Robinson+Cole

KENNETH C. BALDWIN

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

Also admitted in Massachusetts and New York

June 26, 2024

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

Re: **Request of Cellco Partnership d/b/a Verizon Wireless for an Order to Approve the Shared Use of an Existing Tower at 62 Babbitt Hill Road, Pomfret, Connecticut**

Dear Attorney Bachman:

Pursuant to Connecticut General Statutes ("C.G.S.") §16-50aa, as amended, Cellco Partnership d/b/a Verizon Wireless ("Cellco") hereby requests an order from the Siting Council ("Council") to approve the shared use of an existing telecommunications tower located on a 53.9-acre parcel at 62 Babbitt Hill Road in Pomfret (the "Property"). The Property is owned by the Stoddard Family Trust. The tower is owned by SBA Communications Corp. ("SBA"). Cellco identifies this site as its "Pomfret South Facility". The existing 168-foot monopole tower was approved by the Town of Pomfret ("Town") for SBA in April of 1999. A copy of the Town's tower approval is included in Attachment 1.

Cellco requests that the Council find that the proposed shared use of the existing SBA tower satisfies the criteria of C.G.S § 16-50aa and issue an order approving this request. A copy of this filing is being sent to Pomfret's First Selectman, Maureen Nicholson and Town Planner, James Rabbitt. A copy of this letter is being sent to the owner of the Property.

Background

Cellco is licensed by the Federal Communications Commission ("FCC") to provide wireless services throughout the State of Connecticut. Cellco and SBA have agreed to the proposed shared use of the Babbitt Hill Road tower and the installation of equipment on the ground near the base of the tower pursuant to mutually acceptable terms and conditions. SBA

has authorized Cellco to apply for all necessary permits and approvals that may be required to share the existing tower. (*See* Attachment 2).

Cellco proposes to install up to eighteen (18) antennas and twelve (12) remote radio heads ("RRHs") on an antenna platform at a centerline height of 125 feet above ground level ("AGL"). Cellco will also install two equipment cabinets and a 50-kW diesel-fueled backup generator on the ground near the base of the tower and within the existing fenced compound. Included in Attachment 3 are Cellco's project plans showing the location of Cellco's proposed site improvements. Attachment 4 contains specifications for Cellco's proposed antennas, RRHs and backup generator.

C.G.S. § 16-50aa(c)(1) provides that, upon written request for approval of a proposed shared use, "if the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns, the council shall issue an order approving such shared use." Cellco respectfully submits that the shared use of the tower satisfies these criteria.

A. Technical Feasibility. According to a Structural Analysis Report ("SA") dated February 20, 2024 the existing tower is structurally capable of supporting Cellco's antennas, RRHs, antenna platform and related equipment. Also, according to a Post-Modification Antenna Mount Analysis Report ("MA") dated April 1, 2024, the proposed antenna mounting system with certain modification can support Cellco's facility modifications. Copies of the SA and MA are included in Attachment 5. Please note that initially, Cellco will install nine (9) antennas and six (6) RRHs on existing tower and its antenna mounting platform. Should Cellco decide to install the additional nine (9) antennas and/or six (6) RRHs referenced in the SA, Cellco will seek the Council's approval through the exempt modification process and provide updated information as required.

B. Legal Feasibility. Under C.G.S. § 16-50aa, the Council has been authorized to issue orders approving the shared use of an existing tower, such as the existing Babbitt Hill Road tower. This authority complements the Council's prior-existing authority under C.G.S. § 16-50p to issue orders approving the construction of new towers that are subject to the Council's jurisdiction. In addition, § 16-50x(a) directs the Council to "give such consideration to other state laws and municipal regulations as it shall deem appropriate" in ruling on requests for the shared use of existing tower and facility. Under the statutory authority vested in the Council, an order by the Council approving the requested shared use would permit the Applicant to obtain a building permit for the proposed installations.

C. Environmental Feasibility. The proposed shared use of the existing tower

would have minimal environmental effects, for the following reasons:

1. The proposed installation of nine (9) antennas and six (6) RRHs on a lower profile antenna platform at a height of 125 feet AGL on the existing 168-foot tower would have an insignificant incremental visual impact on the area around the Property. As mentioned above, all of Cellco's equipment will be located within the existing fenced compound on the Property near the base of the tower. Cellco's shared use of the existing tower would, therefore, not cause any significant change or alteration in the physical or environmental characteristics of the existing facility.

2. Noise associated with Cellco's proposed facility will comply with State and local noise standards. Noise associated with the backup generator is exempt from state and local noise standards.

3. Operation of Cellco's antennas at this site would not exceed the RF emissions standards adopted by the Federal Communications Commission ("FCC"). Included in Attachment 6 of this filing is a Calculated Radio Frequency Emissions Report that demonstrates that the modified facility will operate well within the FCC's safety standards.

4. Under ordinary operating conditions, the proposed installation would not require the use of any water or sanitary facilities and would not generate air emissions or discharges to water bodies or sanitary facilities. After construction is complete the proposed installations would not generate any increased traffic to the facility other than periodic maintenance visits to the cell site.

The proposed shared use of the existing tower would, therefore, have a minimal environmental effect, and is environmentally feasible.

D. Economic Feasibility. As previously mentioned, Cellco has entered into an agreement with SBA for the shared use of the existing tower subject to mutually agreeable terms. The proposed tower sharing is, therefore, economically feasible.

E. Public Safety Concerns. As discussed above, the tower is structurally capable of supporting Cellco's antennas, antenna mounting system, RRHs and all related equipment. Cellco is not aware of any public safety concerns relative to the proposed sharing of the existing Babbitt Hill Road tower. In fact, the provision of new and improved wireless service through

Cellco's shared use of the existing tower would enhance the safety and welfare of area residents and members of the general public living in and traveling through the Town of Pomfret.

A Certificate of Mailing verifying that a copy of this filing was sent to the municipal officials, the Property owner, and SBA, the tower owner is included in Attachment 7.

Conclusion

For the reasons discussed above, the proposed shared use of the existing tower at the Property satisfies the criteria stated in C.G.S. § 16-50aa and advances the General Assembly's and the Council's goal of preventing the unnecessary proliferation of towers in Connecticut. The Applicant, therefore, respectfully requests that the Council issue an order approving the proposed shared use.

Thank you for your consideration of this matter.

Very truly yours,

Kenneth C. Baldwin

Enclosures
Copy to:
Maureen Nicholson, First Selectman
James Rabbitt, Town Planner
The Stoddard Family Trust, Property Owner
SBA Communications Corp., Tower Owner
Tim Parks

ATTACHMENT 1

TOWN OF POMFRET
BOARD OF SELECTMEN'S MINUTES
MEETING OF APRIL 19, 1999

Present: David Patenaude, First Selectman, and Charles Balch, Selectman. Not Present: Thomas Pahl, Selectman. Others Present: Scott Thomae, SBA Inc., Kevin Huff, and Ford Fay.

Dave Patenaude opened the meeting at 8:00 A.M. The minutes of the previous meeting of April 5, 1999 were duly approved.

Citizen Comments: Kevin Huff commented that he was concerned about person(s)' inappropriate interference or interruptions in Town Board/Commission meetings.

Correspondence: None

Current Business

1. **Road Issues-No discussion**
2. **Selectmen's Goals 1999-No discussion**
3. **Recreation Committee-No discussion**
4. **Ad Hoc Traffic Committee-Update**

A plan was submitted to the Board of Finance for the bus turn-around. The Board of Education was told to included the expenditure in their 1999-2000 proposed budget.

5. **Positively Pomfret Day-No Update**
6. **Steak-Umm-Assessment Appeal-Tabled Until Next Meeting**

New Business

1. **Kevin Huff-357 Orchard Hill Rd: Trailer Permit**

Kevin Huff was present with his trailer permit application. Kevin said this is for a trailer that already exists on the property but he never finished the process. The septic is installed and NEDDH has already signed off on the application. Dave reviewed the trailer ordinance with Mr. Huff. A plot plan is needed, a building permit must be taken out and the Building Inspector must sign off on the trailer permit application, and the $50.00 application fee must be paid.

2. **SBA Inc.-Scott Thomae: Telecommunications Tower Application-Babbitt Hill Rd.**

Scott Thomae of SBA Inc. submitted a telecommunications tower application with all attached documentation. SBA is to build the tower only; they are not a communications company. The tower will hold up to five carriers. Mr. Thomae reviewed the proposal and findings section with the Selectmen. He reviewed the site maps for existing coverage, which included PCS digital systems and existing cellular coverage, and the projected coverage done by an electrical engineer. This showed that a second tower in Pomfret will not be needed. Mr. Thomae reviewed the basic structural design, tower specifications, copy of the lease showing the improvements to restore the area back to normal state, specifications for panel antennas, letters of integrity for safety purposes for monopole communication towers, power density study which shows maximum exposure scenario at 21%, graphs showing that the frequency won't interfere with other carriers in Town, and the map showing the places where the balloon test could be seen in Town.

The findings show that the application was in compliance in all sections except section 3.6 'Surety Bond". Mr. Thomae asked that the Selectmen, in lieu of a donations of $10,000 to the Town of Pomfret, waive the surety bond requirements. The Selectmen would like a mylar of the

plan filed in the land records. Wetlands approval has been received. Dave made motion that the requirement for a surety bond in section 3.6 of the "Town of Pomfret-Wireless Telecommunication Regulations Ordinance" for the proposed tower by SBA, Inc. be waived. Chuck seconded and the motion was approved all in favor. Motion was made by Dave that the application by SBA, Inc. to construction a telecommunications tower on Babbitt Hill Rd. be approved as presented. Motion was seconded by Chuck and approved unanimously. Mr. Thomae is to get in touch with the Building Inspector. Mr. Thomae submitted a check for $10,000 in lieu of the bond requirement to be contributed to the Town to be used for recreation or to purchase land for recreation purposes. The check also included $1,120.00 for building inspection fees.

3. **CT Small Cities Community Development Block Grant-Joint Community Application: Resolution with Town of Putnam and Ten NECCOG Towns**

Dave explained that the grant is for economic opportunities and is being submitted by the Town of Putnam. The resolutions give the Town of Putnam and NECCOG the authority to act on our behalf in regards to this grant. Motion to approve the resolution for cooperative agreement was made by Chuck. Dave seconded and the motion was approved all in favor.

Tax Refunds/Abatements: None

Gun Permits: None

Approval to Pay Bills: Checks #12548-12550 dated 3/30/99 for $133.76; #12553-12565 dated 4/2-4/14/99 for $7615.95; and bill checks to be dated 4/19/99 for $8,558.02. Motion was duly approved to pay the bills as presented.

Adjournment: The meeting was duly adjourned at 9:05 A.M.

Respectfully submitted,

Cheryl A. Grist

Cheryl A. Grist, Clerk

TOWN ON POMFRET
APPLICATION FOR WIRELESS TELECOMMUNICATION STRUCTURES

Permit Number: 99-01
Date Submitted: 4/19/99
Received by: BEB
(Section 2.3.1) Fee: #1000.00 Pd

(Procedures for this application are explained in the Wireless Telecommunication ordinance)

APPLICANT TO FILL OUT THIS SECTION - Please print

Applicant's Name [illegible] Phone (617) 302-3344
Address 125 [illegible] Fax # (860) 453-[illegible]

Co-Applicant's Name [illegible] Phone
Address [illegible] Fax #

If there is an agent for the applicant, please fill in name below.
Name [illegible] Phone [illegible]
Address [illegible] Fax #

LOCATION OF TOWER
Owner of the land [illegible] Phone (860) 974-[illegible]
Address 62 PUTNAM HILL ROAD
Street Name PUTNAM HILL ROAD Map 25 Block 12 Lot 35 (Get from Assessor's office)
Nearest roads/intersections: [illegible]

PROPOSED ACTIVITY: (check those that apply)
☑ Commercial ☐ Industrial ☑ Other-Specify TELECOMMUNICATIONS FACILITY
☑ New Construction ☐ Addition ☐ Alteration

Please provide the following information with this application:

a. Site Plan Ingredients (section 3.2) Five (5) copies of site plan - 24" x 36" at a scale of 1" = 40' prepared by a professional land surveyor licensed in the State of Connecticut.
b. Name of Connecticut Registration Number of Land Surveyor and Professional Engineer. All final plans must have original signatures on maps.
c. Soil Erosion and Sediment Control Plan (section 3.3) a map of 1" = 50'
d. Name of Soil Scientist [illegible]
e. Architectural Plans (see section 4.1.2)
f. Fees: $1,000.00. Please note: If the cost to process and review the application exceeds the initial fee of $1000.00, the applicant shall pay all associated costs incurred by the Commision and/or the Town prior to the issuance of a permit. (Section 2.3).

The undersigned hereby acknowledges that this application, to the best of his/her knowledge, conforms to the Wireless Telecommunications Regulations Ordinance of the Town of Pomfret and that approval of the plan is contingent upon compliance with all requirements of said ordinance. The undersigned hereby authorizes the Pomfret Board of Selectmen, or its agent, to enter upon the property for the purpose of inspection and enforcement of said regulations. The undersigned warrants and guarantees that all of the improvements as shown on the final approved site plan map will be installed in a good and workmanlike manner, and individually and severally guarantee to provide all necessary funds with respect thereto.

Signed [illegible] (Applicant) Dated 4/13/99

Signed Joseph P. Stoddard (Property Owner) Dated 4/14/99

Note: Before site plan approval is granted, the applicant shall file a surety with the Board of Selectmen payable to the Treasurer of the Town of Pomfret and in a form satisfactory to the Town Counsel and in an amount approved by the Board of Selectmen as sufficient to guarantee completion of those items specified by the Board of Selectmen and in conformity with the provisions of these Regulations or any amendments thereto in force at the time of filing. Such surety shall be held by the Town Clerk who shall not be authorized by the Board of Selectmen to release such bond until written certification has been received from the Building Official that all of the requirements of these Regulations have been fully satisfied.

Signed [illegible] Selectmen or Commission Date 4-21-99

wfcupp.wpd

Public Hearing: Yes ✓ No Date: N/A

Bond Amount: *None-Waived at Selectmen's Meeting 4/19/99

*Donation to Town for Recreation Purposes Amount of $10,000.00

Applicant has complied with all requirements of the Ordinance:

Yes: ____ No: ✓ If NO Explain: Selectmen waived bond amount at meeting of 4/19/99

ATTACHMENT 2

SBA Communications Corporation
134 Flanders Road
Suite 125
Westborough MA 01581

T + 508 251.0720
F + 508 251.1755

sbasite.com

LETTER OF AUTHORIZATION

SBA ID / NAME: CT01364-S / Pomfret South. CT
SITE ADDRESS: 62 Babbitt Hill Road Pomfret. CT 06259
LICENSEE: Cellco Partnership D/B/A Verizon Wireless

I. Dulce Lara. Site Development Services Specialist at SBA Communications[1]. owner of the telecommunications facility identified above, do hereby authorize Cellco Partnership D/B/A Verizon Wireless. its successors and assignees, and/or its agent, (collectively "the Licensee") to act as SBA Communications' non-exclusive agent for the sole purpose of filing and consummating any land-use or building permit applications(s) as may be required by the applicable permitting authorities for Licensee's telecommunications' installation.

We understand that this application may be denied, modified, or approved with conditions. The above authorization is limited to the acceptance by Licensee only of conditions related to Licensee's installation and any such conditions of approval or modifications will be Licensee's sole responsibility.

SBA COMMUNICATIONS

BY: _____
DULCE LARA
Site Development Services Specialist

[1] SBA Communications includes all of the "SBA Tower Entities"

ATTACHMENT 3

ANTENNA MOUNT REINFORCEMENT NOTE:
PRIOR TO THE COMMENCEMENT OF THE WORK SHOWN ON THESE DRAWINGS, THE PROPOSED VERIZON TRI-SECTOR ANTENNA MOUNTING FRAME LOCATED ON THE EXISTING MONOPOLE SHALL BE MODIFIED AS PER THE MOUNT MODIFICATION DRAWINGS PREPARED BY COLLIERS ENGINEERING & DESIGN (PROJECT #24777019).

SBA APPROVED

By Stephen Roth at 2:58:27 PM, 6/7/2024

verizon

20 ALEXANDER DRIVE, 2nd FLOOR
WALLINGFORD, CT 06492

POMFRET SOUTH CT

62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

PROJECT TYPE: WIRELESS TELECOMMUNICATIONS COLLOCATION ON EXISTING 168'± MONOPOLE

SUPPORTING DOCUMENTS

RADIO FREQUENCY (RF) DESIGN DATE: 05/13/24

ANTENNA MOUNT STRUCTURAL ANALYSIS DATE: 04/01/24 (BY COLLIERS ENGINEERING & DESIGN)

ANTENNA SUPPORT STRUCTURE (168'± MONOPOLE) STRUCTURAL ANALYSIS DATE: 02/20/24 (BY SBA COMMUNICATIONS CORPORATION)

SITE INFORMATION

VERIZON LOCATION CODE:	780742
VERIZON SITE NAME:	POMFRET SOUTH CT
SBA SITE NUMBER:	CT01364-S
SBA SITE NAME:	POMFRET
SBA COLLO APP NUMBER:	246220, V1
MDG LOCATION ID:	5000017542
FUZE PROJECT ID:	16118821
SITE ADDRESS:	62 BABBITT HILL ROAD POMFRET, CT 06259
PROPERTY OWNER:	STODDARD FAMILY TRUST C/O JOLIN STODDARD TRUSTEE 62 BABBITT HILL ROAD POMFRET CENTER, CT 06259
TOWER OWNER:	SBA TOWERS, LLC 8051 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-995-7670
COUNTY	WINDHAM COUNTY, CT
ZONING DISTRICT:	RR
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	168'±
STRUCTURE HEIGHT W/APPURTENANCE:	180'±
GROUND ELEVATION:	547'±
TOTAL AMSL:	727'±
SITE CONTROL POINT:	CENTER OF EXISTING MONOPOLE N 41°-52'-12.81" (41.870224°) (NAD 83) W 71°-56'-17.67" (71.988241°) (NAD 83)
ARCHITECT/ENGINEER:	CHAPPELL ENGINEERING ASSOCIATES, LLC 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752

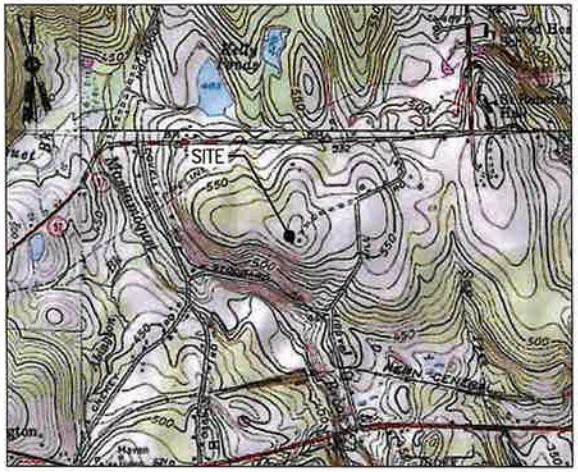
GENERAL NOTES

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 CONTRACTOR'S 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 EAST 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 69 FOR CT-74 TOWARD US-44/WILLINGTON/PUTNAM. TURN RIGHT ONTO CT-74 EAST. TURN LEFT ONTO US-44 EAST. TURN LEFT ONTO BABBITT HILL ROAD. TURN LEFT. SITE IS LOCATED STRAIGHT AHEAD.

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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 OWNER'S 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 POTABLE 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

INSTALL:

- 1 LOW-PROFILE PLATFORM W/MODS
- 9 ANTENNAS
- 6 RADIOS
- 3 DIPLEXERS
- 1 JUNCTION BOX (12 CVP)
- 2 HYBRID CABLES & ASSOCIATED JUMPERS
- 1 ICE BRIDGE
- 1 GPS ANTENNA & ASSOCIATED CABLE
- 1 12'-2" CONCRETE PAD
- 1 EQUIPMENT CABINET
- 1 BATTERY CABINET
- 1 11'-10"x12'-6" ICE CANOPY
- 150kW DIESEL GENERATOR
- 1 HOFFMAN BOX
- 1 POWER TRANSFER LOAD CENTER

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. 25997
LICENSED
PROFESSIONAL CIVIL ENGINEER
4/30/2024

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	04/30/24	CONSTRUCTION REVISED	CMC
3	04/03/24	CONSTRUCTION REVISED	CMC
2	04/02/24	CONSTRUCTION REVISED	CMC
1	03/04/24	ISSUED FOR CONSTRUCTION	CMC
0	02/07/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
62 BABBITT HILL ROAD
POMFRET, CT 06258

VZW LOCATION CODE: 780742
MDG LOCATION ID: 5000017542
FUZE PROJECT ID: 16118821

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 BEARING 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 (NWST0123 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 301 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, U.N.O.

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, U.N.O, IN ACCORDANCE WITH ACI 301 SECTION 4.2.6.

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 HILTI/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 MEP 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 23252-000-3PS-GE7-00001 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 (¾") AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.

4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ½" 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 HILTI/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 30/35) 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 (#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; 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 HOFFMAN 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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20 ALEXANDER DRIVE, 2ND FLOOR
WALLINGFORD, CT 06492
(203) 741-7336

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
4/30/2024

CHECKED BY: JMF

APPROVED BY: JMF

SUBMITTALS

REV	DATE	DESCRIPTION	BY
4	04/30/24	CONSTRUCTION REVISED	CMC
3	04/02/24	CONSTRUCTION REVISED	CMC
2	04/02/24	CONSTRUCTION REVISED	CMC
1	03/04/24	ISSUED FOR CONSTRUCTION	CMC
0	02/27/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS

POMFRET SOUTH CT

(P) BARRETT HILL ROAD
POMFRET, CT 06258

VZW LOCATION CODE:	769742
MDG LOCATION ID:	80000N 7642
FUZE PROJECT ID:	14116881

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN01

SITE PLAN
SCALE: 1" = 100'-0"
1
A01
0 100' 200' 300'

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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
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(508) 481-7400
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JAMES M. FITZGERALD
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CHECKED BY: JMT
APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	04/26/24	CONSTRUCTION REVISED	CMC
3	04/03/24	CONSTRUCTION REVISED	CMC
2	04/28/23	CONSTRUCTION REVISED	CMC
1	03/08/23	ISSUED FOR CONSTRUCTION	CMC
0	02/07/23	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
62 BARRETT HILL ROAD
POMFRET, CT 06250

VZW LOCATION CODE:	783742
MDG LOCATION ID:	88983783742
FUZE PROJECT ID:	16119821

SHEET TITLE
SITE PLAN

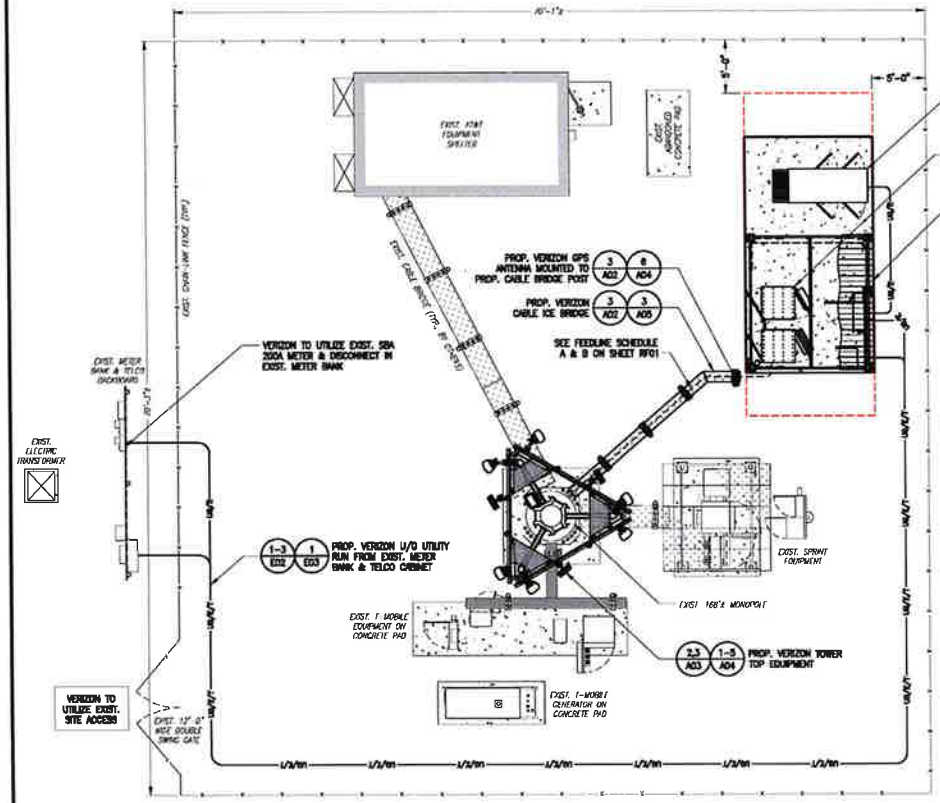
SHEET NUMBER
A01

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.

SPECIAL CONSTRUCTION WORK NOTE (HAND DUG UTILITY TRENCH EXCAVATION REQUIRED):
EXISTING UNDERGROUND UTILITY LOCATIONS ARE UNKNOWN. GENERAL CONTRACTOR SHALL HAND-EXCAVATE TO REQUIRED SUB-GRADE DEPTH SUFFICIENT TEST HOLES OR AS DIRECTED/REQUIRED BY SBA REGIONAL SITE MANAGER SHALL HAND-EXCAVATE ALL PROPOSED UNDERGROUND UTILITY TRENCHES. GENERAL CONTRACTOR RESPONSIBLE FOR ANY REQUIRED SPECIAL TEMPORARY PROTECTION OF EXISTING UNDERGROUND UTILITIES, PHYSICAL DAMAGE REPAIR, AND SERVICE RESTORATION.

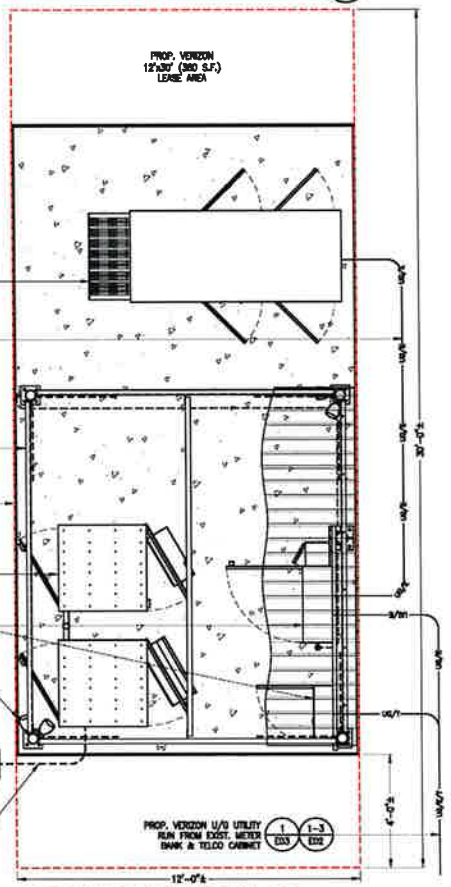
ANTENNA MOUNT REINFORCEMENT NOTE:
PRIOR TO THE COMMENCEMENT OF THE WORK SHOWN ON THESE DRAWINGS, THE PROPOSED VERIZON TRI-SECTOR ANTENNA MOUNTING FRAME LOCATED ON THE EXISTING MONOPOLE SHALL BE MODIFIED AS PER THE MOUNT MODIFICATION DRAWINGS PREPARED BY COLLIERS ENGINEERING & DESIGN (PROJECT #24777019).

PROPOSED EQUIPMENT LOCATION PHOTO (2 / A02)
SCALE: N.T.S.



COMPOUND PLAN (1 / A01)
SCALE: 3/16" = 1'-0"
0 5'-4" 10'-8" 16'-0"

PROP. VERIZON BOMF DIESEL GENERATOR MOUNTED TO PROP. 12'x22' CONCRETE PAD WITHIN PROP. 12'-30" (380 S.F.) LEASE AREA (3/A02, 1,4/A05)
PROP. VERIZON EQUIPMENT MOUNTED TO PROP. 12'x22' CONCRETE PAD WITHIN PROP. 12'-30" (380 S.F.) LEASE AREA (3/A02, 1/A05)
PROP. VERIZON 11'-10"x12'-6" ICE CANOPY OVER PROP. EQUIPMENT (3/A02, 1-3/A05)
PROP. VERIZON BOMF DIESEL GENERATOR MOUNTED TO PROP. CONCRETE PAD (1,4/A05)
PROP. VERIZON U/G UTILITY RUN FROM EXIST. GENERATOR TO PROP. POWER CABINET (1/E03, 1-3/E02)
PROP. VERIZON 11'-10"x12'-6" ICE CANOPY OVER PROP. EQUIPMENT (1-3/A05)
PROP. VERIZON 12'x22' REINFORCED CONCRETE PAD (2/A05)
PROP. VERIZON EQUIPMENT MOUNTED TO PROP. CONCRETE PAD (1/A05)
PROP. VERIZON POWER CABINET & HOFFMAN BOX MOUNTED TO PROP. H-FRAME (8/A06, 1/A05)
PROP. VERIZON DUAL FLOOD LIGHT MOUNTED TO PROP. ICE CANOPY POST (TOTAL OF 2) (1,4/E02, 1/E03)
PROP. VERIZON CABLE ICE BRIDGE (3/A05)
PROP. VERIZON GPS ANTENNA MOUNTED TO PROP. CABLE BRIDGE POST (8/A04)
SEE FEEDLINE SCHEDULE A & B ON SHEET RF01



PROPOSED EQUIPMENT PLAN (3 / A02)
SCALE: 1/2" = 1'-0"
0 2'-0" 4'-0" 6'-0"

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

SBA
SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
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4/30/2024

CHECKED BY: JMT
APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	04/30/24	CONSTRUCTION REVISED	CHC
3	04/03/24	CONSTRUCTION REVISED	CHC
2	04/05/23	CONSTRUCTION REVISED	CHC
1	03/08/23	ISSUED FOR CONSTRUCTION	CHC
0	02/07/23	ISSUED FOR REVIEW	CHC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
92 BARRITT HILL ROAD
POMFRET, CT 06258

VZW LOCATION CODE:	7697402
MDG LOCATION ID:	88888197402
FUZE PROJECT ID:	10118821

SHEET TITLE
COMPOUND & EQUIPMENT PLAN

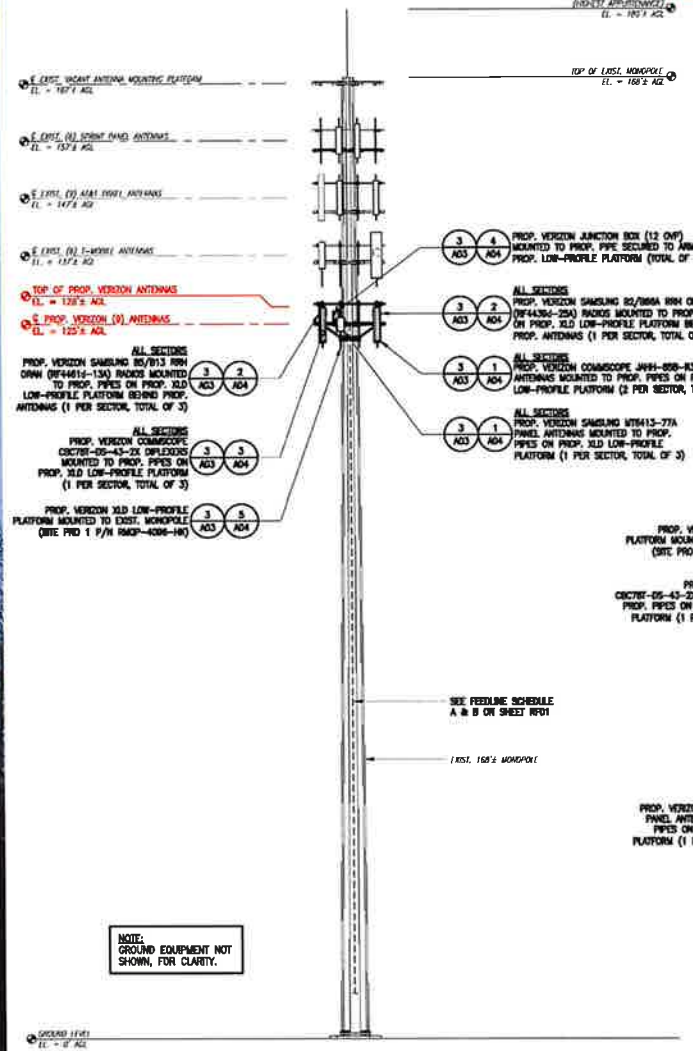
SHEET NUMBER
A02

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.

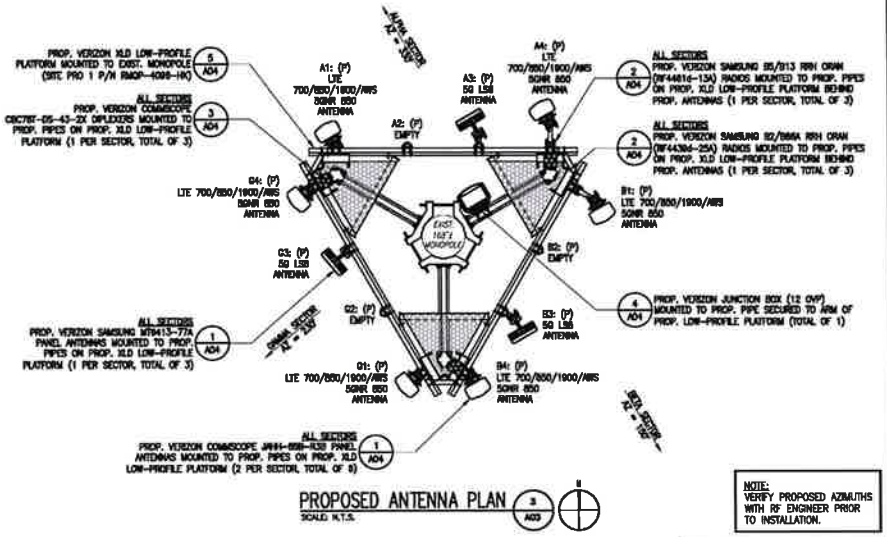
ANTENNA MOUNT REINFORCEMENT NOTE:
PRIOR TO THE COMMENCEMENT OF THE WORK SHOWN ON THESE DRAWINGS, THE PROPOSED VERIZON TRI-SECTOR ANTENNA MOUNTING FRAME LOCATED ON THE EXISTING MONOPOLE SHALL BE MODIFIED AS PER THE MOUNT MODIFICATION DRAWINGS PREPARED BY COLLIERS ENGINEERING & DESIGN (PROJECT #24777019).

EXISTING TOWER PHOTO (1/A03)
SCALE: N.T.S.



NOTE:
GROUND EQUIPMENT NOT SHOWN, FOR CLARITY.

TOWER ELEVATION (2/A03)
SCALE: 1" = 10'-0"
0 10' 20' 30'



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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(508) 251-0720

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STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25987
LICENSED
PROFESSIONAL CIVIL ENGINEER
4/30/2024

CHECKED BY: JMF
APPROVED BY: JMF

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	04/26/24	CONSTRUCTION REVISED	CMC
3	04/12/24	CONSTRUCTION REVISED	CMC
2	04/05/23	CONSTRUCTION REVISED	CMC
1	03/08/23	ISSUED FOR CONSTRUCTION	CMC
0	02/07/23	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
92 BARRITT HILL ROAD
POMFRET, CT 06250

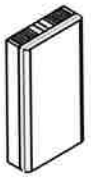
VZW LOCATION CODE:	769742
MDG LOCATION ID:	05969769A2
FUZE PROJECT ID:	16118882

SHEET TITLE
TOWER ELEVATIONS & ANTENNA PLAN

SHEET NUMBER
A03

COMMSCOPE JAHH-65B-R3B ANTENNA

DIMENSIONS: 72.0"H x 13.8"W x 8.2"D
WEIGHT: 84.4 lbs
QUANTITY: 2 PER SECTOR, TOTAL OF 6
SECTORS: ALPHA, BETA, GAMMA



SAMSUNG MT6413-77A ANTENNA

DIMENSIONS: 26.9"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 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

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

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

COMMSCOPE CBC78T-DS-43-2X
4-PACK 700/850MHz DIPLEXER

DIMENSIONS: 8.4"H x 8.8"W x 8.8"D
WEIGHT: 20.7 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3
SECTORS: ALPHA, BETA, GAMMA

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

Procedure

Mounting Procedures

4.1 A mounting base is delivered with the unit. The base allows either wall/ladder or pole mounted installation. See picture to identify the holes for each mode listed below mentioned.

4.2 *Option 1: Pole Mount*
Using supplied hardware, mount bracket to 2" to 4" diameter pole.

4.3 *Option 2: Unistrut*

4.4 *Option 3: Monopole*
Use 1" stainless steel bands (not supplied) through slots on bracket to mount to Monopole.

Gland/Insert Definitions

5.1 See picture to identify Base Gland Assembly Definitions

Assembled in unit as shipped:

Qty	Connector Size	Pos	Insert P/N	Insert Hole	Cable Type
2	M75	A	[illegible]	42mm	6x12 RL
4	M75	B	[illegible]	2x 12.5mm	1x7

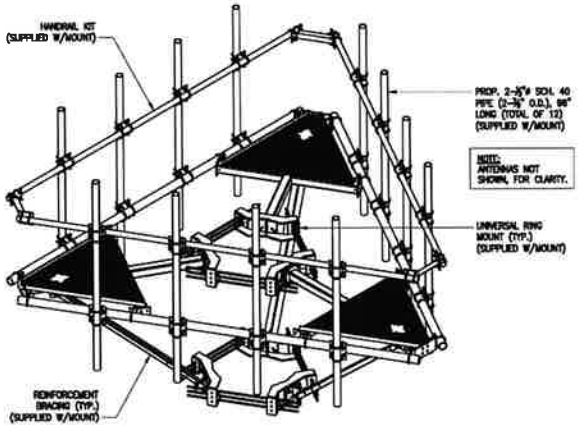
Included in kit shipped with unit:

Qty	Connector Size	Insert P/N	Insert Hole	Cable Type	Purpose	Pos
2	M75	[illegible]	42mm	6x12 RL	2 1-hole RET push-fit/Pull	B
2	M75	[illegible]	2x 28.5mm	2x12 DC	2 stands to wall 76.14 wall DC	B
1	M75	[illegible]	2x 12.5mm	2x12 Fiber	1 gland fit 2 x 12 fiber trunk	B
1	M75	[illegible]	2x 8.5mm	7.6 in	1 gland fit 7 armored cable	F

FIBER JUNCTION BOX

DIMENSIONS: 29.68"H x 16.5"W x 12.6"D
WEIGHT: 32.0 lbs
QUANTITY: TOTAL OF 1

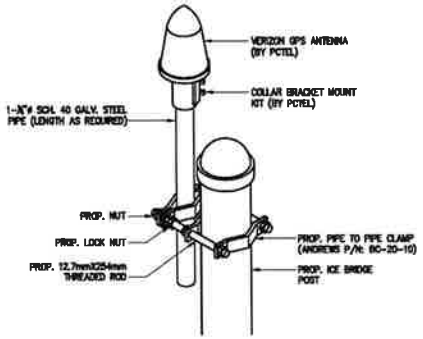
TYPICAL FIBER JUNCTION BOX DETAILS
SCALE: N.T.S.
4 / A04



SITE-PRO 1 12'-6" LOW-PROFILE
CO-LOCATION PLATFORM W/HANDRAIL KIT

PART NUMBER: RMQP-4096-HK
QUANTITY: TOTAL OF 1

ANTENNA MOUNT DETAIL
SCALE: N.T.S.
5 / A04



NOTE:
THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A STANDARD 1"-1¼" DIAMETER GALVANIZED STEEL OR STAINLESS STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH USING A HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. THE CUT PIPE END SHALL BE DEBURRED AND SMOOTH IN ORDER TO SEAL AGAINST THE NEOPRENE GASKET ATTACHED TO THE ANTENNA MOUNT.

GPS ANTENNA MOUNTING DETAIL
SCALE: N.T.S.
6 / A04

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20 ALEXANDER DRIVE, 2ND FLOOR
WALLINGFORD, CT 06492
(203) 741-7336

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134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
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1	03/06/24	ISSUED FOR CONSTRUCTION	CMC
0	02/07/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS

POMFRET SOUTH CT

(P RABBITT HILL ROAD
POMFRET, CT 06259

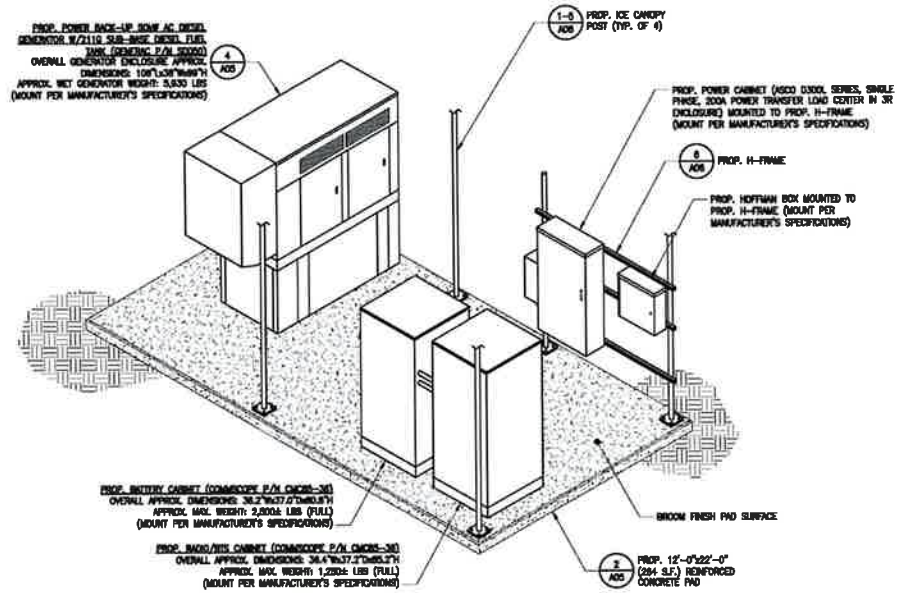
VZW LOCATION CODE:	768742
MDG LOCATION ID:	868817842
FUZE PROJECT ID:	16119881

SHEET TITLE

ANTENNA DETAILS

SHEET NUMBER

A04



EQUIPMENT AREA ISOMETRIC VIEW
1 A05
SCALE: N.T.S.

CONCRETE GENERAL NOTES

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND TO THE PROJECT SPECIFICATIONS.
2. ALL CONCRETE IS TO BE NORMAL DENSITY CONCRETE WITH A MINIMUM SLUMP OF 4 INCHES. MINIMUM AGGREGATE SIZE IS INCH. NO ADDITIONAL WATER SHALL BE ADDED TO THE CONCRETE AT THE JOB SITE.
3. PROVIDE AIR ENTRAINMENT OF 4 TO 6 PERCENT IN ALL EXPOSED CONCRETE WORK WITH AIR-ENTRAINING ADMIXTURE COMPLYING WITH ASTM C 260. AT TROWEL-FINISHED FLOORS, DO NOT EXCEED AIR-ENTRAINMENT CONTENT OF 3 PERCENT.
4. NO HOLES OR SLEEVES SHALL BE MADE THROUGH CONCRETE WORK OTHER THAN THOSE INDICATED ON THE STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.
5. ALL FORMWORK OFFSET TOLERANCES (PER ACI 117) TO BE CLASS A.
6. FLOOR SLAB TOLERANCES TO ASTM E1155; SPECIFIED OVERALL MINIMUM VALUE OF FLATNESS F(F)=25 WITH LOCAL MINIMUM F(F)=17, AND MINIMUM VALUE OF LEVELNESS F(F)=20 WITH LOCAL MINIMUM F(L)=15 WITHIN 72 HOURS OF SLAB CONSTRUCTION.
7. CEMENTS OR SLAB (IF APPLICABLE). ALLOWABLE CAPACITY OF CONCRETE USED IN DESIGN MIN. 4000 PSI.

FOUNDATION NOTES:

1. DESIGN INFORMATION AND GENERAL REQUIREMENTS

1.1 CODES

A. DESIGN CONFORMS TO INTERNATIONAL BUILDING CODE 2012.

B. AMERICAN CONCRETE INSTITUTE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE." ACI 318-08.

2. EARTHWORK

2.1 FOUNDATIONS

A. FOUNDATIONS HAVE BEEN DESIGNED TO BEAR ON UNDISTURBED NATURAL SOILS/COMPACTED STRUCTURAL FILL, CAPABLE OF SAFELY SUPPORTING A NET ALLOWABLE BEARING PRESSURE OF 2000 PSF. IF FOUNDATION CONDITIONS PROVE UNACCEPTABLE AT ELEVATIONS SHOWN, EXCAVATION SHALL BE CARRIED DEEPER AND SHALL BE BACKFILLED WITH LEAN CONCRETE. TO PLAN FOOTING BOTTOM, OR REDESIGN OF FOUNDATIONS WILL BE REQUIRED AT THE DIRECTION OF THE ENGINEER.

B. DEWATER, FURNISH AND INSTALL ALL TEMPORARY SHEETING, BRACINGS AND DRAINAGE NECESSARY TO MAINTAIN THE EXCAVATION AND PROTECT SURROUNDING STRUCTURES AND UTILITIES.

C. THOROUGHLY COMPACT ALL BOTTOM OF FOOTINGS PRIOR TO PLACING ANY CONCRETE.

3. CONCRETE

3.1 FORMWORK

A. CONCRETE CONSTRUCTION SHALL CONFORM TO "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS," (ACI 301-05).

B. FORMWORK SHALL CONFORM TO ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."

3.2 REINFORCEMENT

A. REINFORCING STEEL ASTM A615, GRADE 60, WELDED WIRE ASTM A185 (FLAT SHEET), LAPS 40 BAR DIAMETERS UNLESS NOTED. BARS SHALL BE ACCURATELY HELD IN ACCURATE POSITION BY SUITABLE ACCESSORIES. TIE WIRES, SUPPORT BARS, ETC. HOOK LENGTHS SHALL BE 12 BAR DIAMETERS.

B. CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:

FOOTINGS & SLABS CAST AGAINST GROUND	3"
CONCRETE TO BE IN CONTACT WITH GROUND OR WEATHER AT BARS GREATER THAN #6	2"
AT BARS #6 OR LESS	1-1/2"
CONCRETE NOT TO BE EXPOSED TO GROUND OR WEATHER BEAMS, GIRDERS & COLUMNS	1-1/2"
SLABS & WALLS	3/4"

3.3 CAST-IN-PLACE CONCRETE

A. MINIMUM 28 DAY CYLINDER STRENGTH AND MAXIMUM SLUMP, PRIOR TO ADDITION OF SUPER PLASTICIZERS, AS FOLLOWS:

	f'c (psi)	SLUMP
CLASS 1 FOOTINGS	4000	3"
CLASS 2 FOOTINGS	4000	3"
CLASS 3 INTERIOR ELEVATED SLABS & WALLS	4000	4"
CLASS 4 OTHER WORK	3000	4"
CLASS 5 LEAN CONCRETE FOR OVER EXCAVATION OF FOUNDATIONS	2000	N/A

B. MIX DESIGN TO BE IN ACCORDANCE WITH ACI 318, CHAPTER 5. NO CALCIUM CHLORIDE OR ADMIXTURE CONTAINING CHLORIDES SHALL BE USED IN ANY CONCRETE.

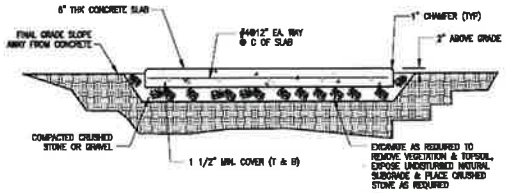
C. COARSE AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33 SIZE 57. COARSE AGGREGATE FOR LIGHT WEIGHT CONCRETE SHALL CONFORM TO ASTM C330 GRADED 3/4" TO 1/4".

D. COLD WEATHER PLACEMENT SHALL COMPLY WITH ACI 306.1.

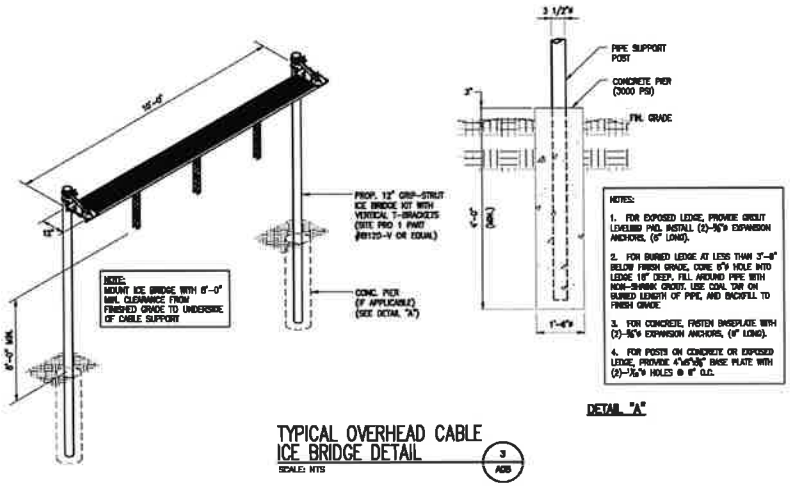
E. HOT WEATHER PLACEMENT SHALL COMPLY WITH ACI 305 R.

F. CHAMFER ALL EXPOSED EDGES 3/4".

G. THE MINIMUM TEMPERATURE OF ALL CONCRETE AT DELIVERY TO THE SITE SHALL BE 65°F. TOTAL DELIVERY TIME SHALL BE LESS THAN 70 MINUTES.



CONCRETE PAD DETAIL
2 A05
SCALE: N.T.S.



DETAIL "A"

TYPICAL OVERHEAD CABLE ICE BRIDGE DETAIL
3 A05
SCALE: NTS

NOTE:
GENERATOR DIESEL TANK TO BE FILLED BY CONTRACTOR

GENERAC SD050 50kW AC 211 GALLON DIESEL GENERATOR
DIMENSIONS W/SUB-BASE DIESEL TANK: 108.0"L x 35.0"W x 89.0"H
MAX IN-SERVICE WEIGHT: 5,930 lbs
QUANTITY: TOTAL OF 1

GENERATOR DETAIL
4 A05
SCALE: N.T.S.

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(508) 251-0720

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(508) 481-2400
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4/30/2024

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APPROVED BY: JMT

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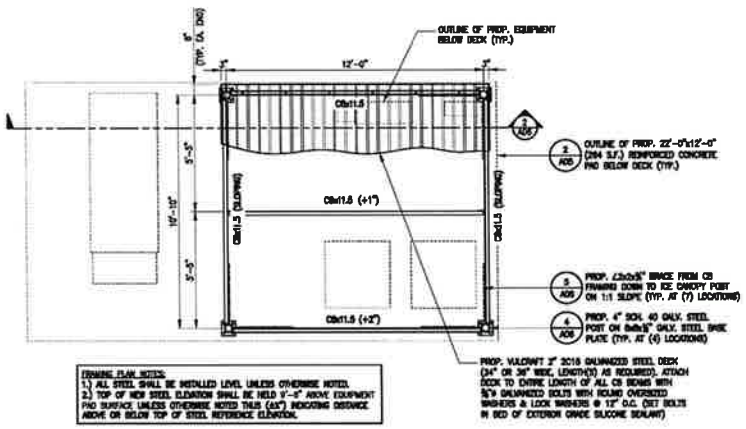
0	02/07/23	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
197 PARNETT HILL ROAD
POMFRET, CT 06250

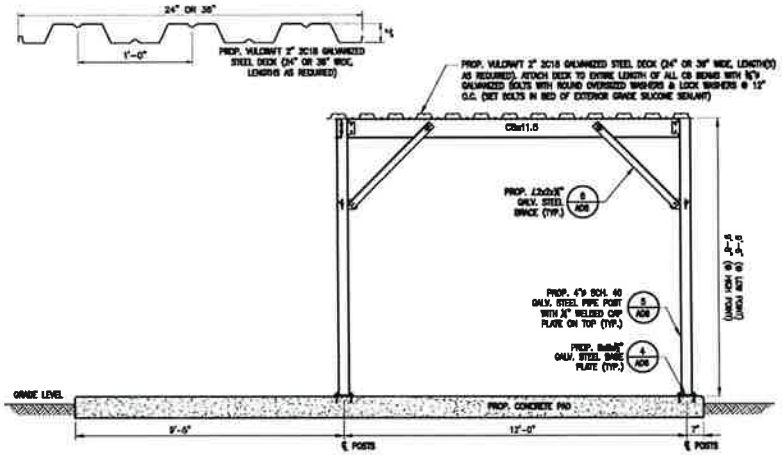
VZW LOCATION CODE:	765742
MDG LOCATION ID:	88880176A2
FUZE PROJECT ID:	10118881

SHEET TITLE
EQUIPMENT DETAILS

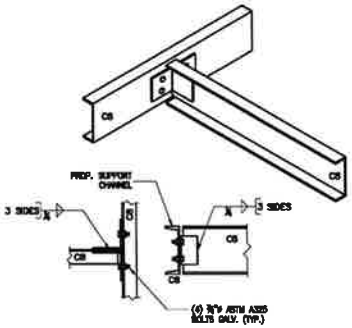
SHEET NUMBER
A05



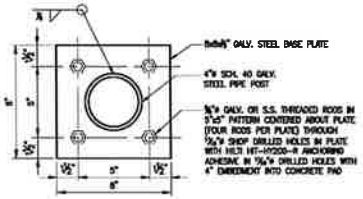
ICE CANOPY FRAMING PLAN (1 A06)
SCALE: 3/8" = 1'-0"
0 2'-8" 5'-4" 8'-0"



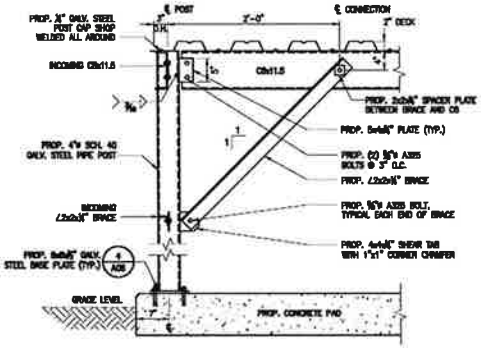
ICE CANOPY SECTION (2 A06)
SCALE: 1/2" = 1'-0"



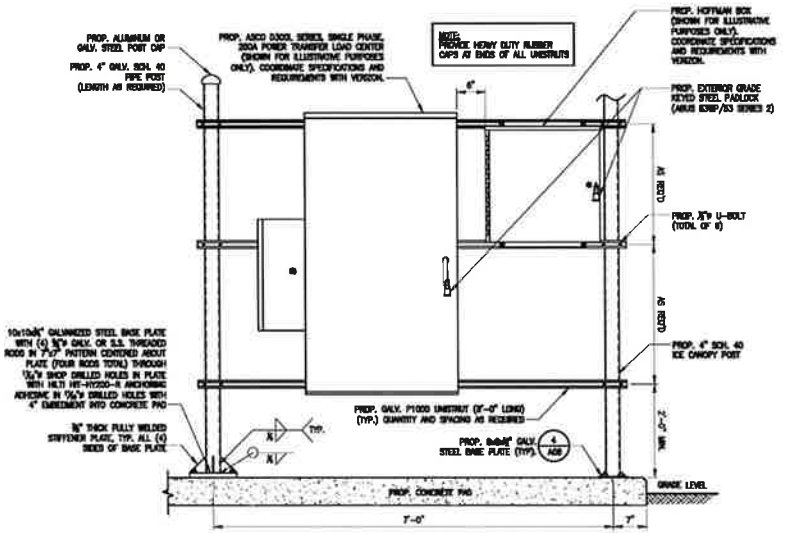
TYP. BEAM TO BEAM CONN. (3 A06)
SCALE: NOT TO SCALE



TYP. ICE CANOPY POST BASE PLATE (4 A06)
SCALE: NONE



TYP. ICE CANOPY POST DETAIL (5 A06)
SCALE: 1" = 1'-0"



H-FRAME DETAIL (6 A06)
SCALE: N.T.S.

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WALLINGFORD, CT 06492
(203) 741-7338

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SBA COMMUNICATIONS CORP.
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WESTBOROUGH, MA 01581
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0	02/07/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
69 BARRETT HILL ROAD
POMFRET, CT 06258

VZW LOCATION CODE:	769748
MDG LOCATION ID:	86888769482
FUZE PROJECT ID:	10119881

SHEET TITLE
ICE CANOPY & H-FRAME DETAILS

SHEET NUMBER
A06

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 ANTENNA	1	330°	125'± AGL	LTE 700/850/1900/AWS 5GNR 850	0°/0°/0°/0°	2°/6°/0°/0°	NEW	72.0	13.8	8.2	64.4	PROP. (2) 6x12 HYBRID CABLES
	SAMSUNG MT6413-77A ANTENNA	1	330°	125'± AGL	5G L26	0°	1°	NEW	28.9	15.8	5.5	57.3	
	COMMSCOPE JAHH-65B-R3B PANEL ANTENNA	1	330°	125'± AGL	LTE 700/850/1900/AWS 5GNR 850	0°/0°/0°/0°	2°/6°/0°/0°	NEW	72.0	13.8	8.2	64.4	
BETA	COMMSCOPE JAHH-65B-R3B PANEL ANTENNA	1	150°	125'± AGL	LTE 700/850/1900/AWS 5GNR 850	0°/0°/0°/0°	2°/6°/0°/0°	NEW	72.0	13.8	8.2	64.4	
	SAMSUNG MT6413-77A ANTENNA	1	150°	125'± AGL	5G L26	0°	1°	NEW	28.9	15.8	5.5	57.3	
	COMMSCOPE JAHH-65B-R3B PANEL ANTENNA	1	150°	125'± AGL	LTE 700/850/1900/AWS 5GNR 850	0°/0°/0°/0°	2°/6°/0°/0°	NEW	72.0	13.8	8.2	64.4	
GAMMA	COMMSCOPE JAHH-65B-R3B PANEL ANTENNA	1	230°	125'± AGL	LTE 700/850/1900/AWS 5GNR 850	0°/0°/0°/0°	2°/6°/0°/0°	NEW	72.0	13.8	8.2	64.4	
	SAMSUNG MT6413-77A ANTENNA	1	230°	125'± AGL	5G L26	0°	1°	NEW	28.9	15.8	5.5	57.3	
	COMMSCOPE JAHH-65B-R3B PANEL ANTENNA	1	230°	125'± AGL	LTE 700/850/1900/AWS 5GNR 850	0°/0°/0°/0°	2°/6°/0°/0°	NEW	72.0	13.8	8.2	64.4	
ALL	SAMSUNG B2/B66A RRH QUAD (RF4439d-25A) RADIOS	3	-	-	-	-	-	NEW	15.0	15.0	10.0	74.7	
	SAMSUNG B5/B13 RRH QUAD (RF4461d-13A) RADIOS	3	-	-	-	-	-	NEW	15.0	15.0	10.2	79.1	
	COMMSCOPE C8C7BT-D5-43-2X DIPLEXERS	3	-	-	-	-	-	NEW	8.4	8.9	9.8	20.7	
	OVP 12	1	-	-	-	-	-	NEW	29.8	18.5	12.8	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 08/13/23.

FEEDLINE SCHEDULE

SCHEDULE	FEEDLINES	LOCATION
A	EXISTING TO REMAIN: N/A EXISTING TO BE REMOVED: N/A	ROUTED PER STRUCTURAL ANALYSIS
B	PROPOSED: (1) 5/8" COAX CABLE FOR GPS ANTENNA (2) 6x12 HYBRID CABLES	

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

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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. 25967
LICENSED
PROFESSIONAL CIVIL ENGINEER
4/30/2024

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	04/30/24	CONSTRUCTION REVISED	CMC
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2	04/08/23	CONSTRUCTION REVISED	CMC
1	03/06/23	ISSUED FOR CONSTRUCTION	CMC
0	02/07/23	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
92 BARRETT HILL ROAD
POMFRET, CT 06258

VZW LOCATION CODE:	765742
MDG LOCATION ID:	88000765742
FUZE PROJECT ID:	16119882

SHEET TITLE
RF DATA

SHEET NUMBER
RF01

N/A

RF PLUMBING DIAGRAM
SCALE: N.T.S.
1
RF02

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WALLINGFORD, CT 06492
(203) 741-7338

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(508) 251-0720

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PROJECT NAME & ADDRESS

POMFRET SOUTH CT

92 BARRITT HILL ROAD
POMFRET, CT 06250

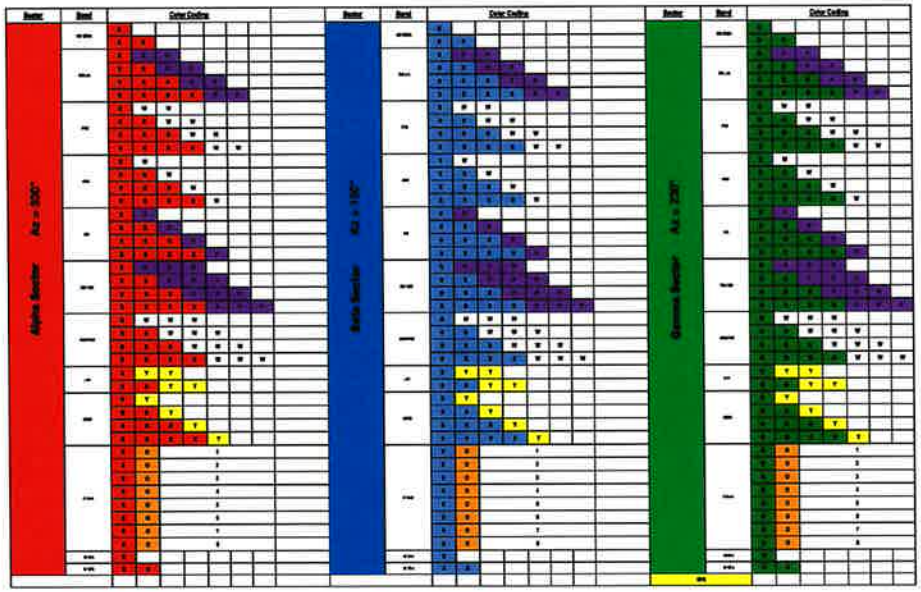
VZW LOCATION CODE:	7697412
MDG LOCATION ID:	16699179412
FUZE PROJECT ID:	19116881

SHEET TITLE

RF PLUMBING DIAGRAM

SHEET NUMBER

RF02



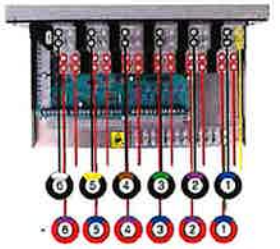
CABLE NOTE:
SEE FEEDLINE SCHEDULE A & B ON SHEET RF01
FOR EXISTING & PROPOSED CABLE QUANTITIES.

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

Hybrid Cable on Towers

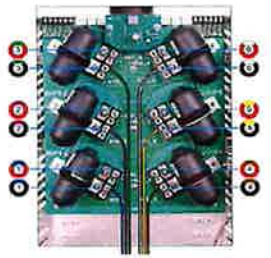
Hybrid Cable 1

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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WALLINGFORD, CT 06492
(203) 741-7336

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

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0	02/07/23	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
92 BARRITT HILL ROAD
POMFRET, CT 06258

VZW LOCATION CODE: 782742
MDG LOCATION ID: 05HBK17942
FUZE PROJECT ID: 16116881

SHEET TITLE
RF COLOR CODE SPECIFICATIONS

SHEET NUMBER
RF03

ELECTRICAL SPECIFICATIONS

1. FURNISH ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS REQUIRED TO MAKE READY FOR USE THE COMPLETE ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS. MAKE ALL NECESSARY CONNECTIONS AT "PACKAGED" EQUIPMENT.
2. THE ELECTRICAL SYSTEMS SHALL BE SUITABLE IN EVERY WAY FOR THE SERVICE REQUIRED. ALL MATERIAL AND ALL WORK WHICH MAY BE REASONABLY IMPLIED AS BEING INCIDENTAL TO THE WORK SHALL BE FURNISHED AT NO EXTRA COST.
3. FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL, STATE AND NATIONAL CODES AND STANDARDS, INCLUDING BUT NOT LIMITED TO:
   - THE 2022 CONNECTICUT STATE BUILDING CODE
   - THE 2020 NATIONAL ELECTRICAL CODE (NFPA-70)
   - THE CONNECTICUT ELECTRIC CODE
   - THE NATIONAL ELECTRICAL SAFETY CODE (ANSI C-2)
   - THE LIFE SAFETY CODE (NFPA 101)
   - THE STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURE AND ANTENNAS (TIA/EIA-222-H)
4. MATERIALS AND EQUIPMENT SHALL BE NEW, UNUSED AND UNDERWRITERS' LABORATORIES, INC. LISTED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS IN A TIMELY FASHION, INCLUDING RESPONSIBILITY FOR DETERMINING AVAILABILITY/LEAD TIME FOR ALL NECESSARY EQUIPMENT.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND PAY ALL FEES FOR PERMITS AND INSPECTIONS. WHERE NEW COMMERCIAL POWER SERVICE IS PROVIDED TO THE SITE, OR EXISTING SERVICE MUST BE MODIFIED, CONTRACTOR SHALL MAKE ALL ARRANGEMENTS WITH THE ELECTRIC UTILITY. SHALL PERFORM ALL OF HIS WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY, AND SHALL PAY ALL UTILITY SERVICE BACK CHARGES.
6. ALL WIRING OUTSIDE SHALL BE INSTALLED IN HEAVY-GAUGE, (SCHEDULE 40) RIGID STEEL CONDUIT, HOT-DIPPED GALVANIZED INSIDE AND OUTSIDE WITH AN ADDITIONAL FACTORY-APPLIED FINISH INSIDE AND OUTSIDE. CUT ENDS SHALL BE REAMED, THREADED AND COLD GALVANIZED. NO COMPRESSION FITTING WILL BE ACCEPTED.
7. UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40 AND INSTALLED NOT LESS THAN 30 INCHES BELOW FINISHED GRADE.
8. WIRING INSTALLED IN THE BUILDING THAT IS SHOWN TO BE IN CONDUIT SHALL BE INSTALLED IN EMT. EMT FITTINGS SHALL BE STEEL COMPRESSION TYPE.
9. LIQUID TIGHT, FLEXIBLE METAL CONDUIT SHALL BE USED FOR ALL MOTOR TERMINATIONS AND FOR CONNECTIONS TO EQUIPMENT SUBJECT TO VIBRATION. FLEXIBLE METAL CONDUIT SHALL CONSIST OF A FLEXIBLE, CORROSION RESISTANT METAL CORE WITH AN EXTRUDED, WATERTIGHT, SYNTHETIC JACKET. CONDUITS SMALLER THAN 1-1/2" SHALL HAVE A CONTINUOUS GROUND CONDUCTOR UNDER THE JACKET.
10. NO CONDUIT SMALLER THAN 3/4" ELECTRICAL TRADE SIZE SHALL BE USED, EXCEPT AS OTHERWISE SHOWN ON THE DRAWINGS. BOX SIZES SHALL BE 4" SQUARE MINIMUM, BUT NOT LESS THAN THAT REQUIRED BY THE CONNECTICUT ELECTRICAL CODE.
11. FITTINGS AND EXPOSED SWITCH, OUTLET AND CONTROL STATION BOXES AND OTHER EXPOSED BOXES 4" SQUARE SHALL BE CAST OR MALLEABLE IRON WITH CADMIUM-ZINC FINISH AND CAST COVERS WITH STAINLESS STEEL SCREWS.
12. FLUSH SWITCH AND OUTLET BOXES SHALL BE HOT-DIPPED GALVANIZED, PRESSED STEEL WITH NYLON COVER PLATES, COLOR AS DETERMINED BY THE ENGINEER.
13. EXCEPT AS OTHERWISE SHOWN, TERMINAL, JUNCTION AND PULL BOXES LARGER THAT 4" SQUARE SHALL BE SHEET STEEL. STEEL BOXES SHALL BE HOT-DIPPED GALVANIZED. BOXES AND COVERS SHALL BE NOT LESS THAN 14 GAUGE METAL. COVERS SHALL BE GASKETED AND FASTENED WITH STAINLESS STEEL HARDWARE.
14. FITTINGS USED WITH LIQUID TIGHT, FLEXIBLE CONDUIT SHALL BE OF THE SCREW-IN, COMPRESSION TYPE WITH SEALING RING. FITTINGS LARGER THAN 1-1/4" SHALL BE FURNISHED WITH INTEGRAL GROUND LUGS.
15. HANGERS, RODS, EACH PLATES, BEAM CLAMPS, ETC. SHALL BE GALVANIZED IRON OR STEEL. CONDUITS SHALL BE SUPPORTED AT LEAST EVERY 5 FEET.
16. EXPOSED CONDUITS SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES TO WALLS. CONDUIT RUNS SHALL BE STRAIGHT AND TRUE. CONDUIT SHALL BE SUPPORTED BY MEANS OF TWO-HOLE PIPE CLAMPS, BACK PLATES SHALL BE INSTALLED WHERE REQUIRED TO RAISE CONDUITS FROM THE SURFACE. MULTIPLE, HORIZONTAL RUNS SHALL BE SUPPORTED ON TRAPEZE HANGERS WITH STEEL HORIZONTAL MEMBERS AND THREADED RODS NOT LESS THAN 3/8 INCHES IN DIAMETER. HANGERS SHALL BE ATTACHED TO STRUCTURAL STEEL BY MEANS OF BEAM CLAMPS. SPOT TYPE INSERTS SHALL BE USED IN CONCRETE.
17. CONDUIT BENDS SHALL BE CAREFULLY MADE TO PREVENT DISTORTION OF THE CIRCULAR CROSS-SECTION. NO CONDUIT RUN SHALL HAVE MORE THAN THE EQUIVALENT OF THREE 90 DEGREE BENDS BETWEEN PULLING POINTS. CHANGES IN DIRECTION SHALL BE MADE WITH BENDS, STANDARD ELBOWS AND PULLBOXES. BENDS IN PARALLEL RUNS SHALL BE CONCENTRIC.
18. CONDUIT SHALL NOT BE SUPPORTED FROM PIPING, PIPING SUPPORTS, DUCTWORK, SUSPENDED CEILING SUPPORTS OR MECHANICAL EQUIPMENT SUBJECT TO VIBRATION OR REMOVAL.
19. THE ENDS OF ALL CONDUITS SHALL BE TIGHTLY PLUGGED DURING BUILDING CONSTRUCTION UNTIL WIRES ARE TO BE PULLED. SPARE CONDUITS SHALL BE FURNISHED WITH THREADED CAPS.
20. CONDUITS SHALL BE TERMINATED AT UNGASKETED SHEET STEEL BOXES AND ENCLOSURES WITH DOUBLE LOCK NUTS AND SUITABLE BUSHINGS. BUSHINGS INSTALLED ON CONDUITS CONTAINING GROUND WIRES SHALL BE GROUNDING TYPE. CONDUITS SHALL BE TERMINATED AT GASKETED SHEET METAL BOXES AND ENCLOSURES WITH CONDUIT HUBS.
21. CONDUCTORS SHALL BE ANNEALED, 98 PERCENT CONDUCTIVITY, SOFT-DRAWN COPPER. NO CONDUCTOR SMALLER THAT NO. 12 AWG SHALL BE USED, EXCEPT AS OTHERWISE NOTED.
22. WIRE FOR POWER AND LIGHTING BRANCH CIRCUITS SHALL BE 600 VOLT, TYPE THHN. WIRE FOR CONTROL CIRCUITS SHALL BE 600 VOLT, TYPE THHN, NO. 14 AWG, STRANDED. SERVICE CONDUCTORS AND FEEDERS SHALL BE TYPE XHHW. CONDUCTORS NO. 10 AWG AND SMALLER SHALL BE SOLID. NO. 8 AWG AND LARGER SHALL BE STRANDED.
23. ALL CONDUCTORS SHALL BE CAREFULLY HANDLED TO AVOID KINKS OR DAMAGE TO INSULATION. LUBRICATIONS SHALL BE USED TO FACILITATE WIRE PULLING. LUBRICANTS SHALL BE UL LISTED FOR USE WITH THE INSULATION SPECIFIED.
24. ALL EQUIPMENT AND MATERIALS SHALL BE GROUNDED IN STRICT ACCORDANCE WITH THE CONNECTICUT ELECTRICAL CODE, AND THE STANDARD REQUIREMENTS OF VERIZON WIRELESS AND LUCENT.
25. DISCONNECT SWITCHES SHALL BE 480 OR 240 VOLT, HEAVY-DUTY, QUICK-MAKE, QUICK BREAK, VISIBLE BLADE, 2 POLE WITH EXTERNAL SPRINGING HANDLE AND FULL COVER INTERLOCK. SWITCHES INSTALLED OUTSIDE SHALL BE NEMA TYPE 3R ENCLOSED.
26. WALL SWITCHES SHALL BE SINGLE POLE 3-WAY OR 4-WAY, INDICATING, TOGGLE-ACTION, FLUSH, QUIET TYPE, SPECIFICATION GRADE, RATED 20 AMPERE, 120-277 VOLT. COLOR AS DETERMINED BY ENGINEER.
27. GENERAL PURPOSE RECEPTACLES SHALL BE DUPLEX, 2 POLE, 3 WIRE, STRAIGHT BLADE, NYLON FACE, GROUNDING TYPE, 20 AMPERE, 125 VOLT, SPECIFICATION GRADE. COLOR AS DETERMINED BY ENGINEER.
28. PANELS SHALL BE PER DIRECTED BY THESE DRAWINGS WITH TYPED DIRECTORIES.
29. CIRCUIT BREAKERS SHALL BE MOLDED CASE, THERMAL-MAGNETIC TYPE WITH RMS SYMMETRICAL INTERRUPTING RATING OF NOT LESS THAN 22,000 AMPERES FOR 240 VOLT BREAKERS. ENCLOSED BREAKERS SHALL HAVE PADLOCKING PROVISIONS AND EXTERNAL OPERATING HANDLE WITH FULL COVER INTERLOCK. BREAKERS SHALL BE 1" MODULES MINIMUM.
30. NAMEPLATES SHALL BE PROVIDED FOR ALL EQUIPMENT INDICATING VOLTAGE, PHASE, USE AND SOURCE OF ORIGIN. DEVICES SHALL BE LABELED INDICATING VOLTAGE AND BRANCH CIRCUIT. BRANCH CONDUCTORS SHALL BE LABELED INDICATING BRANCH CIRCUIT. FEEDER CONDUCTORS SHALL INDICATE PHASE.
31. ALL EXTERIOR CONDUCTOR/LUG TERMINALS SHALL HAVE AN ANTIOXIDANT APPLIED.
32. ALL SPRING TYPE WIRE CONNECTORS USED IN EXTERIOR BOXES SHALL BE SILICON FILLED.
33. ELECTRICAL CONTRACTOR SHALL AS PART OF HIS WORK INCLUDE ALL FITTINGS, SLEEVES AND MINOR CUTTING REQUIRED FOR HIS WORK, INCLUDING FIRES-STOPPING.
34. THE ELECTRICAL CONTRACTOR, AT HIS OWN EXPENSE, SHALL PROVIDE HIS OWN, WHERE DIRECTED, STORAGE AND OFFICE SPACE.
35. FIVE COPIES OF SHOP DRAWINGS OF ALL EQUIPMENT SHALL BE PROVIDED TO THE ENGINEER.
36. ELECTRICAL CONTRACTOR'S WORK SHALL INCLUDE ALL LABOR AND MATERIALS, SCAFFOLDING TOOL AND TRANSPORTATION NECESSARY FOR COMPLETE INSTALLATION.
37. ELECTRICAL CONTRACTOR TO FURNISH ENGINEER ONE SET OF MYLARS OF "AS BUILT" DRAWINGS.
38. ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY POWER & LIGHTING AS REQ'D.

GENERAL NOTES

1. CONTRACTOR SHALL VISIT THE SITE TO BECOME AWARE OF THE EXISTING CONDITIONS.
2. BRANCH CIRCUIT RUNS 100 FT AND OVER SHALL BE #10 AWG CONDUCTORS.
3. THESE DRAWINGS ARE DIAGRAMMATIC ONLY. THE EXACT LOCATION, MOUNTING HEIGHT, SIZE OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE COORDINATED AND DETERMINED IN THE FIELD.
4. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE HVAC AND PLUMBING CONTRACTORS AS TO THE EXACT LOCATION OF THEIR RESPECTIVE EQUIPMENT, THE POWER WIRING, THE CONTROL WIRING AND ALL ELECTRICAL CONNECTIONS REQUIRED BY THIS CONTRACTOR FOR COMPLETELY OPERATIVE HVAC AND PLUMBING SYSTEMS IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
5. INTERRUPTIONS TO THE EXISTING ELECTRICAL SERVICE FOR SPLICING CONNECTIONS, RENOVATION OF EXISTING DISTRIBUTION, BRANCH CIRCUITS, INSTALLATION OF NEW ELECTRIC SERVICE, AND SHALL BE AS SHORT AS POSSIBLE, AND TO THE CONVENIENCE OF THE OWNER.
6. ALL CONDUIT SHALL BE SURFACE MOUNTED UNLESS OTHERWISE NOTED. NO INTERIOR HORIZONTAL CONDUIT BELOW 7'-6" AFF IN FINISHED SPACES.
7. ALL WIRING TO BE 3/4"C, 2#12 & 1#12 GROUND, UNLESS OTHERWISE NOTED.
8. NO BX OR ROMEX CABLE IS PERMITTED.
9. ALL WIRING DEVICES AND EQUIPMENT SHALL BE 20A SPECIFICATION GRADE AND UL LISTED.
10. ALL OUTLET AND JUNCTION BOXES SHALL BE SECURELY SURFACE MOUNTED.
11. ALL RECEPTACLE AND EQUIPMENT CIRCUITS SHALL BE GROUNDED USING A FULL SIZE EQUIPMENT GROUNDING CONDUCTOR RUN WITH THE CURRENT CONDUCTORS.
12. ALL WALL PENETRATIONS FOR TELCO, POWER, AND GROUNDING SHALL REQUIRE PVC SLEEVES.
13. ALL SWITCHES SHALL BE FORTY-EIGHT (48) INCHES AFF, UNLESS OTHERWISE NOTED.
14. ALL RECEPTACLES SHALL BE EIGHTEEN (18) INCHES AFF, UNLESS OTHERWISE NOTED.
15. ALL WIRING SHALL BE IN METAL RACEWAY & NO. 12 AWG COPPER MIN. UNLESS OTHERWISE NOTED.
16. WIRE COLOR SHALL BE PER STANDARD CODING BY PHASE.
17. FOR UTILITY BILLING, PLEASE SEND TO:
    VERIZON WIRELESS
    20 ALEXANDER DRIVE
    WALLINGFORD, CT 06492

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 CONNECTIONS TO HALO GROUND RING AND ALL CABLE TRAY JUMPERS SHALL BE #6 AWG, INSULATED, STRANDED, COPPER WIRE.
3. ALL WIRE-TO-WIRE CONNECTIONS SHALL BE THREE-CLAMP, C TAP COMPRESSION (TAB #54740 ORANGE OR EQUIVALENT). ALL GROUND BAR CONNECTIONS SHALL BE TWO-HOLE, LONG-BARREL TYPE COMPRESSION LUGS (TABB OR EQUIVALENT). ALL OTHER CONNECTIONS TO STEEL SURFACES SHALL USE LUG-TYPE CONNECTORS.
4. MECHANICALLY BOND ANTENNA MOUNTS WITH #2 AWG, BARE, STRANDED CONDUCTORS.
5. ALL GROUNDING WORK SHALL COMPLY WITH VERIZON WIRELESS STANDARDS.
6. 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.
7. CONNECT TO HALO GROUND USING C-TAP (#54730).
8. CONNECT TO ENCLOSURES USING BLUE GROUND LUGS.

