0	%100
12	M8	Z	3.313	3.313	0	%100
13	M9	X	5.737	5.737	0	%100
14	M9	Z	3.313	3.313	0	%100
15	M10	X	3.524	3.524	0	%100
16	M10	Z	2.034	2.034	0	%100
17	M11	X	4.543	4.543	0	%100
18	M11	Z	2.623	2.623	0	%100
19	RRH1	X	4.543	4.543	0	%100
20	RRH1	Z	2.623	2.623	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
21	RRH2	X	4.543	4.543	0	%100
22	RRH2	Z	2.623	2.623	0	%100
23	M14	X	4.543	4.543	0	%100
24	M14	Z	2.623	2.623	0	%100
25	MP1A	X	5.466	5.466	0	%100
26	MP1A	Z	3.156	3.156	0	%100
27	M25	X	5.385	5.385	0	%100
28	M25	Z	3.109	3.109	0	%100
29	M26	X	4.471	4.471	0	%100
30	M26	Z	2.581	2.581	0	%100
31	MP2A	X	6.597	6.597	0	%100
32	MP2A	Z	3.809	3.809	0	%100
33	MP3A	X	5.466	5.466	0	%100
34	MP3A	Z	3.156	3.156	0	%100
35	M31	X	1.71	1.71	0	%100
36	M31	Z	.987	.987	0	%100
37	M32	X	8.318	8.318	0	%100
38	M32	Z	4.802	4.802	0	%100
39	M33	X	4.411	4.411	0	%100
40	M33	Z	2.547	2.547	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	5.136	5.136	0	%100
2	M1	Z	8.895	8.895	0	%100
3	M2	X	5.136	5.136	0	%100
4	M2	Z	8.895	8.895	0	%100
5	M3	X	5.136	5.136	0	%100
6	M3	Z	8.895	8.895	0	%100
7	M4	X	5.136	5.136	0	%100
8	M4	Z	8.895	8.895	0	%100
9	M7	X	3.271	3.271	0	%100
10	M7	Z	5.665	5.665	0	%100
11	M8	X	2.484	2.484	0	%100
12	M8	Z	4.303	4.303	0	%100
13	M9	X	2.484	2.484	0	%100
14	M9	Z	4.303	4.303	0	%100
15	M10	X	1.928	1.928	0	%100
16	M10	Z	3.339	3.339	0	%100
17	M11	X	2.51	2.51	0	%100
18	M11	Z	4.347	4.347	0	%100
19	RRH1	X	2.51	2.51	0	%100
20	RRH1	Z	4.347	4.347	0	%100
21	RRH2	X	2.51	2.51	0	%100
22	RRH2	Z	4.347	4.347	0	%100
23	M14	X	2.51	2.51	0	%100
24	M14	Z	4.347	4.347	0	%100
25	MP1A	X	2.944	2.944	0	%100
26	MP1A	Z	5.1	5.1	0	%100
27	M25	X	2.971	2.971	0	%100
28	M25	Z	5.145	5.145	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
29	M26	X	1.036	1.036	0	%100
30	M26	Z	1.794	1.794	0	%100
31	MP2A	X	3.53	3.53	0	%100
32	MP2A	Z	6.114	6.114	0	%100
33	MP3A	X	2.944	2.944	0	%100
34	MP3A	Z	5.1	5.1	0	%100
35	M31	X	2.961	2.961	0	%100
36	M31	Z	5.129	5.129	0	%100
37	M32	X	5.656	5.656	0	%100
38	M32	Z	9.797	9.797	0	%100
39	M33	X	.701	.701	0	%100
40	M33	Z	1.213	1.213	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	13.695	13.695	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	13.695	13.695	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	13.695	13.695	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	13.695	13.695	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	6.382	6.382	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	1.656	1.656	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	1.656	1.656	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	3.748	3.748	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	4.905	4.905	0	%100
19	RRH1	X	0	0	0	%100
20	RRH1	Z	4.905	4.905	0	%100
21	RRH2	X	0	0	0	%100
22	RRH2	Z	4.905	4.905	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	4.905	4.905	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	5.677	5.677	0	%100
27	M25	X	0	0	0	%100
28	M25	Z	3.014	3.014	0	%100
29	M26	X	0	0	0	%100
30	M26	Z	.333	.333	0	%100
31	MP2A	X	0	0	0	%100
32	MP2A	Z	6.782	6.782	0	%100
33	MP3A	X	0	0	0	%100
34	MP3A	Z	5.677	5.677	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	7.897	7.897	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
37	M32	X	0	0	0	%100
38	M32	Z	7.637	7.637	0	%100
39	M33	X	0	0	0	%100
40	M33	Z	1.6	1.6	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-5.136	-5.136	0	%100
2	M1	Z	8.895	8.895	0	%100
3	M2	X	-5.136	-5.136	0	%100
4	M2	Z	8.895	8.895	0	%100
5	M3	X	-5.136	-5.136	0	%100
6	M3	Z	8.895	8.895	0	%100
7	M4	X	-5.136	-5.136	0	%100
8	M4	Z	8.895	8.895	0	%100
9	M7	X	-3.271	-3.271	0	%100
10	M7	Z	5.665	5.665	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	-1.928	-1.928	0	%100
16	M10	Z	3.339	3.339	0	%100
17	M11	X	-2.51	-2.51	0	%100
18	M11	Z	4.347	4.347	0	%100
19	RRH1	X	-2.51	-2.51	0	%100
20	RRH1	Z	4.347	4.347	0	%100
21	RRH2	X	-2.51	-2.51	0	%100
22	RRH2	Z	4.347	4.347	0	%100
23	M14	X	-2.51	-2.51	0	%100
24	M14	Z	4.347	4.347	0	%100
25	MP1A	X	-2.944	-2.944	0	%100
26	MP1A	Z	5.1	5.1	0	%100
27	M25	X	-.182	-.182	0	%100
28	M25	Z	.315	.315	0	%100
29	M26	X	-.843	-.843	0	%100
30	M26	Z	1.459	1.459	0	%100
31	MP2A	X	-3.53	-3.53	0	%100
32	MP2A	Z	6.114	6.114	0	%100
33	MP3A	X	-2.944	-2.944	0	%100
34	MP3A	Z	5.1	5.1	0	%100
35	M31	X	-2.961	-2.961	0	%100
36	M31	Z	5.129	5.129	0	%100
37	M32	X	-1.127	-1.127	0	%100
38	M32	Z	1.952	1.952	0	%100
39	M33	X	-2.745	-2.745	0	%100
40	M33	Z	4.755	4.755	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.965	-2.965	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
2	M1	Z	1.712	1.712	0	%100
3	M2	X	-2.965	-2.965	0	%100
4	M2	Z	1.712	1.712	0	%100
5	M3	X	-2.965	-2.965	0	%100
6	M3	Z	1.712	1.712	0	%100
7	M4	X	-2.965	-2.965	0	%100
8	M4	Z	1.712	1.712	0	%100
9	M7	X	-5.941	-5.941	0	%100
10	M7	Z	3.43	3.43	0	%100
11	M8	X	-1.434	-1.434	0	%100
12	M8	Z	.828	.828	0	%100
13	M9	X	-1.434	-1.434	0	%100
14	M9	Z	.828	.828	0	%100
15	M10	X	-3.524	-3.524	0	%100
16	M10	Z	2.034	2.034	0	%100
17	M11	X	-4.543	-4.543	0	%100
18	M11	Z	2.623	2.623	0	%100
19	RRH1	X	-4.543	-4.543	0	%100
20	RRH1	Z	2.623	2.623	0	%100
21	RRH2	X	-4.543	-4.543	0	%100
22	RRH2	Z	2.623	2.623	0	%100
23	M14	X	-4.543	-4.543	0	%100
24	M14	Z	2.623	2.623	0	%100
25	MP1A	X	-5.466	-5.466	0	%100
26	MP1A	Z	3.156	3.156	0	%100
27	M25	X	-.555	-.555	0	%100
28	M25	Z	.32	.32	0	%100
29	M26	X	-4.137	-4.137	0	%100
30	M26	Z	2.388	2.388	0	%100
31	MP2A	X	-6.597	-6.597	0	%100
32	MP2A	Z	3.809	3.809	0	%100
33	MP3A	X	-5.466	-5.466	0	%100
34	MP3A	Z	3.156	3.156	0	%100
35	M31	X	-1.71	-1.71	0	%100
36	M31	Z	.987	.987	0	%100
37	M32	X	-.473	-.473	0	%100
38	M32	Z	.273	.273	0	%100
39	M33	X	-7.953	-7.953	0	%100
40	M33	Z	4.592	4.592	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	0	0	0	%100
9	M7	X	-7.019	-7.019	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
10	M7	Z	0	0	0	%100
11	M8	X	-4.969	-4.969	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-4.969	-4.969	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	-4.176	-4.176	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	-5.36	-5.36	0	%100
18	M11	Z	0	0	0	%100
19	RRH1	X	-5.36	-5.36	0	%100
20	RRH1	Z	0	0	0	%100
21	RRH2	X	-5.36	-5.36	0	%100
22	RRH2	Z	0	0	0	%100
23	M14	X	-5.36	-5.36	0	%100
24	M14	Z	0	0	0	%100
25	MP1A	X	-6.523	-6.523	0	%100
26	MP1A	Z	0	0	0	%100
27	M25	X	-3.568	-3.568	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	-6.515	-6.515	0	%100
30	M26	Z	0	0	0	%100
31	MP2A	X	-7.897	-7.897	0	%100
32	MP2A	Z	0	0	0	%100
33	MP3A	X	-6.523	-6.523	0	%100
34	MP3A	Z	0	0	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	0	0	0	%100
37	M32	X	-4.221	-4.221	0	%100
38	M32	Z	0	0	0	%100
39	M33	X	-8.984	-8.984	0	%100
40	M33	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.965	-2.965	0	%100
2	M1	Z	-1.712	-1.712	0	%100
3	M2	X	-2.965	-2.965	0	%100
4	M2	Z	-1.712	-1.712	0	%100
5	M3	X	-2.965	-2.965	0	%100
6	M3	Z	-1.712	-1.712	0	%100
7	M4	X	-2.965	-2.965	0	%100
8	M4	Z	-1.712	-1.712	0	%100
9	M7	X	-5.941	-5.941	0	%100
10	M7	Z	-3.43	-3.43	0	%100
11	M8	X	-5.737	-5.737	0	%100
12	M8	Z	-3.313	-3.313	0	%100
13	M9	X	-5.737	-5.737	0	%100
14	M9	Z	-3.313	-3.313	0	%100
15	M10	X	-3.524	-3.524	0	%100
16	M10	Z	-2.034	-2.034	0	%100
17	M11	X	-4.543	-4.543	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
18	M11	Z	-2.623	-2.623	0	%100
19	RRH1	X	-4.543	-4.543	0	%100
20	RRH1	Z	-2.623	-2.623	0	%100
21	RRH2	X	-4.543	-4.543	0	%100
22	RRH2	Z	-2.623	-2.623	0	%100
23	M14	X	-4.543	-4.543	0	%100
24	M14	Z	-2.623	-2.623	0	%100
25	MP1A	X	-5.466	-5.466	0	%100
26	MP1A	Z	-3.156	-3.156	0	%100
27	M25	X	-5.385	-5.385	0	%100
28	M25	Z	-3.109	-3.109	0	%100
29	M26	X	-4.471	-4.471	0	%100
30	M26	Z	-2.581	-2.581	0	%100
31	MP2A	X	-6.597	-6.597	0	%100
32	MP2A	Z	-3.809	-3.809	0	%100
33	MP3A	X	-5.466	-5.466	0	%100
34	MP3A	Z	-3.156	-3.156	0	%100
35	M31	X	-1.71	-1.71	0	%100
36	M31	Z	-.987	-.987	0	%100
37	M32	X	-8.318	-8.318	0	%100
38	M32	Z	-4.802	-4.802	0	%100
39	M33	X	-4.411	-4.411	0	%100
40	M33	Z	-2.547	-2.547	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-5.136	-5.136	0	%100
2	M1	Z	-8.895	-8.895	0	%100
3	M2	X	-5.136	-5.136	0	%100
4	M2	Z	-8.895	-8.895	0	%100
5	M3	X	-5.136	-5.136	0	%100
6	M3	Z	-8.895	-8.895	0	%100
7	M4	X	-5.136	-5.136	0	%100
8	M4	Z	-8.895	-8.895	0	%100
9	M7	X	-3.271	-3.271	0	%100
10	M7	Z	-5.665	-5.665	0	%100
11	M8	X	-2.484	-2.484	0	%100
12	M8	Z	-4.303	-4.303	0	%100
13	M9	X	-2.484	-2.484	0	%100
14	M9	Z	-4.303	-4.303	0	%100
15	M10	X	-1.928	-1.928	0	%100
16	M10	Z	-3.339	-3.339	0	%100
17	M11	X	-2.51	-2.51	0	%100
18	M11	Z	-4.347	-4.347	0	%100
19	RRH1	X	-2.51	-2.51	0	%100
20	RRH1	Z	-4.347	-4.347	0	%100
21	RRH2	X	-2.51	-2.51	0	%100
22	RRH2	Z	-4.347	-4.347	0	%100
23	M14	X	-2.51	-2.51	0	%100
24	M14	Z	-4.347	-4.347	0	%100
25	MP1A	X	-2.944	-2.944	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
26	MP1A	Z	-5.1	-5.1	0	%100
27	M25	X	-2.971	-2.971	0	%100
28	M25	Z	-5.145	-5.145	0	%100
29	M26	X	-1.036	-1.036	0	%100
30	M26	Z	-1.794	-1.794	0	%100
31	MP2A	X	-3.53	-3.53	0	%100
32	MP2A	Z	-6.114	-6.114	0	%100
33	MP3A	X	-2.944	-2.944	0	%100
34	MP3A	Z	-5.1	-5.1	0	%100
35	M31	X	-2.961	-2.961	0	%100
36	M31	Z	-5.129	-5.129	0	%100
37	M32	X	-5.656	-5.656	0	%100
38	M32	Z	-9.797	-9.797	0	%100
39	M33	X	-.701	-.701	0	%100
40	M33	Z	-1.213	-1.213	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-3.671	-3.671	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-3.671	-3.671	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-3.671	-3.671	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-3.671	-3.671	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-2.136	-2.136	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-.532	-.532	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-.532	-.532	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	-1.557	-1.557	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-1.862	-1.862	0	%100
19	RRH1	X	0	0	0	%100
20	RRH1	Z	-1.862	-1.862	0	%100
21	RRH2	X	0	0	0	%100
22	RRH2	Z	-1.862	-1.862	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	-1.862	-1.862	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	-2.182	-2.182	0	%100
27	M25	X	0	0	0	%100
28	M25	Z	-1.081	-1.081	0	%100
29	M26	X	0	0	0	%100
30	M26	Z	-.128	-.128	0	%100
31	MP2A	X	0	0	0	%100
32	MP2A	Z	-2.387	-2.387	0	%100
33	MP3A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
34	MP3A	Z	-2.182	-2.182	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	-2.594	-2.594	0	%100
37	M32	X	0	0	0	%100
38	M32	Z	-2.172	-2.172	0	%100
39	M33	X	0	0	0	%100
40	M33	Z	-.459	-.459	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.377	1.377	0	%100
2	M1	Z	-2.385	-2.385	0	%100
3	M2	X	1.377	1.377	0	%100
4	M2	Z	-2.385	-2.385	0	%100
5	M3	X	1.377	1.377	0	%100
6	M3	Z	-2.385	-2.385	0	%100
7	M4	X	1.377	1.377	0	%100
8	M4	Z	-2.385	-2.385	0	%100
9	M7	X	1.083	1.083	0	%100
10	M7	Z	-1.875	-1.875	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	.788	.788	0	%100
16	M10	Z	-1.365	-1.365	0	%100
17	M11	X	.941	.941	0	%100
18	M11	Z	-1.63	-1.63	0	%100
19	RRH1	X	.941	.941	0	%100
20	RRH1	Z	-1.63	-1.63	0	%100
21	RRH2	X	.941	.941	0	%100
22	RRH2	Z	-1.63	-1.63	0	%100
23	M14	X	.941	.941	0	%100
24	M14	Z	-1.63	-1.63	0	%100
25	MP1A	X	1.111	1.111	0	%100
26	MP1A	Z	-1.924	-1.924	0	%100
27	M25	X	.066	.066	0	%100
28	M25	Z	-.114	-.114	0	%100
29	M26	X	.305	.305	0	%100
30	M26	Z	-.529	-.529	0	%100
31	MP2A	X	1.219	1.219	0	%100
32	MP2A	Z	-2.112	-2.112	0	%100
33	MP3A	X	1.111	1.111	0	%100
34	MP3A	Z	-1.924	-1.924	0	%100
35	M31	X	.973	.973	0	%100
36	M31	Z	-1.685	-1.685	0	%100
37	M32	X	.32	.32	0	%100
38	M32	Z	-.555	-.555	0	%100
39	M33	X	.787	.787	0	%100
40	M33	Z	-1.364	-1.364	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.795	.795	0	%100
2	M1	Z	-.459	-.459	0	%100
3	M2	X	.795	.795	0	%100
4	M2	Z	-.459	-.459	0	%100
5	M3	X	.795	.795	0	%100
6	M3	Z	-.459	-.459	0	%100
7	M4	X	.795	.795	0	%100
8	M4	Z	-.459	-.459	0	%100
9	M7	X	1.927	1.927	0	%100
10	M7	Z	-1.112	-1.112	0	%100
11	M8	X	.461	.461	0	%100
12	M8	Z	-.266	-.266	0	%100
13	M9	X	.461	.461	0	%100
14	M9	Z	-.266	-.266	0	%100
15	M10	X	1.4	1.4	0	%100
16	M10	Z	-.808	-.808	0	%100
17	M11	X	1.667	1.667	0	%100
18	M11	Z	-.962	-.962	0	%100
19	RRH1	X	1.667	1.667	0	%100
20	RRH1	Z	-.962	-.962	0	%100
21	RRH2	X	1.667	1.667	0	%100
22	RRH2	Z	-.962	-.962	0	%100
23	M14	X	1.667	1.667	0	%100
24	M14	Z	-.962	-.962	0	%100
25	MP1A	X	1.992	1.992	0	%100
26	MP1A	Z	-1.15	-1.15	0	%100
27	M25	X	.2	.2	0	%100
28	M25	Z	-.116	-.116	0	%100
29	M26	X	1.485	1.485	0	%100
30	M26	Z	-.858	-.858	0	%100
31	MP2A	X	2.202	2.202	0	%100
32	MP2A	Z	-1.271	-1.271	0	%100
33	MP3A	X	1.992	1.992	0	%100
34	MP3A	Z	-1.15	-1.15	0	%100
35	M31	X	.562	.562	0	%100
36	M31	Z	-.324	-.324	0	%100
37	M32	X	.134	.134	0	%100
38	M32	Z	-.078	-.078	0	%100
39	M33	X	2.28	2.28	0	%100
40	M33	Z	-1.317	-1.317	0	%100

