Robinson+Cole

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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 Attachment 1.

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 Attachment 2.

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

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

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

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

4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. Included in Attachment 3 is a Calculated Radio Frequency Emissions Report demonstrating that the proposed modified facility will comply with the FCC safety standards. The modified facility will be capable of providing Cellco's 5G wireless service.

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

6. According to the attached Structural Analysis Report ("SA") and Antenna Mount Analysis Report ("MA"), the existing tower, tower foundation and antenna mounts can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

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

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Jay Swan, First Selectman
Delia Fey, AICP, Town Planner
Aleksey Tyurin

ATTACHMENT 1

VL318 PG127

000077

NOTICE OF SPECIAL PERMIT

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:

Terry Beliman
Zoning Enforcement Officer

RECEIVED
TOWN CLERK, WOODSTOCK, CT
01 JAN 19 PM 1:40

Permit No 8508

Dept. of Building Inspections
Town of Woodstock

BUILDING PERMIT

ADDRESS 25 Coatney Hill

OWNER Town of Woodstock

DATE June 15, 2001

WORK AUTHORIZED

Construction of Tower Site

Attach this Permit in Clear View

CALL 928-1388 FOR INSPECTIONS

Tony Dutton

BUILDING OFFICIAL

CERTIFICATE OF USE AND OCCUPANCY

DEPARTMENT OF BUILDING INSPECTIONS

WOODSTOCK, CONNECTICUT

Certificate No. 1286

This is to certify that TOWN OF WOODSTOCK (Owner) Map No. 7276

Located at Street: 215 COATNEY HILL ROAD Block 32

Building Permit No. 8508 Lot No 19A

conforms substantially to the requirements of the Connecticut State Building Code, Sanitation Code, all the Zoning Ordinance of the Town of Woodstock and is hereby approved for occupancy as indicated below:

Type of Construction ..... Use Group: .....

Conditions: .....

.....

.....

Occupancy Load _____

Live Loads _____

Fire Grading _____

Type of Structure CELLULAR TOWER

Date 8-26-01

BUILDING OFFICIAL

Any change or extension of the use herein approved requires a new certificate

WHITE: APPLICANT YELLOW: ASSESSOR PINK: BUILDING OFFICE GOLD: FILE

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

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

ATTACHMENT 2

SBA APPROVED

By Stephen Roth at 11:56:27 AM, 2/19/2024

verizon

20 ALEXANDER DRIVE, 2nd FLOOR
WALLINGFORD, CT 06492

COATNEY HILL CT

215 COATNEY HILL ROAD
WOODSTOCK, CT 06281
WINDHAM COUNTY

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

SUPPORTING DOCUMENTS

RADIO FREQUENCY (RF) DESIGN DATE: 12/01/23

ANTENNA MOUNT STRUCTURAL ANALYSIS DATE: 12/19/23 (BY COLLIERS ENGINEERING & DESIGN)

ANTENNA SUPPORT STRUCTURE (MONOPOLE) STRUCTURAL ANALYSIS DATE: 01/18/24 (BY TOWER ENGINEERING SOLUTIONS)

SITE INFORMATION

VERIZON LOCATION CODE:	467720
VERIZON SITE NAME:	COATNEY HILL CT
SBA SITE NUMBER:	CT08748-A
SBA SITE NAME:	WOODSTOCK 4, CT
SBA COLLO APP NUMBER:	243674, V1
MDG LOCATION ID:	500024842D
FUZE PROJECT ID:	10272134
SITE ADDRESS:	215 COATNEY HILL ROAD WOODSTOCK, CT 06281
PROPERTY OWNER:	MCF COMMUNICATIONS, INC. ATTN: MIKE MCFADDEN 31 ASHWOOD AVENUE WILMINGTON, MA 01887
TOWER OWNER:	SBA TOWERS V, LLC 8051 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-995-7670
COUNTY	WINDHAM, MA
ZONING DISTRICT:	(C) COMMUNITY
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	192'±
STRUCTURE HEIGHT W/APPURTENANCE:	196±
GROUND ELEVATION:	821'±
TOTAL AMSL:	1,017'±
SITE CONTROL POINT:	CENTER OF EXISTING MONOPOLE N 41°-57-44.15" (41.9233") (NAD '83) W 72° 01'-07.16" (-72.0187") (NAD '83)
ARCHITECT/ENGINEER:	CHAPPELL ENGINEERING ASSOCIATES, LLC 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752

GENERAL NOTES

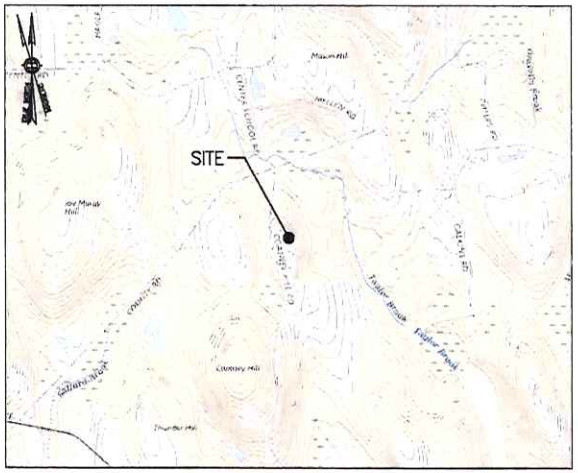
1. CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON JOB SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE ARCHITECT/ENGINEER PLACES THE RESPONSIBILITY ON THE CONTRACTOR TO CORRECT THE DISCREPANCIES AT THE CONTRACTORS EXPENSE.

2. NEW CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.
   - BUILDING CODE: 2022 CONNECTICUT STATE BUILDING CODE
   - ELECTRICAL CODE: 2020 NATIONAL ELECTRICAL CODE
   - STRUCTURAL CODE: TIA/EIA-222-H STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS

AT LEAST 72 HOURS PRIOR TO DIGGING, THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT 811

VICINITY MAP

SCALE: 1"=1000'



DRIVING DIRECTIONS

FROM WALLINGFORD, TAKE CT-68 EAST, TAKE SHARP LEFT ONTO THE I-91 NORTH RAMP TOWARD HARTFORD. MERGE ONTO I-91 NORTH. USE LEFT 2 LANES TO TAKE EXIT 20 FOR US-5 NORTH/CT-15 NORTH/I-84 EAST TOWARD HARTFORD/BOSTON. MERGE ONTO US-5 NORTH. CONTINUE ONTO CT-15 NORTH. USE LEFT 2 LANES TO MERGE ONTO I-84 EAST TOWARD BOSTON. TAKE EXIT 73 FOR CT-100 TOWARD UNION. TURN RIGHT ONTO CT-100 EAST/BUCKLEY HIGHWAY. TURN RIGHT ONTO CT-171 EAST/BIGELOW HOLLOW ROAD. TURN LEFT ONTO CT-107 EAST/LAWSON ROAD. TURN RIGHT ONTO CENTER ROAD. TURN RIGHT ONTO CENTER SCHOOL ROAD. CONTINUE STRAIGHT ONTO COATNEY HILL ROAD. SITE IS LOCATED ON THE LEFT HAND SIDE.

SHEET INDEX

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RF03	RF COLOR CODE SPECIFICATIONS	1
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DO NOT SCALE DRAWINGS

ALL PLANS, EXISTING DIMENSIONS AND CONDITIONS AT THE PROPOSED PROJECT SITE SHALL BE VERIFIED IN THE FIELD DURING THE CONSTRUCTION PHASE. THE PROJECT OWNERS REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES IMMEDIATELY PRIOR TO PROCEEDING WITH THE PROPOSED WORK AFFECTED BY SUCH DISCREPANCIES. IN THE EVENT OF LACK OF SUCH NOTIFICATION, SUCH DISCREPANCIES SHALL BECOME THE RESPONSIBILITY OF THE PREVAILING CONTRACTOR RESPONSIBLE FOR CONSTRUCTION.

PROJECT DESCRIPTION

1. THIS IS AN UNMANNED AND RESTRICTED ACCESS EQUIPMENT INSTALLATION AND WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC WIRELESS TELECOMMUNICATIONS SERVICE.
2. THIS FACILITY DOES NOT, NOR WILL IT CONSUME UNRECOVERABLE ENERGY.
3. NO PORTABLE WATER SUPPLY IS OR WILL BE PROVIDED AT THIS LOCATION.
4. NO WASTE WATER IS OR WILL BE GENERATED AT THIS LOCATION.
5. NO SOLID WASTE IS OR WILL BE GENERATED AT THIS LOCATION.

SCOPE OF WORK

REMOVE:
- 9 ANTENNAS
- 6 RADIOS
- 6 DIPLEXERS

INSTALL:
- 9 ANTENNAS
- 6 RADIOS
- 3 DIPLEXERS

RELOCATE:
- 1 JUNCTION BOX (12 OVP)

verizon
20 ALEXANDER DRIVE, 2ND FLOOR
WALLINGFORD, CT 06492
(203) 741-7338

SBA
SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
(508) 251-0720

CHAPPELL ENGINEERING ASSOCIATES, LLC
R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com

STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25987
LICENSED
PROFESSIONAL CIVIL ENGINEER
8/19/2024

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	02/16/24	ISSUED FOR CONSTRUCTION	CMC
0	02/12/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS

COATNEY HILL CT

215 COATNEY HILL ROAD
WOODSTOCK, CT 06281

VZW LOCATION CODE:	467720
MDG LOCATION ID:	500024842D
FUZE PROJECT ID:	10272134

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T01

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR – VERIZON WIRELESS
   SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – VERIZON WIRELESS
   OEM – ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.

4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

5. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.

6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.

9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.

10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

13. THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

14. SUBCONTRACTOR SHALL NOTIFY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACK FILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS & POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.

15. CONSTRUCTION SHALL COMPLY WITH VERIZON WIRELESS NETWORK STANDARD #NST0123 TO THE MAXIMUM EXTENT FEASIBLE UNLESS PRECLUDED OR LIMITED BY DESIGN SHOWN ON THESE DRAWINGS.

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

17. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

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

SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.

3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.

4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

5. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.

6. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

7. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.

8. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING, OWNER AND/OR LOCAL UTILITIES.

9. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

10. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION, EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

11. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE VERIZON WIRELESS SPECIFICATION FOR SITE SIGNAGE.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.

2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (4000PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE REQUIREMENTS

3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE, WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.

4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF .....1½ IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER
   OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....¾ IN.
   BEAMS AND COLUMNS .....1½ IN.

5. A CHAMFER ¾" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.

7. CONCRETE CYLINDER TEST IS NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
   (A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.
   (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
FOR GREATER THAN 50 CUBIC YARDS THE QC SHALL PERFORM THE CONCRETE CYLINDER TEST.

8. AS AN ALTERNATIVE TO ITEM 7, TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.

9. EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS AND VERIZON WIRELESS SPECIFICATION 25252-000-3PS-GET-00001 UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM-A-36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL OF STEEL CONSTRUCTION".

2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.

3. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (⅞") AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.

4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ⅜" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.

5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.

6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL.

7. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.

2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.

3. AS AN ALTERNATE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.

4. COMPACTED SUBBASE SHALL BE UNIFORM AND LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING #1 SIEVE.

5. AS AN ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AND SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

1. HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

CONSTRUCTION NOTES:

1. FIELD VERIFICATION:
SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, VERIZON WIRELESS ANTENNA PLATFORM LOCATION AND ANTENNAS TO BE REPLACED.

2. COORDINATION OF WORK:
SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.

3. CABLE LADDER RACK:
SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

1. WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.

2. SUBCONTRACTOR SHALL MODIFY EXISTING CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.

3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.

4. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.

5. EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA, AND MATCH EXISTING INSTALLATION REQUIREMENTS.

6. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ¾ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC & OSHA AND MATCH EXISTING INSTALLATION REQUIREMENTS

7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANEL BOARD AND CIRCUIT ID'S).

8. PANEL BOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.

9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.

10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #3 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.

13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.

14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).

15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.

16. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

17. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

18. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

19. GALVANIZED STEEL, INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE

20. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

21. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

22. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.

23. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.

24. CABINETS, BOXES, AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

25. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

26. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS

27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON- CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

28. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

29. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

30. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

31. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.

32. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

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STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25987
LICENSED
PROFESSIONAL CIVIL ENGINEER
2/16/2024

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	02/16/24	ISSUED FOR CONSTRUCTION	CMC
0	02/12/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS

COATNEY HILL CT

215 COATNEY HILL ROAD
WOODSTOCK, CT 06281

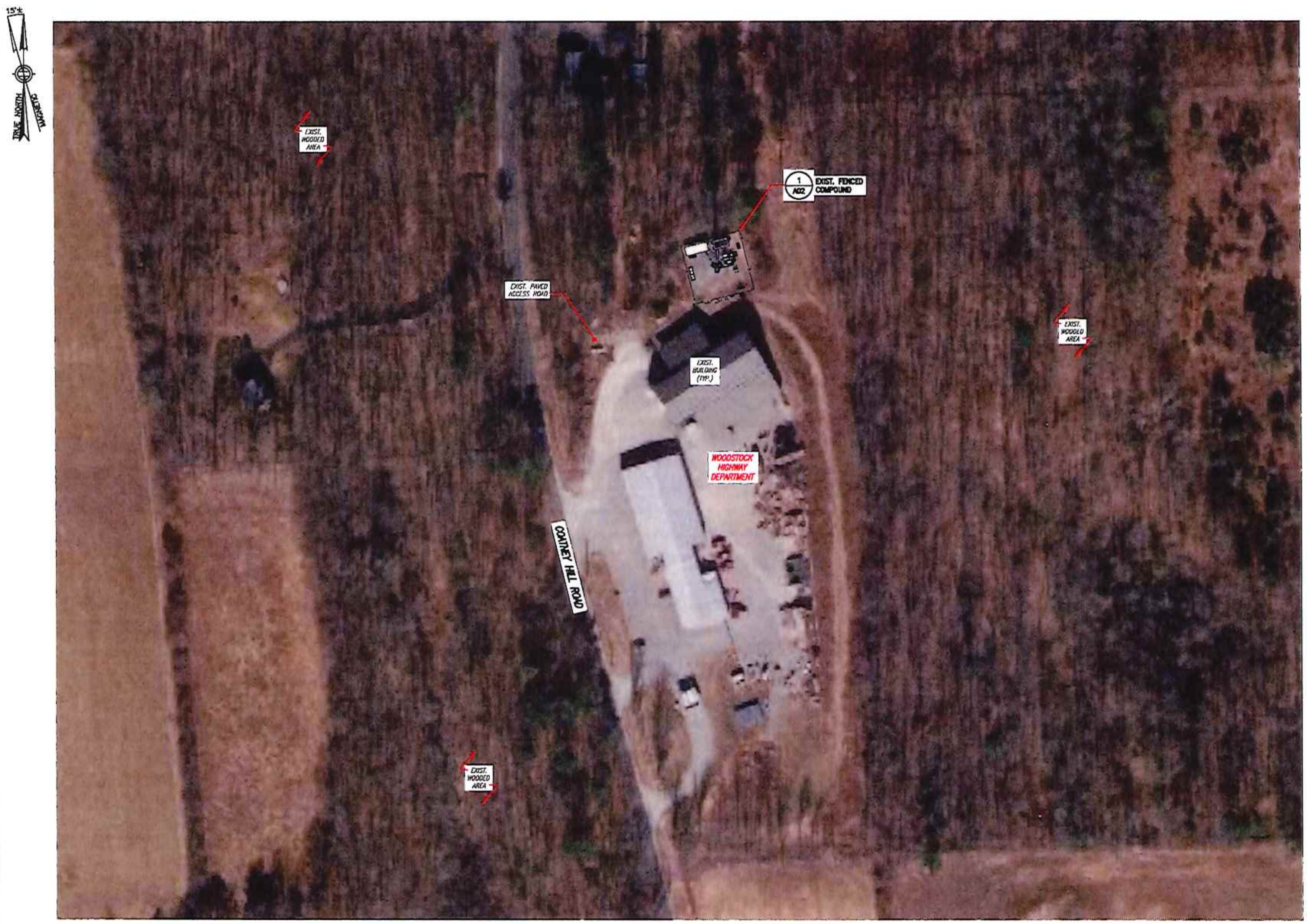
VZW LOCATION CODE:	497720
MDG LOCATION ID:	10000346420
FUZE PROJECT ID:	16272134

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN01



SITE PLAN (1/A01)
SCALE: 1" = 60'-0"
0 60' 120' 180'

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STATE OF CONNECTICUT * JAMES M. FITZGERALD No. 25997 LICENSED PROFESSIONAL CIVIL ENGINEER
2/16/2024

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
1	02/15/24	ISSUED FOR CONSTRUCTION	CMC
0	02/12/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS

COATNEY HILL CT

2[illegible]5 COATNEY HILL ROAD
WOODSTOCK, CT 06281

VZW LOCATION CODE:	467720
MDC LOCATION ID:	5000246420
FUZE PROJECT ID:	16272134

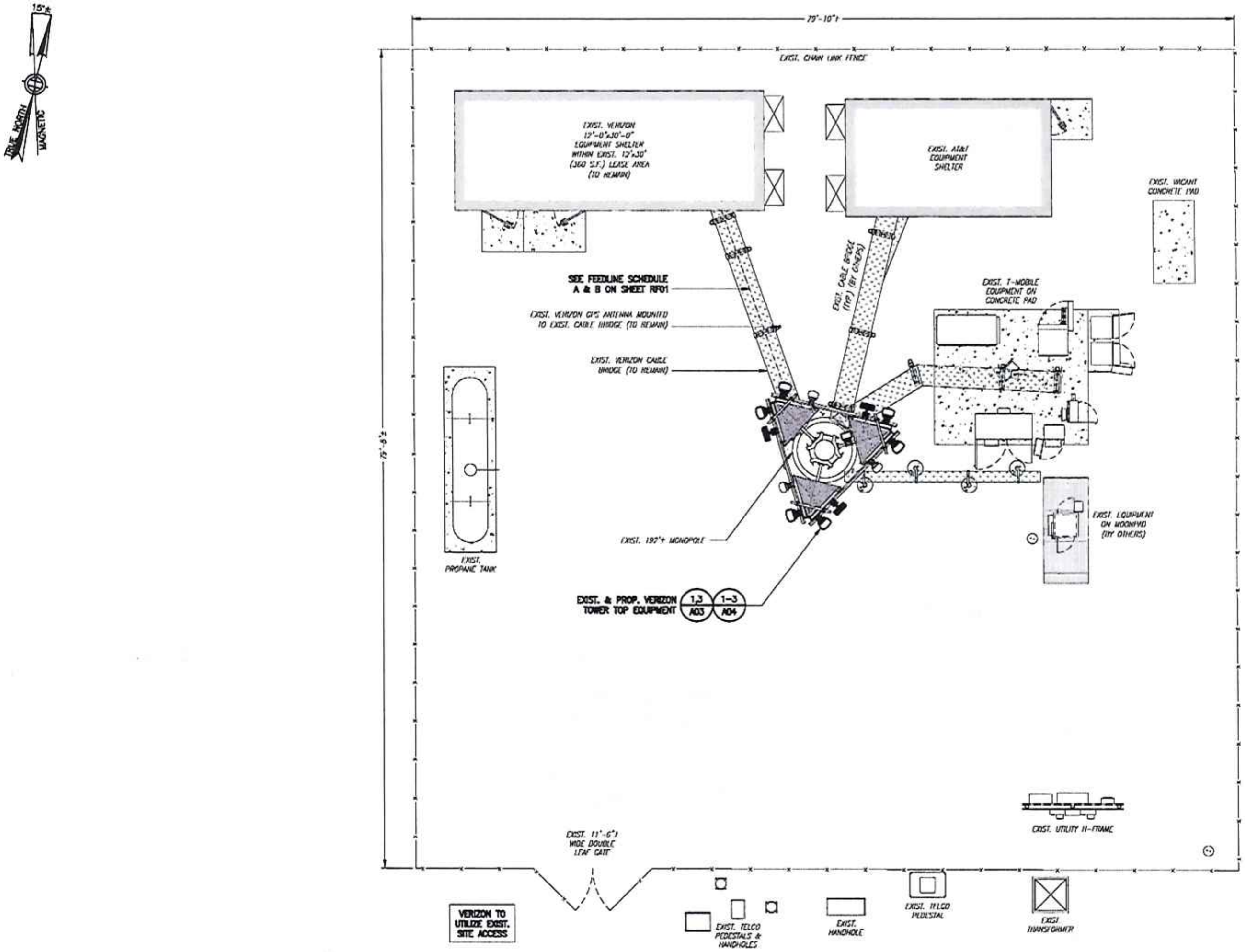
SHEET TITLE

SITE PLAN

SHEET NUMBER

A01

SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY SPECIAL SHIELDING OF TOWER TOP EQUIPMENT AND FOR ANY SPECIAL FEEDLINE BUNDLING OR RELOCATION.



COMPOUND PLAN

SCALE: 3/16" = 1'-0"

0 5'-4" 10'-8" 16'-0"

1 / A02

verizon

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STATE OF CONNECTICUT ★ JAMES M. FITZGERALD No. 25997 LICENSED ★ PROFESSIONAL CIVIL ENGINEER

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	02/6/24	ISSUED FOR CONSTRUCTION	CJC
0	02/2/24	ISSUED FOR REVIEW	CJC

PROJECT NAME & ADDRESS

COATNEY HILL CT

215 COATNEY HILL ROAD
WOODSTOCK, CT 06281

VZW LOCATION CODE:	467720
MDG LOCATION ID:	5000246420
FUZE PROJECT ID:	16272134

SHEET TITLE

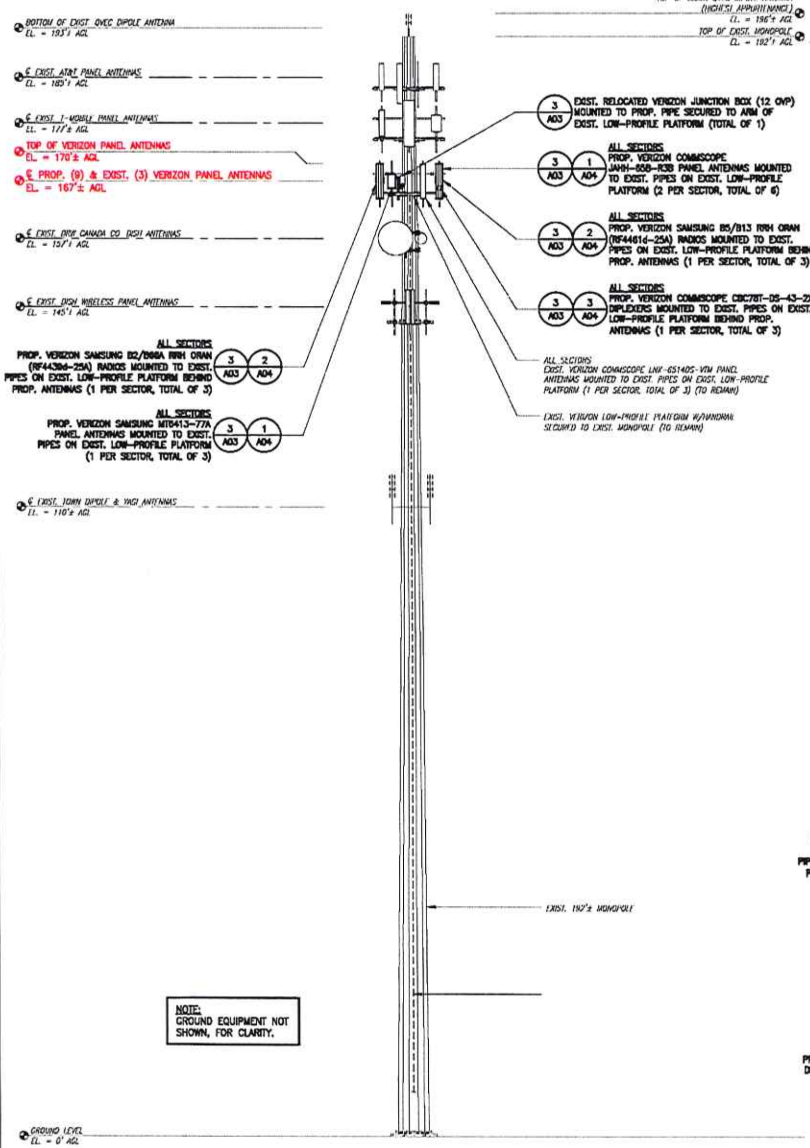
COMPOUND PLAN

SHEET NUMBER

A02

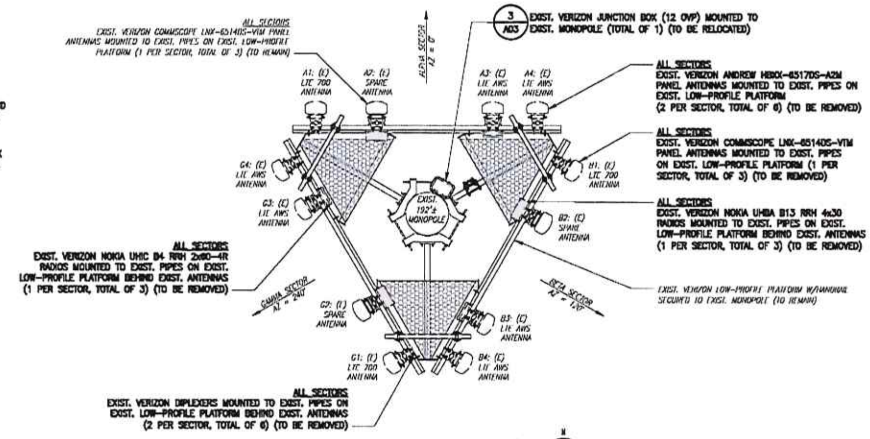
SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY SPECIAL SHIELDING OF TOWER TOP EQUIPMENT AND FOR ANY SPECIAL FEEDLINE BUNDLING OR RELOCATION.

RAD CENTER NOTE:
VERIZON ANTENNA AND MOUNT RAD CENTER SHOWN IN ELEVATION ARE ACCORDING TO STRUCTURAL ANALYSIS DONE BY OTHERS AND MAY DIFFER FROM RAD CENTER ON RFDS PROVIDED BY VERIZON.

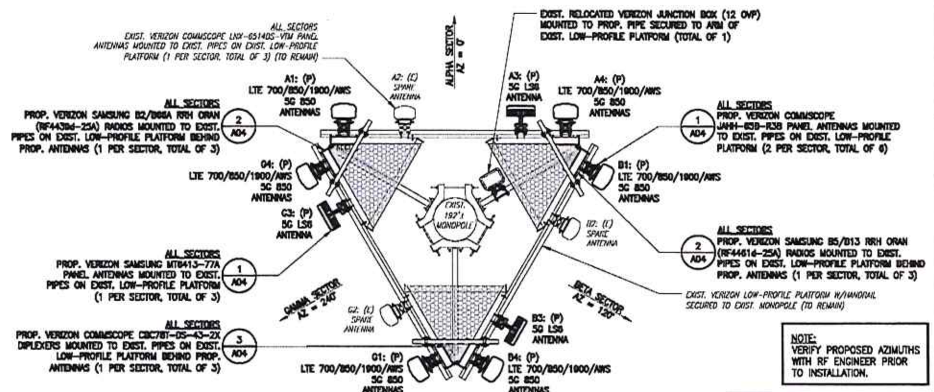


NOTE:
GROUND EQUIPMENT NOT SHOWN, FOR CLARITY.

TOWER ELEVATION (1 / A03)
SCALE: 1" = 10'-0"
0 10'-0" 20'-0" 30'-0"



EXISTING ANTENNA PLAN (2 / A03)
SCALE: N.T.S.



PROPOSED ANTENNA PLAN (3 / A03)
SCALE: N.T.S.

NOTE:
VERIFY PROPOSED AZIMUTHS WITH RF ENGINEER PRIOR TO INSTALLATION.

ANTENNA STATUS LEGEND:
EMPTY – EMPTY PIPE
(E) – EXISTING
(P) – INSTALL
(F) – FUTURE

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STATE OF CONNECTICUT ★ JAMES M. FITZGERALD No. 25697 LICENSED PROFESSIONAL CIVIL ENGINEER ★
2/16/2024

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

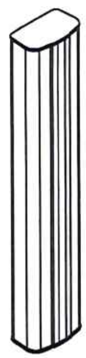
REV.	DATE	DESCRIPTION	BY
1	02/15/24	ISSUED FOR CONSTRUCTION	CMC
0	02/12/24	ISSUED FOR REVIEW	CMC

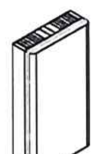
PROJECT NAME & ADDRESS
COATNEY HILL CT
2-5 COATNEY HILL ROAD
WOODSTOCK, CT 06281

VZW LOCATION CODE: 467720
MDG LOCATION ID: 5000246420
FUZE PROJECT ID: 16872134

SHEET TITLE
TOWER ELEVATION & ANTENNA PLANS

SHEET NUMBER
A03

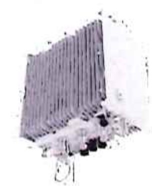




COMMSCOPE JAHH-65B-R3B ANTENNA
DIMENSIONS: 72.0"H x 13.8"W x 8.2"D
WEIGHT: 64.4 lbs
QUANTITY: 2 PER SECTOR, TOTAL OF 6
SECTORS: ALPHA, BETA, GAMMA

SAMSUNG MT6413-77A ANTENNA
DIMENSIONS: 28.9"H x 15.8"W x 5.5"D
WEIGHT: 57.3 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3
SECTORS: ALPHA, BETA, GAMMA

ANTENNA DETAILS
SCALE: N.T.S.
1 / A04



SAMSUNG RF4439d-25A B2/B66A RADIO
DIMENSIONS: 15.0"H x 15.0"W x 10.0"D
WEIGHT: 74.7 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3
SECTORS: ALPHA, BETA, GAMMA

SAMSUNG RF4461d-13A B5/B13 RADIO
DIMENSIONS: 15.0"H x 15.0"W x 10.2"D
WEIGHT: 79.1 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3
SECTORS: ALPHA, BETA, GAMMA

RADIO DETAILS
SCALE: N.T.S.
2 / A04

COMMSCOPE CBC78T-DS-43-2X
4-PACK 700/850MHz DIPLEXER
DIMENSIONS: 8.4"H x 8.9"W x 9.6"D
WEIGHT: 20.7 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3
SECTORS: ALPHA, BETA, GAMMA

DIPLEXER DETAIL
SCALE: N.T.S.
3 / A04

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STATE OF CONNECTICUT ★ JAMES M. FITZGERALD No. 25987 LICENSED PROFESSIONAL CIVIL ENGINEER ★
2/16/2024

CHECKED BY: JMT
APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	02/16/24	ISSUED FOR CONSTRUCTION	CMC
0	02/12/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
COATNEY HILL CT
215 COATNEY HILL ROAD
WOODSTOCK, CT 06281

VZW LOCATION CODE:	497720
MDG LOCATION ID:	5000246420
FUZE PROJECT ID:	16272134

SHEET TITLE
SITE DETAILS

SHEET NUMBER
A04

EXISTING EQUIPMENT CONFIGURATION

SECTOR	EQUIPMENT MAKE & MODEL	QTY	AZIMUTH (TRUE NORTH)	ANTENNA RAD	BAND	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	EQUIPMENT STATUS	H (IN)	W (IN)	D (IN)	WEIGHT (LBS)	HYBRID CABLE SIZE & QTY
ALPHA	COMMSCOPE LNX-6514DS-VTM PANEL ANTENNA	1	0°	167'± AGL	LTE 700	0°	10°	ETRE	72.7	11.9	7.1	44.0	EXIST. (12) 1-5/8" COAXIAL CABLES EXIST. (2) 6x12 HYBRID CABLES
	COMMSCOPE LNX-6514DS-VTM PANEL ANTENNA	1	0°	167'± AGL	SPARE	-	-	ETR	72.7	11.9	7.1	44.0	
	ANDREW HBXX-6517DS-A2M PANEL ANTENNA	1	0°	167'± AGL	LTE AWS	0°	2°	ETRE	74.9	12.0	6.5	42.9	
	ANDREW HBXX-6517DS-A2M PANEL ANTENNA	1	0°	167'± AGL	LTE AWS	0°	2°	ETRE	74.9	12.0	6.5	42.9	
BETA	COMMSCOPE LNX-6514DS-VTM PANEL ANTENNA	1	120°	167'± AGL	LTE 700	0°	6°	ETRE	72.7	11.9	7.1	44.0	
	COMMSCOPE LNX-6514DS-VTM PANEL ANTENNA	1	120°	167'± AGL	SPARE	-	-	ETR	72.7	11.9	7.1	44.0	
	ANDREW HBXX-6517DS-A2M PANEL ANTENNA	1	120°	167'± AGL	LTE AWS	0°	2°	ETRE	74.9	12.0	6.5	42.9	
	ANDREW HBXX-6517DS-A2M PANEL ANTENNA	1	120°	167'± AGL	LTE AWS	0°	2°	ETRE	74.9	12.0	6.5	42.9	
GAMMA	COMMSCOPE LNX-6514DS-VTM PANEL ANTENNA	1	240°	167'± AGL	LTE 700	0°	2°	ETRE	72.7	11.9	7.1	44.0	
	COMMSCOPE LNX-6514DS-VTM PANEL ANTENNA	1	240°	167'± AGL	SPARE	-	-	ETR	72.7	11.9	7.1	44.0	
	ANDREW HBXX-6517DS-A2M PANEL ANTENNA	1	240°	167'± AGL	LTE AWS	0°	2°	ETRE	74.9	12.0	6.5	42.9	
	ANDREW HBXX-6517DS-A2M PANEL ANTENNA	1	240°	167'± AGL	LTE AWS	0°	2°	ETRE	74.9	12.0	6.5	42.9	
ALL	NOKIA UBBA B13 RRH 4x30 RADIOS	3	-	-	-	-	-	ETRE	21.4	12.0	7.2	51.0	
	NOKIA UHIC B4 RRH 2x60-4R RADIOS	3	-	-	-	-	-	ETRE	37.0	11.0	6.0	55.0	
	DIPLEXERS	6	-	-	-	-	-	ETRE	-	-	-	-	
	12 OVP	1	-	-	-	-	-	ETR	29.6	16.5	12.6	32.0	

NOTES:
1. "ETR" DENOTES "EXISTING TO REMAIN".
2. "ETRE" DENOTES "EXISTING TO BE REMOVED".
3. WEIGHTS LISTED ARE WITHOUT MOUNTING BRACKETS.
4. INFORMATION IS BASED ON RFDS DATED 12/01/23.