LEGEND

ELECTRICAL SYMBOLS

M	METER
⊠	GROUND ROD/TEST (OBSERVATION) WELL
⊗	GROUND ROD
▲	CADWELD TYPE CONNECTION
●	COMPRESSION TYPE CONNECTION
----	GROUNDING WIRE
(#12)	REPRESENTS DECIMAL NUMBER
	1'X4' SURFACE MTD. FLUORESCENT LIGHTING FIXTURE
	SELF CONTAINED EMERG. LIGHTING UNIT
S	20A-120V-1P TOGGLE SWITCH
MS	MAGNETIC DOOR SWITCH (DOOR JAMB TYPE)
	20A-120V QUADRAPLEX RECEPTACLE, GROUNDING TYPE, 2-CKT. NO.
WP/GFCI	20A-120V DUPLEX RECEPTACLE, GROUNDING TYPE. WP = WEATHERPROOF GFI = GROUND FAULT
TL	SIMPLEX RECEPTACLE, GROUNDING TYPE. TL = TWIST LOCK
J	JUNCTION BOX
P1	PANELBOARD 'P1'
*M	MOTOR - NUMERAL DENOTES HORSEPOWER
WP	WEATHER PROOF DISCONNECT SWITCH
FS	FUSED DISCONNECT SWITCH - '3R' & '1' - NEMA ENCLOSURE
*T	THERMOSTAT *T_H - HI TEMPERATURE ALARM THERMOSTAT
*H	HUMIDISTAT *H_H/L - H/LO HUMIDITY ALARM HUMIDISTAT
	COMBINATION SMOKE/HEAT DETECTOR WITH MINI HORN SIMPLEX CAT.#2098-9696 WITH FORM A & C CONTACTS
P1-2	HOMERUN TO PANEL (FURNISH & INSTALLED BY MECHANICAL)
S1	SURGE ARRESTER - JOSLYN CAT. NO. 1455-80
AFF	ABOVE FINISHED FLOOR
*D	MOTORIZED DAMPER
#/0-3/4"C	EXPOSED CONDUIT 2#12-3/4"C.
AT	ALARM TERMINAL CABINET

*EQUIPMENT FURNISHED AND INSTALLED BY OTHERS AND WIRED BY THIS CONTRACTOR

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
CCBE	COAX GROUND BAR EXTERNAL
CIBE	COAX ISOLATED GROUND BAR EXTERNAL
MGB	MASTER GROUND BAR
PVC	RIGID (SCH. 40) POLYVINYL CHLORIDE CONDUIT
EBH	ETHERNET BACK HAUL

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(203) 741-7330

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PROJECT NAME & ADDRESS

POMFRET SOUTH CT

69 PARRETT HILL ROAD
POMFRET, CT 06258

VZW LOCATION CODE:	782742
MDG LOCATION ID:	88888782742
FUZE PROJECT ID:	10119881

SHEET TITLE

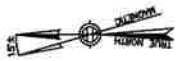
ELECTRICAL SPECIFICATIONS & NOTES

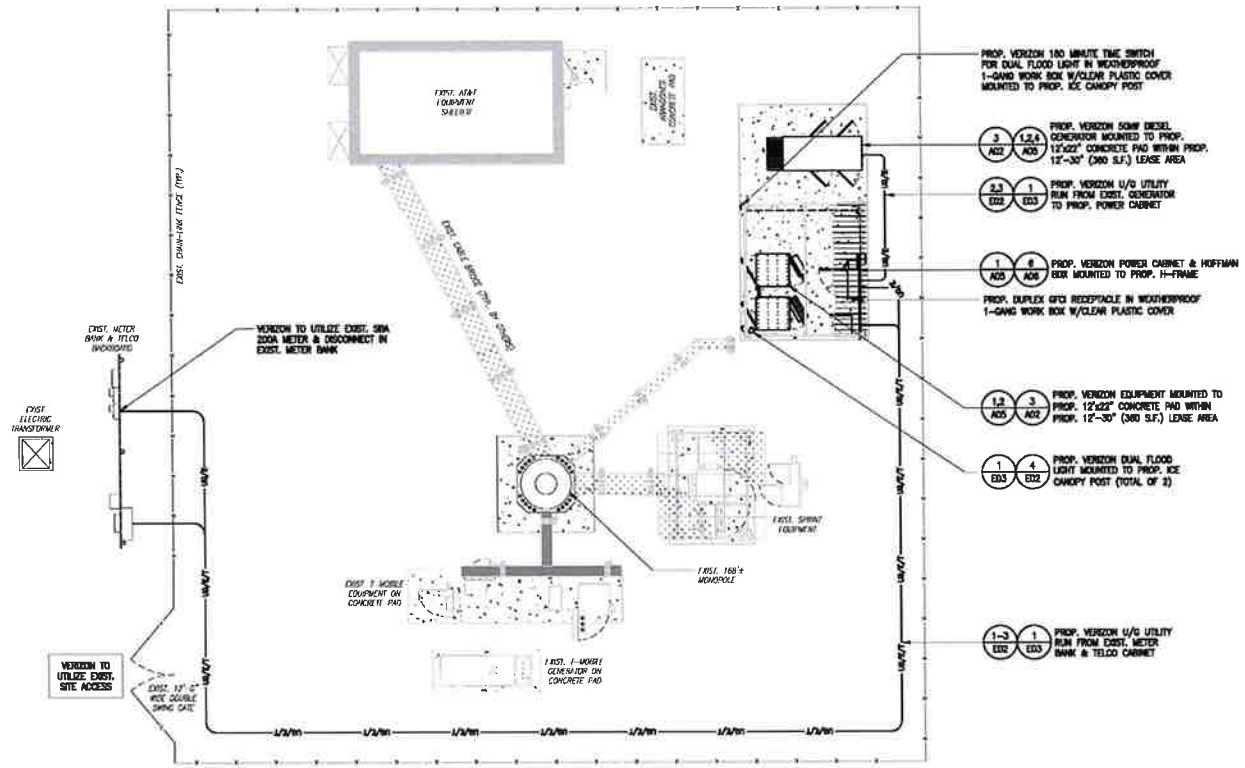
SHEET NUMBER

E01

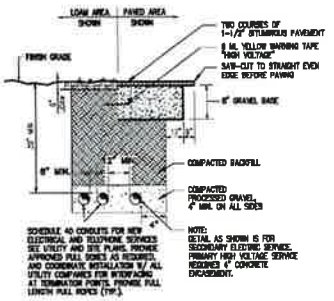
SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY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

SPECIAL CONSTRUCTION WORK NOTE (HAND DUG UTILITY TRENCH EXCAVATION REQUIRED):
EXISTING UNDERGROUND UTILITY LOCATIONS ARE UNKNOWN. GENERAL CONTRACTOR SHALL HAND-EXCAVATE TO REQUIRED SUB-GRADE DEPTH SUFFICIENT TEST HOLES OR AS DIRECTED/REQUIRED BY SBA REGIONAL SITE MANAGER SHALL HAND-EXCAVATE ALL PROPOSED UNDERGROUND UTILITY TRENCHES. GENERAL CONTRACTOR RESPONSIBLE FOR ANY REQUIRED SPECIAL TEMPORARY PROTECTION OF EXISTING UNDERGROUND UTILITIES, PHYSICAL DAMAGE REPAIR, AND SERVICE RESTORATION.

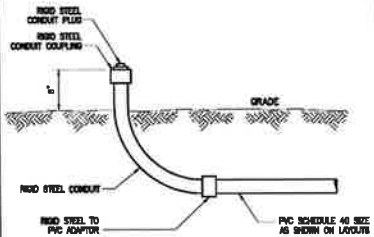




EQUIPMENT COMPOUND UTILITY PLAN (1 / E02)
SCALE: 3/16" = 1'-0"
0 5'-4" 10'-8" 16'-0"



TYPICAL BURIED CONDUIT DETAIL (2 / E02)
SCALE: N.T.S.



TYPICAL CONDUIT STUB-UP DETAIL (3 / E02)
SCALE: N.T.S.

RAB LIGHTING – BULLETZX12B
24W
BLACK

MOUNT PER MANUFACTURER'S SPECIFICATIONS

TYPICAL LED FLOOD LIGHT DETAIL (4 / E02)
SCALE: N.T.S.

verizon
20 ALEXANDER DRIVE, 2ND FLOOR
WALLINGFORD, CT 06492
(203) 741-7336

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

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www.chappellengineering.com

STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25987
LICENSED
PROFESSIONAL CIVIL ENGINEER
4/30/2024

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
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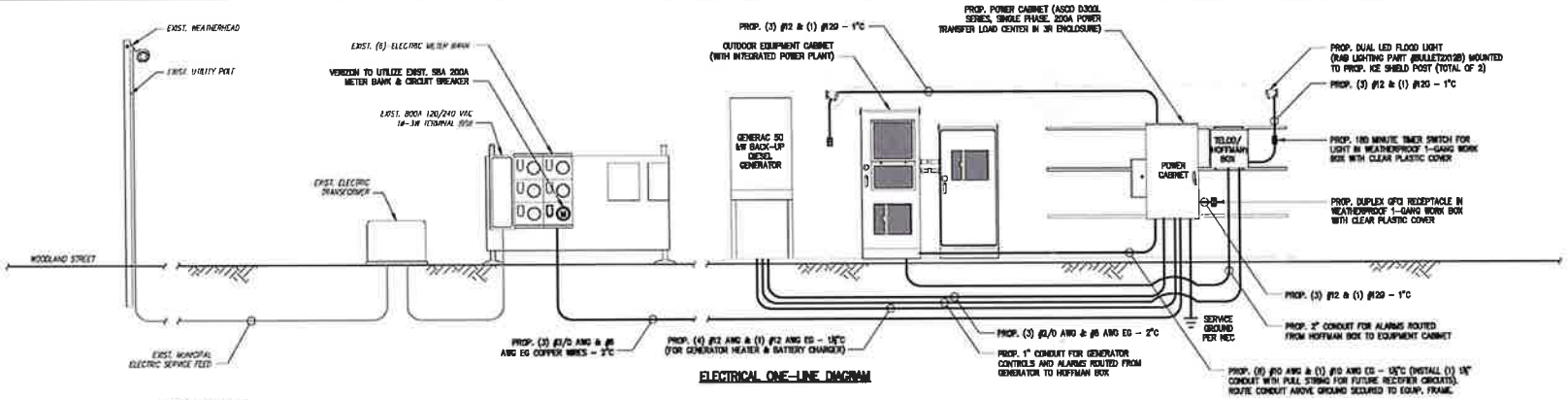
2	04/25/23	CONSTRUCTION REVISED	CMC
1	03/28/23	ISSUED FOR CONSTRUCTION	CMC
0	02/07/23	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
69 BARRETT HILL ROAD
POMFRET, CT 06259

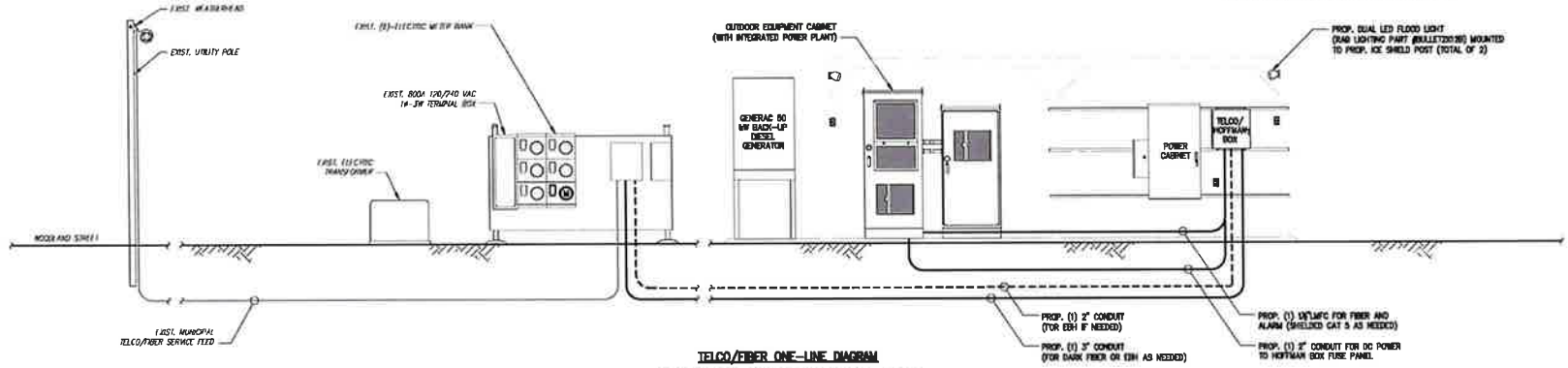
VZW LOCATION CODE:	765742
MDG LOCATION ID:	88838765742
FUZE PROJECT ID:	16118821

SHEET TITLE
EQUIPMENT COMPOUND UTILITY PLAN & DETAILS

SHEET NUMBER
E02



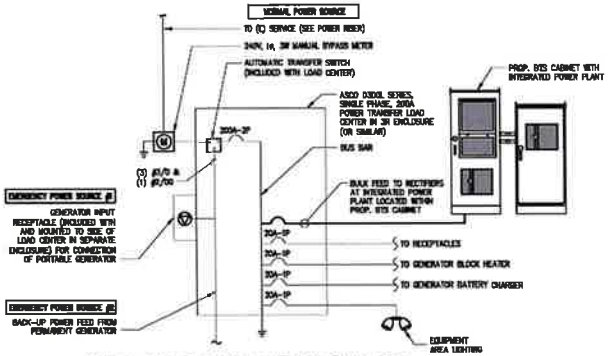
ELECTRICAL ONE-LINE DIAGRAM



TELCO/FIBER ONE-LINE DIAGRAM

UTILITY ONE-LINE DIAGRAMS (1 E03)

SCALE: NOT TO SCALE



POWER SOURCE ONE-LINE DIAGRAM (2 E03)

SCALE: NOT TO SCALE

ASCO D300L SERIES, SINGLE PHASE, 200A POWER TRANSFER LOAD CENTER IN 3R ENCLOSURE

ELECTRICAL PANEL SCHEDULE

MLO/MB A.I.C. RATING 22K

CKT #	DESCRIPTION	AMP	AMP	DESCRIPTION	CKT #
1	RECTIFIER #1	30	30	FUTURE RECTIFIER	2
3					4
5	RECTIFIER #2	30	30	FUTURE RECTIFIER	6
7					8
9	RECTIFIER #3	30	20	PAD LIGHTING	10
11			–	BLANK	12
13	RECTIFIER #4	30	–	BLANK	14
15			–	BLANK	16
17	GFCI RECEPTACLE/LIGHT	20	–	BLANK	18
19	GENERATOR BLOCK HEATER	20	–	BLANK	20
21	GENERATOR BATTERY CHARGER	20	–	BLANK	22
23	BLANK	–	–	BLANK	24
25	BLANK	–	–	BLANK	26
27	BLANK	–	–	BLANK	28
29	BLANK	–	–	BLANK	30

ELECTRICAL PANEL SCHEDULE (3 E03)

SCALE: NTS

ONE-LINE DIAGRAM NOTES:

1) PROVIDE WEATHER TIGHT SEAL CONNECTORS ON ALL CONNECTIONS INSIDE AND OUT.

2) COORDINATE ANY FURTHER MISCELLANEOUS WIRING AND CONDUIT REQUIREMENTS WITH VERIZON WIRELESS AND ELECTRIC COMPANY.

3) ALL CONDUIT ROUTING SHOWN ON THESE DIAGRAMS IS SCHEMATIC IN NATURE AND INTENDED TO CONVEY GENERAL INTENT ONLY.

4) ALL PROPOSED UTILITY DESIGN ELEMENTS SHOWN ARE SUBJECT TO CHANGE BASED ON FINAL DESIGN TO BE PROVIDED BY UTILITY PROVIDERS AND VERIZON WIRELESS. CONTRACTOR SHALL OBTAIN A COPY OF THE FINAL UTILITY DESIGN BY UTILITY COMPANY PRIOR TO COMMENCEMENT OF WORK.

UTILITY CONTACTS

ELECTRICAL:
EVERSOURCE ENERGY
247 STATION DRIVE, SE 210
WESTWOOD, MA 02090
(781) 441-3910

TELEPHONE:
VERIZON
185 FRANKLIN STREET
BOSTON, MA 02107
(800) 941-8800

MAKE ALL CONNECTIONS AS PER UTILITY COMPANY'S REQUIREMENTS.

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

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0	02/07/23	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
49 PARRITT HILL ROAD
POMFRET, CT 06258

VZW LOCATION CODE:	7852482
MDG LOCATION ID:	05859179482
FUZE PROJECT ID:	10116881

SHEET TITLE
ELECTRIC/TELCO/FIBER DIAGRAMS & PANEL SCHEDULE

SHEET NUMBER
E03

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.

SPECIAL CONSTRUCTION WORK NOTE (HAND DUG UTILITY TRENCH EXCAVATION REQUIRED):
EXISTING UNDERGROUND UTILITY LOCATIONS ARE UNKNOWN. GENERAL CONTRACTOR SHALL HAND-EXCAVATE TO REQUIRED SUB-GRADE DEPTH SUFFICIENT TEST HOLES OR AS DIRECTED/REQUIRED BY SBA REGIONAL SITE MANAGER SHALL HAND-EXCAVATE ALL PROPOSED UNDERGROUND UTILITY TRENCHES. GENERAL CONTRACTOR RESPONSIBLE FOR ANY REQUIRED SPECIAL TEMPORARY PROTECTION OF EXISTING UNDERGROUND UTILITIES, PHYSICAL DAMAGE REPAIR, AND SERVICE RESTORATION.

GROUNDING LEGEND

- EXOTHERMIC GROUND
- GROUND ROD
- TEST WELL
- PROP. #2 AWG EQUIPMENT GROUNDING
- PROP. GROUND HALO
- EXIST. SITE GROUNDING (SHOWN SCHEMATICALLY)

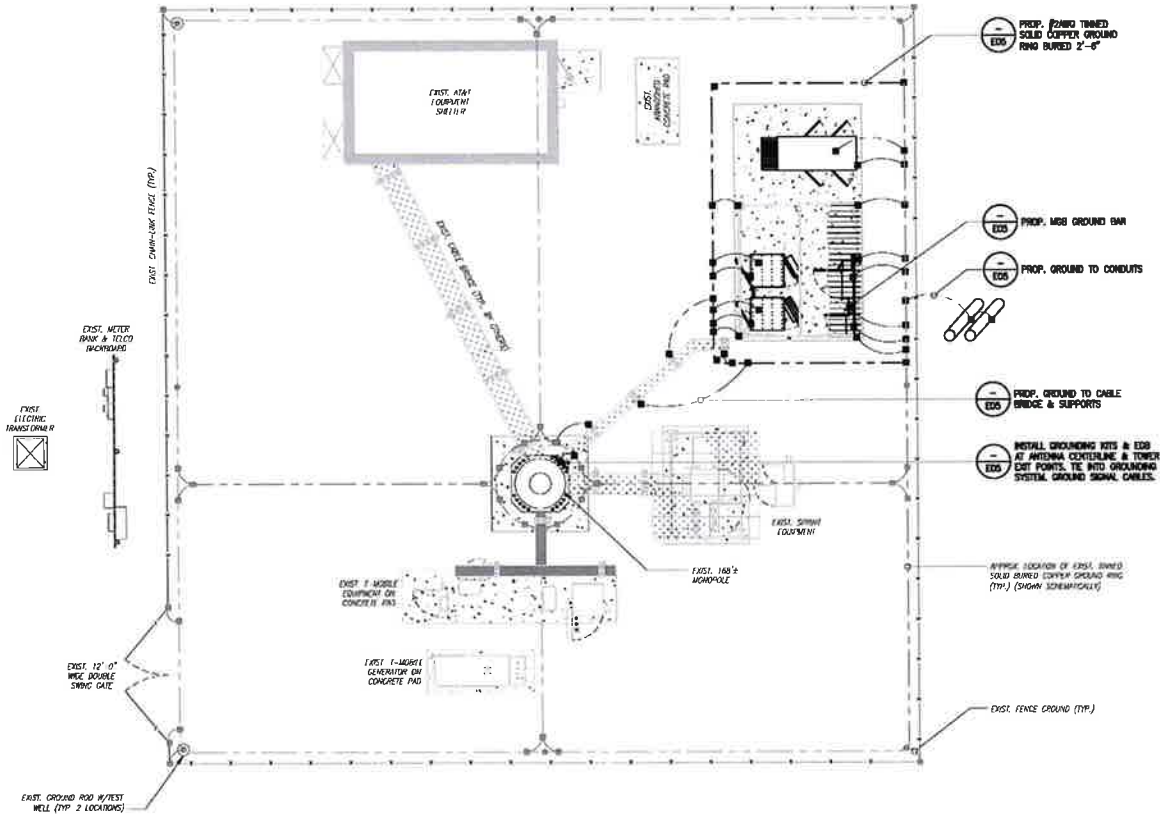
ELECTRICAL AND GROUNDING NOTES:

ELECTRICAL

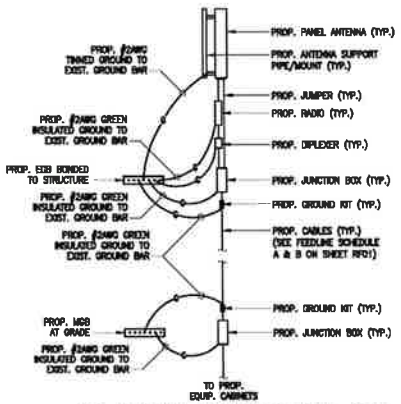
1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND ALL APPLICABLE LOCAL CODES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
3. SERVICE TO EQUIP. SHALL BE 120/240 VAC, 200 AMP, 1Φ, 60 Hz.
4. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.

GROUNDING

5. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC (CADWELD) CONNECTIONS.
6. ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD).
7. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
8. ALL EXOTHERMIC CONNECTIONS TO THE GROUND RODS SHALL START AT THE TOP & HAVE A VERTICAL SEPARATION OF 8" FOR EVERY ADDITIONAL CONNECTION.
9. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
10. ALL EXTERIOR GROUND CONDUCTORS SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
11. GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8"ø 10-FT. LONG, AND SHALL BE DRIVEN VERTICALLY WITH THEIR TOPS 48" BELOW FINAL GRADE.
12. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
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 AND INSTALLED BY CONTRACTOR.



SCHEMATIC GROUNDING DIAGRAM (1/E04)
SCALE: 3/16" = 1'-0"
0 5'-4" 10'-8" 16'-0"



TYP. ANTENNA GROUNDING RISER (2/E04)
SCALE: NOT TO SCALE

verizon
20 ALEXANDER DRIVE, 2ND FLOOR
WALLINGFORD, CT 06492
(203) 741-7328

SBA
SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
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4/25/2024

CHECKED BY: JMT
APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
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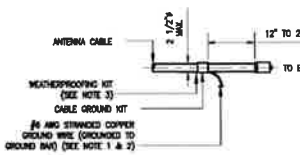
2	04/05/23	CONSTRUCTION REVISED	CMC
1	03/06/23	ISSUED FOR CONSTRUCTION	CMC
0	02/07/23	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS
POMFRET SOUTH CT
69 RABBIT HILL ROAD
POMFRET, CT 06258

VZW LOCATION CODE: 768742
MDG LOCATION ID: BU0001704E
FUZE PROJECT ID: 10118821

SHEET TITLE
SCHEMATIC GROUNDING PLAN & RISER DIAGRAM

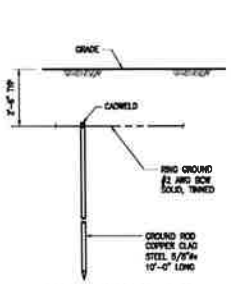
SHEET NUMBER
E04



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.

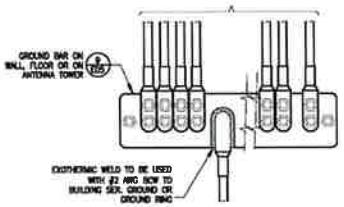
CONN. OF CABLE GROUND KIT TO ANTENNA CABLE

SCALE: N.T.S. — 1 — E05



GROUND ROD

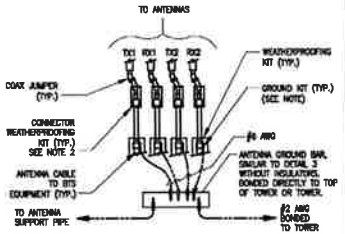
SCALE: N.T.S. — 2 — E05



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

INSTALLATION OF GROUND WIRE TO GROUND BAR

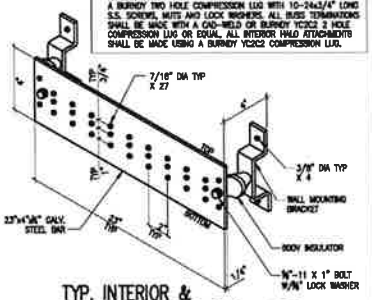
SCALE: N.T.S. — 3 — E05



CONN. OF GROUND WIRE TO GROUND BAR (TOWER)

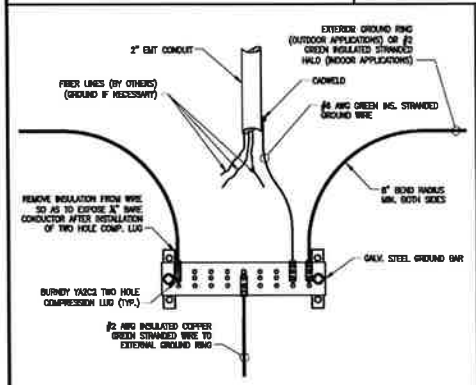
SCALE: N.T.S. — 4 — E05

NOTES:
1. SURFACE PREPERATION: 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 PREPERATION: 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 EXTERIOR HALO ATTACHMENTS SHALL BE MADE USING A BURNDY YC2C2 COMPRESSION LUG.



TYP. INTERIOR & EXTERIOR GROUND BAR

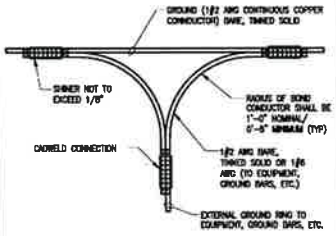
SCALE: N.T.S. — 5 — E05



NOTE:
IF AN ENTRY PORT IS USED FOR THE FIBER ENTRY, THE PORT MUST BE GROUNDED TO THE GROUND BAR WITH A #2 GREEN COPPER STRANDED WIRE.

INTERIOR GROUNDING AT TELCO ENTRY

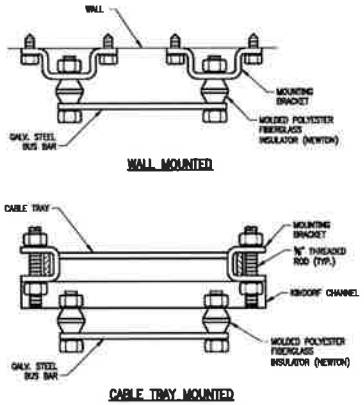
SCALE: N.T.S. — 6 — E05



NOTE:
ALL CONNECTIONS TO GROUND SHALL BE NON-DIRECTIONAL.

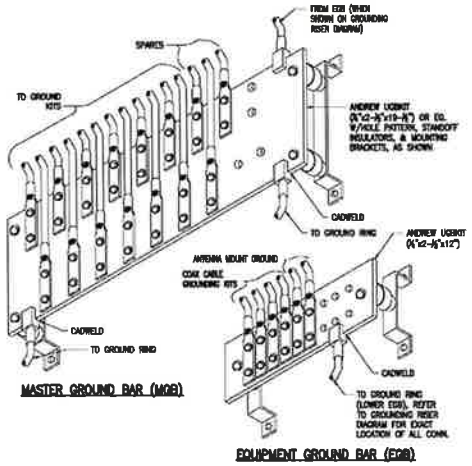
NON-DIRECTIONAL SPLICE

SCALE: N.T.S. — 7 — E05



BUS BAR MOUNTING

SCALE: N.T.S. — 8 — E05

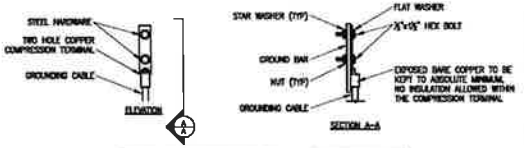


MASTER GROUND BAR (MGB)

EQUIPMENT GROUND BAR (EGB)

GROUND BAR DETAILS

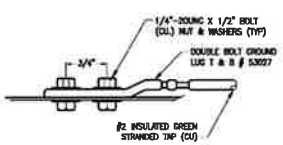
SCALE: N.T.S. — 9 — E05



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

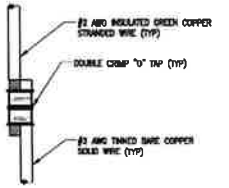
TYP. GROUND BAR CONNECTION

SCALE: N.T.S. — 10 — E05



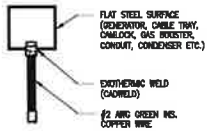
TYP. EQUIPMENT GROUND CONNECTION

SCALE: N.T.S. — 11 — E05



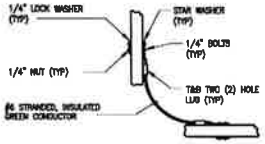
TYP. GROUND CONNECTION SPLICE

SCALE: N.T.S. — 12 — E05



TYP. CADWELD #2 GREEN TO FLAT STEEL SURFACE

SCALE: N.T.S. — 13 — E05



CABLE TRAY GROUNDING

SCALE: N.T.S. — 14 — E05

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

SBA
SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
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PROJECT NAME & ADDRESS:
POMFRET SOUTH CT
OP RARRITT HILL ROAD
POMFRET, CT 06250

VZW LOCATION CODE:	765742
MDG LOCATION ID:	88888765742
FUZE PROJECT ID:	16119821

SHEET TITLE:
GROUNDING DETAILS

SHEET NUMBER:
E05

verizon

MOUNT MODIFICATION DRAWINGS
PROPOSED 12.50' PLATFORM

TOWER OWNER: SBA COMMUNICATIONS CORPORATION
TOWER OWNER SITE NUMBER: CT01364-S

CARRIER SITE NAME: POMFRET SOUTH CT
CARRIER SITE NUMBER: 5009917542
FUZE ID: 16118821

62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

LATITUDE: 41.87025833° N
LONGITUDE: 71.98824167° W

DESIGN CRITERIA

PROJECT DESCRIPTION

SHEET INDEX

BILL OF MATERIALS

SECTION 1 - EQUIPMENT SETS

SECTION 2 - OTHER REQUIRED PARTS

SECTION 3 - REQUIRED GATE'S CORE PARTS

NOTES

VZW SMART BIDS - APPROVED VENDORS

CONTRACTORS	FABRICATORS	S.I.C. CODES

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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
4/30/2024

CHECKED BY: JMF

APPROVED BY: JMF

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	04/30/24	CONSTRUCTION REVISED	CHC
3	04/03/24	CONSTRUCTION REVISED	CHC
2	04/05/23	CONSTRUCTION REVISED	CHC
1	03/08/23	ISSUED FOR CONSTRUCTION	CHC
0	02/07/23	ISSUED FOR REVIEW	CHC

PROJECT NAME & ADDRESS

POMFRET SOUTH CT

62 BABBITT HILL ROAD
POMFRET, CT 06250

VZW LOCATION CODE:	7607492
MDG LOCATION ID:	BD0001275G2
FUZE PROJECT ID:	16118821

SHEET TITLE

MOUNT MODIFICATION DRAWINGS I

SHEET NUMBER

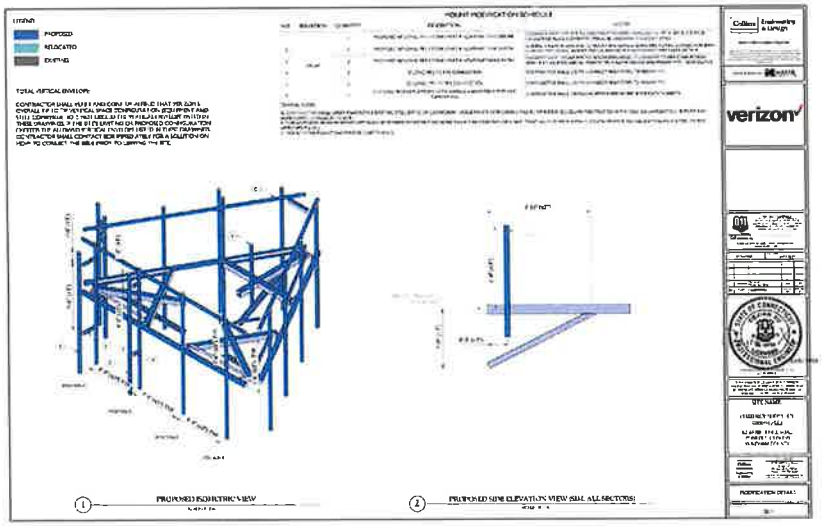
MM01

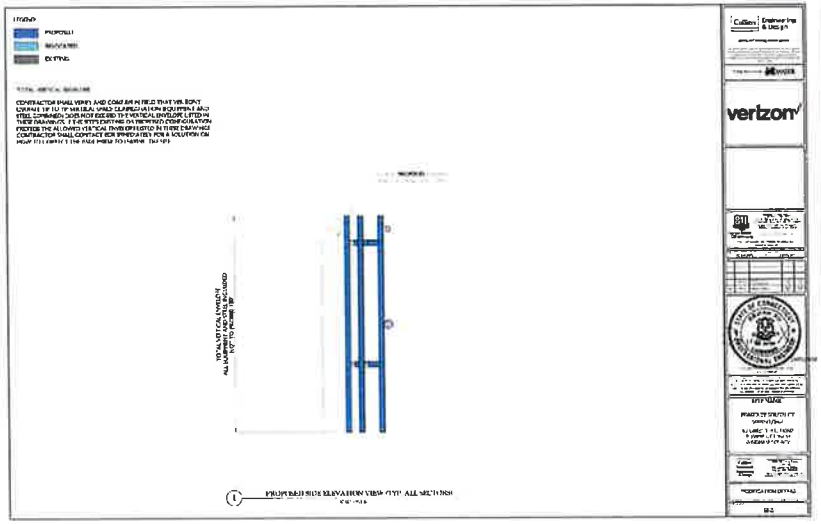
GENERAL NOTES

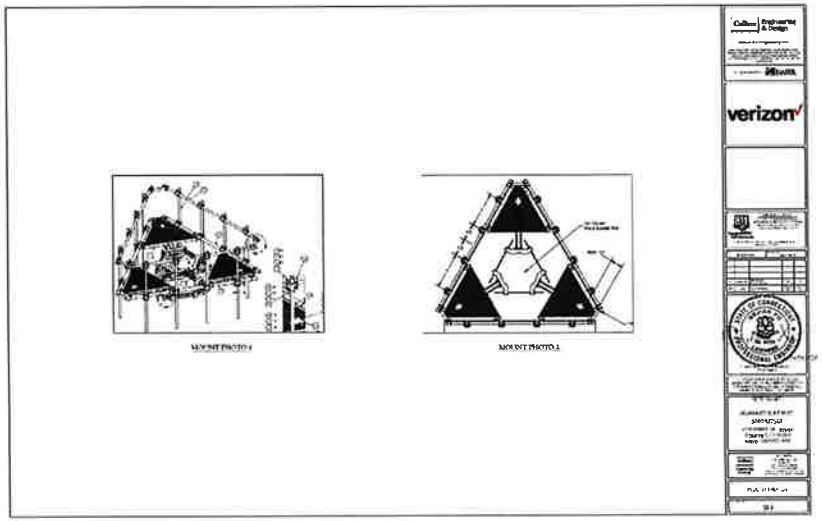
PROJECT DESCRIPTION

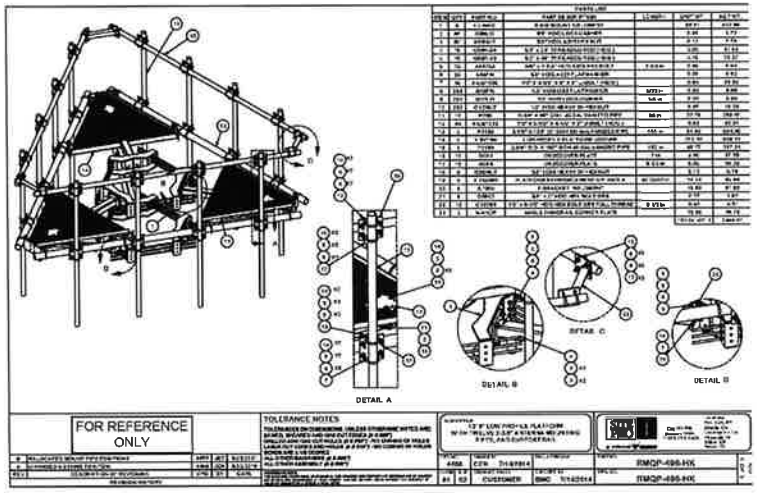
NOTE

DETAILED DESCRIPTION









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WALLINGFORD, CT 06492
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WESTBOROUGH, MA 01581
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4/10/2024

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	04/10/24	CONSTRUCTION REVISED	CMC
3	04/03/24	CONSTRUCTION REVISED	CMC
2	04/02/24	CONSTRUCTION REVISED	CMC
1	03/26/24	ISSUED FOR CONSTRUCTION	CMC
0	02/07/24	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS

POMFRET SOUTH CT

92 RABBITT HILL ROAD
POMFRET, CT 06250

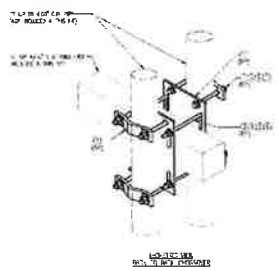
VZW LOCATION CODE:	768942
MDG LOCATION ID:	05BBK179H2
FUZE PROJECT ID:	10178882

SHEET TITLE

MOUNT MODIFICATION DRAWINGS II

SHEET NUMBER

MM02



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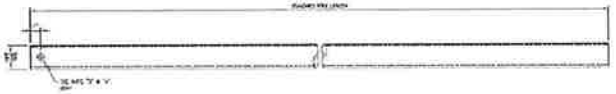

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VZWSMART STANDARD PIPE

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PV-DC-PTPC

DUAL CROSS - PIPE TO PIPE CONNECTION

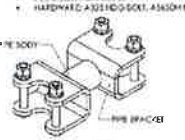
Table 1: Crossover Pipe to Pipe Connection Configurations

Part Number	Weight	Pipe to Pipe C-C	Pipe 1 Size	Pipe 2 Size	Pipe 1 Bolt Size	Pipe 2 Bolt Size
	lbs	in	in	in	in	in
PV-DC-PTPC-2020-6	13	6	2.375	2.375	5/8 x 4-1/2	5/8 x 4-1/2
PV-DC-PTPC-2020-12	14.8	12	2.375	2.375	5/8 x 4-1/2	5/8 x 4-1/2
PV-DC-PTPC-2020-24	18.5	24	2.375	2.375	5/8 x 4-1/2	5/8 x 4-1/2
PV-DC-PTPC-2025-6	13.8	6	2.375	2.875	5/8 x 4-1/2	5/8 x 5
PV-DC-PTPC-2025-12	15.7	12	2.375	2.875	5/8 x 4-1/2	5/8 x 5
PV-DC-PTPC-2025-24	19.3	24	2.375	2.875	5/8 x 4-1/2	5/8 x 5
PV-DC-PTPC-2035-6	15	6	2.375	3.5	5/8 x 4-1/2	5/8 x 5-1/2
PV-DC-PTPC-2035-12	16.1	12	2.375	3.5	5/8 x 4-1/2	5/8 x 5-1/2
PV-DC-PTPC-2035-24	20.4	24	2.375	3.5	5/8 x 4-1/2	5/8 x 5-1/2
PV-DC-PTPC-2525-6	15.2	6	2.875	2.875	5/8 x 5	5/8 x 5
PV-DC-PTPC-2525-12	18	12	2.875	2.875	5/8 x 5	5/8 x 5
PV-DC-PTPC-2525-24	23.9	24	2.875	2.875	5/8 x 5	5/8 x 5
PV-DC-PTPC-2535-6	16.2	6	2.875	3.5	5/8 x 5	5/8 x 5-1/2
PV-DC-PTPC-2535-12	19.1	12	2.875	3.5	5/8 x 5	5/8 x 5-1/2
PV-DC-PTPC-2535-24	25	24	2.875	3.5	5/8 x 5	5/8 x 5-1/2
PV-DC-PTPC-3030-6	17.5	6	3.5	3.5	5/8 x 5-1/2	5/8 x 5-1/2
PV-DC-PTPC-3030-12	21.3	12	3.5	3.5	5/8 x 5-1/2	5/8 x 5-1/2
PV-DC-PTPC-3030-24	29.9	24	3.5	3.5	5/8 x 5-1/2	5/8 x 5-1/2
PV-DC-PTPC-3040-6	19.1	6	3.5	4.5	5/8 x 5-1/2	5/8 x 6-1/2
PV-DC-PTPC-3040-12	23	12	3.5	4.5	5/8 x 5-1/2	5/8 x 6-1/2
PV-DC-PTPC-3040-24	30.5	24	3.5	4.5	5/8 x 5-1/2	5/8 x 6-1/2

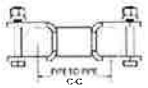
NOTE: PIPE BODY DIAMETER IS ALWAYS EQUIVALENT TO PIPE 1 DIAMETER SIZE

NOTES:

- INSTALLATION REQUIREMENTS
  - MINIMUM BOLT TORQUE: 60 FT-LBS
  - CLEAN, DRY ASSEMBLY
  - GALVANIZED WELDMENT AND HARDWARE
  - COLORED WAX COATING ON NUTS
- MATERIALS
  - PIPE BRACKET: A36 HDG
  - HARDWARE: A325 HDG BOLT, A563 DH HVY



PV-DC-PTPC
DUAL CROSS - PIPE TO PIPE CONNECTION



FV-DC-PTPC
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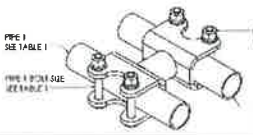

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PERFECT Vision

PTPC-ENG-01-R0

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PROPRIETARY AND CONFIDENTIAL

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

SBA

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1	03/29/23	ISSUED FOR CONSTRUCTION	CMC
0	02/07/23	ISSUED FOR REVIEW	CMC

PROJECT NAME & ADDRESS

POMFRET SOUTH CT

(2) BARRITT HILL ROAD
POMFRET, CT 06259

VZW LOCATION CODE:	765742
MDG LOCATION ID:	88888765742
FUZE PROJECT ID:	16119821

SHEET TITLE

MOUNT MODIFICATION DRAWINGS III

SHEET NUMBER

MM03

ATTACHMENT 4

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

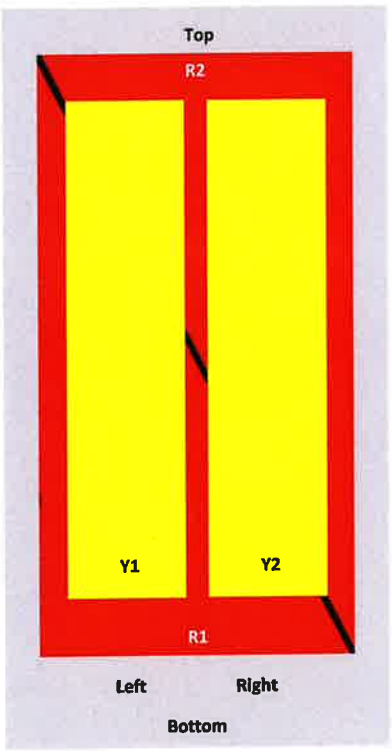
Width	350 mm | 13.78 in

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	ANxxxxxxxxxxxxx1
R2	824-894	3-4	2	ANxxxxxxxxxxxxx2
Y1	1695-2360	5-6	3	ANxxxxxxxxxxxxx3
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

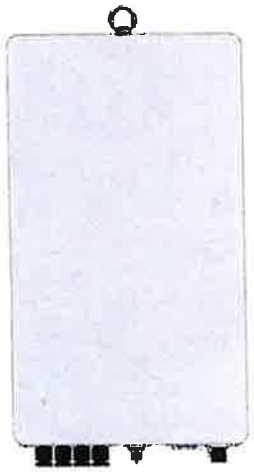
Performance Note	Severe environmental conditions may degrade optimum performance

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°C - 55°C (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

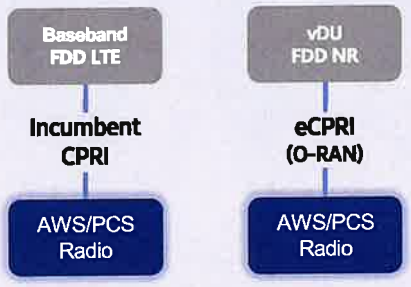
Homepage
samsungnetworks.com

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

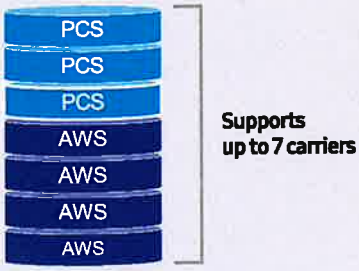
A standardized O-RAN radio can help in implementing cost-effective networks, which are capable of sending more data without compromising additional investments.

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 UL: 777~787MHz	DL: 869~894MHz 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 @ 896 ~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.

SD050 | 3.4L | 50 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

Standby Power Rating
50 kW, 63 kVA, 60 Hz

Prime Power Rating*
45 kW, 56 kVA, 60 Hz

*EPA Certified Prime ratings are not available in the US or its Territories

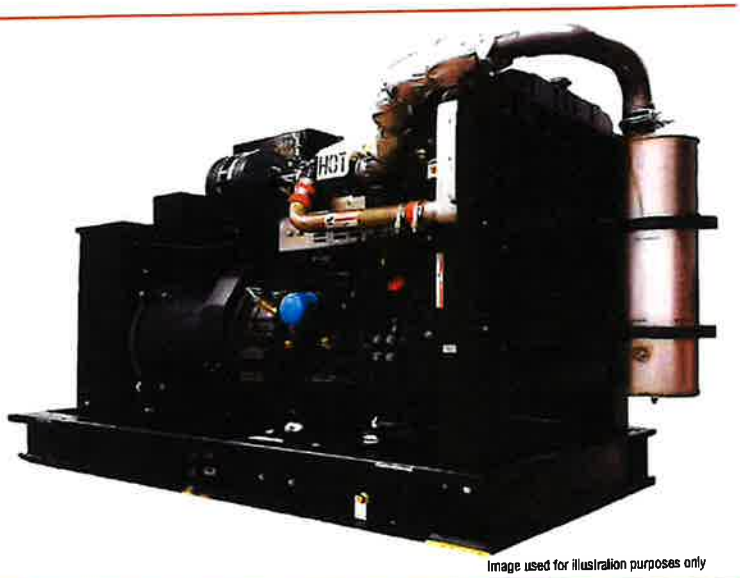


Image used for illustration purposes only

Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.

- UL2200, UL6200, UL1236, UL142
- CSA C22.2
- BS5514 and DIN 6271
- SAE J1349
- NFPA 37, 70, 99, 110
- NEC700, 701, 702, 708
- ISO 3046, 7637, 8528, 9001
- NEMA ICS10, MG1, 250, ICS6, AB1
- ANSI C62.41
- IBC 2009, CBC 2010, IBC 2012, ASCE 7-05, ASCE 7-10, ICC-ES AC-156 (2012)

Powering Ahead

For over 50 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

SD050 | 3.4L | 50 kW

INDUSTRIAL DIESEL GENERATOR SET

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STANDARD FEATURES

ENGINE SYSTEM

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)
- Critical Silencer (Enclosed Units Only)

Fuel System

- Fuel Lockoff Solenoid
- Primary Fuel Filter

Cooling System

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene Glycol Antifreeze
- 120 VAC Coolant Heater

Electrical System

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 Leads (3-Phase, Non 600V)
- Class H Insulation Material
- Vented Rotor
- 2/3 Pitch
- Skewed Stator
- Auxiliary Voltage Regulator Power Winding
- Brushless Excitation
- Sealed Bearing
- Automated Manufacturing (Winding, Insertion, Lacing, Varnishing)
- Rotor Dynamically Spin Balanced
- Full Load Capacity Alternator
- Protective Thermal Switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted In the Discharge Hood (Enclosed Only)
- Silencer of Heat Shield

ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuated Enclosures)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

FUEL TANKS (If Selected)

- UL 142/ULC S-601
- Double Wall Construction
- Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested - 2 psi
- Rupture Basin Alarm
- Fuel Level
- Check Valve In Supply and Return Lines
- RhinoCoat™ - Textured Polyester Powder Coat Paint
- Stainless Steel Hardware

CONTROL SYSTEM

Digital H Control Panel- Dual 4x20 Display

Program Functions

- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- All Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus® Protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

Full System Status Display

- Power Output (kW)
- Power Factor
- kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

Alarms and Warnings

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)

SD050 | 3.4L | 50 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

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CONFIGURABLE OPTIONS

ENGINE SYSTEM

- Engine Coolant Heater
- Oil Heater
- Industrial Silencer (Open Set)
- Air Filter Restriction Indicator
- Fan and Belt Guards (Enclosed Units Only)

FUEL SYSTEM

- Flexible Fuel Lines
- Primary Fuel Filter

ELECTRICAL SYSTEM

- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating
- Permanent Magnet Excitation

GENERATOR SET

- 8 Position Load Center

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENCLOSURE

- Weather Protected Enclosure
- Level 1 Sound Attenuated
- Level 2 Sound Attenuated
- Level 2 Sound Attenuated with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Door Open Alarm Switch
- Pad Vibration Isolator
- Enclosure Heater

WARRANTY (Standby Gensets Only)

- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

CONTROL SYSTEM

- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Sender with Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- 10A Engine Run Relay
- Ground Fault Indication and Protection Functions
- 100 dB Alarm Horn
- 120V GFCI and 240V Outlets

FUEL TANKS (Size On Last Page)

- 8 in (203.2 mm) Fill Extension
- 13 in (330.2 mm) Fill Extension
- 19 in (482.6 mm) Fill Extension
- Overfill Protection Valve
- Vent Extensions
- Tank Risers
- Fuel Drop Tube
- Return Hose
- 90% Fuel Level Alarm

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant Heater Ball Valves
- Fluid Containment Pan

CONTROL SYSTEM

- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

ALTERNATOR SYSTEM

- 3rd Breaker System

GENERATOR SET

- Special Testing
- IBC Seismic Certification

TANKS

- UL2085 Tank
- Stainless Steel Tanks

SD050 | 3.4L | 50 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

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APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Type	In-Line
Displacement - in^3 (L)	207.48 (3.4)
Bore - in (mm)	3.86 (98)
Stroke - in (mm)	4.45 (113)
Compression Ratio	18.5:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head	Cast Iron OHV
Piston Type	Aluminum
Crankshaft Type	Forged Steel

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	±0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow Cartridge
Crankcase Capacity - qt (L)	7.4 (7)

Cooling System

Cooling System Type	Closed Recovery
Water Pump Type	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed - rpm	2,250
Fan Diameter - in (mm)	560 (22)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel #2
Fuel Specifications	ASTM
Fuel Filtering (microns)	10
Fuel Inject Pump	Bosch (VE)
Fuel Pump Type	Engine Driven Gear
Injector Type	Pintel - 2,100 psi (14,479 kPa)
Fuel Supply Line - in (mm)	0.312 (7.92) NPT
Fuel Return Line - in (mm)	0.312 (7.92) NPT

Engine Electrical System

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	K0050124Y21
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	< 50
Standard Excitation	Synchronous Brushless
Bearings	Single Sealed Cartridge
Coupling	Direct via Flexible Disc
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

SD050 | 3.4L | 50 kW

INDUSTRIAL DIESEL GENERATOR SET

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OPERATING DATA

POWER RATINGS

		Standby
Single-Phase 120/240 VAC @1.0pf	50 kW	Amps: 208
Three-Phase 120/208 VAC @0.8pf	50 kW	Amps: 173
Three-Phase 120/240 VAC @0.8pf	50 kW	Amps: 150
Three-Phase 277/480 VAC @0.8pf	50 kW	Amps: 75
Three-Phase 346/600 VAC @0.8pf	50 kW	Amps: 60

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip

277/480 VAC	30%	208/240 VAC	30%
K0050124Y21	98	K0050124Y21	75
K0060124Y21	124	K0060124Y21	95

FUEL CONSUMPTION RATES*

Fuel Pump Lift - ft (m)
3 (1)

Total Fuel Pump Flow (Combustion + Return) - gph (Lph)
3.6 (13.5)

Diesel - gph (Lph)

Percent Load	Standby
25%	1.3 (4.9)
50%	2.3 (8.7)
75%	3.3 (12.5)
100%	4.3 (16.4)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Coolant Flow	gpm (Lpm)	12.2 (46)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (kW)	135,900 (39.8)
Inlet Air	scfm (m^3/hr)	7,500 (212)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Ambient Temperature (Before Derate)	See Bulletin No. 0199280SSD	
Maximum Radiator Backpressure	in H_2O (kPa)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power - scfm (m^3/min)	166 (4.7)

ENGINE

		Standby
Rated Engine Speed	RPM	1,800
Horsepower at Rated kW**	hp	86
Piston Speed	ft/min (m/min)	1,335 (406.9)
BMEP	psi (kPa)	169 (1,165)

EXHAUST

		Standby
Exhaust Flow (Rated Output)	scfm (m^3/min)	448 (12.7)
Max. Allowable Backpressure	inHg (kPa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	1,044 (562)

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.
Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards.
Standby - See Bulletin 0187500SSB
Prime - See Bulletin 0187510SSB

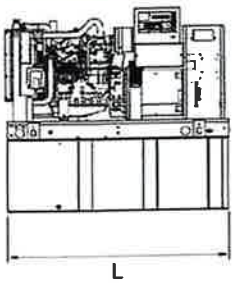
SD050 | 3.4L | 50 kW

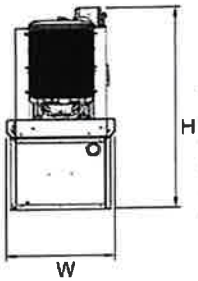
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

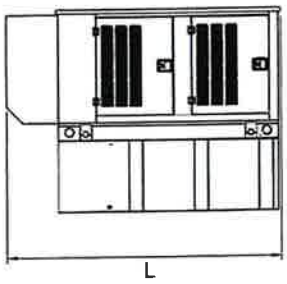
DIMENSIONS AND WEIGHTS*

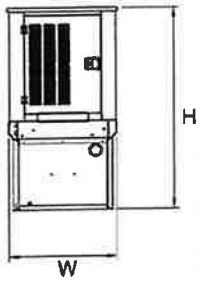




OPEN SET (Includes Exhaust Flex)

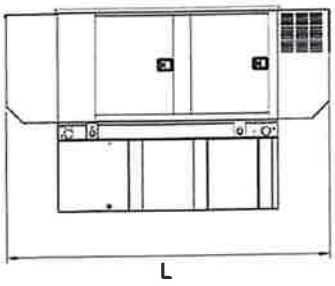
Run Time Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Minimum Weight - lbs (kg)	Maximum Weight - lbs (kg)
No Tank	-	76.7 (1,948) x 37.4 (950) x 45.2 (1,147)	1,710 (776)	1,836 (833)
12	54 (204)	76.7 (1,948) x 37.4 (950) x 58.2 (1,477)	2,190 (993)	2,316 (932)
30	132 (499)	76.7 (1,948) x 37.4 (950) x 70.2 (1,782)	2,420 (1,098)	2,546 (979)
44	190 (719)	76.7 (1,948) x 37.4 (950) x 82.2 (2,087)	2,629 (1,192)	2,755 (1,022)
49	211 (799)	106.0 (2,692) x 37.4 (950) x 71.2 (1,807)	2,634 (1,192)	2,760 (1,023)
69	300 (1,136)	92.9 (2,360) x 37.4 (950) x 85.7 (2,176)	2,692 (1,221)	2,818 (1,035)

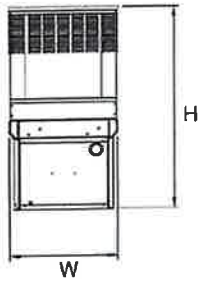




WEATHER PROTECTED ENCLOSURE

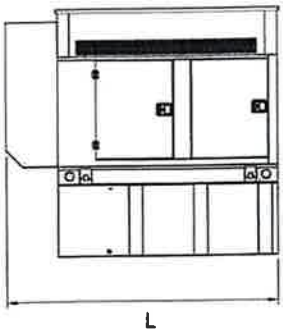
Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Steel Weight Minimum - lbs (kg)	Steel Weight Maximum - lbs (kg)	Aluminum Weight Minimum - lbs (kg)	Aluminum Weight Maximum - lbs (kg)
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	2,158 (979)	2,286 (1,037)	1,935 (878)	2,965 (1,345)
12	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)	2,638 (1,197)	2,766 (1,255)	2,415 (1,096)	3,445 (1,563)
30	132 (499)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)	2,868 (1,301)	2,996 (1,359)	2,645 (1,200)	3,675 (1,667)
44	190 (719)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)	3,077 (1,396)	3,205 (1,454)	2,854 (1,295)	3,884 (1,762)
49	211 (799)	106.0 (2,692) x 38.0 (965) x 99.0 (2,515)	4,316 (1,958)	4,572 (2,074)	3,870 (1,755)	5,930 (2,690)
69	300 (1,136)	94.8 (2,409) x 38.0 (965) x 90.0 (2,287)	3,140 (1,424)	3,268 (1,482)	2,917 (1,323)	3,947 (1,790)

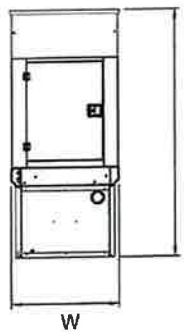




LEVEL 1 SOUND ATTENUATED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Steel Weight Minimum - lbs (kg)	Steel Weight Maximum - lbs (kg)	Aluminum Weight Minimum - lbs (kg)	Aluminum Weight Maximum - lbs (kg)
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	2,158 (979)	2,286 (1,037)	1,935 (878)	2,965 (1,345)
12	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)	2,638 (1,197)	2,766 (1,255)	2,415 (1,096)	3,445 (1,563)
30	132 (499)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)	2,868 (1,301)	2,996 (1,359)	2,645 (1,200)	3,675 (1,667)
44	190 (719)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)	3,077 (1,396)	3,205 (1,454)	2,854 (1,295)	3,884 (1,762)
49	211 (799)	106.0 (2,692) x 38.0 (965) x 99.0 (2,515)	4,316 (1,958)	4,572 (2,074)	3,870 (1,755)	5,930 (2,690)
69	300 (1,136)	94.8 (2,409) x 38.0 (965) x 90.0 (2,287)	3,140 (1,424)	3,268 (1,482)	2,917 (1,323)	3,947 (1,790)





LEVEL 2 SOUND ATTENUATED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Steel Weight Minimum - lbs (kg)	Steel Weight Maximum - lbs (kg)	Aluminum Weight Minimum - lbs (kg)	Aluminum Weight Maximum - lbs (kg)
No Tank	-	94.8 (2,409) x 38 (965) x 70.1 (1,780)	2,389 (1,084)	2,517 (1,142)	2,035 (923)	2,163 (981)
12	54 (204)	94.8 (2,409) x 38 (965) x 62.5 (1,588)	2,638 (1,197)	2,766 (1,255)	2,415 (1,095)	3,445 (1,563)
30	132 (499)	94.8 (2,409) x 38 (965) x 74.5 (1,893)	2,868 (1,301)	2,996 (1,359)	2,645 (1,200)	3,675 (1,667)
44	190 (719)	94.8 (2,409) x 38 (965) x 86.5 (2,198)	3,077 (1,396)	3,205 (1,454)	2,854 (1,295)	3,884 (1,762)
49	211 (799)	105.0 (2,692) x 38 (965) x 99 (2,516)	4,316 (1,958)	4,572 (2,074)	3,870 (1,755)	5,930 (2,690)
69	300 (1,136)	94.8 (2,409) x 38 (965) x 110.6 (2,809)	3,371 (1,529)	3,499 (1,587)	3,017 (1,368)	3,145 (1,427)

* All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.

SPEC SHEET

6 of 6

Part No 0K5090
Rev. D 08/16/19

ATTACHMENT 5

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

T + 561.995.7670
F + 561.995.7626

sbasite.com

APPROVED COLO RSM REDLINE

By SSamuel at 4:54:39 PM, 6/24/2024

(6) JAHH-65B-R3B and (3) MT6413-77A Panels included in Analysis considered for `future lease rights per SDS.

Structural Analysis Report

Client: Verizon

Client Site ID / Name: 5000917542 / Pomfret South CT
Application #: 217673, v7

SBA Site ID / Name: CT01364-S / Pomfret

168 ft Monopole

62 Babbitt Hill Road
Pomfret, Connecticut 06259
Lat: 41.8702, Long: -71.9882

Project number: CT01364-VZW-021624

Analysis Results

Tower	83.7%	Pass
Foundation	81.4%	Pass

Change in tower stress due to mount modification / replacement	N/A

Prepared by:

Asmerom Hagos
Structural Engineer II
214-570-8110 ext 2612
Ahagos@sbasite.com

Reviewed by:

Anantha (Shan) Shanubhogue, P.E.
Senior Manager, Structural Engineering
561-981-7390
SShanubhogue@sbasite.com

February 20, 2024

STATE OF CONNECTICUT
ANANTHA B. SHANUBHOGUE
33123
LICENSED
PROFESSIONAL ENGINEER

02/20/24

Table of Contents

Introduction

The purpose of this report is to summarize the analysis results on the 168 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	Summit, Job # 4728, Dated 04/30/1999
Foundation drawing	N/A
Geotechnical report	JGI, Project # 99261G, Dated 05/21/1999
Modification drawings	N/A
Carrier MA	Colliers Engineering & Design, Project # 24777019, Dated 2/6/2024
Latest SA	TES, Project # 139729, Dated 4/3/2023

Analysis Criteria

Table 2 Code Related Data

Jurisdiction (State/County/City)	Connecticut / Windham / Pomfret
Governing Codes	ANSI/TIA/EIA 222-H, 2021 IBC / 2022 CT State Building Code
Ultimate Wind Speed (3-Sec gust)	120.0 mph
Wind Speed with Ice (3-Sec gust)	50 mph
Service Wind Speed (3-Sec gust)	60 mph
Ice Thickness	1.00"
Risk Category	II
Exposure Category	C
Topographic Category	1
Crest Height	0 ft
Ground Elevation	569.7 ft.
Seismic Parameter S_s	0.182
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
-	168.0	-	-	Low Profile Platform	-	Abandoned
1	157.0	3	ALU 1900 MHz	Low Profile Platform w/Handrail Kit & Reinforcement Kit	(4) 1 1/4" Fiber	T-Mobile Sprint
2		6	ALU 800 MHz			
3		3	ALU TD-RRH8x20-25			
4		3	RFS APXVTM14-C-I20 - Panel			
5		3	Commscope NNVV-65B-R4 - Panel			
6	147.0	6	Ericsson RRUS 11 RRU	Platform W/Handrail	(12) 1 5/8" (2) 3/4" DC (1) 7/16" Fiber	AT&T
7		1	Raycap DC6-48-60-18-8F OVP			
8		6	Powerwave Technologies 7770 - Panel			
9		3	KMW AM-X-CD-17-65-00T-RET - Panel			
10		6	Powerwave Allgon LGP 21401			
11		6	Powerwave LGP21903 Diplexer			
12		6	ADC Cleargain 1900W800 TMA			
13		3	CSS Dual Band Combiner			
14		3	Ericsson RRUS 12 RRU			
15	137.0	3	RFS APXV18-206516S-C-A20 Panel	Low Profile Platform w/ Handrail & Bottom Kicker Support Kit	(12) 1 5/8" (3) 1 5/8" Fiber	T-Mobile
16		3	RFS APXVAARR24_43-U-NA20 Panel			
17		3	Ericsson KRY 112 489/2			
18		3	Allen Telecom FE15501P77/75			
19		3	Ericsson Radio 4449 B71+B12			
20		3	Kathrein 782 11056			

Proposed Loading:

Information pertaining to proposed antennas and transmission lines were based upon the Application #: 217673, v7 from Verizon and is listed in Table 4.

Table 4 Proposed Appurtenances

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
21	125.0	12	Commscope JAHH-65B-R3B - Panel	Platform w/handrail & kicker (Site Pro1 RMQP-496-HK)	(10) 1 5/8" (2) 1-1/4" Hybrid	Verizon
22		6	Samsung MT6413-77A - Panel			
23		3	Commscope CBC78T-DS-43-2X Diplexer			
24		6	Samsung B2/B66A RRH ORAN (RF4439d-25A) RRU			
25		6	Samsung RF4461d-13A RRU			
26		4	Raycap RVZDC-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
Max. Usage:	83.7%	76.7%	67.1%
Pass/Fail	Pass	Pass	Pass

Foundation

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

Table 6 Foundation Reaction Comparison

Structural Component	Max Usage (%)	Analysis Result
Foundation	81.4%	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

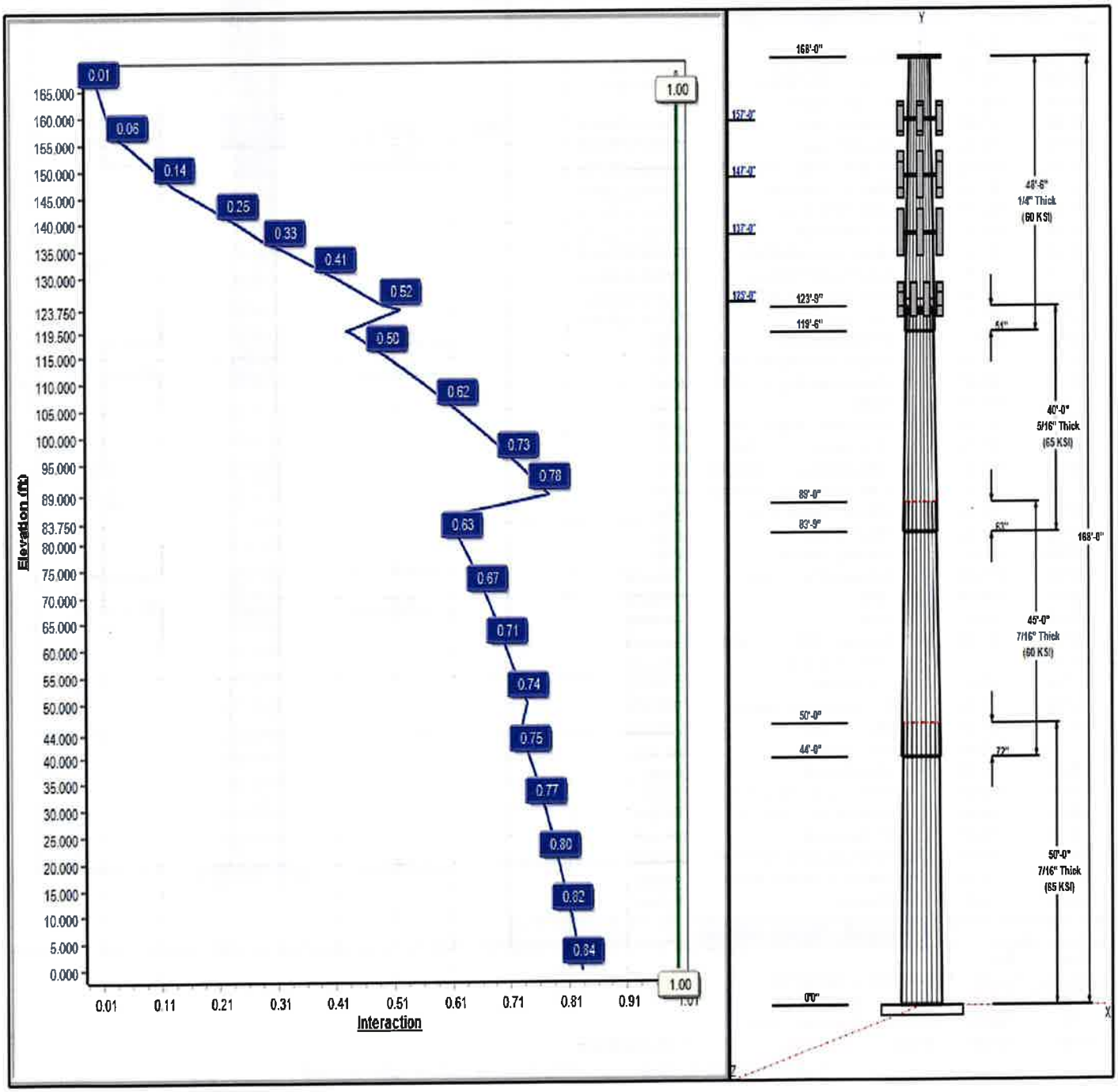
Usage Diagram - Max Ratio 83.69% at 0.0ft

Structure:	CT01364-S	**Code:**	EIA/TIA-222-H	2/20/2024
Site Name:	Pomfret	**Exposure:**	C	
Height:	168.00 (ft)	**Gh:**	1.1	
Base Elev:	0.000 (ft)			Page: 1

SBA

Dead Load Factor:	1.20	**Iterations:**	25
Wind Load Factor:	1.00		

Load Case : 1.2D + 1.0W 120 mph Wind



Structure: CT01364-S

Type: Tapered
Site Name: Pomfret
Height: 168.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.20500

2/20/2024

Shaft Properties

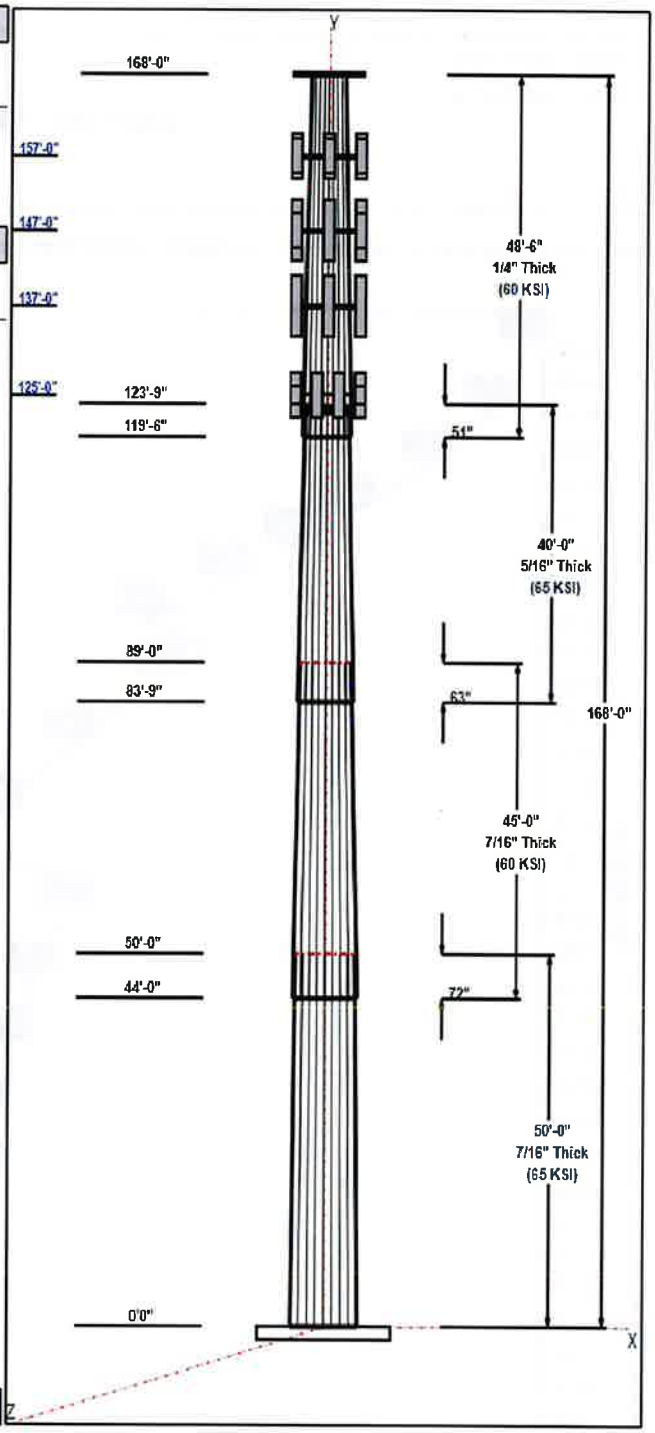
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	50.00	46.19	56.44	0.438		0.20500	65
2	45.00	39.07	48.30	0.438	Slip	0.20500	60
3	40.00	32.57	40.77	0.313	Slip	0.20500	65
4	48.50	24.00	33.94	0.250	Slip	0.20500	60

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
168.00	168.00	1	Low Profile Platform	Abandoned
168.00	168.00	1	6' Lightning rod	
157.00	157.00	1	Handrail Kit (Site Pro1	T-Mobile Sprint
157.00	157.00	12	Mount Pipes	T-Mobile Sprint
157.00	157.00	3	Bottom reinforcement kit	T-Mobile Sprint
157.00	157.00	3	Reinforcement kit	T-Mobile Sprint
157.00	157.00	3	ALU 1900 MHz	T-Mobile Sprint
157.00	157.00	6	ALU 800 MHz	T-Mobile Sprint
157.00	157.00	3	ALU TD-RRH8x20-25	T-Mobile Sprint
157.00	157.00	1	Low Profile Platform	T-Mobile Sprint
157.00	157.00	3	RFS APXVTM14-C-I20	T-Mobile Sprint
157.00	157.00	3	Commscope	T-Mobile Sprint
147.00	147.00	6	Ericsson RRUS 11	AT&T
147.00	147.00	1	Raycap DC6-48-60-18-8F	AT&T
147.00	147.00	6	Powerwave Allgon 7770	AT&T
147.00	147.00	3	KMW	AT&T
147.00	147.00	6	Powerwave Allgon LGP	AT&T
147.00	147.00	6	Powerwave LGP21903	AT&T
147.00	147.00	6	ADC Cleargain 1900W800	AT&T
147.00	147.00	3	CSS Dual Band Combiner	AT&T
147.00	147.00	1	Platform W/Handrail	AT&T
147.00	147.00	12	Mount Pipes	AT&T
147.00	147.00	3	Ericsson RRUS 12	AT&T
137.00	137.00	3	Ericsson Radio 4449	T-Mobile
137.00	137.00	3	RFS	T-Mobile
137.00	137.00	3	RFS	T-Mobile
137.00	137.00	3	Ericsson KRY 112 489/2	T-Mobile
137.00	137.00	3	Allen Telecome	T-Mobile
137.00	137.00	3	782 11056	T-Mobile
137.00	137.00	1	Platform w/ Handrail &	T-Mobile
137.00	137.00	9	Mount Pipes	T-Mobile
125.00	125.00	12	Mount Pipes	Verizon
125.00	125.00	12	Commscope	Verizon
125.00	125.00	6	Samsung MT6413-77A	Verizon
125.00	125.00	1	Platform w/handrail &	Verizon
125.00	125.00	3	Commscope	Verizon
125.00	125.00	6	Samsung B2/B66A RRH	Verizon
125.00	125.00	6	Samsung RF4461d-13A	Verizon
125.00	125.00	4	Raycap	Verizon

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	168.00	Outside	Safety Cable	
0.00	168.00	Outside	Step bolts (ladder)	
0.00	157.00	Inside	1 1/4" Coax	T-Mobile Sprint



0.00	147.00	Inside	1 5/8" Coax	AT&T
0.00	147.00	Inside	3/4" DC	AT&T
0.00	147.00	Inside	7/16" Fiber	AT&T
0.00	137.00	Inside	1 5/8" Coax	T-Mobile
0.00	137.00	Inside	1 5/8" Fiber	T-Mobile
0.00	125.00	Inside	1 5/8" Coax	Verizon
0.00	125.00	Inside	1-1/4" Hybrid	Verizon

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
20	2.25" 18J	75.0	Cluster

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
3.2500	64.0	50.0	Clipped

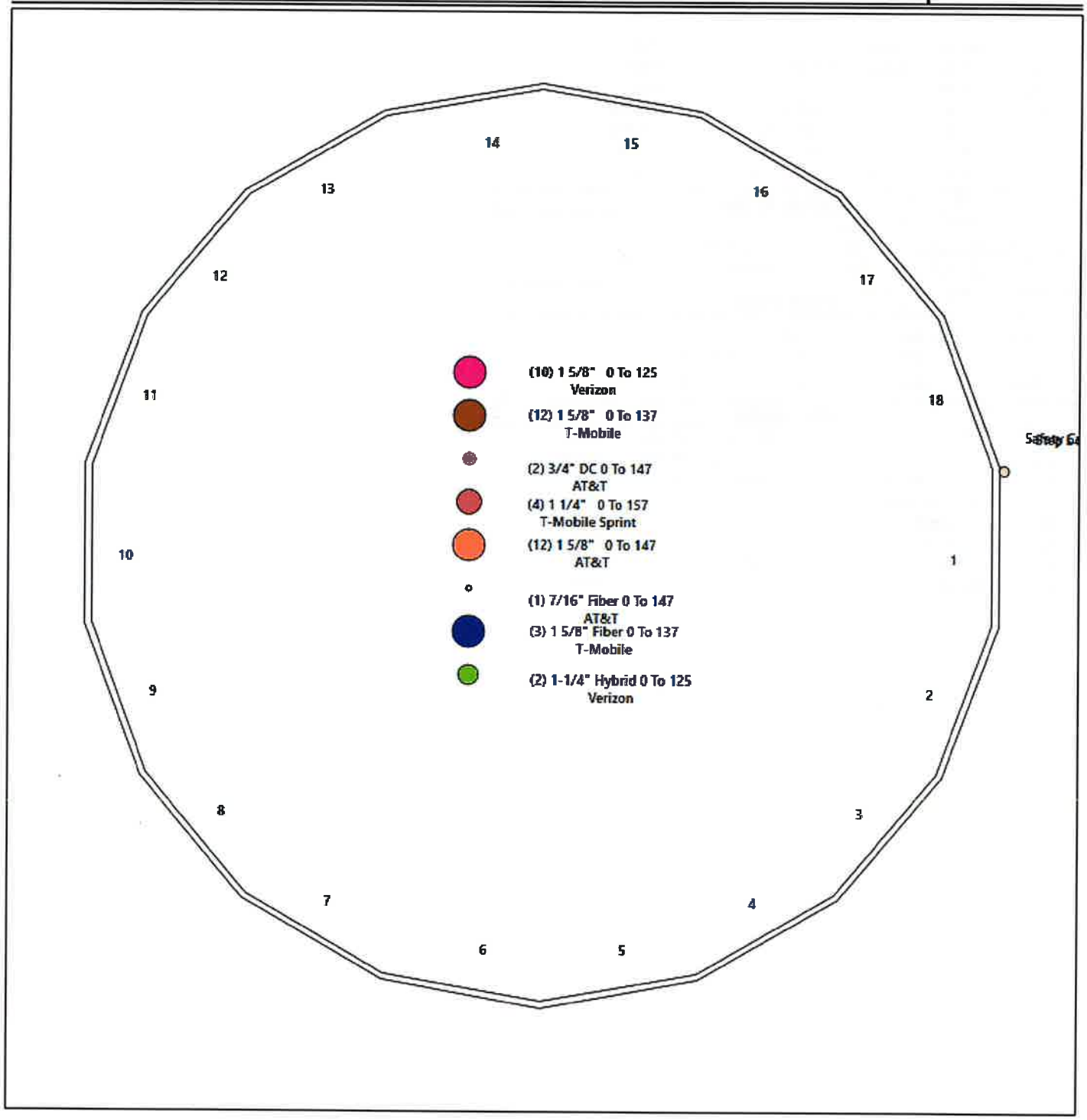
Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 120 mph Wind	5069.9	41.5	64.7
0.9D + 1.0W 120 mph Wind	4989.3	41.4	48.5
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1238.0	10.7	56.3
1.2D + 1.0Ev + 1.0Eh	109.0	0.7	66.9
0.9D + 1.0Ev + 1.0Eh	107.5	0.7	50.7
1.0D + 1.0W 60 mph Wind	1124.2	9.3	54.0

Structure: CT01364-S - Coax Line Placement

Type: Monopole
Site Name: Pomfret
Height: 168.00 (ft)

2/20/2024



Shaft Properties

Structure:	CT01364-S		**Code:**	TIA-222-H	2/20/2024
Site Name:	Pomfret		**Exposure:**	C	
Height:	168.00 (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	50.000	0.4375	65		0.00	12,020
2	18	45.000	0.4375	60	Slip	72.00	9,195
3	18	40.000	0.3125	65	Slip	63.00	4,908
4	18	48.500	0.2500	60	Slip	51.00	3,761
					Total Shaft Weight:		**29,884**

	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	56.44	0.00	77.76	30813.76	21.34	129.01	46.19	50.00	63.53	16802.2	17.21	105.5	0.205000
2	48.30	44.00	66.45	19229.70	18.05	110.39	39.07	89.00	53.64	10115.3	14.34	89.30	0.205000
3	40.77	83.75	40.13	8299.11	21.59	130.47	32.57	123.75	32.00	4206.66	16.97	104.2	0.205000
4	33.94	119.5	26.73	3834.28	22.53	135.77	24.00	168.00	18.84	1343.00	15.52	96.00	0.205000