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

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

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
9	M7	X	2.254	2.254	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	1.597	1.597	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	1.597	1.597	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	1.636	1.636	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	1.946	1.946	0	%100
18	M11	Z	0	0	0	%100
19	RRH1	X	1.946	1.946	0	%100
20	RRH1	Z	0	0	0	%100
21	RRH2	X	1.946	1.946	0	%100
22	RRH2	Z	0	0	0	%100
23	M14	X	1.946	1.946	0	%100
24	M14	Z	0	0	0	%100
25	MP1A	X	2.339	2.339	0	%100
26	MP1A	Z	0	0	0	%100
27	M25	X	1.28	1.28	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	2.336	2.336	0	%100
30	M26	Z	0	0	0	%100
31	MP2A	X	2.594	2.594	0	%100
32	MP2A	Z	0	0	0	%100
33	MP3A	X	2.339	2.339	0	%100
34	MP3A	Z	0	0	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	0	0	0	%100
37	M32	X	1.201	1.201	0	%100
38	M32	Z	0	0	0	%100
39	M33	X	2.576	2.576	0	%100
40	M33	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.795	.795	0	%100
2	M1	Z	.459	.459	0	%100
3	M2	X	.795	.795	0	%100
4	M2	Z	.459	.459	0	%100
5	M3	X	.795	.795	0	%100
6	M3	Z	.459	.459	0	%100
7	M4	X	.795	.795	0	%100
8	M4	Z	.459	.459	0	%100
9	M7	X	1.927	1.927	0	%100
10	M7	Z	1.112	1.112	0	%100
11	M8	X	1.844	1.844	0	%100
12	M8	Z	1.065	1.065	0	%100
13	M9	X	1.844	1.844	0	%100
14	M9	Z	1.065	1.065	0	%100
15	M10	X	1.4	1.4	0	%100
16	M10	Z	.808	.808	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
17	M11	X	1.667	1.667	0	%100
18	M11	Z	.962	.962	0	%100
19	RRH1	X	1.667	1.667	0	%100
20	RRH1	Z	.962	.962	0	%100
21	RRH2	X	1.667	1.667	0	%100
22	RRH2	Z	.962	.962	0	%100
23	M14	X	1.667	1.667	0	%100
24	M14	Z	.962	.962	0	%100
25	MP1A	X	1.992	1.992	0	%100
26	MP1A	Z	1.15	1.15	0	%100
27	M25	X	1.931	1.931	0	%100
28	M25	Z	1.115	1.115	0	%100
29	M26	X	1.605	1.605	0	%100
30	M26	Z	.926	.926	0	%100
31	MP2A	X	2.202	2.202	0	%100
32	MP2A	Z	1.271	1.271	0	%100
33	MP3A	X	1.992	1.992	0	%100
34	MP3A	Z	1.15	1.15	0	%100
35	M31	X	.562	.562	0	%100
36	M31	Z	.324	.324	0	%100
37	M32	X	2.366	2.366	0	%100
38	M32	Z	1.366	1.366	0	%100
39	M33	X	1.265	1.265	0	%100
40	M33	Z	.73	.73	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.377	1.377	0	%100
2	M1	Z	2.385	2.385	0	%100
3	M2	X	1.377	1.377	0	%100
4	M2	Z	2.385	2.385	0	%100
5	M3	X	1.377	1.377	0	%100
6	M3	Z	2.385	2.385	0	%100
7	M4	X	1.377	1.377	0	%100
8	M4	Z	2.385	2.385	0	%100
9	M7	X	1.083	1.083	0	%100
10	M7	Z	1.875	1.875	0	%100
11	M8	X	.798	.798	0	%100
12	M8	Z	1.383	1.383	0	%100
13	M9	X	.798	.798	0	%100
14	M9	Z	1.383	1.383	0	%100
15	M10	X	.788	.788	0	%100
16	M10	Z	1.365	1.365	0	%100
17	M11	X	.941	.941	0	%100
18	M11	Z	1.63	1.63	0	%100
19	RRH1	X	.941	.941	0	%100
20	RRH1	Z	1.63	1.63	0	%100
21	RRH2	X	.941	.941	0	%100
22	RRH2	Z	1.63	1.63	0	%100
23	M14	X	.941	.941	0	%100
24	M14	Z	1.63	1.63	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
25	MP1A	X	1.111	1.111	0	%100
26	MP1A	Z	1.924	1.924	0	%100
27	M25	X	1.065	1.065	0	%100
28	M25	Z	1.845	1.845	0	%100
29	M26	X	.374	.374	0	%100
30	M26	Z	.648	.648	0	%100
31	MP2A	X	1.219	1.219	0	%100
32	MP2A	Z	2.112	2.112	0	%100
33	MP3A	X	1.111	1.111	0	%100
34	MP3A	Z	1.924	1.924	0	%100
35	M31	X	.973	.973	0	%100
36	M31	Z	1.685	1.685	0	%100
37	M32	X	1.609	1.609	0	%100
38	M32	Z	2.786	2.786	0	%100
39	M33	X	.201	.201	0	%100
40	M33	Z	.348	.348	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	3.671	3.671	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	3.671	3.671	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	3.671	3.671	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	3.671	3.671	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	2.136	2.136	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	.532	.532	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	.532	.532	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	1.557	1.557	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	1.862	1.862	0	%100
19	RRH1	X	0	0	0	%100
20	RRH1	Z	1.862	1.862	0	%100
21	RRH2	X	0	0	0	%100
22	RRH2	Z	1.862	1.862	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	1.862	1.862	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	2.182	2.182	0	%100
27	M25	X	0	0	0	%100
28	M25	Z	1.081	1.081	0	%100
29	M26	X	0	0	0	%100
30	M26	Z	.128	.128	0	%100
31	MP2A	X	0	0	0	%100
32	MP2A	Z	2.387	2.387	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
33	MP3A	X	0	0	0	%100
34	MP3A	Z	2.182	2.182	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	2.594	2.594	0	%100
37	M32	X	0	0	0	%100
38	M32	Z	2.172	2.172	0	%100
39	M33	X	0	0	0	%100
40	M33	Z	.459	.459	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.377	-1.377	0	%100
2	M1	Z	2.385	2.385	0	%100
3	M2	X	-1.377	-1.377	0	%100
4	M2	Z	2.385	2.385	0	%100
5	M3	X	-1.377	-1.377	0	%100
6	M3	Z	2.385	2.385	0	%100
7	M4	X	-1.377	-1.377	0	%100
8	M4	Z	2.385	2.385	0	%100
9	M7	X	-1.083	-1.083	0	%100
10	M7	Z	1.875	1.875	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	-.788	-.788	0	%100
16	M10	Z	1.365	1.365	0	%100
17	M11	X	-.941	-.941	0	%100
18	M11	Z	1.63	1.63	0	%100
19	RRH1	X	-.941	-.941	0	%100
20	RRH1	Z	1.63	1.63	0	%100
21	RRH2	X	-.941	-.941	0	%100
22	RRH2	Z	1.63	1.63	0	%100
23	M14	X	-.941	-.941	0	%100
24	M14	Z	1.63	1.63	0	%100
25	MP1A	X	-1.111	-1.111	0	%100
26	MP1A	Z	1.924	1.924	0	%100
27	M25	X	-.066	-.066	0	%100
28	M25	Z	.114	.114	0	%100
29	M26	X	-.305	-.305	0	%100
30	M26	Z	.529	.529	0	%100
31	MP2A	X	-1.219	-1.219	0	%100
32	MP2A	Z	2.112	2.112	0	%100
33	MP3A	X	-1.111	-1.111	0	%100
34	MP3A	Z	1.924	1.924	0	%100
35	M31	X	-.973	-.973	0	%100
36	M31	Z	1.685	1.685	0	%100
37	M32	X	-.32	-.32	0	%100
38	M32	Z	.555	.555	0	%100
39	M33	X	-.787	-.787	0	%100
40	M33	Z	1.364	1.364	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.795	-.795	0	%100
2	M1	Z	.459	.459	0	%100
3	M2	X	-.795	-.795	0	%100
4	M2	Z	.459	.459	0	%100
5	M3	X	-.795	-.795	0	%100
6	M3	Z	.459	.459	0	%100
7	M4	X	-.795	-.795	0	%100
8	M4	Z	.459	.459	0	%100
9	M7	X	-1.927	-1.927	0	%100
10	M7	Z	1.112	1.112	0	%100
11	M8	X	-.461	-.461	0	%100
12	M8	Z	.266	.266	0	%100
13	M9	X	-.461	-.461	0	%100
14	M9	Z	.266	.266	0	%100
15	M10	X	-1.4	-1.4	0	%100
16	M10	Z	.808	.808	0	%100
17	M11	X	-1.667	-1.667	0	%100
18	M11	Z	.962	.962	0	%100
19	RRH1	X	-1.667	-1.667	0	%100
20	RRH1	Z	.962	.962	0	%100
21	RRH2	X	-1.667	-1.667	0	%100
22	RRH2	Z	.962	.962	0	%100
23	M14	X	-1.667	-1.667	0	%100
24	M14	Z	.962	.962	0	%100
25	MP1A	X	-1.992	-1.992	0	%100
26	MP1A	Z	1.15	1.15	0	%100
27	M25	X	-.2	-.2	0	%100
28	M25	Z	.116	.116	0	%100
29	M26	X	-1.485	-1.485	0	%100
30	M26	Z	.858	.858	0	%100
31	MP2A	X	-2.202	-2.202	0	%100
32	MP2A	Z	1.271	1.271	0	%100
33	MP3A	X	-1.992	-1.992	0	%100
34	MP3A	Z	1.15	1.15	0	%100
35	M31	X	-.562	-.562	0	%100
36	M31	Z	.324	.324	0	%100
37	M32	X	-.134	-.134	0	%100
38	M32	Z	.078	.078	0	%100
39	M33	X	-2.28	-2.28	0	%100
40	M33	Z	1.317	1.317	0	%100

