

KENNETH C. BALDWIN

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Also admitted in Massachusetts and New York

February 28, 2024

Via Electronic Mail

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

Re: Notice of Exempt Modification – Facility Modification 215 Coatney Hill Road, Woodstock, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains an existing wireless telecommunications facility at the above-referenced property address (the "Property"). The facility consists of antennas on an existing tower and related equipment on the ground, near the base of the tower. The tower was approved by the Town of Woodstock ("Town") in January of 2001. Cellco's shared use of the tower was approved by the Siting Council ("Council") in October of 2007 (EM-VER-169-070831). A copy of the Town's tower approval and Council's EM-VER-169-070831 approval are included in <u>Attachment 1</u>.

Cellco now intends to modify its facility by removing nine (9) antennas and six (6) remote radio heads ("RRHs") and installing nine (9) new antennas and six (6) new RRHs on its existing antenna platform and antenna mounts. A set of project plans showing Cellco's proposed facility modifications and the specifications for Cellco's new antennas and RRHs are included in <u>Attachment</u> 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 Woodstock's Chief Elected Official and Land Use Officer. The Town of Woodstock is the owner of the Property.

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

28903675-v1

Robinson+Cole

Melanie A. Bachman, Esq. February 28, 2024 Page 2

- 1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's new antennas and RRHs will be installed at the same height on the tower.
- 2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.
- 3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
- 4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. Included in <u>Attachment 3</u> is a Calculated Radio Frequency Emissions Report demonstrating that the proposed modified facility will comply with the FCC safety standards. The modified facility will be capable of providing Cellco's 5G wireless service.
- 5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
- 6. According to the attached Structural Analysis Report ("SA") and Antenna Mount Analysis Report ("MA"), the existing tower, tower foundation and antenna mounts can support Cellco's proposed modifications. Copies of the SA and MA are included in <u>Attachment 4</u>.

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

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

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Enclosures Copy to:

Jay Swan, First Selectman Delia Fey, AICP, Town Planner Aleksey Tyurin

ATTACHMENT 1

VL318 PG127

NOTICE OF SPECIAL PERMIT

000077

Pursuant to Section 8-3c of the Connecticut General Statutes, notice is hereby given that on January 18, 2001 the Woodstock Planning and Zoning Commission:

1. Description of Premises: Woodstock, Assessor Map 7276 Block 32 Lot 19A

2.Permit Granted:

Special Permit granted on condition maintenance agreement is executed as soon as lease is in effect.

(application No. SP438-00-11

3. Name and address Owner of record:

TOWN OF WOODSTOCK Town Hall 415 Route 169 Woodstock, CT 06281

4. Name and address of applicant:

MCF Communications, Inc. 668 Main Street Suite 114 Wilmington, CT 01887

Dated at Woodstock, Connecticut, this 19th day of January, 2001.

This information certified by:

Zowing Enforcement Officer

RECEIVED TOWN CLERK, 1990STOCK, CT

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Permit No **8508**

Dept. of Building Inspections Town of Woodstock

BUILDING PERMIT ADDRESS 215 COATNEY Hill OWNER JOWN of Woodston JUNE 15 200

WORK AUTHORIZED nstruction

Attach this Permit in Clear View

CALL 928-1388 FOR INSPECTIONS

CERTIFICATE OF USE AND OCCUPANCY

DEPARTMENT OF BUILDING INSPECTIONS

WOODSTOCK, CONNECTICUT

| Certificate No. 1286 | | | |
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| This is to certify that | WN OF WOODSTOCK | | 7276 Map No |
| | | | Block 32 |
| Building Permit No8508 | b |) # 4 % \$ \$) \$ * 4 4 4 5 7 5 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | Lot No19A |
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| Date 8-26-01 | | TO TO I | G OFFICIAL |
| | e or extension of the use herein | | |
| WAR | TE: APPLICANT WELLOW: ASSESSOR | PINE BUILDING OFFICE GO | LD: PILE |

October 1, 2007

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

RE: **EM-VER-169-070831** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 215 Coatney Hill Road, Woodstock, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on September 25, 2007, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated August 31, 2007, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Daniel F. Caruso Chairman

DFC/MP/cm

The Honorable Margaret A. Wholean, First Selectman, Town of Woodstock Terry Bellman, Zoning Enforcement Officer, Town of Woodstock MCF Communications bg, Inc.

ATTACHMENT 2





20 ALEXANDER DRIVE, 2nd FLOOR WALLINGFORD, CT 06492

COATNEY HILL CT 215 COATNEY HILL ROAD WOODSTOCK, CT 06281

WINDHAM COUNTY

TELECOMMUNICATIONS INSTALLATION ON EXISTING 192'± MONOPOLE PROJECT TYPE: UPGRADE TO EXISTING WIRELESS

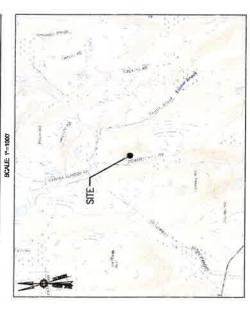
VICINITY MAP

SITE INFORMATION

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|-------------------------|------------------------|--------------------|------------------|-----------------|-----------------------|------------------|------------------|-------------------|--|--|-------------|------------------|-----------------|-------------------|-----------------------------------|------------------|-------------|--|--|
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SUPPORTING DOCUMENTS

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Verizon

20 ALEVANDEN DRVE, 240 FLOOR INALINGERIO, UT 06492 (203) 748—7338

ANTENNA MOUNT STRUCTURAL ANALYSIS DATE: 12/18/23 (BY COLLIERS ENGINEERING & DESIGN)

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134 FLANCES ROVO, SUITE 125
WESTBORICHE, MA D1861
(500) 281—0720

CHAPPELL, EMGHEENING ARSOGNTER, LLC

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(200) AET-7400
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2. SIPPLEMENTAL EXUPPLENT GROUND WERNE LOCKITO OUTDOORS, OR TRELOW GROUS, SHALL BE SINGLE CONDUCTOR TO ARIO SOLID TOWED CLAPPER CHAES, UNIESS OTHERWISE SPECIFED. A TOWER MO COMPOL WEND, WITH A TIZBO ON CHROLIT, SHALL RE MATH-CHROLITON, TYPE TO CHREL (SHALL WITH ON THE CALCULAR ESTIMATION OFFER VALLE MICHION TOWN ON THE LOCATION USES, UNKLOSS CITEMATORS PROPERTY, WHILE OTHER WEST CITEMATORS OF THE LOCATION USES, UNKLOSS CITEMATORS RESIDENCE.

4, All points and grounding connections sault be craim strile, compression wine lugs and was miss my thanke and betts ground, lugs and wine mits sault, die rated for opportor at no less than the (pot). S, RACENNY AND CHEET TRAY SHALL BE LISTED OR LABELED FOR ELECTRICOL, USE IN ACCORDANCE WITH HEIM, UL. WOO/FEE, AND MEE.

7. BESTIEVE METALIC TURNO (BIT) ON INCO NOMETALID CONDUIT (LE, RAID PIC SCHIDALE A), ON ROID PIC SCHIDALE A), ON ROID PIC SCHIDALE BY THE DYNOSD MOTOM LICATIONS. IT HER SACDRE OF CALL THE WILL WITH THE COSTIC RETALLIES WHOSE POSSILL

REPRESAL MEDIALIC TURNO (BAT), BERTRISAL MOMERALIC TURNO (BAT), OR PIGD NOMERFULIC CONDUIT (PAZD. SCHEDULE 40) SHALL BE USED FOR CONCEALD INDOOR LOCATIONS. я, окумить stall итриснут исици союнт (ик) ячиц ат изть гон очтоон цоолон6 люл очих 20, MED HOHETHLY CORDUIT (E. RYID P.R. SCHEDLE 4) ON RIZO PRO SCHEDLE 28) SHALL SE LAST MONOSTACHOR, DRIEST SIMILI SI MENG OF COOKENINE, LIGHT VEIDET TRAFF, OR DELASED IN REPREVIOUS CORMETE, IN MENG OF LIGHT MENGLE TRAFF.

SI, LIJUD-TIGHT PEDIBLE METALLIC CONNUTT (LIQUID-TITE FLEX) SHALL BE UNED MICHORS AND CUTDOOKS, MYETHE MAINTAN OCCURS OR FLEXIBILITY IS NEEDED. 22. CONDUIT AND TRENSE STEMES SYALL BE THEOLOGO OR COMPRESSION—THE AND APPRIMED FOR THE LICKNION USED, SET SKREW FITHINGS ARE NOT ACSETVENE.

- Climets, Bods, and Wrenn's saml is listed on Labed for Bestatal, lise in accordance with Med. Mes/Ree, and Nee.

S. WEINNAS SWILL DE DYCH-CONTD. (GWY), AND MALLOR A. HAKED COMER, DESCRED TO SYMBO OPEN DOMENTARY. JATUDIOSE, PRINCIAT TYPE E. (ON EXVILL), AND MATED FEM. I (ON EXTER) MODORS, ON NEAM, 26 (ON EXTER) JATUDIOSE, ON THE E. (ON EXVILL). 24. CAMETY, BOOK, AND WESHITTD MITCH THE EXITING NETALATION WHERE POSSIBLE.

za, dzupwień czeneta, teraniki bozes, jurtitni Bozes, and priz bries siął, ie calywyczo gł powy-zamo szer bels, sykli nest (ar dozeb) uj. 50, and mito neja, 1 (da retid) proces, gr nejał ay (gr retig) domogyes 2), WETA, REZETIACIE, SMITCH, AND GRACE BOXES SHALL BE: OALWAKED), DFOXY-CONTEO, OR NON-- COMRODHOS, OR WORL- COMRODHOS, OR STEEL OF EXCESTIO, IL SHA, AND MEAN OS 1; AND NATED AREA! I (OR BETTED) MODORS, ON WEATHER PROPERTIES (PROPERTIES) UNDOORS.

ZZA MAMERIALIO, RICEPTIALE, SMITCH, AND TENEZ BOKES SWILL MEET OR EGZEDI MEM, OS 2; AND RATED MEM, (OR EETTER) MODONS, ON WEALHER PROTECTED (MP OR EETTER) DATICONS. 8. THE SUBCOMPINETOR SYML MOTEY AND OSTIVAN NECESSARY ALTHYRIZATION FROM THE CONTRACTOR BETORE CAMERICACON WORK ON THE AC POWEN DISTRIBUTION PARIES.

IZ, CONDUIT ROUTHKS MET SCHEMUTS, SUUTCOMPACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS ELECARD. 20, THE SJEDONIRUCING SHALL PROPAGE HEDSSWAY TACRED ON THE BERNADES, CARLES AND DISTRIBUTION PAREDS IN ADDORBANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEDLAND ACANIST LIFE AND PROPERTY. AND DEFINAL WORK SAME RE PERCUNED IN ACCORDANCE WITH THE PROJECTS SPECIFICATIONS, HES AND ALL



ZO ALEXANDER DRIVE, ZAD FLOOR WALLINGERRO, CT 00402 (ZCD) 74: -7338

SBA 🔊





P.J. ESCUTING COOPE 201 BOSTON POST ROLD WIST, SUITE 101 WANTEDWOODLY MA 07722 (200) BE 7400 www.shapendoopenstry.com



APPROVED BY:

SUBMITTALS

1 GUALAN MASS FOR COMPRESSION CAC

COATNEY HILL CT

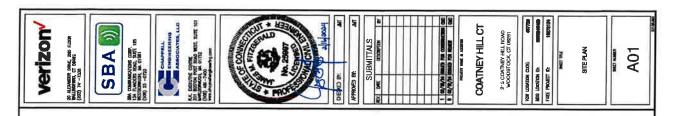
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MDG LOCKTION TO: PUZE PROJECT ID: VZPF LORATION CODES

SMET TITLE

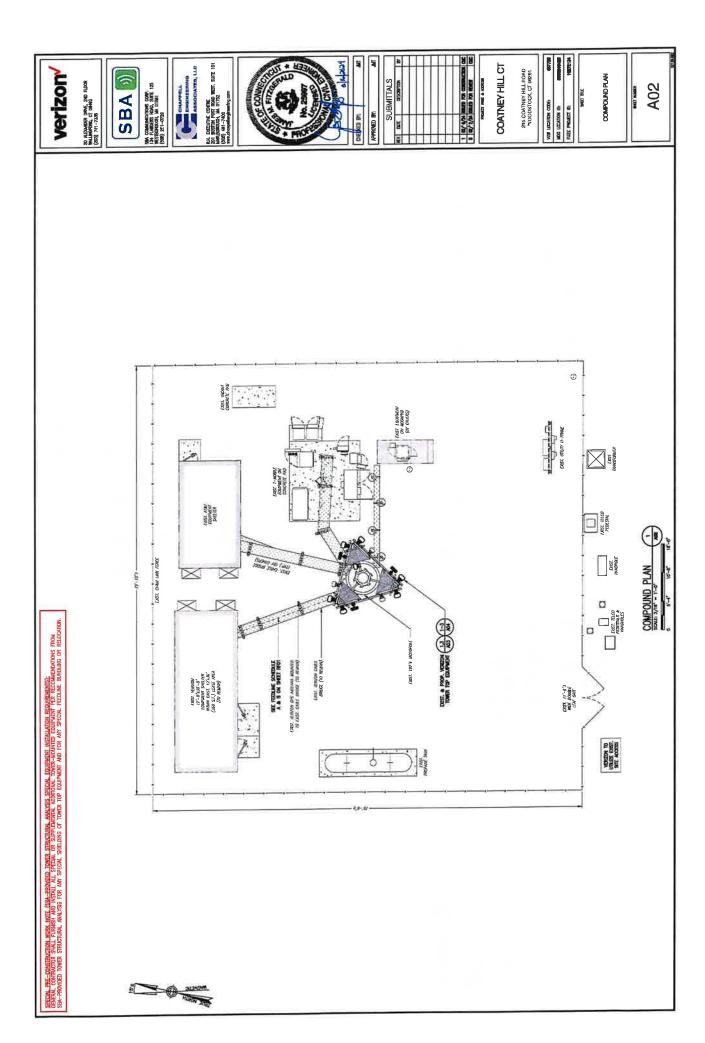
GENERAL NOTES

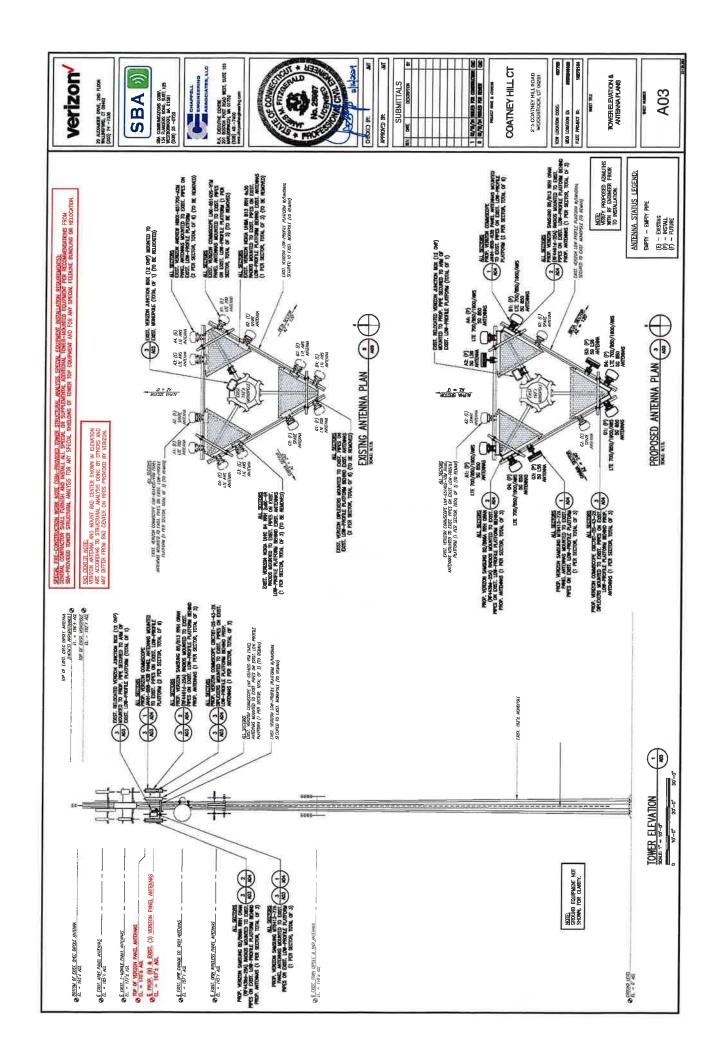
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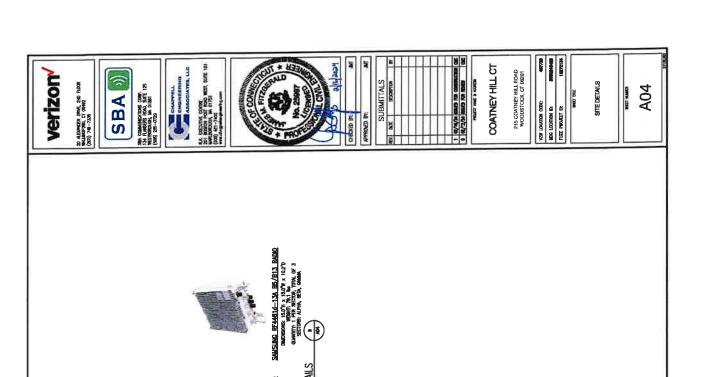


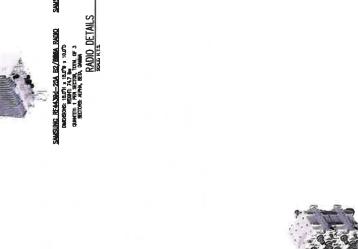


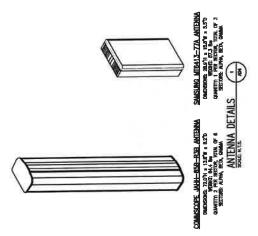














| | | | | 2 | EXISTING EQUIPMENT CONFIGURATION | NT CONFIGURA | NOIL | | | | | | |
|---------|---|------|--------------|-----------|----------------------------------|--------------|---------------------|---------------------|------|------------|-----|-----------------|----------------------------------|
| SECTOR | EQUIPMENT MAKE & MODEL | ď | (TRUE NORTH) | ANTENNA | BAND | MECHANICAL | ELECTRICAL DOWNTILT | EQUIPMENT STATUS | ± Z | ≥ 2 | - E | WEIGHT (LBS) | HYBRID CABLE SIZE & QTY |
| | SOMETHING THE STREET WAS THE WASTER | | .0 | 29'1'01 | 602 317 | 0 | DI | CIRE | 111 | 111 | 17 | 679 | |
| AH DHA | COMPOSITE LAY-151 625 - 704 PARTI, ANTONIA | | (4) | 191,3 165 | SWE | * | | 200 | 123 | 113 | 111 | 979 | |
| 5 | WENT WINDS AND AND PART AND | , | -0 | 207 4,091 | (17.795 | 4 | 7 | FIRE | 74.9 | 12.0 | 2 | 453 | |
| | MINTER HEXX-121735-NOV PART, ANDWE | | 0 | 167'± AGE | (37,445) | | 2 | ETRE | 74.9 | 12.0 | 6.5 | 423 | |
| | SERVICIAN TAN-SINGS-INT WAYNES | | 120 | 167'1 AGL | 111.100 | ь | 9 | ZHZ. | 72.7 | 611 | 177 | 979 | |
| Ě | CONCODE THE ESTER - THE PART AND AND | 1 | 130 | 267.2 AD | SPANT | | , | W.C | 727 | 11.9 | × | 933 | |
| SIS | MAREN MECK-651705-AZM PANEL AVTERUM | ~ | 120 | 357 1,292 | (TE ANS | ۵ | 2 | ENE | 24.9 | 17.0 | 2 | 103 | |
| | ANDREW INDOS-631725-ADM PAYEL ANDREW | , | 120. | 14/2 JD | CTE AINS | ۵ | -,2 | EIRE | 411 | 17.0 | 9 | 603 | Crici (19) 1.50° cristial contra |
| | COMMERCE TWO SECRETARIES AND ACCOUNTS | | 240 | 167'1 458 | U.E. 700 | ٥ | 2 | CIEC | 121 | 113 | 1 | 577 | DIST. (2) Selt? INBINO CURES |
| CALIFIE | CONNECOPT LAW- 424-455-YOF AWEL AVERAGE | | 240 | 26/2 AG | SPARE | | 3 | 813 | 127 | 13 | 12 | 440 | |
| CHIMA | MUREN HEXT-65170S-AZM PRINL ANTENY | ~ | 240 | 1677 400 | (FE ANS | 0 | 2 | 3813 | 74.9 | 00 | 63 | 42.9 | |
| | MOREN HERE-CHAIR AND MALL AND MA | , | 75 | 16/2/10 | thr (II) | ٥ | .2 | ETRE | NB | 17.0 | 13 | 633 | |
| | ASSOCIATED WAY 445 MINES | H | * | × | |) is | | II) | 71.5 | 200 | 2 | 510 | |
| - | ADDA USE AN ARK ZASE AT ROOM | ٦ |) | ÷ | | | 4 | ETHE | 27.0 | 11.0 | 9 | 55.0 | |
| į | DUTCHE | 9 | | | | | | 3613 | 1 | | | 9 | |
| | 11 0% | - | | | | + | 1 | 203 | 23.6 | 165 | 227 | 325 | |
| NOTES: | 1. "ER" IENOITS "DOSTING TO REJAMPI". 2. "EIRE" DEJORES "DOSTINO TO BE PROJPHED. 3. "EIRE" DEJORES "DOSTINO TO BE PROJPHED. 4. WEDGINES LISTED ARE WITHOUT MOUNTAIN SEMBLED OF RESE DATED 12.01/27. | 17/E | | | | | | | | | | | |

| | | | | | FINAL EQUIPMENT CONFIGURATION | CONFIGURATI | 8 | | | | | | |
|--------|--|----|--------------|-----------|--------------------------------|-------------|---------------------|---------------------|-----|------------|------|-----------------|-------------------------------|
| SECTOR | EQUIPMENT MAKE & MODEL | Æ | (FRUE NORTH) | ANTENNA | BAND | MECHANICAL | ELECTRICAL DOWNTILT | EQUIPMENT STATUS | ± € | ≥ € | - E | WEIGHT (LBS) | HYBRID CABLE SIZE & QTY |
| | COMESCOPE JAHH-659-639 PAND, ANDRING | - | ь | 167'± AQ. | LTE 700/050/1900/AES 50 650 | 0/0/0/0 | Z/a/ai/ai | ğ | 2 | 5 | 3 | 444 | |
| AI DUA | CONGCORT THE 437405 WH PARE ANSWER | | 0 | 167°± ACL | Jov.G. | j), | 8 | 8//3 | 2 | 611 | 177 | 9# | |
| 5 | SANSTING INTIM13-77A PAREL ANTENNA | - | | 107± AQ. | BC 138 | ь | 10. | ig. | R | 188 | 20 | 67.3 | |
| | COMECONE JARF-ESS-RUS PARIS, ANTENNS | - | ь | ter'± AGL | LTE 700/850/1800/WES | 2/2/2/2 | 2/10/101 | Þ | 22 | 3 | 23 | 4,8 | |
| | CONFORTE JAHLEDS-RIS TAND. ANDRES | - | 120 | 167'± AG. | LTE 700/850/1800/#RS 5G 850 | 0/0/0/0 | 2/2/2/2 | M | 22 | 2 | 3 | 4.44 | |
| į | DOWNSTON LAY-151415-NV PAGE ANTONN | - | 021 | 167'+ 1/4 | SHARE | à | | č | 122 | 671 | 17 | 44.0 | |
| E S | SAUSOND MISHIS-77A PAPEL ANERSM | - | 120 | 167'± AGL | 95 CS | Ь | 10 | ğ | 8 | ā | 2 | 67.3 | |
| | COMMISCOPE JAME - 658-1739 PANEL ANTENNS | - | 120 | 167'± AQL | LTE 700/N50/1900/ARS 50 650 | 0/0/0/0 | 2/2/2/2 | NG. | 22 | 3 | 2 | 4.4 | CASI. (12) 1-36" CONVIE CHIES |
| | COMMERCENT, JAHR-678-K38 PART, AVEDRING | - | 240 | 167'± AQL | LTE 700/860/1800/MFS 50 650 | 2/2/2/2 | 2/3/2/2 | ğ | 2 | 3 | 2 | 44 | con. (s) are little office |
| CALMAN | COMMERCIAL STATE STRATES - NO. FANCE ANGENIES | • | 240 | 197.4.101 | SPARE | - | ā | £TR. | 727 | 671 | 17 | 94 | |
| CAMINA | SAMELING MT8413-77A PANEL ANTIDAM | - | 240 | 167'± AQL | 25 25 | ь | 10. | Þ | ă | 3 | 3 | 57.3 | |
| | COMMISCOPE JAVAH-859-R38 TAVEL ANTDRING | • | 240 | 167'± AQL | LTE 700/850/1900/ARS 56 850 | 2/2/2/2 | 2/3/2/2 | ğ | 2 | - | 2 | 479 | |
| | SANSTHEE RO/MINN INTEXTED-25A PACKES | 2 | | | | i i | | AGN | 3 | 2 | ā | 74.7 | |
| 14 | SAMELING 85/313 1944614-134 PACKES | | , | | | ī | , | Q | 150 | ä | ā | 1,9% | |
| į | COMMISCOPE, CRC/NS1-CS-45-21, DRILINGS | • | | | | | , | 101 | 3 | 8 | 8.8 | 7.02 | |
| | 12 000 | • | 0 | (4 | | 4 | , | 21.7 | 377 | 113 | 12.6 | 320 | |
| MOTES | 1. Tent objects "Dosting to resume". 2. "Line" objects "Dosting to be resident.". 3. Wichels Lested are without mounting bracests. | 53 | | | | | | | | | | | |

| SCHEDULE | | FEEDLINES | LOCATION |
|----------|--------------------|---|--------------------------|
| ⊲ | wath in these | (1) ½" CRUY CUSTE TOR GOS MATHRE (17) 1—3," CRUMI CUSTS (2) 6.17 HTBND CUSTES | |
| | CHESS IS OF SECOND | 104 | STRUCTURAL STRUCTURAL |
| <u>m</u> | PROPOSED: | NOVE | ĺ |

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20 ALEXANDER DRINE, 2ND FLIDOR INVLINIGEMEN, CT DRINE (ZIX) 741—7338

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SUBMITTALS

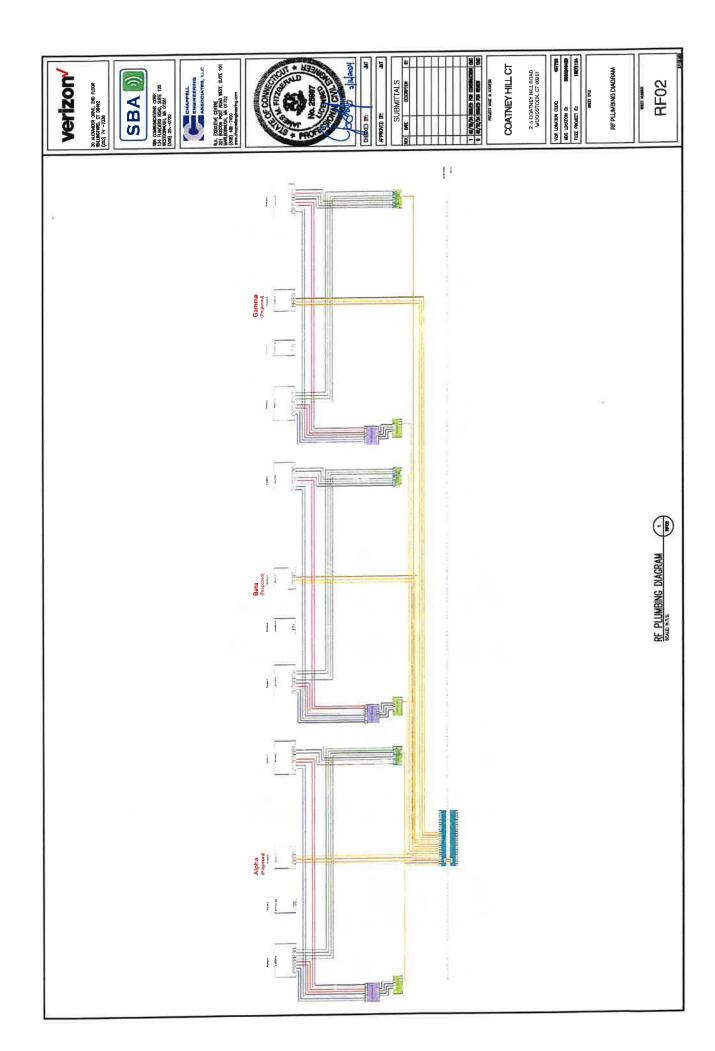
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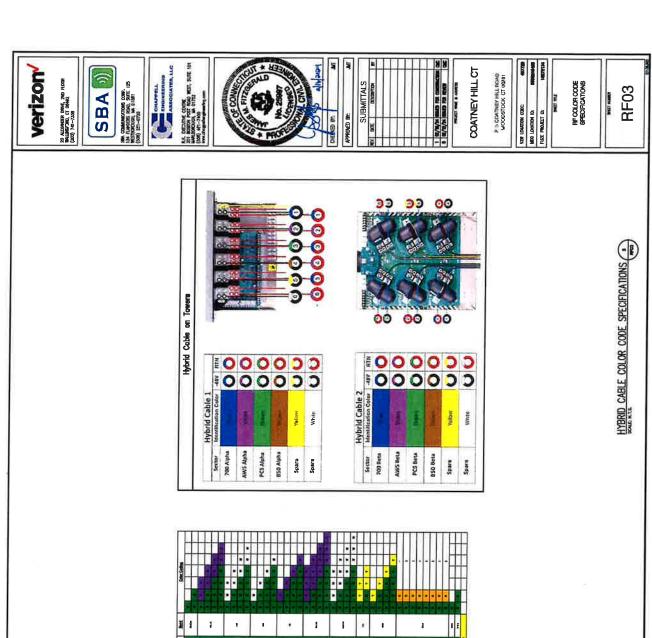
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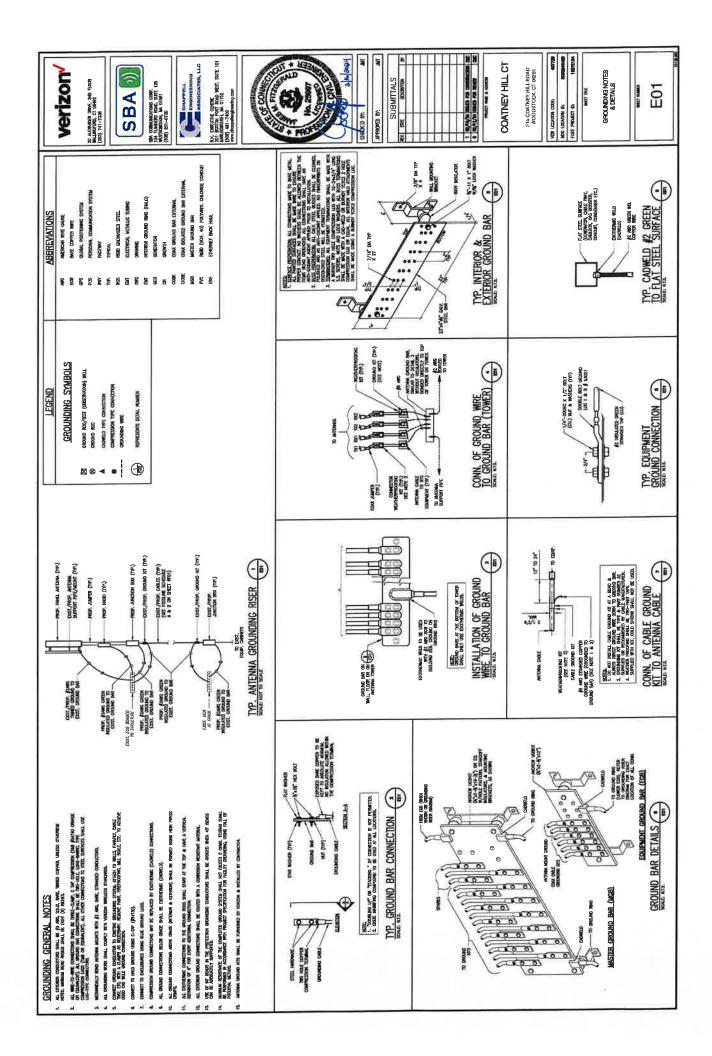
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CABLE NOTE:
SEE FYEDIME SCHEDULE A B SO WHET 1801
FOR DASHING & PROPOSED CARE GAUMITIES.

1 1







8-port sector antenna, 2x 698–787, 2x 824–894 and 4x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have diplexers. Internal SBT's on first LB(Port 1) and first HB(Port 5).

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band

General Specifications

Antenna Type Sector

Band Multiband

Color Light gray

Effective Projective Area (EPA), frontal 0.28 m² | 3.014 ft²

Effective Projective Area (EPA), lateral 0.24 m² | 2.583 ft²

Grounding Type RF connector body grounded to reflector and mounting bracket

Performance Note

Outdoor usage | Wind loading figures are validated by wind tunnel

measurements described in white paper WP-112534-EN

Radome Material Fiberglass, UV resistant

Radiator Material Aluminum Low loss circuit board

Reflector MaterialAluminumRF Connector Interface4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band 4
RF Connector Quantity, low band 4

RF Connector Quantity, total

Remote Electrical Tilt (RET) Information, General

RET Interface 8-pin DIN Female | 8-pin DIN Male

RET Interface, quantity 2 female | 2 male

Dimensions

Width 350 mm | 13.78 in

Page 1 of 4

Length

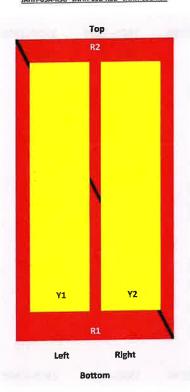
Depth

1828 mm | 71.969 in

208 mm | 8,189 in

Array Layout

JAHH-65A-R3B JAHH-65B-R3B JAHH-65C-R3B



| Array | Freij (MHz) | Contra | (SRET) | AISG RET UID |
|-------|----------------|--------|--------|-------------------------|
| 131 | 695-796 | 1-2 | 1 | ANsmunumuni |
| 82 | 824-894 | 3-4 | 2 | Avenuennemen? |
| YI | 1695-2366 | 5-6 | 1 | ANXXXXXXXXXXXXXXXXXXXXX |
| Y2. | 1003-2360 | 7-8 | | |

View from the front of the antenna (Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

Impedance

Polarization

50 ohm

Operating Frequency Band

1695 – 2360 MHz | 698 – 787 MHz | 824 – 894 MHz

±45°

Remote Electrical Tilt (RET) Information, Electrical

Protocol

3GPP/AISG 2.0 (Single RET)

Power Consumption, idle state, maximum

2 W

Page 2 of 4



Power Consumption, normal conditions, maximum

13 W

Input Voltage

10-30 Vdc

Internal Bias Tee

Port 1 | Port 5

Internal RET

High band (1) | Low band (2)

Electrical Specifications

| Frequency Band, MHz | 698–787 | 824-894 | 1695-1880 | 1850-1990 | 1920–2200 | 2300–2360 |
|--|------------|------------|------------|------------|------------|------------|
| Gain, dBi | 14.5 | 15.8 | 18 | 18.4 | 18.5 | 18,8 |
| Beamwidth, Horizontal, degrees | 67 | 65 | 63 | 63 | 65 | 68 |
| Beamwidth, Vertical, degrees | 12.4 | 10.5 | 5.7 | 5.2 | 4.9 | 4.4 |
| Beam Tilt, degrees | 2–14 | 2–14 | 0–10 | 0–10 | 0–10 | 0–10 |
| USLS (First Lobe), dB | 18 | 18 | 20 | 20 | 21 | 23 |
| Front-to-Back Ratio at 180°, dB | 32 | 34 | 31 | 35 | 36 | 38 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 30 | 30 | 30 | 30 | 30 | 30 |
| VSWR Return loss, dB | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port at 50° C, maximum, watts | 200 | 200 | 300 | 300 | 300 | 250 |

Electrical Specifications, BASTA

| ' | , | | | | | |
|---|---|---|---|---|---|---|
| Frequency Band, MHz | 698-787 | 824-894 | 1695–1880 | 1850-1990 | 1920–2200 | 2300–2360 |
| Gain by all Beam Tilts, average, dBi | 14.3 | 14.9 | 17.6 | 18.1 | 18.2 | 18.5 |
| Gain by all Beam Tilts Tolerance, dB | ±0.3 | ±0.5 | ±0.6 | ±0.4 | ±0.5 | ±0.6 |
| Gain by Beam Tilt, average, dBi | 2 ° 14.3 8 ° 14.3 14 ° 14.3 | 2 ° 15.0 8 ° 14.9 14 ° 15.4 | 0 ° 17.2 5 ° 17.6 10 ° 17.6 | 0 ° 17.6 5 ° 18.2 10 ° 18.2 | 0 ° 17.7 5 ° 18.3 10 ° 18.3 | 0 ° 17.9 5 ° 18.7 10 ° 18.7 |
| Beamwidth, Horizontal Tolerance, degrees | ±1.2 | ±1.4 | ±4 | ±2.4 | ±2.9 | ±2.7 |
| Beamwidth, Vertical Tolerance, degrees | ±0.9 | ±0.5 | ±0.3 | ±0.2 | ±0.3 | ±0.1 |
| USLS, beampeak to 20° above beampeak, dB | 18 | 17 | 17 | 18 | 19 | 18 |
| Front-to-Back Total Power at 180° ± 30°, dB | 25 | 24 | 26 | 29 | 27 | 29 |
| CPR at Boresight, dB | 22 | 23 | 20 | 21 | 21 | 24 |

Page 3 of 4



| CPR at Sector, dB | 11 | 12 | 11 | 11 | 11 | 8 |
|-------------------|----|----|----|----|----|---|
| | | | | | | |

Mechanical Specifications

 Wind Loading at Velocity, frontal
 301.0 N @ 150 km/h
 67.7 lbf @ 150 km/h

 Wind Loading at Velocity, lateral
 254.0 N @ 150 km/h
 57.1 lbf @ 150 km/h

 Wind Loading at Velocity, maximum
 143.4 lbf @ 150 km/h
 638.0 N @ 150 km/h

Wind Speed, maximum 241 km/h | 149.75 mph

Packaging and Weights

 Width, packed
 456 mm
 | 17.953 in

 Depth, packed
 357 mm
 | 14.055 in

 Length, packed
 1975 mm
 | 77.756 in

 Net Weight, without mounting kit
 29.2 kg
 | 64.375 lb

 Weight, gross
 42.5 kg
 | 93.696 lb

Regulatory Compliance/Certifications

Agency Classification

Agency Classification

CHINA-ROHS Above maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

ROHS Compliant/Exempted





Included Products

BSAMNT- _ Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

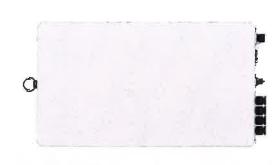
Performance Note Severe environmental conditions may degrade optimum performance



C-band 64T64R

Gen 2

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



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

| Gen 2. 64T64R C-band MMU Dimensions | 400 x 734 x 140 mm (15.75 x 28.90 x 5.51 inch) | 26kg (57.3 lb) |
|-------------------------------------|---|----------------|
| Gen 2. 64T6 | Size (WxHxD) | Weight |

| Item | Gen 2 64T64R (MT6413-77A) |
|-----------------------|--|
| Air Technology | NR n77/TDD |
| Frequency | 3760 – 3980 MHz |
| IBW | 200 MHz |
| WBO | 200 MHz |
| Carrier Bandwidth | 200HW ready)/40/60/100 MHz |
| # of Carriers | 2 carriers |
| Layer | DL:16L, UL:16RX (8L) |
| RF Chain | 64T64R |
| Antenna Configuration | AV16H with 192 AE |
| EIRP | 80.5 dBm @320W (55 dBm + 25.5 dBi) |
| Conductive Power | 320W |
| Spectrum Analyzer | TX/RX support |
| RX Sensitivity | Typical -97.8d8m @(1Rx, 18.36MHz with 30kHz,51RBs) |
| Modulation | DL 256QAM support, (DL 1024QAM with 1~2dB power back-off) |
| Function Split | DL/UL option 7-2x |
| Input Power | -48 VDC (-38 VDC to -57 VDC) |
| Power Consumption | 1,287W (100% load, room temp.) |
| Size (WHD) | 400 x 734 x 140 mm (15.75 x 28.90 x 5.51 inch) |
| Volume | 41.11 |
| Weight | 26kg (57.3 lb) |
| Operating Temperature | -40°C - 55°C (w/o solar load) |
| Cooling | Natural convection |
| | 3GPP 38, 104 |
| | FCC 47 CFR 27.53 : < -13dBm/MHz |
| Unwanted Emission | 40 dBm/MHz @ above 4 GHz 50 dBm /MHz @ 4,040 ~ 4,050 MHz 60 dBm /MHz @ above 4,050 MHz |
| Optic Interface | 15km. 4 ports (25Gbps x 4), SFP28, single mode, Bi-di (Option: Duplex) |
| Mounting Options | Pole, wall |
| NB-IoT | Notsupport |
| External Alarm | 4RX |
| Fronthaul Interface | NOTA. |

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SAMSUNG

AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER FOR MACRO COVERAGE

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

Model Code

RF4439d-25A



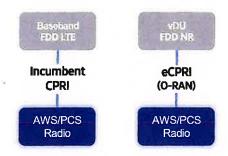




Points of Differentiation

Continuous Migration

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



Optimum Spectrum Utilization

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

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



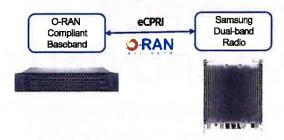
Technical Specifications

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

O-RAN Compliant

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

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



Brand New Features in a Compact Size

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



Same as an incumbent radio volume

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

Specifications



* 5MHz supporting in BI3(700MHz) depends on 3GPP std. and UE capability. External filters in interferent and victim sides for Mexican boarder to support 5MHz service need to be considered.

| Item | Specif | Specification |
|--|-----------------------------------|--|
| Air Interface | LTE, NR(HW r | LTE, NR(HW resource ready) |
| Band | Band13 (700MHz) | Band5 (850MHz) |
| | DL: 746-756MHz | DL: 869-894MHz |
| Freduency | UL: 777~787MHz | UL: 824~849MHz |
| iBW. | 10MHz | 25MHz |
| OBW | 10MHz | 25MHz |
| Carrier Bandwidth | LTE/NR 5*/10MHz | LTE 5/10MHz NR 5/10/15/20MHz |
| ≠ of carriers | 5C* | 30 |
| Total # of carriers | 4C + 81 | 4C + 813 (SDL) 1C |
| RF Chain | 4T4R/2T4F | 414R/214R/212R/112R 212R-212R bi-sector |
| | Total | Total : 320W |
| RF Output Power | 4 x 40W or 2 x 60W | 4 x 40W or 2 x 60V/ |
| Spectrum Analyzer | TX/RX | TX/RX Support |
| RX Sensitivity | Typ104.5dBm (| Typ104.5d8m @1Rx (25R8s 5MHz) |
| Modulation | 256QAM support, (1024QA) | 255QAM support, (1024QAM with 1~2dB power back-off) |
| Input Power | -48VDC (-38) | -48VDC (-38VDC to -57VDC) |
| Power Consumption | 1,165 Watt @ 100% RI | 1,165 Watt @ 100% RF load, room temperature |
| Size (WHD) | 380 x 380 x 260 mm (1 | 380 x 380 x 260 mm (14.96 x 14.96 x 10.23 Inch) |
| Volume | 37 | 37.5 L |
| Weight (W/o Solar Shield & finger quard) | 35.9 kg | 35.9 kg (79.1 lb) |
| Operating Temperature | -40°C (-40°F) ~ 55°C (1 | -40°C (-40°F) ~ 55°C (131°F) (Without solar load) |
| Cooling | Natural | Natural convection |
| | 3GPP 36.104 | 3GPP 36.104 |
| Unwanted Emission | FCC 47 CFR 27.53 c), f) | FCC 47 CFR 22.917 |
| | * | -69 d8m/100 kHz per path @ £96 ~901MHz |
| CPRI Cascade | Not s | Not supported |
| Optic Interface | 20km, 2 ports (9.8Gbps x 2), SFP+ | 20km, 2 ports (9.8Gbps x 2), SFP+, single mode, Duplex (Option: Bi-di) |
| RET & TMA Interface | AI | AISG 3.0 |
| Blas-T | 4 ports (2 p | 4 ports (2 ports per band) |
| Mounting Options | Po | Pole, wall |
| N8-4oT | 2G8+2IB or 4IB | 25A+2GB or 2GB+2IB or 4GB |
| PIM Cancellation | ns. | Support |
| # of antenna port | | 7 |
| External Alarm | | ~7 |
| Fronthaul Interface | Opt. 8 CPRI / Opt. 7-2x selec | Opt. 8 CPRI / Opt. 7-2x selectable (not simultaneous support) |
| CPRI compression | Not | Not Support |

ATTACHMENT 3



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

Calculated Radio Frequency Emissions Report



Coatney Hill CT 215 Coatney Hill Road, Woodstock, CT 06821

February 26, 2024

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1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed modification of Verizon's antenna arrays to be mounted at 167' on an existing guyed tower located at 215 Coatney Hill Road in Woodstock, CT. The coordinates of the tower are 41° 57' 44.2" N, 72° 01' 7.2" W.

Verizon is proposing the following:

1) Install nine (9) multi-band antennas, three (3) per sector to support its commercial LTE and 5G network.

This report considers the planned antenna configuration for Verizon¹ as well as existing antenna configuration for AT&T², Dish³, T-Mobile⁴ and Other⁵ (DRW, Connecticut Light & Power, and Town of Woodstock) to derive the resulting % MPE of its proposed modification.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

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

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

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm²). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment C of this report.

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

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

Coatney Hill CT 1 February 26, 2024

¹ As referenced to Verizon's Radio Frequency Design Sheet updated 12/01/2023.

² As referenced to DISH's Connecticut Siting Council Tower Share Application – 215 Coatney Hill Road, Woodstock, CT, dated May 1st, 2023

³ As referenced to DISH's Connecticut Siting Council Tower Share Application – 215 Coatney Hill Road, Woodstock, CT, dated May 1st, 2023

⁴ As referenced to T-Mobile's Connecticut Siting Council Exempt Modification Application – 215 Coatney Hill Road, Woodstock, CT, dated May 25, 2022

⁵ As referenced to DISH's Connecticut Siting Council Tower Share Application - 215 Coatney Hill Road, Woodstock, CT, dated May 1st, 2023



3. RF Exposure Prediction Methods

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

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

Where:

EIRP = Effective Isotropic Radiated Power

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

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Off Beam Loss is determined by the selected antenna patterns

Ground reflection factor (GRF) of 1.6

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



4. Antenna Inventory

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

| Operator | Sector / Azimuth | TX Freq (MHz) | Power at Antenna (Watts) | Ant Gain (dBi) | Power EIRP (Watts) | Antenna Model | Beam Width | Mech. Tilt | Length (ft) | Antenna Centerline Height (ft) |
|----------|---------------------|---------------------|--------------------------------|----------------------|--------------------------|---------------|---------------|---------------|----------------|--------------------------------------|
| Verizon | Alpha / 0° | 750 | 160 | 14.5 | 4509 | | 67 | 0 | 6 | 167 |
| | | 850 | 160 | 15.8 | 6083 | JAHH-65B-R3B | 65 | | | |
| | | 1900 | 160 | 18.4 | 11069 | | 63 | | | |
| | | 2100 | 240 | 18.5 | 16991 | 1 | 65 | | | |
| | | 3700 | 320 | 25.5 | 113540 | MT6413-77A | = | 0 | 2.46 | 167 |
| | Beta / 120° | 700 | 160 | 14.9 | 4944 | | 65 | 0 | 6 | 167 |
| | | 850 | 160 | 15.0 | 5060 | NHH-65B-R2B | 60 | | | |
| | | 1900 | 160 | 17.9 | 9866 | NHH-03B-K2B | 69 | | | |
| | | 2100 | 240 | 18.4 | 16604 | | 64 | | | |
| | | 3700 | 320 | 25.5 | 113540 | MT6413-77A | - | 0 | 2.46 | 167 |
| | Gamma / 240° | 700 | 160 | 14.9 | 4944 | | 65 | 0 | 6 | 167 |
| | | 850 | 160 | 15.0 | 5060 | NUTTI CED DAD | 60 | | | |
| | | 1900 | 160 | 17.9 | 9866 | NHH-65B-R2B | 69 | | | |
| | | 2100 | 240 | 18.4 | 16604 | | 64 | | | |
| | 30 | 3700 | 320 | 25.5 | 113540 | MT6413-77A | | 0 | 2.46 | 167 |

Table 1: Proposed Antenna Inventory⁶⁷

Coatney Hill CT 3 February 26, 2024

⁶ Antenna heights are in reference to Verizon's Radio Frequency Design Sheet updated 12/01/2023.

⁷ Transmit power assumes 0 dB of cable loss.



5. Calculation Results

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

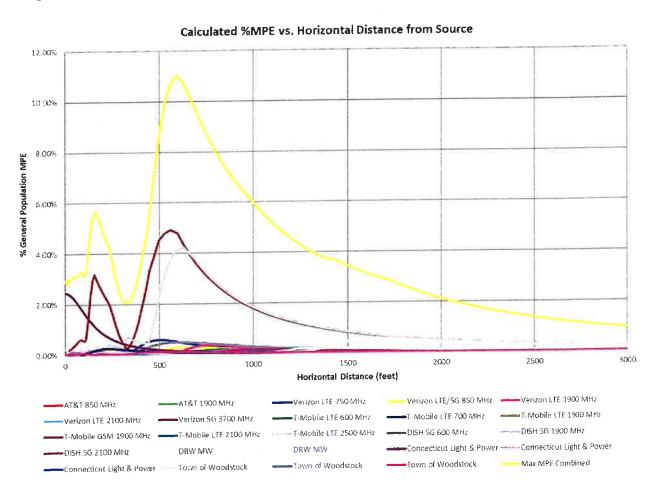


Figure 1: Graph of General Population % MPE vs. Distance

The highest percent of MPE (11.02% of the General Population limit) is calculated to occur at a horizontal distance of 596 feet from antennas. Please note that the percent of MPE calculations close to the site take into account off beam loss, which is determined from the vertical pattern of the antennas used. Therefore, RF power density levels may increase as the distance from the site increases. At distances of approximately 1500 feet and beyond, one would now be in the main beam of the antenna pattern and off beam loss is no longer considered. Beyond this point, RF levels become calculated solely on distance from the site and the percent of MPE decreases significantly as distance from the site increases.



Table 2 below lists percent of MPE values as well as the associated parameters that were included in the calculations. The highest percent of MPE value was calculated to occur at a horizontal distance of 596 feet from the site (reference Figure 1).

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

| Carriet | Number of Transmitters | Power out of Base Station Per Transmitter (Watts) | Antenna Height (Feet) | Distance to the Base of Antennas (Feet) | Power Density (mW/cm²) | Limit (mW/cm²) | % MPE |
|---------------------------|---------------------------|--|-----------------------------|--|------------------------------|-------------------|--------|
| AT&T 1900 MHz | 1 | 160.0 | 185.0 | 596 | 0.000099 | 1.000 | 0.01% |
| AT&T 850 MHz | 1 | 160.0 | 185.0 | 596 | 0.000551 | 0.567 | 0.10% |
| Connecticut Light & Power | 1 | 100.0 | 150.0 | 596 | 0.000405 | 0.300 | 0.14% |
| Connecticut Light & Power | 1 | 100.0 | 150.0 | 596 | 0.000000 | 1.000 | 0.00% |
| Connecticut Light & Power | 1 | 100.0 | 135.0 | 596 | 0.000212 | 0.300 | 0.07% |
| DISH 5G 1900 MHz | 4 | 40.0 | 145.0 | 596 | 0.000274 | 1.000 | 0.03% |
| DISH 5G 2100 MHz | 4 | 40.0 | 145.0 | 596 | 0.000246 | 1.000 | 0.02% |
| DISH 5G 600 MHz | 4 | 61.5 | 145.0 | 596 | 0.001922 | 0.400 | 0.48% |
| DRW MW | 1 | 6.0 | 157.0 | 596 | 0.000109 | 1.000 | 0.01% |
| DRW MW | 1 | 6.0 | 157.0 | 596 | 0.000013 | 1.000 | 0.00% |
| T-Mobile GSM 1900 MHz | 4 | 30.0 | 140.0 | 596 | 0.000141 | 1.000 | 0.01% |
| T-Mobile LTE 1900 MHz | 2 | 60.0 | 140.0 | 596 | 0.000141 | 1.000 | 0.01% |
| T-Mobile LTE 2100 MHz | 2 | 60.0 | 140.0 | 596 | 0.000155 | 1.000 | 0.02% |
| T-Mobile LTE 2500 MHz | 1 | 240.0 | 140.0 | 596 | 0.041330 | 1.000 | 4.13% |
| T-Mobile LTE 600 MHz | 1 | 140.0 | 177.0 | 596 | 0.000247 | 0.400 | 0.06% |
| T-Mobile LTE 700 MHz | 2 | 30.0 | 140.0 | 596 | 0.000302 | 1.000 | 0.03% |
| Town of Woodstock | 1 | 100.0 | 110.0 | 596 | 0.000167 | 0.450 | 0.04% |
| Town of Woodstock | 1 | 100.0 | 110.0 | 596 | 0.000167 | 0.200 | 0.08% |
| Town of Woodstock | 1 | 100.0 | 110.0 | 596 | 0.000310 | 0.300 | 0.10% |
| Verizon 5G 3700 MHz | 1 | 320.0 | 177.0 | 596 | 0.047968 | 1.000 | 4.80% |
| Verizon LTE 1900 MHz | 1 | 160.0 | 167.0 | 596 | 0.000797 | 1.000 | 0.08% |
| Verizon LTE 2100 MHz | 1 | 240.0 | 167.0 | 596 | 0.000373 | 1.000 | 0.04% |
| Verizon LTE 750 MHz | 1 | 160.0 | 167.0 | 596 | 0.002482 | 0.500 | 0.50% |
| Verizon LTE/5G 850 MHz | 1 | 160.0 | 167.0 | 596 | 0.001487 | 0.567 | 0.26% |
| | | | | | | Total | 11.02% |

Table 2: Maximum Percent of General Population Exposure Values^{8,9,10}

-

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

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

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



6. Conclusion

The above analysis verifies that RF exposure levels from the site with Verizon's proposed antenna configuration will be well below the maximum permissible levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Using the conservative calculation methods and parameters detailed above, the maximum cumulative percent of MPE in consideration of all transmitters is calculated to be 11.02 % of the FCC limit (General Population/Uncontrolled). This maximum cumulative percent of MPE value is calculated to occur 596 feet away from the site.

7. Statement of Certification

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

Report Prepared By:

Ram Acharya

RF Engineer

C Squared Systems, LLC

Marty Fand

February 23, 2024

Date

Reviewed/Approved By:

Martin Lavin

Senior RF Engineer C Squared Systems, LLC February 26, 2024 Date



Attachment A: References

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

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

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



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

(A) Limits for Occupational/Controlled Exposure¹¹

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (E) (A/m) | Power Density (S) (mW/cm ²) | Averaging Time $ E ^2$, $ H ^2$ or S (minutes) |
|-----------------------------|---|---|--|---|
| 0.3-3.0 | 614 | 1.63 | (100)* | 6 |
| 3.0-30 | 1842/f | 4.89/f | $(900/f^2)*$ | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1500 | :=:: | S e 4 | f/300 | 6 |
| 1500-100,000 | • | - | 5 | 6 |

(B) Limits for General Population/Uncontrolled Exposure12

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (E) (A/m) | Power Density (S) (mW/cm ²) | Averaging Time $ E ^2$, $ H ^2$ or S (minutes) |
|-----------------------|---|---|--|---|
| 0.3-1.34 | 614 | 1.63 | (100)* | 30 |
| 1.34-30 | 824/f | 2.19/f | $(180/f^2)*$ | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | S#0 | 3. 4 5 | f/1500 | 30 |
| 500-100,000 | - | 184 | 1.0 | 30 |

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

Table 3: FCC Limits for Maximum Permissible Exposure

Coatney Hill CT 8 February 26, 2024

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

¹² General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.



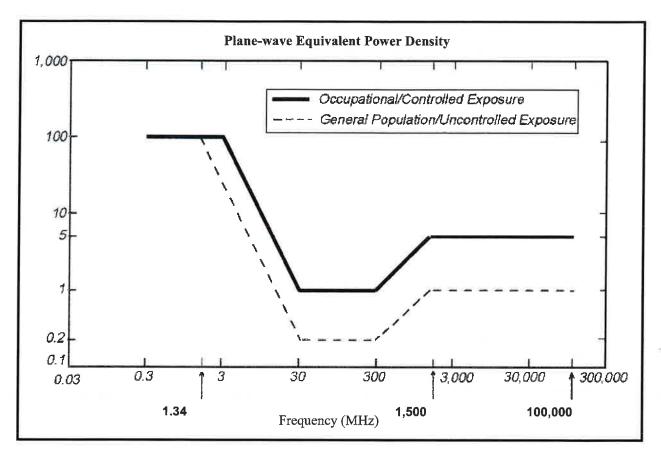


Figure 2: Graph of FCC Limits for Maximum Permissible Exposure (MPE)



Attachment C: Verizon Antenna Model Data Sheets and Electrical Patterns

750 MHz

Manufacturer: COMMSCOPE

Model #: JAHH-65B-R3B

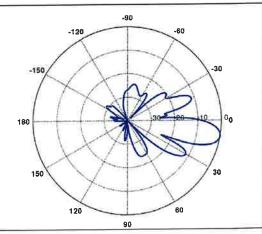
Frequency Band: 698-787 MHz

Gain: 14.5 dBi

Vertical Beamwidth: 12.4° Horizontal Beamwidth: 67°

Polarization: ±45°

Dimensions (L x W x D): 71.96" x 13.78" x 8.2"



850 MHz

Manufacturer: COMMSCOPE

Model #: JAHH-65B-R3B

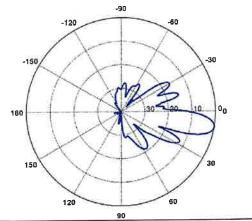
Frequency Band: 824-894 MHz

Gain: 15.8 dBi

Vertical Beamwidth: 5.7° Horizontal Beamwidth: 65°

Polarization: ±45°

Dimensions (L x W x D): 71.96" x 13.78" x 8.2"





1900 MHz

Manufacturer: COMMSCOPE

Model #: JAHH-65B-R3B

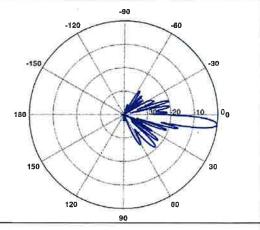
Frequency Band: 1850-1990 MHz

Gain: 18.4 dBi

Vertical Beamwidth: 4.9° Horizontal Beamwidth: 63°

Polarization: ±45°

Dimensions (L x W x D): 71.96" x 13.78" x 8.2"



2100 MHz

Manufacturer: COMMSCOPE

Model #: JAHH-65B-R3B

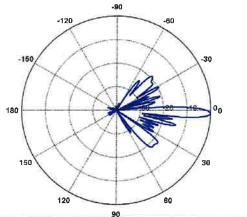
Frequency Band: 1920-2200 MHz

Gain: 18.5 dBi

Vertical Beamwidth: 4.9° Horizontal Beamwidth: 65°

Polarization: ±45°

Dimensions (L x W x D): 71.96" x 13.78" x 8.2"



ATTACHMENT 4

SBA Communications Corporation 8051 Congress Avenue Boca Raton, FL 33487-1307

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sbasite.com





Structural Analysis Report

Client: Verizon

Client Site ID / Name: 5000246420 / Coatney Hill CT Application #: 243674, v1

SBA Site ID / Name: CT08748-A / Woodstock 4 CT

190 ft Monopole

215 Coatney Hill Road Woodstock, Connecticut 06281 Lat: 41.9622, Long: -72.0186

Project number: CT08748-VZW-011524

Analysis Results

| Tower | 92.7% | Pass |
|------------|-------|------|
| Foundation | 75.4% | Pass |

| Change in tower stress due to mount modification | 0.0% |
|--|------|
| Orlange in terrer en es | |

Prepared by:

Samuel Apaez Structural Engineer I

January 18, 2024



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| Assumptions | 8 |
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| Tower Geometry | |
| Coax Layout | 20000000000000 |
| TESPole Report | ***** |
| Foundation Analysis Report | |



Introduction

The purpose of this report is to summarize the analysis results on the 190 ft Monopole to support the proposed antennas and transmissions lines in addition to those currently installed.

Table 1 List of Documents Used

| 60 |
|--|
| Document |
| Fred A. Nudd Corporation, Project # 01-8280, dated 06/10/2001 |
| Fred A. Nudd Corporation, Project # 01-8280, dated 06/10/2001 |
| N/A |
| N/A |
| Colliers Engineering & Design, Project #: 21777291, dated 12/19/2023 |
| TES, Project # 138870, dated 02/24/2023 |
| |

Analysis Criteria

Table 2 Code Related Data

| Table 2 Code Related Data | |
|----------------------------------|--|
| Jurisdiction (State/County/City) | Connecticut/Windham/Woodstock |
| Governing Codes | ANSI/TIA/EIA 222-H, 2021 IBC, 2022 Connecticut State Building Code |
| Ultimate Wind Speed (3-Sec gust) | 119.0 mph |
| Wind Speed with Ice (3-Sec gust) | 50 mph |
| Service Wind Speed (3-Sec gust) | 60 mph |
| Ice Thickness | 1.50" |
| Risk Category | |
| Exposure Category | C |
| Topographic Category | 1 |
| Crest Height | 0 ft |
| Ground Elevation | 817.15 ft. |
| Seismic Parameter S _s | 0.181 |
| Seismic Parameter S ₁ | 0.055 |

This structural analysis is based upon the tower being classified as a risk category II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.



Appurtenance Loading

Existing Loading:

Table 3 Existing Appurtenances

| Items | Elevation (ft) | Qty. | Antenna Descriptions | Mount Type & Qty. | Transmission Lines | Owner | |
|--------------|-------------------|------------------------|---|--|--|---|--|
| 1 | 193.5 | 1 | CommScope DB404 - Dipole | Low Profile Platform | (1) 5/8" | *Quinebaug Valley Emergency Communica tions | |
| 2 | | 6 | Powerwave LGP21401 - TMA | | | | |
| 3 | 185.0 | 6 | Powerwave LGP21903 - TMA | | | | |
| 4 | 105.0 | 6 | ADC CG-1900W800-FULL-DIN - TMA | Low Profile Platform | (12) 1 5/8" | AT&T | |
| 5 | | 9 | Powerwave 7770.00 - Panel | | | | |
| 6 | | 3 | Ericsson KRY 112 489/2 - TMA | | | | |
| 7 | | 3 | Ericsson AIR6419 B41 - Panel | | | | |
| 8 | | 3 | Commscope VV-65A-R1 - Panel | | (13) 1 5/8" | | |
| 9 | 177.0 | 3 | Ericsson 4449 B71 + B85 - RRU | icsson 4449 B71 + B85 - RRU Platform w/Handrails | | T-Mobile | |
| 10 | | 3 | Ericsson 8843 B25/B66A - RRU | • | (3) 1 5/8" Fiber (1) 1.9" Fiber | | |
| 11 | | 3 | RFS APXVAARR24_43-U-NA20 - Panel | | | | |
| 12 | | 3 | Kathrein 782 11056 - TMA | | | V) | |
| 13 | | 6 | Andrew JAHH-65B-R3B - Panel | | | | |
| 14 | | 3 | Commscope LNX-6514DS-A1M - Panel | | (12) 1 5/8" Coax (2) 1 5/8"Fiber | | |
| 15 | 167.0 | 3 | Commscope CBC78T-DS-43-2X - Diplexer | | | | |
| | 107.0 | 2 | RFS DB-T1-6Z-8AB-0Z - Junction Box | Low Profile Platform | | Verizon | |
| | | 3 | Samsung VZS01 - Panel | | | | |
| 5 4 6 | | 3 | Samsung B2/B66A RRH-BR049 - RRU | | | | |
| _ Ser | | 3 | Samsung B5/B13 RRH-BR04C - RRU | | | | |
| 21 | | 1 | Commscope USX6-6W- Dish | | (6) 1/2" Coax | | |
| 22 | 157.0 | 1 | Commscope VHLPX3-6W - Dish | (3) 0: 14 | (6) 1/4" CAT6 | DRW | |
| 23 | 137.0 | 4 SAF TMA | | (2) Pipe Mounts | (6) 1/4" Copper Power | Canada Co. | |
| 24 | | 1 | Raycap RDIDC-9181-PF-48 - OVP | | | | |
| 25 | 145.0 | 3 | Fujitsu TA08025-B605 - RRU | Low Profile Platform | | Dish | |
| 26 | 145.0 | 3 | Fujitsu TA08025-B604 - RRU | w/HRK | (1) 1.6" Hybrid | Wireless | |
| 27 | | 3 | Commscope FFVV-65B-R2 - Panel | | | 0,033 | |
| 28 | | 2 | Decibel DB212-1 - Dipole | | | | |
| 29 | 110.0 | 2 | Telewave ANT450D6-9 - Dipole | Flush Mount | (6) 7/8" | *Town of | |
| 30 | | 2 Antenex Y1505 - Yagi | | | (0) //0 | Woodstock | |

*Note: Leased but not installed



Proposed Loading:

Information pertaining to proposed antennas and transmission lines were based upon the Application #: 243674, v1 from Verizon and is listed in Table 4.

Table 4 Proposed Appurtenances

| Items | Elevation (ft) | Qty. | Qty. Antenna Descriptions Mount Type & Qty. | | Transmission Lines | Owner |
|-------|----------------|------|---|----------------------|--|---------|
| 13 | | 6 | Andrew JAHH-65B-R3B - Panel | | | |
| 14 | | 3 | Commscope LNX-6514DS-A1M - Panel | | (2) 1 1/4" Hybriflex (12) 1 5/8" | Verizon |
| 15 | | 3 | Commscope CBC78T-DS-43-2X - Diplexer | | | |
| 16 | | 2 | RFS DB-T1-6Z-8AB-0Z - Distribution Box | Low Profile Platform | | |
| 17 | 167.0 | 3 | Samsung MT6413-77A - Panel | LOW FROME FIREFORM | | |
| 18 | | 3 | Samsung B2/B66A RRH ORAN (RF4439d-25A) - RRU | | | |
| 19 | | 3 | Samsung RF4461d-13A - RRU | | | |
| 20 | | 1 | Raycap RRFDC-6627-PF-48 - OVP | | | |



Analysis Results

Tower

The results of the structural analysis are shown below in table 5. Additional information for the tower analysis is provided within the Appendix.

Table 5 Tower Analysis Summary

| ű | Pole shafts | Anchor Bolts | Base Plate | Flange Connection |
|-------------|-------------|-----------------|------------|----------------------|
| Max. Usage: | 84.9% | 68.3% | 92.7% | 23.9% |
| Pass/Fail | Pass | Pass | Pass | Pass |

Foundation

The results of the reaction Comparison are shown below in table 6. Additional information for the foundation analysis is provided within the Appendix.

Table 6 Reaction Comparison Summary

| Structural Component | Max Usage (%) | Analysis Result |
|----------------------|---------------|-----------------|
| Foundation | 75.4% | Pass |



Conclusions

Based on the analysis results, the existing tower and foundation were found to be <u>sufficient</u> to safely support the equipment listed in this analysis. No modification to the tower and foundation is needed at this time.

Installation Requirements

This analysis was performed under the assumption that the carrier will place the proposed equipment and feed lines at the installation height listed in Table 4 and in accordance with the coax layout shown. TMAs and RRUs are to be installed on existing mounts behind tenant's antennas unless otherwise noted. No equipment is to be installed directly in the climbing path. All equipment is to be installed per mount manufacturer specifications. In case site conditions do not allow for the required installation parameters to be met the carrier must notify SBA Communications Corporation engineers for approval of an alternative placement.



Assumptions and Limitations

Assumptions

This analysis was completed based on the following assumptions:

- Tower and foundation were built in accordance to manufacturer specifications.
- Tower and foundation has been properly maintained in accordance with the manufacturer's specifications
- All existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion
- Welds and bolts are assumed able to carry their intended original design loads.
- The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Table 3 and 4.
- This analysis may be affected if any assumptions are not valid or have been made in error. SBA should be notified to determine the effect on the structural integrity of the tower.

Limitations

The computer generated analysis performed by the tower software is limited to theoretical capacities of the towers structural members and does not account for any missing or damaged members or connections. The tower and foundation are assumed to have been properly designed, fabricated, installed and maintained, barring any conflicting findings from the most recent inspection.

SBA Communications Corporation has used its due diligence to verify the information provided to perform this analysis. It is unreasonable to perform a more detailed inspection of a tower and its components. This report is not a condition assessment of the tower or foundation.



Appendix



Usage Diagram - Max Ratio 84.88% at 91.0ft

Structure:

CT08748-A

Site Name: Woodstock 4 CT

Height:

190.00 (ft)

Base Elev: 0.000 (ft)

Code:

EIA/TIA-222-H

Exposure: C

Gh:

1.1

1/18/2024

Page: 1

SBA

Dead Load Factor:

1.20

Wind Load Factor:

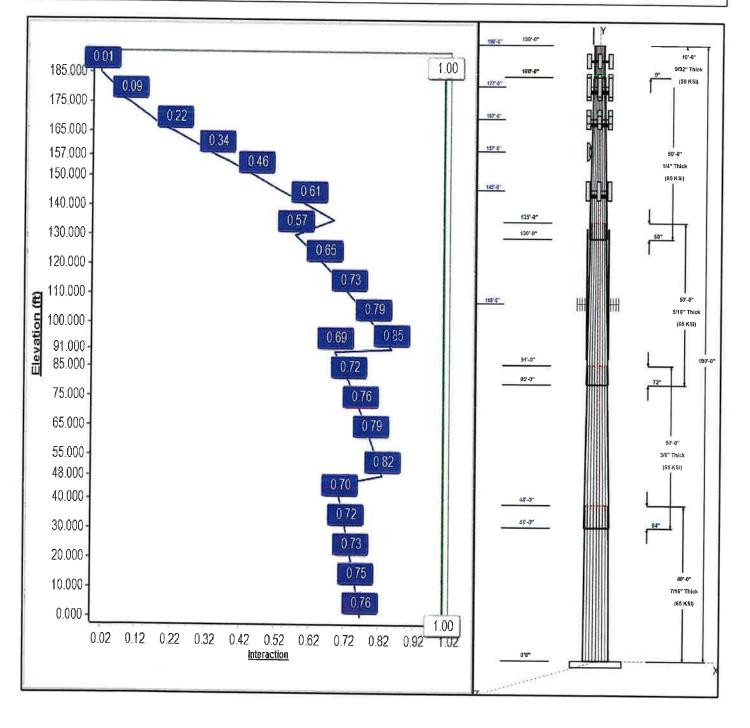
1.00

Load Case: 1.2D + 1.0W 119 mph Wind

Iterations:

26

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Structure: CT08748-A

Custom Type:

Base Shape: 18 Sided

1/18/2024

Site Name: Woodstock 4 CT

Height:

190.00 (ft)

Taper: 0.23542

SBA

Base Elev: 0.00 (ft)

Page: 2

| | | | Shaft | Proper | ties | | | | 190'-0" | I Y | | |
|-----------|--------|-------|----------|--------------------|----------|---------------|---------|---------|----------------|---|-----------------|-----------------------|
| 2 | _ength | Тор | Bottom | Thick | Joint | | Grade | 190"-0" | 190'-0" | _ mir_ | . = | 10"-0" |
| Seq | (ft) | (in) | (in) | (in) | Type | Taper | (ksi) | | | | | 9/32" Thick |
| 1 | 48.00 | 53.20 | 64.50 | 0.438 | | 0.23542 | 65 | (V65/E) | 180'-0" | FARE | 1 f | (50 KSI) |
| 2 | 50.00 | 43,83 | 55.60 | 0.375 | Slip | 0.23542 | 65 | 177'-0" | | | 11. | |
| 3 | 50.00 | 34.09 | 45.86 | 0.313 | Slip | 0.23542 | 65 | | | | 3 | |
| 4 | 50.00 | 24.00 | 35.77 | 0.250 | Slip | 0.23542 | 65 | 167"-0" | | FLIALE | 1 | 1 1 |
| 5 | 10.00 | 24.00 | 24.00 | 0.281 | Butt | 0.00000 | 50 | | | | 1 | |
| | | | crete A | opurte | enances | | | 157"-0" | | B | | 50"-0" |
| Attach | Force | | 0.0.0 | - Pro- | | | | 1 | | Ы | | 1/4" Thick |
| Elev (ft) | |) Qty | Descri | ption | | Carrier | | | | dale | 1 | (65 KSI) |
| 190.00 | 193.00 | | | Scope DB4 | 104 | Quinebaug V | 'alley | 145'-0" | | | ı | |
| 185.00 | | | | ofile Platfo | | AT&T | | | | 4111 | • | |
| 185.00 | | | | | | AT&T | | | 135'-0" | | | |
| 185.00 | | | | ave LGP2 | 21401 | AT&T | | \ \= | 130'-0" | | 60" | |
| 185.00 | | | | ave LGP2 | | AT&T | | 8=- | | | f | |
| 185.00 | | | | | | AT&T | | | | | 572 | |
| 185.00 | | | | ave 7770 | .00 | AT&T | | | | | | |
| 177.00 | | | | n KRY 112 | 2 489/2 | T-Mobile | | | | | (| |
| 177.00 | | | | 9 B41 | | T-Mobile | | 115"-0" | | | ий | 50"-0" |
| 177.00 | | | VV-65A | -R1 | | T-Mobile | | 170.0 | | HH | | 5/16" Thick |
| 177.00 | | | | 71 + B85 | | T-Mobile | | | | | | (65 KSI) |
| 177.00 | | | 8843 B | 25/B66A | | T-Mobile | | | | 1111111 | | |
| 177.00 | | | | ARR24_4 | 3-U-NA20 | T-Mobile | | | | | × | |
| 177,00 | | | | | | T-Mobile | | | 91'-0" | | · . | 190'-0" |
| 177.00 | | | Platforn | n w/Handr | ails | T-Mobile | | | 85'-0" | HHA | 500 | 7 |
| 177.00 | | | Mount F | Pipes | | T-Mobile | | 12. | 80-0 | *************************************** | f 72" | • |
| 167.00 | | | Mount I | Pipes | | Verizon | | | | | 11 | |
| 167.00 | |) 6 | Andrew | JAHH-65 | B-R3B | Verizon | | | | | | |
| 167.00 | |) 3 | Samsui | ng MT641 | 3-77A | Verizon | | | | 1118111 | | |
| 167.00 | |) 3 | Comms | cope | | Verizon | | | | | | 50'-0'' |
| 167.00 | |) 3 | Comms | cope | | Verizon | | | | | | 3/8" Thick |
| 167.00 | |) 3 | Samsui | ng B2/B66 | A RRH | Verizon | | | | | | (65 KSI) |
| 167.00 | |) 3 | Samsui | ng RF446° | 1d-13A | Verizon | | | | 111111 | | |
| 167.00 | |) 1 | Raycap | ı | | Verizon | | | | [[]] | 1 | |
| 167.00 | |) 2 | RFS DE | 3-T1 - 6Z-8 | AB-0Z | Verizon | | | 48'-0" | 4 | | - F |
| 167.00 | |) 1 | Platforn | n w/Handr | ails | Verizon | | | 41'-0" | | 84" | . 1. 1 |
| 157.00 | |) 2 | Flush M | lount | | DRW Canada | | _ | 7 | 1111111 | î f | |
| 157.00 | |) 1 | | | | DRW Canada | | | | | | |
| 157.00 | |) 1 | VHLPX | 3-6W | | DRW Canada | | | | | l | |
| 157.00 | | | | | | DRW Canada | | | | | I | 48'-0" |
| 145.00 | |) 1 | Comms | cope MC- | PK8-DSH | Dish Wireless | S | | | | l | 48'-0" 7/16" Thick |
| 145.00 | | | Mount I | | | Dish Wireless | s | | | | l | (65 KSI) |
| 145.00 | |) 1 | RDIDC | -9181-PF- | 48 | Dish Wireless | s | | | | l | |
| 145.00 | 145.00 |) 3 | TA0802 | 25-B605 | | Dish Wireless | | | | 1011111 | ı | |
| 145.00 | |) 3 | 3 TA0802 | 25-B604 | | Dish Wireles | | | | | l | |
| 145.00 | 145.00 |) 3 | FFVV-6 | 5B-R2 | | Dish Wireles | | | - 2 | | | |
| 110.00 | 113.0 | 0 2 | 2 Decibe | DB212-1 | | Town of Woo | | | "יטים" | Limm | _ | |
| 110.00 | | | 2 Telewa | ve ANT45 | 0D6-9 | Town of Woo | | | | 4.77 | | , |
| 110.00 | | | | | | Town of Woo | | 100 | 1. C. C. C. C. | | | |
| 110.00 | 110.0 | 0 2 | 2 Antene | x Y1505 | | Town of Woo | odstock | 7 | | | | |

Linear Appurtenances

| Elev From (ft) | To (ft) | Placement | Description | Carrier | |
|-------------------|---------|-----------|-------------|------------------|--|
| 0.00 | 190.00 | | 1 7/8" Coax | Quinebaug Valley | |

Structure: CT08748-A

Type:

Custom

Base Shape: 18 Sided

Site Name: Woodstock 4 CT

1/18/2024

Taper: 0.00000

SBA

Height: 190.00 (ft)

Base Elev: 0.00 (ft)

Page: 3

| 0.00 | 190.00 | Outside | Safety Cable | |
|------|--------|---------|---------------------|-------------------|
| 0.00 | 190.00 | Outside | Step bolts (ladder) | |
| 0.00 | 185.00 | Inside | 1 5/8" Coax | AT&T |
| 0.00 | 177.00 | Inside | 1 5/8" Coax | T-Mobile |
| 0.00 | 177,00 | Inside | 1 5/8" Fiber | T-Mobile |
| 0.00 | 177.00 | Inside | 1.9" Fiber | T-Mobile |
| 0.00 | 167.00 | Inside | 1 1/4" Hybriflex | Verizon |
| 0.00 | 167.00 | Inside | 1 5/8" Coax | Verizon |
| 0.00 | 157.00 | Inside | 1/2" Coax | DRW Canada Co. |
| 0.00 | 157.00 | Inside | 1/4" CAT6 | DRW Canada Co. |
| 0.00 | 157.00 | Inside | 1/4" Copper Power | DRW Canada Co. |
| 0.00 | 145.00 | Inside | 1.6" Hybrid | Dish Wireless |
| 0.00 | 110.00 | Inside | 7/8" Coax | Town of Woodstock |

Anchor Bolts

Grade Qty

Specifications (ksi) Arrangement 2.00" F1554 105 105.0 Radial

Base Plate

| Thickness (in) | Specifications (in) | Grade (ksi) | Geometry | |
|----------------|---------------------|----------------|----------|--|
| 2.2500 | 75.0 | 50.0 | Round | |

| Rea | actions | | | |
|----------------------------------|-----------|--------|--------|--|
| | Moment | Shear | Axial | |
| Load Case | (FT-Kips) | (Kips) | (Kips) | |
| 1.2D + 1.0W 119 mph Wind | 5745.7 | 43.2 | 65.5 | |
| 0.9D + 1.0W 119 mph Wind | 5665.4 | 43.2 | 49.1 | |
| 1.2D + 1.0Di + 1.0Wi 50 mph Wind | 1757.9 | 12.8 | 110.8 | |
| 1.2D + 1.0Ev + 1.0Eh | 134.5 | 8.0 | 67.7 | |
| 0.9D + 1.0Ev + 1.0Eh | 133.2 | 8.0 | 51.2 | |
| 1.0D + 1.0W 60 mph Wind | 1297.4 | 9.8 | 54.6 | |

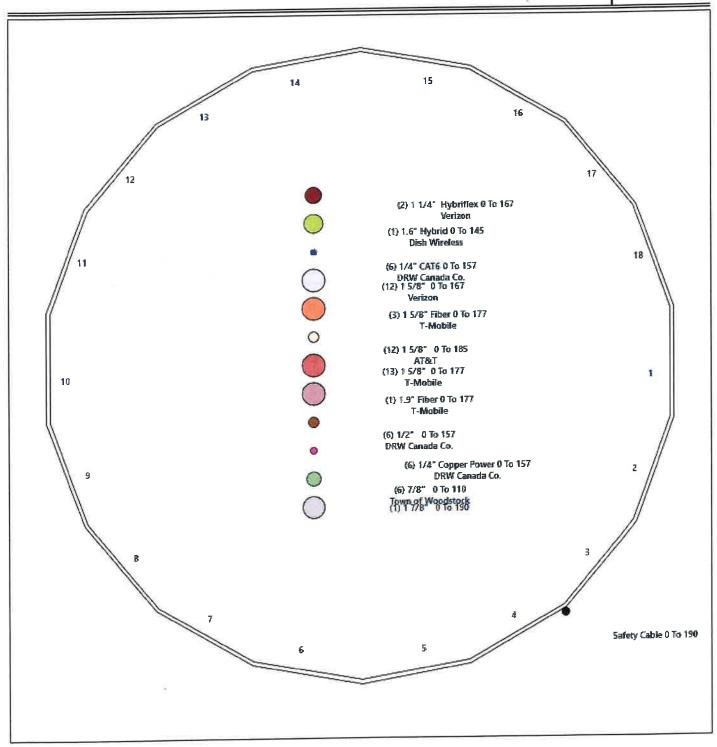
Structure: CT08748-A - Coax Line Placement

Type: Monopole

Site Name: Woodstock 4 CT Height: 190.00 (ft) 1/18/2024

SBA

Page: 4



Shaft Properties

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

Site Name:Woodstock 4 CTExposure:CHeight:190.00 (ft)Crest Height:0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II Page: 5



| Sec. No. | Shape | Length (ft) | Thick (in) | Fy (ksi) | Joint Type | Overlap (in) | Weight (lb) |
|-------------|-------|----------------|---------------|-------------|---------------|-----------------|----------------|
| 1 | 18 | 48.000 | 0.4375 | 65 | | 0.00 | 13,248 |
| 2 | 18 | 50.000 | 0.3750 | 65 | Slip | 84.00 | 9,991 |
| 3 | 18 | 50.000 | 0.3125 | 65 | Slip | 72.00 | 6,694 |
| 4 | 18 | 50.000 | 0.2500 | 65 | Slip | 60.00 | 4,001 |
| 5 | 18 | 10.000 | 0.2813 | 50 | Flange | 0.00 | 720 |
| | | | | | Total Sha | ft Weight: | 34,654 |

| | - | | Вс | ottom | | | | | | | | | |
|-------------|-------------|--------------|----------------|--------------|--------------|--------------|-------------|--------------|----------------|--------------|--------------|--------------|----------|
| Sec. No. | Dia (in) | Elev (ft) | Area (sqin) | lx (in^4) | W/t Ratio | D/t Ratio | Dia (in) | Elev (ft) | Area (sqin) | lx (in^4) | W/t Ratio | D/t Ratio | Taper |
| 1 | 64.50 | 0.00 | 88.96 | 46124.76 | 24.59 | 147.43 | 53.20 | 48.00 | 73.26 | 25769.0 | 20.03 | 121.6 | 0.235417 |
| 2 | 55.60 | 41.00 | 65.73 | 25324.08 | 24.73 | 148.26 | 43,83 | 91.00 | 51.72 | 12336.9 | 19.20 | 116.8 | 0.235417 |
| 3 | 45.86 | 85.00 | 45.18 | 11844.57 | 24.47 | 146.77 | 34.09 | 135.00 | 33.51 | 4830.83 | 17.83 | 109.1 | 0.235417 |
| 4 | 35.77 | 130.0 | 28.18 | 4492.97 | 23.82 | 143.08 | 24.00 | 180.00 | 18.84 | 1343.00 | 15.52 | 96.00 | 0.235417 |
| 5 | 24.00 | 180.0 | 21.17 | 1504.92 | 13.64 | 85.33 | 24.00 | 190.00 | 21.17 | 1504.92 | 13.64 | 85.33 | 0.000000 |

Load Summary

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

Site Name:Woodstock 4 CTExposure:CHeight:190.00 (ft)Crest Height:0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II Page: 6



Discrete Appurtenances

| | | | | | | | Ice | | | | |
|-----|--------------|---------------------------|-----|----------------|--------------|----------------|-------------|--------------|----------------|----------------------|---------------------|
| No. | Elev (ft) | Description | Qty | Weight (lb) | CaAa (sf) | CaAa Factor | Weight (lb) | CaAa (sf) | CaAa Factor | Hor. Ecc. (ft) | Vert Ecc (ft) |
| 1 | | CommScope DB404 | 1 | 14.00 | 5.19 | 1.00 | 125.00 | 6.240 | 1.00 | 0.00 | 3.00 |
| 2 | | Low Profile Platform | 1 | 1250.00 | 14.69 | 1.00 | 2853.98 | 27.257 | 1.00 | 0.00 | 0.00 |
| 3 | | Mount Pipes | 12 | 30.00 | 1.45 | 1.00 | 62.08 | 2.484 | 1.00 | 0.00 | 0.00 |
| 4 | | Powerwave LGP21401 | 6 | 14.10 | 1.29 | 0.50 | 39.63 | 2.143 | 0.50 | 0.00 | 0.00 |
| 5 | | Powerwave LGP21903 | 6 | 5.50 | 0.27 | 0.50 | 14.11 | 0.676 | 0.50 | 0.00 | 0.00 |
| 6 | | ADC CG-1900W800-FULL-DIN | 6 | 16.00 | 0.10 | 0.50 | 16.11 | 0.101 | 0.50 | 0.00 | 0.00 |
| 7 | | Powerwave 7770.00 | 9 | 53.28 | 5.50 | 0.73 | 191.99 | 6.589 | 0.73 | 0.00 | 0.00 |
| 8 | | Ericsson KRY 112 489/2 | 3 | 15.40 | 0.65 | 0.50 | 33.31 | 1.272 | 0.50 | 0.00 | 0.00 |
| 9 | | AIR6419 B41 | 3 | 103.00 | 5.65 | 0.71 | 242.41 | 6.616 | 0.71 | 0.00 | 0.00 |
| 10 | | VV-65A-R1 | 3 | 29.50 | 7.90 | 0.74 | 206.97 | 9.202 | 0.74 | 0.00 | 0.00 |
| 11 | | 4449 B71 + B85 | 3 | 73.20 | 1.97 | 0.50 | 131.91 | 2.549 | 0.50 | 0.00 | 0.00 |
| 12 | | 8843 B25/B66A | 3 | 72.00 | 1.64 | 0.50 | 119.63 | 2.145 | 0.50 | 0.00 | 0.00 |
| 13 | , , | APXVAARR24_43-U-NA20 | 3 | 128.00 | 20.24 | 0.70 | 553.81 | 22.173 | 0.70 | 0.00 | 0.00 |
| 14 | | 782 11056 | 3 | 1.30 | 0.22 | 0.50 | 11.60 | 0.411 | 0.50 | 0.00 | 0.00 |
| 15 | | Platform w/Handrails | 1 | 1604.70 | 21.41 | 1.00 | 3654.75 | 39.645 | 1.00 | 0.00 | 0.00 |
| 16 | , | Mount Pipes | 9 | 30,00 | 0.84 | 1.00 | 61.94 | 1.436 | 1.00 | 0.00 | 0.00 |
| 17 | | Mount Pipes | 12 | 30.00 | 1.00 | 1.00 | 61.75 | 1.706 | 1.00 | 0.00 | 0.00 |
| 18 | | Andrew JAHH-65B-R3B | 6 | 68.56 | 9.10 | 0.83 | 288.68 | 10.423 | 0.84 | 0.00 | 0.00 |
| 19 | | Samsung MT6413-77A | 3 | 57.30 | 3.79 | 0.69 | 149.08 | 4.590 | 0.71 | 0.00 | 0.00 |
| 20 | | Commscope LNX-6514DS-A1M | 3 | 38.80 | 8.17 | 0.83 | 232.80 | 9.444 | 0.84 | 0.00 | 0.00 |
| 21 | | Commscope CBC78T-DS-43-2X | 3 | 20.72 | 0.56 | 0.50 | 39.43 | 0.880 | 0.50 | 0.00 | 0.00 |
| 22 | | Samsung B2/B66A RRH ORAN | 3 | 74.71 | 1.87 | 0.84 | 125.79 | 2.419 | 0.85 | 0.00 | 0.00 |
| 23 | | Samsung RF4461d-13A | 3 | 72.50 | 1.87 | 0.84 | 123.86 | 2.419 | 0.85 | 0.00 | 0.00 |
| 24 | | Raycap RRFDC-6627-PF-48 | 1 | 32.00 | 4.06 | 1.00 | 147.29 | 4.885 | 1.00 | 0.00 | 0.00 |
| 25 | | RFS DB-T1-6Z-8AB-0Z | 2 | 44.00 | 4.80 | 1.00 | 160.37 | 5.657 | 1.00 | 0.00 | 0.00 |
| 26 | | Platform w/Handrails | 1 | 1794.00 | 22.60 | 1.00 | 4072.59 | 41.736 | 1.00 | 0.00 | 0.00 |
| 27 | | Flush Mount | 2 | 350.00 | 5.00 | 1.00 | 644.54 | 8.506 | 1.00 | 0.00 | 0.00 |
| 28 | | SUX6-65B | 1 | 209.00 | 35.67 | 1.00 | 922.34 | 39.172 | 1.00 | 0.00 | 0.00 |
| 29 | | VHLPX3-6W | 1 | 53.00 | 10.68 | 1.00 | 271.51 | 12.605 | 1.00 | 0.00 | 0.00 |
| 30 | 157.00 | | 4 | 7.70 | 1.22 | 0.50 | 32.86 | 2.018 | 0.50 | 0.00 | 0.00 |
| 31 | | Commscope MC-PK8-DSH | 1 | 1801.56 | 33.69 | 1.00 | 4057.66 | 61.817 | 1.00 | 0.00 | 0.00 |
| 32 | | Mount Pipes | 3 | 30.00 | 1.12 | 1.00 | 61.31 | 1.899 | 1.00 | 0.00 | 0.00 |
| 33 | | RDIDC-9181-PF-48 | 1 | 21.90 | 2.01 | 1.00 | 74.97 | 2.576 | 1.00 | 0.00 | 0.00 |
| 34 | | TA08025-B605 | 3 | 75.00 | 1.96 | 0.50 | 127.13 | 2.519 | 0.50 | 0.00 | 0.00 |
| 35 | | TA08025-B604 | 3 | 63.90 | 1.96 | 0.50 | 114.36 | 2.519 | 0.50 | 0.00 | 0.00 |
| 36 | | FFVV-65B-R2 | 3 | 70.80 | 12.27 | 0.74 | 355.01 | 13.721 | 0.74 | 0.00 | 0.00 |
| 37 | | Decibel DB212-1 | 2 | 31.00 | 6.50 | 1.00 | 269.96 | 40.579 | 1.00 | 0.00 | 3.00 |
| 38 | | Telewave ANT450D6-9 | 2 | 18.00 | 2.77 | 1.00 | 98.01 | 5.708 | 1.00 | 0.00 | 2.00 |
| 39 | | Flush Mount | 1 | 350.00 | 5.00 | 1.00 | 634.24 | 8.384 | 1.00 | 0.00 | 0.00 |
| 40 | | Antenex Y1505 | 2 | 5.00 | 3.60 | 1.00 | 56.73 | 8.307 | 1.00 | 0.00 | 0.00 |

Totals: 138 12,929.83 33,212.65

Linear Appurtenances

| Bottom Elev. (ft) | Top Elev. (ft) | Description | Exposed Width | Exposed | |
|-------------------------|----------------------|-----------------|------------------|---------|--|
| 0.00 | 190.00 | (1) 1 7/8" Coax | 0.00 | Inside | |

Discrete Appurtenances

| | | | | | No Ice | | | Ice | | | |
|------|--------------|-------------------------|-----|-------------|--------------|----------------|-------------|--------------|----------------|----------------------|---------------------|
| | Elev (ft) | Description | Qty | Weight (lb) | CaAa (sf) | CaAa Factor | Weight (lb) | CaAa (sf) | CaAa Factor | Hor. Ecc. (ft) | Vert Ecc (ft) |
| 0.00 | 190.00 | (1) Safety Cable | | 0. | 38 | Outside | | | | | |
| 0.00 | 190.00 | (1) Step bolts (ladder) | | 0. | 63 | Outside | | | | | |
| 0.00 | 185.00 | (12) 1 5/8" Coax | | 0. | 00 | Inside | | | | | |
| 0.00 | 177.00 | (13) 1 5/8" Coax | | 0. | 00 | Inside | | | | | |
| 0.00 | 177.00 | (3) 1 5/8" Fiber | | | 00 | Inside | | | | | |
| 0.00 | 177.00 | (1) 1.9" Fiber | | | 00 | Inside | | | | | |
| 0.00 | 167.00 | (2) 1 1/4" Hybriflex | | 0. | 00 | Inside | | | | | |
| 0.00 | 167.00 | (12) 1 5/8" Coax | | 0. | 00 | Inside | | | | | |
| 0.00 | 157.00 | (6) 1/2" Coax | | 0. | 00 | Inside | | | | | |
| 0.00 | 157.00 | (6) 1/4" CAT6 | | 0. | 00 | Inside | | | | | |
| 0.00 | 157.00 | (6) 1/4" Copper Power | | 0. | 00 | Inside | | | | | |
| 0.00 | 145.00 | (1) 1.6" Hybrid | | | 00 | Inside | | | | | |
| 0.00 | 110.00 | (6) 7/8" Coax | | | 00 | Inside | | | | | |

Shaft Section Properties

1/18/2024 TIA-222-H Code: CT08748-A Structure:

С Exposure: Site Name: Woodstock 4 CT Crest Height: 0.00 190.00 (ft) Height:

5 (ft)

Increment Length:

D - Stiff Soil Site Class: Base Elev: 0.000 (ft)

Gh:

Page: 8 Struct Class: || Topography: 1 1.1



| Elev | | Thick | Dia | Area (in^2) | lx (in^4) | W/t Ratio | D/t Ratio | Fpy (ksi) | S (in^3) | Weight (lb) |
|--------|-----------------|------------------|------------------|------------------|------------------|--------------|--------------|--------------|-------------|----------------|
| (ft) | Description | (in) | (in) 64.500 | 88.956 | 46124.8 | 24.59 | 147.43 | | 1408. | 0.0 |
| 0.00 | | 0.4375 | 63.323 | 87.321 | 43628.7 | 24.11 | 144.74 | | 1357. | 1499.6 |
| 5.00 | | 0.4375 | 62.146 | 85.687 | 41224.4 | 23.64 | 142.05 | | 1306. | 1471.8 |
| 10.00 | | 0.4375 | 60.969 | 84.052 | 38910.0 | 23.16 | 139.36 | | 1257. | 1444.0 |
| 15.00 | | 0.4375 | 59.792 | 82,418 | 36683.9 | 22.69 | 136.67 | | 1208. | 1416.2 |
| 20.00 | | 0.4375 0.4375 | 58.615 | 80.783 | 34544.4 | 22.21 | 133.98 | | 1160. | 1388.3 |
| 25.00 | | | 57.437 | 79.149 | 32489.8 | 21.74 | 131.29 | | 1114. | 1360.5 |
| 30.00 | | 0.4375 | 56,260 | 77.514 | 30518.3 | 21.26 | 128.60 | | 1068. | 1332.7 |
| 35.00 | | 0.4375 | 55.083 | 75.880 | 28628.2 | 20.79 | 125.90 | | 1023. | 1304.9 |
| 40.00 | | 0.4375 | 54.848 | 75.553 | | 20.69 | 125.37 | | 1014. | 257.6 |
| 41.00 | Bot - Section 2 | 0.4375 | 53.906 | 74.245 | 26817.8 | 20.32 | 123.21 | | 979.9 | 1906.4 |
| 45.00 | | 0.4375 | 53.950 | | 23124.0 | 23.96 | 143.87 | 0.0 | 0.0 | 1408.1 |
| 48.00 | Top - Section 1 | 0.3750 | 53.479 | 63.205 | 22519.6 | 23.74 | 142.61 | | 829.4 | 432.1 |
| 50.00 | | 0.3750 | 52.302 | | 21055.1 | 23.18 | 139.47 | | 792.9 | 1063.4 |
| 55.00 | | 0.3750 | 51.125 | 60.403 | 19655.5 | 22.63 | 136.33 | | 757.2 | 1039.6 |
| 60.00 | | 0.3750 | 49.948 | | 18319.3 | 22.08 | 133.19 | | 722.4 | 1015.8 |
| 65.00 | | 0.3750 | 49.946 | 57.601 | 17045.1 | 21.52 | 130.06 | | 688.4 | 991.9 |
| 70.00 | | 0.3750 | | 56.200 | 15831.4 | 20.97 | 126.92 | • | 655.2 | 968.1 |
| 75.00 | | 0.3750 | 47.594 | 54.799 | 14676.7 | 20.41 | 123.78 | | 622.8 | 944.3 |
| 80.00 | | 0.3750 | 46.417 | 53.398 | 13579.6 | 19.86 | 120.64 | | 591.2 | 920.4 |
| 85.00 | Bot - Section 3 | 0.3750 | 45.240 44.062 | 51.997 | 12538.5 | 19.31 | 117.50 | | 560.5 | 1655.4 |
| 90,00 | | 0.3750 | | 43.779 | 10776.5 | 23.67 | 142.25 | 0.0 | 0.0 | 325.8 |
| 91.00 | Top - Section 2 | 0.3125 | 44.452 43.510 | 42.845 | 10170.3 | 23.14 | 139.23 | | 457.3 | 589.5 |
| 95.00 | | 0.3125 | | 41.678 | 9298.0 | 22.48 | 135.47 | | 432.6 | 719.0 |
| 100.00 | | 0.3125 | 42.333 | 40.510 | 8538.3 | 21.81 | 131.70 | | 408.6 | 699.2 |
| 105.00 | | 0.3125 | 41.156 | 39.343 | 7821.2 | 21.15 | 127.93 | | 385.3 | 679.3 |
| 110.00 | | 0.3125 | 39.979 | 38.175 | 7145.4 | 20.48 | 124.17 | | 362.7 | 659.4 |
| 115.00 | | 0.3125 | 38.802 | 37.008 | 6509.6 | 19.82 | 120.40 | | 340.8 | 639.6 |
| 120.00 | | 0.3125 | 37.625 | 35.841 | 5912.8 | 19.15 | 116.63 | | 319.5 | 619.7 |
| 125.00 | | 0.3125 | 36.448 | | 5353.6 | 18.49 | 112.87 | | 299.0 | 599.9 |
| 130,00 | Bot - Section 4 | 0.3125 | 35.271 | 34.673 27.251 | 4060.9 | 22.99 | 138.37 | 0.0 | 0.0 | 1051.6 |
| 135.00 | Top - Section 3 | 0.2500 | 34.594 | 26.317 | 3657.5 | 22.16 | 133.67 | | 215.6 | 455.7 |
| 140.00 | | 0.2500 | 33.417 | 25.383 | 3281.8 | 21.33 | 128.96 | | 200.5 | 439.8 |
| 145.00 | | 0.2500 | 32.240 | 25.363 | 2932.7 | 20.50 | 124.25 | | 186.0 | 423.9 |
| 150.00 | | 0.2500 | 31.062 | 23.515 | 2609.3 | 19.67 | 119.54 | | 172.0 | 408.0 |
| 155.00 | | 0.2500 | 29.885 | | 2486.9 | 19.34 | 117.66 | | 166.5 | 158.8 |
| 157.00 | | 0.2500 | 29.415 | 23.141 | 2310.5 | 18.84 | 114.83 | | 158.5 | 233.4 |
| 160.00 | | 0.2500 | 28.708 | 22.581 | 2035.5 | 18.01 | 110.12 | | 145.6 | 376.2 |
| 165.00 | | 0.2500 | 27.531 | 21.647 | 1931.9 | 17.68 | 108.24 | | 140.6 | 146.0 |
| 167.00 | | 0.2500 | 27,060 | 21.273 | 1783.3 | 17.08 | 105.42 | | 133.3 | 214.3 |
| 170.00 | | 0.2500 | 26.354 | 20.713 | | 16.35 | 100.71 | | 121.5 | 344.5 |
| 175.00 | | 0.2500 | 25.177 | 19.779 | 1552.7 1466.4 | 16.01 | 98.82 | | 116.9 | 133.3 |
| 177.00 | | 0.2500 | 24.706 | 19.405 | | 15.52 | 96.02 | | 110.2 | 195.2 |
| 180.00 | Top - Section 4 | 0.2500 | 24.000 | 18.845 | 1343.0 | 13.79 | 85.33 | | 123.5 | 100.2 |
| 180.00 | Bot - Section 5 | 0.2813 | 24.000 | 21.173 | 1504.9 | 13.79 | 85.33 | | 123.5 | 360.2 |
| 185.00 | | 0.2813 | 24.000 | 21.173 | 1504.9 | 13.64 | 85.33 | | 123.5 | 360.2 |
| 190.00 | | 0.2813 | 24.000 | 21.173 | 1504.9 | 13.04 | 00.00 | 00.0 | 120.0 | 34653.9 |
| | | | | | | | | | | 34003.9 |

Wind Loading - Shaft

Structure: CT08748-A

J100/40-A

Site Name: Woodstock 4 CT

Height:

190.00 (ft)

190.00 (11)

Base Elev: 0.000 (ft)

Gh: 1

1.1

ft)

Code:

TIA-222-H

Exposure: C

Crest Height: 0.00

Site Class: D - Stiff Soil

Struct Class: ||

Page: 9

1/18/2024

Iterations

26

Load Case: 1.2D + 1.0W 119 mph Wind

Dead Load Factor

1.20

Topography: 1

Wind Load Factor 1.00

| Elev | | | | qz | qzGh | С | | Ice Thick | Tributary | Aa | CfAa | Wind Force X | Dead Load Ice | Tot Dead Load |
|--------------|--------------|------|------|--------|-------|----------|-------|--------------|-----------|--------|-------|-----------------|------------------|---------------------|
| (ft) | Description | Kzt | Kz | (psf) | (psf) | (mph-ft) | Cf | (in) | (ft) | (sf) | (sf) | (lb) | (lb) | (lb) |
| 0.00 | | 1.00 | 0.85 | 28.420 | 31.26 | 590.01 | 0.730 | 0.000 | 0.00 | 0.000 | 0.00 | 0.0 | 0.0 | 0.0 |
| 5.00 | | 1.00 | 0.85 | 28.420 | 31.26 | 579.24 | 0.730 | 0.000 | 5.00 | 27.041 | 19.74 | 617.1 | 0.0 | 1799.5 |
| 10.00 | | 1.00 | 0.85 | 28.420 | 31.26 | 568.48 | 0.730 | 0.000 | | 26.543 | 19.38 | 605.7 | 0.0 | 1766.1 |
| 15.00 | | 1.00 | 0.85 | 28.420 | 31.26 | 557.71 | 0.730 | 0.000 | 5.00 | 26.045 | 19.01 | 594.4 | 0.0 | 1732.8 |
| 20.00 | | 1.00 | 0.90 | 30.155 | 33.17 | 563.39 | 0.730 | 0.000 | 5.00 | 25.547 | 18.65 | 618.6 | 0.0 | 1699.4 |
| 25.00 | | 1.00 | 0.95 | 31.606 | 34.77 | 565.42 | 0.730 | 0.000 | | 25.049 | 18.29 | 635.7 | 0.0 | 1666.0 |
| 30.00 | | 1.00 | 0.98 | 32.842 | 36.13 | 564.81 | 0.730 | 0.000 | 5.00 | 24.550 | 17.92 | 647.5 | 0.0 | 1632.6 |
| 35.00 | | 1.00 | 1.01 | 33.926 | 37.32 | 562.28 | 0.730 | 0.000 | 5.00 | 24.052 | 17.56 | 655.2 | 0.0 | 1599.3 |
| 40.00 | | 1.00 | 1.04 | 34.893 | 38.38 | 558.31 | 0.730 | 0.000 | 5.00 | 23.554 | 17.19 | 660.0 | 0.0 | 1565.9 |
| 41.00 Bot - | Section 2 | 1.00 | 1.05 | 35.075 | 38.58 | 557.37 | 0.730 | 0.000 | 1.00 | 4.651 | 3.40 | 131.0 | 0.0 | 309.2 |
| 45.00 | | 1.00 | 1.07 | 35.769 | 39.35 | 553.19 | 0.730 | 0.000 | 4.00 | 18.659 | 13.62 | 535.9 | 0.0 | 2287.7 |
| 48.00 Top | - Section 1 | 1.00 | 1.08 | 36.258 | 39.88 | 549.67 | 0.730 | 0.000 | 3.00 | 13.785 | 10.06 | 401.4 | 0.0 | 1689.8 |
| 50.00 | | 1.00 | | 36.571 | 40.23 | 554.93 | 0.730 | 0.000 | 2.00 | 9.091 | 6.64 | 267.0 | 0.0 | 518.5 |
| 55.00 | | 1.00 | 1.12 | 37.313 | 41.04 | 548.19 | 0.730 | 0.000 | 5.00 | 22.378 | 16.34 | 670.5 | 0.0 | 1276.1 |
| 60.00 | | 1.00 | 1.14 | 38.002 | 41.80 | 540.78 | 0.730 | 0.000 | 5.00 | 21.880 | 15.97 | 667.7 | 0.0 | 1247.5 |
| 65.00 | | 1.00 | 1.16 | 38.648 | 42.51 | 532.80 | 0.730 | 0.000 | 5.00 | 21.382 | 15.61 | 663.6 | 0.0 | 1218.9 |
| 70.00 | | 1.00 | 1.17 | 39.256 | 43.18 | 524.32 | 0.730 | 0.000 | 5.00 | 20.884 | 15.25 | 658.3 | 0.0 | 1190.3 |
| 75.00 | | 1.00 | | 39,830 | 43.81 | 515.40 | 0.730 | 0.000 | 5.00 | 20.386 | 14.88 | 652.0 | 0.0 | 1161.7 |
| 80.00 | | 1.00 | | 40.375 | 44.41 | 506.08 | 0.730 | 0.000 | 5.00 | 19.888 | 14.52 | 644.8 | 0.0 | 1133.1 |
| 85.00 Bot - | Section 3 | 1.00 | 1.22 | 40.894 | 44.98 | 496.40 | 0.730 | 0.000 | 5.00 | 19.390 | 14.15 | 636.7 | 0.0 | 1104.5 |
| 90.00 | | 1.00 | | 41.389 | 45.53 | 486.40 | 0.730 | 0.000 | 5.00 | 19.156 | 13.98 | 636.7 | 0.0 | 1986.4 |
| 91.00 Top - | - Section 2 | 1.00 | | 41.485 | 45.63 | 484.37 | 0.730 | 0.000 | 1.00 | 3.771 | 2.75 | 125.6 | 0.0 | 391.0 |
| 95.00 | | 1.00 | | 41.863 | 46.05 | 483.05 | 0.730 | 0.000 | 4.00 | 14.887 | 10.87 | 500.4 | 0.0 | 707.4 |
| 100.00 | | 1.00 | | 42.317 | 46.55 | 472.53 | 0.730 | 0.000 | 5.00 | 18.160 | 13.26 | 617.1 | 0.0 | 862.8 |
| 105.00 | | 1.00 | | 42.754 | 47.03 | 461.75 | 0.730 | 0.000 | 5.00 | 17.662 | 12.89 | 606.4 | 0.0 | 839.0 |
| 110.00 Appu | irtenance(s) | 1.00 | | 43.175 | 47.49 | 450.75 | 0.730 | 0.000 | 5.00 | 17.164 | 12.53 | 595.1 | 0.0 | 815.2 |
| 115.00 | | 1.00 | | 43.581 | 47.94 | 439.53 | 0.730 | 0.000 | 5.00 | 16.666 | 12.17 | 583.2 | 0.0 | 791.3 |
| 120.00 | | 1.00 | | 43,973 | 48.37 | 428.11 | 0.730 | 0.000 | 5.00 | 16.168 | 11.80 | 570.9 | 0.0 | 767.5 |
| 125.00 | • | 1.00 | | 44.352 | 48.79 | 416.50 | 0.730 | 0.000 | 5.00 | 15.670 | 11.44 | 558.1 | 0.0 | 743.7 |
| 130.00 Bot - | | 1.00 | | 44.720 | 49.19 | 404.72 | 0.730 | 0.000 | 5.00 | 15,172 | 11.08 | 544.8 | 0.0 | 719.8 |
| 135.00 Top - | Section 3 | 1.00 | | 45.077 | 49.58 | 392.77 | 0.730 | 0.000 | 5.00 | 14.885 | 10.87 | 538.8 | 0.0 | 1261.9 |
| 140.00 | | 1.00 | | 45.423 | 49.97 | 386.45 | 0.730 | 0.000 | 5.00 | 14.387 | 10.50 | 524.8 | 0,0 | 546.8 |
| 145.00 Appu | rtenance(s) | 1.00 | | 45.760 | 50.34 | 374.21 | 0.730 | 0.000 | 5.00 | 13.889 | 10.14 | 510.4 | 0.0 | 527.8 |
| 150.00 | | 1.00 | | 46.088 | 50.70 | 361.84 | 0.730 | 0.000 | 5.00 | 13.391 | 9.78 | 495.6 | 0.0 | 508.7 |
| 155.00 | | 1.00 | | 46.407 | 51.05 | 349.33 | 0.730 | 0.000 | 5.00 | 12.893 | 9.41 | 480.5 | 0.0 | 489.6 |
| 157.00 Appu | rtenance(s) | 1.00 | | 46.533 | 51.19 | 344.29 | 0.730 | 0.000 | 2.00 | 5.018 | 3.66 | 187.5 | 0.0 | 190.5 |
| 160.00 | | 1.00 | | 46.718 | 51.39 | 336.70 | 0.730 | 0.000 | 3.00 | 7.377 | 5.39 | 276.8 | 0.0 | 280.0 |
| 165.00 | | 1.00 | | 47.022 | 51.72 | 323.94 | 0.730 | 0.000 | 5.00 | 11.897 | 8.69 | 449.2 | 0.0 | 451.5 |
| 167.00 Appu | rtenance(s) | 1.00 | | 47.141 | 51.86 | 318.80 | 0.730 | 0.000 | 2.00 | 4.619 | 3.37 | 174.9 | 0.0 | 175.3 |
| 170.00 | | 1.00 | | 47.318 | 52.05 | 311.06 | 0.730 | 0.000 | 3.00 | 6.780 | 4.95 | 257.6 | 0.0 | 257.2 |
| 175.00 | | 1.00 | | 47.608 | 52.37 | 298.08 | 0.730 | 0.000 | 5.00 | 10.901 | 7.96 | 416.7 | 0.0 | 413.4 |
| 177.00 Appu | () | 1.00 | | 47.722 | 52.49 | 292.85 | 0.730 | 0.000 | 2.00 | 4.221 | 3.08 | 161.8 | 0.0 | 160.0 |
| 180.00 Top - | | 1.00 | | 47.891 | 52.68 | 284.99 | 0.730 | 0.000 | 3.00 | 6.182 | 4.51 | 237.7 | 0.0 | 234.3 |
| 185.00 Appu | | 1.00 | | 48.168 | 52.99 | 285.81 | 0.730 | 0.000 | 5.00 | 10.154 | 7.41 | 392.8 | 0.0 | 432.3 |
| 190.00 Appu | rtenance(s) | 1.00 | 1.45 | 48.440 | 53.28 | 286.61 | 0.730 | 0.000 | 5.00 | 10.154 | 7.41 | 395.0 | 0.0 | 432.3 |
| | | | | | | | | Totals: | 190.00 | | | 21,801.2 | _ | 41,584.7 |

Discrete Appurtenance Forces

CT08748-A Structure:

TIA-222-H Code:

Site Name: Woodstock 4 CT

190.00 (ft)

С Exposure: Crest Height: 0.00

Height: Base Elev: 0.000 (ft)

Site Class: D - Stiff Soil

Gh: 1.1

Struct Class: II Topography: 1

SBA

Load Case: 1.2D + 1.0W 119 mph Wind

1.20 **Dead Load Factor** 1.00 **Wind Load Factor**



1/18/2024

Page: 10

Iterations

26

| | | | | | | Orient | | Total | Dead | Horiz Ecc | Vert Ecc | Wind FX | Mom Y | Mom Z |
|-----|-------------|--------------------------|-----|-------------|---------------|----------------|--------|--------------|--------------|--------------|-------------|------------|----------|----------|
| N. | Elev | Description | Qty | qz (psf) | qzGh (psf) | Factor x Ka | Ka | CaAa (sf) | Load (lb) | (ft) | (ft) | (lb) | (lb-ft) | (lb-ft) |
| No. | (ft) | Description | 1 | 48.600 | 53.460 | 1.00 | 1.00 | 5.19 | 16.80 | 0.000 | 3.000 | 277,45 | 0.00 | 832.36 |
| 1 | 190.00 | werwave 7770.00 | 9 | 48.168 | 52.985 | 0.58 | 0.80 | 28.91 | 575.42 | 0.000 | 0.000 | 1531,70 | 0.00 | 0.00 |
| 2 | 185,00 AD0 | | 6 | 48.168 | 52.985 | 0.40 | 0.80 | 0.24 | 115.20 | 0.000 | 0.000 | 12.72 | 0.00 | 0.00 |
| 4 | | verwave LGP21903 | 6 | | 52.985 | 0.40 | 0.80 | 0.65 | 39.60 | 0.000 | 0.000 | 34.33 | 0.00 | 0.00 |
| 5 | | werwave LGP21401 | 6 | | 52.985 | 0.40 | 0.80 | 3.10 | 101.52 | 0.000 | 0.000 | 164.04 | 0.00 | 0.00 |
| 6 | 185.00 Mou | | 12 | 48.168 | 52.985 | 0.80 | 0.80 | 13.92 | 432.00 | 0.000 | 0.000 | 737.55 | 0.00 | 0.00 |
| 7 | | v Profile Platform | 1 | | 52.985 | 1.00 | 1.00 | 14.69 | 1500.00 | 0.000 | 0.000 | 778.35 | 0.00 | 0.00 |
| 8 | 177.00 VV- | | 3 | 47.722 | 52.494 | 0.55 | 0.75 | 13.15 | 106.20 | 0.000 | 0.000 | 690.48 | 0.00 | 0.00 |
| 9 | | 19 B71 + B85 | 3 | 47.722 | 52.494 | 0.38 | 0.75 | 2.22 | 263.52 | 0.000 | 0.000 | 116.34 | 0.00 | 0.00 |
| 10 | 177.00 AIR | | 3 | 47.722 | 52.494 | 0.53 | 0.75 | 9.03 | 370.80 | 0.000 | 0.000 | 473.81 | 0.00 | 0.00 |
| 11 | | esson KRY 112 489/2 | 3 | 47.722 | 52.494 | 0.38 | 0.75 | 0.73 | 55.44 | 0.000 | 0.000 | 38.39 | 0.00 | 0.00 |
| 12 | 177.00 782 | | 3 | 47.722 | | 0.38 | 0.75 | 0.25 | 4.68 | 0.000 | 0.000 | 12.99 | 0.00 | 0.00 |
| 13 | | 3 B25/B66A | 3 | 47.722 | 52.494 | 0.38 | 0.75 | 1.84 | 259.20 | 0.000 | 0.000 | 96.85 | 0.00 | 0.00 |
| 14 | | XVAARR24 43-U-NA2 | 3 | 47,722 | | 0.52 | 0.75 | 31.88 | 460.80 | 0.000 | 0.000 | 1673.41 | 0.00 | 0.00 |
| 15 | | tform w/Handrails | 1 | 47.722 | 52.494 | 1.00 | 1.00 | 21,41 | 1925.64 | 0.000 | 0.000 | 1123.90 | 0.00 | 0.00 |
| 16 | 177.00 Mou | | 9 | 47.722 | 52.494 | 0.75 | 0.75 | 5.67 | 324.00 | 0.000 | 0.000 | 297.64 | 0.00 | 0.00 |
| 17 | | tform w/Handrails | 1 | 47.141 | 51.856 | 1.00 | 1.00 | 22.60 | 2152.80 | 0.000 | 0.000 | 1171.94 | 0.00 | 0.00 |
| 18 | , | S DB-T1-6Z-8AB-0Z | 2 | 47.141 | 51.856 | 1.00 | 1.00 | 9.60 | 105.60 | 0.000 | 0.000 | 497.81 | 0.00 | 0.00 |
| 19 | 167.00 Ray | | 1 | 47.141 | 51.856 | 1.00 | 1.00 | 4.06 | 38.40 | 0.000 | 0.000 | 210.53 | 0.00 | 0.00 |
| 20 | | nsung RF4461d-13A | 3 | 47.141 | 51,856 | 0.63 | 0.75 | 3.53 | 261.00 | 0.000 | 0.000 | 183.27 | 0.00 | 0.00 |
| 21 | | nsung B2/B66A RRH | 3 | 47.141 | 51.856 | 0.63 | 0.75 | 3.53 | 268.96 | 0.000 | 0.000 | 183.27 | 0.00 | 0.00 |
| 22 | 167.00 Cor | • | 3 | 47.141 | 51.856 | 0.62 | 0.75 | 15.26 | 139.68 | 0.000 | 0.000 | 791.18 | 0.00 | 0.00 |
| 23 | | nsung MT6413-77A | 3 | 47.141 | 51.856 | 0.52 | 0.75 | 5.88 | 206.28 | 0.000 | 0.000 | 305.12 | 0.00 | 0.00 |
| 24 | | rew JAHH-65B-R3B | 6 | 47.141 | 51.856 | 0.62 | 0.75 | 33.99 | 493.63 | 0.000 | 0.000 | 1762.49 | 0.00 | 0.00 |
| 25 | 167.00 Moi | | 12 | 47.141 | 51.856 | 0.75 | 0.75 | 9.00 | 432.00 | 0.000 | 0.000 | 466.70 | 0.00 | 0.00 |
| 26 | 167.00 Mor | ' | 3 | 47.141 | 51.856 | 0.38 | 0.75 | 0.63 | 74.59 | 0.000 | 0.000 | 32.67 | 0.00 | 0.00 |
| 27 | 157.00 SAF | | 4 | 46.533 | 51.186 | 0.50 | 1.00 | 2.44 | 36.96 | 0.000 | 0.000 | 124.89 | 0.00 | 0.00 |
| 28 | 157.00 UAI | | 1 | 46.533 | 51.186 | 1.00 | 1.00 | 10.68 | 63.60 | 0.000 | 0.000 | 546.66 | 0.00 | 0.00 |
| 29 | 157.00 VIII | | 1 | | 51.186 | 1.00 | 1.00 | 35.67 | 250.80 | 0.000 | 0.000 | 1825.80 | 0.00 | 0.00 |
| 30 | 157.00 Flus | | 2 | 46.533 | 51.186 | 1.00 | 1.00 | 10.00 | 840.00 | 0.000 | 0.000 | 511.86 | 0.00 | 0.00 |
| 31 | 145.00 Moi | | 3 | 45.760 | 50.336 | 0.75 | 0.75 | 2.52 | 108.00 | 0.000 | 0.000 | 126.85 | 0.00 | 0.00 |
| 32 | | IDC-9181-PF-48 | 1 | 45.760 | 50.336 | 1.00 | 1.00 | 2.01 | 26.28 | 0.000 | 0.000 | 101.18 | 0.00 | 0.00 |
| 33 | 145.00 Cor | | 1 | 45.760 | 50.336 | 1.00 | 1.00 | 33.69 | 2161.87 | 0.000 | 0.000 | 1695.82 | 0.00 | 0.00 |
| 34 | 145.00 CG | ' | 3 | 45,760 | 50.336 | 0.55 | 0.75 | 20.43 | 254.88 | 0.000 | 0.000 | 1028.34 | 0.00 | 0.00 |
| 35 | | 08025-B605 | 3 | | 50.336 | 0.38 | 0.75 | 2.21 | 270.00 | 0.000 | 0.000 | 110.99 | 0.00 | 0.00 |
| 36 | | 08025-B603 08025-B604 | 3 | 45.760 | 50.336 | 0.38 | 0.75 | 2.21 | 230.04 | 0.000 | 0.000 | 110.99 | 0.00 | 0.00 |
| 37 | | tenex Y1505 | 2 | | 47.492 | 1.00 | 1.00 | 7.20 | 12.00 | 0.000 | 0.000 | 341.94 | 0.00 | 0.00 |
| 38 | 110.00 And | | 1 | 1930 | 47.492 | 1.00 | 1.00 | 5.00 | 420,00 | 0.000 | 0.000 | 237.46 | 0.00 | 0.00 |
| 39 | | ewave ANT450D6-9 | 2 | 43.339 | 47.673 | 1.00 | 1.00 | 5.54 | 43.20 | 0.000 | 2.000 | 264.11 | 0.00 | 528.21 |
| _40 | | cibel DB212-1 | 2 | 43.420 | | 1.00 | 1.00 | 13.00 | 74.40 | 0.000 | 3.000 | 620.91 | 0.00 | 1862.72 |
| 40 | TIV.OU DEC | | | | | | Totals | : | 15,515.80 | | 2 | 21,312.77 | | |

Total Applied Force Summary

Structure: CT08748-A

Site Name: Woodstock 4 CT

190.00 (ft)

Base Elev: 0.000 (ft)

Gh:

Height:

1.1

Code: Exposure: TIA-222-H

1/18/2024

Crest Height: 0.00

Site Class:

Struct Class: ||

С

D - Stiff Soil

Page: 11



Load Case: 1.2D + 1.0W 119 mph Wind

Dead Load Factor

1.20

Topography: 1

Wind Load Factor

1.00

Iterations 26

| Elev | | Lateral FX (-) | Axial FY (-) | Torsion MY | Moment MZ | |
|--------|------------------|-------------------|-----------------|---------------|--------------|--|
| (ft) | Description | (lb) | (lb) | (lb-ft) | (lb-ft) | |
| 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5.00 | | 617.11 | 2050.55 | 0.00 | 0.00 | |
| 10.00 | | 605.74 | 2017,18 | 0.00 | 0.00 | |
| 15.00 | | 594.38 | 1983.81 | 0.00 | 0.00 | |
| 20.00 | | 618.60 | 1950.44 | 0.00 | 0.00 | |
| 25.00 | | 635.72 | 1917.07 | 0.00 | 0.00 | |
| 30.00 | | 647.46 | 1883.70 | 0.00 | 0.00 | |
| 35.00 | | 655.25 | 1850.33 | 0.00 | 0.00 | |
| 40.00 | | 659.97 | 1816.96 | 0.00 | 0.00 | |
| 41.00 | | 131.00 | 359.39 | 0.00 | 0.00 | |
| 45.00 | | 535.94 | 2488.58 | 0.00 | 0.00 | |
| 48.00 | | 401.36 | 1840.41 | 0.00 | 0.00 | |
| 50.00 | | 266.96 | 618.89 | 0.00 | 0.00 | |
| 55.00 | | 670.48 | 1527.19 | 0.00 | 0.00 | |
| 60.00 | | 667.68 | 1498.59 | 0.00 | 0.00 | |
| 65.00 | | 663.57 | 1469.98 | 0.00 | 0.00 | |
| 70.00 | | 658.30 | 1441.38 | 0.00 | 0.00 | |
| 75.00 | | 652.01 | 1412.78 | 0.00 | 0.00 | |
| 80.00 | | 644.78 | 1384.17 | 0.00 | 0.00 | |
| 85.00 | | 636.71 | 1355.57 | 0.00 | 0.00 | |
| 90.00 | | 636.65 | 2237.48 | 0.00 | 0.00 | |
| 91.00 | | 125.64 | 441.20 | 0.00 | 0.00 | |
| 95.00 | | 500.42 | 908.28 | 0.00 | 0.00 | |
| 100.00 | | 617.09 | 1113.90 | 0.00 | 0.00 | |
| 105.00 | | 606.36 | 1090.06 | 0.00 | 0.00 | |
| 110.00 | (7) attachments | 2059.48 | 1615.83 | 0.00 | 2390.93 | |
| 115.00 | | 583.23 | 1023.67 | 0.00 | 0.00 | |
| 120.00 | | 570.89 | 999.84 | 0.00 | 0.00 | |
| 125.00 | | 558.08 | 976.00 | 0.00 | 0.00 | |
| 130.00 | | 544.83 | 952.16 | 0.00 | 0.00 | |
| 135.00 | | 538.80 | 1494.23 | 0.00 | 0.00 | |
| 140.00 | | 524.78 | 779.17 | 0.00 | 0.00 | |
| 145.00 | (14) attachments | 3684.54 | 3811.18 | 0.00 | 0.00 | |
| 150.00 | | 495.60 | 730.12 | 0.00 | 0.00 | |
| 155.00 | In | 480.47 | 711.05 | 0.00 | 0.00 | |
| 157.00 | (8) attachments | 3196.71 | 1470.44 | 0.00 | 0.00 | |
| 160.00 | | 276.76 | 408.04 | 0.00 | 0.00 | |
| 165.00 | (07) | 449.23 | 664.81 | 0.00 | 0.00 | |
| 167.00 | (37) attachments | 5779.86 | 4433.52 | 0.00 | 0.00 | |
| 170.00 | | 257.61 | 335.48 | 0.00 | 0.00 | |
| 175.00 | (04) -#- : | 416.75 | 543.87 | 0.00 | 0.00 | |
| 177.00 | (31) attachments | 4685.58 | 3982,49 | 0.00 | 0.00 | |
| 180.00 | (40) -4 | 237.75 | 248.30 | 0.00 | 0.00 | |
| 185.00 | (40) attachments | 3651.45 | 3219.38 | 0.00 | 0.00 | |
| 190.00 | (1) attachments | 672.42 | 460.91 | 0.00 | 832.36 | |
| | Totals: | 43,114.00 | 65,518.37 | 0.00 | 3,223.29 | |

Linear Appurtenance Segment Forces (Factored)

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT

Height: 190.00 (ft)

Site Close: D. Stite

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II



Load Case: 1.2D + 1.0W 119 mph Wind

Dead Load Factor 1.20 Wind Load Factor 1.00



Iterations

ions 26

| The Description Exposed The Cal The | ead oad lb) |
|--|-------------------|
| 5.00 Stafety Cable Fes 5.00 0.000 0.63 0.26 0.00 0.016 0.000 28.420 0.00 10.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.016 0.000 28.420 0.00 10.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.016 0.000 28.420 0.00 15.00 Safety Cable Yes 5.00 0.000 0.83 0.16 0.00 0.016 0.000 28.420 0.00 15.00 Safety Cable Yes 5.00 0.000 0.83 0.26 0.00 0.016 0.000 30.155 0.00 20.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.017 0.000 31.506 0.00 25.00 Step bolts (ladder) Yes 5.00 0.000 0.38 0.16 0.00 0.017 0.000 31.506 <td>1.64</td> | 1.64 |
| See Dotts (ladder) Yes S.0.0 D.000 D.38 D.16 D.00 D.016 D.000 D.84 Zee D.000 D.000 D.38 D.16 D.000 D.016 D.000 D.84 Zee D.000 D.000 D.38 D.16 D.000 D.016 D.000 Zee Zee D.000 D.000 D.38 D.16 D.000 D.016 D.000 Zee Zee D.000 D.000 D.38 D.16 D.000 D.016 D.000 Zee Zee D.000 D.000 D.000 Zee Zee D.000 D.000 D.000 Zee Zee | 6.24 |
| 10.00 Safety Datalle Yes 5.00 0.000 0.63 0.26 0.00 0.016 0.000 28.420 0.00 | 1.64 |
| 15.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.016 0.000 28.420 0.00 15.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.016 0.000 28.420 0.00 15.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.016 0.000 30.155 0.00 0.000 Step bolts (ladder) Yes 5.00 0.000 0.38 0.16 0.00 0.016 0.000 30.155 0.00 0.000 Step bolts (ladder) Yes 5.00 0.000 0.38 0.16 0.00 0.016 0.000 30.155 0.00 0.000 Step bolts (ladder) Yes 5.00 0.000 0.38 0.16 0.00 0.017 0.000 31.606 0.000 0. | 6.24 |
| 15.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.016 0.000 28.420 0.00 20.01 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.016 0.000 30.155 0.00 20.02 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.016 0.000 30.155 0.00 20.03 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.017 0.000 31.606 0.00 25.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.017 0.000 31.606 0.00 25.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.017 0.000 31.606 0.00 30.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.017 0.000 32.842 0.00 30.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.017 0.000 32.842 0.00 35.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.017 0.000 32.842 0.00 35.00 Safety Cable Yes 5.00 0.000 0.88 0.16 0.00 0.017 0.000 33.926 0.00 35.00 Safety Cable Yes 5.00 0.000 0.83 0.26 0.00 0.017 0.000 33.926 0.00 35.00 Safety Cable Yes 5.00 0.000 0.83 0.26 0.00 0.017 0.000 33.926 0.00 35.00 Safety Cable Yes 5.00 0.000 0.83 0.26 0.00 0.017 0.000 33.926 0.00 40.00 Safety Cable Yes 5.00 0.000 0.83 0.26 0.00 0.017 0.000 33.926 0.00 40.00 Safety Cable Yes 5.00 0.000 0.83 0.26 0.00 0.017 0.000 34.893 0.00 41.00 Safety Cable Yes 5.00 0.000 0.83 0.16 0.00 0.018 0.000 34.893 0.00 41.00 Safety Cable Yes 1.00 0.000 0.38 0.16 0.00 0.018 0.000 34.893 0.00 41.00 Safety Cable Yes 1.00 0.000 0.38 0.13 0.00 0.018 0.000 35.769 0.00 45.00 Safety Cable Yes 4.00 0.000 0.83 0.13 0.00 0.018 0.000 35.769 0.00 45.00 Safety Cable Yes 3.00 0.000 0.83 0.10 0.00 0.018 0.000 35.769 0.00 48.00 Safety Cable Yes 3.00 0.000 0.83 0.16 0.00 0.019 0.000 36.258 0.00 50.00 Safety Cable Yes 3.00 0.000 0.83 0.16 0.00 0.019 0.000 36.258 0.00 50.00 Safety Cable Yes 5.00 0.000 0.83 0.16 0.00 0.019 0.000 36.258 0.00 50.00 Safety Cable Yes 5.00 0.000 0.83 0.16 0.00 0.019 0.000 36.258 0.00 50.00 Safety Cable Yes 5.00 0.000 0.83 0.16 0.00 0.019 0.000 36.258 0.00 50.00 Safety Cable Yes 5.00 0.000 0.83 0.16 0.00 0.019 0.000 38.0571 0.00 50.00 Safety Cable Yes 5.00 0.000 0.83 0.16 0.00 0.019 0.000 38.0648 0.00 50.00 Safety Cable | 1.64 |
| 19.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.016 0.000 30.155 0.00 | 6.24 |
| 20.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.016 0.000 31.656 0.00 25.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.017 0.000 31.606 0.00 25.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.017 0.000 31.606 0.00 31.000 | 1.64 |
| 25.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.017 0.000 31.606 0.00 25.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.017 0.000 31.606 0.00 31.606 0.00 31.606 0.00 0.000 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.017 0.000 32.842 0.00 31.606 0.00 0.000 0.63 0.26 0.00 0.017 0.000 32.842 0.00 31.606 0.00 0.000 0.63 0.26 0.00 0.017 0.000 32.842 0.00 31.606 0.00 0.000 0.63 0.26 0.00 0.017 0.000 32.842 0.00 31.606 0.00 0.000 0.63 0.26 0.00 0.017 0.000 33.926 0.00 31.606 0.00 0.0 | 6.24 |
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| 55.00 Step boits (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.019 0.000 37.313 0.00 60.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.019 0.000 38.002 0.00 60.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.019 0.000 38.002 0.00 65.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.020 0.000 38.648 0.00 65.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 38.648 0.00 70.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.020 0.000 39.256 0.00 70.00 Step bolts (ladder) Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 | 6.24 |
| 60.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.019 0.000 38.002 0.00 60.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.019 0.000 38.002 0.00 65.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 38.648 0.00 65.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 38.648 0.00 70.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.020 0.000 39.256 0.00 70.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 39.256 0.00 70.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 39.256 0.00 75.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 39.830 0.00 75.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 39.830 0.00 75.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 39.830 0.00 75.00 Safety Cable Yes 5.00 0.000 0.038 0.16 0.00 0.021 0.000 39.830 0.00 81.00 Safety Cable Yes 5.00 0.000 0.038 0.16 0.00 0.021 0.000 39.830 0.00 75.00 Safety Cable Yes 5.00 0.000 0.038 0.16 0.00 0.021 0.000 40.375 0.00 81.000 81 | 1.64 |
| 60.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.019 0.000 38.002 0.00 65.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 38.648 0.00 65.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 38.648 0.00 70.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.020 0.000 39.256 0.00 70.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 39.256 0.00 70.00 Step bolts (ladder) Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 39.830 0.00 75.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 39.830 0.00 75.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 39.830 0.00 75.00 Safety Cable Yes 5.00 0.000 0.038 0.16 0.00 0.021 0.000 39.830 0.00 75.00 Safety Cable Yes 5.00 0.000 0.038 0.16 0.00 0.021 0.000 39.830 0.00 75.00 Safety Cable Yes 5.00 0.000 0.038 0.16 0.00 0.021 0.000 40.375 0.00 80.00 Safety Cable Yes 5.00 0.000 0.038 0.16 0.00 0.021 0.000 40.375 0.00 | 6.24 |
| 65.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.020 0.000 38.648 0.00 65.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 38.648 0.00 70.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.020 0.000 39.256 0.00 70.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 39.256 0.00 75.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 39.830 0.00 75.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 39.830 0.00 75.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 39.830 0.00 75.00 Step bolts (ladder) Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 39.830 0.00 81.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 40.375 0.00 80.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 40.375 0.00 | 1.64 |
| 65.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 38.648 0.00 70.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 39.256 0.00 70.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 39.256 0.00 75.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 39.830 0.00 75.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 39.830 0.00 75.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 39.830 0.00 81.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 39.830 0.00 81.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 40.375 0.00 81.000 Safety Cable Yes 5.00 0.000 0.031 0.000 0.021 0.000 40.375 0.00 | 6.24 |
| 70.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.020 0.000 39.256 0.00 70.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.020 0.000 39.256 0.00 75.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 39.830 0.00 75.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 39.830 0.00 80.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 40.375 0.00 80.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 40.375 0.00 | 1.64 |
| 70.00 Step bolts (ladder) Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 39.830 0.00 75.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 39.830 0.00 75.00 Step bolts (ladder) Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 40.375 0.00 80.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 40.375 0.00 | 6.24 |
| 75.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 39.830 0.00 75.00 Step bolts (ladder) Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 40.375 0.00 80.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 40.375 0.00 | 1.64 |
| 75.00 Step bolts (ladder) Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 40.375 0.00 80.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.021 0.000 40.375 0.00 | 6.24 |
| 80.00 Safety Cable Yes 5.00 0.000 0.63 0.26 0.00 0.021 0.000 40.375 0.00 | 1.64 |
| $\frac{1}{2}$ $\frac{1}$ | 6.24 |
| 80.00 Step bolts (ladder) Yes 5.00 0,000 5.00 5.00 5.00 5.00 5.00 5.0 | 1.64 |
| 85.00 Safety Cable Yes 5.00 0.000 0.56 0.10 0.000 0.50 0.10 0.000 | 6.24 |
| 85.00 Step bolts (ladder) Yes 5.00 0.000 0.03 0.20 0.000 0.0 | 1.64 |
| 90.00 Safety Cable Yes 5.00 0.000 0.58 0.70 0.000 0.000 44.390 0.000 | 6.24 |
| 90.00 Step bolts (ladder) Yes 5.00 0.000 0.00 0.00 0.00 0.00 0.00 0. | 0.33 |
| 91.00 Safety Cable Yes 1.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 | 1.25 |
| 91.00 Step bolts (ladder) Yes 1.00 0.000 0 | 1.31 |
| 95.00 Safety Cable Yes 4.00 0.000 0.00 0.00 0.00 0.00 0.00 0. | 4.99 |
| 95.00 Step bolts (ladder) Yes 4.00 0.000 0 | 1.64 |
| 100.00 Safety Cable Yes 5.00 0.000 0.33 0.000 0.33 0.000 42.317 0.00 | 6.24 |
| 100.00 Step bolts (ladder) Yes 5.00 0.000 0.32 0.16 0.00 0.004 0.000 42.754 0.00 | 1.64 |
| 105.00 Safety Cable Yes 5.00 0.000 0.38 0.16 0.00 0.024 0.000 42.754 0.00 Copyright © 2024 by Tower Engineering Solutions, LLC. All rights reserved. | |

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Linear Appurtenance Segment Forces (Factored)

Structure: CT08748-A

Code: TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT

Exposure: С

Height:

190.00 (ft)

Crest Height: 0.00

Site Class: D - Stiff Soil



Base Elev: 0.000 (ft) Gh: 1.1

Topography: 1

Struct Class: II

Page: 13

Load Case: 1.2D + 1.0W 119 mph Wind

Dead Load Factor 1.20 Wind Load Factor 1.00



Iterations

26

| Top Elev | Description | Wind | Length | | Exposed Width | Area | CaAa | | Cf Adjust | qz | FΧ | Dead Load |
|-------------|---------------------|----------------|--------|-------|------------------|--------|--------|-------|--------------|------------------|------|--------------|
| (ft) | Description | Exposed | (ft) | Ca | (in) | (sqft) | (sqft) | Ra | Factor | (psf) | (lb) | (lb) |
| 105.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.024 | 0.000 | 42.754 | 0.00 | 6.24 |
| 110,00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.025 | 0.000 | 43.175 | 0.00 | 1.64 |
| 110.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.025 | 0.000 | 43,175 | 0.00 | 6.24 |
| 115.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.025 | 0.000 | 43.581 | 0.00 | 1.64 |
| 115.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.025 | 0.000 | 43.581 | 0.00 | 6.24 |
| 120.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.026 | 0.000 | 43.973 | 0.00 | 1.64 |
| 120.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.026 | 0.000 | 43.973 | 0.00 | 6.24 |
| 125.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.027 | 0.000 | 44.352 | 0.00 | 1.64 |
| 125.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.027 | 0.000 | 44.352 | 0.00 | 6.24 |
| 130.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.028 | 0.000 | 44.720 | 0.00 | 1.64 |
| 130.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.028 | 0.000 | 44.720 | 0.00 | 6.24 |
| 135.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.029 | 0.000 | 45.077 | 0.00 | 1.64 |
| 135.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.029 | 0.000 | 45.077 | 0.00 | 6.24 |
| 140.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.029 | 0.000 | 45.423 | 0.00 | 1.64 |
| 140.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.029 | 0.000 | 45.423 | 0.00 | 6.24 |
| 145.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.030 | 0.000 | 45.760 | 0.00 | 1.64 |
| 145.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.030 | 0.000 | 45.760 | 0.00 | 6.24 |
| 150.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.031 | 0.000 | 46.088 | 0.00 | 1.64 |
| 150.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.031 | 0.000 | 46.088 | 0.00 | 6.24 |
| 155.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.033 | 0.000 | 46.407 | 0.00 | 1.64 |
| 155.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.033 | 0.000 | 46.407 | 0.00 | 6.24 |
| 157.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.034 | 0.000 | 46.533 | 0.00 | 0.66 |
| 157.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.10 | 0.00 | 0.034 | 0.000 | 46.533 | 0.00 | 2.50 |
| 160.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.034 | 0.000 | 46.718 | 0.00 | 0.98 |
| 160.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.034 | 0.000 | 46.718 | 0.00 | 3.74 |
| 165.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.035 | 0.000 | 47.022 | 0.00 | 1.64 |
| 165.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.035 | 0.000 | 47.022 | 0.00 | 6.24 |
| 167.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.036 | 0.000 | 47.141 | 0.00 | 0.66 |
| 167.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.10 | 0.00 | 0.036 | 0.000 | 47,141 | 0.00 | 2.50 |
| 170.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.037 | 0.000 | 47.318 | 0.00 | 0.98 |
| 170.00 | Step boits (ladder) | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.037 | 0.000 | 47.318 | 0.00 | 3.74 |
| 175.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.039 | 0.000 | 47.608 | 0.00 | 1.64 |
| 175.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.039 | 0.000 | 47.608 | 0.00 | 6.24 |
| 177.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.040 | 0.000 | 47.722 | 0.00 | 0.66 |
| 177.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.10 | 0.00 | 0.040 | 0.000 | 47.722 | 0.00 | 2.50 |
| 180.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.041 | 0.000 | 47.891 | 0.00 | 0.98 |
| 180.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.041 | 0.000 | 47.891 | 0.00 | 3.74 |
| 185.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.041 | 0.000 | 47.691 48.168 | 0.00 | 3.74 1.64 |
| 185.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.041 | 0.000 | 48.168 | | |
| 190.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.041 | 0.000 | 48.440 | 0.00 | 6.24 |
| 190.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.041 | 0.000 | 48.440 | 0.00 | 1.64 |
| | | - - | -100 | 0.000 | 0.00 | 0.20 | 0.00 | 0.041 | | - | 0.00 | 6.24 |
| | | | | | | | | | Tot | als: | 0.0 | 299.4 |

Calculated Forces

Structure: CT08748-A **Code:** TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT Exposure: C
Height: 190.00 (ft) Crest Height: 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II

SBAD

26

Iterations

Load Case: 1.2D + 1.0W 119 mph Wind

Dead Load Factor 1.20 Wind Load Factor 1.00



Page: 14

| Seg Elev | Pu FY (-) | Vu FX (-) | Tu MY (-) | Mu MZ | Mu MX | Resultant Moment | phi Pn (kips) | phi Vn (kips) | phi Tn (ft-kips) | phi Mn (ft-kips) | Total Deflect (in) | Rotation Sway (deg) | Rotation Twist (deg) | Stress Ratio |
|----------------|------------------|------------------|--------------|--------------------|--------------|----------------------|---------------------|---------------------|------------------------|------------------------|--------------------------|---------------------------|----------------------------|-----------------|
| (ft) | (kips) | | (ft-kips) | | (ft-kips) | (ft-kips) 5745.72 | 5803.10 | 1561.17 | 8297.91 | 7657.05 | 0.00 | 0.000 | 0.000 | 0.762 |
| 0.00 | -65.45 | -43.22 | 0.00 | -5745.7 | 0.00 0.00 | 5529.64 | 5740.33 | 1532.49 | 7995.78 | 7434.11 | 0.09 | -0.174 | 0.000 | 0.756 |
| 5.00 | -63.27 | -42.79 | 0.00 | -5529.6 | 0.00 | 5315.70 | 5675.91 | 1503.80 | 7699.25 | 7212.14 | 0.37 | -0.351 | 0.000 | 0.749 |
| 10.00 | -61.12 | -42.36 | 0.00 | -5315.7 -5103.8 | 0.00 | 5103.89 | 5609.85 | 1475.12 | 7408.33 | 6991.28 | 0.83 | -0.530 | 0.000 | 0.741 |
| 15.00 | -59.01 | -41.94 | 0.00 | -4894.1 | 0.00 | 4894.18 | 5542.15 | 1446.43 | 7123.01 | 6771.63 | 1.49 | -0.713 | 0.000 | 0.734 |
| 20.00 | -56.94 | -41.49 | 0.00 | -4686.7 | 0.00 | 4686.76 | 5472.81 | 1417.75 | 6843.29 | 6553.32 | 2.34 | -0.899 | 0.000 | 0.726 |
| 25.00 | -54.89 | -41.00 -40.50 | 0.00 | -4481.7 | 0.00 | 4481.76 | 5401.82 | 1389.06 | 6569.17 | 6336.48 | 3.38 | -1.088 | 0.000 | 0.718 |
| 30.00 | -52.89 | -39.98 | 0.00 | -4279.2 | 0.00 | 4279.27 | 5329.20 | 1360.38 | 6300.66 | 6121.21 | 4.62 | -1.280 | 0.000 | 0.710 |
| 35.00 | -50.92 -49.04 | -39.37 | 0.00 | -4079.3 | 0.00 | 4079.39 | 5254.93 | 1331.69 | 6037.75 | 5907.64 | 6.07 | -1.474 | 0.000 | 0.701 |
| 40.00 | -49.04 -48.61 | -39.37 | 0.00 | -4040.0 | 0.00 | 4040.02 | 5239.88 | 1325.95 | 5985.84 | 5865.14 | 6.38 | -1.515 | 0.000 | 0.699 |
| 41.00 | -46.04 | -38.83 | 0.00 | -3882.7 | 0.00 | 3882.75 | 5179.02 | 1303.01 | 5780.44 | 5695.90 | 7.72 | -1.674 | 0.000 | 0.691 |
| 45.00 | -46.04 -44.15 | -38.45 | 0.00 | -3766.2 | 0.00 | 3766.28 | 4202.19 | 1119,08 | 4974.38 | 4636.19 | 8.81 | -1.796 | 0.000 | 0.824 |
| 48.00 | -44.15 | -38.28 | 0.00 | -3689.3 | 0.00 | 3689.38 | 4180.07 | 1109.25 | 4887.33 | 4570.98 | 9.58 | -1.878 | 0.000 | 0.819 |
| 50.00 55.00 | -43.43 -41.78 | -37.72 | 0.00 | -3497.9 | 0.00 | 3497.99 | 4123.62 | 1084.66 | 4673.07 | 4408.60 | 11.67 | -2.105 | 0.000 | 0.805 |
| | -41.76 -40.16 | -37.16 | 0.00 | -3309.3 | 0.00 | 3309.38 | 4065.54 | 1060.07 | 4463.61 | 4247.27 | 14.00 | -2.335 | 0.000 | 0.790 |
| 60.00 65.00 | -38.57 | -36.59 | 0.00 | -3123.5 | 0.00 | 3123.58 | 4005.81 | 1035.49 | 4258.96 | 4087.10 | 16.57 | -2.568 | 0.000 | 0.775 |
| | -37.01 | -36.02 | 0.00 | -2940.6 | 0.00 | 2940.63 | 3944.44 | 1010.90 | 4059.10 | 3928.21 | 19.38 | -2.803 | 0.000 | 0.759 |
| 70.00 75.00 | -35.49 | -35.45 | 0.00 | -2760.5 | 0.00 | 2760.53 | 3881.43 | 986,31 | 3864.05 | 3770.72 | 22.44 | -3.041 | 0.000 | 0.743 |
| 80.00 | -34.00 | -34.87 | 0.00 | -2583.3 | 0.00 | 2583.31 | 3816.78 | 961.72 | 3673.81 | 3614.75 | 25.76 | -3.281 | 0.000 | 0.725 |
| 85.00 | -34.00 | -34.29 | 0.00 | -2408.9 | 0.00 | 2408.97 | 3750.48 | 937.14 | 3488.36 | 3460.42 | 29.32 | -3.523 | 0.000 | 0.706 |
| 90.00 | -30.26 | -33.59 | 0.00 | -2237.5 | 0.00 | 2237.52 | 3682.55 | 912.55 | 3307.72 | 3307.86 | 33.14 | -3.76 7 | 0.000 | 0.686 |
| 91.00 | -29.75 | -33.50 | 0.00 | -2203.9 | 0.00 | 2203.93 | 2898.33 | 768.33 | 2813.78 | 2634.30 | 33.93 | -3.817 | 0.000 | 0.849 |
| 95.00 | -28.74 | -33.06 | 0.00 | -2069.9 | 0.00 | 2069.93 | 2860.60 | 751.94 | 2695.00 | 2544.15 | 37.22 | -4.014 | 0.000 | 0.826 |
| 100.00 | -27.52 | -32.50 | 0.00 | -1904.6 | 0.00 | 1904.64 | 2811.95 | 731.45 | 2550.13 | 2432.25 | 41.57 | -4.294 | 0.000 | 0.795 |
| 105.00 | -26.32 | -31.94 | 0.00 | -1742.1 | 0.00 | 1742.16 | 2761.66 | 710.96 | 2409.26 | 2321.34 | 46.21 | -4.573 | 0.000 | 0.762 |
| 110.00 | -24.74 | -29.87 | 0.00 | -1580.0 | 0.00 | 1580.08 | 2709.73 | 690.47 | 2272,40 | 2211.55 | 51.14 | -4.850 | 0.000 | 0.725 |
| 115.00 | -23.63 | -29.31 | 0.00 | -1430.7 | 0.00 | 1430.73 | 2656.16 | 669.98 | 2139.54 | 2103.00 | 56.36 | -5.124 | 0.000 | 0.691 |
| 120.00 | -22.55 | -28.76 | 0.00 | -1284.1 | 0.00 | 1284.17 | 2600.95 | 649.49 | 2010.67 | 1995.80 | 61.87 | -5.394 | 0.000 | 0.654 |
| 125.00 | -21.51 | -28.21 | 0.00 | -1140.3 | 0.00 | 1140.38 | 2544.10 | 629.00 | 1885.82 | 1890.08 | 67.65 | -5.659 | 0.000 | 0.614 |
| 130.00 | -20.49 | -27.66 | 0.00 | -999.34 | 0.00 | 999.34 | 2485.60 | 608.51 | 1764.96 | 1785.96 | 73.71 | -5.916 | 0.000 | 0.570 |
| 135.00 | -18.95 | -27.05 | 0.00 | -861.04 | 0.00 | 861.04 | 1823.78 | 478.25 | 1362.76 | 1289.51 | 80.03 | -6.164 | 0.000 | 0.681 |
| 140.00 | -18.12 | -26.52 | 0.00 | -725.81 | 0.00 | 725.81 | 1784.40 | 461.86 | 1270.94 | 1218.11 | 86.60 | -6.397 | 0.000 | 0.609 |
| 145.00 | -14.66 | -22.49 | 0.00 | -593.22 | 0.00 | 593.22 | 1743.38 | 445.47 | 1182.33 | 1147.55 | 93.43 | -6.654 | 0.000 | 0.528 |
| 150.00 | -13.91 | -21.96 | 0.00 | -480.79 | 0.00 | 480.79 | 1700.71 | 429.08 | 1096.92 | 1077.96 | 100.51 | -6.886 | 0.000 | 0.457 |
| 155.00 | -13.21 | -21.43 | 0.00 | -370.98 | 0.00 | 370.98 | 1656.41 | 412.69 | 1014.72 | 1009.45 | 107.82 | -7.093 | 0.000 | 0.378 |
| 157.00 | -12.12 | -18.09 | 0.00 | -328.12 | 0.00 | 328.12 | 1638.23 | 406.13 | 982.73 | 982.37 | 110.80 | -7.169 | 0.000 | 0.343 |
| 160.00 | -11.71 | -17.79 | 0.00 | -273.84 | 0.00 | 273.84 | 1610.46 | 396.29 | 935.71 | 942.14 | 115.33 | -7.273 | 0.000 | 0.300 |
| 165.00 | -11.08 | -17.28 | 0.00 | -184.87 | 0.00 | 184.87 | 1562.88 | 379.90 | 859.91 | 876.15 | 123.00 | -7.414 | 0.000 | 0.220 |
| 167.00 | -7.42 | -10.98 | 0.00 | -150.31 | 0.00 | 150.31 | 1543.38 | 373.35 | 830.48 | 850.16 | 126.11 | -7.461 | 0.000 | 0.182 |
| 170.00 | -7.11 | -10.69 | 0.00 | -117.36 | 0.00 | 117.36 | 1513.65 | 363.51 | 787.30 | 811.61 | 130.81 | -7.520 | 0.000 | 0.150 |
| 175.00 | -6.62 | -10.21 | 0.00 | -63.90 | 0.00 | 63.90 | 1462.77 | 347.12 | 717.90 | 748.63 | 138.70 | -7.592 | 0.000 | 0.091 |
| 177.00 | -3.29 | -5.04 | 0.00 | -43.47 | 0.00 | 43.47 | 1441.72 | 340.56 | 691.04 | 723.78 | 141.88 | -7.612 | 0.000 | 0.063 |
| 180.00 | -3.07 | -4.77 | 0.00 | -28.35 | 0.00 | 28.35 | 1400.09 | 330.73 | 651.70 | 682.38 | 146.65 | -7.633 | 0.000 | 0.044 |
| 180.00 | -3.07 | -4.77 | 0.00 | -28.35 | 0.00 | 28.35 | 1210.02 | 285.83 | 562.49 | 588.19 | 146.65 | -7.633 | 0.000 | 0.051 |
| 185.00 | -0.37 | -0.73 | 0.00 | -4.47 | 0.00 | 4.47 | 1210.02 | 285.83 | 562.49 | 588.19 | 154.64 | -7.650 | 0.000 | 0.008 |
| 190.00 | 0.00 | -0.67 | 0.00 | -0.83 | 0.00 | 0.83 | 1210.02 | 285.83 | 562.49 | 588.19 | 162.62 | -7.652 | 0.000 | 0.001 |
| | | | | | | | | | | | | | | |

Wind Loading - Shaft

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

 Site Name:
 Woodstock 4 CT
 Exposure:
 C

 Height:
 190.00 (ft)
 Crest Height:
 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II Page: 15

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Iterations 26

SBA

Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor 0.90 Wind Load Factor 1.00

| Elev | | | | qz | qzGh | С | | lce Thick | Telbudana | | C44 | Wind | Dead | Tot Dead |
|--------------|--------------|------|------|--------|-------|----------|-------|--------------|-------------------|------------|--------------|----------|------------------|--------------|
| (ft) | Description | Kzt | Kz | (psf) | (psf) | (mph-ft) | Cf | (in) | Tributary (ft) | Aa (sf) | CfAa (sf) | (lb) | Load Ice (lb) | Load (Ib) |
| 0.00 | | 1.00 | 0.85 | 28.420 | 31.26 | 590.01 | 0.730 | 0.000 | 0.00 | 0.000 | 0.00 | 0.0 | 0.0 | 0.0 |
| 5.00 | | 1.00 | 0.85 | 28.420 | 31.26 | 579.24 | 0.730 | 0.000 | 5.00 | 27.041 | 19.74 | 617.1 | 0.0 | 1349.6 |
| 10.00 | | 1.00 | 0.85 | 28.420 | 31.26 | 568.48 | 0.730 | 0.000 | 5.00 | 26.543 | 19.38 | 605.7 | 0.0 | 1324.6 |
| 15.00 | | 1.00 | 0.85 | 28.420 | 31.26 | 557.71 | 0.730 | 0.000 | 5.00 | 26.045 | 19.01 | 594.4 | 0.0 | 1299.6 |
| 20.00 | | 1.00 | 0.90 | 30,155 | 33.17 | 563.39 | 0.730 | 0.000 | 5.00 | 25.547 | 18.65 | 618.6 | 0.0 | 1274.5 |
| 25.00 | | 1.00 | 0.95 | 31.606 | 34.77 | 565.42 | 0.730 | 0.000 | 5.00 | 25.049 | 18.29 | 635.7 | 0.0 | 1249.5 |
| 30.00 | | 1.00 | 0.98 | 32.842 | 36.13 | 564.81 | 0.730 | 0.000 | 5.00 | 24.550 | 17.92 | 647.5 | 0.0 | 1224.5 |
| 35.00 | | 1.00 | 1.01 | 33.926 | 37.32 | 562.28 | 0.730 | 0.000 | 5.00 | 24.052 | 17.56 | 655.2 | 0.0 | 1199.5 |
| 40.00 | | 1.00 | 1.04 | 34.893 | 38.38 | 558.31 | 0.730 | 0.000 | 5.00 | 23.554 | 17.19 | 660.0 | 0.0 | 1174.4 |
| | - Section 2 | 1.00 | 1.05 | 35.075 | 38.58 | 557.37 | 0.730 | 0.000 | 1.00 | 4.651 | 3.40 | 131.0 | 0.0 | 231.9 |
| 45.00 | | 1.00 | 1.07 | 35.769 | 39.35 | 553.19 | 0.730 | 0.000 | 4.00 | 18.659 | 13.62 | 535.9 | 0.0 | 1715.8 |
| | - Section 1 | 1.00 | 1.08 | 36.258 | 39.88 | 549.67 | 0.730 | 0.000 | 3.00 | 13.785 | 10.06 | 401.4 | 0.0 | 1267.3 |
| 50.00 | | 1.00 | 1.09 | 36.571 | 40.23 | 554.93 | 0.730 | 0.000 | 2.00 | 9.091 | 6.64 | 267.0 | 0.0 | 388.8 |
| 55.00 | | 1.00 | 1.12 | 37.313 | 41.04 | 548.19 | 0.730 | 0.000 | 5.00 | 22.378 | 16.34 | 670.5 | 0.0 | 957.1 |
| 60.00 | | 1.00 | 1.14 | 38.002 | 41.80 | 540.78 | 0.730 | 0.000 | 5.00 | 21.880 | 15.97 | 667.7 | 0.0 | 935.6 |
| 65.00 | | 1.00 | 1.16 | 38,648 | 42.51 | 532.80 | 0.730 | 0.000 | 5.00 | 21.382 | 15.61 | 663.6 | 0.0 | 914.2 |
| 70.00 | | 1.00 | 1.17 | 39.256 | 43.18 | 524.32 | 0.730 | 0.000 | 5.00 | 20.884 | 15.25 | 658.3 | 0.0 | 892.7 |
| 75.00 | | 1.00 | 1.19 | 39.830 | 43.81 | 515.40 | 0.730 | 0.000 | 5.00 | 20.386 | 14.88 | 652.0 | 0.0 | 871.3 |
| 80.00 | | 1.00 | 1.21 | 40.375 | 44.41 | 506.08 | 0.730 | 0.000 | 5.00 | 19.888 | 14.52 | 644.8 | 0.0 | 849.8 |
| 85.00 Bot - | - Section 3 | 1.00 | 1.22 | 40.894 | 44.98 | 496.40 | 0.730 | 0.000 | 5,00 | 19.390 | 14.15 | 636.7 | 0.0 | 828.4 |
| 90.00 | | 1.00 | 1.24 | 41.389 | 45.53 | 486.40 | 0.730 | 0.000 | 5.00 | 19.156 | 13.98 | 636.7 | 0.0 | 1489.8 |
| | - Section 2 | 1.00 | 1.24 | 41.485 | 45.63 | 484.37 | 0.730 | 0.000 | 1.00 | 3.771 | 2.75 | 125.6 | 0.0 | 293.2 |
| 95.00 | | 1.00 | 1.25 | 41.863 | 46.05 | 483.05 | 0.730 | 0.000 | 4.00 | 14.887 | 10.87 | 500.4 | 0.0 | 530.6 |
| 100.00 | | 1.00 | 1.27 | 42.317 | 46.55 | 472.53 | 0.730 | 0.000 | 5.00 | 18.160 | 13.26 | 617.1 | 0.0 | 647.1 |
| 105.00 | | 1.00 | 1.28 | 42.754 | 47.03 | 461.75 | 0.730 | 0.000 | 5.00 | 17.662 | 12.89 | 606.4 | 0.0 | 629.3 |
| | urtenance(s) | 1.00 | 1.29 | 43.175 | 47.49 | 450.75 | 0.730 | 0.000 | 5.00 | 17.164 | 12.53 | 595.1 | 0.0 | 611.4 |
| 115.00 | | 1.00 | 1.30 | 43.581 | 47,94 | 439.53 | 0.730 | 0.000 | 5.00 | 16.666 | 12.17 | 583.2 | 0.0 | 593.5 |
| 120.00 | | 1.00 | 1.32 | 43.973 | 48.37 | 428.11 | 0.730 | 0.000 | 5,00 | 16.168 | 11.80 | 570.9 | 0.0 | 575.6 |
| 125.00 | | 1.00 | 1.33 | 44.352 | 48.79 | 416.50 | 0.730 | 0.000 | 5.00 | 15.670 | 11.44 | 558.1 | 0.0 | 557.7 |
| 130.00 Bot - | | 1.00 | 1.34 | 44.720 | 49.19 | 404.72 | 0.730 | 0.000 | 5.00 | 15.172 | 11.08 | 544.8 | 0.0 | 539.9 |
| 135.00 Top | - Section 3 | 1.00 | 1.35 | 45.077 | 49.58 | 392.77 | 0.730 | 0.000 | 5.00 | 14.885 | 10.87 | 538.8 | 0.0 | 946.4 |
| 140.00 | | 1.00 | 1.36 | 45.423 | 49.97 | 386.45 | 0.730 | 0.000 | 5.00 | 14.387 | 10.50 | 524.8 | 0.0 | 410.1 |
| 145.00 Appu | urtenance(s) | 1.00 | 1.37 | 45.760 | 50.34 | 374.21 | 0.730 | 0.000 | 5.00 | 13.889 | 10.14 | 510.4 | 0.0 | 395.8 |
| 150,00 | | 1.00 | | 46.088 | 50.70 | 361.84 | 0.730 | 0.000 | 5.00 | 13.391 | 9.78 | 495.6 | 0.0 | 381.5 |
| 155.00 | | 1.00 | | 46.407 | 51.05 | 349.33 | 0.730 | 0.000 | 5.00 | 12.893 | 9.41 | 480.5 | 0.0 | 367.2 |
| 157.00 Appl | urtenance(s) | 1.00 | | 46.533 | 51.19 | 344.29 | 0.730 | 0.000 | 2.00 | 5.018 | 3.66 | 187.5 | 0.0 | 142.9 |
| 160.00 | | 1.00 | | 46.718 | 51.39 | 336.70 | 0.730 | 0.000 | 3.00 | 7.377 | 5.39 | 276.8 | 0.0 | 210.0 |
| 165.00 | | 1.00 | | 47.022 | 51.72 | 323.94 | 0.730 | 0.000 | 5.00 | 11.897 | 8.69 | 449.2 | 0.0 | 338.6 |
| 167.00 AppL | urtenance(s) | 1.00 | | 47.141 | 51.86 | 318.80 | 0.730 | 0.000 | 2.00 | 4.619 | 3.37 | 174.9 | 0.0 | 131.4 |
| 170.00 | | 1.00 | | 47.318 | 52.05 | 311.06 | 0.730 | 0.000 | 3.00 | 6.780 | 4.95 | 257.6 | 0.0 | 192.9 |
| 175.00 | | 1.00 | | 47.608 | 52.37 | 298.08 | 0.730 | 0.000 | 5.00 | 10.901 | 7.96 | 416.7 | 0.0 | 310.0 |
| 177.00 Appu | () | 1.00 | | 47.722 | 52.49 | 292.85 | 0.730 | 0.000 | 2.00 | 4.221 | 3.08 | 161.8 | 0.0 | 120.0 |
| 180.00 Top - | | 1.00 | | 47.891 | 52.68 | 284.99 | 0.730 | 0.000 | 3.00 | 6.182 | 4.51 | 237.7 | 0.0 | 175.7 |
| 185.00 Appu | | 1.00 | | 48.168 | 52.99 | 285.81 | 0.730 | 0.000 | 5.00 | 10.154 | 7.41 | 392.8 | 0.0 | 324.2 |
| 190.00 Appu | ırtenance(s) | 1.00 | 1.45 | 48.440 | 53.28 | 286.61 | 0.730 | 0.000 | 5.00 | 10.154 | 7.41 | 395.0 | 0.0 | 324.2 |
| | | | | | | | | Totals: | 190.00 | | = | 21,801.2 | - | 31,188.5 |

Discrete Appurtenance Forces

1/18/2024 TIA-222-H Code: Structure: CT08748-A

С Exposure: Site Name: Woodstock 4 CT Crest Height: 0.00 190.00 (ft) Height:

D - Stiff Soil Site Class: Base Elev: 0.000 (ft)

Struct Class: II Topography: 1 Gh: 1.1



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Page: 16

Iterations

Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor 0.90 1.00 **Wind Load Factor**



| No. | Elev (ft) | Description | Qty | qz (psf) | qzGh (psf) | Orient Factor x Ka | Ka | Total CaAa (sf) | Dead Load (lb) | Horiz Ecc (ft) | Vert Ecc (ft) | Wind FX (lb) | Mom Y (lb-ft) | Mom Z (lb-ft) |
|----------|--------------|--|-----|-------------|---------------|--------------------------|--------|-----------------------|----------------------|----------------------|---------------------|--------------------|---------------------|---------------------|
| _ | | Bescription | 1 | 48.600 | 53,460 | 1.00 | 1.00 | 5.19 | 12.60 | 0.000 | 3.000 | 277.45 | 0.00 | 832.36 |
| 1 | 190.00 | Powerwave 7770.00 | 9 | | 52.985 | 0.58 | 0.80 | 28.91 | 431.57 | 0.000 | 0.000 | 1531.70 | 0.00 | 0.00 |
| 2 | 185.00 | | 6 | 48.168 | | 0.40 | 0.80 | 0.24 | 86.40 | 0.000 | 0.000 | 12.72 | 0.00 | 0.00 |
| 3 4 | | Powerwave LGP21903 | 6 | 48.168 | 52.985 | 0.40 | 0.80 | 0.65 | 29.70 | 0.000 | 0.000 | 34.33 | 0.00 | 0.00 |
| 4 5 | | Powerwave LGP21401 | 6 | 48.168 | 52.985 | 0.40 | 0.80 | 3.10 | 76.14 | 0.000 | 0.000 | 164.04 | 0.00 | 0.00 |
| 5 6 | | Mount Pipes | 12 | 48.168 | 52.985 | 0.80 | 0.80 | 13.92 | 324.00 | 0.000 | 0.000 | 737.55 | 0.00 | 0.00 |
| 7 | | Low Profile Platform | 1 | 48,168 | 52.985 | 1.00 | 1.00 | 14.69 | 1125.00 | 0.000 | 0.000 | 778.35 | 0.00 | 0.00 |
| 8 | | VV-65A-R1 | 3 | 47.722 | | 0.55 | 0.75 | 13.15 | 79.65 | 0.000 | 0.000 | 690.48 | 0.00 | 0.00 |
| 9 | | 4449 B71 + B85 | 3 | | 52.494 | 0.38 | 0.75 | 2.22 | 197.64 | 0.000 | 0.000 | 116.34 | 0.00 | 0.00 |
| 10 | | AIR6419 B41 | 3 | 47.722 | 52.494 | 0.53 | 0.75 | 9.03 | 278.10 | 0.000 | 0.000 | 473.81 | 0.00 | 0.00 |
| | | Ericsson KRY 112 489/2 | 3 | | 52.494 | 0.38 | 0.75 | 0.73 | 41.58 | 0.000 | 0.000 | 38.39 | 0.00 | 0.00 |
| 11 12 | | 782 11056 | 3 | | 52.494 | 0.38 | 0.75 | 0.25 | 3.51 | 0.000 | 0.000 | 12.99 | 0.00 | 0.00 |
| | | 8843 B25/B66A | 3 | 47.722 | 52,494 | 0.38 | 0.75 | 1.84 | 194.40 | 0.000 | 0.000 | 96.85 | 0.00 | 0.00 |
| 13 14 | | APXVAARR24_43-U-NA2 | 3 | | 52.494 | 0.52 | 0.75 | 31.88 | 345.60 | 0.000 | 0.000 | 1673.41 | 0.00 | 0.00 |
| | | Platform w/Handrails | 1 | | 52.494 | 1.00 | 1.00 | 21.41 | 1444.23 | 0.000 | 0.000 | 1123.90 | 0.00 | 0.00 |
| 15 | | Mount Pipes | 9 | 47.722 | 52.494 | 0.75 | 0.75 | 5.67 | 243.00 | 0.000 | 0.000 | 297.64 | 0.00 | 0.00 |
| 16 17 | | Platform w/Handrails | 1 | 47.141 | 51.856 | 1.00 | 1.00 | 22.60 | 1614.60 | 0.000 | 0.000 | 1171.94 | 0.00 | 0.00 |
| 18 | | RFS DB-T1-6Z-8AB-0Z | 2 | 47.141 | 51.856 | 1.00 | 1.00 | 9.60 | 79.20 | 0.000 | 0.000 | 497.81 | 0.00 | 0.00 |
| 19 | | Raycap | 1 | 47.141 | 51.856 | 1.00 | 1.00 | 4.06 | 28.80 | 0.000 | 0.000 | 210.53 | 0.00 | 0.00 |
| | | Samsung RF4461d-13A | 3 | | 51.856 | 0.63 | 0.75 | 3.53 | 195.75 | 0.000 | 0.000 | 183.27 | 0.00 | 0.00 |
| 20 | | Samsung B2/B66A RRH | 3 | 47,141 | 51.856 | 0.63 | 0.75 | 3.53 | 201.72 | 0.000 | 0.000 | 183.27 | 0.00 | 0.00 |
| 21 | | Commscope | 3 | 47.141 | 51.856 | 0.62 | 0.75 | 15.26 | 104.76 | 0.000 | 0,000 | 791.18 | 0.00 | 0.00 |
| 22 | | Samsung MT6413-77A | 3 | 47,141 | | 0.52 | 0.75 | 5.88 | 154.71 | 0.000 | 0.000 | 305.12 | 0.00 | 0.00 |
| 23 | | Andrew JAHH-65B-R3B | 6 | 47.141 | 51.856 | 0.62 | 0.75 | 33,99 | 370.22 | 0.000 | 0.000 | 1762.49 | 0.00 | 0.00 |
| 24 | | Mount Pipes | 12 | 47.141 | 51.856 | 0.75 | 0.75 | 9.00 | 324.00 | 0.000 | 0.000 | 466.70 | 0.00 | 0.00 |
| 25 | | Commscope | 3 | 47.141 | | 0.38 | 0.75 | 0.63 | 55.94 | 0.000 | 0.000 | 32.67 | 0.00 | 0.00 |
| 26 27 | 157.00 | | 4 | 46.533 | 51.186 | | 1.00 | 2.44 | 27.72 | 0.000 | 0.000 | 124.89 | 0.00 | 0.00 |
| | | VHLPX3-6W | 1 | | 51.186 | 1.00 | 1.00 | 10.68 | 47.70 | 0.000 | 0.000 | 546.66 | 0.00 | 0.00 |
| 28 29 | | SUX6-65B | 1 | 46.533 | | | 1.00 | 35.67 | 188.10 | 0.000 | 0.000 | 1825.80 | 0.00 | 0.00 |
| 30 | | Flush Mount | 2 | 46.533 | | | 1.00 | 10.00 | 630.00 | 0.000 | 0.000 | 511.86 | | 0.00 |
| 31 | | Mount Pipes | 3 | | 50.336 | 0.75 | 0.75 | 2.52 | 81.00 | 0.000 | 0.000 | 126.85 | 0.00 | 0.00 |
| 32 | | RDIDC-9181-PF-48 | 1 | 45.760 | | | 1.00 | 2.01 | 19.71 | 0.000 | 0.000 | 101.18 | 0.00 | 0.00 |
| | | Commscope | 1 | 45.760 | | 1.00 | 1.00 | 33.69 | 1621.40 | 0.000 | 0.000 | 1695.82 | 0.00 | 0.00 |
| 33 | | FFVV-65B-R2 | 3 | | 50.336 | | 0.75 | 20.43 | 191.16 | 0.000 | 0.000 | 1028.34 | 0.00 | 0.00 |
| 34 | | TA08025-B605 | 3 | 45.760 | | | 0.75 | 2.21 | 202.50 | 0.000 | 0.000 | 110.99 | | 0.00 |
| 35 | | TA08025-B604 | 3 | 45.760 | | | 0.75 | 2.21 | 172.53 | 0.000 | 0.000 | 110.99 | | 0.00 |
| 36 | |) Antenex Y1505 | 2 | | 47.492 | | 1.00 | 7.20 | 9.00 | 0.000 | 0.000 | 341.94 | | 0.00 |
| 37 | | | 1 | 43.175 | | | 1.00 | 5.00 | 315.00 | 0.000 | 0.000 | 237.46 | | 0.00 |
| 38 | |) Flush Mount) Telewave ANT450D6-9 | 2 | 43.339 | | | 1.00 | 5.54 | 32.40 | 0.000 | 2.000 | 264.11 | 0.00 | 528.21 |
| 39 40 | | Decibel DB212-1 | 2 | | 47.762 | | 1.00 | 13.00 | 55.80 | 0.000 | 3.000 | 620.91 | 0.00 | 1862.72 |
| 40 | 110.00 | Decide Day 12-1 | | | | | Totals | s: | 11.636.85 | | | 21,312.77 | | |

Total Applied Force Summary

Structure: CT08748-A

Site Name: Woodstock 4 CT 190.00 (ft)

Height: Base Elev: 0.000 (ft)

Gh: 1.1

Topography: 1

Code:

TIA-222-H

Exposure: Crest Height: 0.00

Site Class:

D - Stiff Soil

Struct Class: II

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1/18/2024

Iterations

26

Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor

0.90

Wind Load Factor 1.00

| Elev | | Lateral FX (-) | Axial FY (-) | Torsion MY | Moment MZ | |
|--------|------------------|-------------------|-----------------|---------------|--------------|--|
| (ft) | Description | (lb) | (lb) | (lb-ft) | (lb-ft) | |
| 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5.00 | | 617.11 | 1537.91 | 0.00 | 0.00 | |
| 10.00 | | 605.74 | 1512.88 | 0.00 | 0.00 | |
| 15.00 | | 594.38 | 1487.86 | 0.00 | 0.00 | |
| 20.00 | | 618.60 | 1462.83 | 0.00 | 0.00 | |
| 25.00 | | 635.72 | 1437.80 | 0.00 | 0.00 | |
| 30.00 | | 647.46 | 1412.77 | 0.00 | 0.00 | |
| 35.00 | | 655,25 | 1387.75 | 0.00 | 0.00 | |
| 40.00 | | 659.97 | 1362.72 | 0.00 | 0.00 | |
| 41.00 | | 131.00 | 269.54 | 0.00 | 0.00 | |
| 45.00 | | 535.94 | 1866.44 | 0.00 | 0.00 | |
| 48.00 | | 401.36 | 1380.31 | 0.00 | 0.00 | |
| 50.00 | | 266.96 | 464.16 | 0.00 | 0.00 | |
| 55.00 | | 670.48 | 1145.39 | 0.00 | 0.00 | |
| 60.00 | | 667.68 | 1123.94 | 0.00 | 0.00 | |
| 65.00 | | 663.57 | 1102.49 | 0.00 | 0.00 | |
| 70.00 | | 658.30 | 1081.04 | 0.00 | 0.00 | |
| 75.00 | | 652.01 | 1059.58 | 0.00 | 0.00 | |
| 80.00 | | 644.78 | 1038,13 | 0.00 | 0.00 | |
| 85.00 | | 636.71 | 1016.68 | 0.00 | 0.00 | |
| 90.00 | | 636.65 | 1678.11 | 0.00 | 0.00 | |
| 91.00 | | 125.64 | 330.90 | 0.00 | 0.00 | |
| 95.00 | | 500.42 | 681.21 | 0.00 | 0.00 | |
| 100.00 | | 617.09 | 835.43 | 0.00 | 0.00 | |
| 105.00 | | 606.36 | 817.55 | 0.00 | 0.00 | |
| 110.00 | (7) attachments | 2059.48 | 1211.87 | 0.00 | 2390.93 | |
| 115.00 | ` ' | 583.23 | 767.75 | 0.00 | 0.00 | |
| 120.00 | | 570.89 | 749.88 | 0.00 | 0.00 | |
| 125.00 | | 558.08 | 732.00 | 0.00 | 0.00 | |
| 130.00 | | 544.83 | 714.12 | 0.00 | 0.00 | |
| 135.00 | | 538.80 | 1120.67 | 0.00 | 0.00 | |
| 140.00 | | 524.78 | 584.38 | 0.00 | 0.00 | |
| 145.00 | (14) attachments | 3684.54 | 2858.38 | 0.00 | 0.00 | |
| 150.00 | | 495.60 | 547.59 | 0.00 | 0.00 | |
| 155.00 | | 480.47 | 533.29 | 0.00 | 0.00 | |
| 157.00 | (8) attachments | 3196.71 | 1102.83 | 0.00 | 0.00 | |
| 160.00 | . , | 276.76 | 306.03 | 0.00 | 0.00 | |
| 165.00 | | 449.23 | 498.61 | 0.00 | 0.00 | |
| 167.00 | (37) attachments | 5779.86 | 3325.14 | 0.00 | 0.00 | |
| 170.00 | | 257.61 | 251.61 | 0.00 | 0.00 | |
| 175.00 | | 416.75 | 407.90 | 0.00 | 0.00 | |
| 177.00 | (31) attachments | 4685.58 | 2986.87 | 0.00 | 0.00 | |
| 180.00 | | 237.75 | 186.22 | 0.00 | 0.00 | |
| 185.00 | (40) attachments | 3651.45 | 2414.53 | 0.00 | 0.00 | |
| 190.00 | (1) attachments | 672.42 | 345.68 | 0.00 | 832.36 | |
| | Totals: | 43,114.00 | | | | |
| | iouis. | 70,114.00 | 49,138.78 | 0.00 | 3,223.29 | |

Linear Appurtenance Segment Forces (Factored)

Exposure:

TIA-222-H 1/18/2024 Code: Structure: CT08748-A С

Site Name: Woodstock 4 CT Height:

Crest Height: 0.00 190.00 (ft)

D - Stiff Soil Site Class: Base Elev: 0.000 (ft) Struct Class: || Topography: 1

Load Case: 0.9D + 1.0W 119 mph Wind

Gh:

0.90 Dead Load Factor Wind Load Factor 1.00



26

| Y | Iterations |
|---|------------|
| X | |
| Z | |

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| | | | | | F | | | | Cf | | | Dead |
|---------------------|---------------------|-----------------|----------------|-------|--------------------------|----------------|----------------|-------|------------------|-------------|-------------|--------------|
| Top Elev (ft) | Description | Wind Exposed | Length (ft) | Ca | Exposed Width (in) | Area (sqft) | CaAa (sqft) | Ra | Adjust Factor | qz (psf) | F X (lb) | Load (Ib) |
| 5.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.016 | 0.000 | 28.420 | 0.00 | 1.23 |
| 5.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.016 | 0.000 | 28.420 | 0.00 | 4.68 |
| 10.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.016 | 0.000 | 28.420 | 0.00 | 1.23 |
| 10.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.016 | 0.000 | 28.420 | 0.00 | 4.68 |
| 15.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.016 | 0.000 | 28.420 | 0.00 | 1.23 |
| 15.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.016 | 0.000 | 28.420 | 0.00 | 4.68 |
| 20.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.016 | 0.000 | 30.155 | 0.00 | 1.23 |
| 20.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.016 | 0.000 | 30.155 | 0.00 | 4.68 |
| 25,00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.017 | 0.000 | 31.606 | 0.00 | 1.23 |
| 25.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.017 | 0.000 | 31.606 | 0.00 | 4.68 |
| 30.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.017 | 0.000 | 32.842 | 0.00 | 1.23 |
| 30.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.017 | 0.000 | 32.842 | 0.00 | 4.68 |
| 35.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.017 | 0.000 | 33,926 | 0.00 | 1.23 |
| 35.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.017 | 0.000 | 33,926 | 0.00 | 4.68 |
| 40.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.018 | 0.000 | 34.893 | 0.00 | 1.23 |
| 40.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.018 | 0.000 | 34,893 | 0.00 | 4.68 |
| 41.00 | Safety Cable | Yes | 1.00 | 0.000 | 0.38 | 0.03 | 0.00 | 0.018 | 0.000 | 35.075 | 0.00 | 0.25 |
| 41.00 | Step bolts (ladder) | Yes | 1.00 | 0.000 | 0.63 | 0.05 | 0.00 | 0.018 | 0.000 | 35.075 | 0.00 | 0.94 |
| | Safety Cable | Yes | 4.00 | 0.000 | 0.38 | 0.13 | 0.00 | 0.018 | 0.000 | 35.769 | 0.00 | 0.98 |
| 45.00 | Step bolts (ladder) | Yes | 4.00 | 0.000 | 0.63 | 0.21 | 0.00 | 0.018 | 0.000 | 35.769 | 0.00 | 3.74 |
| 45.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.019 | 0.000 | 36.258 | 0.00 | 0.74 |
| 48.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.019 | 0.000 | 36.258 | 0.00 | 2.81 |
| 48.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.019 | 0.000 | 36.571 | 0.00 | 0.49 |
| 50.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.10 | 0.00 | 0.019 | 0.000 | 36.571 | 0.00 | 1.87 |
| 50.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.019 | 0.000 | 37.313 | 0.00 | 1.23 |
| 55.00 | | Yes | 5.00 | 0.000 | 0.63 | 0,26 | 0.00 | 0.019 | 0.000 | 37.313 | 0.00 | 4.68 |
| 55.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.019 | 0.000 | 38.002 | 0.00 | 1.23 |
| 60.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.019 | 0.000 | 38.002 | 0.00 | 4.68 |
| 60.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.020 | 0.000 | 38.648 | 0.00 | 1.23 |
| 65.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.020 | 0.000 | 38.648 | 0.00 | 4.68 |
| 65.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.020 | 0.000 | 39.256 | 0.00 | 1.23 |
| 70.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.020 | 0.000 | 39.256 | 0.00 | 4.68 |
| 70.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.021 | 0.000 | 39.830 | 0.00 | 1.23 |
| 75.00 | Safety Cable | | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.021 | 0.000 | 39.830 | 0.00 | 4.68 |
| 75.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.021 | 0.000 | 40.375 | 0.00 | 1.23 |
| 80.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.021 | 0.000 | 40.375 | 0.00 | 4.68 |
| 80.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.022 | 0.000 | 40.894 | 0.00 | 1.23 |
| 85.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.022 | 0.000 | 40.894 | 0.00 | 4.68 |
| 85.00 | Step bolts (ladder) | Yes | | 0.000 | 0.38 | 0.26 | 0.00 | 0.022 | 0.000 | 41.389 | 0.00 | 1.23 |
| 90.00 | Safety Cable | Yes | 5.00 | | 0.63 | 0.16 | 0.00 | 0.022 | 0.000 | 41.389 | 0.00 | 4.68 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.83 | 0.20 | 0.00 | 0.023 | 0.000 | 41.485 | 0.00 | 0.25 |
| | Safety Cable | Yes | 1.00 | 0.000 | 0.63 | 0.05 | 0.00 | 0.023 | 0.000 | 41.485 | 0.00 | 0.94 |
| 91.00 | | Yes | 1.00 | 0.000 | | 0.03 | 0.00 | 0.023 | 0.000 | 41.863 | 0.00 | 0.98 |
| | Safety Cable | Yes | 4.00 | 0.000 | 0.38 | 0.13 | 0.00 | 0.023 | 0.000 | 41.863 | 0.00 | 3.74 |
| | Step bolts (ladder) | Yes | 4.00 | 0.000 | 0.63 | 0.21 | 0.00 | 0.023 | 0.000 | 42.317 | 0.00 | 1.23 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | | 0.00 | 0.023 | 0.000 | 42.317 | 0.00 | 4.68 |
| 100.00 | | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.023 | 0.000 | 42.754 | 0.00 | 1.23 |
| 105.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | | | 12.10 | 0.00 | |

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Linear Appurtenance Segment Forces (Factored)

Structure: CT08748-A

Code: TIA-222-H

Site Name: Woodstock 4 CT

Exposure: C 1/18/2024

Height:

190.00 (ft)

Crest Height: 0.00

D - Stiff Soil

26

Base Elev: 0.000 (ft) Gh: 1.1

Topography: 1

Site Class: Struct Class: II

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Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor 0.90 Wind Load Factor 1.00



Iterations

| Top Elev (ft) | Description | Wind Exposed | Length (ft) | Ca | Exposed Width (in) | Area (sqft) | CaAa (sqft) | Ra | Cf Adjust Factor | qz (psf) | F X (lb) | Dead Load (lb) |
|---------------------|---------------------|-----------------|----------------|-------|--------------------------|----------------|----------------|-------|------------------------|-------------|-------------|----------------------|
| 105.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.024 | 0.000 | 42.754 | 0.00 | 4.68 |
| 110.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.025 | 0.000 | 43.175 | 0.00 | 1.23 |
| 110.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.025 | 0.000 | 43.175 | 0.00 | 4.68 |
| 115.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.025 | 0.000 | 43.173 | 0.00 | 1.23 |
| 115.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.025 | 0.000 | 43,581 | 0.00 | 4.68 |
| 120.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.026 | 0.000 | 43,973 | 0.00 | 1.23 |
| 120.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0,63 | 0.26 | 0.00 | 0.026 | 0.000 | 43.973 | 0.00 | 4.68 |
| 125.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.020 | 0.000 | 44.352 | 0.00 | 1.23 |
| 125.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.027 | 0.000 | 44.352 | 0.00 | 4.68 |
| 130.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.027 | 0.000 | 44.720 | 0.00 | 1.23 |
| 130.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.028 | 0.000 | 44.720 | 0.00 | 4.68 |
| 135.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.029 | 0.000 | 45.077 | 0.00 | 1.23 |
| 135.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.029 | 0.000 | 45.077 | 0.00 | 4.68 |
| 140.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.029 | 0.000 | 45.423 | 0.00 | 1.23 |
| 140.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.029 | 0.000 | 45.423 | 0.00 | 4.68 |
| 145.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.030 | 0.000 | 45.760 | 0.00 | 1.23 |
| 145.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.030 | 0.000 | 45.760 | 0.00 | 4.68 |
| 150.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.031 | 0.000 | 46.088 | 0.00 | 1.23 |
| 150.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.031 | 0.000 | 46.088 | 0.00 | 4.68 |
| 155.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.033 | 0.000 | 46.407 | 0.00 | 1.23 |
| 155.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.033 | 0.000 | 46.407 | 0.00 | 4.68 |
| 157.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.034 | 0.000 | 46.533 | 0.00 | 0.49 |
| 157.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.10 | 0.00 | 0.034 | 0.000 | 46.533 | 0.00 | 1.87 |
| 160.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.034 | 0.000 | 46.718 | 0.00 | 0.74 |
| 160.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.034 | 0.000 | 46.718 | 0.00 | 2.81 |
| 165.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.035 | 0.000 | 47.022 | 0.00 | 1.23 |
| 165.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.035 | 0.000 | 47.022 | 0.00 | 4.68 |
| 167.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.036 | 0.000 | 47.141 | 0.00 | 0.49 |
| 167.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.10 | 0.00 | 0.036 | 0.000 | 47.141 | 0.00 | 1.87 |
| 170.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.037 | 0.000 | 47.318 | 0.00 | 0.74 |
| 170.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.037 | 0.000 | 47.318 | 0.00 | 2.81 |
| 175.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.039 | 0.000 | 47.608 | 0.00 | 1.23 |
| 175.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.039 | 0.000 | 47.608 | 0.00 | 4.68 |
| 177.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.040 | 0.000 | 47.722 | 0.00 | 0.49 |
| 177.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.10 | 0.00 | 0.040 | 0.000 | 47.722 | 0.00 | 1.87 |
| 180.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.041 | 0.000 | 47.891 | 0.00 | 0.74 |
| 180.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.041 | 0.000 | 47.891 | 0.00 | 2.81 |
| 185.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.041 | 0.000 | 48.168 | 0.00 | 1.23 |
| 185.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.041 | 0.000 | 48.168 | 0.00 | 4.68 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.041 | 0.000 | 48.440 | 0.00 | 1.23 |
| 190.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.041 | 0.000 | 48.440 | 0.00 | |
| | . , , | | | 2,000 | 0.00 | 0.20 | 0.00 | 0.041 | - | - | | 4.68 |
| | | | | | | | | | [01 | als: | 0.0 | 224.5 |

Calculated Forces

Structure: CT08748-A **Code:** TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT

Height: 190.00 (ft)

Exposure: C

Crest Height: 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II

SBA 🕥

Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor 0.90 Wind Load Factor 1.00



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Iterations 26

| Seg Elev | Pu FY (-) | Vu FX (-) | Tu MY (-) (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | phi Pn (kips) | phi Vn (kips) | phi Tn (ft-kips) | phi Mn (ft-kips) | Total Deflect (in) | Rotation Sway (deg) | Rotation Twist (deg) | Stress Ratio |
|--------------|------------------|------------------|---------------------------|-----------------------|-----------------------|----------------------------------|---------------------|---------------------|------------------------|------------------------|--------------------------|---------------------------|----------------------------|-----------------|
| (ft) 0.00 | (kips) -49.07 | (kips) -43.19 | 0.00 | -5665.4 | 0.00 | 5665,40 | 5803.10 | 1561.17 | 8297.91 | 7657.05 | 0.00 | 0.000 | 0.000 | 0.749 |
| | -49.07 -47.41 | -42.71 | 0.00 | -5449.4 | 0.00 | 5449.46 | 5740.33 | 1532.49 | 7995.78 | 7434.11 | 0.09 | -0.171 | 0.000 | 0.742 |
| 5.00 | -47.41 -45.77 | -42.24 | 0.00 | -5235.9 | 0.00 | 5235.90 | 5675.91 | 1503.80 | 7699.25 | 7212.14 | 0.37 | -0.346 | 0.000 | 0.735 |
| 10.00 | -45.77 -44.15 | -42.24 | 0.00 | -5024.7 | 0.00 | 5024.71 | 5609.85 | 1475.12 | 7408.33 | 6991.28 | 0.82 | -0.523 | 0.000 | 0.727 |
| 15.00 | -44.15 -42.57 | -41.77 -41.27 | 0.00 | -4815.8 | 0.00 | 4815.85 | 5542.15 | 1446.43 | 7123.01 | 6771.63 | 1.47 | -0.703 | 0.000 | 0.720 |
| 20.00 | -42.57 -41.01 | -40.75 | 0.00 | -4609.4 | 0.00 | 4609.48 | 5472.81 | 1417.75 | 6843.29 | 6553.32 | 2.30 | -0.885 | 0.000 | 0.712 |
| 25.00 | -41.01 | -40.73 | 0.00 | -4405.7 | 0.00 | 4405.74 | 5401.82 | 1389.06 | 6569.17 | 6336.48 | 3.33 | -1.071 | 0.000 | 0.703 |
| 30.00 | -39.46 | -39.65 | 0.00 | -4204.7 | 0.00 | 4204.71 | 5329.20 | 1360.38 | 6300.66 | 6121.21 | 4.55 | -1.259 | 0.000 | 0.695 |
| 35.00 | | -39.03 | 0.00 | -4006.4 | 0.00 | 4006.46 | 5254.93 | 1331.69 | 6037.75 | 5907.64 | 5.97 | -1.451 | 0.000 | 0.686 |
| 40.00 | -36.55 -36.21 | -38.96 | 0.00 | -3967.4 | 0.00 | 3967.43 | 5239.88 | 1325.95 | 5985.84 | 5865.14 | 6.28 | -1.490 | 0.000 | 0.684 |
| 41.00 | -36.21 | -38.45 | 0.00 | -3811.6 | 0.00 | 3811.61 | 5179.02 | 1303.01 | 5780.44 | 5695.90 | 7.60 | -1.647 | 0.000 | 0.677 |
| 45.00 | -34.27 | -38.07 | 0.00 | -3696.2 | 0.00 | 3696.26 | 4202.19 | 1119.08 | 4974.38 | 4636.19 | 8.67 | -1.766 | 0.000 | 0.806 |
| 48.00 | | -37.87 | 0.00 | -3620.1 | 0.00 | 3620.12 | 4180.07 | 1109.25 | 4887.33 | 4570.98 | 9.43 | -1.847 | 0.000 | 0.801 |
| 50.00 | -32.28 -31.01 | -37.28 | 0.00 | -3430.7 | 0.00 | 3430.77 | 4123.62 | 1084.66 | 4673.07 | 4408.60 | 11.48 | -2.070 | 0.000 | 0.787 |
| 55.00 | | | 0.00 | -3244.3 | 0.00 | 3244.36 | 4065.54 | 1060.07 | 4463.61 | 4247.27 | 13.77 | -2.295 | 0.000 | 0.772 |
| 60.00 | -29.77 | -36.69 | 0.00 | -3060.9 | 0.00 | 3060.90 | 4005.81 | 1035.49 | 4258.96 | 4087.10 | 16.30 | -2.524 | 0.000 | 0.757 |
| 65.00 | -28.55 | -36.10 | 0.00 | -2880.4 | 0.00 | 2880.42 | 3944.44 | 1010.90 | 4059.10 | 3928.21 | 19.06 | -2.754 | 0.000 | 0.741 |
| 70.00 | -27.36 | -35.50 | 0.00 | -2702.9 | 0.00 | 2702.92 | 3881.43 | 986.31 | 3864.05 | 3770.72 | 22.07 | -2.987 | 0.000 | 0.725 |
| 75.00 | -26.19 | -34.90 | _ | -2528.4 | 0.00 | 2528.41 | 3816.78 | 961.72 | 3673.81 | 3614.75 | 25.33 | -3.222 | 0.000 | 0.707 |
| 80.00 | -25.05 | -34.31 | 0.00 | -2356.8 | 0.00 | 2356.88 | 3750.48 | 937.14 | 3488.36 | 3460.42 | 28.83 | -3.459 | 0.000 | 0.689 |
| 85.00 | -23.93 | -33.71 | 0.00 | 10 | 0.00 | 2188.32 | 3682.55 | 912.55 | 3307.72 | 3307.86 | 32.57 | -3.697 | 0.000 | 0.669 |
| 90.00 | -22.21 | -33.03 | 0.00 | -2188.3 -2155.3 | 0.00 | 2155.30 | 2898.33 | 768.33 | 2813.78 | 2634.30 | 33,35 | -3.746 | 0.000 | 0.828 |
| 91.00 | -21.82 | -32.93 | 0.00 | | 0.00 | 2023.59 | 2860.60 | 751.94 | 2695.00 | 2544.15 | 36.57 | -3.939 | 0.000 | 0.805 |
| 95.00 | -21.04 | -32.47 | 0.00 | -2023.5 | 0.00 | 1861.26 | 2811.95 | 731.45 | 2550.13 | 2432.25 | 40.84 | -4.213 | 0.000 | 0.774 |
| 100.00 | -20.10 | -31.89 | 0.00 | -1861.2 | 0.00 | 1701.82 | 2761.66 | 710.96 | 2409.26 | 2321.34 | 45.40 | -4.485 | 0.000 | 0.742 |
| 105.00 | -19.18 | -31.31 | 0.00 | -1701.8 | | 1542.87 | 2701.00 | 690.47 | 2272.40 | 2211.55 | 50.24 | -4.756 | 0.000 | 0.706 |
| 110.00 | -18,00 | -29.25 | 0.00 | -1542.8 | 0.00 | 1396.63 | 2656.16 | 669.98 | 2139.54 | 2103.00 | 55.36 | -5.023 | 0.000 | 0.672 |
| 115.00 | -17.16 | -28.68 | 0.00 | -1396.6 | 0.00 | 1253.23 | 2600.95 | 649.49 | 2010.67 | 1995.80 | 60.75 | -5.287 | 0.000 | 0.636 |
| 120.00 | -16.33 | -28.12 | | -1253.2 | 0.00 | 1112.63 | 2544.10 | 629.00 | 1885.82 | 1890.08 | 66.42 | -5.545 | 0.000 | 0.597 |
| 125.00 | -15.53 | -27.56 | 0.00 | -1112.6 | | 974.81 | 2485.60 | 608.51 | 1764.96 | 1785.96 | 72.36 | -5.796 | 0.000 | 0.554 |
| 130.00 | -14.76 | -27.02 | | -974.81 | 0.00 | 839.74 | 1823.78 | 478.25 | 1362.76 | 1289.51 | 78.55 | -6.037 | 0.000 | 0.662 |
| 135.00 | -13.59 | -26.42 | | -839.74 | 0.00 | 707.64 | 1784.40 | 461.86 | 1270.94 | 1218.11 | 84.98 | -6.265 | 0.000 | 0.591 |
| 140.00 | -12.96 | -25.89 | | -707.64 | 0.00 | | 1743.38 | 445.47 | 1182.33 | 1147.55 | 91.67 | -6.515 | 0.000 | 0.512 |
| 145.00 | -10.44 | -21.95 | | -578.19 | 0.00 | 578.19 468.43 | 1743.30 | 429.08 | 1096.92 | 1077.96 | 98.60 | -6.742 | 0.000 | 0.443 |
| 150.00 | -9.87 | -21.43 | | -468.43 | 0.00 | | 1656.41 | 412.69 | 1014.72 | 1009.45 | 105.76 | -6.943 | 0.000 | 0.366 |
| 155.00 | -9.35 | -20.92 | | -361.26 | 0.00 | 361.26 | 1638.23 | 406.13 | 982.73 | 982.37 | 108.68 | -7.018 | 0.000 | 0.332 |
| 157.00 | -8.62 | -17.62 | | -319.42 | 0.00 | 319.42 | 1610.46 | 396.29 | 935.71 | 942.14 | 113.11 | -7.118 | 0.000 | 0.290 |
| 160.00 | -8.31 | -17.33 | | -266.56 | 0.00 | 266.56 | 1562.88 | 379.90 | 859.91 | 876.15 | 120.63 | -7.256 | 0.000 | 0.212 |
| 165.00 | -7.85 | -16.83 | | -179.92 | 0.00 | 179.92 | | | 830.48 | 850.16 | 123.67 | -7.301 | 0.000 | 0.176 |
| 167.00 | -5.27 | -10.68 | | -146.26 | 0.00 | 146.26 | 1543.38 | 373.35 | 787.30 | 811.61 | 128.26 | -7.359 | 0.000 | 0.145 |
| 170.00 | -5.04 | -10.40 | | -114.21 | 0.00 | 114.21 | 1513.65 | 363.51 | 717.90 | 748.63 | 135.99 | -7.429 | 0.000 | 0.087 |
| 175.00 | -4.69 | -9.94 | | -62.21 | 0.00 | 62.21 | 1462.77 | 347.12 | 691.04 | 723.78 | 139.10 | -7.448 | 0.000 | 0.060 |
| 177.00 | -2.33 | -4.91 | 0.00 | -42.34 | 0.00 | 42.34 | 1441.72 | 340.56 | 651.70 | 682.38 | 143.77 | -7.448 | 0.000 | 0.042 |
| 180.00 | -2.17 | -4.65 | | -27.62 | | 27.62 | 1400.09 | 330.73 | | 588.19 | 143.77 | -7.469 | 0.000 | 0.049 |
| 180.00 | -2.17 | -4.65 | 0.00 | -27.62 | | 27.62 | 1210.02 | 285.83 | 562.49 | 588.19 | 151.58 | -7.486 | 0.000 | 0.008 |
| 185.00 | -0.26 | -0.71 | 0.00 | -4.39 | | 4.39 | 1210.02 | 285.83 | 562.49 562.49 | 588.19 | 159.40 | -7.488 | 0.000 | 0.000 |
| 190.00 | 0.00 | -0.67 | 0.00 | -0.83 | 0.00 | 0.83 | 1210.02 | 285.83 | 20∠.49 | JOB. 19 | 108.40 | -1.400 | 0.000 | 0,001 |

