Crown Castle
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065

October 12, 2021

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

RE: **Notice of Exempt Modification for Verizon:**
Crown Site BU: 842870
434 Boston Post Road, Milford, CT 06460
Latitude: 41° 13′ 42.69″ / Longitude: -73° 4′ 12.47″

Dear Ms. Bachman:

Verizon currently maintains fifteen (15) total antennas at the 90-foot centerline on the existing 150-foot self-support tower located at 434 Boston Post Road, Milford, CT. The tower is owned by Crown Castle and the property is owned by the City of Milford. Verizon now intends to swap nine (9) antennas, three (3) RRHs, add three (3) RRHs, swap one (1) OVP, remove six (6) coax lines and six (6) diplexers, install two (2) hybrid lines. Groundwork includes removal of three (3) RRHs.

Tower modifications:

- Swap nine (9) antennas
- Swap three (3) RRHs
- Add three (3) RRHs
- swap one (1) OVP
- remove six (6) coax lines
- six (6) diplexers
- install two (2) hybrid lines

Ground modifications:

- Remove three (3) RRHs

The facility was approved by the City of Milford Planning and Zoning Office on February 10, 2000 when a Zoning Permit was issued. This approval was given without conditions.

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 Honorable Benjamin G. Blake, as both the municipality and property owner, Stephen Harris, City of Milford Zoning Enforcement Officer, and Crown Castle is the tower owner.

Additionally:

1. The proposed modifications will not result in an increase in the height of the existing tower.

2. The proposed modifications will not require the extension of the site boundary.

3. The proposed modification 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 Communication Commission safety standard.

5. The proposed modifications 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, Verizon respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j72(b)(2). Please send approval/rejection letter to my attention at the address listed below.

Sincerely,

S. Snell

Sarah Snell
Site Acquisition Specialist
1800 W. Park Drive
Westborough, MA 01581
T: 508-621-9146
Sarah.Snell@crowncastle.com

Attachments

cc: Benjamin Blake, Mayor
110 River Street
Milford, CT 06460

Stephen Harris, Zoning Enforcement Officer
70 West River Street
Milford, CT 06460

Crown Castle, Tower Owner

Exhibit A

Original Facility Approval

DATE FILED 10 Feb 00

RECEIPT # Exempt

FEE (INCLUDES CZC) $ (see above)

434

City of Milford, Connecticut

APPLICATION FOR ZONING PERMIT

#1430

INSTRUCTIONS: Fill out this application in ball point pen. A scaled plot plan in duplicate, based on a certified surveyor's plot plan must be submitted with this application showing the proposed or existing lot and building dimensions and the location of all buildings in relation to the street lines, side lot lines and rear lot lines.

ADDRESS OF PROPERTY Boston Post Road **ZONE** GB

MAP 64 **BLOCK** 430 **PARCEL** 6 **LOT NO.** _____ **ADDRESS MAP NO.** _____ **LOT SIZE** 2.73 acres

WIDTH OF STREET RIGHT OF WAY LESS THAN 50 FT.? YES ____ NO X **CORNER LOT?** YES ____ NO X

IS ANY PORTION OF THE LOT BELOW REGULATORY FLOOD ELEVATION? YES ____ NO X **CAM** YES ____ NO X

CITY WATER NA **PRIVATE WELL*** ____ **SEWER**** NA **SEPTIC***** ____ **ENGINEERING OFF STREET PERMIT #** _____

OWNER City of Milford → AT&T Wireless PCS, LLC **PHONE** (203) 871-4022

ADDRESS OF OWNER c/o Dan Garber 149 Water St Norwalk CT 06854
STREET CITY STATE ZIP CODE

PRESENT USE OF PROPERTY Police Station

PROPOSED CONSTRUCTION NEW X ADDITION _____ ALTERATION _____ REPAIR _____

SIZE/USE OF PROPOSED CONSTRUCTION Truss construction antenna - roof antenna hardware belongs to City total height antenna - with fencing with barbwire enclosure 50' 54'x64' irregular shape with 20'x12' equip. bldg*

NO. OF STORIES NA **HEIGHT** 150' **REQUIRED PARKING SPACES** NC **LOT COVERAGE** _____%

DATE OF APPROVALS: **ZBA** NA **CASPR** _____ **SITE PLAN** 18 Jan 00 **SPECIAL PERMIT** _____

EXEMPTION ISSUED NA **SUBDIV. NAME** _____ **HISTORIC DIST. CERT.OF APPROPRIATENESS** ____

CERTIFICATION: *(WARNING)* I hereby certify that I am making this application on behalf of and with full authority of the owner of the property and that I am aware of the Zoning Regulations pertinent in this case and that the statements made herein are true and correct. *APPROVAL SHALL BE VALID FOR PLANS AS SUBMITTED.*

THE OCCUPANCY AND USE OF LAND AND BUILDINGS OR STRUCTURES PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY IS PROHIBITED

APPROVED BY:

Peter W. Cultrera ACP
Zoning Official

DATE ISSUED 10 Feb 00

APPLICANT:

NAME Peter H. Maxwell
(Please Print)

SIGNATURE _____

ADDRESS URS Greiner Woodward Clyde, Two Enterprise Dr
Street

CITY Rocky Hill STATE CT ZIP 06706

TELEPHONE NO. (_____) _____

* **Permit required from State Health Dept. for apartments, subdivisions, trailer parks, shopping centers and public buildings.**

** **Permits for sewer connections are granted by Sewer Commission**

*** **Septic system approvals are granted by Health Department**

P&Z OFFICE - **WHITE** BUILDING DEPT. - **YELLOW** APPLICANT'S COPY - **PINK**

ZONPER7/96

RECEIVED
FEB 22 2000
Building Department
Milford, CT

* To be delivered to the site

From: Charles Corell [mailto:ccorell@ci.milford.ct.us]
Sent: Tuesday, February 23, 2016 2:53 PM
To: Goodall, Amanda
Cc: Joseph Griffith; Christine Angelica
Subject: RE: [Milford CT] Cell Tower-434 Boston Post Road

Good afternoon

We located the original file and plans from our archives, there are no conditions in these documents, there is a statement of special inspections and a final statement of special inspections for the construction. Let me know if this helps you at all

Thanks
Charlie Corell

Exhibit B

Property Card

City of Milford, CT

Property Listing Report

Map Block Lot	064 930 6 A	Bldg #	1	Sec #	1	PID	101882	Account	023341

Property Information

Property Location	434 BOSTON POST RD
Owner	CITY OF MILFORD
Co-Owner	C/O AT&T MBLTY-TAX DEPT
Mailing Address	754 PEACHTREE ST NE ATLANTA GA 30308
Land Use	434V CELL TOWER MDL-00
Land Class	I
Zoning Code	
Census Tract	

Neighborhood	D
Acreage	0
Utilities	UNKNOWN
Lot Setting/Desc	UNKNOWN UNKNOWN
Book / Page	02435/0430
Fire District	

Photo

Sketch

No Photo Available

Primary Construction Details

Year Built	0
Building Desc.	CELL TOWER
Building Style	UNKNOWN
Building Grade	
Stories	
Occupancy	
Exterior Walls	
Exterior Walls 2	NA
Roof Style	
Roof Cover	
Interior Walls	
Interior Walls 2	NA
Interior Floors 1	
Interior Floors 2	NA

Heating Fuel	
Heating Type	
AC Type	
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	

(*Industrial / Commercial Details)

Building Use	Vacant
Building Condition	
Sprinkler %	NA
Heat / AC	NA
Frame Type	NA
Baths / Plumbing	NA
Ceiling / Wall	NA
Rooms / Prtns	NA
Wall Height	NA
First Floor Use	NA
Foundation	NA

Report Created On 10/12/2021

City of Milford, CT

Property Listing Report

Map Block Lot	064 930 6 A	Bldg #	1	Sec #	1	PID	101882	Account	023341

Valuation Summary

(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	0	0
Extras	0	0
Improvements		
Outbuildings	450000	315000
Land	0	0
Total	450000	315000

Outbuilding and Extra Features

Type	Description
CEL TWR SITE	1 UNITS

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	0	0

Sales History

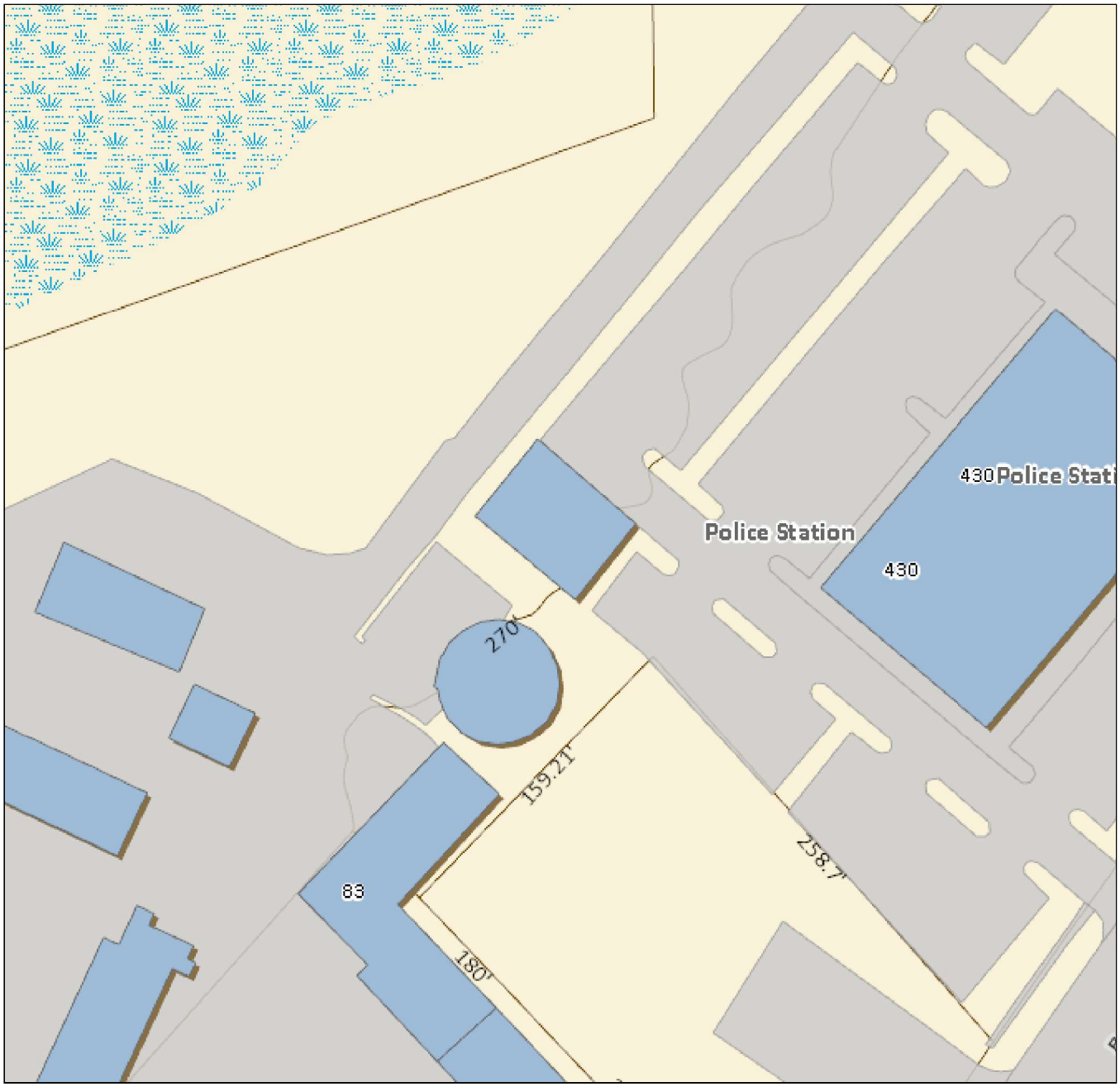
Owner of Record	Book/ Page	Sale Date	Sale Price
CITY OF MILFORD	02435/0430	1999-11-22	0

Report Created On 10/12/2021

City of Milford

Geographic Information System (GIS)

Date Printed: 10/12/2021



MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The City of Milford and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 80 feet

0 80 Feet

N W E S

Exhibit C

Construction Drawings

verizon

VERIZON SITE NUMBER: 469110
VERIZON SITE NAME: MILFORD CENTER CT
SITE TYPE: SELF-SUPPORT TOWER
TOWER HEIGHT: 150'-0"

BUSINESS UNIT #: 842870
SITE ADDRESS: 434 BOSTON POST ROAD MILFORD, CT 06460
COUNTY: NEW HAVEN
JURISDICTION: CONNECTICUT SITTING COUNCIL

VERIZON 5G L-SUB6 - CARRIER ADD 16231893

SITE INFORMATION

CROWN CASTLE USA INC. SITE NAME:	MILFORD
SITE ADDRESS:	434 BOSTON POST ROAD MILFORD, CT 06460
COUNTY:	NEW HAVEN
MAP/PARCEL #:	064 930 7
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41.228528
LONGITUDE:	-73.070139
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	70'
CURRENT ZONING:	CDD-1
JURISDICTION:	CONNECTICUT SITTING COUNCIL
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	GOLD COAST REALTY LLC 470 BOSTON POST RD MILFORD, CT 06460
TOWER OWNER:	CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	VERIZON WIRELESS 180 WASHINGTON VALLEY ROAD BEDMINSTER, NJ 07921
ELECTRIC PROVIDER:	UNITED ILLUMINATING CO. N/A
TELCO PROVIDER:	N/A N/A

PROJECT TEAM

A&E FIRM:	B+T GROUP 1717 S. BOULDER AVE. TULSA, OK 74119 JENNY PAUL
CROWN CASTLE USA INC. DISTRICT CONTACTS:	3 CORPORATE PARK DRIVE, SUITE 101 CLIFTON PARK, NY 12065 N/A - PROJECT MANAGER N/A N/A - CONSTRUCTION MANAGER N/A
VERIZON CONTACT:	ANDREW LEONE ALEONE@STRUCTURECONSULTING.NET

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1	SITE PLAN
C-2	TOWER ELEVATION & ANTENNA PLANS
C-3	EQUIPMENT SCHEDULES
C-4	EQUIPMENT DETAILS
C-5	EQUIPMENT DETAILS
C-6	PLUMBING DIAGRAM
G-1	GROUNDING DETAILS
G-2	GROUNDING DETAILS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 22X34. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

APPROVALS

SIGNATURE	DATE

CONTRACTOR PMI REQUIREMENTS

PMI ACCESSED AT	https://pmi.vzwsmart.com
SMART TOOL VENDOR PROJECT NUMBER	10078045
VzW LOCATION CODE (PSLC)	460110

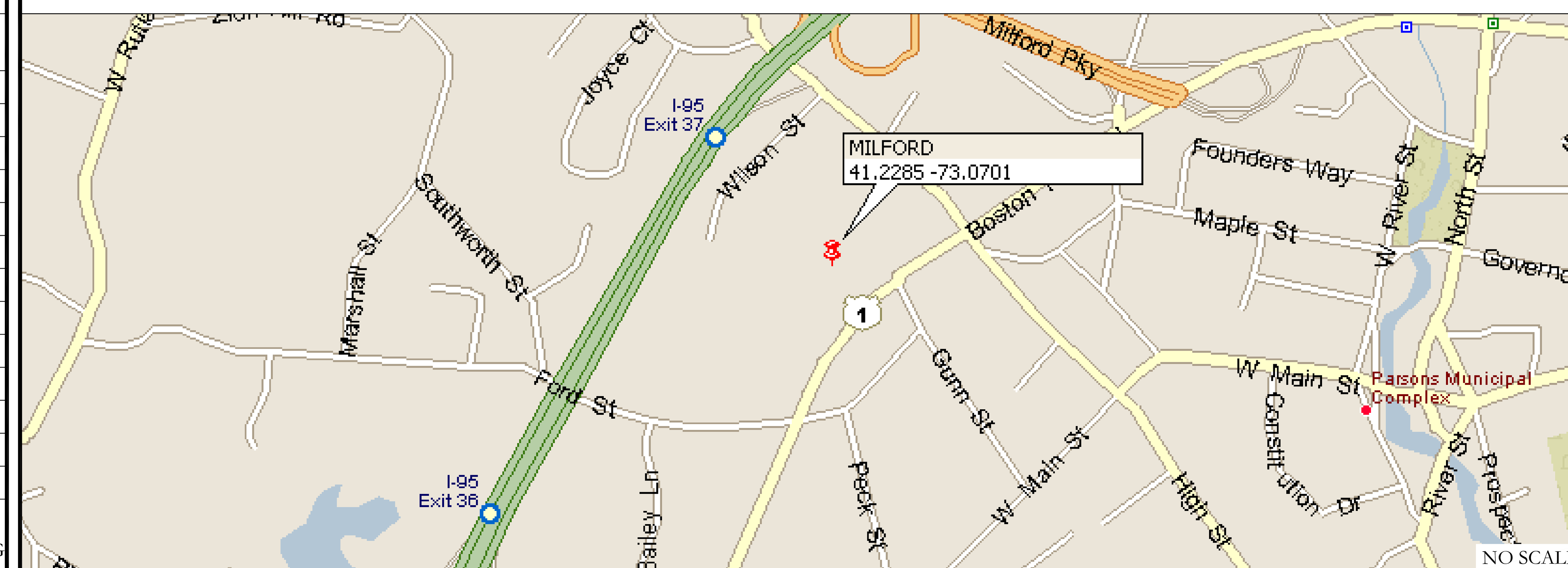
*** PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT

MOUNT MODIFICATION REQUIRED	Y

VzW APPROVED SMART KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VzW SMART KIT APPROVED VENDORS

LOCATION MAP



DRIVING DIRECTIONS FROM JOHN F. KENNEDY INTERNATIONAL AIRPORT:
GET ON I-678 N FROM 130TH PL FOLLOW I-678 N AND I-95 N TO HIGH ST IN MILFORD. TAKE EXIT 37 FROM I-95 N CONTINUE ON HIGH ST TO YOUR DESTINATION

APPLICABLE CODES/REFERENCE DOCUMENTS

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE	CODE
BUILDING	2015 IBC
MECHANICAL	2015 IMC
ELECTRICAL	2017 NEC

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS:	B+T GROUP
DATED:	5/22/21
MOUNT ANALYSIS:	MASER CONSULTING CONNECTICUT
DATED:	6/30/21
RFDS REVISION:	1
DATED:	4/8/21
ORDER ID:	568291
REVISION:	0

CALL CONNECTICUT ONE CALL (800) 922-4455 CBYD.COM CALL 2 WORKING DAYS BEFORE YOU DIG! 811

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

TOWER SCOPE OF WORK:
- REMOVE (9) ANTENNAS
- REMOVE (3) RADIOs
- REMOVE (6) DIPLEXERS
- REMOVE (1) OVP
- REMOVE (1) COAX CABLE
- INSTALL (9) ANTENNAS
- INSTALL (6) RADIOs
- INSTALL (1) OVP
- INSTALL (2) 6x12 HYBRIFLEX LI

GROUND SCOPE OF WORK:
- REMOVE (3) NOKIA - UHBA B13 RRH 4x30

NOTE:
PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN CONSTRUCTION MANAGER

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

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

VERIZON SITE NUMBER:
469110

BU #: 842870
MILFORD

434 BOSTON POST ROAD
MILFORD, CT 06460

EXISTING 150'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	8/24/21	JJR	CONSTRUCTION	JJR

8/24/21

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22

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

SHEET NUMBER:	REVISION:
T-1	0

91292.020.01_MILFORD.dwg — Sheet:T-1 — User: jrichardson — Aug 24, 2021 — 1:25pm

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

1. NOTICE TO PROCEED– NO WORK SHALL COMMENCE PRIOR TO CROWN CASTLE USA INC. WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800–788–7011 & THE CROWN CASTLE USA INC. CONSTRUCTION MANAGER.
2. "LOOK UP" – CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:
   THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
3. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
4. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED–STD–10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA–322 (LATEST EDITION).
5. ALL SITE WORK TO COMPLY WITH QAS–STD–10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE," CED–STD–10294 "STANDARD FOR INSTALLATION OF MOUNTS AND APPURTENANCES," AND LATEST VERSION OF ANSI/TIA–1019–A–2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
6. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR 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.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
10. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
18. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
20. CONTRACTOR 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.
21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
22. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
   CARRIER: VERIZON
   TOWER OWNER: CROWN CASTLE USA INC.
2. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
3. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
4. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
5. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR 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 CROWN CASTLE.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR 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.
8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
10. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF CROWN CASTLE USA INC.
13. CONTRACTOR 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.
14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST–IN–PLACE CONCRETE.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°f AT TIME OF PLACEMENT.
4. CONCRETE EXPOSED TO FREEZE–THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER–TO–CEMENT RATIO (W/C) OF 0.45.
5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:
   #4 BARS AND SMALLER..40 ksi
   #5 BARS AND LARGER..60 ksi
6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH......................3"
   CONCRETE EXPOSED TO EARTH OR WEATHER:
      #6 BARS AND LARGER..2"
      #5 BARS AND SMALLER..1–1/2"
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
      SLAB AND WALLS..3/4"
      BEAMS AND COLUMNS..1–1/2"
7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

GREENFIELD GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL–OF–POTENTAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. 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.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON–ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON–METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON–METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD–WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
   - 4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
   - 4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERYIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI–CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP–STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT) OR METAL–CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
18. LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.
21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).
22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON–PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER–ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY–COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR BETTER) FOR EXTERIOR LOCATIONS.
25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY–COATED OR NON–CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "VERIZON".
30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

