



Filed by:

G. Scott Shepherd, Site Development Specialist II - SBA Communications
134 Flanders Rd., Suite 125, Westborough, MA 01581
508.251.0720 x 3807 - gshepherd@sbsite.com

October 14, 2020

Melanie A. Bachman
Acting Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Notice of Exempt Modification
62 Babbitt Hill Road, Pomfret, CT 06259
Latitude: 41.870258
Longitude: -71.988241
T-Mobile Site #: CT11524A_L600

Dear Ms. Bachman:

T-Mobile currently maintains six (6) antennas at the 137-foot level of the existing 168-foot Monopole Tower at 62 Babbitt Hill Road, Pomfret, CT. The 168-foot tower is owned by SBA Towers, LLC. The property is owned by Joseph & Cecile Stoddard. T-Mobile now intends to remove three (3) antennas and replace them with three (3) new 600/700 MHz antennas. The new antennas would be installed at the 137-foot level of the tower.

Please note: Per the Connecticut Siting Council Website: CSC COVID 19 Guidelines.
In order to prevent the spread of Coronavirus and protect the health and safety of our members and staff, as of March 18, 2020, the Connecticut Siting Council shall convert to full remote operations until March 30, 2020. Please be advised that during this time period, all hard copy filing requirements will be waived in lieu of an electronic filing. Please also be advised that the March 26, 2020 regular meeting shall be held via teleconference. The Council's website is not equipped with an on-line filing fee receipt service. Therefore, filing fees and/or direct cost charges associated with matters received electronically during the above-mentioned time period will be directly invoiced at a later date.

Planned Modifications:

TOWER

Remove:

- n/a

Remove and Replace:

- (3) Commscope - LNX-6515DS-VTM – Panel (Remove) / (3) RFS APXVAARR24_43-U-NA20 600/700 MHz (Replace)
- (3) Ericsson - KRY 112 144/1 – TMA (Remove) / (3) Ericsson KRY 112 489/2 (Replace)

Install New:

- (3) Ericsson Radio 4449 B71+B12
- (3) 1-5/8" fiber
- Added to Low Profile Platform: (1) Support rail w/ end connection (MS-HRECP-35); (1) Kicker(MS-K122-5); (1) Collar mount (MS-1436); (3) 2" STD Mount Pipe

Existing Equipment to Remain:

- (3) Kathrein - 782 11056 - Bias T's (@ 137.5')
- (3) RFS - APXV18-206516S-C-A20 – Panel 1900 MHz
- (3) Allen Telecom - FE15501P77/75 – TMA
- (1) low profile platform with Site Pro P/N PRK-1245
- (6) 1-5/8" lines

Entitlements:

- (6) 1-5/8" lines

GROUND

Install New:

- Equipment inside existing 6201 cabinet

This facility was approved by the Town of Pomfret's Board of Selectmen on April 19, 1999. Approval was given for a tower to hold up to five carriers. There were no further post construction stipulations set. The Town's Selectman signed off on the Application for Wireless Telecommunication Structures on April 21, 1999. Please see attached.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16.50j-72(b)(2). In accordance with R.C.S.A. § 16.50j-73, a copy of this letter is being sent to the Town of Pomfret's First Selectman, Maureen Nicholson, and Zoning Officer, Ryan Brais, as well as to the property owner. (Separate notice is not being sent to tower owner, as it belongs to SBA.)

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. §16.50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modification will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modification will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.



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

Sincerely,

G. Scott Shepherd
Site Development Specialist II
SBA COMMUNICATIONS CORPORATION
134 Flanders Rd., Suite 125
Westborough, MA 01581
508.251.0720 x3807 + T
508.366.2610 + F
508.868.6000 + C
gshepherd@sbsite.com

Attachments

cc: Maureen A. Nicholson, First Selectman / with attachments
Town of Pomfret, 5 Haven Rd., Pomfret Center, CT 06259
Ryan Brais, Zoning Officer / with attachments
Town of Pomfret, 5 Haven Rd., Pomfret Center, CT 06259
Joseph and Cecile Stoddard / with attachments
62 Babbitt Hill Road, Pomfret CT 06259-1700 (SBA address on file – address on Town Property Card is for SBA/Corporate office.)

EXHIBIT LIST

Exhibit 1	Check Copy	X To be Invoiced at a later date
Exhibit 2	Notification Receipts	X
Exhibit 3	Property Card	X
Exhibit 4	Property Map	X
Exhibit 5	Original Zoning Approval	Town of Pomfret Board of Selectmen 4/19/99
Exhibit 6	Construction Drawings	B & T Group 9/16/19
Exhibit 7	Modification Drawings	TES 7/17/19
Exhibit 8	Structural Analysis	TES dated 7/17/19
Exhibit 9	Post-Mod Mount Analysis	TES dated 7/26/19
Exhibit __	EME Report	Transcom dated 6/17/19

EXHIBIT 1

Normally, Exhibit 1 would contain a copy of the check for the filing fee.

EXHIBIT 2

ORIGIN ID:BFBA (508) 614-0389
RICK WOODS
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 13OCT20
ACTWGT: 1.00 LB
CAD: 105843304/NET4280

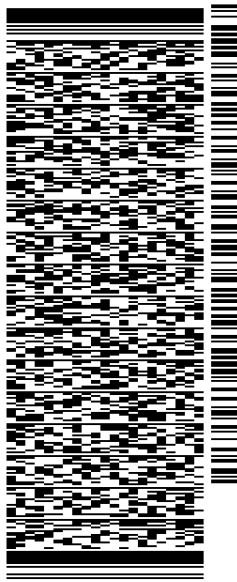
BILL SENDER

TO MELANIE A. BACHMAN EXEC. DIR
CONNECTICUT SITING COUNCIL
TEN FRANKLIN SQUARE

NEW BRITAIN CT 06051

(508) 251-0720 X.3807 REF: 105692009-6089
INV. PO. DEPT:

56B.I2/A27E/B766

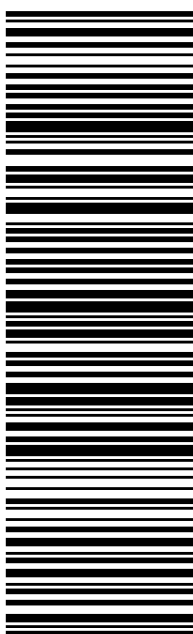


TRK# 7717 8635 0525
0201

WED - 14 OCT 10:30A
PRIORITY OVERNIGHT

EB BDLA

06051
CT-US BDL



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

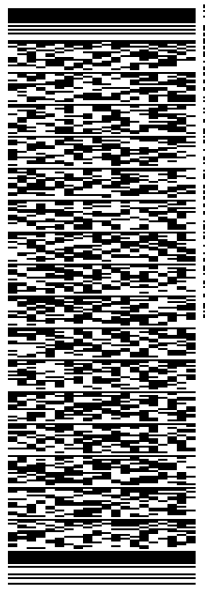
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

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RICK WOODS
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 13OCT20
ACTWGT: 1.00 LB
CAD: 105843304/NET4280
BILL SENDER

TO MAUREEN A. NICHOLSON, 1ST SELECTMAN
TOWN OF POMFRET
5 HAVEN RD.

POMFRET CENTER CT 06259
(508) 251-0720 X 3807 REF: 105692009-6089
INV# PO: DEPT:



TRK# 0201 7717 8642 6707
WED - 14 OCT 4:30P
PRIORITY OVERNIGHT

EBGONA
CT-US BDL 06259
Large barcode

56B.I2/A27E/B766

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UNITED STATES US

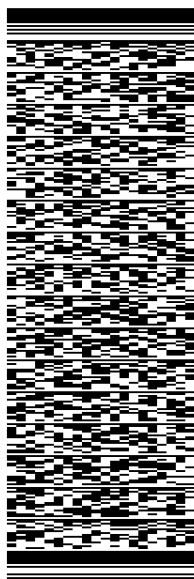
SHIP DATE: 13OCT20
ACTWGT: 1.00 LB
CAD: 105843304/NET4280

BILL SENDER

TO RYAN BRAIS, ZONING OFFICER
TOWN OF POMFRET
5 HAVEN RD.

POMFRET CENTER CT 06259

(508) 251-0720 X 3807 REF: 105692009-6089
INV# PO: DEPT:

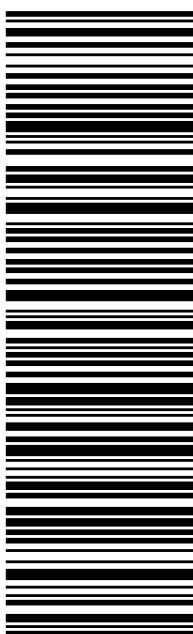


56B.I2/A27E/B766

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EB GONA

06259
CT-US BDL



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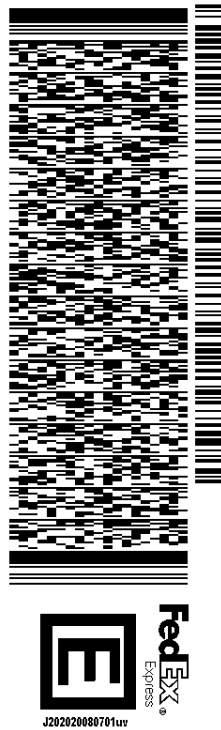
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SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 13OCT20
ACTWGT: 1.00 LB
CAD: 105843304/NET4280
BILL SENDER

TO JOESPH & CECILE STODDARD
62 BABBITT HILL RD.

POMFRET CENTER CT 06259
(508) 251-0720 X 3807 REF: 105692009-6089
INV# PO: DEPT:

56B.I2/A27E/B766



TRK# 0201 7717 8735 7066
WED - 14 OCT 4:30P
PRIORITY OVERNIGHT

EB GONA
CT:US BDL 06259
Large barcode

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EXHIBIT 3

62 BABBITT HILL RD

Location 62 BABBITT HILL RD

Mblu 23/ B/ 005.00/ A/

Acct# S0159010

Owner STODDARD JOSEPH & CECILE

Assessment \$1,233,900

Appraisal \$1,762,700

PID 100643

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2015	\$1,762,700	\$0	\$1,762,700

Assessment			
Valuation Year	Improvements	Land	Total
2015	\$1,233,900	\$0	\$1,233,900

Owner of Record

Owner STODDARD JOSEPH & CECILE

Sale Price \$0

Co-Owner C/O SBA TOWERS INC

Certificate

Book & Page 0053/1043

Sale Date 02/29/1984

Ownership History

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
STODDARD JOSEPH & CECILE	\$0		0053/1043	02/29/1984

Building Information

Building 1 : Section 1

Year Built:

Living Area: 0

Replacement Cost

Less Depreciation: \$0

Building Attributes	
Field	Description
Style	Outbuildings
Model	


Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Full Baths:	
Half Baths:	
Xtra Fixtrs:	
Total Rooms:	
Extra Kitchens	
Whirlpool	
Fireplace	
Xtra Opening	
Blocked FPL	
Gas Fireplace	

Building Photo



(<http://images.vgsi.com/photos/PomfretCTPhotos//\00\00\37\22>)

Building Layout

 Building Layout

(<http://images.vgsi.com/photos/PomfretCTPhotos//Sketches/100>)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use	Land Line Valuation
Use Code 4300	Size (Acres) 0
Description TEL TWR MDL-00	Frontage 0
Zone RR	Depth 0
Neighborhood	Assessed Value \$0
Alt Land Appr Category No	Appraised Value \$0

Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
	CELL TOWER			9	\$1,653,000	1
FN1	FENCE-4' CHAIN			320 L.F.	\$1,700	1
SHD5	Shed-Cell			200 SF	\$54,000	1
SHD5	Shed-Cell			200 SF	\$54,000	1

Valuation History

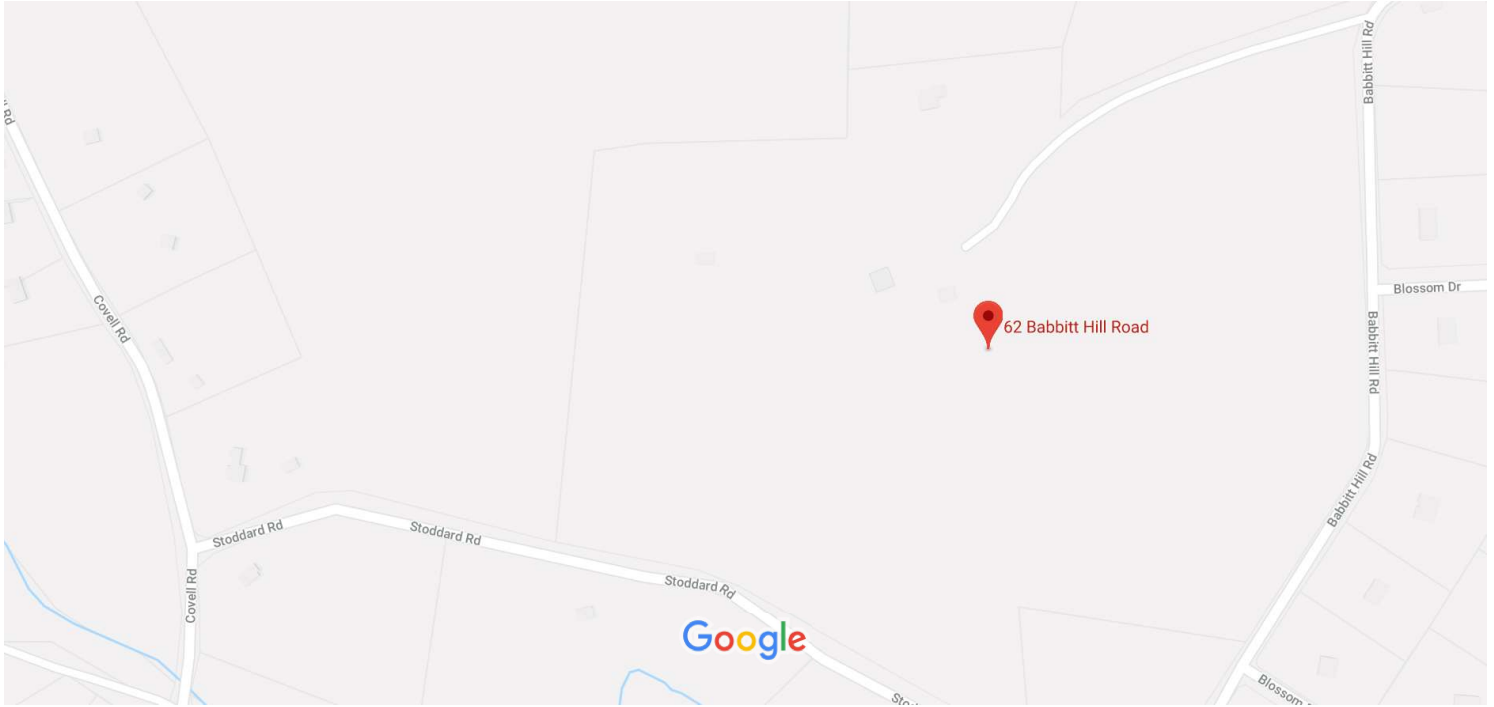
Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$1,762,700	\$0	\$1,762,700
2017	\$1,762,700	\$0	\$1,762,700
2016	\$1,762,700	\$0	\$1,762,700

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$1,233,900	\$0	\$1,233,900
2017	\$1,233,900	\$0	\$1,233,900
2016	\$1,233,900	\$0	\$1,233,900

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EXHIBIT 4

Google Maps 62 Babbitt Hill Rd



Map data ©2019 Google 200 ft



62 Babbitt Hill Rd

Pomfret Center, CT 06259



Directions



Save



Nearby



Send to your phone



Share



V297+RQ Pomfret, Connecticut

EXHIBIT 5

49

**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 include 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.

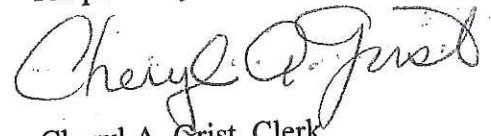
Tax Refunds/Abatements: None

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, Clerk

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TOWN ON POMFRET
APPLICATION FOR WIRELESS TELECOMMUNICATION STRUCTURES

Permit Number:
Date Submitted:
Received by:
(Section 2.3.1) Fee:

99-01
4/19/99
DEP
\$1000.00 PJ

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

APPLICANT TO FILL OUT THIS SECTION - Please print

Applicant's Name SBA INC. Phone (617) 803-8344
Address 125 SHAW ST SU 116 NEW LONDON, CT Fax # (860) 439-0159
06320
Co-Applicant's Name _____ Phone _____
Address _____ Fax # _____

If there is an agent for the applicant, please fill in name below:

Name SCOTT THOMAS, TEAM LEADER SBA INC. Phone SAME AS ABOVE
Address 125 SHAW ST SU 116 NEW LONDON, CT Fax # _____

LOCATION OF TOWER

Owner of the land JOSEPH & CECILE STODDARD Phone (860) 974-0635
Address 62 BABBITT HILL ROAD
Street Name BABBITT HILL ROAD Map 23 Block 8 Lot 005 (Get from Assessor's office)
Nearest roads/intersections: _____

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 ROBERT GRABAREK / OSPREY ENVIRONMENTAL & ENGINEERING
- 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 Commission 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 [Signature] Dated 4/18/99
(Applicant)

Signed Joseph P. Stoddard Dated 4/20/99
(Property Owner)

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 [Signature] Date 4-21-99
Selectmen or Commission

wircapp.vwpd

Public Hearing: _____ Date: N/A
Yes No

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

Applicant has complied with all requirements of the Ordinance: *Donation to Town for Recreation Purposes Amount of \$10,000.00

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

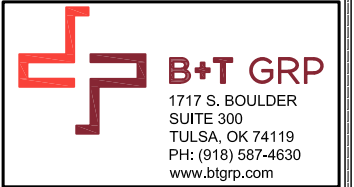
EXHIBIT 6

SITE NAME: CT524/SBA POMFRET

62 BABBIT HILL RD
POMFRET, CT 06259

SITE NUMBER: CT11524A

SITE CONFIG: 67D04G



T-MOBILE NORTHEAST, LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02766



SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581

CT11524A

CT524/SBA POMFRET

62 BABBIT HILL RD
POMFRET, CT 06259

PROJECT NO: 136044.002.01

CHECKED BY: FWP

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	6/20/19	MTJ	FOR REVIEW
1	9/13/19	JCO	FOR REVIEW
2	9/16/19	JJD	FOR REVIEW

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/19



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SHEET NUMBER: T-1 REVISION: 2

T-1 2

PROJECT NOTES

GENERAL NOTES:

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.

THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC, ROUTINE MAINTENANCE AND THEREFORE, DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE T-MOBILE NORTHEAST LLC REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SPECIAL STRUCTURAL NOTES:

TOWER OWNER SHALL PROVIDE GLOBAL STRUCTURAL STABILITY ANALYSIS OF EXISTING ANTENNA SUPPORT STRUCTURE. GENERAL CONTRACTOR SCOPE OF WORK SHALL INCLUDE ALL REQUIRED STRUCTURAL MODIFICATIONS, RE-BUNDLING OF COAXIAL CABLES OR OTHER SPECIAL MODIFICATIONS AS OUTLINED THEREIN.

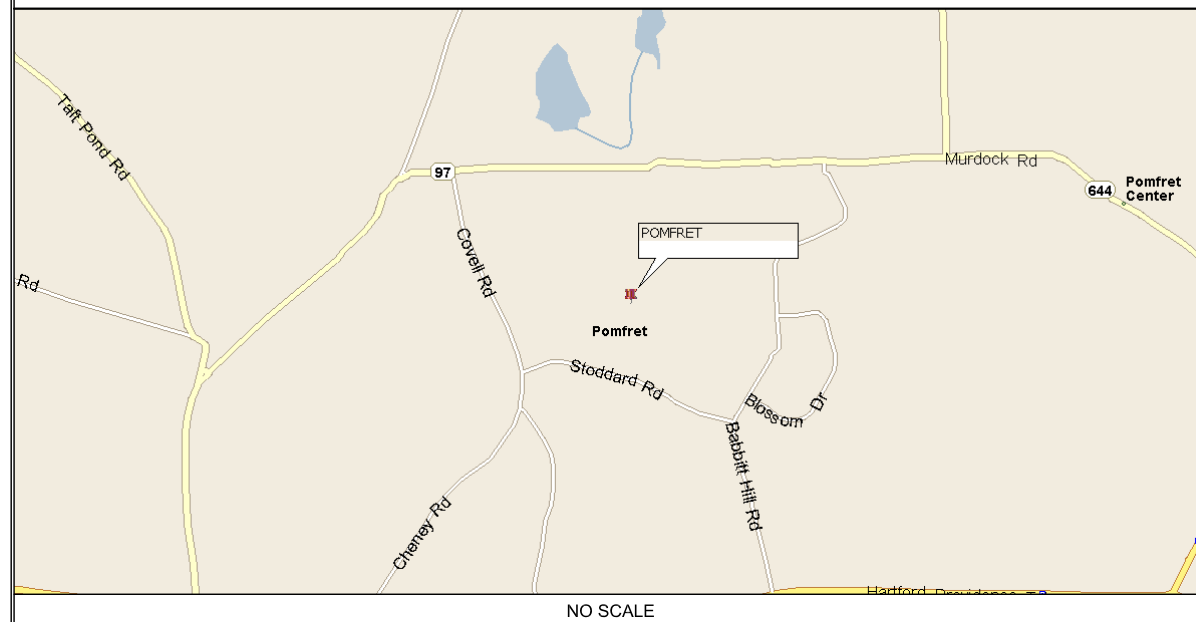
ENGINEER OF RECORD HAS MADE A VISUAL ASSESSMENT ONLY AND HAS DETERMINED THAT THE EXISTING ANTENNA MOUNT SHALL BE REPLACED OR MODIFIED TO ACCOMMODATE ANY ADDITIONAL EQUIPMENT LOAD. STRUCTURAL DESIGNS AND DETAILS AS SHOWN HEREIN FOR STRUCTURAL MODIFICATIONS OF THE EXISTING ANTENNA MOUNT ARE PRELIMINARY ONLY AND FINAL CONSTRUCTION DETAILS ARE SUBJECT TO CHANGE PENDING THE COMPLETION OF AN ANTENNA MOUNT STRUCTURAL ASSESSMENT.

B+T GROUP ASSUMES THAT THE TOWER IS PROPERLY CONSTRUCTED AND MAINTAINED. ALL STRUCTURAL MEMBERS AND THEIR CONNECTIONS ARE ASSUMED TO BE IN GOOD CONDITION AND ARE FREE FROM DEFECTS WITH NO DETERIORATION TO ITS MEMBER CAPACITIES.

T-MOBILE TECHNICIAN SITE SAFETY NOTES

LOCATION	SPECIAL RESTRICTIONS	LOCATION	SPECIAL RESTRICTIONS
SECTOR A:	ACCESS NOT PERMITTED	DIPLEXERS:	UNRESTRICTED
SECTOR B:	ACCESS NOT PERMITTED	RADIO CABINETS:	UNRESTRICTED
SECTOR C:	ACCESS NOT PERMITTED	PPC DISCONNECT:	UNRESTRICTED
RRH:	ACCESS NOT PERMITTED	MAIN CIRCUIT D/C:	UNRESTRICTED
TMA:	ACCESS NOT PERMITTED	NIU/T DEMARC:	UNRESTRICTED
GPS/LMU:	CAUTION: OSHA APPROVED PORTABLE 6' STEP-LADDER REQUIRED	OTHER/SPECIAL:	NONE

LOCATION MAP



PROJECT INFORMATION

SCOPE OF WORK: UNMANNED TELECOMMUNICATIONS FACILITY T-MOBILE EQUIPMENT MODERNIZATION

ZONING JURISDICTION: (TOWN OF POMFRET) BASED ON INFORMATION PROVIDED BY T-MOBILE, REGULATORY COMPLIANCE AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN ELIGIBLE FACILITY UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409 AND IS SUBJECT TO AN ELIGIBLE FACILITY REQUEST, EXPEDITED REVIEW AND LIMITED/PARTIAL ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW OR ADMINISTRATIVE REVIEW).

SITE ADDRESS: 62 BABBIT HILL RD
POMFRET, CT 06259

LATITUDE: 41.870417° N
LONGITUDE: 71.988290° W

JURISDICTION: NATIONAL, STATE & LOCAL CODES & ORDINANCES

CURRENT USE: TELECOMMUNICATIONS FACILITY

PROPOSED USE: TELECOMMUNICATIONS FACILITY

TOWER OWNER: SBA TOWERS, LLC

SBA SITE ID: CT01364-S

SBA SITE NAME: POMFRET

SBA REGIONAL SITE MANAGER: STEPHEN ROTH
(860) 539-4920
sroth@sbasite.com

APPROVALS

TITLE	SIGNATURE	DATE
PROJECT MANAGER:		
CONSTRUCTION:		
RF ENGINEERING:		
ZONING/SITE ACQ.:		
OPERATIONS:		
TOWER OWNER:		

ACCEPTANCE DOES NOT CONSTITUTE APPROVAL OF DESIGN, CALCULATIONS, ANALYSIS, TEST METHODS OF MATERIALS DEVELOPED OR SELECTED BY THE SUBCONTRACTOR AND DOES NOT RELIEVE SUBCONTRACTOR FROM FULL COMPLIANCE WITH CONTRACTUAL OBLIGATIONS.

DRAWING INDEX

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GROUNDING NOTES:

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI OR NFPA) LIGHTING PROTECTION CODE AND GENERAL COMPLIANCE WITH TELECORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATION OR ADVERSE FINDING TO THE CONTRACTOR FOR RESOLUTION.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GE'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 & 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BUS 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
7. APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDED FITTINGS OR BY BINDING ACROSS THE DISCONTINUITY WITH 6 AWS COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20' OR MORE OF 1/2" OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BAR TINNED COPPER GROUND WIRE, PER NEC 250.50.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
 CONTRACTOR: SBA COMMUNICATIONS CORP.
 SUBCONTRACTOR: GENERAL CONTRACTOR (CONSTRUCTION)
 OWNER: T-MOBILE
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALL AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWINGS. 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 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. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS NOTED OTHERWISE, PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WETHER SHALL BE HOT DIPPED GALVANIZED. TOUCH-UP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
16. CONSTRUCTION SHALL COMPLY WITH UMS SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF T-MOBILE SITES."
17. 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.
18. 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.
19. SINCE THE CELL SITE IS ACTIVE, AL 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 ADVISED TO BE WORN TO ALERT IF ANY DANGEROUS EXPOSURE LEVELS.
20. APPLICABLE BUILDING CODES:
 SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
 BUILDING CODE: IBC 2015
 ELECTRICAL CODE: NEC 2017

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318;
 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

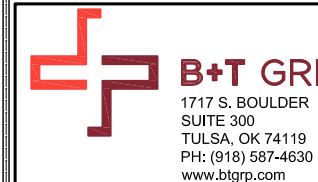
MANUAL OF STEEL CONSTRUCTION; ASD, FOURTEENTH EDITION

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G;
 STRUCTURAL STANDARDS FOR STEEL

ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES;
 REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHOD OF CONSTRUCTION OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS					
AGL	ABOVE GRADE LEVEL	GC	GENERAL CONTRACTOR	REF.	REFERENCE
AWG	AMERICAN WIRE GAUGE	MAX.	MAXIMUM	REQ.	REQUIRED
BCW	BARE COPPER WIRE	MGB	MASTER GROUND BAR	RF	RADIO FREQUENCY
BTS	BASE TRANSCEIVER STATION	MIN.	MINIMUM	T.B.D.	TO BE DETERMINED
(E)	EXISTING	(N)	PROPOSED	T.B.R.	TO BE REMOVED
EG	EQUIPMENT GROUND	N.T.S.	NOT TO SCALE	T.B.R.R.	TO BE REMOVED AND REPLACED
EGR	EQUIPMENT GROUND RING	RE:	REFERENCE	(TYP)	TYPICAL



T-MOBILE NORTHEAST, LLC
 15 COMMERCE WAY, SUITE B
 NORTON, MA 02766



SBA COMMUNICATIONS CORP.
 134 FLANDERS ROAD, SUITE 125
 WESTBOROUGH, MA 01581

CT11524A

**CT524/SBA
 POMFRET**

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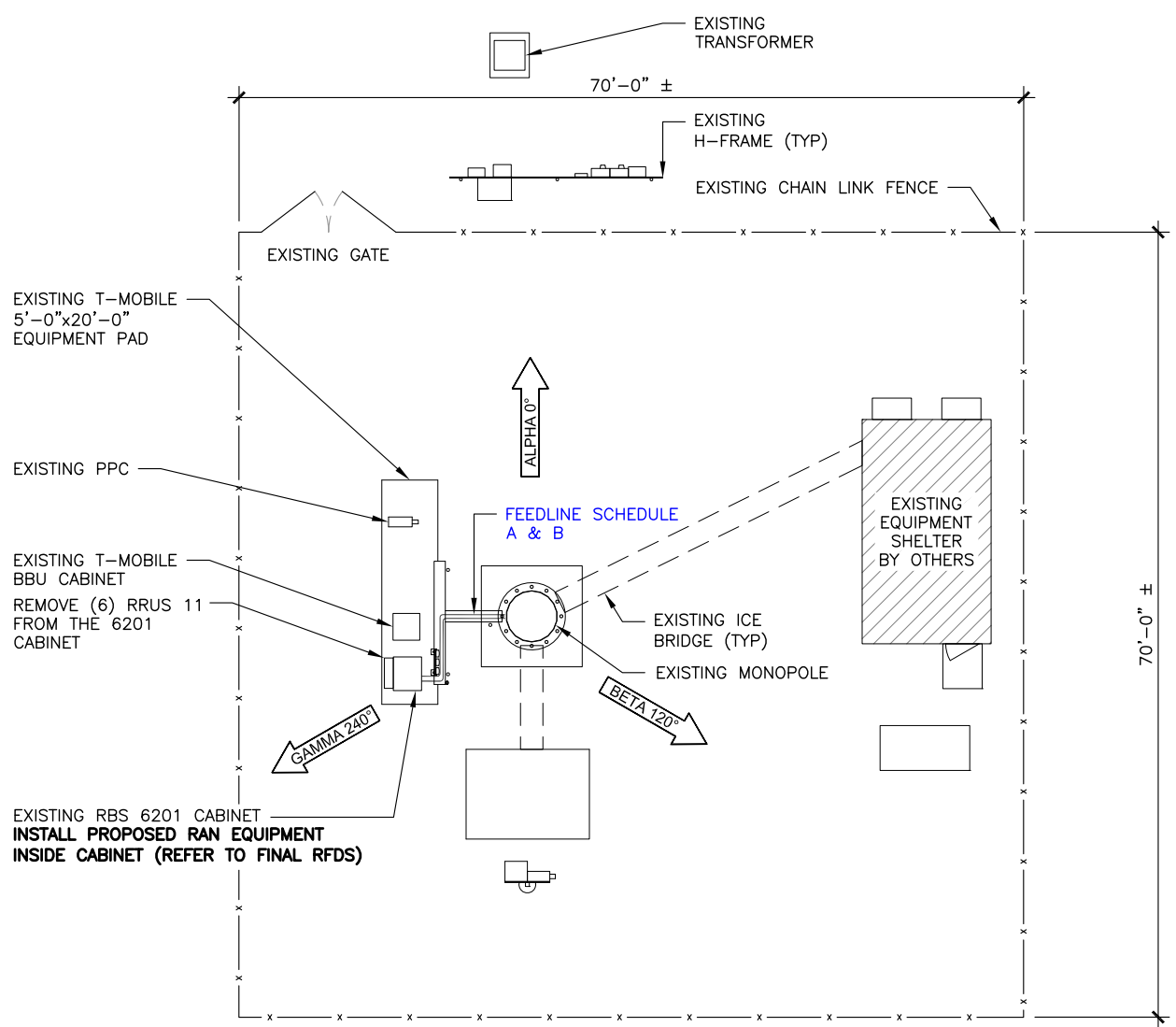
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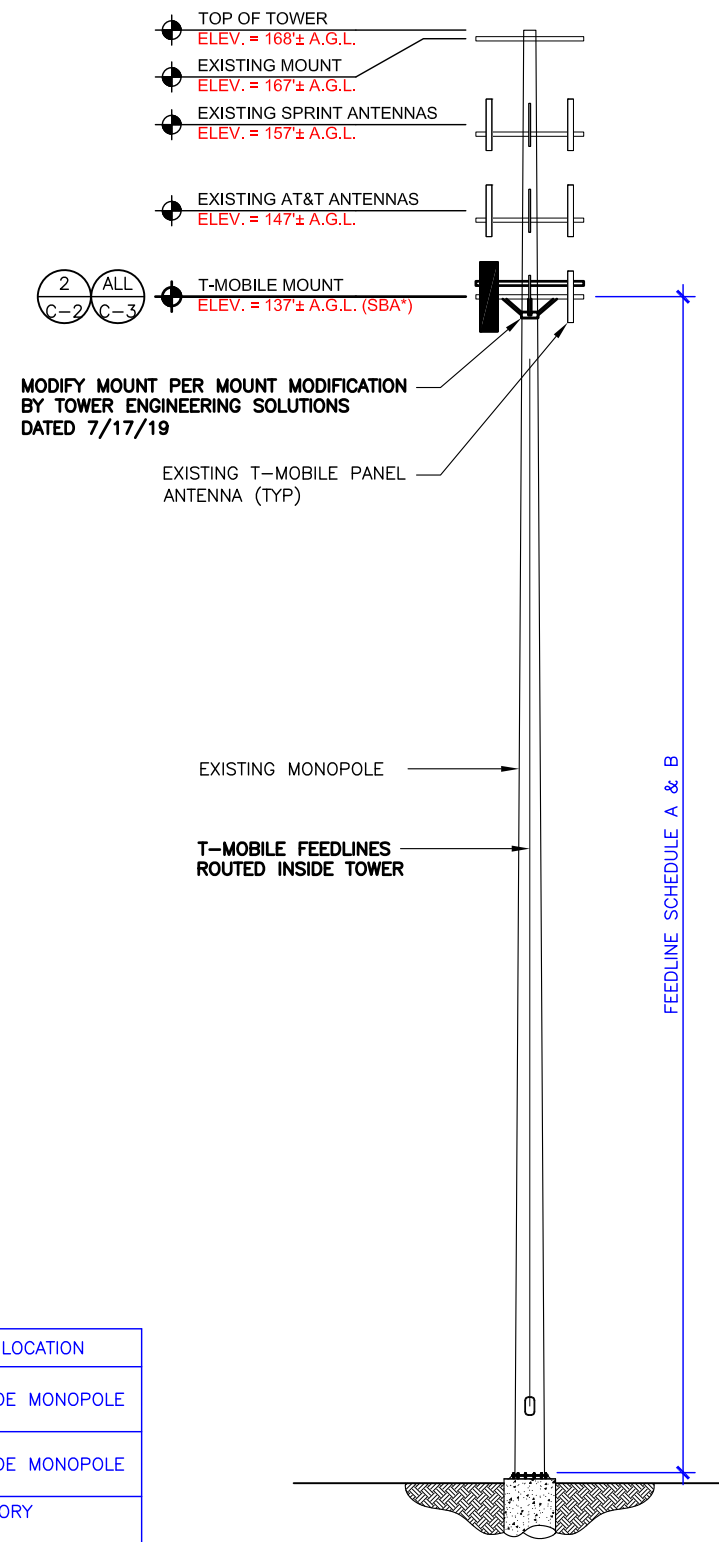
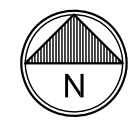
GN-1 2

ANTENNA MOUNT STRUCTURAL DESIGN NOTE:
 ENGINEER-OF-RECORD HAS MADE A VISUAL ASSESSMENT ONLY OF EXISTING ANTENNA MOUNT ASSEMBLIES, WITHOUT THE BENEFIT OF A RIGOROUS ANTENNA MOUNT STRUCTURAL ANALYSIS, AND RECOMMENDS THAT EXISTING AND PROPOSED TOWER TOP EQUIPMENT BE INSTALLED AS DEPICTED HEREIN. STRUCTURAL DETAILS AS DEPICTED HEREIN FOR MODIFICATION OF EXISTING ANTENNA MOUNT ASSEMBLIES ARE PRELIMINARY ONLY AND THAT FINAL CONSTRUCTION DETAILS MAY BE SUBJECT TO CHANGE PENDING THE COMPLETION OF A SEPARATE SUPPLEMENTAL ANTENNA MOUNT STRUCTURAL ASSESSMENT, SUPPLEMENTAL STRUCTURAL MAPPING/CONDITIONS ASSESSMENT REPORT AND/OR SUPPLEMENTAL RIGOROUS ANTENNA MOUNT STRUCTURAL ANALYSIS.

SPECIAL PRE-CONSTRUCTION WORK NOTE:
 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.