Wind Loading - Shaft

Structure: CT08748-A

Site Name: Woodstock 4 CT

Height:

Gh:

190.00 (ft)

Base Elev: 0.000 (ft)

1.1

Topography: 1

1.20

1.00

Code:

TIA-222-H

1/18/2024

Exposure: Crest Height: 0.00

Site Class:

D - Stiff Soil

Struct Class: II

Page: 21

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor Wind Load Factor

Iterations

26

| Elev | | | qz | gzGh | С | | lce Thick | Tributary | Aa | CfAa | Wind | Dead Load Ice | Tot Dead |
|------------------------|------|------|-------|-------|----------|-------|--------------|-----------|--------|-------|---------|------------------|--------------|
| (ft) Description | Kzt | Kz | (psf) | (psf) | (mph-ft) | Cf | (in) | (ft) | (sf) | (sf) | (lb) | (lb) | Load (lb) |
| 0.00 | 1.00 | 0.85 | 5.017 | 5.52 | 0.00 | 1.200 | 0.000 | 0.00 | 0.000 | 0.00 | 0.0 | 0.0 | 0.0 |
| 5.00 | 1.00 | 0.85 | 5.017 | 5.52 | 0.00 | 1.200 | 1.242 | 5.00 | 28.076 | 33.69 | 185.9 | 502.4 | 2301.9 |
| 10.00 | 1.00 | 0.85 | 5.017 | 5.52 | 0.00 | 1.200 | 1.331 | 5.00 | 27.652 | 33.18 | 183.1 | 529.4 | 2295.5 |
| 15.00 | 1.00 | 0.85 | 5.017 | 5.52 | 0.00 | 1.200 | 1,386 | 5.00 | 27.200 | 32.64 | 180.1 | 541.5 | 2274.3 |
| 20.00 | 1.00 | 0.90 | 5.324 | 5.86 | 0.00 | 1.200 | 1.427 | 5.00 | 26.735 | 32.08 | 187.9 | 547.1 | 2246.5 |
| 25.00 | 1.00 | 0,95 | 5.580 | 6.14 | 0.00 | 1.200 | 1.459 | 5.00 | 26.264 | 31.52 | 193.4 | 549.0 | 2215.0 |
| 30.00 | 1.00 | 0.98 | 5.798 | 6.38 | 0.00 | 1.200 | 1,486 | 5.00 | 25.789 | 30.95 | 197.4 | 548.4 | 2181.1 |
| 35.00 | 1.00 | 1.01 | 5.989 | 6.59 | 0.00 | 1.200 | 1.509 | 5.00 | 25.310 | 30.37 | 200.1 | 546.0 | 2145.3 |
| 40.00 | 1.00 | 1.04 | 6.160 | 6.78 | 0.00 | 1.200 | 1.529 | 5.00 | 24.829 | 29.79 | 201.9 | 542.3 | 2108,2 |
| 41,00 Bot - Section 2 | 1.00 | 1.05 | 6.192 | 6.81 | 0.00 | 1.200 | 1.533 | 1.00 | 4.907 | 5.89 | 40.1 | 108.3 | 417.5 |
| 45.00 | 1.00 | 1.07 | 6.315 | 6,95 | 0.00 | 1.200 | 1.547 | 4.00 | 19.691 | 23.63 | 164.1 | 435.8 | 2723.5 |
| 48,00 Top - Section 1 | 1.00 | 1.08 | 6.401 | 7.04 | 0.00 | 1.200 | 1.557 | 3.00 | 14.564 | 17.48 | 123.1 | 324.9 | 2014.6 |
| 50.00 | 1.00 | 1.09 | 6.456 | 7.10 | 0.00 | 1.200 | 1.564 | 2.00 | 9.612 | 11.53 | 81.9 | 215.6 | 734.1 |
| 55.00 | 1.00 | 1.12 | 6.587 | 7.25 | 0.00 | 1.200 | 1.579 | 5.00 | 23.693 | 28.43 | 206.0 | 532.8 | 1808.9 |
| 60,00 | 1.00 | 1.14 | 6.709 | 7.38 | 0.00 | 1.200 | 1.592 | 5.00 | 23.207 | 27.85 | 205.5 | 525.8 | 1773.4 |
| 65.00 | 1.00 | 1.16 | 6.823 | 7.51 | 0.00 | 1.200 | 1.605 | 5.00 | 22.719 | 27.26 | 204.6 | 518.3 | 1737.3 |
| 70.00 | 1.00 | 1.17 | 6.930 | 7.62 | 0.00 | 1.200 | 1.617 | 5.00 | 22.231 | 26.68 | 203.4 | 510.4 | 1700.7 |
| 75.00 | 1.00 | 1.19 | 7.032 | 7.73 | 0.00 | 1.200 | 1.628 | 5.00 | 21.743 | 26.09 | 201.8 | 502.0 | 1663.7 |
| 80.00 | 1.00 | 1.21 | 7.128 | 7.84 | 0.00 | 1.200 | 1.639 | 5.00 | 21.253 | 25.50 | 200.0 | 493.3 | 1626.4 |
| 85.00 Bot - Section 3 | 1.00 | 1.22 | 7.219 | 7.94 | 0.00 | 1.200 | 1.649 | 5.00 | 20.764 | 24.92 | 197.9 | 484.2 | 1588.7 |
| 90.00 | 1.00 | 1.24 | 7.307 | 8.04 | 0.00 | 1.200 | 1.658 | 5.00 | 20.538 | 24.65 | 198.1 | 481.4 | 2467.8 |
| 91.00 Top - Section 2 | 1.00 | 1.24 | 7.324 | 8.06 | 0.00 | 1.200 | 1.660 | 1.00 | 4.048 | 4.86 | 39.1 | 95.9 | 486.9 |
| 95.00 | 1.00 | 1.25 | 7.390 | 8.13 | 0.00 | 1.200 | 1.667 | 4.00 | 15.998 | 19.20 | 156.1 | 377.4 | 1084.8 |
| 100.00 | 1.00 | 1.27 | 7.471 | 8.22 | 0.00 | 1.200 | 1.676 | 5.00 | 19.557 | 23.47 | 192.9 | 461.9 | 1324.8 |
| 105.00 | 1.00 | 1.28 | 7.548 | 8.30 | 0.00 | 1.200 | 1.684 | 5.00 | 19.065 | 22.88 | 190.0 | 451.8 | 1290.8 |
| 110.00 Appurtenance(s) | 1.00 | 1.29 | 7.622 | 8.38 | 0.00 | 1.200 | 1.692 | 5.00 | 18.574 | 22.29 | 186.9 | 441.6 | 1256.7 |
| 115.00 | 1.00 | 1.30 | 7.694 | 8.46 | 0.00 | 1.200 | 1.699 | 5.00 | 18.082 | 21.70 | 183,6 | 431.1 | 1222.4 |
| 120.00 | 1.00 | 1.32 | 7.763 | 8.54 | 0.00 | 1.200 | 1.707 | 5.00 | 17.590 | 21.11 | 180.2 | 420.4 | 1187.9 |
| 125.00 | 1.00 | 1.33 | 7.830 | 8.61 | 0.00 | 1.200 | 1.714 | 5.00 | 17.098 | 20.52 | 176.7 | 409.5 | 1153.2 |
| 130.00 Bot - Section 4 | 1.00 | 1.34 | 7.895 | 8.68 | 0.00 | 1.200 | 1.720 | 5.00 | 16.606 | 19.93 | 173.1 | 398.5 | 1118.4 |
| 135.00 Top - Section 3 | 1.00 | 1.35 | 7.958 | 8.75 | 0.00 | 1.200 | 1,727 | 5.00 | 16.325 | 19.59 | 171.5 | 392.8 | 1654.7 |
| 140.00 | 1.00 | 1.36 | 8.019 | 8.82 | 0.00 | 1.200 | 1.733 | 5.00 | 15.832 | 19.00 | 167.6 | 381.5 | 928.3 |
| 145.00 Appurtenance(s) | 1.00 | 1.37 | 8.079 | 8.89 | 0.00 | 1.200 | 1.739 | 5.00 | 15.339 | 18.41 | 163.6 | 370.1 | 897.8 |
| 150.00 | 1.00 | 1.38 | 8.136 | 8.95 | 0.00 | 1.200 | 1.745 | 5.00 | 14.846 | 17.81 | 159.4 | 358.5 | 867.2 |
| 155.00 | 1.00 | 1.39 | 8.193 | 9.01 | 0.00 | 1.200 | 1.751 | 5.00 | 14.352 | 17.22 | 155.2 | 346.8 | 836.5 |
| 157.00 Appurtenance(s) | 1.00 | 1.39 | 8.215 | 9.04 | 0.00 | 1.200 | 1.753 | 2.00 | 5.602 | 6.72 | 60.7 | 136.9 | 327.4 |
| 160.00 | 1.00 | 1.40 | 8.248 | 9.07 | 0.00 | 1.200 | 1.757 | 3.00 | 8.256 | 9.91 | 89.9 | 201.0 | 481.1 |
| 165.00 | 1.00 | 1.41 | 8.301 | 9.13 | 0.00 | 1.200 | 1.762 | 5.00 | 13.366 | 16.04 | 146.5 | 323.1 | 774.6 |
| 167.00 Appurtenance(s) | 1.00 | 1.41 | 8.322 | 9.15 | 0.00 | 1.200 | 1.764 | 2.00 | 5.208 | 6.25 | 57.2 | 127,3 | 302.6 |
| 170.00 | 1.00 | 1.42 | 8.354 | 9.19 | 0.00 | 1.200 | 1.767 | 3.00 | 7.663 | 9.20 | 84.5 | 186.7 | 443.8 |
| 175.00 | 1.00 | 1.42 | 8.405 | 9.25 | 0.00 | 1.200 | 1.772 | 5.00 | 12.378 | 14.85 | 137.3 | 299.0 | 712.4 |
| 177.00 Appurtenance(s) | 1.00 | 1.43 | 8.425 | 9.27 | 0.00 | 1.200 | 1.774 | 2.00 | 4.813 | 5.78 | 53.5 | 117.7 | 277.7 |
| 180.00 Top - Section 4 | 1.00 | 1.43 | 8.455 | 9.30 | 0.00 | 1.200 | 1.777 | 3.00 | 7.071 | 8.49 | 78.9 | 172.1 | 406.4 |
| 185.00 Appurtenance(s) | 1.00 | 1.44 | 8.504 | 9.35 | 0.00 | 1.200 | 1.782 | 5.00 | 11.639 | 13.97 | 130.7 | 287.6 | 719.9 |
| 190.00 Appurtenance(s) | 1.00 | 1.45 | 8.552 | 9.41 | 0.00 | 1.200 | 1.787 | | 11.643 | 13.97 | 131.4 | 288.5 | 720.7 |
| | | | | | | | Totals: | 190.00 | | | 6,822.8 | _ | 58,501.4 |

Discrete Appurtenance Forces

Structure: CT08748-A

Code:

TIA-222-H C

1/18/2024

Site Name: Woodstock 4 CT

Exposure:

Height:

190.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class:

D - Stiff Soil

SBA

26

Gh:

1.1

Topography: 1

Struct Class: ||

Page: 22

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor

1.20

Wind Load Factor 1.00

Iterations

| | Elev | | qz | qzGh | Orient Factor | | Total CaAa | Dead Load | Horiz Ecc | Vert Ecc | Wind FX | Mom Y | Mom Z |
|-----|-------------------------------|-----|-------|-------|------------------|--------|---------------|--------------|--------------|-------------|------------|----------|--------------|
| No. | 1000 WERLST STREET | Qty | (psf) | (psf) | х Ка | Ka | (sf) | (lb) | (ft) | (ft) | (lb) | (lb-ft) | (lb-ft) |
| 1 | 190.00 | 1 | 8.580 | 9.438 | 1.00 | 1.00 | 6.24 | 16.80 | 0.000 | 3.000 | 58.89 | 0.00 | 176.67 |
| 2 | 185.00 Powerwave 7770.00 | 9 | 8.504 | 9.354 | 0.58 | 0.80 | 34.63 | 1823.77 | 0.000 | 0.000 | 323.96 | 0.00 | 0.00 |
| 3 | 185.00 ADC | 6 | 8.504 | 9.354 | 0.40 | 0.80 | 0.24 | 79.04 | 0.000 | 0.000 | 2.26 | 0.00 | 0.00 0.00 |
| 4 | 185,00 Powerwave LGP21903 | 6 | 8.504 | 9.354 | 0.40 | 0.80 | 1.62 | 82.60 | 0.000 | 0.000 | 15.18 | 0.00 | 0.00 |
| 5 | 185.00 Powerwave LGP21401 | 6 | 8.504 | 9.354 | 0.40 | 0.80 | 5.14 | 219.49 | 0.000 | 0.000 | 48.12 | 0.00 | 0.00 |
| 6 | 185.00 Mount Pipes | 12 | 8.504 | 9.354 | 0.80 | 0.80 | 23.84 | 1176.96 | 0.000 | 0.000 | 223.03 | 0.00 | |
| 7 | 185.00 Low Profile Platform | 1 | 8.504 | 9.354 | 1.00 | 1.00 | 27.26 | 4353.98 | 0.000 | 0.000 | 254.96 | 0.00 | 0.00 0.00 |
| 8 | 177.00 VV-65A-R1 | 3 | 8.425 | 9.267 | 0.55 | 0.75 | 15.32 | 638.60 | 0.000 | 0.000 | 142.00 | 0.00 | 0.00 |
| 9 | 177.00 4449 B71 + B85 | 3 | 8.425 | 9.267 | 0.38 | 0.75 | 2.87 | 264.44 | 0.000 | 0.000 | 26.57 | 0.00 | 0.00 |
| 10 | 177.00 AIR6419 B41 | 3 | 8.425 | 9.267 | 0.53 | 0.75 | 10.57 | 693.92 | 0.000 | 0.000 | 97.95 | 0.00 | 0.00 |
| 11 | 177.00 Ericsson KRY 112 489/2 | 3 | 8.425 | 9.267 | 0.38 | 0.75 | 1.43 | 97.60 | 0.000 | 0.000 | 13.27 | 0.00 | 0.00 |
| 12 | 177.00 782 11056 | 3 | 8.425 | 9.267 | 0.38 | 0.75 | 0.46 | 35.57 | 0.000 | 0.000 | 4.29 | 0.00 | 0.00 |
| 13 | 177.00 8843 B25/B66A | 3 | 8.425 | 9.267 | 0.38 | 0.75 | 2.41 | 366.08 | 0.000 | 0.000 | 22.37 | 0.00 | 0.00 |
| 14 | 177.00 APXVAARR24_43-U-NA2 | 2 3 | 8.425 | 9.267 | 0.52 | 0.75 | 34.92 | 1738.23 | 0.000 | 0.000 | 323.64 | 0.00 | 0.00 |
| 15 | 177.00 Platform w/Handrails | 1 | 8.425 | 9.267 | 1.00 | 1.00 | 39.64 | 5580.39 | 0.000 | 0.000 | 367.40 | 0.00 | 0.00 |
| 16 | 177.00 Mount Pipes | 9 | 8.425 | 9.267 | 0.75 | 0.75 | 9.69 | 881.44 | 0.000 | 0.000 | 89.84 | 0.00 | 0.00 |
| 17 | 167.00 Platform w/Handrails | 1 | 8.322 | 9.155 | 1.00 | 1.00 | 41.74 | 6225.39 | 0.000 | 0.000 | 382.08 | 0.00 | 0.00 |
| 18 | 167.00 RFS DB-T1-6Z-8AB-0Z | 2 | 8.322 | 9.155 | 1.00 | 1.00 | 11.31 | 426.33 | 0.000 | 0.000 | 103.57 | 0.00 | 0.00 |
| 19 | 167.00 Raycap | 1 | 8.322 | 9.155 | 1.00 | 1.00 | 4.89 | 185.69 | 0.000 | 0.000 | 44.72 | 0.00 | 0.00 |
| 20 | 167.00 Samsung RF4461d-13A | 3 | 8.322 | 9.155 | 0.64 | 0.75 | 4.63 | 341.89 | 0.000 | 0.000 | 42.35 | 0.00 | 0.00 |
| 21 | 167.00 Samsung B2/B66A RRH | 3 | 8.322 | 9.155 | 0.64 | 0.75 | 4.63 | 355.63 | 0.000 | 0.000 | 42.35 | 0.00 | 0.00 |
| 22 | 167.00 Commscope | 3 | 8.322 | 9.155 | 0.63 | 0.75 | 17.85 | 838.08 | 0.000 | 0.000 | 163.40 | 0.00 | 0.00 |
| 23 | 167.00 Samsung MT6413-77A | 3 | 8.322 | 9.155 | 0.53 | 0.75 | 7.33 | 653.52 | 0.000 | 0.000 | 67.12 | 0.00 | 0.00 |
| 24 | 167.00 Andrew JAHH-65B-R3B | 6 | 8.322 | 9.155 | 0.63 | 0.75 | 39.40 | 2225.69 | 0.000 | 0.000 | 360.67 | 0.00 | 0.00 |
| 25 | 167.00 Mount Pipes | 12 | 8.322 | 9.155 | 0.75 | 0.75 | 15.35 | 1173.04 | 0.000 | 0.000 | 140.53 | 0.00 | 0.00 |
| 26 | 167.00 Commscope | 3 | 8.322 | 9.155 | 0.38 | 0.75 | 0.99 | 192.89 | 0.000 | 0.000 | 9.06 | | 0.00 |
| 27 | 157.00 SAF | 4 | 8.215 | 9.036 | 0.50 | 1.00 | 4.04 | 109.19 | 0.000 | 0.000 | 36.48 | 0.00 | 0.00 |
| 28 | 157.00 VHLPX3-6W | 1 | 8.215 | 9.036 | 1.00 | 1.00 | 12.60 | 219.81 | 0.000 | 0.000 | 113.90 | 0.00 | 0.00 |
| 29 | 157.00 SUX6-65B | 1 | 8.215 | 9.036 | 1.00 | 1.00 | 39.17 | 760.74 | 0.000 | 0.000 | 353.97 | 0.00 | 0.00 |
| 30 | 157,00 Flush Mount | 2 | 8.215 | 9.036 | 1.00 | 1.00 | 17.01 | 1229.07 | 0.000 | 0.000 | 153.73 | 0.00 | 0.00 |
| 31 | 145.00 Mount Pipes | 3 | 8.079 | 8.886 | 0.75 | 0.75 | 4.27 | 291.92 | 0.000 | 0.000 | 37.97 | 0.00 | 0.00 |
| 32 | 145.00 RDIDC-9181-PF-48 | 1 | 8.079 | 8.886 | 1.00 | 1.00 | 2.58 | 66.65 | 0.000 | 0.000 | 22.89 | 0.00 | 0.00 |
| 33 | 145.00 Commscope | 1 | 8.079 | 8.886 | 1.00 | 1.00 | 61.82 | 6219.53 | 0.000 | 0.000 | 549.33 | | 0.00 |
| 34 | 145.00 FFVV-65B-R2 | 3 | 8.079 | 8.886 | 0.55 | 0.75 | 22.85 | 910.12 | 0.000 | 0.000 | 203.02 | 0.00 | 0.00 |
| 35 | 145.00 TA08025-B605 | 3 | 8.079 | 8.886 | 0.38 | 0.75 | 2.83 | 388.58 | 0.000 | 0.000 | 25.18 | 0.00 | |
| 36 | 145.00 TA08025-B604 | 3 | 8.079 | 8.886 | 0.38 | 0.75 | 2.83 | 345.12 | 0.000 | 0.000 | 25.18 | 0.00 | 0.00 0.00 |
| 37 | 110.00 Antenex Y1505 | 2 | 7.622 | 8.384 | 1.00 | 1.00 | 16.61 | 54.05 | 0.000 | 0.000 | 139.30 | 0.00 | 0.00 |
| 38 | 110.00 Flush Mount | 1 | 7.622 | 8.384 | 1.00 | 1.00 | 8.38 | 604.24 | 0.000 | 0.000 | 70.29 | 0.00 | 192.14 |
| 39 | 110.00 Telewave ANT450D6-9 | 2 | 7.651 | 8.416 | 1.00 | 1.00 | 11.42 | 156.02 | 0.000 | 2.000 | 96.07 | 0.00 | 2052.96 |
| 40 | 110.00 Decibel DB212-1 | 2 | 7.665 | 8.432 | 1.00 | 1.00 | 81.16 | 411.12 | 0.000 | 3.000 | 684.32 | 0.00 | 2002.90 |
| _ | | | | | | Tatala | | 42 422 25 | | | 5 881 25 | | |

Totals:

42,433.25

5,881.25

Total Applied Force Summary

Structure: CT08748-A

Code: TIA-222-H

1/18/2024

Site Name: Woodstock 4 CT

Exposure:

Height:

190.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class:

D - Stiff Soil

SBA

Gh:

1.1

Topography: 1

Struct Class: ||

Page: 23

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20 Wind Load Factor 1.00

Iterations 26

| Elev | | Lateral FX (-) | Axial FY (-) | Torsion MY | Moment MZ |
|--------|------------------|-------------------|-----------------|---------------|--------------|
| (ft) | Description | (lb) | (lb) | (lb-ft) | (Ib-ft) |
| 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| 5.00 | | 185.94 | 2576.84 | 0.00 | 0.00 |
| 10.00 | | 183.14 | 2573.59 | 0.00 | 0.00 |
| 15.00 | | 180.14 | 2554.41 | 0.00 | 0.00 |
| 20.00 | | 187.88 | 2528.23 | 0.00 | 0.00 |
| 25.00 | | 193.44 | 2497.99 | 0.00 | 0.00 |
| 30.00 | | 197.37 | 2465.08 | 0.00 | 0.00 |
| 35.00 | | 200.10 | 2430.25 | 0.00 | 0.00 |
| 40.00 | | 201.89 | 2393.96 | 0.00 | 0.00 |
| 41.00 | | 40.10 | 474.64 | 0.00 | |
| 45.00 | | 164.13 | 2952.75 | | 0.00 |
| 48.00 | | 123.06 | | 0.00 | 0.00 |
| 50.00 | | | 2186.83 | 0.00 | 0.00 |
| 55.00 | | 81.91 | 849.00 | 0.00 | 0.00 |
| | | 206.02 | 2096.78 | 0.00 | 0.00 |
| 60.00 | | 205.52 | 2061.81 | 0.00 | 0.00 |
| 65.00 | | 204.62 | 2026.27 | 0.00 | 0.00 |
| 70.00 | | 203.37 | 1990.23 | 0.00 | 0.00 |
| 75.00 | | 201.81 | 1953.75 | 0.00 | 0.00 |
| 80.00 | | 199.97 | 1916.88 | 0.00 | 0.00 |
| 85.00 | | 197.87 | 1879.65 | 0.00 | 0.00 |
| 90.00 | | 198.09 | 2759.11 | 0.00 | 0.00 |
| 91.00 | | 39.14 | 545.17 | 0.00 | 0.00 |
| 95.00 | | 156.07 | 1318.23 | 0.00 | 0.00 |
| 100.00 | | 192.85 | 1616.87 | 0.00 | 0.00 |
| 105.00 | | 189.95 | 1583.33 | 0.00 | 0.00 |
| 110.00 | (7) attachments | 1176.86 | 2774.99 | 0.00 | 2245.10 |
| 115.00 | • • | 183.64 | 1496.85 | 0.00 | 0.00 |
| 120.00 | | 180.25 | 1462.67 | 0.00 | 0.00 |
| 125.00 | | 176.72 | 1428.30 | 0.00 | 0.00 |
| 130.00 | | 173.05 | 1393.77 | 0.00 | |
| 135.00 | | 171.48 | 1930.38 | | 0.00 |
| 140.00 | | 167.58 | 1204.33 | 0.00 | 0.00 |
| 145.00 | (14) attachments | 1027.15 | | 0.00 | 0.00 |
| 150.00 | (14) attachments | | 9396.04 | 0.00 | 0.00 |
| | | 159.44 | 1132.85 | 0.00 | 0.00 |
| 155.00 | (0) =4 | 155.21 | 1102.37 | 0.00 | 0.00 |
| 157.00 | (8) attachments | 718.84 | 2752.59 | 0.00 | 0.00 |
| 160.00 | | 89.88 | 635.92 | 0.00 | 0.00 |
| 165.00 | | 146.46 | 1032.95 | 0.00 | 0,00 |
| 167.00 | (37) attachments | 1413.08 | 13024.13 | 0.00 | 0.00 |
| 170.00 | | 84.50 | 549.30 | 0.00 | 0.00 |
| 175.00 | | 137.33 | 888.38 | 0.00 | 0.00 |
| 177.00 | (31) attachments | 1140.85 | 10644.38 | 0.00 | 0.00 |
| 180.00 | | 78.91 | 447.82 | 0.00 | 0.00 |
| 185.00 | (40) attachments | 998.16 | 8525.08 | 0.00 | 0.00 |
| 190.00 | (1) attachments | 190.32 | 795.56 | 0.00 | 176.67 |
| | Totals: | 12,704.08 | 110,850.3 | | |
| | iotais. | 12,104.00 | 2 | 0.00 | 2,421.77 |

Linear Appurtenance Segment Forces (Factored)

1/18/2024 TIA-222-H Code: CT08748-A Structure:

С Exposure: Site Name: Woodstock 4 CT Crest Height: 0.00 190.00 (ft) Height:

D - Stiff Soil Site Class: Base Elev: 0.000 (ft)

Struct Class: || Topography: 1 1.1 Gh:



Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20 1.00 **Wind Load Factor**



Iterations

SBA

26

| Top Elev (ft) | Description | Wind Exposed | Length (ft) | Ca | Exposed Width (in) | Area (sqft) | CaAa (sqft) | Ra | Cf Adjust Factor | qz (psf) | F X (lb) | Dead Load (Ib) |
|---------------------|-------------------------------------|-----------------|----------------|-------|--------------------------|----------------|----------------|-------|------------------------|-------------|-------------|----------------------|
| | | Yes | 5.00 | 0.000 | 0.38 | 1.19 | 0.00 | 0.016 | 0.000 | 5.017 | 0.00 | 12.93 |
| | Safety Cable Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.30 | 0.00 | 0.016 | 0.000 | 5.017 | 0.00 | 18.85 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.27 | 0.00 | 0.016 | 0.000 | 5.017 | 0.00 | 14.46 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.37 | 0.00 | 0.016 | 0.000 | 5.017 | 0.00 | 20.46 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.31 | 0.00 | 0.016 | 0.000 | 5.017 | 0.00 | 15.46 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.42 | 0.00 | 0.016 | 0.000 | 5.017 | 0.00 | 21.51 |
| | , , | Yes | 5.00 | 0.000 | 0.38 | 1.35 | 0.00 | 0.016 | 0.000 | 5.324 | 0.00 | 16.21 |
| | Safety Cable Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.45 | 0.00 | 0.016 | 0.000 | 5.324 | 0.00 | 22.31 |
| | | Yes | 5.00 | 0.000 | 0.38 | 1.37 | 0.00 | 0.017 | 0.000 | 5.580 | 0.00 | 16.83 |
| | Safety Cable Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.48 | 0.00 | 0.017 | 0.000 | 5.580 | 0.00 | 22.95 |
| | | Yes | 5.00 | 0.000 | 0.38 | 1.40 | 0.00 | 0.017 | 0.000 | 5.798 | 0.00 | 17.35 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 1.50 | 0.00 | 0.017 | 0.000 | 5.798 | 0.00 | 23.50 |
| | Step boits (ladder) | Yes | 5.00 | 0.000 | 0.38 | 1.42 | 0.00 | 0.017 | 0.000 | 5.989 | 0.00 | 17.80 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 1.52 | 0.00 | 0.017 | 0.000 | 5.989 | 0.00 | 23.98 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 1.43 | 0.00 | 0.018 | 0.000 | 6.160 | 0.00 | 18.21 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 1.54 | 0.00 | 0.018 | 0.000 | 6.160 | 0.00 | 24.40 |
| | Step bolts (ladder) | Yes | 1.00 | 0.000 | 0.38 | 0.29 | 0.00 | 0.018 | 0.000 | 6.192 | 0.00 | 3.66 |
| | Safety Cable | Yes | 1.00 | 0.000 | 0.63 | 0.31 | 0.00 | 0.018 | 0.000 | 6.192 | 0.00 | 4.90 |
| | Step bolts (ladder) | Yes | 4.00 | 0.000 | 0.38 | 1.16 | 0.00 | 0.018 | 0.000 | 6.315 | 0.00 | 14.86 |
| | Safety Cable | | 4.00 | 0.000 | 0.63 | 1.24 | 0.00 | 0.018 | 0.000 | 6.315 | 0.00 | 19.83 |
| | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.38 | 0.87 | 0.00 | 0.019 | 0.000 | 6.401 | 0.00 | 11.27 |
| | Safety Cable | Yes | 3.00 | 0.000 | 0.63 | 0.94 | 0.00 | 0.019 | 0.000 | 6.401 | 0.00 | 15.00 |
| | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.38 | 0.58 | 0.00 | 0.019 | 0.000 | 6.456 | 0.00 | 7.56 |
| | Safety Cable | Yes | 2.00 | 0.000 | 0.63 | 0.63 | 0.00 | 0.019 | 0.000 | 6.456 | 0.00 | 10.06 |
| - | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 1.47 | 0.00 | 0.019 | 0.000 | 6.587 | 0.00 | 19.22 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 1.58 | 0.00 | 0.019 | 0.000 | 6.587 | 0.00 | 25.46 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 1.49 | 0.00 | 0.019 | 0.000 | 6.709 | 0.00 | 19.51 |
| | Safety Cable | Yes | | 0.000 | 0.63 | 1.59 | 0.00 | 0.019 | 0.000 | 6.709 | 0.00 | 25.76 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 1.50 | 0.00 | 0.020 | 0.000 | 6.823 | 0.00 | 19.78 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 1.60 | 0.00 | 0.020 | 0.000 | 6.823 | 0.00 | 26.04 |
| | Step bolts (ladder) | Yes | 5.00 5.00 | 0.000 | 0.38 | 1.51 | 0.00 | 0.020 | 0.000 | 6.930 | 0.00 | 20.03 |
| | Safety Cable | Yes | | 0.000 | 0.63 | 1.61 | 0.00 | 0.020 | 0.000 | 6.930 | 0.00 | 26.31 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 1.52 | 0.00 | 0.021 | 0.000 | 7.032 | 0.00 | 20.27 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 1.62 | 0.00 | 0.021 | 0.000 | 7.032 | 0.00 | 26.56 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 1.52 | 0.00 | 0.021 | 0.000 | 7.128 | 0.00 | 20.49 |
| | Safety Cable | Yes | 5.00 | | 0.56 | 1.63 | 0.00 | 0.021 | 0.000 | 7.128 | 0.00 | 26.79 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 1.53 | 0.00 | 0.022 | 0.000 | 7.219 | 0.00 | 20.71 |
| 85.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 1.64 | 0.00 | 0.022 | 0.000 | 7.219 | 0.00 | 27.02 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.03 | 1.54 | 0.00 | 0.022 | 0.000 | 7.307 | 0.00 | 20.91 |
| 90.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 1.64 | 0.00 | 0.022 | 0.000 | 7.307 | 0.00 | 27.23 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | | 0.31 | 0.00 | 0.023 | 0.000 | 7.324 | 0.00 | 4.19 |
| | Safety Cable | Yes | 1.00 | 0.000 | 0.38 | 0.33 | 0.00 | 0.023 | 0.000 | 7.324 | 0.00 | 5.45 |
| | Step bolts (ladder) | Yes | 1.00 | 0.000 | 0.63 | 1.24 | 0.00 | 0.023 | 0.000 | 7.390 | 0.00 | 16.89 |
| | Safety Cable | Yes | 4.00 | 0.000 | 0.38 | 1.24 | 0.00 | 0.023 | 0.000 | 7.390 | 0.00 | 21.95 |
| 95.00 | Step bolts (ladder) | Yes | 4.00 | 0.000 | 0.63 | 1.55 | 0.00 | 0.023 | 0.000 | 7.471 | 0.00 | 21.30 |
| | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.55 | 0.00 | 0.023 | 0.000 | 7.471 | 0.00 | 27.63 |
| 100.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.56 | 0.00 | 0.023 | 0.000 | 7.548 | 0.00 | 21.48 |
| 105.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | | | | | | | |

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Linear Appurtenance Segment Forces (Factored)

Structure: CT08748-A

Site Name: Woodstock 4 CT

Height:

Base Elev: 0.000 (ft)

Gh: 1.1

190.00 (ft)

Topography: 1

Code:

TIA-222-H

Exposure: С Crest Height: 0.00

Site Class:

D - Stiff Soil

Struct Class: II

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1/18/2024

Iterations

SBA

26

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20 Wind Load Factor 1.00

| | 5 | X |
|---|---|---|
| 3 | | |

| Top Elev (ft) | Description | Wind Exposed | Length (ft) | Ca | Exposed Width (in) | Area (sqft) | CaAa (sqft) | Ra | Cf Adjust Factor | qz (psf) | F X (lb) | Dead Load (lb) |
|---------------------|---------------------|-----------------|----------------|-------|--------------------------|----------------|----------------|-------|------------------------|----------------|--------------|----------------------|
| 105.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.67 | 0.00 | 0.024 | 0.000 | | | |
| 110.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.57 | 0.00 | 0.024 | 0.000 | 7.548 7.622 | 0.00 | 27.82 |
| 110.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.67 | 0.00 | 0.025 | 0.000 | 7.622 7.622 | 0.00 | 21.65 |
| 115.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.57 | 0.00 | 0.025 | 0.000 | 7.624 | 0.00 | 28.00 |
| 115.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.68 | 0.00 | 0.025 | 0.000 | 7.694 | 0.00 | 21.82 |
| 120.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.58 | 0.00 | 0.026 | 0.000 | 7.763 | 0.00 | 28.18 |
| 120,00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.68 | 0.00 | 0.026 | 0.000 | 7.763 | 0.00 | 21.98 |
| 125.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.59 | 0.00 | 0.027 | 0.000 | 7.703 | 0.00 | 28.34 |
| 125.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.69 | 0.00 | 0.027 | 0.000 | 7.830 | 0.00 | 22.14 |
| 130.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.59 | 0.00 | 0.027 | 0.000 | 7.895 | 0.00 0.00 | 28.51 |
| 130.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.70 | 0.00 | 0.028 | 0.000 | 7.895 | | 22.29 |
| 135.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.60 | 0.00 | 0.029 | 0.000 | 7.958 | 0.00 | 28.67 |
| 135.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.70 | 0.00 | 0.029 | 0.000 | 7.958 | 0.00 | 22.43 |
| 140.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.60 | 0.00 | 0.029 | 0.000 | 8.019 | 0.00 | 28.82 |
| 140.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.71 | 0.00 | 0.029 | 0.000 | 8.019 | 0.00 | 22.57 |
| 145.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.61 | 0.00 | 0.030 | 0.000 | 8.079 | 0.00 | 28.97 |
| 145.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.71 | 0.00 | 0.030 | 0.000 | 8.079 | 0.00 | 22.71 |
| 150.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.61 | 0.00 | 0.030 | 0.000 | 8.136 | | 29.11 |
| 150.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.72 | 0.00 | 0.031 | 0.000 | 8.136 | 0.00 | 22.85 |
| 155.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.62 | 0.00 | 0.033 | 0.000 | 8.193 | | 29.25 |
| 155.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.72 | 0.00 | 0.033 | 0.000 | 8.193 | 0.00 | 22.98 |
| 157.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.65 | 0.00 | 0.033 | 0.000 | 8.215 | 0.00 | 29.39 |
| 157.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.69 | 0.00 | 0.034 | 0.000 | 8.215 | 0.00 | 9.21 |
| 160.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.97 | 0.00 | 0.034 | 0.000 | 8.248 | 0.00 | 11.78 |
| 160.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 1.04 | 0.00 | 0.034 | 0.000 | 8.248 | 0.00 | 13.86 |
| 165.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.63 | 0.00 | 0.035 | 0.000 | 8.301 | | 17.71 |
| 165.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.73 | 0.00 | 0.035 | 0.000 | 8.301 | 0.00 | 23.23 |
| 167.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.65 | 0.00 | 0.036 | 0.000 | 8.322 | 0.00 | 29.65 |
| 167.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.69 | 0.00 | 0.036 | 0.000 | 8.322 | 0.00 0.00 | 9.31 |
| 170.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.98 | 0.00 | 0.037 | 0.000 | 8.354 | | 11.88 |
| 170.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 1.04 | 0.00 | 0.037 | 0.000 | 8.354 | 0.00 0.00 | 14.01 |
| 175.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.64 | 0.00 | 0.039 | 0.000 | 8.405 | 0.00 | 17.87 |
| 175.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.74 | 0.00 | 0.039 | 0.000 | 8.405 | | 23,47 |
| 177.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.65 | 0.00 | 0.040 | 0.000 | 8.425 | 0.00 | 29.90 |
| 177.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.70 | 0.00 | 0.040 | 0.000 | 8.425 | 0.00 | 9.41 |
| 180.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.98 | 0.00 | 0.040 | 0.000 | 8.455 | 0.00 | 11.98 |
| 180.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 1.05 | 0.00 | 0.041 | 0.000 | 8.455 | 0.00 | 14.15 |
| 185.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.64 | 0.00 | 0.041 | 0.000 | 8.504 | 0.00 | 18.01 |
| 185.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.75 | 0.00 | 0.041 | 0.000 | 8.504 | 0.00 | 23.70 |
| 190.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 1.65 | 0.00 | 0.041 | 0.000 | 8.552 | 0.00 | 30.14 |
| | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 1.75 | 0.00 | 0.041 | 0.000 | | 0.00 | 23.81 |
| | | | | | 5.00 | 1.10 | 0.00 | 0.041 | | 8.552 | 0.00 | 30.25 |
| | | | | | | | | | Tota | ais: | 0.0 | 1.797.1 |

Calculated Forces

1/18/2024 TIA-222-H Code: Structure: CT08748-A

Exposure: С Site Name: Woodstock 4 CT Crest Height: 0.00 Height: 190.00 (ft)

Site Class: D - Stiff Soil Base Elev: 0.000 (ft)

Struct Class: II Topography: 1 1.1

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26 Iterations

SBA

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20 1.00 **Wind Load Factor**

Gh:



| Seg Elev | Pu FY (-) | Vu FX (-) | Tu MY (-) | Mu MZ | Mu MX | Resultant Moment | phi Pn | phi Vn (kips) | phi Tn (ft-kips) | phi Mn (ft-kips) | Total Deflect (in) | Rotation Sway (deg) | Rotation Twist (deg) | Stress Ratio |
|------------------|------------------|------------------|--------------|--------------------|--------------|----------------------|-------------------|---------------------|------------------------|------------------------|--------------------------|---------------------------|----------------------------|-----------------|
| (ft) | (kips) | | | (ft-kips) | | (ft-kips) 1757.95 | (kips) 5803.10 | 1561.17 | 8297.91 | 7657.05 | 0.00 | 0.000 | 0.000 | 0.249 |
| 0.00 | -110.8 | -12.76 | 0.00 | -1757.9 | 0.00 | 1694.16 | 5740.33 | 1532.49 | 7995.78 | 7434.11 | 0.03 | -0.053 | 0.000 | 0.247 |
| 5.00 | -108.2 | -12.67 | 0.00 | -1694.1 | 0.00 | 1630.81 | 5675.91 | 1503.80 | 7699.25 | 7212.14 | 0.11 | -0.107 | 0.000 | 0.245 |
| 10.00 | | -12.59 | 0.00 | -1630.8 | 0.00 0.00 | 1567.89 | 5609.85 | 1475.12 | 7408.33 | 6991.28 | 0.26 | -0.163 | 0.000 | 0.243 |
| 15.00 | -103.1 | -12.50 | 0.00 | -1567.8 -1505.4 | 0.00 | 1505.40 | 5542.15 | 1446.43 | 7123.01 | 6771.63 | 0.46 | -0.219 | 0.000 | 0.241 |
| 20.00 | -100.5 | -12.40 | 0.00 | | 0.00 | 1443.39 | 5472.81 | 1417.75 | 6843.29 | 6553.32 | 0.72 | -0.276 | 0.000 | 0.238 |
| 25.00 | -98.05 | -12.30 | 0.00 | -1443.3 | 0.00 | 1381.91 | 5401.82 | 1389.06 | 6569.17 | 6336.48 | 1.04 | -0.334 | 0.000 | 0.236 |
| 30.00 | -95.58 | -12.18 | 0.00 | -1381.9 -1320.9 | 0.00 | 1320.99 | 5329.20 | 1360.38 | 6300.66 | 6121.21 | 1.42 | -0.393 | 0.000 | 0.233 |
| 35.00 | -93.14 | -12.07 | 0.00 | -1320.9 | 0.00 | 1260.66 | 5254.93 | 1331.69 | 6037.75 | 5907.64 | 1.86 | -0.453 | 0.000 | 0.231 |
| 40.00 | -90.74 | -11.90 | 0.00 | -1248.7 | 0.00 | 1248.76 | 5239.88 | 1325.95 | 5985.84 | 5865.14 | 1.96 | -0.466 | 0.000 | 0.230 |
| 41.00 | -90.26 | -11.91 | 0.00 | -1240.7 | 0.00 | 1201.13 | 5179.02 | 1303.01 | 5780.44 | 5695.90 | 2.37 | -0.515 | 0.000 | 0.228 |
| 45.00 | -87.30 | -11.79 | 0.00 | -1201.1 | 0.00 | 1165.77 | 4202.19 | 1119.08 | 4974.38 | 4636.19 | 2.71 | -0.553 | 0.000 | 0.272 |
| 48.00 | -85.10 | -11.69 | 0.00 | -1142.4 | 0.00 | 1142.40 | 4180.07 | 1109.25 | 4887.33 | 4570.98 | 2.94 | -0.578 | 0.000 | 0.270 |
| 50.00 | -84.25 | -11.67 | 0.00 | -1084.0 | 0.00 | 1084.06 | 4123.62 | 1084.66 | 4673.07 | 4408.60 | 3.59 | -0.649 | 0.000 | 0.266 |
| 55.00 | -82.14 | -11.54 | 0.00 | -1004.0 | 0.00 | 1026.35 | 4065.54 | 1060.07 | 4463.61 | 4247.27 | 4.31 | -0.720 | 0.000 | 0.261 |
| 60.00 | -80.06 | -11.41 | 0.00 | -969.29 | 0.00 | 969.29 | 4005.81 | 1035.49 | 4258.96 | 4087.10 | 5.10 | -0.792 | 0.000 | 0.257 |
| 65.00 | -78.03 | -11.28 | 0.00 | -909.29 -912.89 | 0.00 | 912.89 | 3944.44 | 1010.90 | 4059.10 | 3928.21 | 5.97 | -0.865 | 0.000 | 0.252 |
| 70.00 | -76.03 | -11.15 | 0.00 | -857.17 | 0.00 | 857.17 | 3881.43 | 986.31 | 3864.05 | 3770.72 | 6.91 | -0.939 | 0.000 | 0.247 |
| 75.00 | -74.06 | -11.01 | 0.00 | -802.13 | 0.00 | 802.13 | 3816.78 | 961.72 | 3673.81 | 3614.75 | 7.94 | -1.014 | 0.000 | 0.241 |
| 80.00 | -72.13 | -10.87 | 0.00 | -747.78 | 0.00 | 747.78 | 3750.48 | 937.14 | 3488.36 | 3460.42 | 9.04 | -1.089 | 0.000 | 0.235 |
| 85.00 | -70.24 | -10.73 | 0.00 | -694.13 | 0.00 | 694.13 | 3682.55 | 912.55 | 3307.72 | 3307.86 | 10.22 | -1.164 | 0.000 | 0.228 |
| 90.00 | -67.48 | -10.53 | 0.00 | -683.60 | 0.00 | 683.60 | 2898.33 | 768.33 | 2813.78 | 2634.30 | 10.47 | -1.180 | 0.000 | 0.283 |
| 91.00 | -66.93 | -10.53 -10.43 | 0.00 | -641.50 | 0.00 | 641.50 | 2860.60 | 751.94 | 2695.00 | 2544.15 | 11.48 | -1.241 | 0.000 | 0.275 |
| 95.00 | -65.60 | -10.43 | 0.00 | -589.37 | 0.00 | 589.37 | 2811.95 | 731.45 | 2550.13 | 2432.25 | 12.83 | -1.328 | 0.000 | 0.265 |
| 100.00 | -63.97 -62.38 | -10.29 | 0.00 | -537.90 | 0.00 | 537.90 | 2761.66 | 710.96 | 2409.26 | 2321.34 | 14.26 | -1.414 | 0.000 | 0.255 |
| 105.00 | | -9.00 | 0.00 | -484.85 | 0.00 | 484.85 | 2709.73 | 690.47 | 2272.40 | 2211.55 | 15.79 | -1.499 | 0.000 | 0.241 |
| 110.00 | -59.62 -58.12 | -8.86 | 0.00 | -439.85 | 0.00 | 439.85 | 2656.16 | 669.98 | 2139.54 | 2103.00 | 17.41 | -1.584 | 0.000 | 0.231 |
| 115.00 | -56.65 | -8.72 | 0.00 | -395.54 | 0.00 | 395.54 | 2600.95 | 649.49 | 2010.67 | 1995.80 | 19.11 | -1.667 | 0.000 | 0.220 |
| 120.00 125.00 | -55.21 | -8.58 | 0.00 | -351.93 | 0.00 | 351.93 | 2544.10 | 629.00 | 1885.82 | 1890.08 | 20.90 | -1.748 | 0.000 | 0.208 |
| | -53.82 | -8.44 | 0.00 | -309.03 | 0.00 | 309.03 | 2485.60 | 608.51 | 1764.96 | 1785.96 | 22.77 | -1.828 | 0.000 | 0.195 |
| 130.00 135.00 | -53.62 -51.88 | -8.27 | 0.00 | -266.84 | 0.00 | 266.84 | 1823.78 | 478.25 | 1362.76 | 1289.51 | 24.73 | -1.904 | 0.000 | 0.236 |
| 140.00 | -50.67 | -8:13 | 0.00 | -225.49 | 0.00 | 225.49 | 1784.40 | 461.86 | 1270.94 | 1218.11 | 26.76 | -1.977 | 0.000 | 0.214 |
| 145.00 | -41.31 | -6.83 | 0.00 | -184.84 | 0.00 | 184.84 | 1743.38 | 445.47 | 1182.33 | 1147.55 | 28.88 | -2.057 | 0.000 | 0.185 |
| | -40.18 | -6.68 | 0.00 | -150.71 | 0.00 | 150.71 | 1700.71 | 429.08 | 1096.92 | 1077.96 | 31.07 | -2.129 | 0.000 | 0.164 |
| 150.00 | -39.07 | -6.51 | 0.00 | -117.33 | 0.00 | 117.33 | 1656.41 | 412.69 | 1014.72 | 1009.45 | 33.34 | -2.194 | 0.000 | 0.140 |
| 155.00 | | -5.70 | 0.00 | -104.32 | 0.00 | 104.32 | 1638.23 | 406.13 | 982.73 | 982.37 | 34.26 | -2.219 | 0.000 | 0.129 |
| 157.00 | -36.35 -35.71 | -5.70 -5.61 | 0.00 | -87.21 | 0.00 | 87.21 | 1610.46 | 396.29 | 935.71 | 942.14 | 35.67 | -2.251 | 0.000 | 0.115 |
| 160.00 | | -5.44 | | -59.15 | 0.00 | 59.15 | 1562.88 | 379.90 | 859.91 | 876.15 | 38.05 | -2.296 | 0.000 | 0.090 |
| 165.00 167.00 | -34.68 -21.73 | -3.51 | 0.00 | -48.27 | 0.00 | 48.27 | 1543.38 | 373.35 | 830.48 | 850.16 | 39.01 | -2.311 | 0.000 | 0.071 |
| | | -3.41 | 0.00 | -37.73 | 0.00 | 37.73 | 1513.65 | 363.51 | 787.30 | 811.61 | 40.47 | -2.330 | 0.000 | 0.061 |
| 170.00 | -21.18 | -3.41 | | -20.66 | 0.00 | 20.66 | 1462.77 | 347.12 | 717.90 | 748.63 | 42.93 | -2.354 | 0.000 | 0.042 |
| 175.00 | -20.30 | -3.25 -1.67 | 0.00 | -14.16 | 0.00 | 14.16 | 1441.72 | 340.56 | 691.04 | 723.78 | 43.91 | -2.360 | 0.000 | 0.026 |
| 177.00 | -9.71 -9.26 | -1.57 | | -9.16 | 0.00 | 9.16 | 1400.09 | 330.73 | 651.70 | 682.38 | 45.40 | -2.367 | 0.000 | 0.020 |
| 180.00 180.00 | -9.26 -9.26 | -1.57 | | -9.16 | 0.00 | 9.16 | 1210.02 | 285.83 | 562.49 | 588.19 | 45.40 | -2.367 | 0.000 | 0.023 |
| | -9.26 -0.79 | -0.22 | | -1.29 | 0.00 | 1.29 | 1210.02 | 285.83 | 562.49 | 588.19 | 47.88 | -2.372 | 0.000 | 0.003 |
| 185.00 | 0.00 | -0.22 | | -0.18 | 0.00 | 0.18 | 1210.02 | 285.83 | 562.49 | 588.19 | 50.36 | -2.373 | 0.000 | 0.000 |
| 190.00 | 0.00 | -0.19 | 0.00 | 0.10 | 5.50 | | | | | | | | | |

Seismic Segment Forces (Factored)

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

Site Name:Woodstock 4 CTExposure:CHeight:190.00 (ft)Crest Height:0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil



| Load Case: 1.2D + 1.0Ev + | 1.0Eh | | | | | Y. | Iterations | 22 |
|----------------------------------|-------|--------------------------|------|-----|------|-----------------|------------|------|
| Gust Response Factor | 1.10 | | | Sds | 0.19 | X | Ss | 0.18 |
| Dead Load Factor | 1.20 | Seismic Load Factor | 1.00 | Sd1 | 0.09 | Z | S1 | 0.06 |
| Wind Load Factor | 0.00 | Structure Frequency (f1) | 0.29 | SA | 0.03 | Seismic Importa | nce Factor | 1.00 |

| Per Pescription Pescript | Top | | | | | Vertical | Lateral | | |
|--|--------|---|---------|----------|--------|----------|---------|-------------|----------|
| 0.00 | Elev | | | | | | | | |
| 1750.6 | (ft) | Description | | (lb) | (lb) | (lp) | (lb) | | R: 1.50 |
| 17228 | | | | 0,00 | 0.00 | 0.00 | 0.00 | | |
| 15.00 | | | | 1750.6 | 2.50 | 67.60 | 0.01 | | |
| 25.00 | | | | 1722.8 | 7.50 | 66.52 | 0.09 | | |
| 1639 4 22.50 63.30 0.73 30.00 1611.5 27.50 62.23 1.06 35.00 1553.7 32.50 61.16 1.43 40.00 1555.8 37.50 60.08 1.83 41.00 80 + Section 2 307.86 40.50 11.89 0.08 45.00 2107.2 43.00 81.37 4.43 48.00 Top - Section 1 1558.7 46.50 60.19 2.83 50.00 532.47 49.00 20.56 0.37 50.00 1314.5 52.50 50.76 2.57 60.00 1290.6 57.50 49.84 2.97 65.00 1290.6 57.50 49.84 2.97 65.00 1290.6 57.50 49.84 2.97 65.00 1290.6 57.50 49.80 2.91 65.00 1290.6 57.50 49.00 4.21 60.00 1290.6 57.50 49.00 4.21 60.00 1290.6 57.50 49.00 4.21 60.00 1290.6 57.50 49.00 4.21 60.00 1290.6 57.50 49.00 4.21 60.00 1290.6 57.50 40.00 3.79 75.00 1291.1 72.50 47.08 4.21 60.00 1906.4 87.50 73.61 15.00 60.00 70.00 97.00 97.50 30.52 2.91 60.00 70.00 97.50 97.50 30.52 2.91 60.00 70.00 97.50 97.50 37.46 4.82 60.00 70.00 97.50 97.50 30.69 5.11 60.00 70.00 97.50 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.00 97.50 30.69 5.11 60.00 97.50 30.69 5.11 60.00 97.50 30.69 5.11 60.00 97.50 30.69 5.11 60.00 97.50 30.69 5.11 60.00 97.50 30.69 5.11 60.00 97.50 30.69 5.11 60.00 97.50 30.69 5.11 60 | | | | 1695.0 | 12.50 | 65.45 | 0.24 | | |
| 30.00 161.5 27.60 162.23 1.06 35.00 1655.9 37.50 60.08 1.83 1.83 1.80 1.80 1.80 1.80 1.80 1.80 1.80 1.80 | | | | 1667.2 | 17.50 | 64.38 | 0.46 | | |
| 1583.7 32.50 61.16 1.43 1.43 1.43 1.43 1.43 1.45 1.4 | | | | 1639.4 | 22.50 | 63.30 | 0.73 | | |
| A0.00 | | | | 1611.5 | 27.50 | 62.23 | 1.06 | | |
| 41.00 Bot - Section 2 307.88 40.50 11.89 0.06 45.00 2107.2 43.00 81.37 4.43 45.00 Top - Section 1 1555.7 46.50 60.19 2.83 50.00 550.00 532.47 49.00 20.56 0.37 550.00 1290.6 57.50 49.84 2.97 65.00 1290.6 57.50 49.84 2.97 65.00 1242.9 67.50 48.00 3.79 75.00 1242.9 67.50 48.00 3.79 75.00 1291.1 72.50 47.08 4.21 80.00 1195.3 77.50 47.08 4.21 80.00 1195.3 77.50 47.08 4.21 80.00 1195.3 77.50 47.08 4.21 80.00 1195.3 77.50 47.08 4.21 80.00 1195.3 77.50 45.66 4.83 85.00 Bot - Section 3 1171.4 82.50 45.23 5.03 90.00 190.0 1906.4 87.50 73.61 15.00 91.00 Top - Section 2 376.04 90.50 14.62 0.62 95.00 780.38 93.00 30.52 2.91 100.00 970.09 97.50 37.66 4.82 105.00 980.23 102.50 36.89 5.11 105.00 980.23 102.50 36.89 5.11 105.00 881.78 112.50 34.43 5.42 105.00 881.78 112.50 34.43 5.42 105.00 881.78 112.50 34.43 5.42 105.00 882.08 122.50 33.67 5.66 105.00 882.08 122.50 32.90 5.87 105.00 882.08 122.50 122.50 32.90 5.87 105.00 882.08 122.50 122.50 32.90 5.87 105.00 882.08 122.50 122.50 32.90 5.87 105.00 882.08 122.50 122.50 32.90 5.87 105.00 882.08 122.50 122 | | | | 1583.7 | 32.50 | 61.16 | 1.43 | | |
| 48.00 Top - Section 1 1558.7 43.00 81.37 4.43 48.00 Top - Section 1 1558.7 46.50 60.19 2.83 50.00 552.47 49.00 20.56 0.37 550.00 1314.5 52.50 50.76 2.57 60.00 1290.6 57.50 49.84 2.97 65.00 1266.8 62.50 48.82 3.38 70.00 1291.1 72.50 47.08 4.21 80.00 1191.1 72.50 46.16 4.63 80.00 1191.1 72.50 46.16 4.63 80.00 1195.3 77.50 46.16 4.63 80.00 1906.4 87.50 73.61 15.00 91.00 1906.4 87.50 73.61 15.00 91.00 1906.4 87.50 73.61 15.00 91.00 1906.4 87.50 73.61 15.00 91.00 1906.4 87.50 73.61 15.00 91.00 1906.0 970.09 97.50 37.46 4.82 105.00 105.00 970.09 97.50 37.46 4.82 105.00 105.00 1388.3 107.50 53.61 12.01 110.00 Appurtenance(s) 1388.3 107.50 53.61 12.01 115.00 891.78 112.50 34.43 5.42 120.00 871.92 117.50 33.67 5.66 125.00 801 Section 4 832.19 127.50 32.13 6.07 120.00 Appurtenance(s) 321.47 142.50 124.13 113.10 145.00 Appurtenance(s) 321.47 142.50 124.13 113.10 150.00 688.03 137.50 26.57 4.82 145.00 Appurtenance(s) 368.04 158.50 13.95 1.77 150.00 629.44 152.50 24.92 4.88 150.00 69.50 170.00 14.83 2.19 150.00 689.03 138.50 13.85 1.77 150.00 69.50 124.11 156.00 47.89 20.17 150.00 69.50 124.11 156.00 47.89 20.17 150.00 69.50 13.85 1.77 150.00 69.50 13.8 | | | | 1555.9 | 37.50 | 60.08 | 1.83 | | |
| 48.00 Top - Section 1 1558.7 46.50 60.19 2.83 50.00 532.47 49.00 20.56 0.37 55.00 1314.5 52.50 50.76 2.57 60.00 1290.6 57.50 49.84 2.97 65.00 1242.9 67.50 48.90 3.79 75.00 1242.9 67.50 48.00 3.79 75.00 1242.9 67.50 48.00 3.79 75.00 1219.1 72.50 47.08 4.21 80.00 190.6 87.50 45.03 50.3 85.00 Bot - Section 3 1171.4 82.50 45.23 5.03 90.00 190.6 87.50 73.61 15.00 91.00 Top - Section 2 376.04 90.50 14.52 0.62 95.00 790.3 90.50 14.52 0.62 95.00 970.9 97.50 37.46 4.82 105.00 970.9 97.50 37.46 4.82 105.00 970.9 97.50 36.69 5.11 105.00 Appurtenance(s) 1388.3 107.50 53.61 12.01 115.00 891.78 112.50 34.43 5.42 120.00 871.92 117.50 33.67 5.66 125.00 852.06 122.50 32.90 5.87 135.00 70 - Section 3 1283.9 132.50 49.58 15.60 140.00 680.03 137.50 26.57 4.82 140.00 680.03 137.50 24.92 4.88 155.00 690.00 | | Bot - Section 2 | | 307.86 | 40.50 | 11.89 | 80.0 | | |
| 50.00 532.47 49.00 20.56 0.37 55.00 1314.5 52.50 50.76 2.57 60.00 1290.6 57.50 49.84 2.97 65.00 1266.8 62.50 48.92 3.38 70.00 1242.9 67.50 48.00 3.79 75.00 1219.1 72.50 47.08 4.21 80.00 1195.3 77.50 46.16 4.63 85.00 Bot - Section 3 1171.4 82.50 45.23 5.03 90.00 190.4 87.50 73.61 15.00 91.00 70p - Section 2 376.04 90.50 14.52 0.62 95.00 790.38 93.00 30.52 2.91 100.00 970.09 97.50 37.46 4.82 105.00 970.13 138.3 107.50 53.61 12.01 115.00 891.78 112.50 34.43 5.42 120.00 871.92 117. | | | | 2107.2 | 43.00 | 81.37 | 4.43 | | |
| 1314.5 52.50 50.76 2.57 | | Top - Section 1 | | 1558.7 | 46.50 | 60.19 | 2.83 | | |
| 60.00 | | | | 532.47 | 49.00 | 20.56 | 0.37 | | |
| 1266.8 62.50 48.92 3.38 3.70,00 1242.9 67.50 48.00 3.79 3.75,00 3.79 3.70,00 3.79 3.70,00 3.79 3.70,00 3.79 3.70,00 3.79 3.70,00 3.79 3.70,00 3.79 3.70,00 3.79 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70,00 3.70 3.70 3.70,00 3.70 3. | | | | 1314.5 | 52,50 | 50.76 | 2.57 | | |
| 70.00 | | | | 1290.6 | 57.50 | 49.84 | 2.97 | | |
| 75.00 | | | | 1266.8 | 62.50 | 48.92 | 3.38 | | |
| 80.00 Bot - Section 3 1171.4 82.50 45.23 5.03 90.00 970.00 1906.4 87.50 73.61 15.00 91.00 Top - Section 2 376.04 90.50 14.52 0.62 95.00 970.00 975.0 37.46 4.82 950.2 102.50 36.69 5.11 100.00 Appurtenance(s) 871.92 117.50 32.13 6.07 135.00 Bot - Section 4 832.19 127.50 32.13 6.07 135.00 Appurtenance(s) 128.94 145.25 24.30 4.97 145.00 Appurtenance(s) 124.01 156.00 629.44 152.50 24.30 4.97 157.00 Appurtenance(s) 124.01 156.00 629.44 152.50 24.30 4.97 157.00 Appurtenance(s) 124.01 156.00 629.44 152.50 24.30 4.97 157.00 Appurtenance(s) 124.01 156.00 158.56 152.50 24.30 4.97 157.00 Appurtenance(s) 124.01 156.00 158.56 152.50 22.76 4.95 156.00 158.56 152.50 22.76 4.95 177.50 Appurtenance(s) 3274.7 142.50 124.13 173.10 156.00 158.56 152.50 22.76 4.95 177.00 Appurtenance(s) 329.25 178.50 88.60 143.21 204.29 177.50 18.34 172.50 18.34 1 | | | | 1242.9 | 67.50 | 48.00 | 3.79 | | |
| 85.00 Bot - Section 3 1171,4 82.50 45.23 5.03 90.00 1906 4 87.50 73.61 15.00 91.00 Top - Section 2 376.04 90.50 14.52 0.62 95.00 970.00 970.09 97.50 37.46 4.82 105.00 950.23 102.50 36.69 5.11 110.00 Appurtenance(s) 1388.3 107.50 53.61 12.01 115.00 891.78 112.50 34.43 5.42 120.00 871.92 117.50 33.67 5.66 122.50 36.09 5.87 130.00 Bot - Section 4 832.19 127.50 32.13 6.07 135.00 Top - Section 3 1283.9 132.50 49.58 15.60 49.00 Appurtenance(s) 1321.47 142.50 124.13 113.10 150.00 645.33 147.50 24.92 4.88 155.00 629.44 152.50 24.30 4.97 157.00 Appurtenance(s) 1370.8 166.00 47.89 20.17 160.00 589.56 182.50 22.76 4.95 177.00 Appurtenance(s) 329.6 182.50 123.60 11.30 1.31 175.00 Appurtenance(s) 327.4 176.00 128.48 184.85 177.00 Appurtenance(s) 328.07 187.50 128.48 184.85 177.00 Appurtenance(s) 328.07 187.50 182.50 103.74 129.58 183.00 Appurtenance(s) 329.67 182.50 183.44 3.62 177.00 Appurtenance(s) 329.67 182.50 183.44 3.62 177.00 Appurtenance(s) 328.67 182.50 103.74 129.58 183.00 Appurtenance(s) 328.07 187.50 128.48 184.85 177.50 Appurtenance(s) 329.67 182.50 103.74 129.58 183.00 Appurtenance(s) 327.4 176.00 128.48 184.85 177.50 182.50 103.74 129.58 185.00 Appurtenance(s) 328.67 185.50 103.74 129.58 185.00 Appurtenance(s) 328.67 129.50 129.50 128.50 125.50 125.50 125.50 125.50 125.50 125.50 125.50 125.50 125.50 125.50 125.50 | | | | 1219.1 | 72.50 | 47.08 | 4.21 | | |
| 90.00 91.00 1906.4 87.50 73.61 15,00 91.00 100.00 970.09 97.50 37.46 4 82 105.00 110.00 4ppurtenance(s) 1388.3 107.50 125.00 891.78 1112.50 38.43 38.75 125.00 891.78 112.50 38.69 125.00 891.78 112.50 38.69 125.00 891.78 112.50 38.69 125.00 891.78 112.50 891.78 112.50 38.69 125.00 891.78 112.50 38.69 125.00 891.78 112.50 38.69 125.00 891.78 112.50 38.69 125.00 891.78 112.50 38.69 126.60 127.50 128.6 | | E . E | | 1195.3 | 77.50 | 46.16 | 4.63 | | |
| 91.00 Top - Section 2 | | Bot - Section 3 | | 1171.4 | 82.50 | 45.23 | 5.03 | | |
| 95.00 | | | | | 87.50 | 73.61 | 15.00 | | |
| 100.00 | | Top - Section 2 | | | 90.50 | 14.52 | 0.62 | | |
| 105.00 | | | | | 93.00 | 30.52 | 2.91 | | |
| 110.00 Appurtenance(s) 1388.3 107.50 53.61 12.01 115.00 891.78 112.50 34.43 5.42 120.00 871.92 117.50 33.67 5.66 125.00 852.06 122.50 32.90 5.87 1380.00 Bot - Section 4 832.19 127.50 32.13 6.07 135.00 Top - Section 3 1283.9 132.50 49.58 15.60 440.00 688.03 137.50 26.57 4.82 145.00 Appurtenance(s) 3214.7 142.50 124.13 113.10 150.00 645.33 147.50 24.92 4.98 157.00 Appurtenance(s) 1240.1 156.00 47.89 20.17 160.00 361.36 158.50 13.95 1.77 165.00 Appurtenance(s) 3708.8 166.00 143.21 204.29 177.00 Appurtenance(s) 3327.4 176.00 128.48 134.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | | | | 97.50 | 37.46 | 4.82 | | |
| 115.00 | | | | 950.23 | 102.50 | 36.69 | 5,11 | | |
| 120.00 871.92 117.50 33.67 5.66 125.00 852.06 122.50 32.90 5.87 130.00 Bot - Section 4 832.19 127.50 32.13 6.07 135.00 Top - Section 3 1283.9 132.50 49.58 15.60 140.00 Appurtenance(s) 3214.7 142.50 124.13 113.10 150.00 645.33 147.50 24.92 4.88 155.00 629.44 152.50 24.30 4.97 157.00 Appurtenance(s) 1240.1 156.00 47.89 20.17 160.00 361.36 158.50 13.95 1.77 165.00 Appurtenance(s) 3708.8 166.00 143.21 204.29 170.00 Appurtenance(s) 3708.8 166.00 143.21 204.29 170.00 Appurtenance(s) 327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 2686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | Appurtenance(s) | | | | 53.61 | 12.01 | | |
| 125.00 | | | | | 112.50 | 34.43 | 5.42 | | |
| 130.00 Bot - Section 4 832.19 127.50 32.13 6.07 135.00 Top - Section 3 1283.9 132.50 49.58 15.60 140.00 688.03 137.50 26.57 4.82 145.00 Appurtenance(s) 3214.7 142.50 124.13 113.10 150.00 645.33 147.50 24.92 4.88 155.00 629.44 152.50 24.30 4.97 157.00 Appurtenance(s) 1240.1 156.00 47.89 20.17 160.00 361.36 158.50 13.95 1.77 165.00 4ppurtenance(s) 3708.8 166.00 143.21 204.29 170.00 292.62 168.50 11.30 1.31 175.00 474.98 172.50 18.34 3.62 177.00 Appurtenance(s) 3327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 386.07 187.50 14.91 2.82 < | | | | | | 33.67 | 5.66 | | |
| 135.00 Top - Section 3 1283.9 132.50 49.58 15.60 140.00 Appurtenance(s) 688.03 137.50 26.57 4.82 145.00 Appurtenance(s) 645.33 147.50 24.92 4.88 155.00 Appurtenance(s) 1240.1 156.00 47.89 20.17 160.00 361.36 158.50 167.00 Appurtenance(s) 3708.8 166.00 143.21 204.29 170.00 Appurtenance(s) 3708.8 166.00 143.21 204.29 170.00 Appurtenance(s) 3708.8 177.00 Appurtenance(s) 3708.8 177.00 474.98 172.50 183.4 3.62 177.00 Appurtenance(s) 3327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 386.07 187.50 188.50 Appurtenance(s) 386.07 187.50 189.00 Appurtenance(s) 386.07 187.50 189.00 Appurtenance(s) 386.07 187.50 189.00 | | | | | | 32.90 | 5.87 | | |
| 140.00 | | | | | | 32.13 | 6.07 | | |
| 145.00 Appurtenance(s) 3214.7 142.50 124.13 113.10 150.00 150. | | l op - Section 3 | | | 132.50 | 49.58 | 15.60 | | |
| 150.00 645.33 147.50 24.92 4.88 155.00 629.44 152.50 24.30 4.97 157.00 Appurtenance(s) 1240.1 156.00 47.89 20.17 160.00 361.36 158.50 13.95 1.77 165.00 589.56 162.50 22.76 4.95 167.00 Appurtenance(s) 3708.8 166.00 143.21 204.29 170.00 292.62 168.50 11.30 1.31 175.00 474.98 172.50 18.34 3.62 177.00 Appurtenance(s) 3327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 2686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | | | | | 26.57 | 4.82 | | |
| 155.00 | | Appurtenance(s) | | | | 124.13 | 113.10 | | |
| 157.00 Appurtenance(s) 1240.1 156.00 47.89 20.17 160.00 361.36 158.50 13.95 1.77 165.00 589.56 162.50 22.76 4.95 167.00 Appurtenance(s) 3708.8 166.00 143.21 204.29 170.00 292.62 168.50 11.30 1.31 175.00 474.98 172.50 18.34 3.62 177.00 Appurtenance(s) 3327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 2686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | | | | | | 4.88 | | |
| 160.00 361.36 158.50 13.95 1.77 165.00 589.56 162.50 22.76 4.95 167.00 Appurtenance(s) 3708.8 166.00 143.21 204.29 170.00 292.62 168.50 11.30 1.31 175.00 474.98 172.50 18.34 3.62 177.00 Appurtenance(s) 3327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 2686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | | | | | | 4.97 | | |
| 165.00 589.56 162.50 22.76 4.95 167.00 Appurtenance(s) 3708.8 166.00 143.21 204.29 170.00 292.62 168.50 11.30 1.31 175.00 474.98 172.50 18.34 3.62 177.00 Appurtenance(s) 3327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 2686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | Appurtenance(s) | | | | | 20.17 | | |
| 167.00 Appurtenance(s) 3708.8 166.00 143.21 204.29 170.00 170.00 292.62 168.50 11.30 1.31 175.00 474.98 172.50 18.34 3.62 177.00 Appurtenance(s) 3327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 42686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 286.07 187.50 14.91 2.82 | | | | | | | | | |
| 170.00 292.62 168.50 11.30 1.31 175.00 474.98 172.50 18.34 3.62 177.00 Appurtenance(s) 3327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 2686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | | | | | 22.76 | 4.95 | | |
| 175.00 474.98 172.50 18.34 3.62 177.00 Appurtenance(s) 3327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 2686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | Appurtenance(s) | | | | | | | |
| 177.00 Appurtenance(s) 3327.4 176.00 128.48 184.85 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 2686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | | | | | | | | |
| 180.00 Top - Section 4 209.25 178.50 8.08 0.75 185.00 Appurtenance(s) 2686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | A (-) | | | | | | | |
| 185.00 Appurtenance(s) 2686.7 182.50 103.74 129.58 190.00 Appurtenance(s) 386.07 187.50 14.91 2.82 | | • | | | | | | | |
| 190.00 Appurtenance(s) <u>386.07</u> 187.50 <u>14.91</u> <u>2.82</u> | | , | | | | | | | |
| 7.41 | | | | | | | | | |
| Totals: 56,001.6 2,162.4 801.1 Total Wind: 43,114.0 | 190.00 | Appurtenance(s) | | | 187.50 | | 2.82 | | |
| | | | Totals: | 56,001.6 | | 2,162.4 | 801.1 | Total Wind: | 43,114.0 |

Seismic Segment Forces (Factored)

SBA

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT Exposure: C

 Height:
 190.00 (ft)
 Crest Height:
 0.00

 Base Elev:
 0.000 (ft)
 Site Class:
 D - Stiff Soil

Calculated Forces

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

 Site Name:
 Woodstock 4 CT
 Exposure:
 C

 Height:
 190.00 (ft)
 Crest Height:
 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil



| Load Case: 1.2D + 1.0Ev + | 1.0Eh | | | | | YA | Iterations | 22 |
|----------------------------------|-------|--------------------------|------|-----|------|-----------------|------------|------|
| Gust Response Factor | 1.10 | | | Sds | 0.19 | Z Z | Ss | 0.18 |
| Dead Load Factor | 1.20 | Seismic Load Factor | 1.00 | Sd1 | 0.09 | Z | S1 | 0.06 |
| Wind Load Factor | 0.00 | Structure Frequency (f1) | 0.29 | SA | 0.03 | Seismic Importa | nce Factor | 1.00 |

| Seg Elev | Pu FY (-) | Vu FX (-) | Tu MY (-) | Mu MZ | Mu MX | Resultant Moment | phi Pn | phi Vn | phi Tn | phi Mn | Total | Rotation | | |
|-------------|--------------|--------------|--------------|-----------|----------|---------------------|-----------|-----------|-----------|-----------|-----------------|---------------|----------------|-----------------|
| (ft) | (kips) | | | (ft-kips) | | (ft-kips) | (kips) | (kips) | (ft-kips) | (ft-kips) | Deflect (in) | Sway (deg) | Twist (deg) | Stress Ratio |
| 0.00 | -67.68 | -0.80 | 0.00 | -134.49 | 0.00 | 134.49 | 5803.10 | 1561.17 | 8297.91 | 7657.05 | (, | 0.00 | 0.00 | 0.029 |
| 5.00 | -65.56 | -0.81 | 0.00 | -130.48 | 0.00 | 130.48 | 5740.33 | 1532.49 | 7995.78 | 7434.11 | | 0.00 | 0.00 | 0.029 |
| 10.00 | -63.48 | -0.81 | 0.00 | -126.44 | 0.00 | 126.44 | 5675.91 | 1503.80 | 7699.25 | 7212.14 | | 0.01 | -0.01 | 0.029 |
| 15.00 | -61.43 | -0.82 | 0.00 | -122.39 | 0.00 | 122.39 | 5609.85 | 1475.12 | 7408.33 | 6991.28 | | 0.02 | -0.01 | 0.028 |
| 20.00 | -59.41 | -0.82 | 0.00 | -118.31 | 0.00 | 118.31 | 5542.15 | 1446.43 | 7123,01 | 6771.63 | | 0.04 | -0.02 | 0.028 |
| 25.00 | -57.43 | -0.82 | 0.00 | -114.22 | 0.00 | 114.22 | 5472.81 | 1417.75 | 6843.29 | 6553.32 | | 0.06 | -0.02 | 0.028 |
| 30.00 | -55.49 | -0.82 | 0.00 | -110.11 | 0.00 | 110.11 | 5401.82 | 1389.06 | 6569.17 | 6336.48 | | 80.0 | -0.03 | 0.028 |
| 35.00 | -53.58 | -0.83 | 0.00 | -105.99 | 0.00 | 105.99 | 5329.20 | 1360.38 | 6300.66 | 6121,21 | | 0.11 | -0.03 | 0.027 |
| 40.00 | -51.70 | -0.83 | 0.00 | -101.85 | 0.00 | 101.85 | 5254.93 | 1331.69 | 6037.75 | 5907.64 | | 0.15 | -0.04 | 0.027 |
| 41.00 | -51,33 | -0.83 | 0.00 | -101.03 | 0.00 | 101.03 | 5239.88 | 1325.95 | 5985.84 | 5865.14 | | 0.15 | -0.04 | 0.027 |
| 45.00 | -48.76 | -0.83 | 0.00 | -97.71 | 0.00 | 97.71 | 5179.02 | 1303.01 | 5780.44 | 5695.90 | | 0.19 | -0.04 | 0.027 |
| 48.00 | -46.86 | -0.82 | 0.00 | -95.24 | 0.00 | 95.24 | 4202,19 | 1119.08 | 4974.38 | 4636.19 | | 0.21 | -0.04 | 0.032 |
| 50.00 | -46.22 | -0.83 | 0.00 | -93.59 | 0.00 | 93.59 | 4180.07 | 1109.25 | 4887.33 | 4570.98 | | 0.23 | -0.05 | 0.032 |
| 55.00 | -44.64 | -0.83 | 0.00 | -89,46 | 0.00 | 89.46 | 4123,62 | 1084.66 | 4673.07 | 4408.60 | | 0.28 | -0.05 | 0.031 |
| 60.00 | -43.09 | -0.83 | 0.00 | -85.33 | 0.00 | 85.33 | 4065.54 | 1060.07 | 4463.61 | 4247.27 | | 0.34 | -0.06 | 0.031 |
| 65.00 | -41.57 | -0.83 | 0.00 | -81.20 | 000 | 81.20 | 4005.81 | 1035.49 | 4258.96 | 4087.10 | | 0.40 | -0.06 | 0.030 |
| 70.00 | -40.08 | -0.82 | 0.00 | -77.08 | 0.00 | 77.08 | 3944.44 | 1010.90 | 4059.10 | 3928.21 | | 0.47 | -0.07 | 0.030 |
| 75.00 | -38.62 | -0.82 | 0.00 | -72.95 | 0.00 | 72.95 | 3881.43 | 986.31 | 3864.05 | 3770.72 | | 0.55 | -0.08 | 0.029 |
| 80.00 | -37.19 | -0.82 | 0.00 | -68.84 | 0.00 | 68.84 | 3816.78 | 961.72 | 3673.81 | 3614.75 | | 0.63 | -0.08 | 0.029 |
| 85.00 | -35.79 | -0.82 | 0.00 | -64.74 | 0.00 | 64.74 | 3750.48 | 937.14 | 3488.36 | 3460.42 | | 0.72 | -0.09 | 0.028 |
| 90.00 | -33.48 | -0.80 | 0.00 | -60.66 | 0.00 | 60.66 | 3682.55 | 912.55 | 3307.72 | 3307.86 | | 0.82 | -0.10 | 0.027 |
| 91.00 | -33.02 | -0.80 | 0.00 | -59.85 | 0.00 | 59.85 | 2898.33 | 768.33 | 2813.78 | 2634.30 | | 0.84 | -0.10 | 0.034 |
| 95.00 | -32.09 | -0.80 | 0.00 | -56.65 | 0.00 | 56.65 | 2860.60 | 751.94 | 2695.00 | 2544.15 | | 0.92 | -0.10 | 0.033 |
| 100.00 | -30.93 | -0.80 | 0.00 | -52.65 | 0.00 | 52.65 | 2811.95 | 731.45 | 2550.13 | 2432,25 | | 1.03 | -0.11 | 0.033 |
| 105.00 | -29.81 | -0.79 | 0.00 | -48.66 | 0.00 | 48.66 | 2761.66 | 710.96 | 2409.26 | 2321.34 | | 1.15 | -0.12 | 0.032 |
| 110.00 | -28.14 | -0.78 | 0.00 | -44.69 | 0.00 | 44.69 | 2709.73 | 690.47 | 2272.40 | 2211.55 | | 1.28 | -0.13 | 0.031 |
| 115.00 | -27.08 | -0.78 | 0.00 | -40.77 | 0.00 | 40.77 | 2656.16 | 669.98 | 2139.54 | 2103,00 | | 1.41 | -0.13 | 0.030 |
| 120.00 | -26.05 | -0.77 | 0.00 | -36.88 | 0.00 | 36.88 | 2600.95 | 649.49 | 2010.67 | 1995.80 | | 1.56 | -0.14 | 0.028 |
| 125.00 | -25.04 | -0.77 | 0.00 | -33.01 | 0.00 | 33.01 | 2544.10 | 629.00 | 1885.82 | 1890.08 | | 1.71 | -0.15 | 0.027 |
| 130.00 | -24.05 | -0.76 | 0.00 | -29,17 | 0.00 | 29.17 | 2485.60 | 608.51 | 1764.96 | 1785.96 | | 1.87 | -0.16 | 0.026 |
| 135.00 | -22.51 | -0.75 | 0.00 | -25.35 | 0.00 | 25.35 | 1823.78 | 478.25 | 1362.76 | 1289.51 | : | 2.04 | -0.16 | 0.032 |
| 140.00 | -21.70 | -0.74 | 0.00 | -21.62 | 0.00 | 21.62 | 1784.40 | 461.86 | 1270.94 | 1218.11 | : | 2.21 | -0.17 | 0.030 |
| 145.00 | -17.77 | -0.62 | 0.00 | -17.91 | 0.00 | 17.91 | 1743.38 | 445.47 | 1182.33 | 1147.55 | : | 2.39 | -0.18 | 0.026 |
| 150.00 | -17.01 | -0.61 | 0.00 | -14.81 | 0.00 | 14.81 | 1700.71 | 429.08 | 1096.92 | 1077.96 | : | 2.58 | -0.18 | 0.024 |
| 155.00 | -16.28 | -0.61 | 0.00 | -11.74 | 0.00 | 11.74 | 1656.41 | 412.69 | 1014.72 | 1009.45 | 2 | 2.78 | -0.19 | 0.021 |
| 157.00 | -14.76 | -0.58 | 0.00 | -10.52 | 0.00 | 10.52 | 1638.23 | 406.13 | 982.73 | 982.37 | | 2.86 | -0.19 | 0.020 |
| 160.00 | -14.34 | -0.58 | 0.00 | -8.77 | 0.00 | 8.77 | 1610.46 | 396.29 | 935.71 | 942.14 | 2 | 2.98 | -0.20 | 0.018 |
| 165.00 | -13.65 | -0.57 | 0.00 | -5.87 | 0.00 | 5.87 | 1562.88 | 379.90 | 859.91 | 876.15 | ; | 3.19 | -0.20 | 0.015 |
| 167.00 | -9.07 | -0.35 | 0.00 | -4.72 | 0.00 | 4.72 | 1543.38 | 373.35 | 830.48 | 850.16 | | 3.28 | -0.20 | 0.011 |
| 170.00 | -8.73 | -0.35 | 0.00 | -3.65 | 0.00 | 3.65 | 1513.65 | 363.51 | 787.30 | 811.61 | | 3.41 | -0.20 | 0.010 |
| 175.00 | -8.17 | -0.35 | 0.00 | -1.89 | 0.00 | 1.89 | 1462.77 | 347.12 | 717.90 | 748.63 | | 3.62 | -0.21 | 0.008 |
| 177.00 | -4,05 | -0.15 | 0.00 | -1.20 | 0.00 | 1.20 | 1441.72 | 340.56 | 691.04 | 723.78 | | 3.71 | -0.21 | 0.004 |
| 180.00 | -3.80 | -0.15 | 0.00 | -0.75 | 0.00 | 0.75 | 1400.09 | 330.73 | 651.70 | 682.38 | | 3.84 | -0.21 | 0.004 |
| 180.00 | -3.80 | -0.15 | 0.00 | -0.75 | 0.00 | 0.75 | 1210.02 | 285.83 | 562.49 | 588.19 | | 3.84 | -0.21 | 0.004 |
| 185.00 | -0.48 | 0.00 | 0.00 | -0.02 | 0.00 | 0.02 | 1210.02 | 285.83 | 562.49 | 588.19 | | 1.06 | -0.21 | 0.000 |
| 190.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1210.02 | 285.83 | 562.49 | 588.19 | 4 | 1.28 | -0.21 | 0.000 |
| | | | | | | | | | | | | | | |

Calculated Forces

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT Exposure: C
Height: 190.00 (ft) Crest Height: 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II Page: 30

SBA

Seismic Segment Forces (Factored)

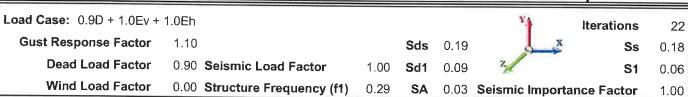
Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT Exposure: C

Height: 190.00 (ft) Crest Height: 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II Page: 31



SBA

| Тор | | | | | Vertical | Lateral | 1.00 |
|--------------|---------------------|---------|----------|--------|----------|---------------|----------------------|
| Elev (ft) | Description | | Wz. | Hz | Ev | Fs | |
| | Description | | (lb) | (lb) | (lb) | (lb) | R: 1.50 |
| 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5.00 | | | 1687.8 | 2,50 | 65.17 | 0.01 | |
| 10.00 | | | 1660.0 | 7.50 | 64.10 | 0.09 | |
| 15.00 | | | 1632.2 | 12.50 | 63.03 | 0.23 | |
| 20.00 | | | 1604.4 | 17.50 | 61.95 | 0.44 | |
| 25.00 | | | 1576.6 | 22.50 | 60.88 | 0.70 | |
| 30.00 | | | 1548.8 | 27.50 | 59.81 | 1.01 | |
| 35.00 | | | 1521.0 | 32.50 | 58.73 | 1.36 | |
| 40.00 | | | 1493.2 | 37.50 | 57.66 | 1.74 | |
| 41.00 | Bot - Section 2 | | 295.30 | 40.50 | 11.40 | 0.08 | |
| 45.00 | | | 2057.0 | 43.00 | 79.43 | 4.35 | |
| 48.00 | Top - Section 1 | | 1521.1 | 46.50 | 58.74 | 2.78 | |
| 50.00 | | | 507,37 | 49.00 | 19.59 | 0.34 | |
| 55.00 | | | 1251.7 | 52.50 | 48.33 | 2.40 | |
| 60.00 | | | 1227.9 | 57.50 | 47.41 | 2.77 | |
| 65.00 | | | 1204.0 | 62.50 | 46.49 | 3.15 | |
| 70.00 | | | 1180.2 | 67.50 | 45.57 | 3.53 | |
| 75.00 | | | 1156.3 | 72.50 | 44.65 | 3.91 | |
| 80.00 | | | 1132.5 | 77.50 | 43.73 | 4.29 | |
| 85.00 | Bot - Section 3 | | 1108.7 | 82.50 | 42.81 | 4.65 | |
| 90.00 | | | 1843.6 | 87.50 | 71.19 | 14.48 | |
| 91.00 | Top - Section 2 | | 363.49 | 90.50 | 14.04 | 0.60 | |
| 95.00 | | | 740.16 | 93.00 | 28.58 | 2.64 | |
| 100.00 | | | 907.33 | 97.50 | 35.03 | 4.35 | |
| 105.00 | | | 887.47 | 102.50 | 34.27 | 4.60 | |
| 110.00 | Appurtenance(s) | | 1325.6 | 107.50 | 51.19 | 11.30 | |
| 115.00 | | | 833.70 | 112.50 | 32.19 | 4.89 | |
| 120,00 | | | 813.84 | 117.50 | 31.42 | 5.09 | |
| 125.00 | | | 793.97 | 122.50 | 30.66 | 5.26 | |
| 130.00 | Bot - Section 4 | | 774.11 | 127.50 | 29.89 | 5.42 | |
| 135.00 | Top - Section 3 | | 1225.8 | 132.50 | 47.33 | 14.68 | |
| 140.00 | · | | 629.95 | 137.50 | 24.32 | 4.17 | |
| 145.00 | Appurtenance(s) | | 3156.6 | 142.50 | 121.89 | 112.56 | |
| 150.00 | (-) | | 589.98 | 147.50 | 22.78 | 4.21 | |
| 155.00 | | | 574.09 | 152.50 | 22.17 | 4.21 | |
| 157.00 | Appurtenance(s) | | 1217.9 | 156.00 | 47.03 | | |
| 160.00 | / | | 329.37 | 158.50 | 12.72 | 20.08 1.52 | |
| 165.00 | | | 536.23 | 162.50 | 20.71 | | |
| 167.00 | Appurtenance(s) | | 3687.4 | 166.00 | 142.39 | 4.22 | |
| 170.00 | | | 273.04 | 168.50 | 142.39 | 208.44 | |
| 175.00 | | | 442.35 | | | 1.18 | |
| 177.00 | Appurtenance(s) | | | 172.50 | 17.08 | 3.24 | |
| 180.00 | Top - Section 4 | | 3314.3 | 176.00 | 127.98 | 189,30 | |
| 185.00 | Appurtenance(s) | | 205.75 | 178.50 | 7.94 | 0.75 | |
| 190.00 | Appurtenance(s) | | 2680.8 | 182.50 | 103.52 | 133.16 | |
| 130.00 | , ippulteriantes(s) | | 383.11 | 187.50 | 14.79 | 2.87 | - |
| | | Totals: | 53,897.2 | | 2,081.1 | 801.1 | Total Wind: 43,114.0 |

Seismic Segment Forces (Factored)

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT Exposure: C
Height: 190.00 (ft) Crest Height: 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil



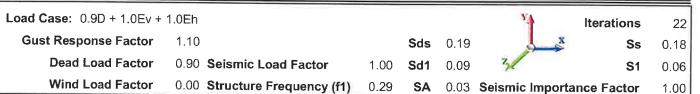
Calculated Forces

Structure: CT08748-A Code: TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT Exposure: C Height: 190.00 (ft) Crest Height: 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil





| Seg | Pu | Vu | Tu | Mu | Mu | Resultant | phi | phi | phi | phi | Total | Rotation | Rotation | |
|----------------|------------------|----------------|--------|------------------|------|----------------|--------------------|------------------|--------------------|-------------------|---------|--------------|----------------|--------|
| Elev | FY (-) | FX (-) | MY (-) | MZ | MX | Moment | Pn | ۷n | Tn | Mn | Deflect | Sway | Twist | Stress |
| (ft) | (kips) | (kips) | | (ft-kips) | | (ft-kips) | (kips) | (kips) | (ft-kips) | (ft-kips) | (in) | (deg) | (deg) | Ratio |
| 0.00 | -51,22 | -0.80 | 0.00 | -133.16 | 0.00 | 133.16 | 5803.10 | 1561.17 | 8297.91 | 7657.05 | | 0.00 | 0.00 | 0.026 |
| 5.00 | -49.62 | -0.81 | 0.00 | -129.15 | 0.00 | 129.15 | 5740.33 | 1532.49 | 7995.78 | 7434.11 | | 0.00 | 0.00 | 0.026 |
| 10.00 | -48.04 | -0.81 | 0.00 | -125.13 | 0.00 | 125.13 | 5675,91 | 1503.80 | 7699.25 | 7212.14 | | 0.01 | -0.01 | 0.026 |
| 15.00 | -46.49 | -0.81 | 0.00 | -121.08 | 0.00 | 121.08 | 5609.85 | 1475.12 | 7408.33 | 6991.28 | | 0.02 | -0.01 | 0.026 |
| 20.00 | -44.96 | -0,81 | 0.00 | -117.03 | 0.00 | 117.03 | 5542.15 | 1446.43 | 7123.01 | 6771.63 | | 0.03 | -0.02 | 0.025 |
| 25.00 | -43.47 | -0.82 | 0.00 | -112.96 | 0.00 | 112.96 | 5472,81 | 1417,75 | 6843.29 | 6553.32 | | 0.05 | -0.02 | 0.025 |
| 30.00 | -41.99 | -0.82 | 0.00 | -108.88 | 0.00 | 108.88 | 5401.82 | 1389.06 | 6569.17 | 6336.48 | | 80.0 | -0.03 | 0.025 |
| 35.00 | -40.55 | -0.82 | 0.00 | -104.79 | 0.00 | 104.79 | 5329.20 | 1360.38 | 6300.66 | 6121.21 | | 0.11 | -0.03 | 0.025 |
| 40.00 | -39.13 | -0.82 | 0.00 | -100.69 | 0.00 | 100.69 | 5254.93 | 1331.69 | 6037.75 | 5907.64 | | 0.14 | -0.04 | 0.024 |
| 41.00 | -38.84 | -0.82 | 0.00 | -99.87 | 0.00 | 99.87 | 5239.88 | 1325,95 | 5985.84 | 5865.14 | | 0.15 | -0.04 | 0.024 |
| 45.00 | -36.90 | -0.82 | 0.00 | -96.59 | 0.00 | 96.59 | 5179.02 | 1303.01 | 5780.44 | 5695.90 | | 0.18 | -0.04 | 0.024 |
| 48.00 | -35.46 | -0.81 | 0.00 | -94.14 | 0.00 | 94.14 | 4202.19 | 1119.08 | 4974.38 | 4636,19 | | 0.21 | -0.04 | 0.029 |
| 50.00 | -34.98 | -0.82 | 0.00 | -92.52 | 0.00 | 92.52 | 4180.07 | 1109,25 | 4887.33 | 4570.98 | | 0.23 | -0.05 | 0.029 |
| 55.00 | -33.78 | -0.82 | 0.00 | -88.44 | 0.00 | 88.44 | 4123.62 | 1084.66 | 4673.07 | 4408.60 | | 0.28 | -0.05 | 0.028 |
| 60.00 | -32.61 | -0.82 | 0.00 | -84.36 | 0.00 | 84.36 | 4065.54 | 1060.07 | 4463.61 | 4247.27 | | 0.34 | -0.06 | 0.028 |
| 65.00 70.00 | -31.46 -30.33 | -0.81 -0.81 | 0.00 | -80.28 | 0.00 | 80.28 | 4005.81 | 1035.49 | 4258.96 | 4087.10 | | 0.40 | -0.06 | 0.027 |
| 75.00 75.00 | -29.23 | -0.81 | 0.00 | -76.21 | 0.00 | 76.21 | 3944.44 | 1010.90 | 4059.10 | 3928.21 | | 0.47 | -0.07 | 0.027 |
| 80.00 | -29.23 -28.15 | -0.81 | 0.00 | -72.14 | 0.00 | 72.14 | 3881.43 | 986.31 | 3864.05 | 3770.72 | | 0.54 | -0.08 | 0.027 |
| 85.00 | -28.15 -27.09 | -0.81 | 0.00 | -68.09 | 0.00 | 68.09 | 3816.78 | 961.72 | 3673.81 | 3614.75 | | 0.62 | -0.08 | 0.026 |
| 90.00 | -27.09 | -0.79 | 0.00 | -64.05 | 0.00 | 64.05 | 3750.48 | 937,14 | 3488.36 | 3460.42 | | 0.71 | -0.09 | 0.026 |
| 91.00 | -25.34 -24.99 | -0.79 | 0.00 | -60.02 | 0.00 | 60.02 | 3682.55 | 912,55 | 3307.72 | 3307.86 | | 0.81 | -0.09 | 0.025 |
| 95.00 | -24.99 -24.28 | -0.79 | 0.00 | -59.23 | 0.00 | 59.23 | 2898.33 | 768.33 | 2813.78 | 2634.30 | | 0.83 | -0.10 | 0.031 |
| 100.00 | -24.20 | -0.79 | 0.00 | -56.07 -52.13 | 0.00 | 56.07 | 2860.60 | 751.94 | 2695.00 | 2544.15 | | 0.91 | -0.10 | 0.031 |
| 105.00 | -22.56 | -0.78 | 0.00 | -32.13 -48.20 | 0.00 | 52.13 | 2811.95 | 731.45 | 2550.13 | 2432.25 | | 1.02 | -0.11 | 0.030 |
| 110.00 | -21.30 | -0.77 | 0.00 | -46.20 -44.28 | 0.00 | 48.20 | 2761.66 | 710.96 | 2409.26 | 2321.34 | | 1.14 | -0.12 | 0.029 |
| 115.00 | -20.50 | -0.77 | 0.00 | -44.26 | 0.00 | 44.28 | 2709.73 | 690.47 | 2272,40 | 2211.55 | | 1.26 | -0.12 | 0.028 |
| 120.00 | -19.72 | -0.76 | 0.00 | -36.59 | 0.00 | 40.43 | 2656.16 | 669.98 | 2139.54 | 2103.00 | | 1.40 | -0.13 | 0.027 |
| 125.00 | -18.95 | -0.76 | 0.00 | -30.39 | 0.00 | 36.59 | 2600.95 | 649.49 | 2010.67 | 1995.80 | | 1.54 | -0.14 | 0.026 |
| 130.00 | -18.21 | -0.75 | 0.00 | -28.98 | 0.00 | 32.77 | 2544.10 | 629.00 | 1885.82 | 1890.08 | | 1.69 | -0.15 | 0.025 |
| 135.00 | -17.04 | -0.74 | 0.00 | -25.21 | 0.00 | 28.98 | 2485.60 | 608.51 | 1764.96 | 1785.96 | | 1.85 | -0.15 | 0.024 |
| 140.00 | -16.43 | -0.73 | 0.00 | -23.21 -21.52 | 0.00 | 25.21 | 1823.78 | 478.25 | 1362.76 | 1289.51 | | 2.01 | -0.16 | 0.029 |
| 145.00 | -13,45 | -0.61 | 0.00 | -17.84 | 0.00 | 21.52 17.84 | 1784.40 | 461.86 | 1270.94 | 1218.11 | | 2.19 | -0.17 | 0.027 |
| 150.00 | -12.88 | -0.61 | 0.00 | -14.77 | 0.00 | 14.77 | 1743.38 1700.71 | 445.47 429.08 | 1182.33 1096.92 | 1147.55 | | 2.37 | -0.18 | 0.023 |
| 155.00 | -12.33 | -0.61 | 0.00 | -11.72 | 0.00 | 11.72 | 1656.41 | | | 1077.96 | | 2.56 | -0.18 | 0.021 |
| 157.00 | -11.18 | -0.58 | 0.00 | -10.51 | 0.00 | 10.51 | 1638,23 | 412.69 406.13 | 1014.72 982.73 | 1009.45 982.37 | | 2.75 | -0.19 | 0.019 |
| 160.00 | -10.86 | -0.58 | 0.00 | -8.76 | 0.00 | 8.76 | 1610.46 | 396.29 | 935.71 | | | 2.83 | -0.19 | 0.018 |
| 165.00 | -10.34 | -0.57 | 0.00 | -5.86 | 0.00 | 5.86 | 1562.88 | 379.90 | | 942.14 876.15 | | 2.95 | -0.20 | 0.016 |
| 167.00 | -6.87 | -0.35 | 0.00 | -4.72 | 0.00 | 4.72 | 1543.38 | 379.90 | 859.91 830.48 | | | 3.16 | -0.20 | 0.013 |
| 170.00 | -6.61 | -0.35 | 0.00 | -3.65 | 0.00 | 3.65 | 1513.65 | 363.51 | 787.30 | 850.16 811.61 | | 3.24 3.37 | -0.20 | 0.010 |
| 175.00 | -6.19 | -0.35 | 0.00 | -1.89 | 0.00 | 1.89 | 1462.77 | 347.12 | 717.90 | 748.63 | | 3.59 | -0.20 | 0.009 |
| 177.00 | -3.07 | -0.15 | 0.00 | -1.19 | 0.00 | 1.19 | 1441.72 | 340.56 | 691.04 | 748.63 | | | -0.21 | 0.007 |
| 180.00 | -2.88 | -0.15 | 0.00 | -0.75 | 0.00 | 0.75 | 1400.09 | 330.73 | 651.70 | 682.38 | | 3.67 | -0.21 | 0.004 |
| 180.00 | -2.88 | -0.15 | 0.00 | -0.75 | 0.00 | 0.75 | 1210.02 | 285.83 | 562.49 | 588.19 | | 3.80 3.80 | -0.21 | 0.003 |
| 185.00 | -0.36 | 0.00 | 0.00 | -0.02 | 0.00 | 0.02 | 1210.02 | 285.83 | 562.49 | 588.19 | | 3.80 4.02 | -0.21 -0.21 | 0.004 |
| 190.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 1210.02 | 285.83 | 562.49 | 588.19 | | 4.02 4.23 | -0.21 -0.21 | 0.000 |
| | | | | | 0.00 | 0.00 | 12 10.02 | 200,00 | JUZ.43 | 500.15 | | T.20 | -U.Z I | 0.000 |

Calculated Forces

Structure: CT08748-A **Code:** TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT Exposure: C
Height: 190.00 (ft) Crest Height: 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Wind Loading - Shaft

Structure: CT08748-A

Site Name: Woodstock 4 CT

Height: 190.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1

Topography: 1

Code:

TIA-222-H

Exposure: С

Crest Height: 0.00

Site Class: D - Stiff Soil

Struct Class: ||

1/18/2024

Page: 35

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00 Wind Load Factor 1.00

Iterations 24

| | | | | | | | | | | | | | | Tot |
|--------------|-------------|------|------|--------|-------|----------|-------|--------------|-----------|--------|-------|---------|------------------|--------------|
| Elev | | | | qz | qzGh | С | | lce Thick | Tributary | Aa | CfAa | Wind | Dead Load Ice | Dead |
| (ft) | Description | Kzt | Kz | (psf) | (psf) | (mph-ft) | Cf | (in) | (ft) | (sf) | (sf) | (lb) | (lb) | Load (lb) |
| 0.00 | | 1.00 | 0.85 | 6.464 | 7.11 | 297.48 | 0.730 | 0.000 | 0.00 | 0.000 | 0.00 | 0.0 | 0.0 | 0.0 |
| 5.00 | | 1.00 | 0.85 | 6.464 | 7.11 | 292.06 | 0.730 | 0.000 | | 27.041 | 19,74 | 140.4 | 0.0 | 1499.6 |
| 10.00 | | 1.00 | 0.85 | 6.464 | 7.11 | 286.63 | 0.730 | 0.000 | | 26.543 | 19.38 | 137.8 | 0.0 | 1471.8 |
| 15.00 | | 1.00 | 0.85 | 6.464 | 7.11 | 281.20 | 0.730 | 0.000 | | | 19,01 | 135.2 | 0.0 | 1444.0 |
| 20.00 | | 1.00 | 0.90 | 6.859 | 7.55 | 284.06 | 0.730 | 0.000 | 5.00 | 25.547 | 18.65 | 140.7 | 0.0 | 1416.2 |
| 25.00 | | 1.00 | 0.95 | 7.189 | 7.91 | 285.09 | 0.730 | 0.000 | 5.00 | 25.049 | 18.29 | 144.6 | 0.0 | 1388.3 |
| 30.00 | | 1.00 | 0.98 | 7.470 | 8.22 | 284.78 | 0.730 | 0.000 | 5.00 | 24.550 | 17.92 | 147.3 | 0.0 | 1360.5 |
| 35.00 | | 1.00 | 1.01 | 7.717 | 8.49 | 283.50 | 0.730 | 0.000 | 5.00 | 24.052 | 17.56 | 149.0 | 0.0 | 1332.7 |
| 40.00 | | 1.00 | 1.04 | 7.937 | 8.73 | 281.50 | 0.730 | 0.000 | 5.00 | 23.554 | 17.19 | 150.1 | 0.0 | 1304.9 |
| 41.00 Bot - | Section 2 | 1.00 | 1.05 | 7.978 | 8.78 | 281.03 | 0.730 | 0.000 | 1.00 | 4.651 | 3.40 | 29.8 | 0.0 | 257.6 |
| 45.00 | | 1.00 | 1.07 | 8.136 | 8.95 | 278.92 | 0.730 | 0.000 | | 18.659 | 13.62 | 121.9 | 0.0 | 1906.4 |
| 48.00 Top | - Section 1 | 1.00 | 1.08 | 8.247 | 9.07 | 277.14 | 0.730 | 0.000 | | 13,785 | 10.06 | 91.3 | 0.0 | 1408.1 |
| 50.00 | | 1.00 | 1.09 | 8.318 | 9.15 | 279.80 | 0.730 | 0.000 | 2.00 | 9.091 | 6.64 | 60.7 | 0.0 | 432.1 |
| 55.00 | | 1.00 | 1.12 | 8.487 | 9.34 | 276.40 | 0.730 | 0.000 | | 22.378 | 16.34 | 152.5 | 0.0 | 1063.4 |
| 60.00 | | 1.00 | 1.14 | 8.644 | 9.51 | 272.66 | 0.730 | 0.000 | | 21.880 | 15.97 | 151.9 | 0.0 | 1039.6 |
| 65.00 | | 1.00 | 1.16 | 8,791 | 9.67 | 268.64 | 0.730 | 0.000 | | 21.382 | 15.61 | 150.9 | 0.0 | 1015.8 |
| 70.00 | | 1.00 | 1.17 | 8.929 | 9.82 | 264.36 | 0.730 | 0.000 | | 20.884 | 15.25 | 149.7 | 0.0 | 991.9 |
| 75.00 | | 1.00 | 1.19 | 9.060 | 9.97 | 259.86 | 0.730 | 0.000 | | 20.386 | 14.88 | 148.3 | 0.0 | 968.1 |
| 80.00 | | 1.00 | 1.21 | 9.184 | 10.10 | 255.16 | 0.730 | 0.000 | | 19.888 | 14.52 | 146.7 | 0.0 | 944.3 |
| 85,00 Bot - | Section 3 | 1.00 | 1.22 | 9.302 | 10.23 | 250.29 | 0.730 | 0.000 | | 19.390 | 14.15 | 144.8 | 0.0 | 920.4 |
| 90.00 | | 1.00 | 1.24 | 9.414 | 10.36 | 245.24 | 0.730 | 0.000 | | 19.156 | 13.98 | 144.8 | 0.0 | 1655.4 |
| 91.00 Top - | Section 2 | 1.00 | 1.24 | 9.436 | 10.38 | 244.22 | 0.730 | 0.000 | 1.00 | 3.771 | 2.75 | 28.6 | 0.0 | 325.8 |
| 95.00 | | 1.00 | 1.25 | 9.522 | 10.47 | 243.55 | 0.730 | 0.000 | | 14.887 | 10.87 | 113.8 | 0.0 | 589.5 |
| 100.00 | | 1.00 | 1.27 | 9.625 | 10.59 | 238.25 | 0.730 | 0.000 | | 18.160 | 13.26 | 140.4 | 0.0 | 719.0 |
| 105.00 | | 1.00 | 1.28 | 9.725 | 10.70 | 232.82 | 0.730 | 0.000 | | 17.662 | 12.89 | 137.9 | 0.0 | 699.2 |
| 110.00 Арри | rtenance(s) | 1.00 | 1.29 | 9.820 | 10.80 | 227.27 | 0.730 | 0.000 | | 17.164 | 12.53 | 135.4 | 0.0 | 679.3 |
| 115.00 | | 1.00 | 1.30 | 9.913 | 10.90 | 221.61 | 0.730 | 0.000 | | 16.666 | 12.17 | 132.7 | 0.0 | 659.4 |
| 120.00 | | 1.00 | 1.32 | 10.002 | 11.00 | 215.85 | 0.730 | 0.000 | | 16.168 | 11.80 | 129.9 | 0.0 | 639.6 |
| 125.00 | | 1.00 | 1.33 | 10.088 | 11.10 | 210.00 | 0.730 | 0.000 | | 15.670 | 11.44 | 126.9 | 0.0 | 619.7 |
| 130,00 Bot - | Section 4 | 1.00 | 1.34 | 10.172 | 11.19 | 204.06 | 0.730 | 0.000 | | 15:172 | 11.08 | 123.9 | 0.0 | 599.9 |
| 135.00 Top - | Section 3 | 1.00 | 1.35 | 10.253 | 11.28 | 198.03 | 0.730 | 0.000 | | 14.885 | 10.87 | 122.6 | 0.0 | 1051.6 |
| 140.00 | | 1.00 | 1.36 | 10.332 | 11.37 | 194.85 | 0.730 | 0.000 | | 14.387 | 10.50 | 119.4 | 0.0 | 455.7 |
| 145.00 Appu | rtenance(s) | 1.00 | 1.37 | 10.409 | 11.45 | 188.68 | 0.730 | 0.000 | | 13.889 | 10.14 | 116.1 | 0.0 | 439.8 |
| 150.00 | | 1.00 | 1.38 | 10.483 | 11.53 | 182.44 | 0.730 | 0.000 | | 13.391 | 9.78 | 112.7 | 0.0 | 423.9 |
| 155,00 | | 1.00 | 1.39 | 10.556 | 11.61 | 176.13 | 0.730 | 0.000 | | 12.893 | 9.41 | 109.3 | 0.0 | 408.0 |
| 157.00 Appu | rtenance(s) | 1.00 | 1.39 | 10.584 | 11.64 | 173.59 | 0.730 | 0.000 | 2.00 | 5.018 | 3.66 | 42.6 | 0.0 | 158.8 |
| 160.00 | | 1.00 | 1.40 | 10.627 | 11.69 | 169.76 | 0.730 | 0.000 | 3.00 | 7.377 | 5.39 | 63.0 | 0.0 | 233.4 |
| 165.00 | | 1.00 | 1.41 | 10.696 | 11.77 | 163.33 | 0.730 | 0.000 | | 11.897 | 8.69 | 102.2 | 0.0 | 376.2 |
| 167.00 Appu | rtenance(s) | 1.00 | 1.41 | 10.723 | 11.80 | 160.74 | 0.730 | 0.000 | 2.00 | 4.619 | 3.37 | 39.8 | 0.0 | 146.0 |
| 170.00 | | 1.00 | 1.42 | 10.763 | 11.84 | 156.84 | 0.730 | 0.000 | 3.00 | 6.780 | 4.95 | 58.6 | 0.0 | 214.3 |
| 175.00 | | 1.00 | 1.42 | 10.829 | 11.91 | 150.29 | 0.730 | 0.000 | | 10.901 | 7.96 | 94.8 | 0.0 | 344.5 |
| 177.00 Appur | rtenance(s) | 1.00 | 1.43 | 10.855 | 11.94 | | 0.730 | 0.000 | 2.00 | 4.221 | 3.08 | 36.8 | 0.0 | 133.3 |
| 180.00 Top - | Section 4 | 1.00 | 1.43 | 10.893 | 11.98 | | 0.730 | 0.000 | 3.00 | 6.182 | 4.51 | 54.1 | 0.0 | 195.2 |
| 185.00 Appur | rtenance(s) | 1.00 | 1.44 | 10.956 | 12.05 | | 0.730 | 0.000 | | 10:154 | 7.41 | 89.3 | 0.0 | 360.2 |
| 190.00 Appur | tenance(s) | 1.00 | 1.45 | 11.018 | 12.12 | 144.51 | 0.730 | 0.000 | | 10.154 | 7.41 | 89.8 | 0.0 | 360.2 |
| | | | | | | | | Totals: | 190.00 | | *** | 4,958.9 | · · · · | 34,653.9 |
| | | | | | | | | | | | | | | • |

Discrete Appurtenance Forces

Structure: CT08748-A

Code:

Site Name: Woodstock 4 CT

Exposure:

TIA-222-H

1/18/2024

Height:

190.00 (ft)

Crest Height: 0.00

SBA

Base Elev: 0.000 (ft)

Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1

Struct Class: II

Page: 36

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00 1.00 **Wind Load Factor**



Iterations

| atio | on: | 5 | 4 | .4 |
|------|-----|---|---|----|
| | | | | |
| | | | | |

| 2 | | | | | Ch | Orient Factor | | Total CaAa | Dead Load | Horiz Ecc | Vert Ecc | Wind FX | Mom Y | Mom Z |
|-----|--------------|------------------------|-----|-------------|---------------|------------------|--------|---------------|--------------|--------------|-------------|------------|----------|------------------|
| No. | Elev (ft) | Description | Qty | qz (psf) | qzGh (psf) | x Ka | Ka | (sf) | (lb) | (ft) | (ft) | (lb) | (lb-ft) | (lb-ft) |
| 1 | 190.00 | Description | 1 | 11.054 | 12.160 | 1.00 | 1.00 | 5.19 | 14.00 | 0.000 | 3.000 | 63.11 | 0.00 | 189.33 |
| 2 | | Powerwave 7770.00 | 9 | 10.956 | 12.052 | 0.58 | 0.80 | 28.91 | 479.52 | 0.000 | 0.000 | 348.40 | 0.00 | 0.00 |
| 3 | 185.00 | | 6 | 10.956 | 12.052 | 0.40 | 0.80 | 0.24 | 96.00 | 0.000 | 0.000 | 2.89 | 0.00 | 0.00 |
| 4 | | Powerwave LGP21903 | 6 | 10.956 | 12.052 | 0.40 | 0.80 | 0.65 | 33.00 | 0.000 | 0.000 | 7.81 | 0.00 | 0.00 |
| 5 | | Powerwave LGP21401 | 6 | 10.956 | 12.052 | 0.40 | 0.80 | 3.10 | 84.60 | 0.000 | 0.000 | 37.31 | 0.00 | 0.00 |
| 6 | | Mount Pipes | 12 | 10.956 | 12.052 | 0.80 | 0.80 | 13.92 | 360.00 | 0.000 | 0.000 | 167.76 | 0.00 | 0.00 |
| 7 | | Low Profile Platform | 1 | 10.956 | 12.052 | 1.00 | 1.00 | 14.69 | 1250.00 | 0.000 | 0.000 | 177.04 | 0.00 | 0.00 |
| 8 | | VV-65A-R1 | 3 | 10.855 | 11.940 | 0.55 | 0.75 | 13.15 | 88.50 | 0.000 | 0.000 | 157.06 | 0.00 | 0.00 |
| 9 | | 4449 B71 + B85 | 3 | 10.855 | 11.940 | 0.38 | 0.75 | 2.22 | 219.60 | 0.000 | 0.000 | 26.46 | 0.00 | 0.00 |
| 10 | | AIR6419 B41 | 3 | 10.855 | 11.940 | 0.53 | 0.75 | 9.03 | 309.00 | 0.000 | 0.000 | 107.77 | 0.00 | 0.00 |
| 11 | | Ericsson KRY 112 489/2 | 3 | 10.855 | 11.940 | 0.38 | 0.75 | 0.73 | 46.20 | 0.000 | 0.000 | 8.73 | 0.00 | 0.00 |
| 12 | | 782 11056 | 3 | 10.855 | 11.940 | 0.38 | 0.75 | 0.25 | 3.90 | 0.000 | 0.000 | 2.96 | 0.00 | 0.00 |
| 13 | | 8843 B25/B66A | 3 | 10.855 | 11.940 | 0.38 | 0.75 | 1.84 | 216.00 | 0.000 | 0.000 | 22.03 | 0.00 | 0.00 |
| 14 | | APXVAARR24_43-U-NA2 | 3 | 10.855 | 11.940 | 0.52 | 0.75 | 31.88 | 384.00 | 0.000 | 0.000 | 380.63 | 0.00 | 0.00 |
| 15 | | Platform w/Handrails | 1 | 10.855 | 11.940 | 1.00 | 1.00 | 21.41 | 1604.70 | 0.000 | 0.000 | 255.64 | 0.00 | 0.00 |
| 16 | | Mount Pipes | 9 | 10.855 | 11.940 | 0.75 | 0.75 | 5.67 | 270.00 | 0.000 | 0.000 | 67.70 | 0.00 | 0.00 |
| 17 | | Platform w/Handrails | 1 | 10.723 | 11.795 | 1.00 | 1.00 | 22.60 | 1794.00 | 0.000 | 0,000 | 266.57 | 0.00 | 0.00 |
| 18 | | RFS DB-T1-6Z-8AB-0Z | 2 | 10.723 | 11.795 | 1.00 | 1.00 | 9.60 | 88.00 | 0,000 | 0.000 | 113.23 | 0.00 | 0.00 |
| 19 | | Raycap | 1 | 10.723 | 11.795 | 1.00 | 1.00 | 4.06 | 32.00 | 0.000 | 0.000 | 47.89 | 0.00 | 0.00 |
| 20 | | Samsung RF4461d-13A | 3 | 10.723 | 11.795 | 0.63 | 0.75 | 3.53 | 217.50 | 0.000 | 0.000 | 41.69 | 0.00 | 0.00 |
| 21 | | Samsung B2/B66A RRH | 3 | 10.723 | 11.795 | 0.63 | 0.75 | 3.53 | 224.13 | 0.000 | 0.000 | 41.69 | 0.00 | 0.00 |
| 22 | 167.00 | Commscope | 3 | 10.723 | 11.795 | 0.62 | 0.75 | 15.26 | 116.40 | 0.000 | 0.000 | 179.96 | 0.00 | 0.00 |
| 23 | | Samsung MT6413-77A | 3 | 10.723 | 11.795 | 0.52 | 0.75 | 5.88 | 171.90 | 0.000 | 0.000 | 69.40 | 0.00 | 0.00 |
| 24 | | Andrew JAHH-65B-R3B | 6 | 10.723 | 11.795 | 0.62 | 0.75 | 33.99 | 411.36 | 0.000 | 0.000 | 400.90 | 0.00 | 0.00 |
| 25 | 167.00 | Mount Pipes | 12 | 10.723 | 11.795 | 0.75 | 0.75 | 9.00 | 360.00 | 0.000 | 0.000 | 106.16 | 0.00 | 0.00 |
| 26 | | Commscope | 3 | 10.723 | 11.795 | 0.38 | 0.75 | 0.63 | 62.16 | 0.000 | 0.000 | 7.43 | 0.00 | 0.00 |
| 27 | 157.00 | SAF | 4 | 10.584 | 11.643 | 0.50 | 1.00 | 2.44 | 30.80 | 0.000 | 0.000 | 28.41 | 0.00 | 0.00 |
| 28 | | VHLPX3-6W | 1 | 10.584 | 11.643 | 1.00 | 1.00 | 10.68 | 53.00 | 0.000 | 0.000 | 124.34 | 0.00 | 0.00 |
| 29 | 157.00 | SUX6-65B | 1 | 10.584 | 11.643 | 1.00 | 1.00 | 35.67 | 209.00 | 0.000 | 0.000 | 415.29 | 0.00 | 0.00 0.00 |
| 30 | 157.00 | Flush Mount | 2 | 10.584 | 11.643 | 1.00 | 1.00 | 10.00 | 700.00 | 0.000 | 0.000 | 116,43 | 0.00 | 0.00 |
| 31 | 145.00 | Mount Pipes | 3 | 10.409 | 11.449 | 0.75 | 0.75 | 2.52 | 90.00 | 0.000 | 0.000 | 28,85 | 0.00 | 0.00 |
| 32 | 145.00 | RDIDC-9181-PF-48 | 1 | 10.409 | 11.449 | 1.00 | 1.00 | 2.01 | 21,90 | 0.000 | 0.000 | 23.01 | 0.00 | 0.00 |
| 33 | 145.00 | Commscope | 1 | 10.409 | 11.449 | | 1.00 | 33.69 | 1801.56 | 0.000 | 0.000 | 385.73 | 0.00 | 0.00 |
| 34 | 145.00 | FFVV-65B-R2 | 3 | 10.409 | 11.449 | 0.55 | 0.75 | 20.43 | 212.40 | 0.000 | 0.000 | 233.91 | 0.00 | |
| 35 | | TA08025-B605 | 3 | 10.409 | 11.449 | 0.38 | 0.75 | 2.21 | 225.00 | 0.000 | 0.000 | 25.25 | 0.00 | 0.00 |
| 36 | 145.00 | TA08025-B604 | 3 | 10.409 | 11.449 | | 0.75 | 2.21 | 191.70 | 0.000 | 0.000 | 25.25 | 0.00 | 0.00 |
| 37 | 110.00 | Antenex Y1505 | 2 | 9.820 | 10.803 | 1.00 | 1.00 | 7.20 | 10.00 | 0.000 | 0.000 | 77.78 | 0.00 | 0.00 |
| 38 | | Flush Mount | 1 | 9.820 | 10.803 | 1.00 | 1.00 | 5.00 | 350.00 | 0.000 | 0.000 | 54.01 | 0.00 | 0.00 |
| 39 | | Telewave ANT450D6-9 | 2 | 9.858 | 10.844 | 1.00 | 1.00 | 5.54 | 36.00 | 0.000 | 2.000 | 60.07 | 0.00 | 120.15 423.69 |
| 40 | | Decibel DB212-1 | 2 | 9.876 | 10.864 | 1.00 | 1.00 | 13.00 | 62.00 | 0.000 | 3.000 | 141.23 | 0.00 | 423.09 |
| - | | | | | | | Totals | | 12.929.83 | | | 4,847.79 | | |

Totals:

12,929.83

4,847.79

Total Applied Force Summary

Structure: CT08748-A

Code:

TIA-222-H

1/18/2024

Site Name: Woodstock 4 CT

Exposure:

С

Height:

190.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: D - Stiff Soil

Gh:

1.1

Topography: 1

Struct Class: ||

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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor

1.00

Wind Load Factor

1.00

Iterations 24

| Elev | | Lateral | Axial | Torsion | Moment |
|--------|-------------------|----------------|----------------|---------------|---------------|
| (ft) | Description | FX (-) (lb) | FY (-) (lb) | MY (lb-ft) | MZ (lb.ft) |
| | | | | | (lb-ft) |
| 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| 5.00 | | 140.37 | 1708.79 | 0.00 | 0.00 |
| 10.00 | | 137.78 | 1680.98 | 0.00 | 0.00 |
| 15.00 | | 135.20 | 1653.17 | 0.00 | 0.00 |
| 20.00 | | 140.71 | 1625,37 | 0.00 | 0.00 |
| 25.00 | | 144.60 | 1597.56 | 0.00 | 0.00 |
| 30.00 | | 147.27 | 1569.75 | 0.00 | 0.00 |
| 35.00 | | 149.04 | 1541.94 | 0.00 | 0.00 |
| 40.00 | | 150.12 | 1514.13 | 0.00 | 0.00 |
| 41.00 | | 29.80 | 299.49 | 0.00 | 0.00 |
| 45.00 | | 121.90 | 2073.82 | 0.00 | 0.00 |
| 48.00 | | 91.29 | 1533.67 | 0.00 | 0.00 |
| 50.00 | | 60.72 | 515.74 | 0.00 | 0.00 |
| 55.00 | | 152.51 | 1272.66 | 0.00 | 0.00 |
| 60.00 | | 151.87 | 1248.82 | 0.00 | 0.00 |
| 65.00 | | 150.93 | 1224.99 | 0.00 | 0.00 |
| 70.00 | | 149.74 | 1201.15 | 0.00 | 0.00 |
| 75,00 | | 148.31 | 1177.32 | 0.00 | 0.00 |
| 80.00 | | 146.66 | 1153.48 | 0.00 | 0.00 |
| 85.00 | | 144.83 | 1129.64 | 0.00 | 0.00 |
| 90.00 | | 144.81 | 1864,57 | 0.00 | 0.00 |
| 91.00 | | 28.58 | 367.67 | 0.00 | |
| 95.00 | | 113.83 | 756.90 | 0.00 | 0.00 |
| 100.00 | | 140.36 | 928.25 | 0.00 | 0.00 |
| 105.00 | | 137.92 | 908.39 | | 0.00 |
| 110.00 | (7) attachments | 468.45 | 1346.52 | 0.00 | 0.00 |
| 115.00 | (1) and diments | 132.66 | | 0.00 | 543.84 |
| 120.00 | | 129.86 | 853.06 | 0.00 | 0.00 |
| 125.00 | | | 833.20 | 0.00 | 0.00 |
| 130.00 | | 126.94 | 813.33 | 0.00 | 0.00 |
| 135.00 | | 123.93 | 793.47 | 0.00 | 0.00 |
| | | 122.56 | 1245.19 | 0.00 | 0.00 |
| 140.00 | /11/ other-bosses | 119.37 | 649.31 | 0.00 | 0.00 |
| 145.00 | (14) attachments | 838.08 | 3175.98 | 0.00 | 0.00 |
| 150.00 | | 112.73 | 608.43 | 0.00 | 0.00 |
| 155.00 | tes | 109.29 | 592.54 | 0.00 | 0.00 |
| 157.00 | (8) attachments | 727,12 | 1225.37 | 0.00 | 0.00 |
| 160.00 | | 62.95 | 340.03 | 0.00 | 0.00 |
| 165.00 | | 102.18 | 554.01 | 0.00 | 0.00 |
| 167.00 | (37) attachments | 1314.68 | 3694.60 | 0.00 | 0.00 |
| 170.00 | | 58.60 | 279.56 | 0.00 | 0.00 |
| 175.00 | | 94.79 | 453.23 | 0.00 | 0.00 |
| 177.00 | (31) attachments | 1065.78 | 3318.74 | 0.00 | 0.00 |
| 180.00 | | 54.08 | 206.91 | 0.00 | 0.00 |
| 185.00 | (40) attachments | 830.56 | 2682.81 | 0.00 | 0.00 |
| 190.00 | (1) attachments | 152.95 | 384.09 | 0.00 | 189.33 |
| | Totals: | 9,806,69 | 54,598.65 | 0.00 | · |
| | i Otalo. | 0,000.03 | J4,J80.03 | 0.00 | 733.17 |

Linear Appurtenance Segment Forces (Factored)

Structure: CT08748-A

Code:

TIA-222-H

1/18/2024

Site Name: Woodstock 4 CT

Exposure:

Height:

Gh:

190.00 (ft)

Crest Height: 0.00

D - Stiff Soil

C



Base Elev: 0.000 (ft)

1.1

Topography: 1

Site Class: Struct Class: ||

Page: 38

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor

1.00

Wind Load Factor

1.00

Iterations

24

| Top Elev (ft) | Description | Wind Exposed | Length (ft) | Ca | Exposed Width (in) | Area (sqft) | CaAa (sqft) | Ra | Cf Adjust Factor | qz (psf) | F X (lb) | Dead Load (lb) |
|---------------------|---------------------|-----------------|-----------------------|-------|--------------------------|----------------|----------------|-------|------------------------|-------------|-------------|----------------------|
| | | Vac | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.016 | 0.000 | 6.464 | 0.00 | 1.37 |
| 5.00 | Safety Cable | Yes Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.016 | 0.000 | 6.464 | 0.00 | 5.20 |
| 5.00 | Step bolts (ladder) | | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.016 | 0.000 | 6.464 | 0.00 | 1.37 |
| 10.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.016 | 0.000 | 6.464 | 0.00 | 5.20 |
| 10.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.016 | 0.000 | 6.464 | 0.00 | 1.37 |
| 15.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.016 | 0.000 | 6.464 | 0.00 | 5.20 |
| 15.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.016 | 0.000 | 6.859 | 0.00 | 1.37 |
| 20.00 | Safety Cable | Yes Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.016 | 0.000 | 6.859 | 0.00 | 5.20 |
| 20.00 | Step bolts (ladder) | | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.017 | 0.000 | 7.189 | 0.00 | 1.37 |
| 25.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.017 | 0.000 | 7.189 | 0.00 | 5.20 |
| 25.00 | Step bolts (ladder) | Yes Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.017 | 0.000 | 7.470 | 0.00 | 1.37 |
| 30.00 | Safety Cable | | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.017 | 0.000 | 7.470 | 0.00 | 5.20 |
| 30.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.017 | 0.000 | 7.717 | 0.00 | 1.37 |
| 35.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.017 | 0.000 | 7.717 | 0.00 | 5.20 |
| 35.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.018 | 0.000 | 7.937 | 0.00 | 1.37 |
| 40.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.018 | 0.000 | 7.937 | 0.00 | 5.20 |
| 40.00 | Step bolts (ladder) | Yes | 1.00 | 0.000 | 0.38 | 0.03 | 0.00 | 0.018 | 0.000 | 7.978 | 0.00 | 0.27 |
| 41.00 | Safety Cable | Yes | 1.00 | 0.000 | 0.63 | 0.05 | 0.00 | 0.018 | 0.000 | 7.978 | 0.00 | 1.04 |
| 41.00 | Step bolts (ladder) | Yes | 4.00 | 0.000 | 0.38 | 0.13 | 0.00 | 0.018 | 0.000 | 8.136 | 0.00 | 1.09 |
| 45.00 | Safety Cable | Yes | 4.00 | 0.000 | 0.63 | 0.21 | 0.00 | 0.018 | 0.000 | 8.136 | 0.00 | 4.16 |
| 45.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.019 | 0.000 | 8.247 | 0.00 | 0.82 |
| 48.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.019 | 0.000 | 8.247 | 0.00 | 3.12 |
| 48.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.019 | 0.000 | 8.318 | 0.00 | 0.55 |
| 50.00 | Safety Cable | Yes | | 0.000 | 0.63 | 0.10 | 0.00 | 0.019 | 0.000 | 8.318 | 0.00 | 2.08 |
| 50.00 | Step bolts (ladder) | Yes | 2.00 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.019 | 0.000 | 8.487 | 0.00 | 1.37 |
| 55.00 | Safety Cable | Yes | | 0.000 | 0.63 | 0.26 | 0.00 | 0.019 | 0.000 | 8.487 | 0.00 | 5.20 |
| 55.00 | Step bolts (ladder) | Yes | 5.00 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.019 | 0.000 | 8.644 | 0.00 | 1.37 |
| 60.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.019 | 0.000 | 8.644 | 0.00 | 5.20 |
| 60.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.020 | 0.000 | 8.791 | 0.00 | 1.37 |
| 65.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.020 | 0.000 | 8.791 | 0,00 | 5.20 |
| 65.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.020 | 0.000 | 8.929 | 0.00 | 1.37 |
| 70.00 | Safety Cable | Yes | | 0.000 | 0.63 | 0.26 | 0.00 | 0.020 | 0.000 | 8.929 | 0.00 | 5.20 |
| 70.00 | Step bolts (ladder) | Yes | 5.00 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.021 | 0.000 | 9.060 | 0.00 | 1.37 |
| 75.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.021 | 0.000 | 9.060 | 0.00 | 5.20 |
| 75.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.021 | 0.000 | 9.184 | 0.00 | 1.37 |
| 80.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.021 | 0.000 | 9.184 | 0.00 | 5.20 |
| 80.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.022 | 0.000 | 9.302 | 0.00 | 1.37 |
| 85.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.022 | 0.000 | 9.302 | 0.00 | 5.20 |
| 85.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.022 | 0.000 | 9.414 | 0.00 | 1.37 |
| 90.00 | • | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.022 | 0.000 | 9.414 | 0.00 | 5.20 |
| | Step bolts (ladder) | Yes | | 0.000 | 0.38 | 0.03 | 0.00 | 0.023 | 0.000 | 9.436 | 0.00 | 0.27 |
| | Safety Cable | Yes | 1.00 | 0.000 | 0.63 | 0.05 | 0.00 | 0.023 | 0.000 | 9.436 | 0.00 | 1.04 |
| | Step bolts (ladder) | Yes | 1.00 4.00 | 0.000 | 0.03 | 0.13 | 0.00 | 0.023 | 0.000 | 9.522 | 0.00 | 1.09 |
| | Safety Cable | Yes | | 0.000 | 0.63 | 0.13 | | 0.023 | 0.000 | 9.522 | 0.00 | 4.16 |
| | Step bolts (ladder) | Yes | 4.00 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.023 | 0.000 | 9.625 | 0.00 | 1.37 |
| | Safety Cable | Yes | 5.00 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.023 | 0.000 | 9.625 | 0.00 | 5.20 |
| 100.00 | | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.024 | 0.000 | 9.725 | 0.00 | 1.37 |
| 105.00 | Safety Cable | Yes | 0.00 wriaht @ 202. | | | | | | | | | |

Linear Appurtenance Segment Forces (Factored)

Structure: CT08748-A

Site Name: Woodstock 4 CT

Height:

190.00 (ft)

Base Elev: 0.000 (ft)

Gh:

1.1

Code:

TIA-222-H

1/18/2024

Exposure: С

Crest Height: 0.00 Site Class:

D - Stiff Soil

Struct Class: ||

Page: 39



Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor

Wind Load Factor

1.00

Topography: 1

1.00

Iterations 24

| Top Elev (ft) | Description | Wind | Length | | Exposed Width | Area | CaAa | | Cf Adjust | qz | FΧ | Dead Load |
|---------------------|---------------------|---------|--------|-------|---------------|--------|--------|-------|--------------|--------|------|--------------|
| | Description | Exposed | (ft) | Ca | (in) | (sqft) | (sqft) | Ra | Factor | (psf) | (lb) | (lb) |
| 105.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0,63 | 0.26 | 0.00 | 0.024 | 0.000 | 9.725 | 0.00 | 5,20 |
| 110.00 | | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.025 | 0.000 | 9.820 | 0.00 | 1.37 |
| 110.00 | () | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.025 | 0.000 | 9.820 | 0.00 | 5.20 |
| 115.00 | • | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.025 | 0.000 | 9.913 | 0.00 | 1.37 |
| 115.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.025 | 0.000 | 9.913 | 0.00 | 5.20 |
| 120.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.026 | 0.000 | 10.002 | 0.00 | 1.37 |
| 120.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.026 | 0.000 | 10.002 | 0.00 | 5.20 |
| 125.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.027 | 0.000 | 10.088 | 0.00 | 1.37 |
| 125.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.027 | 0.000 | 10.088 | 0.00 | 5.20 |
| 130.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.028 | 0.000 | 10.172 | 0.00 | 1.37 |
| 130.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.028 | 0.000 | 10.172 | 0.00 | 5.20 |
| 135.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.029 | 0.000 | 10.253 | 0.00 | 1.37 |
| 135.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.029 | 0.000 | 10.253 | 0.00 | 5.20 |
| 140.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.029 | 0.000 | 10.332 | 0.00 | 1.37 |
| 140.00 | Step bolts (ladder) | Yes | 5,00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.029 | 0.000 | 10.332 | 0.00 | 5.20 |
| 145.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.030 | 0.000 | 10.409 | 0.00 | 1.37 |
| 145.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.030 | 0.000 | 10.409 | 0.00 | 5.20 |
| 150.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.031 | 0.000 | 10.483 | 0.00 | 1.37 |
| 150.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.031 | 0.000 | 10,483 | 0.00 | 5.20 |
| 155.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.033 | 0.000 | 10.556 | 0.00 | 1.37 |
| 155.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.033 | 0.000 | 10.556 | 0.00 | 5.20 |
| 157.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.034 | 0.000 | 10.584 | 0.00 | 0.55 |
| 157.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.10 | 0.00 | 0.034 | 0.000 | 10.584 | 0.00 | 2.08 |
| 160.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.034 | 0.000 | 10.627 | 0.00 | 0.82 |
| 160.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.034 | 0.000 | 10.627 | 0.00 | 3.12 |
| 165.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.035 | 0.000 | 10.696 | 0.00 | 1.37 |
| 165.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.035 | 0.000 | 10.696 | 0.00 | 5.20 |
| 167.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.036 | 0.000 | 10.723 | 0.00 | 0.55 |
| 167.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.10 | 0.00 | 0.036 | 0.000 | 10.723 | 0.00 | 2.08 |
| 170.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.037 | 0.000 | 10.763 | 0.00 | 0.82 |
| 170.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.037 | 0.000 | 10.763 | 0.00 | 3.12 |
| 175.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.039 | 0.000 | 10.829 | 0.00 | 1.37 |
| 175.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.039 | 0.000 | 10.829 | 0.00 | 5.20 |
| 177.00 | Safety Cable | Yes | 2.00 | 0.000 | 0.38 | 0.06 | 0.00 | 0.040 | 0.000 | 10.855 | 0.00 | 0.55 |
| 177.00 | Step bolts (ladder) | Yes | 2.00 | 0.000 | 0.63 | 0.10 | 0.00 | 0.040 | 0.000 | 10.855 | 0.00 | 2.08 |
| 180.00 | Safety Cable | Yes | 3.00 | 0.000 | 0.38 | 0.10 | 0.00 | 0.041 | 0.000 | 10.893 | 0.00 | 0.82 |
| 180.00 | Step bolts (ladder) | Yes | 3.00 | 0.000 | 0.63 | 0.16 | 0.00 | 0.041 | 0.000 | 10.893 | 0.00 | 3.12 |
| 185.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.041 | 0.000 | 10.956 | 0.00 | 1.37 |
| 185.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.041 | 0.000 | 10.956 | 0.00 | 5.20 |
| 190.00 | Safety Cable | Yes | 5.00 | 0.000 | 0.38 | 0.16 | 0.00 | 0.041 | 0.000 | 11.018 | 0.00 | 1.37 |
| 190.00 | Step bolts (ladder) | Yes | 5.00 | 0.000 | 0.63 | 0.26 | 0.00 | 0.041 | 0.000 | 11.018 | 0.00 | 5.20 |
| | • | | 1 | | | V.E.U | 0.00 | 0.0-1 | | _ | | |
| | | | | | | | | | 101 | als: | 0.0 | 249.5 |

Calculated Forces

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

Site Name:Woodstock 4 CTExposure:CHeight:190.00 (ft)Crest Height:0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II



Iterations

SBA

24

Dead Load Factor 1.00
Wind Load Factor 1.00

Load Case: 1.0D + 1.0W 60 mph Wind

| Seg Elev | Pu FY (-) | Vu FX (-) | Tu MY (-) (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | phi Pn (kips) | phi Vn (kips) | phi Tn (ft-kips) | phi Mn (ft-kips) | Total Deflect (in) | Rotation Sway (deg) | Twist (deg) | Stress Ratio |
|------------------|------------------|----------------|---------------------------|-----------------------|-----------------------|----------------------------------|---------------------|---------------------|------------------------|------------------------|--------------------------|---------------------------|----------------|-----------------|
| (ft) 0.00 | (kips) -54.60 | -9.82 | 0.00 | -1297.3 | 0.00 | 1297.38 | 5803.10 | 1561.17 | 8297.91 | 7657.05 | 0,00 | 0.000 | 0.000 | 0.179 |
| 5.00 | -52.88 | -9.72 | 0.00 | -1248.2 | 0.00 | 1248.26 | 5740.33 | 1532.49 | 7995.78 | 7434.11 | 0.02 | -0.039 | 0.000 | 0.177 |
| 10.00 | -51.19 | -9.62 | 0.00 | -1199.6 | 0.00 | 1199.66 | 5675.91 | 1503.80 | 7699.25 | 7212.14 | 80.0 | -0.079 | 0.000 | 0.175 |
| 15.00 | -49.53 | -9.51 | 0.00 | -1151.5 | 0.00 | 1151.58 | 5609.85 | 1475.12 | 7408.33 | 6991.28 | 0.19 | -0.120 | 0.000 | 0.174 |
| 20.00 | -47.90 | -9.40 | 0.00 | -1104.0 | 0.00 | 1104.01 | 5542.15 | 1446.43 | 7123.01 | 6771.63 | 0.34 | -0.161 | 0.000 | 0.172 |
| 25.00 | -46.30 | -9.29 | 0.00 | -1057.0 | 0.00 | 1057.00 | 5472.81 | 1417.75 | 6843.29 | 6553.32 | 0.53 | -0.203 | 0.000 | 0.170 |
| 30.00 | -44.72 | -9.17 | 0.00 | -1010.5 | 0.00 | 1010.56 | 5401.82 | 1389.06 | 6569.17 | 6336.48 | 0.76 | -0.245 | 0.000 | 0.168 |
| 35.00 | -43.17 | -9.04 | 0.00 | -964.71 | 0.00 | 964.71 | 5329.20 | 1360,38 | 6300.66 | 6121.21 | 1.04 | -0.289 | 0.000 | 0.166 |
| 40.00 | -41.66 | -8.91 | 0.00 | -919.49 | 0.00 | 919.49 | 5254.93 | 1331.69 | 6037.75 | 5907.64 | 1.37 | -0.333 | 0.000 | 0.164 |
| 41.00 | -41.35 | -8.89 | 0.00 | -910.59 | 0.00 | 910.59 | 5239.88 | 1325.95 | 5985.84 | 5865.14 | 1.44 | -0.342 | 0.000 | 0.163 |
| 45.00 | -39.27 | -8.78 | 0.00 | -875.02 | 0.00 | 875.02 | 5179.02 | 1303.01 | 5780.44 | 5695.90 | 1.74 | -0.378 | 0.000 | 0.161 |
| 48.00 | -37.74 | -8.69 | 0.00 | -848.69 | 0.00 | 848.69 | 4202.19 | 1119.08 | 4974.38 | 4636.19 | 1.99 | -0.405 | 0.000 | 0.192 |
| 50.00 | -37.22 | -8.65 | 0.00 | -831.31 | 0.00 | 831.31 | 4180.07 | 1109.25 | 4887.33 | 4570.98 | 2.16 | -0.424 | 0.000 | 0.191 |
| 55.00 | -35.94 | -8.52 | | -788.07 | 0.00 | 788.07 | 4123.62 | 1084.66 | 4673.07 | 4408.60 | 2.63 | -0.475 | 0.000 | 0.188 |
| 60.00 | -34.68 | -8.39 | 0.00 | -745.48 | 0.00 | 745.48 | 4065.54 | 1060.07 | 4463.61 | 4247.27 | 3.16 | -0.527 | 0.000 | 0.184 |
| 65.00 | -33.45 | -8.26 | | -703.54 | 0.00 | 703.54 | 4005.81 | 1035.49 | 4258.96 | 4087.10 | 3.74 | -0.579 | 0.000 | 0.181 |
| 70.00 | -33.45 | -8.12 | | -662.26 | 0.00 | 662.26 | 3944.44 | 1010.90 | 4059.10 | 3928.21 | 4.37 | -0.632 | 0.000 | 0.177 |
| 75.00 | -31.06 | -7.99 | | -621.65 | 0.00 | 621.65 | 3881.43 | 986,31 | 3864.05 | 3770.72 | 5.06 | -0.686 | 0.000 | 0.173 |
| 80.00 | -29.90 | -7.86 | 0.00 | -581.69 | 0.00 | 581.69 | 3816.78 | 961.72 | 3673,81 | 3614.75 | 5.81 | -0.740 | 0.000 | 0.169 |
| 85.00 | -28.77 | -7.73 | - | -542.41 | 0.00 | 542.41 | 3750.48 | 937.14 | 3488.36 | 3460.42 | 6.61 | -0.794 | 0.000 | 0.164 |
| 90.00 | -26.90 | -7.57 | 0.00 | -503.78 | 0.00 | 503.78 | 3682.55 | 912.55 | 3307.72 | 3307.86 | 7.48 | -0,849 | 0.000 | 0.160 |
| | -26.53 | -7.55 | | -496.21 | 0.00 | 496.21 | 2898.33 | 768.33 | 2813.78 | 2634.30 | 7.65 | -0.860 | 0.000 | 0.198 |
| 91.00 95.00 | -20.33 | -7.45 | | -466.02 | 0.00 | 466.02 | 2860.60 | 751.94 | 2695.00 | 2544.15 | 8.39 | -0.905 | 0.000 | 0.192 |
| | -24.83 | -7.32 | | -428.78 | 0.00 | 428.78 | 2811.95 | 731.45 | 2550.13 | 2432.25 | 9.38 | -0.968 | 0.000 | 0.185 |
| 100.00 | -24.63 | -7.32 -7.19 | | -392.19 | 0.00 | 392.19 | 2761.66 | 710.96 | 2409.26 | 2321.34 | 10.42 | -1.030 | 0.000 | 0.178 |
| 105.00 | -23.92 | -6.72 | | -355.69 | 0.00 | 355.69 | 2709.73 | 690.47 | 2272,40 | 2211.55 | 11.54 | -1.093 | 0.000 | 0.169 |
| 110.00 | -22.36 | -6.60 | | -322.08 | 0.00 | 322.08 | 2656,16 | 669.98 | 2139.54 | 2103.00 | 12.71 | -1.154 | 0.000 | 0.161 |
| 115.00 | -21.72 | -6.47 | | -289.10 | 0.00 | 289.10 | 2600.95 | 649.49 | 2010.67 | 1995.80 | 13.96 | -1.215 | 0.000 | 0.153 |
| 120.00 | -20.06 | -6.35 | | -256.74 | 0.00 | 256.74 | 2544.10 | 629.00 | 1885.82 | 1890.08 | 15.26 | -1.275 | 0.000 | 0.144 |
| 125.00 130.00 | -19.27 | -6.22 | | -225.01 | 0.00 | 225.01 | 2485.60 | 608.51 | 1764.96 | 1785.96 | 16.63 | -1.333 | 0.000 | 0.134 |
| | | -6.22 | | -193.89 | 0.00 | 193.89 | 1823.78 | 478.25 | 1362.76 | 1289.51 | 18.05 | -1.389 | 0.000 | 0.160 |
| 135.00 | -18.02 -17.37 | -5.09 -5.97 | | -163.44 | 0.00 | 163.44 | 1784.40 | 461.86 | 1270.94 | 1218.11 | 19.54 | -1.441 | 0.000 | 0.144 |
| 140.00 | -17.37 -14.21 | -5.97 | | -133.59 | 0.00 | 133.59 | 1743.38 | 445.47 | 1182.33 | 1147.55 | 21.08 | -1.499 | 0.000 | 0.125 |
| 145.00 | | | | -108.26 | 0.00 | 108.26 | 1700.71 | 429.08 | 1096.92 | 1077.96 | 22.68 | -1.551 | 0.000 | 0.109 |
| 150.00 | -13.60 | -4.95 | | -83.52 | 0.00 | 83.52 | 1656.41 | 412.69 | 1014.72 | 1009.45 | 24.33 | -1.598 | 0.000 | 0.091 |
| 155.00 | -13.01 | -4.83 | | -73.86 | 0.00 | 73.86 | 1638.23 | 406.13 | 982.73 | 982.37 | 25.00 | -1.615 | 0.000 | 0.082 |
| 157.00 | -11.80 | -4.07 | | -61.64 | 0.00 | 61.64 | 1610.46 | 396.29 | 935.71 | 942.14 | 26.02 | -1.638 | 0.000 | 0.073 |
| 160.00 | -11.46 | -4.01 | | -41.62 | 0.00 | 41.62 | 1562.88 | 379.90 | 859.91 | 876.15 | 27.76 | -1.670 | 0.000 | 0.055 |
| 165.00 | -10.91 | -3.89 | | -33.83 | 0.00 | 33.83 | 1543.38 | 373.35 | 830.48 | 850.16 | 28.46 | -1.681 | 0.000 | 0.045 |
| 167.00 | -7.26 | -2.47 | | -33.83 -26.42 | 0.00 | 26.42 | 1513.65 | 363.51 | 787.30 | 811.61 | 29.52 | -1.694 | 0.000 | 0.037 |
| 170.00 | -6.98 | -2.41 | | -26.42 -14.39 | 0.00 | 14.39 | 1462.77 | 347.12 | 717.90 | 748.63 | 31.30 | -1.710 | 0.000 | 0.024 |
| 175.00 | -6.53 | -2.30 | | -14.39 -9.79 | 0.00 | 9.79 | 1441.72 | 340.56 | 691.04 | 723.78 | 32.02 | -1.715 | 0.000 | 0.016 |
| 177.00 | -3.24 | -1.13 | | -9.79 -6.39 | 0.00 | 6.39 | 1400.09 | 330.73 | 651.70 | 682.38 | 33.10 | -1.719 | 0.000 | 0.012 |
| 180.00 | -3.04 | -1.08 | | | 0.00 | 6.39 | 1210.02 | 285.83 | 562.49 | 588.19 | 33.10 | -1.719 | 0.000 | 0.013 |
| 180.00 | -3.04 | -1.08 | | -6.39 | | 1.01 | 1210.02 | 285.83 | 562.49 | 588.19 | 34.90 | -1.723 | 0.000 | 0.002 |
| 185.00 | -0.38 | -0.16 | | -1.01 | 0.00 0.00 | 0.19 | 1210.02 | 285.83 | 562.49 | 588.19 | 36.71 | -1.724 | 0.000 | 0.000 |
| 190.00 | 0.00 | -0.15 | 0.00 | -0.19 | 0.00 | 0.15 | 12 10.02 | 200.00 | 552.75 | | | | | |

Final Analysis Summary

Structure: CT08748-A **Code**: TIA-222-H 1/18/2024

Site Name:Woodstock 4 CTExposure:CHeight:190.00 (ft)Crest Height:0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II Page: 41



Reactions

| Load Case | Shear FX (kips) | Shear FZ (kips) | Axial FY (kips) | Moment MX (ft-kips) | Moment MY (ft-kips) | Moment MZ (ft-kips) | |
|----------------------------------|-----------------------|-----------------------|-----------------------|---------------------------|---------------------------|---------------------------|--|
| 1.2D + 1.0W 119 mph Wind | 43.2 | 0.00 | 65.45 | 0.00 | 0.00 | 5745.72 | |
| 0.9D + 1.0W 119 mph Wind | 43.2 | 0.00 | 49.07 | 0.00 | 0.00 | 5665.40 | |
| 1.2D + 1.0Di + 1.0Wi 50 mph Wind | 12.8 | 0.00 | 110.84 | 0.00 | 0.00 | 1757.95 | |
| 1.2D + 1.0Ev + 1.0Eh | 8.0 | 0.00 | 67.68 | 0.00 | 0.00 | 134.49 | |
| 0,9D + 1.0Ev + 1.0Eh | 8.0 | 0.00 | 51.22 | 0.00 | 0.00 | 133.16 | |
| 1.0D + 1.0W 60 mph Wind | 9.8 | 0.00 | 54.60 | 0.00 | 0.00 | 1297.38 | |

Max Stresses

| Load Case | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (-) (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | | phi Vn (kips) | phi Tn (ft-kips) | phi Mn (ft-kips) | Elev (ft) | Stress Ratio |
|----------------------------------|------------------------|------------------------|---------------------------|-----------------------|-----------------------|----------------------------------|---------|---------------------|------------------------|------------------------|--------------|-----------------|
| 1.2D + 1.0W 119 mph Wind | -29.75 | -33.50 | 0.00 | -2203.9 | 0.00 | -2203.9 | 2898.33 | 768.33 | 2813.78 | 2634.30 | 91.00 | 0.849 |
| 0.9D + 1.0W 119 mph Wind | -21.82 | -32.93 | 0.00 | -2155.3 | 0.00 | -2155.3 | 2898.33 | 768.33 | 2813.78 | 2634.30 | 91.00 | 0.828 |
| 1.2D + 1.0Di + 1.0Wi 50 mph Wind | -66.93 | -10.53 | 0.00 | -683.60 | 0.00 | -683.60 | 2898.33 | 768.33 | 2813.78 | 2634.30 | 91.00 | 0.283 |
| 1.2D + 1.0Ev + 1.0Eh | -33,02 | -0.80 | 0.00 | -59,85 | 0.00 | -59.85 | 2898.33 | 768.33 | 2813.78 | 2634.30 | 91.00 | 0.034 |
| 0.9D + 1.0Ev + 1.0Eh | -24.99 | -0.79 | 0.00 | -59.23 | 0.00 | -59.23 | 2898.33 | 768.33 | 2813.78 | 2634.30 | 91.00 | 0.031 |
| 1.0D + 1.0W 60 mph Wind | -26.53 | -7.55 | 0.00 | -496.21 | 0.00 | -496.21 | 2898.33 | 768.33 | 2813.78 | 2634.30 | 91.00 | 0.198 |

Base Plate Summary

Structure: CT08748-A **Code:** TIA-222-H 1/18/2024

Site Name: Woodstock 4 CT Exposure: C
Height: 190.00 (ft) Crest Height: 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II Page: 42



| Reaction | ns | Base Pla | ate | Anchor Bolts | | | | |
|------------------|---------|-----------------------|-------------|---------------------|-----------------|--|--|--|
| Original De | | Yield (ksi): | 50.00 | Bolt Circle: | 71.00 | | | |
| Moment (kip-ft): | 5640.00 | Width (in): | 75.00 | Number Bolts: | 29.00 | | | |
| Axial (kip): | 60.00 | Style: | Round | Bolt Type: | 2.00" F1554 105 | | | |
| Shear (kip): | 45.20 | Polygon Sides: | 0.00 | Bolt Diameter (in): | 2.00 | | | |
| , ., | | Clip Length (in): | 0.00 | Yield (ksi): | 105.00 | | | |
| Analysis (1.2D | + 1.0W) | | | Ultimate (ksi): | 125.00 | | | |
| Moment (kip-ft): | 5745.72 | Effective Len (in): | 10.19 | Arrangement: | Radial | | | |
| Axial (kip): | 65.45 | Moment (kip-in): | 442.66 | Cluster Dist (in): | 0.00 | | | |
| Shear (kip): | 43.22 | Allow Stress (ksi): | 67.50 | | 0.00 | | | |
| , 17 | | Applied Stress (ksi): | 51.30 | Start Angle (deg): | 0.00 | | | |
| | | Street Batio | (027) A 76 | Compre | ssion | | | |

Stress Ratio: (.927) 0.76 Compression

Force (kip): 136.20
Allowable (kip): 296.88

Ratio: (.561) 0.46

Tension

Force (kip): 131.69

Allowable (kip): 234.38

Ratio: (.683) 0.56

Tower drawings:

Pole Bottom Diameter = 64.5"

Bolt Circle: = 58"

Moment Arm = 64.5" - 58" / 2 = 3.25"

SA workaround:

Pole Bottom Diameter = 64.5"

Bolt Circle: = 71"

Moment Arm = 71" - 64.5" / 2 = 3.25"

Ratio = SA calculation BC / actual BC. : 71/58 = 1.22

Final Rating:

Anchor Bolt = 56% x 1.22 = 68.3% Base Plate = 76% x 1.22 = 92.7%

Monopole Base Reaction Comparison Table



| Site ID: | CT08748-A | |
|--------------|---------------|--------|
| Design TIA: | TIA-222-F | |
| Current TIA: | TIA-222-H | Select |
| Component: | Monopole Base | Select |

| | TIA-22 | 2-F Compared To TIA- | 222-H | |
|-----------------|------------------------------|-------------------------------|--------------------|----------|
| | MONOPOLE BASE | FOUNDATION REACT | ON COMPARISON | |
| REACTIONS | ORIGINAL DESIGN REACTIONS | *MODIFIED DESIGN REACTIONS | ANALYSIS REACTIONS | % RATING |
| MOMENT (kip-ft) | 5640.0 | 7614.0 | 5745.7 | 75.5% |
| SHEAR (kips) | 45.2 | 61.0 | 43.2 | 70.8% |

^{*}Original Design Reactions were multiplied by 1.35 for comparison as allowed by TIA-222-H, Section 15.4.3.

Stiffened or Unstiffened, Exterior Flange Plate - Any Bolt Material TIA Rev H

Site Data

BU#:

Site Name:

Single-Rod B-eff:

App #:

| Reactions | | |
|------------|-------|---------|
| Mu | 28.35 | ft-kips |
| Axial, Pu: | 3.07 | kips |
| Shear, Vu: | 4.77 | kips |
| Elevation: | 180 | feet |

| Boit Threads: |
|----------------------|
| X-Excluded |
| φVn=φ(0.55*Ab*Fu) |
| φ=0.75, φ*Vn (kips): |
| 10.12 |
| |

Other Pole Manufacturer:

| В | olt Data | | | |
|-----------------|----------|-----|----------|--|
| Qty: | 18 | | | |
| Diameter (in.): | 0.5 | | Bolt Fu: | |
| Bolt Material: | | | Bolt Fy: | |
| Strength (Fu): | 125 | ksi | | |
| Yield (Fy): | 105 | ksi | | |
| Circle (in.): | | | | |

| l leid (i y). | 100 | KO |
|---------------|----------|-----|
| Circle (in.): | 27 | |
| | | |
| Pla | ate Data | |
| Diam: | 30 | in |
| Thick, t: | 0.5 | in |
| Grade (Fy): | 50 | ksi |
| Strength, Fu: | 65 | ksi |
| | | |

| Stiffener Data (Welding at Both Sides) | | | | |
|--|---|-------------|--|--|
| Config: | 0 | * | | |
| Weld Type: | | | | |
| Groove Depth: | | < Disregard | | |
| Groove Angle: | | < Disregard | | |
| <u>Fillet</u> H. Weld: | | in | | |
| Fillet V. Weld: | | in | | |
| Width: | | in | | |
| Height: | | in | | |
| Thick: | | in | | |
| Notch: | | in | | |
| Grade: | | ksi | | |
| Weld str.: | | ksi | | |

| Pole Data | | | | |
|--------------------|------|--------------|--|--|
| Diam: | 24 | in | | |
| Thick: | 0.25 | in | | |
| Grade: | 65 | ksi | | |
| # of Sides: | 18 | "0" IF Round | | |
| Fu | 80 | ksi | | |
| Reinf. Fillet Weld | 0 | "0" if None | | |

| | Mu | 28.35 | ft-kips | X-Exclud |
|-----------|-----------------|-------|---------------------|----------------------|
| | Axial, Pu: | 3.07 | kips | φVn=φ(0 |
| | Shear, Vu: | 4.77 | kips | $\varphi = 0.75$, o |
| | Elevation: | 180 | feet | |
| | | | <u> </u> | |
| No stiffe | ners, Criteria: | TIAH | <-Only Applicable t | o Unstiffened Cases |

| If No stiffeners, Criteria: | TIAH < | Only Applicable to Unst | iffened Cases |
|-----------------------------|----------------------|-------------------------|------------------------|
| Flange Bolt Results | | -5777-0.E = - | Non-Rigid |
| Bolt Tension Capaci | | 13,31 kips | φ*Tn |
| Adjusted φ*Tn (due to Vu= | =Vu/Qty), B : | 13.31 kips | φTn[(1-(Vu/φVn)^2]^0.5 |
| Max Bolt directly | | 2.63 Kins | |

0.521 in

0.169 in

Min PL "t1" for actual T w/o Pry: 0.232 in T allowable with Prying: 12.87 kips Prying Force, q: 0.00 kips 2.63 kips Total Bolt Tension=Tu+q: 19.8% Pass

Prying Bolt Stress Ratio=(Tu+q)/(B):

Min. PL "tc" for B cap. w/o Pry:

Min PL "treg" for actual T w/ Pry:

| Exterior Flange Plate Results | Flexural Check |
|---------------------------------|----------------|
| Compression Side Plate Stress: | 10.7 ksi |
| Allowable Plate Stress: | 45.0 ksi |
| Compression Plate Stress Ratio: | 23.9% Pass |
| No Prying | |
| | 44 50/ 5 |

Tension Side Stress Ratio, (treq/t)^2: 11.5% Pass

| | Non-Rigid | |
|---|--------------------|--|
| _ | TIA H | |
| | φ*Fy | |
| | Comp. Y.L. Length: | |
| | 12.37 | |
| _ | | |

0≤α'≤1 case

125

105

Stiffener Results

Horizontal Weld: n/a n/a Vertical Weld: Plate Flex+Shear, fb/Fb+(fv/Fv)^2: n/a Plate Tension+Shear, ft/Ft+(fv/Fv)^2: n/a Plate Comp. (AISC Bracket):

Pole Results

Pole Punching Shear Check: n/a





^{* 0 =} none, 1 = every bolt, 2 = every 2 bolts, 3 = 2 per bolt

Note: for complete joint penetration groove welds the groove depth must be exactly 1/2 the stiffener thickness for calculation purposes





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Antenna Mount Analysis Report and PMI Requirements

Mount Analysis

SMART Tool Project #: 10045193 Colliers Engineering & Design Project #: 21777291 (Rev. 1)

February 21, 2024

Site Information

Site ID:

5000246420-VZW / COATNEY HILL CT

Site Name:

COATNEY HILL CT

Carrier Name:

Verizon Wireless 215 Coatney Road

Address:

Woodstock, Connecticut 06821

Windham County

Latitude:

41.962278°

Longitude:

-72.018667°

Structure Information

Tower Type: Mount Type: 190-Ft Monopole 12.50-Ft Platform

FUZE ID # 16272134

Analysis Results

Platform: 63.8% Pass*

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

***Contractor PMI Requirements:

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

Report Prepared By: Prasanna Dhakal

February 21, 2024 Site ID: 5000246420-VZW / COATNEY HILL CT Page | 2

Executive Summary:

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

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

Sources of Information:

| Document Type | Remarks |
|-----------------------------------|--|
| Radio Frequency Data Sheet (RFDS) | Verizon RFDS, Site ID: 674862, dated December 1, 2023 |
| Mount Mapping Report | Structural Components, Site ID: 16272134 dated October 6, 2021 |

Analysis Criteria:

| Codes | and | Stan | dards: |
|-------|-----|------|--------|
| | | | |

ANSI/TIA-222-H

2022 Connecticut State Building Code (CSBC), Effective October 1, 2022

Wind Parameters:

Basic Wind Speed (Ultimate 3-sec. Gust), Vult: 120 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.50 in Risk Category: П **Exposure Category:** С Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, Ke: 0.971

Seismic Parameters:

S_s: 0.182 g S₁: 0.055 g

Maintenance Parameters:

Wind Speed (3-sec. Gust):

Maintenance Load, Lv:

Maintenance Load, Lm:

30 mph
250 lbs.
500 lbs.

Analysis Software:

RISA-3D (V17)

February 21, 2024 Site ID: 5000246420-VZW / COATNEY HILL CT Page I 3

Final Loading Configuration:

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

| Mount Elevation (ft) | Equipment Elevation (ft) | Quantity | Manufacturer | Model | Status | |
|----------------------------|--------------------------------|-----------|-----------------|-------------------|------------|--|
| | | 6 | Commscope | JAHH-65B-R3B | | |
| 165.00 16 | 3 3 3 | | 3 | Samsung | MT6413-77A | |
| | | 3 | Samsung | RF4439d-25A | Added | |
| | | Commscope | CBC78T-DS-43-2X | | | |
| | 107.00 | 3 | Samsung | RF4461d-13A | | |
| | | 3 | Commscope | LNX-6514DS-A1M | Retained | |
| | | 1 | Raycap | RRFDC-6627-PF-48* | Retained | |

^{*} Equipment is flush mounted directly to the Monopole. They are not mounted on platform mounts and are not included in this mount analysis.

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

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

Standard Conditions:

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

- For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.
- 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.
- All services are performed, results obtained, and recommendations made in accordance with generally
 accepted engineering principles and practices. Colliers Engineering & Design is not responsible for the
 conclusion, opinions, and recommendations made by others based on the information supplied.
- 7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:

Channel, Solid Round, Angle, Plate
HSS (Rectangular)
Pipe
Threaded Rod
Bolts

ASTM A36 (Gr. 36)
ASTM 500 (Gr. B-46)
ASTM A53 (Gr. B-35)
F1554 (Gr. 36)
ASTM A325

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

Analysis Results:

| Component | Utilization % | Pass/Fail |
|--------------------------|---------------|-----------|
| Face Horizontal | 31.2% | Pass |
| Standoff Horizontal | 45.3% | Pass |
| Platform Crossmember | 21.3% | Pass |
| Mount Pipe | 63.8% | Pass |
| Corner Plate | 33.1% | Pass |
| Grating Support | 20.5% | Pass |
| Cross Arm Plate | 46.8% | Pass |
| Support Rail | 55.9% | Pass |
| Support Rail Corner Pipe | 60.2% | Pass |
| Mount Connection | 61.1% | Pass |

| Structure Rating - (Controlling Utilization of all Components) | 63.8% |
|--|-------|

Mount Connection Envelope Reactions:

| Connection Description | Elev. | Node | E | nvelope V | /ind Reaction | ons | Envelope Wind + Ice Reactions | | | | |
|---------------------------|-------------|-------|-------------|------------------|------------------|-------------------|-------------------------------|------------------|------------------|-------------------|--|
| | AGL (Ft) | Lobot | Axial (Lbs) | Lateral (Lbs) | Moment (K-Ft) | Torsion (K-Ft) | Axial (Lbs) | Lateral (Lbs) | Moment (K-Ft) | Torsion (K-Ft) | |
| Sector C Standoff | 165 | N3 | 2162 | 2743 | 6.151 | 2.447 | 3173 | 1012 | 7.295 | 0.638 | |
| Sector B Standoff | 165 | N87D | 2153 | 2802 | 6.212 | 2.439 | 3157 | 1029 | 7.268 | 0.636 | |
| Sector A Standoff | 165 | N115 | 2157 | 2748 | 6.136 | 2.428 | 3159 | 1014 | 7.244 | 0.638 | |

Notes:

- Axial loads act along the axis of the tower
- Lateral reactions act perpendicular to the tower
- Moment loads introduce bending moment to the tower
- Torsion loads introduce twisting moment to the tower
- Batch solutions by individual load cases are included at the end of this document

February 21, 2024 Site ID: 5000246420-VZW / COATNEY HILL CT

BASELINE mount weight per SBA agreement: 1794.00 lbs

Increase in mount weight due to Verizon loading change per SBA agreement: No Change

The weights listed above include 3 sectors.

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

| | Mount Pipe | s Excluded | Mount Pipes Included | | |
|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|--|
| Ice Thickness (In) | Front (EPA)a (Sq. Ft.) | Side (EPA)a (Sq. Ft.) | Front (EPA)a (Sq. Ft.) | Side (EPA)a (Sq. Ft.) | |
| 0 | 22.6 | 22.5 | 37.1 | 37.1 | |
| 0.5 | 30.0 | 30.0 | 50.7 | 50.7 | |
| 1 | 36.7 | 36.7 | 63.6 | 63.5 | |

Notes:

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 3 sectors.
- Ka factors included in (EPA)a calculations

Requirements:

The existing mount is SUFFICIENT for the final loading configuration shown in attachment 2 and do not require modifications. Additional requirements are noted below.

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

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

Attachments:

- 1. Contractor Required Post Installation Inspection (PMI) Report Deliverables
- 2. Antenna Placement Diagrams
- 3. Mount Photos
- 4. Mount Mapping Report (for reference only)
- 5. Analysis Calculations

Mount Desktop - Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Passing Mount Analysis

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

Electronic pdf version of this can be downloaded at https://pmi.vzwsmart.com.

For additional questions and support, please reach out to pmisupport@colliersengineering.com

MDG #: 5000246420

SMART Project #: 10045193

Fuze Project ID: 16272134

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

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

Base Requirements:

- If installation will cause damage to the structure, the climbing facility, or safety climb if present
 or any installed system, SMART Tool vendor to be notified prior to install. Any special photos
 outside of the standard requirements will be indicated on the drawings.
- Provide "as built mount drawings" showing contractor's name, contact information, preparer's signature, and date. Any deviations from the drawings (Proposed modification) shall be shown.
 NOTE: If loading is different than what is conveyed in the passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo should be time and date stamped
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely
 impacted by the install of the modification components. This may involve the install of wire
 rope guides, or other items to protect the wire rope. If there is conflict, contact the SMART Tool
 engineer for recommendations.
- The PMI can be accessed at the following portal: https://pmi.vzwsmart.com

Photo Requirements:

- Photos taken at ground level
 - o Photo of Gate Signs showing the tower owner, site name, and number.
 - Overall tower structure after installation.
 - Photos of the mount after installation; if the mounts are at different rad elevations, pictures must be provided for all elevations that equipment was installed.
- Photos taken at Mount Elevation
 - Photos showing the safety climb wire rope above and below the mount prior to installation.
 - o Photos showing the climbing facility and safety climb if present.

February 21, 2024 Site ID: 5000246420-VZW / COATNEY HILL CT Page | 2

- Photos showing each individual sector after installation. Each entire sector shall be in one photo to show the interconnection of members.
 - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.

Antenna & equipment placement and Geometry Confirmation:

| Antenna & equipment placement and deometry communication |
|---|
| The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below. |
| \Box The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided. |
| OR |
| \Box The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations. |
| Special Instructions / Validation as required from the MA or any other information the contractor |
| deems necessary to share that was identified: |
| |
| Contractor shall inspect climbing facilities and safety climb and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is contacting the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of cold galvanization (Zinga or Zinc Kote). Contractor shall provide photos of wire rope guide installation as part of PMI documents. Contact EOR if additional guidance is required. |
| Response: |
| |
| Special Instruction Confirmation: |
| \square The contractor has read and acknowledges the above special instructions. |
| \square All hardware listed in the Special Instructions above (if applicable) has been properly installed, and the existing hardware was inspected. |
| ☐ The material utilized was as specified in the SMART Tool engineering vendor Special Instructions above (if applicable) and included in the material certification folder is a packing list or invoice for these materials. |

February 21, 2024 Site ID: 5000246420-VZW / COATNEY HILL CT Page | 3

OR

| ☐ The material ut approval is include | ilized was approved by a SMART of the contractor submi | Fool engineering vendor as an "equiva ssion. | lent" and this |
|---|--|---|----------------|
| Comments: | | | |
| | | | |
| Contractor certifies that | the climbing facility / safety of | limb was not damaged prior to sta | arting work: |
| □Yes □ | No | | |
| Contractor certifies no n | ew damage created during th | e current installation: | |
| ☐ Yes ☐ | No | | |
| Contractor to certify the | condition of the safety climb | and verify no damage when leavir | ng the site: |
| ☐ Safety Climb in | Good Condition | ☐ Safety Climb Damaged | |
| Certifying Individual: | | | |
| Company: Employee Name: Contact Phone: Email: Date: | | | |

Structure: 5000246420-VZW - COATNEY HILL CT

Sector:

10045193

12/19/2023

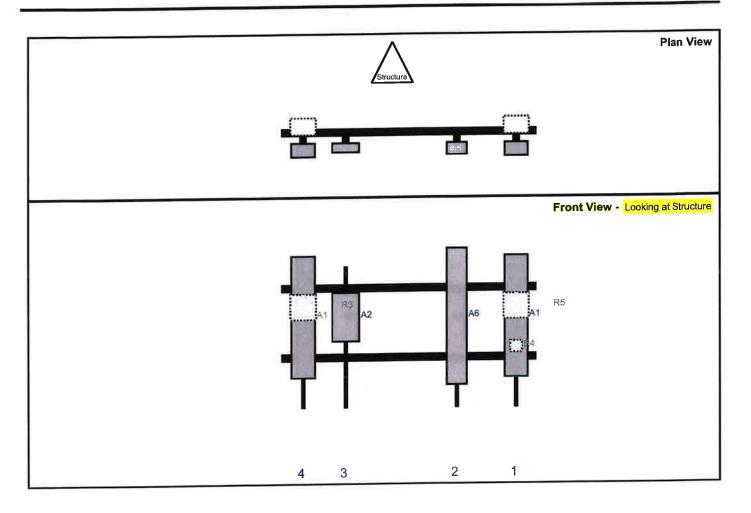
Colliers Engineering & Design

Mount Elev:

Structure Type: Monopole

165.00

Page: 1



| Ref# | Model | Height (in) | Width (in) | H Dist Frm L. | Pipe # | Pipe Pos V | Ant Pos | C. Ant Frm T. | Ant H Off | Status | Validation |
|------|-----------------|----------------|---------------|------------------|-----------|---------------|------------|------------------|--------------|----------|------------|
| A1 | JAHH-65B-R3B | 72 | 13.8 | 138 | 1 | а | Front | 30 | 0 | Added | |
| R4 | CBC78T-DS-43-2X | 6.4 | 6.9 | 138 | 1 | а | Behind | 48 | 0 | Added | |
| R5 | RF4461d-13A | 15 | 15 | 138 | 1 | а | Behind | 24 | 0 | Added | |
| A6 | LNX-6514DS-A1M | 80.6 | 11.9 | 103 | 2 | а | Front | 30 | 0 | Retained | 10/06/2021 |
| A2 | MT6413-77A | 28.9 | 15.8 | 38 | 3 | а | Front | 30 | 0 | Added | |
| A1 | JAHH-65B-R3B | 72 | 13.8 | 13 | 4 | 8 | Front | 30 | 0 | Added | BOR |
| R3 | RF4439d-25A | 15 | 15 | 13 | 4 | а | Behind | 24 | 0 | Added | 15.07 |

Structure: 5000246420-VZW - COATNEY HILL CT

Sector: B 12/19/2023

Structure Type: Monopole

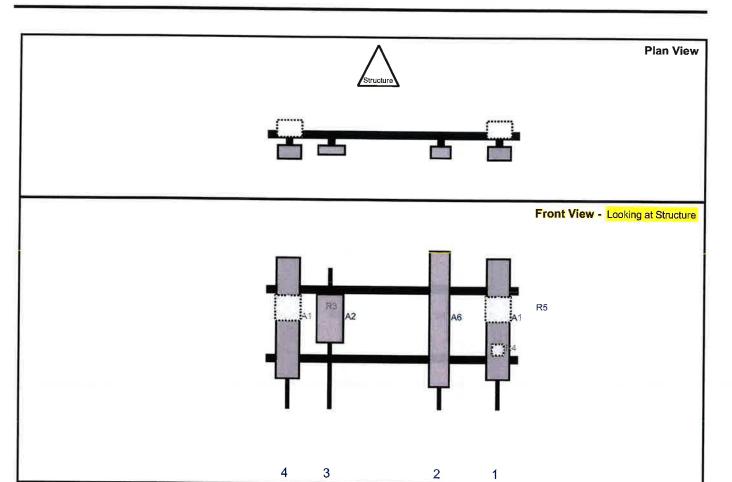
165.00

Mount Elev:

10045193

Colliers Engineering & Design

Page: 2



| | | Height | Width | H Dist | Pipe | Pipe | Ant | C. Ant | Ant | | |
|------|-----------------|--------|-------|--------|------|-------|--------|--------------------|-------|----------|------------|
| Ref# | Model | (in) | (in) | Frm L | # | Pos V | Pos | Frm T ₄ | H Off | Status | Validation |
| A1 | JAHH-65B-R3B | 72 | 13.8 | 138 | 1 | а | Front | 30 | 0 | Added | |
| R4 | CBC78T-DS-43-2X | 6.4 | 6.9 | 138 | 1 | а | Behind | 48 | 0 | Added | |
| R5 | RF4461d-13A | 15 | 15 | 138 | 1 | а | Behind | 24 | 0 | Added | |
| A6 | LNX-6514DS-A1M | 80.6 | 11.9 | 103 | 2 | a | Front | 30 | 0 | Retained | 10/06/2021 |
| A2 | MT6413-77A | 28.9 | 15.8 | 38 | 3 | а | Front | 30 | 0 | Added | |
| A1 | JAHH-65B-R3B | 72 | 13.8 | 13 | 4 | а | Front | 30 | 0 | Added | 115 |
| R3 | RF4439d-25A | 15 | 15 | 13 | 4 | a | Behind | 24 | 0 | Added | |

Sector:

Mount Elev:

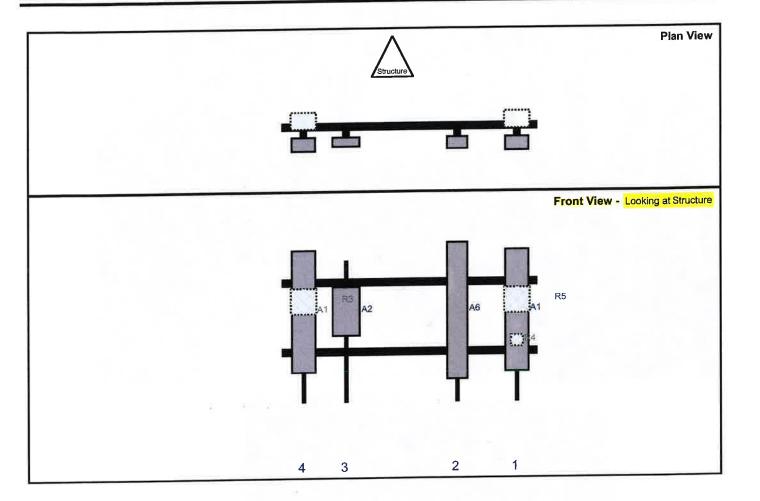
Structure Type: Monopole 165.00

10045193

12/19/2023

Colliers Engineering & Design

Page: 3



| | | Height | Width | H Dist | Pipe | Pipe | Ant | C. Ant | Ant | | |
|------|-----------------|--------|-------|--------|------|-------|--------|--------|-------|----------|------------|
| Ref# | Model | (in) | (in) | Frm L. | # | Pos V | Pos | Frm Ta | H Off | Status | Validation |
| A1 | JAHH-65B-R3B | 72 | 13.8 | 138 | 1 | а | Front | 30 | 0 | Added | |
| R4 | CBC78T-DS-43-2X | 6.4 | 6.9 | 138 | 1 | а | Behind | 48 | 0 | Added | |
| R5 | RF4461d-13A | 15 | 15 | 138 | 1 | а | Behind | 24 | 0 | Added | |
| A6 | LNX-6514DS-A1M | 80.6 | 11.9 | 103 | 2 | а | Front | 30 | 0 | Retained | 10/06/2021 |
| A2 | MT6413-77A | 28.9 | 15.8 | 38 | 3 | а | Front | 30 | 0 | Added | |
| A1 | JAHH-65B-R3B | 72 | 13.8 | 13 | 4 | а | Front | 30 | 0 | Added | |
| R3 | RF4439d-25A | 15 | 15 | 13 | 4 | а | Behind | 24 | 0 | Added | |
| KJ | KF4433U-20A | | | | | | | | | | |





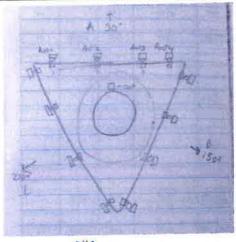
V4.0 Updated on 3-31-2021



| | | | FCC # |
|----------------------------------|-----------------------|------------------------|-----------|
| | Antenna Mount Mapping | Form (PATENT PENDING) | 1227403 |
| | ISBA Towers | Mapping Date: | /2021 |
| Tower Owner: | COATNEY HILL | Tower Type: | opole |
| Site Name: Site Number or ID: | 16272134 | Tower Height (FL): | 00 |
| Magging Contractor: | Structural Components | Mount Elevation (Ft.): | 63 |

Mapping Contractor: | Structural Components | Mount Elevation (FL): 163

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



| Sector / Position | Mount Pipe Size & Length | Vertical Offset Dimension | Horizontal Offset "C1, C2, C3, etc." | Sector / Position | eometries [Unit = Inches] Mount Pipe Size & Length | Vertical Offset Dimension | Horizontal Offset "C1, C2, C3, etc." |
|----------------------|--|---------------------------------|--|----------------------|---|---------------------------------|--|
| A1 | 2.375 x .154 x 96 | 58.00 | 12.00 | Cl | 2,375 x .154 x 102 | 54.00 | 12.00 |
| | 2.375 x .154 x 84 | 54.00 | 47.00 | C2 | 2.375 x .154 x 102 | 51.00 | 47,00 |
| | 2.375 x .154 x 84 | 63.00 | 112.00 | C3 | 2.375 x .154 x 102 | 63.00 | 94.00 |
| | 2.375 x .154 x 63 | 54.00 | 137.00 | C4 | 2.375 x .154 x 102 | 54.00 | 119.00 |
| AS | 2.373 4.1274 4.92 | | | CS | | | |
| A6 | | | | Ç6 | | | |
| | 2.375 x .154 x 96 | 58.00 | 12.00 | D1 | | | |
| B2 | 2.375 x .154 x 84 | 54,00 | 85.00 | D2 | | | |
| B3 | 2 375 x .154 x 84 | 63.00 | 132,00 | D3 | | | |
| B4 | 2 375 x .154 x 63 | 54.00 | 157,00 | D4 | | | |
| 85 | | | | D5 | | | |
| B6 | | | | D6 | | | |
| | Distance between bottom rai | and moun | t CL elevation | on (dim d) | . Unit is inches. See 'Mount Elev Ref' ta | o for details. : | |
| | Distance from to | on of hotton | n support ra | ail to lowe | est tip of ant./egpt. of Carrier above. (N | /A II > 10 II.) : | 94 |
| | Distance from to | p of bottom | support ra | il to highe | est tip of ant./eqpt. of Carrier below. (N | /A if > 10 ft.) : | 14 |
| _ | Wiesenstein in the control of the co | Please ent | er additiona | I infomat | ion or comments below. | | |

| SECTOR 9 | 10 | - SECTOR C | |
|----------|-------|------------|--------------|
| | - V | 045500 | |
| 1/2 | EB / | (60.0 | |
| LEG 9 | 10 | LEG C | |
| 12 | | 1 | |
| 1 | | 11 | |
| | 200 | | |
| SECTOR A | LEG A | (+ | |
| | | - | - Horigental |
| | | | Offset "h" |
| | | | |

| | e Width at Mount Elev. (f | +1. I | | Tower Lea | Size or Pole | Shaft Dia | meter at Mount Elev. | (in.): | | 27.2 |
|--------------------|----------------------------|----------------|----------------|---------------------------|-------------------------|----------------------------------|---|---|---------------------------------|-----------------|
| For T-Arm | s/Platforms on monopole | s, report | the weld si | ze from the | main stand | off to the | plate bolting into the | collar moun | t. | 0.375 |
| | Enter antenna | | | Mountin (Units are inc | Photos o | | | | | |
| Ants, Items | Antenna Models if Known | Width (in.) | Depth (in.) | Height (in.) | Coax Size and Qty | Antenna Center- line (Ft.) | Vertical Distances"b _{1a} , b _{2a} , b _{3a} , b _{1b} " (inches) | Horiz Offset "h" (Use "-" if Ant ls behind) | Antenna Azimuth (Degrees) | Photo Number |
| | | | | | Sector A | | | | | |
| Ant ₁₄ | | | | | | | | | | - 12 |
| Ant _{1b} | LNX-6514DS-A1M | 12.00 | 7.50 | 73.00 | jumpers | 164.958 | 34.50 | 9.00 | 30.00 | 42 |
| Ant _{1c} | UNKNOWN DUAL TM | 7.00 | 5.00 | 7.50 | (2) 1 5/8" | 165.25 | 31.00 | -4.00 | | 42 |
| Ant _{2a} | | | | | | | | | | |
| Ant _{2b} | LNX-6514DS-A1M | 12.00 | 7.50 | 73.00 | jumpers | 164.958 | 30.50 | 9.00 | 30.00 | 42 |
| Ant _{2c} | B13 RRH 4x30 | 12.00 | 7.50 | 20.50 | jumpers | 165.417 | 25.00 | -7.00 | | 42 |
| Ant _{3a} | | | | | | | | | | |
| Ant _{3b} | HBXX-6517DS-A2M | 12.00 | 6.50 | 75.00 | jumpers | 165,667 | 31.00 | 8.00 | 30.00 | 43 |
| Ant _{3c} | B4 RRH 2x60-4R | 10.50 | 6.00 | 33.50 | jumpers | 166 | 27.00 | -6.50 | | 43 |
| Ant _{da} | | | | | | | | | | _ |
| Ant _{4b} | HBXX-6517D5-A2M | 12.00 | 6.50 | 75.00 | jumpers | 165.083 | 29.00 | 8.00 | 30.00 | 43 |
| Ant _{4c} | | | | | | | | | | _ |
| Ant _{Se} | | | | | | | | | _ | _ |
| Ant _{5b} | | | | | | | | | | _ |
| Antsc | | | | | | | | | | _ |
| Ant on Standoff | | | | | | | | | | |
| Ant on Standoff | | | | | | | | | | |
| Ant on Tower | RRFDC-6627-PF-48 | 14.00 | 9.00 | 19.00 | 1 1/2 Hyl | 167 | | | | 44 |
| Ant on Tower | | | | | | | | | | |

| #4 #4 | Antio A | Antza g | Anta 🚊 | Anta a | Ante |
|-----------|------------|--------------|--|----------|-------|
| | ă <u>-</u> | ž | ž <u>. </u> | <u> </u> | |
| | ! | | | | -11- |
| | Aprily | Anta- | Anl x | Anta: | Antse |
| <u>01</u> | | | | | |
| 1 | | <u>C4</u> C: | | J. | |

| Mount Azimuth (Degree) Tower Leg Azimuth (Degree) for Each Sector for Each Sector | | | | | | - | | _ | | | Sector | В | | | | | |
|---|---------------|------------|-------|---------------|--|---|--------------------|-----------------|---------------|------|----------------|--------------------|----------------|----------------|-------|--------|----------|
| Sector A: | tor Eac | | g Le | n A. | for Each Sector | la. | Ant _{1a} | LAIV CELLER | | | | | | | | | |
| Sector B | 150. | | _ | g 8: | | Deg | Ant _{1b} | LNX-6514DS-A1M | 12.00 | 7.50 | 73.00 | Jumpers | _ | 34.50 | 9.00 | 150.00 | 4 |
| Sector C: | 270. | | | g C: | | Deg | Ant _{2a} | UNKNOWN DUAL TM | 7.00 | 5.00 | 7.50 | (2) 1 5/8 | 165.25 | 31.00 | -4.00 | | 4: |
| Sector D: | | _ | g Le | - | | Deg | Ant _{2h} | LNX-6514DS-A1M | 12.00 | 7.50 | 77.00 | | 464.050 | | - | | - |
| | | _ | _ | | lity Information | IDCE | Ant _{2c} | B13 RRH 4x30 | 12.00 | 7.50 | 73.00 | jumpers | 164.958 | 30.50 | 9.00 | 150.00 | 4 |
| ocation: | 190. | | _ | | N/A | | Ant _{3a} | DIS RRIT 4X50 | 12.00 | 7.50 | 20.50 | Jumpers | 165.417 | 25.00 | -7.00 | | 4: |
| | Co | rrosion T | - | _ | Good condition. | _ | Ant _{3b} | HBXX-6517DS-A2M | 12.00 | 6.50 | 75.00 | | 165.663 | 24.00 | - | | - |
| Climbing Facility | | Access | | | Climbing path was obstructe | d. | Anta | B4 RRH 2x60-4R | 10.50 | 6.00 | 75.00 33.50 | jumpers jumpers | 165.667 166 | 31.00 27.00 | 8.00 | 150.00 | 41 |
| racinty | | Conditto | n: | $\overline{}$ | Good condition. | | Anta | THE SAME THE | 10.50 | 0.00 | 33,30 | Jumpers | 100 | 27.00 | -6.50 | | 41 |
| | | | | | | | Antab | HBXX-6517DS-A2M | 12.00 | 6.50 | 75.00 | jumpers | 165.083 | 29.00 | B.00 | 150.00 | . |
| | | | | | | | Ant | | | 0.50 | 73.00 | Junipers | 103.003 | 25.00 | 8.00 | 130.00 | 4 |
| | | | | | | | Ants | | | | | | | | _ | | _ |
| | | | | | | | Ants | | | | | | | | | | |
| | | | | | High | | Ant _{Sc} | | | | | | | | | | _ |
| | | | | | LANGE BOOK OF LAND | | Ant on | | | | | | | | | | _ |
| | | | | | ALE CONTRACTOR | | Standoff Ant on | | | | | | | | | | |
| | | | | | | | Standoff | | | | | | | | | | |
| | | | | | 100 | | Ant on | | | | | | | | | | |
| 0 | | | 36 | | | | Tower | | | | | | | | | | |
| 10/05/2021 1 | | V | 18 | 1 | | | Ant on Tower | | | | | | | | | | |
| 233 | | | 745 | | Dst CE | | | 7 | | | | Sector C | | | | | _ |
| | | | | S | | | Ant _{la} | | | | | | | | | | |
| | | | | | | | Ant _{1b} | LNX-6514DS-A1M | 12.00 | 7.50 | 73.00 | jumpers | 164.625 | 34.50 | 9.00 | 270.00 | 47 |
| 0 | | | | | | | Ant _{1c} | UNKNOWN DUAL TM | 7.00 | 5.00 | 7.50 | (2) 1 5/8" | 164.917 | 31.00 | -4.00 | | 47 |
| | | | | | | | Ant _{2a} | | | | | | | | | | |
| | | | | - | | | Ant _{2b} | LNX-6514DS-A1M | 12.00 | 7.50 | 73.00 | jumpers | 164.708 | 30.50 | 9.00 | 270.00 | 47 |
| | | | | | | | Ant _{2c} | B13 RRH 4x30 | 12.00 | 7.50 | 20.50 | Jumpers | 165,167 | 25.00 | -7.00 | | 47 |
| . 0 | | 1 1 | M | 4 | r. | | Anta | | | | | | | | | | |
| Ü | 1 | nii . | | Π | Ťi . | | Ant _{3b} | HBXX-6517DS-A2M | 12.00 | 6.50 | 75.00 | Jumpers | 165.667 | 31.00 | 8.00 | 270.00 | 48 |
| - 11 | | 1 111 | | Ш | | | Ant _{3c} | B4 RRH 2x60-4R | 10.50 | 6.00 | 33.50 | Jumpers | 166 | 27.00 | -6.50 | | 48 |
| 1 | | 1 | 4 | = | = } | | Ant _{da} | | | | | | | | | | |
| | | T | | 3 | T + + 0 -00 | | Ant _{ab} | HBXX-6517D5-A2M | 12.00 | 6.50 | 75.00 | Jumpers | 165.083 | 29.00 | 8.00 | 270.00 | 48 |
| - | 6 5 59 | - 111 | П | - | INDUCT POR | P OF MAD | Ant₄c | | | | | | | | | | |
| 044 | | | | | PLATTING WEST OF ART./EDF OF SAT./EDF OF S | TP OF MAIN F TO LOTAINST TP COMPLET ANDVE | Ant _{Sa} | _ | | - | | | | | | | |
| | | 311 | | | | 1 | Ant _{sb} | | | | | | | | | | |
| ٦٦ | 7 | v III | TH | ŲF | tistwice From 1 | DF WAN | Ant _{Sc} | | _ | | | | | | | | |
| S CLARGE | | 11 | Ш | | CISTANCE PROMITE PARTIES OF WILLIAMS TO THE CISTANCE PROMITE OF WILLIAMS TO THE CISTANCE PROMITE PROMI | PARAMES REFOR | Standoff | | | | | | | | | | |
| r in | 1 8 | 4 | 111 | д | T. and | | Ant on | | | | | | | | | | |
| | | | Ш | | | | Standoff Ant on | | _ | - | | | | | | | |
| 4 1 | | | , | - | | | Tower | | | | | | | | | | |
| Ų | | ااال | 111 | J | Ų | | Ant an | | | | | | | | | | - |
| | | \circ | 777 | | | | Tower | | | | | | | | | | |
| Ò | | T) | L, | 4 | (T) | | Ant I | | | | | Sector D | | | | | |
| | | | | II. | | | Ant _{1a} | | - | | _ | | | | | | |
| 11 | | | 1 | T | | | Ant _{1c} | | | | | | | | | | |
| Ų= | _ | | ΞĻ, | 扩 | | | Ant _{2a} | | \rightarrow | _ | | | | | | | _ |
| | | | 1 | | 1 n x e x ex | | Ant _{2h} | | - | _ | | | | | | | _ |
| | | _ | /_ | | DETAILS FROM | Too or portrou | Ant _{2c} | | | | | | | _ | | | _ |
| | | | | | 9,47071 RM, 1 947 /5541 CF 16/A F > 10 A | PANELS THOSE IN CL. | Ant ₃ | | | | 7 | | | | | | _ |
| 9 6 | .00 | | 4 | J | = P | | Ant _{3b} | | | | | | _ | | | | |
| 6 - | £, | | | | <u></u> | | Ant _{ac} | | | | | | | | 100 | | |
| time nuc | 1 | 3" | 7 | 1 | SPECIAL PRINCIPLES OF THE PRINCIPLES OF T | DI SE SOTION | Ant _{4a} | | | | | | | | | | _ |
| west | | K | | \dashv | | Deta lette | Ant _{ab} | | | | | | | | | | |
| 1 | - 9 | 3, | Yn | | A ST SF SEASONS | 1 | Ant _{4c} | | | | | | | | | | |
| 1 = | | | | |) | - 1 | Antsa | | | | | | | | | | _ |
| | | | | | | - [| Ant _{5b} | | | | | | | | | | |
| ٦ | | را ال | ZL, | | | - 1 | Antse | | | | | | | | | | |
| -5540 | | (E | | -0 | 140724 | ſ | Ant on | | T | | | | | | | | |
| T-Arms/Pla | atforms | on mono | oles, | recor | d the weld size from the main s | tandoff | Standoff Ant on | | - | | | | | | | | |
| nber to the | e plate b | olting int | the o | ollar. | See below for reference. | | Standoff | | | | | | | | | | |
| 11 | > | _ | | | | 1 | Ant on | | | | - | | - | | | | _ |
| 1 | | | - | _ | | ł | Tower | | _ | | | | | | | | |
| 1 | _ | | | | | I | Ant on Tower | | | | | | | | | | |
| | T | Æ | 4 | 1 | | | | 11. | | | | | | | | -, | |
| | | | | | FEICH VELD CIZE FOR | DEC 1 3 8675 | | | | | | | | | | | |

| _ | Observed Safety and Structural Issues During the Mou | nt Mapping |
|----------|--|------------|
| 52772794 | Observed Safety and Structural Issues During the Mou Description of issue | Photo # |
| Issue # | | 134 |
| 1 | Birds nest on mount. | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |

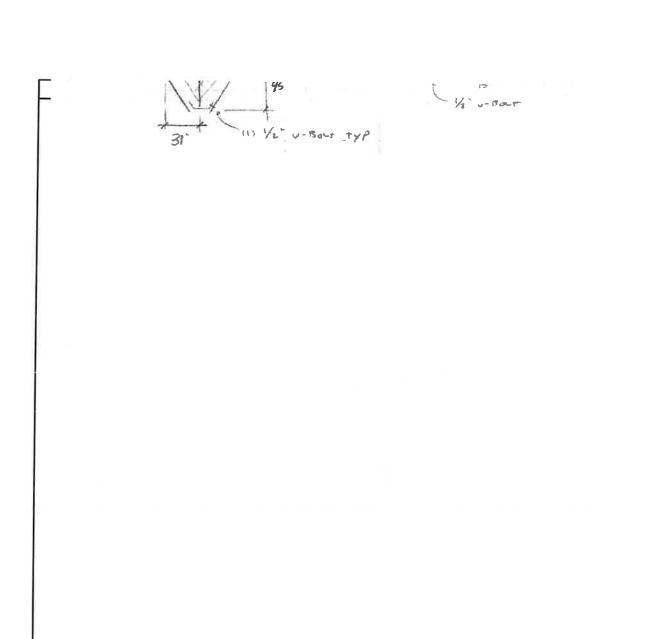
| | | Observed Obstructions to Tower Lighting System | |
|---|---------------------------------|---|---------|
| e tower lighting system is being obstructed by the carr | ier's equipment (for example: a | light nested by the antennas), please provide photos and fill in the information below. | Photo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

Mapping Notes

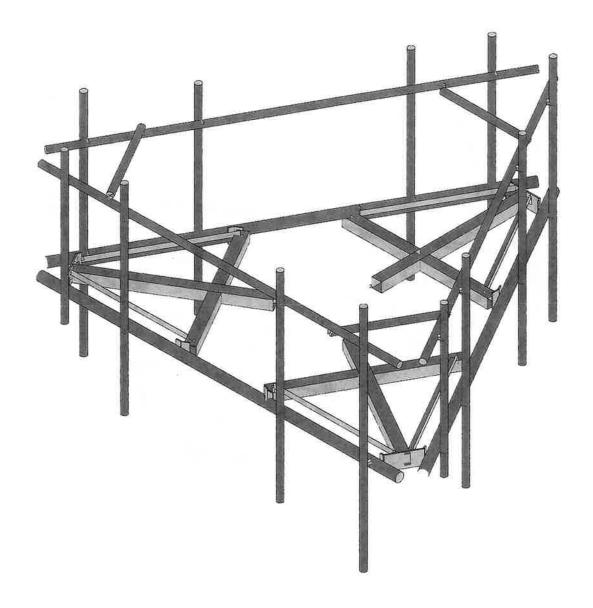
- 1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.)
 2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic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

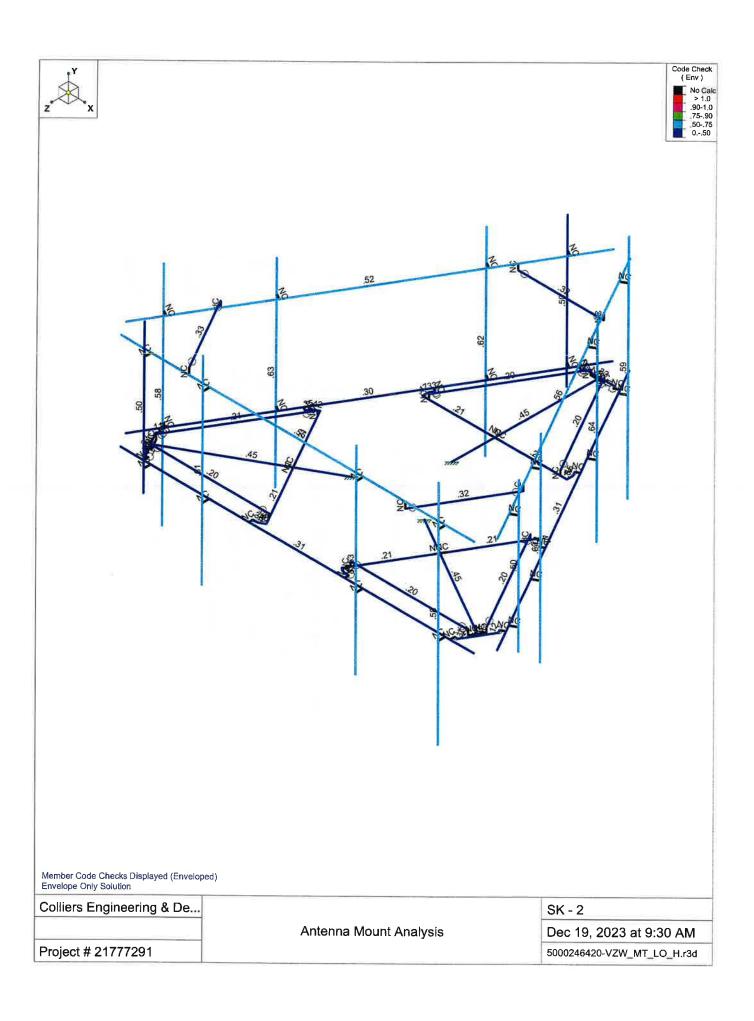






Envelope Only Solution

| Colliers Engineering & De | | SK - 1 |
|---------------------------|------------------------|----------------------------|
| 9 9 | Antenna Mount Analysis | Dec 19, 2023 at 9:29 AM |
| Project # 21777291 | - | 5000246420-VZW_MT_LO_H.r3d |





Shear Check (Env)

No Calc

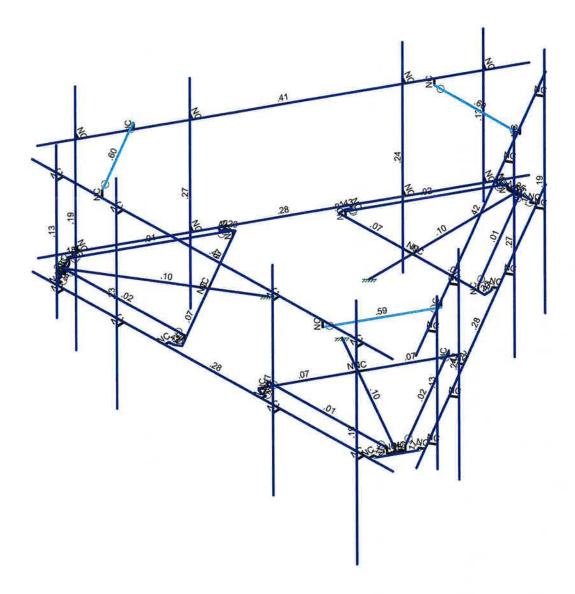
> 1.0

.90-1.0

.75-.90

.50-.75

0.-.50



Member Shear Checks Displayed (Enveloped) Envelope Only Solution

| Envelope Unity Solution | | |
|----------------------------|------------------------|----------------------------|
| Colliers Engineering & De | | SK - 3 |
| Comerc Engineering of 2 cm | Antenna Mount Analysis | Dec 19, 2023 at 9:30 AM |
| Project # 21777291 | | 5000246420-VZW_MT_LO_H.r3d |
| Project # Z1717291 | | |



Colliers Engineering & Design

Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:_____

Basic Load Cases

| | BLC Description | Category | X Gr | Y Gr | Z Gr | Joint Point | Distributed | Area(Member) | Surfa |
|----|---|----------|---------------|------|------|-------------|-------------|--------------|-------|
| 1 | Antenna D | None | | | | 99 | | | June. |
| 2 | Antenna Di | None | | | | 99 | | | 1 |
| 3 | Antenna Wo (0 Deg) | None | | | | 99 | | | |
| 4 | Antenna Wo (30 Deg) | None | | | | 99 | | | |
| 5 | Antenna Wo (60 Deg) | None | | | | 99 | | | |
| 6 | Antenna Wo (90 Deg) | None | | | | 99 | | | |
| 7 | Antenna Wo (120 Deg) | None | | | | 99 | | | |
| 8 | Antenna Wo (150 Deg) | None | | | | 99 | | | - |
| 9 | Antenna Wo (180 Deg) | None | | | | 99 | | | |
| 10 | Antenna Wo (210 Deg) | None | | | | 99 | | | _ |
| 11 | Antenna Wo (240 Deg) | None | | | - | 99 | | | |
| 12 | Antenna Wo (270 Deg) | None | | | | 99 | | | - |
| 13 | Antenna Wo (300 Deg) | None | | | | 99 | | | |
| 14 | Antenna Wo (330 Deg) | None | | | | 99 | | | |
| 15 | Antenna Wi (0 Deg) | None | | | | | | | |
| 16 | Antenna Wi (30 Deg) | None | | | | 99 | | | |
| 17 | Antenna Wi (60 Deg) | None | | _ | | 99 | | | |
| 18 | Antenna Wi (90 Deg) | None | | | | 99 | | | |
| 19 | Antenna Wi (120 Deg) | | | | | 99 | | | |
| 20 | Antenna Wi (150 Deg) | None | | | | 99 | | | |
| 21 | Antenna Wi (180 Deg) | None | | | | 99 | | | |
| 22 | Antenna Wi (210 Deg) | None | | | | 99 | | | |
| 23 | Antenna Wi (240 Deg) | None | | | | . 99 | | | |
| 24 | Antenna Wi (240 Deg) Antenna Wi (270 Deg) | None | | | | 99 | | | |
| 25 | Antenna Wi (270 Deg) | None | | | | 99 | | | |
| | Antenna Wi (300 Deg) | None | | | | 99 | | | |
| 26 | Antenna Wi (330 Deg) | None | | | | 99 | | | |
| 27 | Antenna Wm (0 Deg) | None | | | | 99 | | | |
| 28 | Antenna Wm (30 Deg) | None | | | | 99 | | | |
| 29 | Antenna Wm (60 Deg) | None | | | | 99 | | | |
| 30 | Antenna Wm (90 Deg) | None | | | | 99 | | | |
| 31 | Antenna Wm (120 Deg) | None | | | | 99 | | | |
| 32 | Antenna Wm (150 Deg) | None | | | | 99 | | | - |
| 33 | Antenna Wm (180 Deg) | None | | | | 99 | | | |
| 34 | Antenna Wm (210 Deg) | None | | | | 99 | | | |
| 35 | Antenna Wm (240 Deg) | None | | | | 99 | | | |
| 36 | Antenna Wm (270 Deg) | None | | | | 99 | | | |
| 37 | Antenna Wm (300 Deg) | None | | | | 99 | | | |
| 38 | Antenna Wm (330 Deg) | None | | | | 99 | | | |
| 39 | Structure D | None | | -1 | | - 55 | | 3 | |
| 40 | Structure Di | None | | | | | 57 | 3 | _ |
| 41 | Structure Wo (0 Deg) | None | | | | | 114 | 3 | |
| 42 | Structure Wo (30 Deg) | None | | | | | 114 | | |
| 43 | Structure Wo (60 Deg) | None | | | - | | | | |
| 44 | Structure Wo (90 Deg) | None | \rightarrow | - | | | 114 | | |
| 45 | Structure Wo (120 Deg) | None | | | | | 114 | | |
| 46 | Structure Wo (150 Deg) | None | | | | | 114 | | |
| 47 | Structure Wo (180 Deg) | | | | | | 114 | | |
| 48 | Structure Wo (210 Deg) | None | - | | | | 114 | | |
| 49 | Structure Wo (240 Deg) | None | | - | - | | 114 | | |
| 50 | Structure Wo (270 Deg) | None | | _ | | | 114 | | |
| 51 | Structure Wo (270 Deg) | None | | | | | 114 | | |
| 52 | Structure Wo (300 Deg) | None | | | | | 114 | | |
| | Structure Wo (330 Deg) | None | | - | | | 114 | | |
| 53 | Structure Wi (0 Deg) | None | | | | | 114 | | |
| 54 | Structure Wi (30 Deg) | None | | | | | 114 | FIRST I | |
| 55 | Structure Wi (60 Deg) | None | | | | | 114 | | |
| 56 | Structure Wi (90 Deg) | None | | | | | 114 | | |



Colliers Engineering & Design

Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:_

Basic Load Cases (Continued)

| | BLC Description | Category | X Gr | Y Gr | Z Gr | Joint | Point | Distributed | Area(Member) | Surfa |
|----|-----------------------------|----------|-------|------|---------|-------|-------|-------------|--------------|-------|
| 57 | Structure Wi (120 Deg) | None | | | | | | 114 | | |
| 58 | Structure Wi (150 Deg) | None | | | | | | 114 | | 300 |
| 59 | Structure Wi (180 Deg) | None | | | | | | 114 | | |
| 60 | Structure Wi (210 Deg) | None | | | | | | 114 | | |
| 61 | Structure Wi (240 Deg) | None | | | | | | 114 | | |
| 62 | Structure Wi (270 Deg) | None | | | | | | 114 | | |
| 63 | Structure Wi (300 Deg) | None | | | | | | 114 | | |
| 64 | Structure Wi (330 Deg) | None | | | | | | 114 | | |
| 65 | Structure Wm (0 Deg) | None | | | | | | 114 | | |
| 66 | Structure Wm (30 Deg) | None | | | | | | 114 | | |
| 67 | Structure Wm (60 Deg) | None | | | | | | 114 | | |
| 68 | Structure Wm (90 Deg) | None | | | 1 (4.9) | | | 114 | | |
| 69 | Structure Wm (120 Deg) | None | | | | | | 114 | | |
| 70 | Structure Wm (150 Deg) | None | | | | | | 114 | | |
| 71 | Structure Wm (180 Deg) | None | | | | | | 114 | | |
| 72 | Structure Wm (210 Deg) | None | | | | | | 114 | | |
| 73 | Structure Wm (240 Deg) | None | | | İ | | | 114 | | |
| 74 | Structure Wm (270 Deg) | None | | | | | | 114 | | |
| 75 | Structure Wm (300 Deg) | None | | | | | | 114 | | |
| 76 | Structure Wm (330 Deg) | None | | | | | | 114 | | |
| 77 | Lm1 | None | | | | | 1 | | | |
| 78 | Lm2 | None | | | ST | | 1 | | | |
| 79 | I v1 | None | | | | | 1 | | | |
| 80 | Lv2 | None | | | | | 1 | | | |
| 81 | Antenna Ev | None | | | | | 99 | | | |
| 82 | Antenna Eh (0 Deg) | None | | | | | 66 | | | |
| 83 | Antenna Eh (90 Deg) | None | | | | | 66 | | | - |
| 84 | Structure Ev | ELY | | 0388 | | | | | 3 | |
| 85 | Structure Eh (0 Deg) | ELZ | | | 0971 | | | | 3 | |
| 86 | Structure Eh (90 Deg) | ELX | .0971 | | | | | | 3 | - |
| 87 | BLC 39 Transient Area Loads | None | | | | | | 30 | | |
| 88 | BLC 40 Transient Area Loads | None | | | | | | 30 | | |
| 89 | BLC 84 Transient Area Loads | None | | | | | | 30 | | |
| 90 | BLC 85 Transient Area Loads | None | | | | | | 30 | | |
| 91 | BLC 86 Transient Area Loads | None | | | | | | 30 | | |

Load Combinations

| | Description | S PI | Del | SR | BLC | Fa | BLC | Fa | BLC | Fa | . B | Fa | .в | Fa | . В | Fa | BLC | Fa | В | Fa | В | Fa | B | <u>.Fa</u> |
|----|----------------------|-------|-----|----|-----|-----|-----|-----|-----|----|-----|-----|----|----|-----|-----|-----|----|-----|----------|----------|----|---|------------|
| 1 | 1.2D+1.0Wo (0 Deg) | | Y | | 1 | 1.2 | 39 | 1.2 | 3 | 1 | 41 | | L. | | | | ļ | | | - | ļ., | - | - | - |
| 2 | 1.2D+1.0Wo (30 Deg |)Yes | Y | | 1 | 1.2 | 39 | 1.2 | 4 | 1 | 42 | 1 | - | | | | | | | | | - | | - |
| 3 | 1.2D+1.0Wo (60 Deg |)Yes | Y | | 1_ | 1.2 | 39 | 1.2 | 5 | 1 | 43 | 1 | - | | | _ | - | _ | | - | - | - | - | - |
| 4 | 1.2D+1.0Wo (90 Deg |) Yes | Υ | | 1 | 1.2 | 39 | 1.2 | 6 | 1 | 44 | | - | | | | | - | - | - | - | - | - | - |
| 5 | 1.2D+1.0Wo (120 De | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 7 | 1 | 45 | - | - | | | _ | | | | - | \vdash | - | - | - |
| 6 | 1.2D+1.0Wo (150 De | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 8 | 1 | 46 | 1 | | | 1 | | | - | - | | - | - | - | - |
| 7 | 1.2D+1.0Wo (180 De | | Υ | | 1 | 1.2 | 39 | 1.2 | 9 | 1 | 47 | 1 | - | _ | 1 | _ | | _ | | <u> </u> | H | - | - | |
| 8 | 1.2D+1.0Wo (210 De | Yes | Υ | | 1 | 1.2 | 39 | 1.2 | 10 | 1 | 48 | - | | | | | | | | - | - | - | - | - |
| 9 | 1.2D+1.0Wo (240 De | Yes | Υ | | 1_ | 1.2 | 39 | 1.2 | 11 | 1 | 49 | - | _ | | - | | | | ļ., | - | - | | - | - |
| 10 | 1.2D+1.0Wo (270 De | . Yes | Υ | | 1 | 1.2 | 39 | 1.2 | 12 | 1 | 50 | 1 | - | | | | - | | | - | - | - | - | - |
| 11 | 1.2D+1.0Wo (300 De | Yes | Υ | | 1 | 1.2 | 39 | 1.2 | 13 | 1 | 51 | 1 | | | | | | | | | | - | - | |
| 12 | 1.2D+1.0Wo (330 De | | Υ | | 1 | 1.2 | 39 | 1.2 | 14 | 1 | 52 | | - | | | _ | | _ | - | | | | - | - |
| 13 | 1.2D + 1.0Di + 1.0Wi | | Υ | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | - | 15 | - | 53 | | _ | - | _ | - | - | _ | | 1 |
| 14 | 1.2D + 1.0Di + 1.0Wi | | Υ | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 16 | 1 | 54 | | | | + | | - | - | - | - |
| 15 | 1.2D + 1.0Di + 1.0Wi | | Υ | | 1_ | 1.2 | 39 | 1.2 | 2 | 1 | 40 | . 1 | 17 | 1_ | 55 | 100 | | | | - | - | - | - | |
| 16 | 1.2D + 1.0Di + 1.0Wi | | Υ | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | | 18 | - | 56 | 1_ | | | - | - | | | | - |
| | 1.2D + 1.0Di + 1.0Wi | | Υ | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 19 | 1 | 57 | 1 | | | | | _ | - | | |



Colliers Engineering & Design

Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:___

Load Combinations (Continued)

| | u Combinations | | 1000 IN - 111 | | - | | | | | _ | | | _ | _ | _ | | _ | | | _ | _ | _ | |
|----|--|------|---------------|------|-----|------|-----|-----|-----|-----|----|----|-----|---------------|-----|------|------|-----|-------------------|------|----|----------|-----|
| 18 | Description 1.2D + 1.0Di + 1.0Wi. | SF | PDelSR | BLC | Fa | BLC | Fa | BLC | | . В | Fa | .B | Fa | | | BLC | Fa. | .B. | .Fa | В | Fa | В | Fa |
| | 1.2D + 1.0Di + 1.0Wi. | | | 1 | | 39 | | 2 | 1 | 40 | | 20 | | _ | 1 | - | - | | | | | | |
| 19 | 1.2D + 1.0Di + 1.0Wi. | Ves | Y | 1 | | | 1.2 | | 1 | 40 | | 21 | - | - | 1 | | - | 1_ | | | | | |
| | 1.2D + 1.0Di + 1.0Wi. | | | 1 | | 39 | | 2 | 1 | 40 | | 22 | | _ | 1 | | | - | | | | | |
| 21 | 1.2D + 1.0DI + 1.0VVI. | res | Y | 1 | 1.2 | | 1.2 | 2 | 1 | 40 | | 23 | | - | 1 | _ | - | _ | | | | | |
| | 1.2D + 1.0Di + 1.0Wi. | Yes | Y | 1 | 1.2 | | 1.2 | 2 | 1 | | _ | 24 | | 62 | | | | | | | | | UU |
| 23 | 1.2D + 1.0Di + 1.0Wi. | .Yes | Υ | 1 | 1.2 | _ | 1.2 | 2 | 1 | 40 | | 25 | 1 | 63 | 1 | | | | | | | | |
| | 1.2D + 1.0Di + 1.0Wi. | | | 1 | 1.2 | | 1.2 | 2 | 1 | 40 | | 26 | 1 | 64 | 1 | | | | | | | | |
| | 1.2D + 1.5Lm1 + 1.0 | | | 1_1_ | 1.2 | | 1.2 | | 1.5 | | | 65 | 1 | | | | | | | | | | |
| | 1.2D + 1.5Lm1 + 1.0 | | | 1 | 1.2 | | 1.2 | | 1.5 | | | 66 | 1 | | | - 24 | | | | | | | |
| | 1.2D + 1.5Lm1 + 1.0 | | | 1 | 1.2 | 39 | 1.2 | 77 | 1.5 | 29 | 1 | 67 | 1 | | | | | | | | | | |
| | 1.2D + 1.5Lm1 + 1.0 | | | 1_1_ | 1.2 | | 1.2 | 77 | 1.5 | 30 | 1 | 68 | 1 | | | | | | | | | | |
| | 1.2D + 1.5Lm1 + 1.0 | | | 11 | 1.2 | 39 | 1.2 | | 1.5 | | | 69 | 1 | | | | | | | | | | |
| | 1.2D + 1.5Lm1 + 1.0 | | | 1 | 1.2 | 39 | 1.2 | 77 | 1.5 | 32 | 1 | 70 | 1 | | | | | | | li d | | | |
| | 1.2D + 1.5Lm1 + 1.0 | | | 1 | 1.2 | 39 | 1.2 | | 1.5 | | | 71 | 1 | | | | | | | | | | |
| 32 | 1.2D + 1.5Lm1 + 1.0 | .Yes | Y | 1 | 1.2 | 39 | 1.2 | | 1.5 | | 1 | 72 | 1 | | | | | | | | | | |
| | 1.2D + 1.5Lm1 + 1.0. | | | 1 | 1.2 | | 1.2 | | 1.5 | | 1 | 73 | 1 | | | | | | | | - | | |
| | 1.2D + 1.5Lm1 + 1.0 | | | 1 | 1.2 | | 1.2 | 77 | 1.5 | 36 | 1 | 74 | | | | | | | | | | | |
| | 1.2D + 1.5Lm1 + 1.0 | | | 1 | 1.2 | | 1.2 | | 1.5 | | 1 | 75 | | | | | | | T = | | | | |
| 36 | 1.2D + 1.5Lm1 + 1.0 | .Yes | Y | 1 | 1.2 | | 1.2 | | 1.5 | | | 76 | _ | | | | | | | | | | |
| 37 | 1.2D + 1.5Lm2 + 1.0 | .Yes | Y | 1 | 1.2 | | 1.2 | | | | | 65 | | - | | _ | - | +- | + | | | - 1 | |
| | 1.2D + 1.5Lm2 + 1.0 | | | | 1.2 | | 1.2 | | | | | 66 | | | | | 1 | | - | | | | |
| 39 | 1.2D + 1.5Lm2 + 1.0 | Yes | Y | | | | 1.2 | | 1.5 | | 1 | 67 | | | | | _ | - | - | | | | 100 |
| 40 | 1.2D + 1.5Lm2 + 1.0 | Yes | Υ | | 1.2 | | 1.2 | | | | | 68 | | | | | | 1 | | | _ | | |
| 41 | 1.2D + 1.5Lm2 + 1.0 | Yes | Y | | | | 1.2 | | | | 1 | 69 | | | | | _ | | - | | _ | | - |
| 42 | 1.2D + 1.5Lm2 + 1.0 | Yes | Υ | | 1.2 | | 1.2 | | | | 1 | 70 | | | | - | - | | - | | | | _ |
| | 1.2D + 1.5Lm2 + 1.0 | | Y | | | | 1.2 | | | | 1 | 71 | | | | | | - | | | | | |
| | 1.2D + 1.5Lm2 + 1.0 | | | | | | 1.2 | | | | | - | | | | - | | - | | | | | |
| | 1.2D + 1.5Lm2 + 1.0 | | | | 1.2 | | 1.2 | | | | 1 | 72 | 1 | | - | | | - | - | - | | - | |
| | 1.2D + 1.5Lm2 + 1.0 | | | | | 20 | 1.2 | 70 | 1.0 | 30 | 1 | 73 | | | | | | - | - | - | | | |
| | 1.2D + 1.5Lm2 + 1.0 | | | 1 | 1.2 | 20 | 1.2 | 70 | 1.5 | 30 | 1 | 74 | | | | - | - | - | | | | - | |
| | 1.2D + 1.5Lm2 + 1.0 | | | | | | | | | | | 75 | | | | | | | - | | | - | |
| 49 | | Yes | | | | | 1.2 | | | 38 | | 76 | _1_ | | | | | - | | | | \vdash | |
| 50 | | Yes | | 1 | 1.2 | 20 | 1.2 | 79 | 1.5 | | - | | - | - | - | | | - | | | | - | - |
| 51 | | Yes | | | | | 1.2 | 80 | 1.5 | - | - | | | | | | | | | | | - | |
| | 1.2D + 1.0Ev + 1.0E | | | - | | 39 | | 04 | | - | _ | 00 | 4 | 00 | | | | _ | | | | _ | |
| | 1.2D + 1.0Ev + 1.0E | | 230 | | | | 1.2 | | | E | | 82 | | 83 | _ | ELZ | _ | E | | | | | |
| | 1.2D + 1.0Ev + 1.0E | | Y | | | | 1.2 | | - | | | | _ | | | | .866 | | The second second | | | | |
| | 1.2D + 1.0Ev + 1.0E | | | | 1.2 | | 1.2 | | | | | | | | | | | | .866 | | | | |
| | 1.2D + 1.0Ev + 1.0E | | | | 1.2 | 39 | | 81 | | | | 82 | | 83 | | ELZ | | E | 1 | _ | | | |
| | 1.2D + 1.0Ev + 1.0E | | | | 1.2 | 39 | | 81 | | | | | | | | | | | .866 | | | | |
| | 1.2D + 1.0Ev + 1.0E | | | | | 39 | | 81 | | | | | | | .5 | | 8 | | | | | | |
| | | | | | 1.2 | | 1.2 | | | _ | | 82 | | 83 | | | -1 | | | | | | |
| 29 | 1.2D + 1.0Ev + 1.0E 1.2D + 1.0Ev + 1.0E | res | Y | | | | 1.2 | | | | | | | | | | 8 | | | | | | |
| | | | | 1 | 1.2 | 39 | 1.2 | 81 | | E | | | | | | | | | 8 | | | | |
| | 1.2D + 1.0Ev + 1.0E | | | | | | 1.2 | | 1 | E | | 82 | | | | ELZ | | | -1 | | | | |
| | 1.2D + 1.0Ev + 1.0E | | | 1 | 1.2 | 39 | 1.2 | 81 | | E | | | | | | | | | 8 | | | | |
| | 1.2D + 1.0Ev + 1.0E | | | | | | 1.2 | | | | | | | | 5 | ELZ | .866 | E | 5 | | | | |
| | 0.9D - 1.0Ev + 1.0Eh | | | 1 | | 39 | .9 | | -1 | E | -1 | 82 | 1 | 83 | | ELZ | 1 | E | | | | | |
| | 0.9D - 1.0Ev + 1.0Eh., | | | 1 | | 39 | .9 | 81 | -1 | E | -1 | | | | .5 | ELZ | .866 | E | .5 | | | | |
| | 0.9D - 1.0Ev + 1.0Eh | | | 1 | | | .9 | | | E | | | | | | | | | .866 | | | | |
| | 0.9D - 1.0Ev + 1.0Eh | | | 1 | | 39 | .9 | | | E | | 82 | | 83 | | ELZ | | | 1 | | | | |
| | 0.9D - 1.0Ev + 1.0Eh | | | 1 | .9 | 39 | .9 | | | | | | | | | | | | .866 | | | | |
| 69 | 0.9D - 1.0Ev + 1.0Eh | Yes | Υ | 1 | | 39 | .9 | | | | | | | | | | 8 | | | | | | |
| | 0.9D - 1.0Ev + 1.0Eh | | | 1 | | 39 | .9 | | | E | | | -1 | | - | | -1 | | | | | | |
| 71 | 0.9D - 1.0Ev + 1.0Eh., | Yes | Υ | 1 | | 39 | .9 | | | E | | | | | - 5 | | 8 | | | + | - | 1 | |
| 72 | 0.9D - 1.0Ev + 1.0Eh | Yes | Υ | 1 | | 39 | .9 | | | E | | | | | | | | | 8 | | | | |
| | 0.9D - 1.0Ev + 1.0Eh | | | 1 | | 39 | .9 | | | E | | 82 | | $\overline{}$ | _ | ELZ | - | | -1 | - | | - | |
| | 0.9D - 1.0Ev + 1.0Eh | | | 1 | _ | | .9 | | | | | | | | | | | | 8 | | | | |
| | | | <u></u> | - | .0 | 00 . | .0 | O I | -1 | | -1 | UZ | .U | UJ. | | | .5 | | · U | | | | |



: Colliers Engineering & Design

Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:___

Load Combinations (Continued)

| Description | S PDelSR | BLC | Fa | BLC | Fa | BLC | Fa | . B | Fa | . B | Fa B. | Fa. | . BLC | Fa | .B | Fa B | Fa B Fa | *** |
|--------------------------|----------|-----|----|-----|----|-----|----|-----|----|-----|--------|-----|-------|------|-----|------|---------|-----|
| 75 0 9D - 1.0Ev + 1.0Eh. | Yes Y | 1 | .9 | 39 | .9 | 81 | -1 | E | 1 | 82 | .866 8 | 35 | ELZ | .866 | 3 E | -,5 | | |

Hot Rolled Steel Section Sets

| | Label | Shape | Type | Design List | Material | Desig | | lyy [i | ZZ [i | J [in4] |
|----------|--------------------------|----------|--------|--------------|----------------|---------|------|--------|-------|---------|
| 1 | Face Horizontal | PIPE 3.0 | Beam | Pipe | A53 Gr.B | Typical | | | 2.85 | |
| 2 | Standoff Horizontal | HSS4X4X4 | Beam | SquareTube | A500 Gr.B Rect | Typical | 3.37 | 7.8 | 7.8 | 12.8 |
| 3 | Corner Plate | PL1/2x6 | Beam | BAR | A36 Gr.36 | Typical | | .0625 | 9 | .2369 |
| <u>J</u> | Platform Crossmember | HSS4X4X4 | Beam | SquareTube | A500 Gr.B Rect | Typical | 3.37 | 7.8 | 7.8 | 12.8 |
| 5 | Grating Support | L2x2x3 | Beam | Single Angle | A36 Gr.36 | Typical | | .271 | - | .0092 |
| 6 | Mount Pipe | PIPE 2.0 | Column | Pipe | A53 Gr.B | Typical | | .627 | .627 | 1.25 |
| 7 | Cross Arm Plate | PL3/8x6 | Beam | RECT | A36 Gr.36 | Typical | - | .026 | | .101 |
| 8 | Support Rail | PIPE 2.0 | Beam | Pipe | A53 Gr.B | Typical | | .627 | | 1.25 |
| 9 | Support Rail Corner Pipe | PIPE 2.0 | Beam | Pipe | A53 Gr.B | Typical | 1.02 | .627 | .627 | 1.25 |

Hot Rolled Steel Properties

| | Label | E [ksi] | G [ksi] | Nu | Therm (/ | Density[k/ft^3] | Yield[ksi] | Ry | Fu[ksi] | Rt |
|---|----------------|---------|---------|----|----------|-----------------|------------|------|---------|-----|
| 1 | A992 | 29000 | 11154 | .3 | .65 | .49 | 50 | 1.1_ | 65 | 1.1 |
| 2 | A36 Gr.36 | 29000 | 11154 | .3 | .65 | .49 | 36 | 1.5 | 58 | 1.2 |
| 3 | A572 Gr.50 | 29000 | 11154 | .3 | .65 | .49 | 50 | 1.1 | 65 | 1.1 |
| 4 | A500 Gr.B RND | 29000 | 11154 | .3 | .65 | .527 | 42 | 1.4 | 58 | 1.3 |
| 5 | A500 Gr.B Rect | 29000 | 11154 | .3 | .65 | .527 | 46 | 1.4 | 58 | 1.3 |
| 5 | A53 Gr.B | 29000 | 11154 | .3 | .65 | .49 | 35 | 1.6 | 60 | 1.2 |
| 6 | | 29000 | 11154 | .3 | .65 | .49 | 50 | 1.4 | 65 | 1.3 |
| 8 | A1085 Q235 | 29000 | 11154 | .3 | .65 | .49 | 35 | 1.5 | 58 | 1.2 |

Member Primary Data

| | Label | I Joint | J Joint | K Joint | Rotate(d | Section/Shape | Type | | | Design Ru |
|----|-------|---------|---------|---------|----------|--|--------|--------------|-----------|-----------|
| 1 | M1 | N1 | N2 | | | Face Horizontal | Beam | Pipe | A53 Gr.B | |
| 2 | M4 | N3 | N27 | | | Standoff Horizontal | Beam | SquareTube | A500 Gr | Typical |
| 3 | M10 | N101 | N103A | | | Platform Crossme | Beam | SquareTube | A500 Gr | Typical |
| | M19 | N8 | N9 | 12 | | RIGID | None | None | RIGID | Typical |
| 4 | MP1A | N23 | N22 | | | Mount Pipe | Column | Pipe | A53 Gr.B | Typical |
| 5 | M43 | N102 | N5 | | | Platform Crossme | Beam | SquareTube | A500 Gr | Typical |
| 7 | M46 | N86C | N87A | | | Corner Plate | Beam | BAR | A36 Gr.36 | Typical |
| | | N7 | N30 | | | RIGID | None | None | RIGID | Typical |
| 8 | M35A | N6 | N29 | | | RIGID | None | None | RIGID | Typical |
| 9 | M36A | N87C | N6 | | | Grating Support | Beam | Single Angle | A36 Gr.36 | Typical |
| 10 | M51B | N7 | N87B | | | Grating Support | | Single Angle | A36 Gr.36 | Typical |
| 11 | M52B | N87B | N88C | | | RIGID | None | None | RIGID | Typical |
| 12 | M52 | N102 | N24 | | | RIGID | None | None | RIGID | Typical |
| 13 | M58 | | N103A | | | RIGID | None | None | RIGID | Typical |
| 14 | M59 | N24 | N105A | | - | Cross Arm Plate | Beam | RECT | A36 Gr.36 | Typical |
| 15 | M76 | N101 | N131 | | | Cross Arm Plate | Beam | | A36 Gr.36 | |
| 16 | M77 | N105 | | | | RIGID | None | None | RIGID | Typical |
| 17 | M79 | N131 | N86A | | | Corner Plate | Beam | | A36 Gr.36 | |
| 18 | M80 | N87A | N135 | | | RIGID | None | None | RIGID | Typical |
| 19 | M83 | N135 | N86D | | - | Cross Arm Plate | Beam | | A36 Gr.36 | |
| 20 | M84 | N5 | N104A | | _ | Cross Arm Plate | Beam | | A36 Gr.36 | |
| 21 | M85 | N104A | N144 | | | RIGID | None | None | RIGID | Typical |
| 22 | M88 | N144 | N86B | | | The second secon | Beam | BAR | A36 Gr.36 | |
| 23 | M91 | N86C | N148 | | | Corner Plate | | None | RIGID | Typical |
| 24 | M92 | N148 | N86E | | | RIGID | None | | RIGID | Typical |
| 25 | M50 | N88C | N88A | | | RIGID | None | None | KIGID | Typical |



Colliers Engineering & Design

Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

Member Primary Data (Continued)

| MS1 | | Label | 1 Joint | J Joint | K Joint | Rotate(d. | Section/Shape | Туре | Design List | Material | Design Ru. |
|--|----|-------|--|---------|---------|-----------|---------------------|------|-------------|-----------|------------|
| MS1A | | | | | | | | None | | | Typical |
| MS2A | | | | N86G | | | RIGID | | None | | Typical |
| Platform Crossme Beam SquareTube A500 Gr Typicic 30 M54 N96 N868 Platform Crossme Beam SquareTube A500 Gr Typicic 31 M55 N106 N107 Corner Plate Beam BAR A36 Gr.36 Typicic 32 M56 N90 N94 RIGID None None RIGID Typicic None None RIGID Typici | | | | | | | Standoff Horizontal | Beam | SquareTube | A500 Gr | Typical |
| 300 | | | | N97 | | | Platform Crossme | | | | |
| M55 | | | N96 | N88B | | | Platform Crossme | | | | |
| S22 M56 N90 N94 RIGID None None RIGID Typic: | | | N106 | N107 | | | Corner Plate | | | | |
| MSAA N111 N89 N93 RIGID None None RIGID Typica N50 N50 N50 N113 Grating Support Beam Single Angle A36 Gr. 36 Typica N50 N61 N114 RIGID None None RIGID Typica N61 N96 N91 RIGID None None RIGID Typica N64 N99 N100 Cross Am Piate Beam RECT A36 Gr. 36 Typica N64 N99 N100 Cross Am Piate Beam RECT A36 Gr. 36 Typica N66 N107 N1014 RIGID None None RIGID Typica N66 N100 N104 RIGID None N000 RIGID Typica N66 N100 N104 RIGID None N000 RIGID Typica N60 N104 N104 RIGID None N000 RIGID Typica N104 N105 RIGID N000 N000 RIGID Typica N104 N105 RIGID N0 | | | N90 | N94 | | | | | | | |
| 35 | | M57 | N89 | N93 | | | | | | | |
| 35 | | M58A | | | | | | | | | |
| 36 | 35 | M59A | | | | | | | | | |
| 38 M62 | 36 | M60 | | | | | | | | | |
| M62 | | | | | | | | | | | |
| M63 | 38 | | | | | | | | | | |
| M64 | | | | | | | | | | | |
| M65 | | | | | | | | | | | |
| M66 | | | | | | | | | | | |
| M67 | | | | | | | | | | | |
| M88 | | | | | | | | | | | |
| M69 | | | | | | | | | | | |
| M70 | | | | | | | | | | | |
| M71 | | | | | | | | | | | |
| M72 | | | | | | | | | | | |
| M73 | | | | | | | | | | | |
| State | | | | | | | | | | | |
| 51 M75 N111 N112 RIGID None None RIGID Typics 52 M76A N115 N120 Standoff Horzontal Beam SquareTube A500 Gr. Typics 53 M77A N123 N125 Plaiform Crossme. Beam SquareTube A500 Gr. Typica 54 M78 N124 N116 Plaiform Crossme. Beam SquareTube A500 Gr. Typica 55 M79A N134 N135A Corner Plate Beam BAR A36 Gr.36 Typica 56 M80A N118 N122 RIGID None None RIGID Typica 57 M81 N117 N121 RIGID None None RIGID Typica 58 M82 N139 N117 Grating Support Beam Single Angle A36 Gr.36 Typica 60 M84A N141 N142 RIGID None RIGID Typica <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | | | | | | | | |
| 52 M76A N115 N120 Standoff Horizontal Beam Square Tube A500 Gr Typica Typica Square Tube A500 Gr | | | | | | | | | | | |
| M77A N123 N125 Platform Crossne Beam Square Tube A500 Gr. Typica Start N79A N134 N116 Platform Crossne Beam Square Tube A500 Gr. Typica Start N79A N134 N135A Corner Plate Beam BAR A36 Gr.36 Typica Start N80A N118 N122 RIGID None None RIGID Typica Start N177 N121 RIGID None None RIGID Typica Start N177 N171 RIGID None None RIGID Typica Start N183A N118 N141 Grating Support Beam Single Angle A36 Gr.36 Typica Start N183A N118 N141 Grating Support Beam Single Angle A36 Gr.36 Typica Start N183A N118 N141 Grating Support Beam Single Angle A36 Gr.36 Typica Start N183A N118 N141 Grating Support Beam Single Angle A36 Gr.36 Typica Start N183A N118 N141 RIGID None None RIGID Typica N185A N124 N119 RIGID None None RIGID Typica N185A N123 N127 Cross Arm Plate Beam RECT A36 Gr.36 Typica Start N183A N128 RIGID None None RIGID Typica Start N183A N128 RIGID None None RIGID Typica Start N183A N129 Corner Plate Beam RECT A36 Gr.36 Typica Start N183A N129 Corner Plate Beam RECT A36 Gr.36 Typica Start N194A N129 N136 RIGID None None RIGID Typica Start N194A N130 RIGID None None RIGID Typica Start N194A N130 RIGID None None RIGID Typica Start N194A N130 RIGID None None RIGID Typica N194A N130 N133 RIGID None None RIGID Typica RIGID None None RIGID Typica RIGID None None RIGID Typica N194A N130 RIGID None None RIGID Typica N194A N131A RIGID None None RIGID Typica N194A N194A N194A RIGID None None | | | | | | | | None | None | RIGID | Typical |
| 54 M78 N124 N116 Platform Crossme Beam SquareTube A500 Gr Typica 55 M79A N134 N135A Corner Plate Beam BAR A36 Gr.36 Typica 56 M80A N118 N122 RIGID None None None RIGID Typica 57 M81 N117 N121 RIGID None None RIGID Typica 58 M82 N139 N117 Grating Support Beam Single Angle A36 Gr.36 Typica 59 M83A N118 N141 Grating Support Beam Single Angle A36 Gr.36 Typica 60 M84A N141 N142 RIGID None None RIGID Typica 61 M85A N124 N119 RIGID None None RIGID Typica 62 M86 N119 N125 RIGID None None RIGID Typica 63 M87 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | | | | | | | | |
| May | | | | | | | | | | | |
| M80A | | | | | | | | | SquareTube | A500 Gr | Typical |
| M81 | | | | | _ | | | | | | |
| 58 M82 N139 N117 Grating Support Beam Single Angle A36 Gr.36 Typica 59 M83A N118 N141 Grating Support Beam Single Angle A36 Gr.36 Typica 60 M84A N1141 N142 RIGID None None RIGID Typica 61 M85A N124 N119 RIGID None None None RIGID Typica 62 M86 N119 N125 RIGID None None None RIGID Typica 63 M87 N123 N127 Cross Arm Plate Beam RECT A36 Gr.36 Typica 64 M88A N127 N128 Cross Arm Plate Beam RECT A36 Gr.36 Typica 65 M89 N128 RIGID None None Nine RIGID Typica 67 M91A N129 N136 RIGID None None RIGID Typica | | | | | | | | | | | Typical |
| M83A | | | | N121 | | | | | | | Typical |
| M84A N141 N142 RIGID None None RIGID Typica | | | | | | | | | | | |
| 61 M85A N124 N119 RIGID None None RIGID Typica 62 M86 N119 N125 RIGID None None RIGID Typica 63 M87 N123 N127 Cross Arm Plate Beam RECT A36 Gr.36 Typica 64 M88A N127 N128 Cross Arm Plate Beam RECT A36 Gr.36 Typica 65 M89 N128 N132 RIGID None None RIGID Typica 66 M90 N135A N129 Corner Plate Beam BAR A36 Gr.36 Typica 67 M91A N129 N136 RIGID None None RIGID Typica 68 M92A N116 N126 Cross Arm Plate Beam RECT A36 Gr.36 Typica 70 M94 N130 N133 RIGID None None RIGID Typica 72 </td <td></td> | | | | | | | | | | | |
| 62 M86 N119 N125 RIGID None None RIGID Typica 63 M87 N123 N127 Cross Arm Plate Beam RECT A36 Gr.36 Typica 64 M88A N127 N128 Cross Arm Plate Beam RECT A36 Gr.36 Typica 65 M89 N128 N132 RIGID None None RIGID Typica 66 M90 N135A N129 Corner Plate Beam BAR A36 Gr.36 Typica 67 M91A N129 N136 RIGID None None None RIGID Typica 68 M92A N116 N126 Cross Arm Plate Beam RECT A36 Gr.36 Typica 69 M93 N126 N130 Cross Arm Plate Beam RECT A36 Gr.36 Typica 70 M94 N130 N133 RIGID None None RIGID Typica | | | | | | | | | | | Typical |
| 63 M87 N123 N127 Cross Arm Plate Beam RECT A36 Gr.36 Typica 64 M88A N127 N128 Cross Arm Plate Beam RECT A36 Gr.36 Typica 65 M89 N128 N132 RIGID None None RIGID Typica 66 M90 N135A N129 Corner Plate Beam BAR A36 Gr.36 Typica 67 M91A N129 N136 RIGID None None RIGID Typica 68 M92A N116 N126 Cross Arm Plate Beam RECT A36 Gr.36 Typica 69 M93 N126 N130 Cross Arm Plate Beam RECT A36 Gr.36 Typica 70 M94 N130 N133 RIGID None None RIGID Typica 71 M95 N134 N131A Corner Plate Beam BAR A36 Gr.36 Typica | | | | | | | | | | | |
| 64 M88A N127 N128 Cross Am Plate Beam RECT A36 Gr.36 Typica 65 M89 N128 N132 RIGID None None RIGID Typica 66 M90 N135A N129 Corner Plate Beam BAR A36 Gr.36 Typica 67 M91A N129 N136 RIGID None None None RIGID Typica 68 M92A N116 N126 Cross Am Plate Beam RECT A36 Gr.36 Typica 69 M93 N126 N130 Cross Am Plate Beam RECT A36 Gr.36 Typica 70 M94 N130 N130 Cross Am Plate Beam RECT A36 Gr.36 Typica 71 M95 N134 N131A Corner Plate Beam BAR A36 Gr.36 Typica 72 M96 N131A N137 RIGID None None RIGID Typi | | | N119 | | | | | | | | Typical |
| 65 M89 N128 N132 RIGID None None RIGID Typica 66 M90 N135A N129 Corner Plate Beam BAR A36 Gr.36 Typica 67 M91A N129 N136 RIGID None None RIGID Typica 68 M92A N116 N126 Cross Arm Plate Beam RECT A36 Gr.36 Typica 69 M93 N126 N130 Cross Arm Plate Beam RECT A36 Gr.36 Typica 70 M94 N130 N133 RIGID None None RIGID Typica 71 M95 N134 N131A Corner Plate Beam BAR A36 Gr.36 Typica 72 M96 N131A N137 RIGID None None RIGID Typica 74 M98 N138 N140 RIGID None None RIGID Typica 75 | | | N123 | N127 | | | | | | | |
| 66 M90 N135A N129 Corner Plate Beam BAR A36 Gr.36 Typica 67 M91A N129 N136 RIGID None None RIGID Typica 68 M92A N116 N126 Cross Arm Plate Beam RECT A36 Gr.36 Typica 69 M93 N126 N130 Cross Arm Plate Beam RECT A36 Gr.36 Typica 70 M94 N130 N133 RIGID None None RIGID Typica 71 M95 N134 N131A Corner Plate Beam BAR A36 Gr.36 Typica 72 M96 N131A N137 RIGID None None RIGID Typica 73 M97 N142 N138 RIGID None None RIGID Typica 75 M98 N138 N140 RIGID None None RIGID Typica 76 | | | | | | | | | | | Typical |
| 67 M91A N129 N136 RIGID None None RIGID Typica 68 M92A N116 N126 Cross Arm Plate Beam RECT A36 Gr.36 Typica 69 M93 N126 N130 Cross Arm Plate Beam RECT A36 Gr.36 Typica 70 M94 N130 N133 RIGID None None RIGID Typica 71 M95 N134 N131A Corner Plate Beam BAR A36 Gr.36 Typica 72 M96 N131A N137 RIGID None None RIGID Typica 73 M97 N142 N138 RIGID None None RIGID Typica 74 M98 N138 N140 RIGID None None RIGID Typica 75 M99 N139 N140 RIGID None None RIGID Typica 76 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>None</td><td>None</td><td>RIGID</td><td>Typical</td></td<> | | | | | | | | None | None | RIGID | Typical |
| 67 M91A N129 N136 RIGID None None RIGID Typica 68 M92A N116 N126 Cross Arm Plate Beam RECT A36 Gr.36 Typica 69 M93 N126 N130 Cross Arm Plate Beam RECT A36 Gr.36 Typica 70 M94 N130 N133 RIGID None None RIGID Typica 71 M95 N134 N131A Corner Plate Beam BAR A36 Gr.36 Typica 72 M96 N131A N137 RIGID None None RIGID Typica 73 M97 N142 N138 RIGID None None RIGID Typica 74 M98 N138 N140 RIGID None None RIGID Typica 75 M99 N139 N140 RIGID None None RIGID Typica 76 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Beam</td><td>BAR</td><td>A36 Gr.36</td><td>Typical</td></td<> | | | | | | | | Beam | BAR | A36 Gr.36 | Typical |
| 69 M93 N126 N130 Cross Arm Plate Beam RECT A36 Gr.36 Typica 70 M94 N130 N133 RIGID None None RIGID Typica 71 M95 N134 N131A Corner Plate Beam BAR A36 Gr.36 Typica 72 M96 N131A N137 RIGID None None RIGID Typica 73 M97 N142 N138 RIGID None None RIGID Typica 74 M98 N138 N140 RIGID None None RIGID Typica 75 M99 N139 N140 RIGID None None RIGID Typica 76 M100 N140B N141B Support Rail Beam Pipe A53 Gr.B Typica 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 80 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>RIGID</td> <td>None</td> <td></td> <td>RIGID</td> <td>Typical</td> | | | | | | | RIGID | None | | RIGID | Typical |
| 70 M94 N130 N133 RIGID None None RIGID Typica 71 M95 N134 N131A Corner Plate Beam BAR A36 Gr.36 Typica 72 M96 N131A N137 RIGID None None RIGID Typica 73 M97 N142 N138 RIGID None None RIGID Typica 74 M98 N138 N140 RIGID None None RIGID Typica 75 M99 N139 N140 RIGID None None RIGID Typica 76 M100 N140B N141B Support Rail Beam Pipe A53 Gr.B Typica 77 M101 N142A N143 RIGID None None RIGID Typica 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 80 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Cross Arm Plate</td><td>Beam</td><td>RECT</td><td>A36 Gr.36</td><td>Typical</td></t<> | | | | | | | Cross Arm Plate | Beam | RECT | A36 Gr.36 | Typical |
| 70 M94 N130 N133 RIGID None None RIGID Typica 71 M95 N134 N131A Corner Plate Beam BAR A36 Gr.36 Typica 72 M96 N131A N137 RIGID None None RIGID Typica 73 M97 N142 N138 RIGID None None RIGID Typica 74 M98 N138 N140 RIGID None None RIGID Typica 75 M99 N139 N140 RIGID None None RIGID Typica 76 M100 N140B N141B Support Rail Beam Pipe A53 Gr.B Typica 77 M101 N142A N143 RIGID None None RIGID Typica 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 80 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Cross Arm Plate</td><td>Beam</td><td>RECT</td><td>A36 Gr.36</td><td>Typical</td></t<> | | | | | | | Cross Arm Plate | Beam | RECT | A36 Gr.36 | Typical |
| 71 M95 N134 N131A Corner Plate Beam BAR A36 Gr.36 Typica 72 M96 N131A N137 RIGID None None RIGID Typica 73 M97 N142 N138 RIGID None None RIGID Typica 74 M98 N138 N140 RIGID None None RIGID Typica 75 M99 N139 N140 RIGID None None RIGID Typica 76 M100 N140B N141B Support Rail Beam Pipe A53 Gr.B Typica 77 M101 N142A N143 RIGID None None RIGID Typica 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 80 M82A N102B N103B Support Rail Beam Pipe A53 Gr.B Typica 81 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>None</td> <td>None</td> <td>RIGID</td> <td>Typical</td> | | | | | | | | None | None | RIGID | Typical |
| 72 M96 N131A N137 RIGID None None RIGID Typica 73 M97 N142 N138 RIGID None None RIGID Typica 74 M98 N138 N140 RIGID None None RIGID Typica 75 M99 N139 N140 RIGID None None RIGID Typica 76 M100 N140B N141B Support Rail Beam Pipe A53 Gr.B Typica 77 M101 N142A N143 RIGID None None RIGID Typica 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 80 M82A N102B N103B Support Rail Beam Pipe A53 Gr.B Typica 81 M84B N106A N107A Support Rail Beam Pipe A53 Gr.B Typica | | | | | | | | | | | |
| 73 M97 N142 N138 RIGID None None RIGID Typica 74 M98 N138 N140 RIGID None None RIGID Typica 75 M99 N139 N140 RIGID None None RIGID Typica 76 M100 N140B N141B Support Rail Beam Pipe A53 Gr.B Typica 77 M101 N142A N143 RIGID None None RIGID Typica 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 79 M82A N102B N103B Support Rail Beam Pipe A53 Gr.B Typica 80 M83C N104B N105B Face Horizontal Beam Pipe A53 Gr.B Typica 81 M84B N106A N107A Support Rail Beam Pipe A53 Gr.B Typica | | | | | | | | | | RIGID | Typical |
| 74 M98 N138 N140 RIGID None None RIGID Typica 75 M99 N139 N140 RIGID None None RIGID Typica 76 M100 N140B N141B Support Rail Beam Pipe A53 Gr.B Typica 77 M101 N142A N143 RIGID None None RIGID Typica 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 79 M82A N102B N103B Support Rail Beam Pipe A53 Gr.B Typica 80 M83C N104B N105B Face Horizontal Beam Pipe A53 Gr.B Typica 81 M84B N106A N107A Support Rail Beam Pipe A53 Gr.B Typica | | | | | | | RIGID | None | | | Typical |
| 75 M99 N139 N140 RIGID None None RIGID Typica 76 M100 N140B N141B Support Rail Beam Pipe A53 Gr.B Typica 77 M101 N142A N143 RIGID None None RIGID Typica 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 79 M82A N102B N103B Support Rail Beam Pipe A53 Gr.B Typica 80 M83C N104B N105B Face Horizontal Beam Pipe A53 Gr.B Typica 81 M84B N106A N107A Support Rail Beam Pipe A53 Gr.B Typica | | | | | | | RIGID | | | | Typical |
| 76 M100 N140B N141B Support Rail Beam Pipe A53 Gr.B Typica 77 M101 N142A N143 RIGID None None RIGID Typica 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 79 M82A N102B N103B Support Rail Beam Pipe A53 Gr.B Typica 80 M83C N104B N105B Face Horizontal Beam Pipe A53 Gr.B Typica 81 M84B N106A N107A Support Rail Beam Pipe A53 Gr.B Typica | | | The second secon | | | | | | | | Typical |
| 77 M101 N142A N143 RIGID None None RIGID Typica 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 79 M82A N102B N103B Support Rail Beam Pipe A53 Gr.B Typica 80 M83C N104B N105B Face Horizontal Beam Pipe A53 Gr.B Typica 81 M84B N106A N107A Support Rail Beam Pipe A53 Gr.B Typica | | M100 | | N141B | | | Support Rail | | | | |
| 78 M81A N100A N101B Face Horizontal Beam Pipe A53 Gr.B Typica 79 M82A N102B N103B Support Rail Beam Pipe A53 Gr.B Typica 80 M83C N104B N105B Face Horizontal Beam Pipe A53 Gr.B Typica 81 M84B N106A N107A Support Rail Beam Pipe A53 Gr.B Typica | | | | | | | RIGID | None | | | |
| 79 M82A N102B N103B Support Rail Beam Pipe A53 Gr.B Typica 80 M83C N104B N105B Face Horizontal Beam Pipe A53 Gr.B Typica 81 M84B N106A N107A Support Rail Beam Pipe A53 Gr.B Typica | | | | | | | | Beam | | | |
| 80 M83C N104B N105B Face Horizontal Beam Pipe A53 Gr.B Typica 81 M84B N106A N107A Support Rail Beam Pipe A53 Gr.B Typica | | | | | | | | | | | |
| 81 M84B N106A N107A Support Rail Beam Pipe A53 Gr.B Typica | | M83C | N104B | N105B | | | | | | | |
| an indicate in the state of the | | | N106A | N107A | | | | | | | |
| None Right IVaira | 82 | M83B | | | | | RIGID | None | None | RIGID | Typical |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:_

Member Primary Data (Continued)

| | Label | I Joint | J Joint | K Joint | Rotate(d | . Section/Shape | Type | Design List | | Design Ru. |
|-----|-------|---------|---------|---------|----------|-------------------|--------|-------------|----------|------------|
| 83 | M84C | | N108A | | | RIGID | None | None | RIGID | Typical |
| 84 | M87A | N110A | N112A | | | RIGID | None | None | RIGID | Typical |
| 85 | M89A | | N115A | | | RIGID | None | None | RIGID | Typical |
| 86 | M90A | | N117A | | | RIGID | None | None | RIGID | Typical |
| 87 | M93A | | N121A | | | RIGID | None | None | RIGID | Typical |
| 88 | M94A | N106B | N115A | | | Support Rail Corn | | Pipe | A53 Gr.B | Typical |
| 89 | M95A | | N117A | | | Support Rail Corn | | Pipe | A53 Gr.B | |
| 90 | M96A | N121A | | | | Support Rail Corn | | Pipe | A53 Gr.B | |
| 91 | M91B | | N117B | | | RIGID | None | None | RIGID | Typical |
| 92 | MP2A | | N118A | | | Mount Pipe | Column | Pipe | A53 Gr.B | |
| 93 | M93B | | N121B | | | RIGID | None | None | RIGID | Typical |
| 94 | M94B | N122A | N123A | | | RIGID | None | None | RIGID | Typical |
| 95 | MP3A | | N124A | | | Mount Pipe | Column | Pipe | A53 Gr.B | |
| 96 | M96B | | N127A | | | RIGID | None | None | RIGID | Typical |
| 97 | M97A | | N129A | | | RIGID | None | None | RIGID | Typical |
| 98 | MP4A | N131B | N130A | | | Mount Pipe | Column | Pipe | A53 Gr.B | |
| 99 | M99A | | N133A | | | RIGID | None | None | RIGID | Typical |
| | M100A | | N135B | | | RIGID | None | None | RIGID | Typical |
| 100 | MP1C | N137A | N136A | | | Mount Pipe | Column | Pipe | A53 Gr.B | |
| 101 | M102 | N138A | | 57 | | RIGID | None | None | RIGID | Typical |
| 102 | M103 | | N141A | | | RIGID | None | None | RIGID | Typical |
| 103 | | N143A | | | | Mount Pipe | Column | Pipe | A53 Gr.B | |
| 104 | MP2C | N144A | N145 | | | RIGID | None | None | RIGID | Typical |
| 105 | M105 | N146 | N147 | | | RIGID | None | None | RIGID | Typical |
| 106 | M106 | N149 | N148A | | - | Mount Pipe | Column | Pipe | A53 Gr.B | |
| 107 | MP3C | N150 | N151 | | - | RIGID | None | None | RIGID | Typical |
| 108 | M108 | | N151 | | + | RIGID | None | None | RIGID | Typical |
| 109 | M109 | N152 | N154 | | | Mount Pipe | Column | Pipe | A53 Gr.B | |
| 110 | MP4C | N155 | | | - | RIGID | None | None | RIGID | Typical |
| 111 | M111 | N156 | N157 | | | RIGID | None | None | RIGID | Typical |
| 112 | M112 | N158 | N159 | | + | Mount Pipe | Column | Pipe | A53 Gr.B | |
| 113 | MP1B | N161 | N160 | | + | RIGID | None | None | RIGID | Typical |
| 114 | M114 | N162 | N163 | | | RIGID | None | None | RIGID | Typical |
| 115 | M115 | N164 | N165 | | - | Mount Pipe | Column | Pipe | A53 Gr.B | |
| 116 | MP2B | N167 | N166 | | | | None | None | RIGID | Typical |
| 117 | M117 | N168 | N169 | | | RIGID RIGID | None | None | RIGID | Typical |
| 118 | M118 | N170 | N171 | | | | Column | Pipe | A53 Gr.B | |
| 119 | MP3B | N173 | N172 | | | Mount Pipe | | None | RIGID | Typical |
| 120 | M120 | N174 | N175 | | | RIGID | None | | RIGID | Typical |
| 121 | M121 | N176 | N177 | | | RIGID | None | None | A53 Gr.B | |
| 122 | MP4B | N179 | N178 | | | Mount Pipe | Column | Pipe | | Typical |
| 123 | M123 | N180 | N181 | | | RIGID | None | None | RIGID | Typical |

Member Advanced Data

| J Offset[in] T/C Only | | | | | |
|-----------------------|-----|-------------------------|---|---|---|
| | Yes | Default | | | None |
| | Yes | | | | None |
| | | Default | | | None |
| | | | | | None |
| | Yes | | | | |
| | Yes | ** NA ** | | | None |
| | Yes | Default | | | None |
| | | Default | | | None |
| | - | | | | None |
| | | | | | None |
| | - | | | | |
| | Yes | Default | | | None |
| | Yes | Default | | | None |
| | | Yes Yes Yes Yes Yes Yes | Yes ** NA ** Yes ** NA ** Yes Default Yes Default Yes ** NA ** Yes ** NA ** Yes Default Yes Default | Yes ** NA ** Yes ** NA ** Yes Default Yes Default Yes Default Yes ** NA ** Yes ** NA ** Yes Default Yes Default | Yes ** NA ** Yes ** NA ** Yes Default Yes Default Yes A** Yes ** NA ** Yes ** NA ** Yes Default Yes Default |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:___

Member Advanced Data (Continued)

| 10 | Label | I Release | J Release | I Offset[in] | J Offset[in] | T/C Only | Physical | Defl Ratio Opti. | Analysis | Inactive | Seismi |
|----|-------------|---------------------------------------|-----------|---|--------------|----------|------------|-------------------|--|--------------|--------|
| 12 | M52 | | | | | | Yes | ** NA ** | | | None |
| 13 | M58 | | L | | | | Yes | ** NA ** | | | None |
| 14 | M59 | | | | | | Yes | ** NA ** | | | None |
| 15 | M76 | | | _ | | | Yes | 1.332.3 | | | None |
| 16 | M77 | | | | | | Yes | | | | None |
| 17 | M79 | | BenPIN | | | | Yes | ** NA ** | | | None |
| 18 | M80 | | | | | | Yes | | | | None |
| 19 | M83 | | BenPIN | | | | Yes | ** NA ** | | | None |
| 20 | M84 | | | _ | | | Yes | | | | None |
| 21 | M85 | | | | | | Yes | | | | None |
| 22 | M88 | | BenPIN | | | | Yes | ** NA ** | | | None |
| 23 | M91 | | | | | | Yes | 11/1 | + | | None |
| 24 | M92 | | BenPIN | | | | Yes | ** NA ** | | | None |
| 25 | M50 | | | | | | Yes | ** NA ** | | | None |
| 26 | M51 | | | | | | Yes | ** NA ** | | | |
| 27 | M51A | | | | | | Yes | ** NA ** | + | West Newscon | None |
| 28 | M52A | | | | | | Yes | NA | | | None |
| 29 | M53 | | | | | | Yes | Default | | | None |
| 30 | M54 | | | | | | Yes | Default | | | None |
| 31 | M55 | | | | | | Yes | Default | | | None |
| 32 | M56 | | | | | | Yes | ** NA ** | 1 | | None |
| 33 | M57 | | | | | | Yes | ** NA ** | 1 | | None |
| 34 | M58A | 00000X | 00000X | | | | Yes | Default | | | None |
| 35 | M59A | 00000X | | | | | | | | | None |
| 36 | M60 | | | | | | Yes Yes | Default ** NA ** | | | None |
| 37 | M61 | | | | | | | ** NA ** | | | None |
| 38 | M62 | | | | | | Yes | | | | None |
| 39 | M63 | | | ======================================= | | | Yes | ** NA ** | | | None |
| 40 | M64 | | 211111 | | | | Yes | | | | None |
| 41 | M65 | | BenPIN | | | | Yes | ** *! * ** | | | None |
| 42 | M66 | | Detti IN | | | | Yes | ** NA ** | | | None |
| 43 | M67 | | BenPIN | | | | Yes | ** *! A ** | | | None |
| 44 | M68 | | Delirin | 77 - 41 - | | | Yes | ** NA ** | | | None |
| 45 | M69 | | | | | | Yes | | + | | None |
| 46 | M70 | | BenPIN | | | | Yes | ** *! * ** | | | None |
| 47 | M71 | | Delicity | | | | Yes | ** NA ** | - | | None |
| 48 | M72 | · · · · · · · · · · · · · · · · · · · | PopDIN | | | | Yes | | ļ | | None |
| 49 | M73 | | BenPIN | | | | Yes | ** NA ** | | | None |
| 50 | M74 | | | | | | Yes | ** NA ** | | | None |
| 51 | M75 | | | | | - | Yes | ** NA ** | - | | None |
| 52 | M76A | | | | | | Yes | ** NA ** | | | None |
| 53 | M77A | | | | | | Yes | | | VIII | None |
| 54 | M78 | | | | | | Yes | Default | | | None |
| 55 | M79A | | | | | | Yes | Default | | | None |
| 56 | M80A | | | | | | Yes | Default | | | None |
| | | | | | | | Yes | ** NA ** | | | None |
| 57 | M81 | 00000X | 00000 | | | | Yes | ** NA ** | | | None |
| 58 | M82 M83A | 00000X | | | | | Yes | Default | | | None |
| 59 | | COOOX | COOCOX | | | | Yes | Default | | | None |
| 60 | M84A | | | | | | Yes | ** NA ** | | 9801 | None |
| 61 | M85A | | | | | | Yes | ** NA ** | | | None |
| 62 | M86 | | | | | | Yes | ** NA ** | | | None |
| 63 | M87 | | | | | | Yes | | | | None |
| 64 | M88A | | | | | | Yes | | | | None |
| 65 | M89 | | BenPIN | | | | Yes | ** NA ** | | | None |
| 66 | M90 | - | | | | | Yes | | | | None |
| 67 | M91A | | BenPIN | | | | Yes | ** NA ** | | | None |
| 68 | M92A | | | | | | Yes | | | | None |



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Project # 21777291
Antenna Mount Analysis

Dec 19, 2023 9:31 AM Checked By:___

Member Advanced Data (Continued)

| | Label | I Release | J Release | I Offset[in] | J Offset[in] | T/C Only P | nysicai | Defl Ratio Opti | . Analysis | Inactive | Seismi. None |
|-----|-------|---------------------------------------|-----------|--------------|--------------|---|---------|-----------------|------------|----------|-----------------|
| 69 | M93 | | | | | | Yes | 44 NIA 44 | - | | None |
| 70 | M94 | | BenPIN | | | | Yes | ** NA ** | | | None |
| 71 | M95 | | | | | | Yes | 44 818 44 | | | |
| 72 | M96 | | BenPIN | | | | Yes | ** NA ** | - | | None |
| 73 | M97 | | | | | | Yes | ** NA ** | | | None |
| 74 | M98 | | | | | | Yes | ** NA ** | | | None |
| 75 | M99 | | | | | | Yes | ** NA ** | | | None |
| 76 | M100 | | | | | | Yes | Default | | | None |
| 77 | M101 | | | | | | Yes | ** NA ** | 1 | | None |
| 78 | M81A | | | | | | Yes | Default | | | None |
| 79 | M82A | | | | | | Yes | Default | | | None |
| 80 | M83C | | | | | | Yes | Default | | | None |
| 81 | M84B | | | | | | Yes | Default | | | None |
| 82 | M83B | | | | | | Yes | ** NA ** | | | None |
| 83 | M84C | | | | | | Yes | ** NA ** | | | None |
| | M87A | | | | | | Yes | ** NA ** | | | None |
| 84 | | | | | | | Yes | ** NA ** | | | None |
| 85 | M89A | | | | | | Yes | ** NA ** | | | None |
| 86 | M90A | | | | | | Yes | ** NA ** | | | None |
| 87 | M93A | DesDIN | BenPIN | | | | Yes | Default | | | None |
| 88 | M94A | BenPIN | BenPIN | | | | Yes | Default | | | None |
| 89 | M95A | BenPIN | | | | | Yes | Default | | | None |
| 90 | M96A | BenPIN | BenPIN | | | | Yes | ** NA ** | | | None |
| 91 | M91B | | | | | | Yes | ** NA ** | | | None |
| 92 | MP2A | | | | | | Yes | ** NA ** | | | None |
| 93 | M93B | | | | | | Yes | ** NA ** | | | None |
| 94 | M94B | | | | | 1 | Yes | ** NA ** | | | None |
| 95 | MP3A | | | | | - | Yes | ** NA ** | | | None |
| 96 | M96B | | | | - | - | Yes | ** NA ** | | - | None |
| 97 | M97A | | | | | | Yes | ** NA ** | | | None |
| 98 | MP4A | | | | | | | ** NA ** | | | None |
| 99 | M99A | | | | | | Yes | ** NA ** | | | None |
| 100 | M100A | | | | | + | Yes | ** NA ** | 1 | | None |
| 101 | MP1C | | | | | | Yes | | + | | None |
| 102 | M102 | | | | | | Yes | ** NA ** | | | None |
| 103 | M103 | | | | | | Yes | ** NA ** | - | | None |
| 104 | MP2C | | | | | | Yes | ** NA ** | + | | Non |
| 105 | M105 | | | | | | Yes | ** NA ** | - | | None |
| 106 | M106 | | | | - 11 | | Yes | ** NA ** | | | |
| 107 | MP3C | | | | | | Yes | ** NA ** | | | None |
| 108 | M108 | | | | | | Yes | ** NA ** | | | None |
| 109 | M109 | | | | | | Yes | ** NA ** | | | None |
| 110 | | | | | | | Yes | ** NA ** | | | None |
| 111 | M111 | | | | | | Yes | ** NA ** | | | Non |
| 112 | M112 | | | | | | Yes | ** NA ** | | | Non |
| 113 | MP1B | | | | | | Yes | ** NA ** | | | Non |
| | | + | 1 | | | | Yes | ** NA ** | | | Non |
| 114 | M114 | | | | | | Yes | ** NA ** | | | Non |
| 115 | | | | | | | Yes | ** NA ** | | | Non |
| 116 | MP2B | | 1 | | | | Yes | ** NA ** | | | Non |
| 117 | M117 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | Yes | ** NA ** | | | Non |
| 118 | M118 | | | | | | Yes | ** NA ** | | | Non |
| 119 | MP3B | | - | | | | Yes | ** NA ** | | | Non |
| 120 | M120 | | | | | - | Yes | ** NA ** | | | Non |
| 121 | M121_ | | | | | ++ | Yes | ** NA ** | 1 | | Non |
| 122 | MP4B | | | 10 | | - | | ** NA ** | | | Non |
| 123 | M123 | | | | | | Yes | 11/7 | | | |

Colliers Engineering & Design

Project # 21777291
Antenna Mount Analysis

Dec 19, 2023 9:31 AM Checked By:

Member Point Loads (BLC 1 : Antenna D)

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|-----------|--------------------|----------------|
| 1 | MP1A | Y | -31.65 | .25 |
| 2 | MP1A | My | 0158 | .25 |
| 3 | MP1A | Mz | 0 | .25 |
| 4 | MP1A | Y | -31.65 | 4.75 |
| 5 | MP1A | My | 0158 | 4.75 |
| 6 | MP1A | Mz | 0 | 4.75 |
| 7 | MP1B | Y | -31.65 | .25 |
| 8 | MP1B | Mv | .0079 | .25 |
| 9 | MP1B | Mz | 0137 | .25 |
| 10 | MP1B | Y | -31.65 | 4.75 |
| 11 | MP1B | My | .0079 | 4.75 |
| 12 | MP1B | Mz | 0137 | 4.75 |
| 13 | MP1C | Y | -31.65 | .25 |
| 14 | MP1C | My | .0079 | |
| 15 | MP1C | Mz | .0137 | .25 |
| 16 | MP1C | Y | -31.65 | .25 |
| 17 | MP1C | Mv | .0079 | 4.75 |
| 18 | MP1C | Mz | | 4.75 |
| 19 | MP4A | Y | .0137 | 4.75 |
| 20 | MP4A | My | -31.65 | .25 |
| 21 | MP4A | | 0158 | .25 |
| 22 | MP4A | Mz | 0 | .25 |
| 23 | MP4A | | -31.65 | 4.75 |
| 24 | MP4A | My | 0158 | 4.75 |
| 25 | | Mz | 0 | 4.75 |
| | MP4B | Y | -31.65 | |
| 26 | MP4B | My | .0079 | .25 |
| 27 | MP4B | Mz | 0137 | .25 |
| 28 | MP4B | Y | -31.65 | 4.75 |
| 29 | MP4B | My | .0079 | 4.75 |
| 30 | MP4B | Mz | 0137 | 4.75 |
| 31 | MP4C | Υ | -31.65 | .25 |
| 32 | MP4C | My | .0079 | .25 |
| 33 | MP4C | Mz | .0137 | .25 |
| 34 | MP4C | Υ | -31.65 | 4.75 |
| 35 | MP4C | My | .0079 | 4.75 |
| 36 | MP4C | Mz | .0137 | 4.75 |
| 37 | MP3A | Y | -28.65 | 1.5 |
| 38 | MP3A | My | 0143 | 1.5 |
| 39 | MP3A | Mź | 0 | 1.5 |
| 40 | MP3A | Y | -28.65 | 3.5 |
| 41 | МРЗА | My | 0143 | 3.5 |
| 42 | MP3A | Mz | 0 | 3.5 |
| 43 | MP3B | Y | -28.65 | 1.5 |
| 44 | MP3B | My | .0072 | 1.5 |
| 45 | MP3B | Mz | 0124 | |
| 46 | MP3B | Y | -28.65 | 1.5 3.5 |
| 47 | MP3B | My | .0072 | |
| 48 | MP3B | Mz | 0124 | 3.5 |
| 49 | MP3C | Y | | 3.5 |
| 50 | MP3C | My | -28.65 | 1.5 |
| 51 | MP3C | | .0072 | 1.5 |
| 52 | MP3C | Mz Y | .0124 | 1.5 |
| 53 | | | -28.65 | 3.5 |
| | MP3C | My | .0072 | 3.5 |
| 54 | MP3C | Mz | .0124 | 3.5 |
| 55 56 | MP4A | Y | -74.7 | 2 |
| 56 | MP4A | My | .0374 | 2 |



Colliers Engineering & Design

Project # 21777291
Antenna Mount Analysis

Dec 19, 2023 9:31 AM Checked By:__

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

| Member Labe | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|--------------------|-----------|--------------------|----------------|
| 57 MP4A | Mz | 0 | 2 |
| 58 MP4B | Y | -74.7 | 2 |
| 59 MP4B | My | 0187 | 2 |
| 60 MP4B | Mz | .0323 | 2 |
| 61 MP4C | Y | -74.7 | 2 |
| 62 MP4C | My | 0187 | 2 |
| 63 MP4C | Mz | 0323 | 2 |
| 64 MP1A | Y | -20.8 | 4 |
| 65 MP1A | Mv | .0104 | 4 |
| 66 MP1A | Mz | 0 | 4 |
| 67 MP1B | Y | -20.8 | 4 |
| 68 MP1B | My | .0104 | 4 |
| 69 MP1B | Mz | 0 | 4 |
| 70 MP1C | Y | -20.8 | 4 |
| 71 MP1C | My | .0104 | 4 |
| 72 MP1C | Mz | 0 | 4 |
| 73 MP1A | Y | -79.1 | 2 |
| 74 MP1A | My | .0396 | 2 |
| 75 MP1A | Mz | 0 | 2 |
| 76 MP1B | Y | -79.1 | 2 |
| 77 MP1B | My | 0198 | 2 |
| 78 MP1B | Mz | .0343 | 2 |
| 79 MP1C | Y | -79.1 | 2 |
| | My | 0198 | 2 |
| | Mz | 0343 | 2 |
| 81 MP1C 82 MP2A | Y | -22.95 | .25 |
| | My | 0115 | .25 |
| | Mz | 0 | .25 |
| | Y | -22.95 | 4.75 |
| 85 MP2A | Mv | 0115 | 4.75 |
| 86 MP2A | Mz | 0 | 4.75 |
| 87 MP2A | Y | -22.95 | .25 |
| 88 MP2B | My | .0057 | .25 |
| 89 MP2B | Mz | 0099 | .25 |
| 90 MP2B | Y | -22.95 | 4.75 |
| 91 MP2B | | .0057 | 4.75 |
| 92 MP2B | My | 0099 | 4.75 |
| 93 MP2B | Mz | -22.95 | .25 |
| 94 MP2C | Y | .0057 | .25 |
| 95 MP2C | My | .0099 | .25 |
| 96 MP2C | Mz | -22.95 | 4.75 |
| 97 MP2C | Y | .0057 | 4.75 |
| 98 MP2C | My | | 4.75 |
| 99 MP2C | Mz | .0099 | 4.13 |

Member Point Loads (BLC 2 : Antenna Di)

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 4 | MP1A | Y | -112.1332 | .25 |
| 2 | MP1A | Mv | 0561 | .25 |
| 2 | MP1A | Mz | 0 | .25 |
| 3 | MP1A | Y | -112.1332 | 4.75 |
| 5 | MP1A | My | 0561 | 4.75 |
| 6 | MP1A | Mz | 0 | 4.75 |
| 7 | MP1B | Y | -112.1332 | .25 |
| η | MP1B | Mv | .028 | .25 |
| 9 | MP1B | Mz | 0486 | .25 |
| 10 | MP1B | Y | -112.1332 | 4.75 |



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Project # 21777291
Antenna Mount Analysis

Dec 19, 2023 9:31 AM Checked By:_____

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

| 11 | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 12 | MP1B MP1B | My | .028 | 4.75 |
| 13 | | Mz Mz | 0486 | 4.75 |
| 14 | MP1C MP1C | Y | -112.1332 | .25 |
| 15 | | My | .028 | .25 |
| 16 | MP1C | Mz | .0486 | .25 |
| | MP1C | Y | -112.1332 | 4.75 |
| 17 | MP1C | My | .028 | 4.75 |
| 18 | MP1C | Mz | .0486 | 4.75 |
| 19 | MP4A | Υ | -112.1332 | .25 |
| 20 | MP4A | My | 0561 | .25 |
| 21 | MP4A | Mz | 0 | .25 |
| 22 | MP4A | Υ | -112.1332 | 4.75 |
| 23 | MP4A | My | 0561 | 4.75 |
| 24 | MP4A | Mz | 0 | 4.75 |
| 25 | MP4B | Y | -112.1332 | .25 |
| 26 | MP4B | My | .028 | .25 |
| 27 | MP4B | Mz | 0486 | .25 |
| 28 | MP4B | Y | -112.1332 | 4.75 |
| 29 | MP4B | My | .028 | 4.75 |
| 30 | MP4B | Mz | 0486 | 4.75 |
| 31 | MP4C | Y | -112.1332 | .25 |
| 32 | MP4C | My | .028 | .25 |
| 33 | MP4C | Mz | .0486 | .25 |
| 34 | MP4C | Y | -112.1332 | 4.75 |
| 35 | MP4C | My | .028 | 4.75 |
| 36 | MP4C | Mz | .0486 | 4.75 |
| 37 | MP3A | Y | -48.4151 | |
| 38 | MP3A | My | 0242 | 1.5 |
| 39 | MP3A | Mz | 0242 | 1.5 |
| 40 | MP3A | Y | -48.4151 | 1.5 |
| 41 | MP3A | Mv | | 3.5 |
| 12 | MP3A | Mz | 0242 | 3.5 |
| 43 | MP3B | Y | 0 | 3.5 |
| 14 | MP3B | My | -48.4151 | 1.5 |
| 45 | MP3B | | .0121 | 1.5 |
| 16 | MP3B | Mz Y | 021 | 1.5 |
| 17 | MP3B | | -48.4151 | 3.5 |
| 8 | MP3B | My | .0121 | 3.5 |
| 19 | | Mz | 021 | 3.5 |
| | MP3C | Y | -48.4151 | 1.5 |
| 50 | MP3C | My | .0121 | 1.5 |
| 51 | MP3C | Mz | .021 | 1.5 |
| 2 | MP3C | Y | -48.4151 | 3.5 |
| 3 | MP3C | My | .0121 | 3.5 |
| 4 | MP3C | Mz | .021 | 3.5 |
| 5 | MP4A | Y | -73.3394 | 2 |
| 6 | MP4A | My | .0367 | 2 |
| 7 | MP4A | Mz | 0 | 2 |
| 8 | MP4B | Y | -73.3394 | 2 |
| 9 | MP4B | My | 0183 | 2 |
| 0 | MP4B | Mz | .0318 | 2 |
| 1 | MP4C | Y | -73.3394 | 2 |
| 2 | MP4C | My | 0183 | 2 |
| 3 | MP4C | Mz | 0318 | 2 |
| 4 | MP1A | Y | -27.6043 | 4 |
| 5 | MP1A | My | .0138 | 4 |
| 6 | MP1A | Mz | 0 | 4 |
| 7 | MP1B | Y | -27.6043 | 4 |

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

| Me | mber Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|------------|-----------|--------------------|----------------|
| 68 | MP1B | Mv | .0138 | 4 |
| 69 | MP1B | Mz | 0 | 4 |
| 70 | MP1C | Y | -27.6043 | 4 |
| 71 | MP1C | My | .0138 | 4 |
| | MP1C | Mz | 0 | 4 |
| 72 | MP1A | Y | -74.0879 | 2 |
| 73 | MP1A | Mv | .037 | . 2 |
| 74 | MP1A | Mz | 0 | 2 |
| 75 | MP1B | Y | -74.0879 | 2 |
| 76 | MP1B | Mv | 0185 | 2 |
| 77 | MP1B | Mz | .0321 | 2 |
| 78 | MP16 | Y | -74.0879 | 2 |
| 79 | | Mv | 0185 | 2 |
| 80 | MP1C | Mz | 0321 | 2 |
| 81 | MP1C | Y | -108.3776 | .25 |
| 82 | MP2A | Mv | 0542 | .25 |
| 83 | MP2A | Mz | 0 | .25 |
| 84 | MP2A | Y | -108.3776 | 4.75 |
| 85 | MP2A | | 0542 | 4.75 |
| 86 | MP2A | My | 0042 | 4.75 |
| 87 | MP2A | Mz Y | -108.3776 | .25 |
| 88 | MP2B | | .0271 | .25 |
| 89 | MP2B | My | 0469 | .25 |
| 90 | MP2B | Mz | -108.3776 | 4.75 |
| 91 | MP2B | Y | .0271 | 4.75 |
| 92 | MP2B | My | 0469 | 4.75 |
| 93 | MP2B | Mz | -108.3776 | .25 |
| 94 | MP2C | Y | .0271 | .25 |
| 95 | MP2C | My | | .25 |
| 96 | MP2C | Mz | .0469 | 4.75 |
| 97 | MP2C | Y | -108.3776 | 4.75 |
| 98 | MP2C | My | .0271 | 4.75 |
| 99 | MP2C | Mz | .0469 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 0 | .25 |
| 2 | MP1A | Z | -196.025 | .25 |
| 3 | MP1A | Mx | 0 | .25 |
| 4 | MP1A | X | 0 | 4.75 |
| 5 | MP1A | Z | -196.025 | 4.75 |
| 6 | MP1A | Mx | 0 | 4.75 |
| 7 | MP1B | X | 0 | .25 |
| 8 | MP1B | Z | -145.566 | .25 |
| 9 | MP1B | Mx | .063 | .25 |
| 10 | MP1B | X | 0 | 4.75 |
| 11 | MP1B | 7 | -145.566 | 4.75 |
| 12 | MP1B | Mx | .063 | 4.75 |
| 13 | MP1C | X | 0 | .25 |
| 14 | MP1C | Ž | -145.566 | .25 |
| - | MP1C | Mx | 063 | .25 |
| 15 | MP1C | X | 0 | 4.75 |
| 16 | MP1C | Ž | -145.566 | 4.75 |
| 17 | MP1C | Mx | 063 | 4.75 |
| 18 | | X | 0 | .25 |
| 19 | MP4A | 7 | -196.025 | .25 |
| 20 | MP4A MP4A | Mx | 0 | .25 |



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

| 22 | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 23 | MP4A MP4A | X | 0 | 4.75 |
| 24 | | | -196.025 | 4.75 |
| 25 | MP4A MP4B | Mx | 0 | 4.75 |
| 26 | | X | 0 | .25 |
| 27 | MP4B | Z | -145.566 | .25 |
| | MP4B | Mx | .063 | .25 |
| 28 | MP4B | X | 0 | 4.75 |
| 29 | MP4B | Z | -145.566 | 4.75 |
| 30 | MP4B | Mx | .063 | 4.75 |
| 31 | MP4C | X | 0 | .25 |
| 32 | MP4C | Z | -145.566 | .25 |
| 33 | MP4C | Mx | 063 | .25 |
| 34 | MP4C | X | 0 | 4.75 |
| 35 | MP4C | Z | -145.566 | 4.75 |
| 36 | MP4C | Mx | 063 | 4.75 |
| 37 | MP3A | X | 0 | 1.5 |
| 38 | MP3A | Z | -81.552 | 1.5 |
| 39 | MP3A | Mx | 0 | 1.5 |
| 40 | MP3A | X | Ō | 3.5 |
| 41 | MP3A | Z | -81.552 | 3.5 |
| 42 | MP3A | Mx | 0 | 3.5 |
| 43 | MP3B | X | 0 | 1.5 |
| 44 | MP3B | Z | -43.945 | 1.0 |
| 45 | MP3B | Mx | .019 | 1.5 |
| 46 | MP3B | X | 0 | 1.5 |
| 47 | MP3B | Z | | 3.5 |
| 48 | MP3B | Mx | -43.945 | 3.5 |
| 49 | MP3C | X | .019 | 3.5 |
| 50 | MP3C | Ž | 0 | 1.5 |
| 51 | MP3C | | -43.945 | 1.5 |
| 52 | MP3C | Mx | 019 | 1.5 |
| 53 | MP3C | X | 0 | 3.5 |
| 54 | MP3C | Z | -43.945 | 3.5 |
| 55 | MP4A | Mx | 019 | 3.5 |
| 56 | | X | 0 | 2 |
| 57 | MP4A | Z | -66.705 | 2 |
| | MP4A | Mx | 0 | 2 |
| 58 | MP4B | X | 0 | 2 |
| 59 | MP4B | Z | -50.244 | 2 |
| 60 | MP4B | Mx | 0218 | 2 |
| 61 | MP4C | X | 0 | 2 |
| 62 | MP4C | Z | -50.244 | 2 |
| 63 | MP4C | Mx | .0218 | 2 |
| 64 | MP1A | X Z | 0 | 4 |
| 65 | MP1A | | -15.923 | 4 |
| 66 | MP1A | Mx Mx | 0 | 4 |
| 67 | MP1B | X Z | 0 | 4 |
| 68 | MP1B | | -15.923 | 4 |
| 69 | MP1B | Mx | 0 | 4 |
| 70 | MP1C | X | 0 | 4 |
| 71 | MP1C | Z | -15.923 | 4 |
| 72 | MP1C | Mx | 0 | 4 |
| 73 | MP1A | X | 0 | 2 |
| 74 | MP1A | X | -80.476 | 2 |
| 75 | MP1A | Mx | 0 | 2 |
| 76 | MP1B | X | Ö | 2 |
| 77 | MP1B | Z | -61.271 | 2 |
| 78 | MP1B | Mx | 0265 | 2 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 79 | MP1C | X | 0 | 2 |
| | MP1C | Ž | -61.271 | 2 |
| 80 | | Mx | .0265 | 2 |
| 81 | MP1C | X | 0 | .25 |
| 82 | MP2A | 7 | -198.607 | .25 |
| 83 | MP2A | | 0 | .25 |
| 84 | MP2A | Mx | 0 | 4.75 |
| 85 | MP2A | X | -198.607 | 4.75 |
| 86 | MP2A | | -198.007 | 4.75 |
| 87 | MP2A | Mx | 0 | .25 |
| 88 | MP2B | X | 0 | .25 |
| 89 | MP2B | Z | -148,743 | |
| 90 | MP2B | Mx | .0644 | .25 |
| 91 | MP2B | X | 0 | 4.75 |
| 92 | MP2B | Z | -148.743 | 4.75 |
| | MP2B | Mx | .0644 | 4.75 |
| 93 | | X | 0 | .25 |
| 94 | MP2C | Ž | -148.743 | .25 |
| 95 | MP2C | | 0644 | .25 |
| 96 | MP2C | Mx | 0 | 4.75 |
| 97 | MP2C | X | | 4.75 |
| 98 | MP2C | Z | -148.743 | 4.75 |
| 99 | MP2C | Mx | 0644 | 4.70 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|------------------|--------------------|----------------|
| 4 | MP1A | X | 89.603 | .25 |
| 2 | MP1A | Z | -155.197 | .25 |
| 2 | MP1A | Mx | 0448 | .25 |
| 3 | MP1A | X | 89.603 | 4.75 |
| 4 | MP1A | 7 | -155.197 | 4.75 |
| 5 | MP1A | Mx | 0448 | 4.75 |
| 6 | MP1B | X | 64.373 | .25 |
| 7 | MP1B | Ž | -111.498 | .25 |
| 8 | MP1B | Mx | .0644 | .25 |
| 9 | MP1B | X | 64.373 | 4.75 |
| 10 | MP1B | Ž | -111.498 | 4.75 |
| 11 | | Mx | .0644 | 4.75 |
| 12 | MP1B | X | 89.603 | .25 |
| 13 | MP1C | Ž | -155.197 | .25 |
| 14 | MP1C | Mx | 0448 | .25 |
| 15 | MP1C | X | 89.603 | 4.75 |
| 16 | MP1C | - ^ Z | -155.197 | 4.75 |
| 17 | MP1C | Mx | 0448 | 4.75 |
| 18 | MP1C | X | 89.603 | .25 |
| 19 | MP4A | Z | -155.197 | .25 |
| 20 | MP4A | Mx | 0448 | .25 |
| 21 | MP4A | X | 89.603 | 4.75 |
| 22 | MP4A | Z | -155.197 | 4.75 |
| 23 | MP4A | Mx | 0448 | 4.75 |
| 24 | MP4A | | 64.373 | .25 |
| 25 | MP4B | X | -111.498 | .25 |
| 26 | MP4B | | .0644 | .25 |
| 27 | MP4B | Mx | 64.373 | 4.75 |
| 28 | MP4B | X | -111.498 | 4.75 |
| 29 | MP4B | | .0644 | 4.75 |
| 30 | MP4B | Mx. | 89.603 | .25 |
| 31 | MP4C | X | -155.197 | .25 |
| 32 | MP4C | Z | -100.101 | 14-7 |



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

| 33 | Member Label MP4C | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|----------------------|-----------|--------------------|----------------|
| 34 | MP4C | Mx | 0448 | .25 |
| 35 | | <u>X</u> | 89.603 | 4.75 |
| 36 | MP4C MP4C | Z | -155.197 | 4.75 |
| 37 | MP3A | Mx | 0448 | 4.75 |
| 38 | | X | 34.508 | 1.5 |
| 39 | MP3A | Z | -59.77 | 1.5 |
| 40 | MP3A | Mx | 0173 | 1.5 |
| | MP3A | X | 34.508 | 3.5 |
| 41 | MP3A | Z | -59.77 | 3.5 |
| 42 | MP3A | Mx | 0173 | 3.5 |
| 43 | MP3B | X | 15.705 | 1.5 |
| 44 | MP3B | Z | -27.202 | 1.5 |
| 45 | MP3B | Mx | .0157 | 1.5 |
| 46 | MP3B | X | 15.705 | 3.5 |
| 47 | MP3B | Z | -27.202 | 3.5 |
| 48 | MP3B | Mx | .0157 | 3.5 |
| 49 | MP3C | X | 34.508 | 1.5 |
| 50 | MP3C | Z | -59.77 | 1.5 |
| 51 | MP3C | Mx | 0173 | 1.5 |
| 52 | MP3C | | 34.508 | 3.5 |
| 53 | MP3C | X Z | -59.77 | 3.5 |
| 54 | MP3C | Mx | 0173 | 3.5 |
| 55 | MP4A | X | 30.609 | 2 |
| 56 | MP4A | Ž | -53.016 | |
| 57 | MP4A | Mx | .0153 | 2 |
| 58 | MP4B | X | 22.378 | 2 |
| 59 | MP4B | Z | -38.76 | 2 |
| 60 | MP4B | Mx | 0224 | 2 |
| 61 | MP4C | X | | 2 |
| 62 | MP4C | Z | 30.609 | 2 |
| 63 | MP4C | Mx | -53.016 | 2 |
| 64 | MP1A | | .0153 | 2 |
| 65 | MP1A | X Z | 8.725 | 4 |
| 66 | MP1A | | -15.113 | 4 |
| 67 | MP1B | Mx | .0044 | 4 |
| 68 | MP1B MP1B | X | 8.725 | 4 |
| 69 | | Z | -15.113 | 4 |
| | MP1B | Mx | .0044 | 4 |
| 70 71 | MP1C | X | 8.725 | 4 |
| | MP1C | Z | -15.113 | 4 |
| 72 | MP1C | Mx | .0044 | 4 |
| 73 | MP1A | X | 37.037 | 2 |
| 74 | MP1A | Z | -64.15 | 2 |
| 75 | MP1A | Mx | .0185 | |
| 76 | MP1B | X | 27.435 | 2 2 |
| 77 | MP1B | Z | -47.519 | 2 |
| 78 | MP1B | Mx | 0274 | 2 |
| 79 | MP1C | X | 37.037 | 2 |
| 30 | MP1C | Z | -64.15 | 2 |
| 31 | MP1C | Mx | .0185 | 2 |
| 32 | MP2A | X | 90.993 | .25 |
| 33 | MP2A | Z | -157.604 | .25 |
| 34 | MP2A | Mx | 0455 | .25 |
| 35 | MP2A | X | 90.993 | 4.75 |
| 36 | MP2A | Ž | -157.604 | |
| 37 | MP2A | Mx | 0455 | 4.75 |
| 38 | MP2B | X | 66.061 | 4.75 |
| 89 | MP2B | 7 | -114.42 | .25 |
| | | <u> </u> | -1 14.4Z | .25 |



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

| Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|---|--|--|
| | .0661 | .25 |
| X | 66.061 | 4.75 |
| 7 | | 4.75 |
| Mx | | 4.75 |
| X | | .25 |
| 7 | | .25 |
| Mx | | .25 |
| X | 90.993 | 4.75 |
| 7 | | 4.75 |
| Mx | | 4.75 |
| Member Label MP2B MP2B MP2B MP2B MP2B MP2C MP2C MP2C MP2C MP2C MP2C MP2C MP2C | Member Label Direction MP2B Mx MP2B X MP2B Z MP2B Mx MP2C X MP2C Z MP2C Mx MP2C X MP2C X MP2C X MP2C Z | Member Label Direction Magnitude[lb,k-ft] MP2B Mx .0661 MP2B X 66.061 MP2B Z -114.42 MP2B Mx .0661 MP2C X 90.993 MP2C Z -157.604 MP2C Mx 0455 MP2C X 90.993 MP2C X 90.993 MP2C X 90.993 MP2C X 90.993 MP2C Z -157.604 |