Load Summary

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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	168.00	Low Profile Platform	1	2100.00	18.38	1.00	3335.57	28.762	1.00	0.00	0.00
2	168.00	6' Lightning rod	1	6.50	0.38	1.00	30.98	1.113	1.00	0.00	0.00
3	157.00	Handrail Kit (Site Pro1 HRK14)	1	466.00	6.36	1.00	836.37	10.523	1.00	0.00	0.00
4	157.00	Mount Pipes	12	30.00	1.16	1.00	51.04	1.735	1.00	0.00	0.00
5	157.00	Bottom reinforcement kit	3	150.00	5.78	1.00	220.13	9.833	1.00	0.00	0.00
6	157.00	Reinforcement kit (PRK-SFS-H-L)	3	65.00	2.06	1.00	95.39	3.505	1.00	0.00	0.00
7	157.00	ALU 1900 MHz	3	60.00	2.31	1.01	110.30	2.742	1.01	0.00	0.00
8	157.00	ALU 800 MHz	6	53.00	2.13	0.92	94.97	2.523	0.92	0.00	0.00
9	157.00	ALU TD-RRH8x20-25	3	70.00	4.05	0.69	134.50	4.582	0.69	0.00	0.00
10	157.00	Low Profile Platform	1	2100.00	18.38	1.00	3376.32	26.114	1.00	0.00	0.00
11	157.00	RFS APXVTM14-C-I20	3	56.00	6.34	0.78	157.08	7.063	0.78	0.00	0.00
12	157.00	Commscope NNVV-65B-R4	3	77.40	12.27	0.73	266.69	13.239	0.73	0.00	0.00
13	147.00	Ericsson RRUS 11	6	55.00	3.79	0.64	112.83	4.301	0.64	0.00	0.00
14	147.00	Raycap DC6-48-60-18-8F	1	32.80	2.20	1.34	96.71	2.618	1.34	0.00	0.00
15	147.00	Powerwave Allgon 7770	6	39.00	5.51	0.77	124.06	6.191	0.77	0.00	0.00
16	147.00	KMW AM-X-CD-17-65-00T-RET	3	59.50	11.31	0.80	221.08	12.413	0.80	0.00	0.00
17	147.00	Powerwave Allgon LGP 21401	6	19.00	1.05	0.66	36.21	1.332	0.66	0.00	0.00
18	147.00	Powerwave LGP21903	6	5.50	0.23	0.84	10.21	0.373	0.84	0.00	0.00
19	147.00	ADC Cleargain 1900W800	6	28.66	1.28	0.77	51.05	1.584	0.77	0.00	0.00
20	147.00	CSS Dual Band Combiner	3	5.00	0.74	0.63	16.73	0.979	0.63	0.00	0.00
21	147.00	Platform W/Handrail	1	1604.70	21.41	1.00	2536.33	32.846	1.00	0.00	0.00
22	147.00	Mount Pipes	12	30.00	1.36	1.00	50.90	2.030	1.00	0.00	0.00
23	147.00	Ericsson RRUS 12	3	58.00	3.15	0.70	108.56	3.612	0.70	0.00	0.00
24	137.00	Ericsson Radio 4449 B71+B12	3	74.00	1.63	0.81	102.46	1.967	0.81	0.00	0.00
25	137.00	RFS APXV18-206516S-C-A20	3	18.70	3.62	0.78	72.21	4.223	0.78	0.00	0.00
26	137.00	RFS APXVAARR24_43-U-NA20	3	128.00	20.24	0.72	426.64	21.472	0.72	0.00	0.00
27	137.00	Ericsson KRY 112 489/2	3	15.40	0.56	0.83	26.07	0.774	0.83	0.00	0.00
28	137.00	Allen Telecome FE15501P77/75	3	17.50	0.53	0.73	26.35	0.745	0.73	0.00	0.00
29	137.00	782 11056	3	1.80	0.13	0.67	3.44	0.323	0.67	0.00	0.00
30	137.00	Platform w/ Handrail & Kicker	1	1879.70	32.63	1.00	2963.33	49.936	1.00	0.00	0.00
31	137.00	Mount Pipes	9	30.00	1.13	1.00	50.75	1.682	1.00	0.00	0.00
32	125.00	Mount Pipes	12	30.00	1.24	1.00	50.56	1.841	1.00	0.00	0.00
33	125.00	Commscope JAHH-65B-R3B	12	64.37	9.11	0.83	207.18	9.963	0.83	0.00	0.00
34	125.00	Samsung MT6413-77A	6	57.30	3.79	0.69	116.74	4.308	0.69	0.00	0.00
35	125.00	Platform w/handrail & kicker SitePro1	1	2264.67	26.50	1.00	3817.04	39.337	1.00	0.00	0.00
36	125.00	Commscope CBC78T-DS-43-2X	3	21.00	0.51	0.86	30.53	0.709	0.86	0.00	0.00
37	125.00	Samsung B2/B66A RRH ORAN	6	74.70	1.87	0.84	107.78	2.225	0.84	0.00	0.00
38	125.00	Samsung RF4461d-13A	6	79.10	1.87	0.84	112.39	2.225	0.84	0.00	0.00
39	125.00	Raycap RVZDC-6627-PF-48	4	32.00	4.06	0.88	106.67	4.594	0.88	0.00	0.00
		Totals:	**171**	**17,804.27**			**32,844.36**				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	168.00	(1) Safety Cable	0.38	Outside
0.00	168.00	(1) Step bolts (ladder)	0.63	Outside

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	157.00	(4) 1 1/4" Coax			0.00	Inside					
0.00	147.00	(12) 1 5/8" Coax			0.00	Inside					
0.00	147.00	(2) 3/4" DC			0.00	Inside					
0.00	147.00	(1) 7/16" Fiber			0.00	Inside					
0.00	137.00	(12) 1 5/8" Coax			0.00	Inside					
0.00	137.00	(3) 1 5/8" Fiber			0.00	Inside					
0.00	125.00	(10) 1 5/8" Coax			0.00	Inside					
0.00	125.00	(2) 1-1/4" Hybrid			0.00	Inside					

Shaft Section Properties

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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)

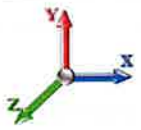
Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
0.00		0.4375	56.440	77.764	30813.8	21.34	129.01	76.3	1075.	0.0
5.00		0.4375	55.415	76.340	29152.6	20.92	126.66	76.8	1036.	1311.0
10.00		0.4375	54.390	74.917	27552.3	20.51	124.32	77.3	997.7	1286.7
15.00		0.4375	53.365	73.494	26011.6	20.10	121.98	77.8	960.0	1262.5
20.00		0.4375	52.340	72.071	24529.4	19.68	119.63	78.2	923.1	1238.3
25.00		0.4375	51.315	70.647	23104.7	19.27	117.29	78.7	886.8	1214.1
30.00		0.4375	50.290	69.224	21736.2	18.86	114.95	79.2	851.3	1189.9
35.00		0.4375	49.265	67.801	20422.8	18.44	112.61	79.7	816.5	1165.7
40.00		0.4375	48.240	66.377	19163.5	18.03	110.26	80.2	782.4	1141.4
44.00	Bot - Section 2	0.4375	47.420	65.239	18194.1	17.70	108.39	80.6	755.7	895.7
45.00		0.4375	47.215	64.954	17957.0	17.62	107.92	80.7	749.1	447.2
50.00	Top - Section 1	0.4375	47.065	64.746	17784.8	17.56	107.58	0.0	0.0	2206.7
55.00		0.4375	46.040	63.322	16637.5	17.15	105.23	75.7	711.8	1089.5
60.00		0.4375	45.015	61.899	15540.7	16.73	102.89	76.1	680.0	1065.3
65.00		0.4375	43.990	60.476	14493.1	16.32	100.55	76.2	648.9	1041.0
70.00		0.4375	42.965	59.053	13493.7	15.91	98.21	76.2	618.6	1016.8
75.00		0.4375	41.940	57.629	12541.4	15.49	95.86	76.2	589.0	992.6
80.00		0.4375	40.915	56.206	11634.9	15.08	93.52	76.2	560.1	968.4
83.75	Bot - Section 3	0.4375	40.146	55.139	10984.5	14.77	91.76	76.2	538.9	710.4
85.00		0.4375	39.890	54.783	10773.2	14.67	91.18	76.2	531.9	403.9
89.00	Top - Section 2	0.3125	39.695	39.061	7654.3	20.99	127.02	0.0	0.0	1275.1
90.00		0.3125	39.490	38.858	7535.4	20.87	126.37	76.9	375.8	132.6
95.00		0.3125	38.465	37.841	6959.3	20.29	123.09	77.5	356.4	652.5
100.00		0.3125	37.440	36.825	6413.3	19.71	119.81	78.2	337.4	635.2
105.00		0.3125	36.415	35.808	5896.7	19.14	116.53	78.9	318.9	617.9
110.00		0.3125	35.390	34.791	5408.5	18.56	113.25	79.6	301.0	600.6
115.00		0.3125	34.365	33.775	4948.1	17.98	109.97	80.3	283.6	583.3
119.50	Bot - Section 4	0.3125	33.443	32.860	4556.8	17.46	107.02	80.9	268.4	510.2
120.00		0.3125	33.340	32.758	4514.6	17.40	106.69	80.9	266.7	101.2
123.75	Top - Section 3	0.2500	33.071	26.043	3544.5	21.91	132.28	0.0	0.0	749.3
125.00		0.2500	32.815	25.839	3462.1	21.73	131.26	70.9	207.8	110.3
130.00		0.2500	31.790	25.026	3145.4	21.01	127.16	71.7	194.9	432.7
135.00		0.2500	30.765	24.213	2848.6	20.29	123.06	72.4	182.4	418.9
137.00		0.2500	30.355	23.887	2735.3	20.00	121.42	72.7	177.5	163.7
140.00		0.2500	29.740	23.399	2571.0	19.57	118.96	73.2	170.3	241.4
145.00		0.2500	28.715	22.586	2312.2	18.84	114.86	73.9	158.6	391.2
147.00		0.2500	28.305	22.261	2213.7	18.55	113.22	74.2	154.0	152.6
150.00		0.2500	27.690	21.773	2071.3	18.12	110.76	74.7	147.3	224.8
155.00		0.2500	26.665	20.960	1847.7	17.40	106.66	75.5	136.5	363.5
157.00		0.2500	26.255	20.634	1763.0	17.11	105.02	75.8	132.3	141.5
160.00		0.2500	25.640	20.146	1640.9	16.67	102.56	76.2	126.0	208.2
165.00		0.2500	24.615	19.333	1450.1	15.95	98.46	76.2	116.0	335.8
168.00		0.2500	24.000	18.845	1343.0	15.52	96.00	76.2	110.2	194.9
										29884.3

Wind Loading - Shaft

Structure: CT01364-S
Site Name: Pomfret
Height: 168.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1 **Topography:** 1

Code: TIA-222-H 2/20/2024
Exposure: C
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II Page: 9

Load Case: 1.2D + 1.0W 120 mph Wind
Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 25

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	29.160	32.08	522.96	0.730	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	29.160	32.08	513.46	0.730	0.000	5.00	23.663	17.27	554.1	0.0	1573.1
10.00		1.00	0.85	29.160	32.08	503.96	0.730	0.000	5.00	23.229	16.96	543.9	0.0	1544.1
15.00		1.00	0.85	29.160	32.08	494.47	0.730	0.000	5.00	22.795	16.64	533.8	0.0	1515.0
20.00		1.00	0.90	30.940	34.03	499.55	0.730	0.000	5.00	22.362	16.32	555.6	0.0	1486.0
25.00		1.00	0.95	32.428	35.67	501.41	0.730	0.000	5.00	21.928	16.01	571.0	0.0	1456.9
30.00		1.00	0.98	33.697	37.07	500.91	0.730	0.000	5.00	21.494	15.69	581.6	0.0	1427.9
35.00		1.00	1.01	34.809	38.29	498.73	0.730	0.000	5.00	21.061	15.37	588.7	0.0	1398.8
40.00		1.00	1.04	35.801	39.38	495.27	0.730	0.000	5.00	20.627	15.06	593.0	0.0	1369.7
44.00	Bot - Section 2	1.00	1.06	36.527	40.18	491.76	0.730	0.000	4.00	16.189	11.82	474.8	0.0	1074.9
45.00		1.00	1.07	36.700	40.37	490.79	0.730	0.000	1.00	4.078	2.98	120.2	0.0	536.6
50.00	Top - Section 1	1.00	1.09	37.523	41.28	485.49	0.730	0.000	5.00	20.130	14.69	606.5	0.0	2648.0
55.00		1.00	1.12	38.284	42.11	488.80	0.730	0.000	5.00	19.696	14.38	605.5	0.0	1307.4
60.00		1.00	1.14	38.991	42.89	482.31	0.730	0.000	5.00	19.262	14.06	603.1	0.0	1278.3
65.00		1.00	1.16	39.654	43.62	475.32	0.730	0.000	5.00	18.829	13.74	599.5	0.0	1249.2
70.00		1.00	1.17	40.277	44.31	467.88	0.730	0.000	5.00	18.395	13.43	594.9	0.0	1220.2
75.00		1.00	1.19	40.867	44.95	460.04	0.730	0.000	5.00	17.961	13.11	589.4	0.0	1191.1
80.00		1.00	1.21	41.426	45.57	451.86	0.730	0.000	5.00	17.528	12.80	583.1	0.0	1162.1
83.75	Bot - Section 3	1.00	1.22	41.827	46.01	445.51	0.730	0.000	3.75	12.861	9.39	432.0	0.0	852.5
85.00		1.00	1.22	41.958	46.15	443.36	0.730	0.000	1.25	4.299	3.14	144.8	0.0	484.7
89.00	Top - Section 2	1.00	1.23	42.366	46.60	436.35	0.730	0.000	4.00	13.575	9.91	461.8	0.0	1530.1
90.00		1.00	1.24	42.466	46.71	441.56	0.730	0.000	1.00	3.350	2.45	114.2	0.0	159.1
95.00		1.00	1.25	42.952	47.25	432.56	0.730	0.000	5.00	16.491	12.04	568.8	0.0	783.0
100.00		1.00	1.27	43.418	47.76	423.31	0.730	0.000	5.00	16.057	11.72	559.8	0.0	762.2
105.00		1.00	1.28	43.867	48.25	413.84	0.730	0.000	5.00	15.624	11.41	550.3	0.0	741.5
110.00		1.00	1.29	44.298	48.73	404.17	0.730	0.000	5.00	15.190	11.09	540.3	0.0	720.7
115.00		1.00	1.30	44.715	49.19	394.30	0.730	0.000	5.00	14.756	10.77	529.8	0.0	699.9
119.50	Bot - Section 4	1.00	1.31	45.078	49.59	385.27	0.730	0.000	4.50	12.910	9.42	467.3	0.0	612.2
120.00		1.00	1.32	45.117	49.63	384.26	0.730	0.000	0.50	1.434	1.05	51.9	0.0	121.5
123.75	Top - Section 3	1.00	1.32	45.411	49.95	376.62	0.730	0.000	3.75	10.616	7.75	387.1	0.0	899.2
125.00	Appurtenance(s)	1.00	1.33	45.507	50.06	379.84	0.730	0.000	1.25	3.485	2.54	127.3	0.0	132.4
130.00		1.00	1.34	45.884	50.47	369.49	0.730	0.000	5.00	13.667	9.98	503.6	0.0	519.3
135.00		1.00	1.35	46.250	50.88	359.00	0.730	0.000	5.00	13.233	9.66	491.5	0.0	502.6
137.00	Appurtenance(s)	1.00	1.35	46.393	51.03	354.77	0.730	0.000	2.00	5.172	3.78	192.7	0.0	196.4
140.00		1.00	1.36	46.605	51.27	348.37	0.730	0.000	3.00	7.628	5.57	285.5	0.0	289.6
145.00		1.00	1.37	46.951	51.65	337.61	0.730	0.000	5.00	12.366	9.03	466.2	0.0	469.4
147.00	Appurtenance(s)	1.00	1.37	47.087	51.80	333.27	0.730	0.000	2.00	4.825	3.52	182.4	0.0	183.1
150.00		1.00	1.38	47.287	52.02	326.72	0.730	0.000	3.00	7.107	5.19	269.9	0.0	269.7
155.00		1.00	1.39	47.615	52.38	315.72	0.730	0.000	5.00	11.499	8.39	439.6	0.0	436.2
157.00	Appurtenance(s)	1.00	1.39	47.744	52.52	311.28	0.730	0.000	2.00	4.478	3.27	171.7	0.0	169.8
160.00		1.00	1.40	47.934	52.73	304.60	0.730	0.000	3.00	6.587	4.81	253.5	0.0	249.8
165.00		1.00	1.41	48.246	53.07	293.37	0.730	0.000	5.00	10.631	7.76	411.9	0.0	403.0
168.00	Appurtenance(s)	1.00	1.41	48.429	53.27	286.58	0.730	0.000	3.00	6.171	4.50	240.0	0.0	233.8
								Totals:	**168.00**			**18,142.9**		**35,861.2**

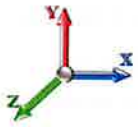
Discrete Appurtenance Forces

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 120 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 25

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	168.00	Low Profile Platform	1	48.429	53.272	1.00	1.00	18.38	2520.00	0.000	0.000	979.14	0.00	0.00
2	168.00	6' Lightning rod	1	48.429	53.272	1.00	1.00	0.38	7.80	0.000	0.000	20.24	0.00	0.00
3	157.00	ALU 1900 MHz	3	47.744	52.518	0.76	0.75	5.25	216.00	0.000	0.000	275.69	0.00	0.00
4	157.00	Handrail Kit (Site Pro1	1	47.744	52.518	1.00	1.00	6.36	559.20	0.000	0.000	334.01	0.00	0.00
5	157.00	Mount Pipes	12	47.744	52.518	0.75	0.75	10.44	432.00	0.000	0.000	548.29	0.00	0.00
6	157.00	Reinforcement kit	3	47.744	52.518	0.75	0.75	4.63	234.00	0.000	0.000	243.42	0.00	0.00
7	157.00	Bottom reinforcement kit	3	47.744	52.518	0.75	0.75	13.00	540.00	0.000	0.000	683.00	0.00	0.00
8	157.00	ALU TD-RRH8x20-25	3	47.744	52.518	0.52	0.75	6.29	252.00	0.000	0.000	330.21	0.00	0.00
9	157.00	Low Profile Platform	1	47.744	52.518	1.00	1.00	18.38	2520.00	0.000	0.000	965.28	0.00	0.00
10	157.00	RFS APXVTM14-C-I20	3	47.744	52.518	0.58	0.75	11.13	201.60	0.000	0.000	584.35	0.00	0.00
11	157.00	Commscope	3	47.744	52.518	0.55	0.75	20.15	278.64	0.000	0.000	1058.42	0.00	0.00
12	157.00	ALU 800 MHz	6	47.744	52.518	0.69	0.75	8.82	381.60	0.000	0.000	463.11	0.00	0.00
13	147.00	ADC Cleargain 1900W800	6	47.087	51.795	0.58	0.75	4.44	206.35	0.000	0.000	229.72	0.00	0.00
14	147.00	Powerwave Allgon LGP	6	47.087	51.795	0.49	0.75	3.12	136.80	0.000	0.000	161.52	0.00	0.00
15	147.00	Powerwave LGP21903	6	47.087	51.795	0.63	0.75	0.87	39.60	0.000	0.000	45.03	0.00	0.00
16	147.00	Ericsson RRUS 12	3	47.087	51.795	0.52	0.75	4.96	208.80	0.000	0.000	256.97	0.00	0.00
17	147.00	CSS Dual Band Combiner	3	47.087	51.795	0.47	0.75	1.05	18.00	0.000	0.000	54.33	0.00	0.00
18	147.00	Platform W/Handrail	1	47.087	51.795	1.00	1.00	21.41	1925.64	0.000	0.000	1108.94	0.00	0.00
19	147.00	Mount Pipes	12	47.087	51.795	0.75	0.75	12.24	432.00	0.000	0.000	633.98	0.00	0.00
20	147.00	KMW	3	47.087	51.795	0.60	0.75	20.36	214.20	0.000	0.000	1054.45	0.00	0.00
21	147.00	Raycap DC6-48-60-18-8F	1	47.087	51.795	1.01	0.75	2.21	39.36	0.000	0.000	114.52	0.00	0.00
22	147.00	Ericsson RRUS 11	6	47.087	51.795	0.48	0.75	10.92	396.00	0.000	0.000	565.36	0.00	0.00
23	147.00	Powerwave Allgon 7770	6	47.087	51.795	0.58	0.75	19.09	280.80	0.000	0.000	988.88	0.00	0.00
24	137.00	Ericsson KRY 112 489/2	3	46.393	51.033	0.62	0.75	1.05	55.44	0.000	0.000	53.37	0.00	0.00
25	137.00	Ericsson Radio 4449	3	46.393	51.033	0.61	0.75	2.97	266.40	0.000	0.000	151.60	0.00	0.00
26	137.00	RFS	3	46.393	51.033	0.54	0.75	32.79	460.80	0.000	0.000	1673.30	0.00	0.00
27	137.00	RFS	3	46.393	51.033	0.58	0.75	6.35	67.32	0.000	0.000	324.22	0.00	0.00
28	137.00	782 11056	3	46.393	51.033	0.50	0.75	0.20	6.48	0.000	0.000	10.00	0.00	0.00
29	137.00	Platform w/ Handrail &	1	46.393	51.033	1.00	1.00	32.63	2255.64	0.000	0.000	1665.20	0.00	0.00
30	137.00	Mount Pipes	9	46.393	51.033	0.75	0.75	7.63	324.00	0.000	0.000	389.25	0.00	0.00
31	137.00	Allen Telecome	3	46.393	51.033	0.55	0.75	0.87	63.00	0.000	0.000	44.43	0.00	0.00
32	125.00	Platform w/handrail &	1	45.507	50.057	1.00	1.00	26.50	2717.60	0.000	0.000	1326.52	0.00	0.00
33	125.00	Mount Pipes	12	45.507	50.057	0.75	0.75	11.16	432.00	0.000	0.000	558.64	0.00	0.00
34	125.00	Commscope	12	45.507	50.057	0.62	0.75	68.05	926.93	0.000	0.000	3406.49	0.00	0.00
35	125.00	Samsung MT6413-77A	6	45.507	50.057	0.52	0.75	11.77	412.56	0.000	0.000	589.07	0.00	0.00
36	125.00	Samsung RF4461d-13A	6	45.507	50.057	0.63	0.75	7.07	569.52	0.000	0.000	353.84	0.00	0.00
37	125.00	Commscope	3	45.507	50.057	0.65	0.75	0.99	75.60	0.000	0.000	49.40	0.00	0.00
38	125.00	Samsung B2/B66A RRH	6	45.507	50.057	0.63	0.75	7.07	537.84	0.000	0.000	353.84	0.00	0.00
39	125.00	Raycap	4	45.507	50.057	0.66	0.75	10.72	153.60	0.000	0.000	536.54	0.00	0.00
							Totals:		**21,365.12**			**23,184.58**		

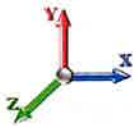
Total Applied Force Summary

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 120 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 25

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		554.07	1845.43	0.00	0.00
10.00		543.92	1816.37	0.00	0.00
15.00		533.76	1787.31	0.00	0.00
20.00		555.57	1758.26	0.00	0.00
25.00		571.00	1729.20	0.00	0.00
30.00		581.61	1700.14	0.00	0.00
35.00		588.67	1671.08	0.00	0.00
40.00		592.99	1642.02	0.00	0.00
44.00		474.85	1292.69	0.00	0.00
45.00		120.18	591.04	0.00	0.00
50.00		606.53	2920.32	0.00	0.00
55.00		605.49	1579.65	0.00	0.00
60.00		603.11	1550.59	0.00	0.00
65.00		599.55	1521.53	0.00	0.00
70.00		594.95	1492.47	0.00	0.00
75.00		589.42	1463.41	0.00	0.00
80.00		583.06	1434.36	0.00	0.00
83.75		431.97	1056.70	0.00	0.00
85.00		144.84	552.77	0.00	0.00
89.00		461.81	1747.96	0.00	0.00
90.00		114.24	213.54	0.00	0.00
95.00		568.79	1055.25	0.00	0.00
100.00		559.84	1034.50	0.00	0.00
105.00		550.35	1013.74	0.00	0.00
110.00		540.34	992.99	0.00	0.00
115.00		529.85	972.23	0.00	0.00
119.50		467.31	857.26	0.00	0.00
120.00		51.95	148.71	0.00	0.00
123.75		387.11	1103.43	0.00	0.00
125.00	(50) attachments	7301.66	6026.13	0.00	0.00
130.00		503.56	717.69	0.00	0.00
135.00		491.47	701.08	0.00	0.00
137.00	(28) attachments	4504.05	3774.86	0.00	0.00
140.00		285.46	351.89	0.00	0.00
145.00		466.22	573.19	0.00	0.00
147.00	(53) attachments	5396.14	4122.18	0.00	0.00
150.00		269.88	283.94	0.00	0.00
155.00		439.65	459.94	0.00	0.00
157.00	(38) attachments	5657.47	5794.37	0.00	0.00
160.00		253.54	254.51	0.00	0.00
165.00		411.87	410.89	0.00	0.00
168.00	(2) attachments	1239.35	2766.37	0.00	0.00
	Totals:	**41,327.45**	**64,782.01**	**0.00**	**0.00**

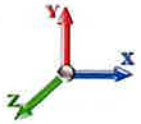
Linear Appurtenance Segment Forces (Factored)

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 120 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 25

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	0.018	0.000	29.160	0.00	1.64
5.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	29.160	0.00	6.24
10.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.018	0.000	29.160	0.00	1.64
10.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	29.160	0.00	6.24
15.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.018	0.000	29.160	0.00	1.64
15.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	29.160	0.00	6.24
20.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.019	0.000	30.940	0.00	1.64
20.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	30.940	0.00	6.24
25.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.019	0.000	32.428	0.00	1.64
25.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	32.428	0.00	6.24
30.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	33.697	0.00	1.64
30.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	33.697	0.00	6.24
35.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	34.809	0.00	1.64
35.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	34.809	0.00	6.24
40.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	35.801	0.00	1.64
40.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	35.801	0.00	6.24
44.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.021	0.000	36.527	0.00	1.31
44.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.021	0.000	36.527	0.00	4.99
45.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.021	0.000	36.700	0.00	0.33
45.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.021	0.000	36.700	0.00	1.25
50.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	37.523	0.00	1.64
50.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	37.523	0.00	6.24
55.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	38.284	0.00	1.64
55.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	38.284	0.00	6.24
60.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	38.991	0.00	1.64
60.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	38.991	0.00	6.24
65.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	39.654	0.00	1.64
65.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	39.654	0.00	6.24
70.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.023	0.000	40.277	0.00	1.64
70.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.023	0.000	40.277	0.00	6.24
75.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.023	0.000	40.867	0.00	1.64
75.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.023	0.000	40.867	0.00	6.24
80.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.024	0.000	41.426	0.00	1.64
80.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.024	0.000	41.426	0.00	6.24
83.75	Safety Cable	Yes	3.75	0.000	0.38	0.12	0.00	0.025	0.000	41.827	0.00	1.23
83.75	Step bolts (ladder)	Yes	3.75	0.000	0.63	0.20	0.00	0.025	0.000	41.827	0.00	4.68
85.00	Safety Cable	Yes	1.25	0.000	0.38	0.04	0.00	0.025	0.000	41.958	0.00	0.41
85.00	Step bolts (ladder)	Yes	1.25	0.000	0.63	0.07	0.00	0.025	0.000	41.958	0.00	1.56
89.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.025	0.000	42.366	0.00	1.31
89.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.025	0.000	42.366	0.00	4.99
90.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.025	0.000	42.466	0.00	0.33
90.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.025	0.000	42.466	0.00	1.25
95.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.026	0.000	42.952	0.00	1.64
95.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.026	0.000	42.952	0.00	6.24
100.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.026	0.000	43.418	0.00	1.64
100.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.026	0.000	43.418	0.00	6.24
105.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.027	0.000	43.867	0.00	1.64

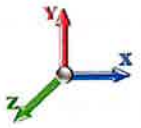
Linear Appurtenance Segment Forces (Factored)

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 120 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 25

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	0.027	0.000	43.867	0.00	6.24
110.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.028	0.000	44.298	0.00	1.64
110.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.028	0.000	44.298	0.00	6.24
115.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.029	0.000	44.715	0.00	1.64
115.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.029	0.000	44.715	0.00	6.24
119.50	Safety Cable	Yes	4.50	0.000	0.38	0.14	0.00	0.029	0.000	45.078	0.00	1.47
119.50	Step bolts (ladder)	Yes	4.50	0.000	0.63	0.24	0.00	0.029	0.000	45.078	0.00	5.62
120.00	Safety Cable	Yes	0.50	0.000	0.38	0.02	0.00	0.030	0.000	45.117	0.00	0.16
120.00	Step bolts (ladder)	Yes	0.50	0.000	0.63	0.03	0.00	0.030	0.000	45.117	0.00	0.62
123.75	Safety Cable	Yes	3.75	0.000	0.38	0.12	0.00	0.030	0.000	45.411	0.00	1.23
123.75	Step bolts (ladder)	Yes	3.75	0.000	0.63	0.20	0.00	0.030	0.000	45.411	0.00	4.68
125.00	Safety Cable	Yes	1.25	0.000	0.38	0.04	0.00	0.030	0.000	45.507	0.00	0.41
125.00	Step bolts (ladder)	Yes	1.25	0.000	0.63	0.07	0.00	0.030	0.000	45.507	0.00	1.56
130.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.031	0.000	45.884	0.00	1.64
130.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.031	0.000	45.884	0.00	6.24
135.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.032	0.000	46.250	0.00	1.64
135.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.032	0.000	46.250	0.00	6.24
137.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.033	0.000	46.393	0.00	0.66
137.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.033	0.000	46.393	0.00	2.50
140.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.033	0.000	46.605	0.00	0.98
140.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.033	0.000	46.605	0.00	3.74
145.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.034	0.000	46.951	0.00	1.64
145.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.034	0.000	46.951	0.00	6.24
147.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.035	0.000	47.087	0.00	0.66
147.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.035	0.000	47.087	0.00	2.50
150.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.036	0.000	47.287	0.00	0.98
150.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.036	0.000	47.287	0.00	3.74
155.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.037	0.000	47.615	0.00	1.64
155.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.037	0.000	47.615	0.00	6.24
157.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.038	0.000	47.744	0.00	0.66
157.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.038	0.000	47.744	0.00	2.50
160.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.038	0.000	47.934	0.00	0.98
160.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.038	0.000	47.934	0.00	3.74
165.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.040	0.000	48.246	0.00	1.64
165.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.040	0.000	48.246	0.00	6.24
168.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.041	0.000	48.429	0.00	0.98
168.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.041	0.000	48.429	0.00	3.74
										Totals:	**0.0**	**264.7**

Calculated Forces

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 14	

Load Case: 1.2D + 1.0W 120 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00

Iterations 25

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	-64.70	-41.46	0.00	-5069.9	0.00	5069.90	5340.38	1364.75	6341.26	6153.95	0.00	0.000	0.000	0.837
5.00	-62.69	-41.15	0.00	-4862.6	0.00	4862.61	5276.02	1339.77	6111.26	5967.64	0.12	-0.229	0.000	0.828
10.00	-60.71	-40.85	0.00	-4656.8	0.00	4656.85	5210.42	1314.79	5885.51	5782.69	0.49	-0.462	0.000	0.818
15.00	-58.76	-40.54	0.00	-4452.6	0.00	4452.62	5143.57	1289.82	5664.01	5599.17	1.10	-0.697	0.000	0.808
20.00	-56.84	-40.20	0.00	-4249.9	0.00	4249.93	5075.47	1264.84	5446.75	5417.17	1.95	-0.935	0.000	0.797
25.00	-54.96	-39.83	0.00	-4048.9	0.00	4048.96	5006.13	1239.86	5233.74	5236.76	3.06	-1.175	0.000	0.785
30.00	-53.10	-39.43	0.00	-3849.8	0.00	3849.84	4935.55	1214.88	5024.99	5058.02	4.42	-1.418	0.000	0.773
35.00	-51.28	-39.02	0.00	-3652.6	0.00	3652.69	4863.72	1189.90	4820.48	4881.04	6.04	-1.664	0.000	0.760
40.00	-49.51	-38.57	0.00	-3457.5	0.00	3457.59	4790.64	1164.92	4620.22	4705.88	7.92	-1.912	0.000	0.746
44.00	-48.15	-38.15	0.00	-3303.3	0.00	3303.32	4731.29	1144.94	4463.07	4567.13	9.60	-2.112	0.000	0.735
45.00	-47.46	-38.14	0.00	-3265.1	0.00	3265.17	4716.32	1139.94	4424.20	4532.64	10.05	-2.164	0.000	0.732
50.00	-44.40	-37.61	0.00	-3074.4	0.00	3074.48	4386.97	1048.88	4057.73	4202.47	12.45	-2.415	0.000	0.743
55.00	-42.69	-37.12	0.00	-2886.4	0.00	2886.42	4315.09	1025.82	3881.29	4041.90	15.12	-2.667	0.000	0.725
60.00	-41.02	-36.61	0.00	-2700.8	0.00	2700.83	4242.11	1002.77	3708.77	3883.37	18.04	-2.906	0.000	0.706
65.00	-39.38	-36.10	0.00	-2517.7	0.00	2517.76	4147.44	979.71	3540.18	3708.56	21.21	-3.145	0.000	0.690
70.00	-37.78	-35.58	0.00	-2337.2	0.00	2337.27	4049.83	956.65	3375.50	3535.21	24.63	-3.383	0.000	0.672
75.00	-36.21	-35.05	0.00	-2159.4	0.00	2159.40	3952.22	933.60	3214.75	3366.00	28.30	-3.620	0.000	0.652
80.00	-34.69	-34.50	0.00	-1984.1	0.00	1984.16	3854.61	910.54	3057.92	3200.95	32.21	-3.855	0.000	0.630
83.75	-33.60	-34.06	0.00	-1854.7	0.00	1854.79	3781.40	893.24	2942.87	3079.88	35.31	-4.031	0.000	0.613
85.00	-32.99	-33.95	0.00	-1812.2	0.00	1812.22	3757.00	887.48	2905.01	3040.04	36.37	-4.090	0.000	0.606
89.00	-31.21	-33.42	0.00	-1676.4	0.00	1676.42	2696.95	685.52	2239.96	2185.23	39.88	-4.275	0.000	0.781
90.00	-30.90	-33.39	0.00	-1643.0	0.00	1643.00	2687.67	681.95	2216.70	2166.29	40.78	-4.321	0.000	0.772
95.00	-29.73	-32.89	0.00	-1476.0	0.00	1476.07	2640.52	664.11	2102.22	2072.16	45.46	-4.616	0.000	0.726
100.00	-28.59	-32.39	0.00	-1311.6	0.00	1311.62	2592.12	646.27	1990.79	1979.09	50.44	-4.901	0.000	0.676
105.00	-27.48	-31.88	0.00	-1149.7	0.00	1149.70	2542.48	628.43	1882.38	1887.15	55.71	-5.174	0.000	0.623
110.00	-26.41	-31.36	0.00	-990.33	0.00	990.33	2491.60	610.59	1777.01	1796.42	61.27	-5.432	0.000	0.565
115.00	-25.37	-30.84	0.00	-833.53	0.00	833.53	2439.47	592.74	1674.68	1706.99	67.08	-5.672	0.000	0.501
119.50	-24.51	-30.33	0.00	-694.77	0.00	694.77	2391.49	576.69	1585.17	1627.67	72.51	-5.869	0.000	0.440
120.00	-24.32	-30.30	0.00	-679.60	0.00	679.60	2386.09	574.90	1575.38	1618.92	73.13	-5.891	0.000	0.433
123.75	-23.21	-29.84	0.00	-565.98	0.00	565.98	1658.06	421.89	1148.87	1119.99	77.81	-6.038	0.000	0.524
125.00	-17.95	-21.98	0.00	-528.68	0.00	528.68	1649.50	418.60	1131.00	1105.44	79.39	-6.084	0.000	0.492
130.00	-17.22	-21.46	0.00	-418.78	0.00	418.78	1614.57	405.42	1060.92	1047.71	85.86	-6.279	0.000	0.413
135.00	-16.54	-20.92	0.00	-311.50	0.00	311.50	1578.53	392.25	993.09	990.78	92.52	-6.444	0.000	0.328
137.00	-13.28	-16.04	0.00	-269.65	0.00	269.65	1563.80	386.98	966.58	968.24	95.23	-6.502	0.000	0.289
140.00	-12.93	-15.73	0.00	-221.55	0.00	221.55	1541.39	379.07	927.49	934.70	99.33	-6.579	0.000	0.247
145.00	-12.40	-15.22	0.00	-142.88	0.00	142.88	1503.14	365.90	864.14	879.56	106.26	-6.680	0.000	0.172
147.00	-8.93	-9.38	0.00	-112.44	0.00	112.44	1487.53	360.63	839.42	857.78	109.06	-6.711	0.000	0.138
150.00	-8.67	-9.09	0.00	-84.29	0.00	84.29	1463.79	352.72	803.03	825.42	113.28	-6.749	0.000	0.109
155.00	-8.27	-8.60	0.00	-38.85	0.00	38.85	1423.34	339.54	744.15	772.36	120.36	-6.791	0.000	0.057
157.00	-3.18	-2.30	0.00	-21.65	0.00	21.65	1406.84	334.27	721.23	751.45	123.20	-6.801	0.000	0.031
160.00	-2.96	-2.02	0.00	-14.76	0.00	14.76	1381.63	326.37	687.52	720.36	127.46	-6.809	0.000	0.023
165.00	-2.60	-1.56	0.00	-4.68	0.00	4.68	1325.85	313.19	633.13	663.10	134.58	-6.818	0.000	0.009
168.00	0.00	-1.24	0.00	0.00	0.00	0.00	1292.39	305.29	601.57	629.89	138.86	-6.819	0.000	0.000

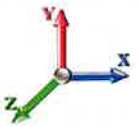
Wind Loading - Shaft

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 120 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 25

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	29.160	32.08	522.96	0.730	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	29.160	32.08	513.46	0.730	0.000	5.00	23.663	17.27	554.1	0.0	1179.9
10.00		1.00	0.85	29.160	32.08	503.96	0.730	0.000	5.00	23.229	16.96	543.9	0.0	1158.1
15.00		1.00	0.85	29.160	32.08	494.47	0.730	0.000	5.00	22.795	16.64	533.8	0.0	1136.3
20.00		1.00	0.90	30.940	34.03	499.55	0.730	0.000	5.00	22.362	16.32	555.6	0.0	1114.5
25.00		1.00	0.95	32.428	35.67	501.41	0.730	0.000	5.00	21.928	16.01	571.0	0.0	1092.7
30.00		1.00	0.98	33.697	37.07	500.91	0.730	0.000	5.00	21.494	15.69	581.6	0.0	1070.9
35.00		1.00	1.01	34.809	38.29	498.73	0.730	0.000	5.00	21.061	15.37	588.7	0.0	1049.1
40.00		1.00	1.04	35.801	39.38	495.27	0.730	0.000	5.00	20.627	15.06	593.0	0.0	1027.3
44.00	Bot - Section 2	1.00	1.06	36.527	40.18	491.76	0.730	0.000	4.00	16.189	11.82	474.8	0.0	806.1
45.00		1.00	1.07	36.700	40.37	490.79	0.730	0.000	1.00	4.078	2.98	120.2	0.0	402.4
50.00	Top - Section 1	1.00	1.09	37.523	41.28	485.49	0.730	0.000	5.00	20.130	14.69	606.5	0.0	1986.0
55.00		1.00	1.12	38.284	42.11	488.80	0.730	0.000	5.00	19.696	14.38	605.5	0.0	980.5
60.00		1.00	1.14	38.991	42.89	482.31	0.730	0.000	5.00	19.262	14.06	603.1	0.0	958.7
65.00		1.00	1.16	39.654	43.62	475.32	0.730	0.000	5.00	18.829	13.74	599.5	0.0	936.9
70.00		1.00	1.17	40.277	44.31	467.88	0.730	0.000	5.00	18.395	13.43	594.9	0.0	915.1
75.00		1.00	1.19	40.867	44.95	460.04	0.730	0.000	5.00	17.961	13.11	589.4	0.0	893.3
80.00		1.00	1.21	41.426	45.57	451.86	0.730	0.000	5.00	17.528	12.80	583.1	0.0	871.6
83.75	Bot - Section 3	1.00	1.22	41.827	46.01	445.51	0.730	0.000	3.75	12.861	9.39	432.0	0.0	639.4
85.00		1.00	1.22	41.958	46.15	443.36	0.730	0.000	1.25	4.299	3.14	144.8	0.0	363.5
89.00	Top - Section 2	1.00	1.23	42.366	46.60	436.35	0.730	0.000	4.00	13.575	9.91	461.8	0.0	1147.6
90.00		1.00	1.24	42.466	46.71	441.56	0.730	0.000	1.00	3.350	2.45	114.2	0.0	119.3
95.00		1.00	1.25	42.952	47.25	432.56	0.730	0.000	5.00	16.491	12.04	568.8	0.0	587.2
100.00		1.00	1.27	43.418	47.76	423.31	0.730	0.000	5.00	16.057	11.72	559.8	0.0	571.7
105.00		1.00	1.28	43.867	48.25	413.84	0.730	0.000	5.00	15.624	11.41	550.3	0.0	556.1
110.00		1.00	1.29	44.298	48.73	404.17	0.730	0.000	5.00	15.190	11.09	540.3	0.0	540.5
115.00		1.00	1.30	44.715	49.19	394.30	0.730	0.000	5.00	14.756	10.77	529.8	0.0	525.0
119.50	Bot - Section 4	1.00	1.31	45.078	49.59	385.27	0.730	0.000	4.50	12.910	9.42	467.3	0.0	459.2
120.00		1.00	1.32	45.117	49.63	384.26	0.730	0.000	0.50	1.434	1.05	51.9	0.0	91.1
123.75	Top - Section 3	1.00	1.32	45.411	49.95	376.62	0.730	0.000	3.75	10.616	7.75	387.1	0.0	674.4
125.00	Appurtenance(s)	1.00	1.33	45.507	50.06	379.84	0.730	0.000	1.25	3.485	2.54	127.3	0.0	99.3
130.00		1.00	1.34	45.884	50.47	369.49	0.730	0.000	5.00	13.667	9.98	503.6	0.0	389.4
135.00		1.00	1.35	46.250	50.88	359.00	0.730	0.000	5.00	13.233	9.66	491.5	0.0	377.0
137.00	Appurtenance(s)	1.00	1.35	46.393	51.03	354.77	0.730	0.000	2.00	5.172	3.78	192.7	0.0	147.3
140.00		1.00	1.36	46.605	51.27	348.37	0.730	0.000	3.00	7.628	5.57	285.5	0.0	217.2
145.00		1.00	1.37	46.951	51.65	337.61	0.730	0.000	5.00	12.366	9.03	466.2	0.0	352.1
147.00	Appurtenance(s)	1.00	1.37	47.087	51.80	333.27	0.730	0.000	2.00	4.825	3.52	182.4	0.0	137.3
150.00		1.00	1.38	47.287	52.02	326.72	0.730	0.000	3.00	7.107	5.19	269.9	0.0	202.3
155.00		1.00	1.39	47.615	52.38	315.72	0.730	0.000	5.00	11.499	8.39	439.6	0.0	327.2
157.00	Appurtenance(s)	1.00	1.39	47.744	52.52	311.28	0.730	0.000	2.00	4.478	3.27	171.7	0.0	127.4
160.00		1.00	1.40	47.934	52.73	304.60	0.730	0.000	3.00	6.587	4.81	253.5	0.0	187.3
165.00		1.00	1.41	48.246	53.07	293.37	0.730	0.000	5.00	10.631	7.76	411.9	0.0	302.3
168.00	Appurtenance(s)	1.00	1.41	48.429	53.27	286.58	0.730	0.000	3.00	6.171	4.50	240.0	0.0	175.4
								Totals:	**168.00**			**18,142.9**		**26,895.9**

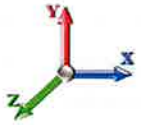
Discrete Appurtenance Forces

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 120 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 25

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	168.00	Low Profile Platform	1	48.429	53.272	1.00	1.00	18.38	1890.00	0.000	0.000	979.14	0.00	0.00
2	168.00	6' Lightning rod	1	48.429	53.272	1.00	1.00	0.38	5.85	0.000	0.000	20.24	0.00	0.00
3	157.00	ALU 1900 MHz	3	47.744	52.518	0.76	0.75	5.25	162.00	0.000	0.000	275.69	0.00	0.00
4	157.00	Handrail Kit (Site Pro1	1	47.744	52.518	1.00	1.00	6.36	419.40	0.000	0.000	334.01	0.00	0.00
5	157.00	Mount Pipes	12	47.744	52.518	0.75	0.75	10.44	324.00	0.000	0.000	548.29	0.00	0.00
6	157.00	Reinforcement kit	3	47.744	52.518	0.75	0.75	4.63	175.50	0.000	0.000	243.42	0.00	0.00
7	157.00	Bottom reinforcement kit	3	47.744	52.518	0.75	0.75	13.00	405.00	0.000	0.000	683.00	0.00	0.00
8	157.00	ALU TD-RRH8x20-25	3	47.744	52.518	0.52	0.75	6.29	189.00	0.000	0.000	330.21	0.00	0.00
9	157.00	Low Profile Platform	1	47.744	52.518	1.00	1.00	18.38	1890.00	0.000	0.000	965.28	0.00	0.00
10	157.00	RFS APXVTM14-C-I20	3	47.744	52.518	0.58	0.75	11.13	151.20	0.000	0.000	584.35	0.00	0.00
11	157.00	Commscope	3	47.744	52.518	0.55	0.75	20.15	208.98	0.000	0.000	1058.42	0.00	0.00
12	157.00	ALU 800 MHz	6	47.744	52.518	0.69	0.75	8.82	286.20	0.000	0.000	463.11	0.00	0.00
13	147.00	ADC Cleargain 1900W800	6	47.087	51.795	0.58	0.75	4.44	154.76	0.000	0.000	229.72	0.00	0.00
14	147.00	Powerwave Allgon LGP	6	47.087	51.795	0.49	0.75	3.12	102.60	0.000	0.000	161.52	0.00	0.00
15	147.00	Powerwave LGP21903	6	47.087	51.795	0.63	0.75	0.87	29.70	0.000	0.000	45.03	0.00	0.00
16	147.00	Ericsson RRUS 12	3	47.087	51.795	0.52	0.75	4.96	156.60	0.000	0.000	256.97	0.00	0.00
17	147.00	CSS Dual Band Combiner	3	47.087	51.795	0.47	0.75	1.05	13.50	0.000	0.000	54.33	0.00	0.00
18	147.00	Platform W/Handrail	1	47.087	51.795	1.00	1.00	21.41	1444.23	0.000	0.000	1108.94	0.00	0.00
19	147.00	Mount Pipes	12	47.087	51.795	0.75	0.75	12.24	324.00	0.000	0.000	633.98	0.00	0.00
20	147.00	KMW	3	47.087	51.795	0.60	0.75	20.36	160.65	0.000	0.000	1054.45	0.00	0.00
21	147.00	Raycap DC6-48-60-18-8F	1	47.087	51.795	1.01	0.75	2.21	29.52	0.000	0.000	114.52	0.00	0.00
22	147.00	Ericsson RRUS 11	6	47.087	51.795	0.48	0.75	10.92	297.00	0.000	0.000	565.36	0.00	0.00
23	147.00	Powerwave Allgon 7770	6	47.087	51.795	0.58	0.75	19.09	210.60	0.000	0.000	988.88	0.00	0.00
24	137.00	Ericsson KRY 112 489/2	3	46.393	51.033	0.62	0.75	1.05	41.58	0.000	0.000	53.37	0.00	0.00
25	137.00	Ericsson Radio 4449	3	46.393	51.033	0.61	0.75	2.97	199.80	0.000	0.000	151.60	0.00	0.00
26	137.00	RFS	3	46.393	51.033	0.54	0.75	32.79	345.60	0.000	0.000	1673.30	0.00	0.00
27	137.00	RFS	3	46.393	51.033	0.58	0.75	6.35	50.49	0.000	0.000	324.22	0.00	0.00
28	137.00	782 11056	3	46.393	51.033	0.50	0.75	0.20	4.86	0.000	0.000	10.00	0.00	0.00
29	137.00	Platform w/ Handrail &	1	46.393	51.033	1.00	1.00	32.63	1691.73	0.000	0.000	1665.20	0.00	0.00
30	137.00	Mount Pipes	9	46.393	51.033	0.75	0.75	7.63	243.00	0.000	0.000	389.25	0.00	0.00
31	137.00	Allen Telecome	3	46.393	51.033	0.55	0.75	0.87	47.25	0.000	0.000	44.43	0.00	0.00
32	125.00	Platform w/handrail &	1	45.507	50.057	1.00	1.00	26.50	2038.20	0.000	0.000	1326.52	0.00	0.00
33	125.00	Mount Pipes	12	45.507	50.057	0.75	0.75	11.16	324.00	0.000	0.000	558.64	0.00	0.00
34	125.00	Commscope	12	45.507	50.057	0.62	0.75	68.05	695.20	0.000	0.000	3406.49	0.00	0.00
35	125.00	Samsung MT6413-77A	6	45.507	50.057	0.52	0.75	11.77	309.42	0.000	0.000	589.07	0.00	0.00
36	125.00	Samsung RF4461d-13A	6	45.507	50.057	0.63	0.75	7.07	427.14	0.000	0.000	353.84	0.00	0.00
37	125.00	Commscope	3	45.507	50.057	0.65	0.75	0.99	56.70	0.000	0.000	49.40	0.00	0.00
38	125.00	Samsung B2/B66A RRH	6	45.507	50.057	0.63	0.75	7.07	403.38	0.000	0.000	353.84	0.00	0.00
39	125.00	Raycap	4	45.507	50.057	0.66	0.75	10.72	115.20	0.000	0.000	536.54	0.00	0.00
							Totals:		**16,023.84**			**23,184.58**		

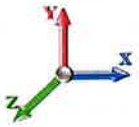
Total Applied Force Summary

Structure:	CT01364-S		**Code:**	TIA-222-H	2/20/2024
Site Name:	Pomfret		**Exposure:**	C	
Height:	168.00 (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 120 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 25

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		554.07	1384.07	0.00	0.00
10.00		543.92	1362.28	0.00	0.00
15.00		533.76	1340.49	0.00	0.00
20.00		555.57	1318.69	0.00	0.00
25.00		571.00	1296.90	0.00	0.00
30.00		581.61	1275.10	0.00	0.00
35.00		588.67	1253.31	0.00	0.00
40.00		592.99	1231.51	0.00	0.00
44.00		474.85	969.52	0.00	0.00
45.00		120.18	443.28	0.00	0.00
50.00		606.53	2190.24	0.00	0.00
55.00		605.49	1184.74	0.00	0.00
60.00		603.11	1162.94	0.00	0.00
65.00		599.55	1141.15	0.00	0.00
70.00		594.95	1119.35	0.00	0.00
75.00		589.42	1097.56	0.00	0.00
80.00		583.06	1075.77	0.00	0.00
83.75		431.97	792.52	0.00	0.00
85.00		144.84	414.58	0.00	0.00
89.00		461.81	1310.97	0.00	0.00
90.00		114.24	160.16	0.00	0.00
95.00		568.79	791.44	0.00	0.00
100.00		559.84	775.87	0.00	0.00
105.00		550.35	760.31	0.00	0.00
110.00		540.34	744.74	0.00	0.00
115.00		529.85	729.17	0.00	0.00
119.50		467.31	642.94	0.00	0.00
120.00		51.95	111.53	0.00	0.00
123.75		387.11	827.57	0.00	0.00
125.00	(50) attachments	7301.66	4519.60	0.00	0.00
130.00		503.56	538.27	0.00	0.00
135.00		491.47	525.81	0.00	0.00
137.00	(28) attachments	4504.05	2831.15	0.00	0.00
140.00		285.46	263.92	0.00	0.00
145.00		466.22	429.90	0.00	0.00
147.00	(53) attachments	5396.14	3091.64	0.00	0.00
150.00		269.88	212.95	0.00	0.00
155.00		439.65	344.96	0.00	0.00
157.00	(38) attachments	5657.47	4345.78	0.00	0.00
160.00		253.54	190.88	0.00	0.00
165.00		411.87	308.17	0.00	0.00
168.00	(2) attachments	1239.35	2074.77	0.00	0.00
	Totals:	**41,327.45**	**48,586.51**	**0.00**	**0.00**

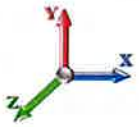
Linear Appurtenance Segment Forces (Factored)

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 120 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 25

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	0.018	0.000	29.160	0.00	1.23
5.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	29.160	0.00	4.68
10.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.018	0.000	29.160	0.00	1.23
10.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	29.160	0.00	4.68
15.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.018	0.000	29.160	0.00	1.23
15.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	29.160	0.00	4.68
20.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.019	0.000	30.940	0.00	1.23
20.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	30.940	0.00	4.68
25.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.019	0.000	32.428	0.00	1.23
25.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	32.428	0.00	4.68
30.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	33.697	0.00	1.23
30.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	33.697	0.00	4.68
35.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	34.809	0.00	1.23
35.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	34.809	0.00	4.68
40.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	35.801	0.00	1.23
40.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	35.801	0.00	4.68
44.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.021	0.000	36.527	0.00	0.98
44.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.021	0.000	36.527	0.00	3.74
45.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.021	0.000	36.700	0.00	0.25
45.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.021	0.000	36.700	0.00	0.94
50.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	37.523	0.00	1.23
50.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	37.523	0.00	4.68
55.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	38.284	0.00	1.23
55.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	38.284	0.00	4.68
60.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	38.991	0.00	1.23
60.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	38.991	0.00	4.68
65.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	39.654	0.00	1.23
65.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	39.654	0.00	4.68
70.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.023	0.000	40.277	0.00	1.23
70.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.023	0.000	40.277	0.00	4.68
75.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.023	0.000	40.867	0.00	1.23
75.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.023	0.000	40.867	0.00	4.68
80.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.024	0.000	41.426	0.00	1.23
80.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.024	0.000	41.426	0.00	4.68
83.75	Safety Cable	Yes	3.75	0.000	0.38	0.12	0.00	0.025	0.000	41.827	0.00	0.92
83.75	Step bolts (ladder)	Yes	3.75	0.000	0.63	0.20	0.00	0.025	0.000	41.827	0.00	3.51
85.00	Safety Cable	Yes	1.25	0.000	0.38	0.04	0.00	0.025	0.000	41.958	0.00	0.31
85.00	Step bolts (ladder)	Yes	1.25	0.000	0.63	0.07	0.00	0.025	0.000	41.958	0.00	1.17
89.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.025	0.000	42.366	0.00	0.98
89.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.025	0.000	42.366	0.00	3.74
90.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.025	0.000	42.466	0.00	0.25
90.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.025	0.000	42.466	0.00	0.94
95.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.026	0.000	42.952	0.00	1.23
95.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.026	0.000	42.952	0.00	4.68
100.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.026	0.000	43.418	0.00	1.23
100.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.026	0.000	43.418	0.00	4.68
105.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.027	0.000	43.867	0.00	1.23

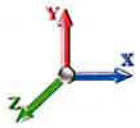
Linear Appurtenance Segment Forces (Factored)

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 120 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 25

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	0.027	0.000	43.867	0.00	4.68
110.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.028	0.000	44.298	0.00	1.23
110.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.028	0.000	44.298	0.00	4.68
115.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.029	0.000	44.715	0.00	1.23
115.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.029	0.000	44.715	0.00	4.68
119.50	Safety Cable	Yes	4.50	0.000	0.38	0.14	0.00	0.029	0.000	45.078	0.00	1.11
119.50	Step bolts (ladder)	Yes	4.50	0.000	0.63	0.24	0.00	0.029	0.000	45.078	0.00	4.21
120.00	Safety Cable	Yes	0.50	0.000	0.38	0.02	0.00	0.030	0.000	45.117	0.00	0.12
120.00	Step bolts (ladder)	Yes	0.50	0.000	0.63	0.03	0.00	0.030	0.000	45.117	0.00	0.47
123.75	Safety Cable	Yes	3.75	0.000	0.38	0.12	0.00	0.030	0.000	45.411	0.00	0.92
123.75	Step bolts (ladder)	Yes	3.75	0.000	0.63	0.20	0.00	0.030	0.000	45.411	0.00	3.51
125.00	Safety Cable	Yes	1.25	0.000	0.38	0.04	0.00	0.030	0.000	45.507	0.00	0.31
125.00	Step bolts (ladder)	Yes	1.25	0.000	0.63	0.07	0.00	0.030	0.000	45.507	0.00	1.17
130.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.031	0.000	45.884	0.00	1.23
130.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.031	0.000	45.884	0.00	4.68
135.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.032	0.000	46.250	0.00	1.23
135.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.032	0.000	46.250	0.00	4.68
137.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.033	0.000	46.393	0.00	0.49
137.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.033	0.000	46.393	0.00	1.87
140.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.033	0.000	46.605	0.00	0.74
140.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.033	0.000	46.605	0.00	2.81
145.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.034	0.000	46.951	0.00	1.23
145.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.034	0.000	46.951	0.00	4.68
147.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.035	0.000	47.087	0.00	0.49
147.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.035	0.000	47.087	0.00	1.87
150.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.036	0.000	47.287	0.00	0.74
150.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.036	0.000	47.287	0.00	2.81
155.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.037	0.000	47.615	0.00	1.23
155.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.037	0.000	47.615	0.00	4.68
157.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.038	0.000	47.744	0.00	0.49
157.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.038	0.000	47.744	0.00	1.87
160.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.038	0.000	47.934	0.00	0.74
160.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.038	0.000	47.934	0.00	2.81
165.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.040	0.000	48.246	0.00	1.23
165.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.040	0.000	48.246	0.00	4.68
168.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.041	0.000	48.429	0.00	0.74
168.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.041	0.000	48.429	0.00	2.81
										Totals:	**0.0**	**198.5**

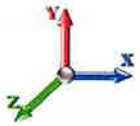
Calculated Forces

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 120 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 25

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	-48.50	-41.42	0.00	-4989.2	0.00	4989.29	5340.38	1364.75	6341.26	6153.95	0.00	0.000	0.000	0.821
5.00	-46.96	-41.05	0.00	-4782.1	0.00	4782.17	5276.02	1339.77	6111.26	5967.64	0.12	-0.226	0.000	0.811
10.00	-45.44	-40.68	0.00	-4576.9	0.00	4576.90	5210.42	1314.79	5885.51	5782.69	0.48	-0.454	0.000	0.801
15.00	-43.94	-40.32	0.00	-4373.4	0.00	4373.48	5143.57	1289.82	5664.01	5599.17	1.08	-0.685	0.000	0.791
20.00	-42.46	-39.92	0.00	-4171.9	0.00	4171.91	5075.47	1264.84	5446.75	5417.17	1.92	-0.919	0.000	0.779
25.00	-41.01	-39.49	0.00	-3972.3	0.00	3972.33	5006.13	1239.86	5233.74	5236.76	3.01	-1.155	0.000	0.768
30.00	-39.59	-39.05	0.00	-3774.8	0.00	3774.87	4935.55	1214.88	5024.99	5058.02	4.35	-1.393	0.000	0.755
35.00	-38.19	-38.59	0.00	-3579.6	0.00	3579.64	4863.72	1189.90	4820.48	4881.04	5.94	-1.634	0.000	0.742
40.00	-36.83	-38.10	0.00	-3386.7	0.00	3386.70	4790.64	1164.92	4620.22	4705.88	7.78	-1.877	0.000	0.728
44.00	-35.80	-37.67	0.00	-3234.3	0.00	3234.31	4731.29	1144.94	4463.07	4567.13	9.43	-2.073	0.000	0.717
45.00	-35.26	-37.62	0.00	-3196.6	0.00	3196.64	4716.32	1139.94	4424.20	4532.64	9.87	-2.123	0.000	0.714
50.00	-32.94	-37.07	0.00	-3008.5	0.00	3008.53	4386.97	1048.88	4057.73	4202.47	12.23	-2.369	0.000	0.725
55.00	-31.63	-36.55	0.00	-2823.1	0.00	2823.17	4315.09	1025.82	3881.29	4041.90	14.84	-2.616	0.000	0.707
60.00	-30.35	-36.02	0.00	-2640.4	0.00	2640.42	4242.11	1002.77	3708.77	3883.37	17.71	-2.850	0.000	0.688
65.00	-29.10	-35.48	0.00	-2460.3	0.00	2460.35	4147.44	979.71	3540.18	3708.56	20.82	-3.083	0.000	0.672
70.00	-27.87	-34.93	0.00	-2282.9	0.00	2282.97	4049.83	956.65	3375.50	3535.21	24.17	-3.316	0.000	0.654
75.00	-26.67	-34.39	0.00	-2108.3	0.00	2108.31	3952.22	933.60	3214.75	3366.00	27.76	-3.547	0.000	0.634
80.00	-25.52	-33.83	0.00	-1936.3	0.00	1936.38	3854.61	910.54	3057.92	3200.95	31.60	-3.777	0.000	0.613
83.75	-24.69	-33.39	0.00	-1809.5	0.00	1809.53	3781.40	893.24	2942.87	3079.88	34.63	-3.948	0.000	0.595
85.00	-24.22	-33.27	0.00	-1767.8	0.00	1767.80	3757.00	887.48	2905.01	3040.04	35.68	-4.006	0.000	0.589
89.00	-22.88	-32.76	0.00	-1634.7	0.00	1634.73	2696.95	685.52	2239.96	2185.23	39.11	-4.186	0.000	0.759
90.00	-22.63	-32.70	0.00	-1601.9	0.00	1601.97	2687.67	681.95	2216.70	2166.29	39.99	-4.232	0.000	0.750
95.00	-21.73	-32.18	0.00	-1438.4	0.00	1438.48	2640.52	664.11	2102.22	2072.16	44.57	-4.519	0.000	0.705
100.00	-20.85	-31.66	0.00	-1277.5	0.00	1277.59	2592.12	646.27	1990.79	1979.09	49.45	-4.796	0.000	0.656
105.00	-20.00	-31.13	0.00	-1119.3	0.00	1119.30	2542.48	628.43	1882.38	1887.15	54.61	-5.062	0.000	0.603
110.00	-19.18	-30.61	0.00	-963.63	0.00	963.63	2491.60	610.59	1777.01	1796.42	60.04	-5.313	0.000	0.547
115.00	-18.39	-30.08	0.00	-810.59	0.00	810.59	2439.47	592.74	1674.68	1706.99	65.73	-5.547	0.000	0.485
119.50	-17.74	-29.59	0.00	-675.22	0.00	675.22	2391.49	576.69	1585.17	1627.67	71.04	-5.739	0.000	0.425
120.00	-17.59	-29.55	0.00	-660.43	0.00	660.43	2386.09	574.90	1575.38	1618.92	71.64	-5.760	0.000	0.418
123.75	-16.76	-29.11	0.00	-549.62	0.00	549.62	1658.06	421.89	1148.87	1119.99	76.22	-5.903	0.000	0.506
125.00	-12.97	-21.40	0.00	-513.24	0.00	513.24	1649.50	418.60	1131.00	1105.44	77.77	-5.948	0.000	0.475
130.00	-12.43	-20.89	0.00	-406.22	0.00	406.22	1614.57	405.42	1060.92	1047.71	84.09	-6.136	0.000	0.398
135.00	-11.92	-20.36	0.00	-301.79	0.00	301.79	1578.53	392.25	993.09	990.78	90.60	-6.297	0.000	0.315
137.00	-9.59	-15.58	0.00	-261.07	0.00	261.07	1563.80	386.98	966.58	968.24	93.24	-6.353	0.000	0.277
140.00	-9.33	-15.29	0.00	-214.32	0.00	214.32	1541.39	379.07	927.49	934.70	97.25	-6.427	0.000	0.237
145.00	-8.94	-14.78	0.00	-137.90	0.00	137.90	1503.14	365.90	864.14	879.56	104.02	-6.524	0.000	0.164
147.00	-6.48	-9.07	0.00	-108.33	0.00	108.33	1487.53	360.63	839.42	857.78	106.76	-6.555	0.000	0.131
150.00	-6.29	-8.79	0.00	-81.11	0.00	81.11	1463.79	352.72	803.03	825.42	110.88	-6.591	0.000	0.103
155.00	-6.00	-8.31	0.00	-37.19	0.00	37.19	1423.34	339.54	744.15	772.36	117.79	-6.632	0.000	0.053
157.00	-2.34	-2.19	0.00	-20.56	0.00	20.56	1406.84	334.27	721.23	751.45	120.57	-6.641	0.000	0.029
160.00	-2.18	-1.92	0.00	-13.99	0.00	13.99	1381.63	326.37	687.52	720.36	124.73	-6.649	0.000	0.021
165.00	-1.92	-1.47	0.00	-4.41	0.00	4.41	1325.85	313.19	633.13	663.10	131.69	-6.657	0.000	0.008
168.00	0.00	-1.24	0.00	0.00	0.00	0.00	1292.39	305.29	601.57	629.89	135.86	-6.658	0.000	0.000

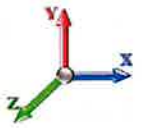
Wind Loading - Shaft

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 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	5.063	5.57	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	5.063	5.57	0.00	1.200	0.828	5.00	24.353	29.22	162.7	291.8	1864.9
10.00		1.00	0.85	5.063	5.57	0.00	1.200	0.887	5.00	23.968	28.76	160.2	307.3	1851.4
15.00		1.00	0.85	5.063	5.57	0.00	1.200	0.924	5.00	23.565	28.28	157.5	314.3	1829.4
20.00		1.00	0.90	5.372	5.91	0.00	1.200	0.951	5.00	23.154	27.79	164.2	317.6	1803.5
25.00		1.00	0.95	5.630	6.19	0.00	1.200	0.973	5.00	22.738	27.29	169.0	318.6	1775.5
30.00		1.00	0.98	5.850	6.44	0.00	1.200	0.991	5.00	22.320	26.78	172.4	318.2	1746.1
35.00		1.00	1.01	6.043	6.65	0.00	1.200	1.006	5.00	21.899	26.28	174.7	316.8	1715.6
40.00		1.00	1.04	6.215	6.84	0.00	1.200	1.019	5.00	21.476	25.77	176.2	314.6	1684.3
44.00	Bot - Section 2	1.00	1.06	6.341	6.98	0.00	1.200	1.029	4.00	16.875	20.25	141.3	249.9	1324.8
45.00		1.00	1.07	6.372	7.01	0.00	1.200	1.032	1.00	4.250	5.10	35.7	63.5	600.1
50.00	Top - Section 1	1.00	1.09	6.514	7.17	0.00	1.200	1.042	5.00	20.998	25.20	180.6	314.2	2962.2
55.00		1.00	1.12	6.646	7.31	0.00	1.200	1.052	5.00	20.573	24.69	180.5	310.5	1617.8
60.00		1.00	1.14	6.769	7.45	0.00	1.200	1.062	5.00	20.147	24.18	180.0	306.4	1584.7
65.00		1.00	1.16	6.884	7.57	0.00	1.200	1.070	5.00	19.721	23.66	179.2	302.1	1551.3
70.00		1.00	1.17	6.993	7.69	0.00	1.200	1.078	5.00	19.294	23.15	178.1	297.4	1517.6
75.00		1.00	1.19	7.095	7.80	0.00	1.200	1.086	5.00	18.866	22.64	176.7	292.6	1483.7
80.00		1.00	1.21	7.192	7.91	0.00	1.200	1.093	5.00	18.438	22.13	175.0	287.5	1449.6
83.75	Bot - Section 3	1.00	1.22	7.262	7.99	0.00	1.200	1.098	3.75	13.547	16.26	129.9	212.7	1065.2
85.00		1.00	1.22	7.284	8.01	0.00	1.200	1.099	1.25	4.528	5.43	43.5	71.6	556.3
89.00	Top - Section 2	1.00	1.23	7.355	8.09	0.00	1.200	1.104	4.00	14.311	17.17	138.9	225.8	1755.9
90.00		1.00	1.24	7.373	8.11	0.00	1.200	1.106	1.00	3.535	4.24	34.4	56.2	215.3
95.00		1.00	1.25	7.457	8.20	0.00	1.200	1.112	5.00	17.417	20.90	171.4	275.6	1058.5
100.00		1.00	1.27	7.538	8.29	0.00	1.200	1.117	5.00	16.989	20.39	169.0	269.8	1032.0
105.00		1.00	1.28	7.616	8.38	0.00	1.200	1.123	5.00	16.559	19.87	166.5	264.0	1005.4
110.00		1.00	1.29	7.691	8.46	0.00	1.200	1.128	5.00	16.130	19.36	163.7	258.0	978.7
115.00		1.00	1.30	7.763	8.54	0.00	1.200	1.133	5.00	15.701	18.84	160.9	251.9	951.9
119.50	Bot - Section 4	1.00	1.31	7.826	8.61	0.00	1.200	1.137	4.50	13.763	16.52	142.2	221.7	833.9
120.00		1.00	1.32	7.833	8.62	0.00	1.200	1.138	0.50	1.529	1.83	15.8	24.9	146.4
123.75	Top - Section 3	1.00	1.32	7.884	8.67	0.00	1.200	1.141	3.75	11.329	13.60	117.9	183.4	1082.6
125.00	Appurtenance(s)	1.00	1.33	7.900	8.69	0.00	1.200	1.142	1.25	3.723	4.47	38.8	60.7	193.2
130.00		1.00	1.34	7.966	8.76	0.00	1.200	1.147	5.00	14.623	17.55	153.8	236.6	755.9
135.00		1.00	1.35	8.030	8.83	0.00	1.200	1.151	5.00	14.193	17.03	150.4	230.1	732.8
137.00	Appurtenance(s)	1.00	1.35	8.054	8.86	0.00	1.200	1.153	2.00	5.556	6.67	59.1	91.0	287.4
140.00		1.00	1.36	8.091	8.90	0.00	1.200	1.155	3.00	8.205	9.85	87.6	134.2	423.8
145.00		1.00	1.37	8.151	8.97	0.00	1.200	1.160	5.00	13.332	16.00	143.5	217.0	686.4
147.00	Appurtenance(s)	1.00	1.37	8.175	8.99	0.00	1.200	1.161	2.00	5.212	6.25	56.2	85.7	268.8
150.00		1.00	1.38	8.210	9.03	0.00	1.200	1.163	3.00	7.689	9.23	83.3	126.1	395.9
155.00		1.00	1.39	8.266	9.09	0.00	1.200	1.167	5.00	12.471	14.97	136.1	203.5	639.7
157.00	Appurtenance(s)	1.00	1.39	8.289	9.12	0.00	1.200	1.169	2.00	4.868	5.84	53.3	80.3	250.1
160.00		1.00	1.40	8.322	9.15	0.00	1.200	1.171	3.00	7.172	8.61	78.8	118.0	367.8
165.00		1.00	1.41	8.376	9.21	0.00	1.200	1.175	5.00	11.610	13.93	128.4	189.7	592.7
168.00	Appurtenance(s)	1.00	1.41	8.408	9.25	0.00	1.200	1.177	3.00	6.759	8.11	75.0	111.3	345.2
								Totals:	**168.00**			**5,462.3**		**44,984.4**

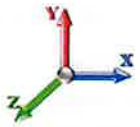
Discrete Appurtenance Forces

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 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	168.00	Low Profile Platform	1	8.408	9.249	1.00	1.00	28.76	4355.57	0.000	0.000	266.01	0.00	0.00
2	168.00	6' Lightning rod	1	8.408	9.249	1.00	1.00	1.11	26.98	0.000	0.000	10.30	0.00	0.00
3	157.00	ALU 1900 MHz	3	8.289	9.118	0.76	0.75	6.23	295.19	0.000	0.000	56.81	0.00	0.00
4	157.00	Handrail Kit (Site Pro1	1	8.289	9.118	1.00	1.00	10.52	852.90	0.000	0.000	95.94	0.00	0.00
5	157.00	Mount Pipes	12	8.289	9.118	0.75	0.75	15.61	-39755.5	0.000	0.000	142.36	0.00	0.00
6	157.00	Reinforcement kit	3	8.289	9.118	0.75	0.75	7.89	-1159.83	0.000	0.000	71.90	0.00	0.00
7	157.00	Bottom reinforcement kit	3	8.289	9.118	0.75	0.75	22.13	-479.62	0.000	0.000	201.73	0.00	0.00
8	157.00	ALU TD-RRH8x20-25	3	8.289	9.118	0.52	0.75	7.11	379.51	0.000	0.000	64.86	0.00	0.00
9	157.00	Low Profile Platform	1	8.289	9.118	1.00	1.00	26.11	3987.32	0.000	0.000	238.10	0.00	0.00
10	157.00	RFS APXVTM14-C-I20	3	8.289	9.118	0.58	0.75	12.40	396.25	0.000	0.000	113.02	0.00	0.00
11	157.00	Commscope	3	8.289	9.118	0.55	0.75	21.75	649.11	0.000	0.000	198.27	0.00	0.00
12	157.00	ALU 800 MHz	6	8.289	9.118	0.69	0.75	10.45	506.85	0.000	0.000	95.25	0.00	0.00
13	147.00	ADC Cleargain 1900W800	6	8.175	8.992	0.58	0.75	5.49	275.05	0.000	0.000	49.35	0.00	0.00
14	147.00	Powerwave Allgon LGP	6	8.175	8.992	0.49	0.75	3.96	226.85	0.000	0.000	35.58	0.00	0.00
15	147.00	Powerwave LGP21903	6	8.175	8.992	0.63	0.75	1.41	53.46	0.000	0.000	12.67	0.00	0.00
16	147.00	Ericsson RRUS 12	3	8.175	8.992	0.52	0.75	5.69	307.39	0.000	0.000	51.16	0.00	0.00
17	147.00	CSS Dual Band Combiner	3	8.175	8.992	0.47	0.75	1.39	45.10	0.000	0.000	12.48	0.00	0.00
18	147.00	Platform W/Handrail	1	8.175	8.992	1.00	1.00	32.85	2661.97	0.000	0.000	295.35	0.00	0.00
19	147.00	Mount Pipes	12	8.175	8.992	0.75	0.75	18.27	-39757.2	0.000	0.000	164.25	0.00	0.00
20	147.00	KMW	3	8.175	8.992	0.60	0.75	22.34	688.44	0.000	0.000	200.92	0.00	0.00
21	147.00	Raycap DC6-48-60-18-8F	1	8.175	8.992	1.01	0.75	2.63	86.57	0.000	0.000	23.66	0.00	0.00
22	147.00	Ericsson RRUS 11	6	8.175	8.992	0.48	0.75	12.39	677.00	0.000	0.000	111.37	0.00	0.00
23	147.00	Powerwave Allgon 7770	6	8.175	8.992	0.58	0.75	21.45	1025.17	0.000	0.000	192.89	0.00	0.00
24	137.00	Ericsson KRY 112 489/2	3	8.054	8.860	0.62	0.75	1.45	78.74	0.000	0.000	12.81	0.00	0.00
25	137.00	Ericsson Radio 4449	3	8.054	8.860	0.61	0.75	3.58	329.89	0.000	0.000	31.76	0.00	0.00
26	137.00	RFS	3	8.054	8.860	0.54	0.75	34.78	1052.84	0.000	0.000	308.19	0.00	0.00
27	137.00	RFS	3	8.054	8.860	0.58	0.75	7.41	167.86	0.000	0.000	65.66	0.00	0.00
28	137.00	782 11056	3	8.054	8.860	0.50	0.75	0.49	4.79	0.000	0.000	4.31	0.00	0.00
29	137.00	Platform w/ Handrail &	1	8.054	8.860	1.00	1.00	49.94	3018.97	0.000	0.000	442.43	0.00	0.00
30	137.00	Mount Pipes	9	8.054	8.860	0.75	0.75	11.36	-29819.2	0.000	0.000	100.62	0.00	0.00
31	137.00	Allen Telecome	3	8.054	8.860	0.55	0.75	1.22	92.56	0.000	0.000	10.84	0.00	0.00
32	125.00	Platform w/handrail &	1	7.900	8.691	1.00	1.00	39.34	3134.65	0.000	0.000	341.86	0.00	0.00
33	125.00	Mount Pipes	12	7.900	8.691	0.75	0.75	16.57	-39761.2	0.000	0.000	143.97	0.00	0.00
34	125.00	Commscope	12	7.900	8.691	0.62	0.75	74.43	2015.14	0.000	0.000	646.81	0.00	0.00
35	125.00	Samsung MT6413-77A	6	7.900	8.691	0.52	0.75	13.38	484.20	0.000	0.000	116.24	0.00	0.00
36	125.00	Samsung RF4461d-13A	6	7.900	8.691	0.63	0.75	8.41	752.47	0.000	0.000	73.11	0.00	0.00
37	125.00	Commscope	3	7.900	8.691	0.65	0.75	1.37	128.19	0.000	0.000	11.93	0.00	0.00
38	125.00	Samsung B2/B66A RRH	6	7.900	8.691	0.63	0.75	8.41	603.11	0.000	0.000	73.11	0.00	0.00
39	125.00	Raycap	4	7.900	8.691	0.66	0.75	12.13	351.47	0.000	0.000	105.41	0.00	0.00
							Totals:		**-121,021.09**			**5,193.28**		

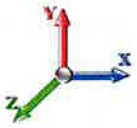
Total Applied Force Summary

Structure:	CT01364-S		**Code:**	TIA-222-H	2/20/2024
Site Name:	Pomfret		**Exposure:**	C	
Height:	168.00 (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 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		162.74	2149.03	0.00	0.00
10.00		160.17	2137.01	0.00	0.00
15.00		157.48	2115.90	0.00	0.00
20.00		164.17	2090.79	0.00	0.00
25.00		168.98	2063.36	0.00	0.00
30.00		172.36	2034.41	0.00	0.00
35.00		174.69	2004.37	0.00	0.00
40.00		176.20	1973.49	0.00	0.00
44.00		141.26	1556.32	0.00	0.00
45.00		35.74	657.97	0.00	0.00
50.00		180.57	3252.04	0.00	0.00
55.00		180.49	1907.97	0.00	0.00
60.00		180.02	1875.14	0.00	0.00
65.00		179.21	1841.98	0.00	0.00
70.00		178.08	1808.53	0.00	0.00
75.00		176.69	1774.84	0.00	0.00
80.00		175.04	1740.92	0.00	0.00
83.75		129.86	1283.78	0.00	0.00
85.00		43.54	629.23	0.00	0.00
89.00		138.94	1989.27	0.00	0.00
90.00		34.40	273.66	0.00	0.00
95.00		171.44	1350.45	0.00	0.00
100.00		169.04	1324.15	0.00	0.00
105.00		166.47	1297.71	0.00	0.00
110.00		163.75	1271.14	0.00	0.00
115.00		160.89	1244.45	0.00	0.00
119.50		142.18	1097.36	0.00	0.00
120.00		15.81	175.69	0.00	0.00
123.75		117.90	1302.29	0.00	0.00
125.00	(50) attachments	1551.25	-32025.62	0.00	0.00
130.00		153.76	975.05	0.00	0.00
135.00		150.43	952.12	0.00	0.00
137.00	(28) attachments	1035.69	-24698.40	0.00	0.00
140.00		87.64	498.66	0.00	0.00
145.00		143.45	811.31	0.00	0.00
147.00	(53) attachments	1205.93	-33391.38	0.00	0.00
150.00		83.32	422.85	0.00	0.00
155.00		136.08	684.82	0.00	0.00
157.00	(38) attachments	1331.51	-34059.66	0.00	0.00
160.00		78.79	385.39	0.00	0.00
165.00		128.37	622.24	0.00	0.00
168.00	(2) attachments	351.32	4745.46	0.00	0.00
	Totals:	**10,655.62**	**-67,853.91**	**0.00**	**0.00**

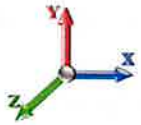
Linear Appurtenance Segment Forces (Factored)