1 OVERALL SITE PLAN
 SCALE: 0' 8' 16' 32' 48'
 11x17 SCALE: 1/16"=1'-0"
 22x34 SCALE: 1/8"=1'-0"



2 ELEVATION DETAIL
 SCALE: N.T.S.

FEEDLINE SCHEDULE	FEEDLINE DESCRIPTION	LOCATION
A	EXISTING TO REMAIN: (6) 1 5/8" COAX TO T-MOBILE RAD @ 137'	INSIDE MONOPOLE
B	PROPOSED: (3) 6x12 FIBER TO T-MOBILE RAD @ 137'	INSIDE MONOPOLE

EXISTING T-MOBILE EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER

B+T GRP
 1717 S. BOULDER SUITE 300
 TULSA, OK 74119
 PH: (918) 587-4630
 www.btgrp.com

T-Mobile
 T-MOBILE NORTHEAST, LLC
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 NORTON, MA 02766

SBA
 SBA COMMUNICATIONS CORP.
 134 FLANDERS ROAD, SUITE 125
 WESTBOROUGH, MA 01581

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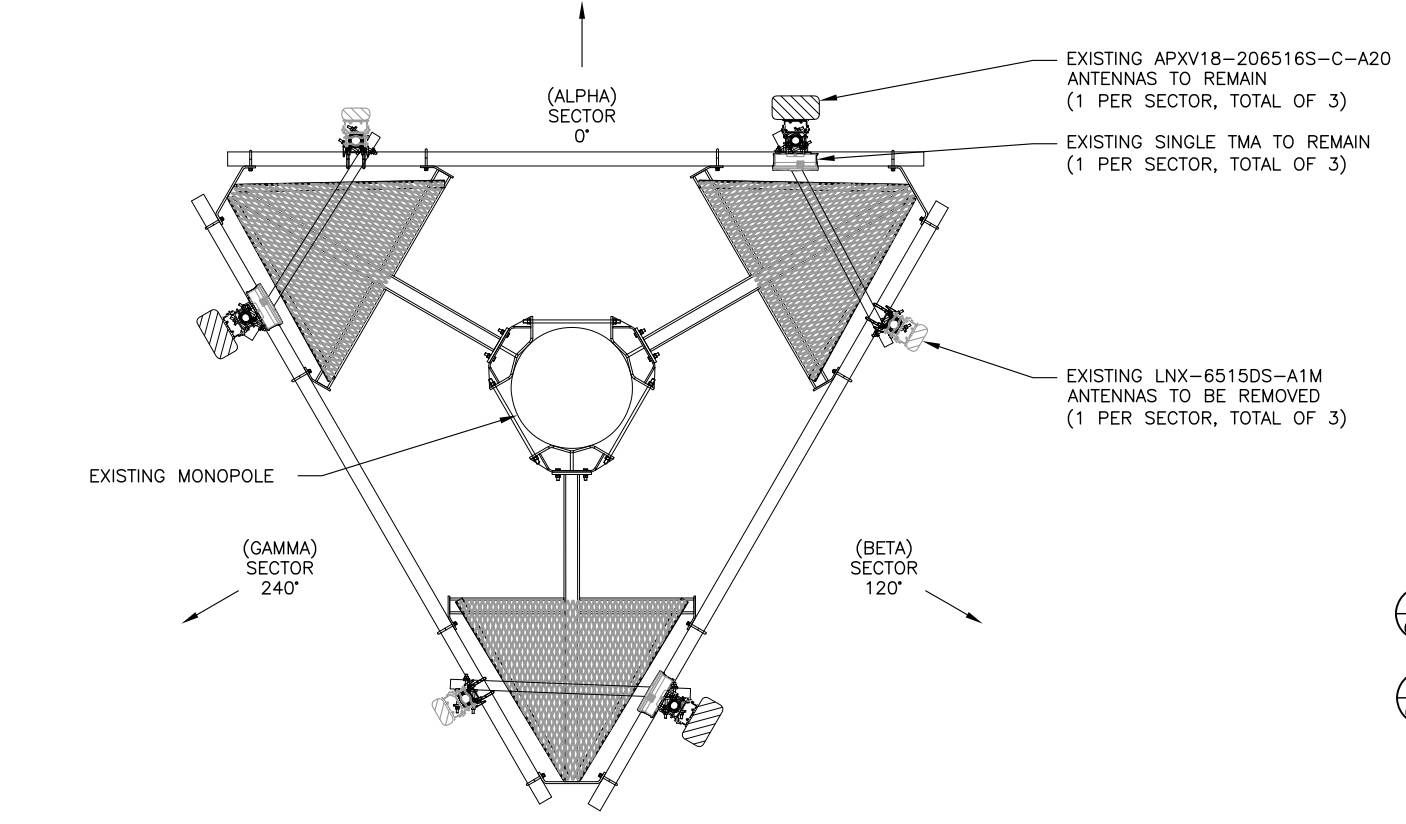


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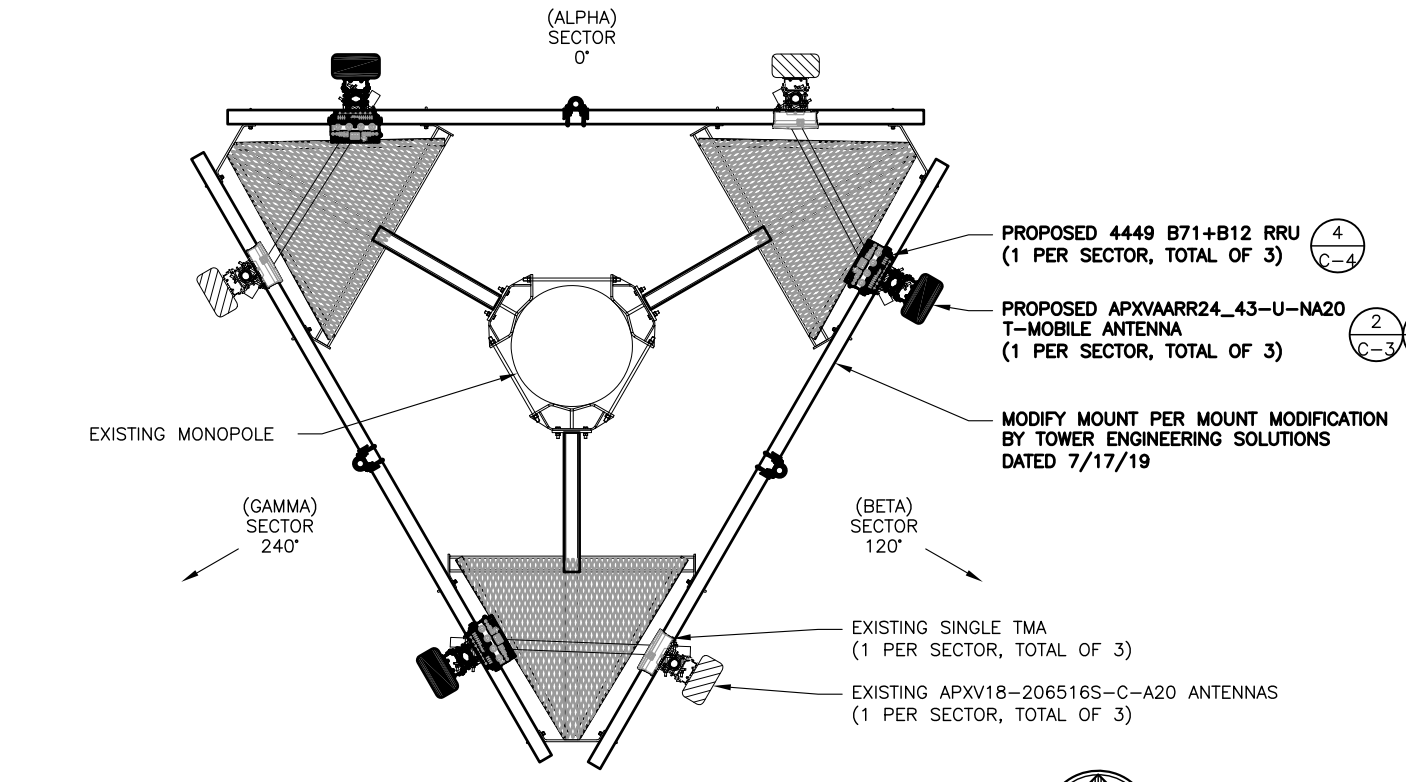
NOTE:
 AT TIME OF CONSTRUCTION, CONTRACTOR TO VERIFY AZIMUTHS OF EXISTING ANTENNAS. IF DIFFERENT FROM RFDS, PLEASE NOTIFY THE RF ENGINEER AND CONSTRUCTION MANAGER WITH ACTUAL AZIMUTH TO ENSURE T-MOBILE'S DATABASE IS ACCURATE AND UP-TO-DATE.

GENERAL CONTRACTOR NOTE:
 GENERAL CONTRACTOR SHALL REFER TO MOUNT STRUCTURAL ANALYSIS AND ANY MOUNT MODIFICATION DESIGN PROVIDED BY SBA

SPECIAL PRE-CONSTRUCTION WORK NOTE:
 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.



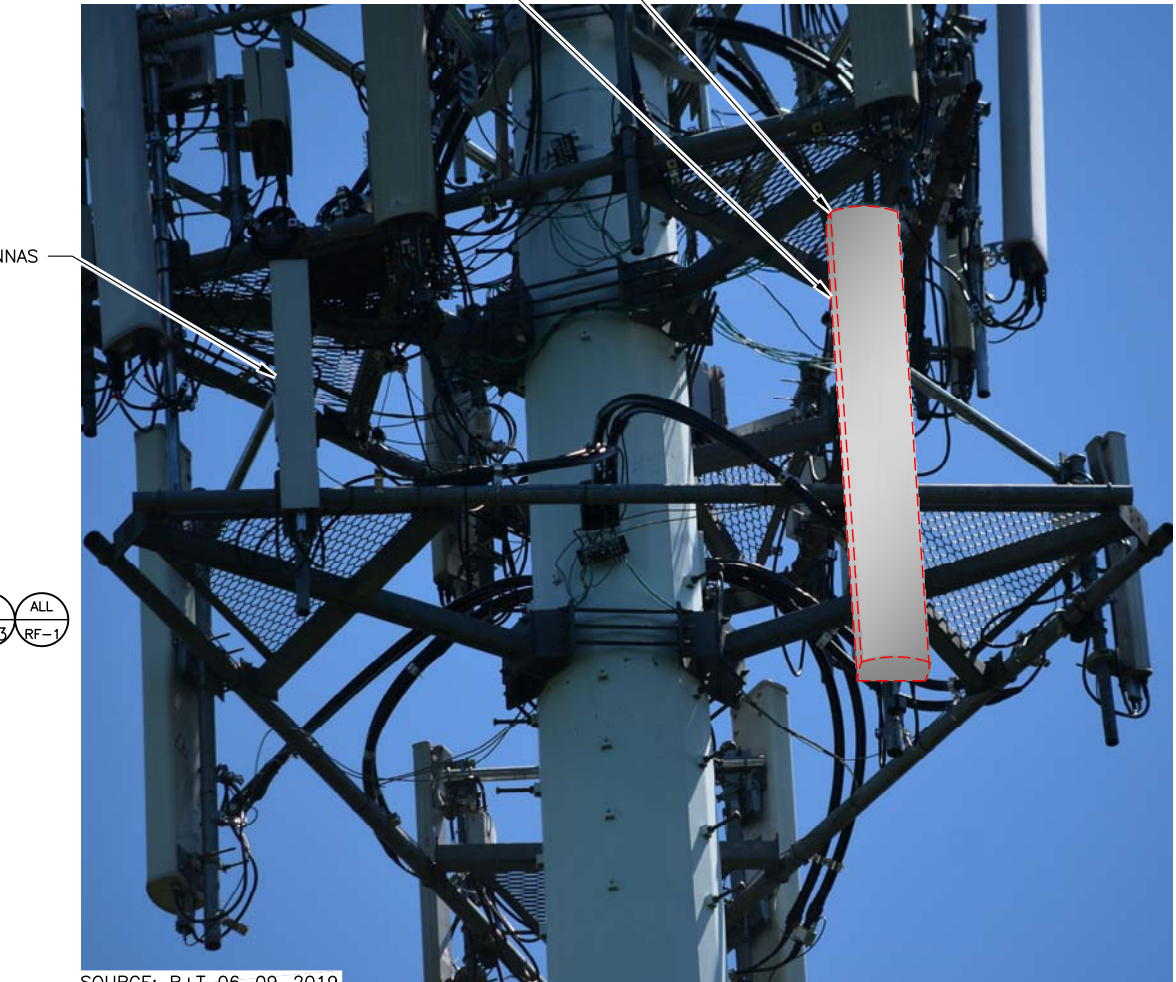
1A EXISTING ANTENNA PLAN
 SCALE: 11x17 SCALE: 1/4"=1'-0" 22x34 SCALE: 1/2"=1'-0"



1B PROPOSED ANTENNA PLAN
 SCALE: 11x17 SCALE: 1/4"=1'-0" 22x34 SCALE: 1/2"=1'-0"

2 **ALL** PROPOSED APXVAARR24_43-U-NA20 T-MOBILE ANTENNA (1 PER SECTOR, TOTAL OF 3)
 C-3 RF-1

2 **ALL** PROPOSED 4449 B71+B12 RRU (1 PER SECTOR, TOTAL OF 3)
 C-3 RF-1



2 ANTENNA MOUNT PHOTO DETAIL
 SCALE: N.T.S.

1A
C-3
PROPOSED ANTENNA TO PIPE CLAMP
(INCLUDED WITH ANTENNA)

2
C-3
PROPOSED L700/L600 ANTENNA

3
C-3
PROPOSED RRU

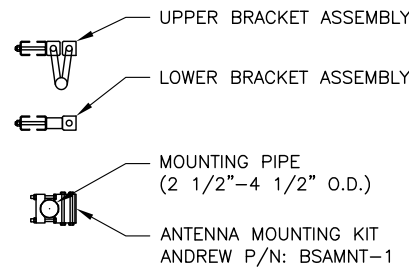
EXISTING PLATFORM
MOUNTING RAIL

WORKING POINT

PROPOSED PIPE TO PIPE
CROSS-OVER CLAMP KIT
SITEPRO P/N: SP219
(OR APPROVED EQUAL)

EXISTING MOUNTING PIPE

ANTENNA INSTALLATION SPECIAL WORK NOTE:
ANTENNA INSTALLATION WORKING POINT IS THE
STRUCTURAL FACE FRAME VERTICAL CENTERLINE OF
THE EXISTING ANTENNA SUPPORT ASSEMBLY.
UNLESS NOTED OTHERWISE VERTICALLY CENTER ALL
PIPE MASTS AND ANTENNAS ON THIS WORKING POINT.



1
SCALE: N.T.S.
PROPOSED L700/L600 ANTENNA
& RRU MOUNTING DETAIL

1A
SCALE: N.T.S.
L700/L600 ANTENNA
MOUNTING BRACKET

2
SCALE: N.T.S.
L700/L600 ANTENNA DETAIL

3
SCALE: N.T.S.
REMOTE RADIO UNIT (RRU)

SPECIAL PRE-CONSTRUCTION WORK NOTE:
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.

ANTENNA MOUNT STRUCTURAL DESIGN NOTE:
ENGINEER-OF-RECORD HAS MADE A VISUAL ASSESSMENT
ONLY OF EXISTING ANTENNA MOUNT ASSEMBLIES, WITHOUT
THE BENEFIT OF A RIGOROUS ANTENNA MOUNT STRUCTURAL
ANALYSIS, AND RECOMMENDS THAT EXISTING AND
PROPOSED TOWER TOP EQUIPMENT BE INSTALLED AS
DEPICTED HEREIN. STRUCTURAL DETAILS AS DEPICTED
HEREIN FOR MODIFICATION OF EXISTING ANTENNA MOUNT
ASSEMBLIES ARE PRELIMINARY ONLY AND THAT FINAL
CONSTRUCTION DETAILS MAY BE SUBJECT TO CHANGE
PENDING THE COMPLETION OF A SEPARATE SUPPLEMENTAL
ANTENNA MOUNT STRUCTURAL ASSESSMENT,
SUPPLEMENTAL STRUCTURAL MAPPING/CONDITIONS
ASSESSMENT REPORT AND/OR SUPPLEMENTAL RIGOROUS
ANTENNA MOUNT STRUCTURAL ANALYSIS.

L700/L600 ANTENNA SPECS

MANUFACTURER	RFS
MODEL #	APXVAARR24_43-U-NA20
WIDTH	24"
DEPTH	8.7"
HEIGHT	95.9"
WEIGHT	128 LBS

RRU SPECIFICATIONS

MANUFACTURER	ERICSSON
MODEL #	4449 B71+B12
WIDTH	13.18"
DEPTH	9.25"
HEIGHT	15"
WEIGHT	74 LBS

FINAL ANTENNA SCHEDULE

SECTOR	TECH	ANTENNA MODEL	AZIMUTH	RAD CENTER	M-TILT	E-TILT	RADIOS	CABLE TYPE	CABLE LENGTH
ALPHA	L700/L600/L600	APXVAARR24_43-U-NA20	0°	137'	0	2/2	(1) 4449 B71+B12	(1) 6x12 HCS FIBER	170'
	L1900/G1900	APXV18-206516S-C-A20	0°	137'	0	2	-	(2) 1 5/8" COAX	170'
BETA	L700/L600/L600	APXVAARR24_43-U-NA20	120°	137'	0	2/2	(1) 4449 B71+B12	(1) 6x12 HCS FIBER	170'
	L1900/G1900	APXV18-206516S-C-A20	120°	137'	0	2	-	(2) 1 5/8" COAX	170'
GAMMA	L700/L600/L600	APXVAARR24_43-U-NA20	240°	137'	0	2/2	(1) 4449 B71+B12	(1) 6x12 HCS FIBER	170'
	L1900/G1900	APXV18-206516S-C-A20	240°	137'	0	2	-	(2) 1 5/8" COAX	170'

4
SCALE: N.T.S.
FINAL ANTENNA SCHEDULE

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

T-Mobile
T-MOBILE NORTHEAST, LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02766

SBA
SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581

CT11524A
**CT524/SBA
POMFRET**
62 BABBIT HILL RD
POMFRET, CT 06259

PROJECT NO: 136044.002.01
CHECKED BY: FWP

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	6/20/19	MTJ	FOR REVIEW
1	9/13/19	JCO	FOR REVIEW
2	9/16/19	JD	FOR REVIEW

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PEC.0001564
Expires 2/10/19



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SHEET NUMBER: **C-3** REVISION: **2**

CT11524A

**CT524/SBA
 POMFRET**

62 BABBIT HILL RD
 POMFRET, CT 06259

PROJECT NO: 136044.002.01

CHECKED BY: FWP

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	6/20/19	MTJ	FOR REVIEW
1	9/13/19	JCO	FOR REVIEW
2	9/16/19	JDJ	FOR REVIEW

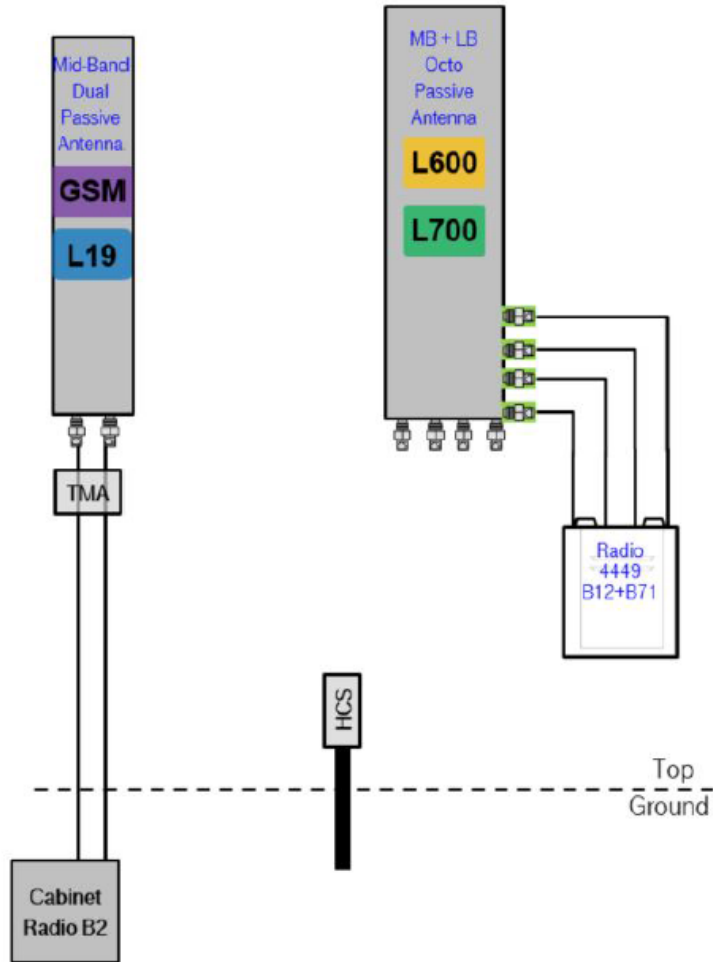
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 PEC.0001564
 Expires 2/10/19



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SHEET NUMBER: REVISION:

RF-1 2



RF DESIGN GENERAL NOTE:

- RF DESIGN BASED ON RFDS DATED 5/8/19. GENERAL CONTRACTOR/TOWER CREW SHALL VERIFY THAT THE LATEST RFDS AND RAN WIRING DIAGRAM IS USED FOR EQUIPMENT INSTALLATION.
- PRIOR TO INSTALLATION OF TOWER TOP EQUIPMENT, GENERAL CONTRACTOR/TOWER CREW SHALL VERIFY AZIMUTHS OF EXISTING ANTENNAS. DISCREPANCIES AND ACTUAL AZIMUTHS SHALL BE REPORTED IMMEDIATELY TO RF ENGINEER AND T-MOBILE CONSTRUCTION MANAGER.

RFDS FOOTNOTES:

- INFORMATION IN BOLD RED TEXT IS PROVIDED BY A&E AND HIGHLIGHTS IMPORTANT DISCREPANCIES BETWEEN RFDS AND ACTUAL FIELD MEASUREMENTS OR SBA-PROVIDED RECORD INFORMATION.
- SBA-PROVIDED ANTENNA RAD AGL BASED ON COLOCATION APPLICATION AND STRUCTURAL ANALYSIS AND SHALL SUPERCEDE ANY CONFLICTING RFDS ANTENNA RAD AGL.
- HYBRID TRUNK FEEDLINE LENGTHS AS PROVIDED BY A&E BASED ON SCALED DIMENSIONS FROM RBS TO ANTENNA/RRU CONNECTIONS PLUS 20' FOR (2) 10' COILS EACH AT TOP AND BOTTOM TERMINATIONS. T-MOBILE CONSTRUCTION MANAGER SHALL CONFIRM ALL EQUIPMENT SCHEDULES, PART NUMBERS AND FEEDLINE/JUMPER LENGTHS BEFORE PREPARING A BILL OF MATERIALS.

Existing RAN Equipment	
Template: 704G	
Enclosure	1
Enclosure Type	RBS 6201 ODE
Baseband	DUG20 (DUS41)
Radio	RUS01 B2 (x7) RUS01 B12 (x5)

Proposed RAN Equipment	
Template: 67D04G	
Enclosure	1
Enclosure Type	RBS 6201 ODE
Baseband	DUG20 (G1900) BB 6630 (L1900) BB 6630 (N600 (DARK) L700 L600)
Hybrid Cable System	Ericsson 6x12 HCS "Select Length & AWG" (x3)
Radio	RUS01 B2 (x3) (G1900) RUS01 B2 (x3) (L1900)

RAN Scope of Work:
 *** RBS6201 ODE Cabinet ***
 Replace (1) DUS41 with (1) BB6630 for LTE.
 Add (1) BB6630 for future 5G N600.
 Remove all (6) RUS01 B12 from cabinet.
 Add (3) 6X12 HCS
 Existing: (12) Coaxial Lines

Sector 1 (Proposed) view from behind					
Coverage Type	1		2		
Antenna	RFS - APXV18-206516S-C-A20 (Dual)		RFS - APXVARR24_43-U-NA20 (Octo)		
Antenna Model					
Azimuth	0		0		
M. Tilt	0		0		
Height	(137)		(137)		
Ports	P1	P2	P3	P4	P5
Active Tech.	(L1900) (G1900)	(L700) (L600)	(L700) (L600)		
Dark Tech.					
Restricted Tech.					
Decom. Tech.					
E. Tilt	0	0	0		
Cables	(1-58" Coax - 170 ft. (x2))	Coax Jumper (x2)	Coax Jumper (x2)		
TMMs	Generic Tain Style 1A - PCS (Antenna)				
Diplexers/ Combiners					
Radio		Radio 4449 B71+B12 (At Antenna)	Radio 4449 B71+B12 (At Antenna)		
Sector Equipment					
Unconnected Equipment:					
Scope of Work:	Replace LB Dual in Position 2 with (1) LB+MB Octo. Add (1) Radio 4449 B71+B12 for L600 and L700 to Position 2 at antenna.				

Sector 2 (Proposed) view from behind					
Coverage Type	1		2		
Antenna	RFS - APXV18-206516S-C-A20 (Dual)		RFS - APXVARR24_43-U-NA20 (Octo)		
Antenna Model					
Azimuth	120		120		
M. Tilt	0		0		
Height	(137)		(137)		
Ports	P1	P2	P3	P4	P5
Active Tech.	(L1900) (G1900)	(L700) (L600)	(L700) (L600)		
Dark Tech.					
Restricted Tech.					
Decom. Tech.					
E. Tilt	0	0	0		
Cables	(1-58" Coax - 170 ft. (x2))	Coax Jumper (x2)	Coax Jumper (x2)		
TMMs	Generic Tain Style 1A - PCS (Antenna)				
Diplexers/ Combiners					
Radio		Radio 4449 B71+B12 (At Antenna)	Radio 4449 B71+B12 (At Antenna)		
Sector Equipment					
Unconnected Equipment:					
Scope of Work:	Replace LB Dual in Position 2 with (1) LB+MB Octo. Add (1) Radio 4449 B71+B12 for L600 and L700 to Position 2 at antenna.				

Sector 3 (Proposed) view from behind					
Coverage Type	1		2		
Antenna	RFS - APXV18-206516S-C-A20 (Dual)		RFS - APXVARR24_43-U-NA20 (Octo)		
Antenna Model					
Azimuth	240		240		
M. Tilt	0		0		
Height	(137)		(137)		
Ports	P1	P2	P3	P4	P5
Active Tech.	(L1900) (G1900)	(L700) (L600)	(L700) (L600)		
Dark Tech.					
Restricted Tech.					
Decom. Tech.					
E. Tilt	0	0	0		
Cables	(1-58" Coax - 170 ft. (x2))	Coax Jumper (x2)	Coax Jumper (x2)		
TMMs	Generic Tain Style 1A - PCS (Antenna)				
Diplexers/ Combiners					
Radio		Radio 4449 B71+B12 (At Antenna)	Radio 4449 B71+B12 (At Antenna)		
Sector Equipment					
Unconnected Equipment:					
Scope of Work:	Replace LB Dual in Position 2 with (1) LB+MB Octo. Add (1) Radio 4449 B71+B12 for L600 and L700 to Position 2 at antenna.				

EXHIBIT 7

MODIFICATION AND DESIGN DRAWINGS FOR EXISTING ANTENNA MOUNTS EXISTING MONOPOLE TOWER

PROPOSED CARRIER: T-MOBILE

TOWER OWNER: SBA / TOWER OWNER SITE #: CT01364-S

CARRIER SITE #/NAME: CT11524A / POMFRET

COORDINATES (LATITUDE: 41.870258°, LONGITUDE: -71.988241°)

PLEASE NOTE THIS SET OF DRAWINGS ARE FOR INSTALLATION AND ASSEMBLY ONLY. FABRICATION DETAIL DRAWINGS ARE NOT PROVIDED AND MUST BE COMPLETED BY THE STEEL FABRICATOR SELECTED. TES CAN PROVIDE THE FABRICATION DETAIL DRAWINGS FOR AN ADDITIONAL FEE.

SHEET	SHEET TITLE	REV
T-1	TITLE SHEET	0
BOM	BILL OF MATERIALS	0
GN-1	GENERAL NOTES	0
A-1	ANTENNA MOUNT MODIFICATION DETAILS	0
A-2	ANTENNA MOUNT PHOTOS	0
D-1	STANDARD DETAILS	0
MS-HRECP-35	METROSITE SUPPORT RAIL WITH END CONNECTION KIT	
MS-1436	MERTROSITE LIGHT COLLAR MOUNT PLATE ASSEMBLY	
MPW-1	METROSITE LIGHT COLLAR MOUNT PLATE WELDMENT	
MS-K122-5	METROSITE KICKER SUPPORT KIT	

NOTE:

- THE MODIFICATION DRAWINGS ARE BASED ON THE TES PROJECT NO. 78331, DATED 06/20/2019.



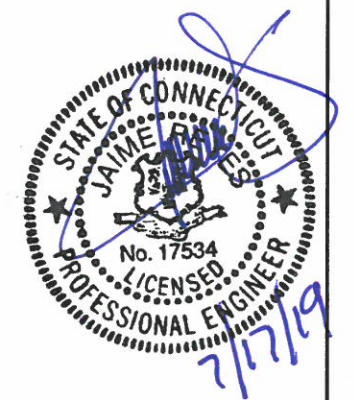
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IRVING, TX 75038
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BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
81227

CUSTOMER SITE NO:
CT01364-S-SBA
CUSTOMER SITE NAME:
POMFRET
62 BABBITT HILL ROAD
POMFRET, CT 06259



DRAWN BY: GA | CHECKED BY: ID/HMA

REV.	DESCRIPTION	BY	DATE
△ 1	FIRST ISSUE	GA	07/17/19
△			
△			
△			

SHEET TITLE:

TITLE SHEET

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SHEET NUMBER: T-1 | REV #: 0

BILL OF MATERIALS

QUANTITY COUNTED	QUANTITY PROVIDED	PART NUMBER	DESCRIPTIONS	SHEET LIST	PIECE WEIGHT (LBS)	WEIGHT (LB)	NOTES
MATERIAL & HARDWARE							
1	1	MS-HRECP-35	METROSITE SUPPORT RAIL WITH END CONNECTION KIT	A-1, MS-HRECP-35	514.0	514.0	Galvanized
1	1	MS-1436	METROSITE LIGHT COLLAR MOUNT PLATE ASSEMBLY	A-1, MS-1436	87.0	87.0	Galvanized
1	1	MS-KI22-5	METROSITE KICKER SUPPORT KIT	A-1, MS-KI22-5	146.0	146.0	Galvanized
FOLLOWING ITEMS ARE "CUSTOM" PARTS							
3	3	PST2375-8	2" PST (2.375" O.D. X 0.154" THK) X 8'-0" A53 GR-B 35KSI	A-1	30.00	90.0	GALVANIZED
<p align="center">ALL METROSITE PARTS ARE AVAILABLE FROM METROSITE, LLC.</p> <p align="center">180 IND PARK BLVD COMMERCE, GA 30529</p> <p align="center">OFFICE: (706) 335-7045</p> <p align="center">FAX: (706) 335-7056</p>							
NOTE: ALL MATERIALS, WHICH WEREN'T LISTED IN THIS SHEET, ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.							
TOTAL WEIGHT (LBS) =					837.0		



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 (800)-487-SITE

TES JOB NO:
81227

CUSTOMER SITE NO:
CT01364-S-SBA
 CUSTOMER SITE NAME:
POMFRET
 62 BABBITT HILL ROAD
 POMFRET, CT 06259

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REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	GA	07/17/19

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BILL OF MATERIALS

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SHEET NUMBER: **BOM** REV #: **0**

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE ANSI/TIA-222-G, ANSI/ASSP A10.48, AND ANY OTHER GOVERNING BUILDING CODES AND OSHA SAFETY REGULATIONS.
2. ALL WORK INDICATED ON THE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TELECOMMUNICATIONS TOWER, POLE AND FOUNDATION CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF ALL MISCELLANEOUS PARTS (SUCH AS SHIMS), TEMPORARY SUPPORTS, AND GUYINGS, ETC., PER ANSI/ASSP A10.48, TO COMPLETE THE ASSEMBLY AS SHOWN IN THE DRAWINGS.
4. CONTRACTOR SHALL PROCEED WITH THE INSTALLATION WORK CAREFULLY SO THE WORK WILL NOT DAMAGE ANY EXISTING CABLE, EQUIPMENT OR THE STRUCTURE.
5. THE USE OF GAS TORCH OR WELDER, ARE NOT ALLOWED ON ANY TOWER STRUCTURE WITHOUT THE CONSENT OF THE TOWER OWNER.
6. GENERALLY THE CONTRACTOR IS RESPONSIBLE TO CONDUCT AN ONSITE VISIT SURVEY OF THE JOB SITE AFTER AWARD, AND REPORT ANY ISSUES WITH THE SITE TO **TES** BEFORE PROCEEDING CONSTRUCTION.
7. IT IS THE RESPONSIBILITY OF THE GC TO VERIFY THAT THERE IS NO INTERFERENCES (WITH SAFETY CLIMB BRACKETS, TRANSMISSION LINES, ETC.) PRIOR TO MOBILIZATION AND INSTALLATION OF THESE MODIFICATIONS.
8. PLEASE NOTIFY TES IMMEDIATELY IF ANY INSTALLATION ISSUES OCCUR RELATED TO THIS DRAWING @ 972-483-0607 OR EMAIL-TESCONSTRUCTION@TESTOWER.US

FABRICATION

1. ALL STEEL SHALL MEET OR EXCEED THE MINIMUM STRENGTH AS SPECIFIED IN THE DRAWINGS. IF YIELD STRENGTH WAS NOT NOTED IN THE DRAWINGS, CONTRACTORS SHALL CONTACT TES FOR DIRECTION.
2. ALL FIELD CUT EDGES SHALL BE GROUND SMOOTH. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

WELDING

1. ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNO. (E70XX UNLESS NOTED OTHERWISE).
2. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING APPROX. 0.5" BEYOND THE PROPOSED FIELD WELD SURFACES.
3. ALL WELDS SHALL BE INSPECTED VISUALLY. A MINIMUM OF 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. 100% OF WELDS SHALL BE INSPECTED IF DEFECTS ARE FOUND.
4. WELD INSPECTIONS SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
5. AFTER INSPECTION, ALL FIELD WELDED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

BOLTED ASSEMBLIES AND TIGHTENING OF CONNECTIONS

1. ALL HIGH STRENGTH BOLTS SHALL CONFORM TO THE PROVISIONS OF THE SPECIFICATIONS FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS AS APPROVED BY THE RSCC.
2. FLANGE BOLTS SHALL BE TIGHTENED BY THE AISC "TURN-OF-THE-NUT" METHOD. THE FOLLOWING TABLE SHOULD BE USED FOR THE "TURN-OF-THE-NUT" TIGHTENING.
3. SPLICE BOLTS AND ALL OTHER BOLTS IN BEARING TYPE CONNECTIONS SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION.
4. THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS ATTAINED BY EITHER A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER WITH AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
5. HB HOLLO-BOLT SHALL BE INSTALLED PER ICC ESR-3330 INSTRUCTIONS.

VERIFICATION AND INSPECTION

1. IF APPLICABLE, VERIFICATION INSPECTION TO BE PERFORMED SHALL BE IN ACCORDANCE TO IBC-2015 SECTION 1705 FOR STEEL CONSTRUCTION AND TABLE 1705.3 FOR CONCRETE CONSTRUCTION.

TABLE 8.2 NUT ROTATION FROM SNUG-TIGHT CONDITION FOR TURN-OF-NUT PRETENSIONING^{a,b}

BOLT LENGTH ^f	DISPOSITION OF OUTER FACE OF BOLTED PARTS		
	BOTH FACES NORMAL TO BOLT AXIS	ONE FACE NORMAL TO BOLT AXIS, OTHER SLOPED NOT MORE THAN 1:20 ^d	BOTH FACES SLOPED NOT MORE THAN 1:20 FROM NORMAL TO BOLT AXIS ^d
NOT MORE THAN 4d _b	1/3 TURN	1/2 TURN	2/3 TURN
MORE THAN 4d _b BUT NOT MORE THAN 8d _b	1/2 TURN	2/3 TURN	5/6 TURN
MORE THAN 8d _b BUT NOT MORE THAN 12d _b	2/3 TURN	5/6 TURN	1 TURN

^a NUT ROTATION IS RELATIVE TO BOLT REGARDLESS OF THE ELEMENT (NUT OR BOLT) BEING TURNED. FOR REQUIRED NUT ROTATIONS OF 1/2 TURN AND LESS, THE TOLERANCE IS PLUS OR MINUS 30 DEGREES; FOR REQUIRED NUT ROTATIONS OF 2/3 TURN AND MORE, THE TOLERANCE IS PLUS OR MINUS 45 DEGREES.

^b APPLICABLE ONLY TO JOINTS IN WHICH ALL MATERIAL WITHIN THE GRIP IS STEEL.

^c WHEN THE BOLT LENGTH EXCEEDS 12d_b, THE REQUIRED NUT ROTATION SHALL BE DETERMINED BY ACTUAL TESTING IN A SUITABLE TENSION CALIBRATOR THAT SIMULATES THE CONDITIONS OF SOLIDLY FITTING STEEL.

^d BEVELED WASHER NOT USED.

SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, JUNE 30, 2004 RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS

INSTALLATION TORQUE REQUIRED FOR HOLLO BOLTS AND AJAX BOLTS:

1. HB12 HOLLO BOLT: 59 FT-LBS
2. HB16 HOLLO BOLT: 140 FT-LBS
3. HB20 HOLLO BOLT: 221 FT-LBS
4. M20 AJAX BOLT: 280 FT-LBS.

FIELD HOT WORK PLAN NOTES:

FOLLOWING GUIDELINES SHALL BE COMPLIED WITH:

1. CONTRACTOR'S RESPONSIBILITY TO COMPLETE A HOT WORK PLAN IF AWARDED PER CUSTOMER SPECIFICATIONS GUIDELINES FOR WELDING, CUTTING & SPARK PRODUCING WORK.
2. HAVE A FIRE PLAN APPROVED BY THE CUSTOMER AND THEIR SAFETY MANAGEMENT DEPT.
3. CONTRACTOR MUST OBTAIN THE CONTACT INFO OF THE LOCAL FIRE DEPARTMENT AND THE 911 ADDRESS OF THE TOWER SITE BEFORE CONSTRUCTION.
4. CONTRACTOR SHALL MAKE SURE THAT CELL PHONE COVERAGE IS AVAILABLE IN THE TOWER SITE. IF CELL COVERAGE IS NOT AVAILABLE, AN IMMEDIATE AVAILABLE MEANS OF DIRECT COMMUNICATION WITH THE FIRE DEPARTMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION START.
5. ALL CONSTRUCTION SHALL BE PERFORMED UNDER WIND SPEED LESS THAN 10 MPH ON THE GROUND LEVEL. IF WIND SPEED INCREASE, CONTRACTOR MUST DETERMINE IF CONSTRUCTION SHALL BE DISCONTINUED.
6. FIRE SUPPRESSION EQUIPMENT MUST BE MADE AVAILABLE ON SITE AND READY TO USE.
7. CONTRACTOR SHALL ASSIGN A FIRE WATCHER TO PERFORM FIRE-FIGHTING DUTIES.
8. ALL WELDERS SHALL BE AWS OR STATE CERTIFIED. THEY MUST ALSO BE EXPERIENCED IN WELDING ON GALVANIZED MATERIALS.
9. IF IT IS POSSIBLE, ALL EXISTING COAX NEAR WELDING AREA SHALL BE TEMPORARILY MOVED AWAY FROM THE WELDING AREA BEFORE WELDING THE PLATES.
10. PLEASE REPORT ANY FIELD ISSUE TO TES @ 972-483-0607.



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TES JOB NO:
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CUSTOMER SITE NO:
CT01364-S-SBA

CUSTOMER SITE NAME:
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1	FIRST ISSUE	GA	07/17/19

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SHEET NUMBER: **GN-1** | REV #: **0**

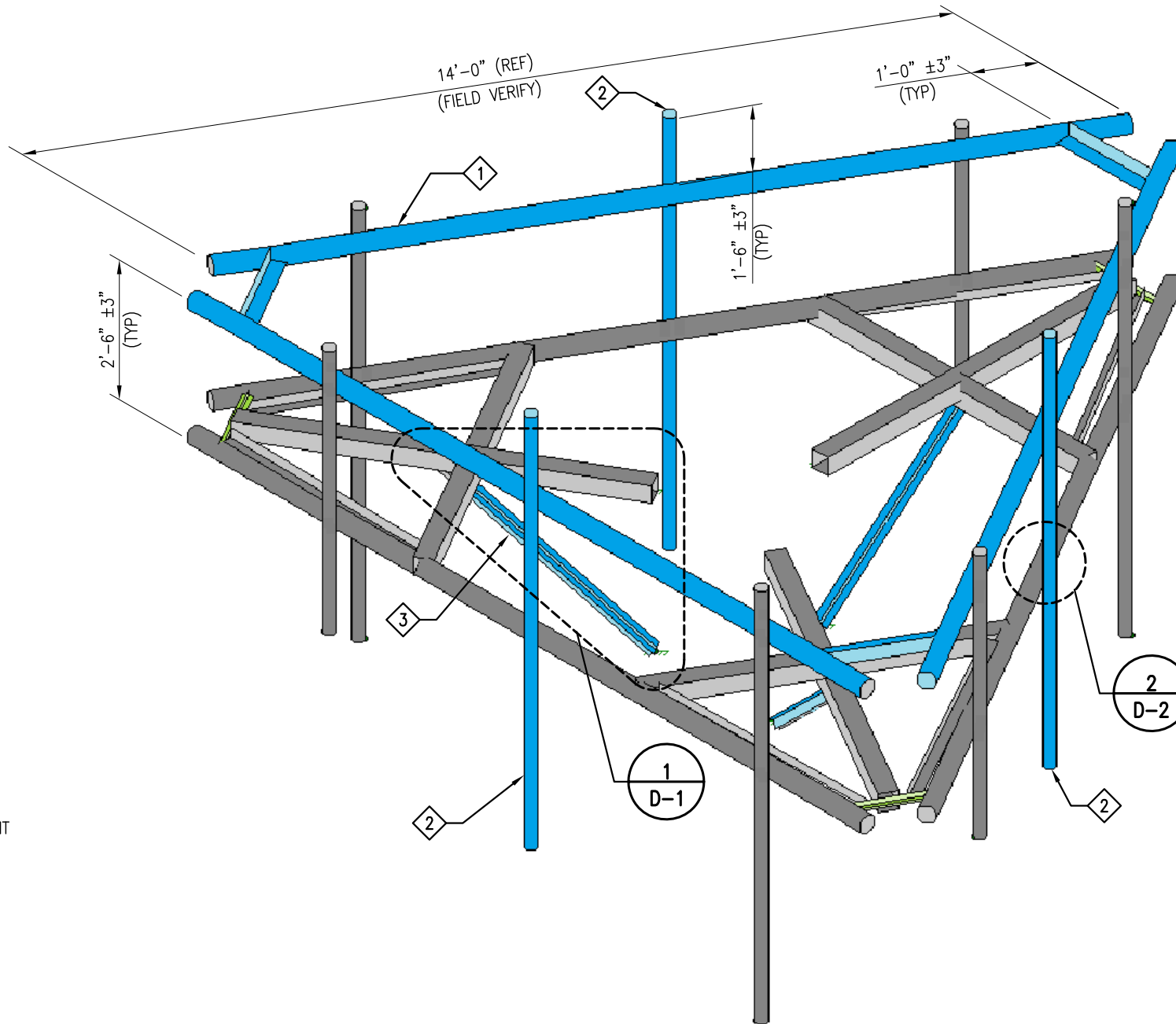
SCOPE OF WORK

- 1 INSTALL NEW SUPPORT RAIL WITH END CONNECTION KIT. SEE SHEET MS-HRECP-35 FOR DETAILS
- 2 INSTALL (3) NEW 2" PST (8'-0") ANTENNA MOUNT PIPE. (1) PER SECTOR.
- 3 INSTALL NEW LIGHT COLLAR MOUNT (NOT SHOWN FOR CLARITY) & KICKER SUPPORT KIT. SEE SHEETS D-1, MS-1436 & MS-KI22-5 FOR DETAILS.
- 4 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP, REMOVAL AND DISPOSAL OF EXCESS MATERIALS USED AND REMOVED FROM THE STRUCTURE AT THE COMPLETION OF THE PROJECT.