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

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

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
9	M7	X	-2.254	-2.254	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	-1.597	-1.597	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-1.597	-1.597	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	-1.636	-1.636	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	-1.946	-1.946	0	%100
18	M11	Z	0	0	0	%100
19	RRH1	X	-1.946	-1.946	0	%100
20	RRH1	Z	0	0	0	%100
21	RRH2	X	-1.946	-1.946	0	%100
22	RRH2	Z	0	0	0	%100
23	M14	X	-1.946	-1.946	0	%100
24	M14	Z	0	0	0	%100
25	MP1A	X	-2.339	-2.339	0	%100
26	MP1A	Z	0	0	0	%100
27	M25	X	-1.28	-1.28	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	-2.336	-2.336	0	%100
30	M26	Z	0	0	0	%100
31	MP2A	X	-2.594	-2.594	0	%100
32	MP2A	Z	0	0	0	%100
33	MP3A	X	-2.339	-2.339	0	%100
34	MP3A	Z	0	0	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	0	0	0	%100
37	M32	X	-1.201	-1.201	0	%100
38	M32	Z	0	0	0	%100
39	M33	X	-2.576	-2.576	0	%100
40	M33	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.795	-.795	0	%100
2	M1	Z	-.459	-.459	0	%100
3	M2	X	-.795	-.795	0	%100
4	M2	Z	-.459	-.459	0	%100
5	M3	X	-.795	-.795	0	%100
6	M3	Z	-.459	-.459	0	%100
7	M4	X	-.795	-.795	0	%100
8	M4	Z	-.459	-.459	0	%100
9	M7	X	-1.927	-1.927	0	%100
10	M7	Z	-1.112	-1.112	0	%100
11	M8	X	-1.844	-1.844	0	%100
12	M8	Z	-1.065	-1.065	0	%100
13	M9	X	-1.844	-1.844	0	%100
14	M9	Z	-1.065	-1.065	0	%100
15	M10	X	-1.4	-1.4	0	%100
16	M10	Z	-.808	-.808	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
17	M11	X	-1.667	-1.667	0	%100
18	M11	Z	-.962	-.962	0	%100
19	RRH1	X	-1.667	-1.667	0	%100
20	RRH1	Z	-.962	-.962	0	%100
21	RRH2	X	-1.667	-1.667	0	%100
22	RRH2	Z	-.962	-.962	0	%100
23	M14	X	-1.667	-1.667	0	%100
24	M14	Z	-.962	-.962	0	%100
25	MP1A	X	-1.992	-1.992	0	%100
26	MP1A	Z	-1.15	-1.15	0	%100
27	M25	X	-1.931	-1.931	0	%100
28	M25	Z	-1.115	-1.115	0	%100
29	M26	X	-1.605	-1.605	0	%100
30	M26	Z	-.926	-.926	0	%100
31	MP2A	X	-2.202	-2.202	0	%100
32	MP2A	Z	-1.271	-1.271	0	%100
33	MP3A	X	-1.992	-1.992	0	%100
34	MP3A	Z	-1.15	-1.15	0	%100
35	M31	X	-.562	-.562	0	%100
36	M31	Z	-.324	-.324	0	%100
37	M32	X	-2.366	-2.366	0	%100
38	M32	Z	-1.366	-1.366	0	%100
39	M33	X	-1.265	-1.265	0	%100
40	M33	Z	-.73	-.73	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.377	-1.377	0	%100
2	M1	Z	-2.385	-2.385	0	%100
3	M2	X	-1.377	-1.377	0	%100
4	M2	Z	-2.385	-2.385	0	%100
5	M3	X	-1.377	-1.377	0	%100
6	M3	Z	-2.385	-2.385	0	%100
7	M4	X	-1.377	-1.377	0	%100
8	M4	Z	-2.385	-2.385	0	%100
9	M7	X	-1.083	-1.083	0	%100
10	M7	Z	-1.875	-1.875	0	%100
11	M8	X	-.798	-.798	0	%100
12	M8	Z	-1.383	-1.383	0	%100
13	M9	X	-.798	-.798	0	%100
14	M9	Z	-1.383	-1.383	0	%100
15	M10	X	-.788	-.788	0	%100
16	M10	Z	-1.365	-1.365	0	%100
17	M11	X	-.941	-.941	0	%100
18	M11	Z	-1.63	-1.63	0	%100
19	RRH1	X	-.941	-.941	0	%100
20	RRH1	Z	-1.63	-1.63	0	%100
21	RRH2	X	-.941	-.941	0	%100
22	RRH2	Z	-1.63	-1.63	0	%100
23	M14	X	-.941	-.941	0	%100
24	M14	Z	-1.63	-1.63	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
25	MP1A	X	-1.111	-1.111	0	%100
26	MP1A	Z	-1.924	-1.924	0	%100
27	M25	X	-1.065	-1.065	0	%100
28	M25	Z	-1.845	-1.845	0	%100
29	M26	X	-.374	-.374	0	%100
30	M26	Z	-.648	-.648	0	%100
31	MP2A	X	-1.219	-1.219	0	%100
32	MP2A	Z	-2.112	-2.112	0	%100
33	MP3A	X	-1.111	-1.111	0	%100
34	MP3A	Z	-1.924	-1.924	0	%100
35	M31	X	-.973	-.973	0	%100
36	M31	Z	-1.685	-1.685	0	%100
37	M32	X	-1.609	-1.609	0	%100
38	M32	Z	-2.786	-2.786	0	%100
39	M33	X	-.201	-.201	0	%100
40	M33	Z	-.348	-.348	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.916	-.916	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.916	-.916	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-.916	-.916	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-.916	-.916	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-.427	-.427	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	-.111	-.111	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-.111	-.111	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	-.251	-.251	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-.328	-.328	0	%100
19	RRH1	X	0	0	0	%100
20	RRH1	Z	-.328	-.328	0	%100
21	RRH2	X	0	0	0	%100
22	RRH2	Z	-.328	-.328	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	-.328	-.328	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	-.38	-.38	0	%100
27	M25	X	0	0	0	%100
28	M25	Z	-.202	-.202	0	%100
29	M26	X	0	0	0	%100
30	M26	Z	-.022	-.022	0	%100
31	MP2A	X	0	0	0	%100
32	MP2A	Z	-.454	-.454	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
33	MP3A	X	0	0	0	%100
34	MP3A	Z	-.38	-.38	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	-.528	-.528	0	%100
37	M32	X	0	0	0	%100
38	M32	Z	-.511	-.511	0	%100
39	M33	X	0	0	0	%100
40	M33	Z	-.107	-.107	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.343	.343	0	%100
2	M1	Z	-.595	-.595	0	%100
3	M2	X	.343	.343	0	%100
4	M2	Z	-.595	-.595	0	%100
5	M3	X	.343	.343	0	%100
6	M3	Z	-.595	-.595	0	%100
7	M4	X	.343	.343	0	%100
8	M4	Z	-.595	-.595	0	%100
9	M7	X	.219	.219	0	%100
10	M7	Z	-.379	-.379	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	.129	.129	0	%100
16	M10	Z	-.223	-.223	0	%100
17	M11	X	.168	.168	0	%100
18	M11	Z	-.291	-.291	0	%100
19	RRH1	X	.168	.168	0	%100
20	RRH1	Z	-.291	-.291	0	%100
21	RRH2	X	.168	.168	0	%100
22	RRH2	Z	-.291	-.291	0	%100
23	M14	X	.168	.168	0	%100
24	M14	Z	-.291	-.291	0	%100
25	MP1A	X	.197	.197	0	%100
26	MP1A	Z	-.341	-.341	0	%100
27	M25	X	.012	.012	0	%100
28	M25	Z	-.021	-.021	0	%100
29	M26	X	.056	.056	0	%100
30	M26	Z	-.098	-.098	0	%100
31	MP2A	X	.236	.236	0	%100
32	MP2A	Z	-.409	-.409	0	%100
33	MP3A	X	.197	.197	0	%100
34	MP3A	Z	-.341	-.341	0	%100
35	M31	X	.198	.198	0	%100
36	M31	Z	-.343	-.343	0	%100
37	M32	X	.075	.075	0	%100
38	M32	Z	-.131	-.131	0	%100
39	M33	X	.184	.184	0	%100
40	M33	Z	-.318	-.318	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.198	.198	0	%100
2	M1	Z	-.114	-.114	0	%100
3	M2	X	.198	.198	0	%100
4	M2	Z	-.114	-.114	0	%100
5	M3	X	.198	.198	0	%100
6	M3	Z	-.114	-.114	0	%100
7	M4	X	.198	.198	0	%100
8	M4	Z	-.114	-.114	0	%100
9	M7	X	.397	.397	0	%100
10	M7	Z	-.229	-.229	0	%100
11	M8	X	.096	.096	0	%100
12	M8	Z	-.055	-.055	0	%100
13	M9	X	.096	.096	0	%100
14	M9	Z	-.055	-.055	0	%100
15	M10	X	.236	.236	0	%100
16	M10	Z	-.136	-.136	0	%100
17	M11	X	.304	.304	0	%100
18	M11	Z	-.175	-.175	0	%100
19	RRH1	X	.304	.304	0	%100
20	RRH1	Z	-.175	-.175	0	%100
21	RRH2	X	.304	.304	0	%100
22	RRH2	Z	-.175	-.175	0	%100
23	M14	X	.304	.304	0	%100
24	M14	Z	-.175	-.175	0	%100
25	MP1A	X	.366	.366	0	%100
26	MP1A	Z	-.211	-.211	0	%100
27	M25	X	.037	.037	0	%100
28	M25	Z	-.021	-.021	0	%100
29	M26	X	.277	.277	0	%100
30	M26	Z	-.16	-.16	0	%100
31	MP2A	X	.441	.441	0	%100
32	MP2A	Z	-.255	-.255	0	%100
33	MP3A	X	.366	.366	0	%100