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

| | Member Label | Direction | Magnitude[lb.k-ft] | Location[ft,%] |
|-------|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 126.064 | .25 |
| 2 | MP1A | Z | -72.783 | .25 |
| 3 | MP1A | Mx | 063 | .25 |
| 4 | MP1A | X | 126.064 | 4.75 |
| 5 | MP1A | Ž | -72,783 | 4.75 |
| 6 | MP1A | Mx | 063 | 4.75 |
| 7 | MP1B | X | 126.064 | .25 |
| 8 | MP1B | Z | -72.783 | .25 |
| 9 | MP1B | Mx | .063 | .25 |
| 10 | MP1B | X | 126.064 | 4.75 |
| 11 | MP1B | Z | -72.783 | 4.75 |
| 12 | MP1B | Mx | .063 | 4.75 |
| 13 | MP1C | X | 169.763 | .25 |
| 14 | MP1C | Ž | -98.013 | .25 |
| 15 | MP1C | Mx | 0 | .25 |
| | MP1C | X | 169.763 | 4.75 |
| 16 | MP1C | Ž | -98.013 | 4.75 |
| 17 | MP1C | Mx | 0 | 4.75 |
| | MP4A | X | 126.064 | .25 |
| 19 | MP4A | Ž | -72.783 | .25 |
| 20 21 | MP4A | Mx | 063 | .25 |
| | MP4A | X | 126.064 | 4.75 |
| 22 | MP4A | Z | -72.783 | 4.75 |
| 23 | MP4A | Mx | 063 | 4.75 |
| 24 | MP4B | X | 126.064 | .25 |
| 25 | MP4B | Z | -72.783 | .25 |
| 26 | MP4B MP4B | Mx | .063 | .25 |
| 27 | | X | 126.064 | 4.75 |
| 28 | MP4B MP4B | | -72.783 | 4.75 |
| 29 | | Mx | .063 | 4.75 |
| 30 | MP4B MP4C | X | 169.763 | .25 |
| 31 | | - Z | -98.013 | .25 |
| 32 | MP4C | Mx | 0 | .25 |
| 33 | MP4C | X | 169.763 | 4.75 |
| 34 | MP4C | Ž | -98.013 | 4.75 |
| 35 | MP4C | Mx | 0 | 4.75 |
| 36 | MP4C | X | 38.058 | 1.5 |
| 37 | MP3A | Ž | -21.973 | 1.5 |
| 38 | MP3A | Mx | 019 | 1.5 |
| 39 | MP3A | X | 38.058 | 3.5 |
| 40 | MP3A | | -21.973 | 3.5 |
| 41 | MP3A | Z Mx | 019 | 3.5 |
| 42 | MP3A | | 38.058 | 1.5 |
| 43 | MP3B | X | 30.030 | |



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

| 44 | Member Label MP3B | Direction | Magnitude[lb,k-ft] | Location[ft.%] |
|----|----------------------|-----------|--------------------|----------------|
| 45 | MP3B | Z | -21.973 | 1.5 |
| 46 | MP3B | Mx | .019 | 1.5 |
| 47 | MP3B | X | 38.058 | 3.5 |
| 48 | MP3B | Mx | -21.973 | 3.5 |
| 49 | MP3C | | .019 | 3.5 |
| 50 | MP3C | X | 70.626 | 1.5 |
| 51 | MP3C | | -40.776 | 1.5 |
| 52 | MP3C | Mx | 0 | 1.5 |
| 53 | MP3C | X | 70.626 | 3.5 |
| 54 | MP3C | | -40.776 | 3.5 |
| 55 | MP4A | Mx V | | 3.5 |
| 56 | MP4A | X Z | 43.512 | 2 |
| 57 | MP4A | Mx | -25.122 | 2 |
| 58 | MP4B | | .0218 | 2 |
| 59 | MP4B | X | 43.512 | 2 |
| 60 | MP4B | | -25.122 | 2 |
| 61 | MP4C | Mx | 0218 | 2 |
| 62 | MP4C | X | 57.768 | 2 |
| 63 | MP4C | Z | -33.352 | 2 |
| 64 | MP1A | Mx | 0 | 2 |
| 65 | MP1A | X | 17.759 | 4 |
| 66 | MP1A | Z | -10.253 | 4 |
| 67 | MP1B | Mx | .0089 | 4 |
| 68 | MP1B | X | 17.759 | 4 |
| 69 | MP1B | Z | -10.253 | 4 |
| 70 | MP1C | Mx | .0089 | 4 |
| 71 | MP1C MP1C | <u>X</u> | 17.759 | 4 |
| 72 | MP1C | Z | -10.253 | 4 |
| 73 | MP1A | Mx | .0089 | 4 |
| 74 | MP1A | X | 53.063 | 2 |
| 75 | MP1A | Z | -30.636 | 2 |
| 76 | MP1B | Mx | .0265 | 2 |
| 77 | MP1B | X Z | 53.063 | 2 |
| 78 | MP1B | | -30.636 | 2 |
| 79 | MP1C | Mx | 0265 | 2 |
| 80 | MP1C | X | 69.694 | 2 2 |
| 81 | MP1C | | -40.238 | 2 |
| 82 | MP2A | Mx | 0 | 2 |
| 83 | MP2A | X | 128.815 | .25 |
| 84 | MP2A | | -74.371 | .25 |
| 85 | MP2A | Mx | 0644 | .25 |
| 86 | MP2A | X | 128.815 | 4.75 |
| 87 | MP2A | | -74.371 | 4.75 |
| 88 | MP2B | Mx | 0644 | 4.75 |
| 89 | MP2B | X | 128.815 | .25 |
| 90 | MP2B | | -74.371 | .25 |
| 91 | MP2B | Mx | .0644 | .25 |
| 92 | MP2B | X | 128.815 | 4.75 |
| 93 | MP2B | | -74.371 | 4.75 |
| 94 | MP2C | Mx | .0644 | 4.75 |
| 95 | MP2C MP2C | X | 171.999 | .25 |
| 96 | MP2C | | -99.304 | .25 |
| 97 | MP2C | Mx V | 0 | .25 |
| 98 | MP2C | X | 171.999 | 4.75 |
| 99 | | Z | -99.304 | 4.75 |
| 33 | MP2C | Mx | | 4.75 |



: Colliers Engineering & Design

Project # 21777291
Antenna Mount Analysis

Dec 19, 2023 9:31 AM Checked By:____

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

| | ember Label | C 6 : Antenna Wo | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|------------------|--------------------|----------------|
| 1 | MP1A | X | 128.747 | .25 |
| 2 | MP1A | Z | 0 | .25 |
| 3 | MP1A | Mx | 0644 | .25 |
| 4 | MP1A | X | 128.747 | 4.75 |
| | MP1A | Z | 0 | 4.75 |
| 5 | MP1A | Mx | 0644 | 4.75 |
| 3 | | X | 179.206 | .25 |
| 7 | MP1B | Z | 0 | .25 |
| 3 | MP1B | Mx | .0448 | .25 |
| 9 | MP1B | X | 179.206 | 4.75 |
| 0 | MP1B | Z | 0 | 4.75 |
| 1 | MP1B | | .0448 | 4.75 |
| 2 | MP1B | Mx | 179,206 | .25 |
| 3 | MP1C | X | 0 | .25 |
| 4 | MP1C | Z | .0448 | .25 |
| 5 | MP1C | Mx | | 4.75 |
| 6 | MP1C | X | 179.206 | 4.75 |
| 7 | MP1C | Z | 0 | 4.75 |
| 8 | MP1C | Mx | .0448 | .25 |
| 9 | MP4A | X | 128.747 | |
| 20 | MP4A | Z | 0 | .25 |
| 21 | MP4A | Mx | 0644 | .25 |
| 22 | MP4A | X | 128.747 | 4.75 |
| 23 | MP4A | Z | 0 | 4.75 |
| | MP4A | Mx | 0644 | 4.75 |
| 24 | | X | 179.206 | .25 |
| 25 | MP4B | Ž | 0 | .25 |
| 26 | MP4B | Mx | .0448 | .25 |
| 27 | MP4B | | 179.206 | 4.75 |
| 28 | MP4B | X | 0 | 4.75 |
| 29 | MP4B | Z | .0448 | 4.75 |
| 30 | MP4B | Mx | 179.206 | .25 |
| 31 | MP4C | X | | .25 |
| 32 | MP4C | Z | 0 | .25 |
| 33 | MP4C | Mx | .0448 | 4.75 |
| 34 | MP4C | X | 179.206 | 4.75 |
| 35 | MP4C | Z | 0 | 4.75 |
| 36 | MP4C | Mx | .0448 | |
| 37 | MP3A | X | 31.41 | 1.5 |
| 38 | MP3A | Z | 0 | 1.5 |
| 39 | MP3A | Mx | 0157 | 1.5 |
| | MP3A | X | 31.41 | 3.5 |
| 10 | MP3A | Ž | 0 | 3.5 |
| 11 | MD3V | Mx | 0157 | 3.5 |
| 12 | MP3A | X | 69.016 | 1.5 |
| 43 | MP3B | Ž | 0 | 1.5 |
| 14 | MP3B | | .0173 | 1.5 |
| 45 | MP3B | Mx. | 69.016 | 3.5 |
| 46 | MP3B | X | 0 | 3.5 |
| 17 | MP3B | Z | | 3.5 |
| 48 | MP3B | Mx | .0173 | 1.5 |
| 19 | MP3C | X | 69.016 | 1.5 |
| 50 | MP3C | Z | 0 | 1.5 |
| 51 | MP3C | Mx | .0173 | 1.5 |
| 52 | MP3C | X | 69.016 | 3.5 |
| 53 | MP3C | Z | 0 | 3.5 |
| | MP3C | Mx | .0173 | 3.5 |
| 54 | MP4A | X | 44.757 | 2 |
| 55 | | Z | 0 | 2 |
| 56 57 | MP4A MP4A | Mx | .0224 | 2 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:___

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

| F0 | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|-----------|--------------------|----------------|
| 58 59 | MP4B | X | 61.218 | 2 |
| | MP4B | | . 0 | |
| 60 | MP4B | Mx | 0153 | 2 |
| 61 | MP4C | X | 61.218 | 2 |
| 62 | MP4C | Z | 0 | 2 |
| 63 | MP4C | Mx | 0153 | 2 |
| 64 | MP1A | X | 22.034 | 4 |
| 65 | MP1A | Z | 0 | 4 |
| 66 | MP1A | Mx | .011 | 4 |
| 67 | MP1B | X | 22.034 | 4 |
| 68 | MP1B | Z | 0 | 4 |
| 69 | MP1B | Mx | .011 | 4 |
| 70 | MP1C | X | 22.034 | 4 |
| 71 | MP1C | Z | 0 | 4 |
| 72 | MP1C | Mx | .011 | 4 |
| 73 | MP1A | X | 54.87 | 2 |
| 74 | MP1A | Z | 0 | 2 |
| 75 | MP1A | Mx | .0274 | 2 |
| 76 | MP1B | X | 74.074 | 2 |
| 77 | MP1B | Z | 0 | 2 |
| 78 | MP1B | Mx | 0185 | 2 |
| 79 | MP1C | X | 74.074 | 2 |
| 80 | MP1C | Z | 0 | 2 |
| 81 | MP1C | Mx | 0185 | 2 |
| 82 | MP2A | X | 132.121 | .25 |
| 83 | MP2A | Z | 0 | .25 |
| 84 | MP2A | Mx | 0661 | .25 |
| 85 | MP2A | X | 132.121 | |
| 86 | MP2A | Z | 0 | 4.75 4.75 |
| 87 | MP2A | Mx | 0661 | |
| 88 | MP2B | X | 181.986 | 4.75 |
| 89 | MP2B | Z | 0 | .25 |
| 90 | MP2B | Mx | .0455 | .25 |
| 91 | MP2B | X | 181.986 | .25 |
| 92 | MP2B | Z | 0 | 4.75 |
| 93 | MP2B | Mx | .0455 | 4.75 |
| 94 | MP2C | X | 181.986 | 4.75 |
| 95 | MP2C | Z | | .25 |
| 96 | MP2C | Mx | .0455 | .25 |
| 97 | MP2C | X | | .25 |
| 98 | MP2C | Z | 181.986 | 4.75 |
| 99 | MP2C | Mx | .0455 | 4.75 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 126.064 | .25 |
| 2 | MP1A | Z | 72.783 | .25 |
| 3 | MP1A | Mx | 063 | .25 |
| 4 | MP1A | X | 126.064 | 4.75 |
| 5 | MP1A | Z | 72.783 | |
| 6 | MP1A | Mx | 063 | 4.75 |
| 7 | MP1B | X | 169.763 | 4.75 .25 |
| 8 | MP1B | 7 | 98.013 | |
| 9 | MP1B | Mx | 0 | .25 |
| 10 | MP1B | X | 169.763 | .25 |
| 11 | MP1B | Z | 98.013 | 4.75 4.75 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:__

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft.%] |
|----------|--------------|-----------|--------------------|----------------|
| 12 | MP1B | Mx | 0 | 4.75 |
| 13 | MP1C | X | 126.064 | .25 |
| 14 | MP1C | Z | 72.783 | .25 |
| 15 | MP1C | Mx | .063 | .25 |
| | MP1C | X | 126.064 | 4.75 |
| 16 | | Z | 72.783 | 4.75 |
| 17 | MP1C | Mx | .063 | 4.75 |
| 18 | MP1C | X | 126.064 | .25 |
| 19 | MP4A | Ž | 72.783 | .25 |
| 20 | MP4A | | 063 | .25 |
| 21 | MP4A | Mx | 126,064 | 4.75 |
| 22 | MP4A | <u>X</u> | | 4.75 |
| 23 | MP4A | Z | 72.783 | 4.75 |
| 24 | MP4A | Mx | 063 | .25 |
| 25 | MP4B | X | 169.763 | .25 |
| 26 | MP4B | Z | 98.013 | |
| 27 | MP4B | Mx | 0 | .25 |
| 28 | MP4B | X | 169.763 | 4.75 |
| 29 | MP4B | Z | 98.013 | 4.75 |
| 30 | MP4B | Mx | 0 | 4.75 |
| 31 | MP4C | X | 126.064 | .25 |
| 32 | MP4C | Z | 72.783 | .25 |
| | MP4C | Mx | .063 | .25 |
| 33 | MP4C | X | 126.064 | 4.75 |
| 34 | | Z | 72.783 | 4.75 |
| 35 | MP4C | Mx | .063 | 4.75 |
| 36 | MP4C | | 38.058 | 1.5 |
| 37 | MP3A | X | 21.973 | 1.5 |
| 38 | MP3A | | 019 | 1.5 |
| 39 | MP3A | Mx | | 3.5 |
| 40 | MP3A | X | 38.058 | 3.5 |
| 41 | MP3A | Z | 21.973 | 3.5 |
| 42 | MP3A | Mx | 019 | 3.0 |
| 43 | MP3B | X | 70.626 | 1.5 |
| 44 | MP3B | Z | 40.776 | 1.5 |
| 45 | MP3B | Mx | 0 | 1.5 |
| 46 | MP3B | X | 70.626 | 3.5 |
| 47 | MP3B | Z | 40.776 | 3,5 |
| 48 | MP3B | Mx | 0 | 3.5 |
| 49 | MP3C | X | 38.058 | 1.5 |
| | MP3C | Ž | 21.973 | 1.5 |
| 50 | MP3C | Mx | .019 | 1.5 |
| 51 | | X | 38.058 | 3.5 |
| 52 | MP3C | Z | 21.973 | 3.5 |
| 53 | MP3C | | .019 | 3.5 |
| 54 | MP3C | Mx | 43.512 | 2 |
| 55 | MP4A | X | 25.122 | 2 |
| 56 | MP4A | Z | | 2 |
| 57 | MP4A | Mx | .0218 | 2 |
| 58 | MP4B | X | 57.768 | 2 |
| 59 | MP4B | Z | 33.352 | |
| 60 | MP4B | Mx | 0 | 2 |
| 61 | MP4C | X | 43.512 | 2 |
| 62 | MP4C | Z | 25.122 | 2 |
| 63 | MP4C | Mx | 0218 | 2 |
| 64 | MP1A | X | 17.759 | 4 |
| | MP1A | Z | 10.253 | 4 |
| 65 | MP1A MP1A | Mx | .0089 | 4 |
| 66 67 | MP1B | X | 17.759 | 4 |
| | | | 10.253 | 4 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 69 | MP1B | Mx | .0089 | 4 |
| 70 | MP1C | X | 17.759 | 4 |
| 71 | MP1C | Z | 10.253 | 4 |
| 72 | MP1C | Mx | .0089 | 4 |
| 73 | MP1A | X | 53.063 | 2 |
| 74 | MP1A | Z | 30.636 | 2 |
| 75 | MP1A | Mx | .0265 | 2 |
| 76 | MP1B | X | 69.694 | 2 |
| 77 | MP1B | Z | 40.238 | 2 |
| 78 | MP1B | Mx | 0 | 2 |
| 79 | MP1C | X | 53.063 | 2 |
| 80 | MP1C | Z | 30.636 | 2 |
| 81 | MP1C | Mx | 0265 | 2 |
| 82 | MP2A | X | 128.815 | .25 |
| 83 | MP2A | Z | 74.371 | .25 |
| 84 | MP2A | Mx | 0644 | .25 |
| 85 | MP2A | X | 128.815 | 4.75 |
| 86 | MP2A | Z | 74.371 | 4.75 |
| 87 | MP2A | Mx | 0644 | 4.75 |
| 88 | MP2B | X | 171.999 | .25 |
| 89 | MP2B | Z | 99.304 | .25 |
| 90 | MP2B | Mx | 0 | .25 |
| 91 | MP2B | X | 171.999 | 4.75 |
| 92 | MP2B | Z | 99.304 | 4.75 |
| 93 | MP2B | Mx | 0 | 4.75 |
| 94 | MP2C | X | 128.815 | .25 |
| 95 | MP2C | Z | 74.371 | .25 |
| 96 | MP2C | Mx | .0644 | .25 |
| 97 | MP2C | X | 128.815 | 4.75 |
| 98 | MP2C | 7 | 74.371 | 4.75 |
| 99 | MP2C | Mx | .0644 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 89.603 | .25 |
| 2 | MP1A | Z | 155.197 | .25 |
| 3 | MP1A | Mx | 0448 | .25 |
| 4 | MP1A | X | 89.603 | 4.75 |
| 5 | MP1A | Z | 155.197 | 4.75 |
| 6 | MP1A | Mx | 0448 | 4.75 |
| 7 | MP1B | X | 89.603 | .25 |
| 8 | MP1B | Z | 155,197 | .25 |
| 9 | MP1B | Mx | 0448 | .25 |
| 10 | MP1B | X | 89.603 | 4.75 |
| 11 | MP1B | Z | 155.197 | 4.75 |
| 12 | MP1B | Mx | 0448 | 4.75 |
| 13 | MP1C | X | 64.373 | .25 |
| 14 | MP1C | Z | 111.498 | |
| 15 | MP1C | Mx | .0644 | .25 |
| 16 | MP1C | X | 64.373 | .25 |
| 17 | MP1C | Ž | 111.498 | 4.75 |
| 18 | MP1C | Mx | .0644 | 4.75 |
| 19 | MP4A | X | | 4.75 |
| 20 | MP4A | ż ż | 89.603 | .25 |
| 21 | MP4A | Mx | 155.197 | .25 |
| 22 | MP4A | X | 0448 89.603 | .25 4.75 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:__

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

| | Member Label | Direction | (150 Deg)) (Continued) Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--|----------------|
| 23 | MP4A | Z | 155.197 | 4.75 |
| 4 | MP4A | Mx | 0448 | 4.75 |
| 25 | MP4B | X | 89.603 | .25 |
| 26 | MP4B | Z | 155.197 | .25 |
| 7 | MP4B | Mx | 0448 | .25 |
| 28 | MP4B | X | 89.603 | 4.75 |
| 29 | MP4B | Z | 155.197 | 4.75 |
| 30 | MP4B | Mx | 0448 | 4.75 |
| 31 | MP4C | X | 64.373 | .25 |
| 32 | MP4C | Z | 111.498 | .25 |
| 33 | MP4C | Mx | .0644 | .25 |
| 34 | MP4C | X | 64.373 | 4.75 4.75 |
| 35 | MP4C | Z | 111.498 | |
| 36 | MP4C | Mx | .0644 | 4.75 |
| 37 | MP3A | X | 34,508 | 1.5 |
| 38 | MP3A | Z | 59.77 | 1.5 |
| 39 | MP3A | Mx | 0173 | 1.5 |
| 40 | MP3A | X | 34.508 | 3.5 |
| 41 | MP3A | Z | 59.77 | 3.5 |
| 42 | MP3A | Mx | 0173 | 3.5 |
| 43 | MP3B | X | 34.508 | 1.5 |
| 44 | MP3B | Z | 59.77 | 1.5 1.5 |
| 45 | MP3B | Mx | 0173 | |
| 46 | MP3B | X | 34.508 | 3.5 |
| 47 | MP3B | Z | 59.77 | 3.5 |
| 48 | MP3B | Mx | 0173 | 3.5 1.5 |
| 49 | MP3C | X | 15.705 | |
| 50 | MP3C | Z | 27.202 | 1.5 1.5 |
| 51 | MP3C | Mx | .0157 | 3.5 |
| 52 | MP3C | X | 15.705 | |
| 53 | MP3C | Z | 27.202 | 3.5 |
| 54 | MP3C | Mx | .0157 | 3.5 |
| 55 | MP4A | X | 30.609 | 2 2 |
| 56 | MP4A | Z | 53.016 | |
| 57 | MP4A | Mx | .0153 | 2 |
| 58 | MP4B | X | 30.609 | <u>Z</u> |
| 59 | MP4B | Z | 53.016 | 2 2 |
| 60 | MP4B | Mx | .0153 | |
| 61 | MP4C | X | 22.378 | 2 2 |
| 62 | MP4C | Z | 38.76 | |
| 63 | MP4C | Mx | 0224 | 2 |
| 64 | MP1A | X | 8.725 | |
| 65 | MP1A | Z | 15.113 | 4 |
| 66 | MP1A | Mx | .0044 | 4 |
| 67 | MP1B | X | 8,725 | 4 4 |
| 68 | MP1B | Z | 15.113 | 4 |
| 69 | MP1B | Mx | .0044 | 4 |
| 70 | MP1C | X | 8.725 | 4 |
| 71 | MP1C | Z | 15.113 | 4 4 |
| 72 | MP1C | Mx | .0044 | 2 |
| 73 | MP1A | X | 37.037 | 2 |
| 74 | MP1A | Z | 64.15 | 2 |
| 75 | MP1A | Mx | .0185 | 2 |
| 76 | MP1B | X | 37.037 | 2 |
| 77 | MP1B | Z | 64.15 | 2 |
| 78 | MP1B | Mx | .0185 | 2 |
| 79 | MP1C | X | 27.435 | 2 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 80 | MP1C | Z | 47.519 | 2 |
| 81 | MP1C | Mx | 0274 | 2 |
| 82 | MP2A | X | 90.993 | .25 |
| 83 | MP2A | Z | 157.604 | .25 |
| 84 | MP2A | Mx | 0455 | .25 |
| 85 | MP2A | X | 90.993 | 4.75 |
| 86 | MP2A | Z | 157.604 | 4.75 |
| 87 | MP2A | Mx | 0455 | 4.75 |
| 88 | MP2B | X | 90.993 | .25 |
| 89 | MP2B | Z | 157.604 | |
| 90 | MP2B | Mx | 0455 | .25 |
| 91 | MP2B | X | 90.993 | .25 |
| 92 | MP2B | 7 | 157.604 | 4.75 |
| 93 | MP2B | Mx | 0455 | 4.75 |
| 94 | MP2C | X | | 4.75 |
| 95 | MP2C | 7 Z | 66.061 114.42 | .25 |
| 96 | MP2C | Mx | | .25 |
| 97 | MP2C | X | .0661 | .25 |
| 98 | MP2C | Ž | 66.061 | 4.75 |
| 99 | MP2C | | 114.42 | 4.75 |
| 00 | IVIFZU | Mx | .0661 | 4.75 |

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

| | Member Label | Direction | Magnitude[ib,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 0 | .25 |
| 2 | MP1A | Z | 196.025 | .25 |
| 3 | MP1A | Mx | 0 | .25 |
| 4 | MP1A | X | 0 | 4.75 |
| 5 | MP1A | Z | 196.025 | 4.75 |
| 6 | MP1A | Mx | 0 | 4.75 |
| 7 | MP1B | X | 0 | .25 |
| 8 | MP1B | Z | 145.566 | .25 |
| 9 | MP1B | Mx | 063 | .25 |
| 10 | MP1B | X | 0 | 4.75 |
| 11 | MP1B | Z | 145.566 | 4.75 |
| 12 | MP1B | Mx | 063 | 4.75 |
| 13 | MP1C | X | 0 | |
| 14 | MP1C | Ž | 145.566 | .25 |
| 15 | MP1C | Mx | .063 | .25 |
| 16 | MP1C | X | .003 | .25 |
| 17 | MP1C | Z | 145.566 | 4.75 |
| 18 | MP1C | Mx | .063 | 4.75 |
| 19 | MP4A | X | 0 | 4.75 |
| 20 | MP4A | Ž | | .25 |
| 21 | MP4A | Mx | 196,025 | .25 |
| 22 | MP4A | X | 0 | .25 |
| 23 | MP4A | Ž | | 4.75 |
| 24 | MP4A | Mx | 196.025 | 4.75 |
| 25 | MP4B | X | 0 | 4.75 |
| 26 | MP4B | Ž | 0 | .25 |
| 27 | MP4B | | 145.566 | .25 |
| 28 | MP4B | Mx | 063 | .25 |
| 29 | MP4B | X | 0 | 4.75 |
| 30 | | Z | 145.566 | 4.75 |
| 31 | MP4B | Mx | 063 | 4.75 |
| | MP4C | X | 0 1 | .25 |
| 32 | MP4C | Z | 145.566 | .25 |
| 33 | MP4C | Mx | .063 | .25 |



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

| | Member Label | Direction | (180 Deg)) (Continued) Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--|----------------|
| 34 | MP4C | X | 0 | 4.75 |
| 35 | MP4C | Ž | 145.566 | 4.75 |
| 36 | MP4C | Mx | .063 | 4.75 |
| | MP3A | X | 0 | 1.5 |
| 37 | MP3A | Z | 81.552 | 1.5 |
| 38 | MP3A | Mx | 0 | 1.5 |
| 39 | | X | Ö | 3.5 |
| 40 | MP3A MP3A | Z | 81.552 | 3.5 |
| 11 | | Mx | 0 | 3.5 |
| 42 | MP3A | X | 0 | 1.5 |
| 43 | MP3B | Z | 43.945 | 1.5 |
| 44 | MP3B | Mx | 019 | 1.5 |
| 45 | MP3B | | 0 | 3.5 |
| 46 | MP3B | X | 43.945 | 3.5 |
| 47 | MP3B | Z | 019 | 3.5 |
| 48 | MP3B | Mx | 0 | 1.5 |
| 49 | MP3C | <u>X</u> | | 1.5 |
| 50 | MP3C | Z | 43.945 | 1.5 |
| 51 | MP3C | Mx | .019 | 3.5 |
| 52 | MP3C | X | 0 | 3.5 |
| 53 | MP3C | Z | 43.945 | 3.5 |
| 54 | MP3C | Mx | .019 | |
| 55 | MP4A | X | 0 | 2 |
| 56 | MP4A | Z | 66.705 | 2 |
| 57 | MP4A | Mx | . 0 | 2 |
| 58 | MP4B | X | 0 | 2 |
| 59 | MP4B | Z | 50.244 | 2 |
| 60 | MP4B | Mx | .0218 | 2 |
| 61 | MP4C | X | 0 | 2 |
| 62 | MP4C | Z | 50.244 | 2 |
| 63 | MP4C | Mx | 0218 | 2 |
| 64 | MP1A | X | 0 | 4 |
| | MP1A | Ž | 15.923 | 4 |
| 65 | MP1A | Mx | 0 | 4 |
| 66 | MP1B | X | 0 | 4 |
| 67 | MP1B | Z | 15.923 | 4 |
| 68 | | Mx | 0 | 4 |
| 69 | MP1B | X | 0 | 4 |
| 70 | MP1C | Z | 15.923 | 4 |
| 71 | MP1C | Mx | 0 | 4 |
| 72 | MP1C | | 0 | 2 |
| 73 | MP1A | X | 80.476 | 2 |
| 74 | MP1A | | 0 | 2 |
| 75 | MP1A | Mx | 0 | |
| 76 | MP1B | X | 61.271 | 2 2 |
| 77 | MP1B | Z | .0265 | 2 |
| 78 | MP1B | Mx . | | 2 2 |
| 79 | MP1C | X | 0 | 2 |
| 80 | MP1C | Z | 61.271 | 2 |
| 81 | MP1C | Mx | 0265 | .25 |
| 82 | MP2A | X | 0 | .25 |
| 83 | MP2A | Z | 198.607 | |
| 84 | MP2A | Mx | 0 | .25 |
| 85 | MP2A | X | 0 | 4.75 |
| 86 | MP2A | Z | 198.607 | 4.75 |
| 87 | MP2A | Mx | 0 | 4.75 |
| 88 | MP2B | X | 0 | .25 |
| 89 | MP2B | Ž | 148.743 | .25 |
| 09 | MP2B | Mx | 0644 | .25 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 91 | MP2B | X | O O | 4.75 |
| 92 | MP2B | Z | 148.743 | 4.75 |
| 93 | MP2B | Mx | 0644 | 4.75 |
| 94 | MP2C | X | 0 | .25 |
| 95 | MP2C | Z | 148.743 | .25 |
| 96 | MP2C | Mx | .0644 | .25 |
| 97 | MP2C | X | 0 | 4.75 |
| 98 | MP2C | 7 | 148.743 | 4.75 |
| 99 | MP2C | Mx | .0644 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -89.603 | .25 |
| 2 | MP1A | Z | 155.197 | .25 |
| 3 | MP1A | Mx | .0448 | .25 |
| 4 | MP1A | X | -89.603 | 4.75 |
| 5 | MP1A | Z | 155.197 | 4.75 |
| 6 | MP1A | Mx | .0448 | 4.75 |
| 7 | MP1B | X | -64.373 | .25 |
| 8 | MP1B | Z | 111.498 | .25 |
| 9 | MP1B | Mx | 0644 | .25 |
| 10 | MP1B | X | -64,373 | 4.75 |
| 11 | MP1B | Z | 111.498 | 4.75 |
| 12 | MP1B | Mx | 0644 | 4.75 |
| 13 | MP1C | X | -89.603 | .25 |
| 14 | MP1C | Z | 155.197 | .25 |
| 15 | MP1C | Mx | .0448 | .25 |
| 16 | MP1C | X | -89.603 | 4.75 |
| 17 | MP1C | Z | 155.197 | 4.75 |
| 18 | MP1C | Mx | .0448 | 4.75 |
| 19 | MP4A | X | -89.603 | .25 |
| 20 | MP4A | Ž | 155.197 | |
| 21 | MP4A | Mx | .0448 | .25 |
| 22 | MP4A | X | -89.603 | .25 |
| 23 | MP4A | Z | 155.197 | 4.75 4.75 |
| 24 | MP4A | Mx | .0448 | 4.75 |
| 25 | MP4B | X | -64.373 | |
| 26 | MP4B | Z | 111.498 | .25 |
| 27 | MP4B | Mx | 0644 | .25 |
| 28 | MP4B | X | -64.373 | .25 |
| 29 | MP4B | Z | 111.498 | 4.75 |
| 30 | MP4B | Mx | | 4.75 |
| 31 | MP4C | X | 0644 -89.603 | 4.75 |
| 32 | MP4C | Z | | .25 |
| 33 | MP4C | Mx | 155.197 | .25 |
| 34 | MP4C | X | .0448 | .25 |
| 35 | MP4C | Z | -89.603 | 4.75 |
| 36 | MP4C | Mx | 155.197 | 4.75 |
| 37 | MP3A | X | .0448 | 4.75 |
| 38 | MP3A | Z | -34.508 | 1.5 |
| 39 | MP3A | | 59.77 | 1.5 |
| 40 | MP3A | Mx | .0173 | 1.5 |
| 41 | MP3A | X | -34.508 | 3.5 |
| 12 | MP3A | Z | 59.77 | 3.5 |
| 43 | | Mx | .0173 | 3.5 |
| 44 | MP3B | X | -15.705 | 1.5 |
| 44 | MP3B | Z | 27.202 | 1.5 |



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Project # 21777291
Antenna Mount Analysis

Dec 19, 2023 9:31 AM Checked By:_

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

| | Member Label | C 10 : Antenna W | Magnitude[lb,k-ft] | Location[ft.%] |
|----|--------------|------------------|--------------------|----------------|
| 45 | MP3B | Mx | 0157 | 1.5 |
| 46 | MP3B | X | -15.705 | 3.5 |
| 47 | MP3B | Z | 27.202 | 3.5 |
| 48 | MP3B | Mx | 0157 | 3.5 |
| 49 | MP3C | X | -34.508 | 1.5 |
| 50 | MP3C | Z | 59.77 | 1.5 |
| 51 | MP3C | Mx | .0173 | 1.5 |
| 52 | MP3C | X | -34.508 | 3.5 |
| 53 | MP3C | Z | 59.77 | 3.5 |
| 54 | MP3C | Mx | .0173 | 3.5 |
| 55 | MP4A | X | -30,609 | 2 |
| 56 | MP4A | Z | 53.016 | 2 |
| | MP4A | Mx | 0153 | 2 |
| 57 | MP4B | X | -22.378 | 2 |
| 58 | | Z | 38.76 | 2 |
| 59 | MP4B | Mx | .0224 | 2 |
| 60 | MP4B | X | -30.609 | 2 |
| 61 | MP4C | Ž | 53.016 | 2 |
| 62 | MP4C | Mx | 0153 | 2 |
| 63 | MP4C | | -8.725 | 4 |
| 64 | MP1A | X | 15.113 | 4 |
| 65 | MP1A | Z | 0044 | 4 |
| 66 | MP1A | Mx | -8.725 | 4 |
| 67 | MP1B | X | 15.113 | 4 |
| 68 | MP1B | Z | 0044 | 4 |
| 69 | MP1B | Mx | -8.725 | 4 |
| 70 | MP1C | X | | 4 |
| 71 | MP1C | Z | 15.113 | 4 |
| 72 | MP1C | Mx | 0044 | 2 |
| 73 | MP1A | X | -37.037 | 2 |
| 74 | MP1A | Z | 64.15 | 2 |
| 75 | MP1A | Mx | 0185 | |
| 76 | MP1B | X | -27.435 | 2 |
| 77 | MP1B | Z | 47.519 | 2 |
| 78 | MP1B | Mx | .0274 | 2 |
| 79 | MP1C | X | -37.037 | 2 |
| 80 | MP1C | Z | 64.15 | 2 |
| 81 | MP1C | Mx | 0185 | 2 |
| 82 | MP2A | X | -90.993 | .25 |
| 83 | MP2A | Z | 157.604 | .25 |
| | MP2A | Mx | .0455 | .25 |
| 84 | MP2A | X | -90.993 | 4.75 |
| 85 | MP2A | Z | 157.604 | 4.75 |
| 86 | MP2A | Mx | .0455 | 4.75 |
| 87 | | X | -66.061 | .25 |
| 88 | MP2B | Ž | 114.42 | .25 |
| 89 | MP2B | Mx | 0661 | .25 |
| 90 | MP2B | | -66.061 | 4.75 |
| 91 | MP2B | X | 114.42 | 4.75 |
| 92 | MP2B | | 0661 | 4.75 |
| 93 | MP2B | Mx | -90.993 | .25 |
| 94 | MP2C | X | -90.993 157.604 | .25 |
| 95 | MP2C | Z | .0455 | .25 |
| 96 | MP2C | Mx | | 4.75 |
| 97 | MP2C | X | -90.993 | 4.75 |
| 98 | MP2C | Z | 157.604 | 4.75 |
| 99 | MP2C | Mx | .0455 | 7.10 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

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

| 1 | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|--|--------------|-----------|--------------------|----------------|
| 2 | MP1A MP1A | X | -126.064 | .25 |
| 3 | | | 72.783 | .25 |
| 4 | MP1A MP1A | Mx | .063 | .25 |
| 5 | | X | -126.064 | 4.75 |
| 6 | MP1A | Z | 72.783 | 4.75 |
| 7 | MP1A | Mx | .063 | 4.75 |
| _ | MP1B | X | -126.064 | .25 |
| 8 | MP1B | Z | 72.783 | .25 |
| 9 | MP1B | Mx | 063 | .25 |
| 10 | MP1B | X | -126.064 | 4.75 |
| 11 | MP1B | Z | 72.783 | 4.75 |
| 12 | MP1B | Mx | 063 | 4.75 |
| 13 | MP1C | X | -169.763 | .25 |
| 14 | MP1C | Z | 98.013 | .25 |
| 15 | MP1C | Mx | 0 | .25 |
| 16 | MP1C | X | -169.763 | 4.75 |
| 17 | MP1C | Z | 98.013 | 4.75 |
| 18 | MP1C | Mx | 0 | 4.75 |
| 19 | MP4A | X | -126.064 | .25 |
| 20 | MP4A | Ž | 72.783 | |
| 21 | MP4A | Mx | .063 | .25 |
| 22 | MP4A | X | -126.064 | .25 |
| 23 | MP4A | Ž | 72.783 | 4.75 |
| 24 | MP4A | Mx | .063 | 4.75 |
| 25 | MP4B | X | -126.064 | 4.75 |
| 26 | MP4B | Z | | .25 |
| 27 | MP4B | Mx | 72.783 | .25 |
| 28 | MP4B | X | 063 | .25 |
| 29 | MP4B | | -126.064 | 4.75 |
| 30 | MP4B | Z | 72.783 | 4.75 |
| 31 | MP4C | Mx | 063 | 4.75 |
| 32 | MP4C | X | -169.763 | .25 |
| 33 | MP4C | Z | 98.013 | .25 |
| 34 | MP4C | Mx | 0 | .25 |
| 35 | | X | -169.763 | 4.75 |
| 36 | MP4C | Z | 98.013 | 4.75 |
| 37 | MP4C | Mx | 0 | 4.75 |
| 38 | MP3A | X | -38.058 | 1.5 |
| | MP3A | Z | 21.973 | 1.5 |
| 39 | MP3A | Mx | .019 | 1,5 |
| 40 | MP3A | X | -38.058 | 3.5 |
| 41 | MP3A | Z | 21.973 | 3.5 |
| 12 | MP3A | Mx | .019 | 3.5 |
| 43 | MP3B | X | -38.058 | 1.5 |
| 14 | MP3B | | 21.973 | 1.5 |
| 45 | MP3B | Mx | 019 | 1.5 |
| 16 | MP3B | X | -38.058 | 3.5 |
| 17 | MP3B | Z | 21.973 | 3.5 |
| 18 | MP3B | Mx | 019 | 3.5 |
| 19 | MP3C | X | -70.626 | 1.5 |
| 50 | MP3C | Ž | 40.776 | 1.5 |
| 51 | MP3C | Mx | 0 | 1.5 |
| 52 | MP3C | X | -70.626 | |
| 53 | MP3C | Z | 40.776 | 3.5 |
| 54 | MP3C | Mx | 0 | 3.5 |
| 5 | MP4A | X | -43.512 | 3.5 |
| 6 | MP4A | Ž | | 2 |
| 57 | MP4A | Mx | 25.122 | 2 |
| Defit and the last of the last | 1911 W.V. | IVIA | 0218 | 2 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:__

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|-----------|--------------------|----------------|
| 58 | MP4B | | -43.512 | 2 |
| 59 | MP4B | X Z | 25.122 | 2 |
| 60 | MP4B | Mx | .0218 | 2 |
| 61 | MP4C | X | -57.768 | 2 |
| 62 | MP4C | Z | 33.352 | 2 |
| 63 | MP4C | Mx | 0 | 2 |
| 64 | MP1A | X | -17.759 | 4 |
| 65 | MP1A | Z | 10.253 | 4 |
| 66 | MP1A | Mx | 0089 | 4 |
| 67 | MP1B | X | -17.759 | 4 |
| 68 | MP1B | Z | 10.253 | 4 |
| 69 | MP1B | Mx | 0089 | 4 |
| 70 | MP1C | X | -17.759 | 4 |
| 71 | MP1C | Z | 10.253 | 4 |
| 72 | MP1C | Mx | 0089 | 4 |
| 73 | MP1A | X | -53.063 | 2 |
| 74 | MP1A | Ž | 30.636 | 2 |
| 75 75 | MP1A | Mx | 0265 | 2 |
| 76 | MP1B | X | -53.063 | 2 |
| 77 | MP1B | Z | 30.636 | 2 |
| 78 | MP1B | Mx | .0265 | 2 |
| 79 | MP1C | X | -69.694 | 2 |
| 80 | MP1C | Z | 40,238 | 2 |
| 81 | MP1C | Mx | 0 | 2 |
| 82 | MP2A | X | -128.815 | .25 |
| 83 | MP2A | Z | 74.371 | .25 |
| 84 | MP2A | Mx | .0644 | .25 |
| 85 | MP2A | X | -128.815 | 4.75 |
| | MP2A | Ž | 74.371 | 4.75 |
| 86 | MP2A | Mx | .0644 | 4.75 |
| 87 | MP2B | X | -128.815 | .25 |
| 88 | MP2B | Z | 74.371 | .25 |
| 89 | MP2B | Mx | 0644 | .25 |
| 90 | MP2B | X | -128.815 | 4.75 |
| 91 | | Z | 74.371 | 4.75 |
| 92 | MP2B MP2B | Mx | 0644 | 4.75 |
| 93 | | X | -171.999 | .25 |
| 94 | MP2C | Ż | 99.304 | .25 |
| 95 | MP2C | Mx | 0 | .25 |
| 96 | MP2C | X | -171.999 | 4.75 |
| 97 | MP2C | Ž | 99.304 | 4.75 |
| 98 | MP2C MP2C | Mx | 0 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 4 | MP1A | X | -128.747 | .25 |
| 2 | MP1A | Ž | 0 | .25 |
| 3 | MP1A | Mx | .0644 | .25 |
| 4 | MP1A | X | -128.747 | 4.75 |
| 5 | MP1A | Z | 0 | 4.75 |
| 6 | MP1A | Mx | .0644 | 4.75 |
| 7 | MP1B | X | -179.206 | .25 |
| 8 | MP1B | Z | 0 | .25 |
| 9 | MP1B | Mx | -,0448 | .25 |
| 10 | MP1B | X | -179.206 | 4.75 |
| 11 | MP1B | Z | 0 | 4.75 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

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

| 12 | Member Label MP1B | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|----------------------|-----------|--------------------|----------------|
| 13 | MP1C | Mx | 0448 | 4.75 |
| 14 | MP1C | X | -179.206 | .25 |
| 15 | MP1C | | 0 | .25 |
| 16 | MP1C | Mx | 0448 | .25 |
| 17 | MP1C | X | -179.206 | 4.75 |
| 18 | | Z | 0 | 4.75 |
| 19 | MP1C | Mx | 0448 | 4.75 |
| | MP4A | X | -128.747 | .25 |
| 20 | MP4A | Z | 0 | .25 |
| 21 | MP4A | Mx | .0644 | .25 |
| 22 | MP4A | X | -128.747 | 4.75 |
| 23 | MP4A | Z | 0 | 4.75 |
| 24 | MP4A | Mx | .0644 | 4.75 |
| 25 | MP4B | X | -179.206 | .25 |
| 26 | MP4B | Z | 0 | .25 |
| 27 | MP4B | Mx | 0448 | .25 |
| 28 | MP4B | X | -179.206 | 4.75 |
| 29 | MP4B | Z | 0 | 4.75 |
| 30 | MP4B | Mx | 0448 | 4.75 |
| 31 | MP4C | X | -179.206 | .25 |
| 32 | MP4C | Z | 0 | .25 |
| 33 | MP4C | Mx | 0448 | .25 |
| 34 | MP4C | X | -179.206 | 4.75 |
| 35 | MP4C | Z | 0 | 4.75 |
| 36 | MP4C | Mx | 0448 | |
| 37 | MP3A | X | -31.41 | 4.75 |
| 38 | MP3A | Z | -31.41 | 1.5 |
| 39 | MP3A | Mx | | 1.5 |
| 40 | MP3A | X | .0157 | 1.5 |
| 41 | MP3A | Z | -31.41 | 3.5 |
| 42 | MP3A | Mx | 0 | 3.5 |
| 43 | MP3B | | .0157 | 3.5 |
| 44 | MP3B | X | -69.016 | 1.5 |
| 45 | MP3B | Z | 0 | 1.5 |
| 46 | MP3B | Mx | 0173 | 1.5 |
| 47 | MP3B | X | -69.016 | 3.5 |
| 48 | | Z | 0 | 3.5 |
| | MP3B | Mx | 0173 | 3.5 |
| 49 | MP3C | X | -69.016 | 1.5 |
| 50 | MP3C | Z | 0 | 1.5 |
| 51 | MP3C | Mx | 0173 | 1.5 |
| 52 | MP3C | X | -69.016 | 3.5 |
| 53 | MP3C | Z | 0 | 3.5 |
| 54 | MP3C | Mx | 0173 | 3.5 |
| 55 | MP4A | X | -44.757 | 2 |
| 56 | MP4A | Z | 0 | 2 |
| 57 | MP4A | Mx | 0224 | 2 |
| 58 | MP4B | X | -61.218 | 2 |
| 59 | MP4B | Z | 0 | 2 |
| 30 | MP4B | Mx | .0153 | 2 |
| 31 | MP4C | X | -61.218 | 2 |
| 32 | MP4C | Z | 0 | 2 |
| 33 | MP4C | Mx | .0153 | |
| 64 | MP1A | X | -22.034 | 2 |
| 35 | MP1A | Z | | 4 |
| 36 | MP1A | Mx | 011 | 4 |
| 67 | MP1B | X | -22.034 | 4 |
| | IVIL I D | Λ | -// 11.54 | 4 |

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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:___

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

| 1011100 | | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|---------|----------------------|-----------|--------------------|----------------|
| 00 | Member Label MP1B | Mx | 011 | 4 |
| 69 | MP1C | X | -22.034 | 4 |
| 70 | | 7 | 0 | 4 |
| 71 | MP1C | Mx | 011 | 4 |
| 72 | MP1C | X | -54.87 | 2 |
| 73 | MP1A | Ž | 0 | 2 |
| 74 | MP1A | Mx | 0274 | 2 |
| 75 | MP1A | X | -74.074 | 2 |
| 76 | MP1B | Ž | 0 | 2 |
| 77 | MP1B | Mx | .0185 | 2 |
| 78 | MP1B | X | -74.074 | 2 |
| 79 | MP1C | Ž | 0 | 2 |
| 80 | MP1C | | .0185 | 2 |
| 81 | MP1C | Mx | -132.121 | .25 |
| 82 | MP2A | X | 0 | .25 |
| 83 | MP2A | | .0661 | .25 |
| 84 | MP2A | Mx | -132.121 | 4.75 |
| 85 | MP2A | X | 0 | 4.75 |
| 86 | MP2A | Z | .0661 | 4.75 |
| 87 | MP2A | Mx | | .25 |
| 88 | MP2B | X | -181.986 0 | .25 |
| 89 | MP2B | Z | | .25 |
| 90 | MP2B | Mx | 0455 | 4.75 |
| 91 | MP2B | X | -181.986 | 4.75 |
| 92 | MP2B | Z | 0 | 4.75 |
| 93 | MP2B | Mx | 0455 | .25 |
| 94 | MP2C | X | -181.986 | .25 |
| 95 | MP2C | Z | 0 | .25 |
| 96 | MP2C | Mx | 0455 | 4.75 |
| 97 | MP2C | X | -181.986 | 4.75 |
| 98 | MP2C | Z | 0 | 4.75 |
| 99 | MP2C | Mx | 0455 | 4.70 |

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

| | 8.51 | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|-----|-------------------|-----------|--------------------|----------------|
| 4 1 | Member Label MP1A | X | -126.064 | .25 |
| 1 | | 7 | -72.783 | .25 |
| 2 | MP1A | Mx | .063 | .25 |
| 3 | MP1A | | -126.064 | 4.75 |
| 4 | MP1A | X 7 | -72.783 | 4.75 |
| 5 | MP1A | | .063 | 4.75 |
| 6 | MP1A | Mx | | .25 |
| 7 | MP1B | X | -169.763 | .25 |
| 8 | MP1B | Z | -98.013 | .25 |
| 9 | MP1B | Mx | 0 | 4.75 |
| 10 | MP1B | X | -169.763 | 4.75 |
| 11 | MP1B | Z | -98.013 | |
| 12 | MP1B | Mx | 0 | 4.75 |
| 13 | MP1C | X | -126.064 | .25 |
| 14 | MP1C | Z | -72.783 | .25 |
| 15 | MP1C | Mx | 063 | .25 |
| 16 | MP1C | X | -126.064 | 4.75 |
| 17 | MP1C | 7 | -72.783 | 4.75 |
| | | Mx | 063 | 4.75 |
| 18 | MP1C | X | -126.064 | .25 |
| 19 | MP4A | Z | -72.783 | .25 |
| 20 | MP4A | Mx | .063 | .25 |
| 21 | MP4A | X | -126.064 | 4.75 |
| 22 | MP4A | | 120.001 | |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 23 | MP4A | Z | -72.783 | 4.75 |
| 24 | MP4A | Mx | .063 | 4.75 |
| 25 | MP4B | X | -169.763 | .25 |
| 26 | MP4B | Z | -98.013 | .25 |
| 27 | MP4B | Mx | 0 | .25 |
| 28 | MP4B | X | -169.763 | 4.75 |
| 29 | MP4B | Z | -98.013 | 4.75 |
| 30 | MP4B | Mx | 0 | 4.75 |
| 31 | MP4C | X | -126.064 | .25 |
| 32 | MP4C | Z | -72.783 | .25 |
| 33 | MP4C | Mx | 063 | .25 |
| 34 | MP4C | X | -126.064 | 4.75 |
| 35 | MP4C | Z | -72.783 | 4.75 |
| 36 | MP4C | Mx | 063 | 4.75 |
| 37 | MP3A | X | -38.058 | 1.5 |
| 38 | MP3A | Z | -21.973 | 1.5 |
| 39 | MP3A | Mx | .019 | 1.5 |
| 40 | MP3A | X | -38.058 | 3.5 |
| 41 | MP3A | Z | -21.973 | 3.5 |
| 42 | MP3A | Mx | .019 | 3.5 |
| 43 | MP3B | X | -70.626 | 1.5 |
| 44 | MP3B | Z | -40.776 | 1.5 |
| 45 | MP3B | Mx | 0 | |
| 46 | MP3B | X | -70.626 | 1.5 |
| 47 | MP3B | Z | -40.776 | 3.5 |
| 48 | MP3B | Mx | 0 | 3.5 |
| 49 | MP3C | X | -38.058 | 3.5 |
| 50 | MP3C | Z | -21.973 | 1.5 |
| 51 | MP3C | Mx | 019 | 1.5 |
| 52 | MP3C | X | -38.058 | 1.5 |
| 53 | MP3C | Z | -21.973 | 3.5 |
| 54 | MP3C | Mx | | 3.5 |
| 55 | MP4A | X | 019 | 3.5 |
| 56 | MP4A | Z | -43.512 | 2 |
| 57 | MP4A | Mx | -25.122 | 2 |
| 58 | MP4B | X | 0218 | 2 |
| 59 | MP4B | Z | -57.768 | 2 |
| 60 | MP4B | Mx | -33.352 | 2 |
| 61 | MP4C | X | 0 | 2 |
| 32 | MP4C | Ž | -43.512 25.422 | 2 |
| 63 | MP4C | Mx | -25.122 | 2 |
| 64 | MP1A | X | .0218 | 2 |
| 35 | MP1A | Z | -17.759 | 4 |
| 36 | MP1A | Mx | -10.253 | 4 |
| 7 | MP1B | X | 0089 | 4 |
| 88 | MP1B | Z Z | -17,759 | 4 |
| 89 | MP1B | Mx | -10.253 | 4 |
| 0 | MP1C | X | 0089 | 4 |
| 1 | MP1C | Ž | -17.759 | 4 |
| 2 | MP1C | Mx | -10.253 | 4 |
| 3 | MP1A | X | 0089 | 4 |
| 4 | MP1A | Z | -53.063 | 2 |
| 5 | MP1A | | -30.636 | 2 |
| 6 | MP1B | Mx | 0265 | 2 2 |
| 7 | MP1B | Z | -69.694 | 2 |
| 8 | MP1B | | -40.238 | 2 |
| 9 | MP1C | Mx | 0 | 2 |
| | MIL TO | X | -53.063 | 2 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--|----------------|
| 00 | MP1C | Z | -30.636 | 2 |
| 80 | | Mx | .0265 | 2 |
| 81 | MP1C | X | -128.815 | .25 |
| 82 | MP2A | | -74.371 | .25 |
| 83 | MP2A | Z | .0644 | .25 |
| 84 | MP2A | Mx | The second secon | 4.75 |
| 85 | MP2A | X | -128.815 | |
| 86 | MP2A | Z | -74.371 | 4.75 |
| 87 | MP2A | Mx | .0644 | 4.75 |
| 88 | MP2B | X | -171.999 | .25 |
| 89 | MP2B | Z | -99.304 | .25 |
| | MP2B | Mx | 0 | .25 |
| 90 | MP2B | X | -171.999 | 4.75 |
| 91 | | Z | -99.304 | 4.75 |
| 92 | MP2B | Mx | 0 | 4.75 |
| 93 | MP2B | | -128.815 | .25 |
| 94 | MP2C | X | -74.371 | .25 |
| 95 | MP2C | Z | | .25 |
| 96 | MP2C | Mx | 0644 | 4.75 |
| 97 | MP2C | X | -128.815 | |
| 98 | MP2C | Z | -74.371 | 4.75 |
| 99 | MP2C | Mx | 0644 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -89.603 | .25 |
| 2 | MP1A | ż | -155.197 | .25 |
| | MP1A | Mx | .0448 | .25 |
| 3 | MP1A | X | -89.603 | 4.75 |
| 4 | MP1A | Z | -155.197 | 4.75 |
| 5 | | Mx | .0448 | 4.75 |
| 6 | MP1A | X | -89.603 | .25 |
| 7 | MP1B | Z | -155.197 | .25 |
| 8 | MP1B | Mx | .0448 | .25 |
| 9 | MP1B | X | -89.603 | 4.75 |
| 10 | MP1B | Z | -155.197 | 4.75 |
| 11 | MP1B | Mx | .0448 | 4.75 |
| 12 | MP1B | X | -64.373 | .25 |
| 13 | MP1C | -+ | -111.498 | .25 |
| 14 | MP1C | Mx | 0644 | .25 |
| 15 | MP1C | X | -64.373 | 4.75 |
| 16 | MP1C | Z | -111.498 | 4.75 |
| 17 | MP1C | | 0644 | 4.75 |
| 18 | MP1C | Mx | -89.603 | .25 |
| 19 | MP4A | X | -155.197 | .25 |
| 20 | MP4A | | .0448 | .25 |
| 21 | MP4A | Mx | -89.603 | 4.75 |
| 22 | MP4A | <u>X</u> | -155.197 | 4.75 |
| 23 | MP4A | Z | .0448 | 4.75 |
| 24 | MP4A | Mx | -89.603 | .25 |
| 25 | MP4B | X | | .25 |
| 26 | MP4B | Z | -155.197 | .25 |
| 27 | MP4B | Mx | .0448 | 4.75 |
| 28 | MP4B | X | -89.603 | 4.75 |
| 29 | MP4B | Z | -155.197 | 4.75 |
| 30 | MP4B | Mx | .0448 | .25 |
| 31 | MP4C | X | -64.373 | .25 |
| 32 | MP4C | Z | -111.498 | .25 |
| 33 | MP4C | Mx | 0644 | .25 |



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

| 34 | Member Label MP4C | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|----------------------|-----------|---------------------|----------------|
| 35 | MP4C | X | -64.373 | 4.75 |
| 36 | MP4C | | -111.498 | 4.75 |
| 37 | MP3A | Mx | 0644 | 4.75 |
| 38 | MP3A | X | -34.508 | 1.5 |
| 39 | MP3A | Z | -59.77 | 1.5 |
| 40 | MP3A | Mx | .0173 | 1.5 |
| 41 | | X | -34.508 | 3.5 |
| 42 | MP3A | Z | -59.77 | 3.5 |
| 43 | MP3A | Mx | .0173 | 3.5 |
| 44 | MP3B | X | -34.508 | 1.5 |
| 45 | MP3B | Z | -59.77 | 1.5 |
| | MP3B | Mx | .0173 | 1.5 |
| 46 | MP3B | X | -34.508 | 3.5 |
| 47 | MP3B | Z | -59.77 | 3.5 |
| 48 | MP3B | Mx | .0173 | 3.5 |
| 49 | MP3C | X | -15.705 | 1.5 |
| 50 | MP3C | Z | -27.202 | 1.5 |
| 51 | MP3C | Mx | 0157 | 1.5 |
| 52 | MP3C | X | -15.705 | 3.5 |
| 53 | MP3C | Z | -27.202 | 3.5 |
| 54 | MP3C | Mx | 0157 | 3.5 |
| 55 | MP4A | X | -30.609 | 2 |
| 56 | MP4A | Z | -53.016 | 2 |
| 57 | MP4A | Mx | 0153 | 2 |
| 58 | MP4B | X | -30.609 | 2 |
| 59 | MP4B | Z | -53.016 | 2 |
| 60 | MP4B | Mx | 0153 | 2 |
| 61 | MP4C | X | -22.378 | 2 |
| 62 | MP4C | Z | -38.76 | 2 |
| 63 | MP4C | Mx | .0224 | 2 |
| 64 | MP1A | X | -8.725 | 4 |
| 65 | MP1A | Z | -15.113 | 4 |
| 66 | MP1A | Mx | 0044 | 4 |
| 67 | MP1B | X | -8.725 | 4 |
| 68 | MP1B | Z | -15.113 | 4 |
| 69 | MP1B | Mx | 0044 | 4 |
| 70 | MP1C | X | -8.725 | 4 |
| 71 | MP1C | Z | -15.113 | 4 |
| 72 | MP1C | Mx | 0044 | 4 |
| 73 | MP1A | X | -37.037 | 2 |
| 74 | MP1A | Z | -64.15 | 2 |
| 75 | MP1A | Mx | 0185 | 2 |
| 76 | MP1B | X | -37.037 | |
| 77 | MP1B | Z | -64.15 | 2 2 |
| 78 | MP1B | Mx | 0185 | 2 |
| 79 | MP1C | X | -27.435 | 2 |
| 80 | MP1C | Z | -27.435 -47.519 | 2 |
| 81 | MP1C | Mx | .0274 | 2 |
| 82 | MP2A | X | | 2 |
| 83 | MP2A | Z | -90.993 -157.604 | .25 |
| 84 | MP2A | Mx | .0455 | .25 |
| 85 | MP2A | | | .25 |
| 86 | MP2A | X | -90.993 | 4.75 |
| 87 | MP2A | Mx | -157.604 | 4.75 |
| 88 | MP2B | X | .0455 | 4.75 |
| 89 | MP2B | Z | -90.993 | .25 |
| 90 | MP2B | Mx | -157.604 | .25 |
| 30 | IVII ZU | IVIX | .0455 | .25 |

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

| 1011110 | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|---------|--|-----------|--------------------|----------------|
| 0.4 | The state of the s | Y | -90.993 | 4.75 |
| 91 | MP2B | 7 | -157.604 | 4.75 |
| 92 | MP2B | Mu L | .0455 | 4.75 |
| 93 | MP2B | Mx | -66.061 | .25 |
| 94 | MP2C | X | | .25 |
| 95 | MP2C | Z | -114.42 | .25 |
| 96 | MP2C | Mx | 0661 | |
| 97 | MP2C | X | -66.061 | 4.75 |
| 98 | MP2C | Z | -114.42 | 4.75 |
| 99 | MP2C | Mx | 0661 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 0 | .25 |
| 2 | MP1A | Z | -39.115 | .25 |
| 3 | MP1A | Mx | 0 | .25 |
| 4 | MP1A | X | 0 | 4.75 |
| 5 | MP1A | Z | -39.115 | 4.75 |
| 6 | MP1A | Mx | 0 | 4.75 |
| 7 | MP1B | X | 0 | .25 |
| 8 | MP1B | Z | -30.097 | .25 |
| 9 | MP1B | Mx | .013 | .25 |
| 10 | MP1B | X | 0 | 4.75 |
| | MP1B | Z | -30.097 | _4.75 |
| 11 | MP1B | Mx | .013 | 4.75 |
| 12 | | X | 0 | .25 |
| 13 | MP1C MP1C | Z | -30.097 | .25 |
| 14 | MP1C | Mx | 013 | .25 |
| 15 | | X | 0 | 4.75 |
| 16 | MP1C | T Z | -30.097 | 4.75 |
| 17 | MP1C | Mx | 013 | 4.75 |
| 18 | MP1C | X | 0 | .25 |
| 19 | MP4A | · | -39.115 | .25 |
| 20 | MP4A | Mx | 0 | .25 |
| 21 | MP4A | | Ö | 4.75 |
| 22 | MP4A | X | -39.115 | 4.75 |
| 23 | MP4A | | 0 | 4.75 |
| 24 | MP4A | Mx | 0 | .25 |
| 25 | MP4B | <u>X</u> | -30.097 | .25 |
| 26 | MP4B | Z | .013 | .25 |
| 27 | MP4B | Mx | | 4.75 |
| 28 | MP4B | X | 0 | 4.75 |
| 29 | MP4B | Z | -30.097 | 4.75 |
| 30 | MP4B | Mx | .013 | .25 |
| 31 | MP4C | X | 0 | .25 |
| 32 | MP4C | Z | -30.097 | .25 |
| 33 | MP4C | Mx | 013 | 4.75 |
| 34 | MP4C | X | 0 | 4.75 |
| 35 | MP4C | Z | -30.097 | 4.75 |
| 36 | MP4C | Mx | 013 | 1.5 |
| 37 | MP3A | X | 0 | 1.5 |
| 38 | MP3A | Z | -17.301 | 1.5 |
| 39 | MP3A | Mx | . 0 | |
| 40 | MP3A | X | 0 | 3.5 |
| 41 | MP3A | Z | -17.301 | 3.5 |
| 42 | MP3A | Mx | 0 | 3.5 |
| 43 | MP3B | X | 0 | 1.5 |
| 44 | MP3B | Ž | -10.07 | 1.5 |



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

| 45 | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|-----------|--------------------|----------------|
| 46 | MP3B | Mx | .0044 | 1.5 |
| 47 | MP3B | <u>X</u> | 0 | 3.5 |
| 48 | MP3B | Z | -10.07 | 3.5 |
| 49 | MP3B | Mx | .0044 | 3.5 |
| 50 | MP3C | X | 0 | 1.5 |
| 51 | MP3C | Z | -10.07 | 1.5 |
| 52 | MP3C MP3C | Mx | 0044 | 1.5 |
| 53 | MP3C | X | 0 | 3.5 |
| 54 | MP3C MP3C | Z | -10.07 | 3.5 |
| 55 | MP4A | Mx | 0044 | 3.5 |
| 56 | MP4A | X | 0 | 2 |
| 57 | MP4A | Z | -18.299 | 2 |
| 58 | MP4B | Mx | 0 | 2 |
| 59 | | X | 0 | 2 |
| 60 | MP4B | Z | -14.317 | 2 |
| 61 | MP4B | Mx | 0062 | 2 |
| 62 | MP4C | X | 0 | 2 |
| 63 | MP4C | Z | -14.317 | 2 |
| 64 | MP4C | Mx | .0062 | 2 |
| | MP1A | X | 0 | 4 |
| 65 | MP1A | Z | -4.903 | 4 |
| 66 | MP1A | Mx | 0 | 4 |
| 67 | MP1B | X | 0 | 4 |
| 68 | MP1B | Z | -4.903 | 4 |
| 69 | MP1B | Mx | 0 | 4 |
| 70 | MP1C | X | 0 | 4 |
| 71 | MP1C | Z | -4.903 | 4 |
| 72 | MP1C | Mx | 0 | 4 |
| 73 | MP1A | X | 0 | 2 |
| 74 | MP1A | Z | -18.299 | 2 |
| 75 70 | MP1A | Mx | 0 | 2 |
| 76 | MP1B | X | 0 | 2 |
| 77 | MP1B | Z | -14.476 | 2 |
| 78 | MP1B | Mx | 0063 | 2 |
| 79 | MP1C | X | 0 | 2 |
| 80 | MP1C | Z | -14.476 | 2 |
| 81 | MP1C | Mx | .0063 | 2 |
| 82 | MP2A | X | 0 | .25 |
| 83 | MP2A | Z | -39.847 | .25 |
| 84 | MP2A | Mx | 0 | .25 |
| 85 | MP2A | X | 0 | 4.75 |
| 36 | MP2A | Z | -39.847 | 4.75 |
| 37 | MP2A | Mx | 0 | 4.75 |
| 88 | MP2B | X | 0 | .25 |
| 39 | MP2B | Z | -31.022 | .25 |
| 90 | MP2B | Mx | .0134 | .25 |
| 91 | MP2B | X | 0 | 4.75 |
| 92 | MP2B | Z | -31.022 | 4.75 |
| 93 | MP2B | Mx | .0134 | 4.75 |
| 94 | MP2C | X | 0 | |
| 95 | MP2C | Z | -31.022 | .25 |
| 96 | MP2C | Mx | 0134 | .25 .25 |
| 97 | MP2C | X | 0134 | |
| 98 | MP2C | Z | -31.022 | 4.75 |
| 99 | MP2C | Mx | | 4.75 |
| | 1111 20 | IVIA | 0134 | 4.75 |



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

| Me | mber Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 18.055 | .25 |
| 2 | MP1A | Z | -31.271 | .25 |
| 3 | MP1A | Mx | -,009 | .25 |
| 4 | MP1A | X | 18.055 | 4.75 |
| 5 | MP1A | Z | -31.271 | 4.75 |
| 6 | MP1A | Mx | 009 | 4.75 |
| 7 | MP1B | X | 13.546 | .25 |
| | MP1B | Z | -23.462 | .25 |
| 8 | | Mx | .0135 | .25 |
| 9 | MP1B | X | 13.546 | 4.75 |
| 10 | MP1B | Z | -23.462 | 4.75 |
| 11 | MP1B | Mx | .0135 | 4.75 |
| 12 | MP1B | | 18.055 | .25 |
| 13 | MP1C | X | -31.271 | .25 |
| 14 | MP1C | Z | 009 | .25 |
| 15 | MP1C | Mx | | 4.75 |
| 16 | MP1C | X | 18.055 | 4.75 |
| 17 | MP1C | Z | -31.271 | 4.75 |
| 18 | MP1C | Mx | 009 | .25 |
| 19 | MP4A | X | 18.055 | |
| 20 | MP4A | Z | -31.271 | .25 |
| 21 | MP4A | Mx | 009 | .25 |
| 22 | MP4A | X | 18.055 | 4.75 |
| 23 | MP4A | Z | -31.271 | 4.75 |
| | MP4A | Mx | 009 | 4.75 |
| 24 | MP4B | X | 13.546 | .25 |
| 25 | | Z | -23.462 | .25 |
| 26 | MP4B | Mx | .0135 | .25 |
| 27 | MP4B | | 13.546 | 4.75 |
| 28 | MP4B | X | -23.462 | 4.75 |
| 29 | MP4B | Z | .0135 | 4.75 |
| 30 | MP4B | Mx | | .25 |
| 31 | MP4C | X | 18.055 | .25 |
| 32 | MP4C | Z | -31.271 | .25 |
| 33 | MP4C | Mx | 009 | 4.75 |
| 34 | MP4C | X | 18.055 | |
| 35 | MP4C | Z | -31,271 | 4.75 |
| 36 | MP4C | Mx | 009 | 4.75 |
| 37 | MP3A | X | 7.445 | 1.5 |
| 38 | MP3A | Z | -12.896 | 1.5 |
| 39 | MP3A | Mx | 0037 | 1.5 |
| 40 | MP3A | X | 7.445 | 3.5 |
| | MP3A | Ž | -12.896 | 3,5 |
| 11 | | Mx | 0037 | 3.5 |
| 42 | MP3A | X | 3.83 | 1.5 |
| 43 | MP3B | Ž | -6.633 | 1.5 |
| 44 | MP3B | | .0038 | 1.5 |
| 45 | MP3B | Mx | 3.83 | 3.5 |
| 46 | MP3B | X | -6.633 | 3.5 |
| 47 | MP3B | Z | | 3.5 |
| 48 | MP3B | Mx | .0038 | 1.5 |
| 49 | MP3C | X | 7.445 | 1.5 |
| 50 | MP3C | Z | -12.896 | 1.5 |
| 51 | MP3C | Mx | 0037 | 1.5 |
| 52 | MP3C | X | 7.445 | 3.5 |
| 53 | MP3C | Z | -12.896 | 3.5 |
| 54 | MP3C | Mx | 0037 | 3.5 |
| 55 | MP4A | X | 8.486 | 2 |
| | MP4A | Z | -14.698 | 2 |
| 56 57 | MP4A | Mx | .0042 | 2 |



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

| M | ember Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|-------------|-----------|--------------------|----------------|
| 58 | MP4B | X | 6.495 | 2 |
| 59 | MP4B | Z | -11.25 | 2 |
| 60 | MP4B | Mx | 0065 | 2 |
| 61 | MP4C | X | 8.486 | 2 |
| 62 | MP4C | Z | -14.698 | 2 |
| 63 | MP4C | Mx | .0042 | 2 |
| 64 | MP1A | X | 2.629 | 4 |
| 65 | MP1A | Z | -4.554 | 4 |
| 66 | MP1A | Mx | .0013 | 4 |
| 67 | MP1B | X | 2.629 | 4 |
| 68 | MP1B | Z | -4.554 | 4 |
| 69 | MP1B | Mx | .0013 | 4 |
| 70 | MP1C | X | 2.629 | 4 |
| 71 | MP1C | Z | -4.554 | 4 |
| 72 | MP1C | Mx | .0013 | 4 |
| 73 | MP1A | X | 8.513 | 2 |
| 74 | MP1A | Z | -14.744 | 2 |
| 75 | MP1A | Mx | .0043 | 2 |
| 76 | MP1B | X | 6.601 | 2 |
| 77 | MP1B | Z | -11.433 | 2 |
| 78 | MP1B | Mx | 0066 | 2 |
| 79 | MP1C | X | 8.513 | 2 |
| 80 | MP1C | Z | -14.744 | 2 |
| 81 | MP1C | Mx | .0043 | 2 |
| 82 | MP2A | X | 18.453 | .25 |
| 83 | MP2A | Z | -31.961 | .25 |
| 84 | MP2A | Mx | 0092 | .25 |
| 35 | MP2A | X | 18.453 | 4.75 |
| 86 | MP2A | Z | -31.961 | 4.75 |
| 87 | MP2A | Mx | 0092 | 4.75 |
| 88 | MP2B | X | 14.04 | .25 |
| 89 | MP2B | Z | -24.318 | .25 |
| | MP2B | Mx | .014 | .25 |
| | MP2B | X | 14.04 | 4.75 |
| | MP2B | Z | -24.318 | 4.75 |
| | MP2B | Mx | .014 | 4.75 |
| | MP2C | X | 18.453 | .25 |
| | MP2C | | -31.961 | .25 |
| | MP2C | Mx | 0092 | .25 |
| | MP2C | X | 18.453 | 4.75 |
| | MP2C | Z | -31.961 | 4.75 |
| 99 | MP2C | Mx | 0092 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 26.065 | .25 |
| 2 | MP1A | Z | -15.049 | .25 |
| 3 | MP1A | Mx | 013 | .25 |
| 4 | MP1A | X | 26.065 | 4.75 |
| 5 | MP1A | Z | -15.049 | 4.75 |
| 6 | MP1A | Mx | 013 | 4.75 |
| 7 | MP1B | X | 26.065 | .25 |
| 8 | MP1B | Z | -15.049 | .25 |
| 9 | MP1B | Mx | .013 | .25 |
| 10 | MP1B | X | 26,065 | 4.75 |
| 11 | MP1B | Z | -15.049 | 4.75 |



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

| | r Point Loads (BL Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|-----------------------------------|-----------|--------------------|----------------|
| 12 | MP1B | Mx | .013 | 4.75 |
| 13 | MP1C | X | 33.875 | .25 |
| 14 | MP1C | Z | -19.558 | .25 |
| 15 | MP1C | Mx | 0 | .25 |
| | MP1C | X | 33.875 | 4.75 |
| 16 | MP1C | Z | -19.558 | 4.75 |
| 17 | | Mx | 0 | 4.75 |
| 18 | MP1C | X | 26.065 | .25 |
| 19 | MP4A | Ž | -15.049 | .25 |
| 20 | MP4A | Mx | 013 | .25 |
| 21 | MP4A | | 26.065 | 4.75 |
| 22 | MP4A | X | -15.049 | 4.75 |
| 23 | MP4A | Z | 013 | 4.75 |
| 24 | MP4A | Mx | 26.065 | .25 |
| 25 | MP4B | X | | .25 |
| 26 | MP4B | Z | -15.049 | .25 |
| 27 | MP4B | Mx | .013 | 4.75 |
| 28 | MP4B | X | 26.065 | |
| 29 | MP4B | · Z | -15.049 | 4.75 |
| 30 | MP4B | Mx | .013 | 4.75 |
| 31 | MP4C | X | 33.875 | .25 |
| 32 | MP4C | Z | -19.558 | .25 |
| 33 | MP4C | Mx | 0 | .25 |
| | MP4C | X | 33.875 | 4.75 |
| 34 | | Z | -19.558 | 4.75 |
| 35 | MP4C | Mx | 0 | 4.75 |
| 36 | MP4C | X | 8.721 | 1.5 |
| 37 | MP3A | Z | -5.035 | 1.5 |
| 38 | MP3A | | 0044 | 1,5 |
| 39 | MP3A | Mx. | 8.721 | 3.5 |
| 40 | MP3A | X | | 3.5 |
| 41 | MP3A | Z | -5.035 | 3.5 |
| 42 | MP3A | Mx | 0044 | 1.5 |
| 43 | MP3B | X | 8.721 | |
| 44 | MP3B | Z | -5.035 | 1.5 |
| 45 | MP3B | Mx | .0044 | 1.5 |
| 46 | MP3B | X | 8.721 | 3.5 |
| 47 | MP3B | Z | -5.035 | 3.5 |
| 48 | MP3B | Mx | .0044 | 3.5 |
| 49 | MP3C | X | 14.983 | 1.5 |
| | MP3C | Z | -8.65 | 1.5 |
| 50 | MP3C | Mx | 0 | 1.5 |
| 51 | | X | 14.983 | 3.5 |
| 52 | MP3C | Z | -8.65 | 3.5 |
| 53 | MP3C | | 0 | 3.5 |
| 54 | MP3C | Mx | 12.399 | 2 |
| 55 | MP4A | X | -7.159 | 2 |
| 56 | MP4A | Z | | 2 |
| 57 | MP4A | Mx | .0062 | 2 |
| 58 | MP4B | X | 12.399 | 2 |
| 59 | MP4B | Z | -7.159 | |
| 60 | MP4B | Mx | 0062 | 2 |
| 61 | MP4C | X | 15.848 | 2 |
| 62 | MP4C | Z | -9.15 | 2 |
| 63 | MP4C | Mx | 0 | 2 |
| 64 | MP1A | X | 5.169 | 4 |
| 65 | MP1A | Ž | -2.984 | 4 |
| | MP1A | Mx | .0026 | 4 |
| 66 67 | | X | 5.169 | 4 |
| n/ | MP1B | Z | -2.984 | 4 |



Company Designer Job Number

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|---------------------|
| 69 | MP1B | Mx | .0026 | Location[it.%] |
| 70 | MP1C | X | 5.169 | 4 |
| 71 | MP1C | Z | -2.984 | 4 |
| 72 | MP1C | Mx | .0026 | 4 |
| 73 | MP1A | X | 12.537 | 2 |
| 74 | MP1A | Z | -7.238 | 2 |
| 75 | MP1A | Mx | .0063 | 2 |
| 76 | MP1B | X | 12.537 | 2 |
| 77 | MP1B | Z | -7.238 | 2 |
| 78 | MP1B | Mx | 0063 | 2 |
| 79 | MP1C | X | 15.848 | 2 |
| 80 | MP1C | Z | -9.15 | 2 |
| 81 | MP1C | Mx | 0 | 2 |
| 82 | MP2A | X | 26.866 | .25 |
| 83 | MP2A | Ž | -15.511 | .25 |
| 84 | MP2A | Mx | 0134 | .25 |
| 85 | MP2A | X | 26.866 | 4.75 |
| 86 | MP2A | Z | -15.511 | 4.75 |
| 87 | MP2A | Mx | 0134 | 4.75 |
| 88 | MP2B | X | 26.866 | .25 |
| 89 | MP2B | Z | -15.511 | .25 |
| 90 | MP2B | Mx | .0134 | .25 |
| 91 | MP2B | X | 26.866 | 4.75 |
| 92 | MP2B | Z | -15.511 | |
| 93 | MP2B | Mx | .0134 | <u>4.75</u> 4.75 |
| 94 | MP2C | X | 34.508 | |
| 95 | MP2C | Ž | -19.923 | .25 .25 |
| 96 | MP2C | Mx | 0 | |
| 97 | MP2C | X | 34.508 | .25 |
| 98 | MP2C | Z | -19.923 | 4.75 |
| 99 | MP2C | Mx | 0 | 4.75 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 27.091 | .25 |
| 2 | MP1A | Z | 0 | .25 |
| 3 | MP1A | Mx | 0135 | .25 |
| 4 | MP1A | X | 27.091 | 4.75 |
| 5 | MP1A | Z | 0 | 4.75 |
| 6 | MP1A | Mx | 0135 | |
| 7 | MP1B | X | 36.109 | 4.75 |
| 8 | MP1B | Ž | 0 | 25 |
| 9 | MP1B | Mx | | .25 |
| 10 | MP1B | | .009 | .25 |
| 11 | MP1B | X | 36.109 | 4.75 |
| 12 | MP1B | Z | 0 | 4.75 |
| 13 | | Mx | .009 | 4.75 |
| | MP1C | X | 36.109 | .25 |
| 14 | MP1C | Z | 0 | .25 |
| 15 | MP1C_ | Mx | .009 | .25 |
| 16 | MP1C | X | 36.109 | 4.75 |
| 17 | MP1C | Z | 0 | 4.75 |
| 18 | MP1C | Mx | .009 | 4.75 |
| 19 | MP4A | X | 27.091 | .25 |
| 20 | MP4A | Z | 0 | .25 |
| 21 | MP4A | Mx | 0135 | .25 |
| 22 | MP4A | X | 27.091 | 4.75 |



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

| | Member Label | Direction | (90 Deg)) (Continued) Magnitude[lb.k-ft] | Location[ft,%] |
|----------|--------------|-----------|---|----------------|
| 23 | MP4A | Z | 0 | 4.75 |
| 24 | MP4A | Mx | 0135 | 4.75 |
| 25 | MP4B | X | 36.109 | .25 |
| 26 | MP4B | Z | 0 | .25 |
| 7 | MP4B | Mx | .009 | .25 |
| 8 | MP4B | X | 36.109 | 4.75 |
| 9 | MP4B | Z | 0 | 4.75 |
| 0 | MP4B | Mx | .009 | 4.75 |
| 1 | MP4C | X | 36.109 | .25 |
| 2 | MP4C | Z | 0 | .25 |
| 3 | MP4C | _Mx_ | .009 | .25 |
| 4 | MP4C | X | 36.109 | 4.75 |
| 5 | MP4C | Z | 0 | 4.75 |
| 6 | MP4C | Mx | .009 | 4.75 |
| 7 | MP3A | Χ | 7.66 | 1.5 |
| 8 | MP3A | Z | 0 | 1.5 |
| 9 | MP3A | Mx | 0038 | 1.5 |
| 0 | MP3A | X | 7.66 | 3.5 |
| 1 | MP3A | Z | 0 | 3.5 |
| 2 | MP3A | Mx | 0038 | 3.5 |
| 3 | MP3B | X | 14,891 | 1.5 |
| 4 | MP3B | Z | 0 | 1.5 |
| 5 | MP3B | Mx | .0037 | 1.5 |
| 6 | мР3В | X | 14.891 | 3.5 |
| 7 | MP3B | Z | 0 | 3.5 |
| 8 | MP3B | Mx | .0037 | 3.5 |
| 9 | MP3C | X | 14.891 | 1.5 |
| 0 | MP3C | Z | 0 | 1.5 |
| 1 | MP3C | Mx | .0037 | 1.5 |
| 2 | MP3C | X | 14.891 | 3.5 |
| 3 | MP3C | Z | 0 | 3.5 |
| 4 | MP3C | Mx | .0037 | 3.5 |
| 5 | MP4A | X | 12.99 | 2 |
| 6 | MP4A | Z | 0 | 2 |
| 7 | MP4A | Mx | .0065 | 2 |
| 8 | MP4B | X | 16.972 | 2 |
| 9 | MP4B | Z | 0 | 2 |
| 50 | MP4B | Mx | 0042 | 2 |
| 61 | MP4C | X | 16.972 | 2 |
| 52 | MP4C | Z | 0 | 2 |
| 3 | MP4C | Mx | 0042 | 2 |
| 4 | MP1A | X | 6.324 | 4 |
| 55 | MP1A | Z | 0 | 4 |
| 66 | MP1A | Mx | .0032 | 4 |
| 57 | MP1B | X | 6.324 | 4 |
| 88 | MP1B | Z | 0 | 4 |
| 9 | MP1B | Mx | .0032 | 4 |
| 0 | MP1C | X | 6.324 | 4 |
| 1 | MP1C | Z | 0 | 4 |
| 2 | MP1C | Mx | .0032 | 4 |
| 3 | MP1A | X | 13.202 | 2 |
| 4 | MP1A | Ž | 0 | 2 |
| 75 | MP1A | Mx | .0066 | 2 |
| | MP1B | X | 17.025 | 2 |
| 76 77 | MP1B | Z | 0 | 2 |
| 78 | MP1B | Mx | 0043 | 2 |
| 78 79 | MP1C | X | 17.025 | 2 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 80 | MP1C | Z | 0 | 2 |
| 81 | MP1C | Mx | 0043 | 2 |
| 82 | MP2A | X | 28.08 | .25 |
| 83 | MP2A | Z | 0 | .25 |
| 84 | MP2A | Mx | 014 | .25 |
| 85 | MP2A | X | 28.08 | 4.75 |
| 86 | MP2A | Z | 0 | 4.75 |
| 87 | MP2A | Mx | 014 | 4.75 |
| 88 | MP2B | X | 36.905 | .25 |
| 89 | MP2B | Z | 0 | .25 |
| 90 | MP2B | Mx | .0092 | .25 |
| 91 | MP2B | X | 36.905 | 4.75 |
| 92 | MP2B | Z | 0 | 4.75 |
| 93 | MP2B | Mx | .0092 | 4.75 |
| 94 | MP2C | X | 36.905 | .25 |
| 95 | MP2C | Z | 0 | .25 |
| 96 | MP2C | Mx | .0092 | .25 |
| 97 | MP2C | X | 36.905 | 4.75 |
| 98 | MP2C | Z | 0 | 4.75 |
| 99 | MP2C | Mx | .0092 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 26.065 | .25 |
| 2 | MP1A | Z | 15.049 | .25 |
| 3 | MP1A | Mx | 013 | .25 |
| 4 | MP1A | X | 26.065 | 4.75 |
| 5 | MP1A | Z | 15.049 | 4.75 |
| 6 | MP1A | Mx | 013 | 4.75 |
| 7 | MP1B | X | 33.875 | .25 |
| 8 | MP1B | Z | 19.558 | .25 |
| 9 | MP1B | Mx | 0 | .25 |
| 10 | MP1B | X | 33.875 | 4.75 |
| 11 | MP1B | Z | 19.558 | 4.75 |
| 12 | MP1B | Mx | 0 | 4.75 |
| 13 | MP1C | X | 26.065 | .25 |
| 14 | MP1C | Z | 15.049 | .25 |
| 15 | MP1C | Mx | .013 | .25 |
| 16 | MP1C | X | 26.065 | 4.75 |
| 17 | MP1C | Z | 15.049 | 4.75 |
| 18 | MP1C | Mx | .013 | 4.75 |
| 19 | MP4A | X | 26.065 | .25 |
| 20 | MP4A | Z | 15.049 | .25 |
| 21 | MP4A | Mx | 013 | .25 |
| 22 | MP4A | X | 26.065 | 4.75 |
| 23 | MP4A | Z | 15.049 | 4.75 |
| 24 | MP4A | Mx | 013 | 4.75 |
| 25 | MP4B | X | 33.875 | .25 |
| 26 | MP4B | Z | 19.558 | .25 |
| 27 | MP4B | Mx | 0 | .25 |
| 28 | MP4B | X | 33.875 | 4.75 |
| 29 | MP4B | Z | 19.558 | 4.75 |
| 30 | MP4B | Mx | 0 | 4.75 |
| 31 | MP4C | X | 26.065 | .25 |
| 32 | MP4C | Z | 15.049 | .25 |
| 33 | MP4C | Mx | .013 | .25 |



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

| | r Point Loads (BL Member Label | Direction | Magnitude[lb,k-ft] | Location[ft.%] |
|----|-----------------------------------|-----------|--------------------|----------------|
| 34 | MP4C | X | 26.065 | 4.75 4.75 |
| 35 | MP4C | Z | 15.049 | |
| 36 | MP4C | Mx | .013 | 4.75 |
| 37 | MP3A | X | 8.721 | 1.5 |
| 38 | MP3A | Z | 5.035 | 1.5 |
| 39 | MP3A | Mx | 0044 | 1.5 |
| 40 | MP3A | X | 8.721 | 3.5 |
| 41 | MP3A | Z | 5.035 | 3.5 |
| 42 | MP3A | Mx | 0044 | 3.5 |
| 43 | MP3B | X | 14.983 | 1.5 |
| 44 | MP3B | Z | 8,65 | 1.5 |
| 45 | MP3B | Mx | 0 | 1.5 |
| 46 | MP3B | X | 14.983 | 3.5 |
| 47 | MP3B | Z | 8.65 | 3.5 |
| 48 | MP3B | Mx | 0 | 3.5 |
| 49 | MP3C | X | 8.721 | 1.5 |
| 50 | MP3C | Z | 5.035 | 1.5 |
| 51 | MP3C | Mx | .0044 | 1.5 |
| 52 | MP3C | X | 8.721 | 3.5 |
| 53 | MP3C | Z | 5.035 | 3.5 |
| 54 | MP3C | Mx | .0044 | 3.5 |
| 55 | MP4A | X | 12.399 | 2 |
| 56 | MP4A | Z | 7.159 | 2 |
| | MP4A | Mx | .0062 | 2 |
| 57 | MP4B | X | 15.848 | 2 |
| 58 | MP4B | Ž | 9.15 | 2 |
| 59 | MP4B | Mx | 0 | 2 |
| 60 | MP4C | X | 12.399 | 2 |
| 61 | MP4C MP4C | Z | 7.159 | 2 |
| 62 | | Mx | 0062 | 2 |
| 63 | MP4C | X | 5.169 | 4 |
| 64 | MP1A | Z | 2.984 | 4 |
| 65 | MP1A | Mx | .0026 | 4 |
| 66 | MP1A | X | 5.169 | 4 |
| 67 | MP1B | Ž | 2.984 | 4 |
| 68 | MP1B | | .0026 | 4 |
| 69 | MP1B | Mx | 5.169 | 4 |
| 70 | MP1C | X | 2.984 | 4 |
| 71 | MP1C | | .0026 | 4 |
| 72 | MP1C | Mx | 12.537 | 2 |
| 73 | MP1A | X | 7.238 | 2 |
| 74 | MP1A | Z | .0063 | 2 |
| 75 | MP1A | Mx | 15.848 | 2 |
| 76 | MP1B | X | 9.15 | 2 |
| 77 | MP1B | Z | 0 | 2 |
| 78 | MP1B | Mx | 12.537 | 2 |
| 79 | MP1C | X | 7.238 | 2 |
| 80 | MP1C | Z | 0063 | 2 |
| 81 | MP1C | Mx | | .25 |
| 82 | MP2A | X | 26.866 | .25 |
| 83 | MP2A | | 15.511 | .25 |
| 84 | MP2A | Mx | 0134 | 4.75 |
| 85 | MP2A | X | 26.866 | 4.75 |
| 86 | MP2A | Z | 15.511 | 4.75 |
| 87 | MP2A | Mx | 0134 | .25 |
| 88 | MP2B | X | 34.508 | .25 |
| 89 | MP2B | Z | 19.923 | .25 |
| 90 | MP2B | Mx | 0 | .20 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 91 | MP2B | X | 34.508 | 4.75 |
| 92 | MP2B | Z | 19.923 | 4.75 |
| 93 | MP2B | Mx | 0 | 4.75 |
| 94 | MP2C | X | 26.866 | .25 |
| 95 | MP2C | Z | 15.511 | .25 |
| 96 | MP2C | Mx | .0134 | .25 |
| 97 | MP2C | X | 26.866 | 4.75 |
| 98 | MP2C | 7 | 15.511 | 4.75 |
| 99 | MP2C | Mx | .0134 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 18.055 | .25 |
| 2 | MP1A | Z | 31.271 | .25 |
| 3 | MP1A | Mx | 009 | .25 |
| 4 | MP1A | X | 18.055 | 4.75 |
| 5 | MP1A | Z | 31.271 | 4.75 |
| 6 | MP1A | Mx | 009 | 4.75 |
| 7 | MP1B | X | 18.055 | .25 |
| 8 | MP1B | Z | 31.271 | .25 |
| 9 | MP1B | Mx | 009 | .25 |
| 10 | MP1B | X | 18.055 | 4.75 |
| 11 | MP1B | Z | 31.271 | 4.75 |
| 12 | MP1B | Mx | 009 | |
| 13 | MP1C | X | 13.546 | 4.75 |
| 14 | MP1C | Z | 23.462 | .25 |
| 15 | MP1C | Mx | .0135 | .25 |
| 16 | MP1C | X | 13.546 | .25 |
| 17 | MP1C | 7 - X | 23.462 | 4.75 |
| 18 | MP1C | Mx | .0135 | 4.75 |
| 19 | MP4A | X | 18.055 | 4.75 |
| 20 | MP4A | Ž | 31.271 | .25 |
| 21 | MP4A | Mx | 009 | .25 |
| 22 | MP4A | X | | .25 |
| 23 | MP4A | Z | 18.055 31.271 | 4.75 |
| 24 | MP4A | Mx | 009 | 4.75 |
| 25 | MP4B | X | | 4.75 |
| 26 | MP4B | ż | 18.055 | .25 |
| 27 | MP4B | Mx | 31.271 | .25 |
| 28 | MP4B | X | 009 | .25 |
| 29 | MP4B | † ^ `Z | 18.055 | 4.75 |
| 30 | MP4B | | 31.271 | 4.75 |
| 31 | MP4C | Mx | 009 | 4.75 |
| 32 | MP4C | X | 13.546 | .25 |
| 33 | MP4C MP4C | Z | 23.462 | .25 |
| 34 | MP4C | Mx | .0135 | .25 |
| 35 | MP4C | X | 13.546 | 4.75 |
| 36 | MP4C | Z | 23.462 | 4.75 |
| 37 | MP3A | Mx | .0135 | 4.75 |
| 38 | | <u>X</u> | 7.445 | 1.5 |
| 39 | MP3A | Z | 12.896 | 1.5 |
| 40 | MP3A | Mx · | 0037 | 1.5 |
| | MP3A | X | 7.445 | 3.5 |
| 41 | MP3A | Z | 12.896 | 3.5 |
| 42 | MP3A | Mx | 0037 | 3.5 |
| 43 | MP3B | <u>X</u> | 7.445 | 1.5 |
| 44 | MP3B | Z | 12.896 | 1.5 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 45 | MP3B | Mx | 0037 | 3.5 |
| 16 | MP3B | X | 7.445 | 3.5 |
| 17 | MP3B | Z | 12.896 | 3.5 |
| 8 | MP3B | Mx | 0037 | |
| 9 | MP3C | X | 3.83 | 1.5 |
| 50 | MP3C | Z | 6.633 | 1.5 |
| 51 | MP3C | Mx | .0038 | 1.5 |
| 2 | MP3C | X | 3.83 | 3.5 |
| 3 | MP3C | Z | 6.633 | 3.5 |
| 34 | MP3C | Mx | .0038 | 3.5 |
| 55 | MP4A | X | 8.486 | 2 |
| 66 | MP4A | Z | 14.698 | 2 |
| 57 | MP4A | Mx | .0042 | 2 |
| 58 | MP4B | X | 8.486 | 2 |
| | MP4B | Ž | 14.698 | 2 |
| 59 | | Mx | .0042 | 2 |
| 50 | MP4B | X | 6.495 | 2 |
| 31 | MP4C | Ž | 11.25 | 2 |
| 2 | MP4C | Mx | 0065 | 2 |
| 33 | MP4C | | 2.629 | 4 |
| 64 | MP1A | X | 4.554 | 4 |
| 35 | MP1A | | .0013 | 4 |
| 36 | MP1A | Mx | 2.629 | 4 |
| 67 | MP1B | X | 4.554 | 4 |
| 88 | MP1B | Z | .0013 | 4 |
| 39 | MP1B | Mx | 2.629 | 4 |
| 70 | MP1C | X | | 4 |
| 71 | MP1C | Z | 4.554 | 4 |
| 72 | MP1C | Mx | .0013 | 2 |
| 73 | MP1A | X | 8.513 | 2 |
| 74 | MP1A | Z | 14.744 | 2 |
| 75 | MP1A | Mx | .0043 | 2 |
| 76 | MP1B | X | 8.513 | |
| 77 | MP1B | Z | 14.744 | 2 |
| 78 | MP1B | Mx | .0043 | 2 |
| 79 | MP1C | X | 6.601 | 2 |
| 30 | MP1C | Z | 11.433 | 2 |
| 31 | MP1C | Mx | 0066 | 2 |
| 32 | MP2A | X | 18.453 | .25 |
| | MP2A | Z | 31.961 | .25 |
| 33 | MP2A | Mx | 0092 | .25 |
| 34 | MP2A MP2A | X | 18.453 | 4.75 |
| 35 | | Z | 31.961 | 4.75 |
| 86 | MP2A | Mx | 0092 | 4.75 |
| 87 | MP2A | X | 18.453 | .25 |
| 88 | MP2B | Z | 31.961 | .25 |
| 89 | MP2B | | 0092 | .25 |
| 90 | MP2B | Mx | 18.453 | 4.75 |
| 91 | MP2B | X | 31.961 | 4.75 |
| 92 | MP2B | Z | 31.301 | 4.75 |
| 93 | MP2B | Mx | 0092 | .25 |
| 94 | MP2C | X | 14.04 | .25 |
| 95 | MP2C | Z | 24.318 | .25 |
| 96 | MP2C | Mx | .014 | |
| 97 | MP2C | X | 14.04 | 4.75 |
| 98 | MP2C | Z | 24.318 | 4.75 |
| 99 | MP2C | Mx | .014 | 4.75 |