EXISTING ANTENNA MOUNT @ 137' ELEV

PHOTO 1



ISOMETRIC VIEW
EXISTING ANTENNA MOUNT @ 137' ELEV.

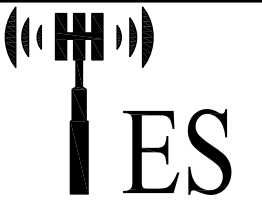
GC NOTE:

- 1. IT IS THE RESPONSIBILITY OF THE GC TO VERIFY THAT THERE IS NO INTERFERENCES WITH (PORT HOLES, SAFETY CLIMB BRACKETS, TRANSMISSION LINES, ETC.) PRIOR TO MOBILIZATION AND INSTALLATION OF THESE MODIFICATIONS.
- 2. PLEASE NOTIFY TES IMMEDIATELY IF ANY INSTALLATION ISSUES OCCUR RELATED TO THIS DRAWING @ 972-483-0607 OR EMAIL-TESCONSTRUCTION@TESTOWER.US

NOTES:

- 1. TEMPORARILY RELOCATE ANY EXISTING COAX ATTACHED TO THE LEGS AND/OR ANY OTHER MEMBERS WHERE OBSTRUCTION WITH THE PROPOSED MODIFICATION MAY OCCUR.
- 2. WHEN FIELD CUTTING AND DRILLING ANGLES, USE SAME GAGE LINES AND EDGE DISTANCES AS INDICATED ON SHOP CUT AND DRILLED ENDS.
- 3. APPLY (2) COATS OF ZINC RICH GALVANIZING COMPOUND AS PER THE MANUFACTURER'S SPECIFICATIONS TO ALL FIELD CUT AND DRILLED AREAS.
- 4. MEMBERS IN BLUE COLOR ARE NEW REINFORCEMENTS.

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	1	MS-HRECP-35	METROSITE SUPPORT RAIL WITH END CONNECTION KIT
2	3	PST2375-8	2" PST (2.375" O.D. X 0.154" THK) X 8'-0" A53 GR-B 35KSI
3	1	MS-1436	METROSITE LIGHT COLLAR MOUNT PLATE ASSEMBLY
4	1	MS-KI22-5	METROSITE KICKER SUPPORT KIT



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POMFRET
62 BABBITT HILL ROAD
POMFRET, CT 06259

DRAWN BY: GA CHECKED BY: ID/HMA

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	GA	07/17/19

SHEET TITLE:
**ANTENNA MOUNT
MODIFICATION DETAILS**

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SHEET NUMBER: **A-1** REV #: **0**



PHOTO 1

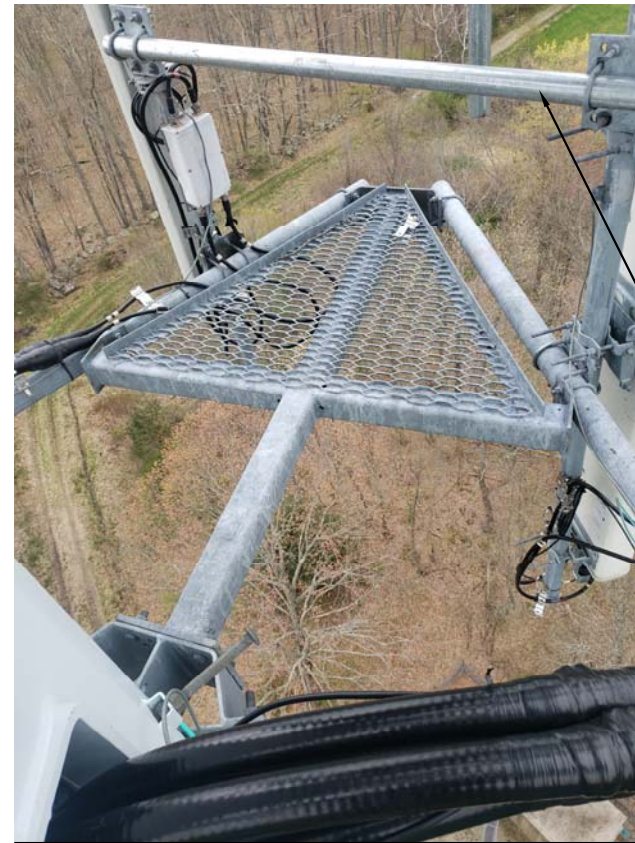


PHOTO 2

REMOVE EXISTING MOUNT PIPE TO
MOUNT PIPE CONNECTION (SUPPORT
PIPE)

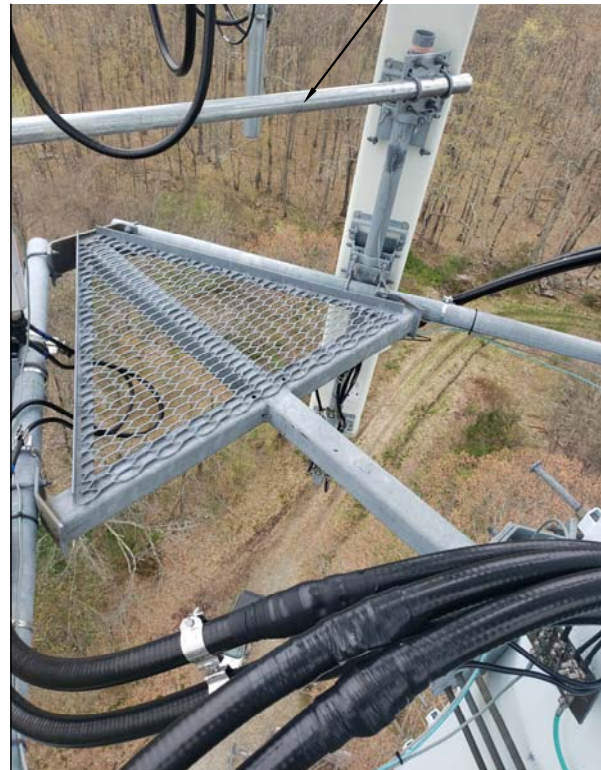
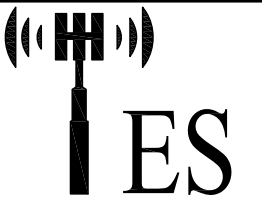


PHOTO 3



Tower Engineering Solutions
1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
81227

CUSTOMER SITE NO:
CT01364-S-SBA
CUSTOMER SITE NAME:
POMFRET
62 BABBITT HILL ROAD
POMFRET, CT 06259

DRAWN BY: GA CHECKED BY: ID/HMA

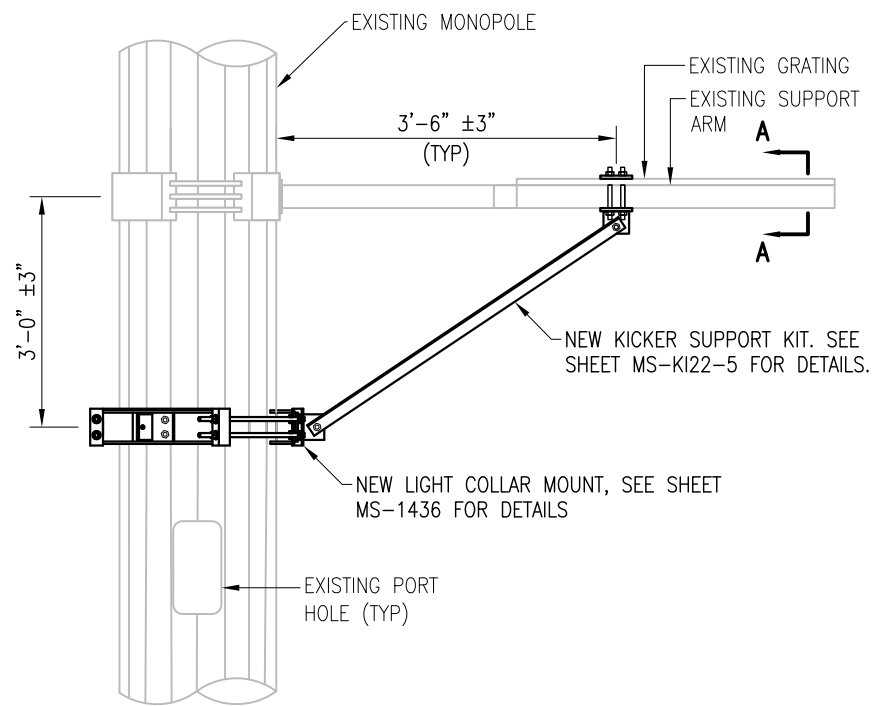
REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	GA	07/17/19

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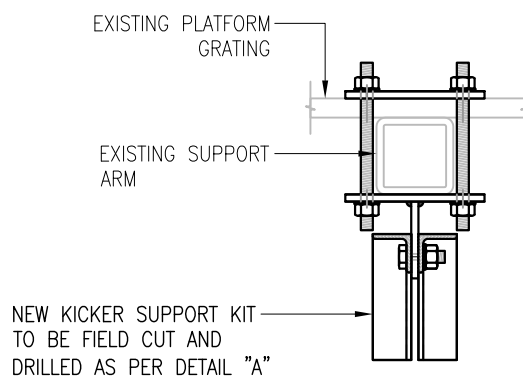
ANTENNA MOUNT
PHOTOS

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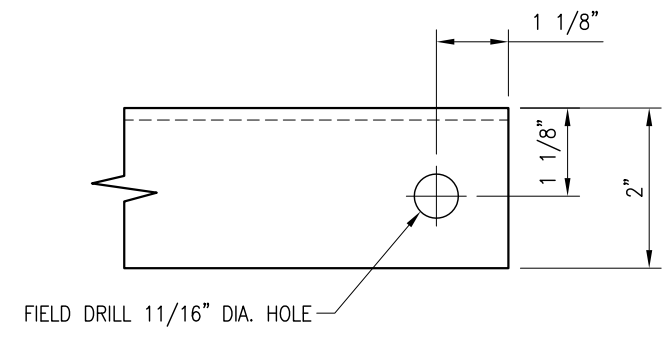
SHEET NUMBER: A-2 REV #: 0



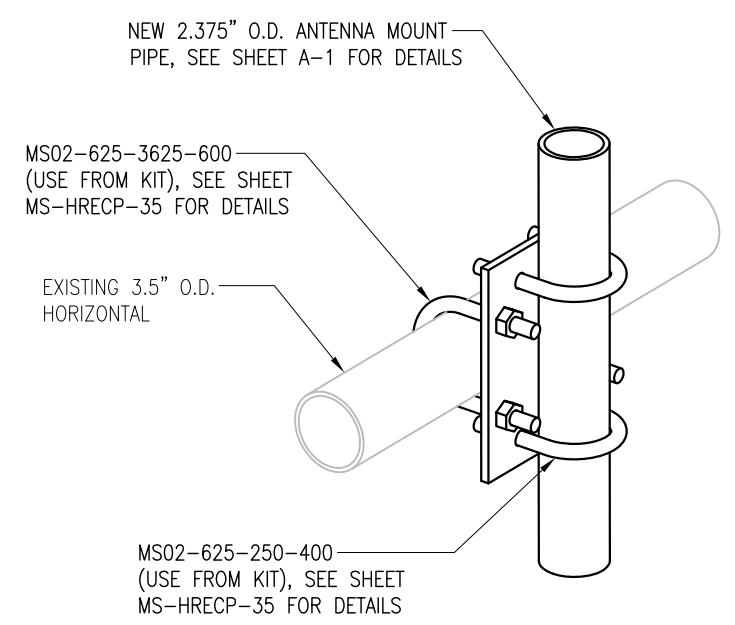
1
D-1
DETAIL



SECTION A-A



DETAIL "A"



2
D-1
DETAIL

NOTES:
 1. HOT-DIPPED GALVANIZED PER ASTM A123.
 2. ALL HOLES ARE 11/16" DIA. U.N.O

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 BOCA RATON, FL 33487
 (800)-487-SITE

TES JOB NO:
 81227
 CUSTOMER SITE NO:
 CT01364-S-SBA
 CUSTOMER SITE NAME:
 POMFRET
 62 BABBITT HILL ROAD
 POMFRET, CT 06259

DRAWN BY: GA CHECKED BY: ID/HMA

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	GA	07/17/19

SHEET TITLE:

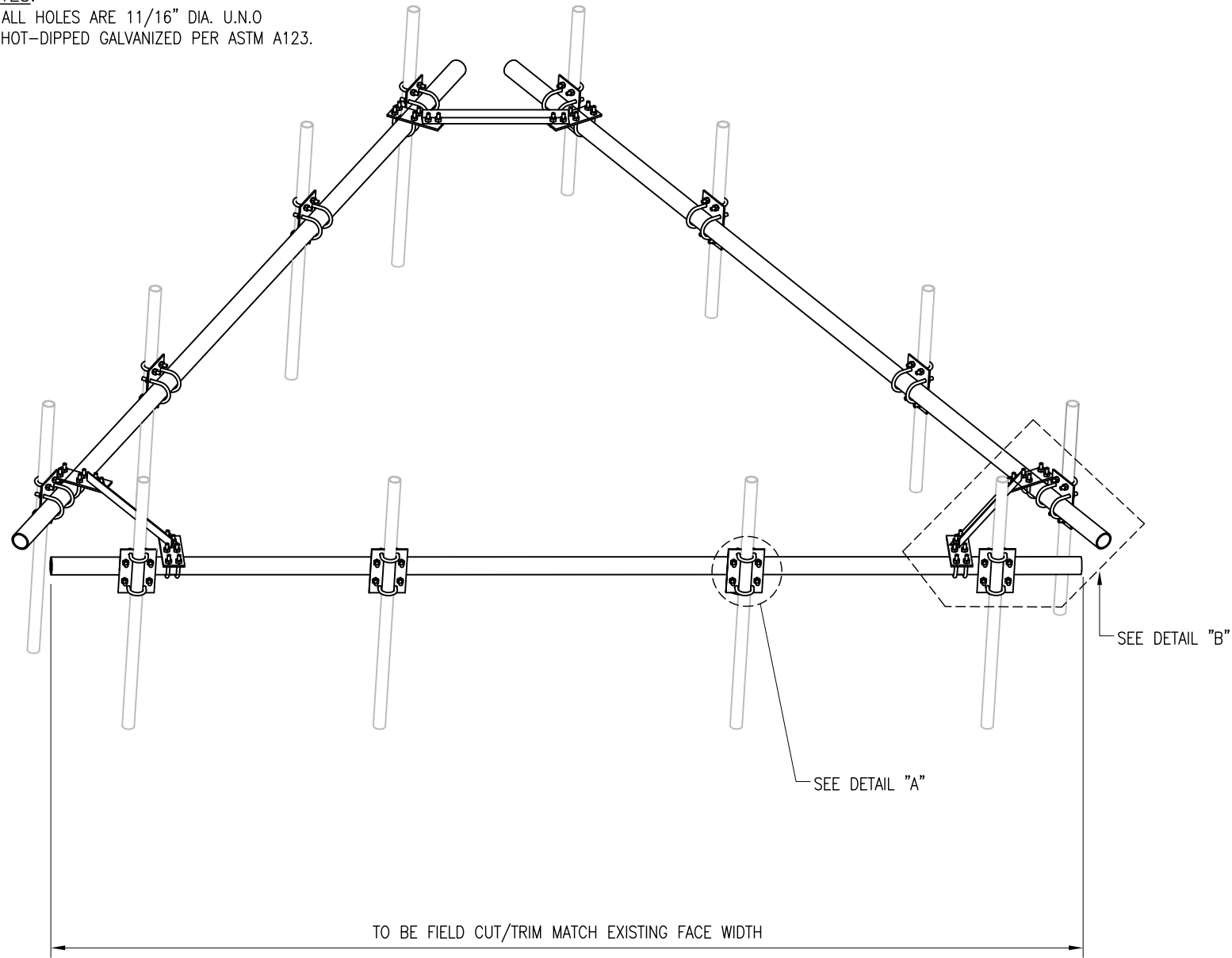
STANDARD DETAILS

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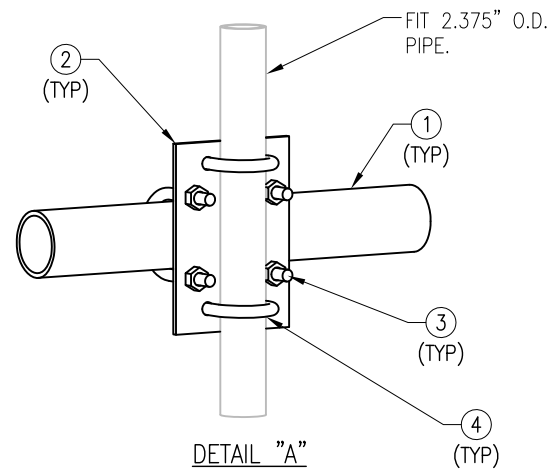
SHEET NUMBER: D-1 REV #: 0

THE FOLLOWING DRAWINGS ARE INCLUDED FOR REFERENCE ONLY
PLEASE REFER TO THE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION DETAILS

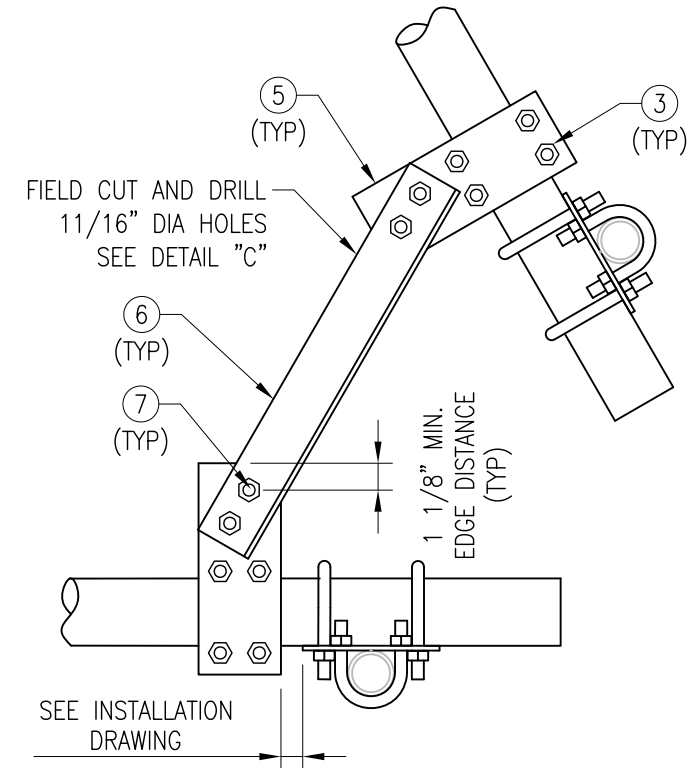
NOTES:
 1. ALL HOLES ARE 11/16" DIA. U.N.O
 2. HOT-DIPPED GALVANIZED PER ASTM A123.



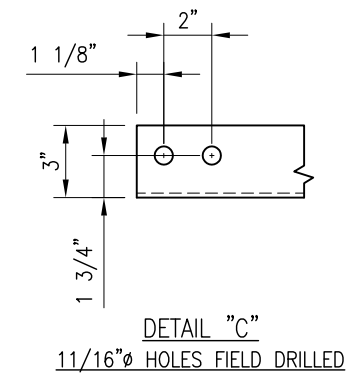
ELEVATION VIEW



DETAIL "A"



DETAIL "B"



DETAIL "C"
 11/16" HOLES FIELD DRILLED

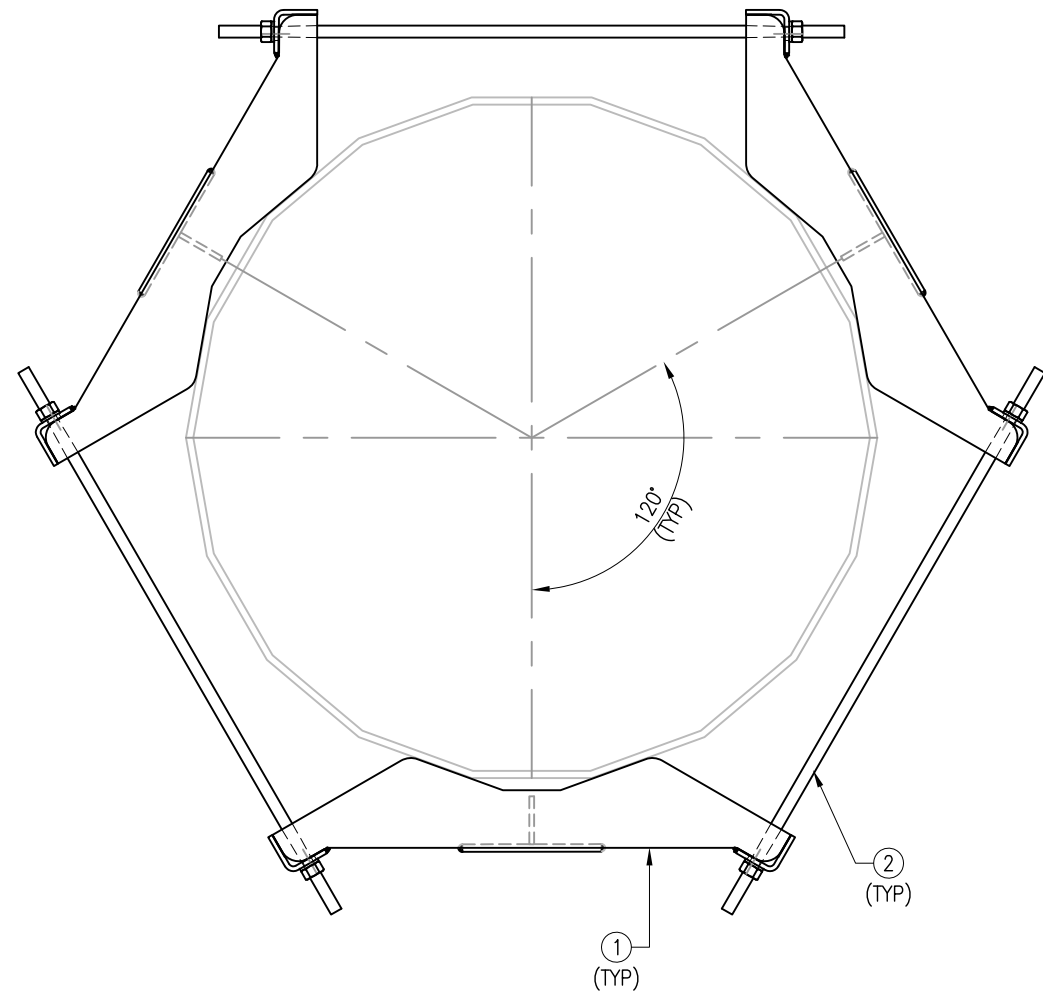
MS-HRECP-35						
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	3	3PST-140	3" PST (3.50" O.D X .216" THICK) X 14'-0"	A53 GR-B	TAF-1	337.2
2	12	PL375-10	PL 3/8" X 7 1/8" X 10"	A36	TAF-1	92.4
3	36	MS02-625-3625-600	RU-BOLT 5/8" X 3 5/8" I.W. X 6" I.L. A36 (OR EQUIV.)	A36	RBC-1	--
4	24	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.)	A36	RBC-1	--
5	6	PL375-11	PL 3/8" X 4 1/4" X 0'-11"	A36	TAF-1	30.2
6	3	AL-33C	L 3" X 3" X 1/4" X 3'-6"	A36	ECP-1	54.0
7	12	--	BOLT 5/8" X 2" A325 W/ HHN & LKW	A325	--	--
GALVANIZED WT						514

THIRD ANGLE PROJECTION				METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH		CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC		TITLE MS-HRECP-35 SUPPORT RAIL WITH END CONNECTION KIT	
STANDARD SHEET TOLERANCES DECIMALS .X ± 0.1 .XX ± 0.02 .XXX ± 0.005		APPROVAL / SIGNATURES DRAWN BY XXX REVIEWED XXX APPROVED XXX		DATE 05/12/17 - -	
		SIZE DWG NO B MS-HRECP-35		REV 1	
		SCALE -		SHEET 1 OF 1	

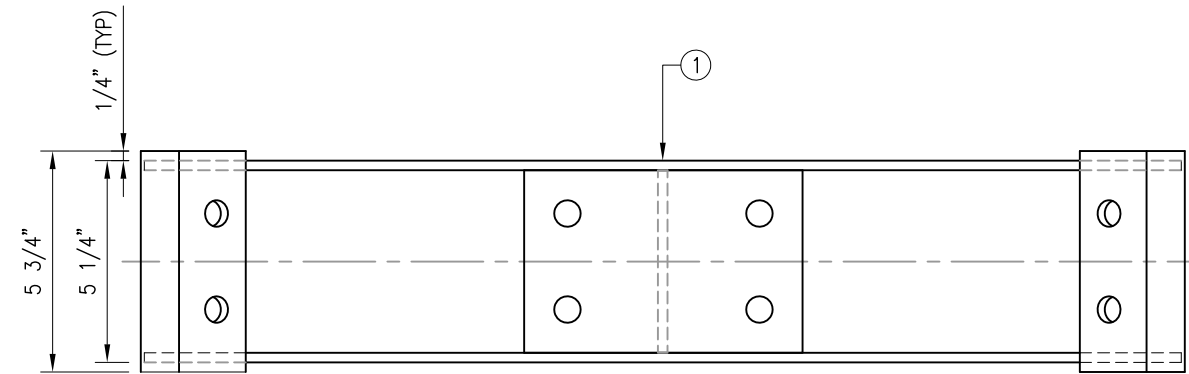
NOTE:
1) FITS 12" DIA TO 32" DIA.

2	6	---	THREADED ROD 5/8" X 2'-4 3/4" W/ 2 HHN & LK EA A36
1	3	MPW-1	MOUNT PLATE WELDMENT A36
ITEM NO.	QTY.	PART NO.	DESCRIPTION

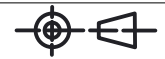

GALVANIZED WEIGHT: 65.6 LBS



TOP VIEW

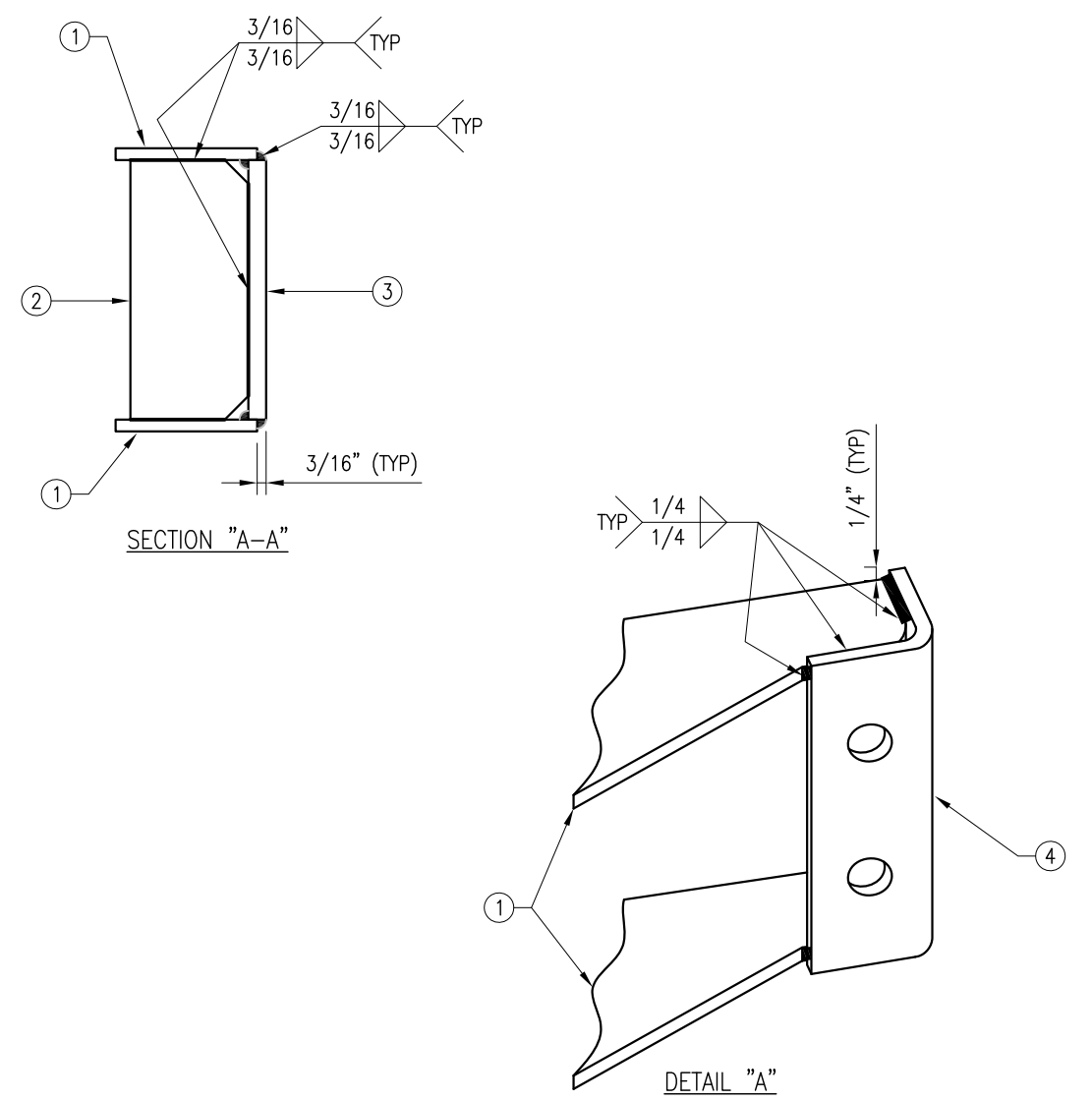
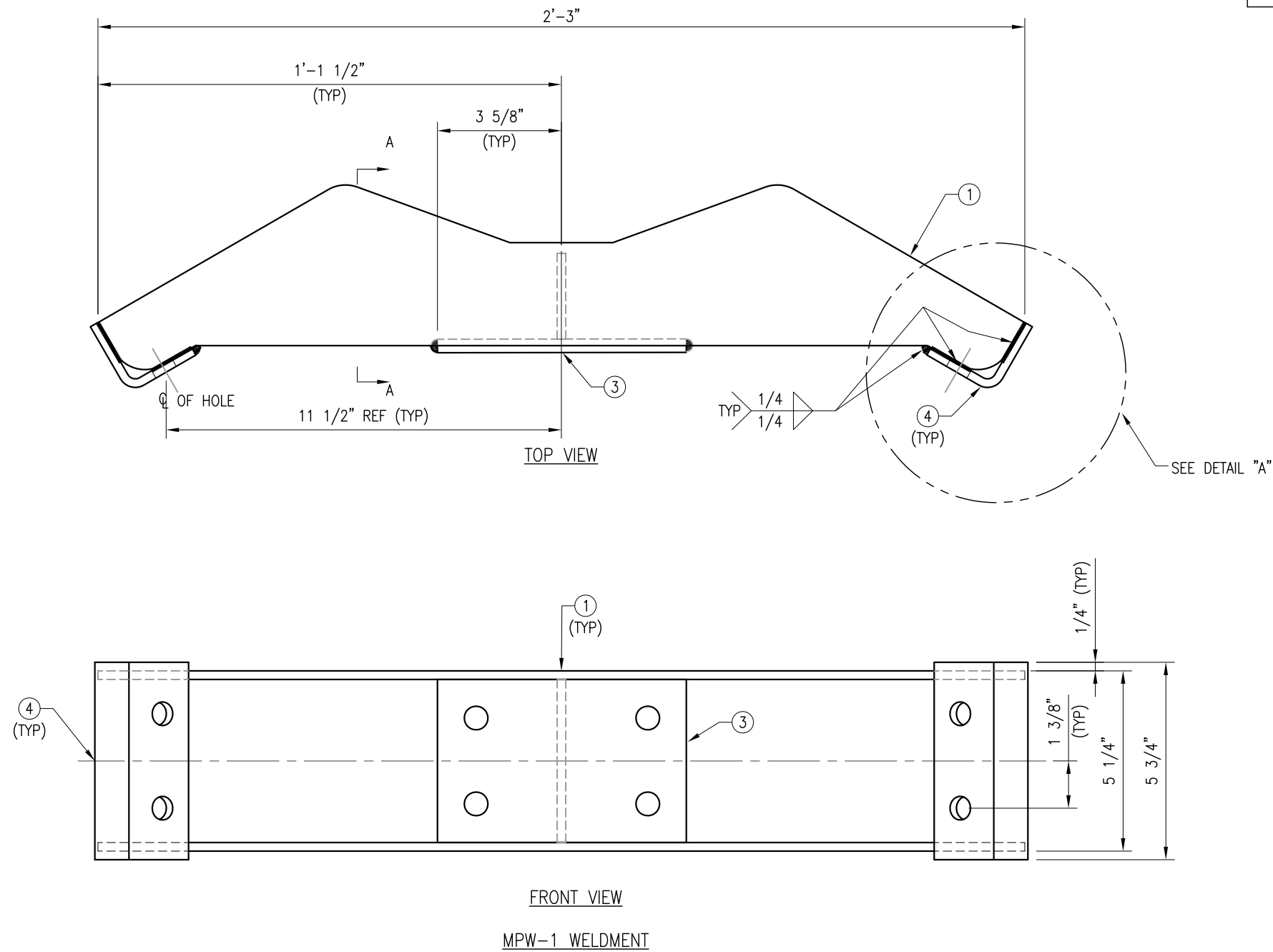


FRONT VIEW

THIRD ANGLE PROJECTION						METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH				CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC				TITLE LIGHT COLLAR MOUNT PLATE ASSEMBLY DETAIL MS-1436	
STANDARD SHEET TOLERANCES		APPROVAL / SIGNATURES		DATE		SIZE/DWG NO			
DECIMALS	ANGLES	DRAWN BY XXX		05/12/17		B MS-1436			
.X ± 0.1	± 1°	REVIEWED XXX		-		REV 1			
.XX ± 0.02	FRACTIONS	APPROVED XXX		-		SCALE -			
.XXX ± 0.005	± 1/32					SHEET 1 OF 1			

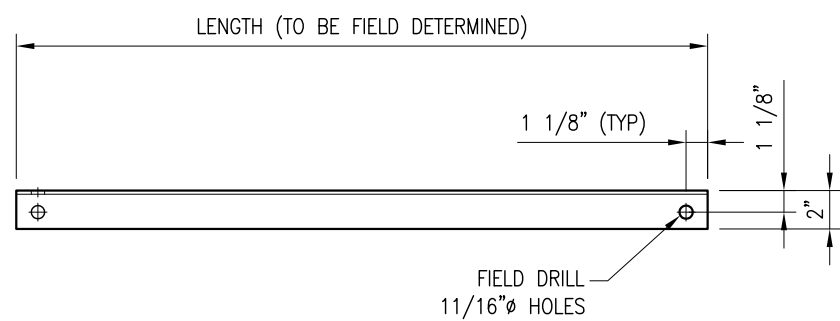
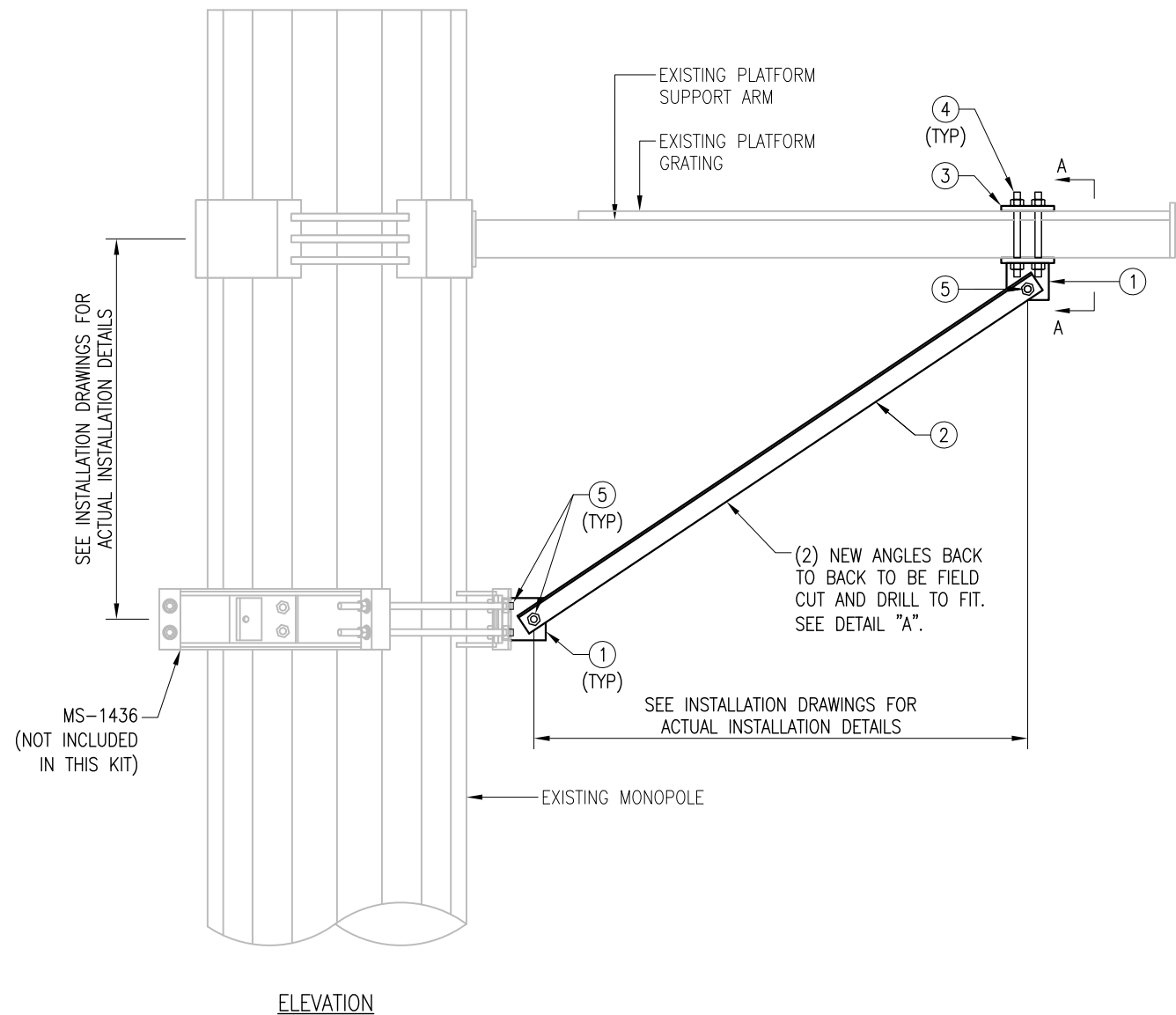
NOTES:
 1. HOT-DIPPED GALVANIZED PER ASTM A123.
 2. WELD TYPE: E70XX.

MPW-1 WELDMENT						
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	2	PL-1	PL 1/4" X 5 3/8" X 2'-3"	A36	F-2	12.6
2	1	PL-2	PL 1/4" X 2 1/2" X 0'-4 3/4"	A36	F-2	.83
3	1	PL-3	PL 3/8" X 4 3/4" X 0'-7 1/4"	A36	F-2	3.7
4	2	PL-8	PL 1/4" x 4 1/8" x 5 3/4"	A36	F-2	3.2
BLACK WT						20.3
GALVANIZED WT						21

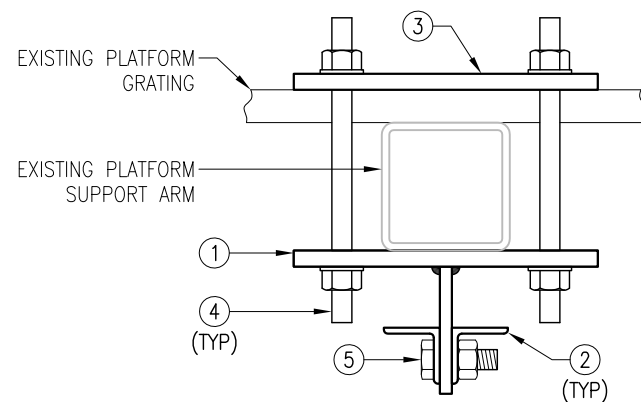


THIRD ANGLE PROJECTION						METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH				CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC			
STANDARD SHEET TOLERANCES		APPROVAL / SIGNATURES		DATE		TITLE	
DECIMALS	ANGLES	DRAWN BY: XXX		05/12/17		SIZE: DWG NO	
.X ± 0.1	± 1°	REVIEWED: XXX		-		B MPW-1	
.XX ± 0.02	FRACTIONS	APPROVED: XXX		-		SCALE	
.XXX ± 0.005	± 1/32					SHEET 1 OF 1	
						REV 0	

NOTE:
THE LOCATION OF KICKER AND EXISTING ANTENNA MOUNT SHOWN ON THE DRAWING IS FOR REPRESENTATION PURPOSE ONLY. SEE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION OF DETAILS.