34	MP3A	Z	-.211	-.211	0	%100
35	M31	X	.114	.114	0	%100
36	M31	Z	-.066	-.066	0	%100
37	M32	X	.032	.032	0	%100
38	M32	Z	-.018	-.018	0	%100
39	M33	X	.532	.532	0	%100
40	M33	Z	-.307	-.307	0	%100

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

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

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
9	M7	X	.469	.469	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	.332	.332	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	.332	.332	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	.279	.279	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	.358	.358	0	%100
18	M11	Z	0	0	0	%100
19	RRH1	X	.358	.358	0	%100
20	RRH1	Z	0	0	0	%100
21	RRH2	X	.358	.358	0	%100
22	RRH2	Z	0	0	0	%100
23	M14	X	.358	.358	0	%100
24	M14	Z	0	0	0	%100
25	MP1A	X	.436	.436	0	%100
26	MP1A	Z	0	0	0	%100
27	M25	X	.239	.239	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	.436	.436	0	%100
30	M26	Z	0	0	0	%100
31	MP2A	X	.528	.528	0	%100
32	MP2A	Z	0	0	0	%100
33	MP3A	X	.436	.436	0	%100
34	MP3A	Z	0	0	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	0	0	0	%100
37	M32	X	.282	.282	0	%100
38	M32	Z	0	0	0	%100
39	M33	X	.601	.601	0	%100
40	M33	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.198	.198	0	%100
2	M1	Z	.114	.114	0	%100
3	M2	X	.198	.198	0	%100
4	M2	Z	.114	.114	0	%100
5	M3	X	.198	.198	0	%100
6	M3	Z	.114	.114	0	%100
7	M4	X	.198	.198	0	%100
8	M4	Z	.114	.114	0	%100
9	M7	X	.397	.397	0	%100
10	M7	Z	.229	.229	0	%100
11	M8	X	.384	.384	0	%100
12	M8	Z	.222	.222	0	%100
13	M9	X	.384	.384	0	%100
14	M9	Z	.222	.222	0	%100
15	M10	X	.236	.236	0	%100
16	M10	Z	.136	.136	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
17	M11	X	.304	.304	0	%100
18	M11	Z	.175	.175	0	%100
19	RRH1	X	.304	.304	0	%100
20	RRH1	Z	.175	.175	0	%100
21	RRH2	X	.304	.304	0	%100
22	RRH2	Z	.175	.175	0	%100
23	M14	X	.304	.304	0	%100
24	M14	Z	.175	.175	0	%100
25	MP1A	X	.366	.366	0	%100
26	MP1A	Z	.211	.211	0	%100
27	M25	X	.36	.36	0	%100
28	M25	Z	.208	.208	0	%100
29	M26	X	.299	.299	0	%100
30	M26	Z	.173	.173	0	%100
31	MP2A	X	.441	.441	0	%100
32	MP2A	Z	.255	.255	0	%100
33	MP3A	X	.366	.366	0	%100
34	MP3A	Z	.211	.211	0	%100
35	M31	X	.114	.114	0	%100
36	M31	Z	.066	.066	0	%100
37	M32	X	.556	.556	0	%100
38	M32	Z	.321	.321	0	%100
39	M33	X	.295	.295	0	%100
40	M33	Z	.17	.17	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.343	.343	0	%100
2	M1	Z	.595	.595	0	%100
3	M2	X	.343	.343	0	%100
4	M2	Z	.595	.595	0	%100
5	M3	X	.343	.343	0	%100
6	M3	Z	.595	.595	0	%100
7	M4	X	.343	.343	0	%100
8	M4	Z	.595	.595	0	%100
9	M7	X	.219	.219	0	%100
10	M7	Z	.379	.379	0	%100
11	M8	X	.166	.166	0	%100
12	M8	Z	.288	.288	0	%100
13	M9	X	.166	.166	0	%100
14	M9	Z	.288	.288	0	%100
15	M10	X	.129	.129	0	%100
16	M10	Z	.223	.223	0	%100
17	M11	X	.168	.168	0	%100
18	M11	Z	.291	.291	0	%100
19	RRH1	X	.168	.168	0	%100
20	RRH1	Z	.291	.291	0	%100
21	RRH2	X	.168	.168	0	%100
22	RRH2	Z	.291	.291	0	%100
23	M14	X	.168	.168	0	%100
24	M14	Z	.291	.291	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
25	MP1A	X	.197	.197	0	%100
26	MP1A	Z	.341	.341	0	%100
27	M25	X	.199	.199	0	%100
28	M25	Z	.344	.344	0	%100
29	M26	X	.069	.069	0	%100
30	M26	Z	.12	.12	0	%100
31	MP2A	X	.236	.236	0	%100
32	MP2A	Z	.409	.409	0	%100
33	MP3A	X	.197	.197	0	%100
34	MP3A	Z	.341	.341	0	%100
35	M31	X	.198	.198	0	%100
36	M31	Z	.343	.343	0	%100
37	M32	X	.378	.378	0	%100
38	M32	Z	.655	.655	0	%100
39	M33	X	.047	.047	0	%100
40	M33	Z	.081	.081	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.916	.916	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.916	.916	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	.916	.916	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	.916	.916	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	.427	.427	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	.111	.111	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	.111	.111	0	%100
15	M10	X	0	0	0	%100
16	M10	Z	.251	.251	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	.328	.328	0	%100
19	RRH1	X	0	0	0	%100
20	RRH1	Z	.328	.328	0	%100
21	RRH2	X	0	0	0	%100
22	RRH2	Z	.328	.328	0	%100
23	M14	X	0	0	0	%100
24	M14	Z	.328	.328	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	.38	.38	0	%100
27	M25	X	0	0	0	%100
28	M25	Z	.202	.202	0	%100
29	M26	X	0	0	0	%100
30	M26	Z	.022	.022	0	%100
31	MP2A	X	0	0	0	%100
32	MP2A	Z	.454	.454	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
33	MP3A	X	0	0	0	%100
34	MP3A	Z	.38	.38	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	.528	.528	0	%100
37	M32	X	0	0	0	%100
38	M32	Z	.511	.511	0	%100
39	M33	X	0	0	0	%100
40	M33	Z	.107	.107	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.343	-.343	0	%100
2	M1	Z	.595	.595	0	%100
3	M2	X	-.343	-.343	0	%100
4	M2	Z	.595	.595	0	%100
5	M3	X	-.343	-.343	0	%100
6	M3	Z	.595	.595	0	%100
7	M4	X	-.343	-.343	0	%100
8	M4	Z	.595	.595	0	%100
9	M7	X	-.219	-.219	0	%100
10	M7	Z	.379	.379	0	%100
11	M8	X	0	0	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	-.129	-.129	0	%100
16	M10	Z	.223	.223	0	%100
17	M11	X	-.168	-.168	0	%100
18	M11	Z	.291	.291	0	%100
19	RRH1	X	-.168	-.168	0	%100
20	RRH1	Z	.291	.291	0	%100
21	RRH2	X	-.168	-.168	0	%100
22	RRH2	Z	.291	.291	0	%100
23	M14	X	-.168	-.168	0	%100
24	M14	Z	.291	.291	0	%100
25	MP1A	X	-.197	-.197	0	%100
26	MP1A	Z	.341	.341	0	%100
27	M25	X	-.012	-.012	0	%100
28	M25	Z	.021	.021	0	%100
29	M26	X	-.056	-.056	0	%100
30	M26	Z	.098	.098	0	%100
31	MP2A	X	-.236	-.236	0	%100
32	MP2A	Z	.409	.409	0	%100
33	MP3A	X	-.197	-.197	0	%100
34	MP3A	Z	.341	.341	0	%100
35	M31	X	-.198	-.198	0	%100
36	M31	Z	.343	.343	0	%100
37	M32	X	-.075	-.075	0	%100
38	M32	Z	.131	.131	0	%100
39	M33	X	-.184	-.184	0	%100
40	M33	Z	.318	.318	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.198	-.198	0	%100
2	M1	Z	.114	.114	0	%100
3	M2	X	-.198	-.198	0	%100
4	M2	Z	.114	.114	0	%100
5	M3	X	-.198	-.198	0	%100
6	M3	Z	.114	.114	0	%100
7	M4	X	-.198	-.198	0	%100
8	M4	Z	.114	.114	0	%100
9	M7	X	-.397	-.397	0	%100
10	M7	Z	.229	.229	0	%100
11	M8	X	-.096	-.096	0	%100
12	M8	Z	.055	.055	0	%100
13	M9	X	-.096	-.096	0	%100
14	M9	Z	.055	.055	0	%100
15	M10	X	-.236	-.236	0	%100
16	M10	Z	.136	.136	0	%100
17	M11	X	-.304	-.304	0	%100
18	M11	Z	.175	.175	0	%100
19	RRH1	X	-.304	-.304	0	%100
20	RRH1	Z	.175	.175	0	%100
21	RRH2	X	-.304	-.304	0	%100
22	RRH2	Z	.175	.175	0	%100
23	M14	X	-.304	-.304	0	%100
24	M14	Z	.175	.175	0	%100
25	MP1A	X	-.366	-.366	0	%100
26	MP1A	Z	.211	.211	0	%100
27	M25	X	-.037	-.037	0	%100
28	M25	Z	.021	.021	0	%100
29	M26	X	-.277	-.277	0	%100
30	M26	Z	.16	.16	0	%100
31	MP2A	X	-.441	-.441	0	%100
32	MP2A	Z	.255	.255	0	%100
33	MP3A	X	-.366	-.366	0	%100
34	MP3A	Z	.211	.211	0	%100
35	M31	X	-.114	-.114	0	%100
36	M31	Z	.066	.066	0	%100
37	M32	X	-.032	-.032	0	%100
38	M32	Z	.018	.018	0	%100
39	M33	X	-.532	-.532	0	%100
40	M33	Z	.307	.307	0	%100