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

| 17 | ation[ft.%] |
|--|-------------|
| 3 | .25 |
| 4 MP1A X 0 5 MP1A Z 39.115 6 MP1A Mx 0 7 MP1B X 0 8 MP1B X 0 9 MP1B X 0 10 MP1B X 0 11 MP1B X 0 12 MP1B X 0 12 MP1B X 0 12 MP1B X 0 13 MP1C X 0 14 MP1C X 0 15 MP1C Mx 013 16 MP1C X 0 17 MP1C X 0 18 MP1C Mx 013 19 MP4A X 0 20 MP4A X 0 21 MP4A X 0 22 MP4A | .25 |
| 5 MP1A Z 39.115 6 MP1A Mx 0 7 MP1B X 0 8 MP1B Z 30.097 9 MP1B Mx -013 10 MP1B X 0 11 MP1B X 0 12 MP1B Mx -013 13 MP1C X 0 14 MP1C X 0 15 MP1C X 0 15 MP1C X 0 16 MP1C X 0 17 MP1C X 0 18 MP1C Mx .013 19 MP4A X 0 20 MP4A X 0 21 MP4A X 0 22 MP4A X 0 23 MP4A X 0 24 MP4B< | .25 |
| 6 MP1A Mx 0 7 MP1B X 0 8 MP1B Z 30,097 9 MP1B X 0 10 MP1B X 0 11 MP1B X 0 11 MP1B X 0 12 MP1B MX -013 13 MP1C X 0 14 MP1C X 0 15 MP1C MX 013 16 MP1C X 0 17 MP1C X 0 17 MP1C X 0 19 MP4A X 0 20 MP4A X 0 21 MP4A X 0 22 MP4A X 0 23 MP4A X 0 24 MP4A X 0 25 MP4B | 4.75 |
| T MP1B X 0 8 MP1B Z 30.097 9 MP1B Mx -013 10 MP1B X 0 11 MP1B X 0 12 MP1B Mx -013 13 MP1C X 0 14 MP1C X 0 15 MP1C Mx 013 16 MP1C X 0 17 MP1C X 0 18 MP1C X 0 20 MP4A X 0 20 MP4A X 0 21 MP4A X 0 22 MP4A X 0 22 MP4A X 0 22 MP4A X 0 23 MP4A X 0 24 MP4A Mx 0 25 MP4B | 4.75 |
| B | 4.75 |
| MP1B | .25 |
| 10 | .25 |
| 11 MP1B Z 30.097 12 MP1B Mx -013 13 MP1C X 0 14 MP1C Z 30.097 15 MP1C Mx .013 16 MP1C X 0 17 MP1C Z 30.097 18 MP1C Mx .013 19 MP4A X 0 20 MP4A X 0 20 MP4A X 0 21 MP4A X 0 22 MP4A X 0 23 MP4A X 0 22 MP4A X 0 23 MP4A X 0 24 MP4A Mx 0 25 MP4B X 0 26 MP4B X 0 27 MP4B X 0 28 | .25 |
| 12 MP1B Mx -013 13 MP1C X 0 14 MP1C Z 30.097 15 MP1C Mx .013 16 MP1C X 0 17 MP1C Z 30.097 18 MP1C Mx .013 19 MP4A X 0 20 MP4A X 0 21 MP4A X 0 21 MP4A X 0 22 MP4A X 0 23 MP4A X 0 23 MP4A X 3 24 MP4A X 0 25 MP4B X 0 26 MP4B X 0 27 MP4B X 0 29 MP4B X 0 30 MP4B X 0 31 M | 4.75 |
| 13 | 4.75 |
| 14 MP1C Z 30.097 15 MP1C Mx .013 16 MP1C X 0 17 MP1C Z 30.097 18 MP1C Mx .013 19 MP4A X 0 20 MP4A X 0 21 MP4A X 0 22 MP4A X 0 23 MP4A X 0 23 MP4A X 0 23 MP4A X 0 24 MP4A X 0 25 MP4B X 0 25 MP4B X 0 26 MP4B X 0 27 MP4B Mx -013 28 MP4B X 0 29 MP4B X 0 30 MP4B X 0 31 M | 4.75 |
| 15 | .25 |
| 16 MP1C X 0 17 MP1C Z 30.097 18 MP1C Mx .013 19 MP4A X 0 20 MP4A X 0 20 MP4A X 0 21 MP4A Mx 0 22 MP4A X 0 23 MP4A X 0 23 MP4A X 0 24 MP4A X 0 25 MP4B X 0 25 MP4B X 0 26 MP4B X 0 26 MP4B X 0 27 MP4B X 0 29 MP4B X 0 29 MP4B X 0 30 MP4B Mx -013 31 MP4C X 0 32 MP4C | .25 |
| 17 MP1C Z 30.097 18 MP1C Mx 013 19 MP4A X 0 20 MP4A X 0 21 MP4A X 0 21 MP4A Mx 0 22 MP4A X 0 23 MP4A X 0 24 MP4A Mx 0 25 MP4B X 0 26 MP4B X 0 26 MP4B X 0 27 MP4B X 0 28 MP4B X 0 29 MP4B X 0 30 MP4B X 0 31 MP4C X 0 32 MP4C X 0 33 MP4C X 0 34 MP4C X 0 35 MP4C | .25 |
| 18 MP1C Mx .013 19 MP4A X 0 20 MP4A Z 39.115 21 MP4A Mx 0 22 MP4A Mx 0 23 MP4A X 0 23 MP4A Mx 0 24 MP4A Mx 0 25 MP4B X 0 26 MP4B X 0 26 MP4B X 0 27 MP4B Mx 013 28 MP4B X 0 29 MP4B X 0 29 MP4B X 0 30 MP4B X 0 31 MP4C X 0 32 MP4C X 0 33 MP4C X 0 34 MP4C X 0 35 MP4C< | 4.75 |
| 19 | 4.75 |
| 20 MP4A Z 39.115 21 MP4A Mx 0 22 MP4A X 0 23 MP4A X 0 24 MP4A Mx 0 25 MP4B X 0 26 MP4B X 0 26 MP4B X 0 27 MP4B X 0 28 MP4B X 0 29 MP4B X 0 30 MP4B X 0 30 MP4B Mx -013 31 MP4C X 0 32 MP4C X 0 33 MP4C X 0 34 MP4C X 0 35 MP4C X 0 36 MP4C Mx 0 37 MP3A X 0 38 MP3A | 4.75 |
| 21 MP4A Mx 0 22 MP4A X 0 23 MP4A Z 39.115 24 MP4A Mx 0 25 MP4B X 0 26 MP4B X 0 26 MP4B X 0 27 MP4B Mx 013 28 MP4B X 0 29 MP4B X 0 30 MP4B X 0 31 MP4C X 0 32 MP4C X 0 33 MP4C X 0 34 MP4C X 0 35 MP4C X 0 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 39 MP3A X 0 40 MP3A <td>.25</td> | .25 |
| 22 MP4A X 0 23 MP4A Z 39.115 24 MP4B MX 0 25 MP4B X 0 26 MP4B X 0 27 MP4B MX -013 28 MP4B X 0 29 MP4B X 0 30 MP4B MX -013 31 MP4C X 0 32 MP4C X 0 32 MP4C X 0 33 MP4C MX .013 34 MP4C X 0 35 MP4C X 0 36 MP4C X 0 37 MP3A X 0 38 MP3A X 0 40 MP3A X 0 40 MP3A X 0 41 MP3A< | .25 |
| 23 MP4A Z 39.115 24 MP4A Mx 0 25 MP4B X 0 26 MP4B X 0 27 MP4B Mx 013 28 MP4B X 0 29 MP4B X 0 30 MP4B Mx 013 31 MP4C X 0 32 MP4C X 0 33 MP4C Mx .013 34 MP4C X 0 35 MP4C X 0 36 MP4C X 0 37 MP3A X 0 38 MP3A X 0 38 MP3A X 0 40 MP3A X 0 41 MP3A X 0 41 MP3A X 0 42 MP3 | .25 |
| 23 MP4A Z 39.115 24 MP4A Mx 0 25 MP4B X 0 26 MP4B X 0 27 MP4B Mx 013 28 MP4B X 0 29 MP4B X 0 30 MP4B X 0 31 MP4C X 0 32 MP4C X 0 32 MP4C X 0 33 MP4C Mx .013 34 MP4C X 0 35 MP4C X 0 36 MP4C X 0 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 40 MP3A X 0 40 MP3A X 0 41 MP3A | 4.75 |
| 24 MP4B X 0 26 MP4B Z 30.097 27 MP4B Mx 013 28 MP4B X 0 29 MP4B X 0 30 MP4B Mx 013 31 MP4C X 0 32 MP4C X 0 33 MP4C Mx .013 34 MP4C X 0 35 MP4C X 0 35 MP4C X 0 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 40 MP3A X 0 40 MP3A X 0 40 MP3A X 0 41 MP3A X 0 42 MP3A X 0 44 | 4.75 |
| 25 MP4B X 0 26 MP4B Z 30,097 27 MP4B Mx 013 28 MP4B X 0 29 MP4B X 0 30 MP4B Mx 013 31 MP4C X 0 32 MP4C X 0 33 MP4C Mx .013 34 MP4C Mx .013 34 MP4C X 0 35 MP4C X 0 35 MP4C X 0 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 39 MP3A X 0 40 MP3A X 0 41 MP3A X 0 41 MP3A X 0 42 | 4.75 |
| 27 MP4B Mx 013 28 MP4B X 0 29 MP4B X 30.097 30 MP4B Mx 013 31 MP4C X 0 32 MP4C X 0 33 MP4C Mx .013 34 MP4C Mx .013 35 MP4C X 0 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 39 MP3A X 0 40 MP3A X 0 41 MP3A X 0 41 MP3A X 0 42 MP3A X 0 44 MP3B X 0 44 MP3B X 0 45 MP3B X 0 47 | .25 |
| 28 MP4B X 0 29 MP4B Z 30.097 30 MP4B Mx 013 31 MP4C X 0 32 MP4C Z 30.097 33 MP4C Mx .013 34 MP4C X 0 35 MP4C X 0 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 39 MP3A X 0 40 MP3A X 0 41 MP3A X 0 41 MP3A X 0 42 MP3A X 0 43 MP3B X 0 44 MP3B X 0 45 MP3B X 0 46 MP3B X 0 47 | .25 |
| 29 MP4B Z 30.097 30 MP4B Mx 013 31 MP4C X 0 32 MP4C Z 30.097 33 MP4C Mx .013 34 MP4C X 0 35 MP4C Z 30.097 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 39 MP3A X 0 40 MP3A X 0 41 MP3A X 0 41 MP3A X 0 42 MP3A X 0 43 MP3B X 0 44 MP3B X 0 45 MP3B X 0 46 MP3B X 0 47 MP3B X 0 48 | .25 |
| Section Sect | 4.75 |
| 30 MP4B Mx 013 31 MP4C X 0 32 MP4C Z 30.097 33 MP4C Mx .013 34 MP4C X 0 35 MP4C Z 30.097 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 39 MP3A X 0 40 MP3A X 0 41 MP3A X 0 41 MP3A X 0 42 MP3A Mx 0 43 MP3B X 0 44 MP3B X 0 45 MP3B X 0 46 MP3B X 0 47 MP3B X 0 47 MP3B X 0 47 <td< td=""><td>4.75</td></td<> | 4.75 |
| 31 MP4C X 0 32 MP4C Z 30.097 33 MP4C Mx .013 34 MP4C X 0 35 MP4C Z 30.097 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 39 MP3A Mx 0 40 MP3A X 0 41 MP3A X 0 41 MP3A X 0 42 MP3A Mx 0 43 MP3B X 0 44 MP3B X 0 44 MP3B X 0 45 MP3B X 0 46 MP3B X 0 47 MP3B X 0 48 MP3B Mx -0044 40 MP3B Mx -0044 | 4.75 |
| 33 MP4C Mx .013 34 MP4C X 0 35 MP4C Z 30.097 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 39 MP3A Mx 0 40 MP3A X 0 41 MP3A X 0 41 MP3A X 0 42 MP3A Mx 0 43 MP3B X 0 44 MP3B X 0 44 MP3B X 0 45 MP3B X 0 47 MP3B X 0 47 MP3B X 0 48 MP3B Mx 0044 40 MP3B Mx 0044 | .25 |
| 33 MP4C Mx .013 34 MP4C X 0 35 MP4C Z 30.097 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 39 MP3A X 0 40 MP3A X 0 41 MP3A X 0 41 MP3A X 0 42 MP3A Mx 0 43 MP3B X 0 44 MP3B X 0 44 MP3B X 0 45 MP3B X 0 47 MP3B X 0 47 MP3B X 0 48 MP3B Mx 0044 40 MP3B Mx 0044 | .25 |
| 34 MP4C X 0 35 MP4C Z 30.097 36 MP4C Mx .013 37 MP3A X 0 38 MP3A X 0 39 MP3A Mx 0 40 MP3A X 0 41 MP3A X 0 41 MP3A X 0 42 MP3A Mx 0 43 MP3B X 0 44 MP3B X 0 44 MP3B X 0 45 MP3B X 0 47 MP3B X 0 47 MP3B X 0 48 MP3B MX 0044 40 MP3B MX 0044 | .25 |
| 35 MP4C Z 30.097 36 MP4C Mx .013 37 MP3A X 0 38 MP3A Z 17.301 39 MP3A Mx 0 40 MP3A X 0 41 MP3A Z 17.301 42 MP3A Mx 0 43 MP3B X 0 44 MP3B X 0 44 MP3B X 0 45 MP3B X 0 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx 0044 | 4.75 |
| 36 MP4C Mx .013 37 MP3A X 0 38 MP3A Z 17.301 39 MP3A Mx 0 40 MP3A X 0 41 MP3A Z 17.301 42 MP3A Mx 0 43 MP3B X 0 44 MP3B Z 10.07 45 MP3B X 0 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B MX 0044 40 MP3B MX 0044 | 4.75 |
| 37 MP3A X 0 38 MP3A Z 17.301 39 MP3A Mx 0 40 MP3A X 0 41 MP3A Z 17.301 42 MP3A Mx 0 43 MP3B X 0 44 MP3B Z 10.07 45 MP3B Mx 0044 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx 0044 40 MP3B Mx 0044 | 4.75 |
| 38 MP3A Z 17.301 39 MP3A Mx 0 40 MP3A X 0 41 MP3A Z 17.301 42 MP3A Mx 0 43 MP3B X 0 44 MP3B Z 10.07 45 MP3B Mx 0044 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx 0044 40 MP3B Mx 0044 | 1.5 |
| 39 MP3A Mx 0 40 MP3A X 0 41 MP3A Z 17.301 42 MP3A Mx 0 43 MP3B X 0 44 MP3B Z 10.07 45 MP3B Mx 0044 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx 0044 40 MP3B Mx 0044 | 1.5 |
| 40 MP3A X 0 41 MP3A Z 17.301 42 MP3A Mx 0 43 MP3B X 0 44 MP3B Z 10.07 45 MP3B Mx 0044 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx 0044 40 MP3B Mx 0044 | 1.5 |
| 41 MP3A Z 17.301 42 MP3A Mx 0 43 MP3B X 0 44 MP3B Z 10.07 45 MP3B Mx 0044 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx 0044 40 MP3B Mx 0044 | 3.5 |
| 42 MP3A Mx 0 43 MP3B X 0 44 MP3B Z 10.07 45 MP3B Mx 0044 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx 0044 | 3.5 |
| 43 MP3B X 0 44 MP3B Z 10.07 45 MP3B Mx 0044 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx 0044 | 3.5 |
| 44 MP3B Z 10.07 45 MP3B Mx 0044 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx 0044 | 1.5 |
| 45 MP3B Mx0044 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx0044 | 1.5 |
| 46 MP3B X 0 47 MP3B Z 10.07 48 MP3B Mx 0044 | 1.5 |
| 47 MP3B Z 10.07 48 MP3B Mx0044 | 3.5 |
| 48 MP3B Mx0044 | 3.5 |
| 10 11700 | 3.5 |
| 49 MP3C X | 1.5 |
| 50 MP3C Z 10.07 | 1.5 |
| E4 MD00 | 1.5 1.5 |
| .0044 | 1.0 |
| FO MESO | 3.5 |
| E4 MPGG | 3.5 |
| 55 MP4A X 0 | 3.5 |
| 56 MP4A Z 18.299 | 2 |
| 57 MP4A Mx 0 | 2 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:__

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|--------------|--------------|-----------|--------------------|----------------|
| 58 | MP4B | X | 0 | 2 |
| 59 | MP4B | Z | 14.317 | 2 |
| 60 | MP4B | Mx | .0062 | 2 |
| 61 | MP4C | X | 0 | 2 |
| 62 | MP4C | Z | 14.317 | 2 |
| 63 | MP4C | Mx | 0062 | 2 |
| 64 | MP1A | X | 0 | 4 |
| 65 | MP1A | Z | 4.903 | 4 |
| 66 | MP1A | Mx | 0 | 4 |
| 67 | MP1B | . X | 0 | 4 |
| 68 | MP1B | Z | 4.903 | 4 |
| 69 | MP1B | Mx | 0 | 4 |
| 70 | MP1C | X | 0 | 4 |
| 71 | MP1C | Z | 4.903 | 4 |
| 72 | MP1C | Mx | 0 | 4 |
| 73 | MP1A | X | 0 | 2 |
| 74 | MP1A | Z | 18.299 | 2 |
| 75 | MP1A | Mx | 0 | 2 |
| 76 | MP1B | X | 0 | 2 |
| 77 | MP1B | Z | 14.476 | 2 |
| | MP1B | Mx | .0063 | 2 |
| 78 79 | MP1C | X | 0 | 2 |
| 80 | MP1C | Z | 14.476 | 2 |
| | MP1C | Mx | 0063 | 2 |
| 81 82 | MP2A | X | 0 | .25 |
| | MP2A | Z | 39.847 | .25 |
| 83 | MP2A | Mx | 0 | .25 |
| 84 | MP2A | X | 0 | 4.75 |
| 85 | MP2A | Z | 39.847 | 4.75 |
| 86 | MP2A | Mx | 0 | 4.75 |
| 87 | MP2B | X | Ö | .25 |
| 88 | MP2B | Z | 31.022 | .25 |
| 89 | MP2B MP2B | Mx | 0134 | .25 |
| 90 | MP2B MP2B | X | 0 | 4.75 |
| 91 | | Ž | 31.022 | 4.75 |
| 92 | MP2B | Mx | 0134 | 4.75 |
| 93 | MP2B | X | 0 | .25 |
| 94 | MP2C | Z | 31.022 | .25 |
| 95 | MP2C | Mx | .0134 | .25 |
| 96 | MP2C | X | 0 | 4.75 |
| 97 | MP2C | Z | 31.022 | 4.75 |
| 98 | MP2C | Mx | .0134 | 4.75 |
| 99 | MP2C | IVIX | .0104 | |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--|-----------|--------------------|----------------|
| 4 | MP1A | X | -18.055 | .25 |
| 2 | MP1A | 7 | 31,271 | .25 |
| _ | MP1A | Mx | .009 | .25 |
| 3 | MP1A | X | -18.055 | 4.75 |
| 4 | MP1A | 7 | 31.271 | 4.75 |
| 5 | MP1A | Mx | .009 | 4.75 |
| 6 | MP1B | X | -13.546 | .25 |
| / | MP1B | 7 | 23.462 | .25 |
| 8 | MP1B | Mx | 0135 | .25 |
| 9 | The state of the s | X | -13.546 | 4.75 |
| 10 | MP1B MP1B | Z | 23.462 | 4.75 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

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

| | Member Label | Direction | Magnitude[lb.k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 12 | MP1B | Mx | 0135 | 4.75 |
| 13 | MP1C | X | -18.055 | .25 |
| 14 | MP1C | Z | 31.271 | .25 |
| 15 | MP1C | Mx | .009 | .25 |
| 16 | MP1C | X | -18.055 | 4.75 |
| 17 | MP1C | Z | 31.271 | 4.75 |
| 18 | MP1C | Mx | .009 | 4.75 |
| 19 | MP4A | X | -18.055 | |
| 20 | MP4A | Z | 31.271 | .25 |
| 21 | MP4A | Mx | .009 | .25 |
| 22 | MP4A | X | -18.055 | .25 |
| 23 | MP4A | Z | | 4.75 |
| 24 | MP4A | Mx | 31.271 | 4.75 |
| 25 | MP4B | | .009 | 4.75 |
| 26 | MP4B | X | -13.546 | .25 |
| 27 | | Z | 23.462 | .25 |
| | MP4B | Mx | 0135 | .25 |
| 28 | MP4B | X | -13.546 | 4.75 |
| 29 | MP4B | Z | 23.462 | 4.75 |
| 30 | MP4B | Mx | 0135 | 4.75 |
| 31 | MP4C | X | -18.055 | .25 |
| 32 | MP4C | Z | 31.271 | .25 |
| 33 | MP4C | Mx | .009 | .25 |
| 34 | MP4C | X | -18.055 | 4.75 |
| 35 | MP4C | Z | 31.271 | 4.75 |
| 36 | MP4C | Mx | .009 | |
| 37 | MP3A | X | -7.445 | 4.75 |
| 38 | MP3A | Z | 12.896 | 1.5 |
| 39 | MP3A | Mx | | 1.5 |
| 40 | MP3A | | .0037 | 1.5 |
| 41 | MP3A | Z | -7.445 | 3.5 |
| 42 | MP3A | | 12.896 | 3.5 |
| 43 | | Mx | .0037 | 3.5 |
| | MP3B | <u> </u> | -3.83 | 1,5 |
| 44 | MP3B | Z | 6.633 | 1.5 |
| 45 | MP3B | Mx | 0038 | 1.5 |
| 46 | MP3B | X | -3.83 | 3.5 |
| 47 | MP3B | Z | 6.633 | 3.5 |
| 48 | MP3B | Mx | 0038 | 3.5 |
| 49 | MP3C | X | -7.445 | 1.5 |
| 50 | MP3C | Z | 12.896 | 1.5 |
| 51 | MP3C | Mx | .0037 | 1.5 |
| 52 | MP3C | X | -7.445 | |
| 53 | MP3C | Z | 12.896 | 3.5 |
| 54 | MP3C | Mx | | 3.5 |
| 55 | MP4A | X | .0037 | 3.5 |
| 56 | MP4A | Z | -8.486 | 2 |
| 57 | MP4A MP4A | | 14.698 | 2 |
| | | Mx | 0042 | 2 |
| 58 | MP4B | X | -6.495 | 2 |
| 59 | MP4B | Z | 11.25 | 2 |
| 30 | MP4B | Mx | .0065 | 2 |
| 31 | MP4C | X | -8.486 | 2 |
| 52 | MP4C | Z | 14.698 | 2 |
| 33 | MP4C | Mx | 0042 | 2 |
| 64 | MP1A | X | -2.629 | 4 |
| 35 | MP1A | Ž | 4.554 | 4 |
| 36 | MP1A | Mx | 0013 | |
| 67 | MP1B | X | -2.629 | 4 |
| 38 | MP1B | ^ | -2.029 | Д |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:__

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| co | MP1B | Mx | 0013 | 4 |
| 69 | MP1C | X | -2.629 | 4 |
| 70 | | 7 | 4.554 | 4 |
| 71 | MP1C | Mx | 0013 | 4 |
| 72 | MP1C | X | -8.513 | 2 |
| 73 | MP1A | Ž | 14.744 | 2 |
| 74 | MP1A | Mx | 0043 | 2 |
| 75 | MP1A | X | -6.601 | 2 |
| 76 | MP1B | Z | 11.433 | 2 |
| 77 | MP1B | Mx | .0066 | 2 |
| 78 | MP1B | X | -8.513 | 2 |
| 79 | MP1C | Ż | 14.744 | 2 |
| 80 | MP1C | Mx | 0043 | 2 |
| 81 | MP1C | X | -18.453 | .25 |
| 82 | MP2A | Z | 31.961 | .25 |
| 83 | MP2A | | .0092 | .25 |
| 84 | MP2A | Mx | -18.453 | 4.75 |
| 85 | MP2A | X | 31.961 | 4.75 |
| 86 | MP2A | Z | .0092 | 4.75 |
| 87 | MP2A | Mx | -14.04 | .25 |
| 88 | MP2B | X | 24.318 | .25 |
| 89 | MP2B | Z | 014 | .25 |
| 90 | MP2B | Mx | -14.04 | 4.75 |
| 91 | MP2B | X | 24.318 | 4.75 |
| 92 | MP2B | Z | 014 | 4.75 |
| 93 | MP2B | Mx | | .25 |
| 94 | MP2C | X | -18.453 | .25 |
| 95 | MP2C | Z | 31.961 | .25 |
| 96 | MP2C | Mx | .0092 | 4.75 |
| 97 | MP2C | X | -18.453 | 4.75 |
| 98 | MP2C | Z | 31.961 | 4.75 |
| 99 | MP2C | Mx | .0092 | 4.73 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 4 | MP1A | X | -26.065 | .25 |
| 1 | | Z | 15.049 | .25 |
| 2 | MP1A | Mx | .013 | .25 |
| 3 | MP1A | X | -26.065 | 4.75 |
| 4 | MP1A | Z | 15.049 | 4.75 |
| 5 | MP1A | Mx | .013 | 4.75 |
| 6 | MP1A | X | -26.065 | .25 |
| 7 | MP1B | 7 | 15.049 | .25 |
| 8 | MP1B | | 013 | .25 |
| 9 | MP1B | Mx | -26.065 | 4.75 |
| 10 | MP1B | X | 15.049 | 4.75 |
| 11 | MP1B | <u>Z</u> | 013 | 4.75 |
| 12 | MP1B | Mx | | .25 |
| 13 | MP1C | X | -33.875 | .25 |
| 14 | MP1C | Z | 19.558 | .25 |
| 15 | MP1C | Mx | 00.075 | 4.75 |
| 16 | MP1C | X | -33.875 | 4.75 |
| 17 | MP1C | Z | 19.558 | 4.75 |
| 18 | MP1C | Mx | 0 | .25 |
| 19 | MP4A | X | -26.065 | |
| 20 | MP4A | Z | 15.049 | .25 |
| 21 | MP4A | Mx | .013 | .25 |
| 22 | MP4A | X | -26.065 | 4.75 |



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

| 23 | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 24 | MP4A MP4A | Z | 15.049 | 4.75 |
| 25 | MP4B | Mx Mx | .013 | 4.75 |
| 26 | MP4B MP4B | X | -26.065 | .25 |
| 27 | MP4B | Z Mx | 15.049 | .25 |
| 28 | MP4B | X | 013 | .25 |
| 29 | MP4B | Z | -26.065 | 4.75 |
| 30 | MP4B | Mx | 15.049 | 4.75 |
| 31 | MP4C | X | 013 | 4.75 |
| 32 | MP4C | Z | -33.875 | .25 |
| 33 | MP4C | Mx | 19.558 | .25 |
| 34 | MP4C | X | 0 | .25 |
| 35 | MP4C | Z | -33.875 | 4.75 |
| 36 | MP4C | Mx | 19.558 | 4.75 |
| 37 | MP3A | X | 0 | 4.75 |
| 38 | MP3A | ż | -8.721 | 1.5 |
| 39 | MP3A | Mx | 5.035 .0044 | 1.5 |
| 40 | MP3A | X | | 1.5 |
| 41 | MP3A | Z | -8.721 5.035 | 3.5 |
| 42 | MP3A | Mx | .0044 | 3.5 |
| 43 | MP3B | X | -8.721 | 3.5 |
| 44 | MP3B | Z | | 1.5 |
| 45 | MP3B | Mx | 5.035 0044 | 1.5 |
| 46 | MP3B | X | | 1.5 |
| 47 | MP3B | Z | -8.721 | 3.5 |
| 48 | MP3B | Mx | 5.035 | 3.5 |
| 49 | MP3C | X | 0044 | 3.5 |
| 50 | MP3C | Ž | -14.983 | 1.5 |
| 51 | MP3C | Mx | 8.65 | 1.5 |
| 52 | MP3C | X | 0 | 1.5 |
| 53 | MP3C | Z | -14.983 | 3.5 |
| 54 | MP3C | Mx | 8.65 | 3.5 |
| 55 | MP4A | X | 12,200 | 3.5 |
| 56 | MP4A | Z | -12.399 | 2 |
| 57 | MP4A | Mx | 7.159 | 2 |
| 58 | MP4B | X | 0062 | 2 |
| 59 | MP4B | Z | -12.399 | 2 |
| 60 | MP4B | Mx | 7.159 | 2 |
| 61 | MP4C | X | .0062 | 2 |
| 62 | MP4C | Z | -15.848 | 2 |
| 63 | MP4C | Mx | 9.15 | 2 |
| 64 | MP1A | X | 5 160 | 2 |
| 65 | MP1A | 999 | -5.169 | 4 |
| 36 | MP1A | Mx | 2.984 | 4 |
| 67 | MP1B | X | 0026 -5.169 | 4 |
| 58 | MP1B | Ž | | 4 |
| 9 | MP1B | Mx | 2.984 | 4 |
| 70 | MP1C | X | 0026 | 4 |
| 71 | MP1C | Z | -5.169 | 4 |
| 72 | MP1C | Mx | 2.984 | 4 |
| 73 | MP1A | X | 0026 | 4 |
| 4 | MP1A | Z | -12.537 | 2 2 |
| 75 | MP1A | Mx | 7.238 | |
| 76 | MP1B | X | 0063 | 2 |
| 7 | MP1B | Z | -12.537 | 2 |
| 8 | MP1B | Mx | 7.238 | 2 |
| | IVII I D | IVIX | .0063 | 2 |

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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:__

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

| | Mambarlahal | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 00 | Member Label | Z | 9.15 | 2 |
| 80 | MP1C | Mx | 0 | 2 |
| 81 | MP1C | | -26.866 | .25 |
| 82 | MP2A | X | 15.511 | .25 |
| 83 | MP2A | Z | | .25 |
| 84 | MP2A | Mx | .0134 | 4.75 |
| 85 | MP2A | X | -26.866 | 4.75 |
| 86 | MP2A | Z | 15.511 | |
| 87 | MP2A | Mx | .0134 | 4.75 |
| 88 | MP2B | X | -26.866 | .25 |
| 89 | MP2B | Z | 15.511 | .25 |
| 90 | MP2B | Mx | 0134 | .25 |
| 91 | MP2B | X | -26.866 | 4.75 |
| | MP2B | Z | 15.511 | 4.75 |
| 92 | MP2B | Mx | 0134 | 4.75 |
| 93 | | X | -34.508 | .25 |
| 94 | MP2C | T Z | 19.923 | .25 |
| 95 | MP2C | | 0 | .25 |
| 96 | MP2C | Mx | -34.508 | 4.75 |
| 97 | MP2C | X | 19.923 | 4.75 |
| 98 | MP2C | Z | | 4.75 |
| 99 | MP2C | Mx | 0 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -27.091 | .25 |
| 2 | MP1A | Ž | 0 | .25 |
| 3 | MP1A | Mx | .0135 | .25 |
| | MP1A | X | -27.091 | 4.75 |
| 4 | MP1A | Z | 0 | 4.75 |
| 5 | MP1A | Mx | .0135 | 4.75 |
| 6 | MP1B | X | -36.109 | .25 |
| 7 | MP1B | Z | 0 | .25 |
| 8 | | Mx | 009 | .25 |
| 9 | MP1B | X | -36.109 | 4.75 |
| 10 | MP1B | Z | 0 | 4.75 |
| 11 | MP1B | Mx | 009 | 4.75 |
| 12 | MP1B | X | -36.109 | .25 |
| 13 | MP1C | Ž | 0 | .25 |
| 14 | MP1C | Mx | 009 | .25 |
| 15 | MP1C | | -36.109 | 4.75 |
| 16 | MP1C | X | 0 | 4.75 |
| 17 | MP1C | | 009 | 4.75 |
| 18 | MP1C | Mx | -27.091 | .25 |
| 19 | MP4A | X | 0 | .25 |
| 20 | MP4A | Z | | .25 |
| 21 | MP4A | Mx | .0135 | 4.75 |
| 22 | MP4A | X | -27.091 | 4.75 |
| 23 | MP4A | Z | 0 | 4.75 |
| 24 | MP4A | Mx | .0135 | .25 |
| 25 | MP4B | X | -36.109 | .25 |
| 26 | MP4B | Z | 0 | .25 |
| 27 | MP4B | Mx | 009 | 4.75 |
| 28 | MP4B | X | -36.109 | 4.75 |
| 29 | MP4B | Z | 0 | |
| 30 | MP4B | Mx | 009 | 4.75 |
| 31 | MP4C | X | -36.109 | .25 |
| 32 | MP4C | Z | 0 | .25 |
| 33 | MP4C | Mx | 009 | .25 |



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

| 34 | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|-----------|--------------------|----------------|
| 35 | MP4C MP4C | X | -36,109 | 4.75 |
| 36 | MP4C | Z | 0 | 4.75 |
| 37 | MP3A | Mx | 009 | 4.75 |
| 38 | | X | -7.66 | 1.5 |
| 39 | MP3A | Z | 0 | 1.5 |
| 40 | MP3A | Mx | .0038 | 1.5 |
| 41 | MP3A | X | -7.66 | 3.5 |
| 42 | MP3A | Z | 0 | 3.5 |
| 43 | MP3A | Mx . | .0038 | 3.5 |
| 44 | MP3B | X | -14.891 | 1.5 |
| | MP3B | Z | 0 | 1.5 |
| 45 | MP3B | Mx | 0037 | 1.5 |
| 46 | MP3B | X | -14.891 | 3.5 |
| 47 | MP3B | Z | 0 | 3.5 |
| 48 | MP3B | Mx | 0037 | 3.5 |
| 49 | MP3C | X | -14.891 | 1.5 |
| 50 | MP3C | Z | 0 | 1.5 |
| 51 | MP3C | Mx | 0037 | 1.5 |
| 52 | MP3C | X | -14.891 | 3.5 |
| 53 | MP3C | Z | 0 | 3.5 |
| 54 | MP3C | Mx | 0037 | 3.5 |
| 55 | MP4A | X | -12.99 | 2 |
| 56 | MP4A | Z | 0 | 2 |
| 57 | MP4A | Mx | 0065 | 2 |
| 58 | MP4B | X | -16.972 | 2 |
| 59 | MP4B | Z | 0 | 2 |
| 60 | MP4B | Mx | .0042 | 2 |
| 61 | MP4C | X | -16.972 | 2 |
| 62 | MP4C | Z | 0 | 2 |
| 63 | MP4C | Mx | .0042 | 2 |
| 64 | MP1A | X | -6.324 | 4 |
| 65 | MP1A | Z | 0 | |
| 66 | MP1A | Mx | 0032 | 4 |
| 67 | MP1B | X | -6.324 | 4 |
| 68 | MP1B | Z | 0 | 4 |
| 69 | MP1B | Mx | 0032 | 4 |
| 70 | MP1C | X | -6.324 | 4 |
| 71 | MP1C | Z | 0 | 4 |
| 72 | MP1C | Mx | 0032 | 4 |
| 73 | MP1A | X | -13.202 | 4 |
| 74 | MP1A | Z | | 2 |
| 75 | MP1A | Mx | 0066 | 2 |
| 76 | MP1B | | | 2 |
| 77 | MP1B | Z | -17.025 | 2 2 |
| 78 | MP1B | Mx | .0043 | 2 |
| 79 | MP1C | X | | 2 |
| 30 | MP1C | Z | -17.025 | 2 |
| 81 | MP1C | Mx | 0 | 2 |
| 32 | MP2A | | .0043 | 2 |
| 33 | MP2A | X | -28.08 | .25 |
| 34 | MP2A | Z | 0 | .25 |
| 85 | | Mx | .014 | .25 |
| | MP2A | X | -28.08 | 4.75 |
| 86 87 | MP2A | Z | 0 | 4.75 |
| | MP2A | Mx | .014 | 4.75 |
| 38 | MP2B | X | -36.905 | .25 |
| 89 | MP2B | Z | 0 | .25 |
| 90 | MP2B | Mx | 0092 | .25 |



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Antenna Mount Analysis

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|-----------|--------------------|----------------|
| 04 | MP2B | Y | -36.905 | 4.75 |
| 91 | | 7 | 0 | 4.75 |
| 92 93 | MP2B | 84. | 0092 | 4.75 |
| 93 | MP2B | Mx | -36.905 | .25 |
| 94 | MP2C | X | -36.903 | .25 |
| 95 | MP2C | Z | 0 | |
| 96 | MP2C | Mx | 0092 | .25 |
| 97 | MP2C | X | -36.905 | 4.75 |
| 98 | MP2C | Z | 0 | 4.75 |
| 99 | MP2C | Mx | 0092 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -26.065 | .25 |
| 2 | MP1A | Z | -15.049 | .25 |
| 3 | MP1A | Mx | .013 | .25 |
| 4 | MP1A | X | -26.065 | 4.75 |
| 5 | MP1A | Z | -15.049 | 4.75 |
| 6 | MP1A | Mx | .013 | 4.75 |
| 7 | MP1B | X | -33.875_ | .25 |
| 8 | MP1B | Z | -19.558 | .25 |
| 9 | MP1B | Mx | 0 | .25 |
| 10 | MP1B | X | -33.875 | 4.75 |
| 11 | MP1B | Z | -19.558 | 4.75 |
| 12 | MP1B | Mx | 0 | 4.75 |
| 13 | MP1C | X | -26.065 | .25 |
| 14 | MP1C | Ž | -15.049 | .25 |
| 15 | MP1C | Mx | 013 | .25 |
| | MP1C | X | -26.065 | 4.75 |
| 16 17 | MP1C | Z | -15.049 | 4.75 |
| | MP1C | Mx | 013 | 4.75 |
| 18 | MP4A | X | -26.065 | .25 |
| 19 | MP4A | Ž Ž | -15.049 | .25 |
| 20 | MP4A MP4A | Mx | .013 | .25 |
| 21 | MP4A | X | -26.065 | 4.75 |
| 22 | | Ž | -15.049 | 4.75 |
| 23 | MP4A | Mx | .013 | 4.75 |
| 24 | MP4A | X | -33.875 | .25 |
| 25 | MP4B | Ž i | -19.558 | .25 |
| 26 | MP4B | Mx | 0 | .25 |
| 27 | MP4B | X | -33.875 | 4.75 |
| 28 | MP4B | | -19.558 | 4.75 |
| 29 | MP4B | | 0 | 4.75 |
| 30 | MP4B | Mx | -26.065 | .25 |
| 31 | MP4C | X Z | -15.049 | .25 |
| 32 | MP4C | | 013 | .25 |
| 33 | MP4C | Mx | -26.065 | 4.75 |
| 34 | MP4C | X | -15.049 | 4.75 |
| 35 | MP4C | | 013 | 4.75 |
| 36 | MP4C | Mx | -8.721 | 1.5 |
| 37 | MP3A | X | -5.035 | 1.5 |
| 38 | МРЗА | Z | .0044 | 1.5 |
| 39 | MP3A | Mx | -8.721 | 3.5 |
| 40 | MP3A | X | -5.035 | 3.5 |
| 41 | MP3A | | -5.035 | 3.5 |
| 42 | MP3A | Mx | | 1.5 |
| 43 | MP3B | X | -14.983 | 1.5 |
| 44 | MP3B | Z | -8.65 | 1.9 |



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

| 45 | Member Label MP3B | Direction Mx | Magnitude[lb,k-ft] | Location[ft,%] |
|----|----------------------|-----------------|--------------------|---------------------|
| 46 | MP3B | | 0 | 1.5 |
| 47 | MP3B | X | -14.983 | 3.5 |
| 48 | MP3B | Mx | -8.65 | 3.5 |
| 49 | MP3C | X | 0 -8.721 | 3.5 |
| 50 | MP3C | Ž | | 1.5 |
| 51 | MP3C | Mx | -5.035 | 1.5 |
| 52 | MP3C | X | 0044 | 1.5 |
| 53 | MP3C | Z | -8.721 | 3.5 |
| 54 | MP3C | Mx | -5.035 | 3.5 |
| 55 | MP4A | X | 0044 | 3.5 |
| 56 | MP4A | Z | -12.399 | 2 |
| 57 | MP4A | Mx | -7.159 | 2 |
| 58 | MP4B | X | 0062 | 2 |
| 59 | MP4B | Ž | -15.848 | 2 |
| 60 | MP4B | Mx | -9.15 | 2 |
| 61 | MP4C | X | -12.399 | 2 |
| 62 | MP4C | Z | -7.159 | 2 |
| 63 | MP4C | Mx | .0062 | 2 |
| 64 | MP1A | X | | 2 |
| 65 | MP1A | Ž | -5.169 | 4 |
| 66 | MP1A | Mx | -2.984 | 4 |
| 67 | MP1B | X | 0026 | 4 |
| 68 | MP1B | Z | -5.169 | 4 |
| 69 | MP1B | Mx | -2.984 | 4 |
| 70 | MP1C | X | 0026 | 4 |
| 71 | MP1C | Z | -5.169 -2.984 | 4 |
| 72 | MP1C | Mx | 0026 | 4 |
| 73 | MP1A | X | -12.537 | 4 |
| 74 | MP1A | Ž | -7.238 | 2 |
| 75 | MP1A | Mx | 0063 | 2 2 |
| 76 | MP1B | X | -15.848 | |
| 77 | MP1B | Z | -9.15 | 2 |
| 78 | MP1B | Mx | 0 | 2 2 |
| 79 | MP1C | X | -12.537 | |
| 80 | MP1C | Ž | -7.238 | 2 |
| 81 | MP1C | Mx | .0063 | 2 2 |
| 82 | MP2A | X | -26.866 | .25 |
| 83 | MP2A | Z | -15.511 | .25 |
| 84 | MP2A | Mx | .0134 | .25 |
| 85 | MP2A | X | -26.866 | |
| 86 | MP2A | Z | -15.511 | 4.75 4.75 |
| 87 | MP2A | Mx | .0134 | |
| 88 | MP2B | X | -34.508 | 4.75 .25 |
| 89 | MP2B | Z | -19.923 | .25 |
| 90 | MP2B | Mx | 0 | .25 |
| 91 | MP2B | X | -34.508 | 4.75 |
| 92 | MP2B | Z | -19.923 | 4.75 |
| 93 | MP2B | Mx | 0 | 4.75 |
| 94 | MP2C | X | -26.866 | .25 |
| 95 | MP2C | Ž | -15.511 | .25 |
| 96 | MP2C | Mx | 0134 | |
| 97 | MP2C | X | -26.866 | .25 4.75 |
| 98 | MP2C | Z | -15.511 | 4./0 |
| 99 | MP2C | Mx | 0134 | <u>4.75</u> 4.75 |



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

| | Member Label | C 26 : Antenna W | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|------------------|--------------------|----------------|
| 1 | MP1A | | -18.055 | .25 |
| 2 | MP1A | X | -31.271 | .25 |
| 3 | MP1A | Mx | .009 | .25 |
| 4 | MP1A | X | -18.055 | 4.75 |
| 5 | MP1A | Z | -31.271 | 4.75 |
| 6 | MP1A | Mx | .009 | 4.75 |
| 7 | MP1B | X | -18.055 | .25 |
| 8 | MP1B | Z | -31.271 | .25 |
| 9 | MP1B | Mx | .009 | .25 |
| 0 | MP1B | X | -18.055 | 4.75 |
| 1 | MP1B | Z | -31.271 | 4.75 |
| 2 | MP1B | Mx | .009 | 4.75 |
| 3 | MP1C | X | -13.546 | .25 |
| 4 | MP1C | Z | -23.462 | .25 |
| 5 | MP1C | Mx | 0135 | .25 |
| 6 | MP1C | X | -13.546 | 4.75 |
| 7 | MP1C | Z | -23.462 | 4.75 |
| 8 | MP1C | Mx | 0135 | 4.75 |
| 9 | MP4A | X | -18.055 | .25 |
| 20 | MP4A | Z | -31.271 | .25 |
| 21 | MP4A | Mx | .009 | .25 |
| 22 | MP4A | X | -18.055 | 4.75 |
| 23 | MP4A | Z | -31.271 | 4.75 |
| 24 | MP4A | Mx | .009 | 4.75 |
| 25 | MP4B | X | -18.055 | .25 |
| | MP4B | Ž | -31.271 | .25 |
| 26 27 | MP4B | Mx | .009 | .25 |
| 28 | MP4B | X | -18.055 | 4.75 |
| 29 | MP4B | Z | -31.271 | 4.75 |
| 30 | MP4B | Mx | .009 | 4.75 |
| 31 | MP4C | X | -13.546 | .25 |
| | MP4C | Z | -23.462 | .25 |
| 32 | MP4C | Mx | 0135 | .25 |
| 33 | MP4C | X | -13.546 | 4.75 |
| 34 | MP4C | Z | -23.462 | 4.75 |
| 35 | MP4C | Mx | 0135 | 4.75 |
| 36 | MP3A | X | -7.445 | 1.5 |
| 37 | MP3A | Z | -12.896 | 1.5 |
| 38 | MP3A | Mx | .0037 | 1.5 |
| 39 | MP3A | X | -7.445 | 3.5 |
| 10 | MP3A | Ž | -12.896 | 3.5 |
| 11 | MP3A | Mx | .0037 | 3.5 |
| 12 | MP3B | X | -7.445 | 1.5 |
| 13 | MP3B | Z | -12.896 | 1.5 |
| 14 | MP3B | Mx | .0037 | 1.5 |
| 15 | MP3B | X | -7.445 | 3.5 |
| 16 | MP3B | Z | -12.896 | 3.5 |
| 47 | MP3B | Mx | .0037 | 3.5 |
| 18 | MP3C | X | -3.83 | 1.5 |
| 19 | MP3C | Z | -6.633 | 1.5 |
| 50 | MP3C | Mx | 0038 | 1.5 |
| 51 | | X | -3.83 | 3.5 |
| 52 | MP3C | Z | -6.633 | 3.5 |
| 53 | MP3C MP3C | Mx | 0038 | 3.5 |
| 54 | | X | -8.486 | 2 |
| 55 | MP4A MP4A | Ž | -14.698 | 2 |
| 56 57 | MP4A | Mx | 0042 | 2 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 58 | MP4B | X | -8.486 | 2 |
| 59 | MP4B | Z | -14.698 | 2 |
| 60 | MP4B | Mx | 0042 | 2 |
| 61 | MP4C | X | -6.495 | 2 |
| 62 | MP4C | Z | -11.25 | 2 |
| 63 | MP4C | Mx | .0065 | 2 |
| 64 | MP1A | X | -2.629 | 4 |
| 65 | MP1A | Z | -4.554 | 4 |
| 66 | MP1A | Mx | 0013 | 4 |
| 67 | MP1B | X | -2.629 | 4 |
| 68 | MP1B | Z | -4.554 | 4 |
| 69 | MP1B | Mx | 0013 | 4 |
| 70 | MP1C | X | -2.629 | 4 |
| 71 | MP1C | Z | -4.554 | 4 |
| 72 | MP1C | Mx | 0013 | 4 |
| 73 | MP1A | X | -8.513 | 2 |
| 74 | MP1A | Z | -14.744 | 2 |
| 75 | MP1A | Mx | 0043 | 2 |
| 76 | MP1B | X | -8.513 | 2 |
| 77 | MP1B | Z | -14.744 | 2 |
| 78 | MP1B | Mx | 0043 | 2 |
| 79 | MP1C | X | -6.601 | 2 |
| 80 | MP1C | Z | -11.433 | 2 |
| 81 | MP1C | Mx | .0066 | 2 |
| 82 | MP2A | X | -18.453 | |
| 83 | MP2A | Z | -31.961 | .25 |
| 84 | MP2A | Mx | .0092 | .25 |
| 85 | MP2A | X | -18.453 | |
| 86 | MP2A | Z | -31.961 | 4.75 |
| 87 | MP2A | Mx | .0092 | 4.75 4.75 |
| 88 | MP2B | X | -18.453 | |
| 89 | MP2B | Z | -31.961 | .25 |
| 90 | MP2B | Mx | .0092 | .25 .25 |
| 91 | MP2B | X | -18.453 | |
| 92 | MP2B | Z | -31.961 | 4.75 |
| 93 | MP2B | Mx | .0092 | 4.75 |
| 94 | MP2C | X | -14.04 | 4.75 |
| 95 | MP2C | Ž | | .25 |
| 96 | MP2C | Mx | -24.318 | .25 |
| 97 | MP2C | X | 014 -14.04 | .25 |
| 98 | MP2C | Z | | 4.75 |
| 99 | MP2C | Mx | -24.318 014 | 4.75 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 0 | .25 |
| 2 | MP1A | Z | -12.252 | .25 |
| 3 | MP1A | Mx | 0 | .25 |
| 4 | MP1A | X | 0 | 4.75 |
| 5 | MP1A | Z | -12.252 | 4.75 |
| 6 | MP1A | Mx | 0 | 4.75 |
| 7 | MP1B | X | 0 | .25 |
| 8 | MP1B | Z | -9.098 | .25 |
| 9 | MP1B | Mx | .0039 | .25 |
| 10 | MP1B | X | 0 | 4.75 |
| 11 | MP1B | Z | -9.098 | 4.75 |



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

| M | ember Label | Direction | Magnitude[lb.k-ft] | Location[ft,%] |
|----|-------------|-----------|--------------------|-------------------|
| 12 | MP1B | Mx | .0039 | 4.75 |
| 13 | MP1C | X | 0 | .25 |
| 14 | MP1C | Z | -9.098 | .25 |
| 15 | MP1C | Mx | 0039 | .25 |
| 16 | MP1C | X | 0 | 4.75 |
| 17 | MP1C | Z | -9.098 | 4.75 |
| 18 | MP1C | Mx | 0039 | 4.75 |
| 19 | MP4A | X | 0 | .25 |
| 20 | MP4A | Z | -12.252 | .25 |
| 21 | MP4A | Mx | 0 | .25 |
| 22 | MP4A | X | 0 | 4.75 |
| | MP4A | Z | -12.252 | 4.75 |
| 23 | MP4A | Mx | 0 | 4.75 |
| 24 | | X | 0 | .25 |
| 25 | MP4B | Z | -9.098 | .25 |
| 26 | MP4B | Mx | .0039 | .25 |
| 27 | MP4B | X | 0 | 4.75 |
| 28 | MP4B | Ż | -9.098 | 4.75 |
| 29 | MP4B | Mx | .0039 | 4.75 |
| 30 | MP4B | | 0 | .25 |
| 31 | MP4C | X Z | -9.098 | .25 |
| 32 | MP4C | | 0039 | .25 |
| 33 | MP4C | Mx | 0 | 4.75 |
| 34 | MP4C | X | -9.098 | 4.75 |
| 35 | MP4C | Z | 0039 | 4.75 |
| 36 | MP4C | Mx | 0 | 1.5 |
| 37 | MP3A | X | -5.097 | 1.5 |
| 38 | MP3A | Z | -5.097 | 1.5 |
| 39 | MP3A | Mx | | 3.5 |
| 40 | MP3A | X | 0 | 3.5 |
| 41 | MP3A | Z | -5.097 | 3.5 |
| 42 | MP3A | Mx | 0 | 1.5 |
| 43 | MP3B | X | 0 | 1.5 |
| 44 | MP3B | Z | -2.747 | 1.5 |
| 45 | MP3B | Mx | .0012 | 3.5 |
| 46 | MP3B | X | 0 | 3.5 |
| 47 | MP3B | Z | -2.747 | |
| 48 | MP3B | Mx | .0012 | 3.5 1.5 |
| 49 | MP3C | X | 0 | |
| 50 | MP3C | Z | -2.747 | 1.5 |
| 51 | MP3C | Mx | 0012 | 1.5 |
| 52 | MP3C | X | 0 | 3.5 |
| 53 | MP3C | Z | -2.747 | 3.5 |
| 54 | MP3C | Mx | 0012 | 3.5 |
| 55 | MP4A | X | 0 | 2 |
| 56 | MP4A | Z | -4.169 | 2 |
| 57 | MP4A | Mx | 0 | 2 |
| 58 | MP4B | X | 0 | 2 |
| | MP4B | Ž | -3.14 | 2 |
| 59 | MP4B | Mx | 0014 | 2 |
| 60 | MP4C | X | 0 | 2 |
| 61 | MP4C | Ž | -3.14 | 2 |
| 62 | | Mx | .0014 | 2 |
| 63 | MP4C | X | 0 | 4 |
| 64 | MP1A | Z | 995 | 4 |
| 65 | MP1A | Mx | 0 | 4 |
| 66 | MP1A | | 0 | 4 |
| 67 | MP1B | X | 995 | 4 |
| 68 | MP1B | Z | 000 | LO H.r3dl Page 56 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location(ff %/1 |
|----|--------------|-----------|--------------------|------------------|
| 69 | MP1B | Mx | 0 | Location[ft,%] 4 |
| 70 | MP1C | X | 0 | 4 |
| 71 | MP1C | Z | 995 | 4 |
| 72 | MP1C | Mx | 0 | 4 |
| 73 | MP1A | X | 0 | 2 |
| 74 | MP1A | Z | -5.03 | 2 |
| 75 | MP1A | Mx | 0 | 2 |
| 76 | MP1B | X | 0 | 2 |
| 77 | MP1B | 7 | -3.829 | 2 |
| 78 | MP1B | Mx | 0017 | 2 |
| 79 | MP1C | X | 0 | 2 |
| 80 | MP1C | Z | -3.829 | 2 |
| 81 | MP1C | Mx | .0017 | 2 |
| 82 | MP2A | X | 0 | .25 |
| 83 | MP2A | Z | -12.413 | .25 |
| 84 | MP2A | Mx | 0 | .25 |
| 85 | MP2A | X | 0 | 4.75 |
| 86 | MP2A | Z | -12.413 | 4.75 |
| 87 | MP2A | Mx | 0 | 4.75 |
| 88 | MP2B | X | 0 | .25 |
| 89 | MP2B | Z | -9.296 | .25 |
| 90 | MP2B | Mx | .004 | .25 |
| 91 | MP2B | X | 0 | 4.75 |
| 92 | MP2B | Z | -9.296 | 4.75 |
| 93 | MP2B | Mx | .004 | 4.75 |
| 94 | MP2C | X | .004 | .25 |
| 95 | MP2C | Z | -9.296 | .25 |
| 96 | MP2C | Mx | 004 | .25 |
| 97 | MP2C | X | 0 | |
| 98 | MP2C | Z | -9.296 | 4.75 |
| 99 | MP2C | Mx | 004 | 4.75 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|--|--------------------|----------------|
| 1 | MP1A | X | 5.6 | .25 |
| 2 | MP1A | Z | -9.7 | .25 |
| 3 | MP1A | Mx | 0028 | .25 |
| 4 | MP1A | X | 5.6 | 4.75 |
| 5 | MP1A | Z | -9.7 | 4.75 |
| 6 | MP1A | Mx | 0028 | 4.75 |
| 7 | MP1B | X | 4.023 | .25 |
| 8 | MP1B | Z | -6.969 | .25 |
| 9 | MP1B | Mx | .004 | |
| 10 | MP1B | X | 4.023 | .25 |
| 11 | MP1B | Ž | -6.969 | 4.75 |
| 12 | MP1B | Mx | .004 | 4.75 |
| 13 | MP1C | X | 5.6 | 4.75 |
| 14 | MP1C | Ž | -9.7 | .25 |
| 15 | MP1C | Mx | | .25 |
| 16 | MP1C | X | 0028 | .25 |
| 17 | MP1C | Ž | 5.6 | 4.75 |
| 18 | MP1C | Mx | -9.7 | 4.75 |
| 19 | MP4A | X | 0028 | 4.75 |
| 20 | MP4A | | 5.6 | .25 |
| 21 | MP4A | The second secon | -9.7 | .25 |
| 22 | MP4A | Mx | 0028 | .25 |
| | IVIC4A | X | 5.6 | 4.75 |



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

| Me | ember Label | Direction | m (30 Deg)) (Continued) Magnitude[lb,k-ft] | Location[ft,%] |
|----|-------------|-----------|---|----------------|
| 23 | MP4A | Z | -9.7 | 4.75 |
| 24 | MP4A | Mx | 0028 | 4.75 |
| 25 | MP4B | X | 4.023 | .25 |
| 26 | MP4B | Z | -6.969 | .25 |
| 7 | MP4B | Mx | .004 | .25 |
| 28 | MP4B | X | 4.023 | 4.75 |
| 29 | MP4B | Z | -6.969 | 4.75 |
| 30 | MP4B | Mx | .004 | 4.75 |
| 31 | MP4C | X | 5.6 | .25 |
| 32 | MP4C | Z | -9.7 | .25 |
| 33 | MP4C | Mx | 0028 | .25 |
| | MP4C | X | 5.6 | 4.75 |
| 34 | MP4C | Z | -9.7 | 4.75 |
| 35 | MP4C | Mx | 0028 | 4.75 |
| 36 | | X | 2.157 | 1.5 |
| 37 | MP3A | ż | -3.736 | 1.5 |
| 38 | MP3A | Mx | 0011 | 1.5 |
| 39 | MP3A | X | 2.157 | 3.5 |
| 10 | MP3A | Z | -3.736 | 3.5 |
| 11 | MP3A | | 0011 | 3.5 |
| 12 | MP3A | Mx | .982 | 1.5 |
| 43 | MP3B | X | -1.7 | 1.5 |
| 14 | MP3B | Z | .000982 | 1.5 |
| 45 | MP3B | Mx | .982 | 3.5 |
| 16 | MP3B | X | -1.7 | 3.5 |
| 17 | MP3B | Z | .000982 | 3.5 |
| 18 | MP3B | Mx | | 1.5 |
| 19 | MP3C | X | 2.157 | 1.5 |
| 50 | MP3C | Z | -3.736 | 1.5 |
| 51 | MP3C | Mx | 0011 | 3.5 |
| 52 | MP3C | X | 2.157 | |
| 53 | MP3C | Z | -3.736 | 3.5 |
| 54 | MP3C | Mx | 0011 | 3.5 |
| 55 | MP4A | X | 1.913 | 2 |
| 56 | MP4A | Z | -3.313 | 2 |
| 57 | MP4A | Mx | .000956 | 2 |
| 58 | MP4B | X | 1.399 | 2 |
| 59 | MP4B | Z | -2.423 | 2 |
| 50 | MP4B | Mx | 0014 | 2 |
| 61 | MP4C | X | 1.913 | 2 |
| 32 | MP4C | Z | -3.313 | 2 |
| 63 | MP4C | Mx | .000956 | 2 |
| | MP1A | X | .545 | 4 |
| 64 | MP1A | Z | 945 | 4 |
| 65 | MP1A | Mx | .000273 | 4 |
| 66 | MP1B | X | .545 | 4 |
| 67 | | Ž | 945 | 4 |
| 68 | MP1B | Mx | .000273 | 4 |
| 69 | MP1B | X | .545 | 4 |
| 70 | MP1C | Z | 945 | 4 |
| 71 | MP1C | Mx | .000273 | 4 |
| 72 | MP1C | X | 2.315 | 2 |
| 73 | MP1A | | -4.009 | 2 |
| 74 | MP1A | Z | .0012 | 2 |
| 75 | MP1A | Mx | 1.715 | 2 |
| 76 | MP1B | X | | 2 |
| 77 | MP1B | Z | -2.97 | 2 |
| 78 | MP1B | Mx | 0017 | 2 |
| 79 | MP1C | X | 2.315 | |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 80 | MP1C | Z | -4.009 | 2 |
| 81 | MP1C | Mx | .0012 | 2 |
| 82 | MP2A | X | 5.687 | .25 |
| 83 | MP2A | Z | -9.85 | .25 |
| 84 | MP2A | Mx | 0028 | .25 |
| 85 | MP2A | X | 5.687 | 4.75 |
| 86 | MP2A | Z | -9.85 | 4.75 |
| 87 | MP2A | Mx | 0028 | 4.75 |
| 88 | MP2B | X | 4.129 | .25 |
| 89 | MP2B | Ž | -7.151 | .25 |
| 90 | MP2B | Mx | .0041 | .25 |
| 91 | MP2B | X | 4.129 | 4.75 |
| 92 | MP2B | Z | -7.151 | 4.75 |
| 93 | MP2B | Mx | .0041 | 4.75 |
| 94 | MP2C | X | 5.687 | |
| 95 | MP2C | Z | -9.85 | .25 |
| 96 | MP2C | Mx | 0028 | .25 |
| 97 | MP2C | X | 5.687 | .25 |
| 98 | MP2C | Z | -9.85 | 4.75 |
| 99 | MP2C | Mx | 0028 | 4.75 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| -1 | MP1A | X | 7.879 | .25 |
| 2 | MP1A | Z | -4.549 | .25 |
| 3 | MP1A | Mx | 0039 | .25 |
| 4 | MP1A | X | 7.879 | 4.75 |
| 5 | MP1A | Z | -4.549 | 4.75 |
| 6 | MP1A | Mx | 0039 | 4.75 |
| 7 | MP1B | X | 7.879 | .25 |
| 8 | MP1B | Z | -4.549 | .25 |
| 9 | MP1B | Mx | .0039 | .25 |
| 10 | MP1B | X | 7.879 | 4.75 |
| 11 | MP1B | Z | -4.549 | 4.75 |
| 12 | MP1B | Mx | .0039 | 4.75 |
| 13 | MP1C | X | 10.61 | .25 |
| 14 | MP1C | Z | -6.126 | .25 |
| 15 | MP1C | Mx | 0 | .25 |
| 16 | MP1C | X | 10.61 | 4.75 |
| 17 | MP1C | Z | -6.126 | 4.75 |
| 18 | MP1C | Mx | 0 | 4.75 |
| 19 | MP4A | X | 7.879 | .25 |
| 20 | MP4A | Z | -4.549 | .25 |
| 21 | MP4A | Mx | 0039 | .25 |
| 22 | MP4A | X | 7.879 | 4.75 |
| 23 | MP4A | Z | -4.549 | 4.75 |
| 24 | MP4A | Mx | 0039 | 4.75 |
| 25 | MP4B | X | 7.879 | .25 |
| 26 | MP4B | Z | -4.549 | .25 |
| 27 | MP4B | Mx | .0039 | .25 |
| 28 | MP4B | X | 7.879 | 4.75 |
| 29 | MP4B | Z | -4.549 | 4.75 |
| 30 | MP4B | Mx | .0039 | 4.75 |
| 31 | MP4C | X | 10.61 | |
| 32 | MP4C | Z | -6.126 | .25 |
| 33 | MP4C | | | .25 |
| 33 | MP4C | Mx | 0 | .25 |



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Project # 21777291 Antenna Mount Analysis

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

| | Member Label | Direction | (m (60 Deg)) (Continued) Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--|----------------|
| 34 | MP4C | | 10.61 | 4.75 |
| 35 | MP4C | X | -6.126 | 4.75 |
| 36 | MP4C | Mx | 0 | 4.75 |
| 37 | MP3A | X | 2.379 | 1.5 |
| 38 | MP3A | Z | -1.373 | 1.5 |
| 39 | MP3A | Mx | 0012 | 1.5 |
| 10 | MP3A | X | 2.379 | 3.5 |
| 11 | MP3A | Z | -1.373 | 3.5 |
| 2 | MP3A | Mx | 0012 | 3,5 |
| 3 | MP3B | X | 2.379 | 1.5 |
| 4 | MP3B | Z | -1,373 | 1.5 |
| 15 | MP3B | Mx | .0012 | 1.5 |
| 16 | MP3B | X | 2.379 | 3.5 |
| 7 | MP3B | Z | -1.373 | 3.5 |
| | MP3B | Mx | .0012 | 3.5 |
| 8 | MP3C | X | 4.414 | 1.5 |
| 9 | MP3C | Ž | -2.548 | 1.5 |
| 0 | MP3C | Mx | 0 | 1.5 |
| 1 | MP3C MP3C | X | 4.414 | 3.5 |
| 2 | MP3C MP3C | X | -2.548 | 3.5 |
| 3 | | Mx | 0 | 3.5 |
| 54 | MP3C | X | 2.72 | 2 |
| 55 | MP4A | 2 Z | -1.57 | 2 |
| 6 | MP4A | Mx | .0014 | 2 |
| 57 | MP4A | X | 2.72 | 2 |
| 58 | MP4B | Ž | -1.57 | 2 |
| 59 | MP4B | | 0014 | 2 |
| 30 | MP4B | Mx | 3.61 | 2 |
| 31 | MP4C | X | -2.085 | 2 |
| 32 | MP4C | | 0 | 2 |
| 33 | MP4C | Mx | 1,11 | 4 |
| 54 | MP1A | X | 641 | 4 |
| 35 | MP1A | | .000555 | 4 |
| 36 | MP1A | Mx | 1,11 | 4 |
| 37 | MP1B | X | 641 | 4 |
| 86 | MP1B | Z | .000555 | 4 |
| 69 | MP1B | Mx | | 4 |
| 70 | MP1C | X | 1.11 | 4 |
| 71 | MP1C | Z | 641 .000555 | 4 |
| 72 | MP1C | Mx | | 2 |
| 73 | MP1A | X | 3.316 | 2 |
| 74 | MP1A | Z | -1.915 | 2 |
| 75 | MP1A | Mx | .0017 | 2 |
| 76 | MP1B | X | 3.316 | 2 |
| 77 | MP1B | Z | -1.915 | 2 |
| 78 | MP1B | Mx | 0017 | 2 |
| 79 | MP1C | X | 4.356 | 2 |
| 80 | MP1C | Z | -2.515 | 2 |
| 81 | MP1C | Mx | 0 | .25 |
| 82 | MP2A | X | 8.051 | .25 |
| 83 | MP2A | Z | -4.648 | .25 |
| 84 | MP2A | Mx | 004 | |
| 85 | MP2A | X | 8.051 | 4.75 |
| 86 | MP2A | Z | -4.648 | 4.75 |
| 87 | MP2A | Mx | 004 | 4.75 |
| 88 | MP2B | X | 8.051 | .25 |
| 89 | MP2B | Z | -4.648 | .25 |
| 90 | MP2B | Mx | .004 | .25 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:__

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 91 | MP2B | X | 8.051 | 4.75 |
| 92 | MP2B | 7 | -4.648 | |
| 93 | MP2B | Mx | .004 | 4.75 |
| 94 | MP2C | X | 10.75 | 4.75 |
| 95 | MP2C | 7 | -6.206 | .25 |
| 96 | MP2C | Mx | 0.200 | |
| 97 | MP2C | X | 10.75 | .25 |
| 98 | MP2C | 7 | -6.206 | 4.75 |
| 99 | MP2C | Mx | 0 | 4.75 4.75 |

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

| 1 | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 2 | MP1A | X | 8.047 | .25 |
| 3 | MP1A | Z | 0 | .25 |
| | MP1A | Mx | 004 | .25 |
| 4 | MP1A | X | 8.047 | 4.75 |
| 5 | MP1A | Z | 0 | 4.75 |
| 6 | MP1A | Mx | 004 | 4.75 |
| 7 | MP1B | X | 11.2 | .25 |
| 8 | MP1B | Z | 0 | .25 |
| 9 | MP1B | Mx | .0028 | .25 |
| 10 | MP1B | X | 11.2 | 4.75 |
| 11 | MP1B | Z | 0 | 4.75 |
| 12 | MP1B | Mx | .0028 | 4.75 |
| 13 | MP1C | X | 11.2 | .25 |
| 14 | MP1C | Z | 0 | .25 |
| 15 | MP1C | Mx | .0028 | .25 |
| 16 | MP1C | X | 11.2 | 4.75 |
| 17 | MP1C | Z | 0 | 4.75 |
| 18 | MP1C | Mx | .0028 | 4.75 |
| 19 | MP4A | X | 8.047 | .25 |
| 20 | MP4A | Z | 0 | .25 |
| 21 | MP4A | Mx | 004 | .25 |
| 22 | MP4A | X | 8.047 | 4.75 |
| 23 | MP4A | Z | 0 | 4.75 |
| 24 | MP4A | Mx | 004 | 4.75 |
| 25 | MP4B | X | 11.2 | .25 |
| 26 | MP4B | Z | 0 | .25 |
| 27 | MP4B | Mx | .0028 | .25 |
| 28 | MP4B | X | 11.2 | 4.75 |
| 29 | MP4B | Z | 0 | 4.75 |
| 30 | MP4B | Mx | .0028 | 4.75 |
| 31 | MP4C | X | 11.2 | .25 |
| 32 | MP4C | Z | 0 | .25 |
| 33 | MP4C | Mx | .0028 | .25 |
| 34 | MP4C | X | 11.2 | 4.75 |
| 35 | MP4C | Z | 0 | 4.75 |
| 36 | MP4C | Mx | .0028 | 4.75 |
| 37 | MP3A | X | 1.963 | 1.5 |
| 38 | MP3A | Z | 0 | 1.5 |
| 39 | MP3A | Mx | 000982 | 1.5 |
| 40 | MP3A | X | 1.963 | 3.5 |
| 41 | MP3A | Z | 0 | |
| 42 | MP3A | Mx | 000982 | 3.5 3.5 |
| 43 | MP3B | X | 4.314 | |
| 14 | MP3B | Z | 0 | 1.5 1.5 |



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

| | Member Label | Direction | m (90 Deg)) (Continued) Magnitude[lb.k-ft] | Location[ft.%] |
|----|--------------|-----------|---|----------------|
| 15 | MP3B | Mx | .0011 | 1.5 |
| 16 | MP3B | X | 4.314 | 3.5 |
| 47 | MP3B | Z | 0 | 3.5 |
| 48 | MP3B | Mx | .0011 | 3.5 |
| 49 | MP3C | X | 4.314 | 1.5 |
| 50 | MP3C | Z | 0 | 1.5 |
| 51 | MP3C | Mx | .0011 | 1.5 |
| 52 | MP3C | X | 4.314 | 3.5 |
| 53 | MP3C | Z | 0 | 3.5 |
| 54 | MP3C | Mx | .0011 | 3.5 |
| 55 | MP4A | X | 2.797 | 2 |
| 56 | MP4A | Z | 0 | 2 |
| 57 | MP4A | Mx | .0014 | 2 |
| 58 | MP4B | X | 3.826 | 2 |
| 59 | MP4B | Z | 0 | 2 |
| 60 | MP4B | Mx | 000956 | 2 |
| 61 | MP4C | X | 3.826 | 2 |
| 62 | MP4C | Z | 0 | 2 |
| 63 | MP4C | Mx | 000956 | 2 |
| 64 | MP1A | X | 1.377 | 4 |
| 65 | MP1A | Z | 0 | 4 |
| 66 | MP1A | Mx | .000688 | 4 |
| 67 | MP1B | X | 1.377 | 4 |
| 68 | MP1B | Z | 0 | 4 |
| 69 | MP1B | Mx | .000688 | 4 |
| 70 | MP1C | X | 1.377 | 4 |
| 71 | MP1C | Z | 0 | 4 |
| 72 | MP1C | Mx | .000688 | 4 |
| 73 | MP1A | X | 3.429 | 2 |
| 74 | MP1A | Z | 0 | 2 |
| 75 | MP1A | Mx | .0017 | 2 |
| 76 | MP1B | X | 4.63 | 2 |
| 77 | MP1B | Z | 0 | 2 |
| 78 | MP1B | Mx | 0012 | 2 |
| 79 | MP1C | X | 4.63 | 2 |
| 80 | MP1C | Z | 0 | 2 |
| 81 | MP1C | Mx | 0012 | 2 |
| 82 | MP2A | X | 8.258 | .25 |
| 83 | MP2A | Z | 0 | .25 |
| 84 | MP2A | Mx | 0041 | .25 |
| 85 | MP2A | X | 8.258 | 4.75 |
| 86 | MP2A | Z | 0 | 4.75 |
| 87 | MP2A | Mx | 0041 | 4.75 |
| 88 | MP2B | X | 11.374 | .25 |
| 89 | MP2B | Z | 0 | .25 |
| 90 | MP2B | Mx | .0028 | .25 |
| 91 | MP2B | X | 11.374 | 4.75 |
| 92 | MP2B | Ž | 0 | 4.75 |
| 93 | MP2B | Mx | .0028 | 4.75 |
| 94 | MP2C | X | 11.374 | .25 |
| 95 | MP2C | Z | 0 | .25 |
| 96 | MP2C | Mx | .0028 | .25 |
| 97 | MP2C | X | 11.374 | 4.75 |
| | MP2C | Ž | 0 | 4.75 |
| 98 | MP2C | Mx | .0028 | 4.75 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 7.879 | .25 |
| 2 | MP1A | Z | 4.549 | .25 |
| 3 | MP1A | Mx | 0039 | .25 |
| 4 | MP1A | X | 7.879 | 4.75 |
| 5 | MP1A | Z | 4.549 | 4.75 |
| 6 | MP1A | Mx | 0039 | 4.75 |
| 7 | MP1B | X | 10.61 | .25 |
| 8 | MP1B | Z | 6.126 | .25 |
| 9 | MP1B | Mx | 0 | .25 |
| 10 | MP1B | X | 10.61 | 4.75 |
| 11 | MP1B | Z | 6.126 | 4.75 |
| 12 | MP1B | Mx | 0 | 4.75 |
| 13 | MP1C | X | 7.879 | .25 |
| 14 | MP1C | Z | 4.549 | .25 |
| 15 | MP1C | Mx | .0039 | .25 |
| 16 | MP1C | X | 7.879 | |
| 17 | MP1C | Z | 4.549 | 4.75 4.75 |
| 18 | MP1C | Mx | .0039 | |
| 19 | MP4A | X | 7.879 | 4.75 |
| 20 | MP4A | Ž | 4.549 | .25 |
| 21 | MP4A | Mx | 0039 | .25 |
| 22 | MP4A | X | 7.879 | .25 |
| 23 | MP4A | Z | 4.549 | 4.75 |
| 24 | MP4A | Mx | 0039 | 4.75 |
| 25 | MP4B | X | 10.61 | 4.75 |
| 26 | MP4B | Z | | .25 |
| 27 | MP4B | Mx | 6.126 | .25 |
| 28 | MP4B | X | 10.61 | .25 |
| 29 | MP4B | Ž | 6.126 | 4.75 |
| 30 | MP4B | Mx | 0.126 | 4.75 |
| 31 | MP4C | X | 7.879 | 4.75 |
| 32 | MP4C | Z | | .25 |
| 33 | MP4C | Mx | 4.549 .0039 | .25 |
| 34 | MP4C | X | 7.879 | .25 |
| 35 | MP4C | Z | | 4.75 |
| 36 | MP4C | Mx | 4.549 | 4.75 |
| 37 | MP3A | X | .0039 | 4.75 |
| 38 | MP3A | Ž | 2.379 1.373 | 1.5 |
| 39 | MP3A | Mx | | 1.5 |
| 40 | MP3A | X | 0012 2.379 | 1.5 |
| 41 | MP3A | Z | | 3.5 |
| 42 | MP3A | Mx | 1.373 | 3.5 |
| 43 | MP3B | X | 0012 | 3.5 |
| 44 | MP3B | Z | 4.414 | 1.5 |
| 45 | MP3B | Mx | 2.548 | 1.5 |
| 46 | MP3B | X | 0 | 1.5 |
| 47 | MP3B | Z | 4.414 | 3.5 |
| 48 | MP3B | | 2.548 | 3.5 |
| 19 | MP3C | Mx | 0 | 3.5 |
| 50 | MP3C | X 7 | 2.379 | 1.5 |
| 51 | MP3C | Z | 1.373 | 1.5 |
| 52 | | Mx | .0012 | 1.5 |
| 53 | MP3C | X | 2.379 | 3.5 |
| 54 | MP3C | Z | 1.373 | 3.5 |
| 55 | MP3C | Mx | .0012 | 3.5 |
| 56 | MP4A | X | 2.72 | 2 |
| | MP4A | Z | 1.57 | 2 |
| 57 | MP4A | Mx | .0014 | 2 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:_

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

| | Member Label | Direction | m (120 Deg)) (Continued) Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|-----------|--|----------------|
| 58 | MP4B | X | 3.61 | 2 |
| 59 | MP4B | Z | 2.085 | 2 |
| 30 | MP4B | Mx | 0 | 2 |
| 51 | MP4C | X | 2.72 | 2 |
| 52 | MP4C | Z | 1.57 | 2 |
| 33 | MP4C | Mx | 0014 | 2 |
| 34 | MP1A | X | 1.11 | 4 |
| 35 | MP1A | Z | .641 | 4 |
| 36 | MP1A | Mx | .000555 | 4 |
| 57 | MP1B | X | 1.11 | 4 |
| 68 | MP1B | Z | .641 | 4 |
| 59 | MP1B | Mx | .000555 | 4 |
| 70 | MP1C | X | 1.11 | 4 |
| 71 | MP1C | Z | .641 | 4 |
| 72 | MP1C | Mx | .000555 | 4 |
| 73 | MP1A | X | 3.316 | 2 |
| 74 | MP1A | Ž | 1.915 | 2 |
| 75 | MP1A | Mx | .0017 | 2 |
| 76 | MP1B | X | 4.356 | 2 |
| 77 | MP1B | Z | 2.515 | 2 |
| 78 | MP1B | Mx | 0 | 2 |
| 79 | MP1C | X | 3.316 | 2 |
| 80 | MP1C | Z | 1.915 | 2 |
| 31 | MP1C | Mx | 0017 | 2 |
| 82 | MP2A | X | 8.051 | .25 |
| 83 | MP2A | Z | 4.648 | .25 |
| 84 | MP2A | Mx | 004 | .25 |
| 85 | MP2A | X | 8.051 | 4.75 |
| 86 | MP2A | Z | 4.648 | 4.75 |
| 87 | MP2A | Mx | 004 | 4.75 |
| 88 | MP2B | X | 10.75 | .25 |
| 89 | MP2B | Z | 6.206 | .25 |
| 90 | MP2B | Mx | 0 | .25 |
| 91 | MP2B | X | 10.75 | 4.75 |
| 92 | MP2B | Z | 6.206 | 4.75 |
| 93 | MP2B | Mx | 0 | 4.75 |
| 93 | MP2C | X | 8.051 | .25 |
| 95 | MP2C | Z | 4.648 | .25 |
| 96 | MP2C | Mx | .004 | .25 |
| 96 97 | MP2C | X | 8.051 | 4.75 |
| 98 | MP2C | Z | 4.648 | 4.75 |
| 98 99 | MP2C | Mx | .004 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 5.6 | .25 |
| 2 | MP1A | Z | 9.7 | .25 |
| 3 | MP1A | Mx | 0028 | .25 |
| 4 | MP1A | X | 5.6 | 4.75 |
| 5 | MP1A | Z | 9.7 | 4.75 |
| 6 | MP1A | Mx | 0028 | 4.75 |
| 7 | MP1B | X | 5.6 | .25 |
| 8 | MP1B | Z | 9.7 | .25 |
| 9 | MP1B | Mx | 0028 | 25 |
| 10 | MP1B | X | 5.6 | 4.75 |
| 11 | MP1B | Z | 9.7 | 4.75 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 12 | MP1B | Mx | 0028 | 4.75 |
| 13 | MP1C | X | 4.023 | .25 |
| 14 | MP1C | Z | 6.969 | .25 |
| 15 | MP1C | Mx | .004 | .25 |
| 16 | MP1C | X | 4.023 | 4.75 |
| 17 | MP1C | Z | 6.969 | 4.75 |
| 18 | MP1C | Mx | .004 | 4.75 |
| 19 | MP4A | X | 5.6 | .25 |
| 20 | MP4A | Z | 9.7 | .25 |
| 21 | MP4A | Mx | 0028 | .25 |
| 22 | MP4A | X | 5.6 | 4.75 |
| 23 | MP4A | Z | 9.7 | 4.75 |
| 24 | MP4A | Mx | 0028 | 4.75 |
| 25 | MP4B | X | 5.6 | .25 |
| 26 | MP4B | Z | 9.7 | .25 |
| 27 | MP4B | Mx | 0028 | .25 |
| 28 | MP4B | X | 5.6 | 4.75 |
| 29 | MP4B | Z | 9.7 | 4.75 |
| 30 | MP4B | Mx | 0028 | 4.75 |
| 31 | MP4C | X | 4.023 | .25 |
| 32 | MP4C | Z | 6.969 | .25 |
| 33 | MP4C | Mx | .004 | .25 |
| 34 | MP4C | X | 4.023 | 4.75 |
| 35 | MP4C | Z | 6.969 | 4.75 |
| 36 | MP4C | Mx | .004 | 4.75 |
| 37 | MP3A | X | 2.157 | 1.5 |
| 38 | MP3A | Z | 3,736 | 1.5 |
| 39 | MP3A | Mx | 0011 | 1.5 |
| 40 | MP3A | X | 2.157 | 3.5 |
| 41 | MP3A | Z | 3.736 | 3.5 |
| 42 | MP3A | Mx | 0011 | 3.5 |
| 43 | MP3B | X | 2.157 | 1.5 |
| 44 | MP3B | Z | 3.736 | 1.5 |
| 45 | MP3B | Mx | 0011 | 1.5 |
| 46 | MP3B | X | 2.157 | 3.5 |
| 47 | MP3B | Z | 3.736 | 3.5 |
| 48 | MP3B | Mx | 0011 | 3.5 |
| 49 | MP3C | X | .982 | 1.5 |
| 50 | MP3C | Z | 1.7 | 1.5 |
| 51 | MP3C | Mx | .000982 | 1.5 |
| 52 | MP3C | X | .982 | 3.5 |
| 53 | MP3C | Z | 1.7 | 3.5 |
| 54 | MP3C | Mx | .000982 | 3.5 |
| 55 | MP4A | X | 1.913 | 2 |
| 56 | MP4A | Z | 3.313 | 2 |
| 57 | MP4A | Mx | .000956 | 2 |
| 58 | MP4B | X | 1.913 | 2 |
| 59 | MP4B | Z | 3.313 | 2 |
| 60 | MP4B | Mx | .000956 | 2 2 |
| 61 | MP4C | X | 1.399 | 2 |
| 62 | MP4C | Z | 2.423 | 2 |
| 63 | MP4C | Mx | 0014 | 2 |
| 64 | MP1A | X | .545 | 4 |
| 65 | MP1A | Z | .945 | |
| 66 | MP1A | Mx | .000273 | 4 |
| 67 | MP1B | X | .545 | |
| 68 | MP1B | Z | .945 | 4 |



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Antonna Mount Analysis

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 00 | MP1B | Mx | .000273 | 4 |
| 69 | MP1C | X | .545 | 4 |
| 70 | MP1C | Ž | .945 | 4 |
| 71 | | Mx | .000273 | 4 |
| 72 | MP1C | X | 2.315 | 2 |
| 73 | MP1A | Ž | 4.009 | 2 |
| 74 | MP1A | Mx | .0012 | 2 |
| 75 | MP1A | X | 2.315 | 2 |
| 76 | MP1B | Z | 4.009 | 2 |
| 77 | MP1B | Mx | .0012 | 2 |
| 78 | MP1B | | 1.715 | 2 |
| 79 | MP1C | X | 2.97 | 2 |
| 80 | MP1C | Z | 0017 | 2 |
| 81 | MP1C | Mx | 5.687 | .25 |
| 82 | MP2A | X | 9.85 | .25 |
| 83 | MP2A | | 0028 | .25 |
| 84 | MP2A | Mx | 5.687 | 4.75 |
| 85 | MP2A | X | 9.85 | 4.75 |
| 86 | MP2A | Z | 0028 | 4.75 |
| 87 | MP2A | Mx | | .25 |
| 88 | MP2B | X | 5.687 | .25 |
| 89 | MP2B | Z | 9.85 | .25 |
| 90 | MP2B | Mx | 0028 | 4.75 |
| 91 | MP2B | X | 5.687 | 4.75 |
| 92 | MP2B | Z | 9.85 | 4.75 |
| 93 | MP2B | Mx | 0028 | .25 |
| 94 | MP2C | X | 4.129 | .25 |
| 95 | MP2C | Z | 7.151 | .25 |
| 96 | MP2C | Mx | .0041 | |
| 97 | MP2C | X | 4.129 | 4.75 |
| 98 | MP2C | Z | 7.151 | 4.75 |
| 99 | MP2C | Mx | .0041 | 4.75 |

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

| | | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| | Member Label | X | 0 | .25 |
| 1 | MP1A | Z | 12.252 | .25 |
| 2 | MP1A | | 0 | .25 |
| 3 | MP1A | Mx | 0 | 4.75 |
| 4 | MP1A | X | 12.252 | 4.75 |
| 5 | MP1A | Z | | 4.75 |
| 6 | MP1A | Mx | 0 | .25 |
| 7 | MP1B | X | 0 | .25 |
| 8 | MP1B | Z | 9.098 | .25 |
| 9 | MP1B | Mx | 0039 | |
| 10 | MP1B | X | 0 | 4.75 |
| 11 | MP1B | Z | 9.098 | 4.75 |
| 12 | MP1B | Mx | 0039 | 4.75 |
| 13 | MP1C | X | 0 | .25 |
| 14 | MP1C | Z | 9.098 | .25 |
| 15 | MP1C | Mx | .0039 | .25 |
| | MP1C | X | 0 | 4.75 |
| 16 | | 7 | 9.098 | 4.75 |
| 17 | MP1C | Mx | .0039 | 4.75 |
| 18 | MP1C | X | 0 | .25 |
| 19 | MP4A | | 12.252 | .25 |
| 20 | MP4A | | 0 | .25 |
| 21 | MP4A | Mx | 0 | 4.75 |
| 22 | MP4A | X | U | 1.10 |



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

| 23 | Member Label MP4A | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|-------------------|-----------|--------------------|----------------|
| 24 | MP4A | Z | 12.252 | 4.75 |
| 25 | MP4B | Mx Mx | 0 | 4.75 |
| 26 | MP4B | X | 0 | .25 |
| 27 | MP4B | Z | 9.098 | .25 |
| 28 | MP4B | Mx | 0039 | .25 |
| 29 | MP4B | X | 0 | 4.75 |
| 30 | MP4B | Z | 9.098 | 4.75 |
| 31 | MP4B MP4C | Mx | 0039 | 4.75 |
| 32 | MP4C | <u> </u> | 0 | .25 |
| 33 | | Z . | 9.098 | .25 |
| 34 | MP4C | Mx | .0039 | .25 |
| 35 | MP4C | X | 0 | 4.75 |
| 36 | MP4C | Z | 9.098 | 4.75 |
| | MP4C | Mx | .0039 | 4.75 |
| 37 | MP3A | X | 0 | 1.5 |
| 38 | MP3A | Z | 5.097 | 1.5 |
| 39 | MP3A | Mx | 0 | 1.5 |
| 40 | MP3A | X | 0 | 3.5 |
| 41 | MP3A | Z | 5.097 | 3.5 |
| 42 | MP3A | Mx | 0 | 3.5 |
| 43 | MP3B | X | 0 | 1.5 |
| 44 | MP3B | Z | 2.747 | 1.5 |
| 45 | MP3B | Mx | 0012 | 1.5 |
| 46 | MP3B | X | 0 | 3.5 |
| 47 | MP3B | Z | 2.747 | 3.5 |
| 48 | MP3B | Mx | 0012 | 3.5 |
| 49 | MP3C | X | 0 | 1.5 |
| 50 | MP3C | Z | 2.747 | 1.5 |
| 51 | MP3C | Mx | .0012 | 1.5 |
| 52 | MP3C | X | 0 | 3.5 |
| 53 | MP3C | Z | 2.747 | 3.5 |
| 54 | MP3C | Mx | .0012 | 3.5 |
| 55 | MP4A | X | 0 | 2 |
| 56 | MP4A | Z | 4.169 | 2 |
| 57 | MP4A | Mx | 0 | 2 |
| 58 | MP4B | X | 0 | 2 |
| 59 | MP4B | Z | 3.14 | 2 |
| 60 | MP4B | Mx | .0014 | 2 |
| 61 | MP4C | X | 0 | 2 |
| 62 | MP4C | Z | 3.14 | 2 |
| 63 | MP4C | Mx | 0014 | 2 |
| 64 | MP1A | X | 0 | 4 |
| 65 | MP1A | Z | .995 | 4 |
| 66 | MP1A | Mx | 0 | 4 |
| 67 | MP1B | X | 0 | 4 |
| 68 | MP1B | Z | .995 | 4 |
| 69 | MP1B | Mx | 0 | 4 |
| 70 | MP1C | X | 0 | 4 |
| 71 | MP1C | Z | .995 | 4 |
| 72 | MP1C | Mx | 0 | 4 |
| 73 | MP1A | X | 0 | 2 |
| 74 | MP1A | Z | 5.03 | 2 |
| 75 | MP1A | Mx | 0 | 2 |
| 76 | MP1B | X | 0 | 2 |
| 77 | MP1B | Ž | 3.829 | 2 |
| 78 | MP1B | Mx | .0017 | 2 |
| 79 | | | | |



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

| | er Point Loads (DL | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|----------------------|-----------|--------------------|----------------|
| 00 | Member Label MP1C | 7 | 3.829 | 2 |
| 80 | | Mx | 0017 | 2 |
| 81 | MP1C | | 0 | .25 |
| 82 | MP2A | X | 12.413 | .25 |
| 83 | MP2A | Z | | .25 |
| 84 | MP2A | Mx | 0 | 4.75 |
| 85 | MP2A | X | 0 | 4.75 |
| 86 | MP2A | Z | 12.413 | 4.75 |
| 87 | MP2A | Mx | 0 | |
| 88 | MP2B | X | 0 | .25 |
| 89 | MP2B | Z | 9.296 | .25 |
| 90 | MP2B | Mx | 004 | .25 |
| 91 | MP2B | X | 0 | 4.75 |
| 92 | MP2B | Z | 9.296 | 4.75 |
| | MP2B | Mx | 004 | 4.75 |
| 93 | MP2C | X | 0 | .25 |
| 94 | | 7 | 9.296 | .25 |
| 95 | MP2C | Mx | .004 | .25 |
| 96 | MP2C | X | 0 | 4.75 |
| 97 | MP2C | | 9.296 | 4.75 |
| 98 | MP2C | | | 4.75 |
| 99 | MP2C | Mx | .004 | 4.75 |

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

| | er Point Loads (BL Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|---------------|------------------------------------|---------------------------------------|--------------------|----------------|
| 4 | MP1A | X | -5.6 | .25 |
| $\frac{1}{2}$ | MP1A | Z | 9.7 | .25 |
| 2 | MP1A | Mx | .0028 | .25 |
| 3 | MP1A | X | -5.6 | 4.75 |
| 4 | MP1A | Z | 9.7 | 4.75 |
| 5 | MP1A | Mx | .0028 | 4.75 |
| 6 | MP1B | | -4.023 | .25 |
| 7 | MP1B | X | 6.969 | .25 |
| 8 | MP1B | Mx | 004 | .25 |
| 9 | MP1B | X | -4.023 | 4.75 |
| 10 | MP1B | Ž | 6.969 | 4.75 |
| 11 | MP1B | Mx | -,004 | 4.75 |
| 12 | | X | -5.6 | .25 |
| 13 | MP1C MP1C | Z Z | 9.7 | .25 |
| 14 | | Mx | .0028 | .25 |
| 15 | MP1C | X | -5.6 | 4.75 |
| 16 | MP1C | Z | 9.7 | 4.75 |
| 17 | MP1C | Mx | .0028 | 4.75 |
| 18 | MP1C_ | X | -5.6 | .25 |
| 19 | MP4A | Ž | 9.7 | .25 |
| 20 | MP4A | Mx | .0028 | .25 |
| 21 | MP4A | X | -5.6 | 4.75 |
| 22 | MP4A | · · · · · · · · · · · · · · · · · · · | 9.7 | 4.75 |
| 23 | MP4A | Mx | .0028 | 4.75 |
| 24 | MP4A | X | -4.023 | .25 |
| 25 | MP4B | | 6.969 | .25 |
| 26 | MP4B | | 004 | .25 |
| 27 | MP4B | Mx X | -4.023 | 4.75 |
| 28 | MP4B | Z | 6.969 | 4.75 |
| 29 | MP4B | A | 004 | 4.75 |
| 30 | MP4B | Mx | -5.6 | .25 |
| 31 | MP4C | X | 9.7 | .25 |
| 32 | MP4C | Z | .0028 | .25 |
| 33 | MP4C | Mx | .0020 | - W |



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

| 34 | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 35 | MP4C MP4C | X | -5.6 | 4.75 |
| 36 | | Z | 9.7 | 4.75 |
| 37 | MP4C | Mx | .0028 | 4.75 |
| 38 | MP3A | <u> </u> | -2.157 | 1.5 |
| | MP3A | Z | 3,736 | 1.5 |
| 39 | MP3A | Mx | .0011 | 1.5 |
| 40 | MP3A | X | -2.157 | 3.5 |
| 41 | MP3A | Z | 3.736 | 3.5 |
| 42 | MP3A | Mx | .0011 | 3.5 |
| 43 | MP3B | X | 982 | 1.5 |
| 44 | MP3B | Z | 1.7 | 1.5 |
| 45 | MP3B | Mx | 000982 | 1.5 |
| 46 | MP3B | X | 982 | 3.5 |
| 47 | MP3B | Z | 1.7 | 3.5 |
| 48 | MP3B | Mx | 000982 | 3.5 |
| 49 | MP3C | X | -2.157 | 1.5 |
| 50 | MP3C | Z | 3.736 | 1.5 |
| 51 | MP3C | Mx | .0011 | 1.5 |
| 52 | MP3C | X | -2.157 | 3.5 |
| 53 | MP3C | Z | 3.736 | |
| 54 | MP3C | Mx | .0011 | 3.5 |
| 55 | MP4A | X | -1.913 | 3.5 |
| 56 | MP4A | Ž | 3.313 | 2 |
| 57 | MP4A | Mx | | 2 |
| 58 | MP4B | X | 000956 | 2 |
| 59 | MP4B | Z | -1.399 | 2 |
| 60 | MP4B | | 2.423 | 2 |
| 61 | MP4C | Mx | .0014 | 2 |
| 62 | MP4C | X | -1.913 | 2 |
| 63 | MP4C MP4C | Z | 3.313 | 2 |
| 64 | | Mx | 000956 | 2 |
| 65 | MP1A | X | 545 | 4 |
| | MP1A | Z | .945 | 4 |
| 66 | MP1A | Mx | 000273 | 4 |
| 67 | MP1B | X | 545 | 4 |
| 68 | MP1B | Z | .945 | 4 |
| 69 | MP1B | Mx | 000273 | 4 |
| 70 | MP1C | X | 545 | 4 |
| 71 | MP1C | Z | .945 | 4 |
| 72 | MP1C | Mx | 000273 | 4 |
| 73 | MP1A | X | -2.315 | 2 |
| 74 | MP1A | Z | 4.009 | 2 |
| 75 | MP1A | Mx | 0012 | 2 |
| 76 | MP1B | X Z | -1.715 | |
| 77 | MP1B | Z | 2.97 | 2 2 |
| 78 | MP1B | Mx | .0017 | 2 |
| 79 | MP1C | | -2.315 | 2 |
| 30 | MP1C | Z | 4.009 | 2 |
| 31 | MP1C | Mx | 0012 | 2 |
| 32 | MP2A | X | -5.687 | .25 |
| 33 | MP2A | Z | 9.85 | |
| 34 | MP2A | Mx | .0028 | .25 |
| 5 | MP2A | | | .25 |
| 6 | MP2A | X | -5.687 | 4.75 |
| 37 | MP2A | Mx | 9.85 | 4.75 |
| 88 | MP2B | | .0028 | 4.75 |
| 9 | MP2B | X | -4.129 | .25 |
| 00 | MP2B | | 7.151 | .25 |
| /U | IVIFZD | Mx | 0041 | .25 |



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

| | TOMIC LOUGO (DE | Direction | Magnitude[lb,k-ft] | Location[ft.%] |
|----------|-----------------|-----------|--------------------|----------------|
| | Member Label | V | -4.129 | 4.75 |
| 91 | MP2B | 7 | 7.151 | 4.75 |
| 92 93 | MP2B | | 0041 | 4.75 |
| 93 | MP2B | Mx | | .25 |
| 94 | MP2C | X | -5.687 | .25 |
| 95 | MP2C | Z | 9.85 | |
| 96 | MP2C | Mx | .0028 | .25 |
| 97 | MP2C | X | -5.687 | 4.75 |
| 00 | MP2C | 7 | 9.85 | 4.75 |
| 98 99 | MP2C | Mx | .0028 | 4.75 |

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

| | er Point Loads (BL | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------------|------------|--------------------|----------------|
| 1 | MP1A | | -7.879 | .25 |
| 2 | MP1A | X | 4.549 | .25 |
| 3 | MP1A | Mx | .0039 | .25 |
| | MP1A | X | -7.879 | 4.75 |
| 4 | MP1A | Z | 4.549 | 4.75 |
| 5 | MP1A | Mx | .0039 | 4.75 |
| 6 | MP1B | X | -7.879 | .25 |
| 7 | MP1B | Ž Ž | 4.549 | ,25 |
| 8 | MP1B | Mx | 0039 | .25 |
| 9 | MP1B | X | -7.879 | 4.75 |
| 10 | MP1B | Z | 4.549 | 4.75 |
| 11 | | Mx | 0039 | 4.75 |
| 12 | MP1B | X | -10.61 | .25 |
| 13 | MP1C | Ž | 6.126 | .25 |
| 14 | MP1C | Mx | 0 | ,25 |
| 15 | MP1C | X | -10.61 | 4.75 |
| 16 | MP1C | - <u>^</u> | 6.126 | 4.75 |
| 17 | MP1C | | 0 | 4.75 |
| 18 | MP1C | Mx | -7.879 | .25 |
| 19 | MP4A | X | 4.549 | .25 |
| 20 | MP4A | Z | .0039 | .25 |
| 21 | MP4A | Mx | -7.879 | 4.75 |
| 22 | MP4A | X | 4.549 | 4.75 |
| 23 | MP4A | Z | .0039 | 4.75 |
| 24 | MP4A | Mx | -7.879 | .25 |
| 25 | MP4B | X | 4.549 | .25 |
| 26 | MP4B | Z | | .25 |
| 27 | MP4B | Mx | 0039 | 4.75 |
| 28 | MP4B | X | -7.879 | 4.75 |
| 29 | MP4B | Z | 4.549 | 4.75 |
| 30 | MP4B | Mx | 0039 | .25 |
| 31 | MP4C | X | -10.61 | .25 |
| 32 | MP4C | Z | 6.126 | .25 |
| 33 | MP4C | Mx | 0 | 4.75 |
| 34 | MP4C | X | -10.61 | 4.75 |
| 35 | MP4C | Z | 6.126 | |
| 36 | MP4C | Mx | 0 | 4.75 |
| 37 | MP3A | X | -2.379 | 1.5 |
| 38 | MP3A | Z | 1.373 | 1.5 |
| 39 | MP3A | Mx | .0012 | 1.5 |
| 40 | MP3A | X | -2.379 | 3.5 |
| 41 | MP3A | Z | 1.373 | 3.5 |
| 42 | MP3A | Mx | .0012 | 3.5 |
| 43 | MP3B | X | -2.379 | 1.5 |
| 44 | MP3B | Z | 1.373 | 1.5 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 45 | MP3B | Mx | 0012 | 1.5 |
| 46 | MP3B | X | -2.379 | 3.5 |
| 47 | MP3B | Z | 1.373 | 3.5 |
| 48 | MP3B | Mx | 0012 | 3.5 |
| 49 | MP3C | X | -4.414 | 1.5 |
| 50 | MP3C | Z | 2.548 | 1.5 |
| 51 | MP3C | Mx | 0 | 1.5 |
| 52 | MP3C | X | -4.414 | 3.5 |
| 53 | MP3C | Z | 2.548 | 3.5 |
| 54 | MP3C | Mx | 0 | 3.5 |
| 55 | MP4A | X | -2.72 | 2 |
| 56 | MP4A | Z | 1.57 | 2 |
| 57 | MP4A | Mx | 0014 | 2 |
| 8 | MP4B | X | -2.72 | 2 |
| 9 | MP4B | Z | 1.57 | 2 |
| 0 | MP4B | Mx | .0014 | 2 |
| 1 | MP4C | X | -3.61 | 2 |
| 2 | MP4C | Ž | 2.085 | 2 |
| 3 | MP4C | Mx | 0 | |
| 4 | MP1A | X | -1.11 | 2 |
| 5 | MP1A | Z | .641 | 4 |
| 6 | MP1A | Mx | 000555 | 4 |
| 7 | MP1B | X | -1.11 | 4 |
| 8 | MP1B | Z | .641 | 4 |
| 9 | MP1B | Mx | 000555 | 4 |
| 0 | MP1C | X | -1.11 | 4 |
| 1 | MP1C | Z | .641 | 4 |
| 2 | MP1C | Mx | | 4 |
| 3 | MP1A | X | 000555 | 4 |
| 4 | MP1A | Z | -3.316 | 2 |
| 5 | MP1A | Mx | 1.915 | 2 |
| 6 | MP1B | X | 0017 | 2 |
| 7 | MP1B | Z | -3.316 | 2 |
| 8 | MP1B | Mx | 1.915 | 2 |
| 9 | MP1C | X | .0017 | 2 |
| | MP1C | Ž | -4.356 | 2 |
| 1 | MP1C | Mx | 2.515 | 2 |
| 2 | MP2A | X | 0 | 2 |
| 3 | MP2A | Z | -8.051 | .25 |
| 1 | MP2A | Mx | 4.648 | .25 |
| 5 | MP2A | X | .004 | .25 |
| 3 | MP2A | Z | -8.051 | 4.75 |
| | | | 4.648 | 4.75 |
| 3 | MP2A MP2B | Mx X | .004 | 4.75 |
| | MP2B | Z | -8.051 | .25 |
| | MP2B | | 4.648 | .25 |
| | MP2B | Mx | 004 | .25 |
| | MP2B | X | -8.051 | 4.75 |
| 3 | MP2B | | 4.648 | 4.75 |
| 1 | MP2C | Mx | 004 | 4.75 |
| 5 | MP2C MP2C | X | -10.75 | .25 |
| 6 | | Z | 6.206 | .25 |
| | MP2C | Mx | 0 | .25 |
| | MP2C | <u>X</u> | -10.75 | 4.75 |
| 3 | MP2C | Z | 6.206 | 4.75 |
| 9 | MP2C | Mx | 0 | 4.75 |