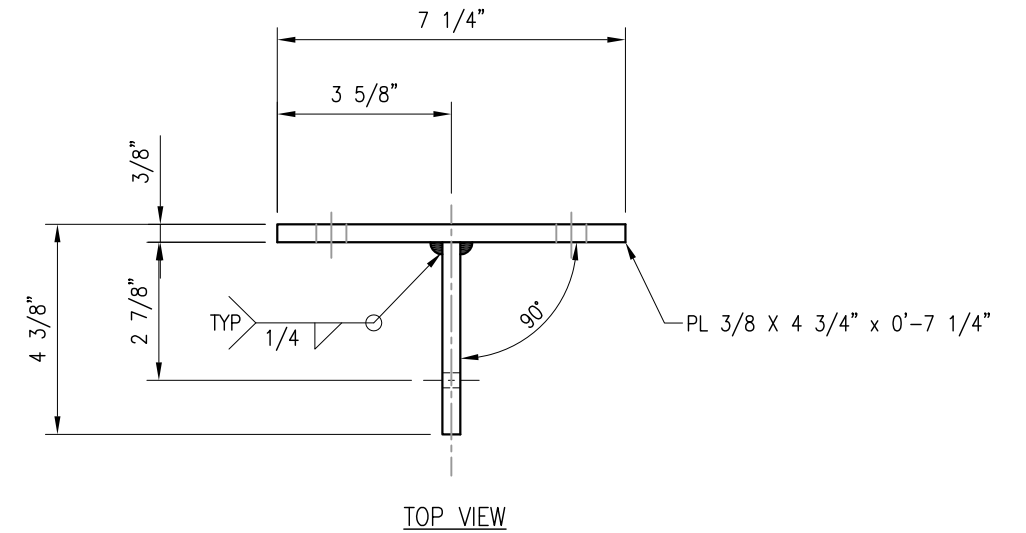


DETAIL "A"

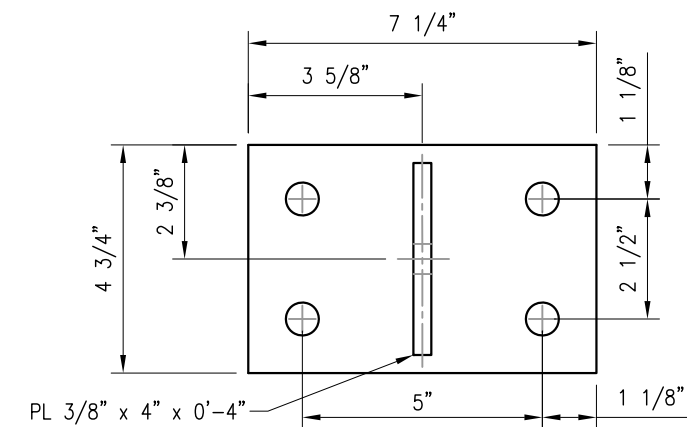


SECTION "A-A"

MS-KI22-5						
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	6	BRKMW-1S	BRACKET WELDMENT	---	BRKMW-1S	34.8
2	6	D2225-5	L 2" X 2" X 1/4" X 5'-0"	A36	KF-1	100.5
3	3	PL1S-375	PL 3/8" X 4 3/4" X 7 1/4"	A36	KF-1	11.1
4	12	---	ALL THREAD ROD 5/8" DIA. X 10" HDG W/ (2) HHN & LKW EA.	A36	---	---
5	18	---	BOLT 5/8" X 2" W/ HHN & LKW	A325	--	--
GALVANIZED WT						146



TOP VIEW



FRONT VIEW

BRKMW-1S WELDMENT

- NOTES:
1. ALL HOLES ARE 11/16" DIA. U.N.O
 2. HOT-DIPPED GALVANIZED PER ASTM A123.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH		THIRD ANGLE PROJECTION				METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529	
STANDARD SHEET TOLERANCES		CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC		TITLE			
DECIMALS .X ± 0.1 .XX ± 0.02 .XXX ± 0.005		ANGLES ± 1° FRACTIONS ± 1/32		APPROVAL / SIGNATURES DRAWN BY: XXX REVIEWED: XXX APPROVED: XXX		DATE 06/21/18	
SIZE/DWG NO B MS-KI22-5				SHEET 1 OF 1		REV 2	

EXHIBIT 8



Tower Engineering Solutions

Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Structural Analysis Report

Existing 168 ft SUMMIT Monopole
Customer Name: SBA Communications Corp
Customer Site Number: CT01364-S
Customer Site Name: Pomfret
Carrier Name: T-Mobile (App#: 117228, V1)
Carrier Site ID / Name: CT11524A / Pomfret
Site Location: 62 Babbitt Hill Road
Pomfret, Connecticut
Windham County
Latitude: 41.870258
Longitude: -71.988241

Analysis Result:

Max Structural Usage: 69.2% [Pass]
Max Foundation Usage: 83.0% [Pass]
Additional Usage Caused by Mount Modification: +3.0%

Report Prepared By : Dipika Dhungana



Introduction

The purpose of this report is to summarize the analysis results on the 168 ft SUMMIT Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	Tower Drawings prepared by Paul J. Ford and Company, Job # 4728 Dated 04/30/1999
Foundation Drawing	Dispersive Wave Propagation Testing and Rebar Investigation prepared by FDH Engineering, Project #1207133EN1 Dated 08/17/2012
Geotechnical Report	Geotechnical Report prepared by Jaworski Geotech Inc., Project # 99261G Dated 05/21/1999
Modification Drawings	N/A

Analysis Criteria

The rigorous analysis was performed in accordance with the requirements and stipulations of the ANSI/TIA/EIA 222-G. In accordance with this standard, the structure was analyzed using **TESPoles**, a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Wind Speed Used in the Analysis:	Ultimate Design Wind Speed $V_{ult} = 130\text{mph}$ (3-Sec. Gust)/ Nominal Design Wind Speed $V_{asd} = 101.0\text{ mph}$ (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	ANSI/TIA/EIA 222-G / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	C
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	$S_S = 0.172$, $S_1 = 0.063$

This structural analysis is based upon the tower being classified as a Structure Class 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.

Existing Antennas, Mounts and Transmission Lines

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft.)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	167.0	-	Vacant	(1) Low Profile Platform	-	-
2	157.0	3	RFS APXVTM14-C-I20	Low Profile Platform w/ Handrails kit & Reinforcement kit [SitePro (1) HRK-14 & (1) SitePro PRK-1245]	(4) 1 1/4" Fiber	Sprint Nextel
3		3	Commscope NNVV-65B-R4			
4		3	ALU 1900 Mhz			
5		6	ALU 800 Mhz			
6		3	ALU TD-RRH8x20-25			
7	147.0	6	Powerwave Technologies- 7770 - Panel	(1) Low Profile Platform (1) Ring Mount (Balmount LWRM)	(12) 1 5/8" (2) 3/4" DC (1) 7/16" Fiber	AT&T
8		3	KMW Communications - AM-X-CD-17-65-00T-RET - Panel			
9		6	Powerwave Allgon - LGP 21401 - TMA			
10		6	ADC Cleargain - 1900W800 - TMA			
11		6	Ericsson - RRUS 11 - RRU			
12		3	Ericsson - RRUS 12 - RRU			
13		6	Powerwave - LGP21903 - Diplexer			
14		1	Raycap - DC6-48-60-18-8F - SP			
15		3	CSS - Dual Band Combiner			
-	137.5	3	Kathrein - 782 11056 - Bias T's	(1) Low Profile Platform w/Site Pro P/N PRK-1245	(12) 1 5/8"	T-Mobile
-	137.0	3	RFS - APXV18-206516S-C-A20 - Panel			
-		3	Commscope - LNX-6515DS-VTM - Panel			
-		3	Allen Telecom - FE15501P77/75 - TMA			
-		3	Ericsson - KRY 112 144/1 - TMA			

Proposed Carrier’s Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier’s final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
16	137.0	3	RFS APXV18-206516S-C-A20	Low Profile Platform with (1)Support rail w/ end connection (MS-HRECP-35) (1)Kicker(MS-K122-5) (1)Collar mount (MS-1436) (3) 2" STD Mount Pipe	(12) 1 5/8" (3) 1 5/8"Fiber	T-Mobile
17		3	RFS APXVAARR24_43-U-NA20			
18		3	Ericsson KRY 112 489/2			
19		3	Allen Telecom FE15501P77/75			
20		3	Ericsson Radio 4449 B71+B12			
21		3	Kathrein 782 11056			

See the attached coax layout for the line placement considered in the analysis.

Analysis Results

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	69.2%	63.6%	56.2%
Pass/Fail	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	4195.1	35.2	90.1

The foundation has been investigated using the supplied documents and soils report and was found adequate. Therefore, no modification to the foundation will be required.

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by ANSI/TIA/EIA 222-G for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.2280 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the existing structure and its foundation were found to be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the ANSI/TIA/EIA 222-G Standard under the design basic wind speed as specified in the Analysis Criteria.

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC**. Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.
2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.
3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the EIA/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.
4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.
5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.
6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Usage Diagram - Max Ratio 69.19% at 0.0ft

Structure: CT01364-S-SBA
Site Name: Pomfret
Height: 168.00 (ft)
Base Elev: 0.000 (ft)

Code: EIA/TIA-222-G
Exposure: C
Gh: 1.1

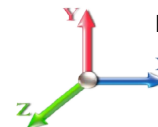
7/2/2019



Page: 1

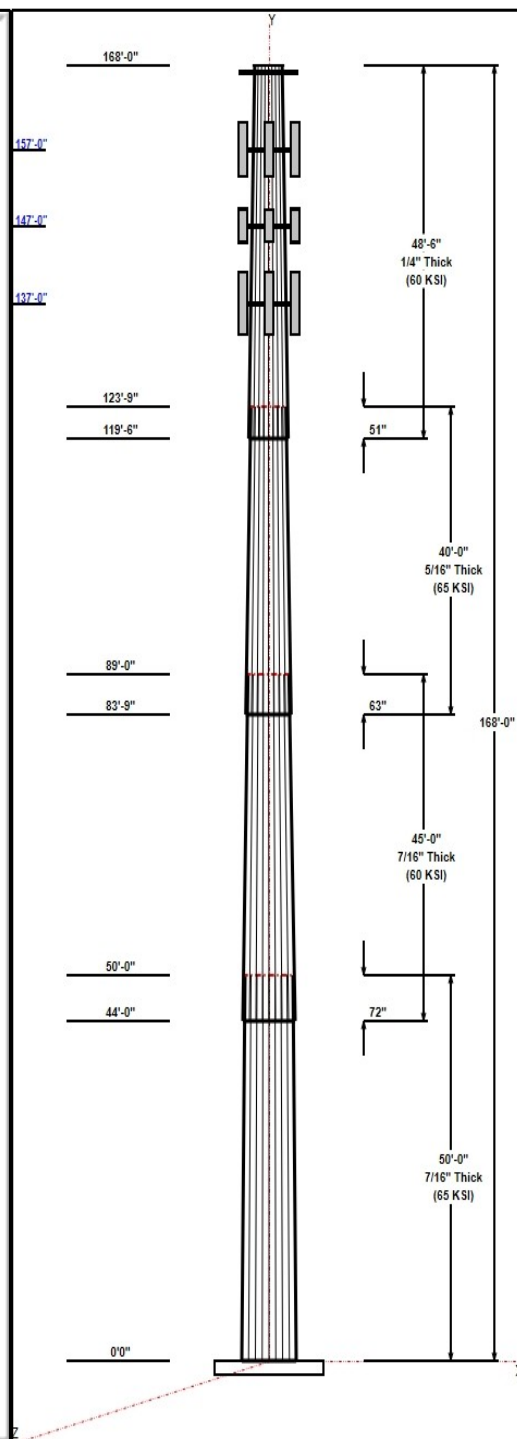
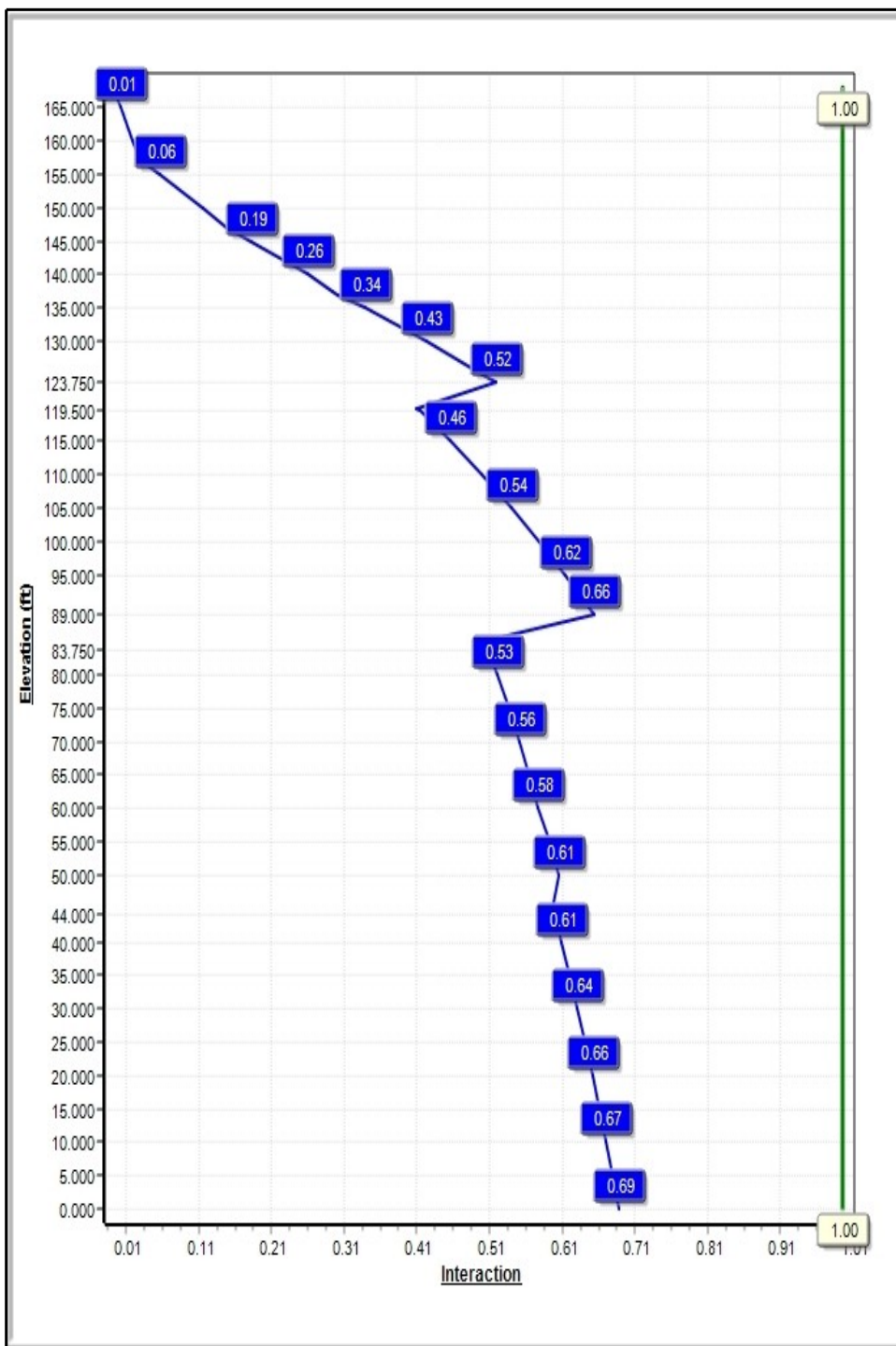
Dead Load Factor: 1.20
 Wind Load Factor: 1.60

Load Case : 1.2D + 1.6W 101 mph Wind



Iterations: 26

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Structure: CT01364-S-SBA

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

Base Shape: 18 Sided
Taper: 0.20500

7/2/2019

Page: 2



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	6' Lightning rod	T-Mobile
167.00	167.00	1	Low Profile Platform-flat	Vacant
157.00	157.00	3	KMW ETCR-654L12H6	Sprint Nextel
157.00	157.00	3	Decibel DB908h90e-m	Sprint Nextel
157.00	157.00	3	ALU 1900 Mhz	Sprint Nextel
157.00	157.00	6	ALU 800 Mhz	Sprint Nextel
157.00	157.00	3	ALU TD-RRH8x20-25	Sprint Nextel
157.00	157.00	1	Platform w/ Hand Rail	Sprint Nextel
147.00	147.00	6	RRUS 11	AT&T
147.00	147.00	1	DC6-48-60-18-8F	AT&T
147.00	147.00	6	7770.00	AT&T
147.00	147.00	3	AM-X-CD-17-65-00T-RET	AT&T
147.00	147.00	6	LGP21401	AT&T
147.00	147.00	6	LGP21903	AT&T
147.00	147.00	6	1900W800	AT&T
147.00	147.00	3	Dual Combiner	AT&T
147.00	147.00	1	Low Profile	AT&T
147.00	147.00	3	RRUS 12	AT&T
137.50	137.50	3	782 11056	T-Mobile
137.00	137.00	1	Low Profile Platform w/	T-Mobile
137.00	137.00	3	4449	T-Mobile
137.00	137.00	3	APXV18-206516S-C-A20	T-Mobile
137.00	137.00	3	APXVAARR24_43-U-NA20	T-Mobile
137.00	137.00	3	KRY 112 489/2	T-Mobile
137.00	137.00	3	FE15501P77/75	T-Mobile

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	157.00	Inside	1 1/4" Coax	Sprint Nextel
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

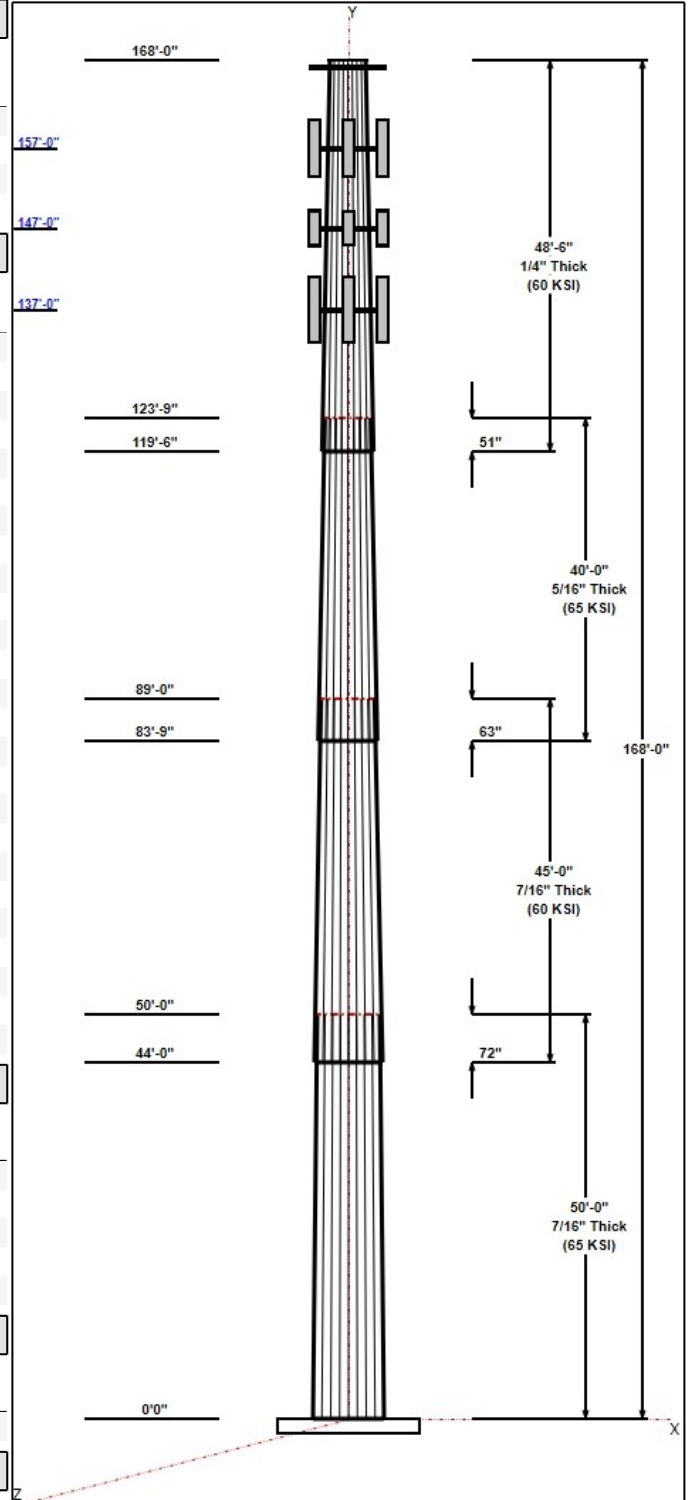
Anchor Bolts

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



Structure: CT01364-S-SBA

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

Base Shape: 18 Sided
Taper: 0.20500

7/2/2019

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Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 101 mph Wind	4195.1	35.2	53.6
0.9D + 1.6W 101 mph Wind	4145.6	35.2	40.2
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1260.9	10.2	90.1
1.2D + 1.0E	148.3	1.2	53.7
0.9D + 1.0E	146.3	1.2	40.3
1.0D + 1.0W 60 mph Wind	919.3	7.8	44.7

Structure: CT01364-S-SBA - Coax Line Placement

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

7/2/2019

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Shaft Properties

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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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-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
1	168.00	6' Lightning rod	1	6.50	0.38	0.00	55.45	1.847	0.00	0.00	0.00
2	167.00	Low Profile Platform-flat	1	1200.00	25.00	1.00	2611.24	53.225	1.00	0.00	0.00
3	157.00	KMW ETCR-654L12H6	3	99.00	15.71	0.71	553.00	17.994	0.71	0.00	0.00
4	157.00	Decibel DB908h90e-m	3	10.00	3.75	0.83	157.44	5.183	0.83	0.00	0.00
5	157.00	ALU 1900 Mhz	3	60.00	2.77	0.99	171.76	4.469	0.99	0.00	0.00
6	157.00	ALU 800 Mhz	6	53.00	2.49	0.92	152.06	4.022	0.92	0.00	0.00
7	157.00	ALU TD-RRH8x20-25	3	70.00	4.05	0.69	228.65	5.168	0.69	0.00	0.00
8	157.00	Platform w/ Hand Rail	1	2600.00	51.70	1.00	7170.46	12.127	1.00	0.00	0.00
9	147.00	RRUS 11	6	50.70	2.52	0.76	178.44	3.412	0.77	0.00	0.00
10	147.00	DC6-48-60-18-8F	1	31.80	1.47	1.00	114.07	2.401	1.00	0.00	0.00
11	147.00	7770.00	6	35.00	5.50	0.75	228.61	6.948	0.75	0.00	0.00
12	147.00	AM-X-CD-17-65-00T-RET	3	30.80	5.00	0.76	179.83	7.494	0.77	0.00	0.00
13	147.00	LGP21401	6	14.10	1.29	0.64	47.37	2.402	0.66	0.00	0.00
14	147.00	LGP21903	6	5.50	0.27	0.74	16.71	0.799	0.76	0.00	0.00
15	147.00	1900W800	6	28.70	1.54	0.76	79.94	2.727	0.77	0.00	0.00
16	147.00	Dual Combiner	3	4.80	0.51	0.59	17.66	1.214	0.63	0.00	0.00
17	147.00	Low Profile Platform-Round	1	1500.00	22.00	1.00	3241.69	45.501	1.00	0.00	0.00
18	147.00	RRUS 12	3	60.00	2.70	0.67	149.17	3.578	0.69	0.00	0.00
19	137.50	782 11056	3	1.80	0.13	0.67	5.08	0.516	0.67	0.00	0.00
20	137.00	Low Profile Platform w/ Kicker	1	1800.00	22.00	1.00	3875.36	45.336	1.00	0.00	0.00
21	137.00	4449	3	70.00	1.65	0.67	167.82	2.386	0.67	0.00	0.00
22	137.00	APXV18-206516S-C-A20	3	18.70	3.61	0.73	111.29	6.064	0.73	0.00	0.00
23	137.00	APXVAARR24_43-U-NA20	3	128.00	20.24	0.70	702.98	22.781	0.70	0.00	0.00
24	137.00	KRY 112 489/2	3	13.20	0.68	0.67	37.08	1.536	0.67	0.00	0.00
25	137.00	FE15501P77/75	3	17.50	0.52	0.67	47.46	1.291	0.67	0.00	0.00
Totals:			81	10,011.70			28,874.74				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
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	(15) 1 5/8" Coax	0.00	Inside

Shaft Section Properties

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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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
137.50		0.2500	30.253	23.806	2707.4	19.93	121.01	72.8	176.3	40.6
140.00		0.2500	29.740	23.399	2571.0	19.57	118.96	73.2	170.3	200.8
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
167.00		0.2500	24.205	19.008	1378.1	15.66	96.82	76.2	112.1	130.5
168.00		0.2500	24.000	18.845	1343.0	15.52	96.00	76.2	110.2	64.4

29884.3

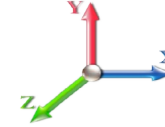
Wind Loading - Shaft

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 26

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	21.088	23.20	444.72	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	21.088	23.20	436.64	0.650	0.000	5.00	23.663	15.38	570.8	0.0	1573.1
10.00		1.00	0.85	21.088	23.20	428.57	0.650	0.000	5.00	23.229	15.10	560.4	0.0	1544.1
15.00		1.00	0.85	21.088	23.20	420.49	0.650	0.000	5.00	22.795	14.82	549.9	0.0	1515.0
20.00		1.00	0.90	22.375	24.61	424.81	0.650	0.000	5.00	22.362	14.54	572.4	0.0	1486.0
25.00		1.00	0.95	23.451	25.80	426.39	0.650	0.000	5.00	21.928	14.25	588.3	0.0	1456.9
30.00		1.00	0.98	24.369	26.81	425.97	0.650	0.000	5.00	21.494	13.97	599.2	0.0	1427.9
35.00		1.00	1.01	25.172	27.69	424.12	0.650	0.000	5.00	21.061	13.69	606.5	0.0	1398.8
40.00		1.00	1.04	25.890	28.48	421.17	0.650	0.000	5.00	20.627	13.41	610.9	0.0	1369.7
44.00	Bot - Section 2	1.00	1.06	26.415	29.06	418.19	0.650	0.000	4.00	16.189	10.52	489.2	0.0	1074.9
45.00		1.00	1.07	26.540	29.19	417.37	0.650	0.000	1.00	4.078	2.65	123.8	0.0	536.6
50.00	Top - Section 1	1.00	1.09	27.135	29.85	412.86	0.650	0.000	5.00	20.130	13.08	624.9	0.0	2648.0
55.00		1.00	1.12	27.685	30.45	415.67	0.650	0.000	5.00	19.696	12.80	623.8	0.0	1307.4
60.00		1.00	1.14	28.197	31.02	410.15	0.650	0.000	5.00	19.262	12.52	621.4	0.0	1278.3
65.00		1.00	1.16	28.676	31.54	404.20	0.650	0.000	5.00	18.829	12.24	617.7	0.0	1249.2
70.00		1.00	1.17	29.127	32.04	397.88	0.650	0.000	5.00	18.395	11.96	613.0	0.0	1220.2
75.00		1.00	1.19	29.553	32.51	391.22	0.650	0.000	5.00	17.961	11.67	607.3	0.0	1191.1
80.00		1.00	1.21	29.958	32.95	384.26	0.650	0.000	5.00	17.528	11.39	600.7	0.0	1162.1
83.75	Bot - Section 3	1.00	1.22	30.248	33.27	378.86	0.650	0.000	3.75	12.861	8.36	445.0	0.0	852.5
85.00		1.00	1.22	30.342	33.38	377.03	0.650	0.000	1.25	4.299	2.79	149.2	0.0	484.7
89.00	Top - Section 2	1.00	1.23	30.638	33.70	371.07	0.650	0.000	4.00	13.575	8.82	475.8	0.0	1530.1
90.00		1.00	1.24	30.710	33.78	375.50	0.650	0.000	1.00	3.350	2.18	117.7	0.0	159.1
95.00		1.00	1.25	31.061	34.17	367.84	0.650	0.000	5.00	16.491	10.72	586.0	0.0	783.0
100.00		1.00	1.27	31.399	34.54	359.98	0.650	0.000	5.00	16.057	10.44	576.8	0.0	762.2
105.00		1.00	1.28	31.723	34.89	351.93	0.650	0.000	5.00	15.624	10.16	567.0	0.0	741.5
110.00		1.00	1.29	32.035	35.24	343.70	0.650	0.000	5.00	15.190	9.87	556.7	0.0	720.7
115.00		1.00	1.30	32.336	35.57	335.31	0.650	0.000	5.00	14.756	9.59	545.9	0.0	699.9
119.50	Bot - Section 4	1.00	1.31	32.598	35.86	327.63	0.650	0.000	4.50	12.910	8.39	481.4	0.0	612.2
120.00		1.00	1.32	32.627	35.89	326.77	0.650	0.000	0.50	1.434	0.93	53.5	0.0	121.5
123.75	Top - Section 3	1.00	1.32	32.839	36.12	320.27	0.650	0.000	3.75	10.616	6.90	398.8	0.0	899.2
125.00		1.00	1.33	32.909	36.20	323.01	0.650	0.000	1.25	3.485	2.26	131.2	0.0	132.4
130.00		1.00	1.34	33.182	36.50	314.21	0.650	0.000	5.00	13.667	8.88	518.8	0.0	519.3
135.00		1.00	1.35	33.446	36.79	305.29	0.650	0.000	5.00	13.233	8.60	506.3	0.0	502.6
137.00	Appurtenance(s)	1.00	1.35	33.550	36.90	301.69	0.650	0.000	2.00	5.172	3.36	198.5	0.0	196.4
137.50	Appurtenance(s)	1.00	1.35	33.576	36.93	300.79	0.650	0.000	0.50	1.282	0.83	49.2	0.0	48.7
140.00		1.00	1.36	33.703	37.07	296.25	0.650	0.000	2.50	6.346	4.12	244.7	0.0	240.9
145.00		1.00	1.37	33.953	37.35	287.10	0.650	0.000	5.00	12.366	8.04	480.3	0.0	469.4
147.00	Appurtenance(s)	1.00	1.37	34.051	37.46	283.41	0.650	0.000	2.00	4.825	3.14	188.0	0.0	183.1
150.00		1.00	1.38	34.196	37.62	277.84	0.650	0.000	3.00	7.107	4.62	278.0	0.0	269.7
155.00		1.00	1.39	34.433	37.88	268.48	0.650	0.000	5.00	11.499	7.47	453.0	0.0	436.2
157.00	Appurtenance(s)	1.00	1.39	34.526	37.98	264.71	0.650	0.000	2.00	4.478	2.91	176.9	0.0	169.8
160.00		1.00	1.40	34.664	38.13	259.03	0.650	0.000	3.00	6.587	4.28	261.2	0.0	249.8
165.00		1.00	1.41	34.890	38.38	249.48	0.650	0.000	5.00	10.631	6.91	424.3	0.0	403.0
167.00	Appurtenance(s)	1.00	1.41	34.978	38.48	245.63	0.650	0.000	2.00	4.131	2.69	165.3	0.0	156.6
168.00	Appurtenance(s)	1.00	1.41	35.022	38.52	243.71	0.650	0.000	1.00	2.040	1.33	81.7	0.0	77.3
Totals:									168.00			18,691.5		35,861.2

Discrete Appurtenance Forces

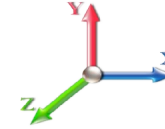
Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 26

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	168.00	6' Lightning rod	1	35.022	38.524	0.00	1.00	0.38	7.80	0.000	0.000	23.42	0.00	0.00
2	167.00	Low Profile Platform-flat	1	34.978	38.476	1.00	1.00	25.00	1440.00	0.000	0.000	1539.04	0.00	0.00
3	157.00	KMW ETCR-654L12H6	3	34.526	37.979	0.53	0.75	25.10	356.40	0.000	0.000	1525.04	0.00	0.00
4	157.00	Decibel DB908h90e-m	3	34.526	37.979	0.62	0.75	7.00	36.00	0.000	0.000	425.56	0.00	0.00
5	157.00	ALU 1900 Mhz	3	34.526	37.979	0.74	0.75	6.17	216.00	0.000	0.000	374.94	0.00	0.00
6	157.00	ALU 800 Mhz	6	34.526	37.979	0.69	0.75	10.31	381.60	0.000	0.000	626.42	0.00	0.00
7	157.00	ALU TD-RRH8x20-25	3	34.526	37.979	0.52	0.75	6.29	252.00	0.000	0.000	382.08	0.00	0.00
8	157.00	Platform w/ Hand Rail	1	34.526	37.979	1.00	1.00	51.70	3120.00	0.000	0.000	3141.63	0.00	0.00
9	147.00	RRUS 12	3	34.051	37.456	0.54	0.80	4.34	216.00	0.000	0.000	260.19	0.00	0.00
10	147.00	LGP21401	6	34.051	37.456	0.51	0.80	3.96	101.52	0.000	0.000	237.50	0.00	0.00
11	147.00	AM-X-CD-17-65-00T-RET	3	34.051	37.456	0.61	0.80	9.12	110.88	0.000	0.000	546.56	0.00	0.00
12	147.00	7770.00	6	34.051	37.456	0.60	0.80	19.80	252.00	0.000	0.000	1186.62	0.00	0.00
13	147.00	DC6-48-60-18-8F	1	34.051	37.456	0.80	0.80	1.18	38.16	0.000	0.000	70.48	0.00	0.00
14	147.00	RRUS 11	6	34.051	37.456	0.61	0.80	9.19	365.04	0.000	0.000	550.94	0.00	0.00
15	147.00	Low Profile	1	34.051	37.456	1.00	1.00	22.00	1800.00	0.000	0.000	1318.47	0.00	0.00
16	147.00	Dual Combiner	3	34.051	37.456	0.47	0.80	0.72	17.28	0.000	0.000	43.28	0.00	0.00
17	147.00	1900W800	6	34.051	37.456	0.61	0.80	5.62	206.64	0.000	0.000	336.68	0.00	0.00
18	147.00	LGP21903	6	34.051	37.456	0.59	0.80	0.96	39.60	0.000	0.000	57.48	0.00	0.00
19	137.50	782 11056	3	33.576	36.933	0.50	0.75	0.20	6.48	0.000	0.000	11.58	0.00	0.00
20	137.00	4449	3	33.550	36.905	0.50	0.75	2.49	252.00	0.000	0.000	146.87	0.00	0.00
21	137.00	FE15501P77/75	3	33.550	36.905	0.50	0.75	0.78	63.00	0.000	0.000	46.29	0.00	0.00
22	137.00	KRY 112 489/2	3	33.550	36.905	0.50	0.75	1.03	47.52	0.000	0.000	60.53	0.00	0.00
23	137.00	APXVAARR24 43-U-NA2	3	33.550	36.905	0.52	0.75	31.88	460.80	0.000	0.000	1882.33	0.00	0.00
24	137.00	APXV18-206516S-C-A20	3	33.550	36.905	0.55	0.75	5.93	67.32	0.000	0.000	350.12	0.00	0.00
25	137.00	Low Profile Platform w/	1	33.550	36.905	1.00	1.00	22.00	2160.00	0.000	0.000	1299.06	0.00	0.00

Totals: 12,014.04

16,443.09

Total Applied Force Summary

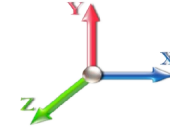
Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 26

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		570.84	1775.11	0.00	0.00
10.00		560.38	1746.05	0.00	0.00
15.00		549.92	1716.99	0.00	0.00
20.00		572.38	1687.93	0.00	0.00
25.00		588.28	1658.87	0.00	0.00
30.00		599.21	1629.81	0.00	0.00
35.00		606.48	1600.75	0.00	0.00
40.00		610.93	1571.69	0.00	0.00
44.00		489.22	1236.43	0.00	0.00
45.00		123.82	576.97	0.00	0.00
50.00		624.88	2850.00	0.00	0.00
55.00		623.81	1509.32	0.00	0.00
60.00		621.36	1480.26	0.00	0.00
65.00		617.69	1451.21	0.00	0.00
70.00		612.95	1422.15	0.00	0.00
75.00		607.26	1393.09	0.00	0.00
80.00		600.70	1364.03	0.00	0.00
83.75		445.04	1003.95	0.00	0.00
85.00		149.22	535.19	0.00	0.00
89.00		475.78	1691.69	0.00	0.00
90.00		117.70	199.48	0.00	0.00
95.00		586.00	984.93	0.00	0.00
100.00		576.78	964.17	0.00	0.00
105.00		567.00	943.42	0.00	0.00
110.00		556.69	922.66	0.00	0.00
115.00		545.88	901.90	0.00	0.00
119.50		481.45	793.97	0.00	0.00
120.00		53.52	141.68	0.00	0.00
123.75		398.83	1050.69	0.00	0.00
125.00		131.18	182.90	0.00	0.00
130.00		518.80	721.21	0.00	0.00
135.00		506.34	704.61	0.00	0.00
137.00	(16) attachments	3983.70	3327.83	0.00	0.00
137.50	(3) attachments	60.83	66.00	0.00	0.00
140.00		244.67	295.13	0.00	0.00
145.00		480.33	577.80	0.00	0.00
147.00	(41) attachments	4796.15	3373.59	0.00	0.00
150.00		278.04	286.70	0.00	0.00
155.00		452.95	464.55	0.00	0.00
157.00	(19) attachments	6652.53	4543.17	0.00	0.00
160.00		261.21	249.78	0.00	0.00
165.00		424.33	403.02	0.00	0.00
167.00	(1) attachments	1704.34	1596.56	0.00	0.00
168.00	(1) attachments	105.14	85.08	0.00	0.00
Totals:		35,134.55	53,682.30	0.00	0.00

Calculated Forces

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II

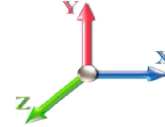


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Load Case: 1.2D + 1.6W 101 mph Wind