CONDUCTOR COLOR CODE

SYSTEM	CONDUCTOR	COLOR
120/240V, 1Ø	A PHASE	BLACK
	B PHASE	RED
	NEUTRAL	WHITE
	GROUND	GREEN
120/208V, 3Ø	A PHASE	BLACK
	B PHASE	RED
	C PHASE	BLUE
	NEUTRAL	WHITE
	GROUND	GREEN
277/480V, 3Ø	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
	NEUTRAL	GREY
	GROUND	GREEN
DC VOLTAGE	POS (+)	RED**
	NEG (–)	BLACK**

* SEE NEC 210.5(C)(1) AND (2)
** POLARITY MARKED AT TERMINATION

APWA UNIFORM COLOR CODE:

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT, AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES, OR CONDUIT AND TRAFFIC LOOPS
BLUE	POTABLE WATER
PURPLE	RECLAIMED WATER, IRRIGATION, AND SLURRY LINES
GREEN	SEWERS AND DRAIN LINES

ABBREVIATIONS:

ANT	ANTENNA
(E)	EXISTING
FIF	FACILITY INTERFACE FRAME
GEN	GENERATOR
GPS	GLOBAL POSITIONING SYSTEM
GSM	GLOBAL SYSTEM FOR MOBILE
LTE	LONG TERM EVOLUTION
MGB	MASTER GROUND BAR
MW	MICROWAVE
(N)	NEW
NEC	NATIONAL ELECTRIC CODE
(P)	PROPOSED
PP	POWER PLANT
QTY	QUANTITY
RECT	RECTIFIER
RBS	RADIO BASE STATION
RET	REMOTE ELECTRIC TILT
RFDS	RADIO FREQUENCY DATA SHEET
RRH	REMOTE RADIO HEAD
RRU	REMOTE RADIO UNIT
SIAD	SMART INTEGRATED DEVICE
TMA	TOWER MOUNTED AMPLIFIER
TYP	TYPICAL
UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
W.P.	WORK POINT

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

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

VERIZON SITE NUMBER:
469110

BU #: **842870**
MILFORD

434 BOSTON POST ROAD
MILFORD, CT 06460

EXISTING 150'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	8/24/21	JJR	CONSTRUCTION	JJR

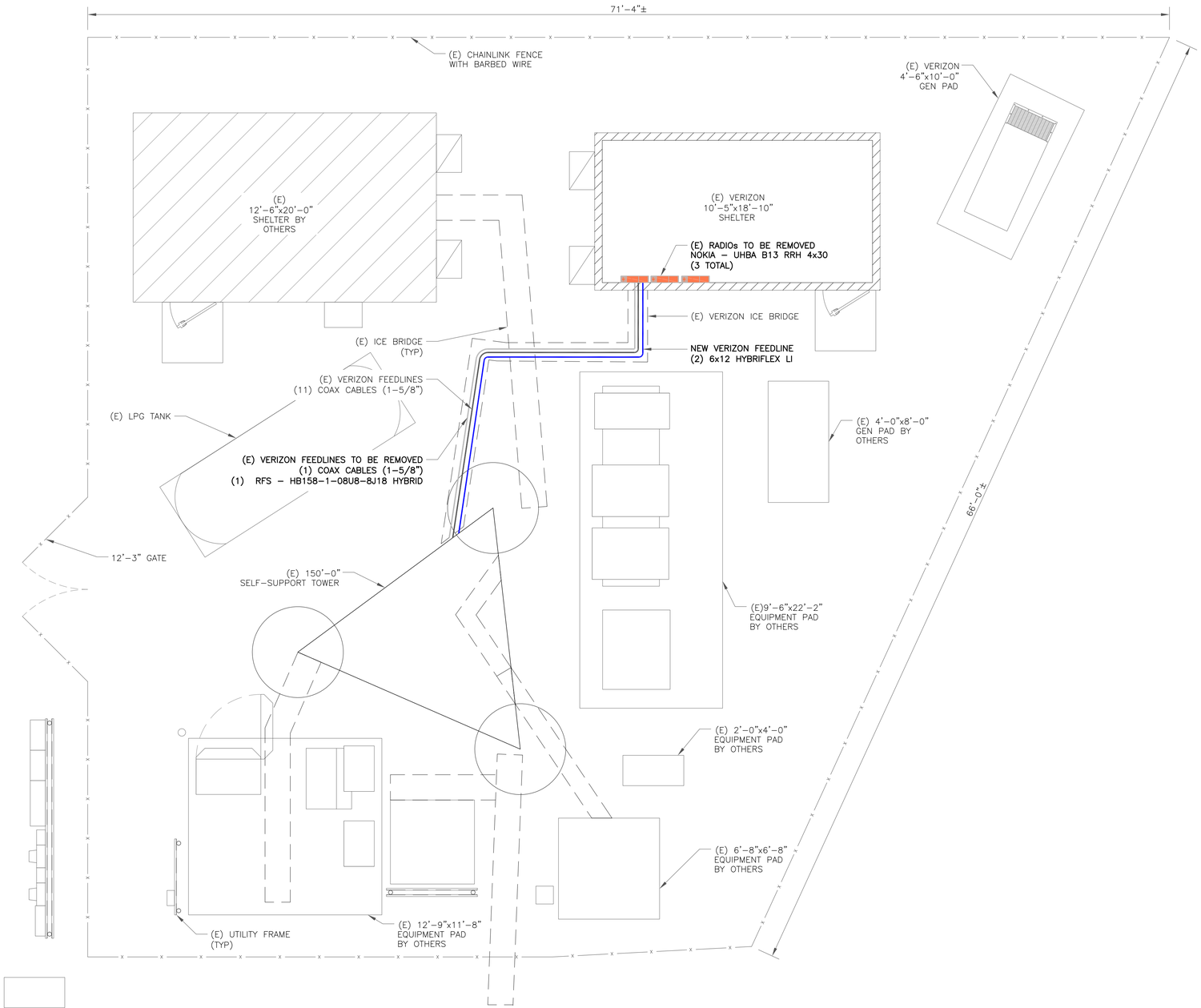
CHAD TUTTLE
No. 23924
8/24/21

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22

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

SHEET NUMBER: T-2
REVISION: 0

91292.020.01_MILFORD.dwg – Sheet:T-2 – User: jrichardson – Aug 24, 2021 – 1:25pm



1 SITE PLAN

SCALE: 4' 3' 2' 1' 0 4'

1/4"=1'-0" (FULL SIZE)
1/8"=1'-0" (11x17)

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

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EXISTING 150'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	8/24/21	JJR	CONSTRUCTION	JJR

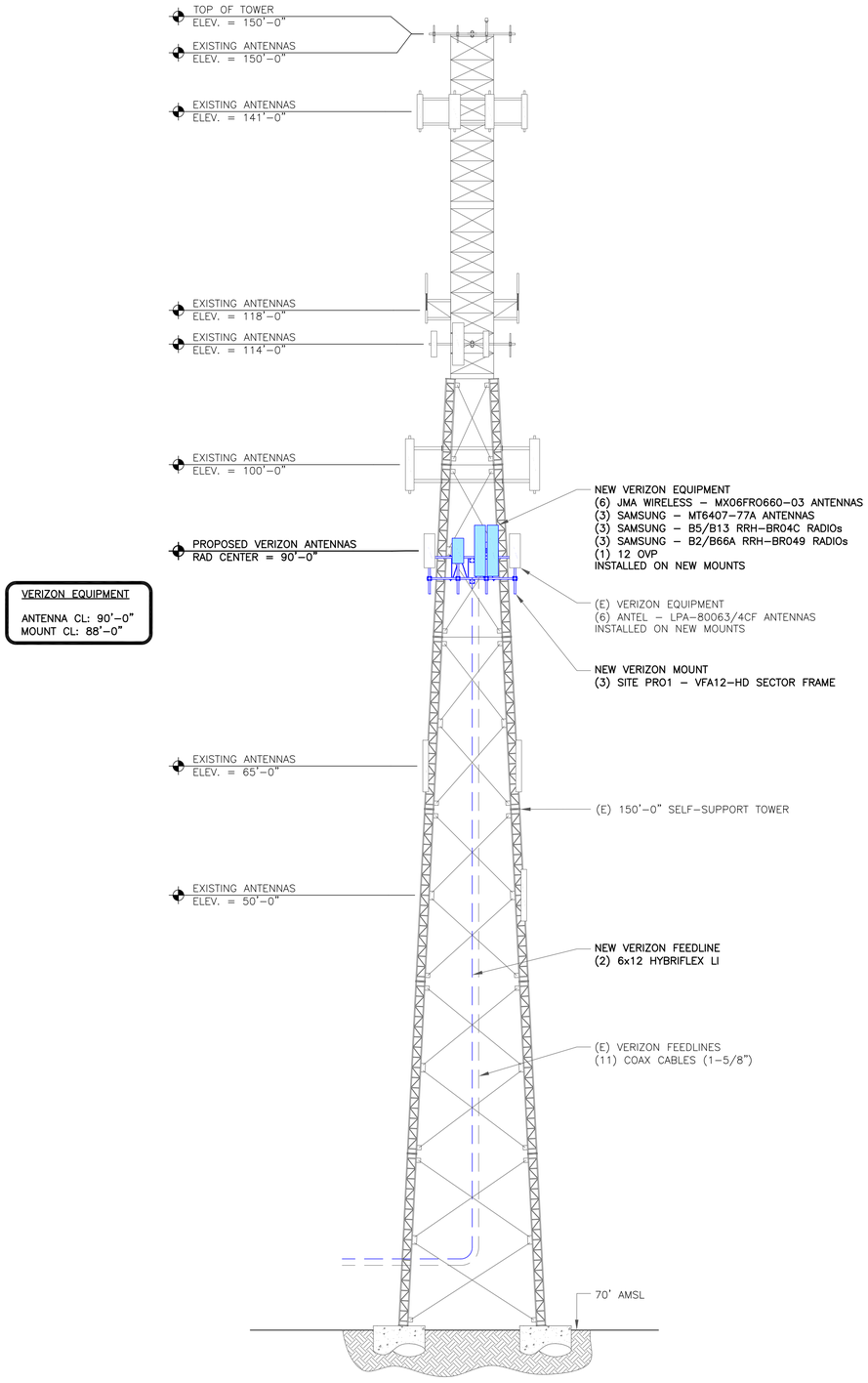
STATE OF CONNECTICUT
JAMES J. RICHARDSON
No. 23924
LICENSED
PROFESSIONAL ENGINEER
8/24/21

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22

SHEET NUMBER: C-1

REVISION: 0

91292.020.01_MILFORD.dwg -- Sheet:C-1 -- User: jrichardson -- Aug 24, 2021 -- 1:27pm



1 TOWER ELEVATION
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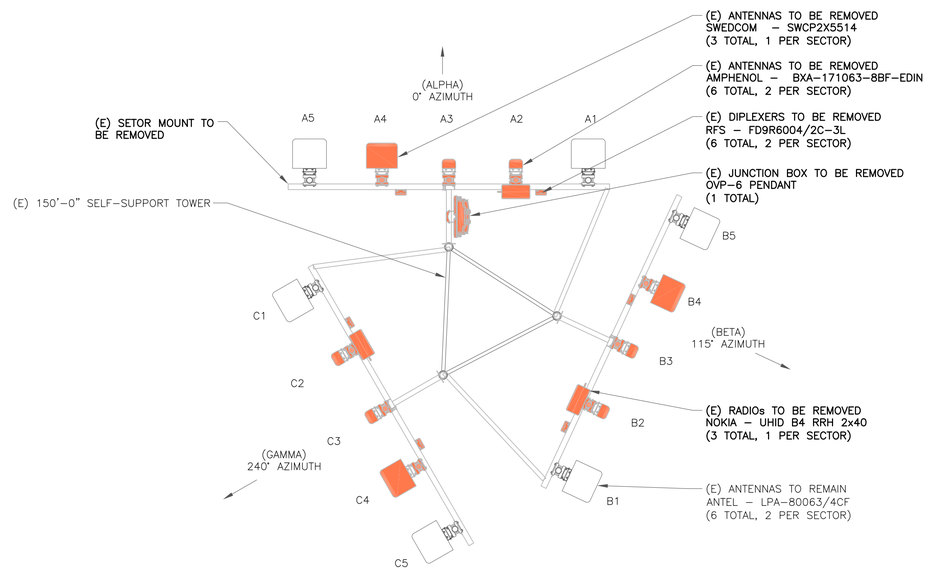
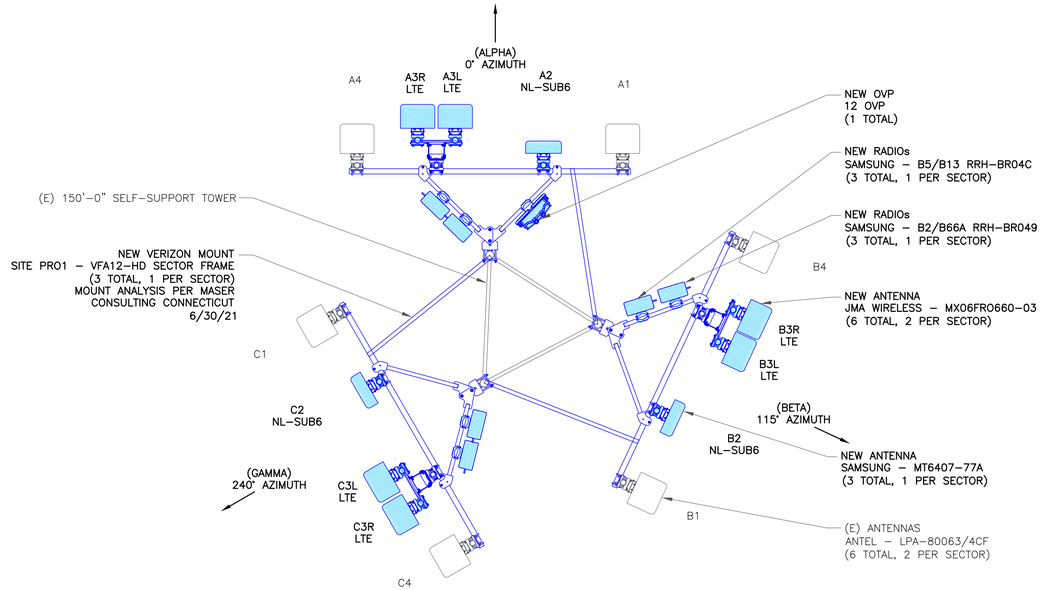


2 EXISTING ANTENNA PLAN
SCALE: NOT TO SCALE



3 NEW ANTENNA PLAN
SCALE: NOT TO SCALE

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180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
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ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	8/24/21	JJR	CONSTRUCTION	JJR

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22

SHEET NUMBER: C-2

REVISION: 0

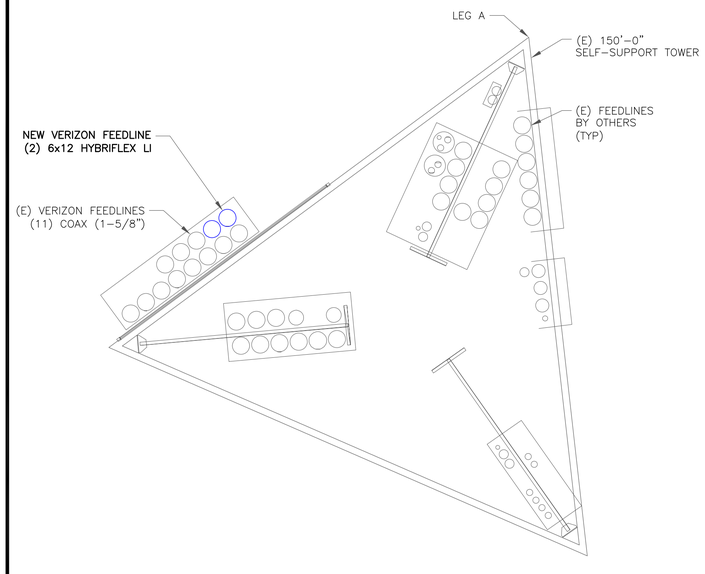
ANTENNA/RRH SCHEDULE

SECTOR	STATUS	ANTENNA MANUFACTURER	ANTENNA MODEL	ANTENNA CENTERLINE	AZIMUTH	MECHANICAL DOWNTILTS	ELECTRICAL DOWNTILTS	TOWER EQUIPMENT MANUFACTURER	TOWER EQUIPMENT QTY/MODEL
A1	EXISTING	ANTEL	LPA-80063/4CF	90'-0"	0°	0°	0°	–	–
A2	NEW	SAMSUNG	MT6407-77A	90'-0"	0°	0°	6°	SAMSUNG	(1) 12 OVP
A3	NEW	JMA WIRELESS	MX06FRO660-03	90'-0"	0°	0°	4°/4°/0°/0°	SAMSUNG	(1) B5/B13 RRH-BR04C
A4	NEW	JMA WIRELESS	MX06FRO660-03	90'-0"	0°	0°	4°/4°/0°/0°	SAMSUNG	(1) B2/B66A RRH-BR049
A5	EXISTING	ANTEL	LPA-80063/4CF	90'-0"	0°	0°	0°	–	–
B1	EXISTING	ANTEL	LPA-80063/4CF	90'-0"	115°	0°	0°	–	–
B2	NEW	SAMSUNG	MT6407-77A	90'-0"	115°	0°	6°	SAMSUNG	(1)
B3	NEW	JMA WIRELESS	MX06FRO660-03	90'-0"	115°	0°	2°/2°/0°/0°	SAMSUNG	(1) B5/B13 RRH-BR04C
B4	NEW	JMA WIRELESS	MX06FRO660-03	90'-0"	115°	0°	2°/2°/0°/0°	SAMSUNG	(1) B2/B66A RRH-BR049
B5	EXISTING	ANTEL	LPA-80063/4CF	90'-0"	115°	0°	0°	–	–
C1	EXISTING	ANTEL	LPA-80063/4CF	90'-0"	240°	0°	0°	–	–
C2	NEW	SAMSUNG	MT6407-77A	90'-0"	240°	0°	6°	SAMSUNG	(1)
C3	NEW	JMA WIRELESS	MX06FRO660-03	90'-0"	240°	0°	4°/4°/0°/0°	SAMSUNG	(1) B5/B13 RRH-BR04C
C4	NEW	JMA WIRELESS	MX06FRO660-03	90'-0"	240°	0°	4°/4°/0°/0°	SAMSUNG	(1) B2/B66A RRH-BR049
C5	EXISTING	ANTEL	LPA-80063/4CF	90'-0"	240°	0°	0°	–	–