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 24	

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

Dead Load Factor 1.20

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	0.85	0.00	0.018	0.000	5.063	0.00	7.09
5.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.95	0.00	0.018	0.000	5.063	0.00	12.60
10.00	Safety Cable	Yes	5.00	0.000	0.38	0.90	0.00	0.018	0.000	5.063	0.00	7.80
10.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.00	0.00	0.018	0.000	5.063	0.00	13.37
15.00	Safety Cable	Yes	5.00	0.000	0.38	0.93	0.00	0.018	0.000	5.063	0.00	8.26
15.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.03	0.00	0.018	0.000	5.063	0.00	13.87
20.00	Safety Cable	Yes	5.00	0.000	0.38	0.95	0.00	0.019	0.000	5.372	0.00	8.61
20.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.06	0.00	0.019	0.000	5.372	0.00	14.24
25.00	Safety Cable	Yes	5.00	0.000	0.38	0.97	0.00	0.019	0.000	5.630	0.00	8.89
25.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.07	0.00	0.019	0.000	5.630	0.00	14.55
30.00	Safety Cable	Yes	5.00	0.000	0.38	0.98	0.00	0.020	0.000	5.850	0.00	9.13
30.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.09	0.00	0.020	0.000	5.850	0.00	14.80
35.00	Safety Cable	Yes	5.00	0.000	0.38	1.00	0.00	0.020	0.000	6.043	0.00	9.34
35.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.10	0.00	0.020	0.000	6.043	0.00	15.03
40.00	Safety Cable	Yes	5.00	0.000	0.38	1.01	0.00	0.020	0.000	6.215	0.00	9.53
40.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.11	0.00	0.020	0.000	6.215	0.00	15.23
44.00	Safety Cable	Yes	4.00	0.000	0.38	0.81	0.00	0.021	0.000	6.341	0.00	7.73
44.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.90	0.00	0.021	0.000	6.341	0.00	12.30
45.00	Safety Cable	Yes	1.00	0.000	0.38	0.20	0.00	0.021	0.000	6.372	0.00	1.94
45.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.22	0.00	0.021	0.000	6.372	0.00	3.08
50.00	Safety Cable	Yes	5.00	0.000	0.38	1.03	0.00	0.021	0.000	6.514	0.00	9.85
50.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.13	0.00	0.021	0.000	6.514	0.00	15.57
55.00	Safety Cable	Yes	5.00	0.000	0.38	1.04	0.00	0.021	0.000	6.646	0.00	10.00
55.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.14	0.00	0.021	0.000	6.646	0.00	15.73
60.00	Safety Cable	Yes	5.00	0.000	0.38	1.04	0.00	0.022	0.000	6.769	0.00	10.13
60.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.15	0.00	0.022	0.000	6.769	0.00	15.87
65.00	Safety Cable	Yes	5.00	0.000	0.38	1.05	0.00	0.022	0.000	6.884	0.00	10.25
65.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.15	0.00	0.022	0.000	6.884	0.00	16.00
70.00	Safety Cable	Yes	5.00	0.000	0.38	1.06	0.00	0.023	0.000	6.993	0.00	10.37
70.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.16	0.00	0.023	0.000	6.993	0.00	16.12
75.00	Safety Cable	Yes	5.00	0.000	0.38	1.06	0.00	0.023	0.000	7.095	0.00	10.48
75.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.17	0.00	0.023	0.000	7.095	0.00	16.24
80.00	Safety Cable	Yes	5.00	0.000	0.38	1.07	0.00	0.024	0.000	7.192	0.00	10.58
80.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.17	0.00	0.024	0.000	7.192	0.00	16.35
83.75	Safety Cable	Yes	3.75	0.000	0.38	0.80	0.00	0.025	0.000	7.262	0.00	7.99
83.75	Step bolts (ladder)	Yes	3.75	0.000	0.63	0.88	0.00	0.025	0.000	7.262	0.00	12.32
85.00	Safety Cable	Yes	1.25	0.000	0.38	0.27	0.00	0.025	0.000	7.284	0.00	2.67
85.00	Step bolts (ladder)	Yes	1.25	0.000	0.63	0.29	0.00	0.025	0.000	7.284	0.00	4.11
89.00	Safety Cable	Yes	4.00	0.000	0.38	0.86	0.00	0.025	0.000	7.355	0.00	8.61
89.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.95	0.00	0.025	0.000	7.355	0.00	13.23
90.00	Safety Cable	Yes	1.00	0.000	0.38	0.22	0.00	0.025	0.000	7.373	0.00	2.15
90.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.24	0.00	0.025	0.000	7.373	0.00	3.31
95.00	Safety Cable	Yes	5.00	0.000	0.38	1.08	0.00	0.026	0.000	7.457	0.00	10.86
95.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.19	0.00	0.026	0.000	7.457	0.00	16.65
100.00	Safety Cable	Yes	5.00	0.000	0.38	1.09	0.00	0.026	0.000	7.538	0.00	10.95
100.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.19	0.00	0.026	0.000	7.538	0.00	16.74
105.00	Safety Cable	Yes	5.00	0.000	0.38	1.09	0.00	0.027	0.000	7.616	0.00	11.03

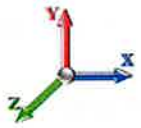
Linear Appurtenance Segment Forces (Factored)

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 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	1.20	0.00	0.027	0.000	7.616	0.00	16.83
110.00	Safety Cable	Yes	5.00	0.000	0.38	1.10	0.00	0.028	0.000	7.691	0.00	11.11
110.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.20	0.00	0.028	0.000	7.691	0.00	16.92
115.00	Safety Cable	Yes	5.00	0.000	0.38	1.10	0.00	0.029	0.000	7.763	0.00	11.19
115.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.21	0.00	0.029	0.000	7.763	0.00	17.00
119.50	Safety Cable	Yes	4.50	0.000	0.38	1.00	0.00	0.029	0.000	7.826	0.00	10.13
119.50	Step bolts (ladder)	Yes	4.50	0.000	0.63	1.09	0.00	0.029	0.000	7.826	0.00	15.36
120.00	Safety Cable	Yes	0.50	0.000	0.38	0.11	0.00	0.030	0.000	7.833	0.00	1.13
120.00	Step bolts (ladder)	Yes	0.50	0.000	0.63	0.12	0.00	0.030	0.000	7.833	0.00	1.71
123.75	Safety Cable	Yes	3.75	0.000	0.38	0.83	0.00	0.030	0.000	7.884	0.00	8.49
123.75	Step bolts (ladder)	Yes	3.75	0.000	0.63	0.91	0.00	0.030	0.000	7.884	0.00	12.85
125.00	Safety Cable	Yes	1.25	0.000	0.38	0.28	0.00	0.030	0.000	7.900	0.00	2.83
125.00	Step bolts (ladder)	Yes	1.25	0.000	0.63	0.30	0.00	0.030	0.000	7.900	0.00	4.29
130.00	Safety Cable	Yes	5.00	0.000	0.38	1.11	0.00	0.031	0.000	7.966	0.00	11.41
130.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.22	0.00	0.031	0.000	7.966	0.00	17.23
135.00	Safety Cable	Yes	5.00	0.000	0.38	1.12	0.00	0.032	0.000	8.030	0.00	11.47
135.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.22	0.00	0.032	0.000	8.030	0.00	17.30
137.00	Safety Cable	Yes	2.00	0.000	0.38	0.45	0.00	0.033	0.000	8.054	0.00	4.60
137.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.49	0.00	0.033	0.000	8.054	0.00	6.93
140.00	Safety Cable	Yes	3.00	0.000	0.38	0.67	0.00	0.033	0.000	8.091	0.00	6.92
140.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.74	0.00	0.033	0.000	8.091	0.00	10.42
145.00	Safety Cable	Yes	5.00	0.000	0.38	1.12	0.00	0.034	0.000	8.151	0.00	11.60
145.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.23	0.00	0.034	0.000	8.151	0.00	17.43
147.00	Safety Cable	Yes	2.00	0.000	0.38	0.45	0.00	0.035	0.000	8.175	0.00	4.65
147.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.49	0.00	0.035	0.000	8.175	0.00	6.98
150.00	Safety Cable	Yes	3.00	0.000	0.38	0.68	0.00	0.036	0.000	8.210	0.00	7.00
150.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.74	0.00	0.036	0.000	8.210	0.00	10.50
155.00	Safety Cable	Yes	5.00	0.000	0.38	1.13	0.00	0.037	0.000	8.266	0.00	11.72
155.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.24	0.00	0.037	0.000	8.266	0.00	17.56
157.00	Safety Cable	Yes	2.00	0.000	0.38	0.45	0.00	0.038	0.000	8.289	0.00	4.70
157.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.49	0.00	0.038	0.000	8.289	0.00	7.04
160.00	Safety Cable	Yes	3.00	0.000	0.38	0.68	0.00	0.038	0.000	8.322	0.00	7.07
160.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.74	0.00	0.038	0.000	8.322	0.00	10.58
165.00	Safety Cable	Yes	5.00	0.000	0.38	1.14	0.00	0.040	0.000	8.376	0.00	11.84
165.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	1.24	0.00	0.040	0.000	8.376	0.00	17.69
168.00	Safety Cable	Yes	3.00	0.000	0.38	0.68	0.00	0.041	0.000	8.408	0.00	7.12
168.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.75	0.00	0.041	0.000	8.408	0.00	10.63
										Totals:	**0.0**	**891.8**

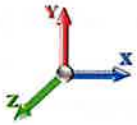
Calculated Forces

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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 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	-56.32	-10.68	0.00	-1238.0	0.00	1238.02	5340.38	1364.75	6341.26	6153.95	0.00	0.000	0.000	0.212
5.00	-54.16	-10.57	0.00	-1184.6	0.00	1184.60	5276.02	1339.77	6111.26	5967.64	0.03	-0.056	0.000	0.209
10.00	-52.01	-10.46	0.00	-1131.7	0.00	1131.74	5210.42	1314.79	5885.51	5782.69	0.12	-0.112	0.000	0.206
15.00	-49.88	-10.35	0.00	-1079.4	0.00	1079.44	5143.57	1289.82	5664.01	5599.17	0.27	-0.170	0.000	0.203
20.00	-47.78	-10.22	0.00	-1027.7	0.00	1027.70	5075.47	1264.84	5446.75	5417.17	0.48	-0.227	0.000	0.199
25.00	-45.71	-10.09	0.00	-976.58	0.00	976.58	5006.13	1239.86	5233.74	5236.76	0.75	-0.285	0.000	0.196
30.00	-43.67	-9.95	0.00	-926.11	0.00	926.11	4935.55	1214.88	5024.99	5058.02	1.08	-0.344	0.000	0.192
35.00	-41.65	-9.81	0.00	-876.34	0.00	876.34	4863.72	1189.90	4820.48	4881.04	1.47	-0.403	0.000	0.188
40.00	-39.67	-9.66	0.00	-827.29	0.00	827.29	4790.64	1164.92	4620.22	4705.88	1.92	-0.462	0.000	0.184
44.00	-38.11	-9.52	0.00	-788.67	0.00	788.67	4731.29	1144.94	4463.07	4567.13	2.33	-0.510	0.000	0.181
45.00	-37.45	-9.50	0.00	-779.15	0.00	779.15	4716.32	1139.94	4424.20	4532.64	2.44	-0.522	0.000	0.180
50.00	-34.19	-9.33	0.00	-731.64	0.00	731.64	4386.97	1048.88	4057.73	4202.47	3.02	-0.582	0.000	0.182
55.00	-32.27	-9.16	0.00	-685.00	0.00	685.00	4315.09	1025.82	3881.29	4041.90	3.66	-0.642	0.000	0.177
60.00	-30.39	-8.99	0.00	-639.21	0.00	639.21	4242.11	1002.77	3708.77	3883.37	4.36	-0.699	0.000	0.172
65.00	-28.54	-8.81	0.00	-594.27	0.00	594.27	4147.44	979.71	3540.18	3708.56	5.12	-0.755	0.000	0.167
70.00	-26.73	-8.64	0.00	-550.21	0.00	550.21	4049.83	956.65	3375.50	3535.21	5.94	-0.811	0.000	0.162
75.00	-24.95	-8.46	0.00	-507.04	0.00	507.04	3952.22	933.60	3214.75	3366.00	6.82	-0.867	0.000	0.157
80.00	-23.20	-8.27	0.00	-464.75	0.00	464.75	3854.61	910.54	3057.92	3200.95	7.76	-0.922	0.000	0.151
83.75	-21.92	-8.13	0.00	-433.72	0.00	433.72	3781.40	893.24	2942.87	3079.88	8.50	-0.963	0.000	0.147
85.00	-21.29	-8.09	0.00	-423.55	0.00	423.55	3757.00	887.48	2905.01	3040.04	8.76	-0.977	0.000	0.145
89.00	-19.30	-7.93	0.00	-391.19	0.00	391.19	2696.95	685.52	2239.96	2185.23	9.60	-1.020	0.000	0.186
90.00	-19.02	-7.90	0.00	-383.27	0.00	383.27	2687.67	681.95	2216.70	2166.29	9.81	-1.031	0.000	0.184
95.00	-17.66	-7.72	0.00	-343.77	0.00	343.77	2640.52	664.11	2102.22	2072.16	10.93	-1.100	0.000	0.173
100.00	-16.33	-7.55	0.00	-305.15	0.00	305.15	2592.12	646.27	1990.79	1979.09	12.12	-1.166	0.000	0.161
105.00	-15.03	-7.37	0.00	-267.41	0.00	267.41	2542.48	628.43	1882.38	1887.15	13.37	-1.230	0.000	0.148
110.00	-13.76	-7.19	0.00	-230.56	0.00	230.56	2491.60	610.59	1777.01	1796.42	14.69	-1.290	0.000	0.134
115.00	-12.51	-7.01	0.00	-194.60	0.00	194.60	2439.47	592.74	1674.68	1706.99	16.07	-1.346	0.000	0.119
119.50	-11.41	-6.85	0.00	-163.04	0.00	163.04	2391.49	576.69	1585.17	1627.67	17.36	-1.392	0.000	0.105
120.00	-11.23	-6.83	0.00	-159.61	0.00	159.61	2386.09	574.90	1575.38	1618.92	17.51	-1.397	0.000	0.103
123.75	-9.93	-6.69	0.00	-133.98	0.00	133.98	1658.06	421.89	1148.87	1119.99	18.62	-1.432	0.000	0.126
125.00	-9.97	-5.14	0.00	-125.62	0.00	125.62	1649.50	418.60	1131.00	1105.44	19.00	-1.443	0.000	0.120
130.00	-8.99	-4.97	0.00	-99.91	0.00	99.91	1614.57	405.42	1060.92	1047.71	20.54	-1.489	0.000	0.101
135.00	-8.04	-4.80	0.00	-75.05	0.00	75.05	1578.53	392.25	993.09	990.78	22.12	-1.529	0.000	0.081
137.00	-8.07	-3.77	0.00	-65.45	0.00	65.45	1563.80	386.98	966.58	968.24	22.76	-1.543	0.000	0.073
140.00	-7.57	-3.67	0.00	-54.16	0.00	54.16	1541.39	379.07	927.49	934.70	23.74	-1.561	0.000	0.063
145.00	-6.77	-3.50	0.00	-35.82	0.00	35.82	1503.14	365.90	864.14	879.56	25.39	-1.586	0.000	0.045
147.00	-6.80	-2.30	0.00	-28.81	0.00	28.81	1487.53	360.63	839.42	857.78	26.05	-1.594	0.000	0.038
150.00	-6.38	-2.21	0.00	-21.91	0.00	21.91	1463.79	352.72	803.03	825.42	27.06	-1.604	0.000	0.031
155.00	-5.70	-2.05	0.00	-10.88	0.00	10.88	1423.34	339.54	744.15	772.36	28.74	-1.615	0.000	0.018
157.00	-5.74	-0.72	0.00	-6.78	0.00	6.78	1406.84	334.27	721.23	751.45	29.42	-1.618	0.000	0.013
160.00	-5.35	-0.63	0.00	-4.61	0.00	4.61	1381.63	326.37	687.52	720.36	30.44	-1.621	0.000	0.010
165.00	-4.73	-0.49	0.00	-1.46	0.00	1.46	1325.85	313.19	633.13	663.10	32.14	-1.623	0.000	0.006
168.00	0.00	-0.35	0.00	0.00	0.00	0.00	1292.39	305.29	601.57	629.89	33.16	-1.624	0.000	0.000

Seismic Segment Forces (Factored)

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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)**	0.26	**SA**	0.02	**S1**	0.06
						Seismic Importance Factor	1.00

R: 1.50

Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)
0.00		0.00	0.00	0.00	0.00
5.00		1583.2	2.50	61.47	0.01
10.00		1559.0	7.50	60.53	0.06
15.00		1534.8	12.50	59.59	0.15
20.00		1510.5	17.50	58.65	0.29
25.00		1486.3	22.50	57.71	0.47
30.00		1462.1	27.50	56.77	0.68
35.00		1437.9	32.50	55.83	0.92
40.00		1413.7	37.50	54.89	1.18
44.00	Bot - Section 2	1113.5	42.00	43.24	0.92
45.00		501.61	44.50	19.48	0.21
50.00	Top - Section 1	2478.9	47.50	96.25	5.81
55.00		1361.7	52.50	52.87	2.14
60.00		1337.5	57.50	51.93	2.48
65.00		1313.3	62.50	50.99	2.83
70.00		1289.1	67.50	50.05	3.18
75.00		1264.8	72.50	49.11	3.53
80.00		1240.6	77.50	48.17	3.88
83.75	Bot - Section 3	914.62	81.88	35.51	2.35
85.00		471.99	84.38	18.33	0.67
89.00	Top - Section 2	1492.9	87.00	57.97	7.07
90.00		187.03	89.50	7.26	0.12
95.00		924.76	92.50	35.91	3.07
100.00		907.46	97.50	35.23	3.28
105.00		890.17	102.50	34.56	3.49
110.00		872.87	107.50	33.89	3.69
115.00		855.57	112.50	33.22	3.89
119.50	Bot - Section 4	755.23	117.25	29.32	3.29
120.00		128.46	119.75	4.99	0.10
123.75	Top - Section 3	953.56	121.88	37.02	5.66
125.00	Appurtenance(s)	5033.1	124.38	195.42	164.33
130.00		631.15	127.50	24.51	2.72
135.00		617.31	132.50	23.97	2.81
137.00	Appurtenance(s)	3158.9	136.00	122.65	77.40
140.00		303.62	138.50	11.79	0.74
145.00		494.96	142.50	19.22	2.09
147.00	Appurtenance(s)	3442.0	146.00	133.64	105.91
150.00		238.99	148.50	9.28	0.53
155.00		387.24	152.50	15.04	1.46
157.00	Appurtenance(s)	4830.2	156.00	187.54	238.10
160.00		212.88	158.50	8.27	0.48
165.00		343.73	162.50	13.35	1.31
168.00	Appurtenance(s)	2306.0	166.50	89.54	61.82
	Totals:	**55,244.3**		**2,145.0**	**725.1**

Total Wind: **41,327.5**

Calculated Forces

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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	

Load Case:	1.2D + 1.0Ev + 1.0Eh							**Iterations**	22
Gust Response Factor	1.10			**Sds**	0.19			**Ss**	0.18
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.09			**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.26	**SA**	0.02	**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	-66.93	-0.73	0.00	-109.00	0.00	109.00	5340.38	1364.75	6341.26	6153.95		0.00	0.00	0.030
5.00	-65.02	-0.73	0.00	-105.37	0.00	105.37	5276.02	1339.77	6111.26	5967.64		0.00	0.00	0.030
10.00	-63.14	-0.74	0.00	-101.70	0.00	101.70	5210.42	1314.79	5885.51	5782.69		0.01	-0.01	0.030
15.00	-61.30	-0.74	0.00	-98.01	0.00	98.01	5143.57	1289.82	5664.01	5599.17		0.02	-0.02	0.029
20.00	-59.48	-0.75	0.00	-94.30	0.00	94.30	5075.47	1264.84	5446.75	5417.17		0.04	-0.02	0.029
25.00	-57.69	-0.75	0.00	-90.56	0.00	90.56	5006.13	1239.86	5233.74	5236.76		0.07	-0.03	0.029
30.00	-55.94	-0.76	0.00	-86.80	0.00	86.80	4935.55	1214.88	5024.99	5058.02		0.10	-0.03	0.028
35.00	-54.21	-0.76	0.00	-83.02	0.00	83.02	4863.72	1189.90	4820.48	4881.04		0.13	-0.04	0.028
40.00	-52.51	-0.76	0.00	-79.22	0.00	79.22	4790.64	1164.92	4620.22	4705.88		0.17	-0.04	0.028
44.00	-51.18	-0.76	0.00	-76.18	0.00	76.18	4731.29	1144.94	4463.07	4567.13		0.21	-0.05	0.027
45.00	-50.56	-0.76	0.00	-75.41	0.00	75.41	4716.32	1139.94	4424.20	4532.64		0.22	-0.05	0.027
50.00	-47.55	-0.76	0.00	-71.59	0.00	71.59	4386.97	1048.88	4057.73	4202.47		0.28	-0.05	0.028
55.00	-45.92	-0.76	0.00	-67.79	0.00	67.79	4315.09	1025.82	3881.29	4041.90		0.33	-0.06	0.027
60.00	-44.31	-0.76	0.00	-63.98	0.00	63.98	4242.11	1002.77	3708.77	3883.37		0.40	-0.07	0.027
65.00	-42.74	-0.76	0.00	-60.17	0.00	60.17	4147.44	979.71	3540.18	3708.56		0.47	-0.07	0.027
70.00	-41.20	-0.76	0.00	-56.36	0.00	56.36	4049.83	956.65	3375.50	3535.21		0.55	-0.08	0.026
75.00	-39.68	-0.76	0.00	-52.56	0.00	52.56	3952.22	933.60	3214.75	3366.00		0.63	-0.08	0.026
80.00	-38.20	-0.76	0.00	-48.76	0.00	48.76	3854.61	910.54	3057.92	3200.95		0.72	-0.09	0.025
83.75	-37.11	-0.75	0.00	-45.93	0.00	45.93	3781.40	893.24	2942.87	3079.88		0.79	-0.09	0.025
85.00	-36.54	-0.75	0.00	-44.98	0.00	44.98	3757.00	887.48	2905.01	3040.04		0.82	-0.09	0.025
89.00	-34.73	-0.75	0.00	-41.97	0.00	41.97	2696.95	685.52	2239.96	2185.23		0.90	-0.10	0.032
90.00	-34.51	-0.75	0.00	-41.22	0.00	41.22	2687.67	681.95	2216.70	2166.29		0.92	-0.10	0.032
95.00	-33.42	-0.75	0.00	-37.48	0.00	37.48	2640.52	664.11	2102.22	2072.16		1.03	-0.11	0.031
100.00	-32.35	-0.75	0.00	-33.74	0.00	33.74	2592.12	646.27	1990.79	1979.09		1.15	-0.11	0.030
105.00	-31.30	-0.74	0.00	-30.01	0.00	30.01	2542.48	628.43	1882.38	1887.15		1.27	-0.12	0.028
110.00	-30.28	-0.74	0.00	-26.29	0.00	26.29	2491.60	610.59	1777.01	1796.42		1.40	-0.13	0.027
115.00	-29.27	-0.74	0.00	-22.58	0.00	22.58	2439.47	592.74	1674.68	1706.99		1.54	-0.14	0.025
119.50	-28.38	-0.73	0.00	-19.26	0.00	19.26	2391.49	576.69	1585.17	1627.67		1.67	-0.14	0.024
120.00	-28.23	-0.74	0.00	-18.89	0.00	18.89	2386.09	574.90	1575.38	1618.92		1.68	-0.14	0.024
123.75	-27.09	-0.73	0.00	-16.14	0.00	16.14	1658.06	421.89	1148.87	1119.99		1.80	-0.15	0.031
125.00	-20.87	-0.55	0.00	-15.23	0.00	15.23	1649.50	418.60	1131.00	1105.44		1.84	-0.15	0.026
130.00	-20.13	-0.55	0.00	-12.48	0.00	12.48	1614.57	405.42	1060.92	1047.71		1.99	-0.15	0.024
135.00	-19.40	-0.54	0.00	-9.75	0.00	9.75	1578.53	392.25	993.09	990.78		2.15	-0.16	0.022
137.00	-15.50	-0.46	0.00	-8.66	0.00	8.66	1563.80	386.98	966.58	968.24		2.22	-0.16	0.019
140.00	-15.14	-0.45	0.00	-7.29	0.00	7.29	1541.39	379.07	927.49	934.70		2.32	-0.16	0.018
145.00	-14.55	-0.45	0.00	-5.02	0.00	5.02	1503.14	365.90	864.14	879.56		2.49	-0.16	0.015
147.00	-10.29	-0.33	0.00	-4.12	0.00	4.12	1487.53	360.63	839.42	857.78		2.56	-0.17	0.012
150.00	-10.00	-0.33	0.00	-3.12	0.00	3.12	1463.79	352.72	803.03	825.42		2.67	-0.17	0.011
155.00	-9.52	-0.33	0.00	-1.46	0.00	1.46	1423.34	339.54	744.15	772.36		2.84	-0.17	0.009
157.00	-3.54	-0.07	0.00	-0.80	0.00	0.80	1406.84	334.27	721.23	751.45		2.91	-0.17	0.004
160.00	-3.28	-0.07	0.00	-0.57	0.00	0.57	1381.63	326.37	687.52	720.36		3.02	-0.17	0.003
165.00	-2.86	-0.07	0.00	-0.21	0.00	0.21	1325.85	313.19	633.13	663.10		3.20	-0.17	0.002
168.00	0.00	-0.06	0.00	0.00	0.00	0.00	1292.39	305.29	601.57	629.89		3.31	-0.17	0.000

Seismic Segment Forces (Factored)

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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: 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)**	0.26	**SA**	0.02	**S1**	0.06
						Seismic Importance Factor	1.00

R: 1.50

Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)
0.00		0.00	0.00	0.00	0.00
5.00		1515.1	2.50	58.83	0.01
10.00		1490.9	7.50	57.89	0.05
15.00		1466.7	12.50	56.95	0.14
20.00		1442.5	17.50	56.01	0.27
25.00		1418.3	22.50	55.07	0.43
30.00		1394.0	27.50	54.13	0.63
35.00		1369.8	32.50	53.19	0.84
40.00		1345.6	37.50	52.25	1.08
44.00	Bot - Section 2	1059.0	42.00	41.12	0.84
45.00		487.99	44.50	18.95	0.20
50.00	Top - Section 1	2410.9	47.50	93.61	5.59
55.00		1293.6	52.50	50.23	1.97
60.00		1269.4	57.50	49.29	2.27
65.00		1245.2	62.50	48.35	2.58
70.00		1221.0	67.50	47.41	2.89
75.00		1196.8	72.50	46.47	3.21
80.00		1172.6	77.50	45.53	3.52
83.75	Bot - Section 3	863.56	81.88	33.53	2.13
85.00		454.97	84.38	17.67	0.63
89.00	Top - Section 2	1438.4	87.00	55.85	6.67
90.00		173.41	89.50	6.73	0.10
95.00		856.69	92.50	33.26	2.68
100.00		839.39	97.50	32.59	2.85
105.00		822.09	102.50	31.92	3.02
110.00		804.80	107.50	31.25	3.19
115.00		787.50	112.50	30.58	3.34
119.50	Bot - Section 4	693.96	117.25	26.94	2.82
120.00		121.66	119.75	4.72	0.09
123.75	Top - Section 3	902.51	121.88	35.04	5.15
125.00	Appurtenance(s)	5016.1	124.38	194.76	165.81
130.00		581.54	127.50	22.58	2.34
135.00		567.70	132.50	22.04	2.41
137.00	Appurtenance(s)	3139.1	136.00	121.88	77.64
140.00		288.05	138.50	11.18	0.68
145.00		469.02	142.50	18.21	1.90
147.00	Appurtenance(s)	3431.6	146.00	133.24	106.94
150.00		235.43	148.50	9.14	0.52
155.00		381.31	152.50	14.81	1.44
157.00	Appurtenance(s)	4827.8	156.00	187.45	241.65
160.00		211.70	158.50	8.22	0.48
165.00		341.76	162.50	13.27	1.31
168.00	Appurtenance(s)	2304.9	166.50	89.49	62.74
	Totals:	**53,355.4**		**2,071.6**	**725.1**

Total Wind: **41,327.5**

Calculated Forces

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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	

Load Case:	0.9D + 1.0Ev + 1.0Eh							**Iterations**	22
Gust Response Factor	1.10			**Sds**	0.19			**Ss**	0.18
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.09			**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.26	**SA**	0.02	**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	-50.66	-0.73	0.00	-107.52	0.00	107.52	5340.38	1364.75	6341.26	6153.95		0.00	0.00	0.027
5.00	-49.22	-0.73	0.00	-103.89	0.00	103.89	5276.02	1339.77	6111.26	5967.64		0.00	0.00	0.027
10.00	-47.79	-0.73	0.00	-100.24	0.00	100.24	5210.42	1314.79	5885.51	5782.69		0.01	-0.01	0.027
15.00	-46.40	-0.74	0.00	-96.56	0.00	96.56	5143.57	1289.82	5664.01	5599.17		0.02	-0.01	0.026
20.00	-45.02	-0.74	0.00	-92.87	0.00	92.87	5075.47	1264.84	5446.75	5417.17		0.04	-0.02	0.026
25.00	-43.67	-0.74	0.00	-89.16	0.00	89.16	5006.13	1239.86	5233.74	5236.76		0.07	-0.03	0.026
30.00	-42.34	-0.75	0.00	-85.44	0.00	85.44	4935.55	1214.88	5024.99	5058.02		0.10	-0.03	0.025
35.00	-41.03	-0.75	0.00	-81.70	0.00	81.70	4863.72	1189.90	4820.48	4881.04		0.13	-0.04	0.025
40.00	-39.75	-0.75	0.00	-77.95	0.00	77.95	4790.64	1164.92	4620.22	4705.88		0.17	-0.04	0.025
44.00	-38.74	-0.75	0.00	-74.94	0.00	74.94	4731.29	1144.94	4463.07	4567.13		0.21	-0.05	0.025
45.00	-38.28	-0.75	0.00	-74.19	0.00	74.19	4716.32	1139.94	4424.20	4532.64		0.22	-0.05	0.024
50.00	-35.99	-0.75	0.00	-70.42	0.00	70.42	4386.97	1048.88	4057.73	4202.47		0.27	-0.05	0.025
55.00	-34.76	-0.75	0.00	-66.68	0.00	66.68	4315.09	1025.82	3881.29	4041.90		0.33	-0.06	0.025
60.00	-33.55	-0.75	0.00	-62.93	0.00	62.93	4242.11	1002.77	3708.77	3883.37		0.39	-0.06	0.024
65.00	-32.36	-0.75	0.00	-59.18	0.00	59.18	4147.44	979.71	3540.18	3708.56		0.47	-0.07	0.024
70.00	-31.19	-0.75	0.00	-55.44	0.00	55.44	4049.83	956.65	3375.50	3535.21		0.54	-0.08	0.023
75.00	-30.05	-0.75	0.00	-51.70	0.00	51.70	3952.22	933.60	3214.75	3366.00		0.62	-0.08	0.023
80.00	-28.92	-0.74	0.00	-47.97	0.00	47.97	3854.61	910.54	3057.92	3200.95		0.71	-0.09	0.022
83.75	-28.10	-0.74	0.00	-45.18	0.00	45.18	3781.40	893.24	2942.87	3079.88		0.78	-0.09	0.022
85.00	-27.67	-0.74	0.00	-44.26	0.00	44.26	3757.00	887.48	2905.01	3040.04		0.81	-0.09	0.022
89.00	-26.30	-0.73	0.00	-41.29	0.00	41.29	2696.95	685.52	2239.96	2185.23		0.89	-0.10	0.029
90.00	-26.13	-0.74	0.00	-40.56	0.00	40.56	2687.67	681.95	2216.70	2166.29		0.91	-0.10	0.028
95.00	-25.31	-0.73	0.00	-36.89	0.00	36.89	2640.52	664.11	2102.22	2072.16		1.01	-0.11	0.027
100.00	-24.50	-0.73	0.00	-33.22	0.00	33.22	2592.12	646.27	1990.79	1979.09		1.13	-0.11	0.026
105.00	-23.71	-0.73	0.00	-29.55	0.00	29.55	2542.48	628.43	1882.38	1887.15		1.25	-0.12	0.025
110.00	-22.93	-0.73	0.00	-25.90	0.00	25.90	2491.60	610.59	1777.01	1796.42		1.38	-0.13	0.024
115.00	-22.17	-0.73	0.00	-22.25	0.00	22.25	2439.47	592.74	1674.68	1706.99		1.52	-0.13	0.022
119.50	-21.50	-0.72	0.00	-18.99	0.00	18.99	2391.49	576.69	1585.17	1627.67		1.64	-0.14	0.021
120.00	-21.38	-0.72	0.00	-18.63	0.00	18.63	2386.09	574.90	1575.38	1618.92		1.66	-0.14	0.020
123.75	-20.52	-0.72	0.00	-15.91	0.00	15.91	1658.06	421.89	1148.87	1119.99		1.77	-0.14	0.027
125.00	-15.81	-0.54	0.00	-15.02	0.00	15.02	1649.50	418.60	1131.00	1105.44		1.81	-0.14	0.023
130.00	-15.25	-0.54	0.00	-12.32	0.00	12.32	1614.57	405.42	1060.92	1047.71		1.96	-0.15	0.021
135.00	-14.70	-0.53	0.00	-9.63	0.00	9.63	1578.53	392.25	993.09	990.78		2.12	-0.15	0.019
137.00	-11.75	-0.45	0.00	-8.56	0.00	8.56	1563.80	386.98	966.58	968.24		2.19	-0.16	0.016
140.00	-11.47	-0.45	0.00	-7.21	0.00	7.21	1541.39	379.07	927.49	934.70		2.29	-0.16	0.015
145.00	-11.02	-0.45	0.00	-4.96	0.00	4.96	1503.14	365.90	864.14	879.56		2.45	-0.16	0.013
147.00	-7.80	-0.33	0.00	-4.07	0.00	4.07	1487.53	360.63	839.42	857.78		2.52	-0.16	0.010
150.00	-7.58	-0.33	0.00	-3.08	0.00	3.08	1463.79	352.72	803.03	825.42		2.63	-0.16	0.009
155.00	-7.22	-0.33	0.00	-1.43	0.00	1.43	1423.34	339.54	744.15	772.36		2.80	-0.17	0.007
157.00	-2.68	-0.07	0.00	-0.78	0.00	0.78	1406.84	334.27	721.23	751.45		2.87	-0.17	0.003
160.00	-2.49	-0.07	0.00	-0.56	0.00	0.56	1381.63	326.37	687.52	720.36		2.97	-0.17	0.003
165.00	-2.16	-0.07	0.00	-0.21	0.00	0.21	1325.85	313.19	633.13	663.10		3.15	-0.17	0.002
168.00	0.00	-0.06	0.00	0.00	0.00	0.00	1292.39	305.29	601.57	629.89		3.25	-0.17	0.000

Wind Loading - Shaft

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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: 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	6.523	7.17	261.48	0.730	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	6.523	7.17	256.73	0.730	0.000	5.00	23.663	17.27	123.9	0.0	1311.0
10.00		1.00	0.85	6.523	7.17	251.98	0.730	0.000	5.00	23.229	16.96	121.7	0.0	1286.7
15.00		1.00	0.85	6.523	7.17	247.23	0.730	0.000	5.00	22.795	16.64	119.4	0.0	1262.5
20.00		1.00	0.90	6.921	7.61	249.78	0.730	0.000	5.00	22.362	16.32	124.3	0.0	1238.3
25.00		1.00	0.95	7.254	7.98	250.70	0.730	0.000	5.00	21.928	16.01	127.7	0.0	1214.1
30.00		1.00	0.98	7.538	8.29	250.46	0.730	0.000	5.00	21.494	15.69	130.1	0.0	1189.9
35.00		1.00	1.01	7.786	8.56	249.37	0.730	0.000	5.00	21.061	15.37	131.7	0.0	1165.7
40.00		1.00	1.04	8.008	8.81	247.63	0.730	0.000	5.00	20.627	15.06	132.6	0.0	1141.4
44.00	Bot - Section 2	1.00	1.06	8.170	8.99	245.88	0.730	0.000	4.00	16.189	11.82	106.2	0.0	895.7
45.00		1.00	1.07	8.209	9.03	245.40	0.730	0.000	1.00	4.078	2.98	26.9	0.0	447.2
50.00	Top - Section 1	1.00	1.09	8.393	9.23	242.75	0.730	0.000	5.00	20.130	14.69	135.7	0.0	2206.7
55.00		1.00	1.12	8.563	9.42	244.40	0.730	0.000	5.00	19.696	14.38	135.4	0.0	1089.5
60.00		1.00	1.14	8.722	9.59	241.16	0.730	0.000	5.00	19.262	14.06	134.9	0.0	1065.3
65.00		1.00	1.16	8.870	9.76	237.66	0.730	0.000	5.00	18.829	13.74	134.1	0.0	1041.0
70.00		1.00	1.17	9.009	9.91	233.94	0.730	0.000	5.00	18.395	13.43	133.1	0.0	1016.8
75.00		1.00	1.19	9.141	10.06	230.02	0.730	0.000	5.00	17.961	13.11	131.8	0.0	992.6
80.00		1.00	1.21	9.266	10.19	225.93	0.730	0.000	5.00	17.528	12.80	130.4	0.0	968.4
83.75	Bot - Section 3	1.00	1.22	9.356	10.29	222.76	0.730	0.000	3.75	12.861	9.39	96.6	0.0	710.4
85.00		1.00	1.22	9.385	10.32	221.68	0.730	0.000	1.25	4.299	3.14	32.4	0.0	403.9
89.00	Top - Section 2	1.00	1.23	9.477	10.42	218.18	0.730	0.000	4.00	13.575	9.91	103.3	0.0	1275.1
90.00		1.00	1.24	9.499	10.45	220.78	0.730	0.000	1.00	3.350	2.45	25.6	0.0	132.6
95.00		1.00	1.25	9.608	10.57	216.28	0.730	0.000	5.00	16.491	12.04	127.2	0.0	652.5
100.00		1.00	1.27	9.712	10.68	211.65	0.730	0.000	5.00	16.057	11.72	125.2	0.0	635.2
105.00		1.00	1.28	9.812	10.79	206.92	0.730	0.000	5.00	15.624	11.41	123.1	0.0	617.9
110.00		1.00	1.29	9.909	10.90	202.08	0.730	0.000	5.00	15.190	11.09	120.9	0.0	600.6
115.00		1.00	1.30	10.002	11.00	197.15	0.730	0.000	5.00	14.756	10.77	118.5	0.0	583.3
119.50	Bot - Section 4	1.00	1.31	10.083	11.09	192.63	0.730	0.000	4.50	12.910	9.42	104.5	0.0	510.2
120.00		1.00	1.32	10.092	11.10	192.13	0.730	0.000	0.50	1.434	1.05	11.6	0.0	101.2
123.75	Top - Section 3	1.00	1.32	10.158	11.17	188.31	0.730	0.000	3.75	10.616	7.75	86.6	0.0	749.3
125.00	Appurtenance(s)	1.00	1.33	10.179	11.20	189.92	0.730	0.000	1.25	3.485	2.54	28.5	0.0	110.3
130.00		1.00	1.34	10.264	11.29	184.75	0.730	0.000	5.00	13.667	9.98	112.6	0.0	432.7
135.00		1.00	1.35	10.345	11.38	179.50	0.730	0.000	5.00	13.233	9.66	109.9	0.0	418.9
137.00	Appurtenance(s)	1.00	1.35	10.377	11.42	177.38	0.730	0.000	2.00	5.172	3.78	43.1	0.0	163.7
140.00		1.00	1.36	10.425	11.47	174.19	0.730	0.000	3.00	7.628	5.57	63.9	0.0	241.4
145.00		1.00	1.37	10.502	11.55	168.81	0.730	0.000	5.00	12.366	9.03	104.3	0.0	391.2
147.00	Appurtenance(s)	1.00	1.37	10.533	11.59	166.64	0.730	0.000	2.00	4.825	3.52	40.8	0.0	152.6
150.00		1.00	1.38	10.577	11.64	163.36	0.730	0.000	3.00	7.107	5.19	60.4	0.0	224.8
155.00		1.00	1.39	10.651	11.72	157.86	0.730	0.000	5.00	11.499	8.39	98.3	0.0	363.5
157.00	Appurtenance(s)	1.00	1.39	10.679	11.75	155.64	0.730	0.000	2.00	4.478	3.27	38.4	0.0	141.5
160.00		1.00	1.40	10.722	11.79	152.30	0.730	0.000	3.00	6.587	4.81	56.7	0.0	208.2
165.00		1.00	1.41	10.792	11.87	146.68	0.730	0.000	5.00	10.631	7.76	92.1	0.0	335.8
168.00	Appurtenance(s)	1.00	1.41	10.833	11.92	143.29	0.730	0.000	3.00	6.171	4.50	53.7	0.0	194.9
								Totals:	**168.00**			**4,058.3**		**29,884.3**

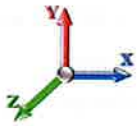
Discrete Appurtenance Forces

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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	

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	168.00	Low Profile Platform	1	10.833	11.916	1.00	1.00	18.38	2100.00	0.000	0.000	219.02	0.00	0.00
2	168.00	6' Lightning rod	1	10.833	11.916	1.00	1.00	0.38	6.50	0.000	0.000	4.53	0.00	0.00
3	157.00	ALU 1900 MHz	3	10.679	11.747	0.76	0.75	5.25	180.00	0.000	0.000	61.67	0.00	0.00
4	157.00	Handrail Kit (Site Pro1	1	10.679	11.747	1.00	1.00	6.36	466.00	0.000	0.000	74.71	0.00	0.00
5	157.00	Mount Pipes	12	10.679	11.747	0.75	0.75	10.44	360.00	0.000	0.000	122.64	0.00	0.00
6	157.00	Reinforcement kit	3	10.679	11.747	0.75	0.75	4.63	195.00	0.000	0.000	54.45	0.00	0.00
7	157.00	Bottom reinforcement kit	3	10.679	11.747	0.75	0.75	13.00	450.00	0.000	0.000	152.78	0.00	0.00
8	157.00	ALU TD-RRH8x20-25	3	10.679	11.747	0.52	0.75	6.29	210.00	0.000	0.000	73.86	0.00	0.00
9	157.00	Low Profile Platform	1	10.679	11.747	1.00	1.00	18.38	2100.00	0.000	0.000	215.92	0.00	0.00
10	157.00	RFS APXVTM14-C-I20	3	10.679	11.747	0.58	0.75	11.13	168.00	0.000	0.000	130.71	0.00	0.00
11	157.00	Commscope	3	10.679	11.747	0.55	0.75	20.15	232.20	0.000	0.000	236.75	0.00	0.00
12	157.00	ALU 800 MHz	6	10.679	11.747	0.69	0.75	8.82	318.00	0.000	0.000	103.59	0.00	0.00
13	147.00	ADC Cleargain 1900W800	6	10.533	11.586	0.58	0.75	4.44	171.96	0.000	0.000	51.39	0.00	0.00
14	147.00	Powerwave Allgon LGP	6	10.533	11.586	0.49	0.75	3.12	114.00	0.000	0.000	36.13	0.00	0.00
15	147.00	Powerwave LGP21903	6	10.533	11.586	0.63	0.75	0.87	33.00	0.000	0.000	10.07	0.00	0.00
16	147.00	Ericsson RRUS 12	3	10.533	11.586	0.52	0.75	4.96	174.00	0.000	0.000	57.48	0.00	0.00
17	147.00	CSS Dual Band Combiner	3	10.533	11.586	0.47	0.75	1.05	15.00	0.000	0.000	12.15	0.00	0.00
18	147.00	Platform W/Handrail	1	10.533	11.586	1.00	1.00	21.41	1604.70	0.000	0.000	248.05	0.00	0.00
19	147.00	Mount Pipes	12	10.533	11.586	0.75	0.75	12.24	360.00	0.000	0.000	141.81	0.00	0.00
20	147.00	KMW	3	10.533	11.586	0.60	0.75	20.36	178.50	0.000	0.000	235.86	0.00	0.00
21	147.00	Raycap DC6-48-60-18-8F	1	10.533	11.586	1.01	0.75	2.21	32.80	0.000	0.000	25.62	0.00	0.00
22	147.00	Ericsson RRUS 11	6	10.533	11.586	0.48	0.75	10.92	330.00	0.000	0.000	126.46	0.00	0.00
23	147.00	Powerwave Allgon 7770	6	10.533	11.586	0.58	0.75	19.09	234.00	0.000	0.000	221.20	0.00	0.00
24	137.00	Ericsson KRY 112 489/2	3	10.377	11.415	0.62	0.75	1.05	46.20	0.000	0.000	11.94	0.00	0.00
25	137.00	Ericsson Radio 4449	3	10.377	11.415	0.61	0.75	2.97	222.00	0.000	0.000	33.91	0.00	0.00
26	137.00	RFS	3	10.377	11.415	0.54	0.75	32.79	384.00	0.000	0.000	374.29	0.00	0.00
27	137.00	RFS	3	10.377	11.415	0.58	0.75	6.35	56.10	0.000	0.000	72.52	0.00	0.00
28	137.00	782 11056	3	10.377	11.415	0.50	0.75	0.20	5.40	0.000	0.000	2.24	0.00	0.00
29	137.00	Platform w/ Handrail &	1	10.377	11.415	1.00	1.00	32.63	1879.70	0.000	0.000	372.48	0.00	0.00
30	137.00	Mount Pipes	9	10.377	11.415	0.75	0.75	7.63	270.00	0.000	0.000	87.07	0.00	0.00
31	137.00	Allen Telecome	3	10.377	11.415	0.55	0.75	0.87	52.50	0.000	0.000	9.94	0.00	0.00
32	125.00	Platform w/handrail &	1	10.179	11.197	1.00	1.00	26.50	2264.67	0.000	0.000	296.72	0.00	0.00
33	125.00	Mount Pipes	12	10.179	11.197	0.75	0.75	11.16	360.00	0.000	0.000	124.96	0.00	0.00
34	125.00	Commscope	12	10.179	11.197	0.62	0.75	68.05	772.44	0.000	0.000	761.98	0.00	0.00
35	125.00	Samsung MT6413-77A	6	10.179	11.197	0.52	0.75	11.77	343.80	0.000	0.000	131.77	0.00	0.00
36	125.00	Samsung RF4461d-13A	6	10.179	11.197	0.63	0.75	7.07	474.60	0.000	0.000	79.15	0.00	0.00
37	125.00	Commscope	3	10.179	11.197	0.65	0.75	0.99	63.00	0.000	0.000	11.05	0.00	0.00
38	125.00	Samsung B2/B66A RRH	6	10.179	11.197	0.63	0.75	7.07	448.20	0.000	0.000	79.15	0.00	0.00
39	125.00	Raycap	4	10.179	11.197	0.66	0.75	10.72	128.00	0.000	0.000	120.01	0.00	0.00
							Totals:		**17,804.27**			**5,186.02**		

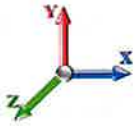
Total Applied Force Summary

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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	

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		123.94	1537.86	0.00	0.00
10.00		121.67	1513.64	0.00	0.00
15.00		119.39	1489.43	0.00	0.00
20.00		124.27	1465.21	0.00	0.00
25.00		127.72	1441.00	0.00	0.00
30.00		130.10	1416.78	0.00	0.00
35.00		131.68	1392.57	0.00	0.00
40.00		132.64	1368.35	0.00	0.00
44.00		106.22	1077.24	0.00	0.00
45.00		26.88	492.53	0.00	0.00
50.00		135.67	2433.60	0.00	0.00
55.00		135.44	1316.37	0.00	0.00
60.00		134.91	1292.16	0.00	0.00
65.00		134.11	1267.94	0.00	0.00
70.00		133.08	1243.73	0.00	0.00
75.00		131.84	1219.51	0.00	0.00
80.00		130.42	1195.30	0.00	0.00
83.75		96.63	880.58	0.00	0.00
85.00		32.40	460.65	0.00	0.00
89.00		103.30	1456.63	0.00	0.00
90.00		25.55	177.95	0.00	0.00
95.00		127.23	879.38	0.00	0.00
100.00		125.23	862.08	0.00	0.00
105.00		123.10	844.78	0.00	0.00
110.00		120.86	827.49	0.00	0.00
115.00		118.52	810.19	0.00	0.00
119.50		104.53	714.38	0.00	0.00
120.00		11.62	123.93	0.00	0.00
123.75		86.59	919.53	0.00	0.00
125.00	(50) attachments	1633.27	5021.78	0.00	0.00
130.00		112.64	598.07	0.00	0.00
135.00		109.93	584.24	0.00	0.00
137.00	(28) attachments	1007.48	3145.72	0.00	0.00
140.00		63.85	293.24	0.00	0.00
145.00		104.29	477.66	0.00	0.00
147.00	(53) attachments	1207.03	3435.15	0.00	0.00
150.00		60.37	236.61	0.00	0.00
155.00		98.34	383.29	0.00	0.00
157.00	(38) attachments	1265.49	4828.64	0.00	0.00
160.00		56.71	212.09	0.00	0.00
165.00		92.13	342.41	0.00	0.00
168.00	(2) attachments	277.22	2305.31	0.00	0.00
	Totals:	**9,244.30**	**53,985.01**	**0.00**	**0.00**

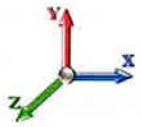
Linear Appurtenance Segment Forces (Factored)

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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	

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	0.018	0.000	6.523	0.00	1.37
5.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	6.523	0.00	5.20
10.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.018	0.000	6.523	0.00	1.37
10.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	6.523	0.00	5.20
15.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.018	0.000	6.523	0.00	1.37
15.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.018	0.000	6.523	0.00	5.20
20.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.019	0.000	6.921	0.00	1.37
20.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	6.921	0.00	5.20
25.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.019	0.000	7.254	0.00	1.37
25.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.019	0.000	7.254	0.00	5.20
30.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	7.538	0.00	1.37
30.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	7.538	0.00	5.20
35.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	7.786	0.00	1.37
35.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	7.786	0.00	5.20
40.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.020	0.000	8.008	0.00	1.37
40.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.020	0.000	8.008	0.00	5.20
44.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.021	0.000	8.170	0.00	1.09
44.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.021	0.000	8.170	0.00	4.16
45.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.021	0.000	8.209	0.00	0.27
45.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.021	0.000	8.209	0.00	1.04
50.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	8.393	0.00	1.37
50.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	8.393	0.00	5.20
55.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.021	0.000	8.563	0.00	1.37
55.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.021	0.000	8.563	0.00	5.20
60.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	8.722	0.00	1.37
60.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	8.722	0.00	5.20
65.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.022	0.000	8.870	0.00	1.37
65.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.022	0.000	8.870	0.00	5.20
70.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.023	0.000	9.009	0.00	1.37
70.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.023	0.000	9.009	0.00	5.20
75.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.023	0.000	9.141	0.00	1.37
75.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.023	0.000	9.141	0.00	5.20
80.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.024	0.000	9.266	0.00	1.37
80.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.024	0.000	9.266	0.00	5.20
83.75	Safety Cable	Yes	3.75	0.000	0.38	0.12	0.00	0.025	0.000	9.356	0.00	1.02
83.75	Step bolts (ladder)	Yes	3.75	0.000	0.63	0.20	0.00	0.025	0.000	9.356	0.00	3.90
85.00	Safety Cable	Yes	1.25	0.000	0.38	0.04	0.00	0.025	0.000	9.385	0.00	0.34
85.00	Step bolts (ladder)	Yes	1.25	0.000	0.63	0.07	0.00	0.025	0.000	9.385	0.00	1.30
89.00	Safety Cable	Yes	4.00	0.000	0.38	0.13	0.00	0.025	0.000	9.477	0.00	1.09
89.00	Step bolts (ladder)	Yes	4.00	0.000	0.63	0.21	0.00	0.025	0.000	9.477	0.00	4.16
90.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.025	0.000	9.499	0.00	0.27
90.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.025	0.000	9.499	0.00	1.04
95.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.026	0.000	9.608	0.00	1.37
95.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.026	0.000	9.608	0.00	5.20
100.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.026	0.000	9.712	0.00	1.37
100.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.026	0.000	9.712	0.00	5.20
105.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.027	0.000	9.812	0.00	1.37

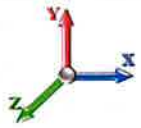
Linear Appurtenance Segment Forces (Factored)

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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

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	0.027	0.000	9.812	0.00	5.20
110.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.028	0.000	9.909	0.00	1.37
110.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.028	0.000	9.909	0.00	5.20
115.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.029	0.000	10.002	0.00	1.37
115.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.029	0.000	10.002	0.00	5.20
119.50	Safety Cable	Yes	4.50	0.000	0.38	0.14	0.00	0.029	0.000	10.083	0.00	1.23
119.50	Step bolts (ladder)	Yes	4.50	0.000	0.63	0.24	0.00	0.029	0.000	10.083	0.00	4.68
120.00	Safety Cable	Yes	0.50	0.000	0.38	0.02	0.00	0.030	0.000	10.092	0.00	0.14
120.00	Step bolts (ladder)	Yes	0.50	0.000	0.63	0.03	0.00	0.030	0.000	10.092	0.00	0.52
123.75	Safety Cable	Yes	3.75	0.000	0.38	0.12	0.00	0.030	0.000	10.158	0.00	1.02
123.75	Step bolts (ladder)	Yes	3.75	0.000	0.63	0.20	0.00	0.030	0.000	10.158	0.00	3.90
125.00	Safety Cable	Yes	1.25	0.000	0.38	0.04	0.00	0.030	0.000	10.179	0.00	0.34
125.00	Step bolts (ladder)	Yes	1.25	0.000	0.63	0.07	0.00	0.030	0.000	10.179	0.00	1.30
130.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.031	0.000	10.264	0.00	1.37
130.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.031	0.000	10.264	0.00	5.20
135.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.032	0.000	10.345	0.00	1.37
135.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.032	0.000	10.345	0.00	5.20
137.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.033	0.000	10.377	0.00	0.55
137.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.033	0.000	10.377	0.00	2.08
140.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.033	0.000	10.425	0.00	0.82
140.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.033	0.000	10.425	0.00	3.12
145.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.034	0.000	10.502	0.00	1.37
145.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.034	0.000	10.502	0.00	5.20
147.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.035	0.000	10.533	0.00	0.55
147.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.035	0.000	10.533	0.00	2.08
150.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.036	0.000	10.577	0.00	0.82
150.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.036	0.000	10.577	0.00	3.12
155.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.037	0.000	10.651	0.00	1.37
155.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.037	0.000	10.651	0.00	5.20
157.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.038	0.000	10.679	0.00	0.55
157.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.038	0.000	10.679	0.00	2.08
160.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.038	0.000	10.722	0.00	0.82
160.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.038	0.000	10.722	0.00	3.12
165.00	Safety Cable	Yes	5.00	0.000	0.38	0.16	0.00	0.040	0.000	10.792	0.00	1.37
165.00	Step bolts (ladder)	Yes	5.00	0.000	0.63	0.26	0.00	0.040	0.000	10.792	0.00	5.20
168.00	Safety Cable	Yes	3.00	0.000	0.38	0.10	0.00	0.041	0.000	10.833	0.00	0.82
168.00	Step bolts (ladder)	Yes	3.00	0.000	0.63	0.16	0.00	0.041	0.000	10.833	0.00	3.12
										Totals:	**0.0**	**220.6**

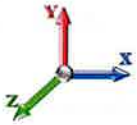
Calculated Forces

Structure:	CT01364-S	**Code:**	TIA-222-H	2/20/2024	
Site Name:	Pomfret	**Exposure:**	C		
Height:	168.00 (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

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	-53.98	-9.27	0.00	-1124.2	0.00	1124.24	5340.38	1364.75	6341.26	6153.95	0.00	0.000	0.000	0.193
5.00	-52.43	-9.19	0.00	-1077.9	0.00	1077.90	5276.02	1339.77	6111.26	5967.64	0.03	-0.051	0.000	0.191
10.00	-50.91	-9.11	0.00	-1031.9	0.00	1031.95	5210.42	1314.79	5885.51	5782.69	0.11	-0.102	0.000	0.188
15.00	-49.42	-9.04	0.00	-986.39	0.00	986.39	5143.57	1289.82	5664.01	5599.17	0.24	-0.154	0.000	0.186
20.00	-47.94	-8.95	0.00	-941.21	0.00	941.21	5075.47	1264.84	5446.75	5417.17	0.43	-0.207	0.000	0.183
25.00	-46.49	-8.86	0.00	-896.46	0.00	896.46	5006.13	1239.86	5233.74	5236.76	0.68	-0.260	0.000	0.181
30.00	-45.07	-8.77	0.00	-852.16	0.00	852.16	4935.55	1214.88	5024.99	5058.02	0.98	-0.314	0.000	0.178
35.00	-43.67	-8.67	0.00	-808.33	0.00	808.33	4863.72	1189.90	4820.48	4881.04	1.34	-0.369	0.000	0.175
40.00	-42.29	-8.56	0.00	-765.00	0.00	765.00	4790.64	1164.92	4620.22	4705.88	1.75	-0.423	0.000	0.171
44.00	-41.21	-8.47	0.00	-730.75	0.00	730.75	4731.29	1144.94	4463.07	4567.13	2.13	-0.468	0.000	0.169
45.00	-40.72	-8.46	0.00	-722.28	0.00	722.28	4716.32	1139.94	4424.20	4532.64	2.23	-0.479	0.000	0.168
50.00	-38.28	-8.34	0.00	-679.98	0.00	679.98	4386.97	1048.88	4057.73	4202.47	2.76	-0.535	0.000	0.171
55.00	-36.95	-8.23	0.00	-638.28	0.00	638.28	4315.09	1025.82	3881.29	4041.90	3.35	-0.590	0.000	0.167
60.00	-35.66	-8.11	0.00	-597.15	0.00	597.15	4242.11	1002.77	3708.77	3883.37	4.00	-0.643	0.000	0.162
65.00	-34.38	-7.99	0.00	-556.60	0.00	556.60	4147.44	979.71	3540.18	3708.56	4.70	-0.696	0.000	0.158
70.00	-33.13	-7.88	0.00	-516.63	0.00	516.63	4049.83	956.65	3375.50	3535.21	5.46	-0.749	0.000	0.154
75.00	-31.91	-7.76	0.00	-477.25	0.00	477.25	3952.22	933.60	3214.75	3366.00	6.27	-0.801	0.000	0.150
80.00	-30.71	-7.63	0.00	-438.47	0.00	438.47	3854.61	910.54	3057.92	3200.95	7.13	-0.853	0.000	0.145
83.75	-29.83	-7.54	0.00	-409.85	0.00	409.85	3781.40	893.24	2942.87	3079.88	7.82	-0.892	0.000	0.141
85.00	-29.36	-7.51	0.00	-400.43	0.00	400.43	3757.00	887.48	2905.01	3040.04	8.06	-0.905	0.000	0.140
89.00	-27.90	-7.40	0.00	-370.39	0.00	370.39	2696.95	685.52	2239.96	2185.23	8.83	-0.946	0.000	0.180
90.00	-27.72	-7.39	0.00	-363.00	0.00	363.00	2687.67	681.95	2216.70	2166.29	9.03	-0.956	0.000	0.178
95.00	-26.84	-7.27	0.00	-326.07	0.00	326.07	2640.52	664.11	2102.22	2072.16	10.07	-1.021	0.000	0.168
100.00	-25.97	-7.16	0.00	-289.70	0.00	289.70	2592.12	646.27	1990.79	1979.09	11.17	-1.084	0.000	0.157
105.00	-25.12	-7.05	0.00	-253.90	0.00	253.90	2542.48	628.43	1882.38	1887.15	12.34	-1.144	0.000	0.145
110.00	-24.29	-6.93	0.00	-218.67	0.00	218.67	2491.60	610.59	1777.01	1796.42	13.57	-1.201	0.000	0.132
115.00	-23.48	-6.82	0.00	-184.01	0.00	184.01	2439.47	592.74	1674.68	1706.99	14.86	-1.254	0.000	0.118
119.50	-22.76	-6.71	0.00	-153.34	0.00	153.34	2391.49	576.69	1585.17	1627.67	16.06	-1.298	0.000	0.104
120.00	-22.64	-6.70	0.00	-149.98	0.00	149.98	2386.09	574.90	1575.38	1618.92	16.20	-1.303	0.000	0.102
123.75	-21.72	-6.60	0.00	-124.87	0.00	124.87	1658.06	421.89	1148.87	1119.99	17.23	-1.335	0.000	0.125
125.00	-16.73	-4.86	0.00	-116.62	0.00	116.62	1649.50	418.60	1131.00	1105.44	17.58	-1.345	0.000	0.116
130.00	-16.13	-4.74	0.00	-92.34	0.00	92.34	1614.57	405.42	1060.92	1047.71	19.02	-1.388	0.000	0.098
135.00	-15.55	-4.62	0.00	-68.64	0.00	68.64	1578.53	392.25	993.09	990.78	20.49	-1.425	0.000	0.079
137.00	-12.43	-3.54	0.00	-59.39	0.00	59.39	1563.80	386.98	966.58	968.24	21.09	-1.438	0.000	0.069
140.00	-12.14	-3.47	0.00	-48.77	0.00	48.77	1541.39	379.07	927.49	934.70	22.00	-1.454	0.000	0.060
145.00	-11.66	-3.36	0.00	-31.41	0.00	31.41	1503.14	365.90	864.14	879.56	23.54	-1.477	0.000	0.044
147.00	-8.26	-2.07	0.00	-24.69	0.00	24.69	1487.53	360.63	839.42	857.78	24.16	-1.483	0.000	0.034
150.00	-8.02	-2.00	0.00	-18.49	0.00	18.49	1463.79	352.72	803.03	825.42	25.09	-1.492	0.000	0.028
155.00	-7.64	-1.89	0.00	-8.49	0.00	8.49	1423.34	339.54	744.15	772.36	26.66	-1.501	0.000	0.016
157.00	-2.85	-0.50	0.00	-4.71	0.00	4.71	1406.84	334.27	721.23	751.45	27.29	-1.503	0.000	0.008
160.00	-2.64	-0.44	0.00	-3.21	0.00	3.21	1381.63	326.37	687.52	720.36	28.23	-1.505	0.000	0.006
165.00	-2.30	-0.34	0.00	-1.01	0.00	1.01	1325.85	313.19	633.13	663.10	29.81	-1.507	0.000	0.003
168.00	0.00	-0.28	0.00	0.00	0.00	0.00	1292.39	305.29	601.57	629.89	30.76	-1.507	0.000	0.000

Final Analysis Summary

Structure:	CT01364-S		**Code:**	TIA-222-H	2/20/2024
Site Name:	Pomfret		**Exposure:**	C	
Height:	168.00 (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

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 120 mph Wind	41.5	0.00	64.70	0.00	0.00	5069.90
0.9D + 1.0W 120 mph Wind	41.4	0.00	48.50	0.00	0.00	4989.29
1.2D + 1.0Di + 1.0Wi 50 mph Wind	10.7	0.00	56.32	0.00	0.00	1238.02
1.2D + 1.0Ev + 1.0Eh	0.7	0.00	66.93	0.00	0.00	109.00
0.9D + 1.0Ev + 1.0Eh	0.7	0.00	50.66	0.00	0.00	107.52
1.0D + 1.0W 60 mph Wind	9.3	0.00	53.98	0.00	0.00	1124.24

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 120 mph Wind	-64.70	-41.46	0.00	-5069.9	0.00	-5069.9	5340.38	1364.7	6341.26	6153.95	0.00	0.837
0.9D + 1.0W 120 mph Wind	-48.50	-41.42	0.00	-4989.2	0.00	-4989.2	5340.38	1364.7	6341.26	6153.95	0.00	0.821
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-56.32	-10.68	0.00	-1238.0	0.00	-1238.0	5340.38	1364.7	6341.26	6153.95	0.00	0.212
1.2D + 1.0Ev + 1.0Eh	-34.73	-0.75	0.00	-41.97	0.00	-41.97	2696.95	685.52	2239.96	2185.23	89.00	0.032
0.9D + 1.0Ev + 1.0Eh	-26.30	-0.73	0.00	-41.29	0.00	-41.29	2696.95	685.52	2239.96	2185.23	89.00	0.029
1.0D + 1.0W 60 mph Wind	-53.98	-9.27	0.00	-1124.2	0.00	-1124.2	5340.38	1364.7	6341.26	6153.95	0.00	0.193

Base Plate Summary

Structure:	CT01364-S		**Code:**	TIA-222-H	2/20/2024
Site Name:	Pomfret		**Exposure:**	C	
Height:	168.00 (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

SBA

Reactions		Base Plate		Anchor Bolts	
Original Design		**Yield (ksi):**	50.00	**Bolt Circle:**	64.00
Moment (kip-ft):	4615.00	**Width (in):**	64.00	**Number Bolts:**	20.00
Axial (kip):	34.00	**Style:**	Clipped	**Bolt Type:**	2.25" 18J
Shear (kip):	37.00	**Polygon Sides:**	0.00	**Bolt Diameter (in):**	2.25
Analysis (1.2D + 1.0W)		**Clip Length (in):**	15.00	**Yield (ksi):**	75.00
Moment (kip-ft):	5069.90	**Effective Len (in):**	9.17	**Ultimate (ksi):**	100.00
Axial (kip):	64.70	**Moment (kip-in):**	730.89	**Arrangement:**	Clustered
Shear (kip):	41.46	**Allow Stress (ksi):**	67.50	**Cluster Dist (in):**	6.00
		Applied Stress (ksi):	45.23	**Start Angle (deg):**	45.00
		Stress Ratio:	0.67	Compression	
				Force (kip):	193.36
				Allowable (kip):	268.39
				Ratio:	0.72
				Tension	
				Force (kip):	186.89
				Allowable (kip):	243.75
				Ratio:	0.77

Monopole Base Reaction Comparison Table

Site ID:	CT01364-S	
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)	4615.0	6230.3	5069.9	81.4%
SHEAR (kips)	37.0	50.0	41.5	83.1%

Although the shear capacity is at 83.1%, the moment reaction is the governing criteria for a monopole drilled pier foundation. Therefore, the overall capacity for this foundation is 81.4%.

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

Colliers Engineering & Design, Architecture, Landscape
Architecture, Surveying, CT P.C
2000 Midlantic Dr, Ste 100
Mt Laurel Township, NJ 08054
856.797.0412
peter.albano@collierseng.com

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10227149
Colliers Engineering & Design Project #: 24777019

April 1, 2024

Site Information	*Site ID:*	*5000917542-VZW / Pomfret South CT*
	Site Name:	*Pomfret South CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*62 Babbitt Hill Road* *Pomfret, Connecticut 06259* *Windham County*
	Latitude:	*41.870258°*
	Longitude:	*-71.988242°*
Structure Information	*Tower Type:*	*168-Ft Monopole*
	Mount Type:	*12.50-Ft Platform*

FUZE ID # 16118821

Analysis Results

Platform: **35.0% Pass w/ Modifications***

***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: Gianna Argentina

STATE OF CONNECTICUT
DEJIAN XU
No. 33733
LICENSED PROFESSIONAL ENGINEER
04/01/2024

Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS, Site ID: 616852035, dated September 13, 2023*
Mount Manufacturer Drawings	*Site Pro 1, P/N: RMQP-496-HK*
Mount Modification Drawings	*Colliers Engineering & Design, Project #: 24777019 dated April 1, 2024*

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}:	125 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	C
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.980
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
125.00	125.00	6	Commscope	JAHH-65B-R3B	Added
		3	Samsung	MT6413-77A	
		1	Raycap	RVZDC-6627-PF-48	
		3	Samsung	RF4439d-25A	
		3	Samsung	RF4461d-13A	
		3	Commscope	CBC78T-DS-43-2X	

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

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

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff Horizontal	16.8 %	Pass
Platform Crossmember	9.3 %	Pass
Corner Plate	21.4 %	Pass
Grating Support	19.2 %	Pass
Cross Arm Plate	33.9 %	Pass
Face Horizontal	9.1 %	Pass
Mount Pipe	35.0 %	Pass
Support Rail	11.3 %	Pass
Support Rail Angle	20.0 %	Pass
Kicker	10.0 %	Pass
Standoff Pipe	19.1 %	Pass
Mount Connection	19.2 %	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**35.0%**

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 B Standoff	125	N30	295	4519	0.478	1.580	585	3584	0.691	0.402
Sector B Bottom Reinforcement	123	N190A	1037	1998	0.000	0.000	1702	3278	0.000	0.000
Sector A Standoff	125	N69	232	4731	0.370	2.312	407	4309	0.601	0.594
Sector A Bottom Reinforcement	123	N133	1175	2268	0.000	0.000	2052	3969	0.000	0.000
Sector C Standoff	125	N136	236	4161	0.335	1.276	407	3589	0.558	0.331
Sector C Bottom Reinforcement	123	N200	998	1920	0.000	0.000	1712	3298	0.000	0.000

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: 0.00 lbs

Increase in mount weight due to Verizon loading change per SBA agreement: 2669.61 lbs

The weights listed above include 3 sector(s).

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	34.8	34.4	51.9	51.5
0.5	46.6	46.9	71.4	70.7
1	57.6	58.0	89.7	88.9

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

Requirements:

The existing mount will be **SUFFICIENT** for the final loading configuration (attachment 2) after the modifications detailed in attachment 3 are successfully completed.

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

Attachments:

1. **Contractor Required PMI Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Modification Drawings
4. Mount Mapping Report (for reference only)
5. Analysis Calculations

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

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 #: 5000917542 SMART Project #: 10227149 Fuze Project ID: 16118821

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

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

Base Requirements:

- If installation of the modification 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 drawings" showing contractor's name, 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 post-modification passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo shall be time and date stamped.
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is 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 of the modifications.
  - Photos of the mount after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed

- *Photos taken at Mount Elevation*
  - Photos showing the safety climb wire rope above and below the mount prior to modification.
  - Photos showing the climbing facility and safety climb if present.

- Photos showing each individual sector after installation of modifications. Each entire sector must 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.
- Photos of each installed modification per the modification drawings; pictures shall also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
- Photos showing the distances (relative distance between collars) of the installed modifications from the appropriate reference locations shown in the modification drawings.
- Photos showing the installed modifications onto the tower (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, an elevation measurement shall be provided before the elevation change.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by the SMART Tool vendor.
    - If the materials are as specified on the drawings
        - The contractor shall provide the packing list, or the materials certifications for the materials utilized to perform the mount modification
        - Commscope, Metrosite, Perfect Vision, Sabre, and Site Pro have all agreed to support Verizon vendors with the necessary material certifications
    - If seeking permission to use an equivalent
        - It is required that the SMART Tool engineering vendor approval of such is included in the contractor submission package. There may be an additional charge for approval if the equivalent submission doesn't meet specifications as prescribed in the drawings.

☐ All hardware has been properly installed, and the existing hardware was inspected.

☐ The material utilized was as specified on the SMART Tool engineering vendor Mount Modification Drawings 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.

Antenna & Equipment Placement and Geometry Confirmation:

☐ 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.

Comments:

Was the mount modification completed in conjunction with the equipment change / installation?

☐ Yes ☐ No

Special Instructions / Validation as required from the MA or Mod Drawings:

Issue:

Install proposed OVP on new equipment pipe on beta/gamma standoff.

Response:

Special Instruction Confirmation:

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

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

Comments:

Contractor to provide measurement from top of the highest equipment/steel to the bottom of the lowest equipment/steel by documenting it using the most appropriate illustration below along with supporting photos:

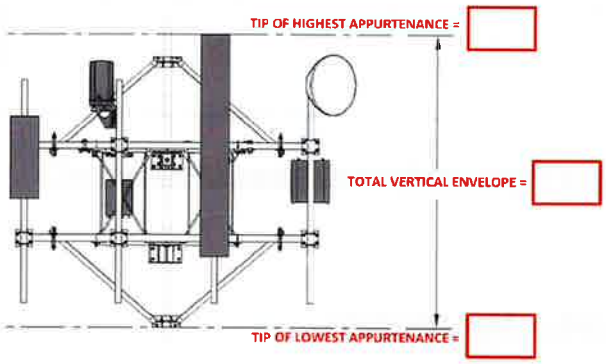


Illustration #1

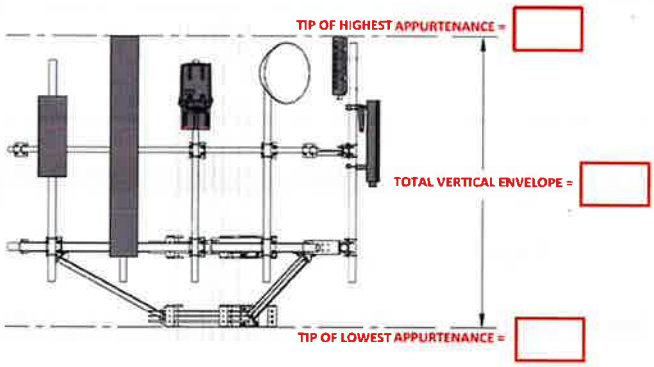


Illustration #2

Certifying Individual:

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

Structure: 5000917542-VZW - Pomfret South CT

Sector: **A**

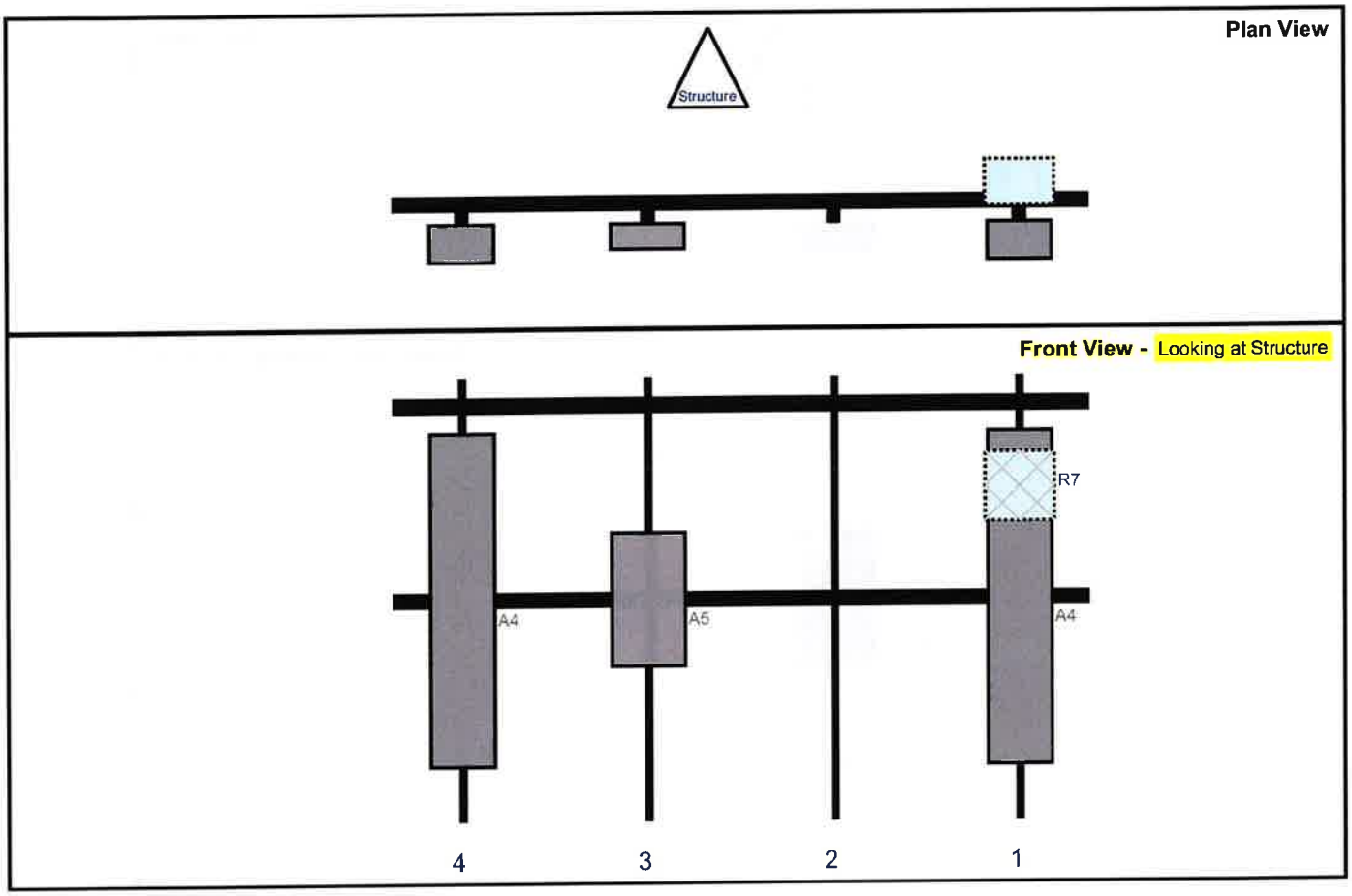
Structure Type: Monopole

Mount Elev: 125.00

10227149

3/28/2024

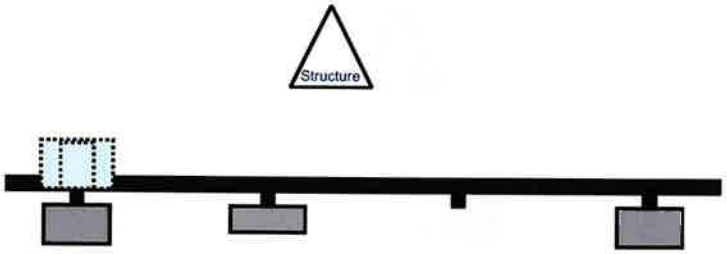
Colliers Engineering & Design



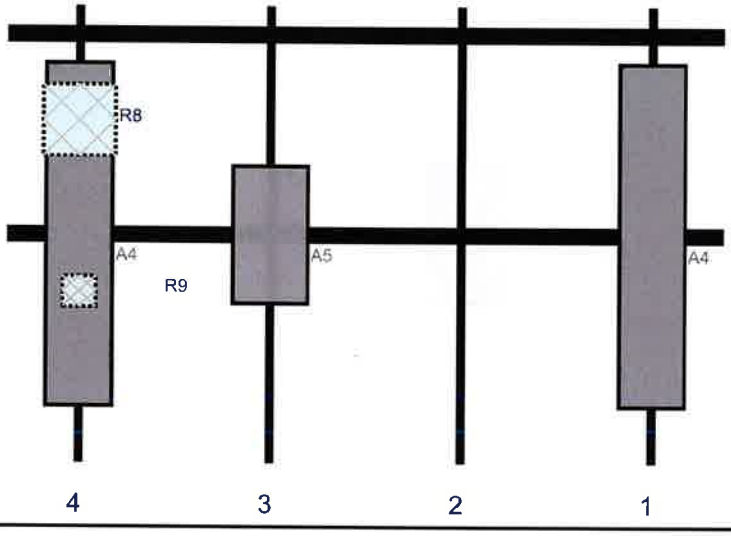
Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A4	JAHH-65B-R3B	72	13.8	135	1	a	Front	48	0	Added	
R7	RF4439d-25A	15	15	135	1	a	Behind	24	0	Added	
A5	MT6413-77A	28.9	15.8	55	3	a	Front	48	0	Added	
A4	JAHH-65B-R3B	72	13.8	15	4	a	Front	48	0	Added	
4A	RF4461d-13A	15	15		Member					Added	
4A	CBC78T-DS-43-2X	6.4	6.9		Member					Added	
1B	RF4439d-25A	15	15		Member					Added	
OVP	RVZDC-6627-PF-48	29.5	16.5		Member					Added	

Colliers Engineering & Design

Plan View



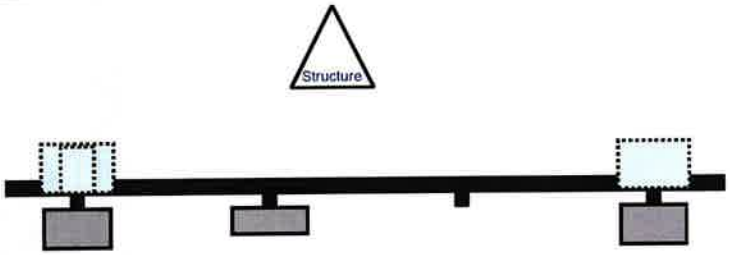
Front View - Looking at Structure



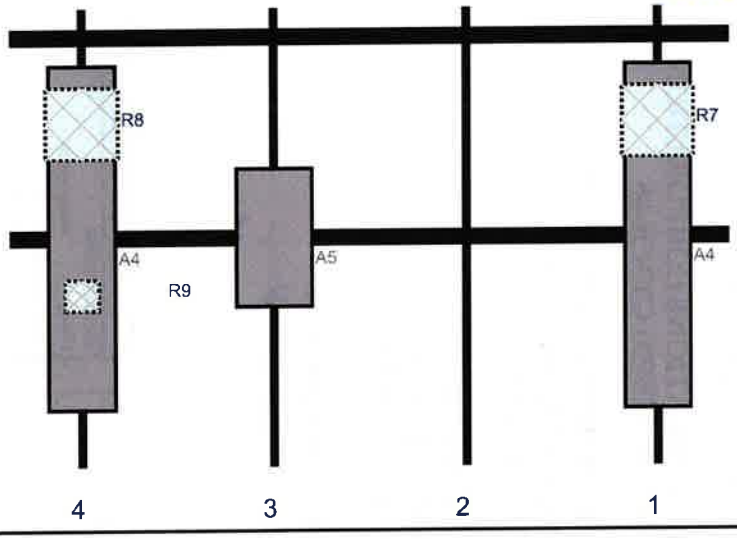
Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A4	JAHH-65B-R3B	72	13.8	135	1	a	Front	48	0	Added	
A5	MT6413-77A	28.9	15.8	55	3	a	Front	48	0	Added	
A4	JAHH-65B-R3B	72	13.8	15	4	a	Front	48	0	Added	
R8	RF4461d-13A	15	15	15	4	a	Behind	24	0	Added	
R9	CBC78T-DS-43-2X	6.4	6.9	15	4	a	Behind	60	0	Added	

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
A4	JAHH-65B-R3B	72	13.8	135	1	a	Front	48	0	Added	
R7	RF4439d-25A	15	15	135	1	a	Behind	24	0	Added	
A5	MT6413-77A	28.9	15.8	55	3	a	Front	48	0	Added	
A4	JAHH-65B-R3B	72	13.8	15	4	a	Front	48	0	Added	
R8	RF4461d-13A	15	15	15	4	a	Behind	24	0	Added	
R9	CBC78T-DS-43-2X	6.4	6.9	15	4	a	Behind	60	0	Added	

verizon

MOUNT MODIFICATION DRAWINGS
PROPOSED 12.50' PLATFORM

TOWER OWNER: SBA COMMUNICATIONS CORPORATION
TOWER OWNER SITE NUMBER: CT01364-S

CARRIER SITE NAME: POMFRET SOUTH CT
CARRIER SITE NUMBER: 5000917542
FUZE ID: 16118821

62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

LATITUDE: 41.87025833° N
LONGITUDE: 71.98824167° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 125 MPH
EXPOSURE CATEGORY C
TOPOGRAPHIC CATEGORY: 1
TOPOGRAPHIC CONSIDERED: N/A
TOPOGRAPHIC METHOD: N/A
MEAN BASE ELEVATION (AMSL) = 569.69'

ICE LOADS

ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_s = .182
LONG TERM MCER GROUND MOTION, S_1 = .055

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

COMPANY: COLLIERS ENGINEERING & DESIGN
CONTACT: PETER ALBANO
PHONE: 856.797.0412
E-MAIL: PETER.ALBANO@COLLIERSENG.COM

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION:	HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #:	10227149
VZW MDG #:	5000917542
ANALYSIS DATE:	4/1/2024

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

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TITLE SHEET

ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	VZWSMART	VZWSMART-P40-238X048	48" LONG, PIPE 2 SCH40 (2.375"OD X 0.154" THK)		15	15
1		VZWSMART-MSK6	BACK TO BACK CROSSOVER PLATE		34	34
4		VZWSMART-P40-238X096	96" LONG, PIPE 2 SCH40 (2.375"OD X 0.154" THK)		29	116

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
2	PERFECT VISION	PV-DC-PTPC-2020-6	6" LONG PIPE TO PIPE CONNECTION	GALVANIZED	13	26
2	PERFECT VISION	PV-DC-PTPC-2020-12	12" LONG PIPE TO PIPE CONNECTION	GALVANIZED	15	30
1	SITE PRO 1	RMQP-496-HK	12' 6" LOW PROFILE PLATFORM WITH ANTENNA MOUNTING PIPES AND SUPPORT RAIL	GALVANIZED	2446	2446

SECTION 3 - REQUIRED SAFETY CLIMB PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	PERFECT VISON	PV-SCRB-RM-U	ROUTING BRACKET	OR EOR APPROVED EQUIVALENT	-	-
1	PERFECT VISION	PV-CMX-CG-80	WIRE ROPE GUIDE	OR EOR APPROVED EQUIVALENT	-	-
					TOTAL:	2667

NOTES:

1. THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
2. ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM

METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM

PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM

SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM

SITE PRO 1	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM

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0	04/01/24	ISSUED FOR CONSTRUCTION	SM	DS	
REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	

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MT. LAUREL
2 Industrial Drive
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0422
www.collierseng.com

BILL OF MATERIALS

SBOM-1

GENERAL NOTES

1. THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H. MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
2. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES. ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK, ORDERING MATERIAL, AND PREPARING OF SHOP DRAWINGS. ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
4. IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
6. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/TIA-322 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-322 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.
7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
8. WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 30-MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.
9. ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSI/TIA-322.
10. CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOFABRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
11. CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
12. DO NOT SCALE DRAWINGS.
13. DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
14. ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO ALTERED SIZE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
15. THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

STRUCTURAL STEEL

1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
   a. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
   b. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
   c. AISC CODE OF STANDARD PRACTICE
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE

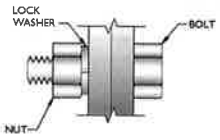
3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
   a. SUBMIT SHOP DRAWINGS TO
      PETER.ALBANO@COLLIERSENG.COM
   b. PROVIDE COLLIERS ENGINEERING & DESIGN PROJECT # AND COLLIERS ENGINEERING & DESIGN PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
7. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
8. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
9. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
10. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
11. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
12. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
13. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
14. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINC COTE, OR EOR APPROVED EQUAL), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

BOLT SCHEDULE (IN.)