Iterations 26

Dead Load Factor 1.20
Wind Load Factor 1.60



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	-53.62	-35.23	0.00	-4195.1	0.00	4195.11	5340.38	2670.19	12289.6	6153.95	0.00	0.000	0.000	0.692
5.00	-51.73	-34.82	0.00	-4018.9	0.00	4018.98	5276.02	2638.01	11917.5	5967.64	0.10	-0.190	0.000	0.683
10.00	-49.87	-34.42	0.00	-3844.8	0.00	3844.87	5210.42	2605.21	11548.2	5782.69	0.40	-0.381	0.000	0.675
15.00	-48.05	-34.02	0.00	-3672.7	0.00	3672.76	5143.57	2571.78	11181.7	5599.17	0.91	-0.576	0.000	0.665
20.00	-46.25	-33.59	0.00	-3502.6	0.00	3502.65	5075.47	2537.74	10818.2	5417.17	1.62	-0.772	0.000	0.656
25.00	-44.48	-33.13	0.00	-3334.7	0.00	3334.71	5006.13	2503.07	10457.9	5236.76	2.53	-0.970	0.000	0.646
30.00	-42.75	-32.65	0.00	-3169.0	0.00	3169.06	4935.55	2467.77	10101.0	5058.02	3.65	-1.170	0.000	0.635
35.00	-41.05	-32.16	0.00	-3005.8	0.00	3005.80	4863.72	2431.86	9747.59	4881.04	4.99	-1.372	0.000	0.624
40.00	-39.39	-31.63	0.00	-2845.0	0.00	2845.03	4790.64	2395.32	9397.80	4705.88	6.53	-1.576	0.000	0.613
44.00	-38.12	-31.17	0.00	-2718.5	0.00	2718.51	4731.29	2365.64	9120.70	4567.13	7.93	-1.741	0.000	0.603
45.00	-37.48	-31.12	0.00	-2687.3	0.00	2687.34	4716.32	2358.16	9051.82	4532.64	8.29	-1.783	0.000	0.601
50.00	-34.54	-30.52	0.00	-2531.7	0.00	2531.76	4386.97	2193.49	8392.46	4202.47	10.27	-1.990	0.000	0.611
55.00	-32.95	-29.96	0.00	-2379.1	0.00	2379.16	4315.09	2157.55	8071.80	4041.90	12.47	-2.198	0.000	0.596
60.00	-31.39	-29.39	0.00	-2229.3	0.00	2229.36	4242.11	2121.05	7755.22	3883.37	14.88	-2.395	0.000	0.582
65.00	-29.87	-28.81	0.00	-2082.4	0.00	2082.42	4147.44	2073.72	7406.11	3708.56	17.49	-2.592	0.000	0.569
70.00	-28.38	-28.23	0.00	-1938.3	0.00	1938.37	4049.83	2024.91	7059.92	3535.21	20.31	-2.790	0.000	0.556
75.00	-26.93	-27.65	0.00	-1797.2	0.00	1797.23	3952.22	1976.11	6722.01	3366.00	23.34	-2.987	0.000	0.541
80.00	-25.52	-27.05	0.00	-1659.0	0.00	1659.00	3854.61	1927.31	6392.39	3200.95	26.57	-3.183	0.000	0.525
83.75	-24.49	-26.59	0.00	-1557.5	0.00	1557.57	3781.40	1890.70	6150.62	3079.88	29.13	-3.330	0.000	0.512
85.00	-23.92	-26.45	0.00	-1524.3	0.00	1524.34	3757.00	1878.50	6071.06	3040.04	30.01	-3.380	0.000	0.508
89.00	-22.22	-25.91	0.00	-1418.5	0.00	1418.53	2696.95	1348.48	4363.97	2185.23	32.90	-3.535	0.000	0.658
90.00	-21.96	-25.84	0.00	-1392.6	0.00	1392.62	2687.67	1343.84	4326.14	2166.29	33.65	-3.575	0.000	0.651
95.00	-20.90	-25.28	0.00	-1263.4	0.00	1263.43	2640.52	1320.26	4138.17	2072.16	37.52	-3.826	0.000	0.618
100.00	-19.88	-24.72	0.00	-1137.0	0.00	1137.02	2592.12	1296.06	3952.30	1979.09	41.66	-4.071	0.000	0.583
105.00	-18.88	-24.17	0.00	-1013.4	0.00	1013.41	2542.48	1271.24	3768.69	1887.15	46.05	-4.310	0.000	0.545
110.00	-17.91	-23.61	0.00	-892.57	0.00	892.57	2491.60	1245.80	3587.51	1796.42	50.68	-4.539	0.000	0.504
115.00	-16.97	-23.05	0.00	-774.52	0.00	774.52	2439.47	1219.73	3408.91	1706.99	55.55	-4.759	0.000	0.461
119.50	-16.18	-22.54	0.00	-670.78	0.00	670.78	2391.49	1195.74	3250.50	1627.67	60.12	-4.946	0.000	0.419
120.00	-16.01	-22.49	0.00	-659.51	0.00	659.51	2386.09	1193.05	3233.04	1618.92	60.64	-4.966	0.000	0.414
123.75	-14.96	-22.03	0.00	-575.16	0.00	575.16	1658.06	829.03	2236.65	1119.99	64.60	-5.112	0.000	0.523
125.00	-14.75	-21.92	0.00	-547.63	0.00	547.63	1649.50	824.75	2207.60	1105.44	65.94	-5.160	0.000	0.505
130.00	-14.00	-21.38	0.00	-438.05	0.00	438.05	1614.57	807.28	2092.31	1047.71	71.45	-5.362	0.000	0.427
135.00	-13.31	-20.83	0.00	-331.16	0.00	331.16	1578.53	789.26	1978.61	990.78	77.16	-5.536	0.000	0.343
137.00	-10.37	-16.55	0.00	-289.49	0.00	289.49	1563.80	781.90	1933.60	968.24	79.49	-5.598	0.000	0.306
137.50	-10.30	-16.49	0.00	-281.21	0.00	281.21	1560.09	780.05	1922.40	962.63	80.07	-5.613	0.000	0.299
140.00	-10.01	-16.24	0.00	-239.98	0.00	239.98	1541.39	770.69	1866.63	934.70	83.03	-5.681	0.000	0.264
145.00	-9.46	-15.71	0.00	-158.79	0.00	158.79	1503.14	751.57	1756.51	879.56	89.03	-5.792	0.000	0.187
147.00	-6.58	-10.60	0.00	-127.37	0.00	127.37	1487.53	743.77	1713.02	857.78	91.46	-5.827	0.000	0.153
150.00	-6.32	-10.30	0.00	-95.55	0.00	95.55	1463.79	731.89	1648.40	825.42	95.13	-5.870	0.000	0.120
155.00	-5.90	-9.81	0.00	-44.03	0.00	44.03	1423.34	711.67	1542.43	772.36	101.30	-5.918	0.000	0.061
157.00	-2.06	-2.72	0.00	-24.42	0.00	24.42	1406.84	703.42	1500.67	751.45	103.78	-5.928	0.000	0.034
160.00	-1.84	-2.44	0.00	-16.25	0.00	16.25	1381.63	690.81	1438.59	720.36	107.50	-5.938	0.000	0.024
165.00	-1.49	-1.97	0.00	-4.06	0.00	4.06	1325.85	662.93	1324.24	663.10	113.71	-5.947	0.000	0.007
167.00	-0.07	-0.11	0.00	-0.11	0.00	0.11	1303.54	651.77	1279.82	640.86	116.20	-5.948	0.000	0.000
168.00	0.00	-0.11	0.00	0.00	0.00	0.00	1292.39	646.19	1257.90	629.89	117.44	-5.948	0.000	0.000

Wind Loading - Shaft

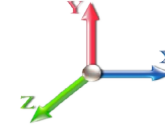
Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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	21.088	23.20	444.72	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	21.088	23.20	436.64	0.650	0.000	5.00	23.663	15.38	570.8	0.0	1179.9
10.00		1.00	0.85	21.088	23.20	428.57	0.650	0.000	5.00	23.229	15.10	560.4	0.0	1158.1
15.00		1.00	0.85	21.088	23.20	420.49	0.650	0.000	5.00	22.795	14.82	549.9	0.0	1136.3
20.00		1.00	0.90	22.375	24.61	424.81	0.650	0.000	5.00	22.362	14.54	572.4	0.0	1114.5
25.00		1.00	0.95	23.451	25.80	426.39	0.650	0.000	5.00	21.928	14.25	588.3	0.0	1092.7
30.00		1.00	0.98	24.369	26.81	425.97	0.650	0.000	5.00	21.494	13.97	599.2	0.0	1070.9
35.00		1.00	1.01	25.172	27.69	424.12	0.650	0.000	5.00	21.061	13.69	606.5	0.0	1049.1
40.00		1.00	1.04	25.890	28.48	421.17	0.650	0.000	5.00	20.627	13.41	610.9	0.0	1027.3
44.00	Bot - Section 2	1.00	1.06	26.415	29.06	418.19	0.650	0.000	4.00	16.189	10.52	489.2	0.0	806.1
45.00		1.00	1.07	26.540	29.19	417.37	0.650	0.000	1.00	4.078	2.65	123.8	0.0	402.4
50.00	Top - Section 1	1.00	1.09	27.135	29.85	412.86	0.650	0.000	5.00	20.130	13.08	624.9	0.0	1986.0
55.00		1.00	1.12	27.685	30.45	415.67	0.650	0.000	5.00	19.696	12.80	623.8	0.0	980.5
60.00		1.00	1.14	28.197	31.02	410.15	0.650	0.000	5.00	19.262	12.52	621.4	0.0	958.7
65.00		1.00	1.16	28.676	31.54	404.20	0.650	0.000	5.00	18.829	12.24	617.7	0.0	936.9
70.00		1.00	1.17	29.127	32.04	397.88	0.650	0.000	5.00	18.395	11.96	613.0	0.0	915.1
75.00		1.00	1.19	29.553	32.51	391.22	0.650	0.000	5.00	17.961	11.67	607.3	0.0	893.3
80.00		1.00	1.21	29.958	32.95	384.26	0.650	0.000	5.00	17.528	11.39	600.7	0.0	871.6
83.75	Bot - Section 3	1.00	1.22	30.248	33.27	378.86	0.650	0.000	3.75	12.861	8.36	445.0	0.0	639.4
85.00		1.00	1.22	30.342	33.38	377.03	0.650	0.000	1.25	4.299	2.79	149.2	0.0	363.5
89.00	Top - Section 2	1.00	1.23	30.638	33.70	371.07	0.650	0.000	4.00	13.575	8.82	475.8	0.0	1147.6
90.00		1.00	1.24	30.710	33.78	375.50	0.650	0.000	1.00	3.350	2.18	117.7	0.0	119.3
95.00		1.00	1.25	31.061	34.17	367.84	0.650	0.000	5.00	16.491	10.72	586.0	0.0	587.2
100.00		1.00	1.27	31.399	34.54	359.98	0.650	0.000	5.00	16.057	10.44	576.8	0.0	571.7
105.00		1.00	1.28	31.723	34.89	351.93	0.650	0.000	5.00	15.624	10.16	567.0	0.0	556.1
110.00		1.00	1.29	32.035	35.24	343.70	0.650	0.000	5.00	15.190	9.87	556.7	0.0	540.5
115.00		1.00	1.30	32.336	35.57	335.31	0.650	0.000	5.00	14.756	9.59	545.9	0.0	525.0
119.50	Bot - Section 4	1.00	1.31	32.598	35.86	327.63	0.650	0.000	4.50	12.910	8.39	481.4	0.0	459.2
120.00		1.00	1.32	32.627	35.89	326.77	0.650	0.000	0.50	1.434	0.93	53.5	0.0	91.1
123.75	Top - Section 3	1.00	1.32	32.839	36.12	320.27	0.650	0.000	3.75	10.616	6.90	398.8	0.0	674.4
125.00		1.00	1.33	32.909	36.20	323.01	0.650	0.000	1.25	3.485	2.26	131.2	0.0	99.3
130.00		1.00	1.34	33.182	36.50	314.21	0.650	0.000	5.00	13.667	8.88	518.8	0.0	389.4
135.00		1.00	1.35	33.446	36.79	305.29	0.650	0.000	5.00	13.233	8.60	506.3	0.0	377.0
137.00	Appurtenance(s)	1.00	1.35	33.550	36.90	301.69	0.650	0.000	2.00	5.172	3.36	198.5	0.0	147.3
137.50	Appurtenance(s)	1.00	1.35	33.576	36.93	300.79	0.650	0.000	0.50	1.282	0.83	49.2	0.0	36.5
140.00		1.00	1.36	33.703	37.07	296.25	0.650	0.000	2.50	6.346	4.12	244.7	0.0	180.7
145.00		1.00	1.37	33.953	37.35	287.10	0.650	0.000	5.00	12.366	8.04	480.3	0.0	352.1
147.00	Appurtenance(s)	1.00	1.37	34.051	37.46	283.41	0.650	0.000	2.00	4.825	3.14	188.0	0.0	137.3
150.00		1.00	1.38	34.196	37.62	277.84	0.650	0.000	3.00	7.107	4.62	278.0	0.0	202.3
155.00		1.00	1.39	34.433	37.88	268.48	0.650	0.000	5.00	11.499	7.47	453.0	0.0	327.2
157.00	Appurtenance(s)	1.00	1.39	34.526	37.98	264.71	0.650	0.000	2.00	4.478	2.91	176.9	0.0	127.4
160.00		1.00	1.40	34.664	38.13	259.03	0.650	0.000	3.00	6.587	4.28	261.2	0.0	187.3
165.00		1.00	1.41	34.890	38.38	249.48	0.650	0.000	5.00	10.631	6.91	424.3	0.0	302.3
167.00	Appurtenance(s)	1.00	1.41	34.978	38.48	245.63	0.650	0.000	2.00	4.131	2.69	165.3	0.0	117.4
168.00	Appurtenance(s)	1.00	1.41	35.022	38.52	243.71	0.650	0.000	1.00	2.040	1.33	81.7	0.0	58.0
Totals:									168.00			18,691.5		26,895.9

Discrete Appurtenance Forces

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II

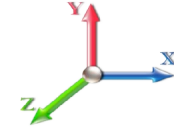


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Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



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	6' Lightning rod	1	35.022	38.524	0.00	1.00	0.38	5.85	0.000	0.000	23.42	0.00	0.00
2	167.00	Low Profile Platform-flat	1	34.978	38.476	1.00	1.00	25.00	1080.00	0.000	0.000	1539.04	0.00	0.00
3	157.00	KMW ETCR-654L12H6	3	34.526	37.979	0.53	0.75	25.10	267.30	0.000	0.000	1525.04	0.00	0.00
4	157.00	Decibel DB908h90e-m	3	34.526	37.979	0.62	0.75	7.00	27.00	0.000	0.000	425.56	0.00	0.00
5	157.00	ALU 1900 Mhz	3	34.526	37.979	0.74	0.75	6.17	162.00	0.000	0.000	374.94	0.00	0.00
6	157.00	ALU 800 Mhz	6	34.526	37.979	0.69	0.75	10.31	286.20	0.000	0.000	626.42	0.00	0.00
7	157.00	ALU TD-RRH8x20-25	3	34.526	37.979	0.52	0.75	6.29	189.00	0.000	0.000	382.08	0.00	0.00
8	157.00	Platform w/ Hand Rail	1	34.526	37.979	1.00	1.00	51.70	2340.00	0.000	0.000	3141.63	0.00	0.00
9	147.00	RRUS 12	3	34.051	37.456	0.54	0.80	4.34	162.00	0.000	0.000	260.19	0.00	0.00
10	147.00	LGP21401	6	34.051	37.456	0.51	0.80	3.96	76.14	0.000	0.000	237.50	0.00	0.00
11	147.00	AM-X-CD-17-65-00T-RET	3	34.051	37.456	0.61	0.80	9.12	83.16	0.000	0.000	546.56	0.00	0.00
12	147.00	7770.00	6	34.051	37.456	0.60	0.80	19.80	189.00	0.000	0.000	1186.62	0.00	0.00
13	147.00	DC6-48-60-18-8F	1	34.051	37.456	0.80	0.80	1.18	28.62	0.000	0.000	70.48	0.00	0.00
14	147.00	RRUS 11	6	34.051	37.456	0.61	0.80	9.19	273.78	0.000	0.000	550.94	0.00	0.00
15	147.00	Low Profile	1	34.051	37.456	1.00	1.00	22.00	1350.00	0.000	0.000	1318.47	0.00	0.00
16	147.00	Dual Combiner	3	34.051	37.456	0.47	0.80	0.72	12.96	0.000	0.000	43.28	0.00	0.00
17	147.00	1900W800	6	34.051	37.456	0.61	0.80	5.62	154.98	0.000	0.000	336.68	0.00	0.00
18	147.00	LGP21903	6	34.051	37.456	0.59	0.80	0.96	29.70	0.000	0.000	57.48	0.00	0.00
19	137.50	782 11056	3	33.576	36.933	0.50	0.75	0.20	4.86	0.000	0.000	11.58	0.00	0.00
20	137.00	4449	3	33.550	36.905	0.50	0.75	2.49	189.00	0.000	0.000	146.87	0.00	0.00
21	137.00	FE15501P77/75	3	33.550	36.905	0.50	0.75	0.78	47.25	0.000	0.000	46.29	0.00	0.00
22	137.00	KRY 112 489/2	3	33.550	36.905	0.50	0.75	1.03	35.64	0.000	0.000	60.53	0.00	0.00
23	137.00	APXVAARR24 43-U-NA2	3	33.550	36.905	0.52	0.75	31.88	345.60	0.000	0.000	1882.33	0.00	0.00
24	137.00	APXV18-206516S-C-A20	3	33.550	36.905	0.55	0.75	5.93	50.49	0.000	0.000	350.12	0.00	0.00
25	137.00	Low Profile Platform w/	1	33.550	36.905	1.00	1.00	22.00	1620.00	0.000	0.000	1299.06	0.00	0.00

Totals: 9,010.53

16,443.09

Total Applied Force Summary

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II

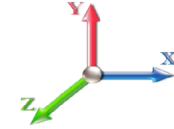


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Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



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		570.84	1331.33	0.00	0.00
10.00		560.38	1309.54	0.00	0.00
15.00		549.92	1287.74	0.00	0.00
20.00		572.38	1265.95	0.00	0.00
25.00		588.28	1244.15	0.00	0.00
30.00		599.21	1222.36	0.00	0.00
35.00		606.48	1200.56	0.00	0.00
40.00		610.93	1178.77	0.00	0.00
44.00		489.22	927.32	0.00	0.00
45.00		123.82	432.73	0.00	0.00
50.00		624.88	2137.50	0.00	0.00
55.00		623.81	1131.99	0.00	0.00
60.00		621.36	1110.20	0.00	0.00
65.00		617.69	1088.40	0.00	0.00
70.00		612.95	1066.61	0.00	0.00
75.00		607.26	1044.82	0.00	0.00
80.00		600.70	1023.02	0.00	0.00
83.75		445.04	752.96	0.00	0.00
85.00		149.22	401.39	0.00	0.00
89.00		475.78	1268.77	0.00	0.00
90.00		117.70	149.61	0.00	0.00
95.00		586.00	738.70	0.00	0.00
100.00		576.78	723.13	0.00	0.00
105.00		567.00	707.56	0.00	0.00
110.00		556.69	691.99	0.00	0.00
115.00		545.88	676.43	0.00	0.00
119.50		481.45	595.47	0.00	0.00
120.00		53.52	106.26	0.00	0.00
123.75		398.83	788.02	0.00	0.00
125.00		131.18	137.17	0.00	0.00
130.00		518.80	540.91	0.00	0.00
135.00		506.34	528.46	0.00	0.00
137.00	(16) attachments	3983.70	2495.87	0.00	0.00
137.50	(3) attachments	60.83	49.50	0.00	0.00
140.00		244.67	221.34	0.00	0.00
145.00		480.33	433.35	0.00	0.00
147.00	(41) attachments	4796.15	2530.19	0.00	0.00
150.00		278.04	215.02	0.00	0.00
155.00		452.95	348.41	0.00	0.00
157.00	(19) attachments	6652.53	3407.38	0.00	0.00
160.00		261.21	187.34	0.00	0.00
165.00		424.33	302.26	0.00	0.00
167.00	(1) attachments	1704.34	1197.42	0.00	0.00
168.00	(1) attachments	105.14	63.81	0.00	0.00
Totals:		35,134.55	40,261.73	0.00	0.00

Calculated Forces

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

Topography: 1

Code: EIA/TIA-222-G
Exposure: C
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

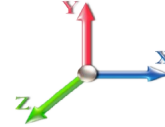
7/2/2019
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Load Case: 0.9D + 1.6W 101 mph Wind

Iterations 25

Dead Load Factor 0.90
Wind Load Factor 1.60



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	-40.20	-35.20	0.00	-4145.5	0.00	4145.59	5340.38	2670.19	12289.6	6153.95	0.00	0.000	0.000	0.681
5.00	-38.76	-34.75	0.00	-3969.6	0.00	3969.60	5276.02	2638.01	11917.5	5967.64	0.10	-0.187	0.000	0.673
10.00	-37.34	-34.31	0.00	-3795.8	0.00	3795.82	5210.42	2605.21	11548.2	5782.69	0.40	-0.377	0.000	0.664
15.00	-35.94	-33.87	0.00	-3624.2	0.00	3624.27	5143.57	2571.78	11181.7	5599.17	0.90	-0.568	0.000	0.654
20.00	-34.57	-33.40	0.00	-3454.9	0.00	3454.90	5075.47	2537.74	10818.2	5417.17	1.60	-0.762	0.000	0.645
25.00	-33.22	-32.91	0.00	-3287.8	0.00	3287.89	5006.13	2503.07	10457.9	5236.76	2.50	-0.957	0.000	0.635
30.00	-31.90	-32.40	0.00	-3123.3	0.00	3123.34	4935.55	2467.77	10101.0	5058.02	3.61	-1.155	0.000	0.624
35.00	-30.60	-31.87	0.00	-2961.3	0.00	2961.35	4863.72	2431.86	9747.59	4881.04	4.92	-1.354	0.000	0.613
40.00	-29.34	-31.33	0.00	-2801.9	0.00	2801.98	4790.64	2395.32	9397.80	4705.88	6.45	-1.555	0.000	0.602
44.00	-28.37	-30.86	0.00	-2676.6	0.00	2676.68	4731.29	2365.64	9120.70	4567.13	7.82	-1.717	0.000	0.592
45.00	-27.87	-30.78	0.00	-2645.8	0.00	2645.82	4716.32	2358.16	9051.82	4532.64	8.19	-1.759	0.000	0.590
50.00	-25.65	-30.18	0.00	-2491.9	0.00	2491.90	4386.97	2193.49	8392.46	4202.47	10.14	-1.962	0.000	0.599
55.00	-24.44	-29.60	0.00	-2340.9	0.00	2340.99	4315.09	2157.55	8071.80	4041.90	12.30	-2.167	0.000	0.585
60.00	-23.26	-29.02	0.00	-2192.9	0.00	2192.98	4242.11	2121.05	7755.22	3883.37	14.67	-2.361	0.000	0.570
65.00	-22.10	-28.43	0.00	-2047.9	0.00	2047.90	4147.44	2073.72	7406.11	3708.56	17.25	-2.555	0.000	0.558
70.00	-20.97	-27.84	0.00	-1905.7	0.00	1905.76	4049.83	2024.91	7059.92	3535.21	20.03	-2.749	0.000	0.544
75.00	-19.86	-27.25	0.00	-1766.5	0.00	1766.58	3952.22	1976.11	6722.01	3366.00	23.01	-2.942	0.000	0.530
80.00	-18.80	-26.65	0.00	-1630.3	0.00	1630.35	3854.61	1927.31	6392.39	3200.95	26.20	-3.135	0.000	0.514
83.75	-18.03	-26.19	0.00	-1530.4	0.00	1530.42	3781.40	1890.70	6150.62	3079.88	28.72	-3.280	0.000	0.502
85.00	-17.59	-26.05	0.00	-1497.6	0.00	1497.69	3757.00	1878.50	6071.06	3040.04	29.58	-3.329	0.000	0.498
89.00	-16.31	-25.53	0.00	-1393.4	0.00	1393.49	2696.95	1348.48	4363.97	2185.23	32.43	-3.482	0.000	0.644
90.00	-16.10	-25.44	0.00	-1367.9	0.00	1367.96	2687.67	1343.84	4326.14	2166.29	33.17	-3.521	0.000	0.638
95.00	-15.29	-24.87	0.00	-1240.7	0.00	1240.75	2640.52	1320.26	4138.17	2072.16	36.99	-3.767	0.000	0.605
100.00	-14.51	-24.31	0.00	-1116.3	0.00	1116.38	2592.12	1296.06	3952.30	1979.09	41.06	-4.008	0.000	0.570
105.00	-13.75	-23.75	0.00	-994.83	0.00	994.83	2542.48	1271.24	3768.69	1887.15	45.38	-4.242	0.000	0.533
110.00	-13.01	-23.19	0.00	-876.09	0.00	876.09	2491.60	1245.80	3587.51	1796.42	49.94	-4.468	0.000	0.493
115.00	-12.30	-22.64	0.00	-760.13	0.00	760.13	2439.47	1219.73	3408.91	1706.99	54.73	-4.683	0.000	0.451
119.50	-11.71	-22.13	0.00	-658.26	0.00	658.26	2391.49	1195.74	3250.50	1627.67	59.23	-4.866	0.000	0.410
120.00	-11.58	-22.08	0.00	-647.20	0.00	647.20	2386.09	1193.05	3233.04	1618.92	59.74	-4.887	0.000	0.405
123.75	-10.79	-21.63	0.00	-564.39	0.00	564.39	1658.06	829.03	2236.65	1119.99	63.63	-5.030	0.000	0.511
125.00	-10.62	-21.52	0.00	-537.35	0.00	537.35	1649.50	824.75	2207.60	1105.44	64.96	-5.076	0.000	0.493
130.00	-10.06	-20.98	0.00	-429.77	0.00	429.77	1614.57	807.28	2092.31	1047.71	70.38	-5.275	0.000	0.417
135.00	-9.54	-20.45	0.00	-324.86	0.00	324.86	1578.53	789.26	1978.61	990.78	75.99	-5.446	0.000	0.335
137.00	-7.43	-16.25	0.00	-283.96	0.00	283.96	1563.80	781.90	1933.60	968.24	78.28	-5.506	0.000	0.298
137.50	-7.37	-16.19	0.00	-275.84	0.00	275.84	1560.09	780.05	1922.40	962.63	78.86	-5.521	0.000	0.292
140.00	-7.15	-15.94	0.00	-235.36	0.00	235.36	1541.39	770.69	1866.63	934.70	81.76	-5.588	0.000	0.257
145.00	-6.75	-15.42	0.00	-155.69	0.00	155.69	1503.14	751.57	1756.51	879.56	87.67	-5.696	0.000	0.182
147.00	-4.70	-10.40	0.00	-124.84	0.00	124.84	1487.53	743.77	1713.02	857.78	90.06	-5.731	0.000	0.149
150.00	-4.51	-10.11	0.00	-93.64	0.00	93.64	1463.79	731.89	1648.40	825.42	93.67	-5.773	0.000	0.117
155.00	-4.20	-9.62	0.00	-43.10	0.00	43.10	1423.34	711.67	1542.43	772.36	99.73	-5.820	0.000	0.059
157.00	-1.49	-2.66	0.00	-23.85	0.00	23.85	1406.84	703.42	1500.67	751.45	102.17	-5.830	0.000	0.033
160.00	-1.33	-2.38	0.00	-15.87	0.00	15.87	1381.63	690.81	1438.59	720.36	105.83	-5.840	0.000	0.023
165.00	-1.07	-1.93	0.00	-3.97	0.00	3.97	1325.85	662.93	1324.24	663.10	111.94	-5.848	0.000	0.007
167.00	-0.05	-0.11	0.00	-0.11	0.00	0.11	1303.54	651.77	1279.82	640.86	114.39	-5.849	0.000	0.000
168.00	0.00	-0.11	0.00	0.00	0.00	0.00	1292.39	646.19	1257.90	629.89	115.61	-5.849	0.000	0.000

Wind Loading - Shaft

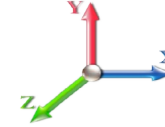
Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0Di + 1.0Wi 50 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	5.168	5.68	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	5.168	5.68	0.00	1.200	1.656	5.00	25.043	30.05	170.8	592.0	2165.2
10.00		1.00	0.85	5.168	5.68	0.00	1.200	1.775	5.00	24.708	29.65	168.6	624.4	2168.5
15.00		1.00	0.85	5.168	5.68	0.00	1.200	1.848	5.00	24.336	29.20	166.0	639.2	2154.2
20.00		1.00	0.90	5.483	6.03	0.00	1.200	1.902	5.00	23.947	28.74	173.3	646.3	2132.3
25.00		1.00	0.95	5.747	6.32	0.00	1.200	1.945	5.00	23.549	28.26	178.6	648.9	2105.8
30.00		1.00	0.98	5.972	6.57	0.00	1.200	1.981	5.00	23.145	27.77	182.5	648.5	2076.4
35.00		1.00	1.01	6.169	6.79	0.00	1.200	2.012	5.00	22.737	27.28	185.2	646.1	2044.9
40.00		1.00	1.04	6.345	6.98	0.00	1.200	2.039	5.00	22.326	26.79	187.0	642.0	2011.7
44.00	Bot - Section 2	1.00	1.06	6.474	7.12	0.00	1.200	2.058	4.00	17.562	21.07	150.1	510.3	1585.1
45.00		1.00	1.07	6.504	7.15	0.00	1.200	2.063	1.00	4.422	5.31	38.0	129.6	666.2
50.00	Top - Section 1	1.00	1.09	6.650	7.32	0.00	1.200	2.085	5.00	21.867	26.24	192.0	641.7	3289.8
55.00		1.00	1.12	6.785	7.46	0.00	1.200	2.105	5.00	21.450	25.74	192.1	634.6	1942.0
60.00		1.00	1.14	6.910	7.60	0.00	1.200	2.123	5.00	21.032	25.24	191.8	626.8	1905.1
65.00		1.00	1.16	7.028	7.73	0.00	1.200	2.140	5.00	20.612	24.73	191.2	618.3	1867.5
70.00		1.00	1.17	7.138	7.85	0.00	1.200	2.156	5.00	20.192	24.23	190.3	609.2	1829.4
75.00		1.00	1.19	7.243	7.97	0.00	1.200	2.171	5.00	19.771	23.72	189.0	599.7	1790.8
80.00		1.00	1.21	7.342	8.08	0.00	1.200	2.185	5.00	19.349	23.22	187.5	589.7	1751.8
83.75	Bot - Section 3	1.00	1.22	7.413	8.15	0.00	1.200	2.195	3.75	14.233	17.08	139.3	436.5	1289.0
85.00		1.00	1.22	7.436	8.18	0.00	1.200	2.198	1.25	4.757	5.71	46.7	147.0	631.7
89.00	Top - Section 2	1.00	1.23	7.508	8.26	0.00	1.200	2.209	4.00	15.047	18.06	149.1	463.6	1993.7
90.00		1.00	1.24	7.526	8.28	0.00	1.200	2.211	1.00	3.719	4.46	36.9	115.5	274.6
95.00		1.00	1.25	7.612	8.37	0.00	1.200	2.223	5.00	18.344	22.01	184.3	566.4	1349.3
100.00		1.00	1.27	7.695	8.46	0.00	1.200	2.234	5.00	17.920	21.50	182.0	555.1	1317.3
105.00		1.00	1.28	7.774	8.55	0.00	1.200	2.245	5.00	17.495	20.99	179.5	543.5	1285.0
110.00		1.00	1.29	7.851	8.64	0.00	1.200	2.256	5.00	17.070	20.48	176.9	531.7	1252.4
115.00		1.00	1.30	7.925	8.72	0.00	1.200	2.266	5.00	16.645	19.97	174.1	519.7	1219.6
119.50	Bot - Section 4	1.00	1.31	7.989	8.79	0.00	1.200	2.275	4.50	14.616	17.54	154.1	457.8	1070.0
120.00		1.00	1.32	7.996	8.80	0.00	1.200	2.276	0.50	1.624	1.95	17.1	51.5	172.9
123.75	Top - Section 3	1.00	1.32	8.048	8.85	0.00	1.200	2.283	3.75	12.043	14.45	127.9	378.9	1278.1
125.00		1.00	1.33	8.065	8.87	0.00	1.200	2.285	1.25	3.961	4.75	42.2	125.5	257.9
130.00		1.00	1.34	8.132	8.95	0.00	1.200	2.294	5.00	15.579	18.69	167.2	489.5	1008.7
135.00		1.00	1.35	8.197	9.02	0.00	1.200	2.303	5.00	15.152	18.18	163.9	476.6	979.3
137.00	Appurtenance(s)	1.00	1.35	8.222	9.04	0.00	1.200	2.306	2.00	5.941	7.13	64.5	188.6	385.0
137.50	Appurtenance(s)	1.00	1.35	8.229	9.05	0.00	1.200	2.307	0.50	1.474	1.77	16.0	47.0	95.7
140.00		1.00	1.36	8.260	9.09	0.00	1.200	2.311	2.50	7.309	8.77	79.7	231.8	472.8
145.00		1.00	1.37	8.321	9.15	0.00	1.200	2.319	5.00	14.299	17.16	157.1	450.5	919.9
147.00	Appurtenance(s)	1.00	1.37	8.345	9.18	0.00	1.200	2.322	2.00	5.599	6.72	61.7	178.1	361.2
150.00		1.00	1.38	8.381	9.22	0.00	1.200	2.327	3.00	8.271	9.92	91.5	262.3	532.0
155.00		1.00	1.39	8.439	9.28	0.00	1.200	2.335	5.00	13.444	16.13	149.8	423.7	860.0
157.00	Appurtenance(s)	1.00	1.39	8.462	9.31	0.00	1.200	2.338	2.00	5.257	6.31	58.7	167.3	337.2
160.00		1.00	1.40	8.495	9.34	0.00	1.200	2.342	3.00	7.758	9.31	87.0	246.1	495.9
165.00		1.00	1.41	8.551	9.41	0.00	1.200	2.349	5.00	12.589	15.11	142.1	396.4	799.5
167.00	Appurtenance(s)	1.00	1.41	8.572	9.43	0.00	1.200	2.352	2.00	4.915	5.90	55.6	156.4	312.9
168.00	Appurtenance(s)	1.00	1.41	8.583	9.44	0.00	1.200	2.353	1.00	2.432	2.92	27.6	77.6	154.9
Totals:								168.00				5,866.5		54,593.2

Discrete Appurtenance Forces

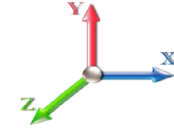
Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0Di + 1.0Wi 50 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	6' Lightning rod	1	8.583	9.441	0.00	1.00	1.85	51.45	0.000	0.000	17.44	0.00	0.00
2	167.00	Low Profile Platform-flat	1	8.572	9.429	1.00	1.00	53.22	2551.24	0.000	0.000	501.88	0.00	0.00
3	157.00	KMW ETCR-654L12H6	3	8.462	9.308	0.53	0.75	28.74	1718.40	0.000	0.000	267.55	0.00	0.00
4	157.00	Decibel DB908h90e-m	3	8.462	9.308	0.62	0.75	9.68	478.31	0.000	0.000	90.09	0.00	0.00
5	157.00	ALU 1900 Mhz	3	8.462	9.308	0.74	0.75	9.95	479.57	0.000	0.000	92.66	0.00	0.00
6	157.00	ALU 800 Mhz	6	8.462	9.308	0.69	0.75	16.65	849.39	0.000	0.000	154.98	0.00	0.00
7	157.00	ALU TD-RRH8x20-25	3	8.462	9.308	0.52	0.75	8.02	727.95	0.000	0.000	74.67	0.00	0.00
8	157.00	Platform w/ Hand Rail	1	8.462	9.308	1.00	1.00	112.13	8090.46	0.000	0.000	1043.64	0.00	0.00
9	147.00	RRUS 12	3	8.345	9.180	0.55	0.80	5.92	436.42	0.000	0.000	54.39	0.00	0.00
10	147.00	LGP21401	6	8.345	9.180	0.53	0.80	7.61	258.53	0.000	0.000	69.85	0.00	0.00
11	147.00	AM-X-CD-17-65-00T-RET	3	8.345	9.180	0.62	0.80	13.85	461.37	0.000	0.000	127.13	0.00	0.00
12	147.00	7770.00	6	8.345	9.180	0.60	0.80	25.01	1413.69	0.000	0.000	229.61	0.00	0.00
13	147.00	DC6-48-60-18-8F	1	8.345	9.180	0.80	0.80	1.92	102.73	0.000	0.000	17.63	0.00	0.00
14	147.00	RRUS 11	6	8.345	9.180	0.62	0.80	12.61	1131.49	0.000	0.000	115.77	0.00	0.00
15	147.00	Low Profile	1	8.345	9.180	1.00	1.00	45.50	3241.69	0.000	0.000	417.68	0.00	0.00
16	147.00	Dual Combiner	3	8.345	9.180	0.50	0.80	1.84	47.17	0.000	0.000	16.86	0.00	0.00
17	147.00	1900W800	6	8.345	9.180	0.62	0.80	10.08	448.68	0.000	0.000	92.53	0.00	0.00
18	147.00	LGP21903	6	8.345	9.180	0.61	0.80	2.92	92.49	0.000	0.000	26.76	0.00	0.00
19	137.50	782 11056	3	8.229	9.051	0.50	0.75	0.78	9.71	0.000	0.000	7.04	0.00	0.00
20	137.00	4449	3	8.222	9.044	0.50	0.75	3.60	545.45	0.000	0.000	32.53	0.00	0.00
21	137.00	FE15501P77/75	3	8.222	9.044	0.50	0.75	1.95	155.88	0.000	0.000	17.60	0.00	0.00
22	137.00	KRY 112 489/2	3	8.222	9.044	0.50	0.75	2.31	103.85	0.000	0.000	20.94	0.00	0.00
23	137.00	APXVAARR24 43-U-NA2	3	8.222	9.044	0.52	0.75	35.88	2185.73	0.000	0.000	324.51	0.00	0.00
24	137.00	APXV18-206516S-C-A20	3	8.222	9.044	0.55	0.75	9.96	285.09	0.000	0.000	90.08	0.00	0.00
25	137.00	Low Profile Platform w/	1	8.222	9.044	1.00	1.00	45.34	3835.36	0.000	0.000	410.04	0.00	0.00

Totals: 29,702.08

4,313.87

Total Applied Force Summary

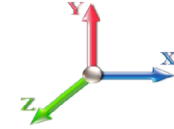
Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0Di + 1.0Wi 50 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		170.84	2367.12	0.00	0.00
10.00		168.55	2370.46	0.00	0.00
15.00		166.01	2356.20	0.00	0.00
20.00		173.33	2334.21	0.00	0.00
25.00		178.65	2307.76	0.00	0.00
30.00		182.46	2278.35	0.00	0.00
35.00		185.15	2246.83	0.00	0.00
40.00		186.99	2213.70	0.00	0.00
44.00		150.07	1746.69	0.00	0.00
45.00		37.96	706.57	0.00	0.00
50.00		191.95	3491.73	0.00	0.00
55.00		192.11	2143.94	0.00	0.00
60.00		191.85	2107.03	0.00	0.00
65.00		191.21	2069.49	0.00	0.00
70.00		190.26	2031.39	0.00	0.00
75.00		189.02	1992.80	0.00	0.00
80.00		187.51	1953.78	0.00	0.00
83.75		139.27	1440.47	0.00	0.00
85.00		46.69	682.19	0.00	0.00
89.00		149.13	2155.30	0.00	0.00
90.00		36.94	314.95	0.00	0.00
95.00		184.32	1551.29	0.00	0.00
100.00		182.02	1519.25	0.00	0.00
105.00		179.54	1486.94	0.00	0.00
110.00		176.90	1454.37	0.00	0.00
115.00		174.12	1421.57	0.00	0.00
119.50		154.13	1251.74	0.00	0.00
120.00		17.14	193.13	0.00	0.00
123.75		127.94	1429.60	0.00	0.00
125.00		42.16	308.42	0.00	0.00
130.00		167.22	1210.67	0.00	0.00
135.00		163.94	1181.25	0.00	0.00
137.00	(16) attachments	960.18	7577.14	0.00	0.00
137.50	(3) attachments	23.05	116.25	0.00	0.00
140.00		79.68	526.95	0.00	0.00
145.00		157.05	1028.30	0.00	0.00
147.00	(41) attachments	1229.90	8038.80	0.00	0.00
150.00		91.50	549.02	0.00	0.00
155.00		149.76	888.29	0.00	0.00
157.00	(19) attachments	1782.31	12692.57	0.00	0.00
160.00		87.00	495.88	0.00	0.00
165.00		142.09	799.45	0.00	0.00
167.00	(1) attachments	557.50	2864.16	0.00	0.00
168.00	(1) attachments	44.99	206.36	0.00	0.00
Totals:		10,180.38	90,102.34	0.00	0.00

Calculated Forces

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II

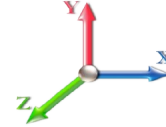


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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 25