1 VERIZON TOWER EQUIPMENT SCHEDULE
SCALE: NOT TO SCALE

CABLE SCHEDULE

STATUS	CABLE TYPE	SIZE	LENGTH	QTY
EXISTING	COAX	1-5/8"	140-0"±	11
NEW	HYBRID	6X12	140'-0"±	2
TOTAL CABLE QTY:				13



2 BASE LEVEL DETAIL
SCALE: NOT TO SCALE

N

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www.btgrp.com

VERIZON SITE NUMBER:
469110

BU #: **842870**
MILFORD

434 BOSTON POST ROAD
MILFORD, CT 06460

EXISTING 150'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

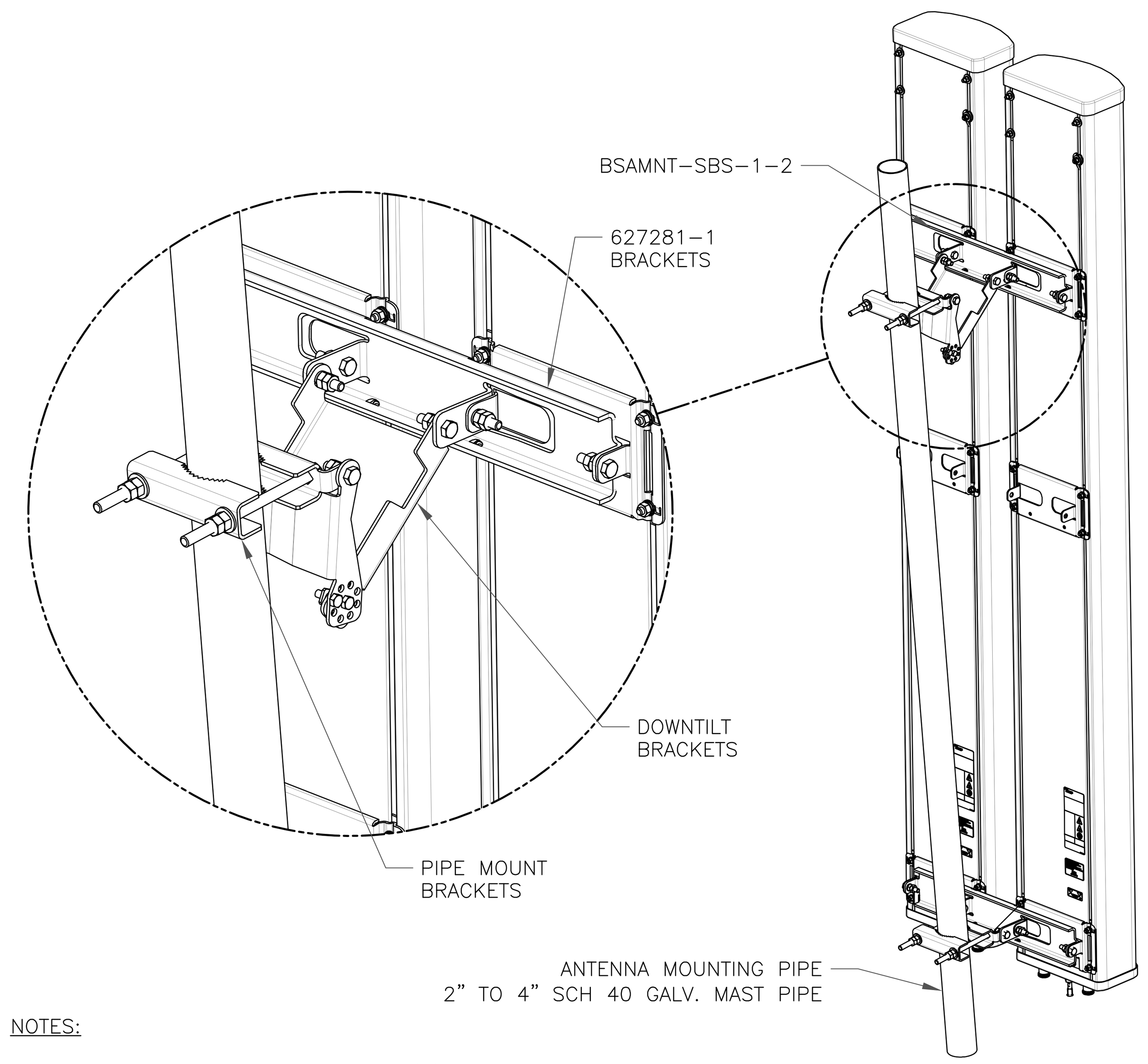
REV	DATE	DRWN	DESCRIPTION	DES./QA
0	8/24/21	JJR	CONSTRUCTION	JJR

STATE OF CONNECTICUT
JASON J. RICHARDSON
No. 23924
LICENSED
PROFESSIONAL ENGINEER
8/24/21

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22

SHEET NUMBER: C-3

REVISION: 0

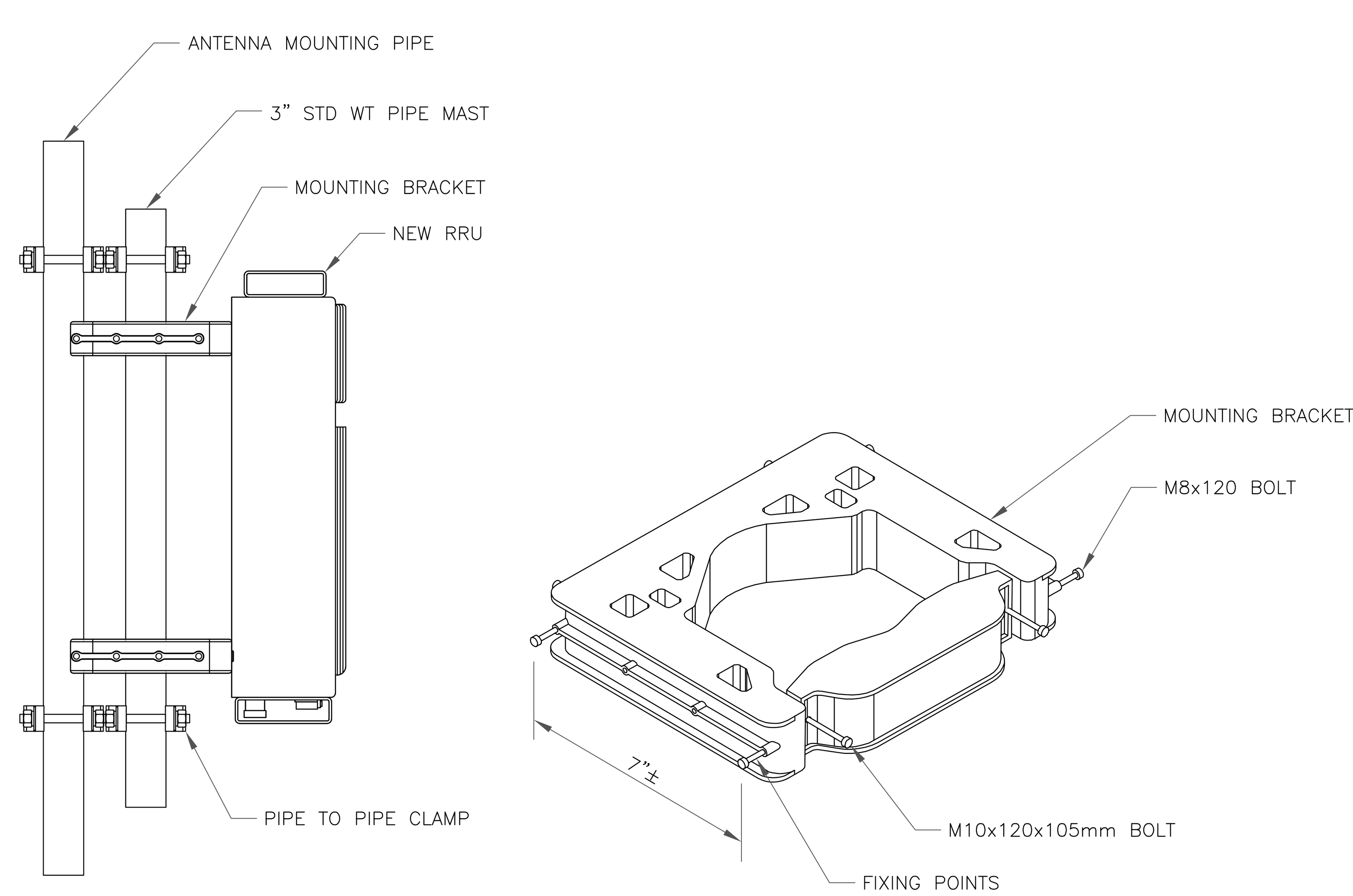


NOTES:

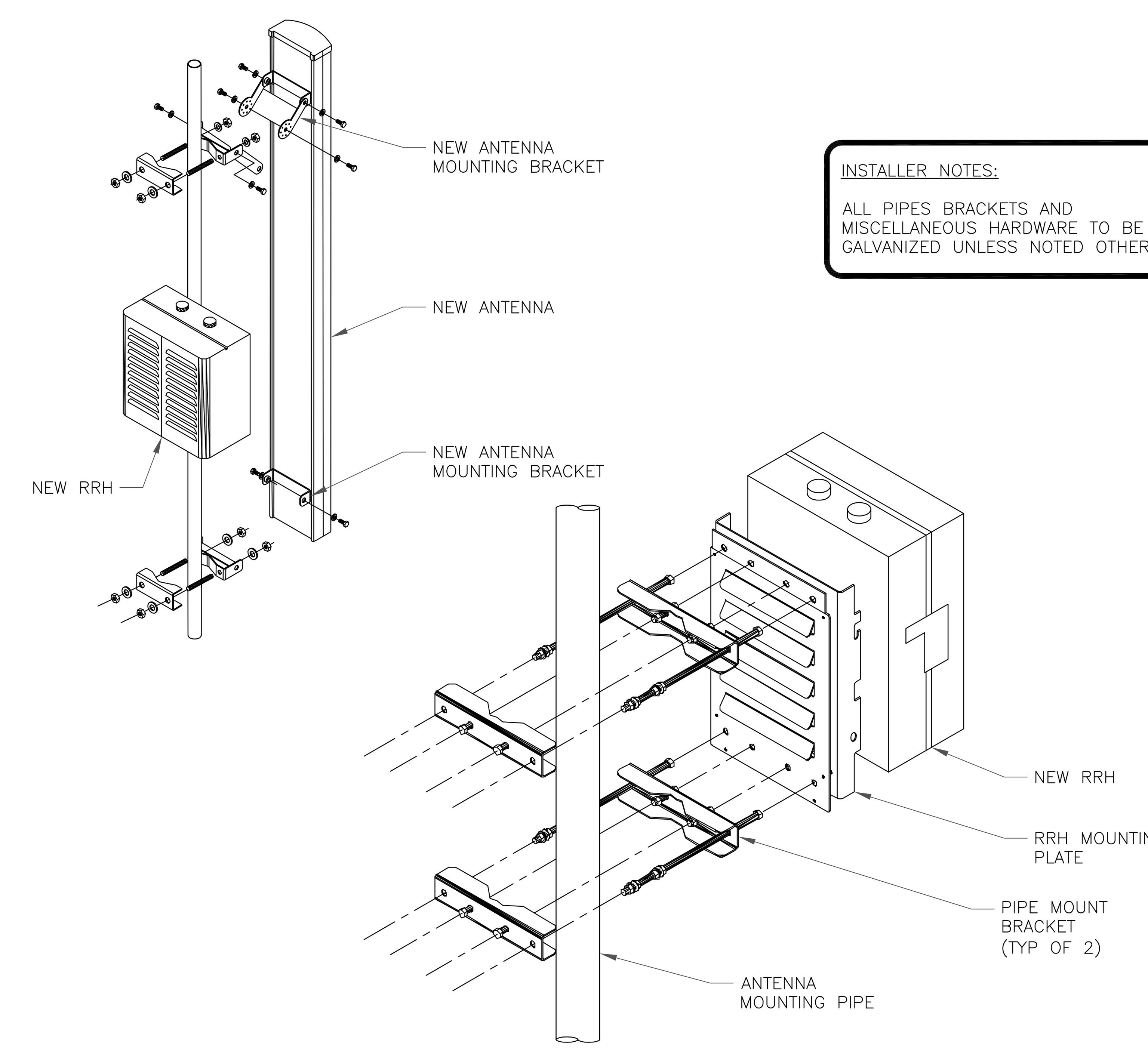
- BSAMNT-SBS-1-2 KIT CONTAINS (2) 627281 MOUNTING BRACKETS.
- TORQUE THE M10 BOLT ASSEMBLY TO 37 N.m. PER MANUFACTURE'S RECOMMENDATIONS.

1 COMMSCOPE – BSAMNT-SBS-1-2
SCALE: NOT TO SCALE

2 NOT USED
SCALE: NOT TO SCALE



3 NOKIA – FPKA BRACKET MOUNTING DETAIL
SCALE: NOT TO SCALE



INSTALLER NOTES:

ALL PIPES BRACKETS AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.

4 ANTENNA & RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

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VERIZON SITE NUMBER:
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BU #: **842870**
MILFORD

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EXISTING 150'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	8/24/21	JJR	CONSTRUCTION	JJR

8/24/21

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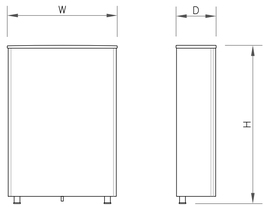
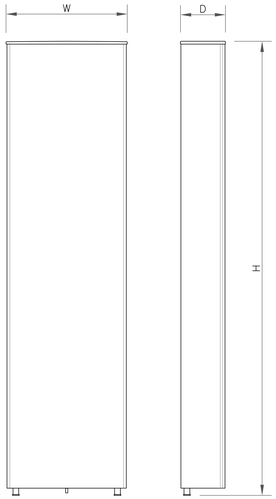
REVISION: 0



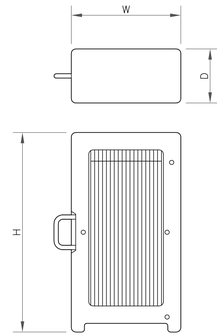
ANTENNA SPECS	
MANUFACTURER	SAMSUNG
MODEL #	MT6407-77A
WIDTH	16.06"
DEPTH	5.51"
HEIGHT	35.06"
WEIGHT	81.57 LBS

1 ANTENNA SPECS
SCALE: NOT TO SCALE



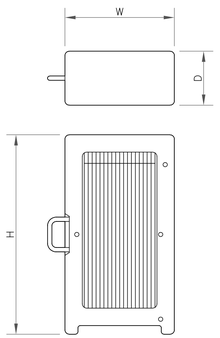
ANTENNA SPECS	
MANUFACTURER	JMA
MODEL #	MX06FRO660-03
WIDTH	15.40"
DEPTH	10.70"
HEIGHT	71.30"
WEIGHT	78.00

2 ANTENNA SPECS
SCALE: NOT TO SCALE



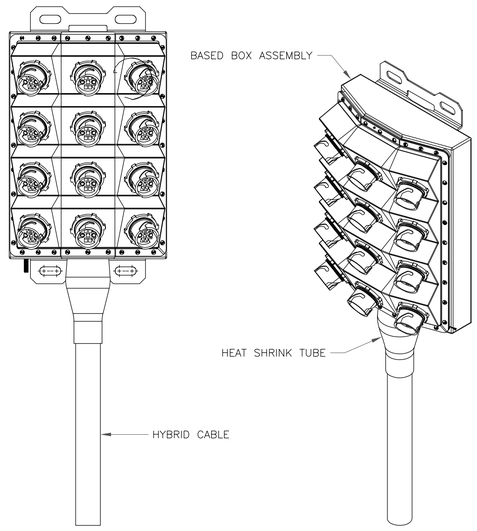
RRU SPECIFICATIONS	
MANUFACTURER	SAMSUNG
MODEL #	RFV01U-D1A
WIDTH	15.00"
DEPTH	10.00"
HEIGHT	15.00"
WEIGHT	84.40 LBS

3 RRU SPECS
SCALE: NOT TO SCALE



RRU SPECIFICATIONS	
MANUFACTURER	SAMSUNG
MODEL #	RFV01U-D2A
WIDTH	15.00"
DEPTH	8.10"
HEIGHT	15.00"
WEIGHT	70.30 LBS

4 RRU SPECS
SCALE: NOT TO SCALE



RAYCAP – RVZDC-6627-PF-48_CCIV2
WEIGHT (WITHOUT MOUNTING HARDWARE): 32.00 LBS.
SIZE (HxWxD): 29.50x16.50x12.60 IN.

5 RAYCAP JUNCTION BOX
SCALE: NOT TO SCALE

6 NOT USED
SCALE: NOT TO SCALE

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VERIZON SITE NUMBER:
469110

BU #: **842870**
MILFORD

434 BOSTON POST ROAD
MILFORD, CT 06460

EXISTING 150'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	8/24/21	JJR	CONSTRUCTION	JJR

STATE OF CONNECTICUT
JOSEPH J. RICHARDSON
No. 23024
LICENSED
PROFESSIONAL ENGINEER
8/24/21

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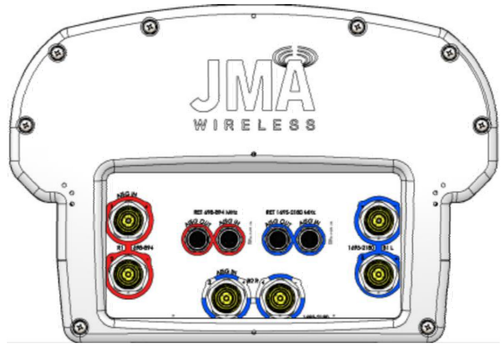
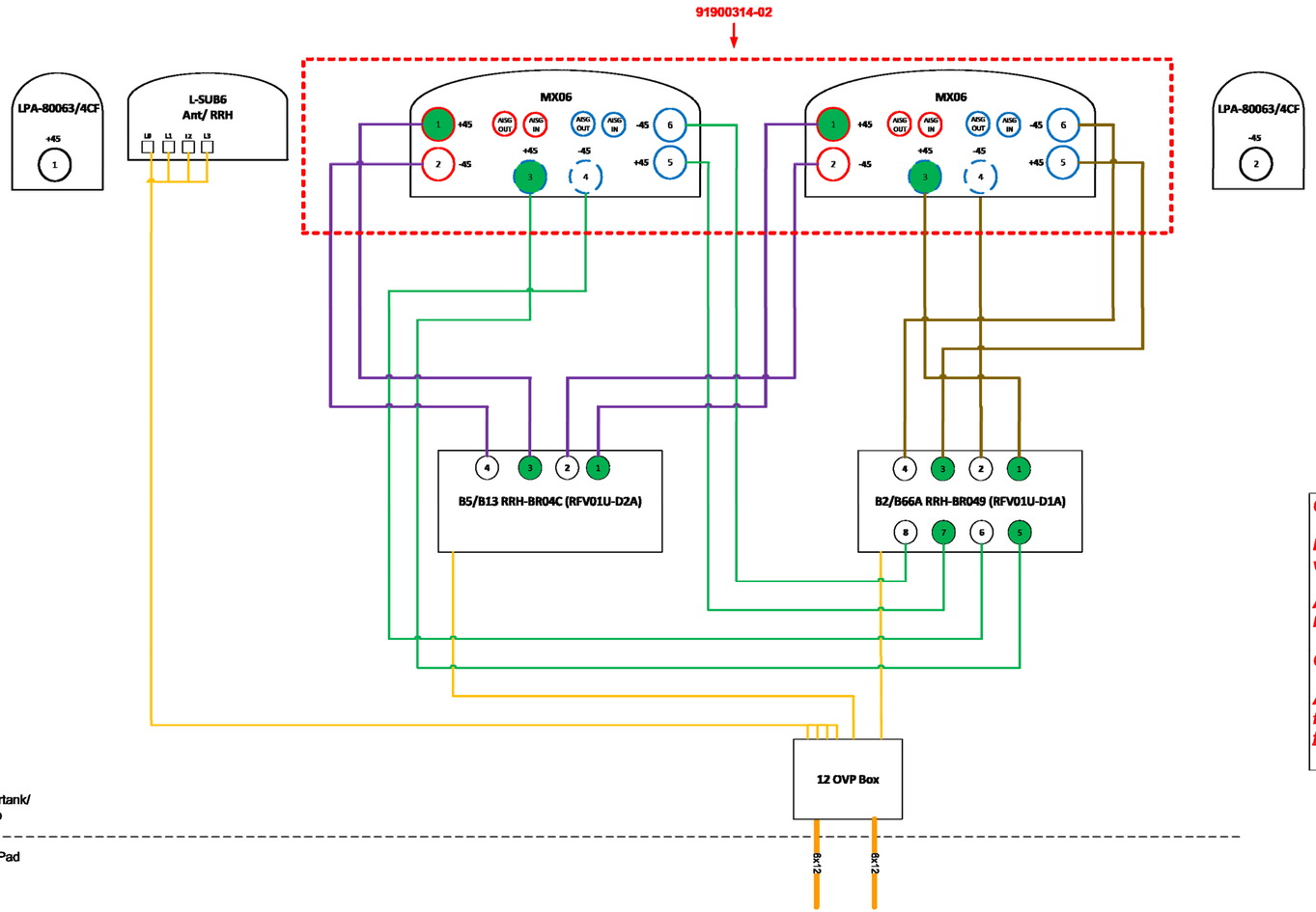
Expires 2/10/22

SHEET NUMBER: C-5
REVISION: 0



- **Port 1 & 2 are for low band (698-896 MHz).**
- **Port 3,4,5, & 6 are for high band (1695-2360 MHz).**
- **Smart Bias Tee (SBT) is through port 1 & 3 for low band and port 1 for high band.**
- **AISG cable is only needed when drawn in the diagrams below, if it is not drawn then SBT is enough to control all RET motors.**
- **Not all SBT ports are needed to control RET, only green port connection to green port will control RET.**

RET DC signal pass for RET
(Port that will control RET)



DC signal capable Port

AISG Cable

RET DC signal pass for RET
(Port that will control RET)

Hybriflex cables

Comments:

Diagram shows antenna port configuration as viewed from below antennas.

Antenna positions are indicated as viewed from IN FRONT of antennas.

Cap and weatherproof unused antenna ports.

All plumbing diagram colors are irrelevant except for AISG & Hybriflex cable. (For the coax colors follow Coax Colors guide above)

1 PLUMBING DIAGRAM
SCALE: NOT TO SCALE

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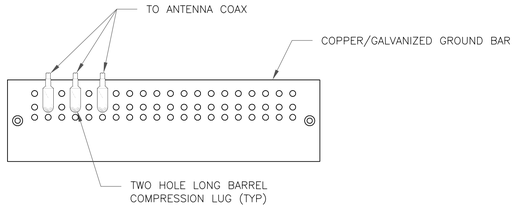
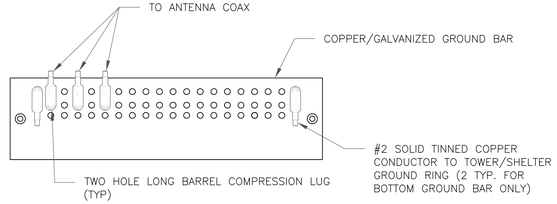


NOTES:

1. DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
3. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO ANTENNA MOUNT STEEL.