FINAL EQUIPMENT CONFIGURATION

SECTOR	EQUIPMENT MAKE & MODEL	QTY	AZIMUTH (TRUE NORTH)	ANTENNA RAD	BAND	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	EQUIPMENT STATUS	H (IN)	W (IN)	D (IN)	WEIGHT (LBS)	HYBRID CABLE SIZE & QTY
ALPHA	COMMSCOPE JAHH-65B-R3B PANEL ANTENNAS	1	0°	167'± AGL	LTE 700/850/1900/AWS 5G 850	0°/0°/0°/0° 0°	10°/10°/6°/2° 10°	NEW	72.0	13.8	8.2	64.4	EXIST. (12) 1-5/8" COAXIAL CABLES EXIST. (2) 6x12 HYBRID CABLES
	COMMSCOPE LNX-6514DS-VTM PANEL ANTENNA	1	0°	167'± AGL	SPARE	-	-	ETR	72.7	11.9	7.1	44.0	
	SAMSUNG MT6413-77A PANEL ANTENNA	1	0°	167'± AGL	5G L58	0°	10°	NEW	28.9	15.8	5.5	57.3	
	COMMSCOPE JAHH-65B-R3B PANEL ANTENNAS	1	0°	167'± AGL	LTE 700/850/1900/AWS 5G 850	0°/0°/0°/0° 0°	10°/10°/6°/2° 10°	NEW	72.0	13.8	8.2	64.4	
BETA	COMMSCOPE JAHH-65B-R3B PANEL ANTENNAS	1	120°	167'± AGL	LTE 700/850/1900/AWS 5G 850	0°/0°/0°/0° 0°	6°/6°/2°/2° 6°	NEW	72.0	13.8	8.2	64.4	
	COMMSCOPE LNX-6514DS-VTM PANEL ANTENNA	1	120°	167'± AGL	SPARE	-	-	ETR	72.7	11.9	7.1	44.0	
	SAMSUNG MT6413-77A PANEL ANTENNA	1	120°	167'± AGL	5G L58	0°	10°	NEW	28.9	15.8	5.5	57.3	
	COMMSCOPE JAHH-65B-R3B PANEL ANTENNAS	1	120°	167'± AGL	LTE 700/850/1900/AWS 5G 850	0°/0°/0°/0° 0°	6°/6°/2°/2° 6°	NEW	72.0	13.8	8.2	64.4	
GAMMA	COMMSCOPE JAHH-65B-R3B PANEL ANTENNAS	1	240°	167'± AGL	LTE 700/850/1900/AWS 5G 850	0°/0°/0°/0° 0°	2°/2°/4°/2° 2°	NEW	72.0	13.8	8.2	64.4	
	COMMSCOPE LNX-6514DS-VTM PANEL ANTENNA	1	240°	167'± AGL	SPARE	-	-	ETR	72.7	11.9	7.1	44.0	
	SAMSUNG MT6413-77A PANEL ANTENNA	1	240°	167'± AGL	5G L58	0°	10°	NEW	28.9	15.8	5.5	57.3	
	COMMSCOPE JAHH-65B-R3B PANEL ANTENNAS	1	240°	167'± AGL	LTE 700/850/1900/AWS 5G 850	0°/0°/0°/0° 0°	2°/2°/4°/2° 2°	NEW	72.0	13.8	8.2	64.4	
ALL	SAMSUNG B2/B66A RF4439d-25A RADIOS	3	-	-	-	-	-	NEW	15.0	15.0	10.0	74.7	
	SAMSUNG B5/B13 RF4461d-13A RADIOS	3	-	-	-	-	-	NEW	15.0	15.0	10.2	70.1	
	COMMSCOPE CBC78T-DS-43-2X DIPLEXERS	3	-	-	-	-	-	NEW	6.4	6.9	9.6	20.7	
	12 OVP	1	-	-	-	-	-	ETR	29.6	16.5	12.6	32.0	

NOTES:
1. "ETR" DENOTES "EXISTING TO REMAIN".
2. "ETRE" DENOTES "EXISTING TO BE REMOVED".
3. WEIGHTS LISTED ARE WITHOUT MOUNTING BRACKETS.
4. INFORMATION IS BASED ON RFDS DATED 12/01/23.

FEEDLINE SCHEDULE

SCHEDULE	FEEDLINES		LOCATION
A	EXISTING TO REMAIN:	(1) 1/2" COAX CABLE FOR GPS ANTENNA (12) 1-5/8" COAXIAL CABLES (2) 6x12 HYBRID CABLES	ROUTED PER STRUCTURAL ANALYSIS
	EXISTING TO BE REMOVED:	NONE	
B	PROPOSED:	NONE	

NOTE:
EXISTING VERIZON EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER.

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STATE OF CONNECTICUT ★ JAMES M. FITZGERALD ★ No. 25997 LICENSED PROFESSIONAL CIVIL ENGINEER

2/16/2024

CHECKED BY:	JMT
APPROVED BY:	JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	02/16/24	ISSUED FOR CONSTRUCTION	CMC
0	02/12/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS

COATNEY HILL CT

215 COATNEY HILL ROAD
WOODSTOCK, CT 06281

VZW LOCATION CODE:	467720
MDG LOCATION ID:	5000246420
FUZE PROJECT ID:	16272134

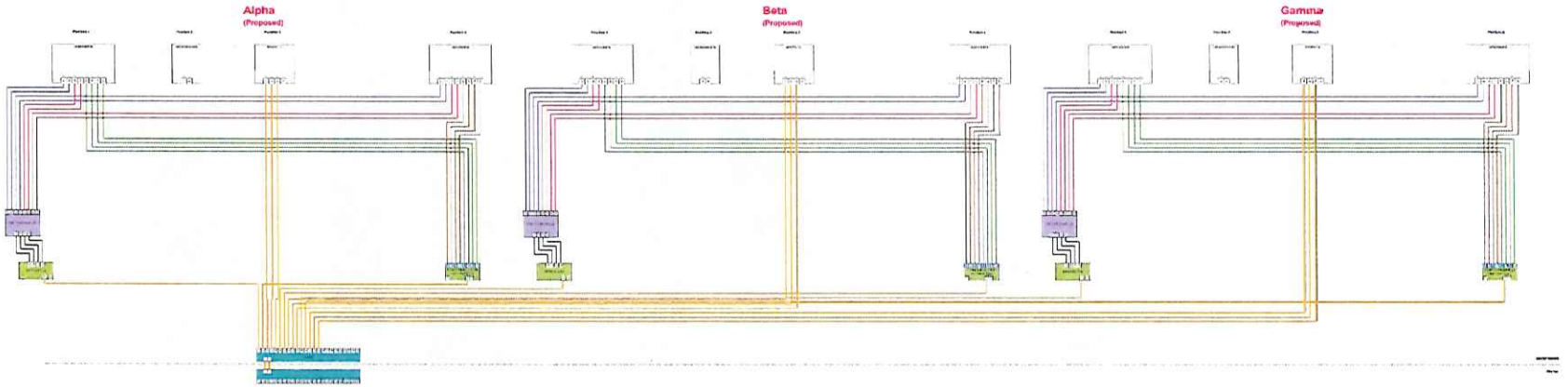
SHEET TITLE

RF DATA

SHEET NUMBER

RF01

23138.063



RF PLUMBING DIAGRAM
SCALE: N.T.S.

1
RF02

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STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25987
LICENSED
PROFESSIONAL CIVIL ENGINEER
3/14/2024

CHECKED BY:	JMT
APPROVED BY:	JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
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0	02/12/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS

COATNEY HILL CT

215 COATNEY HILL ROAD
WOODSTOCK, CT 06281

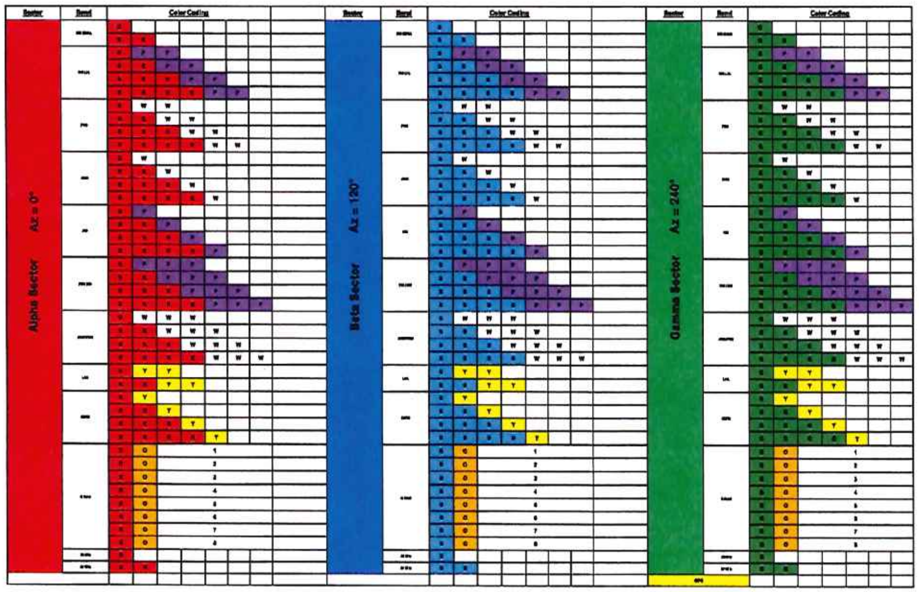
VZW LOCATION CODE:	467720
MDG LOCATION ID:	8000246420
FUZE PROJECT ID:	16272134

SHEET TITLE

RF PLUMBING DIAGRAM

SHEET NUMBER

RF02



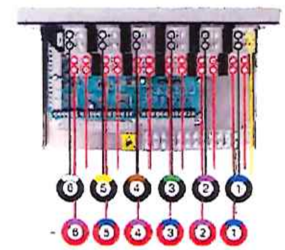
CABLE NOTE:
SEE FEEDLINE SCHEDULE A & B ON SHEET RF01 FOR EXISTING & PROPOSED CABLE QUANTITIES.

LINE COLOR CODE SPECIFICATIONS (1/RF03)
SCALE: N.T.S.

Hybrid Cable on Towers

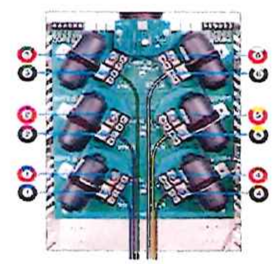
Hybrid Cable 1

Sector	Identification Color	-48V	RTN
700 Alpha	Blue		
AWS Alpha	Violet		
PCS Alpha	Green		
850 Alpha	Brown		
Spare	Yellow		
Spare	White		



Hybrid Cable 2

Sector	Identification Color	-48V	RTN
700 Beta	Blue		
AWS Beta	Violet		
PCS Beta	Green		
850 Beta	Brown		
Spare	Yellow		
Spare	White		



HYBRID CABLE COLOR CODE SPECIFICATIONS (2/RF03)
SCALE: N.T.S.

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STATE OF CONNECTICUT * JAMES M. FITZGERALD * No. 25997 LICENSED PROFESSIONAL CIVIL ENGINEER
2/14/2024

CHECKED BY: JMT
APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	02/16/24	ISSUED FOR CONSTRUCTION	CSC
0	02/12/24	ISSUED FOR REVIEW	CSC

PROJECT NAME & ADDRESS
COATNEY HILL CT
2 ½ COATNEY HILL ROAD
WOODSTOCK, CT 06281

VZW LOCATION CODE: 467720
MDG LOCATION ID: 5000246420
FUZE PROJECT ID: 16272134

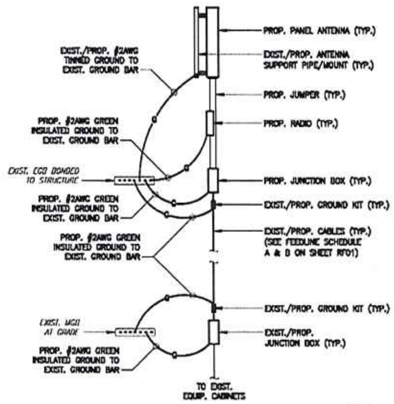
SHEET TITLE
RF COLOR CODE SPECIFICATIONS

SHEET NUMBER
RF03

22135.002

GROUNDING GENERAL NOTES

1. ALL EXTERIOR CONDUCTORS SHALL BE #2 AWG, SOLID, BARE, TINNED COPPER, UNLESS OTHERWISE NOTED. MINIMUM BEND RADIUS SHALL BE EIGHT (8) INCHES.
2. ALL WIRE-TO-WIRE CONNECTIONS SHALL BE THREE-CLAMP, C TAP COMPRESSION (T&B #54740 ORANGE OR EQUIVALENT). ALL GROUND BAR CONNECTIONS SHALL BE TWO-HOLE, LONG-BARREL TYPE COMPRESSION LUGS (T&B OR EQUIVALENT). ALL OTHER CONNECTIONS TO STEEL SURFACES SHALL USE LUG-TYPE CONNECTORS.
3. MECHANICALLY BOND ANTENNA MOUNTS WITH #2 AWG, BARE, STRANDED CONDUCTORS.
4. ALL GROUNDING WORK SHALL COMPLY WITH VERIZON WIRELESS STANDARDS.
5. CONNECT GROUND CONDUCTOR TO EXISTING GROUNDING SYSTEM. ATTACH TO WALLS, PARAPET, CABLE TRAY, ETC. WITH A CLAMPS AS NECESSARY. REMOVE PAINT, FIREPROOFING, MILL SCALE, ETC. TO ACHIEVE GOOD CAD WELD GROUND CONNECTION.
6. CONNECT TO HALO GROUND USING C-TAP (#54730).
7. CONNECT TO ENCLOSURES USING BLUE GROUND LUGS.
8. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC (CADWELD) CONNECTIONS.
9. ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD).
10. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
11. ALL EXOTHERMIC CONNECTIONS TO THE GROUND RODS SHALL START AT THE TOP & HAVE A VERTICAL SEPARATION OF 6" FOR EVERY ADDITIONAL CONNECTION.
12. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
13. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
14. MAXIMUM RESISTANCE OF THE COMPLETED GROUND SYSTEM SHALL NOT EXCEED 5 OHMS. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH PROJECT SPECIFICATION FOR FACILITY GROUNDING, USING FALL OF POTENTIAL METHOD.
15. ANTENNA GROUND KITS SHALL BE FURNISHED BY VERIZON & INSTALLED BY CONTRACTOR.



TYP. ANTENNA GROUNDING RISER (1/E01)
SCALE: NOT TO SCALE

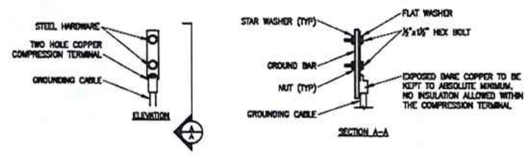
LEGEND

GROUNDING SYMBOLS

⊠	GROUND ROD/TEST (OBSERVATION) WELL
⊗	GROUND ROD
▲	CADWELD TYPE CONNECTION
●	COMPRESSION TYPE CONNECTION
------	GROUNDING WIRE
(1/E02)	REPRESENTS DETAIL NUMBER

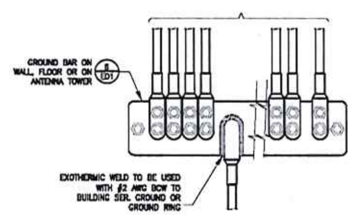
ABBREVIATIONS

AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE
GPS	GLOBAL POSITIONING SYSTEM
PCS	PERSONAL COMMUNICATION SYSTEM
RWY	RACEWAY
TYP.	TYPICAL
RGS	RIGID GALVANIZED STEEL
EMT	ELECTRICAL METALLIC TUBING
DWG	DRAWING
EMT	INTERIOR GROUND RING (HALO)
GEN	GENERATOR
GR	GROWTH
CGBE	COAX GROUND BAR EXTERNAL
CIGBE	COAX ISOLATED GROUND BAR EXTERNAL
MGB	MASTER GROUND BAR
PVC	RIGID (SCH. 40) POLYVINYL CHLORIDE CONDUIT
EBH	ETHERNET BACK HAUL



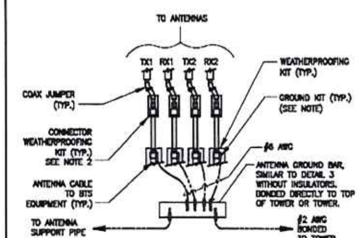
NOTE:
1. "DOUBLING UP" OR "STACKING " OF CONNECTION IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

TYP. GROUND BAR CONNECTION (2/E01)
SCALE: N.T.S.



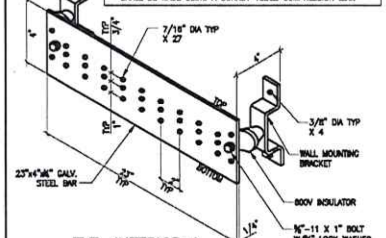
NOTE:
GROUND BARS AT THE BOTTOM OF TOWER SHALL ONLY USE EXOTHERMIC WELDS.

INSTALLATION OF GROUND WIRE TO GROUND BAR (3/E01)
SCALE: N.T.S.

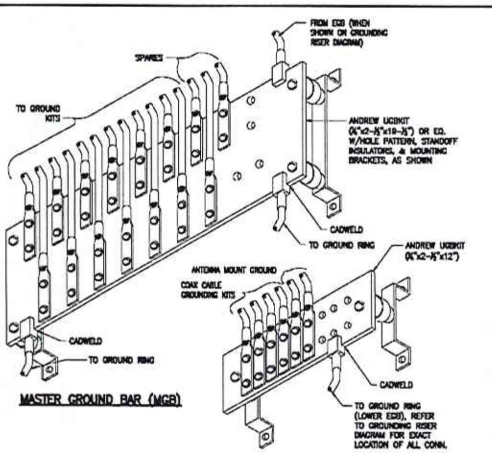


CONN. OF GROUND WIRE TO GROUND BAR (TOWER) (4/E01)
SCALE: N.T.S.

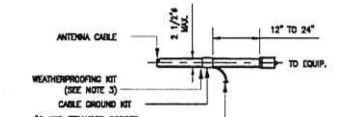
NOTES:
1. SURFACE PREPARATION: ALL CONNECTIONS MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE MADE BARE TO ENSURE PROPER CONTACT. NO WASHERS SHALL BE ALLOWED BETWEEN THE ITEMS BEING GROUNDED. ALL CONNECTIONS SHALL HAVE AN ANTI-OXIDANT AGENT APPLIED PRIOR TO INSTALLATION.
2. BUSS PREPARATION: ALL GALV. STEEL BUSSES SHALL BE CLEANED, POLISHED AND AN ANTI-OXIDANT APPLIED. NO FINGERPRINTS OR DISCOLORED STEEL WILL BE PERMITTED.
3. TERMINATIONS: ALL EQUIPMENT TERMINATIONS SHALL BE MADE WITH A BURNDY TWO HOLE COMPRESSION LUG WITH 10-24x3/4" LONG S.S. SCREWS, NUTS AND LOCK WASHERS. ALL BUSS TERMINATIONS SHALL BE MADE WITH A CAD-WELD OR BURNDY YC2C2 2 HOLE COMPRESSION LUG OR EQUAL. ALL INTERIOR HALO ATTACHMENTS SHALL BE MADE USING A BURNDY YC2C2 COMPRESSION LUG.



TYP. INTERIOR & EXTERIOR GROUND BAR (5/E01)
SCALE: N.T.S.

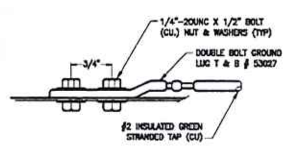


GROUND BAR DETAILS (6/E01)
SCALE: N.T.S.

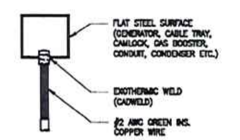


NOTES:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND & ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE & PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE SUPPLIED WITH KIT. COLD SHRINK SHALL NOT BE USED.

CONN. OF CABLE GROUND KIT TO ANTENNA CABLE (7/E01)
SCALE: N.T.S.



TYP. EQUIPMENT GROUND CONNECTION (8/E01)
SCALE: N.T.S.



TYP. CADWELD #2 GREEN TO FLAT STEEL SURFACE (9/E01)
SCALE: N.T.S.

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STATE OF CONNECTICUT * JAMES M. FITZGERALD No. 25997 LICENSED PROFESSIONAL CIVIL ENGINEER *
2/16/2024

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
1	02/16/24	ISSUED FOR CONSTRUCTION	CSC
0	02/12/24	ISSUED FOR REVIEW	CSC

PROJECT NAME & ADDRESS

COATNEY HILL CT

215 COATNEY HILL ROAD
WOODSTOCK, CT 06281

VZW LOCATION CODE:	467720
MDG LOCATION ID:	5000246420
FUZE PROJECT ID:	16272134

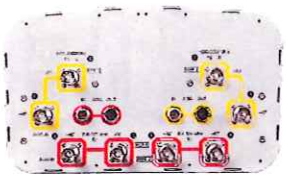
SHEET TITLE

GROUNDING NOTES & DETAILS

SHEET NUMBER

E01

JAHH-65B-R3B



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 m^2 | 3.014 ft^2
Effective Projective Area (EPA), lateral	0.24 m^2 | 2.583 ft^2
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 Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

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

JAHH-65B-R3B

Length	1828 mm | 71.969 in
Depth	208 mm | 8.189 in

Array Layout

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

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-798	1-2	1	ANxxxxxxxxxxxxxx1
R2	824-894	3-4	2	ANxxxxxxxxxxxxxx2
Y1	1695-2360	5-6	3	ANxxxxxxxxxxxxxx3
Y2	1695-2360	7-8		

View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz | 698 – 787 MHz | 824 – 894 MHz
Polarization	±45°

Remote Electrical Tilt (RET) Information, Electrical

Protocol	3GPP/AISG 2.0 (Single RET)
Power Consumption, idle state, maximum	2 W

JAHH-65B-R3B

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

JAHH-65B-R3B

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**
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-3	—	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

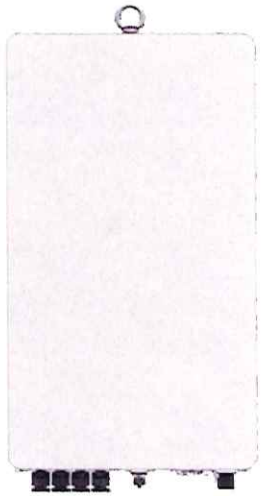
Performance Note	Severe environmental conditions may degrade optimum performance

C-band 64T64R

SAMSUNG

Gen 2

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



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

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

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

SAMSUNG

AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER FOR MACRO COVERAGE

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

Model Code	RF4439d-25A

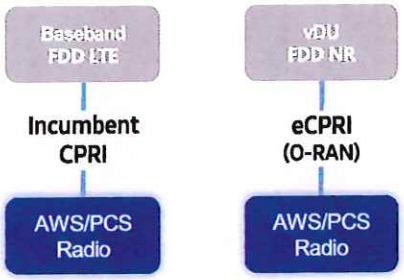
Homepage
samsungnetworks.com

Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

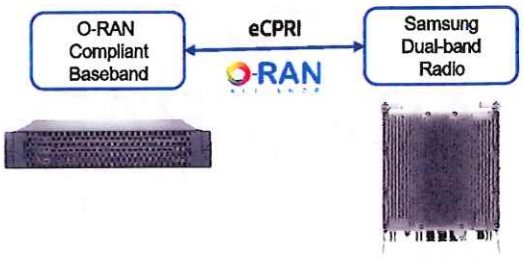
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

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

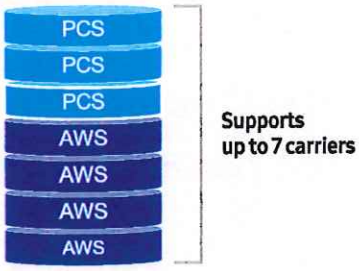
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

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

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



Brand New Features in a Compact Size

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

+

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

Same as an incumbent radio volume

Technical Specifications

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

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

SAMSUNG

Specifications

Item	Specification	
Air Interface	LTE, NR(HW resource ready)	
Band	Band13 (700MHz)	Band5 (850MHz)
Frequency	DL: 746~756MHz	DL: 869~894MHz
	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	2C*	3C
Total # of carriers	4C + B13 (SDL) 1C	
RF Chain	4T4R/2T4R/2T2R/1T2R 2T2R+2T2R bi-sector	
RF Output Power	Total : 320W	
	4 x 40W or 2 x 60W	4 x 40W or 2 x 60W
Spectrum Analyzer	TX/RX Support	
RX Sensitivity	Typ. -104.5dBm @1Rx (25RBs 5MHz)	
Modulation	256QAM support, (1024QAM with 1~2dB power back-off)	
Input Power	-48VDC (-38VDC to -57VDC)	
Power Consumption	1,165 Watt @ 100% RF load, room temperature	
Size (WHD)	380 x 380 x 260 mm (14.96 x 14.96 x 10.23 inch)	
Volume	37.5 L	
Weight (W/o Solar Shield & finger guard)	35.9 kg (79.1 lb)	
Operating Temperature	-40℃ (-40°F) ~ 55℃ (131°F) (Without solar load)	
Cooling	Natural convection	
Unwanted Emission	3GPP 36.104	3GPP 36.104
	FCC 47 CFR 27.53 c), f)	FCC 47 CFR 22.917
	-	-69 dBm/100 kHz per path @ E96 ~901MHz
CPRI Cascade	Not supported	
Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP+, single mode, Duplex (Option: Bi-di)	
RET & TMA Interface	AISG 3.0	
Bias-T	4 ports (2 ports per band)	
Mounting Options	Pole, wall	
NB-IoT	2GB+2IB or 4IB	2SA+2GB or 2GB+2IB or 4GB
PIM Cancellation	Support	
# of antenna port	4	
External Alarm	4	
Fronthaul Interface	Opt. 8 CPRI / Opt. 7-2x selectable (not simultaneous support)	
CPRI compression	Not Support	

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

ATTACHMENT 3

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

Calculated Radio Frequency Emissions Report

verizon

Coatney Hill CT

215 Coatney Hill Road, Woodstock, CT 06821

February 26, 2024

Table of Contents

List of Figures

List of Tables

1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed modification of Verizon's antenna arrays 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 Verizon[1] as well as existing antenna configuration for AT&T[2], Dish[3], T-Mobile[4] and Other[5] (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/cm^2). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment C of this report.

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

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

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[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:

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

Where:

EIRP = Effective Isotropic Radiated Power

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

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Off Beam Loss is determined by the selected antenna patterns

Ground reflection factor (GRF) of 1.6

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

4. Antenna Inventory

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

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

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

[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 ± 5 degrees of the true mathematical angle) to incorporate a realistic worst-case scenario.

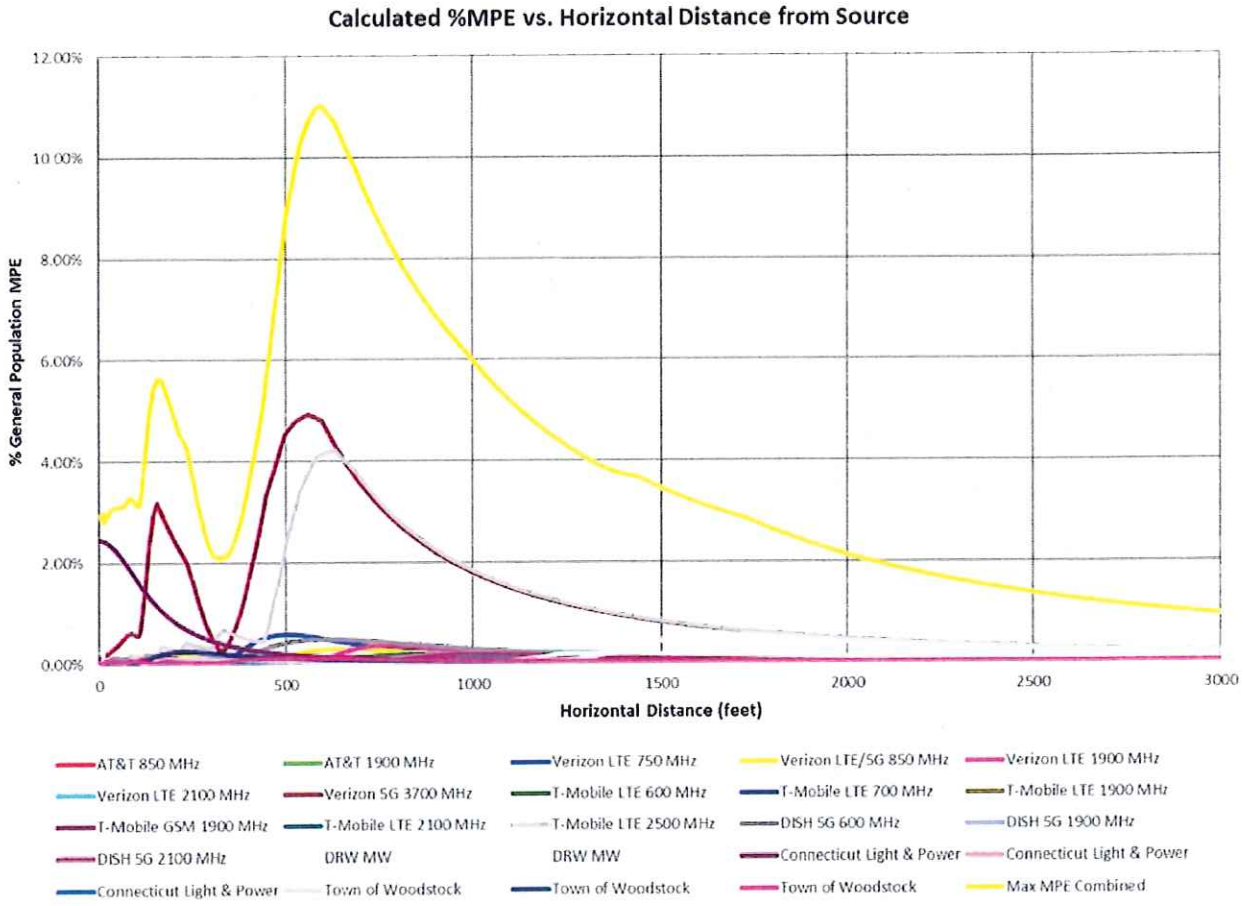


Figure 1: Graph of General Population % MPE vs. Distance

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.

Carrier	Number of Transmitters	Power out of Base Station Per Transmitter (Watts)	Antenna Height (Feet)	Distance to the Base of Antennas (Feet)	Power Density (mW/cm^2)	Limit (mW/cm^2)	% MPE
AT&T 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.

February 23, 2024
Date

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

February 26, 2024
Date

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

Attachment A: References

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

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

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

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

(A) Limits for Occupational/Controlled Exposure[11]

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

(B) Limits for General Population/Uncontrolled Exposure[12]

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

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

Table 3: FCC Limits for Maximum Permissible Exposure

[11] 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.

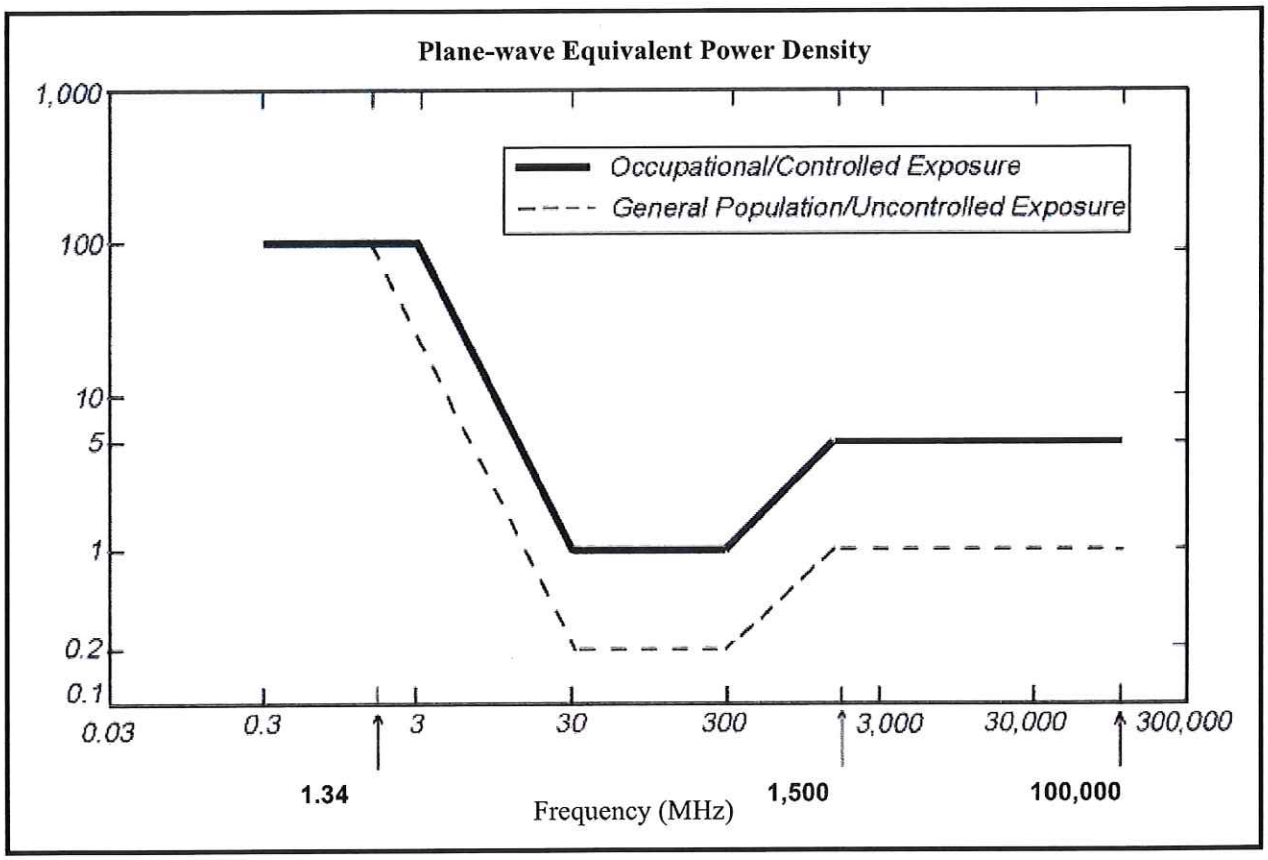
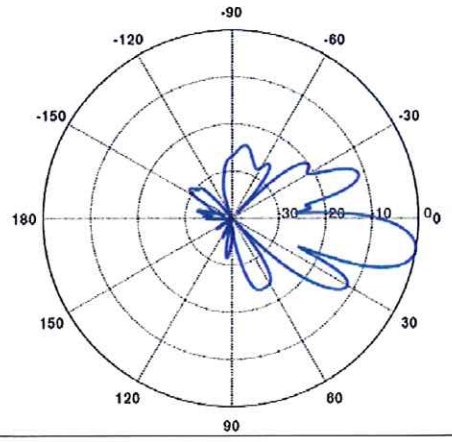
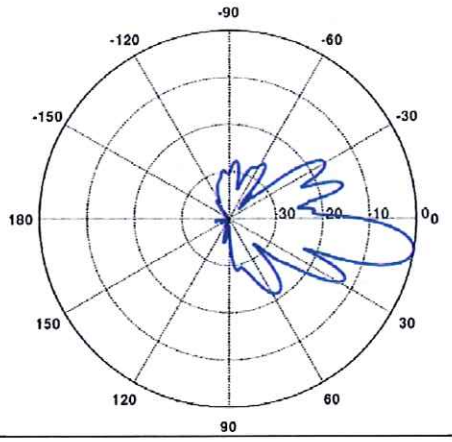
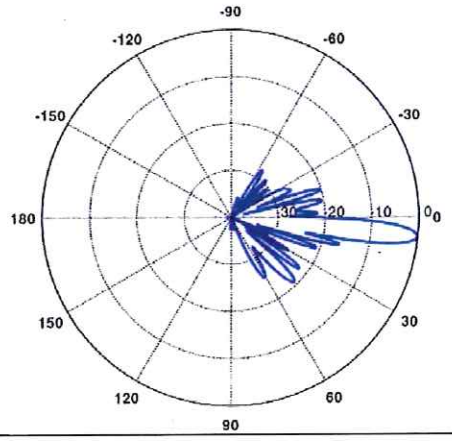
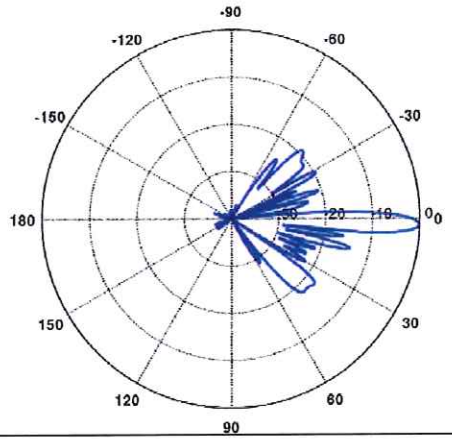