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 11/16	7/8	1 1/2
5/8	11/16	11/16 x 7/8	1 1/8	1 7/8
3/4	13/16	13/16 x 1	1 1/4	2 1/4
7/8	15/16	15/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)

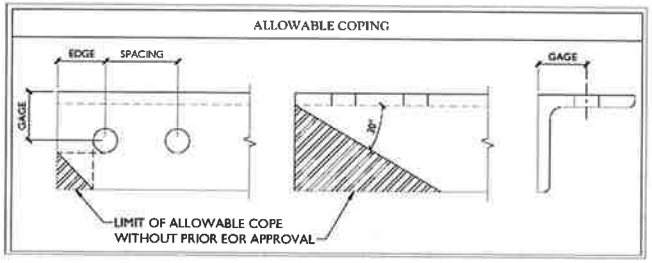
LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



TYP. BOLT ASSEMBLY

NOTES:

1. ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
2. THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENTS.
3. SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS.
4. MATCH EXISTING GAGES WHEN APPLICABLE, UNLESS MINIMUM EDGE DISTANCES ARE COMPROMISED.



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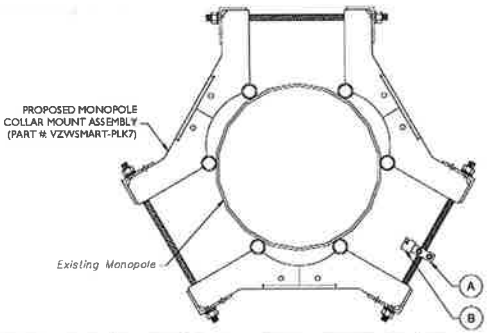
GENERAL NOTES
SGN-1
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



ITEM #	QTY	PART NUMBER	DESCRIPTIONS
A	1	PV-SCRB-RM-U	ROUTING BRACKET (PERFECT VISION OR EOR APPROVED EQ.)
B	1	PV-CMX-CG-BO	WIRE ROPE GUIDE (PERFECT VISION OR EOR APPROVED EQ.)

1 **PROPOSED WIRE ROPE GUIDE ATTACHMENT - PLAN VIEW**
SCALE: N.T.S.

NOTE: CONTRACTOR SHALL ENSURE THAT WIRE ROPE GUIDE DOES NOT PUSH THE WIRE ROPE OUTSIDE OF THE VERTICAL PLANE OF THE SAFETY CLIMB. CONTRACT EOR WITH PHOTOS OF SAFETY CLIMB AND COLLAR FOR FURTHER DIRECTION IF NEEDED.

NOTE:

NO MAPPING WAS COMPLETED AND THERE IS INSUFFICIENT INFORMATION ON THE CLIMBING FACILITY

STRUCTURAL NOTES:

1. CONTRACTOR TO INSPECT CLIMBING FACILITIES AT SITE AND ENSURE THAT THE SAFETY CLIMB IS IN GOOD CONDITION AND THAT THE WIRE ROPE DOES NOT OR WILL NOT INTERFERE WITH THE EXISTING OR PROPOSED MOUNT CONNECTIONS. CONTRACTOR SHALL INSTALL SAFETY CLIMB WIRE ROPE GUIDED AROUND MOUNT CONNECTIONS AS NEEDED.
2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

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CLIMBING FACILITY DETAIL

SCF-1

LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

TOTAL VERTICAL ENVELOPE:

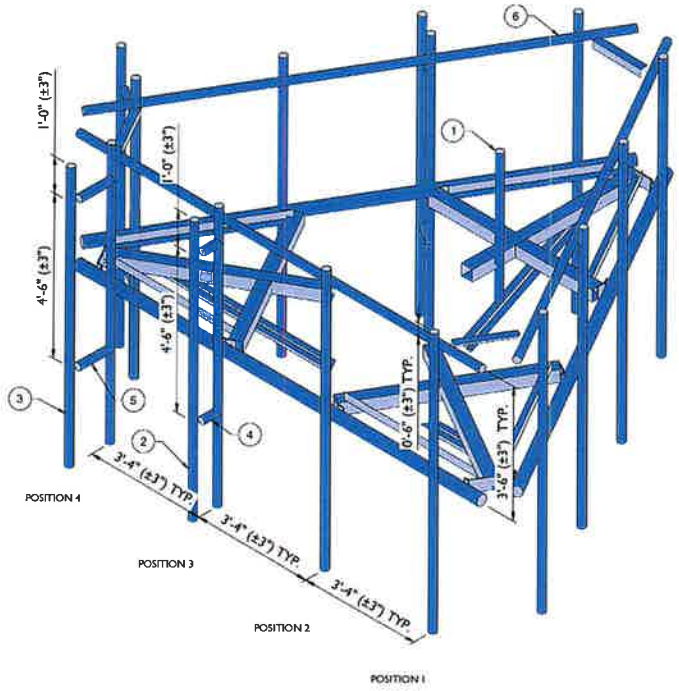
CONTRACTOR SHALL VERIFY AND CONFIRM IN FIELD THAT VERIZON'S OVERALL TIP TO TIP VERTICAL SPACE CONFIGURATION (EQUIPMENT AND STEEL COMBINED) DOES NOT EXCEED THE VERTICAL ENVELOPE LISTED IN THESE DRAWINGS. IF THE SITE'S EXISTING OR PROPOSED CONFIGURATION EXCEEDS THE ALLOWED VERTICAL ENVELOPE LISTED IN THESE DRAWINGS, CONTRACTOR SHALL CONTACT EOR IMMEDIATELY FOR A SOLUTION ON HOW TO CORRECT THE ISSUE PRIOR TO LEAVING THE SITE.

MOUNT MODIFICATION SCHEDULE

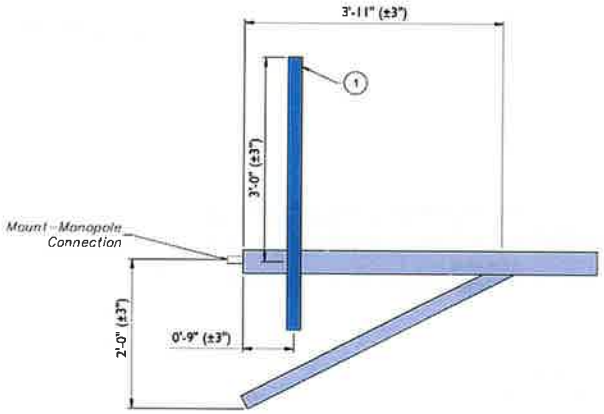
NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	135'-00"	1	PROPOSED 48" LONG, PIPE 2 SCH40 (PART #: VZWSMART-P40-238X048)	CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH BACK TO BACK CROSSOVER PLATE (VZWSMART-MSK6). BETA/GAMMA STANDOFF ONLY.
2		2	PROPOSED 96" LONG, PIPE 2 SCH40 (PART #: VZWSMART-P40-238X096)	CONNECT NEW MOUNT PIPE TO MOUNT PIPE USING 6" LONG PIPE TO PIPE CONNECTION (PART #: PV-DC-PTPC-2020-6). MOUNT PIPE 3 ALPHA SECTOR AND MOUNT PIPE 3 BETA SECTOR.
3		2	PROPOSED 96" LONG, PIPE 2 SCH40 (PART #: VZWSMART-P40-238X096)	CONNECT NEW MOUNT PIPE TO MOUNT PIPE USING 12" LONG PIPE TO PIPE CONNECTION (PART #: PV-DC-PTPC-2020-12). MOUNT PIPE 4 ALPHA SECTOR AND MOUNT PIPE 1 BETA SECTOR.
4		2	6" LONG PIPE TO PIPE CONNECTION	CONTRACTOR SHALL USE TO CONNECT MOUNT PIPE TO MOUNT PIPE.
5		2	12" LONG PIPE TO PIPE CONNECTION	CONTRACTOR SHALL USE TO CONNECT MOUNT PIPE TO MOUNT PIPE.
6		1	12' 6" LOW PROFILE PLATFORM WITH ANTENNA MOUNTING PIPES AND SUPPORT RAIL	CONTRACTOR SHALL INSTALL PROPOSED MOUNT PER SPECIFICATION SHEETS.

GENERAL NOTES:

A. CONTRACTOR SHALL VERIFY THAT NEW & EXISTING STEEL IS FREE OF CORROSION. VISIBLE MINOR CORROSION SHALL BE WIRE BRUSHED CLEAN AND TREATED WITH COLD GALVANIZATION. REPORT ANY SIGNIFICANT CORROSION TO EOR
B. THREADED ROD FROM PROPOSED KITS SHALL BE TRIMMED TO EXTEND NO MORE THAN 3" BEYOND THE LOCK NUT. TREAT ALL CUT ENDS WITH (2) COATS OF COLD GALVANIZATION (ZINC KOTE, OR EOR APPROVED EQUAL).
C. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



1 PROPOSED ISOMETRIC VIEW
SCALE: N.T.S.



2 PROPOSED SIDE ELEVATION VIEW (SIM. ALL SECTORS)
SCALE: N.T.S.

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MT. LAUREL
Commerce Drive
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0900
Fax: 856.797.0909
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MODIFICATION DETAILS

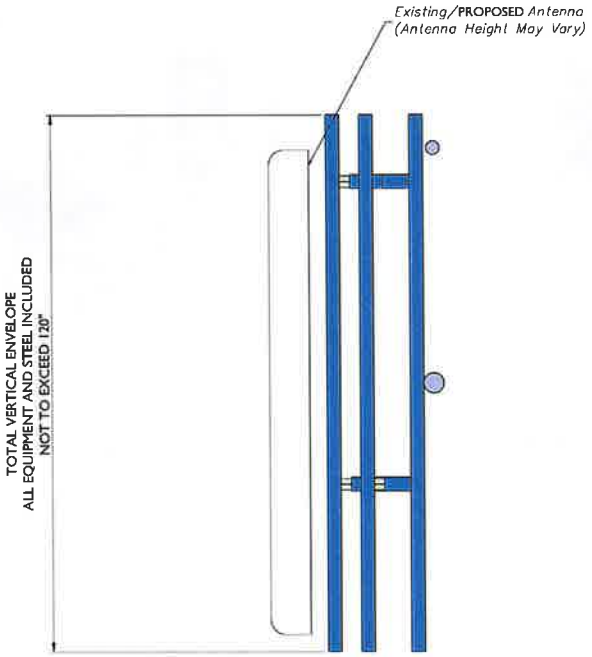
SS-1

LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

TOTAL VERTICAL ENVELOPE:

CONTRACTOR SHALL VERIFY AND CONFIRM IN FIELD THAT VERIZON'S OVERALL TIP TO TIP VERTICAL SPACE CONFIGURATION (EQUIPMENT AND STEEL COMBINED) DOES NOT EXCEED THE VERTICAL ENVELOPE LISTED IN THESE DRAWINGS. IF THE SITE'S EXISTING OR PROPOSED CONFIGURATION EXCEEDS THE ALLOWED VERTICAL ENVELOPE LISTED IN THESE DRAWINGS, CONTRACTOR SHALL CONTACT EOR IMMEDIATELY FOR A SOLUTION ON HOW TO CORRECT THE ISSUE PRIOR TO LEAVING THE SITE.



1 PROPOSED SIDE ELEVATION VIEW (TYP. ALL SECTORS)
SCALE: N.T.S.

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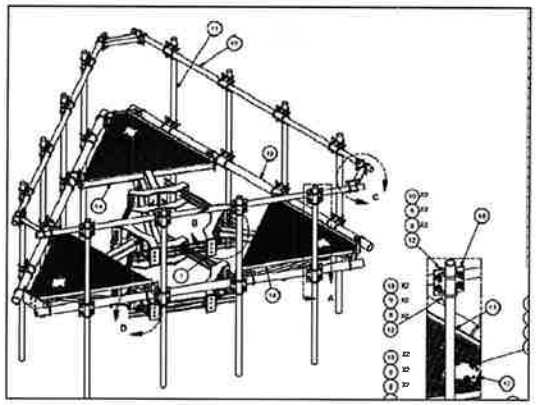
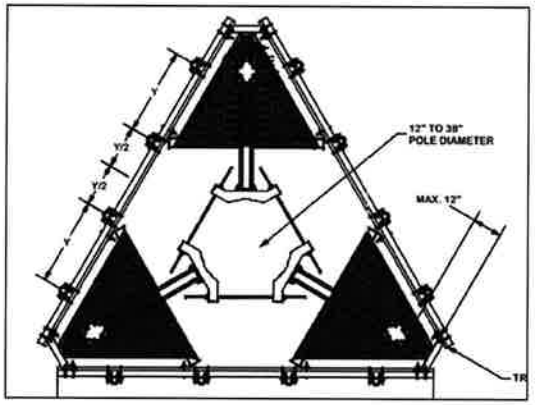
MODIFICATION DETAILS

SS-2



MOUNT PHOTO 1



MOUNT PHOTO 2

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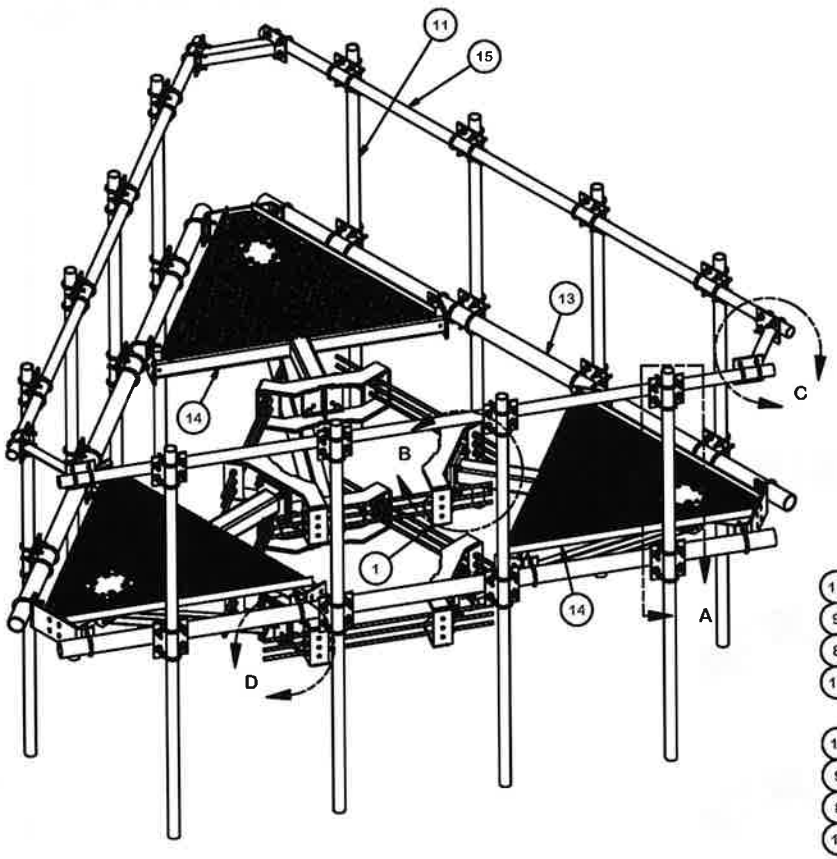
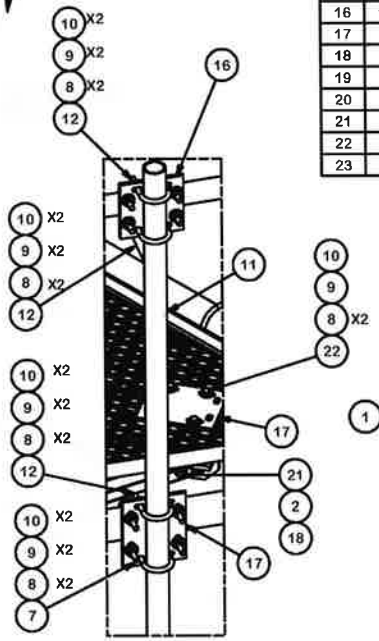
MOUNT PHOTOS

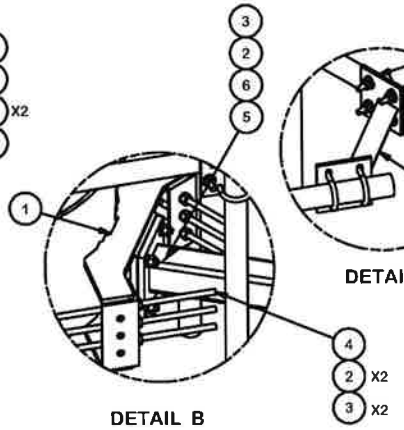
SS-3



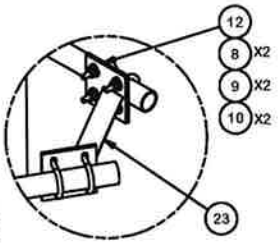
PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	6	X-LWRM	RING MOUNT WELDMENT		68.81	412.85
2	66	G58LW	5/8" HDG LOCKWASHER		0.03	1.72
3	60	A58NUT	5/8" HDG A325 HEX NUT		0.13	7.79
4	18	G58R-24	5/8" x 24" THREADED ROD (HDG.)		2.09	37.63
4	18	G58R-48	5/8" x 48" THREADED ROD (HDG.)		4.18	75.27
5	24	A58234	5/8" x 2-3/4" HDG A325 HEX BOLT	2 3/4 in	0.36	8.54
6	24	A58FW	5/8" HDG A325 FLATWASHER		0.03	0.82
7	36	X-UB1306	1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.)		0.83	29.82
8	264	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	9.00
9	252	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	3.50
10	252	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	18.05
11	12	P296	2-3/8" X 96" SCH. 40 GALVANIZED PIPE	96 in	30.76	369.08
12	84	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.63	52.51
13	3	P3150	3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE	150 in	94.80	284.40
14	3	X-SV196	LOW PROFILE PLATFORM CORNER		212.10	636.31
15	3	P2150	2-3/8" O.D. X 150" SCH 40 GALVANIZED PIPE	150 in	45.77	137.31
16	12	SCX2	CROSSOVER PLATE	7 in	4.80	57.56
17	15	SCX4	CROSSOVER PLATE	8 1/2 in	6.02	90.32
18	6	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	0.78
19	6	X-253993	PLATFORM REINFORCEMENT KIT ANGLE	52 25/32 in	14.33	85.99
20	6	X-TBW	T-BRACKET WELDMENT		13.60	81.60
21	6	G5802	5/8" x 2" HDG HEX BOLT GR5		0.27	1.62
22	12	G12065	1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD	5 1/2 in	0.41	4.91
23	3	X-AHCP	ANGLE HANDRAIL CORNER PLATE		12.92	38.76
					TOTAL WT. #	2445.81



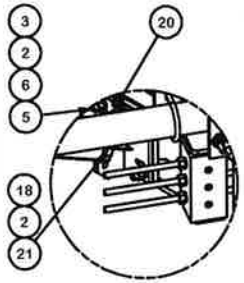
DETAIL A



DETAIL B



DETAIL C



DETAIL D

FOR REFERENCE ONLY

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
B	RELOCATED MOUNT PIPE POSITIONS	4488	JET	5/23/2021
A	CHANGED X-253992 TO X-TBW	4488	CEK	9/20/2018

REVISION HISTORY

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES *(± 0.030")*
DRILLED AND GAS CUT HOLES *(± 0.030")* - NO CONING OF HOLES
LASER CUT EDGES AND HOLES *(± 0.010")* - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

DESCRIPTION
12' 6" LOW PROFILE PLATFORM
WITH TWELVE 2-3/8" ANTENNA MOUNTING
PIPES, AND SUPPORT RAIL

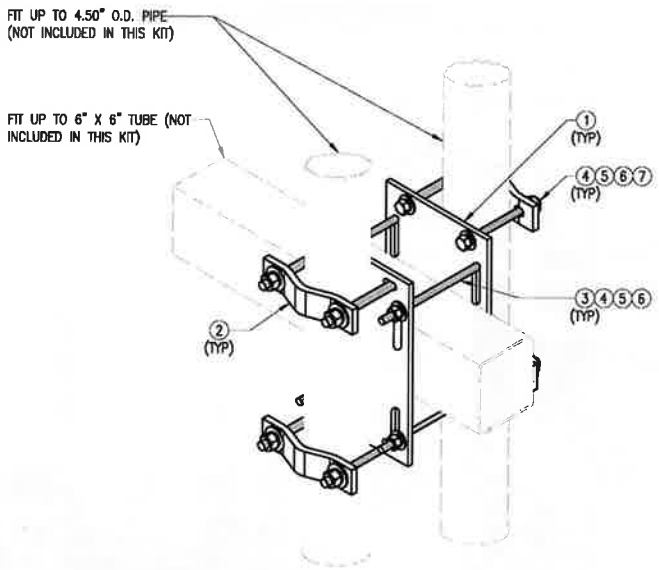
SITE PRO 1 — A valmont COMPANY

Engineering Support Team: 1-888-753-7446

Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
4488	CEK 7/14/2014		RMQP-496-HK

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	CUSTOMER	BMC 7/14/2014	RMQP-496-HK



ISOMETRIC VIEW
BACK TO BACK CROSSOVER

VZWSMART–MSK6 (VZWSMART–MSK6 – BACK TO BACK CROSSOVER)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	2	PL375–8512	PL 3/8" X 8 1/2" X 1'–0" A36	MSK6–F2	20.7
2	4	VCP	PL 1/2" X 2" X 8 5/8" A36 BENT PLATE	MSK6–F1	9.6
3	4	---	THREADED ROD 5/8" DIA. X 10" (Fy=36 KSI HDG)	---	---
4	16	NUT–625	5/8" HDG HEX NUT	---	2
5	24	FW–625	5/8" HDG USS FLAT WASHER	---	2
6	16	LW–625	5/8" HDG LOCK WASHER	---	0
7	8	---	BOLT 5/8" X 6" SAE GRADE 5 ALL THREAD	---	1
				GALVANIZED WT	35

NOTES:
1. HOT–DIPPED GALVANIZED PER ASTM A123.

VzW SMART Tool© Vendor

verizon

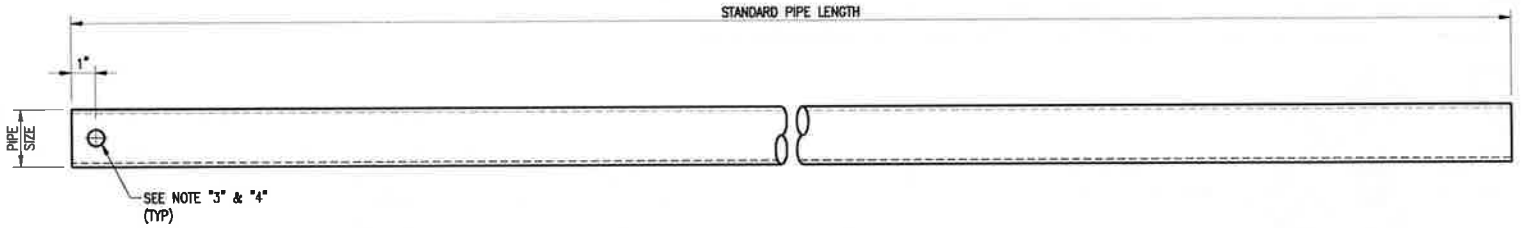
FOR REFERENCE ONLY

DRAWN BY: SK | CHECKED BY: BT/KW

REV	DESCRIPTION	BY	DATE
1	FIRST ISSUE	SK	06/08/20
2	REVISED	AW	08/23/23
3	REVISED	JM	11/30/23

SHEET TITLE:
VZWSMART–MSK6
BACK TO BACK
CROSSOVER

SHEET NUMBER: VZWSMART–MSK6 | REV #: 2



VZWSMART Standard Pipe		
VZWSMART Number	Size	Length
P40-238X048	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	48"
P40-238X072	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	72"
P40-238X096	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	96"
P40-238X120	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	120"
P40-238X126	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	126"
P40-238X150	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	150"
P40-238X174	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	174"
P40-278X048	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	48"
P40-278X072	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	72"
P40-278X096	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	96"
P40-278X120	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	120"
P40-278X126	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	126"
P40-278X150	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	150"
P40-278X174	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	174"
P40-312X048	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	48"
P40-312X072	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	72"
P40-312X126	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	126"
P40-312X150	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	150"
P40-312X174	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	174"

NOTE:
APPROVED SMART KIT VENDORS ARE ALLOWED TO SUBSTITUTE AT THEIR DISCRETION PIPES LISTED ON THIS PAGE FOR CUSTOM LENGTH COMPONENTS OF MATCHING SIZE. SUBSTITUTIONS SHALL MEET THE ORIGINAL STRUCTURAL INTENT.

NOTES:
1. ALL PIPE GRADE A53-B OR BETTER.
2. HOT-DIPPED GALVANIZED PER ASTM A123.
3. ALL HOLES ARE 11/16" DIA. U.N.O
4. HOLES MAY OR MAY NOT BE PRESENT, DEPEND UPON MANUFACTURE DISCRETION.
5. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA OR ZINC COTE PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

VzW SMART Tool© Vendor

verizon

FOR REFERENCE ONLY

DRAWN BY: BT | CHECKED BY: HMA/KW

REV	DESCRIPTION	BY	DATE
1	FIRST ISSUE	BT	08/04/21

SHEET TITLE:

VZWSMART STANDARD PIPE

SHEET NUMBER: VZWSMART-PIPE

REV #: 0

PV-DC-PTPC

DUALCROSS - PIPE TO PIPE CONNECTION

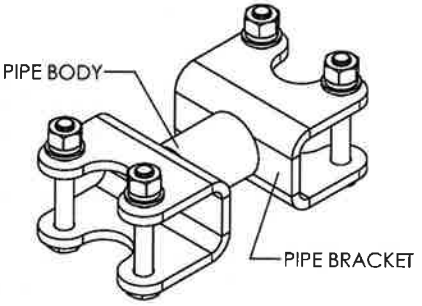
Table 1: Crossover Pipe to Pipe Connection Configurations

Part Number	Weight	Pipe to Pipe C-C	Pipe 1 Size	Pipe 2 Size	Pipe 1 Bolt Size	Pipe 2 Bolt Size
	lbs	*in*	*in*	*in*	*in*	*in*
PV-DC-PTPC-2020-6	13	6	Ø2.375	Ø2.375	Ø5/8 x 4-1/2	Ø5/8 x 4-1/2
PV-DC-PTPC-2020-12	14.8	12	Ø2.375	Ø2.375	Ø5/8 x 4-1/2	Ø5/8 x 4-1/2
PV-DC-PTPC-2020-24	18.5	24	Ø2.375	Ø2.375	Ø5/8 x 4-1/2	Ø5/8 x 4-1/2
PV-DC-PTPC-2025-6	13.8	6	Ø2.375	Ø2.875	Ø5/8 x 4-1/2	Ø5/8 x 5
PV-DC-PTPC-2025-12	15.7	12	Ø2.375	Ø2.875	Ø5/8 x 4-1/2	Ø5/8 x 5
PV-DC-PTPC-2025-24	19.3	24	Ø2.375	Ø2.875	Ø5/8 x 4-1/2	Ø5/8 x 5
PV-DC-PTPC-2030-6	15	6	Ø2.375	Ø3.5	Ø5/8 x 4-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-2030-12	19.1	12	Ø2.375	Ø3.5	Ø5/8 x 4-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-2030-24	20.4	24	Ø2.375	Ø3.5	Ø5/8 x 4-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-2525-6	15.2	6	Ø2.875	Ø2.875	Ø5/8 x 5	Ø5/8 x 5
PV-DC-PTPC-2525-12	18	12	Ø2.875	Ø2.875	Ø5/8 x 5	Ø5/8 x 5
PV-DC-PTPC-2525-24	23.9	24	Ø2.875	Ø2.875	Ø5/8 x 5	Ø5/8 x 5
PV-DC-PTPC-2530-6	16.2	6	Ø2.875	Ø3.5	Ø5/8 x 5	Ø5/8 x 5-1/2
PV-DC-PTPC-2530-12	19.1	12	Ø2.875	Ø3.5	Ø5/8 x 5	Ø5/8 x 5-1/2
PV-DC-PTPC-2530-24	25	24	Ø2.875	Ø3.5	Ø5/8 x 5	Ø5/8 x 5-1/2
PV-DC-PTPC-3030-6	17.5	6	Ø3.5	Ø3.5	Ø5/8 x 5-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-3030-12	21.3	12	Ø3.5	Ø3.5	Ø5/8 x 5-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-3030-24	28.9	24	Ø3.5	Ø3.5	Ø5/8 x 5-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-3040-6	19.1	6	Ø3.5	Ø4.5	Ø5/8 x 5-1/2	Ø5/8 x 6-1/2
PV-DC-PTPC-3040-12	23	12	Ø3.5	Ø4.5	Ø5/8 x 5-1/2	Ø5/8 x 6-1/2
PV-DC-PTPC-3040-24	30.5	24	Ø3.5	Ø4.5	Ø5/8 x 5-1/2	Ø5/8 x 6-1/2

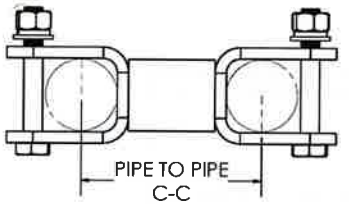
NOTE: 'PIPE BODY' DIAMETER IS ALWAYS EQUIVALENT TO 'PIPE 1' DIAMETER SIZE

NOTES:

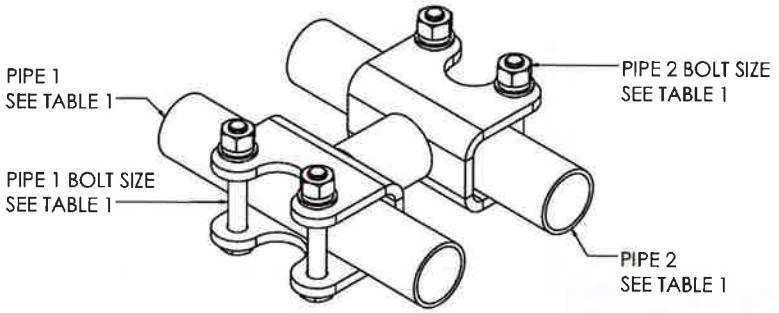
- INSTALLATION REQUIREMENTS:
  - MINIMUM BOLT TORQUE: 100 FT-LBS
  - CLEAN, DRY ASSEMBLY
  - GALVANIZED WELDMENT AND HARDWARE
  - COLORED WAX COATING ON NUTS
- MATERIALS
  - PIPE BRACKET: A36 HDG
  - PIPE BODY: A500 GR. C
  - HARDWARE: A325 HDG BOLT, A563DH NUT



PV-DC-PTPC
DUALCROSS - PIPE TO PIPE CONNECTION



PV-DC-PTPC
SIDE VIEW



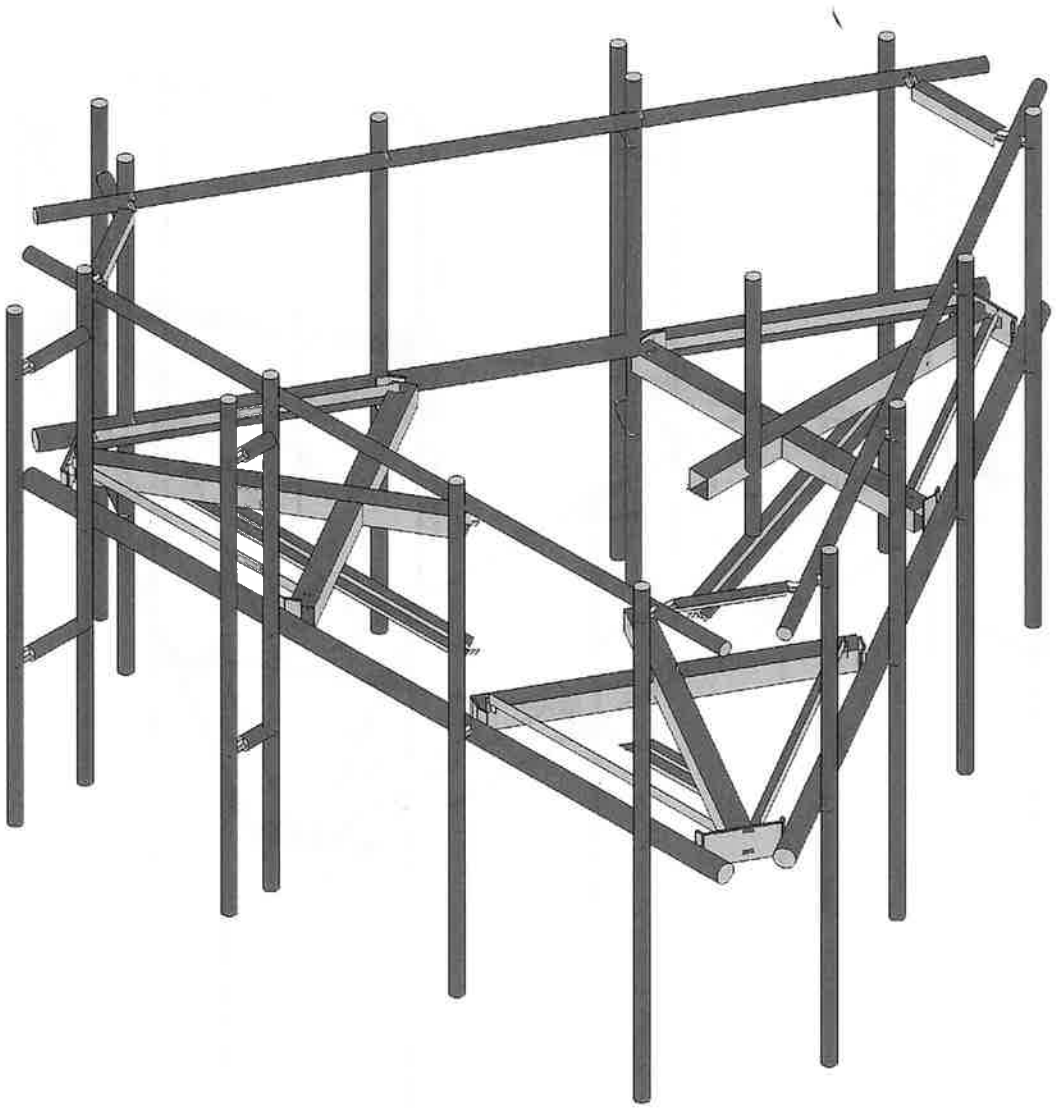
FOR REFERENCE ONLY

SHEET: 1 OF 2	THIRD ANGLE PROJECTION	CATEGORY: 06_Pipe and Attachment Hardware	4		
		SERIES: 01_Crossovers	3		
12/30/2020	SCALE: 1:4	TYPE: PV-DC-PTPC_Pipe to Pipe connection	2		
DIMENSIONS ARE IN INCHES TOLERANCES U.N.O. HOLES: +1/16", -1/32" ANGULAR: PROFILE±1/4°, BEND±2° ALL OTHERS: ±1/16"		BY: INT	1		
		CHECKED:	0	INITIAL RELEASE	3/30/20
		STATUS: APPROVED	REV	DESCRIPTION	DATE

PERFECTVISION

DUALCROSS - PIPE TO PIPE CONNECTION

DOCUMENT NUMBER: PTPC-ENG-01-R0 | REV: 0



Envelope Only Solution

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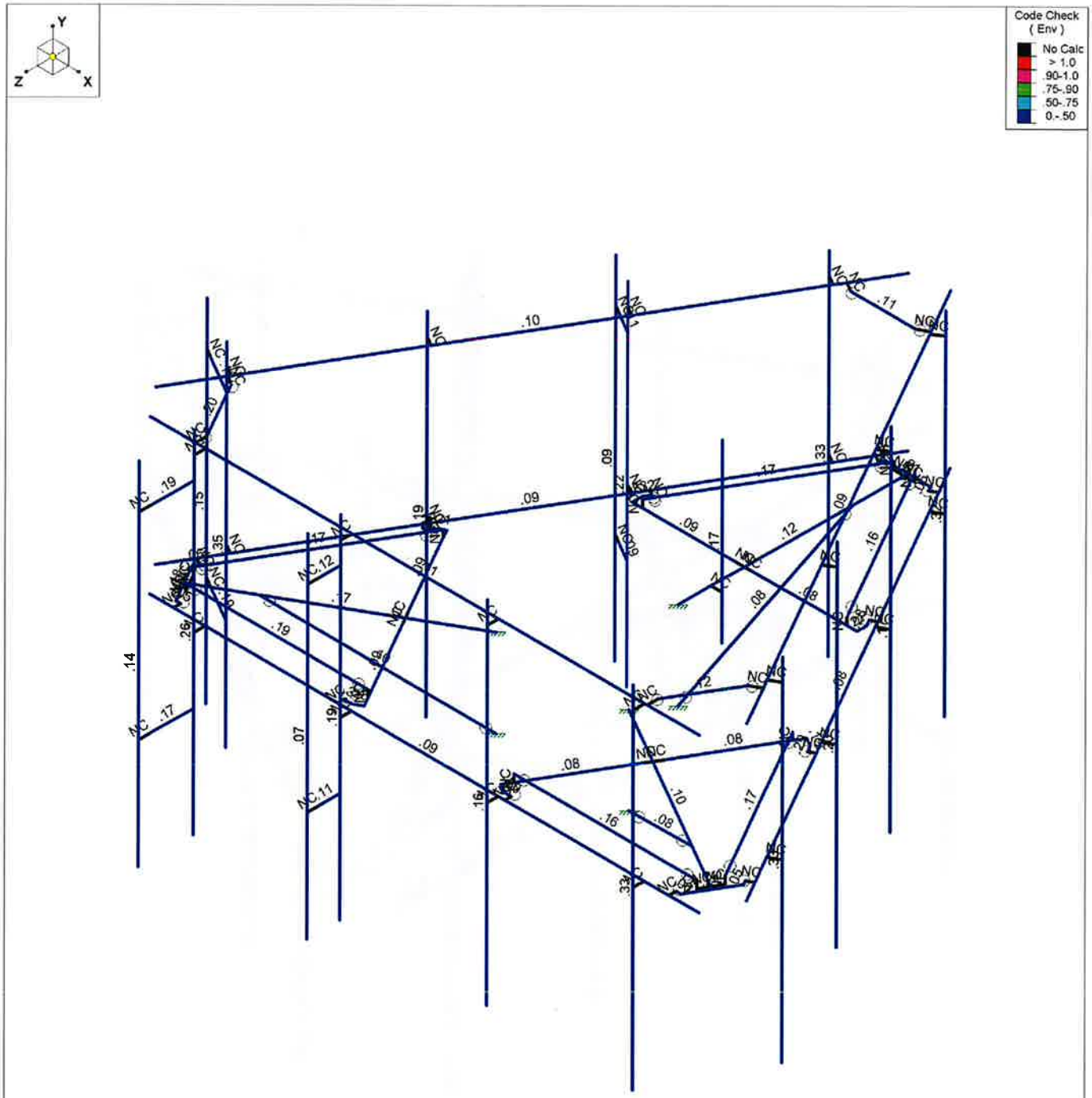

Member Code Checks Displayed (Enveloped)
Envelope Only Solution

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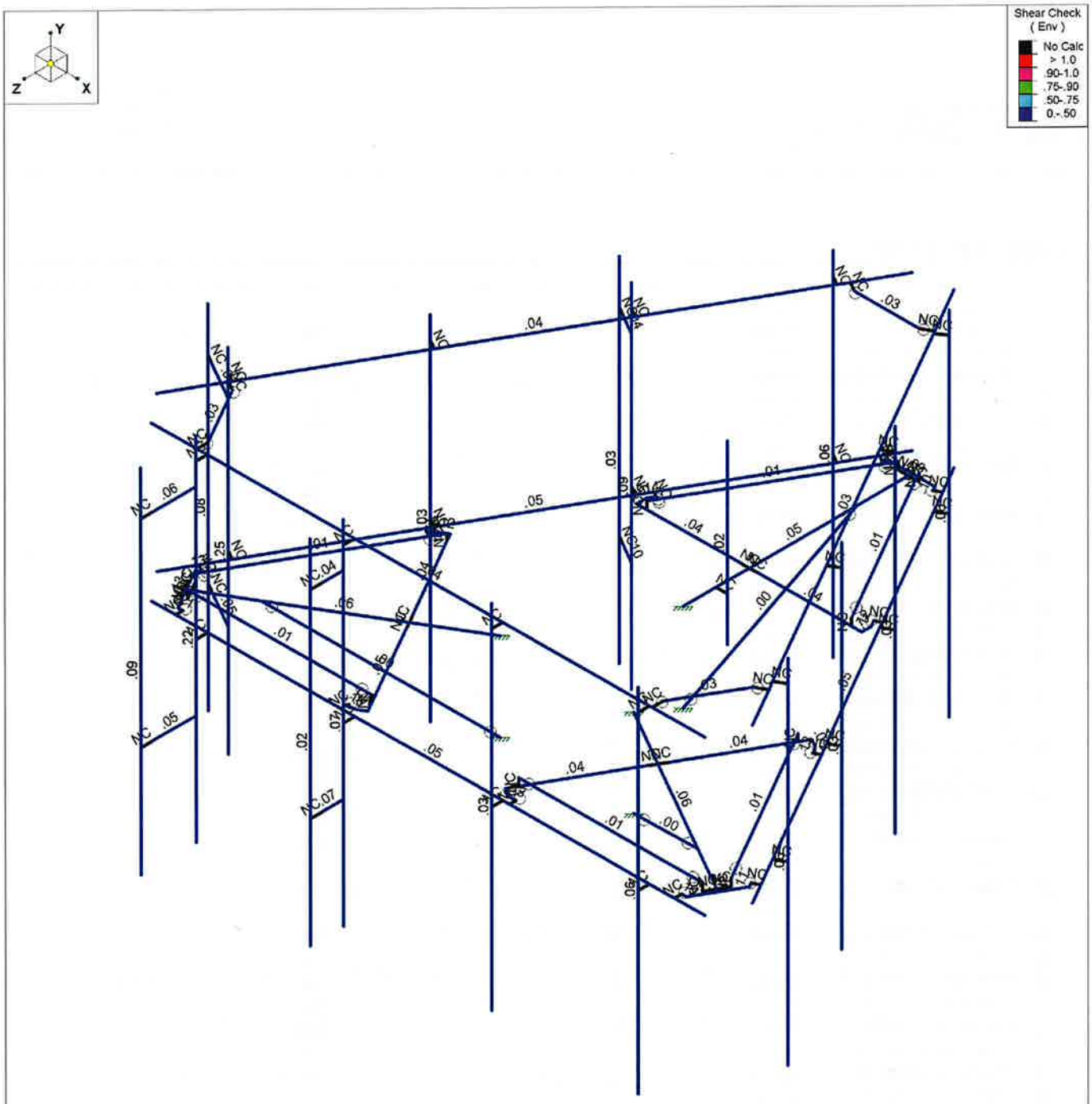

Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 3
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Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					84			
2	Antenna Di	None					84			
3	Antenna Wo (0 Deg)	None					84			
4	Antenna Wo (30 Deg)	None					84			
5	Antenna Wo (60 Deg)	None					84			
6	Antenna Wo (90 Deg)	None					84			
7	Antenna Wo (120 Deg)	None					84			
8	Antenna Wo (150 Deg)	None					84			
9	Antenna Wo (180 Deg)	None					84			
10	Antenna Wo (210 Deg)	None					84			
11	Antenna Wo (240 Deg)	None					84			
12	Antenna Wo (270 Deg)	None					84			
13	Antenna Wo (300 Deg)	None					84			
14	Antenna Wo (330 Deg)	None					84			
15	Antenna Wi (0 Deg)	None					84			
16	Antenna Wi (30 Deg)	None					84			
17	Antenna Wi (60 Deg)	None					84			
18	Antenna Wi (90 Deg)	None					84			
19	Antenna Wi (120 Deg)	None					84			
20	Antenna Wi (150 Deg)	None					84			
21	Antenna Wi (180 Deg)	None					84			
22	Antenna Wi (210 Deg)	None					84			
23	Antenna Wi (240 Deg)	None					84			
24	Antenna Wi (270 Deg)	None					84			
25	Antenna Wi (300 Deg)	None					84			
26	Antenna Wi (330 Deg)	None					84			
27	Antenna Wm (0 Deg)	None					84			
28	Antenna Wm (30 Deg)	None					84			
29	Antenna Wm (60 Deg)	None					84			
30	Antenna Wm (90 Deg)	None					84			
31	Antenna Wm (120 De...	None					84			
32	Antenna Wm (150 De...	None					84			
33	Antenna Wm (180 De...	None					84			
34	Antenna Wm (210 De...	None					84			
35	Antenna Wm (240 De...	None					84			
36	Antenna Wm (270 De...	None					84			
37	Antenna Wm (300 De...	None					84			
38	Antenna Wm (330 De...	None					84			
39	Structure D	None		-1					3	
40	Structure Di	None						73	3	
41	Structure Wo (0 Deg)	None						146		
42	Structure Wo (30 Deg)	None						146		
43	Structure Wo (60 Deg)	None						146		
44	Structure Wo (90 Deg)	None						146		
45	Structure Wo (120 D...	None						146		
46	Structure Wo (150 D...	None						146		
47	Structure Wo (180 D...	None						146		
48	Structure Wo (210 D...	None						146		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
49	Structure Wo (240 D...	None						146		
50	Structure Wo (270 D...	None						146		
51	Structure Wo (300 D...	None						146		
52	Structure Wo (330 D...	None						146		
53	Structure Wi (0 Deg)	None						146		
54	Structure Wi (30 Deg)	None						146		
55	Structure Wi (60 Deg)	None						146		
56	Structure Wi (90 Deg)	None						146		
57	Structure Wi (120 De...	None						146		
58	Structure Wi (150 De...	None						146		
59	Structure Wi (180 De...	None						146		
60	Structure Wi (210 De...	None						146		
61	Structure Wi (240 De...	None						146		
62	Structure Wi (270 De...	None						146		
63	Structure Wi (300 De...	None						146		
64	Structure Wi (330 De...	None						146		
65	Structure Wm (0 Deg)	None						146		
66	Structure Wm (30 D...	None						146		
67	Structure Wm (60 D...	None						146		
68	Structure Wm (90 D...	None						146		
69	Structure Wm (120 ...	None						146		
70	Structure Wm (150 ...	None						146		
71	Structure Wm (180 ...	None						146		
72	Structure Wm (210 ...	None						146		
73	Structure Wm (240 ...	None						146		
74	Structure Wm (270 ...	None						146		
75	Structure Wm (300 ...	None						146		
76	Structure Wm (330 ...	None						146		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					84			
82	Antenna Eh (0 Deg)	None					56			
83	Antenna Eh (90 Deg)	None					56			
84	Structure Ev	ELY		-.039					3	
85	Structure Eh (0 Deg)	ELZ			-.097				3	
86	Structure Eh (90 Deg)	ELX	.097						3	
87	BLC 39 Transient Are...	None						30		
88	BLC 40 Transient Are...	None						30		
89	BLC 84 Transient Are...	None						30		
90	BLC 85 Transient Are...	None						30		
91	BLC 86 Transient Are...	None						30		

Load Combinations

	Description	So...	P...	S...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...
1	1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo (30 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												

Load Combinations (Continued)

	Description	So...	P...	S...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...	B...	Fac...
5	1.2D+1.0Wo (120 Deg)	Yes	Y		1	1.2	39	1.2	7	1	45	1														
6	1.2D+1.0Wo (150 Deg)	Yes	Y		1	1.2	39	1.2	8	1	46	1														
7	1.2D+1.0Wo (180 Deg)	Yes	Y		1	1.2	39	1.2	9	1	47	1														
8	1.2D+1.0Wo (210 Deg)	Yes	Y		1	1.2	39	1.2	10	1	48	1														
9	1.2D+1.0Wo (240 Deg)	Yes	Y		1	1.2	39	1.2	11	1	49	1														
10	1.2D+1.0Wo (270 Deg)	Yes	Y		1	1.2	39	1.2	12	1	50	1														
11	1.2D+1.0Wo (300 Deg)	Yes	Y		1	1.2	39	1.2	13	1	51	1														
12	1.2D+1.0Wo (330 Deg)	Yes	Y		1	1.2	39	1.2	14	1	52	1														
13	1.2D + 1.0Di + 1.0Wi (0 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1										
14	1.2D + 1.0Di + 1.0Wi (30 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1										
15	1.2D + 1.0Di + 1.0Wi (60 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1										
16	1.2D + 1.0Di + 1.0Wi (90 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1										
17	1.2D + 1.0Di + 1.0Wi (120 D...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1										
18	1.2D + 1.0Di + 1.0Wi (150 D...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1										
19	1.2D + 1.0Di + 1.0Wi (180 D...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1										
20	1.2D + 1.0Di + 1.0Wi (210 D...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1										
21	1.2D + 1.0Di + 1.0Wi (240 D...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1										
22	1.2D + 1.0Di + 1.0Wi (270 D...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1										
23	1.2D + 1.0Di + 1.0Wi (300 D...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1										
24	1.2D + 1.0Di + 1.0Wi (330 D...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1										
25	1.2D + 1.5Lm1 + 1.0Wm (0 ...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1												
26	1.2D + 1.5Lm1 + 1.0Wm (30 ...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1												
27	1.2D + 1.5Lm1 + 1.0Wm (60 ...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1												
28	1.2D + 1.5Lm1 + 1.0Wm (90 ...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1												
29	1.2D + 1.5Lm1 + 1.0Wm (12...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1												
30	1.2D + 1.5Lm1 + 1.0Wm (15...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1												
31	1.2D + 1.5Lm1 + 1.0Wm (18...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1												
32	1.2D + 1.5Lm1 + 1.0Wm (21...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1												
33	1.2D + 1.5Lm1 + 1.0Wm (24...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1												
34	1.2D + 1.5Lm1 + 1.0Wm (27...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1												
35	1.2D + 1.5Lm1 + 1.0Wm (30...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1												
36	1.2D + 1.5Lm1 + 1.0Wm (33...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1												
37	1.2D + 1.5Lm2 + 1.0Wm (0 ...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1												
38	1.2D + 1.5Lm2 + 1.0Wm (30 ...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1												
39	1.2D + 1.5Lm2 + 1.0Wm (60 ...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1												
40	1.2D + 1.5Lm2 + 1.0Wm (90 ...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1												
41	1.2D + 1.5Lm2 + 1.0Wm (12...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1												
42	1.2D + 1.5Lm2 + 1.0Wm (15...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1												
43	1.2D + 1.5Lm2 + 1.0Wm (18...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1												
44	1.2D + 1.5Lm2 + 1.0Wm (21...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1												
45	1.2D + 1.5Lm2 + 1.0Wm (24...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1												
46	1.2D + 1.5Lm2 + 1.0Wm (27...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1												
47	1.2D + 1.5Lm2 + 1.0Wm (30...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1												
48	1.2D + 1.5Lm2 + 1.0Wm (33...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1												
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5																
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5																
51	1.4D	Yes	Y		1	1.4	39	1.4																		
52	1.2D + 1.0Ev + 1.0Eh (0 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	1	83		ELZ	1	E...							
53	1.2D + 1.0Ev + 1.0Eh (30 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	.5	ELZ	.866	E...	.5						
54	1.2D + 1.0Ev + 1.0Eh (60 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	.866	ELZ	.5	E...	.866						
55	1.2D + 1.0Ev + 1.0Eh (90 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	1	ELZ		E...	1						
56	1.2D + 1.0Ev + 1.0Eh (120 D...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	.866	ELZ	-.5	E...	.866						

Load Combinations (Continued)

	Description	So..	P..	S..	B..	Fac..	B..	Fac..	B..	Fac..	B..	Fac..	B..	Fac..	B..	Fac..	B..	Fac..	B..	Fac..	B..	Fac..	B..	Fac...
57	1.2D + 1.0Ev + 1.0Eh (150 D..	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.866	83	.5	ELZ	-.866	E...	.5				
58	1.2D + 1.0Ev + 1.0Eh (180 D..	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-1	83		ELZ	-1	E...					
59	1.2D + 1.0Ev + 1.0Eh (210 D..	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.866	83	-.5	ELZ	-.866	E...	-.5				
60	1.2D + 1.0Ev + 1.0Eh (240 D..	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	-.866	ELZ	-.5	E...	-.866				
61	1.2D + 1.0Ev + 1.0Eh (270 D..	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	-1	ELZ		E...	-1				
62	1.2D + 1.0Ev + 1.0Eh (300 D..	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	-.866	ELZ	.5	E...	-.866				
63	1.2D + 1.0Ev + 1.0Eh (330 D..	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	-.5	ELZ	.866	E...	-.5				
64	0.9D - 1.0Ev + 1.0Eh (0 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	1	83		ELZ	1	E...					
65	0.9D - 1.0Ev + 1.0Eh (30 Deg)	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 (60 Deg)	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 (90 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	1	ELZ		E...	1				
68	0.9D - 1.0Ev + 1.0Eh (120 D...	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 (150 D...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.866	83	.5	ELZ	-.866	E...	.5				
70	0.9D - 1.0Ev + 1.0Eh (180 D...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-1	83		ELZ	-1	E...					
71	0.9D - 1.0Ev + 1.0Eh (210 D...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.866	83	-.5	ELZ	-.866	E...	-.5				
72	0.9D - 1.0Ev + 1.0Eh (240 D...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	-.866	ELZ	-.5	E...	-.866				
73	0.9D - 1.0Ev + 1.0Eh (270 D...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	-1	ELZ		E...	-1				
74	0.9D - 1.0Ev + 1.0Eh (300 D...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	-.866	ELZ	.5	E...	-.866				
75	0.9D - 1.0Ev + 1.0Eh (330 D...	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	Design ...	A [in2]	Iyy [in4]	Izz [in4]	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 R...	Typical	3.37	7.8	7.8	12.8
3	Corner Plate	PL1/2x6	Beam	BAR	A36 Gr.36	Typical	3	.063	9	.237
4	Platform Crossmember	HSS4X4X4	Beam	SquareTube	A500 Gr.B R...	Typical	3.37	7.8	7.8	12.8
5	Grating Support	L2x2x3	Beam	Single Angle	A36 Gr.36	Typical	.722	.271	.271	.009
6	Mount Pipe	PIPE_2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
7	Cross Arm Plate	PL3/8x6	Column	RECT	A36 Gr.36	Typical	2.25	.026	6.75	.101
8	Support Rail	PIPE_2.0	Column	RECT	A53 Gr.B	Typical	1.02	.627	.627	1.25
9	Standoff Pipe	PIPE_2.0	Column	RECT	A53 Gr.B	Typical	1.02	.627	.627	1.25
10	Support Rail Angle	L2.5x2.5x4	Column	RECT	A36 Gr.36	Typical	1.19	.692	.692	.026
11	Kicker	LL2.5x2.5x3x3	Column	RECT	A36 Gr.36	Typical	1.8	2.46	1.07	.023