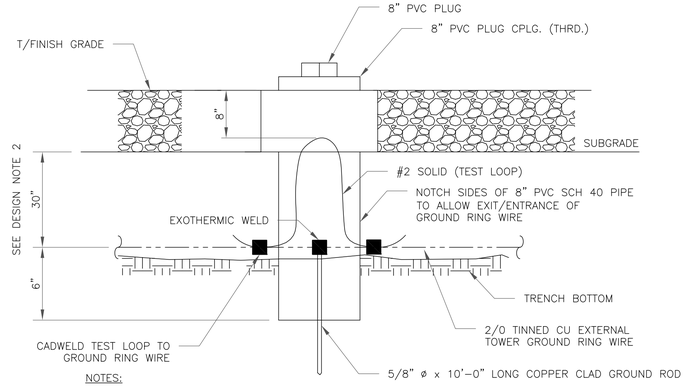
1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

1. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
2. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
3. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

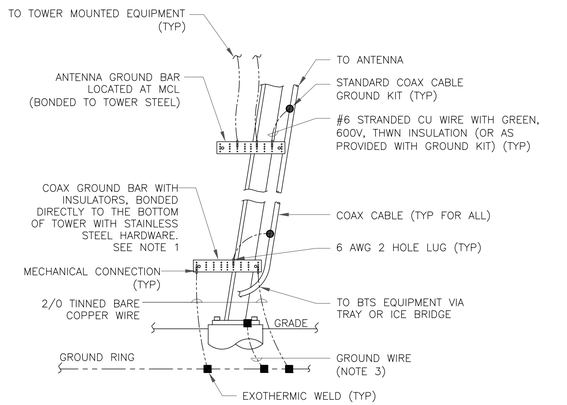
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
2. GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

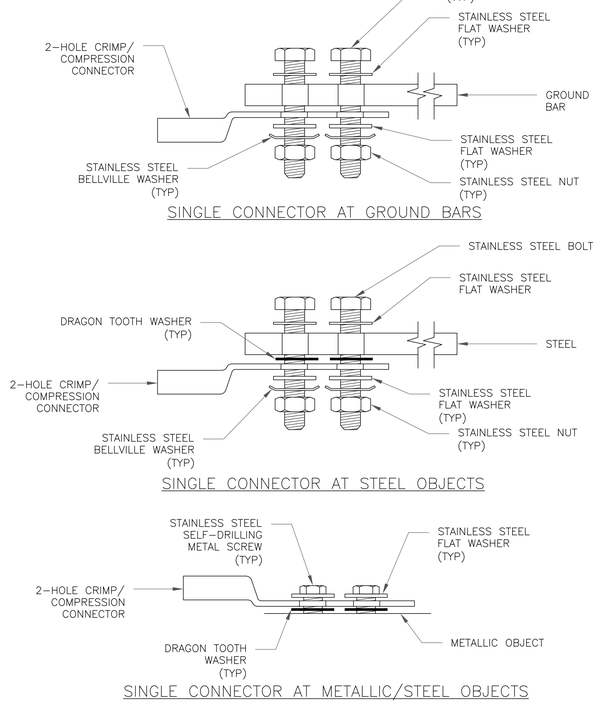
3 INSPECTION WELL DETAIL
SCALE: NOT TO SCALE



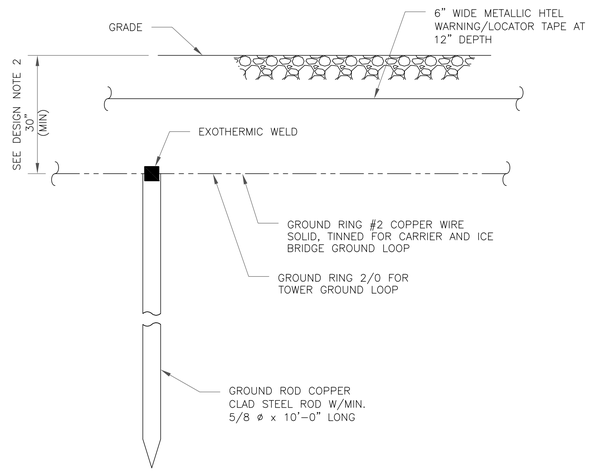
NOTES:

1. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATIONS AND CONNECTION ORIENTATION. COAXIAL CABLES EXCEEDING 200 FEET ON THE TOWER SHALL HAVE GROUND KITS AT THE MIDPOINT. PROVIDE AS REQUIRED.
2. ONLY MECHANICAL CONNECTIONS ARE ALLOWED TO BE MADE TO CROWN CASTLE USA INC. TOWERS. ALL MECHANICAL CONNECTIONS SHALL BE TREATED WITH AN ANTI-OXIDANT COATING.
3. ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF THE RECOGNIZED EDITION OF ANSI/TIA 222 AND NFPA 780.

4 TYPICAL ANTENNA CABLE GROUNDING
SCALE: NOT TO SCALE



5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
2. GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

6 GROUND ROD DETAIL
SCALE: NOT TO SCALE

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BU #: **842870**
MILFORD

434 BOSTON POST ROAD
MILFORD, CT 06460

EXISTING 150'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	8/24/21	JJR	CONSTRUCTION	JJR

8/24/21

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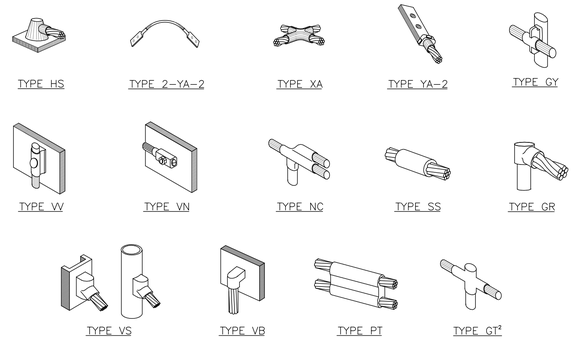
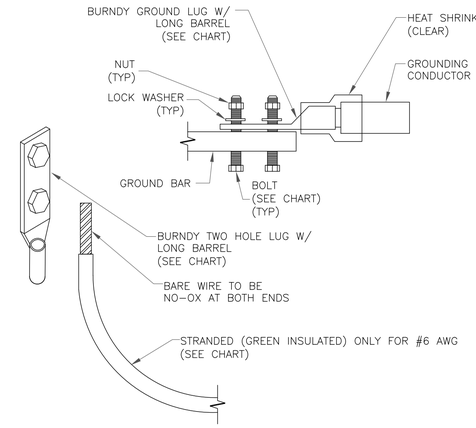


NOTE:

1. ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.
2. MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

1 CADWELD GROUNDING CONNECTIONS
SCALE: NOT TO SCALE

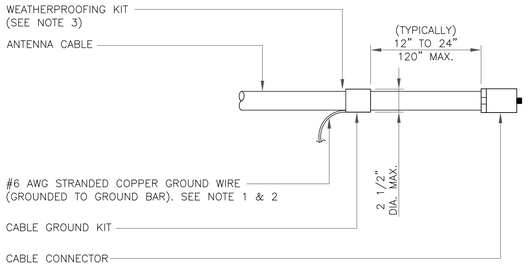
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



NOTES:

1. ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER,GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.

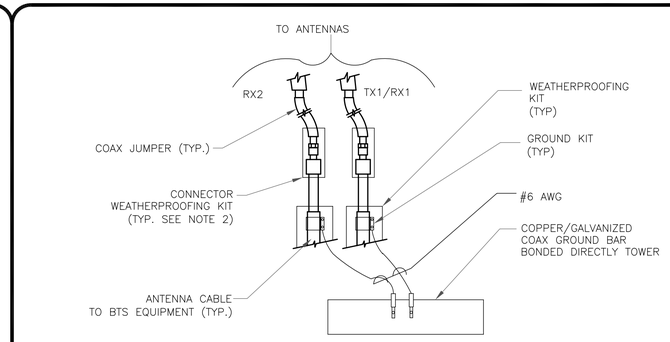
2 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



NOTES:

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

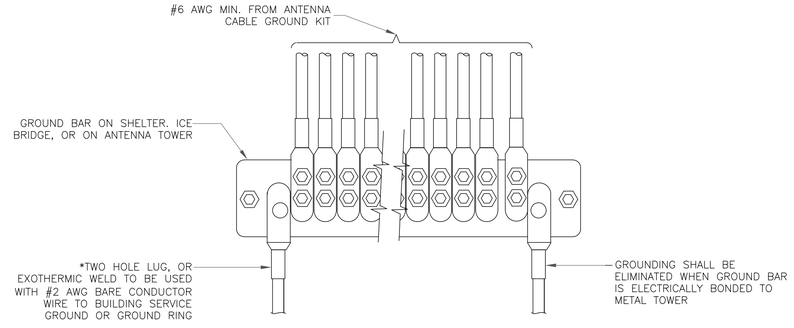
3 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



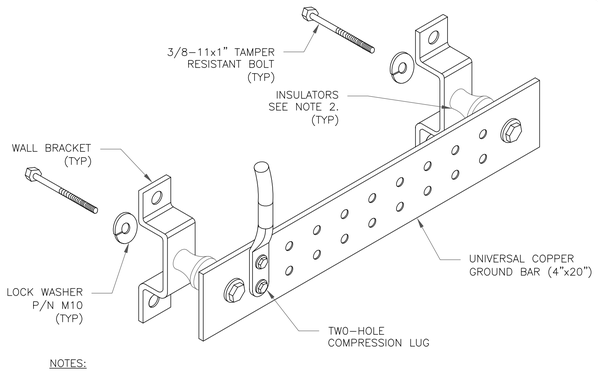
NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

4 GROUND CABLE CONNECTION
SCALE: NOT TO SCALE



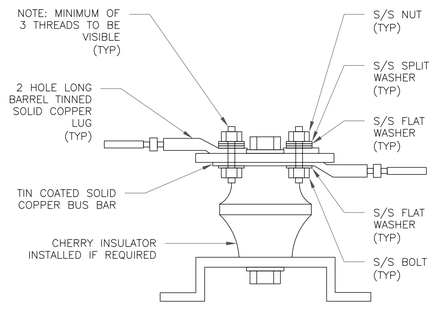
5 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



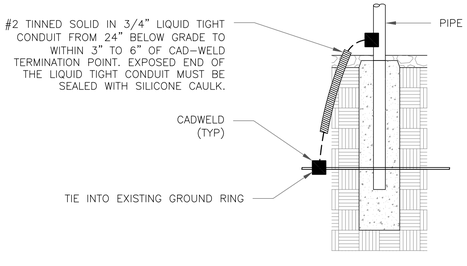
NOTES:

1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

6 GROUND BAR DETAIL
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE



8 TRANSITIONING GROUND DETAIL
SCALE: NOT TO SCALE

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VERIZON SITE NUMBER:
469110

BU #: **842870**
MILFORD

434 BOSTON POST ROAD
MILFORD, CT 06460

EXISTING 150'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	8/24/21	JJR	CONSTRUCTION	JJR

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22

SHEET NUMBER: G-2
REVISION: 0

Exhibit D

Structural Analysis Report

Date: **May 22, 2021**

B+T Group
1717 S. Boulder, Suite 300
Tulsa OK, 74119
(918) 587-4630

Subject:	**Structural Analysis Report**	
Carrier Designation:	***Verizon Wireless* Co-Locate**	
	Site Number:	469110
	Site Name:	Milford Center CT
Crown Castle Designation:	**BU Number:**	842870
	Site Name:	MILFORD
	JDE Job Number:	667192
	Work Order Number:	1962122
	Order Number:	568291 Rev. 0
Engineering Firm Designation:	**B+T Group Project Number:**	91292.019.01
Site Data:	**434 Boston Post Road, Milford, New Haven County, CT**	
	Latitude *41° 13' 42.69"*, Longitude *-73° 4' 12.47"*	
	150 Foot - Self Support Tower	

B+T Group is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above-mentioned tower.

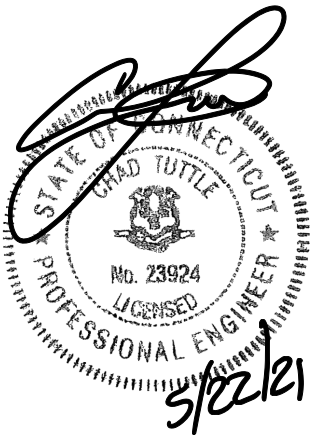
The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC5: Proposed Equipment Configuration **Sufficient Capacity - 99.5%**

This analysis utilizes an ultimate 3-second gust wind speed of 125 mph as required by the 2018 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Jacob Johnson, E.I.T.

Respectfully submitted by: B+T Engineering, Inc.
COA: PEC.0001564 Expires: 02-10-2021



Chad E. Tuttle, P.E.

TABLE OF CONTENTS

1) INTRODUCTION

This is a 150 ft. self-support tower designed by PiRod Inc. in March 2000. This tower has been modified by GPD Group in 2012. Reinforcement consists of replacing the Diagonals Member between elevations from 80' to 100' and those modifications were incorporated in this analysis.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	125 mph
Exposure Category:	C
Topographic Factor:	1
Ice Thickness:	1.5 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
88.0	90.0	6	Antel	LPA-80063/4CF	13	1-5/8
		6	JMA Wireless	MX06FRO660-03		
		1	Raycap	RVZDC-6627-PF-48_CCIV2		
		3	Samsung Tel.	MT6407-77A		
		3	Samsung Tel.	RFV01U-D1A		
		3	Samsung Tel.	RFV01U-D2A		
	88.0	3	JMA	91900314-02		
		1	--	Pipe Mount [PM 601-3]		
		1	--	Sector Mount [SM 408-3]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
150.0	160.0	2	Sinclair	SC226-SFXSNM	6 1	5/8 3/8
	151.0	2	Radio Waves	HPLPD1-18		
	150.0	1	--	Platform Mount [LP 405-1]		
144.0	144.0	3	Ericsson	RRUS 11 B2	--	--
		3	Ericsson	RRUS 32 B30		
		2	Raycap	DC6-48-60-18-8F		
141.0	144.0	3	Ericsson	RRUS 32 B30	12 2 4 3	1-5/8 7/8 5/8 3/8
		3	Ericsson	RRUS 4478 B14		
		3	Ericsson	RRUS 4478 B5		
		1	Raycap	DC6-48-60-18-8F		
	141.0	3	Andrew	SBNHH-1D65A		
		3	CCI Antennas	OPA-65R-LCUU-H4		
		1	Commscope	WCS-IMFQ-AMT		
		3	Ericsson	RRUS 4426 B66		
		6	Kaelus	DBCT108F1V92-1		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
141.0	141.0	3	Kathrein	80010964	--	--
		3	Powerwave Tech.	7020.00		
		3	Powerwave Tech.	7770.00		
		6	Powerwave Tech.	LGP21401		
		1	--	Sector Mount [SM 503-3]		
130.0	130.0	2	Terrawave	M5160160P10006	2	7/8
		2	--	Side Arm Mount [SO 301-1]		
118.0	128.0	1	Sinclair	SC229-SFXLDF	2	7/8
		1	Sinclair	SC320		
	118.0	2	--	Side Arm Mount [SO 306-1]		
114.0	114.0	3	Ericsson	AIR6449 B41	9 2	1-5/8 1-3/8
		3	Ericsson	RADIO 4449 B71 B85A_T-MOBILE		
		3	Ericsson	RRUS 4415 B25_CCIV2		
		1	--	Sector Mount [SM 307-3]		
	112.0	3	Ericsson	AIR 32 B2A/B66AA		
		3	Ericsson	ERICSSON AIR 21 B2A B4P		
		3	Ericsson	KRY 112 71		
		3	RFS Celwave	APXVAARR24_43-U-NA20		
103.0	103.0	1	--	Pipe Mount [PM 601-3]	--	--
	100.0	3	Alcatel Lucent	800MHZ 2X50W RRH W/FILTER		
		3	Alcatel Lucent	PCS 1900MHZ 2X40W		
100.0	103.0	3	Alcatel Lucent	TD-RRH8X20-25	3 1	1-1/4 7/8
	100.0	3	Commscope	DT465B-2XR		
		3	RFS Celwave	APXVSPP18-C-A20		
		1	--	Sector Mount [SM 406-3]		
	97.0	3	Alcatel Lucent	RRH2X50-800		
65.0	65.0	3	RFS Celwave	APXV18-206517S-C	6	1-5/8
50.0	50.0	1	Pctel	GPS-TMG-HR-26NCM	1	1/2

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
Tower Manufacturer Drawing	4480661	CCI Sites
Tower Modification Drawing	4713244	CCI Sites
Post Modification Inspection	4713239	CCI Sites
Foundation Drawing	4480652	CCI Sites
Geotech Report	5359323	CCI Sites
Exposure Category Determination	5974782	CCI Sites
Antenna Configuration	Date: 04/28/2021	CCI Sites

3.1) Analysis Method

tnxTower (version 8.0.9.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard.

3.2) Assumptions

1) Tower and structures were maintained in accordance with the TIA-222 Standard.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

This analysis may be affected if any assumptions are not valid or have been made in error. B+T Group should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T1	150 - 147.583	Leg	1 1/2	1	-6.012	53.917	11.2	Pass
T2	147.583 - 130	Leg	1 1/2	15	-39.799	53.917	73.8	Pass
T3	130 - 110	Leg	2	72	-92.422	117.290	78.8	Pass
T4	110 - 100	Leg	Pirod 105244	136	-97.606	149.618	65.2	Pass
T5	100 - 80	Leg	Pirod 105216	148	-148.908	149.618	99.5	Pass
T6	80 - 60	Leg	Pirod 105217	166	-197.997	225.602	87.8	Pass
T7	60 - 40	Leg	Pirod 105218	184	-240.288	315.715	76.1	Pass
T8	40 - 20	Leg	Pirod 105218	199	-280.088	315.715	88.7	Pass
T9	20 - 0	Leg	Pirod 105219	214	-316.634	419.861	75.4	Pass
T1	150 - 147.583	Diagonal	3/4	11	-2.897	5.577	52.0	Pass
T2	147.583 - 130	Diagonal	3/4	26	-4.696	5.123	91.7	Pass
T3	130 - 110	Diagonal	7/8	83	-6.138	8.211	74.8	Pass
T4	110 - 100	Diagonal	L2 1/2x2 1/2x3/16	142	-11.206	18.455	60.7	Pass
T5	100 - 80	Diagonal	L2 1/2x2 1/2x3/8	156	-10.377	27.043	38.4	Pass
T6	80 - 60	Diagonal	L3x3x3/16	174	-8.848	20.182	43.8	Pass
T7	60 - 40	Diagonal	L3x3x3/16	190	-8.642	16.112	53.6	Pass
T8	40 - 20	Diagonal	L3x3x5/16	205	-9.282	20.744	44.7	Pass
T9	20 - 0	Diagonal	L3x3x5/16	220	-11.218	17.119	65.5	Pass
T2	147.583 - 130	Horizontal	7/8	28	-0.746	5.216	14.3	Pass
T3	130 - 110	Horizontal	3/4	85	-1.671	2.305	72.5	Pass
T1	150 - 147.583	Top Girt	5x1/2	6	-1.919	10.158	18.9	Pass
T2	147.583 - 130	Top Girt	7/8	17	-0.748	6.213	12.0	Pass
T3	130 - 110	Top Girt	7/8	74	-1.846	5.122	36.0	Pass
T4	110 - 100	Top Girt	L3x3x3/16	138	-1.693	28.645	5.9	Pass
T5	100 - 80	Top Girt	L3x3x3/16	150	6.953	30.113	23.1	Pass
T6	80 - 60	Top Girt	L3x3x3/16	167	-5.640	18.645	30.3	Pass
T2	147.583 - 130	Bottom Girt	7/8	19	-1.860	5.073	36.7	Pass
T3	130 - 110	Bottom Girt	7/8	76	-2.189	4.166	52.5	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
							Summary	
						Leg (T5)	99.5	Pass
						Diagonal (T2)	91.7	Pass
						Horizontal (T3)	72.5	Pass
						Top Girt (T3)	36.0	Pass
						Bottom Girt (T3)	52.5	Pass
						Bolt Checks	86.3	Pass
						Rating =	99.5	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Anchor Rods	Base	50.3	Pass
1,2	Base Foundation (Structure)	Base	16.6	Pass
1,2	Base Foundation (Soil Interaction)	Base	45.4	Pass

Structure Rating (max from all components) =	99.5%

Notes:
1) See additional documentation in “Appendix C – Additional Calculations” for calculations supporting the % capacity consumed.
2) Rating per TIA-222-H Section 15.5.