Figure 2: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

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

T + 561 995 7670
F + 561 995 7626

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%

Prepared by:

Samuel Apaez
Structural Engineer I

January 18, 2024

STATE OF CONNECTICUT
JARRYD TIBBETTS
No. 34170
LICENSED
PROFESSIONAL ENGINEER

1/19/2024

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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

Item	Document
Tower design/drawings	Fred A. Nudd Corporation, Project # 01-8280, dated 06/10/2001
Foundation drawings	Fred A. Nudd Corporation, Project # 01-8280, dated 06/10/2001
Geotechnical report	N/A
Modification drawings	N/A
Carrier MA	Colliers Engineering & Design, Project #: 21777291, dated 12/19/2023
Latest SA	TES, Project # 138870, dated 02/24/2023

Analysis Criteria

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

**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.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
13	167.0	6	Andrew JAHH-65B-R3B - Panel	Low Profile Platform	(2) 1 1/4" Hybriflex (12) 1 5/8"	Verizon
14		3	Commscope LNX-6514DS-A1M - Panel			
15		3	Commscope CBC78T-DS-43-2X - Diplexer			
16		2	RFS DB-T1-6Z-8AB-0Z - Distribution Box			
17		3	Samsung MT6413-77A - Panel			
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

	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 ***sufficient*** 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

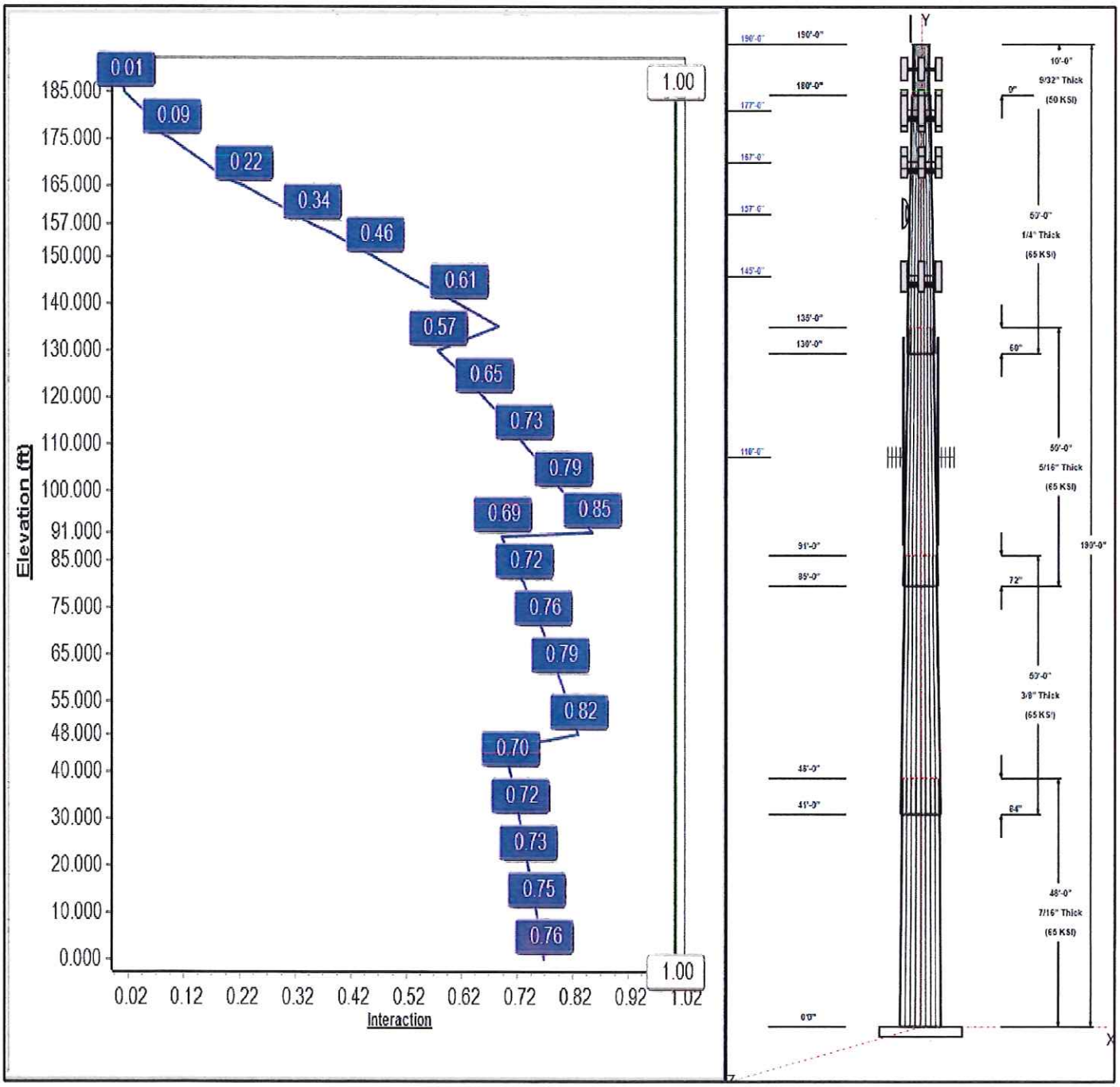
Structure:	CT08748-A	**Code:**	EIA/TIA-222-H	1/18/2024
Site Name:	Woodstock 4 CT	**Exposure:**	C	
Height:	190.00 (ft)	**Gh:**	1.1	
Base Elev:	0.000 (ft)			Page: 1

SBA

Dead Load Factor:	1.20
Wind Load Factor:	1.00

Load Case : 1.2D + 1.0W 119 mph Wind

Iterations: 26



Structure: CT08748-A

Type: Custom
Site Name: Woodstock 4 CT
Height: 190.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.23542

1/18/2024

Shaft Properties

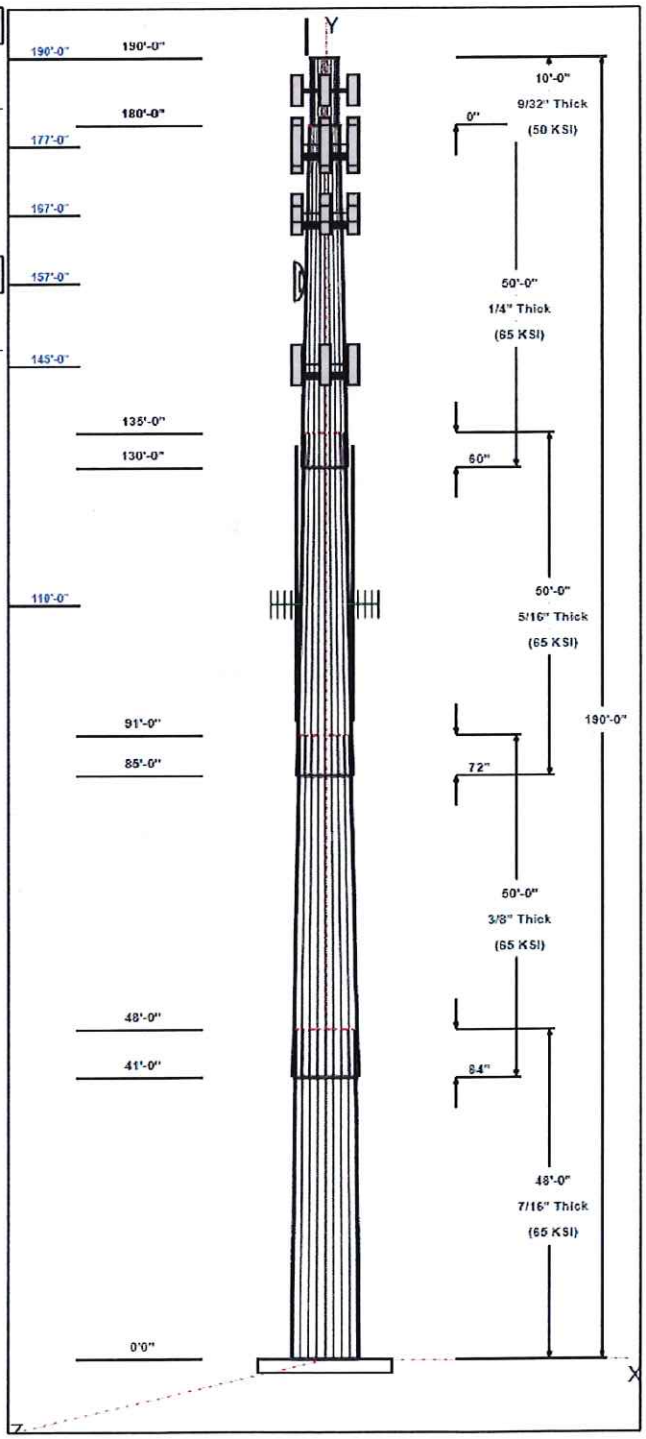
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	48.00	53.20	64.50	0.438		0.23542	65
2	50.00	43.83	55.60	0.375	Slip	0.23542	65
3	50.00	34.09	45.86	0.313	Slip	0.23542	65
4	50.00	24.00	35.77	0.250	Slip	0.23542	65
5	10.00	24.00	24.00	0.281	Butt	0.00000	50

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
190.00	193.00	1	CommScope DB404	Quinebaug Valley
185.00	185.00	1	Low Profile Platform	AT&T
185.00	185.00	12	Mount Pipes	AT&T
185.00	185.00	6	Powerwave LGP21401	AT&T
185.00	185.00	6	Powerwave LGP21903	AT&T
185.00	185.00	6	ADC	AT&T
185.00	185.00	9	Powerwave 7770.00	AT&T
177.00	177.00	3	Ericsson KRY 112 489/2	T-Mobile
177.00	177.00	3	AIR6419 B41	T-Mobile
177.00	177.00	3	VV-65A-R1	T-Mobile
177.00	177.00	3	4449 B71 + B85	T-Mobile
177.00	177.00	3	8843 B25/B66A	T-Mobile
177.00	177.00	3	APXVAARR24_43-U-NA20	T-Mobile
177.00	177.00	3	782 11056	T-Mobile
177.00	177.00	1	Platform w/Handrails	T-Mobile
177.00	177.00	9	Mount Pipes	T-Mobile
167.00	167.00	12	Mount Pipes	Verizon
167.00	167.00	6	Andrew JAHH-65B-R3B	Verizon
167.00	167.00	3	Samsung MT6413-77A	Verizon
167.00	167.00	3	Commscope	Verizon
167.00	167.00	3	Commscope	Verizon
167.00	167.00	3	Samsung B2/B66A RRH	Verizon
167.00	167.00	3	Samsung RF4461d-13A	Verizon
167.00	167.00	1	Raycap	Verizon
167.00	167.00	2	RFS DB-T1-6Z-8AB-0Z	Verizon
167.00	167.00	1	Platform w/Handrails	Verizon
157.00	157.00	2	Flush Mount	DRW Canada Co.
157.00	157.00	1	SUX6-65B	DRW Canada Co.
157.00	157.00	1	VHLPX3-6W	DRW Canada Co.
157.00	157.00	4	SAF	DRW Canada Co.
145.00	145.00	1	Commscope MC-PK8-DSH	Dish Wireless
145.00	145.00	3	Mount Pipes	Dish Wireless
145.00	145.00	1	RDIDC-9181-PF-48	Dish Wireless
145.00	145.00	3	TA08025-B605	Dish Wireless
145.00	145.00	3	TA08025-B604	Dish Wireless
145.00	145.00	3	FFVV-65B-R2	Dish Wireless
110.00	113.00	2	Decibel DB212-1	Town of Woodstock
110.00	112.00	2	Telewave ANT450D6-9	Town of Woodstock
110.00	110.00	1	Flush Mount	Town of Woodstock
110.00	110.00	2	Antenex Y1505	Town of Woodstock

Linear Appurtenances

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



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

Qty	Specifications	Grade (ksi)	Arrangement
29	2.00" F1554 105	105.0	Radial

Base Plate

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

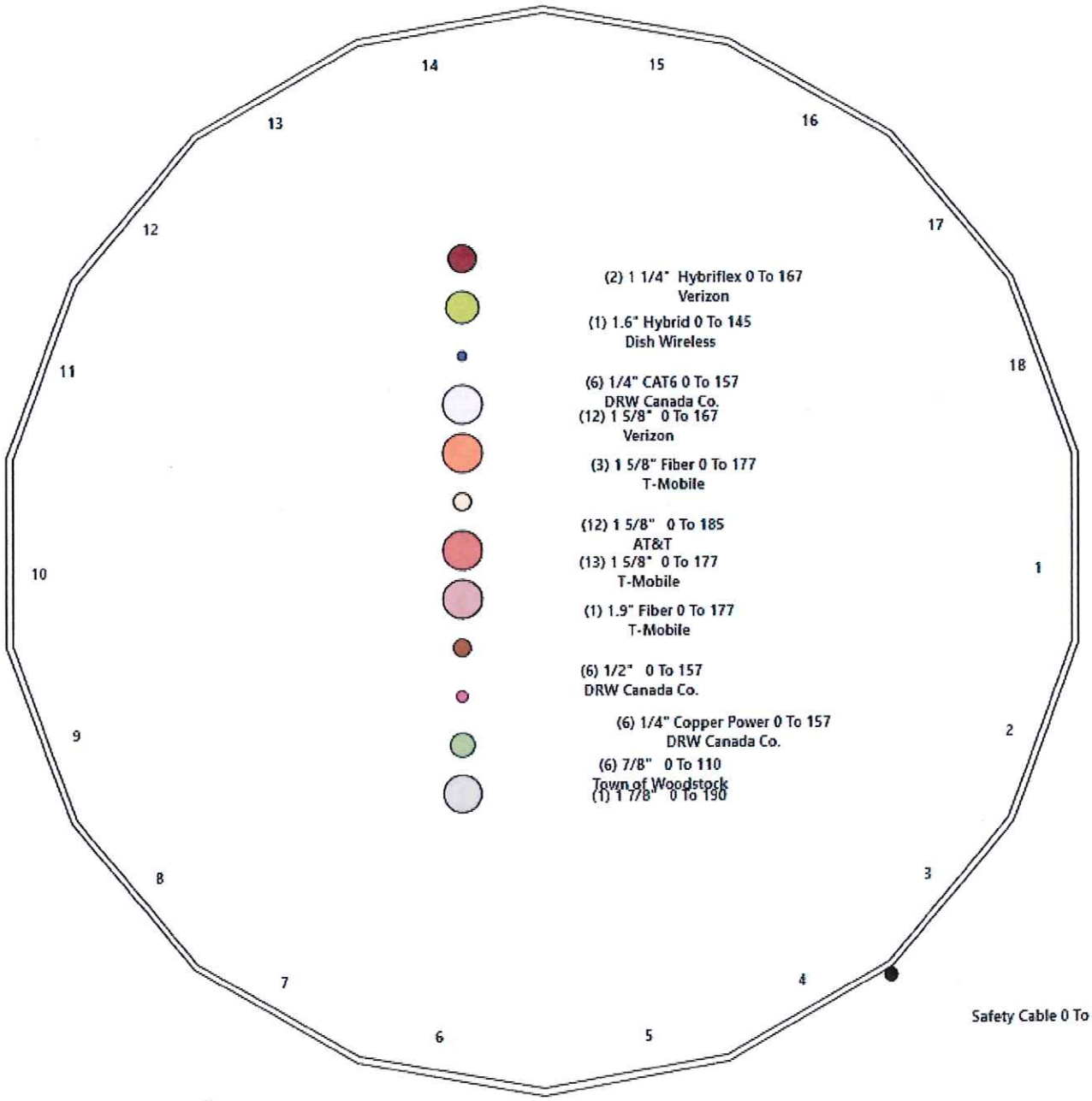
Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (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	0.8	67.7
0.9D + 1.0Ev + 1.0Eh	133.2	0.8	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



Shaft Properties

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: 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 Shaft Weight:		**34,654**

	Bottom						Top						
Sec. No.	**Dia (in)**	**Elev (ft)**	**Area (sqin)**	**Ix (in^4)**	**W/t Ratio**	**D/t Ratio**	**Dia (in)**	**Elev (ft)**	**Area (sqin)**	**Ix (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 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: 6	

Discrete Appurtenances

				No Ice			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	190.00	CommScope DB404	1	14.00	5.19	1.00	125.00	6.240	1.00	0.00	3.00
2	185.00	Low Profile Platform	1	1250.00	14.69	1.00	2853.98	27.257	1.00	0.00	0.00
3	185.00	Mount Pipes	12	30.00	1.45	1.00	62.08	2.484	1.00	0.00	0.00
4	185.00	Powerwave LGP21401	6	14.10	1.29	0.50	39.63	2.143	0.50	0.00	0.00
5	185.00	Powerwave LGP21903	6	5.50	0.27	0.50	14.11	0.676	0.50	0.00	0.00
6	185.00	ADC CG-1900W800-FULL-DIN	6	16.00	0.10	0.50	16.11	0.101	0.50	0.00	0.00
7	185.00	Powerwave 7770.00	9	53.28	5.50	0.73	191.99	6.589	0.73	0.00	0.00
8	177.00	Ericsson KRY 112 489/2	3	15.40	0.65	0.50	33.31	1.272	0.50	0.00	0.00
9	177.00	AIR6419 B41	3	103.00	5.65	0.71	242.41	6.616	0.71	0.00	0.00
10	177.00	VV-65A-R1	3	29.50	7.90	0.74	206.97	9.202	0.74	0.00	0.00
11	177.00	4449 B71 + B85	3	73.20	1.97	0.50	131.91	2.549	0.50	0.00	0.00
12	177.00	8843 B25/B66A	3	72.00	1.64	0.50	119.63	2.145	0.50	0.00	0.00
13	177.00	APXVAARR24_43-U-NA20	3	128.00	20.24	0.70	553.81	22.173	0.70	0.00	0.00
14	177.00	782 11056	3	1.30	0.22	0.50	11.60	0.411	0.50	0.00	0.00
15	177.00	Platform w/Handrails	1	1604.70	21.41	1.00	3654.75	39.645	1.00	0.00	0.00
16	177.00	Mount Pipes	9	30.00	0.84	1.00	61.94	1.436	1.00	0.00	0.00
17	167.00	Mount Pipes	12	30.00	1.00	1.00	61.75	1.706	1.00	0.00	0.00
18	167.00	Andrew JAHH-65B-R3B	6	68.56	9.10	0.83	288.68	10.423	0.84	0.00	0.00
19	167.00	Samsung MT6413-77A	3	57.30	3.79	0.69	149.08	4.590	0.71	0.00	0.00
20	167.00	Commscope LNX-6514DS-A1M	3	38.80	8.17	0.83	232.80	9.444	0.84	0.00	0.00
21	167.00	Commscope CBC78T-DS-43-2X	3	20.72	0.56	0.50	39.43	0.880	0.50	0.00	0.00
22	167.00	Samsung B2/B66A RRH ORAN	3	74.71	1.87	0.84	125.79	2.419	0.85	0.00	0.00
23	167.00	Samsung RF4461d-13A	3	72.50	1.87	0.84	123.86	2.419	0.85	0.00	0.00
24	167.00	Raycap RRFDC-6627-PF-48	1	32.00	4.06	1.00	147.29	4.885	1.00	0.00	0.00
25	167.00	RFS DB-T1-6Z-8AB-0Z	2	44.00	4.80	1.00	160.37	5.657	1.00	0.00	0.00
26	167.00	Platform w/Handrails	1	1794.00	22.60	1.00	4072.59	41.736	1.00	0.00	0.00
27	157.00	Flush Mount	2	350.00	5.00	1.00	644.54	8.506	1.00	0.00	0.00
28	157.00	SUX6-65B	1	209.00	35.67	1.00	922.34	39.172	1.00	0.00	0.00
29	157.00	VHLPX3-6W	1	53.00	10.68	1.00	271.51	12.605	1.00	0.00	0.00
30	157.00	SAF	4	7.70	1.22	0.50	32.86	2.018	0.50	0.00	0.00
31	145.00	Commscope MC-PK8-DSH	1	1801.56	33.69	1.00	4057.66	61.817	1.00	0.00	0.00
32	145.00	Mount Pipes	3	30.00	1.12	1.00	61.31	1.899	1.00	0.00	0.00
33	145.00	RDIDC-9181-PF-48	1	21.90	2.01	1.00	74.97	2.576	1.00	0.00	0.00
34	145.00	TA08025-B605	3	75.00	1.96	0.50	127.13	2.519	0.50	0.00	0.00
35	145.00	TA08025-B604	3	63.90	1.96	0.50	114.36	2.519	0.50	0.00	0.00
36	145.00	FFVV-65B-R2	3	70.80	12.27	0.74	355.01	13.721	0.74	0.00	0.00
37	110.00	Decibel DB212-1	2	31.00	6.50	1.00	269.96	40.579	1.00	0.00	3.00
38	110.00	Telewave ANT450D6-9	2	18.00	2.77	1.00	98.01	5.708	1.00	0.00	2.00
39	110.00	Flush Mount	1	350.00	5.00	1.00	634.24	8.384	1.00	0.00	0.00
40	110.00	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.	Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice 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			0.00	Inside					
0.00	177.00	(1) 1.9" Fiber			0.00	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			0.00	Inside					
0.00	110.00	(6) 7/8" Coax			0.00	Inside					

Shaft Section Properties

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: 8	

Increment Length: 5 (ft)

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
0.00		0.4375	64.500	88.956	46124.8	24.59	147.43	72.5	1408.	0.0
5.00		0.4375	63.323	87.321	43628.7	24.11	144.74	73.0	1357.	1499.6
10.00		0.4375	62.146	85.687	41224.4	23.64	142.05	73.6	1306.	1471.8
15.00		0.4375	60.969	84.052	38910.0	23.16	139.36	74.2	1257.	1444.0
20.00		0.4375	59.792	82.418	36683.9	22.69	136.67	74.7	1208.	1416.2
25.00		0.4375	58.615	80.783	34544.4	22.21	133.98	75.3	1160.	1388.3
30.00		0.4375	57.437	79.149	32489.8	21.74	131.29	75.8	1114.	1360.5
35.00		0.4375	56.260	77.514	30518.3	21.26	128.60	76.4	1068.	1332.7
40.00		0.4375	55.083	75.880	28628.2	20.79	125.90	76.9	1023.	1304.9
41.00	Bot - Section 2	0.4375	54.848	75.553	28259.8	20.69	125.37	77.1	1014.	257.6
45.00		0.4375	53.906	74.245	26817.8	20.32	123.21	77.5	979.9	1906.4
48.00	Top - Section 1	0.3750	53.950	63.765	23124.0	23.96	143.87	0.0	0.0	1408.1
50.00		0.3750	53.479	63.205	22519.6	23.74	142.61	73.5	829.4	432.1
55.00		0.3750	52.302	61.804	21055.1	23.18	139.47	74.1	792.9	1063.4
60.00		0.3750	51.125	60.403	19655.5	22.63	136.33	74.8	757.2	1039.6
65.00		0.3750	49.948	59.002	18319.3	22.08	133.19	75.4	722.4	1015.8
70.00		0.3750	48.771	57.601	17045.1	21.52	130.06	76.1	688.4	991.9
75.00		0.3750	47.594	56.200	15831.4	20.97	126.92	76.7	655.2	968.1
80.00		0.3750	46.417	54.799	14676.7	20.41	123.78	77.4	622.8	944.3
85.00	Bot - Section 3	0.3750	45.240	53.398	13579.6	19.86	120.64	78.0	591.2	920.4
90.00		0.3750	44.062	51.997	12538.5	19.31	117.50	78.7	560.5	1655.4
91.00	Top - Section 2	0.3125	44.452	43.779	10776.5	23.67	142.25	0.0	0.0	325.8
95.00		0.3125	43.510	42.845	10101.4	23.14	139.23	74.2	457.3	589.5
100.00		0.3125	42.333	41.678	9298.0	22.48	135.47	75.0	432.6	719.0
105.00		0.3125	41.156	40.510	8538.3	21.81	131.70	75.7	408.6	699.2
110.00		0.3125	39.979	39.343	7821.2	21.15	127.93	76.5	385.3	679.3
115.00		0.3125	38.802	38.175	7145.4	20.48	124.17	77.3	362.7	659.4
120.00		0.3125	37.625	37.008	6509.6	19.82	120.40	78.1	340.8	639.6
125.00		0.3125	36.448	35.841	5912.8	19.15	116.63	78.9	319.5	619.7
130.00	Bot - Section 4	0.3125	35.271	34.673	5353.6	18.49	112.87	79.7	299.0	599.9
135.00	Top - Section 3	0.2500	34.594	27.251	4060.9	22.99	138.37	0.0	0.0	1051.6
140.00		0.2500	33.417	26.317	3657.5	22.16	133.67	75.3	215.6	455.7
145.00		0.2500	32.240	25.383	3281.8	21.33	128.96	76.3	200.5	439.8
150.00		0.2500	31.062	24.449	2932.7	20.50	124.25	77.3	186.0	423.9
155.00		0.2500	29.885	23.515	2609.3	19.67	119.54	78.3	172.0	408.0
157.00		0.2500	29.415	23.141	2486.9	19.34	117.66	78.7	166.5	158.8
160.00		0.2500	28.708	22.581	2310.5	18.84	114.83	79.2	158.5	233.4
165.00		0.2500	27.531	21.647	2035.5	18.01	110.12	80.2	145.6	376.2
167.00		0.2500	27.060	21.273	1931.9	17.68	108.24	80.6	140.6	146.0
170.00		0.2500	26.354	20.713	1783.3	17.18	105.42	81.2	133.3	214.3
175.00		0.2500	25.177	19.779	1552.7	16.35	100.71	82.2	121.5	344.5
177.00		0.2500	24.706	19.405	1466.4	16.01	98.82	82.5	116.9	133.3
180.00	Top - Section 4	0.2500	24.000	18.845	1343.0	15.52	96.00	82.5	110.2	195.2
180.00	Bot - Section 5	0.2813	24.000	21.173	1504.9	13.79	85.33	63.5	123.5	
185.00		0.2813	24.000	21.173	1504.9	13.64	85.33	63.5	123.5	360.2
190.00		0.2813	24.000	21.173	1504.9	13.64	85.33	63.5	123.5	360.2
										34653.9

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: 9	

Load Case: 1.2D + 1.0W 119 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00

Iterations 26

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (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	5.00	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	5.00	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	1.09	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	1.19	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	1.21	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	1.24	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	1.24	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	1.25	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	1.27	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	1.28	42.754	47.03	461.75	0.730	0.000	5.00	17.662	12.89	606.4	0.0	839.0
110.00	Appurtenance(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	815.2
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	791.3
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	767.5
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	743.7
130.00	Bot - Section 4	1.00	1.34	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	1.35	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	1.36	45.423	49.97	386.45	0.730	0.000	5.00	14.387	10.50	524.8	0.0	546.8
145.00	Appurtenance(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	527.8
150.00		1.00	1.38	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	1.39	46.407	51.05	349.33	0.730	0.000	5.00	12.893	9.41	480.5	0.0	489.6
157.00	Appurtenance(s)	1.00	1.39	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	1.40	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	1.41	47.022	51.72	323.94	0.730	0.000	5.00	11.897	8.69	449.2	0.0	451.5
167.00	Appurtenance(s)	1.00	1.41	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	1.42	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	1.42	47.608	52.37	298.08	0.730	0.000	5.00	10.901	7.96	416.7	0.0	413.4
177.00	Appurtenance(s)	1.00	1.43	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 - Section 4	1.00	1.43	47.891	52.68	284.99	0.730	0.000	3.00	6.182	4.51	237.7	0.0	234.3
185.00	Appurtenance(s)	1.00	1.44	48.168	52.99	285.81	0.730	0.000	5.00	10.154	7.41	392.8	0.0	432.3
190.00	Appurtenance(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**

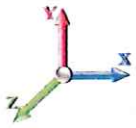
Discrete Appurtenance Forces

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: 10	

Load Case: 1.2D + 1.0W 119 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

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)
1	190.00		1	48.600	53.460	1.00	1.00	5.19	16.80	0.000	3.000	277.45	0.00	832.36
2	185.00	Powerwave 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
3	185.00	ADC	6	48.168	52.985	0.40	0.80	0.24	115.20	0.000	0.000	12.72	0.00	0.00
4	185.00	Powerwave LGP21903	6	48.168	52.985	0.40	0.80	0.65	39.60	0.000	0.000	34.33	0.00	0.00
5	185.00	Powerwave LGP21401	6	48.168	52.985	0.40	0.80	3.10	101.52	0.000	0.000	164.04	0.00	0.00
6	185.00	Mount Pipes	12	48.168	52.985	0.80	0.80	13.92	432.00	0.000	0.000	737.55	0.00	0.00
7	185.00	Low Profile Platform	1	48.168	52.985	1.00	1.00	14.69	1500.00	0.000	0.000	778.35	0.00	0.00
8	177.00	VV-65A-R1	3	47.722	52.494	0.55	0.75	13.15	106.20	0.000	0.000	690.48	0.00	0.00
9	177.00	4449 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	AIR6419 B41	3	47.722	52.494	0.53	0.75	9.03	370.80	0.000	0.000	473.81	0.00	0.00
11	177.00	Ericsson 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 11056	3	47.722	52.494	0.38	0.75	0.25	4.68	0.000	0.000	12.99	0.00	0.00
13	177.00	8843 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	177.00	APXVAARR24_43-U-NA2	3	47.722	52.494	0.52	0.75	31.88	460.80	0.000	0.000	1673.41	0.00	0.00
15	177.00	Platform 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	Mount Pipes	9	47.722	52.494	0.75	0.75	5.67	324.00	0.000	0.000	297.64	0.00	0.00
17	167.00	Platform 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	167.00	RFS 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	Raycap	1	47.141	51.856	1.00	1.00	4.06	38.40	0.000	0.000	210.53	0.00	0.00
20	167.00	Samsung 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	167.00	Samsung 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	Commscope	3	47.141	51.856	0.62	0.75	15.26	139.68	0.000	0.000	791.18	0.00	0.00
23	167.00	Samsung 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	167.00	Andrew 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	Mount Pipes	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	Commscope	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	VHLPX3-6W	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	SUX6-65B	1	46.533	51.186	1.00	1.00	35.67	250.80	0.000	0.000	1825.80	0.00	0.00
30	157.00	Flush Mount	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	Mount Pipes	3	45.760	50.336	0.75	0.75	2.52	108.00	0.000	0.000	126.85	0.00	0.00
32	145.00	RDIDC-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	Commscope	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	FFVV-65B-R2	3	45.760	50.336	0.55	0.75	20.43	254.88	0.000	0.000	1028.34	0.00	0.00
35	145.00	TA08025-B605	3	45.760	50.336	0.38	0.75	2.21	270.00	0.000	0.000	110.99	0.00	0.00
36	145.00	TA08025-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	110.00	Antenex Y1505	2	43.175	47.492	1.00	1.00	7.20	12.00	0.000	0.000	341.94	0.00	0.00
38	110.00	Flush Mount	1	43.175	47.492	1.00	1.00	5.00	420.00	0.000	0.000	237.46	0.00	0.00
39	110.00	Telewave 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	110.00	Decibel DB212-1	2	43.420	47.762	1.00	1.00	13.00	74.40	0.000	3.000	620.91	0.00	1862.72
							Totals:		**15,515.80**			**21,312.77**		

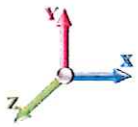
Total Applied Force Summary

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: 11

Load Case: 1.2D + 1.0W 119 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (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		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		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		416.75	543.87	0.00	0.00
177.00	(31) attachments	4685.58	3982.49	0.00	0.00
180.00		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**

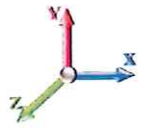
Linear Appurtenance Segment Forces (Factored)

Structure:	CT08748-A	**Code:**	TIA-222-H	1/18/2024	
Site Name:	Woodstock 4 CT	**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: 12	

Load Case: 1.2D + 1.0W 119 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 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 (lb)
5.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.016	0.000	28.420	0.00	1.64
5.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.016	0.000	28.420	0.00	6.24
10.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.016	0.000	28.420	0.00	1.64
10.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.016	0.000	28.420	0.00	6.24
15.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.016	0.000	28.420	0.00	1.64
15.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.016	0.000	28.420	0.00	6.24
20.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.016	0.000	30.155	0.00	1.64
20.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.016	0.000	30.155	0.00	6.24
25.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.017	0.000	31.606	0.00	1.64
25.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.017	0.000	31.606	0.00	6.24
30.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.017	0.000	32.842	0.00	1.64
30.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.017	0.000	32.842	0.00	6.24
35.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.017	0.000	33.926	0.00	1.64
35.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.017	0.000	33.926	0.00	6.24
40.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.018	0.000	34.893	0.00	1.64
40.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	34.893	0.00	6.24
41.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.018	0.000	35.075	0.00	0.33
41.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.018	0.000	35.075	0.00	1.25
45.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.018	0.000	35.769	0.00	1.31
45.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.018	0.000	35.769	0.00	4.99
48.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.019	0.000	36.258	0.00	0.98
48.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.019	0.000	36.258	0.00	3.74
50.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	36.571	0.00	0.66
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	36.571	0.00	2.50
55.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.019	0.000	37.313	0.00	1.64
55.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	37.313	0.00	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	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	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	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	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	1.64
70.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	39.256	0.00	6.24
75.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	39.830	0.00	1.64
75.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	39.830	0.00	6.24
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
80.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	40.375	0.00	6.24
85.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	40.894	0.00	1.64
85.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	40.894	0.00	6.24
90.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	41.389	0.00	1.64
90.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	41.389	0.00	6.24
91.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.023	0.000	41.485	0.00	0.33
91.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.023	0.000	41.485	0.00	1.25
95.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.023	0.000	41.863	0.00	1.31
95.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.023	0.000	41.863	0.00	4.99
100.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.023	0.000	42.317	0.00	1.64
100.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.023	0.000	42.317	0.00	6.24
105.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.024	0.000	42.754	0.00	1.64

Linear Appurtenance 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: 13	

Load Case: 1.2D + 1.0W 119 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00

Iterations 26

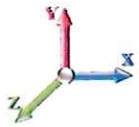
Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
105.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.024	0.000	42.754	0.00	6.24
110.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.025	0.000	43.175	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 bolts (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	48.168	0.00	1.64
185.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.041	0.000	48.168	0.00	6.24
190.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.041	0.000	48.440	0.00	1.64
190.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.041	0.000	48.440	0.00	6.24
										Totals:	**0.0**	**299.4**

Calculated Forces

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 1/18/2024
Exposure: C
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

Load Case: 1.2D + 1.0W 119 mph Wind
Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 26