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E..	Density[k/ft...	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(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M25	N30	N35			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
2	M26	N38	N40			Platform Cross...	Beam	SquareTube	A500 Gr.B...	Typical
3	M27	N39	N31			Platform Cross...	Beam	SquareTube	A500 Gr.B...	Typical
4	M28	N49	N50			Corner Plate	Beam	BAR	A36 Gr.36	Typical
5	M29	N33	N37		240	RIGID	None	None	RIGID	Typical
6	M30	N32	N36		240	RIGID	None	None	RIGID	Typical
7	M31	N54	N32			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
8	M32	N33	N56			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
9	M33	N56	N57		240	RIGID	None	None	RIGID	Typical
10	M34	N39	N34			RIGID	None	None	RIGID	Typical
11	M35	N34	N40			RIGID	None	None	RIGID	Typical
12	M36	N38	N42			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
13	M37	N42	N43			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
14	M38	N43	N47			RIGID	None	None	RIGID	Typical
15	M39	N50	N44			Corner Plate	Beam	BAR	A36 Gr.36	Typical
16	M40	N44	N51			RIGID	None	None	RIGID	Typical
17	M41	N31	N41			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
18	M42	N41	N45			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
19	M43	N45	N48			RIGID	None	None	RIGID	Typical
20	M44	N49	N46			Corner Plate	Beam	BAR	A36 Gr.36	Typical
21	M45	N46	N52			RIGID	None	None	RIGID	Typical
22	M46	N57	N53			RIGID	None	None	RIGID	Typical
23	M47	N53	N55			RIGID	None	None	RIGID	Typical
24	M48	N54	N55		240	RIGID	None	None	RIGID	Typical
25	LV	N86	N87			Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
26	LM2	N92	N93			RIGID	None	None	RIGID	Typical
27	MP1A	N94	N95			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
28	GHJ	N96	N97			RIGID	None	None	RIGID	Typical
29	MP2A	N98	N99			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
30	FGH	N100	N101			RIGID	None	None	RIGID	Typical
31	3A	N102	N103			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
32	LM1	N104	N105			RIGID	None	None	RIGID	Typical
33	4A	N106	N107			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
34	M101	N142	N143			RIGID	None	None	RIGID	Typical
35	OVP	N144	N145			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
36	M103	N146	N147			Support Rail	Column	RECT	A53 Gr.B	Typical
37	M106	N152	N153			RIGID	None	None	RIGID	Typical
38	M107	N154	N155			RIGID	None	None	RIGID	Typical
39	M108	N156	N157			RIGID	None	None	RIGID	Typical
40	M109	N158	N159			RIGID	None	None	RIGID	Typical
41	M122	N184	N186			RIGID	None	None	RIGID	Typical
42	M123	N187	N189			RIGID	None	None	RIGID	Typical
43	M127	N189	N186		180	Support Rail A...	Column	RECT	A36 Gr.36	Typical
44	M128A	N194A	N190A			Kicker	Column	RECT	A36 Gr.36	Typical
45	M45A	N69	N74			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
46	M46A	N77	N79			Platform Cross...	Beam	SquareTube	A500 Gr.B...	Typical
47	M47A	N78	N70			Platform Cross...	Beam	SquareTube	A500 Gr.B...	Typical
48	M48A	N88	N89			Corner Plate	Beam	BAR	A36 Gr.36	Typical
49	M49	N72	N76		120	RIGID	None	None	RIGID	Typical
50	M50	N71	N75		120	RIGID	None	None	RIGID	Typical
51	M51	N93A	N71			Grating Support	Beam	Single Angle	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
52	M52	N72	N95A			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
53	M53	N95A	N96A		120	RIGID	None	None	RIGID	Typical
54	M54	N78	N73			RIGID	None	None	RIGID	Typical
55	M55	N73	N79			RIGID	None	None	RIGID	Typical
56	M56	N77	N81			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
57	M57	N81	N82			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
58	M58	N82	N86A			RIGID	None	None	RIGID	Typical
59	M59	N89	N83			Corner Plate	Beam	BAR	A36 Gr.36	Typical
60	M60	N83	N90			RIGID	None	None	RIGID	Typical
61	M61	N70	N80			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
62	M62	N80	N84			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
63	M63	N84	N87A			RIGID	None	None	RIGID	Typical
64	M64	N88	N85			Corner Plate	Beam	BAR	A36 Gr.36	Typical
65	M65	N85	N91			RIGID	None	None	RIGID	Typical
66	M66	N96A	N92A			RIGID	None	None	RIGID	Typical
67	M67	N92A	N94A			RIGID	None	None	RIGID	Typical
68	M68	N93A	N94A		120	RIGID	None	None	RIGID	Typical
69	M69	N97A	N98A			Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
70	M70	N99A	N100A			RIGID	None	None	RIGID	Typical
71	MP1C	N101A	N102A		240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
72	M72	N103A	N104A			RIGID	None	None	RIGID	Typical
73	MP2C	N105A	N106A		240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
74	M74	N107A	N108			RIGID	None	None	RIGID	Typical
75	MP3C	N109	N110		240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
76	M76	N111	N112			RIGID	None	None	RIGID	Typical
77	MP4C	N113	N114		240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
78	M80A	N119	N120			Support Rail	Column	RECT	A53 Gr.B	Typical
79	M81	N121	N122			RIGID	None	None	RIGID	Typical
80	M82A	N123	N124			RIGID	None	None	RIGID	Typical
81	M83	N125	N126			RIGID	None	None	RIGID	Typical
82	M84	N127	N128			RIGID	None	None	RIGID	Typical
83	M85	N129	N130			RIGID	None	None	RIGID	Typical
84	M86	N131	N132			RIGID	None	None	RIGID	Typical
85	M87	N132	N130		180	Support Rail A...	Column	RECT	A36 Gr.36	Typical
86	M88	N134	N133			Kicker	Column	RECT	A36 Gr.36	Typical
87	M89	N136	N141			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
88	M90	N144A	N146A			Platform Cross...	Beam	SquareTube	A500 Gr.B...	Typical
89	M91	N145A	N137			Platform Cross...	Beam	SquareTube	A500 Gr.B...	Typical
90	M92	N155A	N156A			Corner Plate	Beam	BAR	A36 Gr.36	Typical
91	M93	N139	N143A		360	RIGID	None	None	RIGID	Typical
92	M94	N138	N142A		360	RIGID	None	None	RIGID	Typical
93	M95	N160	N138			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
94	M96	N139	N162			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
95	M97	N162	N163		360	RIGID	None	None	RIGID	Typical
96	M98	N145A	N140			RIGID	None	None	RIGID	Typical
97	M99	N140	N146A			RIGID	None	None	RIGID	Typical
98	M100	N144A	N148			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
99	M101A	N148	N149			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
100	M102	N149	N153A			RIGID	None	None	RIGID	Typical
101	M103A	N156A	N150			Corner Plate	Beam	BAR	A36 Gr.36	Typical
102	M104	N150	N157A			RIGID	None	None	RIGID	Typical
103	M105	N137	N147A			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
104	M106A	N147A	N151			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
105	M107A	N151	N154A			RIGID	None	None	RIGID	Typical
106	M108A	N155A	N152A			Corner Plate	Beam	BAR	A36 Gr.36	Typical
107	M109A	N152A	N158A			RIGID	None	None	RIGID	Typical
108	M110	N163	N159A			RIGID	None	None	RIGID	Typical
109	M111	N159A	N161			RIGID	None	None	RIGID	Typical
110	M112	N160	N161		360	RIGID	None	None	RIGID	Typical
111	M113	N164	N165			Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
112	M114	N166	N167			RIGID	None	None	RIGID	Typical
113	1B	N168	N169		120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
114	M116	N170	N171			RIGID	None	None	RIGID	Typical
115	MP2B	N172	N173		120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
116	M118	N174	N175			RIGID	None	None	RIGID	Typical
117	3B	N176	N177		120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
118	M120	N178	N179			RIGID	None	None	RIGID	Typical
119	MP4B	N180	N181		120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
120	M124	N186A	N187A			Support Rail	Column	RECT	A53 Gr.B	Typical
121	M125	N188	N189A			RIGID	None	None	RIGID	Typical
122	M126	N190	N191			RIGID	None	None	RIGID	Typical
123	M127A	N192	N193			RIGID	None	None	RIGID	Typical
124	M128	N194	N195			RIGID	None	None	RIGID	Typical
125	M129	N196	N197			RIGID	None	None	RIGID	Typical
126	M130	N198	N199			RIGID	None	None	RIGID	Typical
127	M131	N199	N197		180	Support Rail A...	Column	RECT	A36 Gr.36	Typical
128	M132	N201	N200			Kicker	Column	RECT	A36 Gr.36	Typical
129	M129A	N193A	N196A			Standoff Pipe	Column	RECT	A53 Gr.B	Typical
130	M130A	N195A	N197A			Standoff Pipe	Column	RECT	A53 Gr.B	Typical
131	M131A	N192A	N198A			Standoff Pipe	Column	RECT	A53 Gr.B	Typical
132	M132A	N194B	N199A			Standoff Pipe	Column	RECT	A53 Gr.B	Typical
133	M133	N196A	N200A			RIGID	None	None	RIGID	Typical
134	M134	N197A	N201A			RIGID	None	None	RIGID	Typical
135	M135	N198A	N202			RIGID	None	None	RIGID	Typical
136	M136	N199A	N203			RIGID	None	None	RIGID	Typical
137	MP4A	N204	N206			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
138	MP3A	N205	N207			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
139	M139	N208	N210			Standoff Pipe	Column	RECT	A53 Gr.B	Typical
140	M140	N209	N211			Standoff Pipe	Column	RECT	A53 Gr.B	Typical
141	M141	N210	N212			RIGID	None	None	RIGID	Typical
142	M142	N211	N213			RIGID	None	None	RIGID	Typical
143	MP3B	N214	N215		120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
144	M149	N224	N226			Standoff Pipe	Column	RECT	A53 Gr.B	Typical
145	M150	N225	N227			Standoff Pipe	Column	RECT	A53 Gr.B	Typical
146	M151	N226	N228			RIGID	None	None	RIGID	Typical
147	M152	N227	N229			RIGID	None	None	RIGID	Typical
148	MP1B	N230	N231		120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M25						Yes				None
2	M26						Yes	Default			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
3	M27						Yes	Default			None
4	M28						Yes	Default			None
5	M29						Yes	** NA **			None
6	M30						Yes	** NA **			None
7	M31	OOOOOX	OOOOOX				Yes	Default			None
8	M32	OOOOOX	OOOOOX				Yes	Default			None
9	M33						Yes	** NA **			None
10	M34						Yes	** NA **			None
11	M35						Yes	** NA **			None
12	M36						Yes	** NA **			None
13	M37						Yes	** NA **			None
14	M38		BenPIN				Yes	** NA **			None
15	M39						Yes				None
16	M40		BenPIN				Yes	** NA **			None
17	M41						Yes	** NA **			None
18	M42						Yes	** NA **			None
19	M43		BenPIN				Yes	** NA **			None
20	M44						Yes				None
21	M45		BenPIN				Yes	** NA **			None
22	M46						Yes	** NA **			None
23	M47						Yes	** NA **			None
24	M48						Yes	** NA **			None
25	LV						Yes				None
26	LM2						Yes	** NA **			None
27	MP1A						Yes	** NA **			None
28	GHJ						Yes	** NA **			None
29	MP2A						Yes	** NA **			None
30	FGH						Yes	** NA **			None
31	3A						Yes	** NA **			None
32	LM1						Yes	** NA **			None
33	4A						Yes	** NA **			None
34	M101						Yes	** NA **			None
35	OVP						Yes	** NA **			None
36	M103						Yes	** NA **			None
37	M106						Yes	** NA **			None
38	M107						Yes	** NA **			None
39	M108						Yes	** NA **			None
40	M109						Yes	** NA **			None
41	M122	OOOOOX					Yes	** NA **			None
42	M123	OOOOOX					Yes	** NA **			None
43	M127						Yes	** NA **			None
44	M128A	BenPIN	BenPIN				Yes	** NA **			None
45	M45A						Yes				None
46	M46A						Yes	Default			None
47	M47A						Yes	Default			None
48	M48A						Yes	Default			None
49	M49						Yes	** NA **			None
50	M50						Yes	** NA **			None
51	M51	OOOOOX	OOOOOX				Yes	Default			None
52	M52	OOOOOX	OOOOOX				Yes	Default			None
53	M53						Yes	** NA **			None
54	M54						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
55	M55						Yes	** NA **			None
56	M56						Yes	** NA **			None
57	M57						Yes	** NA **			None
58	M58		BenPIN				Yes	** NA **			None
59	M59						Yes				None
60	M60		BenPIN				Yes	** NA **			None
61	M61						Yes	** NA **			None
62	M62						Yes	** NA **			None
63	M63		BenPIN				Yes	** NA **			None
64	M64						Yes				None
65	M65		BenPIN				Yes	** NA **			None
66	M66						Yes	** NA **			None
67	M67						Yes	** NA **			None
68	M68						Yes	** NA **			None
69	M69						Yes				None
70	M70						Yes	** NA **			None
71	MP1C						Yes	** NA **			None
72	M72						Yes	** NA **			None
73	MP2C						Yes	** NA **			None
74	M74						Yes	** NA **			None
75	MP3C						Yes	** NA **			None
76	M76						Yes	** NA **			None
77	MP4C						Yes	** NA **			None
78	M80A						Yes	** NA **			None
79	M81						Yes	** NA **			None
80	M82A						Yes	** NA **			None
81	M83						Yes	** NA **			None
82	M84						Yes	** NA **			None
83	M85	OOOOOX					Yes	** NA **			None
84	M86	OOOOOX					Yes	** NA **			None
85	M87						Yes	** NA **			None
86	M88	BenPIN	BenPIN				Yes	** NA **			None
87	M89						Yes				None
88	M90						Yes	Default			None
89	M91						Yes	Default			None
90	M92						Yes	Default			None
91	M93						Yes	** NA **			None
92	M94						Yes	** NA **			None
93	M95	OOOOOX	OOOOOX				Yes	Default			None
94	M96	OOOOOX	OOOOOX				Yes	Default			None
95	M97						Yes	** NA **			None
96	M98						Yes	** NA **			None
97	M99						Yes	** NA **			None
98	M100						Yes	** NA **			None
99	M101A						Yes	** NA **			None
100	M102		BenPIN				Yes	** NA **			None
101	M103A						Yes				None
102	M104		BenPIN				Yes	** NA **			None
103	M105						Yes	** NA **			None
104	M106A						Yes	** NA **			None
105	M107A		BenPIN				Yes	** NA **			None
106	M108A						Yes				None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
107	M109A		BenPIN				Yes	** NA **			None
108	M110						Yes	** NA **			None
109	M111						Yes	** NA **			None
110	M112						Yes	** NA **			None
111	M113						Yes				None
112	M114						Yes	** NA **			None
113	1B						Yes	** NA **			None
114	M116						Yes	** NA **			None
115	MP2B						Yes	** NA **			None
116	M118						Yes	** NA **			None
117	3B						Yes	** NA **			None
118	M120						Yes	** NA **			None
119	MP4B						Yes	** NA **			None
120	M124						Yes	** NA **			None
121	M125						Yes	** NA **			None
122	M126						Yes	** NA **			None
123	M127A						Yes	** NA **			None
124	M128						Yes	** NA **			None
125	M129	OOOOOX					Yes	** NA **			None
126	M130	OOOOOX					Yes	** NA **			None
127	M131						Yes	** NA **			None
128	M132	BenPIN	BenPIN				Yes	** NA **			None
129	M129A						Yes	** NA **			None
130	M130A						Yes	** NA **			None
131	M131A						Yes	** NA **			None
132	M132A						Yes	** NA **			None
133	M133						Yes	** NA **			None
134	M134						Yes	** NA **			None
135	M135						Yes	** NA **			None
136	M136						Yes	** NA **			None
137	MP4A						Yes	** NA **			None
138	MP3A						Yes	** NA **			None
139	M139						Yes	** NA **			None
140	M140						Yes	** NA **			None
141	M141						Yes	** NA **			None
142	M142						Yes	** NA **			None
143	MP3B						Yes	** NA **			None
144	M149						Yes	** NA **			None
145	M150						Yes	** NA **			None
146	M151						Yes	** NA **			None
147	M152						Yes	** NA **			None
148	MP1B						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	Y	-79.1	2
2	4A	My	0	2
3	4A	Mz	0	2
4	4A	Y	-20.8	5
5	4A	My	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	4A	Mz	0	5
7	1B	Y	-74.7	2
8	1B	My	0	2
9	1B	Mz	0	2
10	MP1A	Y	-31.65	1.5
11	MP1A	My	-.016	1.5
12	MP1A	Mz	0	1.5
13	MP1A	Y	-31.65	6.5
14	MP1A	My	-.016	6.5
15	MP1A	Mz	0	6.5
16	MP1B	Y	-31.65	1.5
17	MP1B	My	.016	1.5
18	MP1B	Mz	0	1.5
19	MP1B	Y	-31.65	6.5
20	MP1B	My	.016	6.5
21	MP1B	Mz	0	6.5
22	MP1C	Y	-31.65	1.5
23	MP1C	My	.003	1.5
24	MP1C	Mz	.016	1.5
25	MP1C	Y	-31.65	6.5
26	MP1C	My	.003	6.5
27	MP1C	Mz	.016	6.5
28	MP4A	Y	-31.65	1.5
29	MP4A	My	-.016	1.5
30	MP4A	Mz	0	1.5
31	MP4A	Y	-31.65	6.5
32	MP4A	My	-.016	6.5
33	MP4A	Mz	0	6.5
34	MP4B	Y	-31.65	1.5
35	MP4B	My	.016	1.5
36	MP4B	Mz	0	1.5
37	MP4B	Y	-31.65	6.5
38	MP4B	My	.016	6.5
39	MP4B	Mz	0	6.5
40	MP4C	Y	-31.65	1.5
41	MP4C	My	.003	1.5
42	MP4C	Mz	.016	1.5
43	MP4C	Y	-31.65	6.5
44	MP4C	My	.003	6.5
45	MP4C	Mz	.016	6.5
46	MP3A	Y	-28.65	3
47	MP3A	My	-.014	3
48	MP3A	Mz	0	3
49	MP3A	Y	-28.65	5
50	MP3A	My	-.014	5
51	MP3A	Mz	0	5
52	MP3B	Y	-28.65	3
53	MP3B	My	.014	3
54	MP3B	Mz	0	3
55	MP3B	Y	-28.65	5
56	MP3B	My	.014	5
57	MP3B	Mz	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3C	Y	-28.65	3
59	MP3C	My	.002	3
60	MP3C	Mz	.014	3
61	MP3C	Y	-28.65	5
62	MP3C	My	.002	5
63	MP3C	Mz	.014	5
64	OVP	Y	-32	1
65	OVP	My	0	1
66	OVP	Mz	0	1
67	MP1A	Y	-74.7	2
68	MP1A	My	.037	2
69	MP1A	Mz	0	2
70	MP1C	Y	-74.7	2
71	MP1C	My	-.006	2
72	MP1C	Mz	-.037	2
73	MP4B	Y	-79.1	2
74	MP4B	My	-.04	2
75	MP4B	Mz	0	2
76	MP4C	Y	-79.1	2
77	MP4C	My	-.007	2
78	MP4C	Mz	-.039	2
79	MP4B	Y	-20.8	5
80	MP4B	My	-.01	5
81	MP4B	Mz	0	5
82	MP4C	Y	-20.8	5
83	MP4C	My	-.002	5
84	MP4C	Mz	-.01	5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	Y	-44.864	2
2	4A	My	0	2
3	4A	Mz	0	2
4	4A	Y	-15.97	5
5	4A	My	0	5
6	4A	Mz	0	5
7	1B	Y	-44.393	2
8	1B	My	0	2
9	1B	Mz	0	2
10	MP1A	Y	-69.183	1.5
11	MP1A	My	-.035	1.5
12	MP1A	Mz	0	1.5
13	MP1A	Y	-69.183	6.5
14	MP1A	My	-.035	6.5
15	MP1A	Mz	0	6.5
16	MP1B	Y	-69.183	1.5
17	MP1B	My	.035	1.5
18	MP1B	Mz	0	1.5
19	MP1B	Y	-69.183	6.5
20	MP1B	My	.035	6.5
21	MP1B	Mz	0	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
22	MP1C	Y	-69.183	1.5
23	MP1C	My	.006	1.5
24	MP1C	Mz	.034	1.5
25	MP1C	Y	-69.183	6.5
26	MP1C	My	.006	6.5
27	MP1C	Mz	.034	6.5
28	MP4A	Y	-69.183	1.5
29	MP4A	My	-.035	1.5
30	MP4A	Mz	0	1.5
31	MP4A	Y	-69.183	6.5
32	MP4A	My	-.035	6.5
33	MP4A	Mz	0	6.5
34	MP4B	Y	-69.183	1.5
35	MP4B	My	.035	1.5
36	MP4B	Mz	0	1.5
37	MP4B	Y	-69.183	6.5
38	MP4B	My	.035	6.5
39	MP4B	Mz	0	6.5
40	MP4C	Y	-69.183	1.5
41	MP4C	My	.006	1.5
42	MP4C	Mz	.034	1.5
43	MP4C	Y	-69.183	6.5
44	MP4C	My	.006	6.5
45	MP4C	Mz	.034	6.5
46	MP3A	Y	-29.445	3
47	MP3A	My	-.015	3
48	MP3A	Mz	0	3
49	MP3A	Y	-29.445	5
50	MP3A	My	-.015	5
51	MP3A	Mz	0	5
52	MP3B	Y	-29.445	3
53	MP3B	My	.015	3
54	MP3B	Mz	0	3
55	MP3B	Y	-29.445	5
56	MP3B	My	.015	5
57	MP3B	Mz	0	5
58	MP3C	Y	-29.445	3
59	MP3C	My	.003	3
60	MP3C	Mz	.014	3
61	MP3C	Y	-29.445	5
62	MP3C	My	.003	5
63	MP3C	Mz	.014	5
64	OVP	Y	-86.951	1
65	OVP	My	0	1
66	OVP	Mz	0	1
67	MP1A	Y	-44.393	2
68	MP1A	My	.022	2
69	MP1A	Mz	0	2
70	MP1C	Y	-44.393	2
71	MP1C	My	-.004	2
72	MP1C	Mz	-.022	2
73	MP4B	Y	-44.864	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
74	MP4B	My	-.022	2
75	MP4B	Mz	0	2
76	MP4C	Y	-44.864	2
77	MP4C	My	-.004	2
78	MP4C	Mz	-.022	2
79	MP4B	Y	-15.97	5
80	MP4B	My	-.008	5
81	MP4B	Mz	0	5
82	MP4C	Y	-15.97	5
83	MP4C	My	-.001	5
84	MP4C	Mz	-.008	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	0	2
2	4A	Z	-76.492	2
3	4A	Mx	0	2
4	4A	X	0	5
5	4A	Z	-18.02	5
6	4A	Mx	0	5
7	1B	X	0	2
8	1B	Z	-63.216	2
9	1B	Mx	0	2
10	MP1A	X	0	1.5
11	MP1A	Z	-202.425	1.5
12	MP1A	Mx	0	1.5
13	MP1A	X	0	6.5
14	MP1A	Z	-202.425	6.5
15	MP1A	Mx	0	6.5
16	MP1B	X	0	1.5
17	MP1B	Z	-202.425	1.5
18	MP1B	Mx	0	1.5
19	MP1B	X	0	6.5
20	MP1B	Z	-202.425	6.5
21	MP1B	Mx	0	6.5
22	MP1C	X	0	1.5
23	MP1C	Z	-135.045	1.5
24	MP1C	Mx	-.066	1.5
25	MP1C	X	0	6.5
26	MP1C	Z	-135.045	6.5
27	MP1C	Mx	-.066	6.5
28	MP4A	X	0	1.5
29	MP4A	Z	-202.425	1.5
30	MP4A	Mx	0	1.5
31	MP4A	X	0	6.5
32	MP4A	Z	-202.425	6.5
33	MP4A	Mx	0	6.5
34	MP4B	X	0	1.5
35	MP4B	Z	-202.425	1.5
36	MP4B	Mx	0	1.5
37	MP4B	X	0	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
38	MP4B	Z	-202.425	6.5
39	MP4B	Mx	0	6.5
40	MP4C	X	0	1.5
41	MP4C	Z	-135.045	1.5
42	MP4C	Mx	-.066	1.5
43	MP4C	X	0	6.5
44	MP4C	Z	-135.045	6.5
45	MP4C	Mx	-.066	6.5
46	MP3A	X	0	3
47	MP3A	Z	-70.215	3
48	MP3A	Mx	0	3
49	MP3A	X	0	5
50	MP3A	Z	-70.215	5
51	MP3A	Mx	0	5
52	MP3B	X	0	3
53	MP3B	Z	-70.215	3
54	MP3B	Mx	0	3
55	MP3B	X	0	5
56	MP3B	Z	-70.215	5
57	MP3B	Mx	0	5
58	MP3C	X	0	3
59	MP3C	Z	-26.038	3
60	MP3C	Mx	-.013	3
61	MP3C	X	0	5
62	MP3C	Z	-26.038	5
63	MP3C	Mx	-.013	5
64	OVP	X	0	1
65	OVP	Z	-132.431	1
66	OVP	Mx	0	1
67	MP1A	X	0	2
68	MP1A	Z	-68.882	2
69	MP1A	Mx	0	2
70	MP1C	X	0	2
71	MP1C	Z	-46.901	2
72	MP1C	Mx	.023	2
73	MP4B	X	0	2
74	MP4B	Z	-83.103	2
75	MP4B	Mx	0	2
76	MP4C	X	0	2
77	MP4C	Z	-57.458	2
78	MP4C	Mx	.028	2
79	MP4B	X	0	5
80	MP4B	Z	-16.443	5
81	MP4B	Mx	0	5
82	MP4C	X	0	5
83	MP4C	Z	-22.563	5
84	MP4C	Mx	.011	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	41.551	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
2	4A	Z	-71.969	2
3	4A	Mx	0	2
4	4A	X	8.221	5
5	4A	Z	-14.24	5
6	4A	Mx	0	5
7	1B	X	34.441	2
8	1B	Z	-59.654	2
9	1B	Mx	0	2
10	MP1A	X	92.528	1.5
11	MP1A	Z	-160.263	1.5
12	MP1A	Mx	-.046	1.5
13	MP1A	X	92.528	6.5
14	MP1A	Z	-160.263	6.5
15	MP1A	Mx	-.046	6.5
16	MP1B	X	92.528	1.5
17	MP1B	Z	-160.263	1.5
18	MP1B	Mx	.046	1.5
19	MP1B	X	92.528	6.5
20	MP1B	Z	-160.263	6.5
21	MP1B	Mx	.046	6.5
22	MP1C	X	80.828	1.5
23	MP1C	Z	-139.997	1.5
24	MP1C	Mx	-.062	1.5
25	MP1C	X	80.828	6.5
26	MP1C	Z	-139.997	6.5
27	MP1C	Mx	-.062	6.5
28	MP4A	X	92.528	1.5
29	MP4A	Z	-160.263	1.5
30	MP4A	Mx	-.046	1.5
31	MP4A	X	92.528	6.5
32	MP4A	Z	-160.263	6.5
33	MP4A	Mx	-.046	6.5
34	MP4B	X	92.528	1.5
35	MP4B	Z	-160.263	1.5
36	MP4B	Mx	.046	1.5
37	MP4B	X	92.528	6.5
38	MP4B	Z	-160.263	6.5
39	MP4B	Mx	.046	6.5
40	MP4C	X	80.828	1.5
41	MP4C	Z	-139.997	1.5
42	MP4C	Mx	-.062	1.5
43	MP4C	X	80.828	6.5
44	MP4C	Z	-139.997	6.5
45	MP4C	Mx	-.062	6.5
46	MP3A	X	29.414	3
47	MP3A	Z	-50.946	3
48	MP3A	Mx	-.015	3
49	MP3A	X	29.414	5
50	MP3A	Z	-50.946	5
51	MP3A	Mx	-.015	5
52	MP3B	X	29.414	3
53	MP3B	Z	-50.946	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
54	MP3B	Mx	.015	3
55	MP3B	X	29.414	5
56	MP3B	Z	-50.946	5
57	MP3B	Mx	.015	5
58	MP3C	X	21.742	3
59	MP3C	Z	-37.659	3
60	MP3C	Mx	-.017	3
61	MP3C	X	21.742	5
62	MP3C	Z	-37.659	5
63	MP3C	Mx	-.017	5
64	OVP	X	70.438	1
65	OVP	Z	-122.001	1
66	OVP	Mx	0	1
67	MP1A	X	31.608	2
68	MP1A	Z	-54.747	2
69	MP1A	Mx	.016	2
70	MP1C	X	27.791	2
71	MP1C	Z	-48.135	2
72	MP1C	Mx	.021	2
73	MP4B	X	38.246	2
74	MP4B	Z	-66.244	2
75	MP4B	Mx	-.019	2
76	MP4C	X	33.793	2
77	MP4C	Z	-58.531	2
78	MP4C	Mx	.026	2
79	MP4B	X	9.01	5
80	MP4B	Z	-15.606	5
81	MP4B	Mx	-.005	5
82	MP4C	X	10.073	5
83	MP4C	Z	-17.447	5
84	MP4C	Mx	.008	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	66.244	2
2	4A	Z	-38.246	2
3	4A	Mx	0	2
4	4A	X	15.606	5
5	4A	Z	-9.01	5
6	4A	Mx	0	5
7	1B	X	54.747	2
8	1B	Z	-31.608	2
9	1B	Mx	0	2
10	MP1A	X	130.18	1.5
11	MP1A	Z	-75.159	1.5
12	MP1A	Mx	-.065	1.5
13	MP1A	X	130.18	6.5
14	MP1A	Z	-75.159	6.5
15	MP1A	Mx	-.065	6.5
16	MP1B	X	130.18	1.5
17	MP1B	Z	-75.159	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP1B	Mx	.065	1.5
19	MP1B	X	130.18	6.5
20	MP1B	Z	-75.159	6.5
21	MP1B	Mx	.065	6.5
22	MP1C	X	168.267	1.5
23	MP1C	Z	-97.149	1.5
24	MP1C	Mx	-.033	1.5
25	MP1C	X	168.267	6.5
26	MP1C	Z	-97.149	6.5
27	MP1C	Mx	-.033	6.5
28	MP4A	X	130.18	1.5
29	MP4A	Z	-75.159	1.5
30	MP4A	Mx	-.065	1.5
31	MP4A	X	130.18	6.5
32	MP4A	Z	-75.159	6.5
33	MP4A	Mx	-.065	6.5
34	MP4B	X	130.18	1.5
35	MP4B	Z	-75.159	1.5
36	MP4B	Mx	.065	1.5
37	MP4B	X	130.18	6.5
38	MP4B	Z	-75.159	6.5
39	MP4B	Mx	.065	6.5
40	MP4C	X	168.267	1.5
41	MP4C	Z	-97.149	1.5
42	MP4C	Mx	-.033	1.5
43	MP4C	X	168.267	6.5
44	MP4C	Z	-97.149	6.5
45	MP4C	Mx	-.033	6.5
46	MP3A	X	31.222	3
47	MP3A	Z	-18.026	3
48	MP3A	Mx	-.016	3
49	MP3A	X	31.222	5
50	MP3A	Z	-18.026	5
51	MP3A	Mx	-.016	5
52	MP3B	X	31.222	3
53	MP3B	Z	-18.026	3
54	MP3B	Mx	.016	3
55	MP3B	X	31.222	5
56	MP3B	Z	-18.026	5
57	MP3B	Mx	.016	5
58	MP3C	X	56.194	3
59	MP3C	Z	-32.443	3
60	MP3C	Mx	-.011	3
61	MP3C	X	56.194	5
62	MP3C	Z	-32.443	5
63	MP3C	Mx	-.011	5
64	OVP	X	114.689	1
65	OVP	Z	-66.216	1
66	OVP	Mx	0	1
67	MP1A	X	44.933	2
68	MP1A	Z	-25.942	2
69	MP1A	Mx	.022	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP1C	X	57.358	2
71	MP1C	Z	-33.115	2
72	MP1C	Mx	.011	2
73	MP4B	X	54.795	2
74	MP4B	Z	-31.636	2
75	MP4B	Mx	-.027	2
76	MP4C	X	69.291	2
77	MP4C	Z	-40.005	2
78	MP4C	Mx	.014	2
79	MP4B	X	18.339	5
80	MP4B	Z	-10.588	5
81	MP4B	Mx	-.009	5
82	MP4C	X	14.879	5
83	MP4C	Z	-8.591	5
84	MP4C	Mx	.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	63.272	2
2	4A	Z	0	2
3	4A	Mx	0	2
4	4A	X	21.176	5
5	4A	Z	0	5
6	4A	Mx	0	5
7	1B	X	51.884	2
8	1B	Z	0	2
9	1B	Mx	0	2
10	MP1A	X	132.95	1.5
11	MP1A	Z	0	1.5
12	MP1A	Mx	-.066	1.5
13	MP1A	X	132.95	6.5
14	MP1A	Z	0	6.5
15	MP1A	Mx	-.066	6.5
16	MP1B	X	132.95	1.5
17	MP1B	Z	0	1.5
18	MP1B	Mx	.066	1.5
19	MP1B	X	132.95	6.5
20	MP1B	Z	0	6.5
21	MP1B	Mx	.066	6.5
22	MP1C	X	200.33	1.5
23	MP1C	Z	0	1.5
24	MP1C	Mx	.017	1.5
25	MP1C	X	200.33	6.5
26	MP1C	Z	0	6.5
27	MP1C	Mx	.017	6.5
28	MP4A	X	132.95	1.5
29	MP4A	Z	0	1.5
30	MP4A	Mx	-.066	1.5
31	MP4A	X	132.95	6.5
32	MP4A	Z	0	6.5
33	MP4A	Mx	-.066	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	MP4B	X	132.95	1.5
35	MP4B	Z	0	1.5
36	MP4B	Mx	.066	1.5
37	MP4B	X	132.95	6.5
38	MP4B	Z	0	6.5
39	MP4B	Mx	.066	6.5
40	MP4C	X	200.33	1.5
41	MP4C	Z	0	1.5
42	MP4C	Mx	.017	1.5
43	MP4C	X	200.33	6.5
44	MP4C	Z	0	6.5
45	MP4C	Mx	.017	6.5
46	MP3A	X	24.664	3
47	MP3A	Z	0	3
48	MP3A	Mx	-.012	3
49	MP3A	X	24.664	5
50	MP3A	Z	0	5
51	MP3A	Mx	-.012	5
52	MP3B	X	24.664	3
53	MP3B	Z	0	3
54	MP3B	Mx	.012	3
55	MP3B	X	24.664	5
56	MP3B	Z	0	5
57	MP3B	Mx	.012	5
58	MP3C	X	68.842	3
59	MP3C	Z	0	3
60	MP3C	Mx	.006	3
61	MP3C	X	68.842	5
62	MP3C	Z	0	5
63	MP3C	Mx	.006	5
64	OVP	X	115.544	1
65	OVP	Z	0	1
66	OVP	Mx	0	1
67	MP1A	X	46.218	2
68	MP1A	Z	0	2
69	MP1A	Mx	.023	2
70	MP1C	X	68.199	2
71	MP1C	Z	0	2
72	MP1C	Mx	-.006	2
73	MP4B	X	56.661	2
74	MP4B	Z	0	2
75	MP4B	Mx	-.028	2
76	MP4C	X	82.306	2
77	MP4C	Z	0	2
78	MP4C	Mx	-.007	2
79	MP4B	X	22.753	5
80	MP4B	Z	0	5
81	MP4B	Mx	-.011	5
82	MP4C	X	16.633	5
83	MP4C	Z	0	5
84	MP4C	Mx	-.001	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	49.07	2
2	4A	Z	28.331	2
3	4A	Mx	0	2
4	4A	X	19.705	5
5	4A	Z	11.377	5
6	4A	Mx	0	5
7	1B	X	40.026	2
8	1B	Z	23.109	2
9	1B	Mx	0	2
10	MP1A	X	130.18	1.5
11	MP1A	Z	75.159	1.5
12	MP1A	Mx	-.065	1.5
13	MP1A	X	130.18	6.5
14	MP1A	Z	75.159	6.5
15	MP1A	Mx	-.065	6.5
16	MP1B	X	130.18	1.5
17	MP1B	Z	75.159	1.5
18	MP1B	Mx	.065	1.5
19	MP1B	X	130.18	6.5
20	MP1B	Z	75.159	6.5
21	MP1B	Mx	.065	6.5
22	MP1C	X	150.445	1.5
23	MP1C	Z	86.86	1.5
24	MP1C	Mx	.056	1.5
25	MP1C	X	150.445	6.5
26	MP1C	Z	86.86	6.5
27	MP1C	Mx	.056	6.5
28	MP4A	X	130.18	1.5
29	MP4A	Z	75.159	1.5
30	MP4A	Mx	-.065	1.5
31	MP4A	X	130.18	6.5
32	MP4A	Z	75.159	6.5
33	MP4A	Mx	-.065	6.5
34	MP4B	X	130.18	1.5
35	MP4B	Z	75.159	1.5
36	MP4B	Mx	.065	1.5
37	MP4B	X	130.18	6.5
38	MP4B	Z	75.159	6.5
39	MP4B	Mx	.065	6.5
40	MP4C	X	150.445	1.5
41	MP4C	Z	86.86	1.5
42	MP4C	Mx	.056	1.5
43	MP4C	X	150.445	6.5
44	MP4C	Z	86.86	6.5
45	MP4C	Mx	.056	6.5
46	MP3A	X	31.222	3
47	MP3A	Z	18.026	3
48	MP3A	Mx	-.016	3
49	MP3A	X	31.222	5
50	MP3A	Z	18.026	5
51	MP3A	Mx	-.016	5
52	MP3B	X	31.222	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	18.026	3
54	MP3B	Mx	.016	3
55	MP3B	X	31.222	5
56	MP3B	Z	18.026	5
57	MP3B	Mx	.016	5
58	MP3C	X	44.509	3
59	MP3C	Z	25.697	3
60	MP3C	Mx	.017	3
61	MP3C	X	44.509	5
62	MP3C	Z	25.697	5
63	MP3C	Mx	.017	5
64	OVP	X	92.752	1
65	OVP	Z	53.55	1
66	OVP	Mx	0	1
67	MP1A	X	44.933	2
68	MP1A	Z	25.942	2
69	MP1A	Mx	.022	2
70	MP1C	X	51.544	2
71	MP1C	Z	29.759	2
72	MP1C	Mx	-.019	2
73	MP4B	X	54.795	2
74	MP4B	Z	31.636	2
75	MP4B	Mx	-.027	2
76	MP4C	X	62.508	2
77	MP4C	Z	36.089	2
78	MP4C	Mx	-.023	2
79	MP4B	X	18.339	5
80	MP4B	Z	10.588	5
81	MP4B	Mx	-.009	5
82	MP4C	X	16.498	5
83	MP4C	Z	9.525	5
84	MP4C	Mx	-.006	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	31.636	2
2	4A	Z	54.795	2
3	4A	Mx	0	2
4	4A	X	10.588	5
5	4A	Z	18.339	5
6	4A	Mx	0	5
7	1B	X	25.942	2
8	1B	Z	44.933	2
9	1B	Mx	0	2
10	MP1A	X	92.528	1.5
11	MP1A	Z	160.263	1.5
12	MP1A	Mx	-.046	1.5
13	MP1A	X	92.528	6.5
14	MP1A	Z	160.263	6.5
15	MP1A	Mx	-.046	6.5
16	MP1B	X	92.528	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	160.263	1.5
18	MP1B	Mx	.046	1.5
19	MP1B	X	92.528	6.5
20	MP1B	Z	160.263	6.5
21	MP1B	Mx	.046	6.5
22	MP1C	X	70.538	1.5
23	MP1C	Z	122.176	1.5
24	MP1C	Mx	.066	1.5
25	MP1C	X	70.538	6.5
26	MP1C	Z	122.176	6.5
27	MP1C	Mx	.066	6.5
28	MP4A	X	92.528	1.5
29	MP4A	Z	160.263	1.5
30	MP4A	Mx	-.046	1.5
31	MP4A	X	92.528	6.5
32	MP4A	Z	160.263	6.5
33	MP4A	Mx	-.046	6.5
34	MP4B	X	92.528	1.5
35	MP4B	Z	160.263	1.5
36	MP4B	Mx	.046	1.5
37	MP4B	X	92.528	6.5
38	MP4B	Z	160.263	6.5
39	MP4B	Mx	.046	6.5
40	MP4C	X	70.538	1.5
41	MP4C	Z	122.176	1.5
42	MP4C	Mx	.066	1.5
43	MP4C	X	70.538	6.5
44	MP4C	Z	122.176	6.5
45	MP4C	Mx	.066	6.5
46	MP3A	X	29.414	3
47	MP3A	Z	50.946	3
48	MP3A	Mx	-.015	3
49	MP3A	X	29.414	5
50	MP3A	Z	50.946	5
51	MP3A	Mx	-.015	5
52	MP3B	X	29.414	3
53	MP3B	Z	50.946	3
54	MP3B	Mx	.015	3
55	MP3B	X	29.414	5
56	MP3B	Z	50.946	5
57	MP3B	Mx	.015	5
58	MP3C	X	14.996	3
59	MP3C	Z	25.974	3
60	MP3C	Mx	.014	3
61	MP3C	X	14.996	5
62	MP3C	Z	25.974	5
63	MP3C	Mx	.014	5
64	OVP	X	57.772	1
65	OVP	Z	100.064	1
66	OVP	Mx	0	1
67	MP1A	X	31.608	2
68	MP1A	Z	54.747	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	.016	2
70	MP1C	X	24.434	2
71	MP1C	Z	42.322	2
72	MP1C	Mx	-.023	2
73	MP4B	X	38.246	2
74	MP4B	Z	66.244	2
75	MP4B	Mx	-.019	2
76	MP4C	X	29.877	2
77	MP4C	Z	51.749	2
78	MP4C	Mx	-.028	2
79	MP4B	X	9.01	5
80	MP4B	Z	15.606	5
81	MP4B	Mx	-.005	5
82	MP4C	X	11.008	5
83	MP4C	Z	19.066	5
84	MP4C	Mx	-.01	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	0	2
2	4A	Z	76.492	2
3	4A	Mx	0	2
4	4A	X	0	5
5	4A	Z	18.02	5
6	4A	Mx	0	5
7	1B	X	0	2
8	1B	Z	63.216	2
9	1B	Mx	0	2
10	MP1A	X	0	1.5
11	MP1A	Z	202.425	1.5
12	MP1A	Mx	0	1.5
13	MP1A	X	0	6.5
14	MP1A	Z	202.425	6.5
15	MP1A	Mx	0	6.5
16	MP1B	X	0	1.5
17	MP1B	Z	202.425	1.5
18	MP1B	Mx	0	1.5
19	MP1B	X	0	6.5
20	MP1B	Z	202.425	6.5
21	MP1B	Mx	0	6.5
22	MP1C	X	0	1.5
23	MP1C	Z	135.045	1.5
24	MP1C	Mx	.066	1.5
25	MP1C	X	0	6.5
26	MP1C	Z	135.045	6.5
27	MP1C	Mx	.066	6.5
28	MP4A	X	0	1.5
29	MP4A	Z	202.425	1.5
30	MP4A	Mx	0	1.5
31	MP4A	X	0	6.5
32	MP4A	Z	202.425	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	0	6.5
34	MP4B	X	0	1.5
35	MP4B	Z	202.425	1.5
36	MP4B	Mx	0	1.5
37	MP4B	X	0	6.5
38	MP4B	Z	202.425	6.5
39	MP4B	Mx	0	6.5
40	MP4C	X	0	1.5
41	MP4C	Z	135.045	1.5
42	MP4C	Mx	.066	1.5
43	MP4C	X	0	6.5
44	MP4C	Z	135.045	6.5
45	MP4C	Mx	.066	6.5
46	MP3A	X	0	3
47	MP3A	Z	70.215	3
48	MP3A	Mx	0	3
49	MP3A	X	0	5
50	MP3A	Z	70.215	5
51	MP3A	Mx	0	5
52	MP3B	X	0	3
53	MP3B	Z	70.215	3
54	MP3B	Mx	0	3
55	MP3B	X	0	5
56	MP3B	Z	70.215	5
57	MP3B	Mx	0	5
58	MP3C	X	0	3
59	MP3C	Z	26.038	3
60	MP3C	Mx	.013	3
61	MP3C	X	0	5
62	MP3C	Z	26.038	5
63	MP3C	Mx	.013	5
64	OVP	X	0	1
65	OVP	Z	132.431	1
66	OVP	Mx	0	1
67	MP1A	X	0	2
68	MP1A	Z	68.882	2
69	MP1A	Mx	0	2
70	MP1C	X	0	2
71	MP1C	Z	46.901	2
72	MP1C	Mx	-.023	2
73	MP4B	X	0	2
74	MP4B	Z	83.103	2
75	MP4B	Mx	0	2
76	MP4C	X	0	2
77	MP4C	Z	57.458	2
78	MP4C	Mx	-.028	2
79	MP4B	X	0	5
80	MP4B	Z	16.443	5
81	MP4B	Mx	0	5
82	MP4C	X	0	5
83	MP4C	Z	22.563	5
84	MP4C	Mx	-.011	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-41.551	2
2	4A	Z	71.969	2
3	4A	Mx	0	2
4	4A	X	-8.221	5
5	4A	Z	14.24	5
6	4A	Mx	0	5
7	1B	X	-34.441	2
8	1B	Z	59.654	2
9	1B	Mx	0	2
10	MP1A	X	-92.528	1.5
11	MP1A	Z	160.263	1.5
12	MP1A	Mx	.046	1.5
13	MP1A	X	-92.528	6.5
14	MP1A	Z	160.263	6.5
15	MP1A	Mx	.046	6.5
16	MP1B	X	-92.528	1.5
17	MP1B	Z	160.263	1.5
18	MP1B	Mx	-.046	1.5
19	MP1B	X	-92.528	6.5
20	MP1B	Z	160.263	6.5
21	MP1B	Mx	-.046	6.5
22	MP1C	X	-80.828	1.5
23	MP1C	Z	139.997	1.5
24	MP1C	Mx	.062	1.5
25	MP1C	X	-80.828	6.5
26	MP1C	Z	139.997	6.5
27	MP1C	Mx	.062	6.5
28	MP4A	X	-92.528	1.5
29	MP4A	Z	160.263	1.5
30	MP4A	Mx	.046	1.5
31	MP4A	X	-92.528	6.5
32	MP4A	Z	160.263	6.5
33	MP4A	Mx	.046	6.5
34	MP4B	X	-92.528	1.5
35	MP4B	Z	160.263	1.5
36	MP4B	Mx	-.046	1.5
37	MP4B	X	-92.528	6.5
38	MP4B	Z	160.263	6.5
39	MP4B	Mx	-.046	6.5
40	MP4C	X	-80.828	1.5
41	MP4C	Z	139.997	1.5
42	MP4C	Mx	.062	1.5
43	MP4C	X	-80.828	6.5
44	MP4C	Z	139.997	6.5
45	MP4C	Mx	.062	6.5
46	MP3A	X	-29.414	3
47	MP3A	Z	50.946	3
48	MP3A	Mx	.015	3
49	MP3A	X	-29.414	5
50	MP3A	Z	50.946	5
51	MP3A	Mx	.015	5
52	MP3B	X	-29.414	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	50.946	3
54	MP3B	Mx	-.015	3
55	MP3B	X	-29.414	5
56	MP3B	Z	50.946	5
57	MP3B	Mx	-.015	5
58	MP3C	X	-21.742	3
59	MP3C	Z	37.659	3
60	MP3C	Mx	.017	3
61	MP3C	X	-21.742	5
62	MP3C	Z	37.659	5
63	MP3C	Mx	.017	5
64	OVP	X	-70.438	1
65	OVP	Z	122.001	1
66	OVP	Mx	0	1
67	MP1A	X	-31.608	2
68	MP1A	Z	54.747	2
69	MP1A	Mx	-.016	2
70	MP1C	X	-27.791	2
71	MP1C	Z	48.135	2
72	MP1C	Mx	-.021	2
73	MP4B	X	-38.246	2
74	MP4B	Z	66.244	2
75	MP4B	Mx	.019	2
76	MP4C	X	-33.793	2
77	MP4C	Z	58.531	2
78	MP4C	Mx	-.026	2
79	MP4B	X	-9.01	5
80	MP4B	Z	15.606	5
81	MP4B	Mx	.005	5
82	MP4C	X	-10.073	5
83	MP4C	Z	17.447	5
84	MP4C	Mx	-.008	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-66.244	2
2	4A	Z	38.246	2
3	4A	Mx	0	2
4	4A	X	-15.606	5
5	4A	Z	9.01	5
6	4A	Mx	0	5
7	1B	X	-54.747	2
8	1B	Z	31.608	2
9	1B	Mx	0	2
10	MP1A	X	-130.18	1.5
11	MP1A	Z	75.159	1.5
12	MP1A	Mx	.065	1.5
13	MP1A	X	-130.18	6.5
14	MP1A	Z	75.159	6.5
15	MP1A	Mx	.065	6.5
16	MP1B	X	-130.18	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	75.159	1.5
18	MP1B	Mx	-.065	1.5
19	MP1B	X	-130.18	6.5
20	MP1B	Z	75.159	6.5
21	MP1B	Mx	-.065	6.5
22	MP1C	X	-168.267	1.5
23	MP1C	Z	97.149	1.5
24	MP1C	Mx	.033	1.5
25	MP1C	X	-168.267	6.5
26	MP1C	Z	97.149	6.5
27	MP1C	Mx	.033	6.5
28	MP4A	X	-130.18	1.5
29	MP4A	Z	75.159	1.5
30	MP4A	Mx	.065	1.5
31	MP4A	X	-130.18	6.5
32	MP4A	Z	75.159	6.5
33	MP4A	Mx	.065	6.5
34	MP4B	X	-130.18	1.5
35	MP4B	Z	75.159	1.5
36	MP4B	Mx	-.065	1.5
37	MP4B	X	-130.18	6.5
38	MP4B	Z	75.159	6.5
39	MP4B	Mx	-.065	6.5
40	MP4C	X	-168.267	1.5
41	MP4C	Z	97.149	1.5
42	MP4C	Mx	.033	1.5
43	MP4C	X	-168.267	6.5
44	MP4C	Z	97.149	6.5
45	MP4C	Mx	.033	6.5
46	MP3A	X	-31.222	3
47	MP3A	Z	18.026	3
48	MP3A	Mx	.016	3
49	MP3A	X	-31.222	5
50	MP3A	Z	18.026	5
51	MP3A	Mx	.016	5
52	MP3B	X	-31.222	3
53	MP3B	Z	18.026	3
54	MP3B	Mx	-.016	3
55	MP3B	X	-31.222	5
56	MP3B	Z	18.026	5
57	MP3B	Mx	-.016	5
58	MP3C	X	-56.194	3
59	MP3C	Z	32.443	3
60	MP3C	Mx	.011	3
61	MP3C	X	-56.194	5
62	MP3C	Z	32.443	5
63	MP3C	Mx	.011	5
64	OVP	X	-114.689	1
65	OVP	Z	66.216	1
66	OVP	Mx	0	1
67	MP1A	X	-44.933	2
68	MP1A	Z	25.942	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	-.022	2
70	MP1C	X	-57.358	2
71	MP1C	Z	33.115	2
72	MP1C	Mx	-.011	2
73	MP4B	X	-54.795	2
74	MP4B	Z	31.636	2
75	MP4B	Mx	.027	2
76	MP4C	X	-69.291	2
77	MP4C	Z	40.005	2
78	MP4C	Mx	-.014	2
79	MP4B	X	-18.339	5
80	MP4B	Z	10.588	5
81	MP4B	Mx	.009	5
82	MP4C	X	-14.879	5
83	MP4C	Z	8.591	5
84	MP4C	Mx	-.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-63.272	2
2	4A	Z	0	2
3	4A	Mx	0	2
4	4A	X	-21.176	5
5	4A	Z	0	5
6	4A	Mx	0	5
7	1B	X	-51.884	2
8	1B	Z	0	2
9	1B	Mx	0	2
10	MP1A	X	-132.95	1.5
11	MP1A	Z	0	1.5
12	MP1A	Mx	.066	1.5
13	MP1A	X	-132.95	6.5
14	MP1A	Z	0	6.5
15	MP1A	Mx	.066	6.5
16	MP1B	X	-132.95	1.5
17	MP1B	Z	0	1.5
18	MP1B	Mx	-.066	1.5
19	MP1B	X	-132.95	6.5
20	MP1B	Z	0	6.5
21	MP1B	Mx	-.066	6.5
22	MP1C	X	-200.33	1.5
23	MP1C	Z	0	1.5
24	MP1C	Mx	-.017	1.5
25	MP1C	X	-200.33	6.5
26	MP1C	Z	0	6.5
27	MP1C	Mx	-.017	6.5
28	MP4A	X	-132.95	1.5
29	MP4A	Z	0	1.5
30	MP4A	Mx	.066	1.5
31	MP4A	X	-132.95	6.5
32	MP4A	Z	0	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	.066	6.5
34	MP4B	X	-132.95	1.5
35	MP4B	Z	0	1.5
36	MP4B	Mx	-.066	1.5
37	MP4B	X	-132.95	6.5
38	MP4B	Z	0	6.5
39	MP4B	Mx	-.066	6.5
40	MP4C	X	-200.33	1.5
41	MP4C	Z	0	1.5
42	MP4C	Mx	-.017	1.5
43	MP4C	X	-200.33	6.5
44	MP4C	Z	0	6.5
45	MP4C	Mx	-.017	6.5
46	MP3A	X	-24.664	3
47	MP3A	Z	0	3
48	MP3A	Mx	.012	3
49	MP3A	X	-24.664	5
50	MP3A	Z	0	5
51	MP3A	Mx	.012	5
52	MP3B	X	-24.664	3
53	MP3B	Z	0	3
54	MP3B	Mx	-.012	3
55	MP3B	X	-24.664	5
56	MP3B	Z	0	5
57	MP3B	Mx	-.012	5
58	MP3C	X	-68.842	3
59	MP3C	Z	0	3
60	MP3C	Mx	-.006	3
61	MP3C	X	-68.842	5
62	MP3C	Z	0	5
63	MP3C	Mx	-.006	5
64	OVP	X	-115.544	1
65	OVP	Z	0	1
66	OVP	Mx	0	1
67	MP1A	X	-46.218	2
68	MP1A	Z	0	2
69	MP1A	Mx	-.023	2
70	MP1C	X	-68.199	2
71	MP1C	Z	0	2
72	MP1C	Mx	.006	2
73	MP4B	X	-56.661	2
74	MP4B	Z	0	2
75	MP4B	Mx	.028	2
76	MP4C	X	-82.306	2
77	MP4C	Z	0	2
78	MP4C	Mx	.007	2
79	MP4B	X	-22.753	5
80	MP4B	Z	0	5
81	MP4B	Mx	.011	5
82	MP4C	X	-16.633	5
83	MP4C	Z	0	5
84	MP4C	Mx	.001	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-49.07	2
2	4A	Z	-28.331	2
3	4A	Mx	0	2
4	4A	X	-19.705	5
5	4A	Z	-11.377	5
6	4A	Mx	0	5
7	1B	X	-40.026	2
8	1B	Z	-23.109	2
9	1B	Mx	0	2
10	MP1A	X	-130.18	1.5
11	MP1A	Z	-75.159	1.5
12	MP1A	Mx	.065	1.5
13	MP1A	X	-130.18	6.5
14	MP1A	Z	-75.159	6.5
15	MP1A	Mx	.065	6.5
16	MP1B	X	-130.18	1.5
17	MP1B	Z	-75.159	1.5
18	MP1B	Mx	-.065	1.5
19	MP1B	X	-130.18	6.5
20	MP1B	Z	-75.159	6.5
21	MP1B	Mx	-.065	6.5
22	MP1C	X	-150.445	1.5
23	MP1C	Z	-86.86	1.5
24	MP1C	Mx	-.056	1.5
25	MP1C	X	-150.445	6.5
26	MP1C	Z	-86.86	6.5
27	MP1C	Mx	-.056	6.5
28	MP4A	X	-130.18	1.5
29	MP4A	Z	-75.159	1.5
30	MP4A	Mx	.065	1.5
31	MP4A	X	-130.18	6.5
32	MP4A	Z	-75.159	6.5
33	MP4A	Mx	.065	6.5
34	MP4B	X	-130.18	1.5
35	MP4B	Z	-75.159	1.5
36	MP4B	Mx	-.065	1.5
37	MP4B	X	-130.18	6.5
38	MP4B	Z	-75.159	6.5
39	MP4B	Mx	-.065	6.5
40	MP4C	X	-150.445	1.5
41	MP4C	Z	-86.86	1.5
42	MP4C	Mx	-.056	1.5
43	MP4C	X	-150.445	6.5
44	MP4C	Z	-86.86	6.5
45	MP4C	Mx	-.056	6.5
46	MP3A	X	-31.222	3
47	MP3A	Z	-18.026	3
48	MP3A	Mx	.016	3
49	MP3A	X	-31.222	5
50	MP3A	Z	-18.026	5
51	MP3A	Mx	.016	5
52	MP3B	X	-31.222	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	-18.026	3
54	MP3B	Mx	-.016	3
55	MP3B	X	-31.222	5
56	MP3B	Z	-18.026	5
57	MP3B	Mx	-.016	5
58	MP3C	X	-44.509	3
59	MP3C	Z	-25.697	3
60	MP3C	Mx	-.017	3
61	MP3C	X	-44.509	5
62	MP3C	Z	-25.697	5
63	MP3C	Mx	-.017	5
64	OVP	X	-92.752	1
65	OVP	Z	-53.55	1
66	OVP	Mx	0	1
67	MP1A	X	-44.933	2
68	MP1A	Z	-25.942	2
69	MP1A	Mx	-.022	2
70	MP1C	X	-51.544	2
71	MP1C	Z	-29.759	2
72	MP1C	Mx	.019	2
73	MP4B	X	-54.795	2
74	MP4B	Z	-31.636	2
75	MP4B	Mx	.027	2
76	MP4C	X	-62.508	2
77	MP4C	Z	-36.089	2
78	MP4C	Mx	.023	2
79	MP4B	X	-18.339	5
80	MP4B	Z	-10.588	5
81	MP4B	Mx	.009	5
82	MP4C	X	-16.498	5
83	MP4C	Z	-9.525	5
84	MP4C	Mx	.006	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-31.636	2
2	4A	Z	-54.795	2
3	4A	Mx	0	2
4	4A	X	-10.588	5
5	4A	Z	-18.339	5
6	4A	Mx	0	5
7	1B	X	-25.942	2
8	1B	Z	-44.933	2
9	1B	Mx	0	2
10	MP1A	X	-92.528	1.5
11	MP1A	Z	-160.263	1.5
12	MP1A	Mx	.046	1.5
13	MP1A	X	-92.528	6.5
14	MP1A	Z	-160.263	6.5
15	MP1A	Mx	.046	6.5
16	MP1B	X	-92.528	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	-160.263	1.5
18	MP1B	Mx	-.046	1.5
19	MP1B	X	-92.528	6.5
20	MP1B	Z	-160.263	6.5
21	MP1B	Mx	-.046	6.5
22	MP1C	X	-70.538	1.5
23	MP1C	Z	-122.176	1.5
24	MP1C	Mx	-.066	1.5
25	MP1C	X	-70.538	6.5
26	MP1C	Z	-122.176	6.5
27	MP1C	Mx	-.066	6.5
28	MP4A	X	-92.528	1.5
29	MP4A	Z	-160.263	1.5
30	MP4A	Mx	.046	1.5
31	MP4A	X	-92.528	6.5
32	MP4A	Z	-160.263	6.5
33	MP4A	Mx	.046	6.5
34	MP4B	X	-92.528	1.5
35	MP4B	Z	-160.263	1.5
36	MP4B	Mx	-.046	1.5
37	MP4B	X	-92.528	6.5
38	MP4B	Z	-160.263	6.5
39	MP4B	Mx	-.046	6.5
40	MP4C	X	-70.538	1.5
41	MP4C	Z	-122.176	1.5
42	MP4C	Mx	-.066	1.5
43	MP4C	X	-70.538	6.5
44	MP4C	Z	-122.176	6.5
45	MP4C	Mx	-.066	6.5
46	MP3A	X	-29.414	3
47	MP3A	Z	-50.946	3
48	MP3A	Mx	.015	3
49	MP3A	X	-29.414	5
50	MP3A	Z	-50.946	5
51	MP3A	Mx	.015	5
52	MP3B	X	-29.414	3
53	MP3B	Z	-50.946	3
54	MP3B	Mx	-.015	3
55	MP3B	X	-29.414	5
56	MP3B	Z	-50.946	5
57	MP3B	Mx	-.015	5
58	MP3C	X	-14.996	3
59	MP3C	Z	-25.974	3
60	MP3C	Mx	-.014	3
61	MP3C	X	-14.996	5
62	MP3C	Z	-25.974	5
63	MP3C	Mx	-.014	5
64	OVP	X	-57.772	1
65	OVP	Z	-100.064	1
66	OVP	Mx	0	1
67	MP1A	X	-31.608	2
68	MP1A	Z	-54.747	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	-.016	2
70	MP1C	X	-24.434	2
71	MP1C	Z	-42.322	2
72	MP1C	Mx	.023	2
73	MP4B	X	-38.246	2
74	MP4B	Z	-66.244	2
75	MP4B	Mx	.019	2
76	MP4C	X	-29.877	2
77	MP4C	Z	-51.749	2
78	MP4C	Mx	.028	2
79	MP4B	X	-9.01	5
80	MP4B	Z	-15.606	5
81	MP4B	Mx	.005	5
82	MP4C	X	-11.008	5
83	MP4C	Z	-19.066	5
84	MP4C	Mx	.01	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	0	2
2	4A	Z	-14.72	2
3	4A	Mx	0	2
4	4A	X	0	5
5	4A	Z	-4.157	5
6	4A	Mx	0	5
7	1B	X	0	2
8	1B	Z	-14.672	2
9	1B	Mx	0	2
10	MP1A	X	0	1.5
11	MP1A	Z	-35.459	1.5
12	MP1A	Mx	0	1.5
13	MP1A	X	0	6.5
14	MP1A	Z	-35.459	6.5
15	MP1A	Mx	0	6.5
16	MP1B	X	0	1.5
17	MP1B	Z	-35.459	1.5
18	MP1B	Mx	0	1.5
19	MP1B	X	0	6.5
20	MP1B	Z	-35.459	6.5
21	MP1B	Mx	0	6.5
22	MP1C	X	0	1.5
23	MP1C	Z	-24.52	1.5
24	MP1C	Mx	-.012	1.5
25	MP1C	X	0	6.5
26	MP1C	Z	-24.52	6.5
27	MP1C	Mx	-.012	6.5
28	MP4A	X	0	1.5
29	MP4A	Z	-35.459	1.5
30	MP4A	Mx	0	1.5
31	MP4A	X	0	6.5
32	MP4A	Z	-35.459	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	0	6.5
34	MP4B	X	0	1.5
35	MP4B	Z	-35.459	1.5
36	MP4B	Mx	0	1.5
37	MP4B	X	0	6.5
38	MP4B	Z	-35.459	6.5
39	MP4B	Mx	0	6.5
40	MP4C	X	0	1.5
41	MP4C	Z	-24.52	1.5
42	MP4C	Mx	-.012	1.5
43	MP4C	X	0	6.5
44	MP4C	Z	-24.52	6.5
45	MP4C	Mx	-.012	6.5
46	MP3A	X	0	3
47	MP3A	Z	-15.384	3
48	MP3A	Mx	0	3
49	MP3A	X	0	5
50	MP3A	Z	-15.384	5
51	MP3A	Mx	0	5
52	MP3B	X	0	3
53	MP3B	Z	-15.384	3
54	MP3B	Mx	0	3
55	MP3B	X	0	5
56	MP3B	Z	-15.384	5
57	MP3B	Mx	0	5
58	MP3C	X	0	3
59	MP3C	Z	-6.758	3
60	MP3C	Mx	-.003	3
61	MP3C	X	0	5
62	MP3C	Z	-6.758	5
63	MP3C	Mx	-.003	5
64	OVP	X	0	1
65	OVP	Z	-30.874	1
66	OVP	Mx	0	1
67	MP1A	X	0	2
68	MP1A	Z	-15.882	2
69	MP1A	Mx	0	2
70	MP1C	X	0	2
71	MP1C	Z	-11.189	2
72	MP1C	Mx	.006	2
73	MP4B	X	0	2
74	MP4B	Z	-15.882	2
75	MP4B	Mx	0	2
76	MP4C	X	0	2
77	MP4C	Z	-11.377	2
78	MP4C	Mx	.006	2
79	MP4B	X	0	5
80	MP4B	Z	-3.847	5
81	MP4B	Mx	0	5
82	MP4C	X	0	5
83	MP4C	Z	-5.047	5
84	MP4C	Mx	.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	7.941	2
2	4A	Z	-13.754	2
3	4A	Mx	0	2
4	4A	X	1.924	5
5	4A	Z	-3.332	5
6	4A	Mx	0	5
7	1B	X	7.941	2
8	1B	Z	-13.754	2
9	1B	Mx	0	2
10	MP1A	X	16.319	1.5
11	MP1A	Z	-28.266	1.5
12	MP1A	Mx	-.008	1.5
13	MP1A	X	16.319	6.5
14	MP1A	Z	-28.266	6.5
15	MP1A	Mx	-.008	6.5
16	MP1B	X	16.319	1.5
17	MP1B	Z	-28.266	1.5
18	MP1B	Mx	.008	1.5
19	MP1B	X	16.319	6.5
20	MP1B	Z	-28.266	6.5
21	MP1B	Mx	.008	6.5
22	MP1C	X	14.42	1.5
23	MP1C	Z	-24.976	1.5
24	MP1C	Mx	-.011	1.5
25	MP1C	X	14.42	6.5
26	MP1C	Z	-24.976	6.5
27	MP1C	Mx	-.011	6.5
28	MP4A	X	16.319	1.5
29	MP4A	Z	-28.266	1.5
30	MP4A	Mx	-.008	1.5
31	MP4A	X	16.319	6.5
32	MP4A	Z	-28.266	6.5
33	MP4A	Mx	-.008	6.5
34	MP4B	X	16.319	1.5
35	MP4B	Z	-28.266	1.5
36	MP4B	Mx	.008	1.5
37	MP4B	X	16.319	6.5
38	MP4B	Z	-28.266	6.5
39	MP4B	Mx	.008	6.5
40	MP4C	X	14.42	1.5
41	MP4C	Z	-24.976	1.5
42	MP4C	Mx	-.011	1.5
43	MP4C	X	14.42	6.5
44	MP4C	Z	-24.976	6.5
45	MP4C	Mx	-.011	6.5
46	MP3A	X	6.58	3
47	MP3A	Z	-11.397	3
48	MP3A	Mx	-.003	3
49	MP3A	X	6.58	5
50	MP3A	Z	-11.397	5
51	MP3A	Mx	-.003	5
52	MP3B	X	6.58	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	-11.397	3
54	MP3B	Mx	.003	3
55	MP3B	X	6.58	5
56	MP3B	Z	-11.397	5
57	MP3B	Mx	.003	5
58	MP3C	X	5.082	3
59	MP3C	Z	-8.803	3
60	MP3C	Mx	-.004	3
61	MP3C	X	5.082	5
62	MP3C	Z	-8.803	5
63	MP3C	Mx	-.004	5
64	OVP	X	16.327	1
65	OVP	Z	-28.28	1
66	OVP	Mx	0	1
67	MP1A	X	7.336	2
68	MP1A	Z	-12.706	2
69	MP1A	Mx	.004	2
70	MP1C	X	6.521	2
71	MP1C	Z	-11.295	2
72	MP1C	Mx	.005	2
73	MP4B	X	7.36	2
74	MP4B	Z	-12.748	2
75	MP4B	Mx	-.004	2
76	MP4C	X	6.578	2
77	MP4C	Z	-11.393	2
78	MP4C	Mx	.005	2
79	MP4B	X	2.078	5
80	MP4B	Z	-3.6	5
81	MP4B	Mx	-.001	5
82	MP4C	X	2.287	5
83	MP4C	Z	-3.961	5
84	MP4C	Mx	.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	12.748	2
2	4A	Z	-7.36	2
3	4A	Mx	0	2
4	4A	X	3.6	5
5	4A	Z	-2.078	5
6	4A	Mx	0	5
7	1B	X	12.706	2
8	1B	Z	-7.336	2
9	1B	Mx	0	2
10	MP1A	X	23.382	1.5
11	MP1A	Z	-13.5	1.5
12	MP1A	Mx	-.012	1.5
13	MP1A	X	23.382	6.5
14	MP1A	Z	-13.5	6.5
15	MP1A	Mx	-.012	6.5
16	MP1B	X	23.382	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	-13.5	1.5
18	MP1B	Mx	.012	1.5
19	MP1B	X	23.382	6.5
20	MP1B	Z	-13.5	6.5
21	MP1B	Mx	.012	6.5
22	MP1C	X	29.566	1.5
23	MP1C	Z	-17.07	1.5
24	MP1C	Mx	-.006	1.5
25	MP1C	X	29.566	6.5
26	MP1C	Z	-17.07	6.5
27	MP1C	Mx	-.006	6.5
28	MP4A	X	23.382	1.5
29	MP4A	Z	-13.5	1.5
30	MP4A	Mx	-.012	1.5
31	MP4A	X	23.382	6.5
32	MP4A	Z	-13.5	6.5
33	MP4A	Mx	-.012	6.5
34	MP4B	X	23.382	1.5
35	MP4B	Z	-13.5	1.5
36	MP4B	Mx	.012	1.5
37	MP4B	X	23.382	6.5
38	MP4B	Z	-13.5	6.5
39	MP4B	Mx	.012	6.5
40	MP4C	X	29.566	1.5
41	MP4C	Z	-17.07	1.5
42	MP4C	Mx	-.006	1.5
43	MP4C	X	29.566	6.5
44	MP4C	Z	-17.07	6.5
45	MP4C	Mx	-.006	6.5
46	MP3A	X	7.546	3
47	MP3A	Z	-4.357	3
48	MP3A	Mx	-.004	3
49	MP3A	X	7.546	5
50	MP3A	Z	-4.357	5
51	MP3A	Mx	-.004	5
52	MP3B	X	7.546	3
53	MP3B	Z	-4.357	3
54	MP3B	Mx	.004	3
55	MP3B	X	7.546	5
56	MP3B	Z	-4.357	5
57	MP3B	Mx	.004	5
58	MP3C	X	12.422	3
59	MP3C	Z	-7.172	3
60	MP3C	Mx	-.002	3
61	MP3C	X	12.422	5
62	MP3C	Z	-7.172	5
63	MP3C	Mx	-.002	5
64	OVP	X	26.737	1
65	OVP	Z	-15.437	1
66	OVP	Mx	0	1
67	MP1A	X	10.611	2
68	MP1A	Z	-6.126	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	.005	2
70	MP1C	X	13.264	2
71	MP1C	Z	-7.658	2
72	MP1C	Mx	.003	2
73	MP4B	X	10.737	2
74	MP4B	Z	-6.199	2
75	MP4B	Mx	-.005	2
76	MP4C	X	13.283	2
77	MP4C	Z	-7.669	2
78	MP4C	Mx	.003	2
79	MP4B	X	4.136	5
80	MP4B	Z	-2.388	5
81	MP4B	Mx	-.002	5
82	MP4C	X	3.457	5
83	MP4C	Z	-1.996	5
84	MP4C	Mx	.000683	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	12.398	2
2	4A	Z	0	2
3	4A	Mx	0	2
4	4A	X	4.775	5
5	4A	Z	0	5
6	4A	Mx	0	5
7	1B	X	12.253	2
8	1B	Z	0	2
9	1B	Mx	0	2
10	MP1A	X	24.179	1.5
11	MP1A	Z	0	1.5
12	MP1A	Mx	-.012	1.5
13	MP1A	X	24.179	6.5
14	MP1A	Z	0	6.5
15	MP1A	Mx	-.012	6.5
16	MP1B	X	24.179	1.5
17	MP1B	Z	0	1.5
18	MP1B	Mx	.012	1.5
19	MP1B	X	24.179	6.5
20	MP1B	Z	0	6.5
21	MP1B	Mx	.012	6.5
22	MP1C	X	35.119	1.5
23	MP1C	Z	0	1.5
24	MP1C	Mx	.003	1.5
25	MP1C	X	35.119	6.5
26	MP1C	Z	0	6.5
27	MP1C	Mx	.003	6.5
28	MP4A	X	24.179	1.5
29	MP4A	Z	0	1.5
30	MP4A	Mx	-.012	1.5
31	MP4A	X	24.179	6.5
32	MP4A	Z	0	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	-.012	6.5
34	MP4B	X	24.179	1.5
35	MP4B	Z	0	1.5
36	MP4B	Mx	.012	1.5
37	MP4B	X	24.179	6.5
38	MP4B	Z	0	6.5
39	MP4B	Mx	.012	6.5
40	MP4C	X	35.119	1.5
41	MP4C	Z	0	1.5
42	MP4C	Mx	.003	1.5
43	MP4C	X	35.119	6.5
44	MP4C	Z	0	6.5
45	MP4C	Mx	.003	6.5
46	MP3A	X	6.49	3
47	MP3A	Z	0	3
48	MP3A	Mx	-.003	3
49	MP3A	X	6.49	5
50	MP3A	Z	0	5
51	MP3A	Mx	-.003	5
52	MP3B	X	6.49	3
53	MP3B	Z	0	3
54	MP3B	Mx	.003	3
55	MP3B	X	6.49	5
56	MP3B	Z	0	5
57	MP3B	Mx	.003	5
58	MP3C	X	15.115	3
59	MP3C	Z	0	3
60	MP3C	Mx	.001	3
61	MP3C	X	15.115	5
62	MP3C	Z	0	5
63	MP3C	Mx	.001	5
64	OVP	X	27.311	1
65	OVP	Z	0	1
66	OVP	Mx	0	1
67	MP1A	X	11.043	2
68	MP1A	Z	0	2
69	MP1A	Mx	.006	2
70	MP1C	X	15.736	2
71	MP1C	Z	0	2
72	MP1C	Mx	-.001	2
73	MP4B	X	11.236	2
74	MP4B	Z	0	2
75	MP4B	Mx	-.006	2
76	MP4C	X	15.742	2
77	MP4C	Z	0	2
78	MP4C	Mx	-.001	2
79	MP4B	X	5.085	5
80	MP4B	Z	0	5
81	MP4B	Mx	-.003	5
82	MP4C	X	3.885	5
83	MP4C	Z	0	5
84	MP4C	Mx	-.000337	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	9.731	2
2	4A	Z	5.618	2
3	4A	Mx	0	2
4	4A	X	4.403	5
5	4A	Z	2.542	5
6	4A	Mx	0	5
7	1B	X	9.563	2
8	1B	Z	5.521	2
9	1B	Mx	0	2
10	MP1A	X	23.382	1.5
11	MP1A	Z	13.5	1.5
12	MP1A	Mx	-.012	1.5
13	MP1A	X	23.382	6.5
14	MP1A	Z	13.5	6.5
15	MP1A	Mx	-.012	6.5
16	MP1B	X	23.382	1.5
17	MP1B	Z	13.5	1.5
18	MP1B	Mx	.012	1.5
19	MP1B	X	23.382	6.5
20	MP1B	Z	13.5	6.5
21	MP1B	Mx	.012	6.5
22	MP1C	X	26.672	1.5
23	MP1C	Z	15.399	1.5
24	MP1C	Mx	.01	1.5
25	MP1C	X	26.672	6.5
26	MP1C	Z	15.399	6.5
27	MP1C	Mx	.01	6.5
28	MP4A	X	23.382	1.5
29	MP4A	Z	13.5	1.5
30	MP4A	Mx	-.012	1.5
31	MP4A	X	23.382	6.5
32	MP4A	Z	13.5	6.5
33	MP4A	Mx	-.012	6.5
34	MP4B	X	23.382	1.5
35	MP4B	Z	13.5	1.5
36	MP4B	Mx	.012	1.5
37	MP4B	X	23.382	6.5
38	MP4B	Z	13.5	6.5
39	MP4B	Mx	.012	6.5
40	MP4C	X	26.672	1.5
41	MP4C	Z	15.399	1.5
42	MP4C	Mx	.01	1.5
43	MP4C	X	26.672	6.5
44	MP4C	Z	15.399	6.5
45	MP4C	Mx	.01	6.5
46	MP3A	X	7.546	3
47	MP3A	Z	4.357	3
48	MP3A	Mx	-.004	3
49	MP3A	X	7.546	5
50	MP3A	Z	4.357	5
51	MP3A	Mx	-.004	5
52	MP3B	X	7.546	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	4.357	3
54	MP3B	Mx	.004	3
55	MP3B	X	7.546	5
56	MP3B	Z	4.357	5
57	MP3B	Mx	.004	5
58	MP3C	X	10.14	3
59	MP3C	Z	5.854	3
60	MP3C	Mx	.004	3
61	MP3C	X	10.14	5
62	MP3C	Z	5.854	5
63	MP3C	Mx	.004	5
64	OVP	X	22.11	1
65	OVP	Z	12.765	1
66	OVP	Mx	0	1
67	MP1A	X	10.611	2
68	MP1A	Z	6.126	2
69	MP1A	Mx	.005	2
70	MP1C	X	12.023	2
71	MP1C	Z	6.941	2
72	MP1C	Mx	-.004	2
73	MP4B	X	10.737	2
74	MP4B	Z	6.199	2
75	MP4B	Mx	-.005	2
76	MP4C	X	12.092	2
77	MP4C	Z	6.981	2
78	MP4C	Mx	-.004	2
79	MP4B	X	4.136	5
80	MP4B	Z	2.388	5
81	MP4B	Mx	-.002	5
82	MP4C	X	3.775	5
83	MP4C	Z	2.179	5
84	MP4C	Mx	-.001	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	6.199	2
2	4A	Z	10.737	2
3	4A	Mx	0	2
4	4A	X	2.388	5
5	4A	Z	4.136	5
6	4A	Mx	0	5
7	1B	X	6.126	2
8	1B	Z	10.611	2
9	1B	Mx	0	2
10	MP1A	X	16.319	1.5
11	MP1A	Z	28.266	1.5
12	MP1A	Mx	-.008	1.5
13	MP1A	X	16.319	6.5
14	MP1A	Z	28.266	6.5
15	MP1A	Mx	-.008	6.5
16	MP1B	X	16.319	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	28.266	1.5
18	MP1B	Mx	.008	1.5
19	MP1B	X	16.319	6.5
20	MP1B	Z	28.266	6.5
21	MP1B	Mx	.008	6.5
22	MP1C	X	12.749	1.5
23	MP1C	Z	22.083	1.5
24	MP1C	Mx	.012	1.5
25	MP1C	X	12.749	6.5
26	MP1C	Z	22.083	6.5
27	MP1C	Mx	.012	6.5
28	MP4A	X	16.319	1.5
29	MP4A	Z	28.266	1.5
30	MP4A	Mx	-.008	1.5
31	MP4A	X	16.319	6.5
32	MP4A	Z	28.266	6.5
33	MP4A	Mx	-.008	6.5
34	MP4B	X	16.319	1.5
35	MP4B	Z	28.266	1.5
36	MP4B	Mx	.008	1.5
37	MP4B	X	16.319	6.5
38	MP4B	Z	28.266	6.5
39	MP4B	Mx	.008	6.5
40	MP4C	X	12.749	1.5
41	MP4C	Z	22.083	1.5
42	MP4C	Mx	.012	1.5
43	MP4C	X	12.749	6.5
44	MP4C	Z	22.083	6.5
45	MP4C	Mx	.012	6.5
46	MP3A	X	6.58	3
47	MP3A	Z	11.397	3
48	MP3A	Mx	-.003	3
49	MP3A	X	6.58	5
50	MP3A	Z	11.397	5
51	MP3A	Mx	-.003	5
52	MP3B	X	6.58	3
53	MP3B	Z	11.397	3
54	MP3B	Mx	.003	3
55	MP3B	X	6.58	5
56	MP3B	Z	11.397	5
57	MP3B	Mx	.003	5
58	MP3C	X	3.765	3
59	MP3C	Z	6.521	3
60	MP3C	Mx	.004	3
61	MP3C	X	3.765	5
62	MP3C	Z	6.521	5
63	MP3C	Mx	.004	5
64	OVP	X	13.656	1
65	OVP	Z	23.652	1
66	OVP	Mx	0	1
67	MP1A	X	7.336	2
68	MP1A	Z	12.706	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	.004	2
70	MP1C	X	5.804	2
71	MP1C	Z	10.054	2
72	MP1C	Mx	-.005	2
73	MP4B	X	7.36	2
74	MP4B	Z	12.748	2
75	MP4B	Mx	-.004	2
76	MP4C	X	5.89	2
77	MP4C	Z	10.202	2
78	MP4C	Mx	-.006	2
79	MP4B	X	2.078	5
80	MP4B	Z	3.6	5
81	MP4B	Mx	-.001	5
82	MP4C	X	2.47	5
83	MP4C	Z	4.278	5
84	MP4C	Mx	-.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	0	2
2	4A	Z	14.72	2
3	4A	Mx	0	2
4	4A	X	0	5
5	4A	Z	4.157	5
6	4A	Mx	0	5
7	1B	X	0	2
8	1B	Z	14.672	2
9	1B	Mx	0	2
10	MP1A	X	0	1.5
11	MP1A	Z	35.459	1.5
12	MP1A	Mx	0	1.5
13	MP1A	X	0	6.5
14	MP1A	Z	35.459	6.5
15	MP1A	Mx	0	6.5
16	MP1B	X	0	1.5
17	MP1B	Z	35.459	1.5
18	MP1B	Mx	0	1.5
19	MP1B	X	0	6.5
20	MP1B	Z	35.459	6.5
21	MP1B	Mx	0	6.5
22	MP1C	X	0	1.5
23	MP1C	Z	24.52	1.5
24	MP1C	Mx	.012	1.5
25	MP1C	X	0	6.5
26	MP1C	Z	24.52	6.5
27	MP1C	Mx	.012	6.5
28	MP4A	X	0	1.5
29	MP4A	Z	35.459	1.5
30	MP4A	Mx	0	1.5
31	MP4A	X	0	6.5
32	MP4A	Z	35.459	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	0	6.5
34	MP4B	X	0	1.5
35	MP4B	Z	35.459	1.5
36	MP4B	Mx	0	1.5
37	MP4B	X	0	6.5
38	MP4B	Z	35.459	6.5
39	MP4B	Mx	0	6.5
40	MP4C	X	0	1.5
41	MP4C	Z	24.52	1.5
42	MP4C	Mx	.012	1.5
43	MP4C	X	0	6.5
44	MP4C	Z	24.52	6.5
45	MP4C	Mx	.012	6.5
46	MP3A	X	0	3
47	MP3A	Z	15.384	3
48	MP3A	Mx	0	3
49	MP3A	X	0	5
50	MP3A	Z	15.384	5
51	MP3A	Mx	0	5
52	MP3B	X	0	3
53	MP3B	Z	15.384	3
54	MP3B	Mx	0	3
55	MP3B	X	0	5
56	MP3B	Z	15.384	5
57	MP3B	Mx	0	5
58	MP3C	X	0	3
59	MP3C	Z	6.758	3
60	MP3C	Mx	.003	3
61	MP3C	X	0	5
62	MP3C	Z	6.758	5
63	MP3C	Mx	.003	5
64	OVP	X	0	1
65	OVP	Z	30.874	1
66	OVP	Mx	0	1
67	MP1A	X	0	2
68	MP1A	Z	15.882	2
69	MP1A	Mx	0	2
70	MP1C	X	0	2
71	MP1C	Z	11.189	2
72	MP1C	Mx	-.006	2
73	MP4B	X	0	2
74	MP4B	Z	15.882	2
75	MP4B	Mx	0	2
76	MP4C	X	0	2
77	MP4C	Z	11.377	2
78	MP4C	Mx	-.006	2
79	MP4B	X	0	5
80	MP4B	Z	3.847	5
81	MP4B	Mx	0	5
82	MP4C	X	0	5
83	MP4C	Z	5.047	5
84	MP4C	Mx	-.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-7.941	2
2	4A	Z	13.754	2
3	4A	Mx	0	2
4	4A	X	-1.924	5
5	4A	Z	3.332	5
6	4A	Mx	0	5
7	1B	X	-7.941	2
8	1B	Z	13.754	2
9	1B	Mx	0	2
10	MP1A	X	-16.319	1.5
11	MP1A	Z	28.266	1.5
12	MP1A	Mx	.008	1.5
13	MP1A	X	-16.319	6.5
14	MP1A	Z	28.266	6.5
15	MP1A	Mx	.008	6.5
16	MP1B	X	-16.319	1.5
17	MP1B	Z	28.266	1.5
18	MP1B	Mx	-.008	1.5
19	MP1B	X	-16.319	6.5
20	MP1B	Z	28.266	6.5
21	MP1B	Mx	-.008	6.5
22	MP1C	X	-14.42	1.5
23	MP1C	Z	24.976	1.5
24	MP1C	Mx	.011	1.5
25	MP1C	X	-14.42	6.5
26	MP1C	Z	24.976	6.5
27	MP1C	Mx	.011	6.5
28	MP4A	X	-16.319	1.5
29	MP4A	Z	28.266	1.5
30	MP4A	Mx	.008	1.5
31	MP4A	X	-16.319	6.5
32	MP4A	Z	28.266	6.5
33	MP4A	Mx	.008	6.5
34	MP4B	X	-16.319	1.5
35	MP4B	Z	28.266	1.5
36	MP4B	Mx	-.008	1.5
37	MP4B	X	-16.319	6.5
38	MP4B	Z	28.266	6.5
39	MP4B	Mx	-.008	6.5
40	MP4C	X	-14.42	1.5
41	MP4C	Z	24.976	1.5
42	MP4C	Mx	.011	1.5
43	MP4C	X	-14.42	6.5
44	MP4C	Z	24.976	6.5
45	MP4C	Mx	.011	6.5
46	MP3A	X	-6.58	3
47	MP3A	Z	11.397	3
48	MP3A	Mx	.003	3
49	MP3A	X	-6.58	5
50	MP3A	Z	11.397	5
51	MP3A	Mx	.003	5
52	MP3B	X	-6.58	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	11.397	3
54	MP3B	Mx	-.003	3
55	MP3B	X	-6.58	5
56	MP3B	Z	11.397	5
57	MP3B	Mx	-.003	5
58	MP3C	X	-5.082	3
59	MP3C	Z	8.803	3
60	MP3C	Mx	.004	3
61	MP3C	X	-5.082	5
62	MP3C	Z	8.803	5
63	MP3C	Mx	.004	5
64	OVP	X	-16.327	1
65	OVP	Z	28.28	1
66	OVP	Mx	0	1
67	MP1A	X	-7.336	2
68	MP1A	Z	12.706	2
69	MP1A	Mx	-.004	2
70	MP1C	X	-6.521	2
71	MP1C	Z	11.295	2
72	MP1C	Mx	-.005	2
73	MP4B	X	-7.36	2
74	MP4B	Z	12.748	2
75	MP4B	Mx	.004	2
76	MP4C	X	-6.578	2
77	MP4C	Z	11.393	2
78	MP4C	Mx	-.005	2
79	MP4B	X	-2.078	5
80	MP4B	Z	3.6	5
81	MP4B	Mx	.001	5
82	MP4C	X	-2.287	5
83	MP4C	Z	3.961	5
84	MP4C	Mx	-.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-12.748	2
2	4A	Z	7.36	2
3	4A	Mx	0	2
4	4A	X	-3.6	5
5	4A	Z	2.078	5
6	4A	Mx	0	5
7	1B	X	-12.706	2
8	1B	Z	7.336	2
9	1B	Mx	0	2
10	MP1A	X	-23.382	1.5
11	MP1A	Z	13.5	1.5
12	MP1A	Mx	.012	1.5
13	MP1A	X	-23.382	6.5
14	MP1A	Z	13.5	6.5
15	MP1A	Mx	.012	6.5
16	MP1B	X	-23.382	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	13.5	1.5
18	MP1B	Mx	-.012	1.5
19	MP1B	X	-23.382	6.5
20	MP1B	Z	13.5	6.5
21	MP1B	Mx	-.012	6.5
22	MP1C	X	-29.566	1.5
23	MP1C	Z	17.07	1.5
24	MP1C	Mx	.006	1.5
25	MP1C	X	-29.566	6.5
26	MP1C	Z	17.07	6.5
27	MP1C	Mx	.006	6.5
28	MP4A	X	-23.382	1.5
29	MP4A	Z	13.5	1.5
30	MP4A	Mx	.012	1.5
31	MP4A	X	-23.382	6.5
32	MP4A	Z	13.5	6.5
33	MP4A	Mx	.012	6.5
34	MP4B	X	-23.382	1.5
35	MP4B	Z	13.5	1.5
36	MP4B	Mx	-.012	1.5
37	MP4B	X	-23.382	6.5
38	MP4B	Z	13.5	6.5
39	MP4B	Mx	-.012	6.5
40	MP4C	X	-29.566	1.5
41	MP4C	Z	17.07	1.5
42	MP4C	Mx	.006	1.5
43	MP4C	X	-29.566	6.5
44	MP4C	Z	17.07	6.5
45	MP4C	Mx	.006	6.5
46	MP3A	X	-7.546	3
47	MP3A	Z	4.357	3
48	MP3A	Mx	.004	3
49	MP3A	X	-7.546	5
50	MP3A	Z	4.357	5
51	MP3A	Mx	.004	5
52	MP3B	X	-7.546	3
53	MP3B	Z	4.357	3
54	MP3B	Mx	-.004	3
55	MP3B	X	-7.546	5
56	MP3B	Z	4.357	5
57	MP3B	Mx	-.004	5
58	MP3C	X	-12.422	3
59	MP3C	Z	7.172	3
60	MP3C	Mx	.002	3
61	MP3C	X	-12.422	5
62	MP3C	Z	7.172	5
63	MP3C	Mx	.002	5
64	OVP	X	-26.737	1
65	OVP	Z	15.437	1
66	OVP	Mx	0	1
67	MP1A	X	-10.611	2
68	MP1A	Z	6.126	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	-.005	2
70	MP1C	X	-13.264	2
71	MP1C	Z	7.658	2
72	MP1C	Mx	-.003	2
73	MP4B	X	-10.737	2
74	MP4B	Z	6.199	2
75	MP4B	Mx	.005	2
76	MP4C	X	-13.283	2
77	MP4C	Z	7.669	2
78	MP4C	Mx	-.003	2
79	MP4B	X	-4.136	5
80	MP4B	Z	2.388	5
81	MP4B	Mx	.002	5
82	MP4C	X	-3.457	5
83	MP4C	Z	1.996	5
84	MP4C	Mx	-.000683	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-12.398	2
2	4A	Z	0	2
3	4A	Mx	0	2
4	4A	X	-4.775	5
5	4A	Z	0	5
6	4A	Mx	0	5
7	1B	X	-12.253	2
8	1B	Z	0	2
9	1B	Mx	0	2
10	MP1A	X	-24.179	1.5
11	MP1A	Z	0	1.5
12	MP1A	Mx	.012	1.5
13	MP1A	X	-24.179	6.5
14	MP1A	Z	0	6.5
15	MP1A	Mx	.012	6.5
16	MP1B	X	-24.179	1.5
17	MP1B	Z	0	1.5
18	MP1B	Mx	-.012	1.5
19	MP1B	X	-24.179	6.5
20	MP1B	Z	0	6.5
21	MP1B	Mx	-.012	6.5
22	MP1C	X	-35.119	1.5
23	MP1C	Z	0	1.5
24	MP1C	Mx	-.003	1.5
25	MP1C	X	-35.119	6.5
26	MP1C	Z	0	6.5
27	MP1C	Mx	-.003	6.5
28	MP4A	X	-24.179	1.5
29	MP4A	Z	0	1.5
30	MP4A	Mx	.012	1.5
31	MP4A	X	-24.179	6.5
32	MP4A	Z	0	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	.012	6.5
34	MP4B	X	-24.179	1.5
35	MP4B	Z	0	1.5
36	MP4B	Mx	-.012	1.5
37	MP4B	X	-24.179	6.5
38	MP4B	Z	0	6.5
39	MP4B	Mx	-.012	6.5
40	MP4C	X	-35.119	1.5
41	MP4C	Z	0	1.5
42	MP4C	Mx	-.003	1.5
43	MP4C	X	-35.119	6.5
44	MP4C	Z	0	6.5
45	MP4C	Mx	-.003	6.5
46	MP3A	X	-6.49	3
47	MP3A	Z	0	3
48	MP3A	Mx	.003	3
49	MP3A	X	-6.49	5
50	MP3A	Z	0	5
51	MP3A	Mx	.003	5
52	MP3B	X	-6.49	3
53	MP3B	Z	0	3
54	MP3B	Mx	-.003	3
55	MP3B	X	-6.49	5
56	MP3B	Z	0	5
57	MP3B	Mx	-.003	5
58	MP3C	X	-15.115	3
59	MP3C	Z	0	3
60	MP3C	Mx	-.001	3
61	MP3C	X	-15.115	5
62	MP3C	Z	0	5
63	MP3C	Mx	-.001	5
64	OVP	X	-27.311	1
65	OVP	Z	0	1
66	OVP	Mx	0	1
67	MP1A	X	-11.043	2
68	MP1A	Z	0	2
69	MP1A	Mx	-.006	2
70	MP1C	X	-15.736	2
71	MP1C	Z	0	2
72	MP1C	Mx	.001	2
73	MP4B	X	-11.236	2
74	MP4B	Z	0	2
75	MP4B	Mx	.006	2
76	MP4C	X	-15.742	2
77	MP4C	Z	0	2
78	MP4C	Mx	.001	2
79	MP4B	X	-5.085	5
80	MP4B	Z	0	5
81	MP4B	Mx	.003	5
82	MP4C	X	-3.885	5
83	MP4C	Z	0	5
84	MP4C	Mx	.000337	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-9.731	2
2	4A	Z	-5.618	2
3	4A	Mx	0	2
4	4A	X	-4.403	5
5	4A	Z	-2.542	5
6	4A	Mx	0	5
7	1B	X	-9.563	2
8	1B	Z	-5.521	2
9	1B	Mx	0	2
10	MP1A	X	-23.382	1.5
11	MP1A	Z	-13.5	1.5
12	MP1A	Mx	.012	1.5
13	MP1A	X	-23.382	6.5
14	MP1A	Z	-13.5	6.5
15	MP1A	Mx	.012	6.5
16	MP1B	X	-23.382	1.5
17	MP1B	Z	-13.5	1.5
18	MP1B	Mx	-.012	1.5
19	MP1B	X	-23.382	6.5
20	MP1B	Z	-13.5	6.5
21	MP1B	Mx	-.012	6.5
22	MP1C	X	-26.672	1.5
23	MP1C	Z	-15.399	1.5
24	MP1C	Mx	-.01	1.5
25	MP1C	X	-26.672	6.5
26	MP1C	Z	-15.399	6.5
27	MP1C	Mx	-.01	6.5
28	MP4A	X	-23.382	1.5
29	MP4A	Z	-13.5	1.5
30	MP4A	Mx	.012	1.5
31	MP4A	X	-23.382	6.5
32	MP4A	Z	-13.5	6.5
33	MP4A	Mx	.012	6.5
34	MP4B	X	-23.382	1.5
35	MP4B	Z	-13.5	1.5
36	MP4B	Mx	-.012	1.5
37	MP4B	X	-23.382	6.5
38	MP4B	Z	-13.5	6.5
39	MP4B	Mx	-.012	6.5
40	MP4C	X	-26.672	1.5
41	MP4C	Z	-15.399	1.5
42	MP4C	Mx	-.01	1.5
43	MP4C	X	-26.672	6.5
44	MP4C	Z	-15.399	6.5
45	MP4C	Mx	-.01	6.5
46	MP3A	X	-7.546	3
47	MP3A	Z	-4.357	3
48	MP3A	Mx	.004	3
49	MP3A	X	-7.546	5
50	MP3A	Z	-4.357	5
51	MP3A	Mx	.004	5
52	MP3B	X	-7.546	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	-4.357	3
54	MP3B	Mx	-.004	3
55	MP3B	X	-7.546	5
56	MP3B	Z	-4.357	5
57	MP3B	Mx	-.004	5
58	MP3C	X	-10.14	3
59	MP3C	Z	-5.854	3
60	MP3C	Mx	-.004	3
61	MP3C	X	-10.14	5
62	MP3C	Z	-5.854	5
63	MP3C	Mx	-.004	5
64	OVP	X	-22.11	1
65	OVP	Z	-12.765	1
66	OVP	Mx	0	1
67	MP1A	X	-10.611	2
68	MP1A	Z	-6.126	2
69	MP1A	Mx	-.005	2
70	MP1C	X	-12.023	2
71	MP1C	Z	-6.941	2
72	MP1C	Mx	.004	2
73	MP4B	X	-10.737	2
74	MP4B	Z	-6.199	2
75	MP4B	Mx	.005	2
76	MP4C	X	-12.092	2
77	MP4C	Z	-6.981	2
78	MP4C	Mx	.004	2
79	MP4B	X	-4.136	5
80	MP4B	Z	-2.388	5
81	MP4B	Mx	.002	5
82	MP4C	X	-3.775	5
83	MP4C	Z	-2.179	5
84	MP4C	Mx	.001	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-6.199	2
2	4A	Z	-10.737	2
3	4A	Mx	0	2
4	4A	X	-2.388	5
5	4A	Z	-4.136	5
6	4A	Mx	0	5
7	1B	X	-6.126	2
8	1B	Z	-10.611	2
9	1B	Mx	0	2
10	MP1A	X	-16.319	1.5
11	MP1A	Z	-28.266	1.5
12	MP1A	Mx	.008	1.5
13	MP1A	X	-16.319	6.5
14	MP1A	Z	-28.266	6.5
15	MP1A	Mx	.008	6.5
16	MP1B	X	-16.319	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	-28.266	1.5
18	MP1B	Mx	-.008	1.5
19	MP1B	X	-16.319	6.5
20	MP1B	Z	-28.266	6.5
21	MP1B	Mx	-.008	6.5
22	MP1C	X	-12.749	1.5
23	MP1C	Z	-22.083	1.5
24	MP1C	Mx	-.012	1.5
25	MP1C	X	-12.749	6.5
26	MP1C	Z	-22.083	6.5
27	MP1C	Mx	-.012	6.5
28	MP4A	X	-16.319	1.5
29	MP4A	Z	-28.266	1.5
30	MP4A	Mx	.008	1.5
31	MP4A	X	-16.319	6.5
32	MP4A	Z	-28.266	6.5
33	MP4A	Mx	.008	6.5
34	MP4B	X	-16.319	1.5
35	MP4B	Z	-28.266	1.5
36	MP4B	Mx	-.008	1.5
37	MP4B	X	-16.319	6.5
38	MP4B	Z	-28.266	6.5
39	MP4B	Mx	-.008	6.5
40	MP4C	X	-12.749	1.5
41	MP4C	Z	-22.083	1.5
42	MP4C	Mx	-.012	1.5
43	MP4C	X	-12.749	6.5
44	MP4C	Z	-22.083	6.5
45	MP4C	Mx	-.012	6.5
46	MP3A	X	-6.58	3
47	MP3A	Z	-11.397	3
48	MP3A	Mx	.003	3
49	MP3A	X	-6.58	5
50	MP3A	Z	-11.397	5
51	MP3A	Mx	.003	5
52	MP3B	X	-6.58	3
53	MP3B	Z	-11.397	3
54	MP3B	Mx	-.003	3
55	MP3B	X	-6.58	5
56	MP3B	Z	-11.397	5
57	MP3B	Mx	-.003	5
58	MP3C	X	-3.765	3
59	MP3C	Z	-6.521	3
60	MP3C	Mx	-.004	3
61	MP3C	X	-3.765	5
62	MP3C	Z	-6.521	5
63	MP3C	Mx	-.004	5
64	OVP	X	-13.656	1
65	OVP	Z	-23.652	1
66	OVP	Mx	0	1
67	MP1A	X	-7.336	2
68	MP1A	Z	-12.706	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	-.004	2
70	MP1C	X	-5.804	2
71	MP1C	Z	-10.054	2
72	MP1C	Mx	.005	2
73	MP4B	X	-7.36	2
74	MP4B	Z	-12.748	2
75	MP4B	Mx	.004	2
76	MP4C	X	-5.89	2
77	MP4C	Z	-10.202	2
78	MP4C	Mx	.006	2
79	MP4B	X	-2.078	5
80	MP4B	Z	-3.6	5
81	MP4B	Mx	.001	5
82	MP4C	X	-2.47	5
83	MP4C	Z	-4.278	5
84	MP4C	Mx	.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	0	2
2	4A	Z	-4.406	2
3	4A	Mx	0	2
4	4A	X	0	5
5	4A	Z	-1.038	5
6	4A	Mx	0	5
7	1B	X	0	2
8	1B	Z	-3.641	2
9	1B	Mx	0	2
10	MP1A	X	0	1.5
11	MP1A	Z	-11.66	1.5
12	MP1A	Mx	0	1.5
13	MP1A	X	0	6.5
14	MP1A	Z	-11.66	6.5
15	MP1A	Mx	0	6.5
16	MP1B	X	0	1.5
17	MP1B	Z	-11.66	1.5
18	MP1B	Mx	0	1.5
19	MP1B	X	0	6.5
20	MP1B	Z	-11.66	6.5
21	MP1B	Mx	0	6.5
22	MP1C	X	0	1.5
23	MP1C	Z	-7.779	1.5
24	MP1C	Mx	-.004	1.5
25	MP1C	X	0	6.5
26	MP1C	Z	-7.779	6.5
27	MP1C	Mx	-.004	6.5
28	MP4A	X	0	1.5
29	MP4A	Z	-11.66	1.5
30	MP4A	Mx	0	1.5
31	MP4A	X	0	6.5
32	MP4A	Z	-11.66	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	0	6.5
34	MP4B	X	0	1.5
35	MP4B	Z	-11.66	1.5
36	MP4B	Mx	0	1.5
37	MP4B	X	0	6.5
38	MP4B	Z	-11.66	6.5
39	MP4B	Mx	0	6.5
40	MP4C	X	0	1.5
41	MP4C	Z	-7.779	1.5
42	MP4C	Mx	-.004	1.5
43	MP4C	X	0	6.5
44	MP4C	Z	-7.779	6.5
45	MP4C	Mx	-.004	6.5
46	MP3A	X	0	3
47	MP3A	Z	-4.044	3
48	MP3A	Mx	0	3
49	MP3A	X	0	5
50	MP3A	Z	-4.044	5
51	MP3A	Mx	0	5
52	MP3B	X	0	3
53	MP3B	Z	-4.044	3
54	MP3B	Mx	0	3
55	MP3B	X	0	5
56	MP3B	Z	-4.044	5
57	MP3B	Mx	0	5
58	MP3C	X	0	3
59	MP3C	Z	-1.5	3
60	MP3C	Mx	-.000739	3
61	MP3C	X	0	5
62	MP3C	Z	-1.5	5
63	MP3C	Mx	-.000739	5
64	OVP	X	0	1
65	OVP	Z	-7.628	1
66	OVP	Mx	0	1
67	MP1A	X	0	2
68	MP1A	Z	-3.968	2
69	MP1A	Mx	0	2
70	MP1C	X	0	2
71	MP1C	Z	-2.702	2
72	MP1C	Mx	.001	2
73	MP4B	X	0	2
74	MP4B	Z	-4.787	2
75	MP4B	Mx	0	2
76	MP4C	X	0	2
77	MP4C	Z	-3.31	2
78	MP4C	Mx	.002	2
79	MP4B	X	0	5
80	MP4B	Z	-.947	5
81	MP4B	Mx	0	5
82	MP4C	X	0	5
83	MP4C	Z	-1.3	5
84	MP4C	Mx	.00064	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	2.393	2
2	4A	Z	-4.145	2
3	4A	Mx	0	2
4	4A	X	.474	5
5	4A	Z	-.82	5
6	4A	Mx	0	5
7	1B	X	1.984	2
8	1B	Z	-3.436	2
9	1B	Mx	0	2
10	MP1A	X	5.33	1.5
11	MP1A	Z	-9.231	1.5
12	MP1A	Mx	-.003	1.5
13	MP1A	X	5.33	6.5
14	MP1A	Z	-9.231	6.5
15	MP1A	Mx	-.003	6.5
16	MP1B	X	5.33	1.5
17	MP1B	Z	-9.231	1.5
18	MP1B	Mx	.003	1.5
19	MP1B	X	5.33	6.5
20	MP1B	Z	-9.231	6.5
21	MP1B	Mx	.003	6.5
22	MP1C	X	4.656	1.5
23	MP1C	Z	-8.064	1.5
24	MP1C	Mx	-.004	1.5
25	MP1C	X	4.656	6.5
26	MP1C	Z	-8.064	6.5
27	MP1C	Mx	-.004	6.5
28	MP4A	X	5.33	1.5
29	MP4A	Z	-9.231	1.5
30	MP4A	Mx	-.003	1.5
31	MP4A	X	5.33	6.5
32	MP4A	Z	-9.231	6.5
33	MP4A	Mx	-.003	6.5
34	MP4B	X	5.33	1.5
35	MP4B	Z	-9.231	1.5
36	MP4B	Mx	.003	1.5
37	MP4B	X	5.33	6.5
38	MP4B	Z	-9.231	6.5
39	MP4B	Mx	.003	6.5
40	MP4C	X	4.656	1.5
41	MP4C	Z	-8.064	1.5
42	MP4C	Mx	-.004	1.5
43	MP4C	X	4.656	6.5
44	MP4C	Z	-8.064	6.5
45	MP4C	Mx	-.004	6.5
46	MP3A	X	1.694	3
47	MP3A	Z	-2.934	3
48	MP3A	Mx	-.000847	3
49	MP3A	X	1.694	5
50	MP3A	Z	-2.934	5
51	MP3A	Mx	-.000847	5
52	MP3B	X	1.694	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	-2.934	3
54	MP3B	Mx	.000847	3
55	MP3B	X	1.694	5
56	MP3B	Z	-2.934	5
57	MP3B	Mx	.000847	5
58	MP3C	X	1.252	3
59	MP3C	Z	-2.169	3
60	MP3C	Mx	-.000959	3
61	MP3C	X	1.252	5
62	MP3C	Z	-2.169	5
63	MP3C	Mx	-.000959	5
64	OVP	X	4.057	1
65	OVP	Z	-7.027	1
66	OVP	Mx	0	1
67	MP1A	X	1.821	2
68	MP1A	Z	-3.153	2
69	MP1A	Mx	.00091	2
70	MP1C	X	1.601	2
71	MP1C	Z	-2.773	2
72	MP1C	Mx	.001	2
73	MP4B	X	2.203	2
74	MP4B	Z	-3.816	2
75	MP4B	Mx	-.001	2
76	MP4C	X	1.946	2
77	MP4C	Z	-3.371	2
78	MP4C	Mx	.001	2
79	MP4B	X	.519	5
80	MP4B	Z	-.899	5
81	MP4B	Mx	-.000259	5
82	MP4C	X	.58	5
83	MP4C	Z	-1.005	5
84	MP4C	Mx	.000445	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	3.816	2
2	4A	Z	-2.203	2
3	4A	Mx	0	2
4	4A	X	.899	5
5	4A	Z	-.519	5
6	4A	Mx	0	5
7	1B	X	3.153	2
8	1B	Z	-1.821	2
9	1B	Mx	0	2
10	MP1A	X	7.498	1.5
11	MP1A	Z	-4.329	1.5
12	MP1A	Mx	-.004	1.5
13	MP1A	X	7.498	6.5
14	MP1A	Z	-4.329	6.5
15	MP1A	Mx	-.004	6.5
16	MP1B	X	7.498	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	-4.329	1.5
18	MP1B	Mx	.004	1.5
19	MP1B	X	7.498	6.5
20	MP1B	Z	-4.329	6.5
21	MP1B	Mx	.004	6.5
22	MP1C	X	9.692	1.5
23	MP1C	Z	-5.596	1.5
24	MP1C	Mx	-.002	1.5
25	MP1C	X	9.692	6.5
26	MP1C	Z	-5.596	6.5
27	MP1C	Mx	-.002	6.5
28	MP4A	X	7.498	1.5
29	MP4A	Z	-4.329	1.5
30	MP4A	Mx	-.004	1.5
31	MP4A	X	7.498	6.5
32	MP4A	Z	-4.329	6.5
33	MP4A	Mx	-.004	6.5
34	MP4B	X	7.498	1.5
35	MP4B	Z	-4.329	1.5
36	MP4B	Mx	.004	1.5
37	MP4B	X	7.498	6.5
38	MP4B	Z	-4.329	6.5
39	MP4B	Mx	.004	6.5
40	MP4C	X	9.692	1.5
41	MP4C	Z	-5.596	1.5
42	MP4C	Mx	-.002	1.5
43	MP4C	X	9.692	6.5
44	MP4C	Z	-5.596	6.5
45	MP4C	Mx	-.002	6.5
46	MP3A	X	1.798	3
47	MP3A	Z	-1.038	3
48	MP3A	Mx	-.000899	3
49	MP3A	X	1.798	5
50	MP3A	Z	-1.038	5
51	MP3A	Mx	-.000899	5
52	MP3B	X	1.798	3
53	MP3B	Z	-1.038	3
54	MP3B	Mx	.000899	3
55	MP3B	X	1.798	5
56	MP3B	Z	-1.038	5
57	MP3B	Mx	.000899	5
58	MP3C	X	3.237	3
59	MP3C	Z	-1.869	3
60	MP3C	Mx	-.000639	3
61	MP3C	X	3.237	5
62	MP3C	Z	-1.869	5
63	MP3C	Mx	-.000639	5
64	OVP	X	6.606	1
65	OVP	Z	-3.814	1
66	OVP	Mx	0	1
67	MP1A	X	2.588	2
68	MP1A	Z	-1.494	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	.001	2
70	MP1C	X	3.304	2
71	MP1C	Z	-1.907	2
72	MP1C	Mx	.000652	2
73	MP4B	X	3.156	2
74	MP4B	Z	-1.822	2
75	MP4B	Mx	-.002	2
76	MP4C	X	3.991	2
77	MP4C	Z	-2.304	2
78	MP4C	Mx	.000788	2
79	MP4B	X	1.056	5
80	MP4B	Z	-.61	5
81	MP4B	Mx	-.000528	5
82	MP4C	X	.857	5
83	MP4C	Z	-.495	5
84	MP4C	Mx	.000169	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	3.644	2
2	4A	Z	0	2
3	4A	Mx	0	2
4	4A	X	1.22	5
5	4A	Z	0	5
6	4A	Mx	0	5
7	1B	X	2.989	2
8	1B	Z	0	2
9	1B	Mx	0	2
10	MP1A	X	7.658	1.5
11	MP1A	Z	0	1.5
12	MP1A	Mx	-.004	1.5
13	MP1A	X	7.658	6.5
14	MP1A	Z	0	6.5
15	MP1A	Mx	-.004	6.5
16	MP1B	X	7.658	1.5
17	MP1B	Z	0	1.5
18	MP1B	Mx	.004	1.5
19	MP1B	X	7.658	6.5
20	MP1B	Z	0	6.5
21	MP1B	Mx	.004	6.5
22	MP1C	X	11.539	1.5
23	MP1C	Z	0	1.5
24	MP1C	Mx	.001	1.5
25	MP1C	X	11.539	6.5
26	MP1C	Z	0	6.5
27	MP1C	Mx	.001	6.5
28	MP4A	X	7.658	1.5
29	MP4A	Z	0	1.5
30	MP4A	Mx	-.004	1.5
31	MP4A	X	7.658	6.5
32	MP4A	Z	0	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	-.004	6.5
34	MP4B	X	7.658	1.5
35	MP4B	Z	0	1.5
36	MP4B	Mx	.004	1.5
37	MP4B	X	7.658	6.5
38	MP4B	Z	0	6.5
39	MP4B	Mx	.004	6.5
40	MP4C	X	11.539	1.5
41	MP4C	Z	0	1.5
42	MP4C	Mx	.001	1.5
43	MP4C	X	11.539	6.5
44	MP4C	Z	0	6.5
45	MP4C	Mx	.001	6.5
46	MP3A	X	1.421	3
47	MP3A	Z	0	3
48	MP3A	Mx	-.00071	3
49	MP3A	X	1.421	5
50	MP3A	Z	0	5
51	MP3A	Mx	-.00071	5
52	MP3B	X	1.421	3
53	MP3B	Z	0	3
54	MP3B	Mx	.00071	3
55	MP3B	X	1.421	5
56	MP3B	Z	0	5
57	MP3B	Mx	.00071	5
58	MP3C	X	3.965	3
59	MP3C	Z	0	3
60	MP3C	Mx	.000344	3
61	MP3C	X	3.965	5
62	MP3C	Z	0	5
63	MP3C	Mx	.000344	5
64	OVP	X	6.655	1
65	OVP	Z	0	1
66	OVP	Mx	0	1
67	MP1A	X	2.662	2
68	MP1A	Z	0	2
69	MP1A	Mx	.001	2
70	MP1C	X	3.928	2
71	MP1C	Z	0	2
72	MP1C	Mx	-.000341	2
73	MP4B	X	3.264	2
74	MP4B	Z	0	2
75	MP4B	Mx	-.002	2
76	MP4C	X	4.741	2
77	MP4C	Z	0	2
78	MP4C	Mx	-.000412	2
79	MP4B	X	1.311	5
80	MP4B	Z	0	5
81	MP4B	Mx	-.000655	5
82	MP4C	X	.958	5
83	MP4C	Z	0	5
84	MP4C	Mx	-8.3e-5	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	2.826	2
2	4A	Z	1.632	2
3	4A	Mx	0	2
4	4A	X	1.135	5
5	4A	Z	.655	5
6	4A	Mx	0	5
7	1B	X	2.305	2
8	1B	Z	1.331	2
9	1B	Mx	0	2
10	MP1A	X	7.498	1.5
11	MP1A	Z	4.329	1.5
12	MP1A	Mx	-.004	1.5
13	MP1A	X	7.498	6.5
14	MP1A	Z	4.329	6.5
15	MP1A	Mx	-.004	6.5
16	MP1B	X	7.498	1.5
17	MP1B	Z	4.329	1.5
18	MP1B	Mx	.004	1.5
19	MP1B	X	7.498	6.5
20	MP1B	Z	4.329	6.5
21	MP1B	Mx	.004	6.5
22	MP1C	X	8.666	1.5
23	MP1C	Z	5.003	1.5
24	MP1C	Mx	.003	1.5
25	MP1C	X	8.666	6.5
26	MP1C	Z	5.003	6.5
27	MP1C	Mx	.003	6.5
28	MP4A	X	7.498	1.5
29	MP4A	Z	4.329	1.5
30	MP4A	Mx	-.004	1.5
31	MP4A	X	7.498	6.5
32	MP4A	Z	4.329	6.5
33	MP4A	Mx	-.004	6.5
34	MP4B	X	7.498	1.5
35	MP4B	Z	4.329	1.5
36	MP4B	Mx	.004	1.5
37	MP4B	X	7.498	6.5
38	MP4B	Z	4.329	6.5
39	MP4B	Mx	.004	6.5
40	MP4C	X	8.666	1.5
41	MP4C	Z	5.003	1.5
42	MP4C	Mx	.003	1.5
43	MP4C	X	8.666	6.5
44	MP4C	Z	5.003	6.5
45	MP4C	Mx	.003	6.5
46	MP3A	X	1.798	3
47	MP3A	Z	1.038	3
48	MP3A	Mx	-.000899	3
49	MP3A	X	1.798	5
50	MP3A	Z	1.038	5
51	MP3A	Mx	-.000899	5
52	MP3B	X	1.798	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	1.038	3
54	MP3B	Mx	.000899	3
55	MP3B	X	1.798	5
56	MP3B	Z	1.038	5
57	MP3B	Mx	.000899	5
58	MP3C	X	2.564	3
59	MP3C	Z	1.48	3
60	MP3C	Mx	.000951	3
61	MP3C	X	2.564	5
62	MP3C	Z	1.48	5
63	MP3C	Mx	.000951	5
64	OVP	X	5.343	1
65	OVP	Z	3.084	1
66	OVP	Mx	0	1
67	MP1A	X	2.588	2
68	MP1A	Z	1.494	2
69	MP1A	Mx	.001	2
70	MP1C	X	2.969	2
71	MP1C	Z	1.714	2
72	MP1C	Mx	-.001	2
73	MP4B	X	3.156	2
74	MP4B	Z	1.822	2
75	MP4B	Mx	-.002	2
76	MP4C	X	3.6	2
77	MP4C	Z	2.079	2
78	MP4C	Mx	-.001	2
79	MP4B	X	1.056	5
80	MP4B	Z	.61	5
81	MP4B	Mx	-.000528	5
82	MP4C	X	.95	5
83	MP4C	Z	.549	5
84	MP4C	Mx	-.000353	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	1.822	2
2	4A	Z	3.156	2
3	4A	Mx	0	2
4	4A	X	.61	5
5	4A	Z	1.056	5
6	4A	Mx	0	5
7	1B	X	1.494	2
8	1B	Z	2.588	2
9	1B	Mx	0	2
10	MP1A	X	5.33	1.5
11	MP1A	Z	9.231	1.5
12	MP1A	Mx	-.003	1.5
13	MP1A	X	5.33	6.5
14	MP1A	Z	9.231	6.5
15	MP1A	Mx	-.003	6.5
16	MP1B	X	5.33	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	9.231	1.5
18	MP1B	Mx	.003	1.5
19	MP1B	X	5.33	6.5
20	MP1B	Z	9.231	6.5
21	MP1B	Mx	.003	6.5
22	MP1C	X	4.063	1.5
23	MP1C	Z	7.037	1.5
24	MP1C	Mx	.004	1.5
25	MP1C	X	4.063	6.5
26	MP1C	Z	7.037	6.5
27	MP1C	Mx	.004	6.5
28	MP4A	X	5.33	1.5
29	MP4A	Z	9.231	1.5
30	MP4A	Mx	-.003	1.5
31	MP4A	X	5.33	6.5
32	MP4A	Z	9.231	6.5
33	MP4A	Mx	-.003	6.5
34	MP4B	X	5.33	1.5
35	MP4B	Z	9.231	1.5
36	MP4B	Mx	.003	1.5
37	MP4B	X	5.33	6.5
38	MP4B	Z	9.231	6.5
39	MP4B	Mx	.003	6.5
40	MP4C	X	4.063	1.5
41	MP4C	Z	7.037	1.5
42	MP4C	Mx	.004	1.5
43	MP4C	X	4.063	6.5
44	MP4C	Z	7.037	6.5
45	MP4C	Mx	.004	6.5
46	MP3A	X	1.694	3
47	MP3A	Z	2.934	3
48	MP3A	Mx	-.000847	3
49	MP3A	X	1.694	5
50	MP3A	Z	2.934	5
51	MP3A	Mx	-.000847	5
52	MP3B	X	1.694	3
53	MP3B	Z	2.934	3
54	MP3B	Mx	.000847	3
55	MP3B	X	1.694	5
56	MP3B	Z	2.934	5
57	MP3B	Mx	.000847	5
58	MP3C	X	.864	3
59	MP3C	Z	1.496	3
60	MP3C	Mx	.000812	3
61	MP3C	X	.864	5
62	MP3C	Z	1.496	5
63	MP3C	Mx	.000812	5
64	OVP	X	3.328	1
65	OVP	Z	5.764	1
66	OVP	Mx	0	1
67	MP1A	X	1.821	2
68	MP1A	Z	3.153	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	.00091	2
70	MP1C	X	1.407	2
71	MP1C	Z	2.438	2
72	MP1C	Mx	-.001	2
73	MP4B	X	2.203	2
74	MP4B	Z	3.816	2
75	MP4B	Mx	-.001	2
76	MP4C	X	1.721	2
77	MP4C	Z	2.981	2
78	MP4C	Mx	-.002	2
79	MP4B	X	.519	5
80	MP4B	Z	.899	5
81	MP4B	Mx	-.000259	5
82	MP4C	X	.634	5
83	MP4C	Z	1.098	5
84	MP4C	Mx	-.000596	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	0	2
2	4A	Z	4.406	2
3	4A	Mx	0	2
4	4A	X	0	5
5	4A	Z	1.038	5
6	4A	Mx	0	5
7	1B	X	0	2
8	1B	Z	3.641	2
9	1B	Mx	0	2
10	MP1A	X	0	1.5
11	MP1A	Z	11.66	1.5
12	MP1A	Mx	0	1.5
13	MP1A	X	0	6.5
14	MP1A	Z	11.66	6.5
15	MP1A	Mx	0	6.5
16	MP1B	X	0	1.5
17	MP1B	Z	11.66	1.5
18	MP1B	Mx	0	1.5
19	MP1B	X	0	6.5
20	MP1B	Z	11.66	6.5
21	MP1B	Mx	0	6.5
22	MP1C	X	0	1.5
23	MP1C	Z	7.779	1.5
24	MP1C	Mx	.004	1.5
25	MP1C	X	0	6.5
26	MP1C	Z	7.779	6.5
27	MP1C	Mx	.004	6.5
28	MP4A	X	0	1.5
29	MP4A	Z	11.66	1.5
30	MP4A	Mx	0	1.5
31	MP4A	X	0	6.5
32	MP4A	Z	11.66	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	0	6.5
34	MP4B	X	0	1.5
35	MP4B	Z	11.66	1.5
36	MP4B	Mx	0	1.5
37	MP4B	X	0	6.5
38	MP4B	Z	11.66	6.5
39	MP4B	Mx	0	6.5
40	MP4C	X	0	1.5
41	MP4C	Z	7.779	1.5
42	MP4C	Mx	.004	1.5
43	MP4C	X	0	6.5
44	MP4C	Z	7.779	6.5
45	MP4C	Mx	.004	6.5
46	MP3A	X	0	3
47	MP3A	Z	4.044	3
48	MP3A	Mx	0	3
49	MP3A	X	0	5
50	MP3A	Z	4.044	5
51	MP3A	Mx	0	5
52	MP3B	X	0	3
53	MP3B	Z	4.044	3
54	MP3B	Mx	0	3
55	MP3B	X	0	5
56	MP3B	Z	4.044	5
57	MP3B	Mx	0	5
58	MP3C	X	0	3
59	MP3C	Z	1.5	3
60	MP3C	Mx	.000739	3
61	MP3C	X	0	5
62	MP3C	Z	1.5	5
63	MP3C	Mx	.000739	5
64	OVP	X	0	1
65	OVP	Z	7.628	1
66	OVP	Mx	0	1
67	MP1A	X	0	2
68	MP1A	Z	3.968	2
69	MP1A	Mx	0	2
70	MP1C	X	0	2
71	MP1C	Z	2.702	2
72	MP1C	Mx	-.001	2
73	MP4B	X	0	2
74	MP4B	Z	4.787	2
75	MP4B	Mx	0	2
76	MP4C	X	0	2
77	MP4C	Z	3.31	2
78	MP4C	Mx	-.002	2
79	MP4B	X	0	5
80	MP4B	Z	.947	5
81	MP4B	Mx	0	5
82	MP4C	X	0	5
83	MP4C	Z	1.3	5
84	MP4C	Mx	-.00064	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-2.393	2
2	4A	Z	4.145	2
3	4A	Mx	0	2
4	4A	X	-.474	5
5	4A	Z	.82	5
6	4A	Mx	0	5
7	1B	X	-1.984	2
8	1B	Z	3.436	2
9	1B	Mx	0	2
10	MP1A	X	-5.33	1.5
11	MP1A	Z	9.231	1.5
12	MP1A	Mx	.003	1.5
13	MP1A	X	-5.33	6.5
14	MP1A	Z	9.231	6.5
15	MP1A	Mx	.003	6.5
16	MP1B	X	-5.33	1.5
17	MP1B	Z	9.231	1.5
18	MP1B	Mx	-.003	1.5
19	MP1B	X	-5.33	6.5
20	MP1B	Z	9.231	6.5
21	MP1B	Mx	-.003	6.5
22	MP1C	X	-4.656	1.5
23	MP1C	Z	8.064	1.5
24	MP1C	Mx	.004	1.5
25	MP1C	X	-4.656	6.5
26	MP1C	Z	8.064	6.5
27	MP1C	Mx	.004	6.5
28	MP4A	X	-5.33	1.5
29	MP4A	Z	9.231	1.5
30	MP4A	Mx	.003	1.5
31	MP4A	X	-5.33	6.5
32	MP4A	Z	9.231	6.5
33	MP4A	Mx	.003	6.5
34	MP4B	X	-5.33	1.5
35	MP4B	Z	9.231	1.5
36	MP4B	Mx	-.003	1.5
37	MP4B	X	-5.33	6.5
38	MP4B	Z	9.231	6.5
39	MP4B	Mx	-.003	6.5
40	MP4C	X	-4.656	1.5
41	MP4C	Z	8.064	1.5
42	MP4C	Mx	.004	1.5
43	MP4C	X	-4.656	6.5
44	MP4C	Z	8.064	6.5
45	MP4C	Mx	.004	6.5
46	MP3A	X	-1.694	3
47	MP3A	Z	2.934	3
48	MP3A	Mx	.000847	3
49	MP3A	X	-1.694	5
50	MP3A	Z	2.934	5
51	MP3A	Mx	.000847	5
52	MP3B	X	-1.694	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	2.934	3
54	MP3B	Mx	-.000847	3
55	MP3B	X	-1.694	5
56	MP3B	Z	2.934	5
57	MP3B	Mx	-.000847	5
58	MP3C	X	-1.252	3
59	MP3C	Z	2.169	3
60	MP3C	Mx	.000959	3
61	MP3C	X	-1.252	5
62	MP3C	Z	2.169	5
63	MP3C	Mx	.000959	5
64	OVP	X	-4.057	1
65	OVP	Z	7.027	1
66	OVP	Mx	0	1
67	MP1A	X	-1.821	2
68	MP1A	Z	3.153	2
69	MP1A	Mx	-.00091	2
70	MP1C	X	-1.601	2
71	MP1C	Z	2.773	2
72	MP1C	Mx	-.001	2
73	MP4B	X	-2.203	2
74	MP4B	Z	3.816	2
75	MP4B	Mx	.001	2
76	MP4C	X	-1.946	2
77	MP4C	Z	3.371	2
78	MP4C	Mx	-.001	2
79	MP4B	X	-.519	5
80	MP4B	Z	.899	5
81	MP4B	Mx	.000259	5
82	MP4C	X	-.58	5
83	MP4C	Z	1.005	5
84	MP4C	Mx	-.000445	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-3.816	2
2	4A	Z	2.203	2
3	4A	Mx	0	2
4	4A	X	-.899	5
5	4A	Z	.519	5
6	4A	Mx	0	5
7	1B	X	-3.153	2
8	1B	Z	1.821	2
9	1B	Mx	0	2
10	MP1A	X	-7.498	1.5
11	MP1A	Z	4.329	1.5
12	MP1A	Mx	.004	1.5
13	MP1A	X	-7.498	6.5
14	MP1A	Z	4.329	6.5
15	MP1A	Mx	.004	6.5
16	MP1B	X	-7.498	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	4.329	1.5
18	MP1B	Mx	-.004	1.5
19	MP1B	X	-7.498	6.5
20	MP1B	Z	4.329	6.5
21	MP1B	Mx	-.004	6.5
22	MP1C	X	-9.692	1.5
23	MP1C	Z	5.596	1.5
24	MP1C	Mx	.002	1.5
25	MP1C	X	-9.692	6.5
26	MP1C	Z	5.596	6.5
27	MP1C	Mx	.002	6.5
28	MP4A	X	-7.498	1.5
29	MP4A	Z	4.329	1.5
30	MP4A	Mx	.004	1.5
31	MP4A	X	-7.498	6.5
32	MP4A	Z	4.329	6.5
33	MP4A	Mx	.004	6.5
34	MP4B	X	-7.498	1.5
35	MP4B	Z	4.329	1.5
36	MP4B	Mx	-.004	1.5
37	MP4B	X	-7.498	6.5
38	MP4B	Z	4.329	6.5
39	MP4B	Mx	-.004	6.5
40	MP4C	X	-9.692	1.5
41	MP4C	Z	5.596	1.5
42	MP4C	Mx	.002	1.5
43	MP4C	X	-9.692	6.5
44	MP4C	Z	5.596	6.5
45	MP4C	Mx	.002	6.5
46	MP3A	X	-1.798	3
47	MP3A	Z	1.038	3
48	MP3A	Mx	.000899	3
49	MP3A	X	-1.798	5
50	MP3A	Z	1.038	5
51	MP3A	Mx	.000899	5
52	MP3B	X	-1.798	3
53	MP3B	Z	1.038	3
54	MP3B	Mx	-.000899	3
55	MP3B	X	-1.798	5
56	MP3B	Z	1.038	5
57	MP3B	Mx	-.000899	5
58	MP3C	X	-3.237	3
59	MP3C	Z	1.869	3
60	MP3C	Mx	.000639	3
61	MP3C	X	-3.237	5
62	MP3C	Z	1.869	5
63	MP3C	Mx	.000639	5
64	OVP	X	-6.606	1
65	OVP	Z	3.814	1
66	OVP	Mx	0	1
67	MP1A	X	-2.588	2
68	MP1A	Z	1.494	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	-.001	2
70	MP1C	X	-3.304	2
71	MP1C	Z	1.907	2
72	MP1C	Mx	-.000652	2
73	MP4B	X	-3.156	2
74	MP4B	Z	1.822	2
75	MP4B	Mx	.002	2
76	MP4C	X	-3.991	2
77	MP4C	Z	2.304	2
78	MP4C	Mx	-.000788	2
79	MP4B	X	-1.056	5
80	MP4B	Z	.61	5
81	MP4B	Mx	.000528	5
82	MP4C	X	-.857	5
83	MP4C	Z	.495	5
84	MP4C	Mx	-.000169	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-3.644	2
2	4A	Z	0	2
3	4A	Mx	0	2
4	4A	X	-1.22	5
5	4A	Z	0	5
6	4A	Mx	0	5
7	1B	X	-2.989	2
8	1B	Z	0	2
9	1B	Mx	0	2
10	MP1A	X	-7.658	1.5
11	MP1A	Z	0	1.5
12	MP1A	Mx	.004	1.5
13	MP1A	X	-7.658	6.5
14	MP1A	Z	0	6.5
15	MP1A	Mx	.004	6.5
16	MP1B	X	-7.658	1.5
17	MP1B	Z	0	1.5
18	MP1B	Mx	-.004	1.5
19	MP1B	X	-7.658	6.5
20	MP1B	Z	0	6.5
21	MP1B	Mx	-.004	6.5
22	MP1C	X	-11.539	1.5
23	MP1C	Z	0	1.5
24	MP1C	Mx	-.001	1.5
25	MP1C	X	-11.539	6.5
26	MP1C	Z	0	6.5
27	MP1C	Mx	-.001	6.5
28	MP4A	X	-7.658	1.5
29	MP4A	Z	0	1.5
30	MP4A	Mx	.004	1.5
31	MP4A	X	-7.658	6.5
32	MP4A	Z	0	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	.004	6.5
34	MP4B	X	-7.658	1.5
35	MP4B	Z	0	1.5
36	MP4B	Mx	-.004	1.5
37	MP4B	X	-7.658	6.5
38	MP4B	Z	0	6.5
39	MP4B	Mx	-.004	6.5
40	MP4C	X	-11.539	1.5
41	MP4C	Z	0	1.5
42	MP4C	Mx	-.001	1.5
43	MP4C	X	-11.539	6.5
44	MP4C	Z	0	6.5
45	MP4C	Mx	-.001	6.5
46	MP3A	X	-1.421	3
47	MP3A	Z	0	3
48	MP3A	Mx	.00071	3
49	MP3A	X	-1.421	5
50	MP3A	Z	0	5
51	MP3A	Mx	.00071	5
52	MP3B	X	-1.421	3
53	MP3B	Z	0	3
54	MP3B	Mx	-.00071	3
55	MP3B	X	-1.421	5
56	MP3B	Z	0	5
57	MP3B	Mx	-.00071	5
58	MP3C	X	-3.965	3
59	MP3C	Z	0	3
60	MP3C	Mx	-.000344	3
61	MP3C	X	-3.965	5
62	MP3C	Z	0	5
63	MP3C	Mx	-.000344	5
64	OVP	X	-6.655	1
65	OVP	Z	0	1
66	OVP	Mx	0	1
67	MP1A	X	-2.662	2
68	MP1A	Z	0	2
69	MP1A	Mx	-.001	2
70	MP1C	X	-3.928	2
71	MP1C	Z	0	2
72	MP1C	Mx	.000341	2
73	MP4B	X	-3.264	2
74	MP4B	Z	0	2
75	MP4B	Mx	.002	2
76	MP4C	X	-4.741	2
77	MP4C	Z	0	2
78	MP4C	Mx	.000412	2
79	MP4B	X	-1.311	5
80	MP4B	Z	0	5
81	MP4B	Mx	.000655	5
82	MP4C	X	-.958	5
83	MP4C	Z	0	5
84	MP4C	Mx	8.3e-5	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-2.826	2
2	4A	Z	-1.632	2
3	4A	Mx	0	2
4	4A	X	-1.135	5
5	4A	Z	-.655	5
6	4A	Mx	0	5
7	1B	X	-2.305	2
8	1B	Z	-1.331	2
9	1B	Mx	0	2
10	MP1A	X	-7.498	1.5
11	MP1A	Z	-4.329	1.5
12	MP1A	Mx	.004	1.5
13	MP1A	X	-7.498	6.5
14	MP1A	Z	-4.329	6.5
15	MP1A	Mx	.004	6.5
16	MP1B	X	-7.498	1.5
17	MP1B	Z	-4.329	1.5
18	MP1B	Mx	-.004	1.5
19	MP1B	X	-7.498	6.5
20	MP1B	Z	-4.329	6.5
21	MP1B	Mx	-.004	6.5
22	MP1C	X	-8.666	1.5
23	MP1C	Z	-5.003	1.5
24	MP1C	Mx	-.003	1.5
25	MP1C	X	-8.666	6.5
26	MP1C	Z	-5.003	6.5
27	MP1C	Mx	-.003	6.5
28	MP4A	X	-7.498	1.5
29	MP4A	Z	-4.329	1.5
30	MP4A	Mx	.004	1.5
31	MP4A	X	-7.498	6.5
32	MP4A	Z	-4.329	6.5
33	MP4A	Mx	.004	6.5
34	MP4B	X	-7.498	1.5
35	MP4B	Z	-4.329	1.5
36	MP4B	Mx	-.004	1.5
37	MP4B	X	-7.498	6.5
38	MP4B	Z	-4.329	6.5
39	MP4B	Mx	-.004	6.5
40	MP4C	X	-8.666	1.5
41	MP4C	Z	-5.003	1.5
42	MP4C	Mx	-.003	1.5
43	MP4C	X	-8.666	6.5
44	MP4C	Z	-5.003	6.5
45	MP4C	Mx	-.003	6.5
46	MP3A	X	-1.798	3
47	MP3A	Z	-1.038	3
48	MP3A	Mx	.000899	3
49	MP3A	X	-1.798	5
50	MP3A	Z	-1.038	5
51	MP3A	Mx	.000899	5
52	MP3B	X	-1.798	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP3B	Z	-1.038	3
54	MP3B	Mx	-.000899	3
55	MP3B	X	-1.798	5
56	MP3B	Z	-1.038	5
57	MP3B	Mx	-.000899	5
58	MP3C	X	-2.564	3
59	MP3C	Z	-1.48	3
60	MP3C	Mx	-.000951	3
61	MP3C	X	-2.564	5
62	MP3C	Z	-1.48	5
63	MP3C	Mx	-.000951	5
64	OVP	X	-5.343	1
65	OVP	Z	-3.084	1
66	OVP	Mx	0	1
67	MP1A	X	-2.588	2
68	MP1A	Z	-1.494	2
69	MP1A	Mx	-.001	2
70	MP1C	X	-2.969	2
71	MP1C	Z	-1.714	2
72	MP1C	Mx	.001	2
73	MP4B	X	-3.156	2
74	MP4B	Z	-1.822	2
75	MP4B	Mx	.002	2
76	MP4C	X	-3.6	2
77	MP4C	Z	-2.079	2
78	MP4C	Mx	.001	2
79	MP4B	X	-1.056	5
80	MP4B	Z	-.61	5
81	MP4B	Mx	.000528	5
82	MP4C	X	-.95	5
83	MP4C	Z	-.549	5
84	MP4C	Mx	.000353	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	-1.822	2
2	4A	Z	-3.156	2
3	4A	Mx	0	2
4	4A	X	-.61	5
5	4A	Z	-1.056	5
6	4A	Mx	0	5
7	1B	X	-1.494	2
8	1B	Z	-2.588	2
9	1B	Mx	0	2
10	MP1A	X	-5.33	1.5
11	MP1A	Z	-9.231	1.5
12	MP1A	Mx	.003	1.5
13	MP1A	X	-5.33	6.5
14	MP1A	Z	-9.231	6.5
15	MP1A	Mx	.003	6.5
16	MP1B	X	-5.33	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1B	Z	-9.231	1.5
18	MP1B	Mx	-.003	1.5
19	MP1B	X	-5.33	6.5
20	MP1B	Z	-9.231	6.5
21	MP1B	Mx	-.003	6.5
22	MP1C	X	-4.063	1.5
23	MP1C	Z	-7.037	1.5
24	MP1C	Mx	-.004	1.5
25	MP1C	X	-4.063	6.5
26	MP1C	Z	-7.037	6.5
27	MP1C	Mx	-.004	6.5
28	MP4A	X	-5.33	1.5
29	MP4A	Z	-9.231	1.5
30	MP4A	Mx	.003	1.5
31	MP4A	X	-5.33	6.5
32	MP4A	Z	-9.231	6.5
33	MP4A	Mx	.003	6.5
34	MP4B	X	-5.33	1.5
35	MP4B	Z	-9.231	1.5
36	MP4B	Mx	-.003	1.5
37	MP4B	X	-5.33	6.5
38	MP4B	Z	-9.231	6.5
39	MP4B	Mx	-.003	6.5
40	MP4C	X	-4.063	1.5
41	MP4C	Z	-7.037	1.5
42	MP4C	Mx	-.004	1.5
43	MP4C	X	-4.063	6.5
44	MP4C	Z	-7.037	6.5
45	MP4C	Mx	-.004	6.5
46	MP3A	X	-1.694	3
47	MP3A	Z	-2.934	3
48	MP3A	Mx	.000847	3
49	MP3A	X	-1.694	5
50	MP3A	Z	-2.934	5
51	MP3A	Mx	.000847	5
52	MP3B	X	-1.694	3
53	MP3B	Z	-2.934	3
54	MP3B	Mx	-.000847	3
55	MP3B	X	-1.694	5
56	MP3B	Z	-2.934	5
57	MP3B	Mx	-.000847	5
58	MP3C	X	-.864	3
59	MP3C	Z	-1.496	3
60	MP3C	Mx	-.000812	3
61	MP3C	X	-.864	5
62	MP3C	Z	-1.496	5
63	MP3C	Mx	-.000812	5
64	OVP	X	-3.328	1
65	OVP	Z	-5.764	1
66	OVP	Mx	0	1
67	MP1A	X	-1.821	2
68	MP1A	Z	-3.153	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP1A	Mx	-.00091	2
70	MP1C	X	-1.407	2
71	MP1C	Z	-2.438	2
72	MP1C	Mx	.001	2
73	MP4B	X	-2.203	2
74	MP4B	Z	-3.816	2
75	MP4B	Mx	.001	2
76	MP4C	X	-1.721	2
77	MP4C	Z	-2.981	2
78	MP4C	Mx	.002	2
79	MP4B	X	-.519	5
80	MP4B	Z	-.899	5
81	MP4B	Mx	.000259	5
82	MP4C	X	-.634	5
83	MP4C	Z	-1.098	5
84	MP4C	Mx	.000596	5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	LM2	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	LM1	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