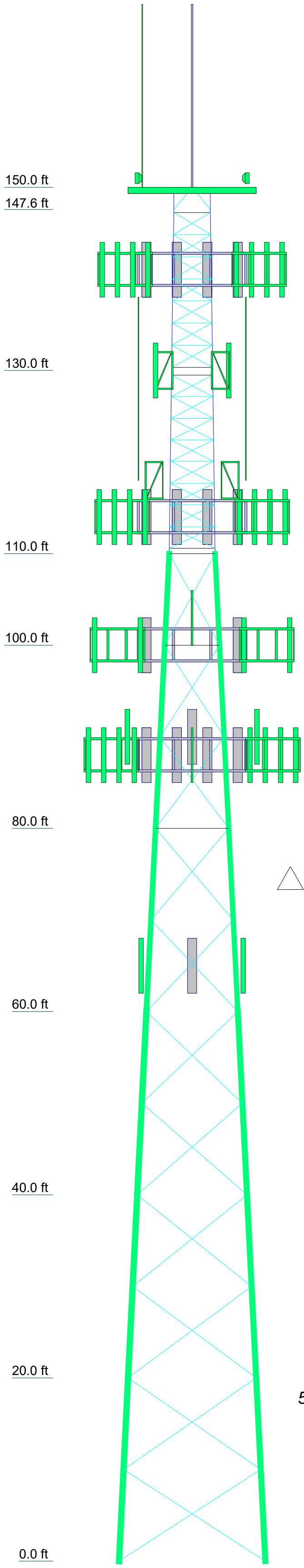
4.1) Recommendations

The tower and its foundations have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

APPENDIX A

TNXTOWER OUTPUT

Section	Legs	Leg Grade	Diagonals	Diagonal Grade	Top Girts	Bottom Girts	Horizontals	Face Width (ft)	# Panels @ (ft)	Weight (K)
T1	SR 1 1/2	A572-50	SR 3/4	A572-50	B	C	C	4		0.2
T2	SR 1 1/2	A572-50	SR 3/4	A572-50	SR 7/8	SR 7/8	SR 7/8	4.0625	8 @ 2.41667	0.7
T3	SR 2	A572-50	SR 7/8	A572-50	SR 7/8	SR 7/8	SR 3/4	4.5	8 @ 2.36458	1.3
T4	Pirod 105244	A572-50	A	A36	L3x3x3/16	N.A.	N.A.	5	11 @ 10	1.1
T5	Pirod 105216	A572-50	L2 1/2x2 1/2x3/8	A36	L3x3x3/16	N.A.	N.A.	6	11 @ 10	2.5
T6	Pirod 105217	A572-50	L3x3x3/16	A36	L3x3x3/16	N.A.	N.A.	8	11 @ 10	2.6
T7	Pirod 105218	A572-50	L3x3x3/16	A36	N.A.	N.A.	N.A.	10	11 @ 10	3.0
T8	Pirod 105218	A572-50	L3x3x5/16	A36	N.A.	N.A.	N.A.	12	11 @ 10	3.5
T9	Pirod 105219	A572-50	L3x3x5/16	A36	N.A.	N.A.	N.A.	14 / 16	11 @ 10	4.2
										19.1



SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	L2 1/2x2 1/2x3/16	C	N.A.
B	5x1/2		

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 125 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0'
8. TIA-222-H Annex S
9. TOWER RATING: 99.5%

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 328 K
SHEAR: 33 K

UPLIFT: -288 K
SHEAR: 30 K

AXIAL 139 K
SHEAR 14 K
MOMENT 1241 kip-ft
TORQUE 6 kip-ft
50 mph WIND - 1.500 in ICE

AXIAL 58 K
SHEAR 50 K
MOMENT 4272 kip-ft
TORQUE 28 kip-ft
REACTIONS - 125 mph WIND

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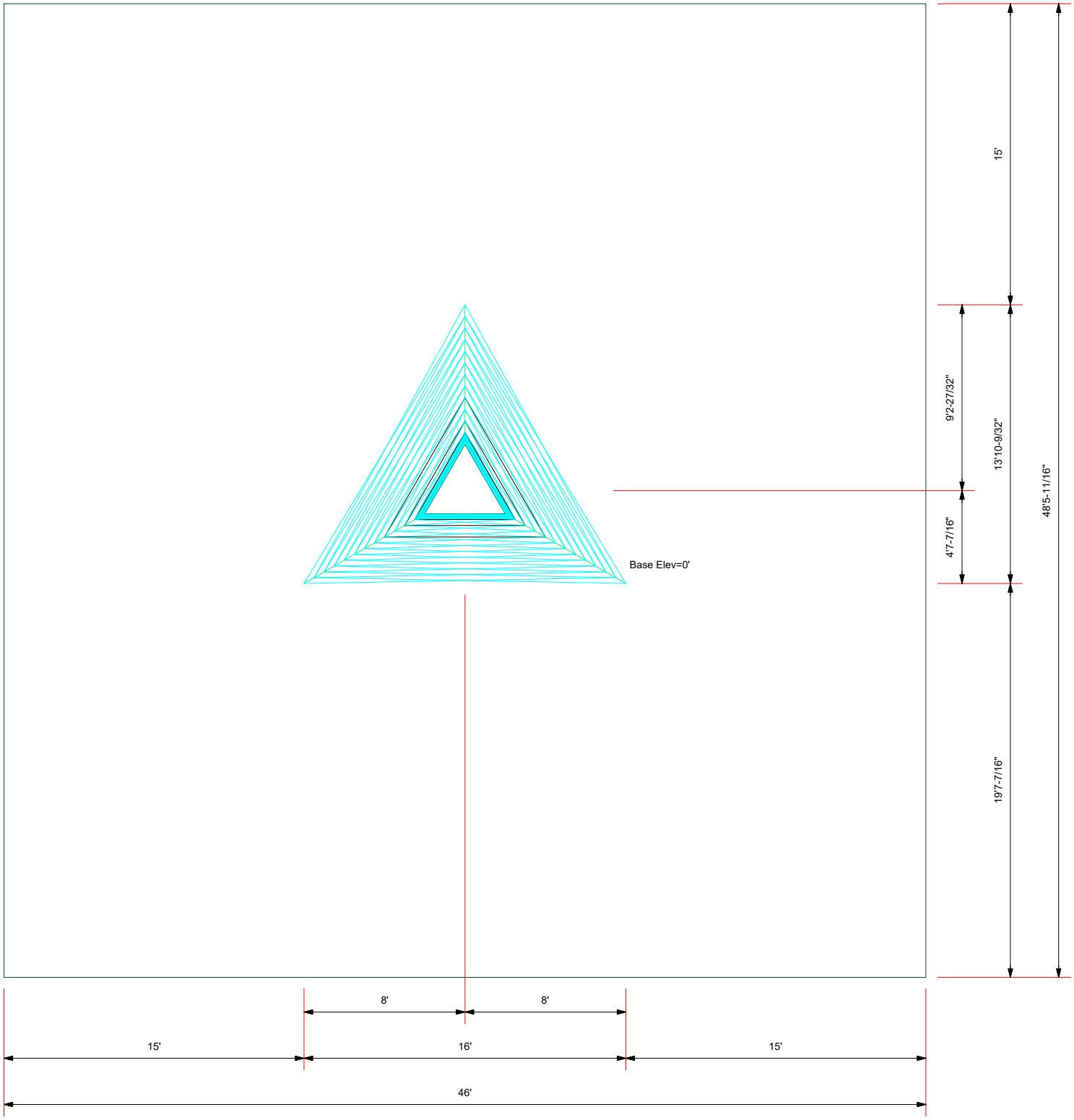
Job: 91292.019.01 - MILFORD, CT (BU# 84287			
Project:			
Client: Crown Castle	Drawn by: Nithesh	App'd:	
Code: TIA-222-H	Date: 05/14/21	Scale: NTS	
Path: E:\Working Jobs\SA\91292_842870_Milford--NP--ASP---05-18\019\tnx Tower\91292_019_01_MILFORD_CT.eri		Dwg No. E-1	

Plot Plan
Total Area - 0.05 Acres



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Job: ***91292.019.01 - MILFORD, CT (BU# 842870***			
Project:			
Client: Crown Castle	Drawn by: Nithesh	App'd:	
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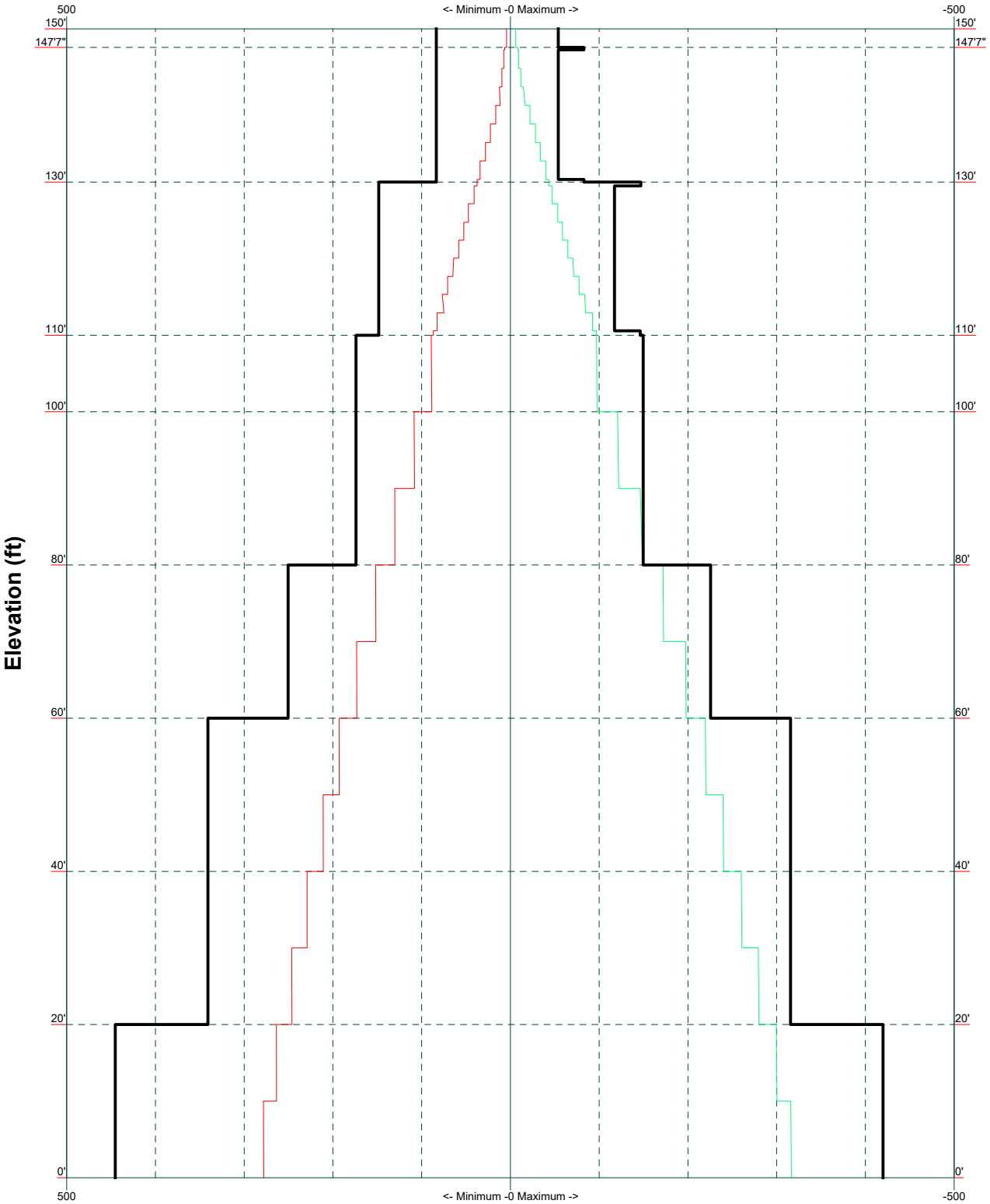
TIA-222-H - 125 mph/50 mph 1.500 in Ice Exposure C

Leg Capacity ——— **Leg Compression (K)**



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Job: *91292.019.01 - MILFORD, CT (BU# 842870*			
Project:			
Client: Crown Castle	Drawn by: Nithesh	App'd:	
Code: TIA-222-H	Date: 05/14/21	Scale: NTS	
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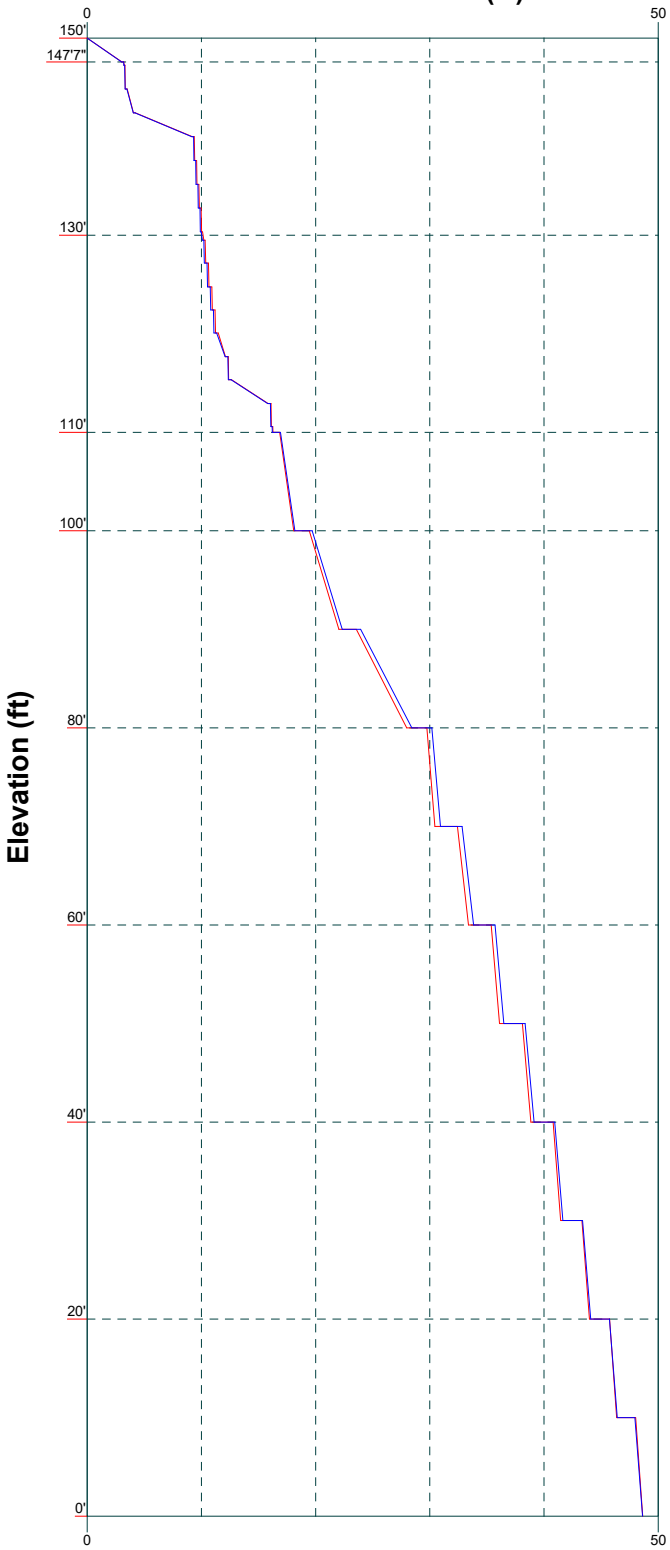
TIA-222-H - 125 mph/50 mph 1.500 in Ice Exposure C

Vx Vz

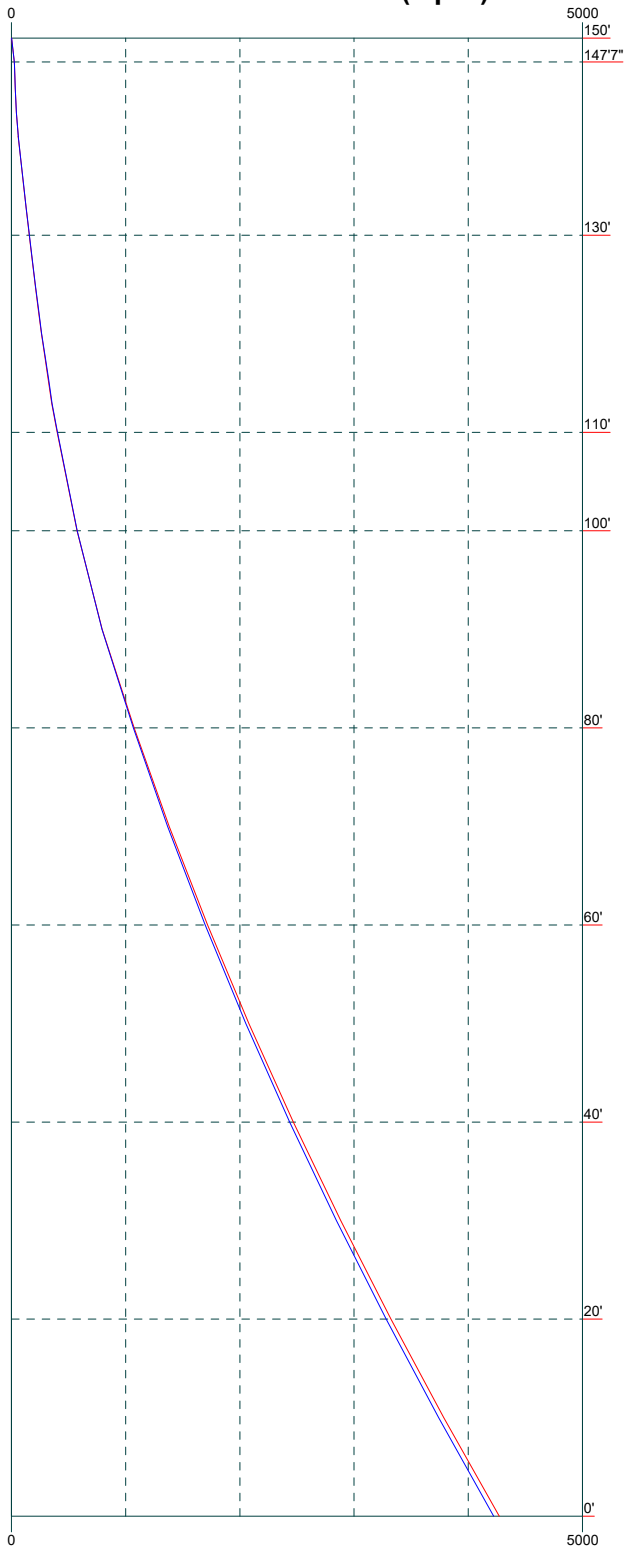
Maximum Values

Mx Mz

Global Mast Shear (K)



Global Mast Moment (kip-ft)



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Job: 91292.019.01 - MILFORD, CT (BU# 842870			
Project:			
Client: Crown Castle	Drawn by: Nithesh	App'd:	
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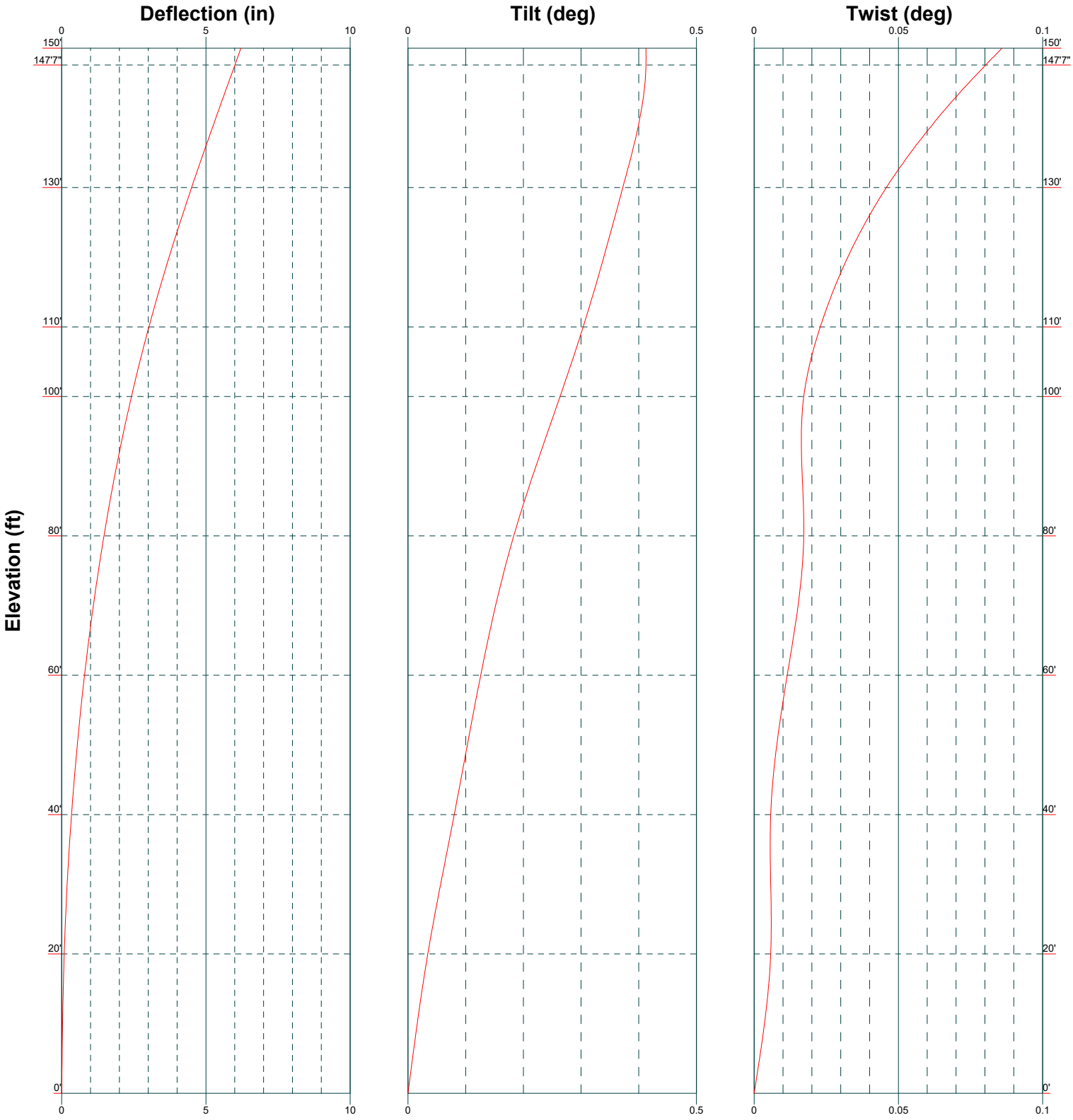
TIA-222-H - Service - 60 mph