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	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
0.00	-65.45	-43.22	0.00	-5745.7	0.00	5745.72	5803.10	1561.17	8297.91	7657.05	0.00	0.000	0.000	0.762
5.00	-63.27	-42.79	0.00	-5529.6	0.00	5529.64	5740.33	1532.49	7995.78	7434.11	0.09	-0.174	0.000	0.756
10.00	-61.12	-42.36	0.00	-5315.7	0.00	5315.70	5675.91	1503.80	7699.25	7212.14	0.37	-0.351	0.000	0.749
15.00	-59.01	-41.94	0.00	-5103.8	0.00	5103.89	5609.85	1475.12	7408.33	6991.28	0.83	-0.530	0.000	0.741
20.00	-56.94	-41.49	0.00	-4894.1	0.00	4894.18	5542.15	1446.43	7123.01	6771.63	1.49	-0.713	0.000	0.734
25.00	-54.89	-41.00	0.00	-4686.7	0.00	4686.76	5472.81	1417.75	6843.29	6553.32	2.34	-0.899	0.000	0.726
30.00	-52.89	-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
35.00	-50.92	-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
40.00	-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
41.00	-48.61	-39.32	0.00	-4040.0	0.00	4040.02	5239.88	1325.95	5985.84	5865.14	6.38	-1.515	0.000	0.699
45.00	-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
48.00	-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
50.00	-43.43	-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
55.00	-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
60.00	-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
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
70.00	-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
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	-32.53	-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	-3.767	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

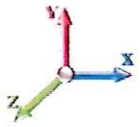
Wind Loading - Shaft

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	

Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (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	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
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	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
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	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
91.00	Top - 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
110.00	Appurtenance(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 - Section 4	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	Appurtenance(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	1.38	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	1.39	46.407	51.05	349.33	0.730	0.000	5.00	12.893	9.41	480.5	0.0	367.2
157.00	Appurtenance(s)	1.00	1.39	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	1.40	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	1.41	47.022	51.72	323.94	0.730	0.000	5.00	11.897	8.69	449.2	0.0	338.6
167.00	Appurtenance(s)	1.00	1.41	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	1.42	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	1.42	47.608	52.37	298.08	0.730	0.000	5.00	10.901	7.96	416.7	0.0	310.0
177.00	Appurtenance(s)	1.00	1.43	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 - Section 4	1.00	1.43	47.891	52.68	284.99	0.730	0.000	3.00	6.182	4.51	237.7	0.0	175.7
185.00	Appurtenance(s)	1.00	1.44	48.168	52.99	285.81	0.730	0.000	5.00	10.154	7.41	392.8	0.0	324.2
190.00	Appurtenance(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**

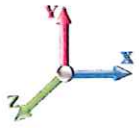
Discrete Appurtenance Forces

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: 16	

Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 26

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)
1	190.00		1	48.600	53.460	1.00	1.00	5.19	12.60	0.000	3.000	277.45	0.00	832.36
2	185.00	Powerwave 7770.00	9	48.168	52.985	0.58	0.80	28.91	431.57	0.000	0.000	1531.70	0.00	0.00
3	185.00	ADC	6	48.168	52.985	0.40	0.80	0.24	86.40	0.000	0.000	12.72	0.00	0.00
4	185.00	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
5	185.00	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
6	185.00	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	185.00	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	177.00	VV-65A-R1	3	47.722	52.494	0.55	0.75	13.15	79.65	0.000	0.000	690.48	0.00	0.00
9	177.00	4449 B71 + B85	3	47.722	52.494	0.38	0.75	2.22	197.64	0.000	0.000	116.34	0.00	0.00
10	177.00	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
11	177.00	Ericsson KRY 112 489/2	3	47.722	52.494	0.38	0.75	0.73	41.58	0.000	0.000	38.39	0.00	0.00
12	177.00	782 11056	3	47.722	52.494	0.38	0.75	0.25	3.51	0.000	0.000	12.99	0.00	0.00
13	177.00	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
14	177.00	APXVAARR24_43-U-NA2	3	47.722	52.494	0.52	0.75	31.88	345.60	0.000	0.000	1673.41	0.00	0.00
15	177.00	Platform w/Handrails	1	47.722	52.494	1.00	1.00	21.41	1444.23	0.000	0.000	1123.90	0.00	0.00
16	177.00	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
17	167.00	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	167.00	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	167.00	Raycap	1	47.141	51.856	1.00	1.00	4.06	28.80	0.000	0.000	210.53	0.00	0.00
20	167.00	Samsung RF4461d-13A	3	47.141	51.856	0.63	0.75	3.53	195.75	0.000	0.000	183.27	0.00	0.00
21	167.00	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
22	167.00	Commscope	3	47.141	51.856	0.62	0.75	15.26	104.76	0.000	0.000	791.18	0.00	0.00
23	167.00	Samsung MT6413-77A	3	47.141	51.856	0.52	0.75	5.88	154.71	0.000	0.000	305.12	0.00	0.00
24	167.00	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
25	167.00	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
26	167.00	Commscope	3	47.141	51.856	0.38	0.75	0.63	55.94	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	27.72	0.000	0.000	124.89	0.00	0.00
28	157.00	VHLPX3-6W	1	46.533	51.186	1.00	1.00	10.68	47.70	0.000	0.000	546.66	0.00	0.00
29	157.00	SUX6-65B	1	46.533	51.186	1.00	1.00	35.67	188.10	0.000	0.000	1825.80	0.00	0.00
30	157.00	Flush Mount	2	46.533	51.186	1.00	1.00	10.00	630.00	0.000	0.000	511.86	0.00	0.00
31	145.00	Mount Pipes	3	45.760	50.336	0.75	0.75	2.52	81.00	0.000	0.000	126.85	0.00	0.00
32	145.00	RDIDC-9181-PF-48	1	45.760	50.336	1.00	1.00	2.01	19.71	0.000	0.000	101.18	0.00	0.00
33	145.00	Commscope	1	45.760	50.336	1.00	1.00	33.69	1621.40	0.000	0.000	1695.82	0.00	0.00
34	145.00	FFVV-65B-R2	3	45.760	50.336	0.55	0.75	20.43	191.16	0.000	0.000	1028.34	0.00	0.00
35	145.00	TA08025-B605	3	45.760	50.336	0.38	0.75	2.21	202.50	0.000	0.000	110.99	0.00	0.00
36	145.00	TA08025-B604	3	45.760	50.336	0.38	0.75	2.21	172.53	0.000	0.000	110.99	0.00	0.00
37	110.00	Antenex Y1505	2	43.175	47.492	1.00	1.00	7.20	9.00	0.000	0.000	341.94	0.00	0.00
38	110.00	Flush Mount	1	43.175	47.492	1.00	1.00	5.00	315.00	0.000	0.000	237.46	0.00	0.00
39	110.00	Telewave ANT450D6-9	2	43.339	47.673	1.00	1.00	5.54	32.40	0.000	2.000	264.11	0.00	528.21
40	110.00	Decibel DB212-1	2	43.420	47.762	1.00	1.00	13.00	55.80	0.000	3.000	620.91	0.00	1862.72
							Totals:		**11,636.85**			**21,312.77**		

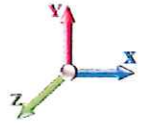
Total Applied Force Summary

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: 17

Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (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**	**49,138.78**	**0.00**	**3,223.29**

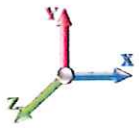
Linear Appurtenance Segment Forces (Factored)

Structure:	CT08748-A	**Code:**	TIA-222-H	1/18/2024	
Site Name:	Woodstock 4 CT	**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: 18	

Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 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 (lb)
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
45.00	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
48.00	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
50.00	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
55.00	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	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	37.313	0.00	4.68
60.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.019	0.000	38.002	0.00	1.23
60.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	38.002	0.00	4.68
65.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	38.648	0.00	1.23
65.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	38.648	0.00	4.68
70.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	39.256	0.00	1.23
70.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	39.256	0.00	4.68
75.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	39.830	0.00	1.23
75.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	39.830	0.00	4.68
80.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	40.375	0.00	1.23
80.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	40.375	0.00	4.68
85.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	40.894	0.00	1.23
85.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	40.894	0.00	4.68
90.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	41.389	0.00	1.23
90.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	41.389	0.00	4.68
91.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.023	0.000	41.485	0.00	0.25
91.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.023	0.000	41.485	0.00	0.94
95.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.023	0.000	41.863	0.00	0.98
95.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.023	0.000	41.863	0.00	3.74
100.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.023	0.000	42.317	0.00	1.23
100.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.023	0.000	42.317	0.00	4.68
105.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.024	0.000	42.754	0.00	1.23

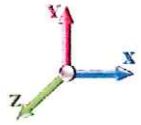
Linear Appurtenance Segment Forces (Factored)

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: 19	

Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 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 (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	43.581	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	0.027	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	0.028	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	0.26	0.00	0.041	0.000	48.168	0.00	4.68
190.00	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	4.68
										Totals:	**0.0**	**224.5**

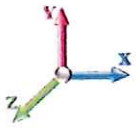
Calculated Forces

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: 20	

Load Case: 0.9D + 1.0W 119 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 26

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	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
0.00	-49.07	-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
5.00	-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
10.00	-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
15.00	-44.15	-41.77	0.00	-5024.7	0.00	5024.71	5609.85	1475.12	7408.33	6991.28	0.82	-0.523	0.000	0.727
20.00	-42.57	-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
25.00	-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
30.00	-39.48	-40.21	0.00	-4405.7	0.00	4405.74	5401.82	1389.06	6569.17	6336.48	3.33	-1.071	0.000	0.703
35.00	-37.97	-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
40.00	-36.55	-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
41.00	-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
45.00	-34.27	-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
48.00	-32.83	-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
50.00	-32.28	-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
55.00	-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
60.00	-29.77	-36.69	0.00	-3244.3	0.00	3244.36	4065.54	1060.07	4463.61	4247.27	13.77	-2.295	0.000	0.772
65.00	-28.55	-36.10	0.00	-3060.9	0.00	3060.90	4005.81	1035.49	4258.96	4087.10	16.30	-2.524	0.000	0.757
70.00	-27.36	-35.50	0.00	-2880.4	0.00	2880.42	3944.44	1010.90	4059.10	3928.21	19.06	-2.754	0.000	0.741
75.00	-26.19	-34.90	0.00	-2702.9	0.00	2702.92	3881.43	986.31	3864.05	3770.72	22.07	-2.987	0.000	0.725
80.00	-25.05	-34.31	0.00	-2528.4	0.00	2528.41	3816.78	961.72	3673.81	3614.75	25.33	-3.222	0.000	0.707
85.00	-23.93	-33.71	0.00	-2356.8	0.00	2356.88	3750.48	937.14	3488.36	3460.42	28.83	-3.459	0.000	0.689
90.00	-22.21	-33.03	0.00	-2188.3	0.00	2188.32	3682.55	912.55	3307.72	3307.86	32.57	-3.697	0.000	0.669
91.00	-21.82	-32.93	0.00	-2155.3	0.00	2155.30	2898.33	768.33	2813.78	2634.30	33.35	-3.746	0.000	0.828
95.00	-21.04	-32.47	0.00	-2023.5	0.00	2023.59	2860.60	751.94	2695.00	2544.15	36.57	-3.939	0.000	0.805
100.00	-20.10	-31.89	0.00	-1861.2	0.00	1861.26	2811.95	731.45	2550.13	2432.25	40.84	-4.213	0.000	0.774
105.00	-19.18	-31.31	0.00	-1701.8	0.00	1701.82	2761.66	710.96	2409.26	2321.34	45.40	-4.485	0.000	0.742
110.00	-18.00	-29.25	0.00	-1542.8	0.00	1542.87	2709.73	690.47	2272.40	2211.55	50.24	-4.756	0.000	0.706
115.00	-17.16	-28.68	0.00	-1396.6	0.00	1396.63	2656.16	669.98	2139.54	2103.00	55.36	-5.023	0.000	0.672
120.00	-16.33	-28.12	0.00	-1253.2	0.00	1253.23	2600.95	649.49	2010.67	1995.80	60.75	-5.287	0.000	0.636
125.00	-15.53	-27.56	0.00	-1112.6	0.00	1112.63	2544.10	629.00	1885.82	1890.08	66.42	-5.545	0.000	0.597
130.00	-14.76	-27.02	0.00	-974.81	0.00	974.81	2485.60	608.51	1764.96	1785.96	72.36	-5.796	0.000	0.554
135.00	-13.59	-26.42	0.00	-839.74	0.00	839.74	1823.78	478.25	1362.76	1289.51	78.55	-6.037	0.000	0.662
140.00	-12.96	-25.89	0.00	-707.64	0.00	707.64	1784.40	461.86	1270.94	1218.11	84.98	-6.265	0.000	0.591
145.00	-10.44	-21.95	0.00	-578.19	0.00	578.19	1743.38	445.47	1182.33	1147.55	91.67	-6.515	0.000	0.512
150.00	-9.87	-21.43	0.00	-468.43	0.00	468.43	1700.71	429.08	1096.92	1077.96	98.60	-6.742	0.000	0.443
155.00	-9.35	-20.92	0.00	-361.26	0.00	361.26	1656.41	412.69	1014.72	1009.45	105.76	-6.943	0.000	0.366
157.00	-8.62	-17.62	0.00	-319.42	0.00	319.42	1638.23	406.13	982.73	982.37	108.68	-7.018	0.000	0.332
160.00	-8.31	-17.33	0.00	-266.56	0.00	266.56	1610.46	396.29	935.71	942.14	113.11	-7.118	0.000	0.290
165.00	-7.85	-16.83	0.00	-179.92	0.00	179.92	1562.88	379.90	859.91	876.15	120.63	-7.256	0.000	0.212
167.00	-5.27	-10.68	0.00	-146.26	0.00	146.26	1543.38	373.35	830.48	850.16	123.67	-7.301	0.000	0.176
170.00	-5.04	-10.40	0.00	-114.21	0.00	114.21	1513.65	363.51	787.30	811.61	128.26	-7.359	0.000	0.145
175.00	-4.69	-9.94	0.00	-62.21	0.00	62.21	1462.77	347.12	717.90	748.63	135.99	-7.429	0.000	0.087
177.00	-2.33	-4.91	0.00	-42.34	0.00	42.34	1441.72	340.56	691.04	723.78	139.10	-7.448	0.000	0.060
180.00	-2.17	-4.65	0.00	-27.62	0.00	27.62	1400.09	330.73	651.70	682.38	143.77	-7.469	0.000	0.042
180.00	-2.17	-4.65	0.00	-27.62	0.00	27.62	1210.02	285.83	562.49	588.19	143.77	-7.469	0.000	0.049
185.00	-0.26	-0.71	0.00	-4.39	0.00	4.39	1210.02	285.83	562.49	588.19	151.58	-7.486	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	159.40	-7.488	0.000	0.001

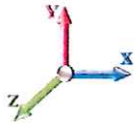
Wind Loading - Shaft

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: 21	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead 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	5.00	11.643	13.97	131.4	288.5	720.7
								Totals:	**190.00**			**6,822.8**		**58,501.4**

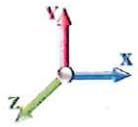
Discrete Appurtenance Forces

Structure:	CT08748-A	**Code:**	TIA-222-H	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: 22	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

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)
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
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	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
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	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	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	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	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
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	0.00
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	192.14
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	2052.96
							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:**	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: 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 (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-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	0.00
45.00		164.13	2952.75	0.00	0.00
48.00		123.06	2186.83	0.00	0.00
50.00		81.91	849.00	0.00	0.00
55.00		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	0.00
135.00		171.48	1930.38	0.00	0.00
140.00		167.58	1204.33	0.00	0.00
145.00	(14) attachments	1027.15	9396.04	0.00	0.00
150.00		159.44	1132.85	0.00	0.00
155.00		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**	**110,850.32**	**0.00**	**2,421.77**

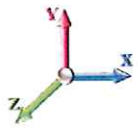
Linear Appurtenance Segment Forces (Factored)

Structure: CT08748-A
Site Name: Woodstock 4 CT
Height: 190.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1 **Topography:** 1

Code: TIA-222-H 1/18/2024
Exposure: C
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 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 (lb)
5.00	Safety Cable	Yes	5.00	0.000	0.38	1.19	0.00	0.016	0.000	5.017	0.00	12.93
5.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.30	0.00	0.016	0.000	5.017	0.00	18.85
10.00	Safety Cable	Yes	5.00	0.000	0.38	1.27	0.00	0.016	0.000	5.017	0.00	14.46
10.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.37	0.00	0.016	0.000	5.017	0.00	20.46
15.00	Safety Cable	Yes	5.00	0.000	0.38	1.31	0.00	0.016	0.000	5.017	0.00	15.46
15.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.42	0.00	0.016	0.000	5.017	0.00	21.51
20.00	Safety Cable	Yes	5.00	0.000	0.38	1.35	0.00	0.016	0.000	5.324	0.00	16.21
20.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.45	0.00	0.016	0.000	5.324	0.00	22.31
25.00	Safety Cable	Yes	5.00	0.000	0.38	1.37	0.00	0.017	0.000	5.580	0.00	16.83
25.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.48	0.00	0.017	0.000	5.580	0.00	22.95
30.00	Safety Cable	Yes	5.00	0.000	0.38	1.40	0.00	0.017	0.000	5.798	0.00	17.35
30.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.50	0.00	0.017	0.000	5.798	0.00	23.50
35.00	Safety Cable	Yes	5.00	0.000	0.38	1.42	0.00	0.017	0.000	5.989	0.00	17.80
35.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.52	0.00	0.017	0.000	5.989	0.00	23.98
40.00	Safety Cable	Yes	5.00	0.000	0.38	1.43	0.00	0.018	0.000	6.160	0.00	18.21
40.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.54	0.00	0.018	0.000	6.160	0.00	24.40
41.00	Safety Cable	Yes	1.00	0.000	0.38	0.29	0.00	0.018	0.000	6.192	0.00	3.66
41.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.31	0.00	0.018	0.000	6.192	0.00	4.90
45.00	Safety Cable	Yes	4.00	0.000	0.38	1.16	0.00	0.018	0.000	6.315	0.00	14.86
45.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	1.24	0.00	0.018	0.000	6.315	0.00	19.83
48.00	Safety Cable	Yes	3.00	0.000	0.38	0.87	0.00	0.019	0.000	6.401	0.00	11.27
48.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.94	0.00	0.019	0.000	6.401	0.00	15.00
50.00	Safety Cable	Yes	2.00	0.000	0.38	0.58	0.00	0.019	0.000	6.456	0.00	7.56
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.63	0.00	0.019	0.000	6.456	0.00	10.06
55.00	Safety Cable	Yes	5.00	0.000	0.38	1.47	0.00	0.019	0.000	6.587	0.00	19.22
55.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.58	0.00	0.019	0.000	6.587	0.00	25.46
60.00	Safety Cable	Yes	5.00	0.000	0.38	1.49	0.00	0.019	0.000	6.709	0.00	19.51
60.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.59	0.00	0.019	0.000	6.709	0.00	25.76
65.00	Safety Cable	Yes	5.00	0.000	0.38	1.50	0.00	0.020	0.000	6.823	0.00	19.78
65.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.60	0.00	0.020	0.000	6.823	0.00	26.04
70.00	Safety Cable	Yes	5.00	0.000	0.38	1.51	0.00	0.020	0.000	6.930	0.00	20.03
70.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.61	0.00	0.020	0.000	6.930	0.00	26.31
75.00	Safety Cable	Yes	5.00	0.000	0.38	1.52	0.00	0.021	0.000	7.032	0.00	20.27
75.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.62	0.00	0.021	0.000	7.032	0.00	26.56
80.00	Safety Cable	Yes	5.00	0.000	0.38	1.52	0.00	0.021	0.000	7.128	0.00	20.49
80.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.63	0.00	0.021	0.000	7.128	0.00	26.79
85.00	Safety Cable	Yes	5.00	0.000	0.38	1.53	0.00	0.022	0.000	7.219	0.00	20.71
85.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.64	0.00	0.022	0.000	7.219	0.00	27.02
90.00	Safety Cable	Yes	5.00	0.000	0.38	1.54	0.00	0.022	0.000	7.307	0.00	20.91
90.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.64	0.00	0.022	0.000	7.307	0.00	27.23
91.00	Safety Cable	Yes	1.00	0.000	0.38	0.31	0.00	0.023	0.000	7.324	0.00	4.19
91.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.33	0.00	0.023	0.000	7.324	0.00	5.45
95.00	Safety Cable	Yes	4.00	0.000	0.38	1.24	0.00	0.023	0.000	7.390	0.00	16.89
95.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	1.32	0.00	0.023	0.000	7.390	0.00	21.95
100.00	Safety Cable	Yes	5.00	0.000	0.38	1.55	0.00	0.023	0.000	7.471	0.00	21.30
100.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.66	0.00	0.023	0.000	7.471	0.00	27.63
105.00	Safety Cable	Yes	5.00	0.000	0.38	1.56	0.00	0.024	0.000	7.548	0.00	21.48

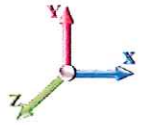
Linear Appurtenance Segment Forces (Factored)

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: 25	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 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 (lb)
105.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.67	0.00	0.024	0.000	7.548	0.00	27.82
110.00	Safety Cable	Yes	5.00	0.000	0.38	1.57	0.00	0.025	0.000	7.622	0.00	21.65
110.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.67	0.00	0.025	0.000	7.622	0.00	28.00
115.00	Safety Cable	Yes	5.00	0.000	0.38	1.57	0.00	0.025	0.000	7.694	0.00	21.82
115.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.68	0.00	0.025	0.000	7.694	0.00	28.18
120.00	Safety Cable	Yes	5.00	0.000	0.38	1.58	0.00	0.026	0.000	7.763	0.00	21.98
120.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.68	0.00	0.026	0.000	7.763	0.00	28.34
125.00	Safety Cable	Yes	5.00	0.000	0.38	1.59	0.00	0.027	0.000	7.830	0.00	22.14
125.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.69	0.00	0.027	0.000	7.830	0.00	28.51
130.00	Safety Cable	Yes	5.00	0.000	0.38	1.59	0.00	0.028	0.000	7.895	0.00	22.29
130.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.70	0.00	0.028	0.000	7.895	0.00	28.67
135.00	Safety Cable	Yes	5.00	0.000	0.38	1.60	0.00	0.029	0.000	7.958	0.00	22.43
135.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.70	0.00	0.029	0.000	7.958	0.00	28.82
140.00	Safety Cable	Yes	5.00	0.000	0.38	1.60	0.00	0.029	0.000	8.019	0.00	22.57
140.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.71	0.00	0.029	0.000	8.019	0.00	28.97
145.00	Safety Cable	Yes	5.00	0.000	0.38	1.61	0.00	0.030	0.000	8.079	0.00	22.71
145.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.71	0.00	0.030	0.000	8.079	0.00	29.11
150.00	Safety Cable	Yes	5.00	0.000	0.38	1.61	0.00	0.031	0.000	8.136	0.00	22.85
150.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.72	0.00	0.031	0.000	8.136	0.00	29.25
155.00	Safety Cable	Yes	5.00	0.000	0.38	1.62	0.00	0.033	0.000	8.193	0.00	22.98
155.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.72	0.00	0.033	0.000	8.193	0.00	29.39
157.00	Safety Cable	Yes	2.00	0.000	0.38	0.65	0.00	0.034	0.000	8.215	0.00	9.21
157.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.69	0.00	0.034	0.000	8.215	0.00	11.78
160.00	Safety Cable	Yes	3.00	0.000	0.38	0.97	0.00	0.034	0.000	8.248	0.00	13.86
160.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	1.04	0.00	0.034	0.000	8.248	0.00	17.71
165.00	Safety Cable	Yes	5.00	0.000	0.38	1.63	0.00	0.035	0.000	8.301	0.00	23.23
165.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.73	0.00	0.035	0.000	8.301	0.00	29.65
167.00	Safety Cable	Yes	2.00	0.000	0.38	0.65	0.00	0.036	0.000	8.322	0.00	9.31
167.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.69	0.00	0.036	0.000	8.322	0.00	11.88
170.00	Safety Cable	Yes	3.00	0.000	0.38	0.98	0.00	0.037	0.000	8.354	0.00	14.01
170.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	1.04	0.00	0.037	0.000	8.354	0.00	17.87
175.00	Safety Cable	Yes	5.00	0.000	0.38	1.64	0.00	0.039	0.000	8.405	0.00	23.47
175.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.74	0.00	0.039	0.000	8.405	0.00	29.90
177.00	Safety Cable	Yes	2.00	0.000	0.38	0.65	0.00	0.040	0.000	8.425	0.00	9.41
177.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.70	0.00	0.040	0.000	8.425	0.00	11.98
180.00	Safety Cable	Yes	3.00	0.000	0.38	0.98	0.00	0.041	0.000	8.455	0.00	14.15
180.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	1.05	0.00	0.041	0.000	8.455	0.00	18.01
185.00	Safety Cable	Yes	5.00	0.000	0.38	1.64	0.00	0.041	0.000	8.504	0.00	23.70
185.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.75	0.00	0.041	0.000	8.504	0.00	30.14
190.00	Safety Cable	Yes	5.00	0.000	0.38	1.65	0.00	0.041	0.000	8.552	0.00	23.81
190.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.75	0.00	0.041	0.000	8.552	0.00	30.25
										Totals:	**0.0**	**1,797.1**

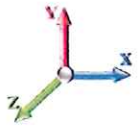
Calculated Forces

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: 26	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	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
0.00	-110.8	-12.76	0.00	-1757.9	0.00	1757.95	5803.10	1561.17	8297.91	7657.05	0.00	0.000	0.000	0.249
5.00	-108.2	-12.67	0.00	-1694.1	0.00	1694.16	5740.33	1532.49	7995.78	7434.11	0.03	-0.053	0.000	0.247
10.00	-105.6	-12.59	0.00	-1630.8	0.00	1630.81	5675.91	1503.80	7699.25	7212.14	0.11	-0.107	0.000	0.245
15.00	-103.1	-12.50	0.00	-1567.8	0.00	1567.89	5609.85	1475.12	7408.33	6991.28	0.26	-0.163	0.000	0.243
20.00	-100.5	-12.40	0.00	-1505.4	0.00	1505.40	5542.15	1446.43	7123.01	6771.63	0.46	-0.219	0.000	0.241
25.00	-98.05	-12.30	0.00	-1443.3	0.00	1443.39	5472.81	1417.75	6843.29	6553.32	0.72	-0.276	0.000	0.238
30.00	-95.58	-12.18	0.00	-1381.9	0.00	1381.91	5401.82	1389.06	6569.17	6336.48	1.04	-0.334	0.000	0.236
35.00	-93.14	-12.07	0.00	-1320.9	0.00	1320.99	5329.20	1360.38	6300.66	6121.21	1.42	-0.393	0.000	0.233
40.00	-90.74	-11.90	0.00	-1260.6	0.00	1260.66	5254.93	1331.69	6037.75	5907.64	1.86	-0.453	0.000	0.231
41.00	-90.26	-11.91	0.00	-1248.7	0.00	1248.76	5239.88	1325.95	5985.84	5865.14	1.96	-0.466	0.000	0.230
45.00	-87.30	-11.79	0.00	-1201.1	0.00	1201.13	5179.02	1303.01	5780.44	5695.90	2.37	-0.515	0.000	0.228
48.00	-85.10	-11.69	0.00	-1165.7	0.00	1165.77	4202.19	1119.08	4974.38	4636.19	2.71	-0.553	0.000	0.272
50.00	-84.25	-11.67	0.00	-1142.4	0.00	1142.40	4180.07	1109.25	4887.33	4570.98	2.94	-0.578	0.000	0.270
55.00	-82.14	-11.54	0.00	-1084.0	0.00	1084.06	4123.62	1084.66	4673.07	4408.60	3.59	-0.649	0.000	0.266
60.00	-80.06	-11.41	0.00	-1026.3	0.00	1026.35	4065.54	1060.07	4463.61	4247.27	4.31	-0.720	0.000	0.261
65.00	-78.03	-11.28	0.00	-969.29	0.00	969.29	4005.81	1035.49	4258.96	4087.10	5.10	-0.792	0.000	0.257
70.00	-76.03	-11.15	0.00	-912.89	0.00	912.89	3944.44	1010.90	4059.10	3928.21	5.97	-0.865	0.000	0.252
75.00	-74.06	-11.01	0.00	-857.17	0.00	857.17	3881.43	986.31	3864.05	3770.72	6.91	-0.939	0.000	0.247
80.00	-72.13	-10.87	0.00	-802.13	0.00	802.13	3816.78	961.72	3673.81	3614.75	7.94	-1.014	0.000	0.241
85.00	-70.24	-10.73	0.00	-747.78	0.00	747.78	3750.48	937.14	3488.36	3460.42	9.04	-1.089	0.000	0.235
90.00	-67.48	-10.53	0.00	-694.13	0.00	694.13	3682.55	912.55	3307.72	3307.86	10.22	-1.164	0.000	0.228
91.00	-66.93	-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
95.00	-65.60	-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
100.00	-63.97	-10.29	0.00	-589.37	0.00	589.37	2811.95	731.45	2550.13	2432.25	12.83	-1.328	0.000	0.265
105.00	-62.38	-10.16	0.00	-537.90	0.00	537.90	2761.66	710.96	2409.26	2321.34	14.26	-1.414	0.000	0.255
110.00	-59.62	-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
115.00	-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
120.00	-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
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
130.00	-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
135.00	-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
150.00	-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
155.00	-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
157.00	-36.35	-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
160.00	-35.71	-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
165.00	-34.68	-5.44	0.00	-59.15	0.00	59.15	1562.88	379.90	859.91	876.15	38.05	-2.296	0.000	0.090
167.00	-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
170.00	-21.18	-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
175.00	-20.30	-3.25	0.00	-20.66	0.00	20.66	1462.77	347.12	717.90	748.63	42.93	-2.354	0.000	0.042
177.00	-9.71	-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
180.00	-9.26	-1.57	0.00	-9.16	0.00	9.16	1400.09	330.73	651.70	682.38	45.40	-2.367	0.000	0.020
180.00	-9.26	-1.57	0.00	-9.16	0.00	9.16	1210.02	285.83	562.49	588.19	45.40	-2.367	0.000	0.023
185.00	-0.79	-0.22	0.00	-1.29	0.00	1.29	1210.02	285.83	562.49	588.19	47.88	-2.372	0.000	0.003
190.00	0.00	-0.19	0.00	-0.18	0.00	0.18	1210.02	285.83	562.49	588.19	50.36	-2.373	0.000	0.000

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: 27	

SBA

Load Case: 1.2D + 1.0Ev + 1.0Eh

Gust Response Factor	1.10			**Sds**	0.19		**Iterations**	22
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.09		**Ss**	0.18
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.29	**SA**	0.03	**Seismic Importance Factor**	**S1**	0.06
								1.00

Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	
5.00		1750.6	2.50	67.60	0.01	
10.00		1722.8	7.50	66.52	0.09	
15.00		1695.0	12.50	65.45	0.24	
20.00		1667.2	17.50	64.38	0.46	
25.00		1639.4	22.50	63.30	0.73	
30.00		1611.5	27.50	62.23	1.06	
35.00		1583.7	32.50	61.16	1.43	
40.00		1555.9	37.50	60.08	1.83	
41.00	Bot - 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	
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		1906.4	87.50	73.61	15.00	
91.00	Top - 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		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	
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		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		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	
	Totals:	**56,001.6**		**2,162.4**	**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	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 28

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: 29	

Load Case: 1.2D + 1.0Ev + 1.0Eh

Gust Response Factor	1.10			**Sds**	0.19			**Iterations**	22
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.09			**Ss**	0.18
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.29	**SA**	0.03			**S1**	0.06
								Seismic Importance Factor	1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	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
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		0.08	-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	0.00	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		2.78	-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		2.98	-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		4.06	-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		4.28	-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

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	

Load Case: 0.9D + 1.0Ev + 1.0Eh

Gust Response Factor	1.10			**Sds**	0.19		**Iterations**	22
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.09		**Ss**	0.18
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.29	**SA**	0.03	**Seismic Importance Factor**	**S1**	0.06
								1.00

Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (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	4.26	
157.00	Appurtenance(s)	1217.9	156.00	47.03	20.08	
160.00		329.37	158.50	12.72	1.52	
165.00		536.23	162.50	20.71	4.22	
167.00	Appurtenance(s)	3687.4	166.00	142.39	208.44	
170.00		273.04	168.50	10.54	1.18	
175.00		442.35	172.50	17.08	3.24	
177.00	Appurtenance(s)	3314.3	176.00	127.98	189.30	
180.00	Top - Section 4	205.75	178.50	7.94	0.75	
185.00	Appurtenance(s)	2680.8	182.50	103.52	133.16	
190.00	Appurtenance(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	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 32

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: 33	

SBA

Load Case: 0.9D + 1.0Ev + 1.0Eh

Gust Response Factor	1.10			**Sds**	0.19			**Iterations**	22
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.09			**Ss**	0.18
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.29	**SA**	0.03			**S1**	0.06
								Seismic Importance Factor	1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	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
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		0.08	-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	-31.46	-0.81	0.00	-80.28	0.00	80.28	4005.81	1035.49	4258.96	4087.10		0.40	-0.06	0.027
70.00	-30.33	-0.81	0.00	-76.21	0.00	76.21	3944.44	1010.90	4059.10	3928.21		0.47	-0.07	0.027
75.00	-29.23	-0.81	0.00	-72.14	0.00	72.14	3881.43	986.31	3864.05	3770.72		0.54	-0.08	0.027
80.00	-28.15	-0.81	0.00	-68.09	0.00	68.09	3816.78	961.72	3673.81	3614.75		0.62	-0.08	0.026
85.00	-27.09	-0.81	0.00	-64.05	0.00	64.05	3750.48	937.14	3488.36	3460.42		0.71	-0.09	0.026
90.00	-25.34	-0.79	0.00	-60.02	0.00	60.02	3682.55	912.55	3307.72	3307.86		0.81	-0.09	0.025
91.00	-24.99	-0.79	0.00	-59.23	0.00	59.23	2898.33	768.33	2813.78	2634.30		0.83	-0.10	0.031
95.00	-24.28	-0.79	0.00	-56.07	0.00	56.07	2860.60	751.94	2695.00	2544.15		0.91	-0.10	0.031
100.00	-23.41	-0.79	0.00	-52.13	0.00	52.13	2811.95	731.45	2550.13	2432.25		1.02	-0.11	0.030
105.00	-22.56	-0.78	0.00	-48.20	0.00	48.20	2761.66	710.96	2409.26	2321.34		1.14	-0.12	0.029
110.00	-21.30	-0.77	0.00	-44.28	0.00	44.28	2709.73	690.47	2272.40	2211.55		1.26	-0.12	0.028
115.00	-20.50	-0.77	0.00	-40.43	0.00	40.43	2656.16	669.98	2139.54	2103.00		1.40	-0.13	0.027
120.00	-19.72	-0.76	0.00	-36.59	0.00	36.59	2600.95	649.49	2010.67	1995.80		1.54	-0.14	0.026
125.00	-18.95	-0.76	0.00	-32.77	0.00	32.77	2544.10	629.00	1885.82	1890.08		1.69	-0.15	0.025
130.00	-18.21	-0.75	0.00	-28.98	0.00	28.98	2485.60	608.51	1764.96	1785.96		1.85	-0.15	0.024
135.00	-17.04	-0.74	0.00	-25.21	0.00	25.21	1823.78	478.25	1362.76	1289.51		2.01	-0.16	0.029
140.00	-16.43	-0.73	0.00	-21.52	0.00	21.52	1784.40	461.86	1270.94	1218.11		2.19	-0.17	0.027
145.00	-13.45	-0.61	0.00	-17.84	0.00	17.84	1743.38	445.47	1182.33	1147.55		2.37	-0.18	0.023
150.00	-12.88	-0.61	0.00	-14.77	0.00	14.77	1700.71	429.08	1096.92	1077.96		2.56	-0.18	0.021
155.00	-12.33	-0.61	0.00	-11.72	0.00	11.72	1656.41	412.69	1014.72	1009.45		2.75	-0.19	0.019
157.00	-11.18	-0.58	0.00	-10.51	0.00	10.51	1638.23	406.13	982.73	982.37		2.83	-0.19	0.018
160.00	-10.86	-0.58	0.00	-8.76	0.00	8.76	1610.46	396.29	935.71	942.14		2.95	-0.20	0.016
165.00	-10.34	-0.57	0.00	-5.86	0.00	5.86	1562.88	379.90	859.91	876.15		3.16	-0.20	0.013
167.00	-6.87	-0.35	0.00	-4.72	0.00	4.72	1543.38	373.35	830.48	850.16		3.24	-0.20	0.010
170.00	-6.61	-0.35	0.00	-3.65	0.00	3.65	1513.65	363.51	787.30	811.61		3.37	-0.20	0.009
175.00	-6.19	-0.35	0.00	-1.89	0.00	1.89	1462.77	347.12	717.90	748.63		3.59	-0.21	0.007
177.00	-3.07	-0.15	0.00	-1.19	0.00	1.19	1441.72	340.56	691.04	723.78		3.67	-0.21	0.004
180.00	-2.88	-0.15	0.00	-0.75	0.00	0.75	1400.09	330.73	651.70	682.38		3.80	-0.21	0.003
180.00	-2.88	-0.15	0.00	-0.75	0.00	0.75	1210.02	285.83	562.49	588.19		3.80	-0.21	0.004
185.00	-0.36	0.00	0.00	-0.02	0.00	0.02	1210.02	285.83	562.49	588.19		4.02	-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		4.23	-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: 34