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

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	Y	-3.071	2
2	4A	My	0	2
3	4A	Mz	0	2
4	4A	Y	-.808	5
5	4A	My	0	5
6	4A	Mz	0	5
7	1B	Y	-2.9	2
8	1B	My	0	2
9	1B	Mz	0	2
10	MP1A	Y	-1.229	1.5
11	MP1A	My	-.000614	1.5
12	MP1A	Mz	0	1.5
13	MP1A	Y	-1.229	6.5
14	MP1A	My	-.000614	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP1A	Mz	0	6.5
16	MP1B	Y	-1.229	1.5
17	MP1B	My	.000614	1.5
18	MP1B	Mz	0	1.5
19	MP1B	Y	-1.229	6.5
20	MP1B	My	.000614	6.5
21	MP1B	Mz	0	6.5
22	MP1C	Y	-1.229	1.5
23	MP1C	My	.000107	1.5
24	MP1C	Mz	.000605	1.5
25	MP1C	Y	-1.229	6.5
26	MP1C	My	.000107	6.5
27	MP1C	Mz	.000605	6.5
28	MP4A	Y	-1.229	1.5
29	MP4A	My	-.000614	1.5
30	MP4A	Mz	0	1.5
31	MP4A	Y	-1.229	6.5
32	MP4A	My	-.000614	6.5
33	MP4A	Mz	0	6.5
34	MP4B	Y	-1.229	1.5
35	MP4B	My	.000614	1.5
36	MP4B	Mz	0	1.5
37	MP4B	Y	-1.229	6.5
38	MP4B	My	.000614	6.5
39	MP4B	Mz	0	6.5
40	MP4C	Y	-1.229	1.5
41	MP4C	My	.000107	1.5
42	MP4C	Mz	.000605	1.5
43	MP4C	Y	-1.229	6.5
44	MP4C	My	.000107	6.5
45	MP4C	Mz	.000605	6.5
46	MP3A	Y	-1.112	3
47	MP3A	My	-.000556	3
48	MP3A	Mz	0	3
49	MP3A	Y	-1.112	5
50	MP3A	My	-.000556	5
51	MP3A	Mz	0	5
52	MP3B	Y	-1.112	3
53	MP3B	My	.000556	3
54	MP3B	Mz	0	3
55	MP3B	Y	-1.112	5
56	MP3B	My	.000556	5
57	MP3B	Mz	0	5
58	MP3C	Y	-1.112	3
59	MP3C	My	9.7e-5	3
60	MP3C	Mz	.000548	3
61	MP3C	Y	-1.112	5
62	MP3C	My	9.7e-5	5
63	MP3C	Mz	.000548	5
64	OVP	Y	-1.242	1
65	OVP	My	0	1
66	OVP	Mz	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
67	MP1A	Y	-2.9	2
68	MP1A	My	.001	2
69	MP1A	Mz	0	2
70	MP1C	Y	-2.9	2
71	MP1C	My	-.000252	2
72	MP1C	Mz	-.001	2
73	MP4B	Y	-3.071	2
74	MP4B	My	-.002	2
75	MP4B	Mz	0	2
76	MP4C	Y	-3.071	2
77	MP4C	My	-.000267	2
78	MP4C	Mz	-.002	2
79	MP4B	Y	-.808	5
80	MP4B	My	-.000404	5
81	MP4B	Mz	0	5
82	MP4C	Y	-.808	5
83	MP4C	My	-7e-5	5
84	MP4C	Mz	-.000398	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	Z	-7.678	2
2	4A	Mx	0	2
3	4A	Z	-2.019	5
4	4A	Mx	0	5
5	1B	Z	-7.251	2
6	1B	Mx	0	2
7	MP1A	Z	-3.072	1.5
8	MP1A	Mx	0	1.5
9	MP1A	Z	-3.072	6.5
10	MP1A	Mx	0	6.5
11	MP1B	Z	-3.072	1.5
12	MP1B	Mx	0	1.5
13	MP1B	Z	-3.072	6.5
14	MP1B	Mx	0	6.5
15	MP1C	Z	-3.072	1.5
16	MP1C	Mx	-.002	1.5
17	MP1C	Z	-3.072	6.5
18	MP1C	Mx	-.002	6.5
19	MP4A	Z	-3.072	1.5
20	MP4A	Mx	0	1.5
21	MP4A	Z	-3.072	6.5
22	MP4A	Mx	0	6.5
23	MP4B	Z	-3.072	1.5
24	MP4B	Mx	0	1.5
25	MP4B	Z	-3.072	6.5
26	MP4B	Mx	0	6.5
27	MP4C	Z	-3.072	1.5
28	MP4C	Mx	-.002	1.5
29	MP4C	Z	-3.072	6.5
30	MP4C	Mx	-.002	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP3A	Z	-2.781	3
32	MP3A	Mx	0	3
33	MP3A	Z	-2.781	5
34	MP3A	Mx	0	5
35	MP3B	Z	-2.781	3
36	MP3B	Mx	0	3
37	MP3B	Z	-2.781	5
38	MP3B	Mx	0	5
39	MP3C	Z	-2.781	3
40	MP3C	Mx	-.001	3
41	MP3C	Z	-2.781	5
42	MP3C	Mx	-.001	5
43	OVP	Z	-3.106	1
44	OVP	Mx	0	1
45	MP1A	Z	-7.251	2
46	MP1A	Mx	0	2
47	MP1C	Z	-7.251	2
48	MP1C	Mx	.004	2
49	MP4B	Z	-7.678	2
50	MP4B	Mx	0	2
51	MP4C	Z	-7.678	2
52	MP4C	Mx	.004	2
53	MP4B	Z	-2.019	5
54	MP4B	Mx	0	5
55	MP4C	Z	-2.019	5
56	MP4C	Mx	.000994	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	4A	X	7.678	2
2	4A	Mx	0	2
3	4A	X	2.019	5
4	4A	Mx	0	5
5	1B	X	7.251	2
6	1B	Mx	0	2
7	MP1A	X	3.072	1.5
8	MP1A	Mx	-.002	1.5
9	MP1A	X	3.072	6.5
10	MP1A	Mx	-.002	6.5
11	MP1B	X	3.072	1.5
12	MP1B	Mx	.002	1.5
13	MP1B	X	3.072	6.5
14	MP1B	Mx	.002	6.5
15	MP1C	X	3.072	1.5
16	MP1C	Mx	.000267	1.5
17	MP1C	X	3.072	6.5
18	MP1C	Mx	.000267	6.5
19	MP4A	X	3.072	1.5
20	MP4A	Mx	-.002	1.5
21	MP4A	X	3.072	6.5
22	MP4A	Mx	-.002	6.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP4B	X	3.072	1.5
24	MP4B	Mx	.002	1.5
25	MP4B	X	3.072	6.5
26	MP4B	Mx	.002	6.5
27	MP4C	X	3.072	1.5
28	MP4C	Mx	.000267	1.5
29	MP4C	X	3.072	6.5
30	MP4C	Mx	.000267	6.5
31	MP3A	X	2.781	3
32	MP3A	Mx	-.001	3
33	MP3A	X	2.781	5
34	MP3A	Mx	-.001	5
35	MP3B	X	2.781	3
36	MP3B	Mx	.001	3
37	MP3B	X	2.781	5
38	MP3B	Mx	.001	5
39	MP3C	X	2.781	3
40	MP3C	Mx	.000241	3
41	MP3C	X	2.781	5
42	MP3C	Mx	.000241	5
43	OVP	X	3.106	1
44	OVP	Mx	0	1
45	MP1A	X	7.251	2
46	MP1A	Mx	.004	2
47	MP1C	X	7.251	2
48	MP1C	Mx	-.00063	2
49	MP4B	X	7.678	2
50	MP4B	Mx	-.004	2
51	MP4C	X	7.678	2
52	MP4C	Mx	-.000667	2
53	MP4B	X	2.019	5
54	MP4B	Mx	-.001	5
55	MP4C	X	2.019	5
56	MP4C	Mx	-.000175	5

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N33	N56	N54	N32	Y	Two Way	-.005
2	N72	N95A	N93A	N71	Y	Two Way	-.005
3	N139	N162	N160	N138	Y	Two Way	-.005

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N33	N56	N54	N32	Y	Two Way	-.01
2	N72	N95A	N93A	N71	Y	Two Way	-.01
3	N139	N162	N160	N138	Y	Two Way	-.01

Member Area Loads (BLC 84 : Structure Ev)

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]

Member Area Loads (BLC 84 : Structure Ev) (Continued)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N33	N56	N54	N32	Y	Two Way	-.000202
2	N72	N95A	N93A	N71	Y	Two Way	-.000202
3	N139	N162	N160	N138	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	N33	N56	N54	N32	Z	Two Way	-.000505
2	N72	N95A	N93A	N71	Z	Two Way	-.000505
3	N139	N162	N160	N138	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	N33	N56	N54	N32	X	Two Way	.000505
2	N72	N95A	N93A	N71	X	Two Way	.000505
3	N139	N162	N160	N138	X	Two Way	.000505

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N30	max	1084.587	10	585.181	19	4517.731	1	.683	13	1.545	4	.021	39
2		min	-1088.199	4	189.877	64	-1728.642	7	.166	7	-1.58	10	-.135	33
3	N190A	max	36.877	10	1701.945	13	-1064.572	70	0	75	0	4	0	10
4		min	-36.956	4	551.614	70	-3278.446	13	0	1	0	10	0	4
5	N69	max	4078.066	9	406.723	24	1082.443	2	-.062	6	2.312	12	-.035	48
6		min	-1081.757	3	89.754	50	-2773.461	8	-.598	48	-2.296	6	-.467	17
7	N133	max	-1118.066	66	2052.152	21	1984.396	21	0	6	0	48	0	48
8		min	-3437.2	21	666.591	66	645.518	66	0	48	0	6	0	6
9	N136	max	1183.991	11	407.3	21	621.483	12	.013	8	1.242	8	.519	20
10		min	-3664.712	5	131.866	35	-2040.808	6	-.487	26	-1.276	2	.046	26
11	N200	max	2855.943	17	1711.667	17	1648.593	17	0	8	0	8	0	8
12		min	933.666	74	558.484	74	539.051	74	0	26	0	26	0	26
13	Totals:	max	5200.678	10	6671.773	18	5623.093	1						
14		min	-5200.679	4	2332.529	73	-5623.108	7						

Joint Reactions (By Combination)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N30	-95.703	248.995	4517.731	.47	.48	-.088
2	1	N190A	.916	1037.396	-1998.008	0	0	0
3	1	N69	477.875	220.977	1055.632	-.308	1.969	-.19
4	1	N133	-1402.329	837.952	839.382	0	0	0
5	1	N136	-156.844	199.087	497.453	-.224	-.451	.191
6	1	N200	1176.081	705.851	710.904	0	0	0
7	1	Totals:	-.005	3250.259	5623.093			
8	1	COG (ft):	X: -.25	Y: .526	Z: .084			
9	2	N30	-450.686	253.793	4129.194	.462	.533	-.036
10	2	N190A	-9.299	1009.721	-1939.867	0	0	0
11	2	N69	-758.667	210.411	1082.443	-.257	.73	-.216
12	2	N133	-1273.155	756.935	745.791	0	0	0
13	2	N136	-1656.716	205.824	27.473	-.24	-1.276	.18

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
14	2	N200	1341.296	813.576	817.267	0	0	0
15	2	Totals:	-2807.228	3250.26	4862.3			
16	2	COG (ft):	X: -.25	Y: .526	Z: .084			
17	3	N30	-883.492	261.726	2930.198	.397	1.083	0
18	3	N190A	-26.818	915.168	-1754.454	0	0	0
19	3	N69	-1081.757	204.602	706.281	-.193	.017	-.246
20	3	N133	-1238.174	735.529	714.916	0	0	0
21	3	N136	-2962.715	213.651	-800.02	-.204	-1.096	.2
22	3	N200	1513.583	919.587	904.736	0	0	0
23	3	Totals:	-4679.374	3250.262	2701.657			
24	3	COG (ft):	X: -.25	Y: .526	Z: .084			
25	4	N30	-1088.199	274.094	1252.044	.321	1.545	-.009
26	4	N190A	-36.956	790.321	-1524.41	0	0	0
27	4	N69	-801.648	198.566	153.687	-.133	-.331	-.269
28	4	N133	-1317.421	777.332	749.536	0	0	0
29	4	N136	-3586.22	226.81	-1582.99	-.145	-.361	.244
30	4	N200	1629.764	983.141	952.135	0	0	0
31	4	Totals:	-5200.679	3250.263	.003			
32	4	COG (ft):	X: -.25	Y: .526	Z: .084			
33	5	N30	-807.073	287.305	-310.915	.264	.947	-.022
34	5	N190A	-27.221	676.604	-1316.357	0	0	0
35	5	N69	-208.681	191.392	-783.606	-.085	-1.306	-.281
36	5	N133	-1466.958	860.53	816.442	0	0	0
37	5	N136	-3664.712	236.378	-1970.251	-.095	-.203	.283
38	5	N200	1663.288	998.055	960.038	0	0	0
39	5	Totals:	-4511.357	3250.264	-2604.649			
40	5	COG (ft):	X: -.25	Y: .526	Z: .084			
41	6	N30	-303.839	294.548	-1348.687	.21	-.116	-.013
42	6	N190A	-10.22	593.268	-1153.171	0	0	0
43	6	N69	932.928	191.671	-1979.517	-.062	-2.296	-.282
44	6	N133	-1635.681	964.856	903.448	0	0	0
45	6	N136	-3315.558	233.153	-2040.808	-.05	-.263	.306
46	6	N200	1622.153	972.769	924.449	0	0	0
47	6	Totals:	-2710.217	3250.265	-4694.287			
48	6	COG (ft):	X: -.25	Y: .526	Z: .084			
49	7	N30	88.145	294.024	-1728.642	.166	-.513	-.027
50	7	N190A	-.522	554.793	-1073.817	0	0	0
51	7	N69	2529.989	202.103	-2752.952	-.079	-1.949	-.27
52	7	N133	-1800.904	1072.739	1010.681	0	0	0
53	7	N136	-2329.879	223.189	-1920.117	-.003	.413	.325
54	7	N200	1513.174	903.416	841.738	0	0	0
55	7	Totals:	.004	3250.265	-5623.108			
56	7	COG (ft):	X: -.25	Y: .526	Z: .084			
57	8	N30	450.15	288.852	-1339.804	.173	-.573	-.08
58	8	N190A	9.489	582.807	-1132.572	0	0	0
59	8	N69	3759.593	213.242	-2773.461	-.13	-.711	-.245
60	8	N133	-1929.495	1153.275	1103.606	0	0	0
61	8	N136	-831.097	216.025	-1455.744	.013	1.242	.335
62	8	N200	1348.586	796.064	735.66	0	0	0
63	8	Totals:	2807.227	3250.264	-4862.315			
64	8	COG (ft):	X: -.25	Y: .526	Z: .084			
65	9	N30	882.653	280.218	-138.287	.238	-1.123	-.116

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
66	9	N190A	27.026	677.63	-1318.393	0	0	0
67	9	N69	4078.066	219.201	-2398.365	-.194	-.002	-.215
68	9	N133	-1964.493	1174.581	1134.12	0	0	0
69	9	N136	479.714	208.613	-628.728	-.023	1.068	.316
70	9	N200	1176.406	690.018	647.981	0	0	0
71	9	Totals:	4679.372	3250.262	-2701.672			
72	9	COG (ft):	X: -.25	Y: .526	Z: .084			
73	10	N30	1084.587	267.573	1542.879	.314	-1.58	-.106
74	10	N190A	36.877	802.444	-1548.316	0	0	0
75	10	N69	3797.183	224.896	-1849.846	-.254	.342	-.192
76	10	N133	-1885.638	1133.018	1099.628	0	0	0
77	10	N136	1107.94	196.135	155.092	-.083	.334	.272
78	10	N200	1059.729	626.194	600.546	0	0	0
79	10	Totals:	5200.678	3250.26	-.018			
80	10	COG (ft):	X: -.25	Y: .526	Z: .084			
81	11	N30	800.476	254.717	3103.565	.371	-.977	-.093
82	11	N190A	26.952	915.843	-1755.804	0	0	0
83	11	N69	3210.833	231.578	-914.548	-.302	1.318	-.179
84	11	N133	-1736.74	1050.185	1032.867	0	0	0
85	11	N136	1183.991	186.89	546.159	-.132	.171	.233
86	11	N200	1025.844	611.045	592.395	0	0	0
87	11	Totals:	4511.356	3250.259	2604.633			
88	11	COG (ft):	X: -.25	Y: .526	Z: .084			
89	12	N30	293.144	248.119	4137.945	.426	.087	-.102
90	12	N190A	10.418	998.884	-1918.517	0	0	0
91	12	N69	2076.841	231.069	279.228	-.324	2.312	-.178
92	12	N133	-1568.204	946.097	946.388	0	0	0
93	12	N136	831.176	189.861	621.483	-.177	.225	.21
94	12	N200	1066.841	636.228	627.744	0	0	0
95	12	Totals:	2710.216	3250.259	4694.272			
96	12	COG (ft):	X: -.25	Y: .526	Z: .084			
97	13	N30	-21.644	562.399	3583.512	.683	.078	-.106
98	13	N190A	.239	1701.945	-3278.446	0	0	0
99	13	N69	2883.658	405.691	-1297.317	-.401	.485	-.448
100	13	N133	-3292.749	1965.918	1907.723	0	0	0
101	13	N136	-2290.872	404.32	-1164.065	-.253	-.132	.49
102	13	N200	2721.366	1631.499	1578.944	0	0	0
103	13	Totals:	-.003	6671.772	1330.351			
104	13	COG (ft):	X: -.27	Y: .466	Z: .077			
105	14	N30	-107.275	564.263	3493.597	.682	.081	-.091
106	14	N190A	-2.213	1694.45	-3262.586	0	0	0
107	14	N69	2589.34	403.729	-1295.241	-.389	.193	-.454
108	14	N133	-3259.734	1945.502	1884.272	0	0	0
109	14	N136	-2652.29	403.144	-1275.091	-.254	-.331	.486
110	14	N200	2766.679	1660.684	1607.72	0	0	0
111	14	Totals:	-665.494	6671.772	1152.671			
112	14	COG (ft):	X: -.27	Y: .466	Z: .077			
113	15	N30	-215.984	568.884	3212.662	.669	.218	-.082
114	15	N190A	-6.576	1669.459	-3213.262	0	0	0
115	15	N69	2500.781	401.906	-1380.326	-.375	.039	-.46
116	15	N133	-3250.158	1939.861	1876.461	0	0	0
117	15	N136	-2963.218	402.301	-1479.758	-.245	-.28	.488

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
118	15	N200	2813.574	1689.363	1631.765	0	0	0
119	15	Totals:	-1121.581	6671.772	647.542			
120	15	COG (ft):	X: -.27	Y: .466	Z: .077			
121	16	N30	-266.574	575.176	2806.707	.654	.32	-.084
122	16	N190A	-9.108	1636.109	-3151.419	0	0	0
123	16	N69	2552.809	399.929	-1519.008	-.361	-.056	-.465
124	16	N133	-3269.572	1950.047	1885.189	0	0	0
125	16	N136	-3112.341	403.273	-1667.231	-.231	-.119	.495
126	16	N200	2846.252	1707.238	1645.749	0	0	0
127	16	Totals:	-1258.533	6671.773	-.014			
128	16	COG (ft):	X: -.27	Y: .466	Z: .077			
129	17	N30	-193.098	580.89	2425.26	.642	.158	-.087
130	17	N190A	-6.748	1605.34	-3094.672	0	0	0
131	17	N69	2694.801	397.776	-1758.105	-.349	-.307	-.467
132	17	N133	-3307.917	1971.32	1902.776	0	0	0
133	17	N136	-3132.343	404.779	-1752.816	-.22	-.107	.503
134	17	N200	2855.943	1711.667	1648.593	0	0	0
135	17	Totals:	-1089.362	6671.773	-628.964			
136	17	COG (ft):	X: -.27	Y: .466	Z: .077			
137	18	N30	-67.203	584.347	2179.882	.631	-.091	-.088
138	18	N190A	-2.706	1582.959	-3050.506	0	0	0
139	18	N69	2977.489	396.812	-2044.294	-.344	-.528	-.466
140	18	N133	-3351.915	1998.432	1925.72	0	0	0
141	18	N136	-3045.832	405.145	-1769.732	-.211	-.122	.509
142	18	N200	2843.276	1704.078	1638.445	0	0	0
143	18	Totals:	-646.89	6671.773	-1120.484			
144	18	COG (ft):	X: -.27	Y: .466	Z: .077			
145	19	N30	25.208	585.181	2095.535	.621	-.16	-.095
146	19	N190A	-.463	1572.961	-3029.716	0	0	0
147	19	N69	3361.717	397.861	-2216.683	-.347	-.419	-.462
148	19	N133	-3394.629	2026.121	1953.185	0	0	0
149	19	N136	-2803.511	405.282	-1748.063	-.203	.058	.515
150	19	N200	2811.677	1684.367	1615.358	0	0	0
151	19	Totals:	0	6671.773	-1330.385			
152	19	COG (ft):	X: -.27	Y: .466	Z: .077			
153	20	N30	111.21	583.3	2185.482	.623	-.163	-.109
154	20	N190A	1.974	1580.466	-3045.596	0	0	0
155	20	N69	3655.734	399.855	-2218.442	-.359	-.127	-.455
156	20	N133	-3427.622	2046.516	1976.603	0	0	0
157	20	N136	-2442.197	406.436	-1637.346	-.202	.258	.519
158	20	N200	2766.393	1655.199	1586.594	0	0	0
159	20	Totals:	665.491	6671.773	-1152.704			
160	20	COG (ft):	X: -.27	Y: .466	Z: .077			
161	21	N30	219.898	578.645	2466.55	.636	-.3	-.118
162	21	N190A	6.339	1605.464	-3094.923	0	0	0
163	21	N69	3744.078	401.689	-2133.427	-.373	.027	-.449
164	21	N133	-3437.2	2052.152	1984.396	0	0	0
165	21	N136	-2131.049	407.3	-1432.712	-.211	.207	.517
166	21	N200	2719.511	1626.522	1562.542	0	0	0
167	21	Totals:	1121.578	6671.772	-647.575			
168	21	COG (ft):	X: -.27	Y: .466	Z: .077			
169	22	N30	270.358	572.338	2872.656	.651	-.402	-.117

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
170	22	N190A	8.854	1638.809	-3156.754	0	0	0
171	22	N69	3692.008	403.647	-1994.952	-.387	.122	-.444
172	22	N133	-3417.804	2041.976	1975.672	0	0	0
173	22	N136	-1981.703	406.363	-1245.204	-.225	.045	.509
174	22	N200	2686.817	1608.638	1548.562	0	0	0
175	22	Totals:	1258.53	6671.772	-.02			
176	22	COG (ft):	X: -.27	Y: .466	Z: .077			
177	23	N30	196.715	566.642	3253.944	.662	-.24	-.114
178	23	N190A	6.486	1669.564	-3213.478	0	0	0
179	23	N69	3550.362	405.772	-1755.943	-.399	.372	-.442
180	23	N133	-3379.489	2020.721	1958.087	0	0	0
181	23	N136	-1961.83	404.873	-1159.385	-.236	.034	.501
182	23	N200	2677.115	1604.199	1545.704	0	0	0
183	23	Totals:	1089.359	6671.772	628.93			
184	23	COG (ft):	X: -.27	Y: .466	Z: .077			
185	24	N30	70.584	563.216	3499.132	.674	.009	-.113
186	24	N190A	2.475	1691.939	-3257.638	0	0	0
187	24	N69	3268.011	406.723	-1469.859	-.404	.594	-.443
188	24	N133	-3335.495	1993.619	1935.172	0	0	0
189	24	N136	-2048.458	404.494	-1142.192	-.245	.048	.496
190	24	N200	2689.77	1611.781	1555.836	0	0	0
191	24	Totals:	646.887	6671.772	1120.451			
192	24	COG (ft):	X: -.27	Y: .466	Z: .077			
193	25	N30	-12.78	216.251	1500.424	.272	.028	-.134
194	25	N190A	.035	793.023	-1528.978	0	0	0
195	25	N69	1363.572	278.639	-700.433	-.291	.105	-.25
196	25	N133	-1550.411	925.241	896.858	0	0	0
197	25	N136	-2595.398	132.599	-1459.356	-.486	-.039	.047
198	25	N200	2794.981	1654.503	1615.372	0	0	0
199	25	Totals:	0	4000.256	323.888			
200	25	COG (ft):	X: .749	Y: .428	Z: .834			
201	26	N30	-33.422	216.534	1478.032	.271	.032	-.131
202	26	N190A	-.547	791.422	-1525.618	0	0	0
203	26	N69	1292.533	278.018	-699.052	-.288	.034	-.251
204	26	N133	-1542.983	920.585	891.48	0	0	0
205	26	N136	-2681.767	133.021	-1486.209	-.487	-.086	.046
206	26	N200	2804.486	1660.676	1621.425	0	0	0
207	26	Totals:	-161.699	4000.256	280.058			
208	26	COG (ft):	X: .749	Y: .428	Z: .834			
209	27	N30	-58.343	217.01	1408.901	.267	.063	-.129
210	27	N190A	-1.557	785.97	-1514.93	0	0	0
211	27	N69	1274.043	277.679	-720.681	-.284	-.007	-.253
212	27	N133	-1540.956	919.347	889.704	0	0	0
213	27	N136	-2757.086	133.489	-1533.852	-.485	-.076	.047
214	27	N200	2814.373	1666.759	1626.466	0	0	0
215	27	Totals:	-269.526	4000.256	155.607			
216	27	COG (ft):	X: .749	Y: .428	Z: .834			
217	28	N30	-70.059	217.731	1312.155	.263	.09	-.129
218	28	N190A	-2.134	778.779	-1501.682	0	0	0
219	28	N69	1290.181	277.341	-752.389	-.281	-.027	-.254
220	28	N133	-1545.496	921.741	891.686	0	0	0
221	28	N136	-2793.086	134.252	-1579.007	-.481	-.034	.05

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
222	28	N200	2821.034	1670.411	1629.229	0	0	0
223	28	Totals:	-299.561	4000.256	-.007			
224	28	COG (ft):	X: .749	Y: .428	Z: .834			
225	29	N30	-53.787	218.486	1222.19	.26	.055	-.13
226	29	N190A	-1.568	772.235	-1489.708	0	0	0
227	29	N69	1324.151	276.943	-806.313	-.278	-.083	-.255
228	29	N133	-1554.079	926.515	895.527	0	0	0
229	29	N136	-2797.532	134.808	-1601.408	-.478	-.024	.052
230	29	N200	2822.965	1671.268	1629.681	0	0	0
231	29	Totals:	-259.85	4000.256	-150.031			
232	29	COG (ft):	X: .749	Y: .428	Z: .834			
233	30	N30	-24.691	218.893	1162.501	.257	-.006	-.129
234	30	N190A	-.6	767.438	-1480.312	0	0	0
235	30	N69	1389.686	276.965	-875.13	-.277	-.141	-.255
236	30	N133	-1563.782	932.511	900.516	0	0	0
237	30	N136	-2777.334	134.633	-1605.587	-.476	-.028	.053
238	30	N200	2820.61	1669.816	1627.619	0	0	0
239	30	Totals:	-156.111	4000.256	-270.393			
240	30	COG (ft):	X: .749	Y: .428	Z: .834			
241	31	N30	-2.197	218.861	1140.611	.254	-.029	-.13
242	31	N190A	-.046	765.216	-1475.729	0	0	0
243	31	N69	1481.725	277.552	-919.762	-.278	-.121	-.254
244	31	N133	-1573.311	938.73	906.684	0	0	0
245	31	N136	-2720.486	134.071	-1598.594	-.473	.011	.054
246	31	N200	2814.316	1665.826	1622.886	0	0	0
247	31	Totals:	0	4000.256	-323.903			
248	31	COG (ft):	X: .749	Y: .428	Z: .834			
249	32	N30	18.468	218.576	1163.004	.255	-.032	-.133
250	32	N190A	.535	766.818	-1479.091	0	0	0
251	32	N69	1552.741	278.175	-921.121	-.281	-.049	-.253
252	32	N133	-1580.737	943.385	912.06	0	0	0
253	32	N136	-2634.121	133.648	-1571.759	-.472	.059	.055
254	32	N200	2804.812	1659.654	1616.834	0	0	0
255	32	Totals:	161.699	4000.256	-280.073			
256	32	COG (ft):	X: .749	Y: .428	Z: .834			
257	33	N30	43.388	218.098	1232.144	.258	-.064	-.135
258	33	N190A	1.546	772.271	-1489.78	0	0	0
259	33	N69	1571.216	278.514	-899.496	-.284	-.008	-.251
260	33	N133	-1582.764	944.622	913.835	0	0	0
261	33	N136	-2558.785	133.181	-1524.118	-.474	.049	.054
262	33	N200	2794.926	1653.57	1611.793	0	0	0
263	33	Totals:	269.526	4000.256	-155.622			
264	33	COG (ft):	X: .749	Y: .428	Z: .834			
265	34	N30	55.095	217.375	1328.899	.263	-.09	-.135
266	34	N190A	2.122	779.462	-1503.028	0	0	0
267	34	N69	1555.075	278.851	-867.802	-.288	.011	-.25
268	34	N133	-1578.225	942.229	911.853	0	0	0
269	34	N136	-2522.77	132.42	-1478.961	-.478	.006	.051
270	34	N200	2788.264	1649.918	1609.03	0	0	0
271	34	Totals:	299.561	4000.256	-.008			
272	34	COG (ft):	X: .749	Y: .428	Z: .834			
273	35	N30	38.813	216.622	1418.857	.266	-.056	-.134

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
274	35	N190A	1.555	786.005	-1515	0	0	0
275	35	N69	1521.127	279.247	-813.885	-.291	.068	-.249
276	35	N133	-1569.644	937.456	908.013	0	0	0
277	35	N136	-2518.332	131.866	-1456.546	-.48	-.003	.049
278	35	N200	2786.331	1649.06	1608.577	0	0	0
279	35	Totals:	259.85	4000.256	150.016			
280	35	COG (ft):	X: .749	Y: .428	Z: .834			
281	36	N30	9.703	216.217	1478.534	.269	.006	-.135
282	36	N190A	.588	790.801	-1524.394	0	0	0
283	36	N69	1455.618	279.225	-745.074	-.292	.125	-.249
284	36	N133	-1559.942	931.461	903.026	0	0	0
285	36	N136	-2538.542	132.04	-1452.352	-.483	0	.048
286	36	N200	2788.686	1650.512	1610.638	0	0	0
287	36	Totals:	156.111	4000.255	270.378			
288	36	COG (ft):	X: .749	Y: .428	Z: .834			
289	37	N30	-1.716	213.45	1501.172	.269	-.006	.016
290	37	N190A	-.007	792.28	-1527.515	0	0	0
291	37	N69	2806.751	161.847	-1524.046	-.597	.118	-.036
292	37	N133	-2996.781	1772.659	1731.667	0	0	0
293	37	N136	-1106.747	282.407	-608.914	-.222	-.027	.276
294	37	N200	1298.498	777.607	751.523	0	0	0
295	37	Totals:	-.002	4000.251	323.887			
296	37	COG (ft):	X: -1.126	Y: .428	Z: .834			
297	38	N30	-22.358	213.745	1478.778	.268	-.002	.019
298	38	N190A	-.59	790.672	-1524.14	0	0	0
299	38	N69	2735.686	161.216	-1522.757	-.594	.047	-.037
300	38	N133	-2989.328	1768.018	1726.373	0	0	0
301	38	N136	-1193.103	282.801	-635.837	-.223	-.074	.275
302	38	N200	1307.991	783.799	757.64	0	0	0
303	38	Totals:	-161.701	4000.251	280.057			
304	38	COG (ft):	X: -1.126	Y: .428	Z: .834			
305	39	N30	-47.28	214.229	1409.644	.264	.029	.021
306	39	N190A	-1.6	785.214	-1513.441	0	0	0
307	39	N69	2717.181	160.889	-1544.427	-.591	.006	-.039
308	39	N133	-2987.285	1766.784	1724.633	0	0	0
309	39	N136	-1268.446	283.236	-683.479	-.221	-.064	.276
310	39	N200	1317.9	789.899	762.676	0	0	0
311	39	Totals:	-269.529	4000.252	155.606			
312	39	COG (ft):	X: -1.126	Y: .428	Z: .834			
313	40	N30	-58.996	214.954	1312.898	.26	.056	.021
314	40	N190A	-2.176	778.021	-1500.188	0	0	0
315	40	N69	2733.311	160.571	-1576.146	-.587	-.014	-.041
316	40	N133	-2991.816	1769.173	1726.624	0	0	0
317	40	N136	-1304.478	283.975	-728.593	-.217	-.022	.279
318	40	N200	1324.592	793.559	765.398	0	0	0
319	40	Totals:	-299.563	4000.252	-.007			
320	40	COG (ft):	X: -1.126	Y: .428	Z: .834			
321	41	N30	-42.725	215.707	1222.935	.257	.021	.02
322	41	N190A	-1.609	771.479	-1488.219	0	0	0
323	41	N69	2767.237	160.199	-1630.117	-.585	-.07	-.041
324	41	N133	-3000.354	1773.934	1730.512	0	0	0
325	41	N136	-1308.919	284.517	-750.994	-.215	-.013	.281

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
326	41	N200	1326.518	794.417	765.852	0	0	0
327	41	Totals:	-259.852	4000.252	-150.031			
328	41	COG (ft):	X: -1.126	Y: .428	Z: .834			
329	42	N30	-13.629	216.107	1163.252	.254	-.04	.02
330	42	N190A	-.641	766.689	-1478.837	0	0	0
331	42	N69	2832.71	160.256	-1698.974	-.583	-.127	-.041
332	42	N133	-3009.995	1779.906	1735.543	0	0	0
333	42	N136	-1288.701	284.336	-755.182	-.212	-.016	.282
334	42	N200	1324.143	792.957	763.804	0	0	0
335	42	Totals:	-156.113	4000.252	-270.394			
336	42	COG (ft):	X: -1.126	Y: .428	Z: .834			
337	43	N30	8.865	216.063	1141.366	.251	-.063	.02
338	43	N190A	-.087	764.476	-1474.271	0	0	0
339	43	N69	2924.733	160.876	-1743.558	-.584	-.107	-.041
340	43	N133	-3019.508	1786.098	1741.671	0	0	0
341	43	N136	-1231.861	283.785	-748.136	-.209	.023	.284
342	43	N200	1317.856	788.953	759.025	0	0	0
343	43	Totals:	-.002	4000.252	-323.903			
344	43	COG (ft):	X: -1.126	Y: .428	Z: .834			
345	44	N30	29.53	215.767	1163.761	.252	-.066	.017
346	44	N190A	.494	766.085	-1477.648	0	0	0
347	44	N69	2995.775	161.509	-1744.827	-.587	-.036	-.039
348	44	N133	-3026.96	1790.738	1746.963	0	0	0
349	44	N136	-1145.508	283.39	-721.231	-.208	.071	.284
350	44	N200	1308.365	782.763	752.908	0	0	0
351	44	Totals:	161.697	4000.252	-280.073			
352	44	COG (ft):	X: -1.126	Y: .428	Z: .834			
353	45	N30	54.451	215.281	1232.903	.255	-.098	.014
354	45	N190A	1.504	771.544	-1488.349	0	0	0
355	45	N69	3014.265	161.836	-1723.16	-.591	.005	-.037
356	45	N133	-3029.003	1791.972	1748.702	0	0	0
357	45	N136	-1070.149	282.957	-673.591	-.21	.061	.283
358	45	N200	1298.457	776.662	747.871	0	0	0
359	45	Totals:	269.524	4000.252	-155.622			
360	45	COG (ft):	X: -1.126	Y: .428	Z: .834			
361	46	N30	66.158	214.555	1329.66	.26	-.124	.015
362	46	N190A	2.08	778.737	-1501.601	0	0	0
363	46	N69	2998.132	162.154	-1691.454	-.594	.025	-.036
364	46	N133	-3024.473	1789.584	1746.712	0	0	0
365	46	N136	-1034.101	282.22	-628.474	-.214	.018	.28
366	46	N200	1291.763	773.002	745.149	0	0	0
367	46	Totals:	299.559	4000.251	-.009			
368	46	COG (ft):	X: -1.126	Y: .428	Z: .834			
369	47	N30	49.877	213.803	1419.615	.263	-.09	.016
370	47	N190A	1.513	785.278	-1513.568	0	0	0
371	47	N69	2964.228	162.524	-1637.489	-.597	.081	-.035
372	47	N133	-3015.937	1784.824	1742.824	0	0	0
373	47	N136	-1029.668	281.679	-606.061	-.217	.009	.278
374	47	N200	1289.835	772.143	744.694	0	0	0
375	47	Totals:	259.848	4000.251	150.015			
376	47	COG (ft):	X: -1.126	Y: .428	Z: .834			
377	48	N30	20.768	213.405	1479.287	.266	-.028	.015

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
378	48	N190A	.546	790.067	-1522.948	0	0	0
379	48	N69	2898.78	162.465	-1568.64	-.598	.138	-.035
380	48	N133	-3006.296	1778.852	1737.794	0	0	0
381	48	N136	-1049.899	281.859	-601.857	-.219	.012	.277
382	48	N200	1292.21	773.602	746.742	0	0	0
383	48	Totals:	156.109	4000.251	270.378			
384	48	COG (ft):	X: -1.126	Y: .428	Z: .834			
385	49	N30	-1.727	212.941	1370.422	.259	-.018	-.059
386	49	N190A	-.028	787.547	-1518.957	0	0	0
387	49	N69	1610.423	360.03	-910.965	-.514	.008	-.229
388	49	N133	-1718.777	1023.943	992.335	0	0	0
389	49	N136	-1362.422	361.184	-782.976	-.443	-.017	.253
390	49	N200	1472.53	879.609	850.135	0	0	0
391	49	Totals:	-.001	3625.254	-.007			
392	49	COG (ft):	X: -.216	Y: .472	Z: .498			
393	50	N30	2.646	254.949	1343.85	.301	-.031	-.026
394	50	N190A	-.044	786.195	-1516.291	0	0	0
395	50	N69	2367.966	89.754	-1346.786	-.262	.006	-.092
396	50	N133	-2502.854	1483.388	1444.99	0	0	0
397	50	N136	-1176.965	227.066	-681.659	-.123	-.005	.269
398	50	N200	1309.249	783.907	755.888	0	0	0
399	50	Totals:	-.001	3625.258	-.008			
400	50	COG (ft):	X: -.863	Y: .472	Z: .498			
401	51	N30	-2.043	316.094	1621.208	.371	-.021	-.067
402	51	N190A	-.039	929.162	-1792.604	0	0	0
403	51	N69	1744.73	246.639	-985.121	-.226	.009	-.268
404	51	N133	-1869.151	1114.779	1079.16	0	0	0
405	51	N136	-1442.724	246.308	-828.612	-.132	-.019	.301
406	51	N200	1569.226	938.991	905.961	0	0	0
407	51	Totals:	0	3791.972	-.009			
408	51	COG (ft):	X: -.25	Y: .526	Z: .084			
409	52	N30	-2.433	275.185	1602.251	.328	-.01	-.06
410	52	N190A	-.016	842.235	-1624.353	0	0	0
411	52	N69	1490.684	220.7	-788.314	-.205	.074	-.238
412	52	N133	-1636.816	976.417	946.252	0	0	0
413	52	N136	-1224.452	219.08	-666.905	-.123	-.052	.264
414	52	N200	1373.034	821.812	793.981	0	0	0
415	52	Totals:	0	3355.429	262.912			
416	52	COG (ft):	X: -.25	Y: .526	Z: .084			
417	53	N30	-25.171	276.125	1576.26	.328	.015	-.061
418	53	N190A	-.656	839.295	-1618.734	0	0	0
419	53	N69	1429.717	221.625	-773.028	-.203	.047	-.24
420	53	N133	-1625.791	969.582	939.367	0	0	0
421	53	N136	-1298.422	217.333	-699.494	-.122	-.065	.263
422	53	N200	1388.863	831.468	803.309	0	0	0
423	53	Totals:	-131.459	3355.429	227.681			
424	53	COG (ft):	X: -.25	Y: .526	Z: .084			
425	54	N30	-41.649	278.017	1512.316	.329	.031	-.061
426	54	N190A	-1.128	831.782	-1604.41	0	0	0
427	54	N69	1399.332	221.636	-784.179	-.201	.01	-.241
428	54	N133	-1622.308	967.272	936.645	0	0	0
429	54	N136	-1366.541	215.747	-741.113	-.12	-.065	.262