Maximum Values



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Job: *91292.019.01 - MILFORD, CT (BU# 842870*			
Project:			
Client: Crown Castle	Drawn by: Nithesh	App'd:	
Code: TIA-222-H	Date: 05/14/21	Scale: NTS	
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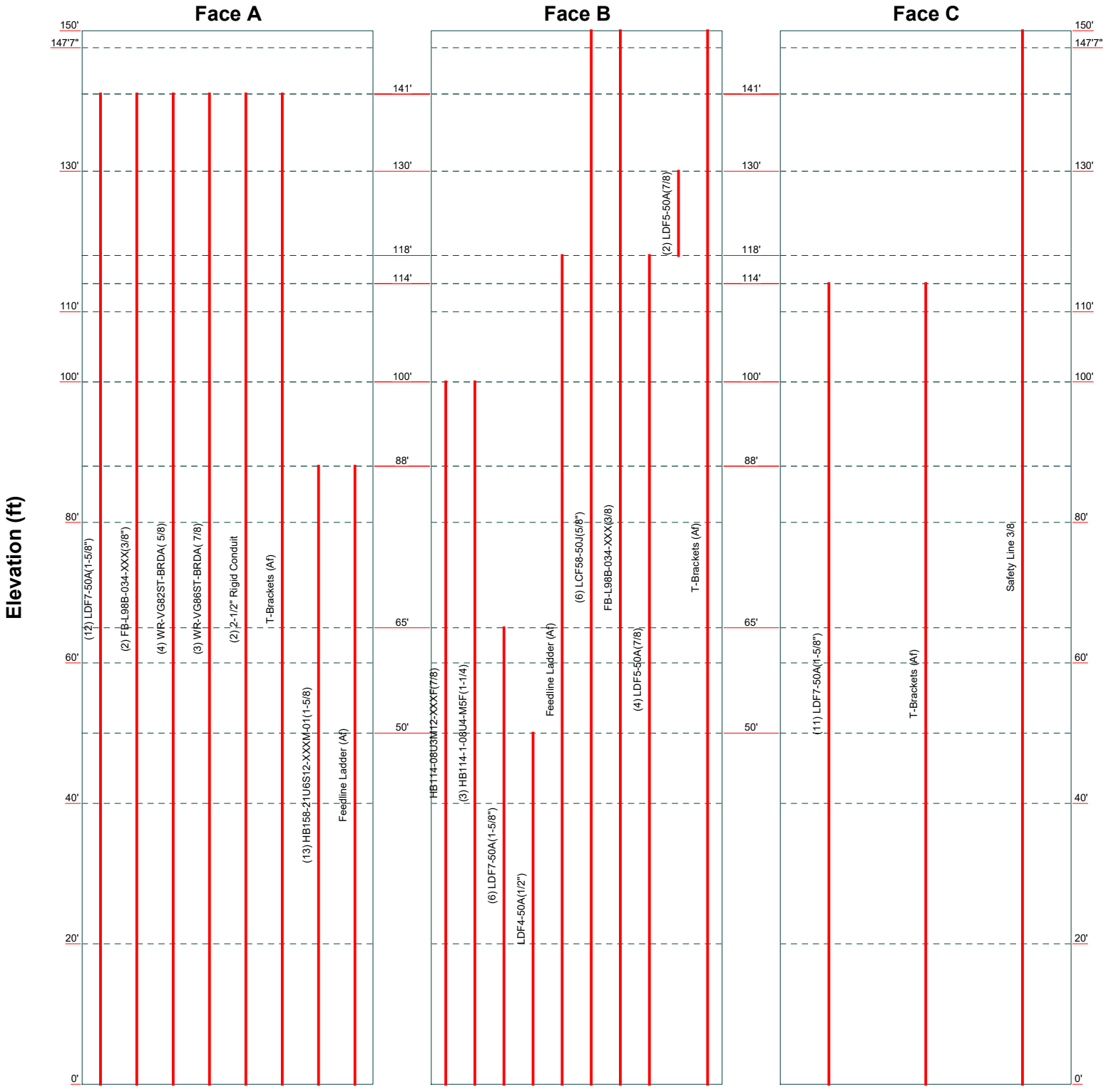
Feed Line Distribution Chart
0' - 150'

Round | Flat | App In Face | App Out Face | Truss Leg



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Job: 91292.019.01 - MILFORD, CT (BU# 842870			
Project:			
Client: Crown Castle	Drawn by: Nithesh	App'd:	
Code: TIA-222-H	Date: 05/14/21	Scale: NTS	
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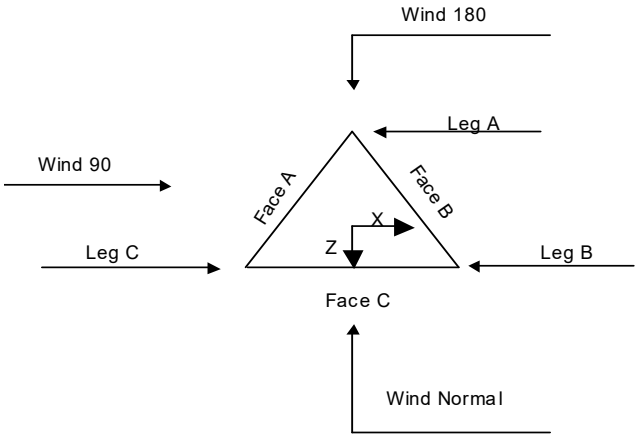
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 150' above the ground line.
The base of the tower is set at an elevation of 0' above the ground line.
The face width of the tower is 4' at the top and 16' at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower is located in New Haven County, Connecticut.
Tower base elevation above sea level: 68'.
Basic wind speed of 125 mph.
Risk Category II.
Exposure Category C.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0'.
Nominal ice thickness of 1.500 in.
Ice thickness is considered to increase with height.
Ice density of 56.000 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50.000 °F.
Deflections calculated using a wind speed of 60 mph.
TIA-222-H Annex S.
Pressures are calculated at each section.
Stress ratio used in tower member design is 1.
Tower analysis based on target reliabilities in accordance with Annex S.
Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
Maximum demand-capacity ratio is: 1.05.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

	Consider Moments - Legs		Distribute Leg Loads As Uniform		Use ASCE 10 X-Brace Ly Rules
	Consider Moments - Horizontals		Assume Legs Pinned	√	Calculate Redundant Bracing Forces
	Consider Moments - Diagonals	√	Assume Rigid Index Plate		Ignore Redundant Members in FEA
	Use Moment Magnification	√	Use Clear Spans For Wind Area	√	SR Leg Bolts Resist Compression
√	Use Code Stress Ratios	√	Use Clear Spans For KL/r		All Leg Panels Have Same Allowable
√	Use Code Safety Factors - Guys		Retension Guys To Initial Tension		Offset Girt At Foundation
	Escalate Ice	√	Bypass Mast Stability Checks	√	Consider Feed Line Torque
	Always Use Max Kz	√	Use Azimuth Dish Coefficients	√	Include Angle Block Shear Check
	Use Special Wind Profile	√	Project Wind Area of Appurt.		Use TIA-222-H Bracing Resist. Exemption
	Include Bolts In Member Capacity		Autocalc Torque Arm Areas		Use TIA-222-H Tension Splice Exemption
	Leg Bolts Are At Top Of Section		Add IBC .6D+W Combination		Poles
√	Secondary Horizontal Braces Leg	√	Sort Capacity Reports By Component		Include Shear-Torsion Interaction
	Use Diamond Inner Bracing (4 Sided)		Triangulate Diamond Inner Bracing		Always Use Sub-Critical Flow
	SR Members Have Cut Ends		Treat Feed Line Bundles As Cylinder		Use Top Mounted Sockets
	SR Members Are Concentric		Ignore KL/ry For 60 Deg. Angle Legs		Pole Without Linear Attachments
					Pole With Shroud Or No Appurtenances
					Outside and Inside Corner Radii Are Known



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	150'-147'7"			4'	1	2'5"
T2	147'7"-130'			4'3/4"	1	17'7"
T3	130'-110'			4'6"	1	20'
T4	110'-100'			5'	1	10'
T5	100'-80'			6'	1	20'
T6	80'-60'			8'	1	20'
T7	60'-40'			10'	1	20'
T8	40'-20'			12'	1	20'
T9	20'-0'			14'	1	20'

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	150'-147'7"	2'5"	K Brace Down	No	Yes	0.000	0.000
T2	147'7"-130'	2'5"	X Brace	No	Steps	4.000	4.000
T3	130'-110'	2'4-3/8"	X Brace	No	Steps	6.000	7.000
T4	110'-100'	10'	X Brace	No	No	0.000	0.000
T5	100'-80'	10'	X Brace	No	No	0.000	0.000
T6	80'-60'	10'	X Brace	No	No	0.000	0.000
T7	60'-40'	10'	X Brace	No	No	0.000	0.000
T8	40'-20'	10'	X Brace	No	No	0.000	0.000

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T9	20'-0'	10'	X Brace	No	No	0.000	0.000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 150'-147'7"	Solid Round	1 1/2	A572-50 (50 ksi)	Solid Round	3/4	A572-50 (50 ksi)
T2 147'7"-130'	Solid Round	1 1/2	A572-50 (50 ksi)	Solid Round	3/4	A572-50 (50 ksi)
T3 130'-110'	Solid Round	2	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T4 110'-100'	Truss Leg	Pirod 105244	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T5 100'-80'	Truss Leg	Pirod 105216	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/8	A36 (36 ksi)
T6 80'-60'	Truss Leg	Pirod 105217	A572-50 (50 ksi)	Equal Angle	L3x3x3/16	A36 (36 ksi)
T7 60'-40'	Truss Leg	Pirod 105218	A572-50 (50 ksi)	Equal Angle	L3x3x3/16	A36 (36 ksi)
T8 40'-20'	Truss Leg	Pirod 105218	A572-50 (50 ksi)	Equal Angle	L3x3x5/16	A36 (36 ksi)
T9 20'-0'	Truss Leg	Pirod 105219	A572-50 (50 ksi)	Equal Angle	L3x3x5/16	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T2 147'7"-130'	Solid Round	7/8	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T3 130'-110'	Solid Round	7/8	A572-50 (50 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T4 110'-100'	Equal Angle	L3x3x3/16	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T5 100'-80'	Equal Angle	L3x3x3/16	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T6 80'-60'	Equal Angle	L3x3x3/16	A36 (36 ksi)	Equal Angle		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T1 150'-147'7"	None	Solid Round		A36 (36 ksi)	Flat Bar	5x1/2	A36 (36 ksi)

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T2 147'7"-130'	None	Solid Round		A36 (36 ksi)	Solid Round	7/8	A572-50 (50 ksi)
T3 130'-110'	None	Solid Round		A36 (36 ksi)	Solid Round	3/4	A572-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1 150'-147'7"	0.000	0.000	A36 (36 ksi)	1	1	1	Mid-Pt	Mid-Pt	Mid-Pt
T2 147'7"-130'	0.000	0.000	A36 (36 ksi)	1	1	1	Mid-Pt	Mid-Pt	Mid-Pt
T3 130'-110'	0.000	0.000	A36 (36 ksi)	1	1	1	Mid-Pt	Mid-Pt	Mid-Pt
T4 110'-100'	0.000	0.000	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T5 100'-80'	0.000	0.000	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T6 80'-60'	0.000	0.000	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T7 60'-40'	0.000	0.000	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T8 40'-20'	0.000	0.000	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T9 20'-0'	0.000	0.000	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1 150'-147'7"	No	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T2 147'7"-130'	No	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T3 130'-110'	No	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T4 110'-100'	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T5 100'-80'	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T6 80'-60'	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T7 60'-40'	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T8 40'-20'	Yes	No	1	1	1	1	1	1	1	1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Legs	K Factors[1] X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
				1	1	1	1	1	1	1
T9 20'-0'	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1

[1]*Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.*

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Truss-Leg K Factors: Truss-Legs Used As Leg Members: Leg Panels	X Brace Diagonals	Z Brace Diagonals	Truss-Legs Used As Inner Members: Leg Panels	X Brace Diagonals	Z Brace Diagonals
T4 110'-100'	1	0.5	0.85	1	0.5	0.85
T5 100'-80'	1	0.5	0.85	1	0.5	0.85
T6 80'-60'	1	0.5	0.85	1	0.5	0.85
T7 60'-40'	1	0.5	0.85	1	0.5	0.85
T8 40'-20'	1	0.5	0.85	1	0.5	0.85
T9 20'-0'	1	0.5	0.85	1	0.5	0.85

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Net Width Deduct in	U	Diagonal Net Width Deduct in	U	Top Girt Net Width Deduct in	U	Bottom Girt Net Width Deduct in	U	Mid Girt Net Width Deduct in	U	Long Horizontal Net Width Deduct in	U	Short Horizontal Net Width Deduct in	U
T1 150'-147'7"	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75
T2 147'7"-130'	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75
T3 130'-110'	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75
T4 110'-100'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 100'-80'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 80'-60'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 60'-40'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 40'-20'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T9 20'-0'	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Elevation ft	Redundant Horizontal Net Width Deduct in	U	Redundant Diagonal Net Width Deduct in	U	Redundant Sub-Diagonal Net Width Deduct in	U	Redundant Sub-Horizontal Net Width Deduct in	U	Redundant Vertical Net Width Deduct in	U	Redundant Hip Net Width Deduct in	U	Redundant Hip Diagonal Net Width Deduct in	U
T1 150'-147'7"	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T2 147'7"-130'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T3 130'-110'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T4 110'-100'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 100'-80'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 80'-60'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 60'-40'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 40'-20'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T9 20'-0'	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 150'-147'7"	Sleeve DS	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0
T2 147'7"-130'	Sleeve DS	0.625 A325N	5	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0
T3 130'-110'	Flange	1.000 A325N	6	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0
T4 110'-100'	Flange	1.000 A325N	6	1.000 A325N	1	1.000 A325N	1	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0
T5 100'-80'	Flange	1.000 A325N	6	1.000 A325N	1	1.000 A325N	1	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0
T6 80'-60'	Flange	1.000 A325N	6	1.000 A325N	1	1.000 A325N	1	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0
T7 60'-40'	Flange	1.000 A325N	6	1.000 A325N	1	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0
T8 40'-20'	Flange	1.000 A325N	6	1.000 A325N	1	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0
T9 20'-0'	Flange	1.250 A687	0	1.250 A325N	1	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight klf
LDF7-50A(1-5/8")	A	No	No	Ar (CaAa)	141' - 0'	-15.000	0.4	12	4	0.750 1.000	1.980		0.001
FB-L98B-034-XXX(3/8")	A	No	No	Ar (CaAa)	141' - 0'	-4.000	0.38	2	2	0.300	0.394		0.000
WR-VG82ST-BRDA(5/8)	A	No	No	Ar (CaAa)	141' - 0'	-4.000	0.37	4	4	0.300	0.645		0.000
WR-VG86ST-BRDA(7/8)	A	No	No	Ar (CaAa)	141' - 0'	-8.000	0.34	3	2	0.300	0.880		0.001
2-1/2" Rigid Conduit	A	No	No	Ar (CaAa)	141' - 0'	-4.000	0.38	2	2	1.000	2.500		0.003
T-Brackets	A	No	No	Af (CaAa)	141' - 0'	-8.000	0.42	1	1	1.000	1.000		0.008

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight klf
(Af) *													
HB158-21U6S12-XXXM-01 (1-5/8)	A	No	No	Ar (CaAa)	88' - 0'	0.000	-0.1	13	11	0.500	1.990		0.002
Feedline Ladder (Af) *	A	No	No	Af (CaAa)	88' - 0'	0.000	-0.1	1	1	3.000	3.000		0.008
HB114-08U3M12-XXXF(7/8)	B	No	No	Ar (CaAa)	100' - 0'	-2.000	-0.18	1	1	1.000	1.110		0.001
HB114-1-08U4-M5F(1-1/4) *	B	No	No	Ar (CaAa)	100' - 0'	-2.000	-0.22	3	3	0.750	1.540		0.001
LDF7-50A(1-5/8") *	B	No	No	Ar (CaAa)	65' - 0'	-2.000	-0.3	6	6	0.750	1.980		0.001
LDF4-50A(1/2")	B	No	No	Ar (CaAa)	50' - 0'	-1.000	-0.19	1	1	0.750	0.630		0.000
Feedline Ladder (Af) *	B	No	No	Af (CaAa)	118' - 0'	-1.000	-0.26	1	1	3.000	3.000		0.008
LCF58-50J(5/8")	B	No	No	Ar (CaAa)	150' - 0'	-4.000	0.46	6	4	0.750 0.850	0.840		0.000
FB-L98B-034-XXX(3/8) *	B	No	No	Ar (CaAa)	150' - 0'	-5.000	0.39	1	1	0.500	0.394		0.000
LDF5-50A(7/8)	B	No	No	Ar (CaAa)	118' - 0'	-4.000	0.42	4	4	0.750	1.030		0.000
LDF5-50A(7/8)	B	No	No	Ar (CaAa)	130' - 118'	-4.000	0.42	2	2	0.750	1.030		0.000
T-Brackets (Af) *	B	No	No	Af (CaAa)	150' - 0'	-3.000	0.47	1	1	1.000	1.000		0.008
LDF7-50A(1-5/8")	C	No	No	Ar (CaAa)	114' - 0'	-7.000	0.42	11	6	0.750 0.850	1.980		0.001
T-Brackets (Af) *	C	No	No	Af (CaAa)	114' - 0'	-4.000	0.44	1	1	1.000	1.000		0.008
Safety Line 3/8 *	C	No	No	Ar (CaAa)	150' - 0'	0.000	0.5	1	1	0.375	0.375		0.000

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	150'-147'7"	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	1.716	0.000	0.024
		C	0.000	0.000	0.091	0.000	0.001
T2	147'7"-130'	A	0.000	0.000	40.077	0.000	0.304
		B	0.000	0.000	12.485	0.000	0.175
		C	0.000	0.000	0.659	0.000	0.004
T3	130'-110'	A	0.000	0.000	72.868	0.000	0.552
		B	0.000	0.000	23.969	0.000	0.285
		C	0.000	0.000	10.129	0.000	0.074

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T4	110'-100'	A	0.000	0.000	36.434	0.000	0.276
		B	0.000	0.000	16.220	0.000	0.197
		C	0.000	0.000	23.822	0.000	0.176
T5	100'-80'	A	0.000	0.000	97.564	0.000	0.817
		B	0.000	0.000	43.901	0.000	0.485
		C	0.000	0.000	47.643	0.000	0.353
T6	80'-60'	A	0.000	0.000	134.608	0.000	1.214
		B	0.000	0.000	49.841	0.000	0.510
		C	0.000	0.000	47.643	0.000	0.353
T7	60'-40'	A	0.000	0.000	134.608	0.000	1.214
		B	0.000	0.000	68.291	0.000	0.585
		C	0.000	0.000	47.643	0.000	0.353
T8	40'-20'	A	0.000	0.000	134.608	0.000	1.214
		B	0.000	0.000	68.921	0.000	0.587
		C	0.000	0.000	47.643	0.000	0.353
T9	20'-0'	A	0.000	0.000	134.608	0.000	1.214
		B	0.000	0.000	68.921	0.000	0.587
		C	0.000	0.000	47.643	0.000	0.353

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	150'-147'7"	A	1.482	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	5.007	0.000	0.078
		C		0.000	0.000	0.807	0.000	0.009
T2	147'7"-130'	A	1.472	0.000	0.000	69.946	0.000	1.138
		B		0.000	0.000	36.296	0.000	0.566
		C		0.000	0.000	5.836	0.000	0.062
T3	130'-110'	A	1.451	0.000	0.000	126.349	0.000	2.047
		B		0.000	0.000	67.760	0.000	0.974
		C		0.000	0.000	18.416	0.000	0.310
T4	110'-100'	A	1.431	0.000	0.000	62.801	0.000	1.014
		B		0.000	0.000	40.729	0.000	0.622
		C		0.000	0.000	32.794	0.000	0.630
T5	100'-80'	A	1.410	0.000	0.000	161.600	0.000	2.704
		B		0.000	0.000	113.622	0.000	1.635
		C		0.000	0.000	65.271	0.000	1.249
T6	80'-60'	A	1.375	0.000	0.000	215.164	0.000	3.690
		B		0.000	0.000	124.219	0.000	1.749
		C		0.000	0.000	64.762	0.000	1.229
T7	60'-40'	A	1.329	0.000	0.000	212.943	0.000	3.614
		B		0.000	0.000	161.173	0.000	2.168
		C		0.000	0.000	64.102	0.000	1.204
T8	40'-20'	A	1.263	0.000	0.000	209.714	0.000	3.506
		B		0.000	0.000	161.408	0.000	2.110
		C		0.000	0.000	63.141	0.000	1.168
T9	20'-0'	A	1.132	0.000	0.000	203.312	0.000	3.295
		B		0.000	0.000	155.360	0.000	1.937
		C		0.000	0.000	61.236	0.000	1.099

Feed Line Center of Pressure

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
T1	150'-147'7"	2.491	2.506	2.059	2.688
T2	147'7"-130'	5.336	-4.293	3.589	-1.561
T3	130'-110'	3.594	-6.006	3.463	-2.987
T4	110'-100'	-2.272	-3.936	-0.287	-1.485
T5	100'-80'	-4.145	-6.406	-1.240	-3.935
T6	80'-60'	-6.864	-8.454	-3.384	-6.328
T7	60'-40'	-7.607	-12.619	-3.932	-10.682
T8	40'-20'	-8.692	-14.626	-4.506	-12.629
T9	20'-0'	-9.626	-16.251	-5.309	-14.274