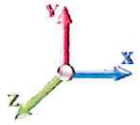
Wind Loading - Shaft

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: 35	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 24

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead 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	5.00	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	5.00	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	5.00	26.045	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	4.00	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	3.00	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	5.00	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	5.00	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	5.00	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	5.00	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	5.00	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	5.00	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	5.00	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	5.00	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	4.00	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	5.00	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	5.00	17.662	12.89	137.9	0.0	699.2
110.00	Appurtenance(s)	1.00	1.29	9.820	10.80	227.27	0.730	0.000	5.00	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	5.00	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	5.00	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	5.00	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	5.00	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	5.00	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	5.00	14.387	10.50	119.4	0.0	455.7
145.00	Appurtenance(s)	1.00	1.37	10.409	11.45	188.68	0.730	0.000	5.00	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	5.00	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	5.00	12.893	9.41	109.3	0.0	408.0
157.00	Appurtenance(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	5.00	11.897	8.69	102.2	0.0	376.2
167.00	Appurtenance(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	5.00	10.901	7.96	94.8	0.0	344.5
177.00	Appurtenance(s)	1.00	1.43	10.855	11.94	147.66	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	143.69	0.730	0.000	3.00	6.182	4.51	54.1	0.0	195.2
185.00	Appurtenance(s)	1.00	1.44	10.956	12.05	144.11	0.730	0.000	5.00	10.154	7.41	89.3	0.0	360.2
190.00	Appurtenance(s)	1.00	1.45	11.018	12.12	144.51	0.730	0.000	5.00	10.154	7.41	89.8	0.0	360.2
								Totals:	**190.00**			**4,958.9**		**34,653.9**

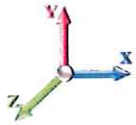
Discrete Appurtenance Forces

Structure:	CT08748-A	**Code:**	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: 36	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 24

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)
1	190.00		1	11.054	12.160	1.00	1.00	5.19	14.00	0.000	3.000	63.11	0.00	189.33
2	185.00	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	ADC	6	10.956	12.052	0.40	0.80	0.24	96.00	0.000	0.000	2.89	0.00	0.00
4	185.00	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	185.00	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	185.00	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	185.00	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	177.00	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	177.00	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	177.00	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	177.00	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	177.00	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	177.00	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	177.00	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	177.00	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	177.00	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	167.00	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	167.00	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	167.00	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	167.00	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	167.00	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	167.00	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	167.00	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	167.00	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	157.00	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
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	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	0.00
35	145.00	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	0.38	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	110.00	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	110.00	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
40	110.00	Decibel DB212-1	2	9.876	10.864	1.00	1.00	13.00	62.00	0.000	3.000	141.23	0.00	423.69
							Totals:		**12,929.83**			**4,847.79**		

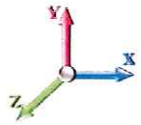
Total Applied Force Summary

Structure:	CT08748-A		**Code:**	TIA-222-H	1/18/2024
Site Name:	Woodstock 4 CT		**Exposure:**	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: 37

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 24

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (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	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	0.00
110.00	(7) attachments	468.45	1346.52	0.00	543.84
115.00		132.66	853.06	0.00	0.00
120.00		129.86	833.20	0.00	0.00
125.00		126.94	813.33	0.00	0.00
130.00		123.93	793.47	0.00	0.00
135.00		122.56	1245.19	0.00	0.00
140.00		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		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**	**733.17**

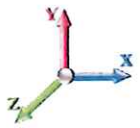
Linear Appurtenance Segment Forces (Factored)

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: 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)
5.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.016	0.000	6.464	0.00	1.37
5.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.016	0.000	6.464	0.00	5.20
10.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.016	0.000	6.464	0.00	1.37
10.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.016	0.000	6.464	0.00	5.20
15.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.016	0.000	6.464	0.00	1.37
15.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.016	0.000	6.464	0.00	5.20
20.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.016	0.000	6.859	0.00	1.37
20.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.016	0.000	6.859	0.00	5.20
25.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.017	0.000	7.189	0.00	1.37
25.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.017	0.000	7.189	0.00	5.20
30.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.017	0.000	7.470	0.00	1.37
30.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.017	0.000	7.470	0.00	5.20
35.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.017	0.000	7.717	0.00	1.37
35.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.017	0.000	7.717	0.00	5.20
40.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.018	0.000	7.937	0.00	1.37
40.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	7.937	0.00	5.20
41.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.018	0.000	7.978	0.00	0.27
41.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.018	0.000	7.978	0.00	1.04
45.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.018	0.000	8.136	0.00	1.09
45.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.018	0.000	8.136	0.00	4.16
48.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.019	0.000	8.247	0.00	0.82
48.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.019	0.000	8.247	0.00	3.12
50.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	8.318	0.00	0.55
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	8.318	0.00	2.08
55.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.019	0.000	8.487	0.00	1.37
55.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	8.487	0.00	5.20
60.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.019	0.000	8.644	0.00	1.37
60.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	8.644	0.00	5.20
65.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	8.791	0.00	1.37
65.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	8.791	0.00	5.20
70.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	8.929	0.00	1.37
70.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	8.929	0.00	5.20
75.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	9.060	0.00	1.37
75.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	9.060	0.00	5.20
80.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	9.184	0.00	1.37
80.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	9.184	0.00	5.20
85.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	9.302	0.00	1.37
85.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	9.302	0.00	5.20
90.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	9.414	0.00	1.37
90.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	9.414	0.00	5.20
91.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.023	0.000	9.436	0.00	0.27
91.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.023	0.000	9.436	0.00	1.04
95.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.023	0.000	9.522	0.00	1.09
95.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.023	0.000	9.522	0.00	4.16
100.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.023	0.000	9.625	0.00	1.37
100.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.023	0.000	9.625	0.00	5.20
105.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.024	0.000	9.725	0.00	1.37

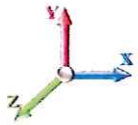
Linear Appurtenance Segment Forces (Factored)

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: 39	

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)
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	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.025	0.000	9.820	0.00	1.37
110.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.025	0.000	9.820	0.00	5.20
115.00	Safety Cable	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
										Totals:	**0.0**	**249.5**

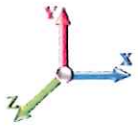
Calculated Forces

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: 40	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 24

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	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
0.00	-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	0.08	-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	0.00	-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	0.00	-703.54	0.00	703.54	4005.81	1035.49	4258.96	4087.10	3.74	-0.579	0.000	0.181
70.00	-32.25	-8.12	0.00	-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	0.00	-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	0.00	-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
91.00	-26.53	-7.55	0.00	-496.21	0.00	496.21	2898.33	768.33	2813.78	2634.30	7.65	-0.860	0.000	0.198
95.00	-25.77	-7.45	0.00	-466.02	0.00	466.02	2860.60	751.94	2695.00	2544.15	8.39	-0.905	0.000	0.192
100.00	-24.83	-7.32	0.00	-428.78	0.00	428.78	2811.95	731.45	2550.13	2432.25	9.38	-0.968	0.000	0.185
105.00	-23.92	-7.19	0.00	-392.19	0.00	392.19	2761.66	710.96	2409.26	2321.34	10.42	-1.030	0.000	0.178
110.00	-22.58	-6.72	0.00	-355.69	0.00	355.69	2709.73	690.47	2272.40	2211.55	11.54	-1.093	0.000	0.169
115.00	-21.72	-6.60	0.00	-322.08	0.00	322.08	2656.16	669.98	2139.54	2103.00	12.71	-1.154	0.000	0.161
120.00	-20.88	-6.47	0.00	-289.10	0.00	289.10	2600.95	649.49	2010.67	1995.80	13.96	-1.215	0.000	0.153
125.00	-20.06	-6.35	0.00	-256.74	0.00	256.74	2544.10	629.00	1885.82	1890.08	15.26	-1.275	0.000	0.144
130.00	-19.27	-6.22	0.00	-225.01	0.00	225.01	2485.60	608.51	1764.96	1785.96	16.63	-1.333	0.000	0.134
135.00	-18.02	-6.09	0.00	-193.89	0.00	193.89	1823.78	478.25	1362.76	1289.51	18.05	-1.389	0.000	0.160
140.00	-17.37	-5.97	0.00	-163.44	0.00	163.44	1784.40	461.86	1270.94	1218.11	19.54	-1.441	0.000	0.144
145.00	-14.21	-5.07	0.00	-133.59	0.00	133.59	1743.38	445.47	1182.33	1147.55	21.08	-1.499	0.000	0.125
150.00	-13.60	-4.95	0.00	-108.26	0.00	108.26	1700.71	429.08	1096.92	1077.96	22.68	-1.551	0.000	0.109
155.00	-13.01	-4.83	0.00	-83.52	0.00	83.52	1656.41	412.69	1014.72	1009.45	24.33	-1.598	0.000	0.091
157.00	-11.80	-4.07	0.00	-73.86	0.00	73.86	1638.23	406.13	982.73	982.37	25.00	-1.615	0.000	0.082
160.00	-11.46	-4.01	0.00	-61.64	0.00	61.64	1610.46	396.29	935.71	942.14	26.02	-1.638	0.000	0.073
165.00	-10.91	-3.89	0.00	-41.62	0.00	41.62	1562.88	379.90	859.91	876.15	27.76	-1.670	0.000	0.055
167.00	-7.26	-2.47	0.00	-33.83	0.00	33.83	1543.38	373.35	830.48	850.16	28.46	-1.681	0.000	0.045
170.00	-6.98	-2.41	0.00	-26.42	0.00	26.42	1513.65	363.51	787.30	811.61	29.52	-1.694	0.000	0.037
175.00	-6.53	-2.30	0.00	-14.39	0.00	14.39	1462.77	347.12	717.90	748.63	31.30	-1.710	0.000	0.024
177.00	-3.24	-1.13	0.00	-9.79	0.00	9.79	1441.72	340.56	691.04	723.78	32.02	-1.715	0.000	0.016
180.00	-3.04	-1.08	0.00	-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	0.00	6.39	1210.02	285.83	562.49	588.19	33.10	-1.719	0.000	0.013
185.00	-0.38	-0.16	0.00	-1.01	0.00	1.01	1210.02	285.83	562.49	588.19	34.90	-1.723	0.000	0.002
190.00	0.00	-0.15	0.00	-0.19	0.00	0.19	1210.02	285.83	562.49	588.19	36.71	-1.724	0.000	0.000

Final Analysis 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: 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	0.8	0.00	67.68	0.00	0.00	134.49
0.9D + 1.0Ev + 1.0Eh	0.8	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 Pn (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

SBA

Reactions		Base Plate		Anchor Bolts	
Original Design		**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
Analysis (1.2D + 1.0W)		**Clip Length (in):**	0.00	**Yield (ksi):**	105.00
Moment (kip-ft):	5745.72	**Effective Len (in):**	10.19	**Ultimate (ksi):**	125.00
Axial (kip):	65.45	**Moment (kip-in):**	442.66	**Arrangement:**	Radial
Shear (kip):	43.22	**Allow Stress (ksi):**	67.50	**Cluster Dist (in):**	0.00
		Applied Stress (ksi):	51.30	**Start Angle (deg):**	0.00
		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-222-F Compared To TIA-222-H				
MONOPOLE BASE FOUNDATION REACTION 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:
App #:

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

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

Pole Manufacturer:	Other

If No stiffeners, Criteria:	TIA H	<-Only Applcable to Unstiffened Cases

Bolt Data				
Qty:	18			
Diameter (in.):	0.5	Bolt Fu:	125	
Bolt Material:	Other	Bolt Fy:	105	
Strength (Fu):	125	ksi		
Yield (Fy):	105	ksi		
Circle (in.):	27			

Plate Data		
Diam:	30	in
Thick, t:	0.5	in
Grade (Fy):	50	ksi
Strength, Fu:	65	ksi
Single-Rod B-eff:	4.23	in

Stiffener Data (Welding at Both Sides)		
Config:	0	*
Weld Type:		
Groove Depth:		<-- Disregard
Groove Angle:		<-- Disregard
Fillet 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

Flange Bolt Results

Bolt Tension Capacity, φ*Tn,**B1**:	13.31	kips
Adjusted φ*Tn (due to Vu=Vu/Qty), **B**:	13.31	kips
Max Bolt directly applied Tu:	2.63	Kips
Min. PL "tc" for **B** cap. **w/o** Pry:	0.521	in
Min PL "treq" for actual **T w/ Pry:**	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
Total Bolt Tension=Tu+q:	2.63	kips
Prying Bolt Stress Ratio=(Tu+q)/(B):	19.8%	Pass

Non-Rigid
φ*Tn
φTn[(1-(Vu/φVn)^2]^0.5

0≤α'≤1 case

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

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

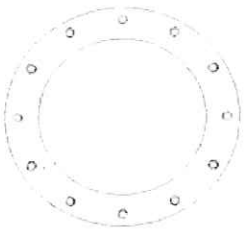
n/a

Stiffener Results

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

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*
	Address:	*215 Coatney Road* *Woodstock, Connecticut 06821* *Windham County*
	Latitude:	*41.962278°*
	Longitude:	*-72.018667°*
Structure Information	*Tower Type:*	*190-Ft Monopole*
	Mount Type:	*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

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 Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	120 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.50 in
	Risk Category:	II
	Exposure Category:	C
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.971
Seismic Parameters:	S_S:	0.182 g
	S_1:	0.055 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Load, Lv:	250 lbs.
	Maintenance Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
165.00	167.00	6	Commscope	JAHH-65B-R3B	Added
		3	Samsung	MT6413-77A	
		3	Samsung	RF4439d-25A	
		3	Commscope	CBC78T-DS-43-2X	
		3	Samsung	RF4461d-13A	
		3	Commscope	LNX-6514DS-A1M	Retained
		1	Raycap	RRFDC-6627-PF-48*	

* 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:

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

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

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

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

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

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

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

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

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

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. AGL (Ft)	Node Label	Envelope Wind Reactions				Envelope Wind + Ice Reactions			
			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

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:

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	22.6	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

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MDG #: 5000246420 SMART Project #: 10045193 Fuze Project ID: 16272134

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

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

Base Requirements:

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

Photo Requirements:

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

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

Antenna & equipment placement and Geometry Confirmation:

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

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

OR

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

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

Issue:

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:

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

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

☐ The material utilized was as specified in the SMART Tool engineering vendor Special Instructions above (if applicable) and included in the material certification folder is a packing list or invoice for these materials.

OR

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

Comments:

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

☐ Yes ☐ No

Contractor certifies no new damage created during the current installation:

☐ Yes ☐ No

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

☐ Safety Climb in Good Condition ☐ Safety Climb Damaged

Certifying Individual:

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

Structure: 5000246420-VZW - COATNEY HILL CT

Sector: A

Structure Type: Monopole

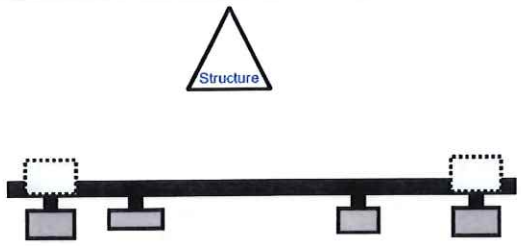
Mount Elev: 165.00

10045193

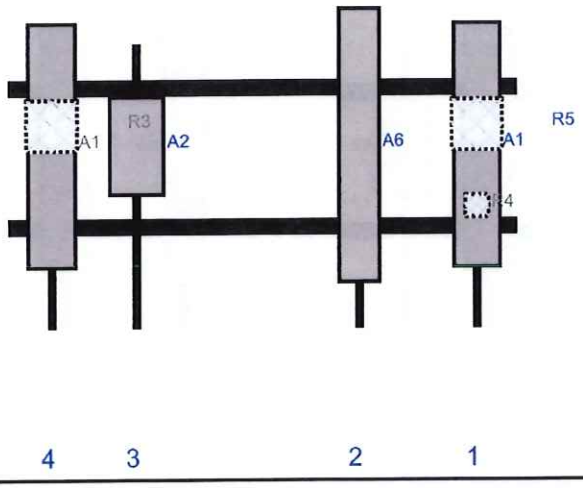
12/19/2023

Colliers Engineering & Design

Plan View

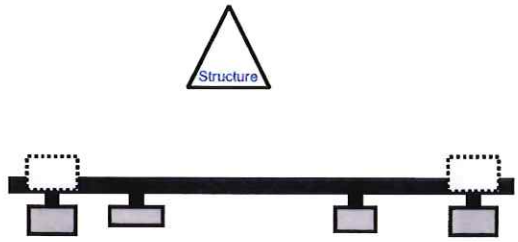


Front View - Looking at Structure

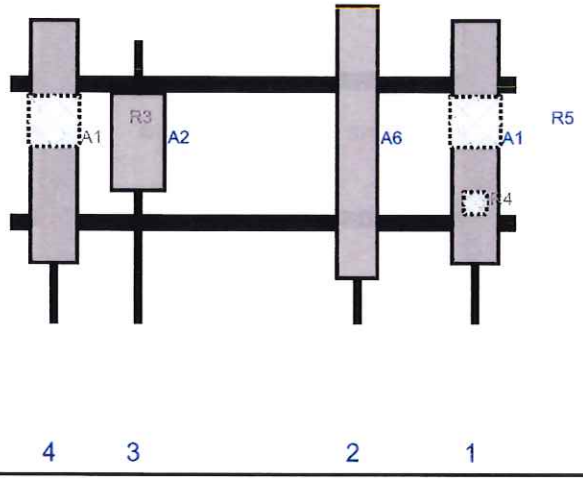


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	JAHH-65B-R3B	72	13.8	138	1	a	Front	30	0	Added	
R4	CBC78T-DS-43-2X	6.4	6.9	138	1	a	Behind	48	0	Added	
R5	RF4461d-13A	15	15	138	1	a	Behind	24	0	Added	
A6	LNX-6514DS-A1M	80.6	11.9	103	2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

Plan View

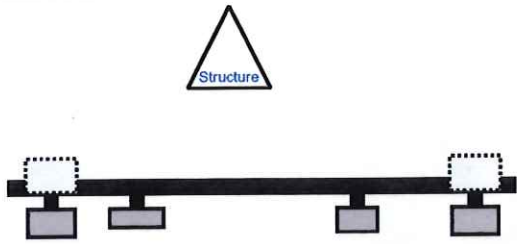


Front View - Looking at Structure

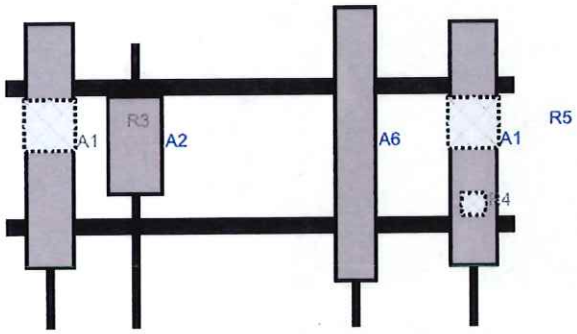


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	JAHH-65B-R3B	72	13.8	138	1	a	Front	30	0	Added	
R4	CBC78T-DS-43-2X	6.4	6.9	138	1	a	Behind	48	0	Added	
R5	RF4461d-13A	15	15	138	1	a	Behind	24	0	Added	
A6	LNX-6514DS-A1M	80.6	11.9	103	2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

Plan View



Front View - Looking at Structure



4 3 2 1

Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	JAHH-65B-R3B	72	13.8	138	1	a	Front	30	0	Added	
R4	CBC78T-DS-43-2X	6.4	6.9	138	1	a	Behind	48	0	Added	
R5	RF4461d-13A	15	15	138	1	a	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	a	Front	30	0	Added	
A1	JAHH-65B-R3B	72	13.8	13	4	a	Front	30	0	Added	
R3	RF4439d-25A	15	15	13	4	a	Behind	24	0	Added	

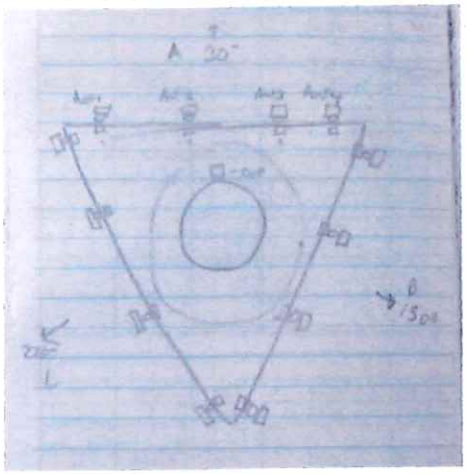

10/06/2021 13:59

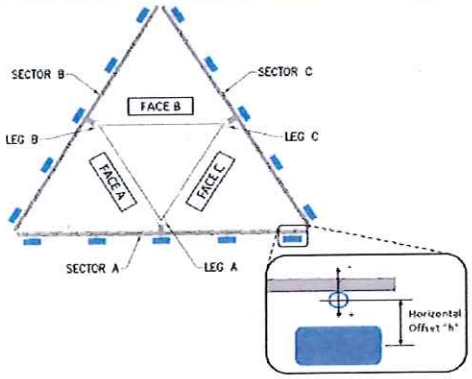
V4.0 Updated on 3-31-2021

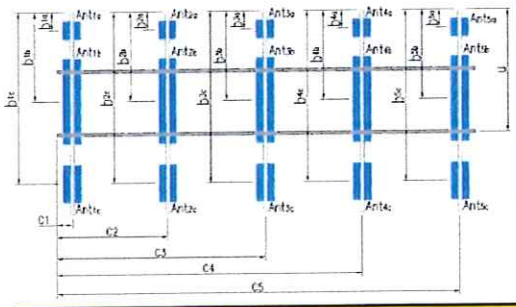
Antenna Mount Mapping Form (PATENT PENDING)

FCC # 1227403

Tower Owner:	SBA Towers	Mapping Date:	10/6/2021
Site Name:	COATNEY HILL	Tower Type:	Monopole
Site Number or ID:	16272134	Tower Height (Ft.):	200
Mapping Contractor:	Structural Components	Mount Elevation (Ft.):	163







Antenna Layout (Looking Out From Tower)

Mount Pipe Configuration and Geometries (Unit = Inches)

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2.375 x .154 x 96	58.00	12.00	C1	2.375 x .154 x 102	54.00	12.00
A2	2.375 x .154 x 84	54.00	47.00	C2	2.375 x .154 x 102	51.00	47.00
A3	2.375 x .154 x 84	63.00	112.00	C3	2.375 x .154 x 102	63.00	94.00
A4	2.375 x .154 x 63	54.00	137.00	C4	2.375 x .154 x 102	54.00	119.00
A5				C5			
A6				C6			
B1	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			
B5				D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	94
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	14

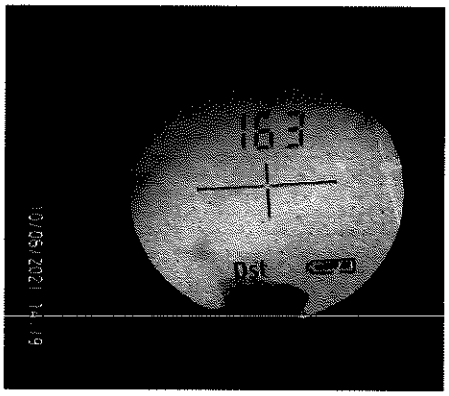
Please enter additional infomation or comments below.

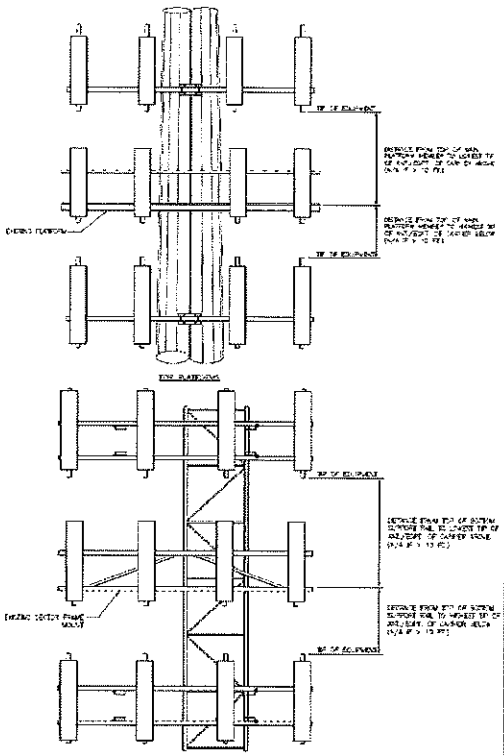
Tower Face Width at Mount Elev. (ft.):		Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	27.2
For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.			0.375

	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
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. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant_{1a}										
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_{4a}										
Ant_{4b}	HBXX-6517DS-A2M	12.00	6.50	75.00	jumpers	165.083	29.00	8.00	30.00	43
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower	RRFDC-6627-PF-48	14.00	9.00	19.00	1 1/2 Hyb	167				44
Ant on Tower										

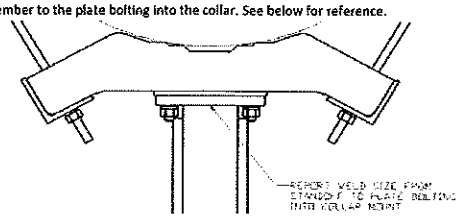
Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	30.00	Deg	Leg A:		Deg
Sector B:	150.00	Deg	Leg B:		Deg
Sector C:	270.00	Deg	Leg C:		Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	190.00	Deg	N/A
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was obstructed.
	Condition:		Good condition.





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



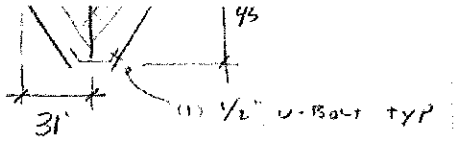
Sector B										
Ant_{1a}										
Ant_{1b}	LNX-6514DS-A1M	12.00	7.50	73.00	jumpers	164.958	34.50	9.00	150.00	45
Ant_{1c}	UNKNOWN DUAL TM	7.00	5.00	7.50	(2) 1 5/8'	165.25	31.00	-4.00		45
Ant_{2a}										
Ant_{2b}	LNX-6514DS-A1M	12.00	7.50	73.00	jumpers	164.958	30.50	9.00	150.00	45
Ant_{2c}	B13 RRH 4x30	12.00	7.50	20.50	jumpers	165.417	25.00	-7.00		45
Ant_{3a}										
Ant_{3b}	H8XX-6517DS-A2M	12.00	6.50	75.00	jumpers	165.667	31.00	8.00	150.00	46
Ant_{3c}	B4 RRH 2x60-4R	10.50	6.00	33.50	jumpers	166	27.00	-6.50		46
Ant_{4a}										
Ant_{4b}	H8XX-6517DS-A2M	12.00	6.50	75.00	jumpers	165.083	29.00	8.00	150.00	46
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}										
Ant_{1b}	LNX-6514DS-A1M	12.00	7.50	73.00	jumpers	164.625	34.50	9.00	270.00	47
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
Ant_{3a}										
Ant_{3b}	H8XX-6517DS-A2M	12.00	6.50	75.00	jumpers	165.667	31.00	8.00	270.00	48
Ant_{3c}	B4 RRH 2x60-4R	10.50	6.00	33.50	jumpers	166	27.00	-6.50		48
Ant_{4a}										
Ant_{4b}	H8XX-6517DS-A2M	12.00	6.50	75.00	jumpers	165.083	29.00	8.00	270.00	48
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

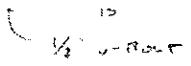
Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #
1	Birds nest on mount.	134
2		
3		
4		
5		
6		
7		
8		

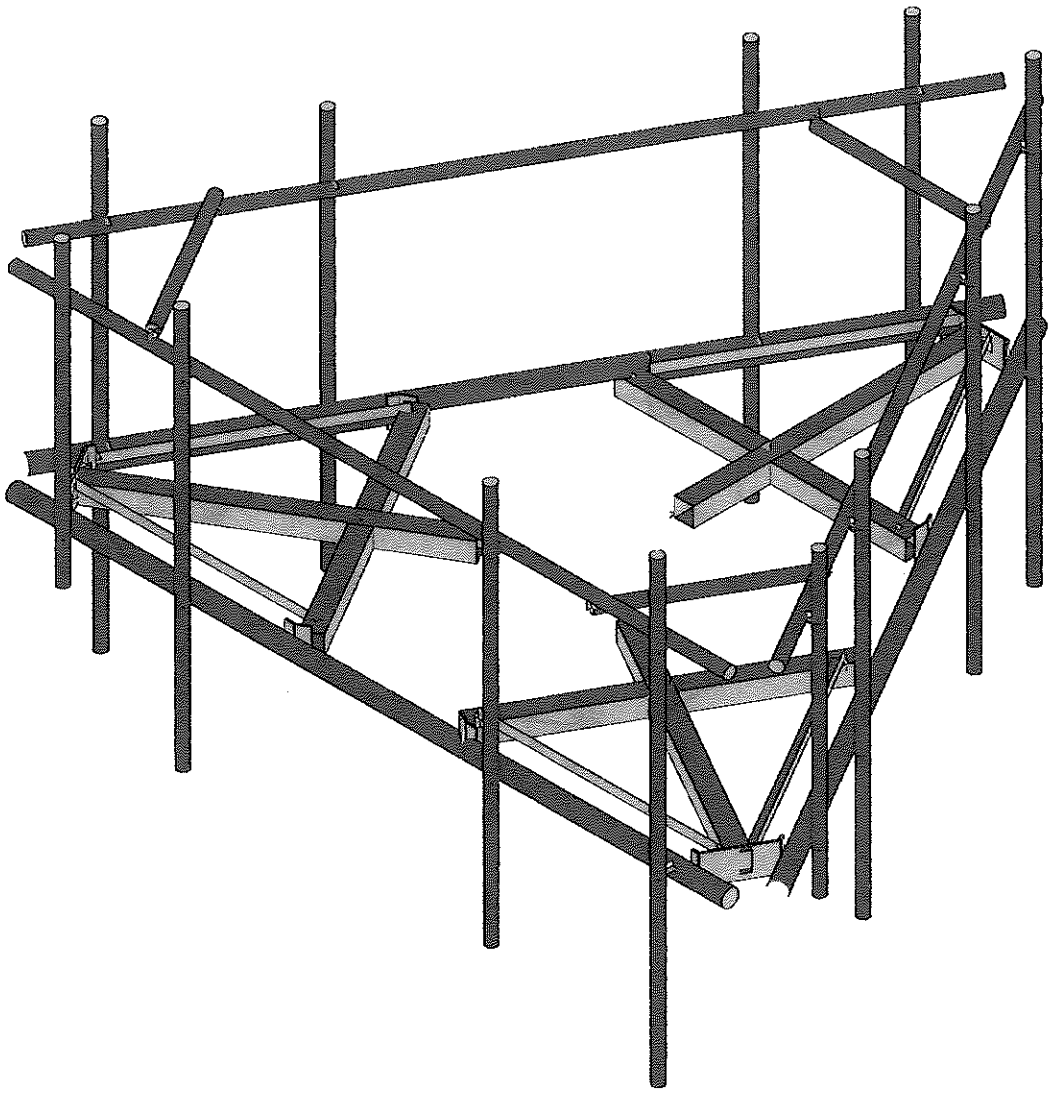
Observed Obstructions to Tower Lighting System					
If the tower lighting system is being obstructed by the carrier's equipment (for example: a light nested by the antennas), please provide photos and fill in the information below.					Photo #
Description of Obstruction:					
Type of Light:		Photo #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