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
430	54	N200	1404.607	840.975	812.193	0	0	0
431	54	Totals:	-227.687	3355.429	131.453			
432	54	COG (ft):	X: -.25	Y: .526	Z: .084			
433	55	N30	-47.457	280.355	1427.538	.329	.034	-.06
434	55	N190A	-1.306	821.707	-1585.215	0	0	0
435	55	N69	1407.665	220.73	-818.783	-.198	-.028	-.242
436	55	N133	-1627.299	970.105	938.816	0	0	0
437	55	N136	-1410.571	214.746	-780.618	-.117	-.052	.262
438	55	N200	1416.051	847.786	818.254	0	0	0
439	55	Totals:	-262.918	3355.429	-.007			
440	55	COG (ft):	X: -.25	Y: .526	Z: .084			
441	56	N30	-41.032	282.513	1344.646	.329	.023	-.06
442	56	N190A	-1.142	811.772	-1566.293	0	0	0
443	56	N69	1452.495	219.148	-867.568	-.195	-.056	-.241
444	56	N133	-1639.43	977.324	945.299	0	0	0
445	56	N136	-1418.702	214.597	-807.418	-.114	-.03	.264
446	56	N200	1420.124	850.074	819.867	0	0	0
447	56	Totals:	-227.687	3355.429	-131.467			
448	56	COG (ft):	X: -.25	Y: .526	Z: .084			
449	57	N30	-24.098	283.912	1285.855	.328	0	-.059
450	57	N190A	-.68	804.638	-1552.717	0	0	0
451	57	N69	1521.792	217.317	-917.454	-.194	-.067	-.24
452	57	N133	-1655.446	986.992	954.356	0	0	0
453	57	N136	-1388.766	215.341	-814.338	-.113	-.004	.266
454	57	N200	1415.739	847.229	816.601	0	0	0
455	57	Totals:	-131.459	3355.429	-227.696			
456	57	COG (ft):	X: -.25	Y: .526	Z: .084			
457	58	N30	-1.189	284.176	1266.91	.328	-.027	-.059
458	58	N190A	-.044	802.216	-1548.12	0	0	0
459	58	N69	1596.999	215.726	-955.082	-.194	-.058	-.238
460	58	N133	-1671.059	996.52	963.56	0	0	0
461	58	N136	-1328.778	216.778	-799.525	-.112	.019	.268
462	58	N200	1404.069	840.012	809.33	0	0	0
463	58	Totals:	0	3355.429	-262.928			
464	58	COG (ft):	X: -.25	Y: .526	Z: .084			
465	59	N30	21.555	283.235	1292.903	.327	-.052	-.058
466	59	N190A	.596	805.157	-1553.739	0	0	0
467	59	N69	1657.957	214.802	-970.364	-.196	-.031	-.235
468	59	N133	-1682.083	1003.355	970.444	0	0	0
469	59	N136	-1254.808	218.524	-766.943	-.113	.032	.27
470	59	N200	1388.241	830.356	800.002	0	0	0
471	59	Totals:	131.458	3355.429	-227.697			
472	59	COG (ft):	X: -.25	Y: .526	Z: .084			
473	60	N30	38.035	281.342	1356.852	.327	-.068	-.059
474	60	N190A	1.068	812.67	-1568.064	0	0	0
475	60	N69	1688.338	214.792	-959.213	-.198	.006	-.234
476	60	N133	-1685.566	1005.664	973.165	0	0	0
477	60	N136	-1186.686	220.112	-725.327	-.115	.032	.27
478	60	N200	1372.497	820.849	791.118	0	0	0
479	60	Totals:	227.686	3355.429	-131.469			
480	60	COG (ft):	X: -.25	Y: .526	Z: .084			
481	61	N30	43.839	279.003	1441.633	.327	-.071	-.059

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
482	61	N190A	1.245	822.745	-1587.259	0	0	0
483	61	N69	1680.007	215.698	-924.614	-.201	.044	-.233
484	61	N133	-1680.576	1002.831	970.993	0	0	0
485	61	N136	-1142.652	221.115	-685.819	-.117	.019	.27
486	61	N200	1361.054	814.038	785.056	0	0	0
487	61	Totals:	262.916	3355.429	-.009			
488	61	COG (ft):	X: -.25	Y: .526	Z: .084			
489	62	N30	37.408	276.846	1524.522	.327	-.06	-.059
490	62	N190A	1.081	832.68	-1606.179	0	0	0
491	62	N69	1635.185	217.277	-875.833	-.204	.072	-.234
492	62	N133	-1668.446	995.613	964.511	0	0	0
493	62	N136	-1134.521	221.264	-659.012	-.12	-.004	.268
494	62	N200	1356.979	811.749	783.443	0	0	0
495	62	Totals:	227.685	3355.429	131.451			
496	62	COG (ft):	X: -.25	Y: .526	Z: .084			
497	63	N30	20.472	275.449	1583.308	.328	-.037	-.06
498	63	N190A	.619	839.813	-1619.756	0	0	0
499	63	N69	1565.893	219.108	-825.948	-.205	.083	-.235
500	63	N133	-1652.43	985.946	955.456	0	0	0
501	63	N136	-1164.461	220.519	-652.089	-.122	-.03	.266
502	63	N200	1361.364	814.594	786.71	0	0	0
503	63	Totals:	131.458	3355.429	227.68			
504	63	COG (ft):	X: -.25	Y: .526	Z: .084			
505	64	N30	-1.88	189.877	1164.906	.228	-.004	-.042
506	64	N190A	-.005	591.63	-1140.778	0	0	0
507	64	N69	1019.977	154.133	-522.567	-.144	.072	-.165
508	64	N133	-1132.557	675.736	655.141	0	0	0
509	64	N136	-835.241	152.61	-443.382	-.087	-.047	.183
510	64	N200	949.706	568.544	549.595	0	0	0
511	64	Totals:	0	2332.529	262.915			
512	64	COG (ft):	X: -.25	Y: .526	Z: .084			
513	65	N30	-24.615	190.819	1138.916	.228	.021	-.042
514	65	N190A	-.649	588.689	-1135.16	0	0	0
515	65	N69	959.018	155.063	-507.277	-.143	.045	-.167
516	65	N133	-1121.54	668.9	648.25	0	0	0
517	65	N136	-909.2	150.858	-475.967	-.086	-.06	.182
518	65	N200	965.527	578.2	558.922	0	0	0
519	65	Totals:	-131.459	2332.529	227.684			
520	65	COG (ft):	X: -.25	Y: .526	Z: .084			
521	66	N30	-41.091	192.715	1074.976	.229	.037	-.042
522	66	N190A	-1.124	581.175	-1120.839	0	0	0
523	66	N69	928.64	155.075	-518.421	-.14	.007	-.169
524	66	N133	-1118.066	666.591	645.518	0	0	0
525	66	N136	-977.311	149.268	-517.582	-.084	-.06	.181
526	66	N200	981.265	587.706	567.803	0	0	0
527	66	Totals:	-227.687	2332.529	131.455			
528	66	COG (ft):	X: -.25	Y: .526	Z: .084			
529	67	N30	-46.899	195.058	990.206	.229	.04	-.042
530	67	N190A	-1.302	571.101	-1101.649	0	0	0
531	67	N69	936.977	154.165	-553.015	-.137	-.03	-.169
532	67	N133	-1123.063	669.424	647.678	0	0	0
533	67	N136	-1021.336	148.264	-557.084	-.081	-.047	.181

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
534	67	N200	992.706	594.516	573.86	0	0	0
535	67	Totals:	-262.918	2332.529	-.005			
536	67	COG (ft):	X: -.25	Y: .526	Z: .084			
537	68	N30	-40.477	197.22	907.323	.229	.028	-.041
538	68	N190A	-1.134	561.167	-1082.735	0	0	0
539	68	N69	981.807	152.578	-601.791	-.134	-.059	-.169
540	68	N133	-1135.195	676.644	654.152	0	0	0
541	68	N136	-1029.468	148.115	-583.882	-.079	-.025	.183
542	68	N200	996.782	596.805	575.468	0	0	0
543	68	Totals:	-227.687	2332.529	-131.465			
544	68	COG (ft):	X: -.25	Y: .526	Z: .084			
545	69	N30	-23.547	198.621	848.541	.228	.006	-.041
546	69	N190A	-.667	554.034	-1069.165	0	0	0
547	69	N69	1051.099	150.739	-651.671	-.133	-.07	-.167
548	69	N133	-1151.209	686.313	663.203	0	0	0
549	69	N136	-999.539	148.861	-590.801	-.077	.001	.185
550	69	N200	992.402	593.961	572.199	0	0	0
551	69	Totals:	-131.459	2332.529	-227.694			
552	69	COG (ft):	X: -.25	Y: .526	Z: .084			
553	70	N30	-.641	198.885	829.601	.228	-.022	-.04
554	70	N190A	-.024	551.614	-1064.572	0	0	0
555	70	N69	1126.299	149.142	-689.298	-.133	-.061	-.165
556	70	N133	-1166.815	695.842	672.408	0	0	0
557	70	N136	-939.56	150.302	-575.991	-.076	.024	.187
558	70	N200	980.741	586.745	564.926	0	0	0
559	70	Totals:	0	2332.529	-262.926			
560	70	COG (ft):	X: -.25	Y: .526	Z: .084			
561	71	N30	22.099	197.942	855.594	.227	-.047	-.04
562	71	N190A	.621	554.555	-1070.192	0	0	0
563	71	N69	1187.249	148.214	-704.583	-.135	-.034	-.163
564	71	N133	-1177.831	702.676	679.298	0	0	0
565	71	N136	-865.601	152.052	-543.412	-.077	.037	.188
566	71	N200	964.921	577.09	555.599	0	0	0
567	71	Totals:	131.458	2332.529	-227.695			
568	71	COG (ft):	X: -.25	Y: .526	Z: .084			
569	72	N30	38.578	196.044	919.539	.227	-.063	-.04
570	72	N190A	1.095	562.069	-1084.513	0	0	0
571	72	N69	1217.623	148.202	-693.438	-.138	.004	-.161
572	72	N133	-1181.306	704.986	682.028	0	0	0
573	72	N136	-797.488	153.643	-501.799	-.079	.037	.189
574	72	N200	949.184	567.584	546.717	0	0	0
575	72	Totals:	227.686	2332.529	-131.466			
576	72	COG (ft):	X: -.25	Y: .526	Z: .084			
577	73	N30	44.382	193.701	1004.311	.227	-.065	-.041
578	73	N190A	1.272	572.143	-1103.702	0	0	0
579	73	N69	1209.288	149.111	-658.849	-.141	.041	-.161
580	73	N133	-1176.31	702.152	679.868	0	0	0
581	73	N136	-753.459	154.649	-462.295	-.082	.024	.189
582	73	N200	937.743	560.773	540.66	0	0	0
583	73	Totals:	262.917	2332.529	-.006			
584	73	COG (ft):	X: -.25	Y: .526	Z: .084			
585	74	N30	37.954	191.54	1087.191	.227	-.054	-.041

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
586	74	N190A	1.104	582.077	-1122.616	0	0	0
587	74	N69	1164.466	150.696	-610.078	-.143	.07	-.161
588	74	N133	-1164.178	694.933	673.395	0	0	0
589	74	N136	-745.327	154.799	-435.49	-.084	.001	.187
590	74	N200	933.666	558.484	539.051	0	0	0
591	74	Totals:	227.686	2332.529	131.454			
592	74	COG (ft):	X: -.25	Y: .526	Z: .084			
593	75	N30	21.021	190.141	1145.968	.228	-.032	-.042
594	75	N190A	.637	589.209	-1136.186	0	0	0
595	75	N69	1095.179	152.534	-560.199	-.144	.081	-.163
596	75	N133	-1148.165	685.265	664.345	0	0	0
597	75	N136	-775.26	154.052	-428.568	-.086	-.025	.185
598	75	N200	938.045	561.328	542.322	0	0	0
599	75	Totals:	131.458	2332.529	227.683			
600	75	COG (ft):	X: -.25	Y: .526	Z: .084			

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [...	phi*Mn ...	phi*Mn ...	Cb	Eqn
1	M25	HSS4X4X4	.123	0	10	.045	.757	z	4	124657...	139518	16.181	16.181	2...	H1-1b
2	M26	HSS4X4X4	.076	2.375	14	.036	.223	z	2	136263....	139518	16.181	16.181	1.7	H1-1b
3	M27	HSS4X4X4	.085	0	24	.041	2.152	z	12	136263....	139518	16.181	16.181	1....	H1-1b
4	M28	PL1/2x6	.208	.516	6	.093	.516	y	13	66009.2...	97200	1.012	12.15	1...	H1-1b
5	M31	L2x2x3	.160	4.162	2	.009	4.162	y	17	9823.122	23392.8	.558	1.105	1....	H2-1
6	M32	L2x2x3	.170	0	12	.009	0	y	21	9823.122	23392.8	.558	1.11	1...	H2-1
7	M36	PL3/8x6	.212	0	8	.105	0	y	7	70677.9...	72900	.57	9.113	1...	H1-1b
8	M37	PL3/8x6	.278	.167	8	.121	0	y	24	71601.7...	72900	.57	9.113	1...	H1-1b
9	M39	PL1/2x6	.048	0	2	.097	0	y	24	96757.5...	97200	1.012	12.15	1...	H1-1b
10	M41	PL3/8x6	.283	0	6	.088	0	y	1	70677.9...	72900	.57	9.113	2...	H1-1b
11	M42	PL3/8x6	.320	.167	6	.143	0	y	14	71601.7...	72900	.57	9.113	1...	H1-1b
12	M44	PL1/2x6	.058	0	6	.101	0	y	14	96757.5...	97200	1.012	12.15	1...	H1-1b
13	LV	PIPE_3.0	.091	11.198	2	.053	4.427		7	28250.5...	65205	5.749	5.749	2...	H1-1b
14	MP1A	PIPE_2.0	.330	4	1	.063	4		7	14916.0...	32130	1.872	1.872	1...	H1-1b
15	MP2A	PIPE_2.0	.158	4	3	.033	4		10	14916.0...	32130	1.872	1.872	1...	H1-1b
16	3A	PIPE_2.0	.186	4	3	.070	4		9	14916.0...	32130	1.872	1.872	1...	H1-1b
17	4A	PIPE_2.0	.261	4	11	.220	4		10	14916.0...	32130	1.872	1.872	1...	H1-1b
18	OVP	PIPE_2.0	.175	3	2	.018	3		2	26521.4...	32130	1.872	1.872	1...	H1-1b
19	M103	PIPE_2.0	.113	11.328	5	.045	11.198		8	6295.422	32130	1.872	1.872	4...	H1-1b
20	M127	L2.5x2.5x4	.107	1.492	10	.029	0	z	10	35855.3...	38556	1.114	2.537	2...	H2-1
21	M128A	LL2.5x2.5x3...	.083	4.416	13	.004	4.416	z	4	44462.5...	58320	3.954	2.55	1	H1-1b*
22	M45A	HSS4X4X4	.168	0	12	.061	3.945	y	48	124657....	139518	16.181	16.181	1...	H1-1b
23	M46A	HSS4X4X4	.091	2.375	22	.039	.223	z	10	136263....	139518	16.181	16.181	1...	H1-1b
24	M47A	HSS4X4X4	.093	0	20	.047	2.152	z	8	136263....	139518	16.181	16.181	1...	H1-1b
25	M48A	PL1/2x6	.185	.516	10	.129	.516	y	45	66009.2...	97200	1.012	12.15	1...	H1-1b
26	M51	L2x2x3	.167	4.162	10	.009	4.162	y	13	9823.122	23392.8	.558	1.105	1....	H2-1
27	M52	L2x2x3	.192	0	8	.009	0	y	17	9823.122	23392.8	.558	1.11	1....	H2-1
28	M56	PL3/8x6	.206	0	10	.116	0	y	2	70677.9...	72900	.57	9.113	1...	H1-1b
29	M57	PL3/8x6	.284	.167	4	.145	0	y	20	71601.7...	72900	.57	9.113	1...	H1-1b
30	M59	PL1/2x6	.059	.112	8	.125	0	y	20	96757.5...	97200	1.012	12.15	1...	H1-1b
31	M61	PL3/8x6	.152	0	2	.111	0	y	45	70677.9...	72900	.57	9.113	2...	H1-1b
32	M62	PL3/8x6	.339	.167	2	.158	0	y	22	71601.7...	72900	.57	9.113	1...	H1-1b

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [...	phi*Mn ...	phi*Mn ...	Cb	Eqn
33	M64	PL1/2x6	.051	.112	10	.205	0	y	46	96757.5...	97200	1.012	12.15	1....	H1-1b
34	M69	PIPE_3.0	.079	4.427	7	.053	8.203		9	28250.5...	65205	5.749	5.749	2....	H1-1b
35	MP1C	PIPE_2.0	.323	4	4	.063	4		12	14916.0...	32130	1.872	1.872	1....	H1-1b
36	MP2C	PIPE_2.0	.165	4	9	.026	4		6	14916.0...	32130	1.872	1.872	1....	H1-1b
37	MP3C	PIPE_2.0	.199	4	10	.031	4		5	14916.0...	32130	1.872	1.872	1....	H1-1b
38	MP4C	PIPE_2.0	.330	4	4	.058	4		12	14916.0...	32130	1.872	1.872	1....	H1-1b
39	M80A	PIPE_2.0	.092	11.328	8	.031	4.557		9	6295.422	32130	1.872	1.872	3....	H1-1b
40	M87	L2.5x2.5x4	.200	1.492	8	.027	0	z	6	35855.3...	38556	1.114	2.537	1....	H2-1
41	M88	LL2.5x2.5x3...	.100	4.416	21	.005	4.416	z	12	44462.5...	58320	3.954	2.55	1	H1-1b*
42	M89	HSS4X4X4	.101	0	2	.056	3.945	y	26	124657....	139518	16.181	16.181	1....	H1-1b
43	M90	HSS4X4X4	.082	2.375	18	.037	.223	z	6	136263....	139518	16.181	16.181	1.7	H1-1b
44	M91	HSS4X4X4	.082	0	16	.041	2.152	z	4	136263....	139518	16.181	16.181	1....	H1-1b
45	M92	PL1/2x6	.214	.516	12	.125	.516	y	28	66009.2...	97200	1.012	12.15	1....	H1-1b
46	M95	L2x2x3	.162	4.162	6	.009	4.162	y	21	9823.122	23392.8	.558	1.105	1....	H2-1
47	M96	L2x2x3	.167	0	4	.009	0	y	13	9823.122	23392.8	.558	1.11	1....	H2-1
48	M100	PL3/8x6	.323	0	12	.106	0	y	11	70677.9...	72900	.57	9.113	1....	H1-1b
49	M101A	PL3/8x6	.304	.167	12	.127	0	y	16	71601.7...	72900	.57	9.113	1....	H1-1b
50	M103A	PL1/2x6	.060	0	6	.192	0	y	27	96757.5...	97200	1.012	12.15	1....	H1-1b
51	M105	PL3/8x6	.188	0	10	.092	0	y	5	70677.9...	72900	.57	9.113	2....	H1-1b
52	M106A	PL3/8x6	.288	.167	10	.133	0	y	17	71601.7...	72900	.57	9.113	1....	H1-1b
53	M108A	PL1/2x6	.048	0	4	.109	0	y	19	96757.5...	97200	1.012	12.15	1....	H1-1b
54	M113	PIPE_3.0	.087	1.302	3	.054	8.203		5	28250.5...	65205	5.749	5.749	3....	H1-1b
55	1B	PIPE_2.0	.350	4	8	.251	4		2	14916.0...	32130	1.872	1.872	1....	H3-6
56	MP2B	PIPE_2.0	.190	4	8	.030	4		10	14916.0...	32130	1.872	1.872	1....	H1-1b
57	3B	PIPE_2.0	.218	4	7	.089	4		8	14916.0...	32130	1.872	1.872	1....	H1-1b
58	MP4B	PIPE_2.0	.333	4	1	.058	5		11	14916.0...	32130	1.872	1.872	1....	H1-1b
59	M124	PIPE_2.0	.098	11.198	8	.041	1.302		10	6295.422	32130	1.872	1.872	4....	H1-1b
60	M131	L2.5x2.5x4	.118	1.492	2	.034	0	z	8	35855.3...	38556	1.114	2.537	2....	H2-1
61	M132	LL2.5x2.5x3...	.084	4.416	17	.004	4.416	z	8	44462.5...	58320	3.954	2.55	1	H1-1b*
62	M129A	PIPE_2.0	.187	0	12	.058	0		11	31747.0...	32130	1.872	1.872	1....	H1-1b
63	M130A	PIPE_2.0	.173	0	11	.053	0		10	31747.0...	32130	1.872	1.872	1....	H1-1b
64	M131A	PIPE_2.0	.119	0	1	.039	0		2	32033.8...	32130	1.872	1.872	1....	H1-1b
65	M132A	PIPE_2.0	.113	0	1	.070	0		9	32033.8...	32130	1.872	1.872	1....	H1-1b
66	MP4A	PIPE_2.0	.140	5.5	1	.088	1		5	14916.0...	32130	1.872	1.872	1....	H1-1b
67	MP3A	PIPE_2.0	.069	5.5	3	.025	1		5	14916.0...	32130	1.872	1.872	2....	H1-1b
68	M139	PIPE_2.0	.111	0	5	.039	0		7	32033.8...	32130	1.872	1.872	1....	H1-1b
69	M140	PIPE_2.0	.094	0	11	.095	0		8	32033.8...	32130	1.872	1.872	1....	H1-1b
70	MP3B	PIPE_2.0	.090	5.5	7	.029	5.5		1	14916.0...	32130	1.872	1.872	3....	H1-1b
71	M149	PIPE_2.0	.176	0	7	.066	0		7	31747.0...	32130	1.872	1.872	1....	H1-1b
72	M150	PIPE_2.0	.191	0	2	.055	0		8	31747.0...	32130	1.872	1.872	1....	H1-1b
73	MP1B	PIPE_2.0	.148	5.5	1	.084	1		8	14916.0...	32130	1.872	1.872	2....	H1-1b

VzW SMART Tool© Vendor

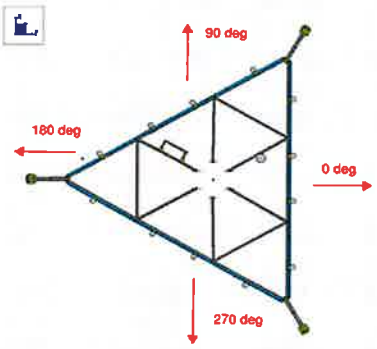
Client:	Verizon Wireless	Date:	3/28/2024
Site Name:	Pomfret South CT		
MDG #:	5000917542		
Fuze ID #:	16118821	Page:	1

Version 2.00

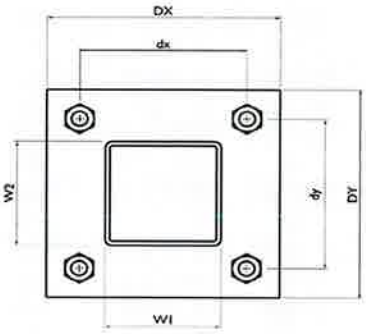
I. Mount-to-Tower Connection Check

Custom Orientation Required	Yes

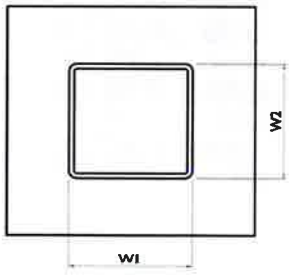
Nodes (labeled per Risa)	Orientation (per graphic of typical platform)
N136	60
N30	180
N69	300



Tower Connection Bolt Checks	Yes
Bolt Orientation	Parallel
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	6
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	6
Bolt Type:	A325N
Bolt Diameter (in):	0.625
Required Tensile Strength / bolt (kips):	3.1
Required Shear Strength / bolt (kips):	0.3
Tensile Capacity / bolt (kips):	20.7
Shear Capacity / bolt (kips):	12.4
Bolt Overall Utilization:	**15.0%**



Tower Connection Baseplate Checks	Yes
Connecting Standoff Member Shape:	Rect Tube
Weld Stiffener Configuration:	No Stiffeners
Plate Width, D_x (in):	8
Plate Height, D_y (in):	8
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):	0.75
Length of Yield Line, L_y (in):	5.85
Bolt Eccentricity, e (in):	1.65
M_u (kip-in):	5.13
Phi*M_n (kip-in):	26.65
Plate Bending Utilization:	**19.2%**



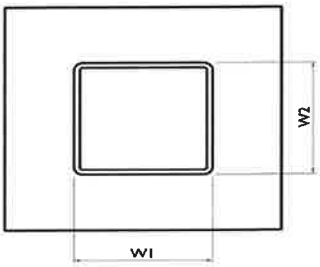
VzW SMART Tool© Vendor

Client:	Verizon Wireless	Date:	3/28/2024
Site Name:	Pomfret South CT		
PSLC #:	5000917542		
Fuze ID #:	16118821	Page:	2

Version 2.00

Tower Connection Weld Checks

	Yes
Weld Shape:	Rectangle
Weld Stiffener Configuration:	None
Stiffener Notch Length, n (in):	
Weld Size (1/16 in):	6
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):	1.08
Weld Capacity (kip/in):	8.35
Weld Utilization:	**12.9%**



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MOUNT MODIFICATION DRAWINGS
PROPOSED 12.50' PLATFORM

TOWER OWNER: SBA COMMUNICATIONS CORPORATION
TOWER OWNER SITE NUMBER: CT01364-S

CARRIER SITE NAME: POMFRET SOUTH CT
CARRIER SITE NUMBER: 5000917542
FUZE ID: 16118821

62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

LATITUDE: 41.87025833° N
LONGITUDE: 71.98824167° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 125 MPH
EXPOSURE CATEGORY C
TOPOGRAPHIC CATEGORY: 1
TOPOGRAPHIC CONSIDERED: N/A
TOPOGRAPHIC METHOD: N/A
MEAN BASE ELEVATION (AMSL) = 569.69'

ICE LOADS

ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_s = .182
LONG TERM MCER GROUND MOTION, S_1 = .055

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

COMPANY: COLLIERS ENGINEERING & DESIGN
CONTACT: PETER ALBANO
PHONE: 856.797.0412
E-MAIL: PETER.ALBANO@COLLIERSENG.COM

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10227149
VZW MDG #: 5000917542
ANALYSIS DATE: 4/1/2024

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

SHEET	DESCRIPTION
ST-1	TITLE SHEET
SBOM-1	BILL OF MATERIALS
SGN-1	GENERAL NOTES
SCF-1	CLIMBING FACILITY DETAIL
SS-1	MODIFICATION DETAILS
SS-2	MODIFICATION DETAILS
SS-3	MOUNT PHOTOS
	SPECIFICATION SHEETS

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REV	DATE	DESCRIPTION	BY	CHK'D BY
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STATE OF CONNECTICUT
DEJIAN XU
No. 33733
LICENSED PROFESSIONAL ENGINEER
04/01/2024

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE NAME:
POMFRET SOUTH CT
5000917542
62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

Colliers Engineering & Design
MT. LAUREL
2000 Midlantic Drive
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERSENGINEERING & DESIGN, INC.
D/B/A/ MASER CONSULTING

TITLE SHEET

ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	VZWSMART	VZWSMART-P40-238X048	48" LONG, PIPE 2 SCH40 (2.375"OD X 0.154" THK)		15	15
1		VZWSMART-MSK6	BACK TO BACK CROSSOVER PLATE		34	34
4		VZWSMART-P40-238X096	96" LONG, PIPE 2 SCH40 (2.375"OD X 0.154" THK)		29	116

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
2	PERFECT VISION	PV-DC-PTPC-2020-6	6" LONG PIPE TO PIPE CONNECTION	GALVANIZED	13	26
2	PERFECT VISION	PV-DC-PTPC-2020-12	12" LONG PIPE TO PIPE CONNECTION	GALVANIZED	15	30
1	SITE PRO 1	RMQP-496-HK	12' 6" LOW PROFILE PLATFORM WITH ANTENNA MOUNTING PIPES AND SUPPORT RAIL	GALVANIZED	2446	2446

SECTION 3 - REQUIRED SAFETY CLIMB PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	PERFECT VISON	PV-SCRB-RM U	ROUTING BRACKET	OR EOR APPROVED EQUIVALENT	-	-
1	PERFECT VISION	PV-CMX-CG-BO	WIRE ROPE GUIDE	OR EOR APPROVED EQUIVALENT	-	-
					TOTAL:	2667

NOTES:

1. THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
2. ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM

METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 980-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM

PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM

SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6927
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM

SITE PRO 1	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM

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STATE OF CONNECTICUT
DEJIAN XU
No. 33733
LICENSED PROFESSIONAL ENGINEER
04/01/2024

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE NAME:

POMFRET SOUTH CT
5000917542

62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

Colliers Engineering & Design

MT. LAUREL
2999 Mistral Drive
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0452

BILL OF MATERIALS

SBOM-1

GENERAL NOTES

1. THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H. MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
2. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES. ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK, ORDERING MATERIAL AND PREPARING OF SHOP DRAWINGS. ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
4. IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
6. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/TIA-322 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-322 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.
7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
8. WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 30-MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.
9. ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSI/TIA-322.
10. CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOFABRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
11. CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
12. DO NOT SCALE DRAWINGS.
13. DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
14. ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO ALTERED SIZE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
15. THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

STRUCTURAL STEEL

1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
   a. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
   b. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
   c. AISC CODE OF STANDARD PRACTICE
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE

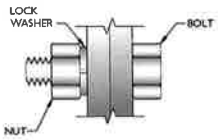
3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
   a. SUBMIT SHOP DRAWINGS TO:
      PETER.ALBANO@COLLIERSENG.COM
   b. PROVIDE COLLIERS ENGINEERING & DESIGN PROJECT # AND COLLIERS ENGINEERING & DESIGN PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
7. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
8. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
9. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
10. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
11. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
12. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
13. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
14. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINC COTE, OR EOR APPROVED EQUAL), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

BOLT SCHEDULE (IN.)

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 11/16	7/8	1 1/2
5/8	11/16	11/16 x 7/8	1 1/8	1 7/8
3/4	13/16	13/16 x 1	1 1/4	2 1/4
7/8	15/16	15/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)

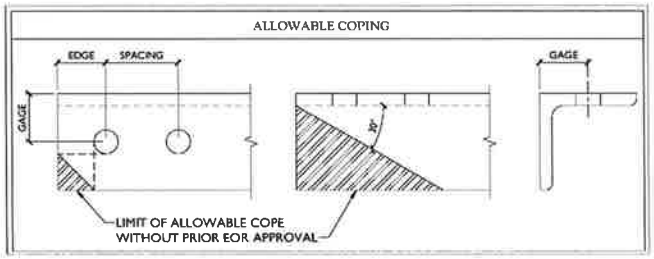
LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



TYP. BOLT ASSEMBLY

NOTES:

1. ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
2. THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENTS.
3. SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS
4. MATCH EXISTING GAGES WHEN APPLICABLE, UNLESS MINIMUM EDGE DISTANCES ARE COMPROMISED.



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ALL EXISTING UTILITY LOCATIONS SHOWN ON THESE DRAWINGS, DESIGNATIONS, OR OMISSIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR FIELD VERIFICATION OF EXACT LOCATIONS PRIOR TO CONSTRUCTION.
Know what's below. Call before you dig.
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0	04/01/24	ISSUED FOR CONSTRUCTION	KA	BA
REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY

STATE OF CONNECTICUT
DEJIAN XU
No. 33733
LICENSED PROFESSIONAL ENGINEER
04/01/2024

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

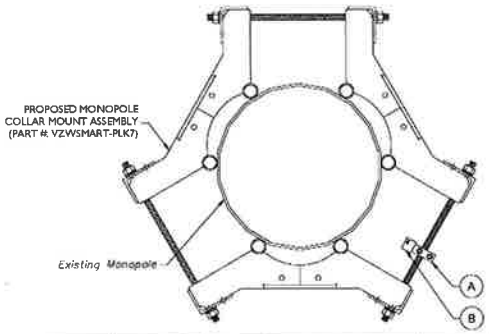
SITE NAME:
POMFRET SOUTH CT
5000917542
62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

Colliers Engineering & Design
MT. LAUREL
2999 Westgate Drive
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN, INC.
DOING BUSINESS AS MASER CONSULTING

GENERAL NOTES

SGN-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



ITEM #	QTY	PART NUMBER	DESCRIPTIONS
A	1	PV-SCRB-RM-U	ROUTING BRACKET (PERFECT VISION OR EOR APPROVED EQ.)
B	1	PV-CMX-CG-BO	WIRE ROPE GUIDE (PERFECT VISION OR EOR APPROVED EQ.)

1 **PROPOSED WIRE ROPE GUIDE ATTACHMENT - PLAN VIEW**

SCALE: N.T.S.

NOTE: CONTRACTOR SHALL ENSURE THAT WIRE ROPE GUIDE DOES NOT PUSH THE WIRE ROPE OUTSIDE OF THE VERTICAL PLANE OF THE SAFETY CLIMB. CONTRACT EOR WITH PHOTOS OF SAFETY CLIMB AND COLLAR FOR FURTHER DIRECTION IF NEEDED.

NOTE:

NO MAPPING WAS COMPLETED AND THERE IS INSUFFICIENT INFORMATION ON THE CLIMBING FACILITY

STRUCTURAL NOTES:

1. CONTRACTOR TO INSPECT CLIMBING FACILITIES AT SITE AND ENSURE THAT THE SAFETY CLIMB IS IN GOOD CONDITION AND THAT THE WIRE ROPE DOES NOT OR WILL NOT INTERFERE WITH THE EXISTING OR PROPOSED MOUNT CONNECTIONS. CONTRACTOR SHALL INSTALL SAFETY CLIMB WIRE ROPE GUIDED AROUND MOUNT CONNECTIONS AS NEEDED.
2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

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ALTERED DRAWINGS OR DIGITAL DATA
ALTERED DRAWINGS OR DIGITAL DATA
FOR STATE SPECIFIC CORRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE	JOB NUMBER
AS SHOWN	24772019

REV	DATE	DESCRIPTION	BY	CHK'D
0	04/01/24	ISSUED FOR CONSTRUCTION	GA	BA

STATE OF CONNECTICUT
DEJIAN XU
No. 33733
LICENSED PROFESSIONAL ENGINEER
04/01/2024

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SITE NAME:

POMFRET SOUTH CT
5000917542

62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

Colliers Engineering & Design
MT. LAUREL
2000 Midlantic Drive
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0422
COLLIERSENGINEERING & DESIGN.COM
DOING BUSINESS AS MASER CONSULTING

CLIMBING FACILITY DETAIL

SCF-1

LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

TOTAL VERTICAL ENVELOPE:

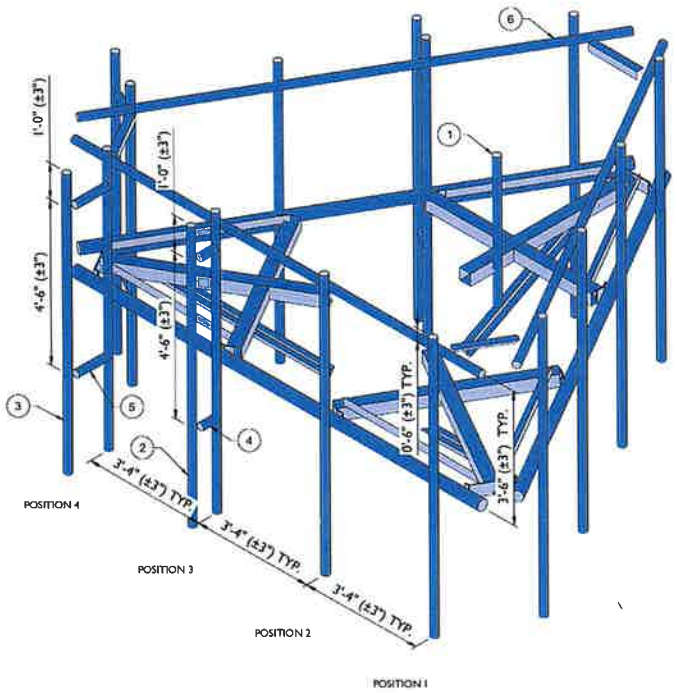
CONTRACTOR SHALL VERIFY AND CONFIRM IN FIELD THAT VERIZON'S OVERALL TIP TO TIP VERTICAL SPACE CONFIGURATION (EQUIPMENT AND STEEL COMBINED) DOES NOT EXCEED THE VERTICAL ENVELOPE LISTED IN THESE DRAWINGS. IF THE SITE'S EXISTING OR PROPOSED CONFIGURATION EXCEEDS THE ALLOWED VERTICAL ENVELOPE LISTED IN THESE DRAWINGS, CONTRACTOR SHALL CONTACT EOR IMMEDIATELY FOR A SOLUTION ON HOW TO CORRECT THE ISSUE PRIOR TO LEAVING THE SITE.

MOUNT MODIFICATION SCHEDULE

NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	125'-00"	1	PROPOSED 48" LONG, PIPE 2 SCH40 (PART #: VZWSMART-P40-238X048)	CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH BACK TO BACK CROSSOVER PLATE (VZWSMART-MSK6). BETA/GAMMA STANDOFF ONLY.
2		2	PROPOSED 96" LONG, PIPE 2 SCH40 (PART #: VZWSMART-P40-238X096)	CONNECT NEW MOUNT PIPE TO MOUNT PIPE USING 6" LONG PIPE TO PIPE CONNECTION (PART #: PV-DC-PTPC-2020-6). MOUNT PIPE 3 ALPHA SECTOR AND MOUNT PIPE 3 BETA SECTOR.
3		2	PROPOSED 96" LONG, PIPE 2 SCH40 (PART #: VZWSMART-P40-238X096)	CONNECT NEW MOUNT PIPE TO MOUNT PIPE USING 12" LONG PIPE TO PIPE CONNECTION (PART #: PV-DC-PTPC-2020-12). MOUNT PIPE 4 ALPHA SECTOR AND MOUNT PIPE 1 BETA SECTOR.
4		2	6" LONG PIPE TO PIPE CONNECTION	CONTRACTOR SHALL USE TO CONNECT MOUNT PIPE TO MOUNT PIPE.
5		2	12" LONG PIPE TO PIPE CONNECTION	CONTRACTOR SHALL USE TO CONNECT MOUNT PIPE TO MOUNT PIPE.
6		1	12' 6" LOW PROFILE PLATFORM WITH ANTENNA MOUNTING PIPES AND SUPPORT RAIL	CONTRACTOR SHALL INSTALL PROPOSED MOUNT PER SPECIFICATION SHEETS.

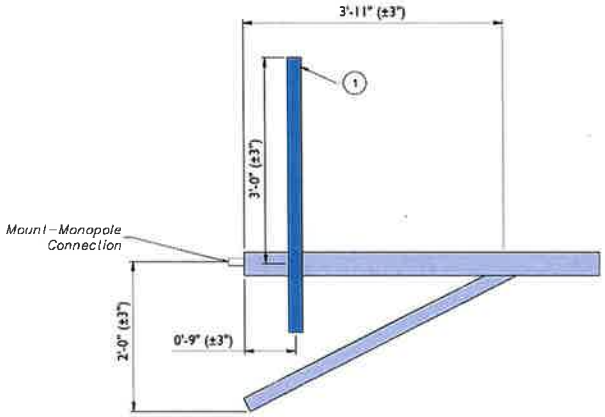
GENERAL NOTES:

A. CONTRACTOR SHALL VERIFY THAT NEW & EXISTING STEEL IS FREE OF CORROSION. VISIBLE MINOR CORROSION SHALL BE WIRE BRUSHED CLEAN AND TREATED WITH COLD GALVANIZATION. REPORT ANY SIGNIFICANT CORROSION TO EOR.
B. THREADED ROD FROM PROPOSED KITS SHALL BE TRIMMED TO EXTEND NO MORE THAN 3" BEYOND THE LOCK NUT. TREAT ALL CUT ENDS WITH (2) COATS OF COLD GALVANIZATION (ZINC KOTE, OR EOR APPROVED EQUAL).
C. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



1 PROPOSED ISOMETRIC VIEW

SCALE : N.T.S.



2 PROPOSED SIDE ELEVATION VIEW (SIM. ALL SECTORS)

SCALE : N.T.S.

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AS SHOWN

STATE OF CONNECTICUT DEJIAN XU No. 33733 LICENSED PROFESSIONAL ENGINEER 04/01/2024

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE NAME:

POMFRET SOUTH CT
5000917542

62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

Colliers Engineering & Design
MT. LAUREL
2000 Midlantic Drive
Suite 100
Mt. Laurel, NJ 08054
PHONE: (856) 797-1412
COLLIERS ENGINEERING & DESIGN, INC.
CONNECTICUT | MAINE | MASSACHUSETTS | NEW HAMPSHIRE | NEW JERSEY | NEW YORK | PENNSYLVANIA | RHODE ISLAND | VERMONT

MODIFICATION DETAILS

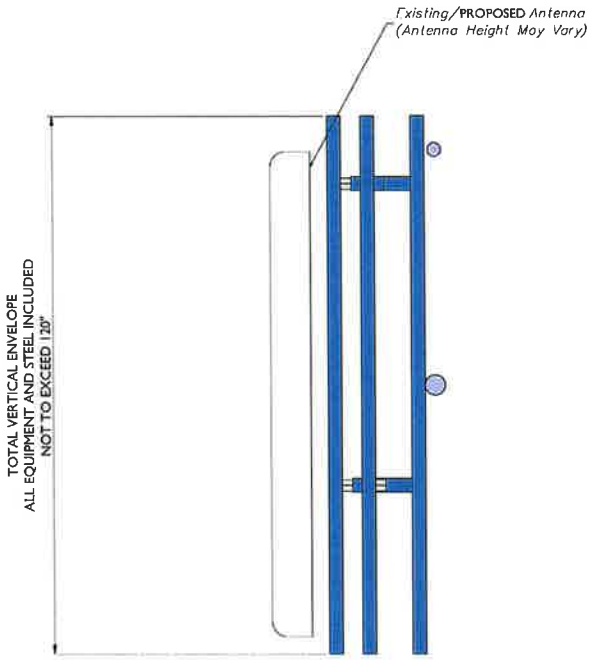
SS-1

LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

TOTAL VERTICAL ENVELOPE:

CONTRACTOR SHALL VERIFY AND CONFIRM IN FIELD THAT VERIZON'S OVERALL TIP TO TIP VERTICAL SPACE CONFIGURATION (EQUIPMENT AND STEEL COMBINED) DOES NOT EXCEED THE VERTICAL ENVELOPE LISTED IN THESE DRAWINGS. IF THE SITE'S EXISTING OR PROPOSED CONFIGURATION EXCEEDS THE ALLOWED VERTICAL ENVELOPE LISTED IN THESE DRAWINGS, CONTRACTOR SHALL CONTACT EOR IMMEDIATELY FOR A SOLUTION ON HOW TO CORRECT THE ISSUE PRIOR TO LEAVING THE SITE.



1 PROPOSED SIDE ELEVATION VIEW (TYP. ALL SECTORS)
SCALE: N.T.S.

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PROTECT YOURSELF
ALTERATION OR FALSIFICATION OF ENGINEERING DOCUMENTS BY ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER IS A VIOLATION OF LAW. IF ANY ALTERATIONS ARE MADE, THE ALTERING ENGINEER SHALL AFFIX TO THE DOCUMENT HIS SEAL, THE WORDS "ALTERED BY" FOLLOWED BY HIS SIGNATURE, AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

SCALE	JOB NUMBER
AS SHOWN	24772019

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	04/01/24	FOR CONSTRUCTION	GA	DS

STATE OF CONNECTICUT
DEJIAN XU
No. 33733
LICENSED PROFESSIONAL ENGINEER
04/01/2024

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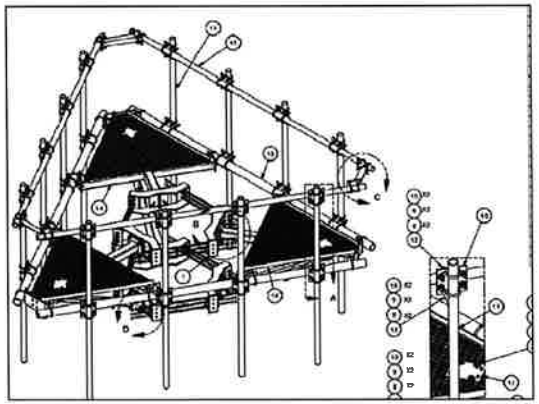
POMFRET SOUTH CT
5000917542

62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

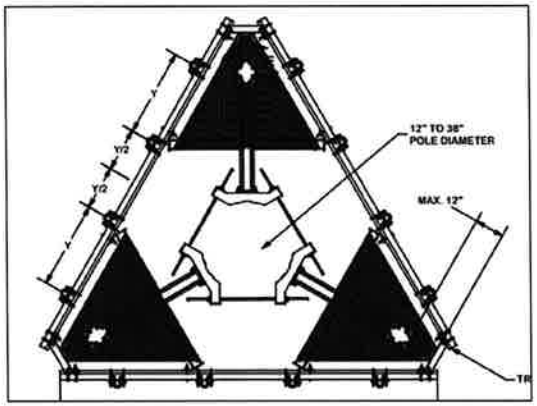
Colliers Engineering & Design
M L LAUREL
2099 Gaither Drive
Suite 160
Mt. Laurel, NJ 08054
Phone: 856 797 0422
CIVIL ENGINEERING | DESIGN BY
DOMESTIC PARTNERS | GROUP CONSULTING

MODIFICATION DETAILS

SS-2



MOUNT PHOTO 1



MOUNT PHOTO 2

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PROTECTED AREA

ALL UTILITIES SUBJECT TO THE PROVISIONS OF EXCAVATION, DEMOLITION OR ANY PERSON PERFORMING THE EXCAVATION OR DEMOLITION SHALL NOTIFY THE CONNECTICUT UNDERGROUND UTILITIES PROTECTION SERVICE NOT LESS THAN TWO BUSINESS DAYS NOR MORE THAN TEN BUSINESS DAYS PRIOR TO COMMENCEMENT OF SUCH EXCAVATION OR DEMOLITION.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT WWW.CALL811.COM

SCALE	DRAWING
AS SHOWN	24772615

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	04/01/24	FOR PERMITTING	GA	DK

STATE OF CONNECTICUT
DEJIAN XU
No. 33733
LICENSED PROFESSIONAL ENGINEER
04/01/2024

COLLIERS ENGINEERING & DESIGN (CT) INC.
CT BUSINESS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE NAME:

POMFRET SOUTH CT
5000917542

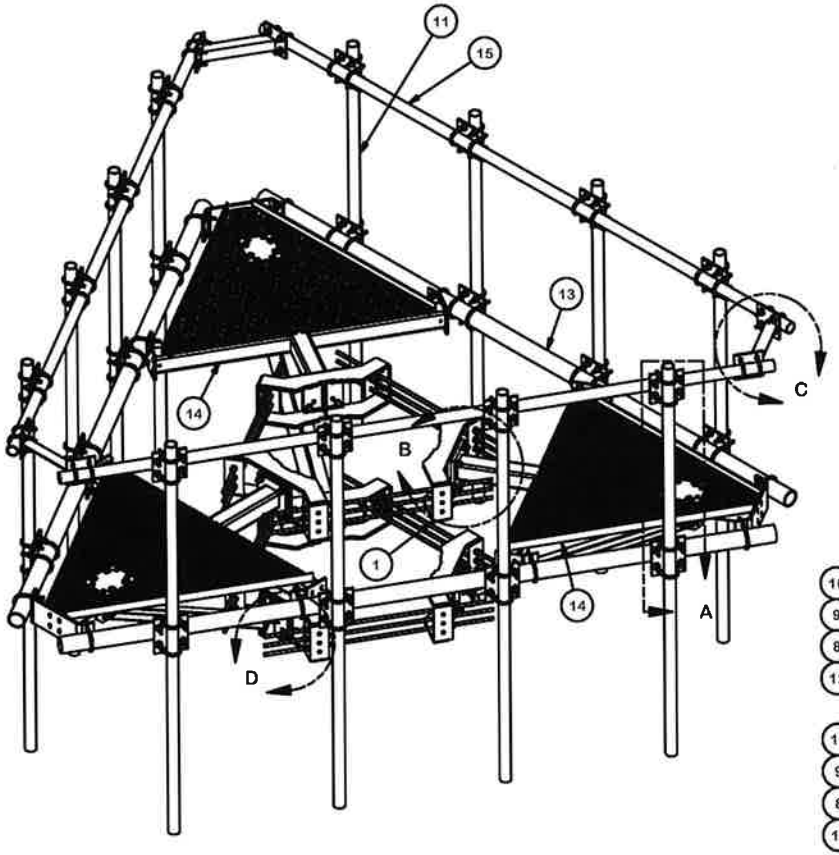
62 BABBITT HILL ROAD
POMFRET, CT 06259
WINDHAM COUNTY

Colliers Engineering & Design

MT. LAUREL

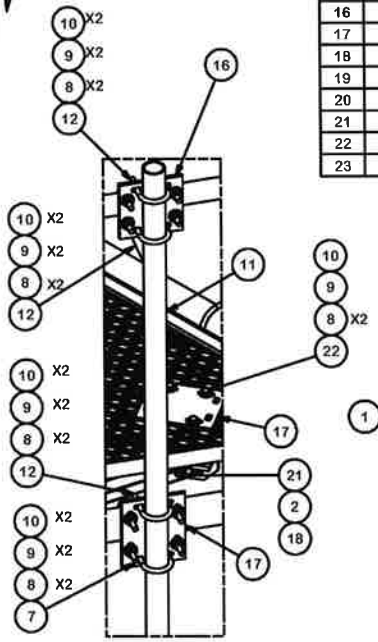
MOUNT PHOTOS

SS-3

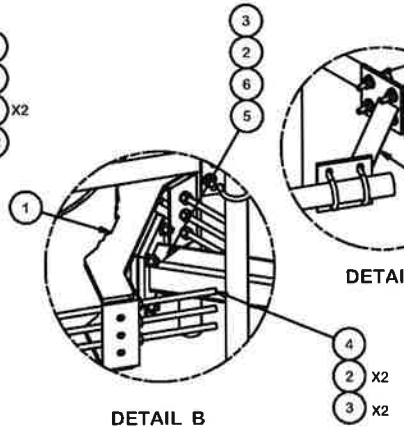


PARTS LIST

ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	6	X-LWRM	RING MOUNT WELDMENT		68.81	412.85
2	66	G58LW	5/8" HDG LOCKWASHER		0.03	1.72
3	60	A58NUT	5/8" HDG A325 HEX NUT		0.13	7.79
4	18	G58R-24	5/8" x 24" THREADED ROD (HDG.)		2.09	37.63
4	18	G58R-48	5/8" x 48" THREADED ROD (HDG.)		4.18	75.27
5	24	A58234	5/8" x 2-3/4" HDG A325 HEX BOLT	2 3/4 in	0.36	8.54
6	24	A58FW	5/8" HDG A325 FLATWASHER		0.03	0.82
7	36	X-UB1306	1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.)		0.83	29.82
8	264	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	9.00
9	252	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	3.50
10	252	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	18.05
11	12	P296	2-3/8" X 96" SCH. 40 GALVANIZED PIPE	96 in	30.76	369.08
12	84	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.63	52.51
13	3	P3150	3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE	150 in	94.80	284.40
14	3	X-SV196	LOW PROFILE PLATFORM CORNER		212.10	636.31
15	3	P2150	2-3/8" O.D. X 150" SCH 40 GALVANIZED PIPE	150 in	45.77	137.31
16	12	SCX2	CROSSOVER PLATE	7 in	4.80	57.56
17	15	SCX4	CROSSOVER PLATE	8 1/2 in	6.02	90.32
18	6	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	0.78
19	6	X-253993	PLATFORM REINFORCEMENT KIT ANGLE	52 25/32 in	14.33	85.99
20	6	X-TBW	T-BRACKET WELDMENT		13.60	81.60
21	6	G5802	5/8" x 2" HDG HEX BOLT GR5		0.27	1.62
22	12	G12065	1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD	5 1/2 in	0.41	4.91
23	3	X-AHCP	ANGLE HANDRAIL CORNER PLATE		12.92	38.76
					TOTAL WT. #	2445.81



DETAIL A



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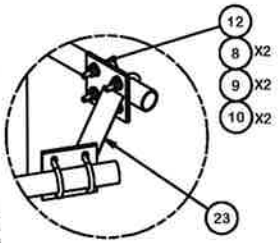

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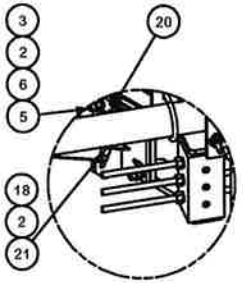


DETAIL D

FOR REFERENCE ONLY

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
B	RELOCATED MOUNT PIPE POSITIONS	4488	JET	5/23/2021
A	CHANGED X-253992 TO X-TBW	4488	CEK	9/20/2018

REVISION HISTORY

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES *(± 0.030")*
DRILLED AND GAS CUT HOLES *(± 0.030")* - NO CONING OF HOLES
LASER CUT EDGES AND HOLES *(± 0.010")* - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

DESCRIPTION
12' 6" LOW PROFILE PLATFORM
WITH TWELVE 2-3/8" ANTENNA MOUNTING
PIPES, AND SUPPORT RAIL

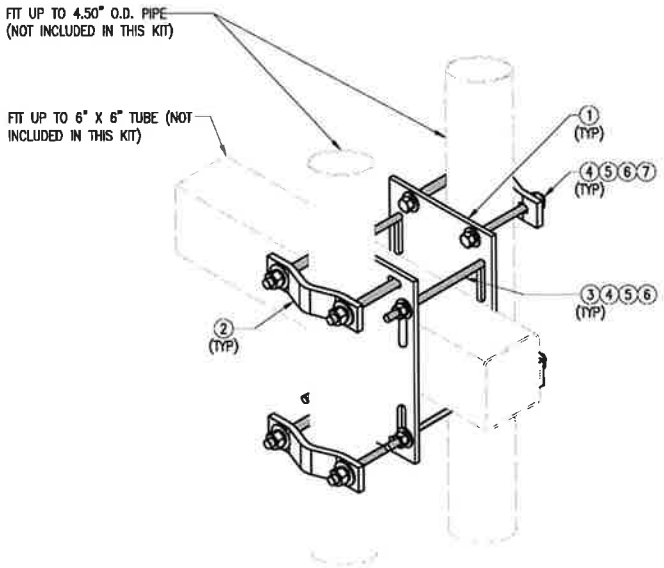
SITE PRO 1
A valmont COMPANY

Engineering Support Team: 1-888-753-7446

Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
4488	CEK 7/14/2014		RMQP-496-HK

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	CUSTOMER	BMC 7/14/2014	RMQP-496-HK



ISOMETRIC VIEW
BACK TO BACK CROSSOVER

VZWSMART–MSK6 (VZWSMART–MSK6 – BACK TO BACK CROSSOVER)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	2	PL375–8512	PL 3/8" X 8 1/2" X 1'–0" A36	MSK6–F2	20.7
2	4	VCP	PL 1/2" X 2" X 8 5/8" A36 BENT PLATE	MSK6–F1	9.6
3	4	----	THREADED ROD 5/8" DIA. X 10" (Fy=36 KSI HDG	----	----
4	16	2 NUT–625	5/8" HDG HEX NUT	----	2
5	24	FW–625	5/8" HDG USS FLAT WASHER	----	2
6	16	LW–625	5/8" HDG LOCK WASHER	----	0
7	8	----	BOLT 5/8" X 6" SAE GRADE 5 ALL THREAD	----	1
				GALVANIZED WT	35

NOTES:
1. HOT–DIPPED GALVANIZED PER ASTM A123.

VzW
SMART Tool©
Vendor

verizon

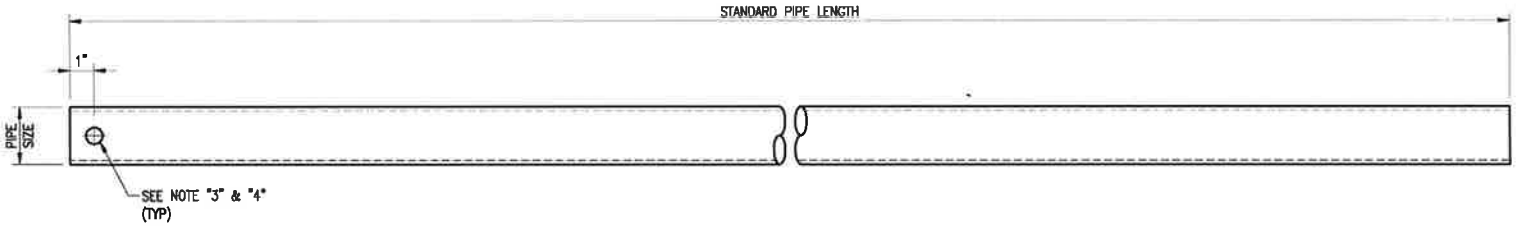
FOR REFERENCE ONLY

DRAWN BY: SK | CHECKED BY: BT/KW

REV	DESCRIPTION	BY	DATE
1	LAST ISSUE	SK	05/08/20
2	REVISED	AW	08/23/23
3	REVISED	JM	11/30/23
4			
5			

SHEET TITLE:
VZWSMART–MSK6
BACK TO BACK
CROSSOVER

SHEET NUMBER: VZWSMART–MSK6 | REV #: 2



VZWSMART Standard Pipe		
VZWSMART Number	Size	Length
P40-238X048	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	48"
P40-238X072	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	72"
P40-238X096	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	96"
P40-238X120	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	120"
P40-238X126	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	126"
P40-238X150	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	150"
P40-238X174	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	174"
P40-278X048	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	48"
P40-278X072	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	72"
P40-278X096	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	96"
P40-278X120	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	120"
P40-278X126	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	126"
P40-278X150	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	150"
P40-278X174	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	174"
P40-312X048	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	48"
P40-312X072	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	72"
P40-312X126	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	126"
P40-312X150	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	150"
P40-312X174	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	174"

NOTE:
APPROVED SMART KIT VENDORS ARE ALLOWED TO SUBSTITUTE AT THEIR DISCRETION PIPES LISTED ON THIS PAGE FOR CUSTOM LENGTH COMPONENTS OF MATCHING SIZE. SUBSTITUTIONS SHALL MEET THE ORIGINAL STRUCTURAL INTENT.

NOTES:
1. ALL PIPE GRADE A53-B OR BETTER.
2. HOT-DIPPED GALVANIZED PER ASTM A123.
3. ALL HOLES ARE 11/16" DIA. U.N.O
4. HOLES MAY OR MAY NOT BE PRESENT, DEPEND UPON MANUFACTURE DISCRETION.
5. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA OR ZINC COTE PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

VzW SMART Tool© Vendor

verizon

FOR REFERENCE ONLY

DRAWN BY: BT | CHECKED BY: HMA/KW

REV	DESCRIPTION	BY	DATE
1	FIRST ISSUE	BT	06/04/21

SHEET TITLE:

VZWSMART STANDARD PIPE

SHEET NUMBER: VZWSMART-PIPE

REV #: 0

PV-DC-PTPC

DUALCROSS - PIPE TO PIPE CONNECTION

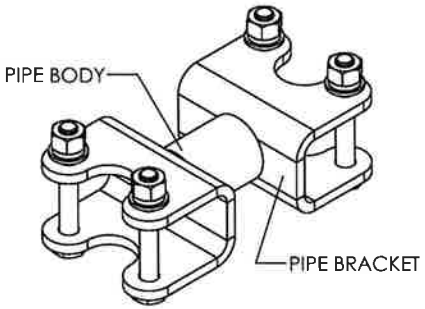
Table 1: Crossover Pipe to Pipe Connection Configurations

Part Number	Weight	Pipe to Pipe C-C	Pipe 1 Size	Pipe 2 Size	Pipe 1 Bolt Size	Pipe 2 Bolt Size
	lbs	*in*	*in*	*in*	*in*	*in*
PV-DC-PTPC-2020-6	13	6	Ø2.375	Ø2.375	Ø5/8 x 4-1/2	Ø5/8 x 4-1/2
PV-DC-PTPC-2020-12	14.8	12	Ø2.375	Ø2.375	Ø5/8 x 4-1/2	Ø5/8 x 4-1/2
PV-DC-PTPC-2020-24	18.5	24	Ø2.375	Ø2.375	Ø5/8 x 4-1/2	Ø5/8 x 4-1/2
PV-DC-PTPC-2025-6	13.8	6	Ø2.375	Ø2.875	Ø5/8 x 4-1/2	Ø5/8 x 5
PV-DC-PTPC-2025-12	15.7	12	Ø2.375	Ø2.875	Ø5/8 x 4-1/2	Ø5/8 x 5
PV-DC-PTPC-2025-24	19.3	24	Ø2.375	Ø2.875	Ø5/8 x 4-1/2	Ø5/8 x 5
PV-DC-PTPC-2030-6	15	6	Ø2.375	Ø3.5	Ø5/8 x 4-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-2030-12	19.1	12	Ø2.375	Ø3.5	Ø5/8 x 4-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-2030-24	20.4	24	Ø2.375	Ø3.5	Ø5/8 x 4-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-2525-6	15.2	6	Ø2.875	Ø2.875	Ø5/8 x 5	Ø5/8 x 5
PV-DC-PTPC-2525-12	18	12	Ø2.875	Ø2.875	Ø5/8 x 5	Ø5/8 x 5
PV-DC-PTPC-2525-24	23.9	24	Ø2.875	Ø2.875	Ø5/8 x 5	Ø5/8 x 5
PV-DC-PTPC-2530-6	16.2	6	Ø2.875	Ø3.5	Ø5/8 x 5	Ø5/8 x 5-1/2
PV-DC-PTPC-2530-12	19.1	12	Ø2.875	Ø3.5	Ø5/8 x 5	Ø5/8 x 5-1/2
PV-DC-PTPC-2530-24	25	24	Ø2.875	Ø3.5	Ø5/8 x 5	Ø5/8 x 5-1/2
PV-DC-PTPC-3030-6	17.5	6	Ø3.5	Ø3.5	Ø5/8 x 5-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-3030-12	21.3	12	Ø3.5	Ø3.5	Ø5/8 x 5-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-3030-24	28.9	24	Ø3.5	Ø3.5	Ø5/8 x 5-1/2	Ø5/8 x 5-1/2
PV-DC-PTPC-3040-6	19.1	6	Ø3.5	Ø4.5	Ø5/8 x 5-1/2	Ø5/8 x 6-1/2
PV-DC-PTPC-3040-12	23	12	Ø3.5	Ø4.5	Ø5/8 x 5-1/2	Ø5/8 x 6-1/2
PV-DC-PTPC-3040-24	30.5	24	Ø3.5	Ø4.5	Ø5/8 x 5-1/2	Ø5/8 x 6-1/2

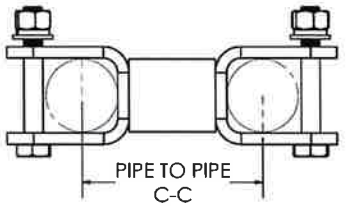
NOTE: 'PIPE BODY' DIAMETER IS ALWAYS EQUIVALENT TO 'PIPE 1' DIAMETER SIZE

NOTES:

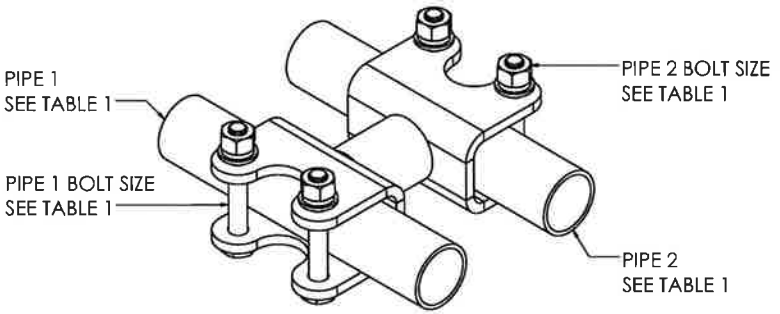
- INSTALLATION REQUIREMENTS:
  - MINIMUM BOLT TORQUE: 100 FT-LBS
  - CLEAN, DRY ASSEMBLY
  - GALVANIZED WELDMENT AND HARDWARE
  - COLORED WAX COATING ON NUTS
- MATERIALS
  - PIPE BRACKET: A36 HDG
  - PIPE BODY: A500 GR. C
  - HARDWARE: A325 HDG BOLT, A563DH NUT



PV-DC-PTPC
DUALCROSS - PIPE TO PIPE CONNECTION



PV-DC-PTPC
SIDE VIEW



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SHEET 1 OF 2	THIRD ANGLE PROJECTION	CATEGORY 06_Pipe and Attachment Hardware	4			PERFECTVISION
12/30/2020	SCALE 1:4	SERIES 01_Crossovers	3			DUALCROSS - PIPE TO PIPE CONNECTION
DIMENSIONS ARE IN INCHES TOLERANCES U.N.O. HOLES: +1/16", -1/32" ANGULAR: PROFILE±1/4", BEND±2° ALL OTHERS: ±1/16"		TYPE PV-DC PTPC_Pipe to Pipe connection	2			
		BY INT	1			DOCUMENT NUMBER PTPC-ENG-01-R0 / REV 0
		CHECKED	0	INITIAL RELEASE	3/30/20	
		STATUS APPROVED	REV	DESCRIPTION	DATE	

ATTACHMENT 6

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

Calculated Radio Frequency Emissions Report

verizon

Pomfret South

62 Babbitt Hill Road, Pomfret, CT

June 20, 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 125' AGL on an existing monopole located at 62 Babbitt Hill Road in Pomfret, CT. The coordinates of the monopole tower are 41° 52' 12.936" N, 71° 59' 17.66" W.

Verizon is proposing the following:

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

This report considers the planned antenna configuration for Verizon[1] and the existing antennas for AT&T[2], Sprint[3] and T-Mobile[4] to derive the resulting % MPE of its proposed installation.

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.

[1] As referenced to Verizon's Radio Frequency Design Sheet updated 9/13/2023.

[2] As referenced to Connecticut Siting Council Notice of Exempt Modification – 62 Babbitt Hill Road, Pomfret, Connecticut, dated 10/14/2020.

[3] As referenced to Connecticut Siting Council Notice of Exempt Modification – 62 Babbitt Hill Road, Pomfret, Connecticut, dated 10/14/2020.

[4] As referenced to Radio Frequency Emissions Analysis Report by Transcom Engineering, Inc, dated 9/6/2023.

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:

$$\text{PowerDensity} = \left(\frac{EIRP}{\pi \times R^2}\right) \times \text{Off BeamLoss}$$

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 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 / Call Sign	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 / 330°	700	160	14.5	4509	JAHH-65B-R3B	67	0	6	125
		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	125
	Beta / 150°	700	160	14.5	4509	JAHH-65B-R3B	67	0	6	125
		850	160	15.8	6083		65			
		1900	160	18.4	11069		63			
		2100	240	18.5	16991		65			
		3700	200	25.5	113540	MT6413-77A	-	0	2.46	125
	Gamma / 230°	700	160	14.5	4509	JAHH-65B-R3B	67	0	6	125
		850	160	15.8	6083		65			
		1900	160	18.4	11069		63			
		2100	240	18.5	16991		65			
		3700	200	25.5	113540	MT6413-77A	-	0	2.46	125

Table 1: Proposed Antenna Inventory[5] [6]

[5] Antenna heights are in reference to Verizon's Radio Frequency Design Sheet updated 9/13/2023.

[6] 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.

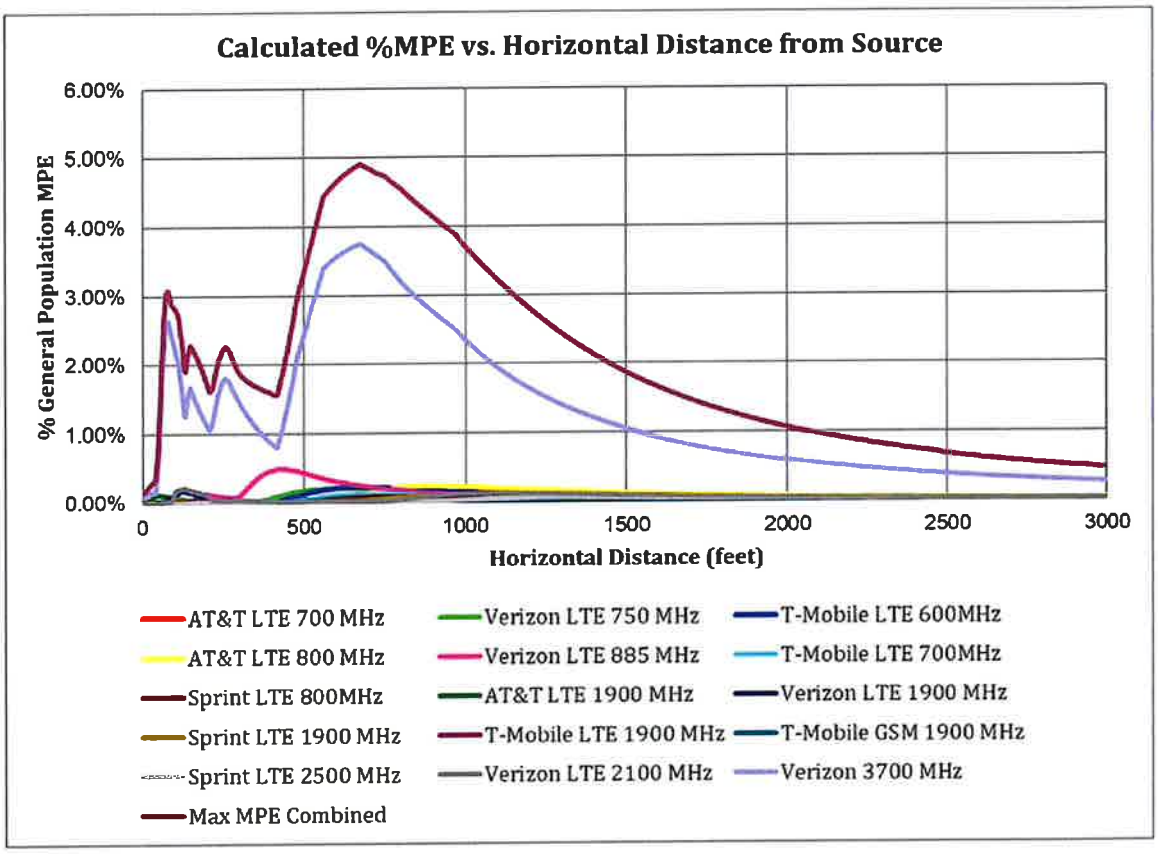


Figure 1: Graph of General Population % MPE vs. Distance

The highest percent of MPE (4.91% of the General Population limit) is calculated to occur at a horizontal distance of 675 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 675 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 LTE 1900 MHz	1	120.0	147.0	675	0.000054	1.000	0.01%
AT&T LTE 700 MHz	1	80.0	147.0	675	0.000426	0.467	0.09%
AT&T LTE 800 MHz	1	120.0	147.0	675	0.000633	0.533	0.12%
Sprint LTE 1900 MHz	1	180.0	157.0	675	0.000236	1.000	0.02%
Sprint LTE 2500 MHz	1	160.0	157.0	675	0.000096	1.000	0.01%
Sprint LTE 800MHz	1	100.0	157.0	675	0.000410	0.533	0.08%
T-Mobile GSM 1900 MHz	1	15.0	137.0	675	0.000008	1.000	0.00%
T-Mobile LTE 1900 MHz	1	160.0	137.0	675	0.000085	1.000	0.01%
T-Mobile LTE 600MHz	1	80.0	137.0	675	0.000896	0.400	0.22%
T-Mobile LTE 700MHz	1	40.0	137.0	675	0.000556	0.467	0.12%
Verizon 3700 MHz	1	320.0	125.0	675	0.037528	1.000	3.75%
Verizon LTE 1900 MHz	1	160.0	125.0	675	0.000149	1.000	0.01%
Verizon LTE 2100 MHz	1	240.0	125.0	675	0.000207	1.000	0.02%
Verizon LTE 750 MHz	1	160.0	125.0	675	0.001001	0.500	0.20%
Verizon LTE 885 MHz	1	160.0	125.0	675	0.001391	0.567	0.25%
						Total	**4.91%**

Table 2: Maximum Percent of General Population Exposure Values

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 **4.91% of the FCC limit (General Population/Uncontrolled)**. This maximum cumulative percent of MPE value is calculated to occur 675 feet away from the site.

7. Statement of Certification

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

Report Prepared By: Ram Acharya
RF Engineer 1
C Squared Systems, LLC

June 19, 2024
Date

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

June 20, 2024
Date

Attachment A: References

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

IEEE C95.1-2005, IEEE Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz IEEE-SA Standards Board

IEEE C95.3-2002 (R2008), IEEE Recommended Practice for Measurements and Computations of Radio Frequency Electromagnetic Fields With Respect to Human Exposure to Such Fields, 100 kHz-300 GHz IEEE-SA Standards Board

Verizon's Radio Frequency Design Sheet updated 10/21/2022

AT&T's filing, Connecticut Siting Council Notice of Exempt Modification – Antenna Add - 62 Babbitt Hill Road (aka 1 Service Road) Pomfret, CT, dated 9/23/2022

As referenced to Dish Wireless LLC's filing, Connecticut Siting Council Tower Share Application – 62 Babbitt Hill Road, Pomfret, CT, dated 11/19/2021

T-Mobile's filing, Connecticut Siting Council Notice of Exempt Modification – 62 Babbitt Hill Road, Pomfret, CT, dated 10/1/2020

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

(A) Limits for Occupational/Controlled Exposure[7]

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[8]

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

[7] 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.

[8] 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.

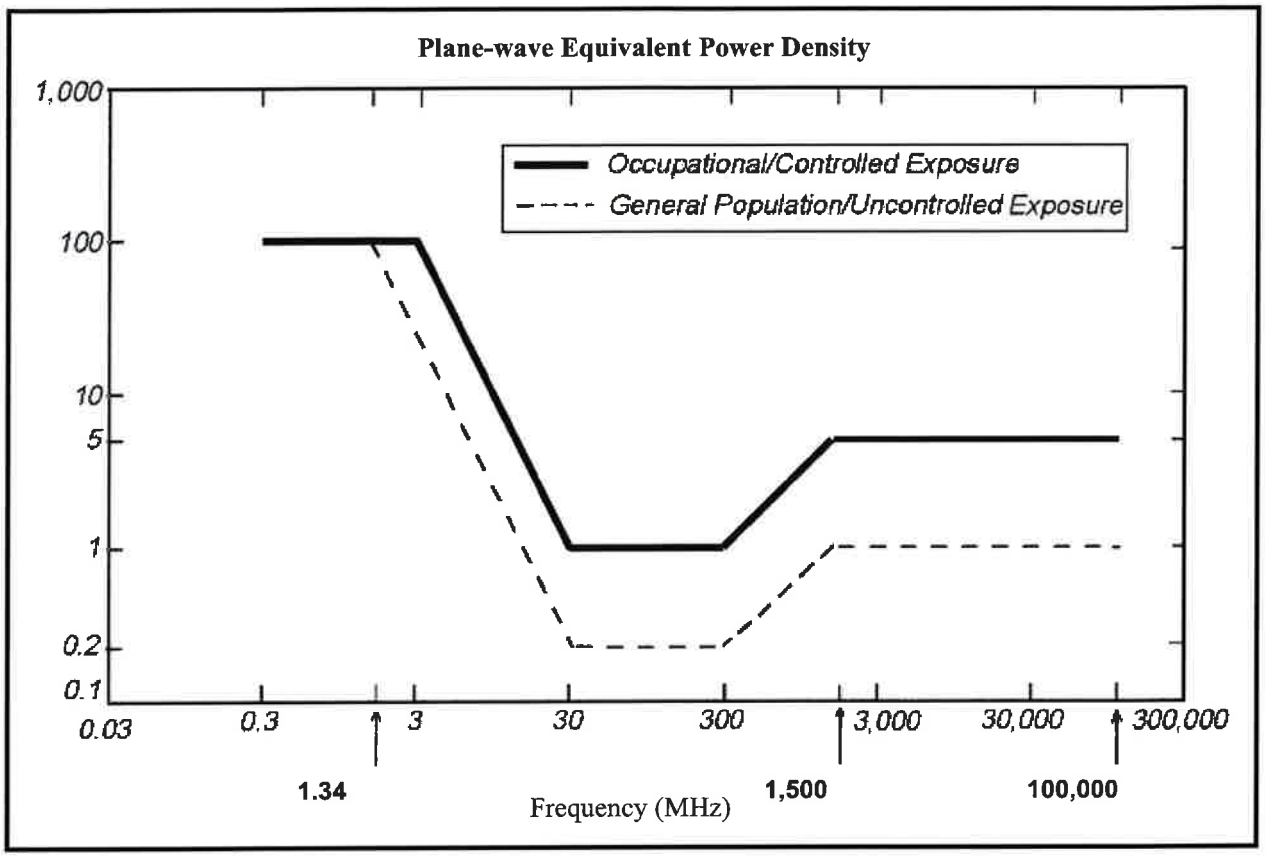
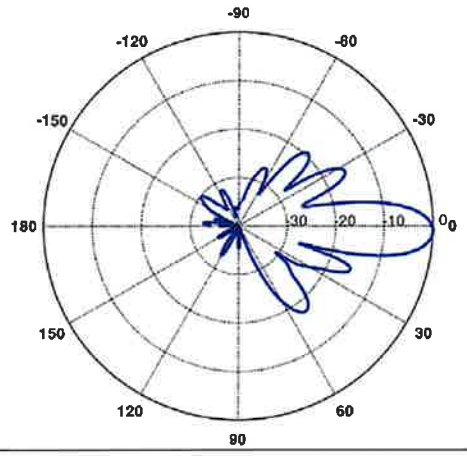


Figure 2: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: Verizon Antenna Model Data Sheets and Electrical Patterns

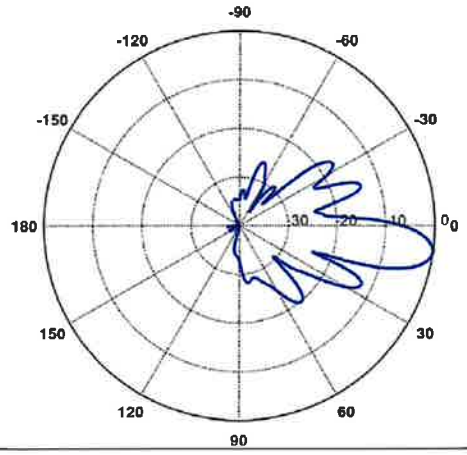
750 MHz

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):	71.9" x 13.78" x 8.18"



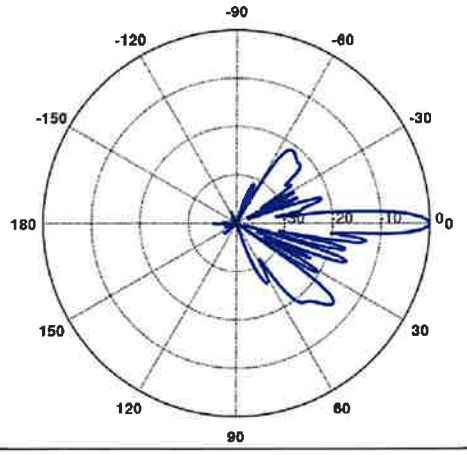
885 MHz

Manufacturer:	COMMSCOPE
Model #:	JAHH-65B-R3B
Frequency Band:	824-894 MHz
Gain:	15.8 dBi
Vertical Beamwidth:	10.5°
Horizontal Beamwidth:	65°
Polarization:	±45°
Dimensions (L x W x D):	71.9" x 13.78" x 8.18"



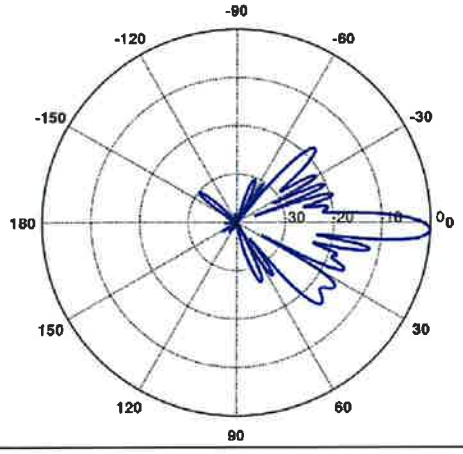
1900 MHz

Manufacturer:	COMMSCOPE
Model #:	JAHH-65B-R3B
Frequency Band:	1850-1990 MHz
Gain:	18.4 dBi
Vertical Beamwidth:	5.2°
Horizontal Beamwidth:	63°
Polarization:	±45°
Dimensions (L x W x D):	71.9" x 13.78" x 8.18"



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):	71.9" x 13.78" x 8.18"



ATTACHMENT 7

Verizon/Pomfret South

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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	4	4	quadient CORRECTION IMI $004.00 US POSTAGE
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USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Maureen Nicolson, First Selectman Town of Pomfret 5 Haven Road Pomfret Center, CT 06259	JUN 26 2024 USPS			
2.	James Rabbitt, Town Planner Town of Pomfret 5 Haven Road Pomfret Center, CT 06259				
3.	The Stoddard Family Trust C/O John Stoddard, Trustee 62 Babbitt Hill Road Pomfret, CT 06529				
4.	SBA Communications Corp. 8501 Congress Avenue Boca Raton, FL 33487				
5.					
6.					

See Reverse for Instructions