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	19	LCF58-50J(5/8")	147.58 - 150.00	0.6000	0.4113
T1	20	FB-L98B-034-XXX(3/8)	147.58 - 150.00	0.6000	0.4113
T1	24	T-Brackets (Af)	147.58 - 150.00	0.6000	0.4113
T1	29	Safety Line 3/8	147.58 - 150.00	0.6000	0.4113
T2	1	LDF7-50A(1-5/8")	130.00 - 141.00	0.6000	0.5569
T2	2	FB-L98B-034-XXX(3/8")	130.00 - 141.00	0.0000	0.0000
T2	3	WR-VG82ST-BRDA(5/8)	130.00 - 141.00	0.0000	0.0000
T2	4	WR-VG86ST-BRDA(7/8)	130.00 - 141.00	0.6000	0.5569
T2	5	2-1/2" Rigid Conduit	130.00 - 141.00	0.6000	0.5569
T2	6	T-Brackets (Af)	130.00 - 141.00	0.6000	0.5569
T2	19	LCF58-50J(5/8")	130.00 - 147.58	0.6000	0.5569
T2	20	FB-L98B-034-XXX(3/8)	130.00 - 147.58	0.6000	0.5569
T2	24	T-Brackets (Af)	130.00 - 147.58	0.6000	0.5569
T2	29	Safety Line 3/8	130.00 - 147.58	0.6000	0.5569
T3	1	LDF7-50A(1-5/8")	110.00 - 130.00	0.6000	0.5638
T3	2	FB-L98B-034-XXX(3/8")	110.00 - 130.00	0.0000	0.0000
T3	3	WR-VG82ST-BRDA(5/8)	110.00 - 130.00	0.0000	0.0000
T3	4	WR-VG86ST-BRDA(7/8)	110.00 - 130.00	0.6000	0.5638
T3	5	2-1/2" Rigid Conduit	110.00 - 130.00	0.6000	0.5638
T3	6	T-Brackets (Af)	110.00 - 130.00	0.6000	0.5638
T3	17	Feedline Ladder (Af)	110.00 - 118.00	0.6000	0.5638
T3	19	LCF58-50J(5/8")	110.00 - 130.00	0.6000	0.5638
T3	20	FB-L98B-034-XXX(3/8)	110.00 - 130.00	0.6000	0.5638
T3	22	LDF5-50A(7/8)	110.00 - 118.00	0.6000	0.5638
T3	23	LDF5-50A(7/8)	118.00 - 130.00	0.6000	0.5638
T3	24	T-Brackets (Af)	110.00 - 130.00	0.6000	0.5638
T3	26	LDF7-50A(1-5/8")	110.00 - 114.00	0.6000	0.5638
T3	27	T-Brackets (Af)	110.00 - 114.00	0.6000	0.5638
T3	29	Safety Line 3/8	110.00 - 130.00	0.6000	0.5638
T4	1	LDF7-50A(1-5/8")	100.00 - 110.00	0.6000	0.3339
T4	2	FB-L98B-034-XXX(3/8")	100.00 - 110.00	0.0000	0.0000
T4	3	WR-VG82ST-BRDA(5/8)	100.00 - 110.00	0.0000	0.0000
T4	4	WR-VG86ST-BRDA(7/8)	100.00 - 110.00	0.6000	0.3339
T4	5	2-1/2" Rigid Conduit	100.00 - 110.00	0.6000	0.3339
T4	6	T-Brackets (Af)	100.00 - 110.00	0.6000	0.3339
T4	17	Feedline Ladder (Af)	100.00 - 110.00	0.6000	0.3339
T4	19	LCF58-50J(5/8")	100.00 - 110.00	0.6000	0.3339
T4	20	FB-L98B-034-XXX(3/8)	100.00 - 110.00	0.6000	0.3339
T4	22	LDF5-50A(7/8)	100.00 - 110.00	0.6000	0.3339
T4	24	T-Brackets (Af)	100.00 - 110.00	0.6000	0.3339
T4	26	LDF7-50A(1-5/8")	100.00 - 110.00	0.6000	0.3339

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T4	27	T-Brackets (Af)	100.00 - 110.00	0.6000	0.3339
T4	29	Safety Line 3/8	100.00 - 110.00	0.6000	0.3339
T5	1	LDF7-50A(1-5/8")	80.00 - 100.00	0.6000	0.4398
T5	2	FB-L98B-034-XXX(3/8")	80.00 - 100.00	0.0000	0.0000
T5	3	WR-VG82ST-BRDA(5/8)	80.00 - 100.00	0.0000	0.0000
T5	4	WR-VG86ST-BRDA(7/8)	80.00 - 100.00	0.6000	0.4398
T5	5	2-1/2" Rigid Conduit	80.00 - 100.00	0.6000	0.4398
T5	6	T-Brackets (Af)	80.00 - 100.00	0.6000	0.4398
T5	8	HB158-21U6S12-XXXM-01(1-5/8)	80.00 - 88.00	0.6000	0.4398
T5	9	Feedline Ladder (Af)	80.00 - 88.00	0.6000	0.4398
T5	11	HB114-08U3M12-XXXF(7/8)	80.00 - 100.00	0.6000	0.4398
T5	12	HB114-1-08U4-M5F(1-1/4)	80.00 - 100.00	0.6000	0.4398
T5	17	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.4398
T5	19	LCF58-50J(5/8")	80.00 - 100.00	0.6000	0.4398
T5	20	FB-L98B-034-XXX(3/8)	80.00 - 100.00	0.6000	0.4398
T5	22	LDF5-50A(7/8)	80.00 - 100.00	0.6000	0.4398
T5	24	T-Brackets (Af)	80.00 - 100.00	0.6000	0.4398
T5	26	LDF7-50A(1-5/8")	80.00 - 100.00	0.6000	0.4398
T5	27	T-Brackets (Af)	80.00 - 100.00	0.6000	0.4398
T5	29	Safety Line 3/8	80.00 - 100.00	0.6000	0.4398
T6	1	LDF7-50A(1-5/8")	60.00 - 80.00	0.6000	0.5201
T6	2	FB-L98B-034-XXX(3/8")	60.00 - 80.00	0.0000	0.0000
T6	3	WR-VG82ST-BRDA(5/8)	60.00 - 80.00	0.0000	0.0000
T6	4	WR-VG86ST-BRDA(7/8)	60.00 - 80.00	0.6000	0.5201
T6	5	2-1/2" Rigid Conduit	60.00 - 80.00	0.6000	0.5201
T6	6	T-Brackets (Af)	60.00 - 80.00	0.6000	0.5201
T6	8	HB158-21U6S12-XXXM-01(1-5/8)	60.00 - 80.00	0.6000	0.5201
T6	9	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.5201
T6	11	HB114-08U3M12-XXXF(7/8)	60.00 - 80.00	0.6000	0.5201
T6	12	HB114-1-08U4-M5F(1-1/4)	60.00 - 80.00	0.6000	0.5201
T6	14	LDF7-50A(1-5/8")	60.00 - 65.00	0.6000	0.5201
T6	17	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.5201
T6	19	LCF58-50J(5/8")	60.00 - 80.00	0.6000	0.5201
T6	20	FB-L98B-034-XXX(3/8)	60.00 - 80.00	0.6000	0.5201
T6	22	LDF5-50A(7/8)	60.00 - 80.00	0.6000	0.5201
T6	24	T-Brackets (Af)	60.00 - 80.00	0.6000	0.5201
T6	26	LDF7-50A(1-5/8")	60.00 - 80.00	0.6000	0.5201
T6	27	T-Brackets (Af)	60.00 - 80.00	0.6000	0.5201
T6	29	Safety Line 3/8	60.00 - 80.00	0.6000	0.5201
T7	1	LDF7-50A(1-5/8")	40.00 - 60.00	0.6000	0.5999
T7	2	FB-L98B-034-XXX(3/8")	40.00 - 60.00	0.0000	0.0000
T7	3	WR-VG82ST-BRDA(5/8)	40.00 - 60.00	0.0000	0.0000
T7	4	WR-VG86ST-BRDA(7/8)	40.00 - 60.00	0.6000	0.5999
T7	5	2-1/2" Rigid Conduit	40.00 - 60.00	0.6000	0.5999
T7	6	T-Brackets (Af)	40.00 - 60.00	0.6000	0.5999
T7	8	HB158-21U6S12-XXXM-01(1-5/8)	40.00 - 60.00	0.6000	0.5999
T7	9	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.5999
T7	11	HB114-08U3M12-XXXF(7/8)	40.00 - 60.00	0.6000	0.5999
T7	12	HB114-1-08U4-M5F(1-1/4)	40.00 - 60.00	0.6000	0.5999
T7	14	LDF7-50A(1-5/8")	40.00 - 60.00	0.6000	0.5999
T7	16	LDF4-50A(1/2")	40.00 - 50.00	0.6000	0.5999
T7	17	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.5999
T7	19	LCF58-50J(5/8")	40.00 - 60.00	0.6000	0.5999
T7	20	FB-L98B-034-XXX(3/8)	40.00 - 60.00	0.6000	0.5999
T7	22	LDF5-50A(7/8)	40.00 - 60.00	0.6000	0.5999
T7	24	T-Brackets (Af)	40.00 - 60.00	0.6000	0.5999

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T7	26	LDF7-50A(1-5/8")	40.00 - 60.00	0.6000	0.5999
T7	27	T-Brackets (Af)	40.00 - 60.00	0.6000	0.5999
T7	29	Safety Line 3/8	40.00 - 60.00	0.6000	0.5999
T8	1	LDF7-50A(1-5/8")	20.00 - 40.00	0.6000	0.6000
T8	2	FB-L98B-034-XXX(3/8")	20.00 - 40.00	0.0000	0.0000
T8	3	WR-VG82ST-BRDA(5/8)	20.00 - 40.00	0.0000	0.0000
T8	4	WR-VG86ST-BRDA(7/8)	20.00 - 40.00	0.6000	0.6000
T8	5	2-1/2" Rigid Conduit	20.00 - 40.00	0.6000	0.6000
T8	6	T-Brackets (Af)	20.00 - 40.00	0.6000	0.6000
T8	8	HB158-21U6S12-XXXM-01(1-5/8)	20.00 - 40.00	0.6000	0.6000
T8	9	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T8	11	HB114-08U3M12-XXXF(7/8)	20.00 - 40.00	0.6000	0.6000
T8	12	HB114-1-08U4-M5F(1-1/4)	20.00 - 40.00	0.6000	0.6000
T8	14	LDF7-50A(1-5/8")	20.00 - 40.00	0.6000	0.6000
T8	16	LDF4-50A(1/2")	20.00 - 40.00	0.6000	0.6000
T8	17	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T8	19	LCF58-50J(5/8")	20.00 - 40.00	0.6000	0.6000
T8	20	FB-L98B-034-XXX(3/8)	20.00 - 40.00	0.6000	0.6000
T8	22	LDF5-50A(7/8)	20.00 - 40.00	0.6000	0.6000
T8	24	T-Brackets (Af)	20.00 - 40.00	0.6000	0.6000
T8	26	LDF7-50A(1-5/8")	20.00 - 40.00	0.6000	0.6000
T8	27	T-Brackets (Af)	20.00 - 40.00	0.6000	0.6000
T8	29	Safety Line 3/8	20.00 - 40.00	0.6000	0.6000
T9	1	LDF7-50A(1-5/8")	0.00 - 20.00	0.6000	0.6000
T9	2	FB-L98B-034-XXX(3/8")	0.00 - 20.00	0.0000	0.0000
T9	3	WR-VG82ST-BRDA(5/8)	0.00 - 20.00	0.0000	0.0000
T9	4	WR-VG86ST-BRDA(7/8)	0.00 - 20.00	0.6000	0.6000
T9	5	2-1/2" Rigid Conduit	0.00 - 20.00	0.6000	0.6000
T9	6	T-Brackets (Af)	0.00 - 20.00	0.6000	0.6000
T9	8	HB158-21U6S12-XXXM-01(1-5/8)	0.00 - 20.00	0.6000	0.6000
T9	9	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T9	11	HB114-08U3M12-XXXF(7/8)	0.00 - 20.00	0.6000	0.6000
T9	12	HB114-1-08U4-M5F(1-1/4)	0.00 - 20.00	0.6000	0.6000
T9	14	LDF7-50A(1-5/8")	0.00 - 20.00	0.6000	0.6000
T9	16	LDF4-50A(1/2")	0.00 - 20.00	0.6000	0.6000
T9	17	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T9	19	LCF58-50J(5/8")	0.00 - 20.00	0.6000	0.6000
T9	20	FB-L98B-034-XXX(3/8)	0.00 - 20.00	0.6000	0.6000
T9	22	LDF5-50A(7/8)	0.00 - 20.00	0.6000	0.6000
T9	24	T-Brackets (Af)	0.00 - 20.00	0.6000	0.6000
T9	26	LDF7-50A(1-5/8")	0.00 - 20.00	0.6000	0.6000
T9	27	T-Brackets (Af)	0.00 - 20.00	0.6000	0.6000
T9	29	Safety Line 3/8	0.00 - 20.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral / Vert ft / ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
SC226-SFXSNM	A	From Leg	4.000 0' 10'	0.000	150'	No Ice 1/2" Ice 1" Ice 2" Ice	22.194 30.838 31.868 33.955	22.194 30.838 31.868 33.955	0.032 0.340 0.661 1.340
SC226-SFXSNM	C	From Leg	4.000 0' 10'	0.000	150'	No Ice 1/2" Ice 1" Ice 2" Ice	22.194 30.838 31.868 33.955	22.194 30.838 31.868 33.955	0.032 0.340 0.661 1.340
1' x 6" x 3"	C	From Leg	4.000 0' 0'	0.000	150'	No Ice 1/2" Ice 1" Ice 2" Ice	0.600 0.704 0.815 1.059	0.317 0.401 0.492 0.695	0.033 0.038 0.044 0.062
(3) 5' x 2" Pipe Mount	A	From Leg	4.000 0' 0'	0.000	150'	No Ice 1/2" Ice 1" Ice 2" Ice	1.188 1.496 1.807 2.458	1.188 1.496 1.807 2.458	0.018 0.027 0.040 0.076
(3) 5' x 2" Pipe Mount	B	From Leg	4.000 0' 0'	0.000	150'	No Ice 1/2" Ice 1" Ice 2" Ice	1.188 1.496 1.807 2.458	1.188 1.496 1.807 2.458	0.018 0.027 0.040 0.076
(3) 5' x 2" Pipe Mount	C	From Leg	4.000 0' 0'	0.000	150'	No Ice 1/2" Ice 1" Ice 2" Ice	1.188 1.496 1.807 2.458	1.188 1.496 1.807 2.458	0.018 0.027 0.040 0.076
5' x 2" Pipe Mount	C	From Leg	0.000 0' 3'	0.000	150'	No Ice 1/2" Ice 1" Ice 2" Ice	1.188 1.496 1.807 2.458	1.188 1.496 1.807 2.458	0.018 0.027 0.040 0.076
Platform Mount [LP 405-1]	C	None		0.000	150'	No Ice 1/2" Ice 1" Ice 2" Ice	20.880 28.890 37.040 53.730	20.880 28.890 37.040 53.730	1.800 2.277 2.868 4.394
*									
RRUS 32 B30	A	From Leg	0.500 0' 0'	0.000	144'	No Ice 1/2" Ice 1" Ice 2" Ice	2.692 2.912 3.138 3.614	1.573 1.756 1.945 2.346	0.060 0.080 0.104 0.161
RRUS 32 B30	B	From Leg	0.500 0' 0'	0.000	144'	No Ice 1/2" Ice 1" Ice 2" Ice	2.692 2.912 3.138 3.614	1.573 1.756 1.945 2.346	0.060 0.080 0.104 0.161
RRUS 32 B30	C	From Leg	0.500 0' 0'	0.000	144'	No Ice 1/2" Ice 1" Ice 2" Ice	2.692 2.912 3.138 3.614	1.573 1.756 1.945 2.346	0.060 0.080 0.104 0.161
RRUS 11 B2	A	From Leg	0.500 0' 0'	0.000	144'	No Ice 1/2" Ice 1" Ice 2" Ice	2.833 3.043 3.259 3.715	1.182 1.330 1.485 1.826	0.051 0.072 0.095 0.153
RRUS 11 B2	B	From Leg	0.500 0' 0'	0.000	144'	No Ice 1/2" Ice 1" Ice 2" Ice	2.833 3.043 3.259 3.715	1.182 1.330 1.485 1.826	0.051 0.072 0.095 0.153
RRUS 11 B2	C	From Leg	0.500	0.000	144'	No Ice	2.833	1.182	0.051

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0'			1/2" Ice	3.043	1.330	0.072
			0'			1" Ice	3.259	1.485	0.095
						2" Ice	3.715	1.826	0.153
DC6-48-60-18-8F	A	From Leg	6.000	0.000	144'	No Ice	1.212	1.212	0.033
			0'			1/2" Ice	1.892	1.892	0.055
			0'			1" Ice	2.105	2.105	0.080
						2" Ice	2.570	2.570	0.138
DC6-48-60-18-8F	B	From Leg	6.000	0.000	144'	No Ice	1.212	1.212	0.033
			0'			1/2" Ice	1.892	1.892	0.055
			0'			1" Ice	2.105	2.105	0.080
						2" Ice	2.570	2.570	0.138
(2) 4'x2" Flat Bar Mount	A	From Leg	0.000	0.000	144'	No Ice	0.800	0.007	0.001
			0'			1/2" Ice	1.081	0.023	0.006
			0'			1" Ice	1.370	0.047	0.015
						2" Ice	1.970	0.118	0.044
(2) 4'x2" Flat Bar Mount	B	From Leg	0.000	0.000	144'	No Ice	0.800	0.007	0.001
			0'			1/2" Ice	1.081	0.023	0.006
			0'			1" Ice	1.370	0.047	0.015
						2" Ice	1.970	0.118	0.044
(2) 4'x2" Flat Bar Mount	C	From Leg	0.000	0.000	144'	No Ice	0.800	0.007	0.001
			0'			1/2" Ice	1.081	0.023	0.006
			0'			1" Ice	1.370	0.047	0.015
						2" Ice	1.970	0.118	0.044
*									
7770.00 w/ Mount Pipe	A	From Leg	4.000	0.000	141'	No Ice	5.746	4.254	0.055
			0'			1/2" Ice	6.179	5.014	0.103
			0'			1" Ice	6.607	5.711	0.157
						2" Ice	7.488	7.155	0.287
7770.00 w/ Mount Pipe	B	From Leg	4.000	0.000	141'	No Ice	5.746	4.254	0.055
			0'			1/2" Ice	6.179	5.014	0.103
			0'			1" Ice	6.607	5.711	0.157
						2" Ice	7.488	7.155	0.287
7770.00 w/ Mount Pipe	C	From Leg	4.000	0.000	141'	No Ice	5.746	4.254	0.055
			0'			1/2" Ice	6.179	5.014	0.103
			0'			1" Ice	6.607	5.711	0.157
						2" Ice	7.488	7.155	0.287
80010964 w/ Mount Pipe	A	From Leg	4.000	0.000	141'	No Ice	8.610	4.100	0.116
			0'			1/2" Ice	9.180	4.590	0.186
			0'			1" Ice	9.770	5.100	0.265
						2" Ice	10.980	6.160	0.453
80010964 w/ Mount Pipe	B	From Leg	4.000	0.000	141'	No Ice	8.610	4.100	0.116
			0'			1/2" Ice	9.180	4.590	0.186
			0'			1" Ice	9.770	5.100	0.265
						2" Ice	10.980	6.160	0.453
80010964 w/ Mount Pipe	C	From Leg	4.000	0.000	141'	No Ice	8.610	4.100	0.116
			0'			1/2" Ice	9.180	4.590	0.186
			0'			1" Ice	9.770	5.100	0.265
						2" Ice	10.980	6.160	0.453
SBNHH-1D65A w/ Mount Pipe	A	From Leg	4.000	0.000	141'	No Ice	3.040	2.450	0.054
			0'			1/2" Ice	3.340	2.750	0.104
			0'			1" Ice	3.650	3.050	0.162
						2" Ice	4.310	3.680	0.307
SBNHH-1D65A w/ Mount Pipe	B	From Leg	4.000	0.000	141'	No Ice	3.040	2.450	0.054
			0'			1/2" Ice	3.340	2.750	0.104
			0'			1" Ice	3.650	3.050	0.162
						2" Ice	4.310	3.680	0.307
SBNHH-1D65A	C	From Leg	4.000	0.000	141'	No Ice	3.080	1.850	0.034

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0'			1/2" Ice	3.400	2.140	0.073
			0'			1" Ice	3.730	2.450	0.117
						2" Ice	4.410	3.090	0.222
OPA-65R-LCUU-H4 w/ Mount Pipe	A	From Leg	4.000	0.000	141'	No Ice	6.030	4.110	0.082
			0'			1/2" Ice	6.560	4.600	0.131
			0'			1" Ice	7.110	5.110	0.187
						2" Ice	8.260	6.180	0.326
OPA-65R-LCUU-H4 w/ Mount Pipe	B	From Leg	4.000	0.000	141'	No Ice	6.030	4.110	0.082
			0'			1/2" Ice	6.560	4.600	0.131
			0'			1" Ice	7.110	5.110	0.187
						2" Ice	8.260	6.180	0.326
OPA-65R-LCUU-H4 w/ Mount Pipe	C	From Leg	4.000	0.000	141'	No Ice	6.030	4.110	0.082
			0'			1/2" Ice	6.560	4.600	0.131
			0'			1" Ice	7.110	5.110	0.187
						2" Ice	8.260	6.180	0.326
(2) LGP21401	A	From Leg	4.000	0.000	141'	No Ice	1.104	0.207	0.014
			0'			1/2" Ice	1.239	0.274	0.021
			0'			1" Ice	1.381	0.348	0.030
						2" Ice	1.688	0.521	0.055
(2) LGP21401	B	From Leg	4.000	0.000	141'	No Ice	1.104	0.207	0.014
			0'			1/2" Ice	1.239	0.274	0.021
			0'			1" Ice	1.381	0.348	0.030
						2" Ice	1.688	0.521	0.055
(2) LGP21401	C	From Leg	4.000	0.000	141'	No Ice	1.104	0.207	0.014
			0'			1/2" Ice	1.239	0.274	0.021
			0'			1" Ice	1.381	0.348	0.030
						2" Ice	1.688	0.521	0.055
7020.00	A	From Leg	4.000	0.000	141'	No Ice	0.102	0.175	0.002
			0'			1/2" Ice	0.147	0.239	0.005
			0'			1" Ice	0.199	0.311	0.009
						2" Ice	0.326	0.476	0.022
7020.00	B	From Leg	4.000	0.000	141'	No Ice	0.102	0.175	0.002
			0'			1/2" Ice	0.147	0.239	0.005
			0'			1" Ice	0.199	0.311	0.009
						2" Ice	0.326	0.476	0.022
7020.00	C	From Leg	4.000	0.000	141'	No Ice	0.102	0.175	0.002
			0'			1/2" Ice	0.147	0.239	0.005
			0'			1" Ice	0.199	0.311	0.009
						2" Ice	0.326	0.476	0.022
RRUS 32 B30	A	From Leg	4.000	0.000	141'	No Ice	2.692	1.573	0.060
			0'			1/2" Ice	2.912	1.756	0.080
			3'			1" Ice	3.138	1.945	0.104
						2" Ice	3.614	2.346	0.161
RRUS 32 B30	B	From Leg	4.000	0.000	141'	No Ice	2.692	1.573	0.060
			0'			1/2" Ice	2.912	1.756	0.080
			3'			1" Ice	3.138	1.945	0.104
						2" Ice	3.614	2.346	0.161
RRUS 32 B30	C	From Leg	4.000	0.000	141'	No Ice	2.692	1.573	0.060
			0'			1/2" Ice	2.912	1.756	0.080
			3'			1" Ice	3.138	1.945	0.104
						2" Ice	3.614	2.346	0.161
RRUS 4478 B14	A	From Leg	4.000	0.000	141'	No Ice	1.843	1.059	0.060
			0'			1/2" Ice	2.012	1.197	0.076
			3'			1" Ice	2.190	1.342	0.094
						2" Ice	2.566	1.656	0.140
RRUS 4478 B14	B	From Leg	4.000	0.000	141'	No Ice	1.843	1.059	0.060
			0'			1/2" Ice	2.012	1.197	0.076