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

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

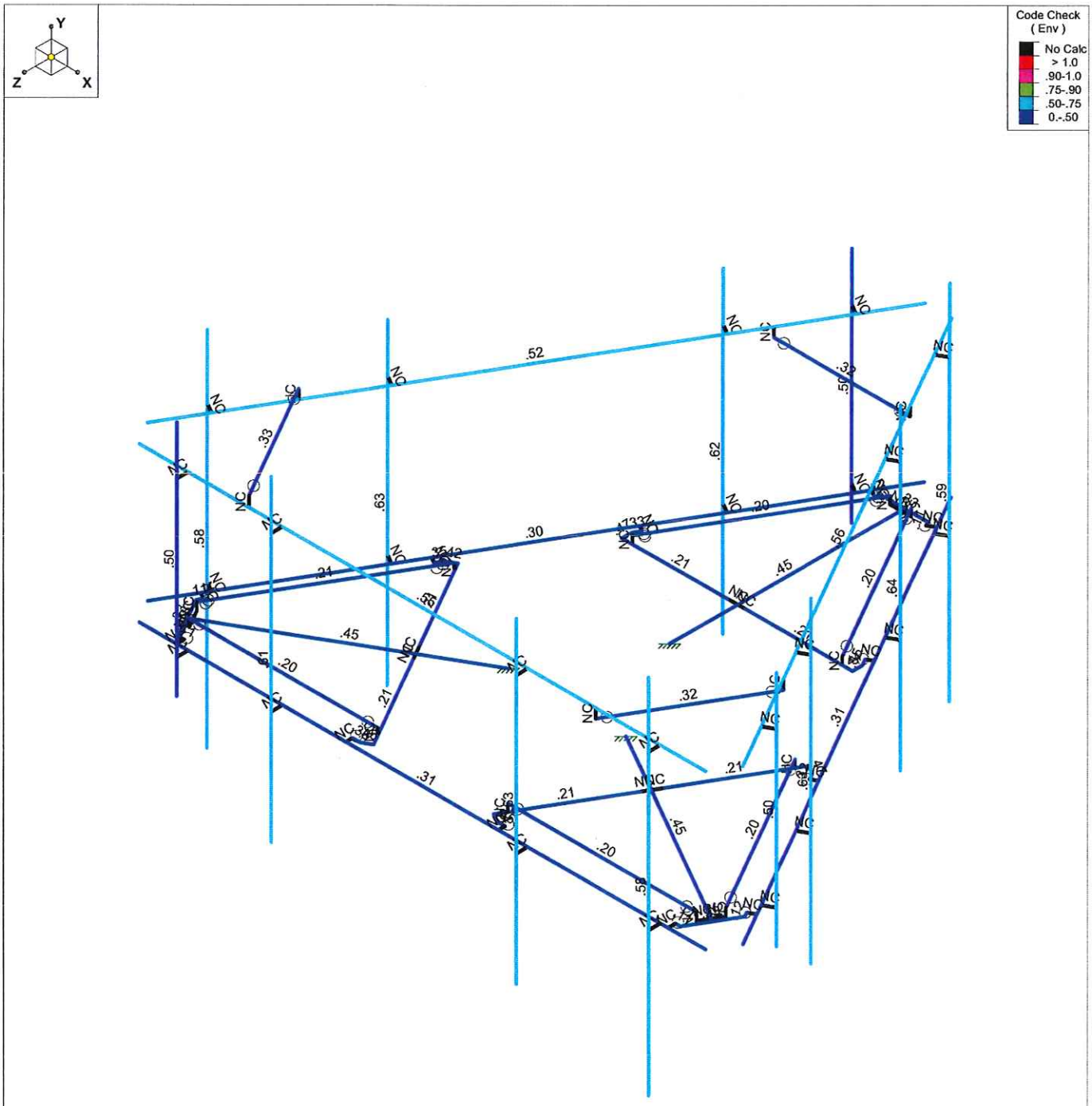

45
31"
(1) 1/2" U-Bolt typ


1/2" U-Bolt



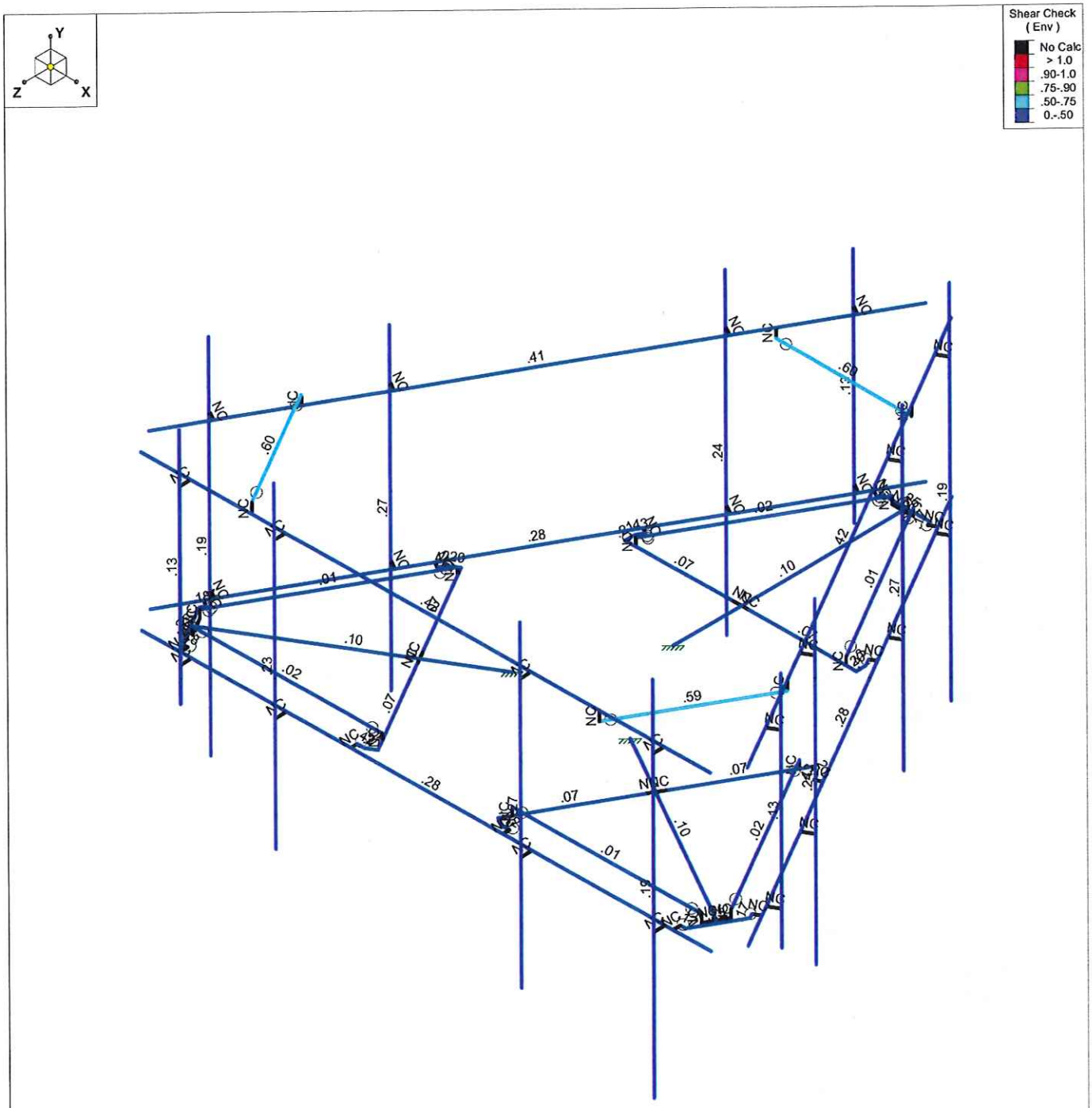
Envelope Only Solution

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



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...	Antenna Mount Analysis	SK - 2
		Dec 19, 2023 at 9:30 AM
Project # 21777291		5000246420-VZW_MT_LO_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...	Antenna Mount Analysis	SK - 3
		Dec 19, 2023 at 9:30 AM
Project # 21777291		5000246420-VZW_MT_LO_H.r3d

Basic Load Cases

	BLC Description	Category	X Gr...	Y Gr...	Z Gr...	Joint	Point	Distributed	Area(Member)	Surfa...
1	Antenna D	None					99			
2	Antenna Di	None					99			
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					99			
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)	None					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 (270 Deg)	None					99			
25	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					3	
40	Structure Di	None						57	3	
41	Structure Wo (0 Deg)	None						114		
42	Structure Wo (30 Deg)	None						114		
43	Structure Wo (60 Deg)	None						114		
44	Structure Wo (90 Deg)	None						114		
45	Structure Wo (120 Deg)	None						114		
46	Structure Wo (150 Deg)	None						114		
47	Structure Wo (180 Deg)	None						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 (300 Deg)	None						114		
52	Structure Wo (330 Deg)	None						114		
53	Structure Wi (0 Deg)	None						114		
54	Structure Wi (30 Deg)	None						114		
55	Structure Wi (60 Deg)	None						114		
56	Structure Wi (90 Deg)	None						114		

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		
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						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						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					1			
79	Lv1	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...	PDel...	SR...	BLC	Fa...	BLC	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo (30 Deg)	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo (60 Deg)	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo (90 Deg)	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo (120 De...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo (150 De...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo (180 De...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo (210 De...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo (240 De...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo (270 De...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo (300 De...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo (330 De...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								

Load Combinations (Continued)

	Description	S...	PDel...	SR...	BLC	Fa...	BLC	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
18	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																
52	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	1	83		ELZ	1	E...					
53	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	.5	ELZ	.866	E...	.5				
54	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	.866	ELZ	.5	E...	.866				
55	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	1	ELZ		E...	1				
56	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	.866	ELZ	-.5	E...	.866				
57	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.8...	83	.5	ELZ	-.8...	E...	.5				
58	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-1	83		ELZ	-1	E...					
59	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.8...	83	-.5	ELZ	-.8...	E...	-.5				
60	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	-.8...	ELZ	-.5	E...	-.8...				
61	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	-1	ELZ		E...	-1				
62	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	-.8...	ELZ	.5	E...	-.8...				
63	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	-.5	ELZ	.866	E...	-.5				
64	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	1	83		ELZ	1	E...					
65	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	.5	ELZ	.866	E...	.5				
66	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	.866	ELZ	.5	E...	.866				
67	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	1	ELZ		E...	1				
68	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	.866	ELZ	-.5	E...	.866				
69	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.8...	83	.5	ELZ	-.8...	E...	.5				
70	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-1	83		ELZ	-1	E...					
71	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.8...	83	-.5	ELZ	-.8...	E...	-.5				
72	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	-.8...	ELZ	-.5	E...	-.8...				
73	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	-1	ELZ		E...	-1				
74	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	-.8...	ELZ	.5	E...	-.8...				

Load Combinations (Continued)

	Description	S...	PDel...	SR...	BLC	Fa...	BLC	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
75	0.9D - 1.0Ev + 1.0Eh..	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	-.5	ELZ	.866	E...	-.5				

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Desig...	A [in2]	Iyy [i...	Izz [i...	J [in4]
1	Face Horizontal	PIPE_3.0	Beam	Pipe	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
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	3	.0625	9	.2369
4	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	.722	.271	.271	.0092
6	Mount Pipe	PIPE_2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
7	Cross Arm Plate	PL3/8x6	Beam	RECT	A36 Gr.36	Typical	2.25	.026	6.75	.101
8	Support Rail	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.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
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3
8	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 List	Material	Design Ru...
1	M1	N1	N2			Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
2	M4	N3	N27			Standoff Horizontal	Beam	SquareTube	A500 Gr...	Typical
3	M10	N101	N103A			Platform Crossme...	Beam	SquareTube	A500 Gr...	Typical
4	M19	N8	N9			RIGID	None	None	RIGID	Typical
5	MP1A	N23	N22			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
6	M43	N102	N5			Platform Crossme...	Beam	SquareTube	A500 Gr...	Typical
7	M46	N86C	N87A			Corner Plate	Beam	BAR	A36 Gr.36	Typical
8	M35A	N7	N30			RIGID	None	None	RIGID	Typical
9	M36A	N6	N29			RIGID	None	None	RIGID	Typical
10	M51B	N87C	N6			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
11	M52B	N7	N87B			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
12	M52	N87B	N88C			RIGID	None	None	RIGID	Typical
13	M58	N102	N24			RIGID	None	None	RIGID	Typical
14	M59	N24	N103A			RIGID	None	None	RIGID	Typical
15	M76	N101	N105			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
16	M77	N105	N131			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
17	M79	N131	N86A			RIGID	None	None	RIGID	Typical
18	M80	N87A	N135			Corner Plate	Beam	BAR	A36 Gr.36	Typical
19	M83	N135	N86D			RIGID	None	None	RIGID	Typical
20	M84	N5	N104A			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
21	M85	N104A	N144			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
22	M88	N144	N86B			RIGID	None	None	RIGID	Typical
23	M91	N86C	N148			Corner Plate	Beam	BAR	A36 Gr.36	Typical
24	M92	N148	N86E			RIGID	None	None	RIGID	Typical
25	M50	N88C	N88A			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
26	M51	N88A	N86G			RIGID	None	None	RIGID	Typical
27	M51A	N87C	N86G			RIGID	None	None	RIGID	Typical
28	M52A	N87D	N92			Standoff Horizontal	Beam	SquareTube	A500 Gr...	Typical
29	M53	N95	N97			Platform Crossme...	Beam	SquareTube	A500 Gr...	Typical
30	M54	N96	N88B			Platform Crossme...	Beam	SquareTube	A500 Gr...	Typical
31	M55	N106	N107			Corner Plate	Beam	BAR	A36 Gr.36	Typical
32	M56	N90	N94			RIGID	None	None	RIGID	Typical
33	M57	N89	N93			RIGID	None	None	RIGID	Typical
34	M58A	N111	N89			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
35	M59A	N90	N113			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
36	M60	N113	N114			RIGID	None	None	RIGID	Typical
37	M61	N96	N91			RIGID	None	None	RIGID	Typical
38	M62	N91	N97			RIGID	None	None	RIGID	Typical
39	M63	N95	N99			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
40	M64	N99	N100			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
41	M65	N100	N104			RIGID	None	None	RIGID	Typical
42	M66	N107	N101A			Corner Plate	Beam	BAR	A36 Gr.36	Typical
43	M67	N101A	N108			RIGID	None	None	RIGID	Typical
44	M68	N88B	N98			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
45	M69	N98	N102A			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
46	M70	N102A	N105A			RIGID	None	None	RIGID	Typical
47	M71	N106	N103			Corner Plate	Beam	BAR	A36 Gr.36	Typical
48	M72	N103	N109			RIGID	None	None	RIGID	Typical
49	M73	N114	N110			RIGID	None	None	RIGID	Typical
50	M74	N110	N112			RIGID	None	None	RIGID	Typical
51	M75	N111	N112			RIGID	None	None	RIGID	Typical
52	M76A	N115	N120			Standoff Horizontal	Beam	SquareTube	A500 Gr...	Typical
53	M77A	N123	N125			Platform Crossme...	Beam	SquareTube	A500 Gr...	Typical
54	M78	N124	N116			Platform Crossme...	Beam	SquareTube	A500 Gr...	Typical
55	M79A	N134	N135A			Corner Plate	Beam	BAR	A36 Gr.36	Typical
56	M80A	N118	N122			RIGID	None	None	RIGID	Typical
57	M81	N117	N121			RIGID	None	None	RIGID	Typical
58	M82	N139	N117			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
59	M83A	N118	N141			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
60	M84A	N141	N142			RIGID	None	None	RIGID	Typical
61	M85A	N124	N119			RIGID	None	None	RIGID	Typical
62	M86	N119	N125			RIGID	None	None	RIGID	Typical
63	M87	N123	N127			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
64	M88A	N127	N128			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
65	M89	N128	N132			RIGID	None	None	RIGID	Typical
66	M90	N135A	N129			Corner Plate	Beam	BAR	A36 Gr.36	Typical
67	M91A	N129	N136			RIGID	None	None	RIGID	Typical
68	M92A	N116	N126			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
69	M93	N126	N130			Cross Arm Plate	Beam	RECT	A36 Gr.36	Typical
70	M94	N130	N133			RIGID	None	None	RIGID	Typical
71	M95	N134	N131A			Corner Plate	Beam	BAR	A36 Gr.36	Typical
72	M96	N131A	N137			RIGID	None	None	RIGID	Typical
73	M97	N142	N138			RIGID	None	None	RIGID	Typical
74	M98	N138	N140			RIGID	None	None	RIGID	Typical
75	M99	N139	N140			RIGID	None	None	RIGID	Typical
76	M100	N140B	N141B			Support Rail	Beam	Pipe	A53 Gr.B	Typical
77	M101	N142A	N143			RIGID	None	None	RIGID	Typical
78	M81A	N100A	N101B			Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
79	M82A	N102B	N103B			Support Rail	Beam	Pipe	A53 Gr.B	Typical
80	M83C	N104B	N105B			Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
81	M84B	N106A	N107A			Support Rail	Beam	Pipe	A53 Gr.B	Typical
82	M83B	N104C	N106B			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
83	M84C	N107B	N108A			RIGID	None	None	RIGID	Typical
84	M87A	N110A	N112A			RIGID	None	None	RIGID	Typical
85	M89A	N113A	N115A			RIGID	None	None	RIGID	Typical
86	M90A	N116A	N117A			RIGID	None	None	RIGID	Typical
87	M93A	N119A	N121A			RIGID	None	None	RIGID	Typical
88	M94A	N106B	N115A			Support Rail Corn...	Beam	Pipe	A53 Gr.B	Typical
89	M95A	N108A	N117A			Support Rail Corn...	Beam	Pipe	A53 Gr.B	Typical
90	M96A	N121A	N112A			Support Rail Corn...	Beam	Pipe	A53 Gr.B	Typical
91	M91B	N116B	N117B			RIGID	None	None	RIGID	Typical
92	MP2A	N119B	N118A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
93	M93B	N120A	N121B			RIGID	None	None	RIGID	Typical
94	M94B	N122A	N123A			RIGID	None	None	RIGID	Typical
95	MP3A	N125A	N124A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
96	M96B	N126A	N127A			RIGID	None	None	RIGID	Typical
97	M97A	N128A	N129A			RIGID	None	None	RIGID	Typical
98	MP4A	N131B	N130A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
99	M99A	N132A	N133A			RIGID	None	None	RIGID	Typical
100	M100A	N134A	N135B			RIGID	None	None	RIGID	Typical
101	MP1C	N137A	N136A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
102	M102	N138A	N139A			RIGID	None	None	RIGID	Typical
103	M103	N140A	N141A			RIGID	None	None	RIGID	Typical
104	MP2C	N143A	N142B			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
105	M105	N144A	N145			RIGID	None	None	RIGID	Typical
106	M106	N146	N147			RIGID	None	None	RIGID	Typical
107	MP3C	N149	N148A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
108	M108	N150	N151			RIGID	None	None	RIGID	Typical
109	M109	N152	N153			RIGID	None	None	RIGID	Typical
110	MP4C	N155	N154			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
111	M111	N156	N157			RIGID	None	None	RIGID	Typical
112	M112	N158	N159			RIGID	None	None	RIGID	Typical
113	MP1B	N161	N160			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
114	M114	N162	N163			RIGID	None	None	RIGID	Typical
115	M115	N164	N165			RIGID	None	None	RIGID	Typical
116	MP2B	N167	N166			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
117	M117	N168	N169			RIGID	None	None	RIGID	Typical
118	M118	N170	N171			RIGID	None	None	RIGID	Typical
119	MP3B	N173	N172			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
120	M120	N174	N175			RIGID	None	None	RIGID	Typical
121	M121	N176	N177			RIGID	None	None	RIGID	Typical
122	MP4B	N179	N178			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
123	M123	N180	N181			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio Opti...	Analysis ...	Inactive	Seismi...
1	M1						Yes	Default			None
2	M4						Yes				None
3	M10						Yes	Default			None
4	M19						Yes	** NA **			None
5	MP1A						Yes	** NA **			None
6	M43						Yes	Default			None
7	M46						Yes	Default			None
8	M35A						Yes	** NA **			None
9	M36A						Yes	** NA **			None
10	M51B	OOOOOX	OOOOOX				Yes	Default			None
11	M52B	OOOOOX	OOOOOX				Yes	Default			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio Opti...	Analysis ...	Inactive	Seismi...
12	M52						Yes	** NA **			None
13	M58						Yes	** NA **			None
14	M59						Yes	** NA **			None
15	M76						Yes				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				None
24	M92		BenPIN				Yes	** NA **			None
25	M50						Yes	** NA **			None
26	M51						Yes	** NA **			None
27	M51A						Yes	** NA **			None
28	M52A						Yes				None
29	M53						Yes	Default			None
30	M54						Yes	Default			None
31	M55						Yes	Default			None
32	M56						Yes	** NA **			None
33	M57						Yes	** NA **			None
34	M58A	OOOOOX	OOOOOX				Yes	Default			None
35	M59A	OOOOOX	OOOOOX				Yes	Default			None
36	M60						Yes	** NA **			None
37	M61						Yes	** NA **			None
38	M62						Yes	** NA **			None
39	M63						Yes				None
40	M64						Yes				None
41	M65		BenPIN				Yes	** NA **			None
42	M66						Yes				None
43	M67		BenPIN				Yes	** NA **			None
44	M68						Yes				None
45	M69						Yes				None
46	M70		BenPIN				Yes	** NA **			None
47	M71						Yes				None
48	M72		BenPIN				Yes	** NA **			None
49	M73						Yes	** NA **			None
50	M74						Yes	** NA **			None
51	M75						Yes	** NA **			None
52	M76A						Yes				None
53	M77A						Yes	Default			None
54	M78						Yes	Default			None
55	M79A						Yes	Default			None
56	M80A						Yes	** NA **			None
57	M81						Yes	** NA **			None
58	M82	OOOOOX	OOOOOX				Yes	Default			None
59	M83A	OOOOOX	OOOOOX				Yes	Default			None
60	M84A						Yes	** NA **			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

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio Opti...	Analysis ...	Inactive	Seismi...
69	M93						Yes				None
70	M94		BenPIN				Yes	** NA **			None
71	M95						Yes				None
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 **			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
84	M87A						Yes	** NA **			None
85	M89A						Yes	** NA **			None
86	M90A						Yes	** NA **			None
87	M93A						Yes	** NA **			None
88	M94A	BenPIN	BenPIN				Yes	Default			None
89	M95A	BenPIN	BenPIN				Yes	Default			None
90	M96A	BenPIN	BenPIN				Yes	Default			None
91	M91B						Yes	** NA **			None
92	MP2A						Yes	** NA **			None
93	M93B						Yes	** NA **			None
94	M94B						Yes	** NA **			None
95	MP3A						Yes	** NA **			None
96	M96B						Yes	** NA **			None
97	M97A						Yes	** NA **			None
98	MP4A						Yes	** NA **			None
99	M99A						Yes	** NA **			None
100	M100A						Yes	** NA **			None
101	MP1C						Yes	** NA **			None
102	M102						Yes	** NA **			None
103	M103						Yes	** NA **			None
104	MP2C						Yes	** NA **			None
105	M105						Yes	** NA **			None
106	M106						Yes	** NA **			None
107	MP3C						Yes	** NA **			None
108	M108						Yes	** NA **			None
109	M109						Yes	** NA **			None
110	MP4C						Yes	** NA **			None
111	M111						Yes	** NA **			None
112	M112						Yes	** NA **			None
113	MP1B						Yes	** NA **			None
114	M114						Yes	** NA **			None
115	M115						Yes	** NA **			None
116	MP2B						Yes	** NA **			None
117	M117						Yes	** NA **			None
118	M118						Yes	** NA **			None
119	MP3B						Yes	** NA **			None
120	M120						Yes	** NA **			None
121	M121						Yes	** NA **			None
122	MP4B						Yes	** NA **			None
123	M123						Yes	** NA **			None

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	My	.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	.25
15	MP1C	Mz	.0137	.25
16	MP1C	Y	-31.65	4.75
17	MP1C	My	.0079	4.75
18	MP1C	Mz	.0137	4.75
19	MP4A	Y	-31.65	.25
20	MP4A	My	-.0158	.25
21	MP4A	Mz	0	.25
22	MP4A	Y	-31.65	4.75
23	MP4A	My	-.0158	4.75
24	MP4A	Mz	0	4.75
25	MP4B	Y	-31.65	.25
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	Y	-31.65	.25
32	MP4C	My	.0079	.25
33	MP4C	Mz	.0137	.25
34	MP4C	Y	-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	Mz	0	1.5
40	MP3A	Y	-28.65	3.5
41	MP3A	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	1.5
46	MP3B	Y	-28.65	3.5
47	MP3B	My	.0072	3.5
48	MP3B	Mz	-.0124	3.5
49	MP3C	Y	-28.65	1.5
50	MP3C	My	.0072	1.5
51	MP3C	Mz	.0124	1.5
52	MP3C	Y	-28.65	3.5
53	MP3C	My	.0072	3.5
54	MP3C	Mz	.0124	3.5
55	MP4A	Y	-74.7	2
56	MP4A	My	.0374	2

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

	Member Label	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	My	.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
80	MP1C	My	-.0198	2
81	MP1C	Mz	-.0343	2
82	MP2A	Y	-22.95	.25
83	MP2A	My	-.0115	.25
84	MP2A	Mz	0	.25
85	MP2A	Y	-22.95	4.75
86	MP2A	My	-.0115	4.75
87	MP2A	Mz	0	4.75
88	MP2B	Y	-22.95	.25
89	MP2B	My	.0057	.25
90	MP2B	Mz	-.0099	.25
91	MP2B	Y	-22.95	4.75
92	MP2B	My	.0057	4.75
93	MP2B	Mz	-.0099	4.75
94	MP2C	Y	-22.95	.25
95	MP2C	My	.0057	.25
96	MP2C	Mz	.0099	.25
97	MP2C	Y	-22.95	4.75
98	MP2C	My	.0057	4.75
99	MP2C	Mz	.0099	4.75

Member Point Loads (BLC 2 : Antenna Di)

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP1B	My	.028	4.75
12	MP1B	Mz	-.0486	4.75
13	MP1C	Y	-112.1332	.25
14	MP1C	My	.028	.25
15	MP1C	Mz	.0486	.25
16	MP1C	Y	-112.1332	4.75
17	MP1C	My	.028	4.75
18	MP1C	Mz	.0486	4.75
19	MP4A	Y	-112.1332	.25
20	MP4A	My	-.0561	.25
21	MP4A	Mz	0	.25
22	MP4A	Y	-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	1.5
38	MP3A	My	-.0242	1.5
39	MP3A	Mz	0	1.5
40	MP3A	Y	-48.4151	3.5
41	MP3A	My	-.0242	3.5
42	MP3A	Mz	0	3.5
43	MP3B	Y	-48.4151	1.5
44	MP3B	My	.0121	1.5
45	MP3B	Mz	-.021	1.5
46	MP3B	Y	-48.4151	3.5
47	MP3B	My	.0121	3.5
48	MP3B	Mz	-.021	3.5
49	MP3C	Y	-48.4151	1.5
50	MP3C	My	.0121	1.5
51	MP3C	Mz	.021	1.5
52	MP3C	Y	-48.4151	3.5
53	MP3C	My	.0121	3.5
54	MP3C	Mz	.021	3.5
55	MP4A	Y	-73.3394	2
56	MP4A	My	.0367	2
57	MP4A	Mz	0	2
58	MP4B	Y	-73.3394	2
59	MP4B	My	-.0183	2
60	MP4B	Mz	.0318	2
61	MP4C	Y	-73.3394	2
62	MP4C	My	-.0183	2
63	MP4C	Mz	-.0318	2
64	MP1A	Y	-27.6043	4
65	MP1A	My	.0138	4
66	MP1A	Mz	0	4
67	MP1B	Y	-27.6043	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
68	MP1B	My	.0138	4
69	MP1B	Mz	0	4
70	MP1C	Y	-27.6043	4
71	MP1C	My	.0138	4
72	MP1C	Mz	0	4
73	MP1A	Y	-74.0879	2
74	MP1A	My	.037	2
75	MP1A	Mz	0	2
76	MP1B	Y	-74.0879	2
77	MP1B	My	-.0185	2
78	MP1B	Mz	.0321	2
79	MP1C	Y	-74.0879	2
80	MP1C	My	-.0185	2
81	MP1C	Mz	-.0321	2
82	MP2A	Y	-108.3776	.25
83	MP2A	My	-.0542	.25
84	MP2A	Mz	0	.25
85	MP2A	Y	-108.3776	4.75
86	MP2A	My	-.0542	4.75
87	MP2A	Mz	0	4.75
88	MP2B	Y	-108.3776	.25
89	MP2B	My	.0271	.25
90	MP2B	Mz	-.0469	.25
91	MP2B	Y	-108.3776	4.75
92	MP2B	My	.0271	4.75
93	MP2B	Mz	-.0469	4.75
94	MP2C	Y	-108.3776	.25
95	MP2C	My	.0271	.25
96	MP2C	Mz	.0469	.25
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	Z	-145.566	4.75
12	MP1B	Mx	.063	4.75
13	MP1C	X	0	.25
14	MP1C	Z	-145.566	.25
15	MP1C	Mx	-.063	.25
16	MP1C	X	0	4.75
17	MP1C	Z	-145.566	4.75
18	MP1C	Mx	-.063	4.75
19	MP4A	X	0	.25
20	MP4A	Z	-196.025	.25
21	MP4A	Mx	0	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
22	MP4A	X	0	4.75
23	MP4A	Z	-196.025	4.75
24	MP4A	Mx	0	4.75
25	MP4B	X	0	.25
26	MP4B	Z	-145.566	.25
27	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	0	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	1.5
45	MP3B	Mx	.019	1.5
46	MP3B	X	0	3.5
47	MP3B	Z	-43.945	3.5
48	MP3B	Mx	.019	3.5
49	MP3C	X	0	1.5
50	MP3C	Z	-43.945	1.5
51	MP3C	Mx	-.019	1.5
52	MP3C	X	0	3.5
53	MP3C	Z	-43.945	3.5
54	MP3C	Mx	-.019	3.5
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
65	MP1A	Z	-15.923	4
66	MP1A	Mx	0	4
67	MP1B	X	0	4
68	MP1B	Z	-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	Z	-80.476	2
75	MP1A	Mx	0	2
76	MP1B	X	0	2
77	MP1B	Z	-61.271	2
78	MP1B	Mx	-.0265	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
79	MP1C	X	0	2
80	MP1C	Z	-61.271	2
81	MP1C	Mx	.0265	2
82	MP2A	X	0	.25
83	MP2A	Z	-198.607	.25
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	Z	-148.743	.25
90	MP2B	Mx	.0644	.25
91	MP2B	X	0	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	Z	-148.743	4.75
99	MP2C	Mx	-.0644	4.75

Member Point Loads (BLC 4 : Antenna Wo (30 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	Z	-155.197	.25
21	MP4A	Mx	-.0448	.25
22	MP4A	X	89.603	4.75
23	MP4A	Z	-155.197	4.75
24	MP4A	Mx	-.0448	4.75
25	MP4B	X	64.373	.25
26	MP4B	Z	-111.498	.25
27	MP4B	Mx	.0644	.25
28	MP4B	X	64.373	4.75
29	MP4B	Z	-111.498	4.75
30	MP4B	Mx	.0644	4.75
31	MP4C	X	89.603	.25
32	MP4C	Z	-155.197	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4C	Mx	-.0448	.25
34	MP4C	X	89.603	4.75
35	MP4C	Z	-155.197	4.75
36	MP4C	Mx	-.0448	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	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	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
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	30.609	2
62	MP4C	Z	-53.016	2
63	MP4C	Mx	.0153	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	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
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	66.061	.25
89	MP2B	Z	-114.42	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
90	MP2B	Mx	.0661	.25
91	MP2B	X	66.061	4.75
92	MP2B	Z	-114.42	4.75
93	MP2B	Mx	.0661	4.75
94	MP2C	X	90.993	.25
95	MP2C	Z	-157.604	.25
96	MP2C	Mx	-.0455	.25
97	MP2C	X	90.993	4.75
98	MP2C	Z	-157.604	4.75
99	MP2C	Mx	-.0455	4.75

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	Z	-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	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	Z	-72.783	.25
21	MP4A	Mx	-.063	.25
22	MP4A	X	126.064	4.75
23	MP4A	Z	-72.783	4.75
24	MP4A	Mx	-.063	4.75
25	MP4B	X	126.064	.25
26	MP4B	Z	-72.783	.25
27	MP4B	Mx	.063	.25
28	MP4B	X	126.064	4.75
29	MP4B	Z	-72.783	4.75
30	MP4B	Mx	.063	4.75
31	MP4C	X	169.763	.25
32	MP4C	Z	-98.013	.25
33	MP4C	Mx	0	.25
34	MP4C	X	169.763	4.75
35	MP4C	Z	-98.013	4.75
36	MP4C	Mx	0	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	38.058	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP3B	Z	-21.973	1.5
45	MP3B	Mx	.019	1.5
46	MP3B	X	38.058	3.5
47	MP3B	Z	-21.973	3.5
48	MP3B	Mx	.019	3.5
49	MP3C	X	70.626	1.5
50	MP3C	Z	-40.776	1.5
51	MP3C	Mx	0	1.5
52	MP3C	X	70.626	3.5
53	MP3C	Z	-40.776	3.5
54	MP3C	Mx	0	3.5
55	MP4A	X	43.512	2
56	MP4A	Z	-25.122	2
57	MP4A	Mx	.0218	2
58	MP4B	X	43.512	2
59	MP4B	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	Z	-30.636	2
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
86	MP2A	Z	-74.371	4.75
87	MP2A	Mx	-.0644	4.75
88	MP2B	X	128.815	.25
89	MP2B	Z	-74.371	.25
90	MP2B	Mx	.0644	.25
91	MP2B	X	128.815	4.75
92	MP2B	Z	-74.371	4.75
93	MP2B	Mx	.0644	4.75
94	MP2C	X	171.999	.25
95	MP2C	Z	-99.304	.25
96	MP2C	Mx	0	.25
97	MP2C	X	171.999	4.75
98	MP2C	Z	-99.304	4.75
99	MP2C	Mx	0	4.75

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

	Member Label	Direction	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
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
12	MP1B	Mx	.0448	4.75
13	MP1C	X	179.206	.25
14	MP1C	Z	0	.25
15	MP1C	Mx	.0448	.25
16	MP1C	X	179.206	4.75
17	MP1C	Z	0	4.75
18	MP1C	Mx	.0448	4.75
19	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	4.75
37	MP3A	X	31.41	1.5
38	MP3A	Z	0	1.5
39	MP3A	Mx	-.0157	1.5
40	MP3A	X	31.41	3.5
41	MP3A	Z	0	3.5
42	MP3A	Mx	-.0157	3.5
43	MP3B	X	69.016	1.5
44	MP3B	Z	0	1.5
45	MP3B	Mx	.0173	1.5
46	MP3B	X	69.016	3.5
47	MP3B	Z	0	3.5
48	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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP4B	X	61.218	2
59	MP4B	Z	0	2
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	4.75
86	MP2A	Z	0	4.75
87	MP2A	Mx	-.0661	4.75
88	MP2B	X	181.986	.25
89	MP2B	Z	0	.25
90	MP2B	Mx	.0455	.25
91	MP2B	X	181.986	4.75
92	MP2B	Z	0	4.75
93	MP2B	Mx	.0455	4.75
94	MP2C	X	181.986	.25
95	MP2C	Z	0	.25
96	MP2C	Mx	.0455	.25
97	MP2C	X	181.986	4.75
98	MP2C	Z	0	4.75
99	MP2C	Mx	.0455	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	4.75
6	MP1A	Mx	-.063	4.75
7	MP1B	X	169.763	.25
8	MP1B	Z	98.013	.25
9	MP1B	Mx	0	.25
10	MP1B	X	169.763	4.75
11	MP1B	Z	98.013	4.75

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
16	MP1C	X	126.064	4.75
17	MP1C	Z	72.783	4.75
18	MP1C	Mx	.063	4.75
19	MP4A	X	126.064	.25
20	MP4A	Z	72.783	.25
21	MP4A	Mx	-.063	.25
22	MP4A	X	126.064	4.75
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	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
50	MP3C	Z	21.973	1.5
51	MP3C	Mx	.019	1.5
52	MP3C	X	38.058	3.5
53	MP3C	Z	21.973	3.5
54	MP3C	Mx	.019	3.5
55	MP4A	X	43.512	2
56	MP4A	Z	25.122	2
57	MP4A	Mx	.0218	2
58	MP4B	X	57.768	2
59	MP4B	Z	33.352	2
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
65	MP1A	Z	10.253	4
66	MP1A	Mx	.0089	4
67	MP1B	X	17.759	4
68	MP1B	Z	10.253	4

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	Z	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	.25
15	MP1C	Mx	.0644	.25
16	MP1C	X	64.373	4.75
17	MP1C	Z	111.498	4.75
18	MP1C	Mx	.0644	4.75
19	MP4A	X	89.603	.25
20	MP4A	Z	155.197	.25
21	MP4A	Mx	-.0448	.25
22	MP4A	X	89.603	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP4A	Z	155.197	4.75
24	MP4A	Mx	-.0448	4.75
25	MP4B	X	89.603	.25
26	MP4B	Z	155.197	.25
27	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
35	MP4C	Z	111.498	4.75
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
45	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	2
77	MP1B	Z	64.15	2
78	MP1B	Mx	.0185	2
79	MP1C	X	27.435	2

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	.25
90	MP2B	Mx	-.0455	.25
91	MP2B	X	90.993	4.75
92	MP2B	Z	157.604	4.75
93	MP2B	Mx	-.0455	4.75
94	MP2C	X	66.061	.25
95	MP2C	Z	114.42	.25
96	MP2C	Mx	.0661	.25
97	MP2C	X	66.061	4.75
98	MP2C	Z	114.42	4.75
99	MP2C	Mx	.0661	4.75