Dead Load Factor 1.20
Wind Load 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	-90.10	-10.23	0.00	-1260.9	0.00	1260.91	5340.38	2670.19	12289.6	6153.95	0.00	0.000	0.000	0.222
5.00	-87.72	-10.14	0.00	-1209.7	0.00	1209.79	5276.02	2638.01	11917.5	5967.64	0.03	-0.057	0.000	0.219
10.00	-85.34	-10.06	0.00	-1159.0	0.00	1159.08	5210.42	2605.21	11548.2	5782.69	0.12	-0.115	0.000	0.217
15.00	-82.97	-9.97	0.00	-1108.8	0.00	1108.80	5143.57	2571.78	11181.7	5599.17	0.27	-0.173	0.000	0.214
20.00	-80.63	-9.87	0.00	-1058.9	0.00	1058.96	5075.47	2537.74	10818.2	5417.17	0.49	-0.233	0.000	0.211
25.00	-78.31	-9.76	0.00	-1009.6	0.00	1009.60	5006.13	2503.07	10457.9	5236.76	0.76	-0.293	0.000	0.208
30.00	-76.03	-9.65	0.00	-960.78	0.00	960.78	4935.55	2467.77	10101.0	5058.02	1.10	-0.353	0.000	0.205
35.00	-73.77	-9.53	0.00	-912.53	0.00	912.53	4863.72	2431.86	9747.59	4881.04	1.50	-0.415	0.000	0.202
40.00	-71.55	-9.40	0.00	-864.88	0.00	864.88	4790.64	2395.32	9397.80	4705.88	1.97	-0.476	0.000	0.199
44.00	-69.80	-9.27	0.00	-827.31	0.00	827.31	4731.29	2365.64	9120.70	4567.13	2.39	-0.527	0.000	0.196
45.00	-69.09	-9.27	0.00	-818.04	0.00	818.04	4716.32	2358.16	9051.82	4532.64	2.50	-0.540	0.000	0.195
50.00	-65.59	-9.12	0.00	-771.69	0.00	771.69	4386.97	2193.49	8392.46	4202.47	3.10	-0.603	0.000	0.199
55.00	-63.43	-8.97	0.00	-726.12	0.00	726.12	4315.09	2157.55	8071.80	4041.90	3.77	-0.666	0.000	0.194
60.00	-61.32	-8.81	0.00	-681.28	0.00	681.28	4242.11	2121.05	7755.22	3883.37	4.50	-0.726	0.000	0.190
65.00	-59.24	-8.66	0.00	-637.21	0.00	637.21	4147.44	2073.72	7406.11	3708.56	5.29	-0.786	0.000	0.186
70.00	-57.21	-8.50	0.00	-593.91	0.00	593.91	4049.83	2024.91	7059.92	3535.21	6.15	-0.847	0.000	0.182
75.00	-55.21	-8.34	0.00	-551.42	0.00	551.42	3952.22	1976.11	6722.01	3366.00	7.07	-0.907	0.000	0.178
80.00	-53.25	-8.17	0.00	-509.73	0.00	509.73	3854.61	1927.31	6392.39	3200.95	8.05	-0.967	0.000	0.173
83.75	-51.81	-8.03	0.00	-479.10	0.00	479.10	3781.40	1890.70	6150.62	3079.88	8.83	-1.013	0.000	0.169
85.00	-51.12	-8.00	0.00	-469.06	0.00	469.06	3757.00	1878.50	6071.06	3040.04	9.09	-1.028	0.000	0.168
89.00	-48.97	-7.84	0.00	-437.06	0.00	437.06	2696.95	1348.48	4363.97	2185.23	9.98	-1.076	0.000	0.218
90.00	-48.65	-7.83	0.00	-429.22	0.00	429.22	2687.67	1343.84	4326.14	2166.29	10.20	-1.088	0.000	0.216
95.00	-47.09	-7.68	0.00	-390.06	0.00	390.06	2640.52	1320.26	4138.17	2072.16	11.38	-1.165	0.000	0.206
100.00	-45.56	-7.53	0.00	-351.65	0.00	351.65	2592.12	1296.06	3952.30	1979.09	12.65	-1.241	0.000	0.195
105.00	-44.07	-7.37	0.00	-314.02	0.00	314.02	2542.48	1271.24	3768.69	1887.15	13.99	-1.315	0.000	0.184
110.00	-42.61	-7.21	0.00	-277.17	0.00	277.17	2491.60	1245.80	3587.51	1796.42	15.40	-1.386	0.000	0.171
115.00	-41.19	-7.05	0.00	-241.12	0.00	241.12	2439.47	1219.73	3408.91	1706.99	16.89	-1.455	0.000	0.158
119.50	-39.94	-6.88	0.00	-209.41	0.00	209.41	2391.49	1195.74	3250.50	1627.67	18.29	-1.513	0.000	0.145
120.00	-39.74	-6.88	0.00	-205.97	0.00	205.97	2386.09	1193.05	3233.04	1618.92	18.45	-1.519	0.000	0.144
123.75	-38.31	-6.73	0.00	-180.17	0.00	180.17	1658.06	829.03	2236.65	1119.99	19.66	-1.565	0.000	0.184
125.00	-38.00	-6.71	0.00	-171.76	0.00	171.76	1649.50	824.75	2207.60	1105.44	20.07	-1.580	0.000	0.178
130.00	-36.79	-6.55	0.00	-138.22	0.00	138.22	1614.57	807.28	2092.31	1047.71	21.76	-1.644	0.000	0.155
135.00	-35.61	-6.37	0.00	-105.49	0.00	105.49	1578.53	789.26	1978.61	990.78	23.52	-1.699	0.000	0.129
137.00	-28.06	-5.19	0.00	-92.75	0.00	92.75	1563.80	781.90	1933.60	968.24	24.23	-1.718	0.000	0.114
137.50	-27.95	-5.17	0.00	-90.16	0.00	90.16	1560.09	780.05	1922.40	962.63	24.41	-1.723	0.000	0.112
140.00	-27.42	-5.09	0.00	-77.23	0.00	77.23	1541.39	770.69	1866.63	934.70	25.32	-1.745	0.000	0.100
145.00	-26.39	-4.91	0.00	-51.79	0.00	51.79	1503.14	751.57	1756.51	879.56	27.17	-1.781	0.000	0.076
147.00	-18.40	-3.43	0.00	-41.97	0.00	41.97	1487.53	743.77	1713.02	857.78	27.92	-1.792	0.000	0.061
150.00	-17.85	-3.33	0.00	-31.67	0.00	31.67	1463.79	731.89	1648.40	825.42	29.05	-1.807	0.000	0.051
155.00	-16.97	-3.16	0.00	-15.01	0.00	15.01	1423.34	711.67	1542.43	772.36	30.95	-1.823	0.000	0.031
157.00	-4.34	-0.97	0.00	-8.70	0.00	8.70	1406.84	703.42	1500.67	751.45	31.71	-1.826	0.000	0.015
160.00	-3.84	-0.87	0.00	-5.79	0.00	5.79	1381.63	690.81	1438.59	720.36	32.86	-1.830	0.000	0.011
165.00	-3.05	-0.70	0.00	-1.45	0.00	1.45	1325.85	662.93	1324.24	663.10	34.78	-1.833	0.000	0.004
167.00	-0.20	-0.05	0.00	-0.05	0.00	0.05	1303.54	651.77	1279.82	640.86	35.55	-1.833	0.000	0.000
168.00	0.00	-0.04	0.00	0.00	0.00	0.00	1292.39	646.19	1257.90	629.89	35.93	-1.833	0.000	0.000

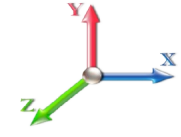
Seismic Segment Forces (Factored)

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0E						Iterations 23
Gust Response Factor	1.10			Sds	0.11	Ss 0.17
Dead Load Factor	1.20	Seismic Load Factor	1.00	Sd1	0.04	S1 0.06
Wind Load Factor	0.00	Structure Frequency (f1)	0.31	SA	0.01	Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
5.00		1310.9	0.00	0.03	0.02	17.41	
10.00		1286.7	0.01	0.05	0.03	23.82	
15.00		1262.5	0.02	0.06	0.04	26.61	
20.00		1238.3	0.03	0.07	0.04	27.76	
25.00		1214.0	0.04	0.07	0.04	28.14	
30.00		1189.8	0.06	0.07	0.04	28.23	
35.00		1165.6	0.08	0.07	0.04	28.26	
40.00		1141.4	0.11	0.07	0.04	28.32	
44.00	Bot - Section 2	895.72	0.13	0.07	0.03	22.66	
45.00		447.15	0.14	0.07	0.03	11.37	
50.00	Top - Section 1	2206.7	0.17	0.07	0.03	57.32	
55.00		1089.4	0.20	0.06	0.02	28.61	
60.00		1065.2	0.24	0.06	0.02	27.65	
65.00		1041.0	0.28	0.05	0.01	25.61	
70.00		1016.8	0.33	0.04	0.01	21.91	
75.00		992.61	0.38	0.03	0.01	16.00	
80.00		968.39	0.43	0.01	0.01	7.75	
83.75	Bot - Section 3	710.40	0.47	-0.01	0.01	0.34	
85.00		403.92	0.48	-0.01	0.01	-0.88	
89.00	Top - Section 2	1275.1	0.53	-0.03	0.01	-13.51	
90.00		132.57	0.54	-0.03	0.01	-1.67	
95.00		652.47	0.60	-0.05	0.02	-13.88	
100.00		635.18	0.67	-0.08	0.02	-17.20	
105.00		617.88	0.74	-0.10	0.04	-18.45	
110.00		600.58	0.81	-0.11	0.06	-17.92	
115.00		583.29	0.89	-0.12	0.08	-15.91	
119.50	Bot - Section 4	510.17	0.96	-0.12	0.11	-11.71	
120.00		101.24	0.96	-0.12	0.11	-2.26	
123.75	Top - Section 3	749.35	1.03	-0.10	0.14	-12.89	
125.00		110.34	1.05	-0.10	0.16	-1.68	
130.00		432.71	1.13	-0.05	0.21	-2.51	
135.00		418.87	1.22	0.02	0.27	2.45	
137.00	Appurtenance(s)	2705.8	1.26	0.07	0.30	30.16	
137.50	Appurtenance(s)	45.97	1.27	0.08	0.31	0.58	
140.00		200.79	1.31	0.14	0.35	3.97	
145.00		391.20	1.41	0.30	0.44	14.10	
147.00	Appurtenance(s)	2775.2	1.45	0.38	0.48	119.95	
150.00		224.76	1.51	0.52	0.55	12.30	
155.00		363.52	1.61	0.81	0.68	27.57	
157.00	Appurtenance(s)	3776.5	1.65	0.94	0.74	320.93	
160.00		208.15	1.71	1.18	0.84	20.71	
165.00		335.85	1.82	1.65	1.02	42.22	
167.00	Appurtenance(s)	1330.4	1.87	1.86	1.10	182.19	
168.00	Appurtenance(s)	70.90	1.89	1.98	1.14	10.12	
Totals:		39,896.0				1,084.6	Total Wind: 35,134.6

Seismic Segment Forces (Factored)

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

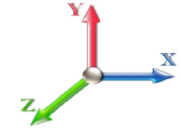
Calculated Forces

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0E		Iterations 23
Gust Response Factor 1.10	Sds 0.11	Ss 0.17
Dead Load Factor 1.20	Seismic Load Factor 1.00	S1 0.06
Wind Load Factor 0.00	Structure Frequency (f1) 0.31	SA 0.01
	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	-53.68	-1.22	0.00	-148.29	0.00	148.29	5340.38	2670.19	12289.6	6153.95	0.00	0.00	0.00	0.034
5.00	-51.91	-1.21	0.00	-142.20	0.00	142.20	5276.02	2638.01	11917.5	5967.64	0.00	-0.01	0.034	
10.00	-50.16	-1.19	0.00	-136.17	0.00	136.17	5210.42	2605.21	11548.2	5782.69	0.01	-0.01	0.033	
15.00	-48.44	-1.17	0.00	-130.23	0.00	130.23	5143.57	2571.78	11181.7	5599.17	0.03	-0.02	0.033	
20.00	-46.76	-1.14	0.00	-124.40	0.00	124.40	5075.47	2537.74	10818.2	5417.17	0.06	-0.03	0.032	
25.00	-45.10	-1.12	0.00	-118.68	0.00	118.68	5006.13	2503.07	10457.9	5236.76	0.09	-0.03	0.032	
30.00	-43.47	-1.10	0.00	-113.07	0.00	113.07	4935.55	2467.77	10101.0	5058.02	0.13	-0.04	0.031	
35.00	-41.87	-1.07	0.00	-107.59	0.00	107.59	4863.72	2431.86	9747.59	4881.04	0.18	-0.05	0.031	
40.00	-40.29	-1.05	0.00	-102.23	0.00	102.23	4790.64	2395.32	9397.80	4705.88	0.23	-0.06	0.030	
44.00	-39.06	-1.03	0.00	-98.04	0.00	98.04	4731.29	2365.64	9120.70	4567.13	0.28	-0.06	0.030	
45.00	-38.48	-1.02	0.00	-97.01	0.00	97.01	4716.32	2358.16	9051.82	4532.64	0.29	-0.06	0.030	
50.00	-35.63	-0.96	0.00	-91.93	0.00	91.93	4386.97	2193.49	8392.46	4202.47	0.36	-0.07	0.030	
55.00	-34.12	-0.93	0.00	-87.12	0.00	87.12	4315.09	2157.55	8071.80	4041.90	0.44	-0.08	0.029	
60.00	-32.64	-0.91	0.00	-82.45	0.00	82.45	4242.11	2121.05	7755.22	3883.37	0.53	-0.09	0.029	
65.00	-31.19	-0.89	0.00	-77.90	0.00	77.90	4147.44	2073.72	7406.11	3708.56	0.62	-0.09	0.029	
70.00	-29.77	-0.87	0.00	-73.48	0.00	73.48	4049.83	2024.91	7059.92	3535.21	0.72	-0.10	0.028	
75.00	-28.37	-0.85	0.00	-69.15	0.00	69.15	3952.22	1976.11	6722.01	3366.00	0.83	-0.11	0.028	
80.00	-27.01	-0.84	0.00	-64.90	0.00	64.90	3854.61	1927.31	6392.39	3200.95	0.95	-0.12	0.027	
83.75	-26.01	-0.84	0.00	-61.74	0.00	61.74	3781.40	1890.70	6150.62	3079.88	1.04	-0.12	0.027	
85.00	-25.47	-0.84	0.00	-60.69	0.00	60.69	3781.40	1878.50	6071.06	3040.04	1.08	-0.12	0.027	
89.00	-23.78	-0.84	0.00	-57.31	0.00	57.31	2696.95	1348.48	4363.97	2185.23	1.18	-0.13	0.035	
90.00	-23.58	-0.84	0.00	-56.47	0.00	56.47	2687.67	1343.84	4326.14	2166.29	1.21	-0.13	0.035	
95.00	-22.59	-0.84	0.00	-52.26	0.00	52.26	2640.52	1320.26	4138.17	2072.16	1.35	-0.14	0.034	
100.00	-21.63	-0.85	0.00	-48.04	0.00	48.04	2592.12	1296.06	3952.30	1979.09	1.51	-0.15	0.033	
105.00	-20.69	-0.85	0.00	-43.81	0.00	43.81	2542.48	1271.24	3768.69	1887.15	1.67	-0.16	0.031	
110.00	-19.76	-0.85	0.00	-39.57	0.00	39.57	2491.60	1245.80	3587.51	1796.42	1.85	-0.17	0.030	
115.00	-18.86	-0.85	0.00	-35.33	0.00	35.33	2439.47	1219.73	3408.91	1706.99	2.03	-0.18	0.028	
119.50	-18.07	-0.85	0.00	-31.51	0.00	31.51	2391.49	1195.74	3250.50	1627.67	2.21	-0.19	0.027	
120.00	-17.93	-0.85	0.00	-31.09	0.00	31.09	2386.09	1193.05	3233.04	1618.92	2.23	-0.19	0.027	
123.75	-16.88	-0.85	0.00	-27.91	0.00	27.91	1658.06	829.03	2236.65	1119.99	2.38	-0.20	0.035	
125.00	-16.69	-0.85	0.00	-26.85	0.00	26.85	1649.50	824.75	2207.60	1105.44	2.43	-0.20	0.034	
130.00	-15.97	-0.85	0.00	-22.62	0.00	22.62	1614.57	807.28	2092.31	1047.71	2.65	-0.21	0.031	
135.00	-15.27	-0.84	0.00	-18.38	0.00	18.38	1578.53	789.26	1978.61	990.78	2.88	-0.22	0.028	
137.00	-11.94	-0.80	0.00	-16.70	0.00	16.70	1563.80	781.90	1933.60	968.24	2.97	-0.22	0.025	
137.50	-11.87	-0.80	0.00	-16.30	0.00	16.30	1560.09	780.05	1922.40	962.63	2.99	-0.22	0.025	
140.00	-11.58	-0.80	0.00	-14.29	0.00	14.29	1541.39	770.69	1866.63	934.70	3.11	-0.23	0.023	
145.00	-11.00	-0.78	0.00	-10.31	0.00	10.31	1503.14	751.57	1756.51	879.56	3.35	-0.24	0.019	
147.00	-7.63	-0.65	0.00	-8.75	0.00	8.75	1487.53	743.77	1713.02	857.78	3.45	-0.24	0.015	
150.00	-7.34	-0.63	0.00	-6.81	0.00	6.81	1463.79	731.89	1648.40	825.42	3.60	-0.24	0.013	
155.00	-6.88	-0.61	0.00	-3.63	0.00	3.63	1423.34	711.67	1542.43	772.36	3.86	-0.24	0.010	
157.00	-2.33	-0.27	0.00	-2.42	0.00	2.42	1406.84	703.42	1500.67	751.45	3.96	-0.25	0.005	
160.00	-2.08	-0.24	0.00	-1.63	0.00	1.63	1381.63	690.81	1438.59	720.36	4.12	-0.25	0.004	
165.00	-1.68	-0.20	0.00	-0.41	0.00	0.41	1325.85	662.93	1324.24	663.10	4.37	-0.25	0.002	
167.00	-0.09	-0.01	0.00	-0.01	0.00	0.01	1303.54	651.77	1279.82	640.86	4.48	-0.25	0.000	
168.00	0.00	-0.01	0.00	0.00	0.00	0.00	1292.39	646.19	1257.90	629.89	4.53	-0.25	0.000	

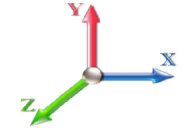
Seismic Segment Forces (Factored)

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0E		Iterations 22
Gust Response Factor 1.10	Sds 0.11	Ss 0.17
Dead Load Factor 0.90	Seismic Load Factor 1.00	S1 0.06
Wind Load Factor 0.00	Structure Frequency (f1) 0.31	SA 0.01
		Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
5.00		1310.9	0.00	0.03	0.02	17.41	
10.00		1286.7	0.01	0.05	0.03	23.82	
15.00		1262.5	0.02	0.06	0.04	26.61	
20.00		1238.3	0.03	0.07	0.04	27.76	
25.00		1214.0	0.04	0.07	0.04	28.14	
30.00		1189.8	0.06	0.07	0.04	28.23	
35.00		1165.6	0.08	0.07	0.04	28.26	
40.00		1141.4	0.11	0.07	0.04	28.32	
44.00	Bot - Section 2	895.72	0.13	0.07	0.03	22.66	
45.00		447.15	0.14	0.07	0.03	11.37	
50.00	Top - Section 1	2206.7	0.17	0.07	0.03	57.32	
55.00		1089.4	0.20	0.06	0.02	28.61	
60.00		1065.2	0.24	0.06	0.02	27.65	
65.00		1041.0	0.28	0.05	0.01	25.61	
70.00		1016.8	0.33	0.04	0.01	21.91	
75.00		992.61	0.38	0.03	0.01	16.00	
80.00		968.39	0.43	0.01	0.01	7.75	
83.75	Bot - Section 3	710.40	0.47	-0.01	0.01	0.34	
85.00		403.92	0.48	-0.01	0.01	-0.88	
89.00	Top - Section 2	1275.1	0.53	-0.03	0.01	-13.51	
90.00		132.57	0.54	-0.03	0.01	-1.67	
95.00		652.47	0.60	-0.05	0.02	-13.88	
100.00		635.18	0.67	-0.08	0.02	-17.20	
105.00		617.88	0.74	-0.10	0.04	-18.45	
110.00		600.58	0.81	-0.11	0.06	-17.92	
115.00		583.29	0.89	-0.12	0.08	-15.91	
119.50	Bot - Section 4	510.17	0.96	-0.12	0.11	-11.71	
120.00		101.24	0.96	-0.12	0.11	-2.26	
123.75	Top - Section 3	749.35	1.03	-0.10	0.14	-12.89	
125.00		110.34	1.05	-0.10	0.16	-1.68	
130.00		432.71	1.13	-0.05	0.21	-2.51	
135.00		418.87	1.22	0.02	0.27	2.45	
137.00	Appurtenance(s)	2705.8	1.26	0.07	0.30	30.16	
137.50	Appurtenance(s)	45.97	1.27	0.08	0.31	0.58	
140.00		200.79	1.31	0.14	0.35	3.97	
145.00		391.20	1.41	0.30	0.44	14.10	
147.00	Appurtenance(s)	2775.2	1.45	0.38	0.48	119.95	
150.00		224.76	1.51	0.52	0.55	12.30	
155.00		363.52	1.61	0.81	0.68	27.57	
157.00	Appurtenance(s)	3776.5	1.65	0.94	0.74	320.93	
160.00		208.15	1.71	1.18	0.84	20.71	
165.00		335.85	1.82	1.65	1.02	42.22	
167.00	Appurtenance(s)	1330.4	1.87	1.86	1.10	182.19	
168.00	Appurtenance(s)	70.90	1.89	1.98	1.14	10.12	
Totals:		39,896.0				1,084.6	Total Wind: 35,134.6

Seismic Segment Forces (Factored)

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

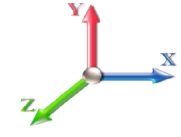
Calculated Forces

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0E		Iterations 22
Gust Response Factor 1.10	Sds 0.11	Ss 0.17
Dead Load Factor 0.90	Seismic Load Factor 1.00	S1 0.06
Wind Load Factor 0.00	Structure Frequency (f1) 0.31	SA 0.01
	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	-40.26	-1.22	0.00	-146.29	0.00	146.29	5340.38	2670.19	12289.6	6153.95	0.00	0.00	0.00	0.031
5.00	-38.93	-1.20	0.00	-140.22	0.00	140.22	5276.02	2638.01	11917.5	5967.64	0.00	-0.01	-0.01	0.031
10.00	-37.62	-1.18	0.00	-134.20	0.00	134.20	5210.42	2605.21	11548.2	5782.69	0.01	-0.01	-0.01	0.030
15.00	-36.33	-1.16	0.00	-128.29	0.00	128.29	5143.57	2571.78	11181.7	5599.17	0.03	-0.02	-0.02	0.030
20.00	-35.07	-1.14	0.00	-122.49	0.00	122.49	5075.47	2537.74	10818.2	5417.17	0.06	-0.03	-0.03	0.030
25.00	-33.82	-1.11	0.00	-116.80	0.00	116.80	5006.13	2503.07	10457.9	5236.76	0.09	-0.03	-0.03	0.029
30.00	-32.60	-1.09	0.00	-111.24	0.00	111.24	4935.55	2467.77	10101.0	5058.02	0.13	-0.04	-0.04	0.029
35.00	-31.40	-1.06	0.00	-105.81	0.00	105.81	4863.72	2431.86	9747.59	4881.04	0.17	-0.05	-0.05	0.028
40.00	-30.22	-1.04	0.00	-100.50	0.00	100.50	4790.64	2395.32	9397.80	4705.88	0.23	-0.06	-0.06	0.028
44.00	-29.29	-1.01	0.00	-96.36	0.00	96.36	4731.29	2365.64	9120.70	4567.13	0.28	-0.06	-0.06	0.027
45.00	-28.86	-1.00	0.00	-95.35	0.00	95.35	4716.32	2358.16	9051.82	4532.64	0.29	-0.06	-0.06	0.027
50.00	-26.72	-0.95	0.00	-90.33	0.00	90.33	4386.97	2193.49	8392.46	4202.47	0.36	-0.07	-0.07	0.028
55.00	-25.59	-0.92	0.00	-85.59	0.00	85.59	4315.09	2157.55	8071.80	4041.90	0.44	-0.08	-0.08	0.027
60.00	-24.48	-0.89	0.00	-80.98	0.00	80.98	4242.11	2121.05	7755.22	3883.37	0.52	-0.08	-0.08	0.027
65.00	-23.39	-0.87	0.00	-76.51	0.00	76.51	4147.44	2073.72	7406.11	3708.56	0.61	-0.09	-0.09	0.026
70.00	-22.33	-0.85	0.00	-72.16	0.00	72.16	4049.83	2024.91	7059.92	3535.21	0.71	-0.10	-0.10	0.026
75.00	-21.28	-0.83	0.00	-67.91	0.00	67.91	3952.22	1976.11	6722.01	3366.00	0.82	-0.11	-0.11	0.026
80.00	-20.26	-0.83	0.00	-63.73	0.00	63.73	3854.61	1927.31	6392.39	3200.95	0.94	-0.11	-0.11	0.025
83.75	-19.50	-0.83	0.00	-60.63	0.00	60.63	3781.40	1890.70	6150.62	3079.88	1.03	-0.12	-0.12	0.025
85.00	-19.10	-0.83	0.00	-59.60	0.00	59.60	3757.00	1878.50	6071.06	3040.04	1.06	-0.12	-0.12	0.025
89.00	-17.83	-0.83	0.00	-56.29	0.00	56.29	2696.95	1348.48	4363.97	2185.23	1.16	-0.13	-0.13	0.032
90.00	-17.68	-0.83	0.00	-55.46	0.00	55.46	2687.67	1343.84	4326.14	2166.29	1.19	-0.13	-0.13	0.032
95.00	-16.95	-0.83	0.00	-51.33	0.00	51.33	2640.52	1320.26	4138.17	2072.16	1.33	-0.14	-0.14	0.031
100.00	-16.22	-0.83	0.00	-47.18	0.00	47.18	2592.12	1296.06	3952.30	1979.09	1.48	-0.15	-0.15	0.030
105.00	-15.51	-0.83	0.00	-43.04	0.00	43.04	2542.48	1271.24	3768.69	1887.15	1.64	-0.16	-0.16	0.029
110.00	-14.82	-0.83	0.00	-38.88	0.00	38.88	2491.60	1245.80	3587.51	1796.42	1.82	-0.17	-0.17	0.028
115.00	-14.15	-0.83	0.00	-34.73	0.00	34.73	2439.47	1219.73	3408.91	1706.99	2.00	-0.18	-0.18	0.026
119.50	-13.55	-0.83	0.00	-30.99	0.00	30.99	2391.49	1195.74	3250.50	1627.67	2.17	-0.19	-0.19	0.025
120.00	-13.44	-0.83	0.00	-30.57	0.00	30.57	2386.09	1193.05	3233.04	1618.92	2.19	-0.19	-0.19	0.025
123.75	-12.66	-0.83	0.00	-27.46	0.00	27.46	1658.06	829.03	2236.65	1119.99	2.34	-0.20	-0.20	0.032
125.00	-12.52	-0.83	0.00	-26.42	0.00	26.42	1649.50	824.75	2207.60	1105.44	2.39	-0.20	-0.20	0.031
130.00	-11.98	-0.83	0.00	-22.27	0.00	22.27	1614.57	807.28	2092.31	1047.71	2.61	-0.21	-0.21	0.029
135.00	-11.45	-0.83	0.00	-18.12	0.00	18.12	1578.53	789.26	1978.61	990.78	2.83	-0.22	-0.22	0.026
137.00	-8.95	-0.79	0.00	-16.46	0.00	16.46	1563.80	781.90	1933.60	968.24	2.92	-0.22	-0.22	0.023
137.50	-8.90	-0.79	0.00	-16.07	0.00	16.07	1560.09	780.05	1922.40	962.63	2.94	-0.22	-0.22	0.022
140.00	-8.68	-0.78	0.00	-14.10	0.00	14.10	1541.39	770.69	1866.63	934.70	3.06	-0.22	-0.22	0.021
145.00	-8.25	-0.77	0.00	-10.18	0.00	10.18	1503.14	751.57	1756.51	879.56	3.30	-0.23	-0.23	0.017
147.00	-5.72	-0.64	0.00	-8.64	0.00	8.64	1487.53	743.77	1713.02	857.78	3.40	-0.23	-0.23	0.014
150.00	-5.50	-0.63	0.00	-6.72	0.00	6.72	1463.79	731.89	1648.40	825.42	3.54	-0.24	-0.24	0.012
155.00	-5.16	-0.60	0.00	-3.59	0.00	3.59	1423.34	711.67	1542.43	772.36	3.80	-0.24	-0.24	0.008
157.00	-1.75	-0.26	0.00	-2.40	0.00	2.40	1406.84	703.42	1500.67	751.45	3.90	-0.24	-0.24	0.004
160.00	-1.56	-0.24	0.00	-1.61	0.00	1.61	1381.63	690.81	1438.59	720.36	4.05	-0.24	-0.24	0.003
165.00	-1.26	-0.20	0.00	-0.41	0.00	0.41	1325.85	662.93	1324.24	663.10	4.30	-0.24	-0.24	0.002
167.00	-0.06	-0.01	0.00	-0.01	0.00	0.01	1303.54	651.77	1279.82	640.86	4.40	-0.24	-0.24	0.000
168.00	0.00	-0.01	0.00	0.00	0.00	0.00	1292.39	646.19	1257.90	629.89	4.46	-0.24	-0.24	0.000

Wind Loading - Shaft

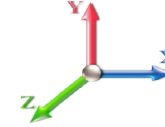
Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 24

Elev (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	7.442	8.19	264.19	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	7.442	8.19	259.39	0.650	0.000	5.00	23.663	15.38	125.9	0.0	1311.0
10.00		1.00	0.85	7.442	8.19	254.59	0.650	0.000	5.00	23.229	15.10	123.6	0.0	1286.7
15.00		1.00	0.85	7.442	8.19	249.80	0.650	0.000	5.00	22.795	14.82	121.3	0.0	1262.5
20.00		1.00	0.90	7.896	8.69	252.36	0.650	0.000	5.00	22.362	14.54	126.2	0.0	1238.3
25.00		1.00	0.95	8.276	9.10	253.30	0.650	0.000	5.00	21.928	14.25	129.8	0.0	1214.1
30.00		1.00	0.98	8.600	9.46	253.05	0.650	0.000	5.00	21.494	13.97	132.2	0.0	1189.9
35.00		1.00	1.01	8.883	9.77	251.95	0.650	0.000	5.00	21.061	13.69	133.8	0.0	1165.7
40.00		1.00	1.04	9.137	10.05	250.20	0.650	0.000	5.00	20.627	13.41	134.8	0.0	1141.4
44.00	Bot - Section 2	1.00	1.06	9.322	10.25	248.43	0.650	0.000	4.00	16.189	10.52	107.9	0.0	895.7
45.00		1.00	1.07	9.366	10.30	247.94	0.650	0.000	1.00	4.078	2.65	27.3	0.0	447.2
50.00	Top - Section 1	1.00	1.09	9.576	10.53	245.26	0.650	0.000	5.00	20.130	13.08	137.8	0.0	2206.7
55.00		1.00	1.12	9.770	10.75	246.93	0.650	0.000	5.00	19.696	12.80	137.6	0.0	1089.5
60.00		1.00	1.14	9.951	10.95	243.65	0.650	0.000	5.00	19.262	12.52	137.1	0.0	1065.3
65.00		1.00	1.16	10.120	11.13	240.12	0.650	0.000	5.00	18.829	12.24	136.2	0.0	1041.0
70.00		1.00	1.17	10.279	11.31	236.36	0.650	0.000	5.00	18.395	11.96	135.2	0.0	1016.8
75.00		1.00	1.19	10.430	11.47	232.41	0.650	0.000	5.00	17.961	11.67	133.9	0.0	992.6
80.00		1.00	1.21	10.572	11.63	228.27	0.650	0.000	5.00	17.528	11.39	132.5	0.0	968.4
83.75	Bot - Section 3	1.00	1.22	10.675	11.74	225.07	0.650	0.000	3.75	12.861	8.36	98.2	0.0	710.4
85.00		1.00	1.22	10.708	11.78	223.98	0.650	0.000	1.25	4.299	2.79	32.9	0.0	403.9
89.00	Top - Section 2	1.00	1.23	10.812	11.89	220.44	0.650	0.000	4.00	13.575	8.82	104.9	0.0	1275.1
90.00		1.00	1.24	10.838	11.92	223.07	0.650	0.000	1.00	3.350	2.18	26.0	0.0	132.6
95.00		1.00	1.25	10.962	12.06	218.52	0.650	0.000	5.00	16.491	10.72	129.3	0.0	652.5
100.00		1.00	1.27	11.081	12.19	213.85	0.650	0.000	5.00	16.057	10.44	127.2	0.0	635.2
105.00		1.00	1.28	11.195	12.31	209.06	0.650	0.000	5.00	15.624	10.16	125.1	0.0	617.9
110.00		1.00	1.29	11.305	12.44	204.18	0.650	0.000	5.00	15.190	9.87	122.8	0.0	600.6
115.00		1.00	1.30	11.412	12.55	199.19	0.650	0.000	5.00	14.756	9.59	120.4	0.0	583.3
119.50	Bot - Section 4	1.00	1.31	11.504	12.65	194.63	0.650	0.000	4.50	12.910	8.39	106.2	0.0	510.2
120.00		1.00	1.32	11.514	12.67	194.12	0.650	0.000	0.50	1.434	0.93	11.8	0.0	101.2
123.75	Top - Section 3	1.00	1.32	11.589	12.75	190.26	0.650	0.000	3.75	10.616	6.90	88.0	0.0	749.3
125.00		1.00	1.33	11.614	12.78	191.89	0.650	0.000	1.25	3.485	2.26	28.9	0.0	110.3
130.00		1.00	1.34	11.710	12.88	186.66	0.650	0.000	5.00	13.667	8.88	114.4	0.0	432.7
135.00		1.00	1.35	11.803	12.98	181.36	0.650	0.000	5.00	13.233	8.60	111.7	0.0	418.9
137.00	Appurtenance(s)	1.00	1.35	11.840	13.02	179.22	0.650	0.000	2.00	5.172	3.36	43.8	0.0	163.7
137.50	Appurtenance(s)	1.00	1.35	11.849	13.03	178.69	0.650	0.000	0.50	1.282	0.83	10.9	0.0	40.6
140.00		1.00	1.36	11.894	13.08	175.99	0.650	0.000	2.50	6.346	4.12	54.0	0.0	200.8
145.00		1.00	1.37	11.982	13.18	170.56	0.650	0.000	5.00	12.366	8.04	105.9	0.0	391.2
147.00	Appurtenance(s)	1.00	1.37	12.017	13.22	168.36	0.650	0.000	2.00	4.825	3.14	41.5	0.0	152.6
150.00		1.00	1.38	12.068	13.27	165.06	0.650	0.000	3.00	7.107	4.62	61.3	0.0	224.8
155.00		1.00	1.39	12.152	13.37	159.49	0.650	0.000	5.00	11.499	7.47	99.9	0.0	363.5
157.00	Appurtenance(s)	1.00	1.39	12.185	13.40	157.25	0.650	0.000	2.00	4.478	2.91	39.0	0.0	141.5
160.00		1.00	1.40	12.233	13.46	153.88	0.650	0.000	3.00	6.587	4.28	57.6	0.0	208.2
165.00		1.00	1.41	12.313	13.54	148.21	0.650	0.000	5.00	10.631	6.91	93.6	0.0	335.8
167.00	Appurtenance(s)	1.00	1.41	12.344	13.58	145.92	0.650	0.000	2.00	4.131	2.69	36.5	0.0	130.5
168.00	Appurtenance(s)	1.00	1.41	12.360	13.60	144.78	0.650	0.000	1.00	2.040	1.33	18.0	0.0	64.4
Totals:									168.00			4,122.7		29,884.3

Discrete Appurtenance Forces

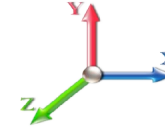
Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 24

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	6' Lightning rod	1	12.360	13.596	0.00	1.00	0.38	6.50	0.000	0.000	5.17	0.00	0.00
2	167.00	Low Profile Platform-flat	1	12.344	13.578	1.00	1.00	25.00	1200.00	0.000	0.000	339.46	0.00	0.00
3	157.00	KMW ETCR-654L12H6	3	12.185	13.403	0.53	0.75	25.10	297.00	0.000	0.000	336.37	0.00	0.00
4	157.00	Decibel DB908h90e-m	3	12.185	13.403	0.62	0.75	7.00	30.00	0.000	0.000	93.86	0.00	0.00
5	157.00	ALU 1900 Mhz	3	12.185	13.403	0.74	0.75	6.17	180.00	0.000	0.000	82.70	0.00	0.00
6	157.00	ALU 800 Mhz	6	12.185	13.403	0.69	0.75	10.31	318.00	0.000	0.000	138.17	0.00	0.00
7	157.00	ALU TD-RRH8x20-25	3	12.185	13.403	0.52	0.75	6.29	210.00	0.000	0.000	84.27	0.00	0.00
8	157.00	Platform w/ Hand Rail	1	12.185	13.403	1.00	1.00	51.70	2600.00	0.000	0.000	692.94	0.00	0.00
9	147.00	RRUS 12	3	12.017	13.219	0.54	0.80	4.34	180.00	0.000	0.000	57.39	0.00	0.00
10	147.00	LGP21401	6	12.017	13.219	0.51	0.80	3.96	84.60	0.000	0.000	52.38	0.00	0.00
11	147.00	AM-X-CD-17-65-00T-RET	3	12.017	13.219	0.61	0.80	9.12	92.40	0.000	0.000	120.55	0.00	0.00
12	147.00	7770.00	6	12.017	13.219	0.60	0.80	19.80	210.00	0.000	0.000	261.73	0.00	0.00
13	147.00	DC6-48-60-18-8F	1	12.017	13.219	0.80	0.80	1.18	31.80	0.000	0.000	15.55	0.00	0.00
14	147.00	RRUS 11	6	12.017	13.219	0.61	0.80	9.19	304.20	0.000	0.000	121.52	0.00	0.00
15	147.00	Low Profile	1	12.017	13.219	1.00	1.00	22.00	1500.00	0.000	0.000	290.81	0.00	0.00
16	147.00	Dual Combiner	3	12.017	13.219	0.47	0.80	0.72	14.40	0.000	0.000	9.55	0.00	0.00
17	147.00	1900W800	6	12.017	13.219	0.61	0.80	5.62	172.20	0.000	0.000	74.26	0.00	0.00
18	147.00	LGP21903	6	12.017	13.219	0.59	0.80	0.96	33.00	0.000	0.000	12.68	0.00	0.00
19	137.50	782 11056	3	11.849	13.034	0.50	0.75	0.20	5.40	0.000	0.000	2.55	0.00	0.00
20	137.00	4449	3	11.840	13.024	0.50	0.75	2.49	210.00	0.000	0.000	32.40	0.00	0.00
21	137.00	FE15501P77/75	3	11.840	13.024	0.50	0.75	0.78	52.50	0.000	0.000	10.21	0.00	0.00
22	137.00	KRY 112 489/2	3	11.840	13.024	0.50	0.75	1.03	39.60	0.000	0.000	13.35	0.00	0.00
23	137.00	APXVAARR24 43-U-NA2	3	11.840	13.024	0.52	0.75	31.88	384.00	0.000	0.000	415.18	0.00	0.00
24	137.00	APXV18-206516S-C-A20	3	11.840	13.024	0.55	0.75	5.93	56.10	0.000	0.000	77.22	0.00	0.00
25	137.00	Low Profile Platform w/	1	11.840	13.024	1.00	1.00	22.00	1800.00	0.000	0.000	286.53	0.00	0.00

Totals: 10,011.70

3,626.80

Total Applied Force Summary

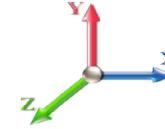
Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 24

Elev (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		125.91	1479.25	0.00	0.00
10.00		123.60	1455.04	0.00	0.00
15.00		121.29	1430.82	0.00	0.00
20.00		126.25	1406.61	0.00	0.00
25.00		129.75	1382.39	0.00	0.00
30.00		132.17	1358.18	0.00	0.00
35.00		133.77	1333.96	0.00	0.00
40.00		134.75	1309.74	0.00	0.00
44.00		107.90	1030.36	0.00	0.00
45.00		27.31	480.81	0.00	0.00
50.00		137.83	2375.00	0.00	0.00
55.00		137.59	1257.77	0.00	0.00
60.00		137.05	1233.55	0.00	0.00
65.00		136.24	1209.34	0.00	0.00
70.00		135.20	1185.12	0.00	0.00
75.00		133.94	1160.91	0.00	0.00
80.00		132.49	1136.69	0.00	0.00
83.75		98.16	836.63	0.00	0.00
85.00		32.91	445.99	0.00	0.00
89.00		104.94	1409.75	0.00	0.00
90.00		25.96	166.23	0.00	0.00
95.00		129.25	820.77	0.00	0.00
100.00		127.22	803.48	0.00	0.00
105.00		125.06	786.18	0.00	0.00
110.00		122.79	768.88	0.00	0.00
115.00		120.40	751.59	0.00	0.00
119.50		106.19	661.64	0.00	0.00
120.00		11.81	118.07	0.00	0.00
123.75		87.97	875.57	0.00	0.00
125.00		28.93	152.41	0.00	0.00
130.00		114.43	601.01	0.00	0.00
135.00		111.68	587.17	0.00	0.00
137.00	(16) attachments	878.67	2773.19	0.00	0.00
137.50	(3) attachments	13.42	55.00	0.00	0.00
140.00		53.97	245.94	0.00	0.00
145.00		105.94	481.50	0.00	0.00
147.00	(41) attachments	1057.87	2811.32	0.00	0.00
150.00		61.33	238.92	0.00	0.00
155.00		99.91	387.12	0.00	0.00
157.00	(19) attachments	1467.33	3785.97	0.00	0.00
160.00		57.61	208.15	0.00	0.00
165.00		93.59	335.85	0.00	0.00
167.00	(1) attachments	375.92	1330.46	0.00	0.00
168.00	(1) attachments	23.19	70.90	0.00	0.00
Totals:		7,749.51	44,735.25	0.00	0.00