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

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

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
9	M7	X	-.469	-.469	0	%100
10	M7	Z	0	0	0	%100
11	M8	X	-.332	-.332	0	%100
12	M8	Z	0	0	0	%100
13	M9	X	-.332	-.332	0	%100
14	M9	Z	0	0	0	%100
15	M10	X	-.279	-.279	0	%100
16	M10	Z	0	0	0	%100
17	M11	X	-.358	-.358	0	%100
18	M11	Z	0	0	0	%100
19	RRH1	X	-.358	-.358	0	%100
20	RRH1	Z	0	0	0	%100
21	RRH2	X	-.358	-.358	0	%100
22	RRH2	Z	0	0	0	%100
23	M14	X	-.358	-.358	0	%100
24	M14	Z	0	0	0	%100
25	MP1A	X	-.436	-.436	0	%100
26	MP1A	Z	0	0	0	%100
27	M25	X	-.239	-.239	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	-.436	-.436	0	%100
30	M26	Z	0	0	0	%100
31	MP2A	X	-.528	-.528	0	%100
32	MP2A	Z	0	0	0	%100
33	MP3A	X	-.436	-.436	0	%100
34	MP3A	Z	0	0	0	%100
35	M31	X	0	0	0	%100
36	M31	Z	0	0	0	%100
37	M32	X	-.282	-.282	0	%100
38	M32	Z	0	0	0	%100
39	M33	X	-.601	-.601	0	%100
40	M33	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.198	-.198	0	%100
2	M1	Z	-.114	-.114	0	%100
3	M2	X	-.198	-.198	0	%100
4	M2	Z	-.114	-.114	0	%100
5	M3	X	-.198	-.198	0	%100
6	M3	Z	-.114	-.114	0	%100
7	M4	X	-.198	-.198	0	%100
8	M4	Z	-.114	-.114	0	%100
9	M7	X	-.397	-.397	0	%100
10	M7	Z	-.229	-.229	0	%100
11	M8	X	-.384	-.384	0	%100
12	M8	Z	-.222	-.222	0	%100
13	M9	X	-.384	-.384	0	%100
14	M9	Z	-.222	-.222	0	%100
15	M10	X	-.236	-.236	0	%100
16	M10	Z	-.136	-.136	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
17	M11	X	-.304	-.304	0	%100
18	M11	Z	-.175	-.175	0	%100
19	RRH1	X	-.304	-.304	0	%100
20	RRH1	Z	-.175	-.175	0	%100
21	RRH2	X	-.304	-.304	0	%100
22	RRH2	Z	-.175	-.175	0	%100
23	M14	X	-.304	-.304	0	%100
24	M14	Z	-.175	-.175	0	%100
25	MP1A	X	-.366	-.366	0	%100
26	MP1A	Z	-.211	-.211	0	%100
27	M25	X	-.36	-.36	0	%100
28	M25	Z	-.208	-.208	0	%100
29	M26	X	-.299	-.299	0	%100
30	M26	Z	-.173	-.173	0	%100
31	MP2A	X	-.441	-.441	0	%100
32	MP2A	Z	-.255	-.255	0	%100
33	MP3A	X	-.366	-.366	0	%100
34	MP3A	Z	-.211	-.211	0	%100
35	M31	X	-.114	-.114	0	%100
36	M31	Z	-.066	-.066	0	%100
37	M32	X	-.556	-.556	0	%100
38	M32	Z	-.321	-.321	0	%100
39	M33	X	-.295	-.295	0	%100
40	M33	Z	-.17	-.17	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.343	-.343	0	%100
2	M1	Z	-.595	-.595	0	%100
3	M2	X	-.343	-.343	0	%100
4	M2	Z	-.595	-.595	0	%100
5	M3	X	-.343	-.343	0	%100
6	M3	Z	-.595	-.595	0	%100
7	M4	X	-.343	-.343	0	%100
8	M4	Z	-.595	-.595	0	%100
9	M7	X	-.219	-.219	0	%100
10	M7	Z	-.379	-.379	0	%100
11	M8	X	-.166	-.166	0	%100
12	M8	Z	-.288	-.288	0	%100
13	M9	X	-.166	-.166	0	%100
14	M9	Z	-.288	-.288	0	%100
15	M10	X	-.129	-.129	0	%100
16	M10	Z	-.223	-.223	0	%100
17	M11	X	-.168	-.168	0	%100
18	M11	Z	-.291	-.291	0	%100
19	RRH1	X	-.168	-.168	0	%100
20	RRH1	Z	-.291	-.291	0	%100
21	RRH2	X	-.168	-.168	0	%100
22	RRH2	Z	-.291	-.291	0	%100
23	M14	X	-.168	-.168	0	%100
24	M14	Z	-.291	-.291	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
25	MP1A	X	-.197	-.197	0	%100
26	MP1A	Z	-.341	-.341	0	%100
27	M25	X	-.199	-.199	0	%100
28	M25	Z	-.344	-.344	0	%100
29	M26	X	-.069	-.069	0	%100
30	M26	Z	-.12	-.12	0	%100
31	MP2A	X	-.236	-.236	0	%100
32	MP2A	Z	-.409	-.409	0	%100
33	MP3A	X	-.197	-.197	0	%100
34	MP3A	Z	-.341	-.341	0	%100
35	M31	X	-.198	-.198	0	%100
36	M31	Z	-.343	-.343	0	%100
37	M32	X	-.378	-.378	0	%100
38	M32	Z	-.655	-.655	0	%100
39	M33	X	-.047	-.047	0	%100
40	M33	Z	-.081	-.081	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N48A	max	786.465	6	723.342	24	631.142	12	.88	6	0	51	1.618	12
2		min	-578.623	12	321.61	7	-1086.83	6	-1.229	48	0	1	-1.901	6
3	N49A	max	7.035	11	887.162	13	1359.625	15	.89	6	0	51	1.543	12
4		min	-805.09	17	246.641	7	224.603	9	-1.286	12	0	1	-1.864	6
5	N50A	max	29.134	10	98.811	9	514.42	3	0	51	0	51	0	51
6		min	-30.241	4	-91.723	3	-333.252	9	0	1	0	1	0	1
7	N51A	max	600.798	6	113.614	6	874.738	12	0	51	0	51	0	51
8		min	-777.72	12	-80.921	12	-710.16	6	0	1	0	1	0	1
9	N58	max	2180.59	12	719.902	18	-262.432	12	0	51	0	51	0	51
10		min	-1460.637	6	152.304	12	-1333.455	18	0	1	0	1	0	1
11	Totals:	max	1015.943	11	2267.842	24	1794.915	1						
12		min	-1015.949	5	1133.825	6	-1794.918	7						

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [...	phi*Mn ...	phi*Mn ...	Cb	Eqn
1	M1	L3X3X3	.603	5.238	48	.223	.259	y	6	15081.2...	35316	1.32	2.547	1....	H2-1
2	M2	L3X3X3	.606	0	12	.773	0	y	13	15081.2...	35316	1.32	2.489	1....	H2-1
3	M3	L3X3X3	.517	5.238	48	.274	.905	z	42	15081.2...	35316	1.32	2.58	1....	H2-1
4	M4	L3X3X3	.333	.97	12	.523	0	z	24	15081.2...	35316	1.32	2.198	1....	H2-1
5	M7	PIPE_3.0	.252	.412	17	.266	2.63		6	62054.35	65205	5.749	5.749	1....	H1-1b
6	M8	HSS3X3X4	.342	2.583	48	.295	0	y	6	95875.4...	101016	8.556	8.556	2....	H3-6
7	M9	HSS3X3X4	.307	2.583	48	.290	0	y	12	95875.4...	101016	8.556	8.556	2....	H3-6
8	M10	PIPE_1.5	.463	2.25	24	.257	2.25		6	22661.6...	23593.5	1.105	1.105	2....	H1-1b
9	M11	PIPE_2.0	.317	.539	12	.112	.539		12	28756.4...	32130	1.872	1.872	2....	H1-1b