Member Point Loads (BLC 9 : Antenna Wo (180 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	Z	145.566	4.75
12	MP1B	Mx	-.063	4.75
13	MP1C	X	0	.25
14	MP1C	Z	145.566	.25
15	MP1C	Mx	.063	.25
16	MP1C	X	0	4.75
17	MP1C	Z	145.566	4.75
18	MP1C	Mx	.063	4.75
19	MP4A	X	0	.25
20	MP4A	Z	196.025	.25
21	MP4A	Mx	0	.25
22	MP4A	X	0	4.75
23	MP4A	Z	196.025	4.75
24	MP4A	Mx	0	4.75
25	MP4B	X	0	.25
26	MP4B	Z	145.566	.25
27	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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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	0	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	1.5
45	MP3B	Mx	-.019	1.5
46	MP3B	X	0	3.5
47	MP3B	Z	43.945	3.5
48	MP3B	Mx	-.019	3.5
49	MP3C	X	0	1.5
50	MP3C	Z	43.945	1.5
51	MP3C	Mx	.019	1.5
52	MP3C	X	0	3.5
53	MP3C	Z	43.945	3.5
54	MP3C	Mx	.019	3.5
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
65	MP1A	Z	15.923	4
66	MP1A	Mx	0	4
67	MP1B	X	0	4
68	MP1B	Z	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	Z	80.476	2
75	MP1A	Mx	0	2
76	MP1B	X	0	2
77	MP1B	Z	61.271	2
78	MP1B	Mx	.0265	2
79	MP1C	X	0	2
80	MP1C	Z	61.271	2
81	MP1C	Mx	-.0265	2
82	MP2A	X	0	.25
83	MP2A	Z	198.607	.25
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	Z	148.743	.25
90	MP2B	Mx	-.0644	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
91	MP2B	X	0	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	Z	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	Z	155.197	.25
21	MP4A	Mx	.0448	.25
22	MP4A	X	-89.603	4.75
23	MP4A	Z	155.197	4.75
24	MP4A	Mx	.0448	4.75
25	MP4B	X	-64.373	.25
26	MP4B	Z	111.498	.25
27	MP4B	Mx	-.0644	.25
28	MP4B	X	-64.373	4.75
29	MP4B	Z	111.498	4.75
30	MP4B	Mx	-.0644	4.75
31	MP4C	X	-89.603	.25
32	MP4C	Z	155.197	.25
33	MP4C	Mx	.0448	.25
34	MP4C	X	-89.603	4.75
35	MP4C	Z	155.197	4.75
36	MP4C	Mx	.0448	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	-15.705	1.5
44	MP3B	Z	27.202	1.5

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

	Member Label	Direction	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
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	-30.609	2
62	MP4C	Z	53.016	2
63	MP4C	Mx	-.0153	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	-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
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	-66.061	.25
89	MP2B	Z	114.42	.25
90	MP2B	Mx	-.0661	.25
91	MP2B	X	-66.061	4.75
92	MP2B	Z	114.42	4.75
93	MP2B	Mx	-.0661	4.75
94	MP2C	X	-90.993	.25
95	MP2C	Z	157.604	.25
96	MP2C	Mx	.0455	.25
97	MP2C	X	-90.993	4.75
98	MP2C	Z	157.604	4.75
99	MP2C	Mx	.0455	4.75

Member Point Loads (BLC 11 : Antenna Wo (240 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	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	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	Z	72.783	.25
21	MP4A	Mx	.063	.25
22	MP4A	X	-126.064	4.75
23	MP4A	Z	72.783	4.75
24	MP4A	Mx	.063	4.75
25	MP4B	X	-126.064	.25
26	MP4B	Z	72.783	.25
27	MP4B	Mx	-.063	.25
28	MP4B	X	-126.064	4.75
29	MP4B	Z	72.783	4.75
30	MP4B	Mx	-.063	4.75
31	MP4C	X	-169.763	.25
32	MP4C	Z	98.013	.25
33	MP4C	Mx	0	.25
34	MP4C	X	-169.763	4.75
35	MP4C	Z	98.013	4.75
36	MP4C	Mx	0	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	-38.058	1.5
44	MP3B	Z	21.973	1.5
45	MP3B	Mx	-.019	1.5
46	MP3B	X	-38.058	3.5
47	MP3B	Z	21.973	3.5
48	MP3B	Mx	-.019	3.5
49	MP3C	X	-70.626	1.5
50	MP3C	Z	40.776	1.5
51	MP3C	Mx	0	1.5
52	MP3C	X	-70.626	3.5
53	MP3C	Z	40.776	3.5
54	MP3C	Mx	0	3.5
55	MP4A	X	-43.512	2
56	MP4A	Z	25.122	2
57	MP4A	Mx	-.0218	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP4B	X	-43.512	2
59	MP4B	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	Z	30.636	2
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
86	MP2A	Z	74.371	4.75
87	MP2A	Mx	.0644	4.75
88	MP2B	X	-128.815	.25
89	MP2B	Z	74.371	.25
90	MP2B	Mx	-.0644	.25
91	MP2B	X	-128.815	4.75
92	MP2B	Z	74.371	4.75
93	MP2B	Mx	-.0644	4.75
94	MP2C	X	-171.999	.25
95	MP2C	Z	99.304	.25
96	MP2C	Mx	0	.25
97	MP2C	X	-171.999	4.75
98	MP2C	Z	99.304	4.75
99	MP2C	Mx	0	4.75

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

	Member Label	Direction	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
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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP1B	Mx	-.0448	4.75
13	MP1C	X	-179.206	.25
14	MP1C	Z	0	.25
15	MP1C	Mx	-.0448	.25
16	MP1C	X	-179.206	4.75
17	MP1C	Z	0	4.75
18	MP1C	Mx	-.0448	4.75
19	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	4.75
37	MP3A	X	-31.41	1.5
38	MP3A	Z	0	1.5
39	MP3A	Mx	.0157	1.5
40	MP3A	X	-31.41	3.5
41	MP3A	Z	0	3.5
42	MP3A	Mx	.0157	3.5
43	MP3B	X	-69.016	1.5
44	MP3B	Z	0	1.5
45	MP3B	Mx	-.0173	1.5
46	MP3B	X	-69.016	3.5
47	MP3B	Z	0	3.5
48	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
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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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	4.75
86	MP2A	Z	0	4.75
87	MP2A	Mx	.0661	4.75
88	MP2B	X	-181.986	.25
89	MP2B	Z	0	.25
90	MP2B	Mx	-.0455	.25
91	MP2B	X	-181.986	4.75
92	MP2B	Z	0	4.75
93	MP2B	Mx	-.0455	4.75
94	MP2C	X	-181.986	.25
95	MP2C	Z	0	.25
96	MP2C	Mx	-.0455	.25
97	MP2C	X	-181.986	4.75
98	MP2C	Z	0	4.75
99	MP2C	Mx	-.0455	4.75

Member Point Loads (BLC 13 : Antenna Wo (300 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	4.75
6	MP1A	Mx	.063	4.75
7	MP1B	X	-169.763	.25
8	MP1B	Z	-98.013	.25
9	MP1B	Mx	0	.25
10	MP1B	X	-169.763	4.75
11	MP1B	Z	-98.013	4.75
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	Z	-72.783	4.75
18	MP1C	Mx	-.063	4.75
19	MP4A	X	-126.064	.25
20	MP4A	Z	-72.783	.25
21	MP4A	Mx	.063	.25
22	MP4A	X	-126.064	4.75

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	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
50	MP3C	Z	-21.973	1.5
51	MP3C	Mx	-.019	1.5
52	MP3C	X	-38.058	3.5
53	MP3C	Z	-21.973	3.5
54	MP3C	Mx	-.019	3.5
55	MP4A	X	-43.512	2
56	MP4A	Z	-25.122	2
57	MP4A	Mx	-.0218	2
58	MP4B	X	-57.768	2
59	MP4B	Z	-33.352	2
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
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	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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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	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	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	.25
15	MP1C	Mx	-.0644	.25
16	MP1C	X	-64.373	4.75
17	MP1C	Z	-111.498	4.75
18	MP1C	Mx	-.0644	4.75
19	MP4A	X	-89.603	.25
20	MP4A	Z	-155.197	.25
21	MP4A	Mx	.0448	.25
22	MP4A	X	-89.603	4.75
23	MP4A	Z	-155.197	4.75
24	MP4A	Mx	.0448	4.75
25	MP4B	X	-89.603	.25
26	MP4B	Z	-155.197	.25
27	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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	MP4C	X	-64.373	4.75
35	MP4C	Z	-111.498	4.75
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
45	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	2
77	MP1B	Z	-64.15	2
78	MP1B	Mx	-.0185	2
79	MP1C	X	-27.435	2
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	.25
90	MP2B	Mx	.0455	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
91	MP2B	X	-90.993	4.75
92	MP2B	Z	-157.604	4.75
93	MP2B	Mx	.0455	4.75
94	MP2C	X	-66.061	.25
95	MP2C	Z	-114.42	.25
96	MP2C	Mx	-.0661	.25
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
11	MP1B	Z	-30.097	4.75
12	MP1B	Mx	.013	4.75
13	MP1C	X	0	.25
14	MP1C	Z	-30.097	.25
15	MP1C	Mx	-.013	.25
16	MP1C	X	0	4.75
17	MP1C	Z	-30.097	4.75
18	MP1C	Mx	-.013	4.75
19	MP4A	X	0	.25
20	MP4A	Z	-39.115	.25
21	MP4A	Mx	0	.25
22	MP4A	X	0	4.75
23	MP4A	Z	-39.115	4.75
24	MP4A	Mx	0	4.75
25	MP4B	X	0	.25
26	MP4B	Z	-30.097	.25
27	MP4B	Mx	.013	.25
28	MP4B	X	0	4.75
29	MP4B	Z	-30.097	4.75
30	MP4B	Mx	.013	4.75
31	MP4C	X	0	.25
32	MP4C	Z	-30.097	.25
33	MP4C	Mx	-.013	.25
34	MP4C	X	0	4.75
35	MP4C	Z	-30.097	4.75
36	MP4C	Mx	-.013	4.75
37	MP3A	X	0	1.5
38	MP3A	Z	-17.301	1.5
39	MP3A	Mx	0	1.5
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	Z	-10.07	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
45	MP3B	Mx	.0044	1.5
46	MP3B	X	0	3.5
47	MP3B	Z	-10.07	3.5
48	MP3B	Mx	.0044	3.5
49	MP3C	X	0	1.5
50	MP3C	Z	-10.07	1.5
51	MP3C	Mx	-.0044	1.5
52	MP3C	X	0	3.5
53	MP3C	Z	-10.07	3.5
54	MP3C	Mx	-.0044	3.5
55	MP4A	X	0	2
56	MP4A	Z	-18.299	2
57	MP4A	Mx	0	2
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
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
86	MP2A	Z	-39.847	4.75
87	MP2A	Mx	0	4.75
88	MP2B	X	0	.25
89	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	.25
95	MP2C	Z	-31.022	.25
96	MP2C	Mx	-.0134	.25
97	MP2C	X	0	4.75
98	MP2C	Z	-31.022	4.75
99	MP2C	Mx	-.0134	4.75

Member Point Loads (BLC 16 : Antenna Wi (30 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	13.546	.25
8	MP1B	Z	-23.462	.25
9	MP1B	Mx	.0135	.25
10	MP1B	X	13.546	4.75
11	MP1B	Z	-23.462	4.75
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	.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	13.546	.25
26	MP4B	Z	-23.462	.25
27	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	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
41	MP3A	Z	-12.896	3.5
42	MP3A	Mx	-.0037	3.5
43	MP3B	X	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	3.5
53	MP3C	Z	-12.896	3.5
54	MP3C	Mx	-.0037	3.5
55	MP4A	X	8.486	2
56	MP4A	Z	-14.698	2
57	MP4A	Mx	.0042	2

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

	Member 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
85	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
90	MP2B	Mx	.014	.25
91	MP2B	X	14.04	4.75
92	MP2B	Z	-24.318	4.75
93	MP2B	Mx	.014	4.75
94	MP2C	X	18.453	.25
95	MP2C	Z	-31.961	.25
96	MP2C	Mx	-.0092	.25
97	MP2C	X	18.453	4.75
98	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

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

	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
16	MP1C	X	33.875	4.75
17	MP1C	Z	-19.558	4.75
18	MP1C	Mx	0	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	26.065	.25
26	MP4B	Z	-15.049	.25
27	MP4B	Mx	.013	.25
28	MP4B	X	26.065	4.75
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
34	MP4C	X	33.875	4.75
35	MP4C	Z	-19.558	4.75
36	MP4C	Mx	0	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	8.721	1.5
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
50	MP3C	Z	-8.65	1.5
51	MP3C	Mx	0	1.5
52	MP3C	X	14.983	3.5
53	MP3C	Z	-8.65	3.5
54	MP3C	Mx	0	3.5
55	MP4A	X	12.399	2
56	MP4A	Z	-7.159	2
57	MP4A	Mx	.0062	2
58	MP4B	X	12.399	2
59	MP4B	Z	-7.159	2
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	Z	-2.984	4
66	MP1A	Mx	.0026	4
67	MP1B	X	5.169	4
68	MP1B	Z	-2.984	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1B	Mx	.0026	4
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	Z	-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	4.75
93	MP2B	Mx	.0134	4.75
94	MP2C	X	34.508	.25
95	MP2C	Z	-19.923	.25
96	MP2C	Mx	0	.25
97	MP2C	X	34.508	4.75
98	MP2C	Z	-19.923	4.75
99	MP2C	Mx	0	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	4.75
7	MP1B	X	36.109	.25
8	MP1B	Z	0	.25
9	MP1B	Mx	.009	.25
10	MP1B	X	36.109	4.75
11	MP1B	Z	0	4.75
12	MP1B	Mx	.009	4.75
13	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

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

	Member Label	Direction	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
27	MP4B	Mx	.009	.25
28	MP4B	X	36.109	4.75
29	MP4B	Z	0	4.75
30	MP4B	Mx	.009	4.75
31	MP4C	X	36.109	.25
32	MP4C	Z	0	.25
33	MP4C	Mx	.009	.25
34	MP4C	X	36.109	4.75
35	MP4C	Z	0	4.75
36	MP4C	Mx	.009	4.75
37	MP3A	X	7.66	1.5
38	MP3A	Z	0	1.5
39	MP3A	Mx	-.0038	1.5
40	MP3A	X	7.66	3.5
41	MP3A	Z	0	3.5
42	MP3A	Mx	-.0038	3.5
43	MP3B	X	14.891	1.5
44	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	4
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	2
74	MP1A	Z	0	2
75	MP1A	Mx	.0066	2
76	MP1B	X	17.025	2
77	MP1B	Z	0	2
78	MP1B	Mx	-.0043	2
79	MP1C	X	17.025	2

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	MP4C	X	26.065	4.75
35	MP4C	Z	15.049	4.75
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
57	MP4A	Mx	.0062	2
58	MP4B	X	15.848	2
59	MP4B	Z	9.15	2
60	MP4B	Mx	0	2
61	MP4C	X	12.399	2
62	MP4C	Z	7.159	2
63	MP4C	Mx	-.0062	2
64	MP1A	X	5.169	4
65	MP1A	Z	2.984	4
66	MP1A	Mx	.0026	4
67	MP1B	X	5.169	4
68	MP1B	Z	2.984	4
69	MP1B	Mx	.0026	4
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	15.848	2
77	MP1B	Z	9.15	2
78	MP1B	Mx	0	2
79	MP1C	X	12.537	2
80	MP1C	Z	7.238	2
81	MP1C	Mx	-.0063	2
82	MP2A	X	26.866	.25
83	MP2A	Z	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	34.508	.25
89	MP2B	Z	19.923	.25
90	MP2B	Mx	0	.25

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	Z	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	4.75
13	MP1C	X	13.546	.25
14	MP1C	Z	23.462	.25
15	MP1C	Mx	.0135	.25
16	MP1C	X	13.546	4.75
17	MP1C	Z	23.462	4.75
18	MP1C	Mx	.0135	4.75
19	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
26	MP4B	Z	31.271	.25
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
32	MP4C	Z	23.462	.25
33	MP4C	Mx	.0135	.25
34	MP4C	X	13.546	4.75
35	MP4C	Z	23.462	4.75
36	MP4C	Mx	.0135	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
41	MP3A	Z	12.896	3.5
42	MP3A	Mx	-.0037	3.5
43	MP3B	X	7.445	1.5
44	MP3B	Z	12.896	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
45	MP3B	Mx	-.0037	1.5
46	MP3B	X	7.445	3.5
47	MP3B	Z	12.896	3.5
48	MP3B	Mx	-.0037	3.5
49	MP3C	X	3.83	1.5
50	MP3C	Z	6.633	1.5
51	MP3C	Mx	.0038	1.5
52	MP3C	X	3.83	3.5
53	MP3C	Z	6.633	3.5
54	MP3C	Mx	.0038	3.5
55	MP4A	X	8.486	2
56	MP4A	Z	14.698	2
57	MP4A	Mx	.0042	2
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	.25
83	MP2A	Z	31.961	.25
84	MP2A	Mx	-.0092	.25
85	MP2A	X	18.453	4.75
86	MP2A	Z	31.961	4.75
87	MP2A	Mx	-.0092	4.75
88	MP2B	X	18.453	.25
89	MP2B	Z	31.961	.25
90	MP2B	Mx	-.0092	.25
91	MP2B	X	18.453	4.75
92	MP2B	Z	31.961	4.75
93	MP2B	Mx	-.0092	4.75
94	MP2C	X	14.04	.25
95	MP2C	Z	24.318	.25
96	MP2C	Mx	.014	.25
97	MP2C	X	14.04	4.75
98	MP2C	Z	24.318	4.75
99	MP2C	Mx	.014	4.75

Member Point Loads (BLC 21 : Antenna Wi (180 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
11	MP1B	Z	30.097	4.75
12	MP1B	Mx	-.013	4.75
13	MP1C	X	0	.25
14	MP1C	Z	30.097	.25
15	MP1C	Mx	.013	.25
16	MP1C	X	0	4.75
17	MP1C	Z	30.097	4.75
18	MP1C	Mx	.013	4.75
19	MP4A	X	0	.25
20	MP4A	Z	39.115	.25
21	MP4A	Mx	0	.25
22	MP4A	X	0	4.75
23	MP4A	Z	39.115	4.75
24	MP4A	Mx	0	4.75
25	MP4B	X	0	.25
26	MP4B	Z	30.097	.25
27	MP4B	Mx	-.013	.25
28	MP4B	X	0	4.75
29	MP4B	Z	30.097	4.75
30	MP4B	Mx	-.013	4.75
31	MP4C	X	0	.25
32	MP4C	Z	30.097	.25
33	MP4C	Mx	.013	.25
34	MP4C	X	0	4.75
35	MP4C	Z	30.097	4.75
36	MP4C	Mx	.013	4.75
37	MP3A	X	0	1.5
38	MP3A	Z	17.301	1.5
39	MP3A	Mx	0	1.5
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	Z	10.07	1.5
45	MP3B	Mx	-.0044	1.5
46	MP3B	X	0	3.5
47	MP3B	Z	10.07	3.5
48	MP3B	Mx	-.0044	3.5
49	MP3C	X	0	1.5
50	MP3C	Z	10.07	1.5
51	MP3C	Mx	.0044	1.5
52	MP3C	X	0	3.5
53	MP3C	Z	10.07	3.5
54	MP3C	Mx	.0044	3.5
55	MP4A	X	0	2
56	MP4A	Z	18.299	2
57	MP4A	Mx	0	2

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
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
86	MP2A	Z	39.847	4.75
87	MP2A	Mx	0	4.75
88	MP2B	X	0	.25
89	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	.25
95	MP2C	Z	31.022	.25
96	MP2C	Mx	.0134	.25
97	MP2C	X	0	4.75
98	MP2C	Z	31.022	4.75
99	MP2C	Mx	.0134	4.75

Member Point Loads (BLC 22 : Antenna Wi (210 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	-13.546	.25
8	MP1B	Z	23.462	.25
9	MP1B	Mx	-.0135	.25
10	MP1B	X	-13.546	4.75
11	MP1B	Z	23.462	4.75

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	.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	-13.546	.25
26	MP4B	Z	23.462	.25
27	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	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
41	MP3A	Z	12.896	3.5
42	MP3A	Mx	.0037	3.5
43	MP3B	X	-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	3.5
53	MP3C	Z	12.896	3.5
54	MP3C	Mx	.0037	3.5
55	MP4A	X	-8.486	2
56	MP4A	Z	14.698	2
57	MP4A	Mx	-.0042	2
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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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
85	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
90	MP2B	Mx	-.014	.25
91	MP2B	X	-14.04	4.75
92	MP2B	Z	24.318	4.75
93	MP2B	Mx	-.014	4.75
94	MP2C	X	-18.453	.25
95	MP2C	Z	31.961	.25
96	MP2C	Mx	.0092	.25
97	MP2C	X	-18.453	4.75
98	MP2C	Z	31.961	4.75
99	MP2C	Mx	.0092	4.75

Member Point Loads (BLC 23 : Antenna Wi (240 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
12	MP1B	Mx	-.013	4.75
13	MP1C	X	-33.875	.25
14	MP1C	Z	19.558	.25
15	MP1C	Mx	0	.25
16	MP1C	X	-33.875	4.75
17	MP1C	Z	19.558	4.75
18	MP1C	Mx	0	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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP4A	Z	15.049	4.75
24	MP4A	Mx	.013	4.75
25	MP4B	X	-26.065	.25
26	MP4B	Z	15.049	.25
27	MP4B	Mx	-.013	.25
28	MP4B	X	-26.065	4.75
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
34	MP4C	X	-33.875	4.75
35	MP4C	Z	19.558	4.75
36	MP4C	Mx	0	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	-8.721	1.5
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
50	MP3C	Z	8.65	1.5
51	MP3C	Mx	0	1.5
52	MP3C	X	-14.983	3.5
53	MP3C	Z	8.65	3.5
54	MP3C	Mx	0	3.5
55	MP4A	X	-12.399	2
56	MP4A	Z	7.159	2
57	MP4A	Mx	-.0062	2
58	MP4B	X	-12.399	2
59	MP4B	Z	7.159	2
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	Z	2.984	4
66	MP1A	Mx	-.0026	4
67	MP1B	X	-5.169	4
68	MP1B	Z	2.984	4
69	MP1B	Mx	-.0026	4
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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
80	MP1C	Z	9.15	2
81	MP1C	Mx	0	2
82	MP2A	X	-26.866	.25
83	MP2A	Z	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	4.75
93	MP2B	Mx	-.0134	4.75
94	MP2C	X	-34.508	.25
95	MP2C	Z	19.923	.25
96	MP2C	Mx	0	.25
97	MP2C	X	-34.508	4.75
98	MP2C	Z	19.923	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	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	4.75
7	MP1B	X	-36.109	.25
8	MP1B	Z	0	.25
9	MP1B	Mx	-.009	.25
10	MP1B	X	-36.109	4.75
11	MP1B	Z	0	4.75
12	MP1B	Mx	-.009	4.75
13	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
23	MP4A	Z	0	4.75
24	MP4A	Mx	.0135	4.75
25	MP4B	X	-36.109	.25
26	MP4B	Z	0	.25
27	MP4B	Mx	-.009	.25
28	MP4B	X	-36.109	4.75
29	MP4B	Z	0	4.75
30	MP4B	Mx	-.009	4.75
31	MP4C	X	-36.109	.25
32	MP4C	Z	0	.25
33	MP4C	Mx	-.009	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	MP4C	X	-36.109	4.75
35	MP4C	Z	0	4.75
36	MP4C	Mx	-.009	4.75
37	MP3A	X	-7.66	1.5
38	MP3A	Z	0	1.5
39	MP3A	Mx	.0038	1.5
40	MP3A	X	-7.66	3.5
41	MP3A	Z	0	3.5
42	MP3A	Mx	.0038	3.5
43	MP3B	X	-14.891	1.5
44	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	4
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	2
74	MP1A	Z	0	2
75	MP1A	Mx	-.0066	2
76	MP1B	X	-17.025	2
77	MP1B	Z	0	2
78	MP1B	Mx	.0043	2
79	MP1C	X	-17.025	2
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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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 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	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
34	MP4C	X	-26.065	4.75
35	MP4C	Z	-15.049	4.75
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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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
57	MP4A	Mx	-.0062	2
58	MP4B	X	-15.848	2
59	MP4B	Z	-9.15	2
60	MP4B	Mx	0	2
61	MP4C	X	-12.399	2
62	MP4C	Z	-7.159	2
63	MP4C	Mx	.0062	2
64	MP1A	X	-5.169	4
65	MP1A	Z	-2.984	4
66	MP1A	Mx	-.0026	4
67	MP1B	X	-5.169	4
68	MP1B	Z	-2.984	4
69	MP1B	Mx	-.0026	4
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	-15.848	2
77	MP1B	Z	-9.15	2
78	MP1B	Mx	0	2
79	MP1C	X	-12.537	2
80	MP1C	Z	-7.238	2
81	MP1C	Mx	.0063	2
82	MP2A	X	-26.866	.25
83	MP2A	Z	-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	-34.508	.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	Z	-15.511	.25
96	MP2C	Mx	-.0134	.25
97	MP2C	X	-26.866	4.75
98	MP2C	Z	-15.511	4.75
99	MP2C	Mx	-.0134	4.75

Member Point Loads (BLC 26 : Antenna Wi (330 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	4.75
13	MP1C	X	-13.546	.25
14	MP1C	Z	-23.462	.25
15	MP1C	Mx	-.0135	.25
16	MP1C	X	-13.546	4.75
17	MP1C	Z	-23.462	4.75
18	MP1C	Mx	-.0135	4.75
19	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
26	MP4B	Z	-31.271	.25
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
32	MP4C	Z	-23.462	.25
33	MP4C	Mx	-.0135	.25
34	MP4C	X	-13.546	4.75
35	MP4C	Z	-23.462	4.75
36	MP4C	Mx	-.0135	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
41	MP3A	Z	-12.896	3.5
42	MP3A	Mx	.0037	3.5
43	MP3B	X	-7.445	1.5
44	MP3B	Z	-12.896	1.5
45	MP3B	Mx	.0037	1.5
46	MP3B	X	-7.445	3.5
47	MP3B	Z	-12.896	3.5
48	MP3B	Mx	.0037	3.5
49	MP3C	X	-3.83	1.5
50	MP3C	Z	-6.633	1.5
51	MP3C	Mx	-.0038	1.5
52	MP3C	X	-3.83	3.5
53	MP3C	Z	-6.633	3.5
54	MP3C	Mx	-.0038	3.5
55	MP4A	X	-8.486	2
56	MP4A	Z	-14.698	2
57	MP4A	Mx	-.0042	2

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	.25
83	MP2A	Z	-31.961	.25
84	MP2A	Mx	.0092	.25
85	MP2A	X	-18.453	4.75
86	MP2A	Z	-31.961	4.75
87	MP2A	Mx	.0092	4.75
88	MP2B	X	-18.453	.25
89	MP2B	Z	-31.961	.25
90	MP2B	Mx	.0092	.25
91	MP2B	X	-18.453	4.75
92	MP2B	Z	-31.961	4.75
93	MP2B	Mx	.0092	4.75
94	MP2C	X	-14.04	.25
95	MP2C	Z	-24.318	.25
96	MP2C	Mx	-.014	.25
97	MP2C	X	-14.04	4.75
98	MP2C	Z	-24.318	4.75
99	MP2C	Mx	-.014	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

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

	Member 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
23	MP4A	Z	-12.252	4.75
24	MP4A	Mx	0	4.75
25	MP4B	X	0	.25
26	MP4B	Z	-9.098	.25
27	MP4B	Mx	.0039	.25
28	MP4B	X	0	4.75
29	MP4B	Z	-9.098	4.75
30	MP4B	Mx	.0039	4.75
31	MP4C	X	0	.25
32	MP4C	Z	-9.098	.25
33	MP4C	Mx	-.0039	.25
34	MP4C	X	0	4.75
35	MP4C	Z	-9.098	4.75
36	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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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	Z	-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	0	.25
95	MP2C	Z	-9.296	.25
96	MP2C	Mx	-.004	.25
97	MP2C	X	0	4.75
98	MP2C	Z	-9.296	4.75
99	MP2C	Mx	-.004	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	.25
10	MP1B	X	4.023	4.75
11	MP1B	Z	-6.969	4.75
12	MP1B	Mx	.004	4.75
13	MP1C	X	5.6	.25
14	MP1C	Z	-9.7	.25
15	MP1C	Mx	-.0028	.25
16	MP1C	X	5.6	4.75
17	MP1C	Z	-9.7	4.75
18	MP1C	Mx	-.0028	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

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

	Member Label	Direction	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
27	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
34	MP4C	X	5.6	4.75
35	MP4C	Z	-9.7	4.75
36	MP4C	Mx	-.0028	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	.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	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
60	MP4B	Mx	-.0014	2
61	MP4C	X	1.913	2
62	MP4C	Z	-3.313	2
63	MP4C	Mx	.000956	2
64	MP1A	X	.545	4
65	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	1.715	2
77	MP1B	Z	-2.97	2
78	MP1B	Mx	-.0017	2
79	MP1C	X	2.315	2

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	Z	-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	.25
95	MP2C	Z	-9.85	.25
96	MP2C	Mx	-.0028	.25
97	MP2C	X	5.687	4.75
98	MP2C	Z	-9.85	4.75
99	MP2C	Mx	-.0028	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	.25
32	MP4C	Z	-6.126	.25
33	MP4C	Mx	0	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	MP4C	X	10.61	4.75
35	MP4C	Z	-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
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
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
58	MP4B	X	2.72	2
59	MP4B	Z	-1.57	2
60	MP4B	Mx	-.0014	2
61	MP4C	X	3.61	2
62	MP4C	Z	-2.085	2
63	MP4C	Mx	0	2
64	MP1A	X	1.11	4
65	MP1A	Z	-.641	4
66	MP1A	Mx	.000555	4
67	MP1B	X	1.11	4
68	MP1B	Z	-.641	4
69	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	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	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	8.051	.25
89	MP2B	Z	-4.648	.25
90	MP2B	Mx	.004	.25

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	Z	-4.648	4.75
93	MP2B	Mx	.004	4.75
94	MP2C	X	10.75	.25
95	MP2C	Z	-6.206	.25
96	MP2C	Mx	0	.25
97	MP2C	X	10.75	4.75
98	MP2C	Z	-6.206	4.75
99	MP2C	Mx	0	4.75

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

	Member Label	Direction	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
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	3.5
42	MP3A	Mx	-.000982	3.5
43	MP3B	X	4.314	1.5
44	MP3B	Z	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
45	MP3B	Mx	.0011	1.5
46	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	Z	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
98	MP2C	Z	0	4.75
99	MP2C	Mx	.0028	4.75

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	4.75
17	MP1C	Z	4.549	4.75
18	MP1C	Mx	.0039	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	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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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
64	MP1A	X	1.11	4
65	MP1A	Z	.641	4
66	MP1A	Mx	.000555	4
67	MP1B	X	1.11	4
68	MP1B	Z	.641	4
69	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	Z	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
81	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
94	MP2C	X	8.051	.25
95	MP2C	Z	4.648	.25
96	MP2C	Mx	.004	.25
97	MP2C	X	8.051	4.75
98	MP2C	Z	4.648	4.75
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

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
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	4
66	MP1A	Mx	.000273	4
67	MP1B	X	.545	4
68	MP1B	Z	.945	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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	2.315	2
77	MP1B	Z	4.009	2
78	MP1B	Mx	.0012	2
79	MP1C	X	1.715	2
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	.25
95	MP2C	Z	7.151	.25
96	MP2C	Mx	.0041	.25
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))

	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
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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP4A	Z	12.252	4.75
24	MP4A	Mx	0	4.75
25	MP4B	X	0	.25
26	MP4B	Z	9.098	.25
27	MP4B	Mx	-.0039	.25
28	MP4B	X	0	4.75
29	MP4B	Z	9.098	4.75
30	MP4B	Mx	-.0039	4.75
31	MP4C	X	0	.25
32	MP4C	Z	9.098	.25
33	MP4C	Mx	.0039	.25
34	MP4C	X	0	4.75
35	MP4C	Z	9.098	4.75
36	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	Z	3.829	2
78	MP1B	Mx	.0017	2
79	MP1C	X	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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	0	.25
95	MP2C	Z	9.296	.25
96	MP2C	Mx	.004	.25
97	MP2C	X	0	4.75
98	MP2C	Z	9.296	4.75
99	MP2C	Mx	.004	4.75

Member Point Loads (BLC 34 : Antenna Wm (210 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	.25
10	MP1B	X	-4.023	4.75
11	MP1B	Z	6.969	4.75
12	MP1B	Mx	-.004	4.75
13	MP1C	X	-5.6	.25
14	MP1C	Z	9.7	.25
15	MP1C	Mx	.0028	.25
16	MP1C	X	-5.6	4.75
17	MP1C	Z	9.7	4.75
18	MP1C	Mx	.0028	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	-4.023	.25
26	MP4B	Z	6.969	.25
27	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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	MP4C	X	-5.6	4.75
35	MP4C	Z	9.7	4.75
36	MP4C	Mx	.0028	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	-.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	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
60	MP4B	Mx	.0014	2
61	MP4C	X	-1.913	2
62	MP4C	Z	3.313	2
63	MP4C	Mx	-.000956	2
64	MP1A	X	-.545	4
65	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	-1.715	2
77	MP1B	Z	2.97	2
78	MP1B	Mx	.0017	2
79	MP1C	X	-2.315	2
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	Z	7.151	.25
90	MP2B	Mx	-.0041	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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	.25
95	MP2C	Z	9.85	.25
96	MP2C	Mx	.0028	.25
97	MP2C	X	-5.687	4.75
98	MP2C	Z	9.85	4.75
99	MP2C	Mx	.0028	4.75

Member Point Loads (BLC 35 : Antenna Wm (240 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	.25
32	MP4C	Z	6.126	.25
33	MP4C	Mx	0	.25
34	MP4C	X	-10.61	4.75
35	MP4C	Z	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
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

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
58	MP4B	X	-2.72	2
59	MP4B	Z	1.57	2
60	MP4B	Mx	.0014	2
61	MP4C	X	-3.61	2
62	MP4C	Z	2.085	2
63	MP4C	Mx	0	2
64	MP1A	X	-1.11	4
65	MP1A	Z	.641	4
66	MP1A	Mx	-.000555	4
67	MP1B	X	-1.11	4
68	MP1B	Z	.641	4
69	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	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	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	-8.051	.25
89	MP2B	Z	4.648	.25
90	MP2B	Mx	-.004	.25
91	MP2B	X	-8.051	4.75
92	MP2B	Z	4.648	4.75
93	MP2B	Mx	-.004	4.75
94	MP2C	X	-10.75	.25
95	MP2C	Z	6.206	.25
96	MP2C	Mx	0	.25
97	MP2C	X	-10.75	4.75
98	MP2C	Z	6.206	4.75
99	MP2C	Mx	0	4.75

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

	Member Label	Direction	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
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	3.5
42	MP3A	Mx	.000982	3.5
43	MP3B	X	-4.314	1.5
44	MP3B	Z	0	1.5
45	MP3B	Mx	-.0011	1.5
46	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

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	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	Z	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
98	MP2C	Z	0	4.75
99	MP2C	Mx	-.0028	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	4.75
11	MP1B	Z	-6.126	4.75

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

	Member Label	Direction	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
17	MP1C	Z	-4.549	4.75
18	MP1C	Mx	-.0039	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	-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
64	MP1A	X	-1.11	4
65	MP1A	Z	-.641	4
66	MP1A	Mx	-.000555	4
67	MP1B	X	-1.11	4
68	MP1B	Z	-.641	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	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	Z	-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
81	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
94	MP2C	X	-8.051	.25
95	MP2C	Z	-4.648	.25
96	MP2C	Mx	-.004	.25
97	MP2C	X	-8.051	4.75
98	MP2C	Z	-4.648	4.75
99	MP2C	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	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
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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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
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	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	-2.315	2
77	MP1B	Z	-4.009	2
78	MP1B	Mx	-.0012	2
79	MP1C	X	-1.715	2