Calculated Forces

Structure: CT01364-S-SBA

Code: EIA/TIA-222-G

7/2/2019

Site Name: Pomfret

Exposure: C

Height: 168.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: B - Competent Rock

Gh: 1.1

Topography: 1

Struct Class: II

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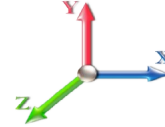


Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 24

Dead Load Factor 1.00

Wind Load 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	-44.73	-7.76	0.00	-919.28	0.00	919.28	5340.38	2670.19	12289.6	6153.95	0.00	0.000	0.000	0.158
5.00	-43.25	-7.67	0.00	-880.45	0.00	880.45	5276.02	2638.01	11917.5	5967.64	0.02	-0.042	0.000	0.156
10.00	-41.79	-7.58	0.00	-842.10	0.00	842.10	5210.42	2605.21	11548.2	5782.69	0.09	-0.084	0.000	0.154
15.00	-40.35	-7.48	0.00	-804.23	0.00	804.23	5143.57	2571.78	11181.7	5599.17	0.20	-0.126	0.000	0.151
20.00	-38.94	-7.38	0.00	-766.82	0.00	766.82	5075.47	2537.74	10818.2	5417.17	0.35	-0.169	0.000	0.149
25.00	-37.55	-7.28	0.00	-729.91	0.00	729.91	5006.13	2503.07	10457.9	5236.76	0.55	-0.212	0.000	0.147
30.00	-36.19	-7.17	0.00	-693.54	0.00	693.54	4935.55	2467.77	10101.0	5058.02	0.80	-0.256	0.000	0.144
35.00	-34.85	-7.05	0.00	-657.71	0.00	657.71	4863.72	2431.86	9747.59	4881.04	1.09	-0.300	0.000	0.142
40.00	-33.54	-6.93	0.00	-622.45	0.00	622.45	4790.64	2395.32	9397.80	4705.88	1.43	-0.345	0.000	0.139
44.00	-32.50	-6.83	0.00	-594.71	0.00	594.71	4731.29	2365.64	9120.70	4567.13	1.74	-0.381	0.000	0.137
45.00	-32.02	-6.82	0.00	-587.88	0.00	587.88	4716.32	2358.16	9051.82	4532.64	1.82	-0.390	0.000	0.136
50.00	-29.64	-6.69	0.00	-553.80	0.00	553.80	4386.97	2193.49	8392.46	4202.47	2.25	-0.436	0.000	0.139
55.00	-28.38	-6.56	0.00	-520.37	0.00	520.37	4315.09	2157.55	8071.80	4041.90	2.73	-0.481	0.000	0.135
60.00	-27.14	-6.43	0.00	-487.57	0.00	487.57	4242.11	2121.05	7755.22	3883.37	3.26	-0.524	0.000	0.132
65.00	-25.93	-6.30	0.00	-455.41	0.00	455.41	4147.44	2073.72	7406.11	3708.56	3.83	-0.567	0.000	0.129
70.00	-24.74	-6.18	0.00	-423.89	0.00	423.89	4049.83	2024.91	7059.92	3535.21	4.45	-0.611	0.000	0.126
75.00	-23.58	-6.05	0.00	-393.01	0.00	393.01	3952.22	1976.11	6722.01	3366.00	5.11	-0.654	0.000	0.123
80.00	-22.44	-5.92	0.00	-362.78	0.00	362.78	3854.61	1927.31	6392.39	3200.95	5.82	-0.696	0.000	0.119
83.75	-21.60	-5.81	0.00	-340.60	0.00	340.60	3781.40	1890.70	6150.62	3079.88	6.38	-0.729	0.000	0.116
85.00	-21.15	-5.78	0.00	-333.33	0.00	333.33	3757.00	1878.50	6071.06	3040.04	6.57	-0.740	0.000	0.115
89.00	-19.74	-5.67	0.00	-310.20	0.00	310.20	2696.95	1348.48	4363.97	2185.23	7.20	-0.774	0.000	0.149
90.00	-19.57	-5.65	0.00	-304.53	0.00	304.53	2687.67	1343.84	4326.14	2166.29	7.37	-0.782	0.000	0.148
95.00	-18.75	-5.53	0.00	-276.27	0.00	276.27	2640.52	1320.26	4138.17	2072.16	8.22	-0.837	0.000	0.140
100.00	-17.94	-5.41	0.00	-248.64	0.00	248.64	2592.12	1296.06	3952.30	1979.09	9.12	-0.891	0.000	0.133
105.00	-17.15	-5.28	0.00	-221.61	0.00	221.61	2542.48	1271.24	3768.69	1887.15	10.08	-0.943	0.000	0.124
110.00	-16.38	-5.16	0.00	-195.20	0.00	195.20	2491.60	1245.80	3587.51	1796.42	11.10	-0.993	0.000	0.115
115.00	-15.63	-5.04	0.00	-169.39	0.00	169.39	2439.47	1219.73	3408.91	1706.99	12.16	-1.041	0.000	0.106
119.50	-14.97	-4.93	0.00	-146.71	0.00	146.71	2391.49	1195.74	3250.50	1627.67	13.17	-1.082	0.000	0.096
120.00	-14.85	-4.92	0.00	-144.25	0.00	144.25	2386.09	1193.05	3233.04	1618.92	13.28	-1.087	0.000	0.095
123.75	-13.97	-4.82	0.00	-125.81	0.00	125.81	1658.06	829.03	2236.65	1119.99	14.15	-1.118	0.000	0.121
125.00	-13.82	-4.79	0.00	-119.79	0.00	119.79	1649.50	824.75	2207.60	1105.44	14.44	-1.129	0.000	0.117
130.00	-13.22	-4.68	0.00	-95.82	0.00	95.82	1614.57	807.28	2092.31	1047.71	15.65	-1.173	0.000	0.100
135.00	-12.63	-4.56	0.00	-72.44	0.00	72.44	1578.53	789.26	1978.61	990.78	16.90	-1.211	0.000	0.081
137.00	-9.88	-3.62	0.00	-63.33	0.00	63.33	1563.80	781.90	1933.60	968.24	17.41	-1.225	0.000	0.072
137.50	-9.82	-3.61	0.00	-61.52	0.00	61.52	1560.09	780.05	1922.40	962.63	17.54	-1.228	0.000	0.070
140.00	-9.57	-3.55	0.00	-52.49	0.00	52.49	1541.39	770.69	1866.63	934.70	18.18	-1.243	0.000	0.062
145.00	-9.09	-3.44	0.00	-34.73	0.00	34.73	1503.14	751.57	1756.51	879.56	19.50	-1.267	0.000	0.046
147.00	-6.31	-2.32	0.00	-27.85	0.00	27.85	1487.53	743.77	1713.02	857.78	20.03	-1.275	0.000	0.037
150.00	-6.07	-2.25	0.00	-20.89	0.00	20.89	1463.79	731.89	1648.40	825.42	20.84	-1.284	0.000	0.029
155.00	-5.68	-2.15	0.00	-9.62	0.00	9.62	1423.34	711.67	1542.43	772.36	22.19	-1.295	0.000	0.016
157.00	-1.93	-0.59	0.00	-5.33	0.00	5.33	1406.84	703.42	1500.67	751.45	22.73	-1.297	0.000	0.008
160.00	-1.73	-0.53	0.00	-3.55	0.00	3.55	1381.63	690.81	1438.59	720.36	23.54	-1.299	0.000	0.006
165.00	-1.39	-0.43	0.00	-0.89	0.00	0.89	1325.85	662.93	1324.24	663.10	24.91	-1.301	0.000	0.002
167.00	-0.07	-0.02	0.00	-0.02	0.00	0.02	1303.54	651.77	1279.82	640.86	25.45	-1.301	0.000	0.000
168.00	0.00	-0.02	0.00	0.00	0.00	0.00	1292.39	646.19	1257.90	629.89	25.72	-1.301	0.000	0.000

Final Analysis Summary

Structure: CT01364-S-SBA	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 30



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 + 1.6W 101 mph Wind	35.2	0.00	53.62	0.00	0.00	4195.11
0.9D + 1.6W 101 mph Wind	35.2	0.00	40.20	0.00	0.00	4145.59
1.2D + 1.0Di + 1.0Wi 50 mph Wind	10.2	0.00	90.10	0.00	0.00	1260.91
1.2D + 1.0E	1.2	0.00	53.68	0.00	0.00	148.29
0.9D + 1.0E	1.2	0.00	40.26	0.00	0.00	146.29
1.0D + 1.0W 60 mph Wind	7.8	0.00	44.73	0.00	0.00	919.28

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 + 1.6W 101 mph Wind	-53.62	-35.23	0.00	-4195.1	0.00	-4195.1	5340.38	2670.1	12289.6	6153.95	0.00	0.692
0.9D + 1.6W 101 mph Wind	-40.20	-35.20	0.00	-4145.5	0.00	-4145.5	5340.38	2670.1	12289.6	6153.95	0.00	0.681
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-90.10	-10.23	0.00	-1260.9	0.00	-1260.9	5340.38	2670.1	12289.6	6153.95	0.00	0.222
1.2D + 1.0E	-16.88	-0.85	0.00	-27.91	0.00	-27.91	1658.06	829.03	2236.65	1119.99	123.75	0.035
0.9D + 1.0E	-17.83	-0.83	0.00	-56.29	0.00	-56.29	2696.95	1348.4	4363.97	2185.23	89.00	0.032
1.0D + 1.0W 60 mph Wind	-44.73	-7.76	0.00	-919.28	0.00	-919.28	5340.38	2670.1	12289.6	6153.95	0.00	0.158

Base Plate Summary

Structure: CT01364-S-SB	Code: EIA/TIA-222-G	7/2/2019
Site Name: Pomfret	Exposure: C	
Height: 168.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 31



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	Clip Length (in): 11.00	Yield (ksi): 75.00
Moment (kip-ft): 4195.11	Effective Len (in): 9.17	Ultimate (ksi): 100.00
Axial (kip): 90.10	Moment (kip-in): 611.68	Arrangement: Clustered
Shear (kip): 35.23	Allow Stress (ksi): 67.50	Cluster Dist (in): 6.00
	Applied Stress (ksi): 0.00	Start Angle (deg): 45.00
Moment Design %: 90.90	Stress Ratio: 0.56	Compression
		Force (kip): 161.82
		Allowable (kip): 260.00
		Ratio: 0.64
		Tension
		Force (kip): 152.81
		Allowable (kip): 260.00
		Ratio: 0.60



Monopole Mat Foundation Design

Date

7/2/2019

Customer Name:	T-Mobile	EIA/TIA Standard:	EIA-222-G
Site Name:		Structure Height (Ft.):	168
Site Number:	CT01364-S-SBA	Engineer Name:	J. Chen
Engr. Number:	78516	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations
Monopole
Analysis

Structure Type:

Analysis or Design?

Base Reactions (Factored):

Axial Load (Kips):	90.1	Shear Force (Kips):	35.2
Uplift Force (Kips):	0.0	Moment (Kips-ft):	4195.1

Allowable overstress %: 5.0%

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	9.0	Depth of Base BG (ft.):	8.6
Pier Height A. G. (ft.):	1.00	Thickness of Pad (ft):	2.00
Length of Pad (ft.):	23	Width of Pad (ft.):	23

Final Length of pad (ft)	23.0	Final width of pad (ft):	23.0
--------------------------	------	--------------------------	------

Material Properties and Rebar Info:

Concrete Strength (psi):	3000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	9	Tie / Stirrup Size #:	4	
Qty. of Vertical Rebars:	46	Tie Spacing (in):	12.0	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	8	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf

Rebar at the bottom of the concrete pad:

Qty. of Rebar in Pad (L):	20	Qty. of Rebar in Pad (W):	20
---------------------------	----	---------------------------	----

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	20	Qty. of Rebar in Pad (W):	20
---------------------------	----	---------------------------	----

Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

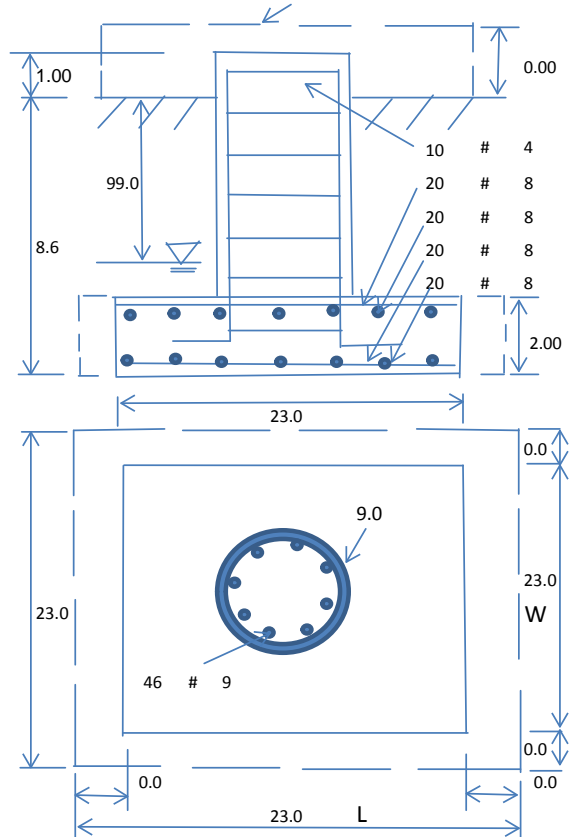
Soil Unit Weight (pcf):	125.0	Soil Buoyant Weight:	50.0	Pcf		
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	9000	Ultimate Skin Friction:	0	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	Yes		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	No	Reduction factor on the maximum soil bearing pressure:	1.00			

Foundation Analysis and Design:

Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75
Total Dry Soil Volume (cu. Ft.):	3071.53	Total Dry Soil Weight (Kips):	383.94
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	383.94	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	1541.49	Total Dry Concrete Weight (Kips):	231.22
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	231.22	Total Vertical Load on Base (Kips):	705.26

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	4117	<	Allowable Factored Soil Bearing (psf):	6750	0.61	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	7403.1	>	Design Factored Momont (kips-ft):	4533	0.61	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.63					OK!



Check the capacities of Reinforcing Concrete:

Strength reduction factor (Flexure and axial tension): 0.90 Strength reduction factor (Shear): 0.75
Strength reduction factor (Axial compression): 0.65 Wind Load Factor on Concrete Design: 1.00

Load/
Capacity
Ratio

(1) Concrete Pier:

Vertical Steel Rebar Area (sq. in./each):	1.00	Tie / Stirrup Area (sq. in./each):	0.20		
Calculated Moment Capacity (Mn,Kips-Ft):	9927.8	> Design Factored Moment (Mu, Kips-F	4462.6	0.45	OK!
Calculated Shear Capacity (Kips):	925.4	> Design Factored Shear (Kips):	35.2	0.04	OK!
Calculated Tension Capacity (Tn, Kips):	2484.0	> Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	12086.3	> Design Factored Axial Load (Pu Kips):	90.1	0.01	OK!
Moment & Axial Strength Combination:	0.45	OK! Check Tie Spacing (Design/Required):	1		OK!
Pier Reinforcement Ratio:	0.005	Reinforcement Ratio is satisfied per ACI			

(2).Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):	464.9	> One-Way Factored Shear (L-D. Kips):	277.7	0.60	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	464.9	> One-Way Factored Shear (W-D., Kips)	277.7	0.60	OK!
One-Way Design Shear Capacity (Corner-Corner, Kips):	406.4	> One-Way Factored Shear (C-C, Kips):	272.2	0.67	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0028	NG! Lower Steel Pad Reinf. Ratio (W-Direc	0.0028		
Lower Steel Pad Moment Capacity (L-Direction, Kips-ft):	1409.7	> Moment at Bottom (L-Dir. K-Ft):	1155.5	0.82	OK!
Lower Steel Pad Moment Capacity (W-Direction, Kips-ft):	1409.7	> Moment at Bottom (W-Dir. K-Ft):	1155.5	0.82	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	1967.7	> Moment at Bottom (C-C Dir. K-Ft):	1634.2	0.83	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0028	OK! Upper Steel Reinf. Ratio (W-Dir.):	0.0028		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	1409.7	> Moment at the top (L-Dir K-Ft):	465.8	0.33	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	1409.7	> Moment at the top (W-Dir K-Ft):	465.8	0.33	OK!
Upper Steel Pad Moment Capacity (Corner-Corner, K-ft):	1967.7	> Moment at the top (C-C Dir. K-Ft):	448.5	0.23	OK!

(3).Check Punching Shear Capacity due to Moment in the Pier:

Moment transferred by punching shear:	1678.0	k-ft.	Max. factored shear stress $v_{u,CD}$:	3.1	Psi
Max. factored shear stress $v_{u,AB}$:	15.7	Psi	Factored shear Strength ϕv_n :	164.3	Psi
Max. factored shear stress v_u :	15.7	Psi	Check Usage of Punching Shear Capacity:	0.10	OK!

EXHIBIT 9



Tower Engineering Solutions

Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Post-Mod Antenna Mount Analysis Report

Existing 168-Ft Monopole Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT01364-S-SBA

Customer Site Name: Pomfret

Carrier Name: T-Mobile (App#: 117228, V1)

Carrier Site ID / Name: CT11524A / Pomfret

Site Location: 62 Babbitt Hill Road

Pomfret, Connecticut

Windham County

Latitude: 41.870258

Longitude: -71.988241

Analysis Result:

Max Structural Usage: 53.1% [Pass]

Report Prepared By: Ishwor Dhakal



Introduction

The purpose of this report is to summarize the analysis results on the (1) Low profile platform at 137.00' elevation including the proposed modifications to support the proposed antenna configuration. Any existing modification listed under Sources of Information was assumed completed and was included in this analysis.

The proposed modification by **TES** listed under Sources of Information was considered completed and was included in this analysis.

Sources of Information

Mount Drawings	Mount Mapping by SkyTower LLC, dated 05/3/2019.
Antenna Loading	SBA, Application #: 117228, v1.
Existing Modification	N/A.
Proposed Modification	TES Project No. 81227

Analysis Criteria

Wind Speed Used in the Analysis: $V_{ULT} = 130$ mph (3-Sec. Gust) / Equivalent to
 $V_{ASD} = 101$ mph (3-Sec. Gust)

Wind Speed with Ice: 50 mph (3-Sec. Gust) with 1" radial ice concurrent

Operational Wind Speed: 60 mph +0" Radial ice

Standard/Codes: ANSI/TIA-222-G / 2015 IBC / 2018 CSBC

Exposure Category: C

Structure Class: II

Topographic Category: 1

Crest Height (Ft): 0

The site is a Risk Category II structure per table 1604.5 of the IBC. This site does not support emergency communication equipment for first responders such as fire departments, police, hospitals, ambulance services or any of the facilities listed for Risk Categories III and IV. The scope of work detailed in this structural analysis does not include items that are a part of emergency service as the 911 or essential facility service of an emergency response system.

Mount Information

(1) Low profile platform at 137.00' elevation.

Proposed Modifications

(1) Metrosite Support Rail w/ End Connection: MS-HRECP-35

(1) Metrosite Light Collar Mount: MS-1436

(1) Metrosite Kicker Kit: MS-KI22-5

(3) Metrosite Mount Pipes: PST2375-8

Final Antenna Configuration

- 3 RFS APXV18-206516S-C-A20
- 3 RFS APXVAARR24_43-U-NA20
- 3 Ericsson KRY 112 489/2
- 3 Allen Telecom FE15501P77/75
- 3 Ericsson Radio 4449 B71+B12
- 3 Kathrein Scala 782 11056

Any proposed antennas not currently installed should be mounted such that the centers of the antennas do not exceed 0.5 ft vertically from the center of the Low profile platform.

Analysis Results

Our calculations have determined that under design wind load the existing mounts will be structurally adequate to support the proposed antenna configuration after the proposed modification is successfully completed. The maximum structural usage is 53.1%, which occurs in the pipe mount. The proposed equipment must be installed as stipulated in the Final Antenna Configuration section of this report. The analysis results are void if the proposed equipment is not installed in accordance with this report.

Attachments

1. Mount Photos Before Modification
2. Antenna Placement Diagram
3. Mount Mapping Information
4. Analysis Calculations

Standard Conditions

1. The loading configuration as analyzed in this report is as provided from the customer. Any deviation from this design shall be communicated to TES to verify deviation will not adversely impact the analysis.
2. The analysis is based on the presumption that the antenna mount members and components along with any existing reinforcement items have been correctly and properly designed, manufactured, installed and maintained.
3. All the existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion. The mount analysis is not a condition assessment of the mount.
4. The mount analysis was performed in accordance with the loading provided, and if applicable the modification required to support the additional loading.
5. If the mount is modified, installation must adhere to the configuration communicated in the modification drawings.
6. The modification drawings are not intended to convey means or methods. These are the responsibility of the installing contractor.
7. Rigging plan review is available if the contractor requires for a construction class IV or other if required. Review fee would apply.
8. The mount modification package was created based upon information provided for the mount loading. The underlying tower is assumed to provide support and sufficient rigidity to support the mount loads as a tower analysis was not part of the mount analysis.
9. TES is not responsible for modifications to climbing facilities unless communicated to TES in writing.



Structure: CT01364-S-SBA - Pomfret

Sector: **A**

7/15/2019

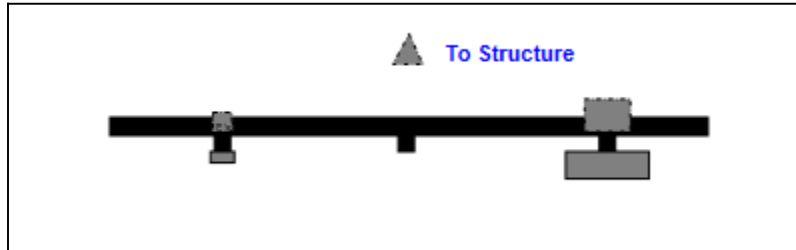
Structure Type: Monopole

Mount Elev: 137.00

Page: 1

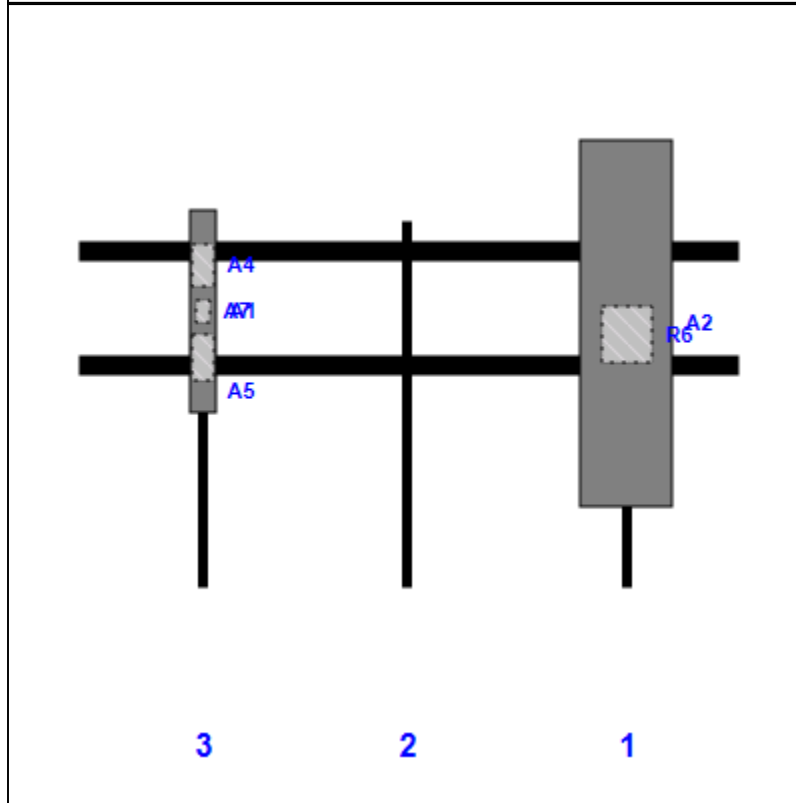


Plan View



Front View

Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist From Left	Pipe #	Pipe Pos V	Antenna Pos	Center Ant From Top	Antenna H Offset
A2	APXVAARR24_43-U-NA20	95.90	24.00	144.00	1	a	Front	27.00	0.00
R6	Radio 4449 B71+B12	15.00	13.20	144.00	1	a	Behind	30.00	0.00
A1	APXV18-206516S-C-A20	53.10	6.90	33.00	3	a	Front	24.00	0.00
A4	KRY 112 489/2	11.00	6.10	33.00	3	a	Behind	12.00	0.00
A5	Allen Telecom FE15501P77/75	11.80	5.40	33.00	3	a	Behind	36.00	0.00
A7	782 11056	5.50	3.20	33.00	3	a	Behind	24.00	0.00

Sector: **B**

7/15/2019

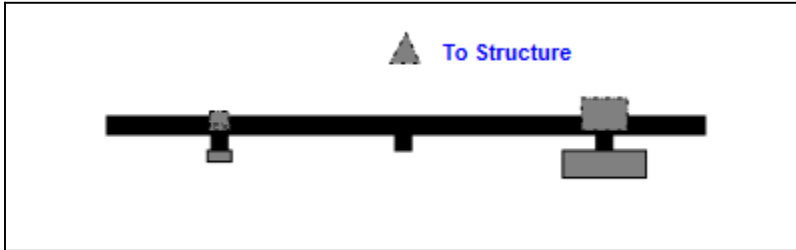
Structure Type: Monopole



Mount Elev: 137.00

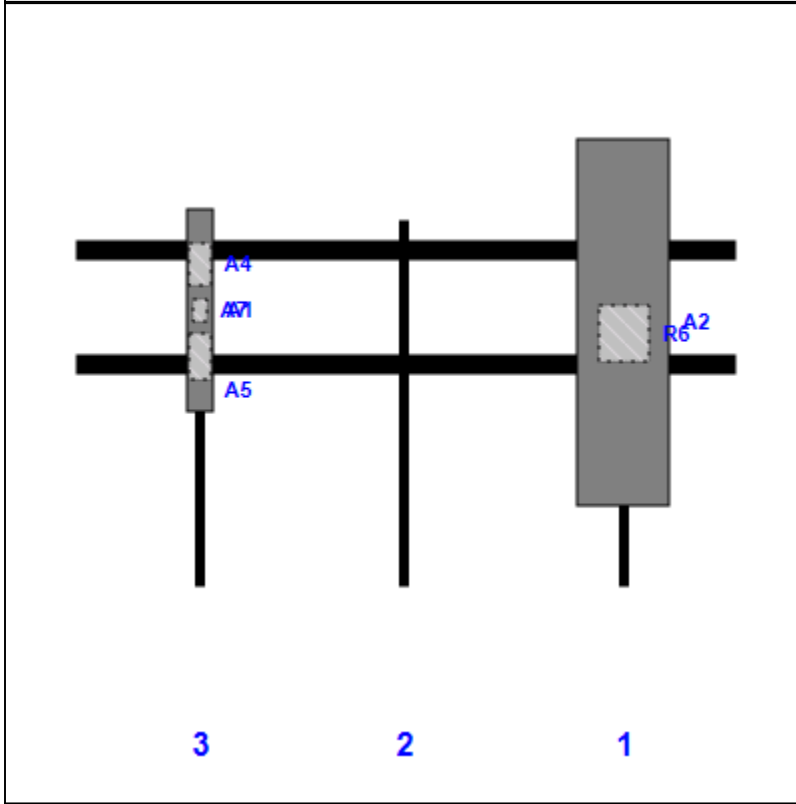
Page: 2

Plan View



Front View

Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist From Left	Pipe #	Pipe Pos V	Antenna Pos	Center Ant From Top	Antenna H Offset
A2	APXVAARR24_43-U-NA20	95.90	24.00	144.00	1	a	Front	27.00	0.00
R6	Radio 4449 B71+B12	15.00	13.20	144.00	1	a	Behind	30.00	0.00
A1	APXV18-206516S-C-A20	53.10	6.90	33.00	3	a	Front	24.00	0.00
A4	KRY 112 489/2	11.00	6.10	33.00	3	a	Behind	12.00	0.00
A5	Allen Telecom FE15501P77/75	11.80	5.40	33.00	3	a	Behind	36.00	0.00
A7	782 11056	5.50	3.20	33.00	3	a	Behind	24.00	0.00

Structure: CT01364-S-SBA - Pomfret

Sector: C

7/15/2019

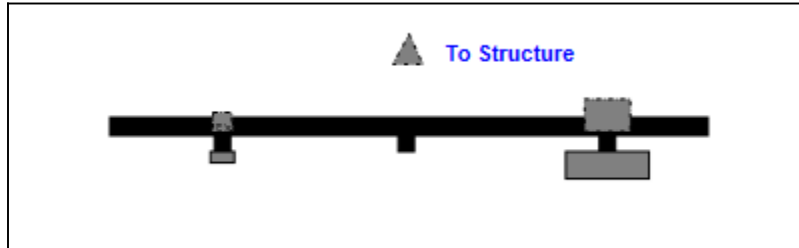


Structure Type: Monopole

Page: 3

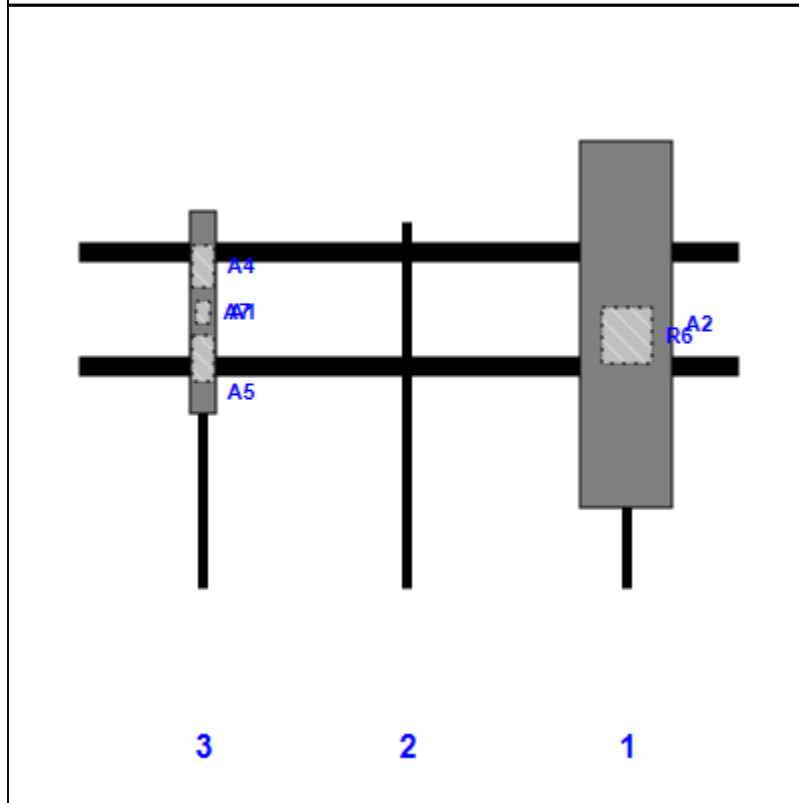
Mount Elev: 137.00

Plan View



Front View

Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist From Left	Pipe #	Pipe Pos V	Antenna Pos	Center Ant From Top	Antenna H Offset
A2	APXVAARR24_43-U-NA20	95.90	24.00	144.00	1	a	Front	27.00	0.00
R6	Radio 4449 B71+B12	15.00	13.20	144.00	1	a	Behind	30.00	0.00
A1	APXV18-206516S-C-A20	53.10	6.90	33.00	3	a	Front	24.00	0.00
A4	KRY 112 489/2	11.00	6.10	33.00	3	a	Behind	12.00	0.00
A5	Allen Telecom FE15501P77/75	11.80	5.40	33.00	3	a	Behind	36.00	0.00
A7	782 11056	5.50	3.20	33.00	3	a	Behind	24.00	0.00

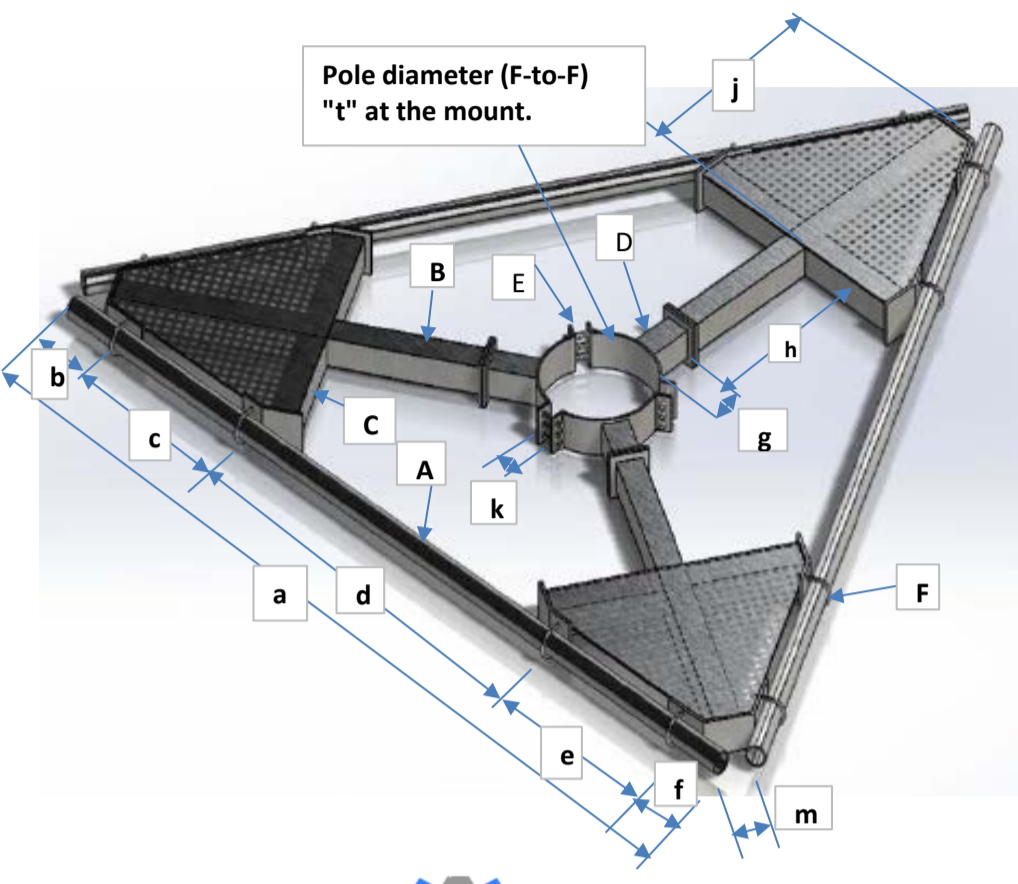


Antenna Mount Type "MT-C" Mapping Form (PATENT PENDING)

FCC #
1201278

Tower Owner:	SBA Corp.	Mapping Date:	5/3/19
Site Name:	Pomfret	Structure Type:	Monopole
Site Number or ID:	CT01364-S	Structure Height (Ft.):	170
Mapping Contractor:	SkyTower, LLC	Mount Height (Ft.):	139

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



Geometries (Unit: inches)									
a	173	e	45	j	46	o		s	
b	6	f	6	k	17	p		t	30
c	44	g	6	m	14	q		u *	38
d	72	h	33	n		r		v *	96

Members/Bolts (Unit: inches) * - See Ant. Layout for "u", "v" and member "K" (pipe)									
Items	Member	Lx (O.D.)	Ly (I.D.)	T	Items	Member	Lx (O.D.)	Ly (I.D.)	T
A	3.5 OD x 0.216 Pipe	3.5	3.068	0.216	F	1/2" U-Bolt			
B	Tubing 4x4x1/4	4	4	0.25	G				
C	Tubing 4x4x1/4	4	4	0.25	H				
D	1/2" Thick. Plate	0	0	0.5	J				
E	3/4" Bolt				K* (pipe)	.375 OD x 0.154 Pip	2.375	2.067	0.154

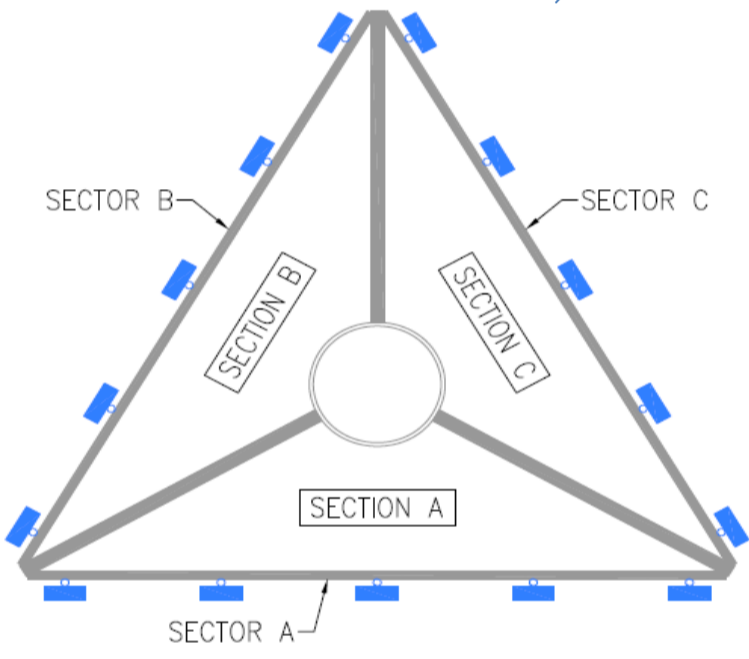
Distance from top of main platform member to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) 2'4"

Distance from top of main platform member to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) N/A

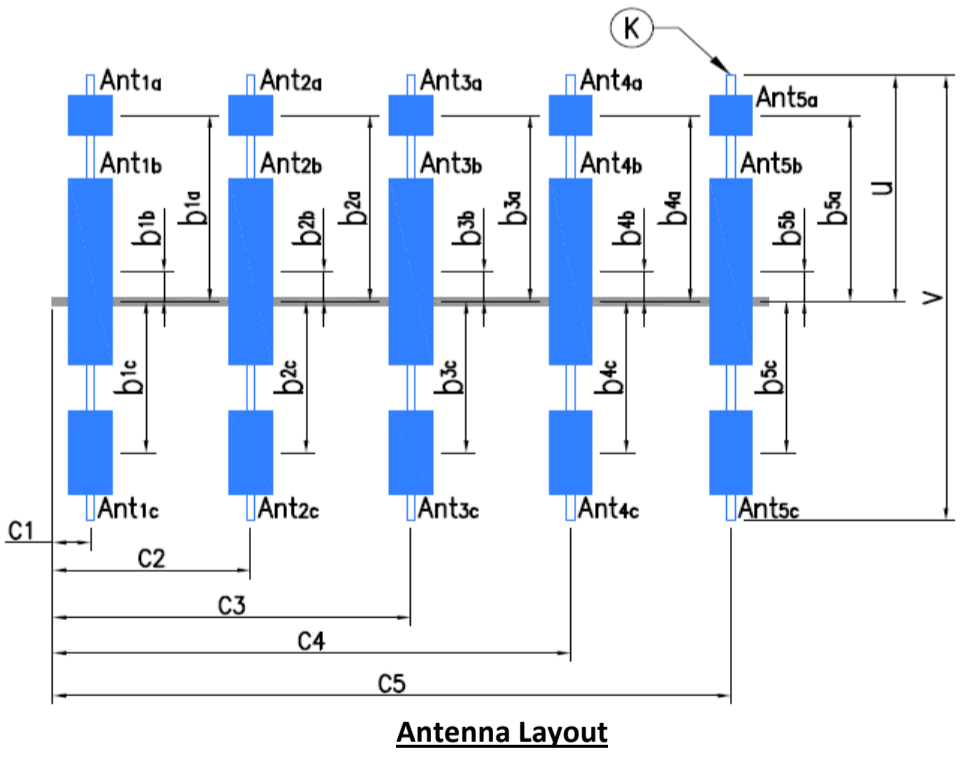
Please enter the information below if members can't be found from the drop down lists

One antenna pipe is 2.87 x 0.2

Stabilizing pipe connected to POS 1 & 2 of opposite sectors measures 58" using four 1/2" u-bolts



Climbing facility is , at 200 Degree Azimuth



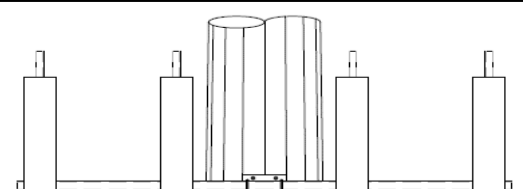
Ants. Items	Enter antenna model. If not labeled, enter "Unknown". If no antenna at specified location, enter "N/A". If antennas and the locations are the same on all three sectors, only enter one sector.					Mounting Locations (Unit: inches)			Photos of antennas
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ..." (In.)	Horiz. offset (Use "-" if Ant. is inside)	Horiz. offset "C ₁ , C ₂ , C ₃ , C ₄ , C ₅ " (in.)	Photo Numbers
Sector A									
Ant _{1a}	LNX-6515DS-A1M	12	7.5	96	2 (1/2)	11	3.5	29	430-557
Ant _{1b}									
Ant _{1c}									
Ant _{2a}	Unknown	7	3.5	53	2 (1/2)	20	4.5	140	748-915
Ant _{2b}	DTMA1900	6	4	11		13			
Ant _{2c}									
Ant _{3a}									
Ant _{3b}									
Ant _{3c}									
Ant _{4a}									
Ant _{4b}									
Ant _{4c}									
Ant _{5a}									
Ant _{5b}									
Ant _{5c}									

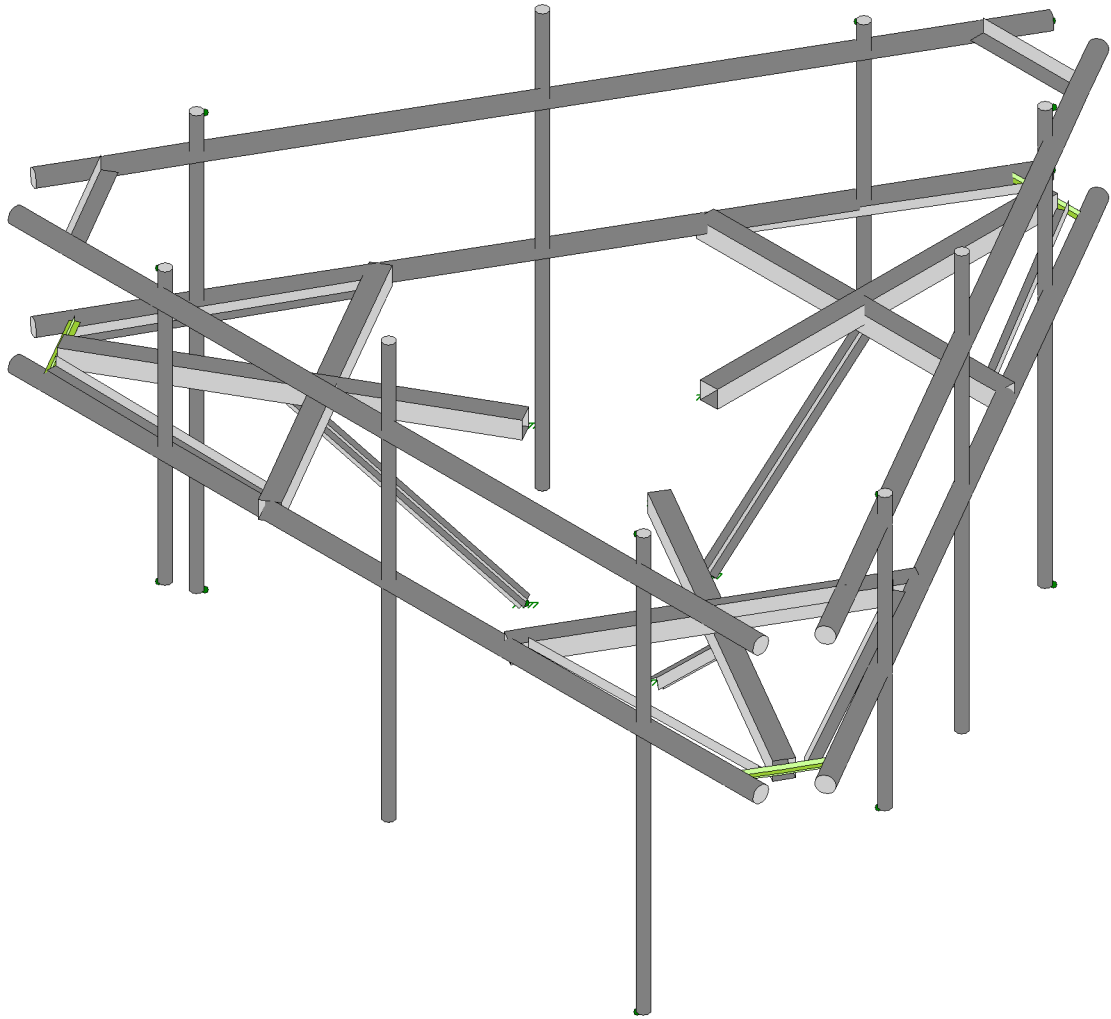
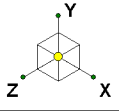
Are Ant same as sector A? Yes Antennas on Sector B are the same as Sector A

Azimuth (Degree) of Each Sector and Climbing Information

Sector A:	15	↗	Deg	
Sector B:	135		Deg	
Sector C:	255		Deg	
Climbing:	200		Deg	
Climbing Facility	Corrosion Type:	Good condition		
	Access:	Climbing path was unobstructed.		
	Condition:	N/A		

Are Ant same as sector A/B? Same As A Antennas on Sector C are the same as Sector A





Tower Engineering Solutio...