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [...	phi*Mn ...	phi*Mn ...	Cb	Eqn
10	RRH1	PIPE_2.0	.175	0	50	.105	0		12	28756.4...	32130	1.872	1.872	2....	H1-1b
11	RRH2	PIPE_2.0	.284	0	48	.097	.729		12	28756.4...	32130	1.872	1.872	2....	H1-1b
12	M14	PIPE_2.0	.452	3.042	48	.108	0		6	28756.4...	32130	1.872	1.872	2....	H1-1b
13	MP1A	PIPE_2.0	.345	.875	6	.190	.875		6	20866.7...	32130	1.872	1.872	2....	H1-1b
14	M25	PIPE_2.0	.136	3.727	12	.005	10.222		24	9414.181	32130	1.872	1.872	1....	H1-1b
15	M26	PIPE_2.0	.225	0	42	.009	5.402		42	22642.83	32130	1.872	1.872	1....	H1-1b
16	MP2A	PIPE_2.5	.290	1.385	6	.278	1.385		6	33961.6...	50715	3.596	3.596	1....	H3-6
17	MP3A	PIPE_2.0	.324	.875	12	.300	1.625		12	20866.7...	32130	1.872	1.872	2....	H1-1b
18	M31	PIPE_2.5	.484	8.666	6	.166	8.666		6	14754.8...	50715	3.596	3.596	1....	H1-1b
19	M32	L2.5x2.5x4	.106	2.38	6	.017	5.313	z	12	15346.2...	38556	1.114	2.244	1....	H2-1
20	M33	L2.5x2.5x4	.067	3.462	12	.017	3.462	z	48	26078.5...	38556	1.114	2.451	1....	H2-1

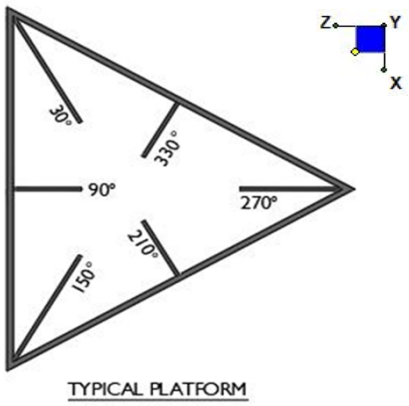
Client:	Verizon Wireless	Date:	12/31/2020
Site Name:	Redding CT		
Project No.	20777382A		
Title:	Mount Analysis Report	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

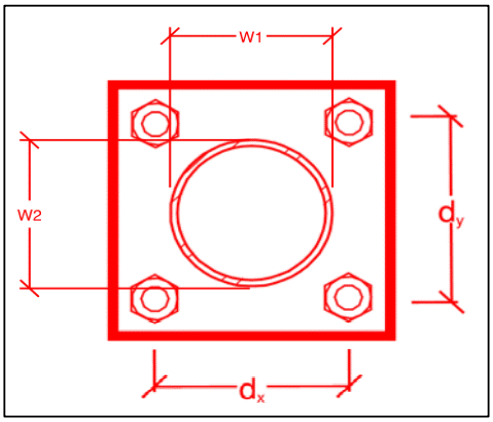
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N48A	30
N49A	30



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	9.5
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	2
Bolt Type:	A307
Bolt Diameter (in):	0.5
Required Tensile Strength (kips):	15.7
Required Shear Strength (kips):	5.4
Tensile Strength / bolt (kips):	6.3
Shear Strength / bolt (kips):	3.8
Tensile Capacity Overall:	**62.7%***
Shear Capacity Overall:	**35.3%**



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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Purpose – to provide TES 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 modification was completed in accordance with the modification drawings.
- Contractor shall relay any data that can impact the performance of the mount or the mount modification, this includes safety issues.

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the drawings
- Provide "as built drawings" showing contractor's name, preparer's signature, and date. Any deviations from the drawings (proposed modification) must be shown.
- Notation that all hardware was properly installed, and the existing hardware was inspected for any issues.
- Verification that loading is as communicated in the modification drawings. NOTE If loading is different than what is conveyed in the modification drawing contact TES 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 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 modifications. Each entire sector must be in one photo to show in the inter-connection of members.
        - 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
    - Close-up photos of each installed modification per the modification drawings; pictures should also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
    - Photos showing the measurements of the installed modification member sizes (i.e. lengths, widths, depths, diameters, thicknesses)
    - Photos showing the elevation or distances of the installed modifications from the appropriate reference locations shown in the modification drawings
    - Photos showing the installed modifications onto the tower with tape drop measurements (if applicable) (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, a tape drop measurement shall be provided before the elevation change
    - 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.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by TES.
    - If the drawings are as specified on the drawings
        - The contractor should provide the packing list or the materials utilized to perform the mount modification
    - If an equivalent is utilized
        - It is required that the TES certification of such is included in the contractor submission package. There may be an additional charge for this certification if the equivalent submission doesn't meet specifications as prescribed in the drawings.

- The contractor must certify that the materials meet these specifications by one of these methods.

☐ The Material utilized was as specified on the TES Mount Modification Drawings and included in the Material certification folder is a packing list or invoice for these materials

☐ The material utilized was an "equivalent" and included as part of the contractor submission is the TES certification, invoices, or specifications validating accepted status

Certifying Individual: Company _____

Name _____

Signature _____

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 Mod Drawings:

Issue:

1. Proposed radios shall be installed on the face vertical pipes.
2. Relocate the GPS unit up or down to accommodate for new horizontal.

Response:

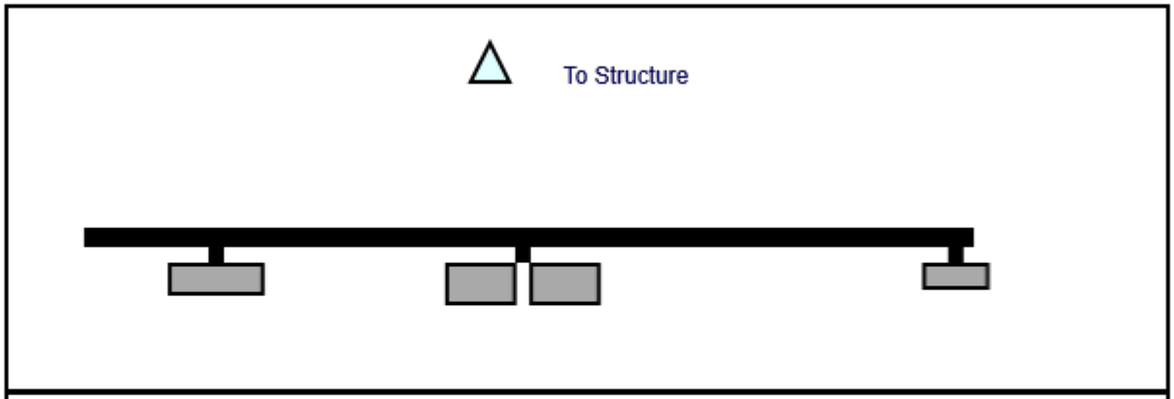
Sector: A

Structure Type: Self Support

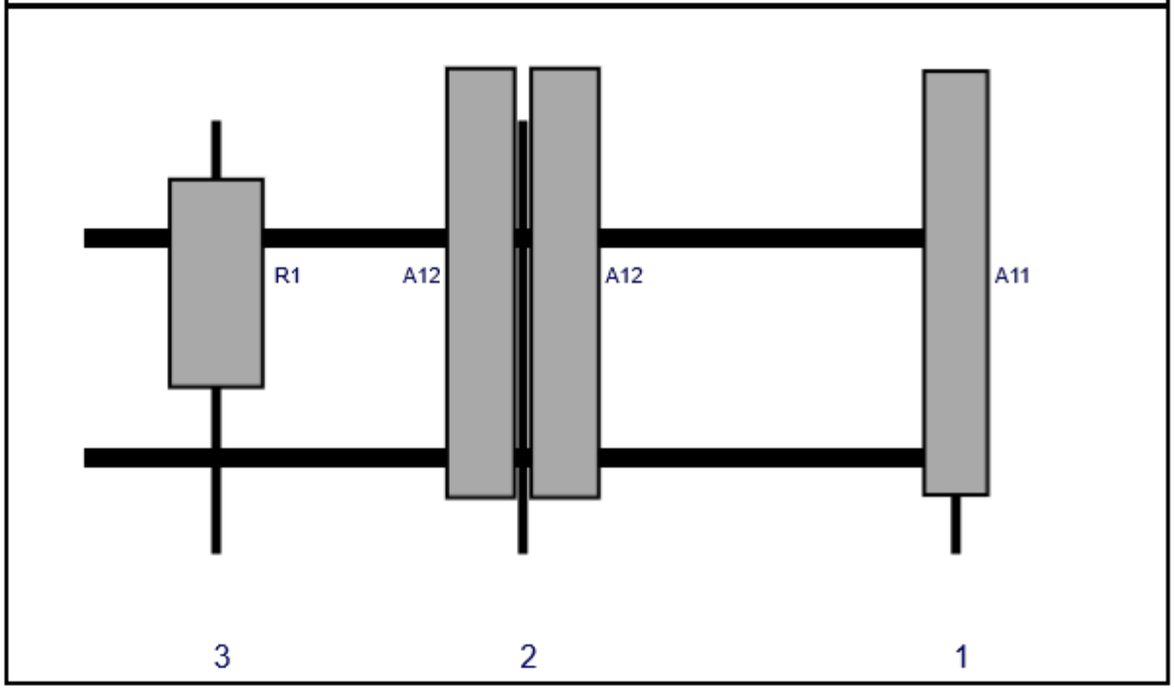
Mount Elev: 81.00

4/28/2021

Plan View

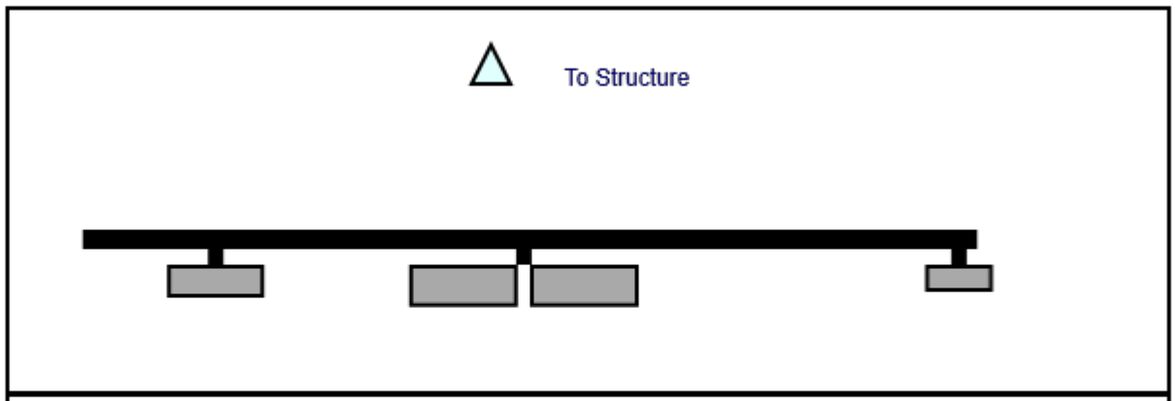


Front View
Looking at Structure

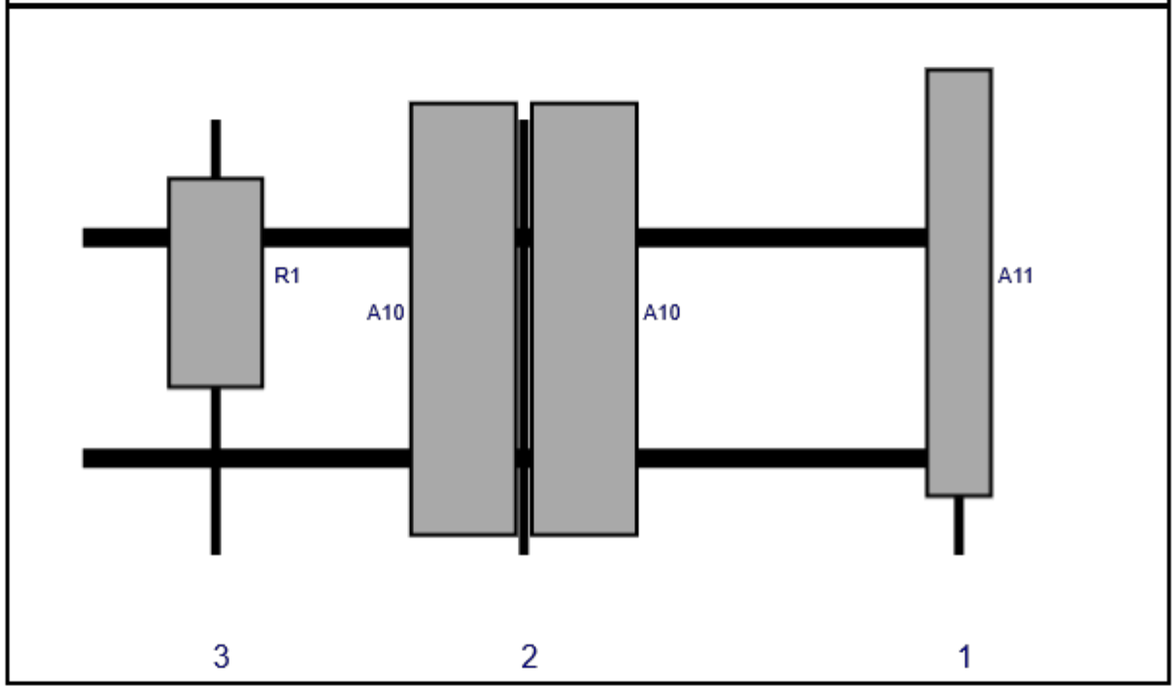


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A11	BXA-80063/6CF	71.1	11.2	145	1	a	Front	27	0	Retained	11/17/2020
A12	NHH-65B-R2B	72	11.9	73	2	a	Front	27	-7	Retained	11/17/2020
A12	NHH-65B-R2B	72	11.9	73	2	b	Front	27	7	Retained	11/17/2020
R1	MT6407-77A	35.1	16.1	22	3	a	Front	27	0	Added	

Plan View

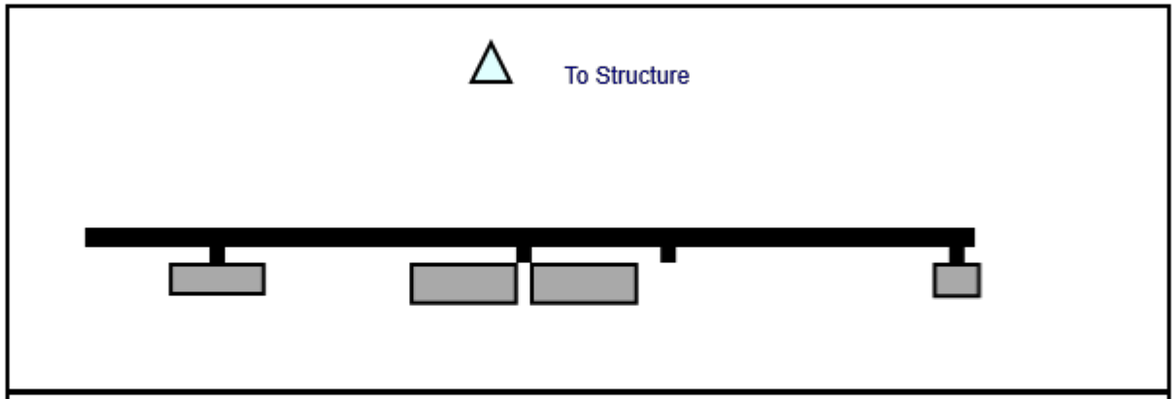


Front View
Looking at Structure

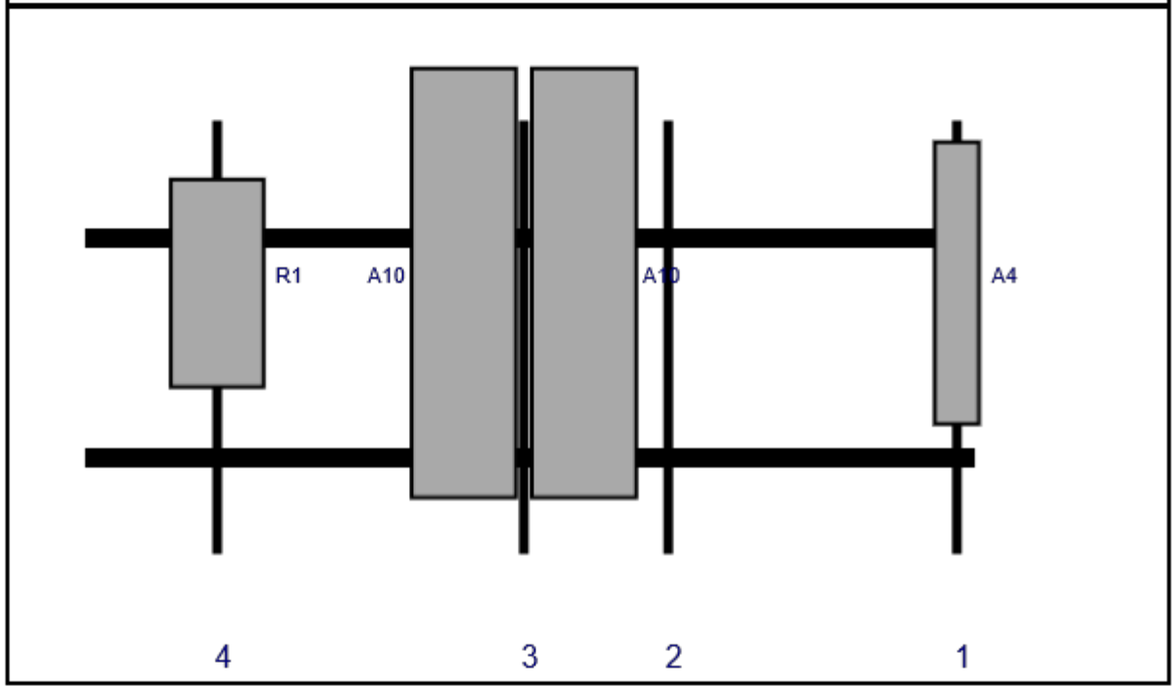


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A11	BXA-80063/6CF	71.1	11.2	145	1	a	Front	27	0	Retained	11/17/2020
A10	NHH-45B-R2B	72	18	73	2	a	Front	33	10	Retained	11/17/2020
A10	NHH-45B-R2B	72	18	73	2	b	Front	33	-10	Retained	11/17/2020
R1	MT6407-77A	35.1	16.1	22	3	a	Front	27	0	Added	

Plan View



Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A4	BXA-80080-4CF-EDIN-X	47.5	8	145	1	a	Front	27	0	Retained	11/17/2020
A10	NHH-45B-R2B	72	18	73	3	a	Front	27	10	Retained	11/17/2020
A10	NHH-45B-R2B	72	18	73	3	b	Front	27	-10	Retained	11/17/2020
R1	MT6407-77A	35.1	16.1	22	4	a	Front	27	0	Added	

MASER CONSULTING
— CONNECTICUT —

Maser Consulting Connecticut

Subject TIA-222-H Adoption and Wind Speed Usage

Site Information

Site ID:	*468848-VZW / Redding CT*
Site Name:	*Redding CT*
Carrier Name:	*Verizon Wireless*
Address:	*80 Lonetown Rd* *Redding, Connecticut 06896* *Fairfield County*
Latitude:	*41.327833°*
Longitude:	*-73.383306°*

Structure Information

Tower Type:	*100-Ft Self Support*
Mount Type:	*12.33-Ft T-Frame*

To Whom It May Concern,

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

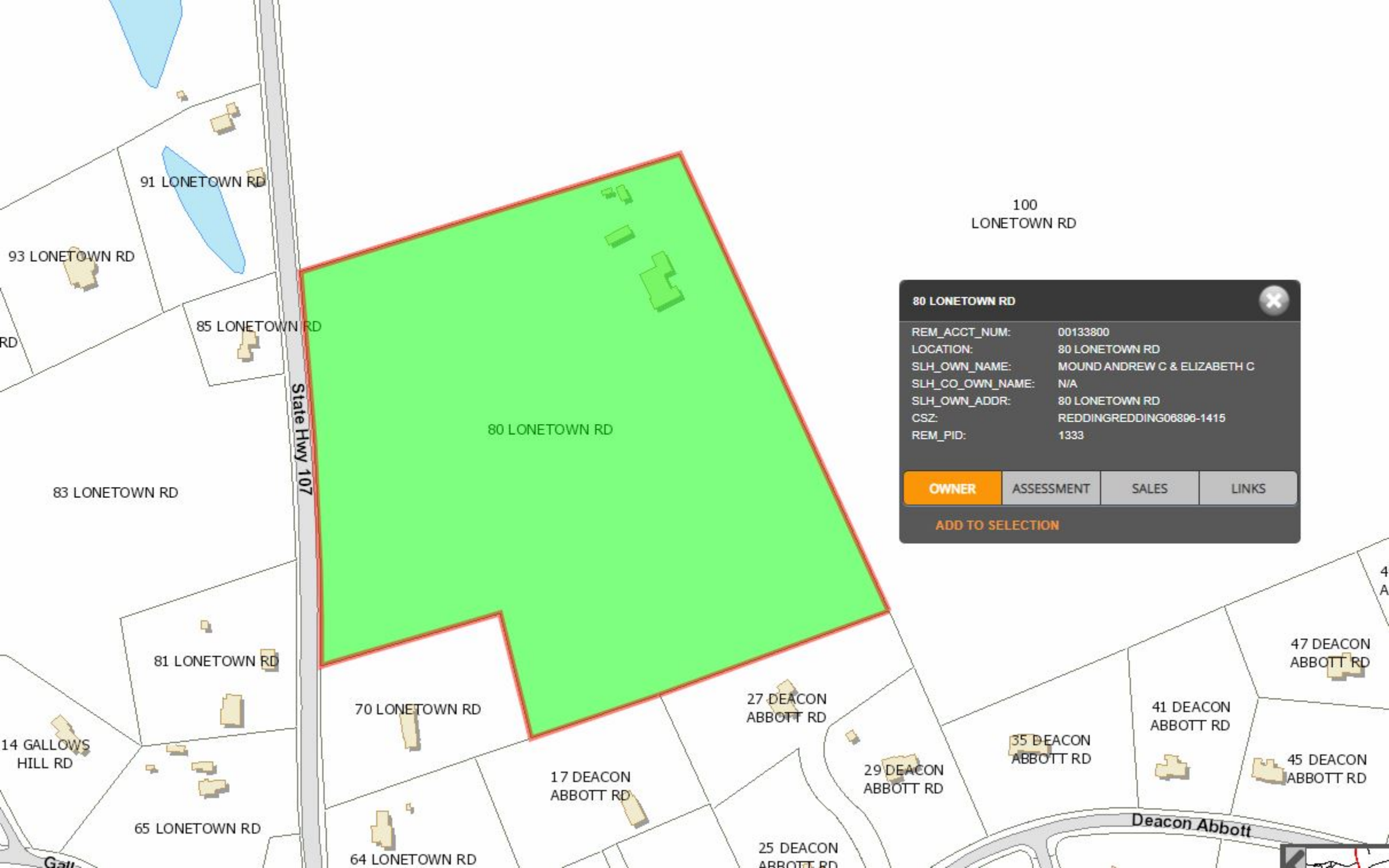
The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. The TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