Colliers Engineering & Design

Project # 21777291
Antenna Mount Analysis

Dec 19, 2023 9:31 AM Checked By:_

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

| | Member Label | C 36 : Antenna Wi | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-------------------|--------------------|----------------|
| 1 | MP1A | X | -8.047 | .25 |
| 2 | MP1A | Z | 0 | .25 |
| 3 | MP1A | Mx | .004 | .25 |
| 4 | MP1A | X | -8.047 | 4.75 |
| | MP1A | Ž | 0 | 4.75 |
| 5 | MP1A | Mx | .004 | 4.75 |
| 6 | | X | -11.2 | .25 |
| 7 | MP1B | Ž | 0 | .25 |
| 8 | MP1B | Mx | 0028 | .25 |
| 9 | MP1B | X | -11.2 | 4.75 |
| 10 | MP1B | Ž | 0 | 4.75 |
| 11 | MP1B | Mx | 0028 | 4.75 |
| 12 | MP1B | X | -11.2 | .25 |
| 13 | MP1C | Ž | 0 | .25 |
| 14 | MP1C | | 0028 | .25 |
| 15 | MP1C | Mx | -11.2 | 4.75 |
| 16 | MP1C | X | 0 | 4.75 |
| 17 | MP1C | Z | 0028 | 4.75 |
| 18 | MP1C | Mx | -8.047 | .25 |
| 19 | MP4A | <u> </u> | 0- | .25 |
| 20 | MP4A | Z | .004 | .25 |
| 21 | MP4A | Mx | -8.047 | 4.75 |
| 22 | MP4A | X | | 4.75 |
| 23 | MP4A | Z | 0 | 4.75 |
| 24 | MP4A | Mx | .004 | .25 |
| 25 | MP4B | X | -11.2 | .25 |
| 26 | MP4B | Z | 0 | .25 |
| 27 | MP4B | Mx | 0028 | 4.75 |
| 28 | MP4B | X | -11.2 | 4.75 |
| 29 | MP4B | Z | 0 | |
| 30 | MP4B | Mx | 0028 | 4.75 |
| 31 | MP4C | X | -11.2 | .25 |
| 32 | MP4C | Z | 0 | .25 |
| 33 | MP4C | Mx | -,0028 | .25 |
| 34 | MP4C | X | -11.2 | 4.75 |
| 35 | MP4C | Z | 0 | 4.75 |
| 36 | MP4C | Mx | 0028 | 4.75 |
| 37 | MP3A | X | -1.963 | 1.5 |
| 38 | MP3A | Z | 0 | 1.5 |
| 39 | MP3A | Mx | .000982 | 1.5 |
| 40 | MP3A | X | -1.963 | 3.5 |
| | MP3A | Z | 0 | 3.5 |
| 41 | MP3A | Mx | .000982 | 3.5 |
| 42 | MP3B | X | -4.314 | 1.5 |
| 43 | | Z | 0 | 1.5 |
| 44 | MP3B | Mx | 0011 | 1.5 |
| 45 | MP3B | X | -4.314 | 3.5 |
| 46 | MP3B | Ž | 0 | 3.5 |
| 47 | MP3B | Mx | 0011 | 3.5 |
| 48 | MP3B | | -4.314 | 1.5 |
| 49 | MP3C | X Z | 0 | 1.5 |
| 50 | MP3C | | 0011 | 1.5 |
| 51 | MP3C | Mx | -4.314 | 3.5 |
| 52 | MP3C | X | 0 | 3.5 |
| 53 | MP3C | | 0011 | 3.5 |
| 54 | MP3C | Mx | -2.797 | 2 |
| 55 | MP4A | X | | 2 |
| 56 | MP4A | Z | 0 | 2 |
| 57 | MP4A | Mx | 0014 | |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 58 | MP4B | X | -3.826 | 2 |
| 59 | MP4B | Z | 0 | |
| 60 | MP4B | Mx | .000956 | 2 |
| 61 | MP4C | X | -3.826 | 2 |
| 62 | MP4C | Z | 0 | 2 |
| 63 | MP4C | Mx | .000956 | 2 |
| 64 | MP1A | X | -1.377 | 4 |
| 65 | MP1A | Z | 0 | 4 |
| 66 | MP1A | Mx | 000688 | 4 |
| 67 | MP1B | X | -1.377 | 4 |
| 68 | MP1B | Z | 0 | 4 |
| 69 | MP1B | Mx | 000688 | 4 |
| 70 | MP1C | X | -1.377 | 4 |
| 71 | MP1C | Z | 0 | 4 |
| 72 | MP1C | Mx | 000688 | 4 |
| 73 | MP1A | X | -3.429 | 2 |
| 74 | MP1A | Z | 0 | 2 |
| 75 | MP1A | Mx | 0017 | 2 |
| 76 | MP1B | X | -4.63 | 2 |
| 77 | MP1B | Z | 0 | 2 |
| 78 | MP1B | Mx | .0012 | 2 |
| 79 | MP1C | X | -4.63 | 2 |
| 80 | MP1C | Ž | 0 | 2 |
| 81 | MP1C | Mx | .0012 | 2 |
| 82 | MP2A | X | -8.258 | |
| 83 | MP2A | Z | 0 | .25 .25 |
| 84 | MP2A | Mx | .0041 | .25 |
| 85 | MP2A | X | -8.258 | |
| 86 | MP2A | Ž | 0 | 4.75 |
| 87 | MP2A | Mx | .0041 | 4.75 |
| 88 | MP2B | X | -11.374 | 4.75 |
| 89 | MP2B | Z | 0 | .25 |
| 90 | MP2B | Mx | 0028 | .25 |
| 91 | MP2B | X | -11.374 | .25 |
| 92 | MP2B | Ž | 0 | 4.75 |
| 93 | MP2B | Mx | 0028 | 4.75 |
| 94 | MP2C | X | -11.374 | 4.75 |
| 95 | MP2C | Z | 0 | .25 |
| 96 | MP2C | Mx | 0028 | .25 |
| 97 | MP2C | X | -11.374 | .25 |
| 98 | MP2C | Ž | | 4.75 |
| 99 | MP2C | Mx | 0 0028 | 4.75 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|---------------------|
| 1 | MP1A | X | -7.879 | .25 |
| 2 | MP1A | Z | -4.549 | .25 |
| 3 | MP1A | Mx | .0039 | .25 |
| 4 | MP1A | X | -7.879 | 4.75 |
| 5 | MP1A | Z | -4.549 | 4.75 |
| 6 | MP1A | Mx | .0039 | 4.75 |
| 7 | MP1B | X | -10.61 | .25 |
| 8 | MP1B | Z | -6.126 | .25 |
| 9 | MP1B | Mx | 0 | .25 |
| 10 | MP1B | X | -10.61 | |
| 11 | MP1B | Z | -6.126 | <u>4.75</u> 4.75 |



: Colliers Engineering & Design

: Project # 21777291 : Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:_

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

| | Member Label | Direction | m (300 Deg)) (Continued) Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|-----------|--|----------------|
| 12 | MP1B | Mx | 0 | 4.75 |
| 13 | MP1C | X | -7.879 | .25 |
| 14 | MP1C | Z | -4.549 | .25 |
| 15 | MP1C | Mx | 0039 | .25 |
| 16 | MP1C | X | -7.879 | 4.75 4.75 |
| 17 | MP1C | Z | -4.549 | |
| 18 | MP1C | Mx | 0039 | 4.75 .25 |
| 19 | MP4A | X | -7.879 | .25 |
| 20 | MP4A | Z | -4.549 | .25 |
| 21 | MP4A | Mx | .0039 | 4.75 |
| 22 | MP4A | X | -7.879 | |
| 23 | MP4A | Z | -4.549 | 4.75 |
| 24 | MP4A | Mx | .0039 | 4.75 |
| 25 | MP4B | X | -10.61 | .25 |
| 26 | MP4B | Z | -6.126 | .25 |
| 27 | MP4B | Mx | 0 | .25 |
| 28 | MP4B | X | -10.61 | 4.75 |
| 29 | MP4B | Z | -6.126 | 4.75 |
| 30 | MP4B | Mx | 0 | 4.75 |
| 31 | MP4C | X | -7.879 | .25 |
| 32 | MP4C | Z | -4.549 | .25 |
| 33 | MP4C | Mx | 0039 | .25 |
| 34 | MP4C | X | -7.879 | 4.75 |
| 35 | MP4C | Z | -4.549 | 4.75 |
| 36 | MP4C | Mx | 0039 | 4.75 |
| 37 | MP3A | X | -2.379 | 1.5 |
| 38 | MP3A | Z | -1.373 | 1.5 |
| 39 | MP3A | Mx | .0012 | 1.5 |
| 40 | MP3A | X | -2.379 | 3.5 |
| 41 | MP3A | Z | -1.373 | 3.5 |
| 42 | MP3A | Mx | .0012 | 3,5 |
| 43 | MP3B | X | -4.414 | 1.5 |
| 44 | MP3B | Z | -2.548 | 1.5 |
| 45 | MP3B | Mx | 0 | 1.5 |
| 46 | MP3B | X | -4.414 | 3.5 |
| 47 | MP3B | Z | -2.548 | 3.5 |
| 48 | MP3B | Mx | 0 | 3.5 |
| 49 | MP3C | X | -2.379 | 1.5 |
| 50 | MP3C | Z | -1.373 | 1.5 |
| 51 | MP3C | Mx | 0012 | 1,5 |
| 52 | MP3C | X | -2.379 | 3.5 |
| 53 | MP3C | Z | -1.373 | 3.5 |
| 54 | MP3C | Mx | 0012 | 3.5 |
| 55 | MP4A | X | -2.72 | 2 |
| 56 | MP4A | Z | -1.57 | 2 |
| 57 | MP4A | Mx | 0014 | 2 |
| 58 | MP4B | X | -3.61 | 2 |
| 59 | MP4B | Z | -2.085 | 2 |
| 60 | MP4B | Mx | 0 | 2 |
| 61 | MP4C | X | -2.72 | 2 |
| 62 | MP4C | Z | -1.57 | 2 |
| 63 | MP4C | Mx | .0014 | 2 |
| | MP1A | X | -1.11 | 4 |
| 64 | MP1A | Z | 641 | 4 |
| 65 | MP1A | Mx | 000555 | 4 |
| 66 | MP1B | X | -1.11 | 4 |
| 67 68 | MP1B | Ž | 641 | 4 |



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Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

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

| Men | nber Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|------|------------|-----------|--------------------|----------------|
| | MP1B | Mx | 000555 | 4 |
| | MP1C | X | -1.11 | 4 |
| | MP1C | Z | 641 | 4 |
| 72 | MP1C | Mx | 000555 | 4 |
| 73 | MP1A | X | -3.316 | 2 |
| | MP1A | 7 | -1.915 | 2 |
| | MP1A | Mx | 0017 | |
| | MP1B | X | -4.356 | 2 |
| | MP1B | Z | -2.515 | 2 |
| | MP1B | Mx | -2.515 | 2 |
| | /P1C | X | -3.316 | 2 |
| | MP1C | ž | | 2 |
| | MP1C | Mx | -1.915 | 2 |
| | MP2A | X | .0017 | 2 |
| | MP2A | Ž | -8.051 | .25 |
| | MP2A | Mx | -4.648 | .25 |
| | MP2A | X | .004 | .25 |
| | MP2A | Ž | -8.051 | 4.75 |
| | MP2A | Mx | -4.648 | 4.75 |
| | MP2B | | .004 | 4.75 |
| | MP2B | X Z | -10.75 | .25 |
| | MP2B | | -6.206 | .25 |
| | MP2B | Mx | 0 | .25 |
| | MP2B | X | -10.75 | 4.75 |
| | MP2B | | -6.206 | 4.75 |
| | IP2C | Mx | 0 | 4.75 |
| | IP2C | X | -8.051 | 25 |
| | | Z | -4.648 | .25 |
| | IP2C | Mx | 004 | .25 |
| | IP2C | X | -8.051 | 4.75 |
| | P2C | Z | -4.648 | 4.75 |
| 99 M | P2C | Mx | 004 | 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -5.6 | .25 |
| 2 | MP1A | Z | -9.7 | .25 |
| 3 | MP1A | Mx | .0028 | .25 |
| 4 | MP1A | X | -5.6 | |
| 5 | MP1A | Z | -9.7 | 4.75 |
| 6 | MP1A | Mx | .0028 | 4.75 |
| 7 | MP1B | X | -5.6 | 4.75 |
| 8 | MP1B | Ž | | .25 |
| 9 | MP1B | Mx | -9.7 | .25 |
| 10 | MP1B | X | .0028 | .25 |
| 11 | MP1B | | -5.6 | 4.75 |
| 12 | | Z | -9.7 | 4.75 |
| | MP1B | Mx | .0028 | 4.75 |
| 13 | MP1C | X | -4.023 | .25 |
| 14 | MP1C | Z | -6.969 | .25 |
| 15 | MP1C | Mx | 004 | .25 |
| 16 | MP1C | X | -4.023 | 4.75 |
| 17 | MP1C | Z | -6.969 | 4.75 |
| 18 | MP1C | Mx | 004 | 4.75 |
| 19 | MP4A | X | -5.6 | .25 |
| 20 | MP4A | Ž | -9.7 | |
| 21 | MP4A | Mx | .0028 | .25 |
| 22 | MP4A | X | -5.6 | .25 |
| | , . | | -3.0 | 4.75 |



RISA-3D Version 17.0.4

Company Designer Job Number Model Name Colliers Engineering & Design

Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:_

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

| Men | nber Label | Direction | (m (330 Deg)) (Continued) Magnitude[lb,k-ft] | Location[ft.%] |
|-----|------------|-----------|---|----------------|
| | MP4A | Z | -9.7 | 4.75 |
| 24 | MP4A | Mx | .0028 | 4.75 |
| | MP4B | X | -5.6 | .25 |
| | MP4B | Z | -9.7 | .25 |
| 27 | MP4B | Mx | .0028 | .25 |
| | MP4B | X | -5.6 | 4.75 |
| | MP4B | Z | -9.7 | 4.75 |
| | MP4B | Mx | .0028 | 4.75 |
| 31 | MP4C | X | -4.023 | .25 |
| | MP4C | Z | -6.969 | .25 |
| | MP4C | Mx | 004 | .25 |
| | MP4C | X | -4.023 | 4.75 |
| | MP4C | Z | -6.969 | 4.75 |
| | MP4C | Mx | 004 | 4.75 |
| 37 | MP3A | X | -2.157 | 1.5 |
| 38 | MP3A | Z | -3.736 | 1.5 |
| 39 | MP3A | Mx | .0011 | 1.5 |
| 40 | MP3A | X | -2.157 | 3.5 3.5 |
| 41 | MP3A | Z | -3.736 | 3.5 |
| | MP3A | Mx | .0011 | 3.5 |
| 43 | MP3B | X | -2.157 | 1.5 1.5 |
| 44 | MP3B | Z | -3.736 | 1.5 |
| 45 | MP3B | Mx | .0011 | 3.5 |
| | MP3B | X | -2.157 | 3.5 |
| | MP3B | Z | -3.736 | 3.5 |
| | MP3B | Mx | .0011 | 1.5 |
| 49 | MP3C | X | 982 | |
| 50 | MP3C | Z | -1.7 | 1.5 1.5 |
| 51 | MP3C | Mx | 000982 | 3.5 |
| | MP3C | X | 982 | |
| 53 | MP3C | Z | -1.7 | 3.5 |
| 54 | MP3C | Mx | 000982 | 3.5 |
| 55 | MP4A | X | -1.913 | 2 |
| 56 | MP4A | Z | -3.313 | 2 |
| | MP4A | Mx | 000956 | 2 |
| 58 | MP4B | X | -1.913 | 2 2 |
| | MP4B | Z | -3.313 | |
| 60 | MP4B | Mx | 000956 | 2 |
| | MP4C | X | -1.399 | 2 2 |
| | MP4C | Z | -2.423 | 2 |
| 63 | MP4C | Mx | .0014 | 4 |
| 64 | MP1A | X | 545 | |
| | MP1A | Z | 945 | 4 |
| | MP1A | Mx | 000273 | 4 |
| | MP1B | X | 545 | 4 |
| | MP1B | Z | 945 | 4 |
| | MP1B | Mx | 000273 | 4 |
| 70 | MP1C | X | 545 | |
| | MP1C | Z | 945 | 4 |
| | MP1C | Mx | 000273 | 2 |
| | MP1A | X | -2.315 | 2 |
| | MP1A | Z | -4.009 | 2 |
| | MP1A | Mx | -,0012 | 2 |
| | MP1B | X | -2.315 | 2 |
| | MP1B | Z | -4.009 | 2 2 |
| | MP1B | Mx | 0012 | |
| | MP1C | X | -1.715 | 2 |



Colliers Engineering & Design

Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 80 | MP1C | Z | -2.97 | 2 |
| 81 | MP1C | Mx | .0017 | 2 |
| 82 | MP2A | X | -5.687 | .25 |
| 83 | MP2A | Z | -9.85 | .25 |
| 84 | MP2A | Mx | .0028 | .25 |
| 85 | MP2A | X | -5.687 | 4.75 |
| 86 | MP2A | Z | -9.85 | 4.75 |
| 87 | MP2A | Mx | .0028 | 4.75 |
| 88 | MP2B | X | -5.687 | .25 |
| 89 | MP2B | Z | -9.85 | .25 |
| 90 | MP2B | Mx | .0028 | .25 |
| 91 | MP2B | X | -5.687 | 4.75 |
| 92 | MP2B | Z | -9.85 | 4.75 |
| 93 | MP2B | Mx | .0028 | 4.75 |
| 94 | MP2C | X | -4.129 | |
| 95 | MP2C | 7 | -7.151 | .25 |
| 96 | MP2C | Mx | 0041 | .25 |
| 97 | MP2C | X | -4.129 | .25 |
| 98 | MP2C | Z | -7.151 | 4.75 |
| 99 | MP2C | Mx | 0041 | 4.75 4.75 |

Member Point Loads (BLC 77: Lm1)

| | Member Label | Direction | Magnitude[lb.k-ft] | Location[ft.%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | M19 | Y | -500 | Location[it,%] |

Member Point Loads (BLC 78 : Lm2)

| | Member Label | Direction | Magnitude[]b k-ff] | Location[ft.%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | M97A | Υ | -500 | 0 |

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

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

Member Point Loads (BLC 81 : Antenna Ev)

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft.%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | Y | -1.2289 | .25 |
| 2 | MP1A | Mv | 000614 | .25 |
| 3 | MP1A | Mz | 0 | .25 |
| 4 | MP1A | Y | -1.2289 | 4.75 |
| 5 | MP1A | My | 000614 | 4.75 |
| 6 | MP1A | Mz | 0 | 4.75 |
| 7 | MP1B | Y | -1.2289 | .25 |
| 8 | MP1B | Mv | .000307 | .25 |
| 9 | MP1B | Mz | 000532 | .25 |
| 10 | MP1B | Y | -1.2289 | 4.75 |
| 11 | MP1B | Mv | .000307 | 4.75 |
| 12 | MP1B | Mz | 000532 | 4.75 |
| 13 | MP1C | Y | -1.2289 | .25 |
| 14 | MP1C | My | .000307 | |
| 15 | MP1C | Mz | .000532 | .25 |



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Project # 21777291 Antenna Mount Analysis

Dec 19, 2023 9:31 AM Checked By:___

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

| | ber Label | C 81 : Antenna EN | Magnitude[lb,k-ft] | Location[ft,%] |
|--|---------------------|-------------------|--------------------|-------------------|
| | IP1C | Y | -1.2289 | 4.75 |
| | IP1C | My | .000307 | 4.75 |
| | IP1C | Mz | .000532 | 4.75 |
| | /P4A | Y | -1.2289 | .25 |
| | /IP4A | My | 000614 | .25 |
| | /IP4A | Mz | 0 | .25 |
| | /P4A | Υ | -1.2289 | 4.75 |
| | /P4A | My | 000614 | 4.75 |
| | ЛР4А | Mz | 0 | 4.75 |
| | /IP4B | Y | -1.2289 | .25 |
| | лР4В | My | .000307 | .25 |
| | //P4B | Mz | 000532 | .25 |
| | лР4В | Y | -1.2289 | 4.75 |
| | <u>иР4В</u> ИР4В | My | .000307 | 4.75 |
| | лР4В ЛР4В | Mz | 000532 | 4.75 |
| | | Y | -1.2289 | .25 |
| | APAC | My | .000307 | .25 |
| | MP4C | Mz | .000532 | .25 |
| | AP4C | Y | -1.2289 | 4.75 |
| | MP4C | My | .000307 | 4.75 |
| | /P4C | Mz | .000532 | 4.75 |
| | /IP4C | Y | -1.1124 | 1.5 |
| | MP3A | | 000556 | 1.5 |
| | MP3A | My | 0 | 1.5 |
| | MP3A | Mz | -1.1124 | 3.5 |
| | MP3A | Y | 000556 | 3.5 |
| | MP3A | My | 0 | 3.5 |
| | иРЗА | Mz | | 1.5 |
| | MP3B | Y | -1.1124 | 1.5 |
| | ИРЗВ | My | .000278 | 1.5 |
| 45 | ИРЗВ | Mz | 000482 | 3.5 |
| 46 | ИРЗВ | Y | -1.1124 | 3.5 |
| 47 | ИРЗВ | My | .000278 | 3.5 |
| | иР3В | Mz | 000482 | 1.5 |
| 49 | иР3С | Y | -1.1124 | |
| | VP3C | My | .000278 | 1.5 |
| | MP3C | Mz | .000482 | 1.5 |
| | MP3C | Y | -1.1124 | 3.5 |
| | иР3С | My | .000278 | 3.5 |
| | MP3C | Mz | .000482 | 3.5 |
| | MP4A | Y | -2.9004 | 2 |
| | MP4A | My | ,0014 | 2 |
| | MP4A | Mz | 0 | 2 |
| | MP4B | Y | -2.9004 | 2 |
| | MP4B | My | 000725 | 2 |
| | MP4B | Mz | .0013 | 2 |
| | MP4C | Y | -2.9004 | 2 |
| | MP4C | My | 000725 | 2 |
| | MP4C MP4C | Mz | 0013 | 2 |
| | | Y | 8076 | 4 |
| | MP1A | My | .000404 | 4 |
| | MP1A | Mz | 0 | 4 |
| | MP1A | | 8076 | 4 |
| | MP1B | Y | .000404 | 4 |
| The second secon | MP1B | My | 0 | 4 |
| | MP1B | Mz | 8076 | 4 |
| 70 | MP1C | Y | .000404 | 4 |
| | MP1C | My | | 4 |
| 72 | MP1C | Mz | 0 | LO H.r3d] Page 78 |



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

| | Member Label | Direction | Magnitude[lb.k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 73 | MP1A | Y | -3.0712 | 2 |
| 74 | MP1A | My | .0015 | 2 |
| 75 | MP1A | Mz | 0 | 2 |
| 76 | MP1B | Y | -3.0712 | 2 |
| 77 | MP1B | My | 000768 | 2 |
| 78 | MP1B | Mz | .0013 | 2 |
| 79 | MP1C | Y | -3.0712 | 2 |
| 80 | MP1C | My | 000768 | 2 |
| 81 | MP1C | Mz | 0013 | 2 |
| 82 | MP2A | Y | 8911 | .25 |
| 83 | MP2A | My | 000446 | .25 |
| 84 | MP2A | Mz | 0 | .25 |
| 85 | MP2A | Y | 8911 | 4.75 |
| 86 | MP2A | Mv | 000446 | 4.75 |
| 87 | MP2A | Mz | 0 | 4.75 |
| 88 | MP2B | Y | 8911 | .25 |
| 89 | MP2B | Mv | .000223 | .25 |
| 90 | MP2B | Mz | 000386 | .25 |
| 91 | MP2B | Y | 8911 | 4.75 |
| 92 | MP2B | My | .000223 | |
| 93 | MP2B | Mz | 000386 | 4.75 |
| 94 | MP2C | Y | 8911 | 4.75 |
| 95 | MP2C | My | .000223 | .25 .25 |
| 96 | MP2C | Mz | .000223 | |
| 97 | MP2C | Y | 8911 | .25 |
| 98 | MP2C | My | .000223 | 4.75 |
| 99 | MP2C | Mz | .000223 | 4.75 4.75 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|-------|--------------|-----------|--------------------|----------------|
| 1 . | MP1A | Z | -3.0722 | .25 |
| 2 | MP1A | Mx | 0 | .25 |
| 3 | MP1A | Z | -3.0722 | 4.75 |
| 4 | MP1A | Mx | 0 | 4.75 |
| 5 | MP1B | Z | -3.0722 | .25 |
| 6 | MP1B | Mx | .0013 | .25 |
| 7 | MP1B | Z | -3.0722 | 4.75 |
| 8 | MP1B | Mx | .0013 | 4.75 |
| 9 | MP1C | Z | -3.0722 | .25 |
| 10 | MP1C | Mx | 0013 | .25 |
| 11 | MP1C | Z | -3.0722 | 4.75 |
| 12 | MP1C | Mx | 0013 | |
| 13 | MP4A | Z | -3.0722 | 4.75 |
| 14 | MP4A | Mx | 0 | .25 |
| 15 | MP4A | Z | -3.0722 | |
| 16 | MP4A | Mx | 0 | 4.75 |
| 17 | MP4B | Z | -3.0722 | 4.75 |
| 18 | MP4B | Mx | .0013 | .25 |
| 19 | MP4B | Z | | .25 |
| 20 | MP4B | Mx | -3.0722 | 4.75 |
| 21 | MP4C | Z | .0013 | 4.75 |
| 22 | MP4C | Mx | -3.0722 | .25 |
| 23 | MP4C | Z | 0013 | .25 |
| 24 | MP4C | Mx | -3.0722 | 4.75 |
| 25 | MP3A | Z | 0013 | 4.75 |
| 26 | MP3A | Mx | -2.781 | 1.5 |
| | IVII OA | IVIX | 0 | 1.5 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|--------------|-----------|--------------------|----------------|
| 27 | MP3A | Z | -2.781 | 3.5 |
| 28 | MP3A | Mx | 0 | 3.5 |
| 29 | MP3B | Z | -2.781 | 1.5 |
| 30 | MP3B | Mx | .0012 | 1.5 |
| 31 | MP3B | Z | -2.781 | 3.5 |
| 32 | MP3B | Mx | .0012 | 3.5 |
| 33 | MP3C | Z | -2.781 | 1.5 |
| 34 | MP3C | Mx | 0012 | 1.5 |
| 35 | MP3C | Z | -2.781 | 3.5 |
| 36 | MP3C | Mx | 0012 | 3.5 |
| 37 | MP4A | Z | -7.2509 | 2 |
| 38 | MP4A | Mx | 0 | 2 |
| | MP4B | Z | -7.2509 | 2 |
| 39 | MP4B | Mx | 0031 | 2 |
| 40 | MP4C | Z | -7.2509 | 2 |
| 41 | MP4C MP4C | Mx | .0031 | 2 |
| 42 | MP1A | Z | -2.019 | 4 |
| 43 | MP1A | Mx | 0 | 4 |
| 44 | MP1B | Z | -2.019 | 4 |
| 45 | MP1B | Mx | 0 | 4 |
| 46 | | Z | -2.019 | 4 |
| 47 | MP1C | Mx | 0 | 4 |
| 48 | MP1C | Z | -7.678 | 2 |
| 49 | MP1A | Mx | 0 | 2 |
| 50 | MP1A MP1B | Z | -7.678 | 2 |
| 51 | MP1B | Mx | 0033 | 2 |
| 52 | MP1B | Z | -7.678 | 2 |
| 53 | MP1C | Mx | .0033 | 2 |
| 54 | MP1C | Z | -2.2277 | .25 |
| 55 | MP2A | Mx | 0 | .25 |
| 56 | MP2A | Z | -2.2277 | 4.75 |
| 57 | MP2A | Mix | 0 | 4.75 |
| 58 | MP2A | Z | -2.2277 | .25 |
| 59 | MP2B | Mx | .000965 | .25 |
| 60 | MP2B | | -2.2277 | 4.75 |
| 61 | MP2B | Z | .000965 | 4.75 |
| 62 | MP2B | Mx | -2.2277 | .25 |
| 63 | MP2C | Z | 000965 | .25 |
| 64 | MP2C | Mx | -2.2277 | 4.75 |
| 65 | MP2C | Z | | 4.75 |
| 66 | MP2C | Mx | 000965 | 7.70 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----------|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 3.0722 | .25 |
| 2 | MP1A | Mx | 0015 | .25 |
| 3 | MP1A | X | 3.0722 | 4.75 |
| 4 | MP1A | Mx | 0015 | 4.75 |
| 5 | MP1B | X | 3.0722 | .25 |
| 6 | MP1B | Mx | .000768 | .25 |
| 7 | MP1B | X | 3.0722 | 4.75 |
| 0 | MP1B | Mx | .000768 | 4.75 |
| 8 | MP1C | X | 3.0722 | .25 |
| 9 | MP1C | Mx | .000768 | .25 |
| 10 | | Y X | 3.0722 | 4.75 |
| 11 | MP1C | Mx | .000768 | 4.75 |
| 12 13 | MP1C MP4A | X | 3.0722 | .25 |



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

| 14 | Member Label MP4A | Direction | Magnitude[lb,k-ft] | Location[ft,%] |
|----|----------------------|-----------|--------------------|----------------|
| 15 | MP4A | Mx | 0015 | .25 |
| 16 | | X | 3.0722 | 4.75 |
| 17 | MP4A | Mx | 0015 | 4.75 |
| 18 | MP4B | X | 3.0722 | .25 |
| | MP4B | Mx | .000768 | .25 |
| 19 | MP4B | X | 3.0722 | 4.75 |
| 20 | MP4B | Mx | .000768 | 4.75 |
| 21 | MP4C | X | 3.0722 | .25 |
| 22 | MP4C | Mx | .000768 | .25 |
| 23 | MP4C | X | 3.0722 | 4.75 |
| 24 | MP4C | Mx | .000768 | 4.75 |
| 25 | MP3A | X | 2.781 | 1.5 |
| 26 | MP3A | Mx | 0014 | 1.5 |
| 27 | MP3A | X | 2.781 | 3.5 |
| 28 | MP3A | Mx | 0014 | 3.5 |
| 29 | MP3B | X | 2.781 | 1.5 |
| 30 | MP3B | Mx | .000695 | 1.5 |
| 31 | MP3B | X | 2.781 | 3.5 |
| 32 | MP3B | Mx | .000695 | 3.5 |
| 33 | MP3C | X | 2.781 | 1.5 |
| 34 | MP3C | Mx | .000695 | 1.5 |
| 35 | MP3C | X | 2.781 | 3.5 |
| 36 | MP3C | Mx | .000695 | 3.5 |
| 37 | MP4A | X | 7.2509 | 2 |
| 38 | MP4A | Mx | .0036 | 2 |
| 39 | MP4B | X | 7.2509 | 2 |
| 40 | MP4B | Mx | 0018 | 2 |
| 41 | MP4C | X | 7.2509 | 2 |
| 42 | MP4C | Mx | 0018 | 2 |
| 43 | MP1A | X | 2.019 | 4 |
| 44 | MP1A | Mx | .001 | 4 |
| 45 | MP1B | X | 2.019 | |
| 46 | MP1B | Mx | .001 | 4 |
| 47 | MP1C | X | 2.019 | 4 |
| 48 | MP1C | Mx | .001 | 4 |
| 49 | MP1A | X | 7.678 | 4 |
| 50 | MP1A | Mx | | 2 |
| 51 | MP1B | X | .0038 | 2 |
| 52 | MP1B | Mx | 7.678 | 2 |
| 53 | MP1C | X | 0019 | 2 |
| 54 | MP1C | | 7.678 | 2 |
| 55 | MP2A | Mx X | 0019 | 2 |
| 56 | MP2A | | 2.2277 | .25 |
| 57 | MP2A | Mx | 0011 | .25 |
| 58 | MP2A | X | 2.2277 | 4.75 |
| 59 | MP2B | Mx | 0011 | 4.75 |
| 60 | | X | 2.2277 | .25 |
| 61 | MP2B | Mx | .000557 | .25 |
| | MP2B | X | 2.2277 | 4.75 |
| 62 | MP2B | Mx | .000557 | 4.75 |
| 63 | MP2C | X | 2.2277 | .25 |
| 64 | MP2C | Mx | .000557 | .25 |
| 65 | MP2C | X | 2.2277 | 4.75 |
| 66 | MP2C | Mx | .000557 | 4.75 |



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Member Area Loads (BLC 39 : Structure D)

| | 1-1-1-1 | Joint B | Joint C | Joint D | Direction | Distribution | Magnitude[ksf] |
|------|---------|----------|---------|---------|-----------|--------------|----------------|
| 4 | Joint A | N87B | N87C | N6 | Y | Two Way | 0052 |
| -1 + | N/ | N141 | N139 | N117 | Y | Two Way | 0052 |
| 2 | N118 | 4.54.4.1 | N111 | N89 | Ý | Two Way | 0052 |
| -3 | N90 | N113 | INIII | 1400 | | 1110 1101 | |

Member Area Loads (BLC 40 : Structure Di)

| , , , , , , | Joint A | Joint B | Joint C | Joint D | Direction | Distribution | Magnitude[ksf] |
|-------------|---------|---------|---------|---------|-----------|--------------|----------------|
| 1 | NI7 | N87B | N87C | N6 | Y | Two Way | 0129 |
| 0 | N118 | N141 | N139 | N117 | Y | Two Way | 0129 |
| 2 | | | N111 | N89 | Y | Two Way | 0129 |
| 3 1 | N90 | N113 | INIT | 1405 | | 1110 1101 | |

Member Area Loads (BLC 84 : Structure Ev)

| Joint A | Joint B | Joint C | Joint D | Direction | Distribution | Magnitude[ksf] |
|-------------|--------------|---------|---------|-----------|--------------|----------------|
| N7 | N87B | N87C | N6 | Y | Two Way | 000202 |
| | N141 | N139 | N117 | Y | Two Way | 000202 |
| N118 N90 | N141 N113 | N111 | N89 | Ý | Two Way | 000202 |

Member Area Loads (BLC 85 : Structure Eh (0 Deg))

| rem | | Jaint D | Joint C | Joint D | Direction | Distribution | Magnitude[ksf] |
|-----|---------------|-----------------|---------|---------|-----------|--------------|----------------|
| 4 | Joint A N7 | Joint B N87B | N87C | N6 | Z | Two Way | 000505 |
| 2 | N118 | N141 | N139 | N117 | Z | Two Way | 000505 |
| 2 | NIGO | N113 | N111 | N89 | Z | Two Way | 000505 |

Member Area Loads (BLC 86 : Structure Eh (90 Deg))

| | Joint A | Joint B | Joint C | Joint D | Direction | Distribution | Magnitude[ksf] |
|---|---------|---------|---------|---------|-----------|--------------|----------------|
| _ | N7 | N87B | N87C | N6 | X | Two Way | .000505 |
| _ | 137 | N141 | N139 | N117 | X | Two Way | .000505 |
| | N118 | 11111 | | N89 | X | Two Way | .000505 |
| | N90 | N113 | N111 | N89 | | TWO VVay | .000000 |

Envelope Joint Reactions

| LIIV | | 00. | X [lb] | LC | Y [lb] | LC | Z [lb] | LC | MX [k-ft] | LC | MY [k-ft] | L., | MZ [k-ft] | LC |
|---------------|---------|-----|-----------|----|----------|----|-----------|----|-----------|----|-----------|-----|-----------|----|
| 4 | Joint | | 1161.534 | 10 | 3173.112 | 13 | 2538.824 | 1 | 7.295 | 13 | 2.447 | 4 | .83 | 4 |
| | N3 | *** | -1166.446 | 4 | -107.282 | 7 | -2742.054 | 7 | -1.719 | 7 | -2.439 | 10 | 841 | 10 |
| 2 | NOZD | *** | 2285.338 | q | 3156.772 | 21 | 1417.827 | 1 | .98 | 2 | 2.439 | 12 | 1.592 | 3_ |
| 3 | N87D | | -2458.787 | 3 | -111.78 | 3 | -1312.822 | 7 | -3.606 | 20 | -2.431 | 6 | -6.321 | 21 |
| <u>4</u> 5 | N115 | *** | 2344.764 | 11 | 3159.256 | 17 | 1545.353 | 1 | .988 | 12 | | 8 | 6.25 | 17 |
| 6 | NIIS | | -2164.985 | 5 | -115.297 | 11 | -1447.136 | 7 | -3.681 | 18 | -2.424 | 2 | -1.503 | 11 |
| 7 | Totals: | *** | 5522.036 | 10 | 8623.273 | 21 | 5502.003 | 1 | | | | | | |
| 8 | Totals. | | -5522.038 | 4 | 2197.856 | 66 | -5502.011 | 7 | | | | | | |

Joint Reactions

| 001171 | | Joint Label | X [lb] | Y [lb] | Z [lb] | MX [k-ft] | MY [k-ft] | MZ [k-ft] |
|--------|----|-------------|-----------|----------|----------|-----------|-----------|-----------|
| | LC | N3 | -72,013 | 2162.409 | 2538.824 | 6.151 | .043 | 0 |
| 1 | | N87D | -874.862 | 452,992 | 1417.827 | .516 | 1.487 | 545 |
| 2 | 1 | N115 | 946.923 | 447.192 | 1545.353 | .531 | -1.533 | .558 |
| 3 | | Totals: | .047 | 3062.593 | 5502.003 | | | |
| 4 | 1 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 5 | 0 | N3 | -316.913 | 2009.193 | 2271.424 | 5.625 | .192 | .392 |
| 6 | 2 | N87D | -2016.069 | 39.764 | 1405.593 | .98 | .136 | .908 |
| / | 2 | N115 | -420.65 | 1013.631 | 1091.973 | 358 | -2.424 | 2.313 |
| 8 | 2 | Totals: | -2753.632 | 3062.588 | 4768.99 | | | |
| 9 | 2 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |



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| 11 | <u>LC</u> 3 | Joint Label N3 | X [lb] | Y [lb] | Z [lb] | MX [k-ft] | MY [k-ft] | MZ [k-ft] |
|----|----------------|-------------------|---------------------|----------|-----------|-----------|-----------|--|
| 12 | 3 | N87D | -855.736 | 1591.356 | 1373.28 | 4.191 | 1.522 | .706 |
| 13 | 3 | | -2458.787 | -111.78 | 1343.507 | .903 | 038 | 1.592 |
| 14 | | N115 | -1463.435 | 1583.011 | 41.315 | -1.464 | -1.444 | 3.945 |
| 15 | 3 | Totals: | -4777.959 | 3062.587 | 2758.102 | | | |
| | 3 | COG (ft): | X; 0 | Y: 1.422 | Z: 0 | | | |
| 16 | 4 | N3 | -1166.446 | 1021.217 | -39.869 | 2.229 | 2.447 | .83 |
| 17 | 4 | N87D | -2358.381 | 38.996 | 981.585 | .281 | 21 | 1.331 |
| 18 | 4 | N115 | -1997.211 | 2002.378 | -942.011 | -2.47 | 089 | 5.038 |
| 19 | 4 | Totals: | -5522.038 | 3062.591 | 295 | | | |
| 20 | 4 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 21 | 5 | N3 | -794.33 | 453.036 | -1474.233 | .257 | 1.492 | .704 |
| 22 | 5 | N87D | -1818.694 | 452.441 | 51.703 | 733 | -1.536 | .21 |
| 23 | 5 | N115 | -2164.985 | 2157.121 | -1336.064 | -3.082 | .063 | 5.306 |
| 24 | 5 | Totals: | -4778.008 | 3062.598 | -2758.593 | 0.002 | .005 | 3.300 |
| 25 | 5 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | 1 | | |
| 26 | 6 | N3 | -209.636 | 41.159 | | 1 100 | 400 | 007 |
| 27 | 6 | N87D | -712.171 | 1016.57 | -2422.752 | -1.192 | .136 | .387 |
| 28 | 6 | N115 | -1831.909 | | -923.574 | -1.837 | -2.431 | -1.473 |
| 29 | 6 | Totals: | | 2004.877 | -1422.928 | -3.161 | .199 | 4.663 |
| 30 | 6 | | -2753.716 | 3062.606 | -4769.254 | | | |
| 31 | 7 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 32 | 7 | N3 | 67.48 | -107.282 | -2742.054 | -1.719 | 038 | 011 |
| | | N87D | 735.679 | 1580.754 | -1312.822 | -2.718 | -1.455 | -3.274 |
| 33 | 7 | N115 | -803.208 | 1589.141 | -1447.136 | -2.714 | 1.512 | 3.277 |
| 34 | 7 | Totals: | 049 | 3062.613 | -5502.011 | | | |
| 35 | 7 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 36 | 8 | N3 | 332.326 | 43.979 | -2462.693 | -1.181 | 209 | 412 |
| 37 | 8 | N87D | 1859.203 | 1997.479 | -1289.073 | -3.174 | 106 | -4.708 |
| 38 | 8 | N115 | 562.102 | 1021.16 | -1017.228 | -1.839 | 2.428 | 1.526 |
| 39 | 8 | Totals: | 2753.631 | 3062.617 | -4768.994 | 1.000 | 2.720 | 1.020 |
| 40 | 8 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | 11110 | | |
| 41 | 9 | N3 | 870.201 | 458.176 | -1543.021 | .273 | -1.54 | 728 |
| 42 | 9 | N87D | 2285.338 | 2152.817 | -1237.719 | -3.1 | .045 | The second secon |
| 43 | 9 | N115 | 1622.419 | 451.625 | 22.638 | | | -5.383 |
| 44 | 9 | Totals: | 4777.958 | 3062.618 | | 735 | 1.473 | 122 |
| 45 | 9 | COG (ft): | X: 0 | | -2758.102 | - | | |
| 46 | 10 | N3 | 1161.534 | Y: 1.422 | Z: 0 | 0.040 | 0.100 | |
| 47 | 10 | N87D | 2183.953 | 1026.75 | -119.383 | 2.243 | -2.439 | 841 |
| 48 | 10 | N115 | | 2000.109 | -896.911 | -2.49 | .192 | -5.128 |
| 49 | 10 | | 2176.549 | 35.755 | 1016.588 | .283 | .115 | -1.232 |
| 50 | 10 | Totals: | 5522.036 | 3062.614 | .295 | | | |
| | | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 51 | 11 | N3 | 771.211 | 1594.875 | 1301.956 | 4.2 | -1.46 | 705 |
| 52 | 11 | N87D | 1662.031 | 1583.031 | 23.967 | -1.487 | 1.517 | -4.023 |
| 53 | | N115 | 2344.764 | -115.297 | 1432.669 | .907 | 058 | -1.503 |
| 54 | 11 | Totals: | 4778.005 | 3062.608 | 2758.591 | | | |
| 55 | 11 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 56 | 12 | N3 | 185.922 | 2010.274 | 2227.675 | 5.628 | 107 | 39 |
| 57 | 12 | N87D | 573.865 | 1017.334 | 1009.029 | 38 | 2.439 | -2.354 |
| 58 | 12 | N115 | 1993.926 | 34.991 | 1532.545 | .988 | 218 | 847 |
| 59 | 12 | Totals: | 2753.714 | 3062.6 | 4769.249 | .000 | .210 | .047 |
| 60 | 12 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 61 | 13 | N3 | -16.948 | 3173.112 | 393.405 | 7.295 | .01 | 040 |
| 62 | 13 | N87D | -485.969 | 2725.244 | | | | .049 |
| 63 | 13 | N115 | 502.929 | | 529.962 | -2.673 | .389 | -5.091 |
| 64 | 13 | Totals: | | 2724.91 | 553.463 | -2.745 | 403 | 5.042 |
| 65 | 13 | COG (ft): | .012 | 8623.267 | 1476.83 | | | |
| 66 | 14 | | X: 0 | Y: 1.476 | Z: 0 | | | |
| 67 | | N3 N97D | <u>-88.125</u> | 3134.383 | 322.356 | 7.161 | .054 | .148 |
| UI | 14 | N87D | -784.37 | 2619.791 | 524.304 | -2.555 | .038 | -4.724 |



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| | LC | (Continued) Joint Label | X [lb] | Y [lb] | Z [lb] | MX [k-ft] | | MZ [k-ft] |
|----------|----------|--------------------------|-----------|----------|-----------|-----------|-----------|-----------|
| 68 | 14 | N115 | 133.432 | 2869.092 | 433.309 | -2.97 | 638 | 5.486 |
| 69 | 14 | Totals: | -739.063 | 8623.266 | 1279.97 | | | |
| 70 | 14 | COG (ft): | X: 0 | Y: 1.476 | Z: 0 | | 7,000,000 | |
| 71 | 15 | N3 | -231.475 | 3028.448 | 82.248 | 6.797 | .399 | .227 |
| 72 | 15 | N87D | -898.5 | 2580.84 | 502.062 | -2.573 | 011 | -4.551 |
| 73 | 15 | N115 | -152.186 | 3013.978 | 155.83 | -3.25 | 389 | 5.902 |
| 74 | 15 | Totals: | -1282.16 | 8623.266 | 740.14 | | | |
| 75 | 15 | COG (ft): | X: 0 | Y: 1.476 | Z: 0 | | | 222 |
| 76 | 16 | N3 | -313.518 | 2883.537 | -300.622 | 6.298 | .637 | .257 |
| 77 | 16 | N87D | -874.755 | 2619.41 | 405.064 | -2.729 | 057 | -4.617 |
| 78 | 16 | N115 | -293.431 | 3120.32 | -104.519 | -3.506 | 036 | 6.181 |
| 79 | 16 | Totals: | -1481.704 | 8623.267 | 077 | | | |
| 80 | 16 | COG (ft): | X: 0 | Y: 1.476 | Z: 0 | | | |
| 81 | 17 | N3 | -216.804 | 2739.079 | -686.007 | 5.8 | .391 | .225 |
| 82 | 17 | N87D | -734.058 | 2724.934 | 159.042 | -2.984 | 4 | -4.9 |
| 83 | 17 | N115 | -331.312 | 3159.256 | -213.304 | -3.662 | .011 | 6.25 |
| | 17 | Totals: | -1282.173 | 8623.268 | -740.269 | | 100 | |
| 84 85 | 17 | COG (ft): | X: 0 | Y: 1.476 | Z: 0 | | | |
| 86 | 18 | N3 | -61.819 | 2634.082 | -932.725 | 5.434 | .038 | .145 |
| 87 | 18 | N87D | -437.274 | 2868.491 | -105.497 | -3.264 | 636 | -5.325 |
| | 18 | N115 | -239.993 | 3120.697 | -241.817 | -3.681 | .052 | 6.087 |
| 88 | 18 | Totals: | -739.085 | 8623.27 | -1280.039 | | | |
| 89 | 18 | COG (ft): | X: 0 | Y: 1.476 | Z: 0 | | | 2002 |
| 90 | 19 | N3 | 14.989 | 2595.973 | -1012.091 | 5.3 | 011 | .045 |
| 91 92 | 19 | N87D | -49.739 | 3011.925 | -217.032 | -3.489 | 389 | -5.783 |
| | 19 | N115 | 34.736 | 3015.375 | -247.709 | -3.567 | .392 | 5.735 |
| 93 | 19 | Totals: | 014 | 8623.272 | -1476.832 | | | |
| 94 | 19 | COG (ft): | X: 0 | Y: 1.476 | Z: 0 | | | |
| 95 | 20 | N3 | 87.502 | 2634.579 | -940.28 | 5.435 | 057 | 054 |
| 96 | | N87D | 247.509 | 3117.594 | -210.587 | -3.606 | 038 | -6.149 |
| 97 | 20 | N115 | 404.051 | 2871.1 | -129.105 | -3,343 | .628 | 5.291 |
| 98 | 20 | Totals: | 739.061 | 8623.273 | -1279.972 | | | |
| 99 | | COG (ft): | X: 0 | Y: 1.476 | Z: 0 | | | |
| 100 | 20 21 | N3 | 230.76 | 2740.289 | -698.726 | 5.801 | 401 | 134 |
| 101 | | N87D | 360.532 | 3156.772 | -189.09 | -3.588 | .009 | -6.32 |
| 102 | 21 | N115 | 690.866 | 2726.212 | 147,674 | -3.063 | .382 | 4.874 |
| 103 | 21 | Totals: | 1282.159 | 8623.273 | -740.142 | | | |
| 104 | 21 | COG (ft): | X: 0 | Y: 1.476 | Z: 0 | | | |
| 105 | 21 | N3 | 311.54 | 2885.103 | -315.131 | 6.3 | 638 | 163 |
| 106 | 22 | N87D | 336.694 | 3118.081 | -93.49 | -3.433 | .053 | -6.25 |
| 107 | 22 | N115 | 833.468 | 2620.088 | 408.696 | -2.806 | .029 | 4.593 |
| 108 | 22 | Totals: | 1481.702 | 8623.273 | .075 | | | |
| 109 | 22 | COG (ft): | X: 0 | Y: 1.476 | Z: 0 | | | |
| 110 | 22 | N3 | 213.615 | 3029.563 | 69.356 | 6.798 | 39 | 129 |
| 111 | 23 | N87D | 197.207 | 3012.334 | 151.951 | -3.178 | .396 | -5.97 |
| 112 | 23 | | 871.348 | 2581.373 | 518.96 | -2.65 | 02 | 4.525 |
| 113 | 23 | N115 | 1282.171 | 8623.271 | 740.267 | | | |
| 114 | 23 | Totals: | X: 0 | Y: 1.476 | Z: 0 | | | |
| 115 | 23 | COG (ft): | 58.558 | 3134.78 | 314.57 | 7.162 | 038 | 05 |
| 116 | 24 | N3 | -98.345 | 2868.682 | 417.108 | -2.899 | .634 | -5.54 |
| 117 | 24 | N87D | 778.87 | 2619.807 | 548.359 | -2.63 | 063 | 4.689 |
| 118 | 24 | N115 | 739.083 | 8623.269 | 1280.037 | | | |
| 119 | 24 | Totals: | | Y: 1.476 | Z: 0 | 9 | | |
| 120 | 24 | COG (ft): | X: 0 | 963.677 | 48.531 | 2.032 | .021 | .094 |
| 121 | 25 | N3 | -16.288 | 948.903 | 136.553 | -1.013 | .069 | -1.41 |
| 122 | 25 | N87D | -155.181 | 1899.998 | 158.79 | -2.653 | 098 | 4.026 |
| 123 | 25 | N115 | 171.468 | 3812.578 | 343.874 | 2.000 | .500 | |
| 124 | 25 | Totals: | 0 | 3012.370 | J-10.014 | | | |



: Colliers Engineering & Design

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| 100 | LC | Joint Label | X [lb] | Y [lb] | Z [lb] | MX [k-ft] | MY [k-ft] | MZ [k-ft |
|-----|------|-------------|-------------------|----------------------|----------|-----------|-----------|----------|
| 125 | 25 | COG (ft): | X: 1.033 | Y: 1.142 | Z: .778 | | | 1,1,100 |
| 126 | 26 | N3 | -32.157 | 954.137 | 31.406 | 1.999 | .031 | .119 |
| 127 | 26 | N87D | -226.005 | 922.995 | 135.531 | 984 | 015 | -1.32 |
| 128 | 26 | N115 | 86.057 | 1935.444 | 131.125 | -2.708 | 154 | 4.136 |
| 129 | 26 | Totals: | -172.104 | 3812.577 | 298.062 | | | 1.1.2.2 |
| 130 | 26 | COG (ft): | X: 1.033 | Y: 1.142 | Z: .778 | | | |
| 131 | 27 | N3 | -65.733 | 928,149 | -25.435 | 1.909 | .114 | .138 |
| 132 | 27 | N87D | -253.224 | 913.387 | 131.998 | 988 | 026 | -1.279 |
| 133 | 27 | N115 | 20.331 | 1971.041 | 65.814 | -2.777 | 094 | 4.238 |
| 134 | 27 | Totals: | -298.626 | 3812.577 | 172.377 | | | 7.200 |
| 135 | 27 | COG (ft): | X: 1.033 | Y: 1.142 | Z: .778 | | | |
| 136 | 28 | N3 | -84.502 | 892.595 | -114.127 | 1.786 | .171 | .146 |
| 137 | 28 | N87D | -246.952 | 922.806 | 109.994 | -1.027 | 036 | -1.29 |
| 138 | 28 | N115 | -13.676 | 1997.177 | 4.112 | -2.84 | 009 | 4.307 |
| 139 | 28 | Totals: | -345.13 | 3812.578 | 021 | 2.04 | 003 | 4.507 |
| 140 | 28 | COG (ft): | X: 1.033 | Y: 1.142 | Z: .778 | 1 | | |
| 141 | 29 | N3 | -60.653 | 857.126 | -203.414 | 1.663 | .111 | .138 |
| 142 | 29 | N87D | -213.76 | 948.689 | 52.114 | -1.09 | 119 | -1.364 |
| 143 | 29 | N115 | -24.217 | 2006.763 | -21.113 | -2.878 | .001 | 4.323 |
| 144 | 29 | Totals: | -298.629 | 3812.578 | -172.413 | -2.070 | | 4.323 |
| 145 | 29 | COG (ft): | X: 1.033 | Y: 1.142 | Z: .778 | | | |
| 146 | 30 | N3 | -24.065 | 831.336 | -262.009 | 1.573 | 000 | 440 |
| 147 | 30 | N87D | -145.138 | 983.94 | -9.201 | | .026 | .118 |
| 148 | 30 | N115 | -2.906 | | | -1.159 | 175 | -1.469 |
| 149 | 30 | Totals: | -172.11 | 1997.302 | -26.874 | -2.883 | .01 | 4.283 |
| 150 | 30 | COG (ft): | X: 1.033 | 3812.578 Y: 1.142 | -298.084 | | | |
| 151 | 31 | N3 | -7.293 | | Z: .778 | 4.544 | 0.10 | |
| 152 | 31 | N87D | -7.293 -54.614 | 822.006 | -281.685 | 1.541 | .016 | .093 |
| 153 | 31 | N115 | | 1019.16 | -34.196 | -1.214 | 115 | -1.582 |
| 154 | 31 | Totals: | 61.901 | 1971.413 | -27.998 | -2.855 | .092 | 4.196 |
| 155 | 31 | COG (ft): | 006 | 3812.579 | -343.879 | 1 | | |
| 156 | 32 | | X: 1.033 | Y: 1.142 | Z: .778 | | | |
| 157 | 32 | N3 | 8.654 | 831.538 | -264.513 | 1.574 | .006 | .069 |
| 158 | 32 | N87D | 16.141 | 1045.08 | -33.13 | -1.243 | 031 | -1.672 |
| | | N115 | 147.303 | 1935.961 | 425 | -2.8 | .149 | 4.087 |
| 159 | 32 | Totals: | 172.098 | 3812.579 | -298.068 | | | |
| 160 | 32 | COG (ft): | X: 1.033 | Y: 1.142 | Z: .778 | | | |
| 161 | 33 | N3 | 42.226 | 857.512 | -207.589 | 1.664 | 078 | .049 |
| 162 | 33 | N87D | 43.296 | 1054.704 | -29.639 | -1.238 | 021 | -1.715 |
| 63 | 33 | N115 | 213.098 | 1900.363 | 64.845 | -2.731 | .089 | 3.984 |
| 164 | 33 | Totals: | 298.62 | 3812.579 | -172.383 | | | |
| 165 | 33 | COG (ft): | X: 1.033 | Y: 1.142 | Z: .778 | | | |
| 66 | 34 | N3 | 60.92 | 893.06 | -118.855 | 1.787 | 134 | .042 |
| 67 | 34 | N87D | 37.02 | 1045.277 | -7.717 | -1.2 | 011 | -1.698 |
| 168 | 34 | N115 | 247.184 | 1874.242 | 126.588 | -2.668 | .004 | 3.916 |
| 169 | 34 | Totals: | 345.124 | 3812.579 | .016 | | | 0.010 |
| 70 | 34 | COG (ft): | X: 1.033 | Y: 1.142 | Z: .778 | | | |
| 71 | 35 | N3 | 36.999 | 928.529 | -29.619 | 1.91 | 074 | .05 |
| 72 | 35 | N87D | 3.898 | 1019.381 | 50.128 | -1.137 | .072 | -1.629 |
| 73 | 35 | N115 | 257.726 | 1864.669 | 151.899 | -2.629 | 006 | 3.899 |
| 74 | 35 | Totals: | 298.623 | 3812.579 | 172.408 | 2.020 | 000 | 5.033 |
| 75 | 35 | COG (ft): | X: 1.033 | Y: 1.142 | Z: .778 | | | |
| 76 | 36 | N3 | .41 | 954.332 | 28.887 | 2 | .011 | OGO |
| 77 | 36 | N87D | -64.653 | 984.123 | | | 100 | .069 |
| 78 | 36 | N115 | 236.346 | 1874.123 | 111.481 | -1.068 | .129 | -1.524 |
| 79 | 36 | Totals: | 172.103 | | 157.71 | -2.624 | 016 | 3.939 |
| 80 | 36 | COG (ft): | X: 1.033 | 3812.578 V: 1.142 | 298.078 | | | |
| 81 | 37 | N3 | 4.368 | Y: 1.142 | Z: .778 | 0.010 | - 05 | |
| J | - 01 | 140 | 4.300 | 968.492 | 48.104 | 2.046 | 02 | 101 |



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| 182 183 184 | 1C 37 | Joint Label N87D | X [lb] | Y [lb] | Z [lb] | MX [k-ft] | MY [k-ft] | |
|-------------------|----------|---------------------|--------------------|----------|----------|-----------|-----------|--------|
| 183 184 | | | -164.274 | 1894.751 | 154.857 | -2.685 | .088 | -3.974 |
| 184 | 27 | N115 | 159.902 | 949.357 | 140.929 | -1.005 | 078 | 1.422 |
| | 37 | Totals: | 004 | 3812.6 | 343.889 | | | |
| | 37 | COG (ft): | X: -1.016 | Y: 1.142 | Z: .778 | | | |
| 185 | 37 | | -11.546 | 959.026 | 31.08 | 2.013 | 01 | 076 |
| 186 | 38 | N3 | | 1868.803 | 153.81 | -2.656 | .004 | -3.884 |
| 187 | 38 | N87D | -235.049 | 984.771 | 113.187 | -1.06 | 134 | 1.532 |
| 188 | 38 | N115 | 74.487 | 3812.6 | 298.077 | -1.00 | -105 | 1.002 |
| 189 | 38 | Totals: | -172.108 | | Z: .778 | + | | |
| 190 | 38 | COG (ft): | X: -1.016 | Y: 1.142 | -25.672 | 1.923 | .073 | 057 |
| 191 | 39 | N3 | -45.227 | 933.076 | | | 006 | -3.842 |
| 192 | 39 | N87D | -262.203 | 1859.205 | 150.289 | -2.661 | | 1.634 |
| 193 | 39 | N115 | 8.8 | 1020.319 | 47.776 | -1.129 | 074 | 1.034 |
| 194 | 39 | Totals: | -298.63 | 3812.6 | 172.393 | | | |
| 195 | 39 | COG (ft): | X: -1.016 | Y: 1.142 | Z: .778 | 1.0 | 404 | 040 |
| 196 | 40 | N3 | -64.139 | 897.533 | -114.33 | 1.8 | .131 | 049 |
| 197 | 40 | N87D | -255.856 | 1868.7 | 128.334 | -2.699 | 016 | -3.858 |
| 198 | 40 | N115 | -25.138 | 1046.367 | -14.01 | -1.192 | .011 | 1.703 |
| 199 | 40 | Totals: | -345.134 | 3812.6 | 006 | | | |
| 200 | 40 | COG (ft): | X: -1.016 | Y: 1.142 | Z: .778 | | | |
| | | N3 | -40.425 | 862.065 | -203.656 | 1.677 | .07 | 058 |
| 201 | 41 | N87D | -222.6 | 1894.668 | 70.537 | -2.762 | 099 | -3.92 |
| 202 | 41 | N115 | -35.608 | 1055.867 | -39.278 | -1.23 | .021 | 1.72 |
| 203 | 41 | | -298.633 | 3812.601 | -172.398 | | | |
| 204 | 41 | Totals: | | Y: 1.142 | Z: .778 | | | |
| 205 | 41 | COG (ft): | X: -1.016 | 836.244 | -262.34 | 1.587 | 014 | 077 |
| 206 | 42 | N3 | -3.926 | | 9.311 | -2.831 | 156 | -4.032 |
| 207 | 42 | N87D | -153.949 | 1929.981 | | -1.235 | .03 | 1.679 |
| 208 | 42 | N115 | -14.239 | 1046.376 | -45.04 | -1.233 | .03 | 1.073 |
| 209 | 42 | Totals: | -172.113 | 3812.601 | -298.069 | + | | |
| 210 | 42 | COG (ft): | X: -1.016 | Y: 1.142 | Z: .778 | 1.554 | 005 | 400 |
| 211 | 43 | N3 | 12.824 | 826.843 | -282.116 | 1.554 | 025 | 102 |
| 212 | 43 | N87D | -63.44 | 1965.252 | -15.62 | -2.886 | 096 | -4.144 |
| 213 | 43 | N115 | 50.606 | 1020.506 | -46.128 | -1.207 | .112 | 1.592 |
| 214 | 43 | Totals: | 01 | 3812.602 | -343.864 | | | |
| 215 | 43 | COG (ft): | X: -1.016 | Y: 1.142 | Z: .778 | | | |
| 216 | 44 | N3 | 28.816 | 836.302 | -265.046 | 1.587 | 035 | 127 |
| | 44 | N87D | 7.266 | 1991.214 | -14.529 | -2.915 | 011 | -4.234 |
| 217 | | N115 | 136.012 | 985.086 | -18.478 | -1.152 | .169 | 1.482 |
| 218 | 44 | Totals: | 172.094 | 3812.602 | -298.052 | | | |
| 219 | 44 | | X; -1.016 | Y: 1.142 | Z: .778 | | | |
| 220 | 44 | COG (ft): | | 862.238 | -208.21 | 1.678 | 118 | 146 |
| 221 | 45 | N3 | 62.494 | 2000.826 | -11.049 | -2.91 | 001 | -4.27 |
| 222 | 45 | N87D | 34.355 | | 46.891 | -1.083 | .108 | 1.38 |
| 223 | 45 | N115 | 201.768 | 949.538 | | -1.000 | .100 | 1.00 |
| 224 | 45 | Totals: | 298.616 | 3812.602 | -172.368 | | | |
| 225 | 45 | COG (ft): | X: -1.016 | Y: 1.142 | Z: .778 | 4.0 | 175 | 154 |
| 226 | 46 | N3 | 81.33 | 897.774 | -119.511 | 1.8 | 175 | -4.26 |
| 227 | 46 | N87D | 28.005 | 1991.324 | 10.824 | -2.872 | .009 | |
| 228 | 46 | N115 | 235.786 | 923.503 | 108.719 | -1.02 | .023 | 1.311 |
| 229 | 46 | Totals: | 345.12 | 3812.602 | .031 | | | |
| 230 | 46 | COG (ft): | X: -1.016 | Y: 1.142 | Z: .778 | | | |
| 231 | 47 | N3 | 57.545 | 933.242 | -30.236 | 1.923 | 115 | 145 |
| | 47 | N87D | -5.182 | 1965.341 | 68.586 | -2.809 | .091 | -4.19 |
| 232 | | N115 | 246.257 | 914.018 | 134.073 | 981 | .013 | 1.294 |
| 233 | 47 | | 298.619 | 3812.601 | 172.423 | 4 | | |
| 234 | 47 | Totals: | X: -1.016 | Y: 1.142 | Z: .778 | | | |
| 235 | 47 | COG (ft): | | 959.076 | 28.359 | 2.013 | 03 | 126 |
| 236 | 48 | N3 | 21.043 | 1930.023 | 129.849 | -2.74 | .148 | -4.08 |
| 237 238 | 48 48 | N87D N115 | -73.762 224.819 | 923.501 | 139.886 | 976 | .004 | 1.335 |



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| 239 | 48 | Joint Label Totals: | X [lb] 172.099 | <u>Ү [ib]</u> 3812.601 | Z [lb] 298.094 | MX [k-ft] | MY [k-ft] | MZ [k-ft] |
|-----|----|------------------------|--------------------------|---------------------------|-------------------|-----------|------------|-----------------|
| 240 | 48 | COG (ft): | X: -1.016 | Y: 1.142 | Z: .778 | | | - |
| 241 | 49 | N3 | 5.56 | 964.862 | -111.4 | 1.999 | 016 | 078 |
| 242 | 49 | N87D | -105.268 | 1506.453 | 63.716 | -1.99 | 003 | -3.196 |
| 243 | 49 | N115 | 99.703 | 966.287 | 47.691 | -1.048 | .011 | |
| 244 | 49 | Totals: | 004 | 3437.601 | .007 | -1.046 | .011 | 1.628 |
| 245 | 49 | COG (ft): | X:682 | Y: 1.267 | Z: .431 | | | |
| 246 | 50 | N3 | -1.431 | 944.254 | | 0.074 | 000 | 007 |
| 247 | 50 | N87D | -83.675 | | -96.342 | 2.071 | 002 | 007 |
| 248 | 50 | N115 | 85.105 | 1245.588 | 49.594 | -1.537 | 003 | -2.091 |
| 249 | 50 | Totals: | 001 | 1247.758 | 46.75 | -1.526 | 002 | 2.095 |
| 250 | 50 | COG (ft): | X: 0 | 3437.601 | .001 | | | |
| 251 | 51 | N3 | | Y: 1.267 | Z: .431 | 0.005 | 222 | |
| 252 | 51 | N87D | -1.592 | 1196.338 | -112.034 | 2.605 | 002 | 007 |
| 253 | 51 | | -96.977 | 1188.112 | 57.805 | -1.292 | 002 | -2.229 |
| 254 | 51 | N115 | 98.569 | 1188.587 | 54.229 | -1.279 | 004 | 2.236 |
| | | Totals: | 0 | 3573.036 | 001 | | | |
| 255 | 51 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 256 | 52 | N3 | -1.686 | 1099,888 | 24.239 | 2.449 | 001 | 006 |
| 257 | 52 | N87D | -121.897 | 1030.728 | 113.082 | -1.085 | .06 | -1.922 |
| 258 | 52 | N115 | 123.584 | 1031.082 | 110.407 | -1.073 | 066 | 1.928 |
| 259 | 52 | Totals: | .002 | 3161.698 | 247.729 | | | |
| 260 | 52 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 261 | 53 | N3 | -22.373 | 1094.27 | 7.192 | 2.429 | .035 | .008 |
| 262 | 53 | N87D | -169.285 | 1015.714 | 123.015 | -1.067 | .034 | -1.87 |
| 263 | 53 | N115 | 67.787 | 1051.714 | 84.321 | -1.106 | 075 | 1.992 |
| 264 | 53 | Totals: | -123.871 | 3161.697 | 214.528 | | | 11000 |
| 265 | 53 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 266 | 54 | N3 | -37.448 | 1079.097 | -38.333 | 2.376 | .061 | .019 |
| 267 | 54 | N87D | -194.301 | 1010.243 | 113.684 | -1.07 | 002 | -1.845 |
| 268 | 54 | N115 | 17.203 | 1072.357 | 48.505 | -1.145 | 064 | 2.053 |
| 269 | 54 | Totals: | -214.546 | 3161.697 | 123.856 | 1.170 | 004 | 2.000 |
| 270 | 54 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 271 | 55 | N3 | -42.874 | 1058.434 | -100.155 | 2.304 | .071 | .023 |
| 272 | 55 | N87D | -190.243 | 1015.78 | 87.59 | -1.093 | 038 | -1.855 |
| 273 | 55 | N115 | -14.628 | 1087.484 | 12.555 | -1.181 | 038 | 2.093 |
| 274 | 55 | Totals: | -247.745 | 3161.698 | 011 | -1.101 | 030 | 2.093 |
| 275 | 55 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 276 | 56 | N3 | -37.186 | 1037.82 | -161.709 | 2.233 | .061 | .019 |
| 277 | 56 | N87D | -158.188 | 1030.843 | 51.731 | -1.129 | | |
| 278 | 56 | N115 | -19.174 | 1093.035 | -13.897 | -1.204 | 064 002 | -1.896 2.103 |
| 279 | 56 | Totals: | -214.548 | 3161.698 | -123.874 | -1.204 | 002 | 2.103 |
| 280 | 56 | COG (ft): | X: 0 | Y: 1.422 | | + + | | |
| 281 | 57 | N3 | -21.906 | | Z: 0 | 0.40 | 00.4 | 000 |
| 282 | 57 | N87D | | 1022.778 | -206.493 | 2.18 | .034 | .008 |
| 283 | 57 | N115 | <u>-106.741</u> 4.773 | 1051.395 | 15.724 | -1.169 | 073 | -1.957 |
| 284 | 57 | Totals: | -123.875 | 1087.525 | -23.771 | -1.207 | .034 | 2.079 |
| 285 | 57 | | | 3161.698 | -214.54 | | | |
| 286 | | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| | 58 | N3 | -1.124 | 1017.335 | -222.508 | 2.161 | 002 | 006 |
| 287 | 58 | N87D | -49.686 | 1071.934 | -10.793 | -1.202 | 064 | -2.023 |
| 288 | 58 | N115 | 50.808 | 1072.43 | -14.43 | -1.19 | .059 | 2.029 |
| 289 | 58 | Totals: | 002 | 3161.698 | -247.731 | | | |
| 290 | 58 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 291 | 59 | N3 | 19.582 | 1022.951 | -205.448 | 2.18 | 039 | 021 |
| 292 | 59 | N87D | -2.316 | 1086.953 | -20.716 | -1.22 | 038 | -2.075 |
| 293 | 59 | N115 | 106.604 | 1051.795 | 11.634 | -1.157 | .068 | 1.965 |
| 294 | 59 | Totals: | 123.87 | 3161.699 | -214.53 | | | |
| 295 | 59 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |



Colliers Engineering & Design

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Antenna Mount Analysis

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| | LC | Joint Label | X [lb] | Y [lb] | Z [lb] | MX [k-ft] | MY [k-ft] | MZ [k-ft] |
|-----|----|-------------|----------|----------|----------|-----------|-----------|-----------|
| 296 | 60 | N3 | 34.657 | 1038.119 | -159.901 | 2.233 | 065 | 032 |
| 297 | 60 | N87D | 22.683 | 1092.426 | -11.395 | -1.217 | 002 | -2.099 |
| 298 | 60 | N115 | 157.205 | 1031.154 | 47.438 | -1.118 | .058 | 1.904 |
| 299 | 60 | Totals: | 214.546 | 3161.699 | -123.858 | | | |
| | 60 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 300 | | N3 | 40.064 | 1058.779 | -98.07 | 2.305 | 074 | 035 |
| 301 | 61 | N87D | 18.625 | 1086.888 | 14.679 | -1.194 | .034 | -2.09 |
| 302 | 61 | N115 | 189.056 | 1016.031 | 83.399 | -1.082 | .031 | 1.864 |
| 303 | 61 | | 247.744 | 3161.698 | .009 | | | |
| 304 | 61 | Totals: | | Y: 1.422 | Z: 0 | | | |
| 305 | 61 | COG (ft): | X: 0 | 1079.395 | -36.529 | 2.377 | 064 | 032 |
| 306 | 62 | N3 | 34.357 | 1071.82 | 50.528 | -1.158 | .06 | -2.049 |
| 307 | 62 | N87D | -13.413 | | 109.873 | -1.059 | 005 | 1.854 |
| 308 | 62 | N115 | 193.604 | 1010.483 | | -1.039 | 005 | 1.007 |
| 309 | 62 | Totals: | 214.548 | 3161.698 | 123.872 | | | |
| 310 | 62 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | 0.400 | 038 | 021 |
| 311 | 63 | N3 | 19.077 | 1094.442 | 8.233 | 2.429 | | -1.988 |
| 312 | 63 | N87D | -64.842 | 1051.265 | 86.545 | -1.118 | .07 | |
| 313 | 63 | N115 | 169.639 | 1015.991 | 119.76 | -1.056 | 04 | 1.878 |
| 314 | 63 | Totals: | 123.874 | 3161.698 | 214.538 | | | |
| 315 | 63 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 316 | 64 | N3 | -1.249 | 777.074 | 54.423 | 1.746 | 0 | 004 |
| 317 | 64 | N87D | -95.69 | 710.273 | 97.504 | 736 | .061 | -1.32 |
| 318 | 64 | N115 | 96.941 | 710.509 | 95.803 | 728 | 065 | 1.325 |
| | 64 | Totals: | .002 | 2197.856 | 247.729 | | | |
| 319 | | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 320 | 64 | N3 | -21.96 | 771.468 | 37.383 | 1.726 | .035 | .01 |
| 321 | 65 | | -143.07 | 695.293 | 107.412 | 719 | .034 | -1.269 |
| 322 | 65 | N87D | 41.159 | 731.095 | 69.733 | 761 | 074 | 1.389 |
| 323 | 65 | N115 | -123.871 | 2197.856 | 214.529 | | | |
| 324 | 65 | Totals: | | Y: 1.422 | Z: 0 | _ | | |
| 325 | 65 | COG (ft): | X: 0 | 756.329 | -8.125 | 1.674 | .062 | .021 |
| 326 | 66 | N3 | -37.053 | | 98.057 | 722 | 001 | -1.244 |
| 327 | 66 | N87D | -168.092 | 689.835 | 33.924 | 8 | 063 | 1.449 |
| 328 | 66 | N115 | -9.401 | 751.692 | 123.856 | 0 | 005 | 1.440 |
| 329 | 66 | Totals: | -214.546 | 2197.856 | | | | |
| 330 | 66 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | 4 000 | .071 | .025 |
| 331 | 67 | N3 | -42.485 | 735.713 | -69.925 | 1.602 | | -1.254 |
| 332 | 67 | N87D | -164.051 | 695.36 | 71.946 | 744 | 037 | |
| 333 | 67 | N115 | -41.209 | 766.783 | -2.032 | 836 | 037 | 1.49 |
| 334 | 67 | Totals: | -247.745 | 2197.856 | 01 | | | |
| 335 | 67 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 336 | 68 | N3 | -36.792 | 715.144 | -131.457 | 1.53 | .061 | .021 |
| 337 | 68 | N87D | -132.02 | 710.391 | 36.082 | 78 | 063 | -1.294 |
| 338 | 68 | N115 | -45.736 | 772.321 | -28.499 | 859 | 0 | 1.499 |
| | | Totals: | -214.548 | 2197.856 | -123.874 | | | |
| 339 | 68 | COG (ft): | X; 0 | Y: 1.422 | Z: 0 | | | |
| 340 | 68 | N3 | -21.494 | 700.136 | -176.227 | 1.477 | .034 | .01 |
| 341 | 69 | | | 730.899 | .083 | 82 | 073 | -1.356 |
| 342 | 69 | N87D | -80.599 | 766.822 | -38.396 | 862 | .035 | 1.476 |
| 343 | 69 | N115 | -21.781 | | -214.54 | .002 | | |
| 344 | 69 | Totals: | -123.874 | 2197.857 | Z: 0 | + | | 1 |
| 345 | 69 | COG (ft): | X: 0 | Y: 1.422 | | 1.458 | 002 | 004 |
| 346 | 70 | N3 | 69 | 694.705 | -192.239 | | 063 | -1.42 |
| 347 | 70 | N87D | -23.563 | 751.392 | -26.416 | 853 | | 1.425 |
| 348 | 70 | N115 | 24.251 | 751.759 | -29.076 | 845 | .06 | 1.420 |
| 349 | 70 | Totals: | 002 | 2197.857 | -247.731 | | | |
| 350 | 70 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | 000 | 0.40 |
| 351 | 71 | N3 | 20.04 | 700.309 | -175.187 | 1.478 | 038 | 019 |
| 352 | 71 | N87D | 23.799 | 766.377 | -36.314 | 871 | 037 | -1.473 |



Colliers Engineering & Design

Project # 21777291 Antenna Mount Analysis Dec 19, 2023 9:31 AM Checked By:____

Joint Reactions (Continued)

| | LC | Joint Label | X [lb] | Y [lb] | Z IIbl | MX [k-ft] | MY [k-ft] | MZ [k-ft] |
|-----|----|-------------|---------|----------|----------|-----------|-----------|-----------|
| 353 | 71 | N115 | 80.031 | 731.17 | -3.029 | 812 | .069 | 1.361 |
| 354 | 71 | Totals: | 123.87 | 2197.857 | -214.53 | | | |
| 355 | 71 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 356 | 72 | N3 | 35.132 | 715,444 | -129.657 | 1.53 | 064 | 03 |
| 357 | 72 | N87D | 48.804 | 771.838 | -26,969 | 868 | 001 | -1.498 |
| 358 | 72 | N115 | 130.609 | 710.575 | 32.769 | 773 | .059 | 1.301 |
| 359 | 72 | Totals: | 214.546 | 2197.857 | -123.857 | 11.10 | | 1.001 |
| 360 | 72 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 361 | 73 | N3 | 40.546 | 736.058 | -67.848 | 1.602 | 074 | 034 |
| 362 | 73 | N87D | 44.763 | 766.311 | 879 | 845 | .035 | -1.489 |
| 363 | 73 | N115 | 162.436 | 695,488 | 68.735 | 737 | .032 | 1.261 |
| 364 | 73 | Totals: | 247,745 | 2197.857 | .009 | 1 | | 1.201 |
| 365 | 73 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |
| 366 | 74 | N3 | 34.834 | 756.628 | -6.328 | 1.674 | 064 | 03 |
| 367 | 74 | N87D | 12.749 | 751.275 | 34.975 | 809 | .061 | -1.448 |
| 368 | 74 | N115 | 166.965 | 689.954 | 95.225 | 714 | 004 | 1.251 |
| 369 | 74 | Totals: | 214.548 | 2197.857 | 123.873 | | 1001 | |
| 370 | 74 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | 1-0 | |
| 371 | 75 | N3 | 19.536 | 771.641 | 38.42 | 1.727 | 037 | 019 |
| 372 | 75 | N87D | -38.654 | 730.765 | 70.985 | 769 | .07 | -1.386 |
| 373 | 75 | N115 | 142.992 | 695.451 | 105.133 | 711 | 039 | 1.275 |
| 374 | 75 | Totals: | 123.874 | 2197.856 | 214.538 | | | 1,210 |
| 375 | 75 | COG (ft): | X: 0 | Y: 1.422 | Z: 0 | | | |

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

| | Member | Shape | Code Check | Lo | LC | Shear Check | Lo | LC | phi*Pncphi*Pnt [| ohi*Mn v | nhi*Mn | СЬ | Egn |
|-----|----------|----------|------------|------|----|-------------|--------|----|------------------|----------|--------|-------|------|
| _1_ | M1 | PIPE_3.0 | .312 | 9 | 4 | .278 | 7 | 4 | 28250.5 65205 | 5.749 | 5.749 | 2.399 | H3-6 |
| 2 | M4 | HSS4X4X4 | .453 | 0 | 13 | .096 | 0 v | 15 | 124657139518 | 16.181 | 16.181 | 2.739 | H1 |
| 3 | M10 | HSS4X4X4 | .212 | 2 | 14 | .069 | 2 v | 15 | 136263139518 | 16,181 | 16.181 | 1.66 | H1 |
| 4 | MP1A | PIPE_2.0 | .579 | 4 | 9 | .188 | 4 | 3 | 14916.0 32130 | 1.872 | 1.872 | 2.044 | H1 |
| 5 | M43 | HSS4X4X4 | .213 | 0 | 24 | .069 | 0 v | 23 | 136263139518 | 16.181 | 16.181 | 1.66 | H1 |
| 6 | M46 | PL1/2x6 | .331 | .516 | 12 | .246 | .516 v | 10 | 66009.2 97200 | 1.012 | 12.15 | 1.446 | H1 |
| 7 | M51B | L2x2x3 | .203 | 0 | 3 | .015 | 4 y | 16 | 9823.122 23392.8 | .558 | 1.068 | 1.112 | H2-1 |
| 8 | M52B | L2x2x3 | .198 | 4 | 11 | .016 | 4 v | 22 | 9823.122 23392.8 | .558 | 1.069 | 1.114 | H2-1 |
| 9 | M76 | PL3/8x6 | .438 | 0 | 2 | .202 | 0 v | 18 | 70647.0 72900 | .57 | 9.113 | 1.229 | H1 |
| 10 | M77 | PL3/8x6 | .348 | .167 | 8 | .425 | 0 v | 15 | 71583.5 72900 | .57 | 9.113 | 1.045 | H1 |
| 11 | M80 | PL1/2x6 | .113 | .112 | 1 | .174 | 0 v | 11 | 96757.5 97200 | 1.012 | 12.15 | 1.285 | H1 |
| 12 | M84 | PL3/8x6 | .468 | 0 | 12 | .207 | 0 v | 15 | 70647.0 72900 | .57 | 9.113 | 1.244 | H1 |
| 13 | M85 | PL3/8x6 | .326 | .167 | 6 | .428 | 0 v | 23 | 71583.5 72900 | .57 | 9.113 | 1.068 | H1 |
| 14 | M91 | PL1/2x6 | .117 | .112 | 1 | .172 | 0 v | 3 | 96757.5 97200 | 1.012 | 12.15 | 1.273 | H1 |
| 15 | THE COLD | HSS4X4X4 | .451 | 0 | 21 | .096 | 0 v | 23 | 124657139518 | 16.181 | 16.181 | 2.733 | H1 |
| 16 | M53 | HSS4X4X4 | .212 | 2 | 22 | .068 | 2 y | 23 | 136263139518 | 16.181 | 16.181 | 1.66 | H1 |
| 17 | M54 | HSS4X4X4 | .211 | 0 | 20 | .069 | 0 v | 19 | 136263139518 | 16.181 | 16.181 | 1.66 | H1 |
| 18 | M55 | PL1/2x6 | .325 | .516 | 8 | .247 | .516 y | 6 | 66009.2 97200 | 1.012 | 12.15 | 1.442 | H1 |
| 19 | M58A | L2x2x3 | .205 | 0 | 11 | .015 | 4 v | 24 | 9823.122 23392.8 | .558 | 1.069 | 1.114 | H2-1 |
| 20 | M59A | L2x2x3 | .197 | 4 | 7 | .016 | 4 y | 17 | 9823.122 23392.8 | .558 | 1.068 | 1.112 | H2-1 |
| 21 | M63 | PL3/8x6 | .422 | 0 | 4 | .202 | 0 v | 14 | 70647.0 72900 | .57 | 9.113 | 1.046 | H1 |
| 22 | M64 | PL3/8x6 | .354 | .167 | 4 | .424 | 0 v | 23 | 71583.5 72900 | .57 | 9.113 | 1.037 | H1 |
| 23 | M66 | PL1/2x6 | .107 | .112 | 9 | .176 | 0 v | 7 | 96757.5 97200 | 1.012 | 12.15 | 1.281 | H1 |
| 24 | M68 | PL3/8x6 | .447 | 0 | 8 | .206 | 0 v | 23 | 70647.0 72900 | .57 | 9.113 | 1.243 | H1 |
| 25 | M69 | PL3/8x6 | .328 | .167 | 2 | .425 | 0 V | 19 | 71583.5., 72900 | .57 | 9.113 | 1.052 | H1 |
| 26 | M71 | PL1/2x6 | .111 | .112 | 3 | .176 | 0 v | 11 | 96757.5 97200 | 1.012 | 12.15 | 1.378 | H1 |
| 27 | M76A | HSS4X4X4 | .450 | 0 | 17 | .095 | 0 v | 19 | 124657139518 | 16.181 | 16.181 | 2.747 | H1 |
| 28 | M77A | HSS4X4X4 | .212 | 2 | 18 | .068 | 2 v | 18 | 136263139518 | 16.181 | 16.181 | 1.66 | H1 |
| 29 | M78 | HSS4X4X4 | .212 | 0 | 16 | .069 | 0 y | 15 | | | 16.181 | 1.66 | H1 |



Colliers Engineering & Design

Project # 21777291
Antenna Mount Analysis

Dec 19, 2023 9:31 AM Checked By:___

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

| | Member | Shape | Code Check | Lo | LC | Shear Check | Lo | LC | phi*Pncphi*Pnt [| | | Cb | Egn |
|----|--------|----------|------------|------|----|-------------|-------|----|------------------|-------|-------|-------|------|
| 30 | M79A | PL1/2x6 | .328 | .516 | 4 | .247 | 516 y | 2 | 66009.2 97200 | 1.012 | 12.15 | 1.445 | H1 |
| 31 | M82 | L2x2x3 | .205 | 0 | 7 | .015 | 4 y | 20 | 9823.122 23392.8 | .558 | 1.068 | 1.112 | H2-1 |
| 32 | M83A | L2x2x3 | .195 | 4 | 3 | .016 | 4 y | 14 | 9823.122 23392.8 | .558 | 1.069 | 1.114 | H2-1 |
| 33 | M87 | PL3/8x6 | .440 | 0 | 6 | .201 | 0 y | 22 | 70647.0 72900 | .57 | 9.113 | 1.228 | H1 |
| 34 | M88A | PL3/8x6 | .351 | .167 | 12 | .423 | 0 y | 19 | 71583.5 72900 | .57 | 9.113 | 1.049 | H1 |
| 35 | M90 | PL1/2x6 | .113 | .112 | 5 | .173 | 0 v | 3 | 96757.5 97200 | 1.012 | 12.15 | 1.27 | H1 |
| 36 | M92A | PL3/8x6 | .466 | 0 | 4 | .206 | 0 y | 19 | 70647.0 72900 | .57 | 9.113 | 1.244 | H1 |
| 37 | M93 | PL3/8x6 | .323 | 167 | 10 | .428 | 0 y | 15 | 71583.5 72900 | .57 | 9.113 | 1.065 | H1 |
| 38 | M95 | PL1/2x6 | .117 | .112 | 5 | .172 | 0 y | 7 | 96757.5 97200 | 1.012 | 12.15 | 1.286 | H1 |
| 39 | M100 | PIPE 2.0 | .548 | 1 | 9 | .419 | 2 | 9 | 6295.422 32130 | 1.872 | 1.872 | 3.929 | H3-6 |
| 40 | M81A | PIPE 3.0 | .310 | 9 | 12 | .279 | 7 | 12 | 28093.2. 65205 | 5.749 | 5.749 | 2.427 | H3-6 |
| 41 | M82A | PIPE 2.0 | .559 | 1 | 5 | .416 | 2 | 5 | 6232.937 32130 | 1.872 | 1.872 | 3.783 | H3-6 |
| 42 | M83C | PIPE 3.0 | .303 | 9 | 8 | .278 | 4 | 2 | 28093.2 65205 | 5.749 | 5.749 | 2.35 | H3-6 |
| 43 | M84B | PIPE 2.0 | .520 | 1 | 1 | .407 | 10 | 9 | 6232.937 32130 | 1.872 | 1.872 | 3.921 | H3-6 |
| 44 | M94A | PIPE 2.0 | .318 | 1 | 8 | .595 | 0 | 8 | 28803.3 32130 | 1.872 | 1.872 | 1.136 | H3-6 |
| 45 | M95A | PIPE 2.0 | .326 | 1 | 12 | .602 | 0 | 12 | 28803.3. 32130 | 1.872 | 1.872 | 1.136 | H3-6 |
| 46 | M96A | PIPE 2.0 | .320 | 1 | 4 | .597 | 0 | 4 | 28803.3 32130 | 1.872 | 1.872 | 1.136 | H3-6 |
| 47 | MP2A | PIPE 2.0 | .633 | 4 | 10 | .274 | 4 | 4 | 17855.0 32130 | 1.872 | 1.872 | 2.129 | H1 |
| 48 | MP3A | PIPE 2.0 | .613 | 4 | 5 | .235 | 4 | 4 | 17855.0 32130 | 1.872 | 1.872 | 2.16 | H1 |
| 49 | MP4A | PIPE 2.0 | .498 | 4 | 5 | .133 | 1 | 11 | 23088.1 32130 | 1.872 | 1.872 | 1.845 | H1 |
| 50 | MP1C | PIPE 2.0 | .586 | 4 | 5 | .195 | 4 | 11 | 14916.0 32130 | 1.872 | 1.872 | 2.168 | H1 |
| 51 | MP2C | PIPE 2.0 | .638 | 4 | 6 | .272 | 4 | 6 | 17855.0 32130 | 1.872 | 1.872 | 2.139 | H1 |
| 52 | MP3C | PIPE 2.0 | .631 | 4 | 12 | .237 | 4 | 12 | 17855.0 32130 | 1.872 | 1.872 | 1.683 | H1 |
| 53 | MP4C | PIPE 2.0 | .505 | 4 | 1 | .131 | 1, | 7 | 23088.1 32130 | 1.872 | 1.872 | 1.197 | H1 |
| 54 | MP1B | PIPE 2.0 | .580 | 4 | 1 | .192 | 4 | 7 | 14916.0 32130 | 1.872 | 1.872 | 1.684 | H1 |
| 55 | MP2B | PIPE 2.0 | .625 | 4 | 2 | .271 | 4 | 2 | 17855.0 32130 | 1.872 | 1.872 | 2.316 | H1 |
| 56 | MP3B | PIPE 2.0 | .618 | 4 | 8 | .236 | 4 | 2 | 17855.0 32130 | 1.872 | 1.872 | 2.126 | H1 |
| 57 | MP4B | PIPE 2.0 | .496 | 4 | 9 | .132 | 1 | 3 | 23088.1 32130 | 1.872 | 1.872 | 1.956 | H1 |

VzW SMART Tool[©] Vendor

| Verizon Wireless | Date: 12/19/ | 2023 |
|------------------|-------------------------------|----------------------------|
| COATNEY HILL CT | | |
| 5000246420 | | |
| 16272134 | Page: 1 | |
| | COATNEY HILL CT 5000246420 | COATNEY HILL CT 5000246420 |

Version 2.00

I. Mount-to-Tower Connection Check

| | Custom | Orien | tation | Req | uired |
|--|--------|-------|--------|-----|-------|
|--|--------|-------|--------|-----|-------|

Tower Connection Bolt Checks

Bolt Orientation

Bolt Quantity per Reaction:

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

Bolt Type:

Bolt Diameter (in):

Required Tensile Strength / bolt (kips):

Required Shear Strength / bolt (kips):

Tensile Capacity / bolt (kips):

Shear Capacity / bolt (kips):

Bolt Overall Utilization:

Tower Connection Baseplate Checks

Connecting Standoff Member Shape:

Weld Stiffener Configuration:

Plate Width, D_x (in):

Plate Height, D_y (in):

W1(in):

W2 (in):

Member Thickness (in):

Stiffener location a₁ (in):

Stiffener location b₁ (in):

Stiffener location a_2 (in):

Stiffener location b₂ (in):

F_y (ksi, plate):

Plate Thickness (in):

Length of Yield Line, L, (in):

Bolt Eccentricity, e (in):

 M_u (kip-in):

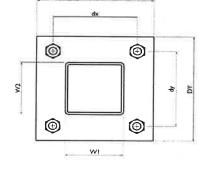
Phi*M_n (kip-in):

Plate Bending Utilization:

| No | N. L | |
|----|------|--|
| | | |

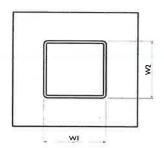
Yes

| Parallel |
|-----------|
| |
| 4 |
| 7 16 7 18 |
| 7 |
| A325N |
| 0.625 |
| 6.4 |
| 0.8 |
| 20.7 |
| 12.4 |
| 30.7% |



Yes

| Rect Tube |
|---------------|
| No Stiffeners |
| 10 |
| 10 |
| 4 |
| 4 |
| 0.25 |
| |
| |
| |
| |
| 36 |
| 0.625 |
| 7.75 |
| 2.35 |
| 14.97 |
| 24.52 |
| 61.1% |



VzW SMART Tool[©] Vendor

| Client: | Verizon Wireless | Date: 12/19/2023 |
|------------|------------------|------------------|
| Site Name: | COATNEY HILL CT | |
| MDG #: | 5000246420 | |
| Fuze ID #: | 16272134 | Page: 2 |
| | | Varsian 2 00 |

Version 2.00

Tower Connection Weld Checks

Weld Shape:

Weld Stiffener Configuration:

Weld Size (1/16 in):

W1 (in):

W2 (in):

Weld Total Length (in):

 $Z_x (in^3/in)$:

 Z_y (in³/in):

 J_p (in⁴/in):

c_x (in)

c_v (in)

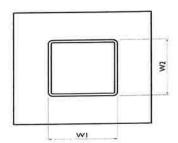
Required combined strength (kip/in):

Weld Capacity (kip/in):

Weld Utilization:

| Rectangle | |
|-----------|---|
| None | |
| 4 | |
| 4 | |
| 4 | |
| 16.00 | |
| 21.33 | |
| 21.33 | |
| 85.33 | |
| 2.25 | |
| 2.25 | |
| 2.76 | |
| 5.57 | |
| 49.6% | Ξ |

Yes



ATTACHMENT 5



215 COATNEY HILL RD

Location 215 COATNEY HILL RD

Mblu 7276/ 32/ 19A/ /

W0438400 Acct#

WOODSTOCK TOWN OF Owner

Assessment \$839,100

Appraisal \$1,198,600

PID 4525 **Building Count** 2

Current Value

| | Appraisal | | |
|----------------|--------------|-----------|-------------|
| Valuation Year | Improvements | Land | Total |
| 2021 | \$939,100 | \$259,500 | \$1,198,600 |
| | Assessment | | |
| Valuation Year | Improvements | Land | Total |
| 2021 | \$657,400 | \$181,700 | \$839,100 |

Owner of Record

Owner

WOODSTOCK TOWN OF

Co-Owner TOWN GARAGE

Address

415 RT 169

WOODSTOCK, CT 06281-3039

Sale Price

\$0

Certificate

1

Book & Page 62/315

Sale Date

09/14/1967

Ownership History

| Ownership History | | | | | | |
|-------------------|------------|-------------|-------------|------------|--|--|
| Owner | Sale Price | Certificate | Book & Page | Sale Date | | |
| WOODSTOCK TOWN OF | \$0 | 1 | 62/ 315 | 09/14/1967 | | |

Building Information

Building 1: Section 1

Year Built:

1970

Living Area:

4,600

Replacement Cost:

\$227,815

Building Percent Good:

52

Replacement Cost

Less Depreciation:

\$118.500

| Less Depresiation. | Ψ. το,οοο | |
|--------------------|---------------------|--|
| | Building Attributes | |
| Field | Description | |

ATTACHMENT 6

Certificate of Mailing — Firm