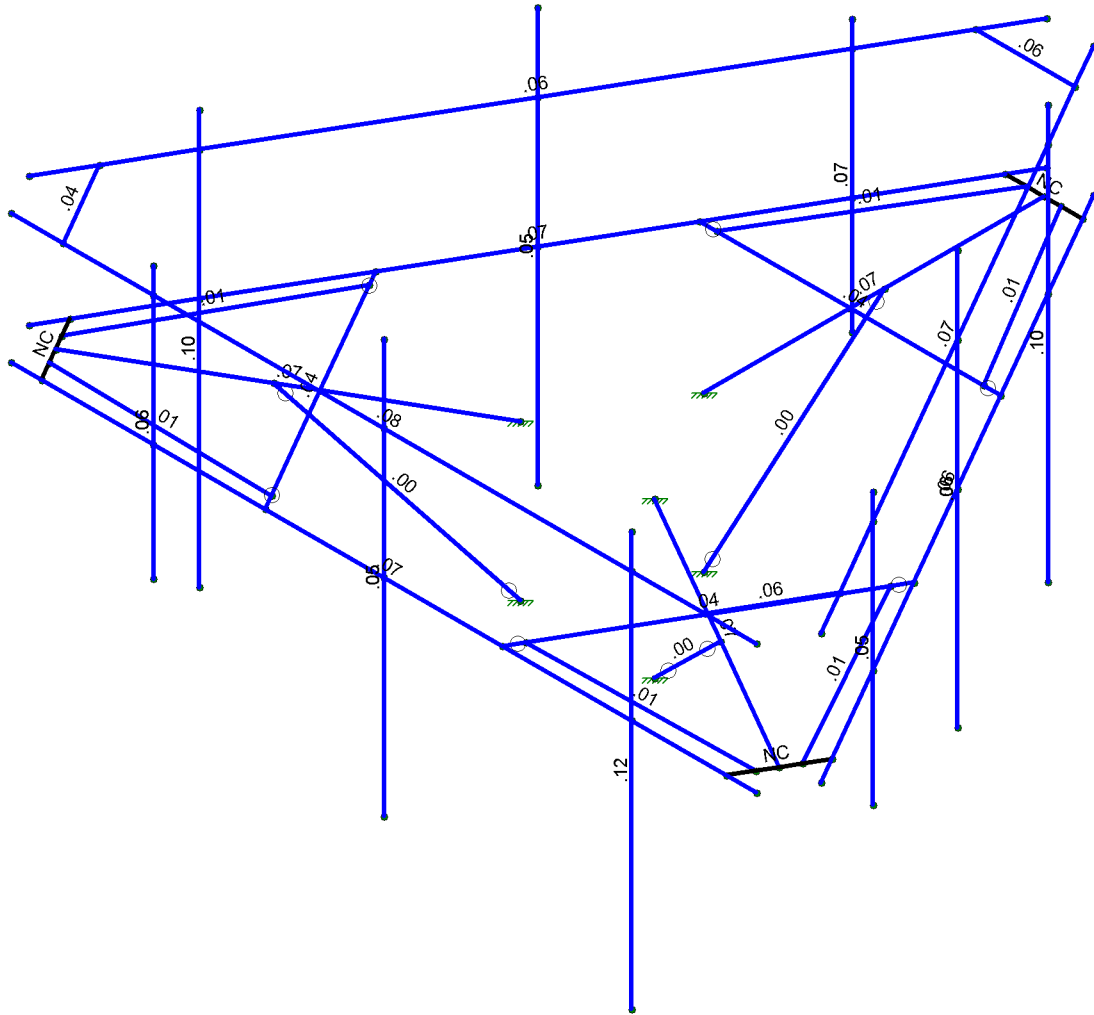
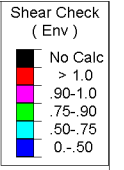
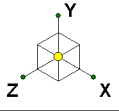
TES Project No. 81227

CT01364-S-SBA_MT-C_Loads Only_G

SK - 1

July 15, 2019 at 4:29 PM

CT01364-S-SBA_81227_G_RISA_L...



Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.6W (Front)

Tower Engineering Solutio...		SK - 3
	CT01364-S-SBA_MT-C_Loads Only_G	July 15, 2019 at 4:29 PM
TES Project No. 81227		CT01364-S-SBA_81227_G_RISA_L...



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 Ö^ ä) ^! K
 R ä^ { a^! K VÖÜÄU! [b&äp] Æ FGG
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R r' Äí ÆGfJ
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A Ya Vyf'Dc]bhi@UXg'f6 @ '* : '5 bhYbbUK]G'XYL

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G	T ÚGÖE	Ý	FI ÈI H	I
H	T ÚGÓ	Ý	GEGJH	€
I	T ÚGÓ	Ý	GEGJH	I
Í	T ÚGÔ	Ý	GEGJH	€
Î	T ÚGÔ	Ý	GEGJH	I
Ï	T ÚFÖE	Ý	IÍ ÈI	€
Ë	T ÚFÖE	Ý	IÍ ÈI	I È
J	T ÚFÓ	Ý	IÍ ÈH	€
FE	T ÚFÓ	Ý	IÍ ÈH	I È
FF	T ÚFÔ	Ý	IÍ ÈH	€
FG	T ÚFÔ	Ý	IÍ ÈH	I È
FH	T ÚGÖE	Ý	I ÈJ	F
FI	T ÚGÓ	Ý	I ÈJG	F
FÍ	T ÚGÔ	Ý	I ÈJG	F
FÎ	T ÚGÖE	Ý	J ÈH	H
FÏ	T ÚGÓ	Ý	J ÈH	H
FÌ	T ÚGÔ	Ý	J ÈH	H
FJ	T ÚFÖE	Ý	FI ÈI I	GÈ
GÈ	T ÚFÓ	Ý	GEG I	GÈ
GF	T ÚFÔ	Ý	GEG I	GÈ
GG	T ÚGÖE	Ý	HEI G	G
GH	T ÚGÓ	Ý	ÈÈ È	G
G	T ÚGÓ	Ý	HE F	G

A Ya Vyf'Dc]bhi@UXg'f6 @ '+ : 'GYfj JW' @ %L

	T^ { a^! / äæ^ }	Öä^&çä }	T æ) æ ä^ žaB Eeá	Š äæ^ } žaA á
F	TF	Ý	È È €	€

A Ya Vyf'Dc]bhi@UXg'f6 @ ' ; : 'GYfj JW' @ &L

	T^ { a^! / äæ^ }	Öä^&çä }	T æ) æ ä^ žaB Eeá	Š äæ^ } žaA á
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A Ya Vyf'8]qf]Vi hYX'@UXg'f6 @ '%\$: 'Gfi Wñ fY'8]L

	T^ { a^! / äæ^ }	Öä^&çä }	ÜcáoT æ) æ ä^ žaB ÈÈÖ) äÁ æ) æ ä^ žaB ÈÈ ÜcáoŠ äæ^ } žaA á	Ö) äÁ Š äæ^ } žaA á
F	TF	Ý	ÈÈ ÈÈ I	€
G	TG	Ý	ÈÈ ÈÈ I	€
H	TH	Ý	ÈÈ ÈÈ I	€
I	TÍ	Ý	ÈÈÈÈ G	€
Í	TJ	Ý	ÈÈÈÈ G	€
Î	T ÚFÖE	Ý	ÈÈÈÈ I	€
Ï	T ÚGÖE	Ý	ÈÈÈÈ I	€
Ë	T ÚFÓ	Ý	ÈÈÈÈ I	€
J	T ÚFÔ	Ý	ÈÈÈÈ I	€
FE	T ÚGÔ	Ý	ÈÈÈÈ I	€
FF	T ÚGÓ	Ý	ÈÈÈÈ I	€
FG	T FÍ	Ý	ÈÈÈÈ G	€
FH	T FÏ	Ý	ÈÈÈÈ G	€
FI	T FJÖE	Ý	ÈÈÈÈ G	€



Ô[{]æ˘ K V[, ^!Á) *ã^!ã *ÁU[r'ç) •ÉÉŠÓ
 Ó^ã) ^! K
 R àÁ { a^! K VÒÚÁU! [b&áP] É FGG
 T [a^!Áæ ^ K ÔVEFHÍ | ÈÈÚÓE T VÉO' Š [aã•ÁU] r' Ö

R r' Áí ÈGÉJ
 I KHEÚT
 Ô@&^!ÁÓ'K''''

A Ya Vyf'8 jgfv]vi hyx' @ Uxg'f6 @ '%\$. 'Gfi Wñ fy'8 jLif'7 cb]jbi YXL

	T^ { a^!Áæ^ }	Öã^&ç)	ÚcáoÁ æ) æ a^ ŽaDç(É) áÁ æ) æ a^ ŽaDç(É) ÚcáoÁ &ç) ŽčÁ á	Ò) áÁ &ç) ŽčÁ á		
FÍ	T GEE	ÿ	ÈÇÈ G	ÈÇÈ G	€	Ä FEE
FÌ	T GG	ÿ	ÈFÈ F	ÈFÈ F	€	Ä FEE
FÌ	T GH	ÿ	ÈFÈ F	ÈFÈ F	€	Ä FEE
FÌ	T G	ÿ	ÈFÈ F	ÈFÈ F	€	Ä FEE
FJ	T Ğ	ÿ	ÈFÈ F	ÈFÈ F	€	Ä FEE
G€	T Ğ	ÿ	ÈFÈ F	ÈFÈ F	€	Ä FEE
GF	T Ğ	ÿ	ÈFÈ F	ÈFÈ F	€	Ä FEE
GG	T Ğ OE	ÿ	ÈÍ ÈÍ	ÈÍ ÈÍ	€	Ä FEE
GH	T Ğ OE	ÿ	ÈÍ ÈÍ	ÈÍ ÈÍ	€	Ä FEE
G	T Ğ OE	ÿ	ÈÍ ÈÍ	ÈÍ ÈÍ	€	Ä FEE
Ĝ	T Ğ	ÿ	ÈFÈ F	ÈFÈ F	€	Ä FEE
Ĝ	T GJ	ÿ	ÈFÈ F	ÈFÈ F	€	Ä FEE
Ĝ	T H€	ÿ	ÈFÈ F	ÈFÈ F	€	Ä FEE
Ĝ	T HF	ÿ	ÈFÈ J	ÈFÈ J	€	Ä FEE
GJ	T HG	ÿ	ÈFÈ J	ÈFÈ J	€	Ä FEE
H€	T HH	ÿ	ÈFÈ J	ÈFÈ J	€	Ä FEE
HF	T H	ÿ	ÈJÈ H	ÈJÈ H	€	Ä FEE
HG	T H	ÿ	ÈJÈ H	ÈJÈ H	€	Ä FEE
HH	T H	ÿ	ÈJÈ H	ÈJÈ H	€	Ä FEE

A Ya Vyf'8 jgfv]vi hyx' @ Uxg'f6 @ '%. 'Gfi Wñ fy'K ': fcbk

	T^ { a^!Áæ^ }	Öã^&ç)	ÚcáoÁ æ) æ a^ ŽaDç(É) áÁ æ) æ a^ ŽaDç(É) ÚcáoÁ &ç) ŽčÁ á	Ò) áÁ &ç) ŽčÁ á		
F	T F	ÚZ	ÈÇÈ F	ÈÇÈ F	€	Ä FEE
G	T G	ÚZ	ÈÇÈ F	ÈÇÈ F	€	Ä FEE
H	T H	ÚZ	ÈÇÈ F	ÈÇÈ F	€	Ä FEE
I	T Í	ÚZ	ÈÇÈ EH	ÈÇÈ EH	€	Ä FEE
Í	T J	ÚZ	ÈÇÈ EH	ÈÇÈ EH	€	Ä FEE
Î	T ÚFOE	ÚZ	ÈÈÈ Í	ÈÈÈ Í	€	Ä FEE
Ï	T ÚGOE	ÚZ	ÈÈÈ Í	ÈÈÈ Í	€	Ä FEE
Ì	T ÚFÓ	ÚZ	ÈÈÈ Í	ÈÈÈ Í	€	Ä FEE
J	T ÚFÔ	ÚZ	ÈÈÈ Í	ÈÈÈ Í	€	Ä FEE
F€	T ÚGÔ	ÚZ	ÈÈÈ Í	ÈÈÈ Í	€	Ä FEE
FF	T ÚGÓ	ÚZ	ÈÈÈ Í	ÈÈÈ Í	€	Ä FEE
FG	T FÍ	ÚZ	ÈÇÈ EH	ÈÇÈ EH	€	Ä FEE
FH	T FÌ	ÚZ	ÈÇÈ EH	ÈÇÈ EH	€	Ä FEE
FI	T FJOE	ÚZ	ÈÇÈ EH	ÈÇÈ EH	€	Ä FEE
FÍ	T GEE	ÚZ	ÈÇÈ EH	ÈÇÈ EH	€	Ä FEE
FÌ	T GG	ÚZ	ÈÇÈ EG	ÈÇÈ EG	€	Ä FEE
FÌ	T GH	ÚZ	ÈÇÈ EG	ÈÇÈ EG	€	Ä FEE
FÌ	T G	ÚZ	ÈÇÈ EG	ÈÇÈ EG	€	Ä FEE
FJ	T Ğ	ÚZ	ÈÇÈ EG	ÈÇÈ EG	€	Ä FEE
G€	T Ğ	ÚZ	ÈÇÈ EG	ÈÇÈ EG	€	Ä FEE
GF	T Ğ	ÚZ	ÈÇÈ EG	ÈÇÈ EG	€	Ä FEE
GG	T Ğ OE	ÚZ	ÈÇÈ F	ÈÇÈ F	€	Ä FEE
GH	T Ğ OE	ÚZ	ÈÇÈ F	ÈÇÈ F	€	Ä FEE
G	T Ğ OE	ÚZ	ÈÇÈ F	ÈÇÈ F	€	Ä FEE
Ĝ	T Ğ	ÚZ	ÈÈÈ Í	ÈÈÈ Í	€	Ä FEE
Ĝ	T GJ	ÚZ	ÈÈÈ Í	ÈÈÈ Í	€	Ä FEE
Ĝ	T H€	ÚZ	ÈÈÈ Í	ÈÈÈ Í	€	Ä FEE
Ĝ	T HF	ÚZ	ÈFÈ Í G	ÈFÈ Í G	€	Ä FEE
GJ	T HG	ÚZ	ÈFÈ Í G	ÈFÈ Í G	€	Ä FEE



Ô{ }a^ K V[, ^/A) * a^A) * A{ }a) • EESSÔ
 Ô• a) ^ K
 R a^A { a^ K VÔUÁU{ }a^A) E FG
 T { a^/A a^ K ÔVEFH I EUEOCE T VEO' S{ }a^A) } ^ Ô

R r Áí EGEJ
 I KEÁU
 Ô@a^AÁO'K''''

9bj YcdYA Ya Vyf GYWJcb: cfWg f7 cb7bi YXL

	T^ { a^	U^&	Orayáa	SÔ	^Á@æZaa	SÔ	: Á@æZaa	SÔ	V{ }^Z E SÔ	^E Á{ } ^ E SÔ	: E Á{ } ^ E SÔ					
JG			{ a	ííE	F	EííEí	G	EííEí	I	EííEí	G	EííEí	í	€	F	
JH		G	{ æ	HUJÉí	í	GíEíEí	F	GHGíFH	H	EííEí	I	EííEí	H	EííEí	G	
JI			{ a	EííEíí	I	EííEííF	G	EííEííU	I	EííEí	G	H	EííEíG	I	EííEí	F
JÍ		H	{ æ	EííEíí	H	HH EííF	G	íííEíJG	I	€	F	EííEí	H	EííEí	G	
JĪ			{ a	EííEíEí	í	EííEíEíJ	F	EííEíEíG	H	€	í	EííEí	I	EííEí	F	
JĪ		I	{ æ	EííEíH	H	G EííH	G	G EííG	I	€	F	EííEíG	H	EííEíG	G	
Jì			{ a	EííEíEí	í	EííEíEíG	F	EííEíEí	H	€	í	EííEíG	I	EííEíG	F	
JJ		í	{ æ	€	í	EííH	F	EííH	H	€	F	€	H	€	G	
F€€			{ a	€	G	EííG	í	Eííí	í	€	í	€	í	€	F	
F€F	T ÚGÔ	F	{ æ	ííEíG	í	JíEíí	I	ííEíEíG	F	EííEí	H	EííEí	í	€	F	
F€G			{ a	FF€G	F	EííEíí	H	EííEíEí	G	EííEí	I	EííEí	G	€	F	
F€H		G	{ æ	HUGÉíí	í	FííEíí	F	HííEíí	F	EííEí	H	EííEíG	G	EííEíG	F	
F€I			{ a	EííEíEíí	í	EííEíEíH	H	EííEíEíG	G	EííEí	G	I	EííEíG	F	EííEí	G
F€Í		H	{ æ	IHGÉíEí	í	FííEíEíH	I	HUJÉíEíH	F	EííEí	H	EííEí	F	EííEí	H	
F€Ī			{ a	EííEíEíí	í	EííEíEíH	H	EííEíEíí	G	EííEí	G	I	EííEíG	G	EííEíJ	I
F€Ī		I	{ æ	EííEííí	í	FF€EíH	H	íJÉJí	G	€	G	EííEí	F	EííEí	H	
F€Ī			{ a	EííEíEíí	í	EííEíEíG	I	EííEíEíJ	F	€	í	EííEí	G	EííEí	I	
F€J		í	{ æ	€	F	Eíí	í	Eíí	í	€	G	€	G	€	F	
FF€			{ a	€	F	EííEí	G	EííEí	F	€	í	€	í	€	G	
FFF	T ÚGÔ	F	{ æ	ííEíG	í	JíEíí	I	ííEíEí	F	EííEí	H	EííEí	í	€	F	
FFG			{ a	FF€G	F€	EííEíí	H	EííEíEí	G	EííEí	I	EííEí	F	€	F	
FFH		G	{ æ	íEíEíG	í	GíEíí	I	FíEíEíJ	F	EííEí	I	EííEíH	I	EííEíJ	G	
FFI			{ a	EííEíEíH	H	EííEíEíG	H	EííEíEí	G	EííEí	F	H	EííEíF	H	EííEíF	F
FFÍ		H	{ æ	íííEíEí	í	HGÉíEíF	I	FJGÉíEí	F	EííEí	I	EííEí	F	EííEí	H	
FFĪ			{ a	EííEíEíEí	H	EííEíEí	H	EííEíEíí	G	EííEí	F	H	EííEíH	G	EííEí	I
FFĪ		I	{ æ	EííEííí	H	FF€EíH	H	íJÉJí	G	€	I	EííEí	F	EííEí	H	
FFì			{ a	EííEíEíí	í	EííEíEíH	I	EííEíEíG	F	€	í	EííEí	G	EííEí	I	
FFJ		í	{ æ	€	F	EííG	í	Eíí	H	€	I	€	G	€	H	
FO€			{ a	€	F	EííEí	I	EííEí	í	€	í	€	í	€	I	
FGF	TFÍ	F	{ æ	GíEíEíí	H	GíEíG	F€	ííEíEíFH	G	EííEí	F€	F€Eí	F	EííEí	F€	
FGG			{ a	EííEíEíEíG	I	EííEíEíí	J	EííEíEíHF	F	EííEí	F	EííEí	G	EííEíJ	J	
FGH		G	{ æ	GíEíEíEí	H	GíEíH	F€	ííEíEíGF	G	EííEí	F€	EííEí	H	EííEí	J	
FGI			{ a	EííEíEíEí	I	EííEíEíEí	J	EííEíEí	F	EííEí	F	EííEí	I	EííEí	H	
FGÍ		H	{ æ	GíEíEíEíG	H	EííEíEíEíF	H	GíEíEíEí	H	EííEíG	G	EííEíG	G	EííEíEí	í	
FGĪ			{ a	EííEíEíEíG	I	EííEíEíEíG	í	EííEíEíEí	I	EííEí	F	EííEíEí	F	EííEíG	H	
FGĪ		I	{ æ	HGÉíEíH	H	FF€EíH	í	FJHGíEíH	H	EííEíG	G	EííEíJ	H	EííEíJ	J	
FGĪ			{ a	EííEíEíEíí	I	FííEíEí	H	EííEíEíí	I	EííEí	F	EííEíG	I	EííEíJ	F	
FGĪ		í	{ æ	GíEíEíEíF	H	F€íEíEíG	í	FííEíEí	H	EííEíG	G	EííEí	H	EííEíH	H	
FHE			{ a	EííEíEíEíF	I	FF€EíH	H	EííEíEíF	I	EííEí	F	EííEí	I	EííEíEí	í	
FHF	TFÍ	F	{ æ	FF€Eíí	F	EííEíí	H	íEíEíH	I	EííEíG	I	€	F	€	F	
FHG			{ a	EííEíEíEí	G	EííEíEíí	í	EííEíEíEí	H	EííEí	H	€	F	€	F	
FHH		G	{ æ	ííEíEíEí	H	EííEíEíí	H	FíEíEí	I	EííEí	I	EííEíH	I	FíEíEí	í	
FHI			{ a	EííEíEíEíF	I	EííEíEíEíJ	í	EííEíEíEí	H	EííEí	H	EííEí	H	EííEí	H	
FHÍ		H	{ æ	ííEíEíEí	H	ííEíEíEí	í	GíEíEíEí	I	EííEíH	F	EííEíF	I	GíEíEí	í	
FHĪ			{ a	EííEíEíEíH	I	EííEíEíEíF	I	EííEíEíEí	H	EííEíEí	G	EííEíJ	H	EííEíH	F	
FHĪ		I	{ æ	ííEíEíEíF	F	íEíEíEí	í	FíEíEíEí	F	EííEíH	F	EííEí	G	FíEíEíJ	í	
FHĪ			{ a	EííEíEíEíí	G	FF€EíG	F	EííEíEíEíG	G	EííEíEí	G	EííEíG	F	EííEí	F	
FHU		í	{ æ	ííEíEíEíí	H	ííEíEíEíH	í	ííEíEíEí	F	EííEíG	F	€	F	€	F	
FI€			{ a	EííEíEíEíí	I	J€Eíí	H	EííEíEíEí	G	EííEíG	G	€	F	€	F	
FIF	TFÍ	F	{ æ	ííEíEíEí	G	EííEíEíF	H	F€íEíEí	I	EííEíH	H	EííEíG	I	EííEí	í	
FIG			{ a	EííEíEíEíJ	F	EííEíEíG	í	EííEíEíEí	H	EííEíJ	í	EííEí	H	EííEíG	F	
FIH		G	{ æ	ííEíEíEí	G	EííEíEíí	H	F€íEíEí	I	EííEíH	H	EííEíJ	I	EííEí	í	



Ô{ }a^ K V[, ^/A) * a^Aia * AÚ[r q) • EESSÓ
 Ô• a}^ K
 R aA^ { a^ K VÒUÁU[b&A b [E FGG
 T { a^/A a^ K ÔVEFH I EUEÓE T VEO' S[aa•AÚ] r' Ô

R r Áí EGEJ
 I KEÁU
 Ô@a•aÁO'K''''

9bj YcdYA Ya Vyf GYWJcb: cfWwg f7 cbh7bi YXL

T^ { a^	U^ &	Craxaa	SÓ	^Á@aZaa	SÓ	: Á@aZaa	SÓ	V[: ^Z E SÓ	^E Á [{ ^ E SÓ	: E Á [{ ^ E SÓ					
FJÍ		{ a	E E E I I	I	E E E J I	I	E E E J J	H	€	H	E E E I	I	E E E I	G	
FJÌ		I	{ a	I G E I I	H	E E E I	H	H E E I F	I	€	I	€	G	E E I G	I
FJÌ			{ a	E F E E I I	I	E E E J I	I	E G E E F H	H	€	H	E E E I	I	E E E F I	H
FJJ		Í	{ a	I H E E I	H	E E E I F	H	I J E J I	I	€	I	E E E J	I	E E F H	I
GEE			{ a	E E G E E I H	I	E E E J G	I	E E E G	H	€	H	E E E I	I	E E E J	H
GEF	T G	F	{ a	I I F E F F	G	I I E I I	I	H E E J I	F	€	J	E E E F	G	E E I F	I
GEG			{ a	E F H E G	F	I E G	J	E F E I I	G	€	I	E E E I	I	E E E G H	H
GEH		G	{ a	I I G E J I	G	G E E H	I	F G E I	F	€	J	E E E I	F	E E H I	I
GEI			{ a	E F H E E G	F	E E I	J	E E E H	G	€	I	E E E I	G	E E E G	H
GEÍ		H	{ a	I I G E I I	G	F E E F	I	F G E G G	H	€	J	E E F H	I	E E F J	J
GEÌ			{ a	E F I E I	F	E E E I	J	E E E	I	€	I	E E E I	G	E E E J	G
GEÌ		I	{ a	I I G E I J	G	E E E H	I	H E E F I	G	€	J	E E E I	H	E E I	J
GEÌ			{ a	E F I E I I	F	E E E F H	I	E E E I J	F	€	I	E E E F	J	E E E I	G
GEJ		Í	{ a	I I H E G F	G	E E E I	I	I I E I	G	€	J	E E G H	G	E E E G	I
GFE			{ a	E F I E I J	F	E E E H F	I	E E G E I	F	€	I	E E E H	I	E E E I	F
GFF	T G	F	{ a	I J I E I H	I	I F E I F	I	F I E I J	I	€	I	E E E F	F	E E H I	J
GFG			{ a	E E J E F I	H	G E J I	H	E E E I I	H	€	J	E E E I	I	E E E G	H
GFH		G	{ a	I I I E F I	I	G E E I	I	F E E J I	I	€	I	E E E F	F	E E G J	J
GFÍ			{ a	E E J E I I	H	E E E F F	H	E E E G F	F	€	J	E E E J	G	E E E G H	H
GFÌ		H	{ a	I I I E J F	I	I E E H	I	F J E I I	H	€	I	E E E I	I	E E H G	J
GFÌ			{ a	E E I E E I G	H	E E E J J	I	E E E I I	I	€	J	E E E I	H	E E E I	J
GFÌ		I	{ a	I I I E I I	I	E E E J H	I	H E E I I	H	€	I	€	H	E E I F	J
GFÌ			{ a	E E I F E H	H	E E E J H	I	E E E J I	I	€	J	E E E F	J	E E E F H	F
GFJ		Í	{ a	I I I E H I	I	E E E I G	I	I E E G F	H	€	I	E E E F F	H	E E E F F	I
GGE			{ a	E E G E E J	H	E E E F F	I	E E E G	I	€	J	E E E I	I	E E E I	I
GGF	T G	F	{ a	I H E E I F	H	I I E E I	I	G E E J	I	€	F	€	H	E E I	I
GGG			{ a	E E J E E I H	I	F E E I	F	E G E E I	H	€	I	E E E H	I	E E E G	F
GGH		G	{ a	I H E E F I	H	G E E J	I	F E E I I	F	€	F	E E E I	I	E E I	G
GG			{ a	E E I F E I I	I	G E I	F	E E E I	G	€	I	E E E I	H	E E E G	F
GG		H	{ a	I G F E J	H	G E E I	G	F I E H F	F	€	F	E E F G	I	E E G	G
GG			{ a	E E I G E H F	I	E E E G	I	E E E G	G	€	I	E E E I	H	E E E F I	F
GG		I	{ a	I F F E I H	H	E E E I	G	G E E H	H	€	F	E E E I	F	E E I H	I
GG			{ a	E E I H E E	I	E E E G	I	E G E H U	I	€	I	E E F G	G	E E E I	F
GGJ		Í	{ a	I E G E H	H	E E E I H	G	I F E J G	H	€	F	E E F F	H	E E E I	I
GHE			{ a	E E I E I	I	E E E J I	I	E E E F I	I	€	I	E E E I	I	E E E I	I
GHF	T G	F	{ a	I I I E F I	G	I G E J	I	G E E G	G	€	I	€	I	E E G	G
GHG			{ a	E E J E E I H	F	F E G G	F	E G E E E	F	€	I	E E E I	I	E E E F H	F
GHI		G	{ a	I I I E	G	G E E J	I	F F E I I	I	€	I	E E F G	G	E E G	G
GH			{ a	E E J E E I I	F	E E E F I	F	E E E I F	I	€	I	E E E F F	F	E E E J	F
GH		H	{ a	I I I E G	G	I E E G	G	G E E I	F	€	I	E E E I	I	E E E I	H
GH			{ a	E E I E G	F	E E E I	I	E E E I G	G	€	I	E E E F F	F	E E E I	I
GH		I	{ a	I I I E I I	G	E E E J I	G	I H E I I	F	€	I	€	J	E E I G	I
GH			{ a	E E I E E F	F	E E E I G	I	E E E I	G	€	I	E E E I	I	E E E J	G
GHU		Í	{ a	I I I E I	G	E E E I	G	I I E J	F	€	I	E E E I	F	E E E I	I
GE			{ a	E E I E E J G	F	E E E I	I	E E E I I	G	€	I	E E E I	I	E E E G	G
GF	T G E	F	{ a	€	F	€	F	€	F	€	F	€	F	€	F
GG			{ a	€	F	€	F	€	F	€	F	€	F	€	F
GH		G	{ a	F F J E I	I	F E F E E I I	G	I E E E I	H	E E I	F	E E I J	I	E G J	G
GI			{ a	E G F E U I	I	E E E I I	F	E E E G	I	E E E I	G	E E E J	H	E E E J I	F
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GÌ			{ a	E G F E U I	I	E F I E E I I	H	E E I E G F	G	E E E I	G	E E E G	I	E E E I	F E
GÌ		I	{ a	F H E E I	F E	F I I E E I	I	I I E U I	F	E E H	H	E E I H	F	E E J I	H

EXHIBIT 10

Transcom Engineering, Inc.

Wireless Network Design and Deployment

Radio Frequency Emissions Analysis Report

T-MOBILE Existing Facility

Site ID: CT11524A

CT524_SBA Pomfret
62 Babbit Hill Road
Pomfret, CT 06259

June 17, 2019

Transcom Engineering Project Number: 737001-0166

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	4.83 %

Transcom Engineering, Inc.

Wireless Network Design and Deployment

June 17, 2019

T-MOBILE

Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, CT 6009

Emissions Analysis for Site: **CT11524A – CT524_SBA Pomfret**

Transcom Engineering, Inc (“Transcom”) was directed to analyze the proposed upgrades to the T-MOBILE facility located at **62 Babbit Hill Road, Pomfret, CT**, for the purpose of determining whether the emissions from the Proposed T-MOBILE Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 600 MHz & 700 MHz bands are approximately $400 \mu\text{W}/\text{cm}^2$ and $467 \mu\text{W}/\text{cm}^2$ respectively. The general population exposure limit for the 1900 MHz (PCS) and 2100 MHz (AWS) bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

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CALCULATIONS

Calculations were performed for the proposed upgrades to the T-MOBILE antenna facility located at **62 Babbit Hill Road, Pomfret, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-MOBILE is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

All emissions values for additional carriers were taken from the Connecticut Siting Council (CSC) active MPE database. Values in this database are provided by the individual carriers themselves

For each sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
LTE	1900 MHz (PCS)	4	40
GSM	1900 MHz (PCS)	1	15
LTE / 5G NR	600 MHz	2	40
LTE	700 MHz	2	20

Table 1: Channel Data Table

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The following antennas listed in *Table 2* were used in the modeling for transmission in the 600 MHz, 700 MHz, 1900 MHz (PCS) and 2100 MHz (AWS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	RFS APXV18-206516S-C-A20	137
A	2	RFS APXVAARR24_43-U-NA20	137
B	1	RFS APXV18-206516S-C-A20	137
B	2	RFS APXVAARR24_43-U-NA20	137
C	1	RFS APXV18-206516S-C-A20	137
C	2	RFS APXVAARR24_43-U-NA20	137

Table 2: Antenna Data

All calculations were done with respect to uncontrolled / general population threshold limits.

Cable losses were factored in the calculations for this site. Since all **1900 MHz (PCS)** radios are ground mounted the following cable loss values were used. For each ground mounted **1900 MHz (PCS)** radio there was **1.75 dB** of cable loss calculated into the system gains / losses for this site. These values were calculated based upon the manufacturers specifications for **170 feet** of **1-5/8"** coax.

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RESULTS

Per the calculations completed for the proposed T-MOBILE configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	RFS APXV18-206516S-C-A20	1900 MHz (PCS)	16.3	5	175	4,989.28	1.05
Antenna A2	RFS APXVAARR24_43-U-NA20	600 MHz / 700 MHz	12.95 / 13.35	4	120	2,443.03	1.22
Sector A Composite MPE%							2.27
Antenna B1	RFS APXV18-206516S-C-A20	1900 MHz (PCS)	16.3	5	175	4,989.28	1.05
Antenna B2	RFS APXVAARR24_43-U-NA20	600 MHz / 700 MHz	12.95 / 13.35	4	120	2,443.03	1.22
Sector B Composite MPE%							2.27
Antenna C1	RFS APXV18-206516S-C-A20	1900 MHz (PCS)	16.3	5	175	4,989.28	1.05
Antenna C2	RFS APXVAARR24_43-U-NA20	600 MHz / 700 MHz	12.95 / 13.35	4	120	2,443.03	1.22
Sector C Composite MPE%							2.27

Table 3: T-MOBILE Emissions Levels

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The Following table (*table 4*) shows all additional carriers on site and their MPE% as recorded in the CSC active MPE database for this facility along with the newly calculated maximum T-MOBILE MPE contributions per this report. FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. For this site, all three sectors have the same configuration yielding the same results on all three sectors. *Table 5* below shows a summary for each T-MOBILE Sector as well as the composite MPE value for the site.

Site Composite MPE%	
Carrier	MPE%
T-MOBILE – Max Per Sector Value	2.27 %
Nextel	0.22 %
Sprint	0.30 %
AT&T	2.04 %
Site Total MPE %:	4.83 %

Table 4: All Carrier MPE Contributions

T-MOBILE Sector A Total:	2.27 %
T-MOBILE Sector B Total:	2.27 %
T-MOBILE Sector C Total:	2.27 %
Site Total:	4.83 %

Table 5: Site MPE Summary

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FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated T-MOBILE sector(s). For this site, all three sectors have the same configuration yielding the same results on all three sectors.

T-MOBILE _ Frequency Band / Technology Max Power Values (Per Sector)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
T-Mobile 1900 MHz (PCS) LTE	4	1,140.41	137	9.56	1900 MHz (PCS)	1000	0.96%
T-Mobile 1900 MHz (PCS) GSM	1	427.65	137	0.90	1900 MHz (PCS)	1000	0.09%
T-Mobile 600 MHz LTE / 5G NR	2	788.97	137	3.31	600 MHz	400	0.83%
T-Mobile 700 MHz LTE	2	432.54	137	1.81	700 MHz	467	0.39%
						Total:	2.27%

Table 6: T-MOBILE Maximum Sector MPE Power Values

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Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general population exposure to RF Emissions.

The anticipated maximum composite contributions from the T-MOBILE facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

T-MOBILE Sector	Power Density Value (%)
Sector A:	2.27 %
Sector B:	2.27 %
Sector C:	2.27 %
T-MOBILE Maximum Total (per sector):	2.27 %
Site Total:	4.83 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **4.83 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.



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