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

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

Sincerely,

ATTACHMENT 5


91 LONETOWN RD
93 LONETOWN RD
85 LONETOWN RD
State Hwy 107
80 LONETOWN RD
100
LONETOWN RD
83 LONETOWN RD
81 LONETOWN RD
70 LONETOWN RD
14 GALLOWS
HILL RD
65 LONETOWN RD
64 LONETOWN RD
17 DEACON
ABBOTT RD
27 DEACON
ABBOTT RD
29 DEACON
ABBOTT RD
35 DEACON
ABBOTT RD
41 DEACON
ABBOTT RD
47 DEACON
ABBOTT RD
45 DEACON
ABBOTT RD
25 DEACON
Deacon Abbott
80 LONETOWN RD
REM_ACCT_NUM: 00133800
LOCATION: 80 LONETOWN RD
SLH_OWN_NAME: MOUND ANDREW C & ELIZABETH C
SLH_CO_OWN_NAME: N/A
SLH_OWN_ADDR: 80 LONETOWN RD
CSZ: REDDINGREDDING06896-1415
REM_PID: 1333
OWNER
ASSESSMENT
SALES
LINKS
ADD TO SELECTION

REDDING,CT

80 LONETOWN RD

Location
80 LONETOWN RD
Mblu
14/ / 21/ /
Acct#
00133800
Owner
MOUND ANDREW C & ELIZABETH C
Assessment
$399,190
Appraisal
$782,500
PID
1333
Building Count
1

Current Value

Appraisal

Valuation Year	Improvements	Land	Total
2020	$251,600	$530,900	$782,500

Assessment

Valuation Year	Improvements	Land	Total

2020	$176,100	$223,090	$399,190

Owner of Record

Owner MOUND ANDREW C & ELIZABETH C
Co-Owner
Address 80 LONETOWN RD
REDDING, CT 06896-1415
Sale Price $967,500
Certificate 1
Book & Page 0229/0721
Sale Date 05/04/1999
Instrument XX

Ownership History

Ownership History

Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
MOUND ANDREW C & ELIZABETH C	$967,500	1	0229/0721	XX	05/04/1999
GIANNINOTO JAMES H GORDON J &	$0	2	0162/0187	XX	07/01/1991
GIANNINOTO FRANK A EST OF	$0	3	0146/0796	XX	06/28/1988
GIANNINOTO FRANK A	$0	4	0043/0013	XX	12/29/1944

Building Information
Building 1 : Section 1

Year Built: 1950
Living Area: 2,774
Replacement Cost: $379,233
Building Percent Good: 63
Replacement Cost Less Depreciation: $238,900

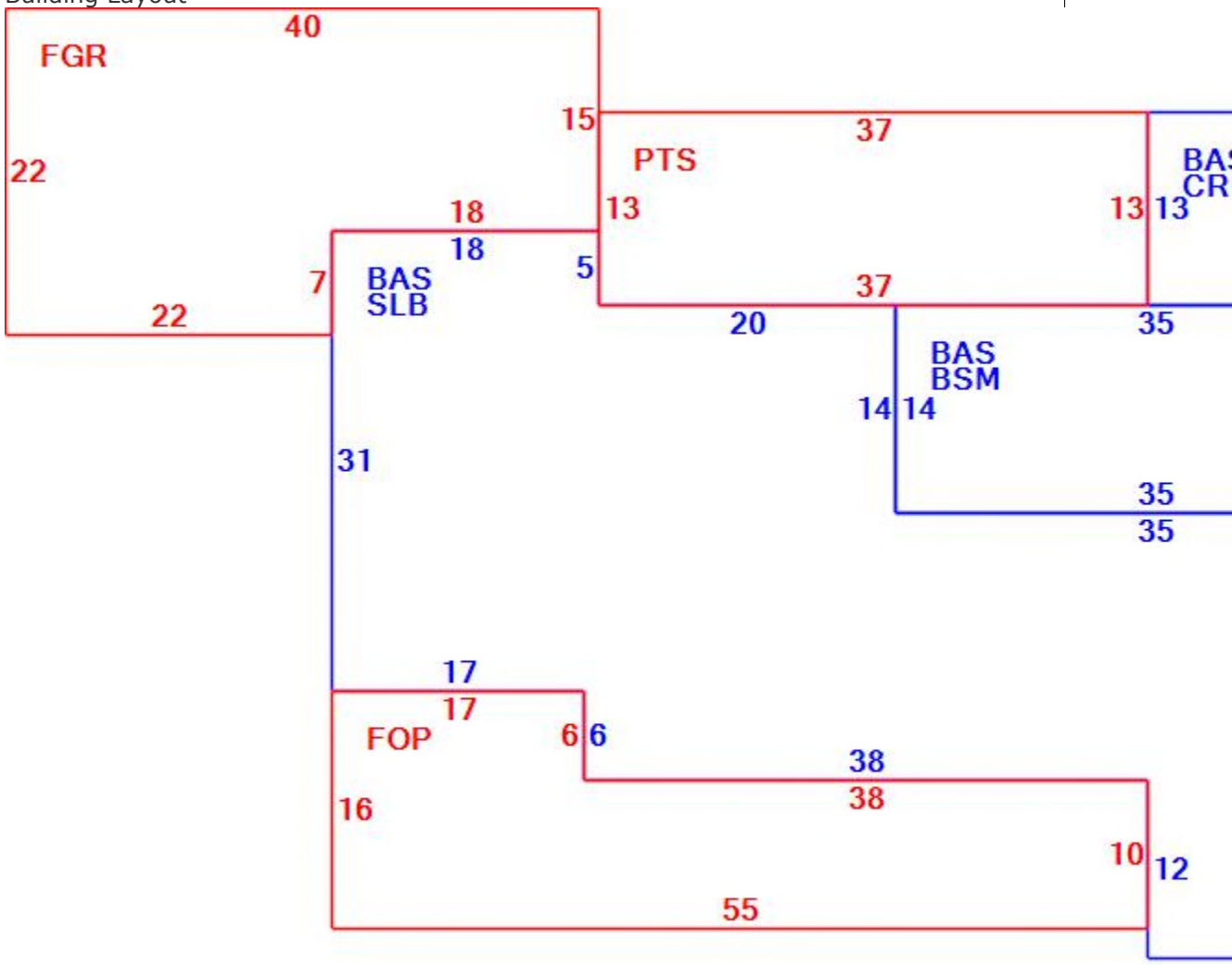
Building Attributes

Field	Description
Style	Ranch
Model	Residential
Grade:	B+
Stories	1 Story
Occupancy	1
Exterior Wall 1	Concrete
Exterior Wall 2	Stucco
Roof Structure	Hip
Roof Cover	Asphalt Shingl
Interior Wall 1	Drywall
Interior Wall 2	
Interior Flr 1	Hardwood
Interior Flr 2	
Heat Fuel	Oil
Heat Type:	Forced Air
AC Type:	Central
Total Bedrooms	4 Bedrooms
Full Bathrooms	3
Half Bathrooms	1
Total Xtra Fixtrs	4
Total Rooms	9
Bath Style:	Above Average
Kitchen Style:	Above Average
Fireplaces 2	2
Cndtn	
Whirlpool Tubs	1

Fin Bsmt Area	
Fin Bsmt Qual	
Bsmt Garages	
Num Park	
Fireplaces	
Fndtn Cndtn	
Basement	

Building Photo

Building Layout



Building Sub-Areas (sq ft) Legend

Code	Description	Gross Area	Living Area
BAS	First Floor	2,774	2,774
BSM	Basement Area	490	0
CRL	Crawl Space	234	0
FGR	Garage	754	0
FOP	Framed Open Porch	652	0
PTS	Patio - Stone	481	0

SLB	Slab	2,050	0
		7,435	2,774

Extra Features

Extra Features Legend

No Data for Extra Features

Land

Land Use

Use Code 101
Description Single Family Res
Zone R-2
Neighborhood 130
Alt Land Appr No
Category

Special Land

Land Use Code	Land Use Description	Units	Unit Type
800	Open Space	14	AC

Land Line Valuation

Size (Acres) 22.56
Frontage
Depth
Assessed Value $223,090
Appraised Value $530,900

Outbuildings

Outbuildings Legend

Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
GRN1	Res Green Hse			936.00 S.F.	$9,800	1
SHD1	Shed	FR	Frame	432.00 S.F.	$1,700	1
SHD1	Shed	CB	CindBk/Frame	160.00 S.F.	$1,200	1

Valuation History

Appraisal

Valuation Year	Improvements	Land	Total
2020	$251,600	$530,900	$782,500
2019	$251,600	$530,900	$782,500
2018	$251,600	$530,900	$782,500

Assessment

Valuation Year	Improvements	Land	Total
2020	$176,100	$223,090	$399,190
2019	$176,100	$223,090	$399,190
2018	$176,100	$223,090	$399,190

closecloseclose

ATTACHMENT 6

UNITED STATES POSTAL SERVICE®

REDDING

Certi□cate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Of ce™	Af□x Stamp Here ***Postmark with Date of Receipt.***
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	3	OLD STATE HOUSE STATION 06103 JUN 14 2021 USPS	neopost 06/14/2021 US POSTAGE $002.89⁰ ZIP 06103 041L12208937
	Postmaster, per *(name of receiving employee)*		

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3.	Andrew and Elizabeth Mound 80 Lonetown Road Redding, CT 06875				
4.					
5.					
6.					