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	.25
95	MP2C	Z	-7.151	.25
96	MP2C	Mx	-.0041	.25
97	MP2C	X	-4.129	4.75
98	MP2C	Z	-7.151	4.75
99	MP2C	Mx	-.0041	4.75

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M19	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M97A	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	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	My	-.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	My	.000307	.25
9	MP1B	Mz	-.000532	.25
10	MP1B	Y	-1.2289	4.75
11	MP1B	My	.000307	4.75
12	MP1B	Mz	-.000532	4.75
13	MP1C	Y	-1.2289	.25
14	MP1C	My	.000307	.25
15	MP1C	Mz	.000532	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	MP1C	Y	-1.2289	4.75
17	MP1C	My	.000307	4.75
18	MP1C	Mz	.000532	4.75
19	MP4A	Y	-1.2289	.25
20	MP4A	My	-.000614	.25
21	MP4A	Mz	0	.25
22	MP4A	Y	-1.2289	4.75
23	MP4A	My	-.000614	4.75
24	MP4A	Mz	0	4.75
25	MP4B	Y	-1.2289	.25
26	MP4B	My	.000307	.25
27	MP4B	Mz	-.000532	.25
28	MP4B	Y	-1.2289	4.75
29	MP4B	My	.000307	4.75
30	MP4B	Mz	-.000532	4.75
31	MP4C	Y	-1.2289	.25
32	MP4C	My	.000307	.25
33	MP4C	Mz	.000532	.25
34	MP4C	Y	-1.2289	4.75
35	MP4C	My	.000307	4.75
36	MP4C	Mz	.000532	4.75
37	MP3A	Y	-1.1124	1.5
38	MP3A	My	-.000556	1.5
39	MP3A	Mz	0	1.5
40	MP3A	Y	-1.1124	3.5
41	MP3A	My	-.000556	3.5
42	MP3A	Mz	0	3.5
43	MP3B	Y	-1.1124	1.5
44	MP3B	My	.000278	1.5
45	MP3B	Mz	-.000482	1.5
46	MP3B	Y	-1.1124	3.5
47	MP3B	My	.000278	3.5
48	MP3B	Mz	-.000482	3.5
49	MP3C	Y	-1.1124	1.5
50	MP3C	My	.000278	1.5
51	MP3C	Mz	.000482	1.5
52	MP3C	Y	-1.1124	3.5
53	MP3C	My	.000278	3.5
54	MP3C	Mz	.000482	3.5
55	MP4A	Y	-2.9004	2
56	MP4A	My	.0014	2
57	MP4A	Mz	0	2
58	MP4B	Y	-2.9004	2
59	MP4B	My	-.000725	2
60	MP4B	Mz	.0013	2
61	MP4C	Y	-2.9004	2
62	MP4C	My	-.000725	2
63	MP4C	Mz	-.0013	2
64	MP1A	Y	-.8076	4
65	MP1A	My	.000404	4
66	MP1A	Mz	0	4
67	MP1B	Y	-.8076	4
68	MP1B	My	.000404	4
69	MP1B	Mz	0	4
70	MP1C	Y	-.8076	4
71	MP1C	My	.000404	4
72	MP1C	Mz	0	4

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	My	-.000446	4.75
87	MP2A	Mz	0	4.75
88	MP2B	Y	-.8911	.25
89	MP2B	My	.000223	.25
90	MP2B	Mz	-.000386	.25
91	MP2B	Y	-.8911	4.75
92	MP2B	My	.000223	4.75
93	MP2B	Mz	-.000386	4.75
94	MP2C	Y	-.8911	.25
95	MP2C	My	.000223	.25
96	MP2C	Mz	.000386	.25
97	MP2C	Y	-.8911	4.75
98	MP2C	My	.000223	4.75
99	MP2C	Mz	.000386	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	4.75
13	MP4A	Z	-3.0722	.25
14	MP4A	Mx	0	.25
15	MP4A	Z	-3.0722	4.75
16	MP4A	Mx	0	4.75
17	MP4B	Z	-3.0722	.25
18	MP4B	Mx	.0013	.25
19	MP4B	Z	-3.0722	4.75
20	MP4B	Mx	.0013	4.75
21	MP4C	Z	-3.0722	.25
22	MP4C	Mx	-.0013	.25
23	MP4C	Z	-3.0722	4.75
24	MP4C	Mx	-.0013	4.75
25	MP3A	Z	-2.781	1.5
26	MP3A	Mx	0	1.5

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
39	MP4B	Z	-7.2509	2
40	MP4B	Mx	-.0031	2
41	MP4C	Z	-7.2509	2
42	MP4C	Mx	.0031	2
43	MP1A	Z	-2.019	4
44	MP1A	Mx	0	4
45	MP1B	Z	-2.019	4
46	MP1B	Mx	0	4
47	MP1C	Z	-2.019	4
48	MP1C	Mx	0	4
49	MP1A	Z	-7.678	2
50	MP1A	Mx	0	2
51	MP1B	Z	-7.678	2
52	MP1B	Mx	-.0033	2
53	MP1C	Z	-7.678	2
54	MP1C	Mx	.0033	2
55	MP2A	Z	-2.2277	.25
56	MP2A	Mx	0	.25
57	MP2A	Z	-2.2277	4.75
58	MP2A	Mx	0	4.75
59	MP2B	Z	-2.2277	.25
60	MP2B	Mx	.000965	.25
61	MP2B	Z	-2.2277	4.75
62	MP2B	Mx	.000965	4.75
63	MP2C	Z	-2.2277	.25
64	MP2C	Mx	-.000965	.25
65	MP2C	Z	-2.2277	4.75
66	MP2C	Mx	-.000965	4.75

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
8	MP1B	Mx	.000768	4.75
9	MP1C	X	3.0722	.25
10	MP1C	Mx	.000768	.25
11	MP1C	X	3.0722	4.75
12	MP1C	Mx	.000768	4.75
13	MP4A	X	3.0722	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
14	MP4A	Mx	-.0015	.25
15	MP4A	X	3.0722	4.75
16	MP4A	Mx	-.0015	4.75
17	MP4B	X	3.0722	.25
18	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	4
46	MP1B	Mx	.001	4
47	MP1C	X	2.019	4
48	MP1C	Mx	.001	4
49	MP1A	X	7.678	2
50	MP1A	Mx	.0038	2
51	MP1B	X	7.678	2
52	MP1B	Mx	-.0019	2
53	MP1C	X	7.678	2
54	MP1C	Mx	-.0019	2
55	MP2A	X	2.2277	.25
56	MP2A	Mx	-.0011	.25
57	MP2A	X	2.2277	4.75
58	MP2A	Mx	-.0011	4.75
59	MP2B	X	2.2277	.25
60	MP2B	Mx	.000557	.25
61	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

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N7	N87B	N87C	N6	Y	Two Way	-.0052
2	N118	N141	N139	N117	Y	Two Way	-.0052
3	N90	N113	N111	N89	Y	Two Way	-.0052

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N7	N87B	N87C	N6	Y	Two Way	-.0129
2	N118	N141	N139	N117	Y	Two Way	-.0129
3	N90	N113	N111	N89	Y	Two Way	-.0129

Member Area Loads (BLC 84 : Structure Ev)

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

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N7	N87B	N87C	N6	Z	Two Way	-.000505
2	N118	N141	N139	N117	Z	Two Way	-.000505
3	N90	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]
1	N7	N87B	N87C	N6	X	Two Way	.000505
2	N118	N141	N139	N117	X	Two Way	.000505
3	N90	N113	N111	N89	X	Two Way	.000505

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	L...	MZ [k-ft]	LC
1	N3	...	1161.534	10	3173.112	13	2538.824	1	7.295	13	2.447	4	.83	4
2		...	-1166.446	4	-107.282	7	-2742.054	7	-1.719	7	-2.439	10	-.841	10
3	N87D	...	2285.338	9	3156.772	21	1417.827	1	.98	2	2.439	12	1.592	3
4		...	-2458.787	3	-111.78	3	-1312.822	7	-3.606	20	-2.431	6	-6.321	21
5	N115	...	2344.764	11	3159.256	17	1545.353	1	.988	12	2.428	8	6.25	17
6		...	-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		...	-5522.038	4	2197.856	66	-5502.011	7						

Joint Reactions

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N3	-72.013	2162.409	2538.824	6.151	.043	0
2	1	N87D	-874.862	452.992	1417.827	.516	1.487	-.545
3	1	N115	946.923	447.192	1545.353	.531	-1.533	.558
4	1	Totals:	.047	3062.593	5502.003			
5	1	COG (ft):	X: 0	Y: 1.422	Z: 0			
6	2	N3	-316.913	2009.193	2271.424	5.625	.192	.392
7	2	N87D	-2016.069	39.764	1405.593	.98	.136	.908
8	2	N115	-420.65	1013.631	1091.973	-.358	-2.424	2.313
9	2	Totals:	-2753.632	3062.588	4768.99			
10	2	COG (ft):	X: 0	Y: 1.422	Z: 0			

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
11	3	N3	-855.736	1591.356	1373.28	4.191	1.522	.706
12	3	N87D	-2458.787	-111.78	1343.507	.903	-.038	1.592
13	3	N115	-1463.435	1583.011	41.315	-1.464	-1.444	3.945
14	3	Totals:	-4777.959	3062.587	2758.102			
15	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			
25	5	COG (ft):	X: 0	Y: 1.422	Z: 0			
26	6	N3	-209.636	41.159	-2422.752	-1.192	.136	.387
27	6	N87D	-712.171	1016.57	-923.574	-1.837	-2.431	-1.473
28	6	N115	-1831.909	2004.877	-1422.928	-3.161	.199	4.663
29	6	Totals:	-2753.716	3062.606	-4769.254			
30	6	COG (ft):	X: 0	Y: 1.422	Z: 0			
31	7	N3	67.48	-107.282	-2742.054	-1.719	-.038	-.011
32	7	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			
40	8	COG (ft):	X: 0	Y: 1.422	Z: 0			
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	-5.383
43	9	N115	1622.419	451.625	22.638	-.735	1.473	-.122
44	9	Totals:	4777.958	3062.618	-2758.102			
45	9	COG (ft):	X: 0	Y: 1.422	Z: 0			
46	10	N3	1161.534	1026.75	-119.383	2.243	-2.439	-.841
47	10	N87D	2183.953	2000.109	-896.911	-2.49	.192	-5.128
48	10	N115	2176.549	35.755	1016.588	.283	.115	-1.232
49	10	Totals:	5522.036	3062.614	.295			
50	10	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	11	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			
60	12	COG (ft):	X: 0	Y: 1.422	Z: 0			
61	13	N3	-16.948	3173.112	393.405	7.295	.01	.049
62	13	N87D	-485.969	2725.244	529.962	-2.673	.389	-5.091
63	13	N115	502.929	2724.91	553.463	-2.745	-.403	5.042
64	13	Totals:	.012	8623.267	1476.83			
65	13	COG (ft):	X: 0	Y: 1.476	Z: 0			
66	14	N3	-88.125	3134.383	322.356	7.161	.054	.148
67	14	N87D	-784.37	2619.791	524.304	-2.555	.038	-4.724

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [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			
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			
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
84	17	Totals:	-1282.173	8623.268	-740.269			
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
88	18	N115	-239.993	3120.697	-241.817	-3.681	.052	6.087
89	18	Totals:	-739.085	8623.27	-1280.039			
90	18	COG (ft):	X: 0	Y: 1.476	Z: 0			
91	19	N3	14.989	2595.973	-1012.091	5.3	-.011	.045
92	19	N87D	-49.739	3011.925	-217.032	-3.489	-.389	-5.783
93	19	N115	34.736	3015.375	-247.709	-3.567	.392	5.735
94	19	Totals:	-.014	8623.272	-1476.832			
95	19	COG (ft):	X: 0	Y: 1.476	Z: 0			
96	20	N3	87.502	2634.579	-940.28	5.435	-.057	-.054
97	20	N87D	247.509	3117.594	-210.587	-3.606	-.038	-6.149
98	20	N115	404.051	2871.1	-129.105	-3.343	.628	5.291
99	20	Totals:	739.061	8623.273	-1279.972			
100	20	COG (ft):	X: 0	Y: 1.476	Z: 0			
101	21	N3	230.76	2740.289	-698.726	5.801	-.401	-.134
102	21	N87D	360.532	3156.772	-189.09	-3.588	.009	-6.321
103	21	N115	690.866	2726.212	147.674	-3.063	.382	4.874
104	21	Totals:	1282.159	8623.273	-740.142			
105	21	COG (ft):	X: 0	Y: 1.476	Z: 0			
106	22	N3	311.54	2885.103	-315.131	6.3	-.638	-.163
107	22	N87D	336.694	3118.081	-93.49	-3.433	.053	-6.256
108	22	N115	833.468	2620.088	408.696	-2.806	.029	4.593
109	22	Totals:	1481.702	8623.273	.075			
110	22	COG (ft):	X: 0	Y: 1.476	Z: 0			
111	23	N3	213.615	3029.563	69.356	6.798	-.39	-.129
112	23	N87D	197.207	3012.334	151.951	-3.178	.396	-5.974
113	23	N115	871.348	2581.373	518.96	-2.65	-.02	4.525
114	23	Totals:	1282.171	8623.271	740.267			
115	23	COG (ft):	X: 0	Y: 1.476	Z: 0			
116	24	N3	58.558	3134.78	314.57	7.162	-.038	-.05
117	24	N87D	-98.345	2868.682	417.108	-2.899	.634	-5.549
118	24	N115	778.87	2619.807	548.359	-2.63	-.063	4.689
119	24	Totals:	739.083	8623.269	1280.037			
120	24	COG (ft):	X: 0	Y: 1.476	Z: 0			
121	25	N3	-16.288	963.677	48.531	2.032	.021	.094
122	25	N87D	-155.181	948.903	136.553	-1.013	.069	-1.411
123	25	N115	171.468	1899.998	158.79	-2.653	-.098	4.026
124	25	Totals:	0	3812.578	343.874			

Joint Reactions (Continued)

	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			
126	26	N3	-32.157	954.137	31.406	1.999	.031	.119
127	26	N87D	-226.005	922.995	135.531	-.984	-.015	-1.321
128	26	N115	86.057	1935.444	131.125	-2.708	-.154	4.136
129	26	Totals:	-172.104	3812.577	298.062			
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			
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	-1.295
138	28	N115	-13.676	1997.177	4.112	-2.84	-.009	4.307
139	28	Totals:	-345.13	3812.578	-.021			
140	28	COG (ft):	X: 1.033	Y: 1.142	Z: .778			
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			
145	29	COG (ft):	X: 1.033	Y: 1.142	Z: .778			
146	30	N3	-24.065	831.336	-262.009	1.573	.026	.118
147	30	N87D	-145.138	983.94	-9.201	-1.159	-.175	-1.469
148	30	N115	-2.906	1997.302	-26.874	-2.883	.01	4.283
149	30	Totals:	-172.11	3812.578	-298.084			
150	30	COG (ft):	X: 1.033	Y: 1.142	Z: .778			
151	31	N3	-7.293	822.006	-281.685	1.541	.016	.093
152	31	N87D	-54.614	1019.16	-34.196	-1.214	-.115	-1.582
153	31	N115	61.901	1971.413	-27.998	-2.855	.092	4.196
154	31	Totals:	-.006	3812.579	-343.879			
155	31	COG (ft):	X: 1.033	Y: 1.142	Z: .778			
156	32	N3	8.654	831.538	-264.513	1.574	.006	.069
157	32	N87D	16.141	1045.08	-33.13	-1.243	-.031	-1.672
158	32	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
163	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			
166	34	N3	60.92	893.06	-118.855	1.787	-.134	.042
167	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			
170	34	COG (ft):	X: 1.033	Y: 1.142	Z: .778			
171	35	N3	36.999	928.529	-29.619	1.91	-.074	.05
172	35	N87D	3.898	1019.381	50.128	-1.137	.072	-1.629
173	35	N115	257.726	1864.669	151.899	-2.629	-.006	3.899
174	35	Totals:	298.623	3812.579	172.408			
175	35	COG (ft):	X: 1.033	Y: 1.142	Z: .778			
176	36	N3	.41	954.332	28.887	2	.011	.069
177	36	N87D	-64.653	984.123	111.481	-1.068	.129	-1.524
178	36	N115	236.346	1874.123	157.71	-2.624	-.016	3.939
179	36	Totals:	172.103	3812.578	298.078			
180	36	COG (ft):	X: 1.033	Y: 1.142	Z: .778			
181	37	N3	4.368	968.492	48.104	2.046	-.02	-.101

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
182	37	N87D	-164.274	1894.751	154.857	-2.685	.088	-3.974
183	37	N115	159.902	949.357	140.929	-1.005	-.078	1.422
184	37	Totals:	-.004	3812.6	343.889			
185	37	COG (ft):	X: -1.016	Y: 1.142	Z: .778			
186	38	N3	-11.546	959.026	31.08	2.013	-.01	-.076
187	38	N87D	-235.049	1868.803	153.81	-2.656	.004	-3.884
188	38	N115	74.487	984.771	113.187	-1.06	-.134	1.532
189	38	Totals:	-172.108	3812.6	298.077			
190	38	COG (ft):	X: -1.016	Y: 1.142	Z: .778			
191	39	N3	-45.227	933.076	-25.672	1.923	.073	-.057
192	39	N87D	-262.203	1859.205	150.289	-2.661	-.006	-3.842
193	39	N115	8.8	1020.319	47.776	-1.129	-.074	1.634
194	39	Totals:	-298.63	3812.6	172.393			
195	39	COG (ft):	X: -1.016	Y: 1.142	Z: .778			
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			
201	41	N3	-40.425	862.065	-203.656	1.677	.07	-.058
202	41	N87D	-222.6	1894.668	70.537	-2.762	-.099	-3.927
203	41	N115	-35.608	1055.867	-39.278	-1.23	.021	1.72
204	41	Totals:	-298.633	3812.601	-172.398			
205	41	COG (ft):	X: -1.016	Y: 1.142	Z: .778			
206	42	N3	-3.926	836.244	-262.34	1.587	-.014	-.077
207	42	N87D	-153.949	1929.981	9.311	-2.831	-.156	-4.032
208	42	N115	-14.239	1046.376	-45.04	-1.235	.03	1.679
209	42	Totals:	-172.113	3812.601	-298.069			
210	42	COG (ft):	X: -1.016	Y: 1.142	Z: .778			
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
217	44	N87D	7.266	1991.214	-14.529	-2.915	-.011	-4.234
218	44	N115	136.012	985.086	-18.478	-1.152	.169	1.482
219	44	Totals:	172.094	3812.602	-298.052			
220	44	COG (ft):	X: -1.016	Y: 1.142	Z: .778			
221	45	N3	62.494	862.238	-208.21	1.678	-.118	-.146
222	45	N87D	34.355	2000.826	-11.049	-2.91	-.001	-4.277
223	45	N115	201.768	949.538	46.891	-1.083	.108	1.38
224	45	Totals:	298.616	3812.602	-172.368			
225	45	COG (ft):	X: -1.016	Y: 1.142	Z: .778			
226	46	N3	81.33	897.774	-119.511	1.8	-.175	-.154
227	46	N87D	28.005	1991.324	10.824	-2.872	.009	-4.26
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
232	47	N87D	-5.182	1965.341	68.586	-2.809	.091	-4.191
233	47	N115	246.257	914.018	134.073	-.981	.013	1.294
234	47	Totals:	298.619	3812.601	172.423			
235	47	COG (ft):	X: -1.016	Y: 1.142	Z: .778			
236	48	N3	21.043	959.076	28.359	2.013	-.03	-.126
237	48	N87D	-73.762	1930.023	129.849	-2.74	.148	-4.087
238	48	N115	224.819	923.501	139.886	-.976	.004	1.335

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
239	48	Totals:	172.099	3812.601	298.094			
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	1.628
244	49	Totals:	-.004	3437.601	.007			
245	49	COG (ft):	X: -.682	Y: 1.267	Z: .431			
246	50	N3	-1.431	944.254	-96.342	2.071	-.002	-.007
247	50	N87D	-83.675	1245.588	49.594	-1.537	-.003	-2.091
248	50	N115	85.105	1247.758	46.75	-1.526	-.002	2.095
249	50	Totals:	-.001	3437.601	.001			
250	50	COG (ft):	X: 0	Y: 1.267	Z: .431			
251	51	N3	-1.592	1196.338	-112.034	2.605	-.002	-.007
252	51	N87D	-96.977	1188.112	57.805	-1.292	-.002	-2.229
253	51	N115	98.569	1188.587	54.229	-1.279	-.004	2.236
254	51	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			
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			
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			
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	-.064	-1.896
278	56	N115	-19.174	1093.035	-13.897	-1.204	-.002	2.103
279	56	Totals:	-214.548	3161.698	-123.874			
280	56	COG (ft):	X: 0	Y: 1.422	Z: 0			
281	57	N3	-21.906	1022.778	-206.493	2.18	.034	.008
282	57	N87D	-106.741	1051.395	15.724	-1.169	-.073	-1.957
283	57	N115	4.773	1087.525	-23.771	-1.207	.034	2.079
284	57	Totals:	-123.875	3161.698	-214.54			
285	57	COG (ft):	X: 0	Y: 1.422	Z: 0			
286	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			

Joint Reactions (Continued)

	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			
300	60	COG (ft):	X: 0	Y: 1.422	Z: 0			
301	61	N3	40.064	1058.779	-98.07	2.305	-.074	-.035
302	61	N87D	18.625	1086.888	14.679	-1.194	.034	-2.09
303	61	N115	189.056	1016.031	83.399	-1.082	.031	1.864
304	61	Totals:	247.744	3161.698	.009			
305	61	COG (ft):	X: 0	Y: 1.422	Z: 0			
306	62	N3	34.357	1079.395	-36.529	2.377	-.064	-.032
307	62	N87D	-13.413	1071.82	50.528	-1.158	.06	-2.049
308	62	N115	193.604	1010.483	109.873	-1.059	-.005	1.854
309	62	Totals:	214.548	3161.698	123.872			
310	62	COG (ft):	X: 0	Y: 1.422	Z: 0			
311	63	N3	19.077	1094.442	8.233	2.429	-.038	-.021
312	63	N87D	-64.842	1051.265	86.545	-1.118	.07	-1.988
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	-1.321
318	64	N115	96.941	710.509	95.803	-.728	-.065	1.325
319	64	Totals:	.002	2197.856	247.729			
320	64	COG (ft):	X: 0	Y: 1.422	Z: 0			
321	65	N3	-21.96	771.468	37.383	1.726	.035	.01
322	65	N87D	-143.07	695.293	107.412	-.719	.034	-1.269
323	65	N115	41.159	731.095	69.733	-.761	-.074	1.389
324	65	Totals:	-123.871	2197.856	214.529			
325	65	COG (ft):	X: 0	Y: 1.422	Z: 0			
326	66	N3	-37.053	756.329	-8.125	1.674	.062	.021
327	66	N87D	-168.092	689.835	98.057	-.722	-.001	-1.244
328	66	N115	-9.401	751.692	33.924	-.8	-.063	1.449
329	66	Totals:	-214.546	2197.856	123.856			
330	66	COG (ft):	X: 0	Y: 1.422	Z: 0			
331	67	N3	-42.485	735.713	-69.925	1.602	.071	.025
332	67	N87D	-164.051	695.36	71.946	-.744	-.037	-1.254
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
339	68	Totals:	-214.548	2197.856	-123.874			
340	68	COG (ft):	X: 0	Y: 1.422	Z: 0			
341	69	N3	-21.494	700.136	-176.227	1.477	.034	.01
342	69	N87D	-80.599	730.899	.083	-.82	-.073	-1.356
343	69	N115	-21.781	766.822	-38.396	-.862	.035	1.476
344	69	Totals:	-123.874	2197.857	-214.54			
345	69	COG (ft):	X: 0	Y: 1.422	Z: 0			
346	70	N3	-.69	694.705	-192.239	1.458	-.002	-.004
347	70	N87D	-23.563	751.392	-26.416	-.853	-.063	-1.421
348	70	N115	24.251	751.759	-29.076	-.845	.06	1.425
349	70	Totals:	-.002	2197.857	-247.731			
350	70	COG (ft):	X: 0	Y: 1.422	Z: 0			
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

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	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			
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			
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			
370	74	COG (ft):	X: 0	Y: 1.422	Z: 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			
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*Pnc...	phi*Pnt [..	phi*Mn y...	phi*Mn...	Cb	Eqn
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	y	15	124657....	139518	16.181	16.181	2.739	H1-...
3	M10	HSS4X4X4	.212	2....	14	.069	2....	y	15	136263....	139518	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	y	23	136263....	139518	16.181	16.181	1.66	H1-...
6	M46	PL1/2x6	.331	.516	12	.246	.516	y	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....	y	22	9823.122	23392.8	.558	1.069	1.114	H2-1
9	M76	PL3/8x6	.438	0	2	.202	0	y	18	70647.0...	72900	.57	9.113	1.229	H1-...
10	M77	PL3/8x6	.348	.167	8	.425	0	y	15	71583.5...	72900	.57	9.113	1.045	H1-...
11	M80	PL1/2x6	.113	.112	1	.174	0	y	11	96757.5...	97200	1.012	12.15	1.285	H1-...
12	M84	PL3/8x6	.468	0	12	.207	0	y	15	70647.0...	72900	.57	9.113	1.244	H1-...
13	M85	PL3/8x6	.326	.167	6	.428	0	y	23	71583.5...	72900	.57	9.113	1.068	H1-...
14	M91	PL1/2x6	.117	.112	1	.172	0	y	3	96757.5...	97200	1.012	12.15	1.273	H1-...
15	M52A	HSS4X4X4	.451	0	21	.096	0	y	23	124657....	139518	16.181	16.181	2.733	H1-...
16	M53	HSS4X4X4	.212	2....	22	.068	2....	y	23	136263....	139518	16.181	16.181	1.66	H1-...
17	M54	HSS4X4X4	.211	0	20	.069	0	y	19	136263....	139518	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....	y	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	y	14	70647.0...	72900	.57	9.113	1.046	H1-...
22	M64	PL3/8x6	.354	.167	4	.424	0	y	23	71583.5...	72900	.57	9.113	1.037	H1-...
23	M66	PL1/2x6	.107	.112	9	.176	0	y	7	96757.5...	97200	1.012	12.15	1.281	H1-...
24	M68	PL3/8x6	.447	0	8	.206	0	y	23	70647.0...	72900	.57	9.113	1.243	H1-...
25	M69	PL3/8x6	.328	.167	2	.425	0	y	19	71583.5...	72900	.57	9.113	1.052	H1-...
26	M71	PL1/2x6	.111	.112	3	.176	0	y	11	96757.5...	97200	1.012	12.15	1.378	H1-...
27	M76A	HSS4X4X4	.450	0	17	.095	0	y	19	124657....	139518	16.181	16.181	2.747	H1-...
28	M77A	HSS4X4X4	.212	2....	18	.068	2....	y	18	136263....	139518	16.181	16.181	1.66	H1-...
29	M78	HSS4X4X4	.212	0	16	.069	0	y	15	136263....	139518	16.181	16.181	1.66	H1-...

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

	Member	Shape	Code Check	Lo...	LC	Shear Check	Lo.....		LC	phi*Pnc...	phi*Pnt [...	phi*Mn y...	phi*Mn...	Cb	Eqn
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	y	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

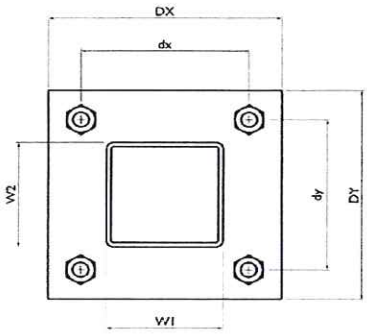
Client:	Verizon Wireless	Date:	12/19/2023
Site Name:	COATNEY HILL CT		
MDG #:	5000246420		
Fuze ID #:	16272134	Page:	1

Version 2.00

I. Mount-to-Tower Connection Check

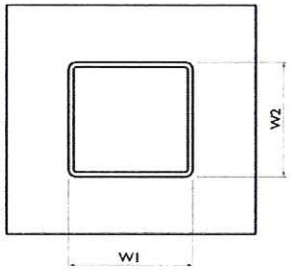
Custom Orientation Required	No
Tower Connection Bolt Checks	Yes
Bolt Orientation	Parallel

Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	7
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	7
Bolt Type:	A325N
Bolt Diameter (in):	0.625
Required Tensile Strength / bolt (kips):	6.4
Required Shear Strength / bolt (kips):	0.8
Tensile Capacity / bolt (kips):	20.7
Shear Capacity / bolt (kips):	12.4
Bolt Overall Utilization:	**30.7%**



Tower Connection Baseplate Checks	Yes

Connecting Standoff Member Shape:	Rect Tube
Weld Stiffener Configuration:	No Stiffeners
Plate Width, D_x (in):	10
Plate Height, D_y (in):	10
W1(in):	4
W2 (in):	4
Member Thickness (in):	0.25
Stiffener location a_1 (in):	
Stiffener location b_1 (in):	
Stiffener location a_2 (in):	
Stiffener location b_2 (in):	
F_y (ksi, plate):	36
Plate Thickness (in):	0.625
Length of Yield Line, L_y (in):	7.75
Bolt Eccentricity, e (in):	2.35
M_u (kip-in):	14.97
Phi*M_n (kip-in):	24.52
Plate Bending Utilization:	**61.1%**

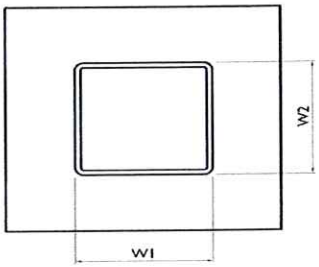


VzW SMART Tool© Vendor

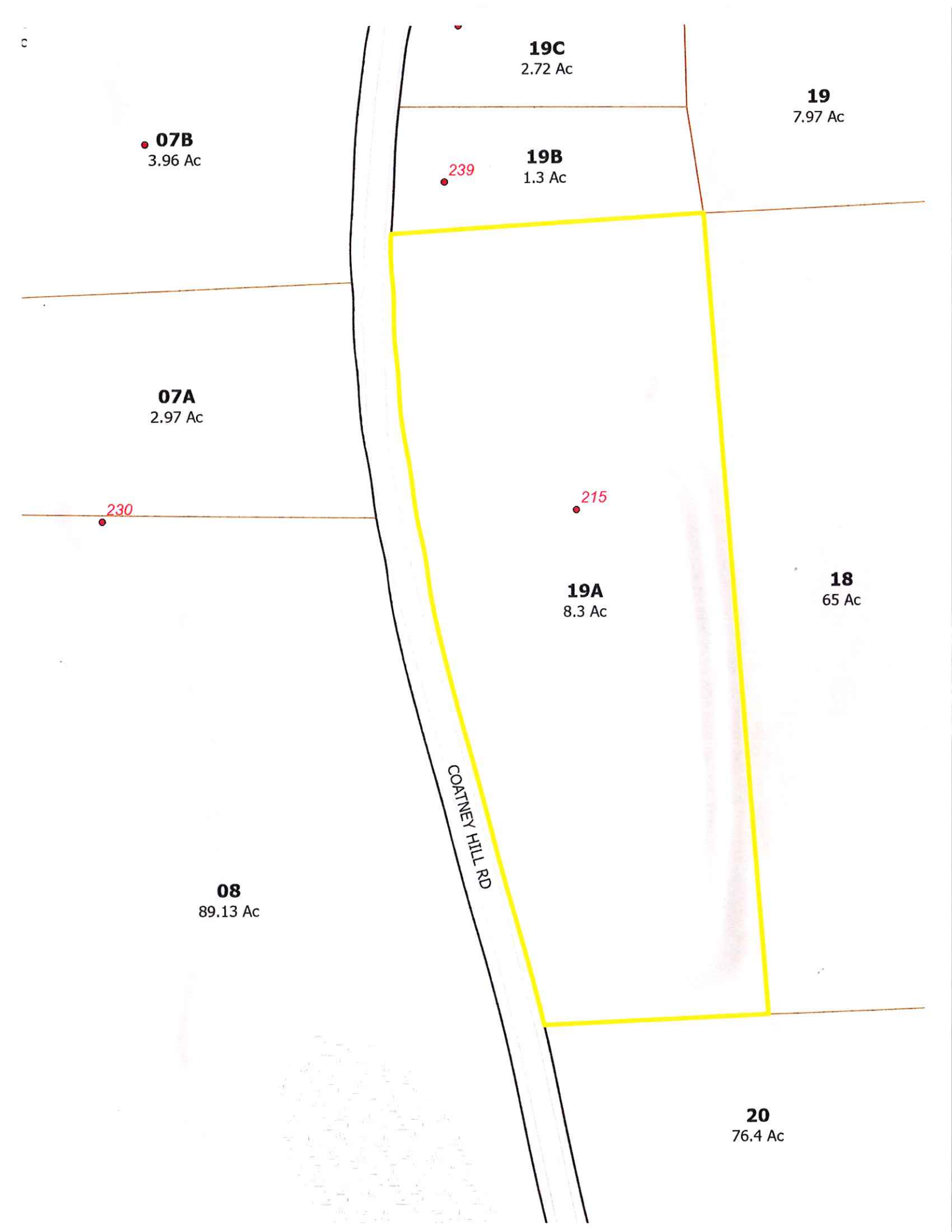
Client:	Verizon Wireless	Date:	12/19/2023
Site Name:	COATNEY HILL CT		
MDG #:	5000246420		
Fuze ID #:	16272134	Page:	2

Version 2.00

Tower Connection Weld Checks	Yes
Weld Shape:	Rectangle
Weld Stiffener Configuration:	None
Weld Size (1/16 in):	4
W1 (in):	4
W2 (in):	4
Weld Total Length (in):	16.00
Z_x (in^3/in):	21.33
Z_y (in^3/in):	21.33
J_p (in^4/in):	85.33
c_x (in)	2.25
c_y (in)	2.25
Required combined strength (kip/in):	2.76
Weld Capacity (kip/in):	5.57
Weld Utilization:	**49.6%**



ATTACHMENT 5


19C
2.72 Ac
19
7.97 Ac
07B
3.96 Ac
239
19B
1.3 Ac
07A
2.97 Ac
230
215
19A
8.3 Ac
18
65 Ac
COATNEY HILL RD
08
89.13 Ac
20
76.4 Ac

215 COATNEY HILL RD

Location	215 COATNEY HILL RD	**Mblu**	7276/ 32/ 19A/ /
Acct#	W0438400	**Owner**	WOODSTOCK TOWN OF
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	**Sale Price**	$0
Co-Owner	TOWN GARAGE	**Certificate**	1
Address	415 RT 169 WOODSTOCK , CT 06281-3039	**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

Building Attributes	
Field	**Description**

ATTACHMENT 6

Verizon/Coatney Hill

UNITED STATES POSTAL SERVICE®

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here ***Postmark with Date of Receipt.***
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103			
	Postmaster, per *(name of receiving employee)*		

USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Jay Swan, First Selectman Town of Woodstock 415 Route 169 Woodstock, CT 06281				
2.	Delia Fey, AICP, Town Planner Town of Woodstock 415 Route 169 Woodstock, CT 06281				
3.					
4.					
5.					
6.					