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			3'			1" Ice	2.190	1.342	0.094
						2" Ice	2.566	1.656	0.140
RRUS 4478 B14	C	From Leg	4.000	0.000	141'	No Ice	1.843	1.059	0.060
			0'			1/2" Ice	2.012	1.197	0.076
			3'			1" Ice	2.190	1.342	0.094
						2" Ice	2.566	1.656	0.140
(2) DBCT108F1V92-1	A	From Leg	4.000	0.000	141'	No Ice	0.637	0.320	0.014
			0'			1/2" Ice	0.740	0.400	0.019
			0'			1" Ice	0.850	0.487	0.026
						2" Ice	1.093	0.690	0.045
(2) DBCT108F1V92-1	B	From Leg	4.000	0.000	141'	No Ice	0.637	0.320	0.014
			0'			1/2" Ice	0.740	0.400	0.019
			0'			1" Ice	0.850	0.487	0.026
						2" Ice	1.093	0.690	0.045
(2) DBCT108F1V92-1	C	From Leg	4.000	0.000	141'	No Ice	0.637	0.320	0.014
			0'			1/2" Ice	0.740	0.400	0.019
			0'			1" Ice	0.850	0.487	0.026
						2" Ice	1.093	0.690	0.045
RRUS 4478 B5	A	From Leg	4.000	0.000	141'	No Ice	1.843	1.059	0.060
			0'			1/2" Ice	2.012	1.197	0.076
			3'			1" Ice	2.190	1.342	0.094
						2" Ice	2.566	1.656	0.140
RRUS 4478 B5	B	From Leg	4.000	0.000	141'	No Ice	1.843	1.059	0.060
			0'			1/2" Ice	2.012	1.197	0.076
			3'			1" Ice	2.190	1.342	0.094
						2" Ice	2.566	1.656	0.140
RRUS 4478 B5	C	From Leg	4.000	0.000	141'	No Ice	1.843	1.059	0.060
			0'			1/2" Ice	2.012	1.197	0.076
			3'			1" Ice	2.190	1.342	0.094
						2" Ice	2.566	1.656	0.140
RRUS 4426 B66	A	From Leg	4.000	0.000	141'	No Ice	1.644	0.725	0.048
			0'			1/2" Ice	1.804	0.842	0.061
			0'			1" Ice	1.972	0.969	0.076
						2" Ice	2.329	1.244	0.115
RRUS 4426 B66	B	From Leg	4.000	0.000	141'	No Ice	1.644	0.725	0.048
			0'			1/2" Ice	1.804	0.842	0.061
			0'			1" Ice	1.972	0.969	0.076
						2" Ice	2.329	1.244	0.115
RRUS 4426 B66	C	From Leg	4.000	0.000	141'	No Ice	1.644	0.725	0.048
			0'			1/2" Ice	1.804	0.842	0.061
			0'			1" Ice	1.972	0.969	0.076
						2" Ice	2.329	1.244	0.115
DC6-48-60-18-8F	A	From Leg	2.000	0.000	141'	No Ice	1.212	1.212	0.033
			0'			1/2" Ice	1.892	1.892	0.055
			3'			1" Ice	2.105	2.105	0.080
						2" Ice	2.570	2.570	0.138
WCS-IMFQ-AMT	C	From Leg	4.000	0.000	141'	No Ice	0.989	0.644	0.030
			0'			1/2" Ice	1.114	0.748	0.039
			0'			1" Ice	1.246	0.860	0.051
						2" Ice	1.533	1.105	0.081
(4) 5'x2.875" Mount Pipe	A	From Leg	4.000	0.000	141'	No Ice	1.328	1.328	0.018
			0'			1/2" Ice	1.632	1.632	0.029
			0'			1" Ice	1.946	1.946	0.043
						2" Ice	2.601	2.601	0.083
(4) 5'x2.875" Mount Pipe	B	From Leg	4.000	0.000	141'	No Ice	1.328	1.328	0.018
			0'			1/2" Ice	1.632	1.632	0.029
			0'			1" Ice	1.946	1.946	0.043

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	2.601	2.601	0.083
(4) 5'x2.875" Mount Pipe	C	From Leg	4.000 0' 0'	0.000	141'	No Ice 1/2" Ice 1" Ice	1.328 1.632 1.946	1.328 1.632 1.946	0.018 0.029 0.043
						2" Ice	2.601	2.601	0.083
8' x 2" Mount Pipe	A	From Leg	2.000 0' 0'	0.000	141'	No Ice 1/2" Ice 1" Ice	1.900 2.728 3.401	1.900 2.728 3.401	0.029 0.044 0.063
						2" Ice	4.396	4.396	0.119
8' x 2" Mount Pipe	B	From Leg	2.000 0' 0'	0.000	141'	No Ice 1/2" Ice 1" Ice	1.900 2.728 3.401	1.900 2.728 3.401	0.029 0.044 0.063
						2" Ice	4.396	4.396	0.119
8' x 2" Mount Pipe	C	From Leg	2.000 0' 0'	0.000	141'	No Ice 1/2" Ice 1" Ice	1.900 2.728 3.401	1.900 2.728 3.401	0.029 0.044 0.063
						2" Ice	4.396	4.396	0.119
10.5' x 2.375" horizontal mount pipe	A	From Leg	4.000 0' 0'	0.000	141'	No Ice 1/2" Ice 1" Ice	2.494 3.572 4.667	2.494 3.572 4.667	0.035 0.054 0.079
						2" Ice	6.317	6.317	0.151
10.5' x 2.375" horizontal mount pipe	B	From Leg	4.000 0' 0'	0.000	141'	No Ice 1/2" Ice 1" Ice	2.494 3.572 4.667	2.494 3.572 4.667	0.035 0.054 0.079
						2" Ice	6.317	6.317	0.151
10.5' x 2.375" horizontal mount pipe	C	From Leg	4.000 0' 0'	0.000	141'	No Ice 1/2" Ice 1" Ice	2.494 3.572 4.667	2.494 3.572 4.667	0.035 0.054 0.079
						2" Ice	6.317	6.317	0.151
(2) Horizontal Tube Support	A	From Leg	0.500 0' 0'	0.000	141'	No Ice 1/2" Ice 1" Ice	1.561 2.076 2.397	1.561 2.076 2.397	0.054 0.070 0.090
						2" Ice	3.067	3.067	0.141
(2) Horizontal Tube Support	B	From Leg	0.500 0' 0'	0.000	141'	No Ice 1/2" Ice 1" Ice	1.561 2.076 2.397	1.561 2.076 2.397	0.054 0.070 0.090
						2" Ice	3.067	3.067	0.141
(2) Horizontal Tube Support	C	From Leg	0.500 0' 0'	0.000	141'	No Ice 1/2" Ice 1" Ice	1.561 2.076 2.397	1.561 2.076 2.397	0.054 0.070 0.090
						2" Ice	3.067	3.067	0.141
Pipe Mount [PM 601-3]	C	None		0.000	141'	No Ice 1/2" Ice 1" Ice	3.170 3.790 4.420	3.170 3.790 4.420	0.195 0.232 0.279
						2" Ice	5.760	5.760	0.401
Sector Mount [SM 503-3]	C	None		0.000	141'	No Ice 1/2" Ice 1" Ice	30.430 43.020 55.430	30.430 43.020 55.430	1.690 2.296 3.097
						2" Ice	79.890	79.890	5.269
*									
M5160160P10006	B	From Leg	2.000 0' 0'	0.000	130'	No Ice 1/2" Ice 1" Ice	0.850 1.050 1.260	0.210 0.380 0.550	0.002 0.007 0.014
						2" Ice	1.740	0.960	0.035
M5160160P10006	C	From Leg	2.000 0' 0'	0.000	130'	No Ice 1/2" Ice 1" Ice	0.850 1.050 1.260	0.210 0.380 0.550	0.002 0.007 0.014

Description	Face or Leg	Offset Type	Offsets: Horz Lateral (ft) Vert (ft)	Azimuth Adjustment (°)	Placement (ft)		C_AA_A Front (ft^2)	C_AA_A Side (ft^2)	Weight (K)
						2" Ice	1.740	0.960	0.035
Side Arm Mount [SO 301-1]	B	From Leg	1.000 0' 0'	0.000	130'	No Ice 1/2" Ice 1" Ice 2" Ice	0.460 0.650 0.870 1.410	0.910 1.300 1.710 2.620	0.023 0.033 0.047 0.091
Side Arm Mount [SO 301-1]	C	From Leg	1.000 0' 0'	0.000	130'	No Ice 1/2" Ice 1" Ice 2" Ice	0.460 0.650 0.870 1.410	0.910 1.300 1.710 2.620	0.023 0.033 0.047 0.091
*									
SC320	B	From Leg	4.000 0' 10'	0.000	118'	No Ice 1/2" Ice 1" Ice 2" Ice	6.380 8.613 10.862 15.410	6.380 8.613 10.862 15.410	0.025 0.071 0.131 0.293
SC229-SFXLDF	C	From Leg	4.000 0' 10'	0.000	118'	No Ice 1/2" Ice 1" Ice 2" Ice	5.950 7.967 10.000 14.117	5.950 7.967 10.000 14.117	0.032 0.075 0.130 0.279
Side Arm Mount [SO 306-1]	B	From Leg	2.000 0' 0'	0.000	118'	No Ice 1/2" Ice 1" Ice 2" Ice	0.410 0.810 1.230 2.080	2.260 3.830 5.480 9.370	0.042 0.062 0.094 0.187
Side Arm Mount [SO 306-1]	C	From Leg	2.000 0' 0'	0.000	118'	No Ice 1/2" Ice 1" Ice 2" Ice	0.410 0.810 1.230 2.080	2.260 3.830 5.480 9.370	0.042 0.062 0.094 0.187
10' x 2.375" Horizontal Mount Pipe	B	From Face	1.000 0' 0'	0.000	118'	No Ice 1/2" Ice 1" Ice 2" Ice	2.375 3.403 4.448 5.911	0.061 0.124 0.209 0.443	0.040 0.058 0.082 0.151
10' x 2.375" Horizontal Mount Pipe	C	From Face	1.000 0' 0'	0.000	118'	No Ice 1/2" Ice 1" Ice 2" Ice	2.375 3.403 4.448 5.911	0.061 0.124 0.209 0.443	0.040 0.058 0.082 0.151
*									
AIR6449 B41 w/ Mount Pipe	A	From Leg	4.000 0' 0'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	5.180 5.590 6.010 6.900	2.720 3.050 3.390 4.130	0.118 0.164 0.216 0.344
AIR6449 B41 w/ Mount Pipe	B	From Leg	4.000 0' 0'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	5.180 5.590 6.010 6.900	2.720 3.050 3.390 4.130	0.118 0.164 0.216 0.344
AIR6449 B41 w/ Mount Pipe	C	From Leg	4.000 0' 0'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	5.180 5.590 6.010 6.900	2.720 3.050 3.390 4.130	0.118 0.164 0.216 0.344
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	A	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	3.140 3.450 3.770 4.430	2.590 2.880 3.190 3.840	0.112 0.164 0.225 0.375
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	B	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	3.140 3.450 3.770 4.430	2.590 2.880 3.190 3.840	0.112 0.164 0.225 0.375
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	C	From Leg	4.000 0'	0.000	114'	No Ice 1/2" Ice	3.140 3.450	2.590 2.880	0.112 0.164

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			-2'			1" Ice	3.770	3.190	0.225
						2" Ice	4.430	3.840	0.375
APXVAARR24_43-U-NA20 w/ Mount Pipe	A	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	14.690 15.460 16.230 17.820	6.870 7.550 8.250 9.670	0.186 0.315 0.458 0.788
APXVAARR24_43-U-NA20 w/ Mount Pipe	B	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	14.690 15.460 16.230 17.820	6.870 7.550 8.250 9.670	0.186 0.315 0.458 0.788
APXVAARR24_43-U-NA20 w/ Mount Pipe	C	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	14.690 15.460 16.230 17.820	6.870 7.550 8.250 9.670	0.186 0.315 0.458 0.788
AIR 32 B2A/B66AA w/ Mount Pipe	A	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	3.760 4.120 4.480 5.240	3.150 3.490 3.840 4.580	0.194 0.252 0.320 0.485
AIR 32 B2A/B66AA w/ Mount Pipe	B	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	3.760 4.120 4.480 5.240	3.150 3.490 3.840 4.580	0.194 0.252 0.320 0.485
AIR 32 B2A/B66AA w/ Mount Pipe	C	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	3.760 4.120 4.480 5.240	3.150 3.490 3.840 4.580	0.194 0.252 0.320 0.485
KRY 112 71	A	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	0.583 0.688 0.799 1.045	0.398 0.488 0.586 0.805	0.013 0.018 0.025 0.044
KRY 112 71	B	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	0.583 0.688 0.799 1.045	0.398 0.488 0.586 0.805	0.013 0.018 0.025 0.044
KRY 112 71	C	From Leg	4.000 0' -2'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	0.583 0.688 0.799 1.045	0.398 0.488 0.586 0.805	0.013 0.018 0.025 0.044
RRUS 4415 B25_CCIV2	A	From Leg	4.000 0' 0'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	1.843 2.012 2.190 2.566	0.820 0.943 1.075 1.368	0.046 0.060 0.077 0.118
RRUS 4415 B25_CCIV2	B	From Leg	4.000 0' 0'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	1.843 2.012 2.190 2.566	0.820 0.943 1.075 1.368	0.046 0.060 0.077 0.118
RRUS 4415 B25_CCIV2	C	From Leg	4.000 0' 0'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	1.843 2.012 2.190 2.566	0.820 0.943 1.075 1.368	0.046 0.060 0.077 0.118
RADIO 4449 B71 B85A_T-MOBILE	A	From Leg	4.000 0' 0'	0.000	114'	No Ice 1/2" Ice 1" Ice 2" Ice	1.970 2.147 2.331 2.721	1.587 1.749 1.918 2.280	0.073 0.093 0.116 0.170
RADIO 4449 B71 B85A_T-MOBILE	B	From Leg	4.000 0' 0'	0.000	114'	No Ice 1/2" Ice 1" Ice	1.970 2.147 2.331	1.587 1.749 1.918	0.073 0.093 0.116

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	2.721	2.280	0.170
RADIO 4449 B71	C	From Leg	4.000	0.000	114'	No Ice	1.970	1.587	0.073
B85A_T-MOBILE			0'			1/2" Ice	2.147	1.749	0.093
			0'			1" Ice	2.331	1.918	0.116
						2" Ice	2.721	2.280	0.170
(2) L 2.5x2.5x3/16x6'	A	From Leg	2.000	0.000	114'	No Ice	1.500	0.005	0.025
			0'			1/2" Ice	1.918	0.024	0.034
			0'			1" Ice	2.343	0.049	0.048
						2" Ice	3.215	0.123	0.091
(2) L 2.5x2.5x3/16x6'	B	From Leg	2.000	0.000	114'	No Ice	1.500	0.005	0.025
			0'			1/2" Ice	1.918	0.024	0.034
			0'			1" Ice	2.343	0.049	0.048
						2" Ice	3.215	0.123	0.091
(2) L 2.5x2.5x3/16x6'	C	From Leg	2.000	0.000	114'	No Ice	1.500	0.005	0.025
			0'			1/2" Ice	1.918	0.024	0.034
			0'			1" Ice	2.343	0.049	0.048
						2" Ice	3.215	0.123	0.091
Sector Mount [SM 307-3]	C	None		0.000	114'	No Ice	26.180	26.180	1.620
						1/2" Ice	35.720	35.720	2.113
						1" Ice	45.160	45.160	2.761
						2" Ice	63.920	63.920	4.520
*									
800MHZ 2X50W RRH	A	From Leg	2.000	0.000	103'	No Ice	2.058	1.932	0.064
W/FILTER			0'			1/2" Ice	2.240	2.109	0.086
			-3'			1" Ice	2.429	2.293	0.111
						2" Ice	2.829	2.684	0.172
800MHZ 2X50W RRH	B	From Leg	2.000	0.000	103'	No Ice	2.058	1.932	0.064
W/FILTER			0'			1/2" Ice	2.240	2.109	0.086
			-3'			1" Ice	2.429	2.293	0.111
						2" Ice	2.829	2.684	0.172
800MHZ 2X50W RRH	C	From Leg	2.000	0.000	103'	No Ice	2.058	1.932	0.064
W/FILTER			0'			1/2" Ice	2.240	2.109	0.086
			-3'			1" Ice	2.429	2.293	0.111
						2" Ice	2.829	2.684	0.172
PCS 1900MHZ 2X40W	A	From Leg	2.000	0.000	103'	No Ice	2.351	1.278	0.044
			0'			1/2" Ice	2.547	1.434	0.062
			-3'			1" Ice	2.751	1.598	0.084
						2" Ice	3.181	1.946	0.135
PCS 1900MHZ 2X40W	B	From Leg	2.000	0.000	103'	No Ice	2.351	1.278	0.044
			0'			1/2" Ice	2.547	1.434	0.062
			-3'			1" Ice	2.751	1.598	0.084
						2" Ice	3.181	1.946	0.135
PCS 1900MHZ 2X40W	C	From Leg	2.000	0.000	103'	No Ice	2.351	1.278	0.044
			0'			1/2" Ice	2.547	1.434	0.062
			-3'			1" Ice	2.751	1.598	0.084
						2" Ice	3.181	1.946	0.135
(2) 4' x 2" Pipe Mount	A	From Leg	1.000	0.000	103'	No Ice	0.785	0.785	0.029
			0'			1/2" Ice	1.028	1.028	0.035
			0'			1" Ice	1.281	1.281	0.044
						2" Ice	1.814	1.814	0.072
(2) 4' x 2" Pipe Mount	B	From Leg	1.000	0.000	103'	No Ice	0.785	0.785	0.029
			0'			1/2" Ice	1.028	1.028	0.035
			0'			1" Ice	1.281	1.281	0.044
						2" Ice	1.814	1.814	0.072
(2) 4' x 2" Pipe Mount	C	From Leg	1.000	0.000	103'	No Ice	0.785	0.785	0.029
			0'			1/2" Ice	1.028	1.028	0.035
			0'			1" Ice	1.281	1.281	0.044

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
Pipe Mount [PM 601-3]	C	None		0.000	103'	2" Ice No Ice 1/2" Ice 1" Ice 2" Ice	1.814 3.170 3.790 4.420 5.760	1.814 3.170 3.790 4.420 5.760	0.072 0.195 0.232 0.279 0.401
*									
DT465B-2XR w/ Mount Pipe	A	From Leg	4.000 0' 0'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	5.500 5.970 6.450 7.440	4.380 4.840 5.300 6.260	0.091 0.164 0.248 0.451
DT465B-2XR w/ Mount Pipe	B	From Leg	4.000 0' 0'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	5.500 5.970 6.450 7.440	4.380 4.840 5.300 6.260	0.091 0.164 0.248 0.451
DT465B-2XR w/ Mount Pipe	C	From Leg	4.000 0' 0'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	5.500 5.970 6.450 7.440	4.380 4.840 5.300 6.260	0.091 0.164 0.248 0.451
APXVSPP18-C-A20 w/ Mount Pipe	A	From Leg	4.000 0' 0'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419
APXVSPP18-C-A20 w/ Mount Pipe	B	From Leg	4.000 0' 0'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419
APXVSPP18-C-A20 w/ Mount Pipe	C	From Leg	4.000 0' 0'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419
RRH2X50-800	A	From Leg	4.000 0' -3'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	1.701 1.864 2.035 2.398	1.282 1.428 1.580 1.908	0.053 0.070 0.090 0.138
RRH2X50-800	B	From Leg	4.000 0' -3'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	1.701 1.864 2.035 2.398	1.282 1.428 1.580 1.908	0.053 0.070 0.090 0.138
RRH2X50-800	C	From Leg	4.000 0' -3'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	1.701 1.864 2.035 2.398	1.282 1.428 1.580 1.908	0.053 0.070 0.090 0.138
TD-RRH8X20-25	A	From Leg	4.000 0' 3'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8X20-25	B	From Leg	4.000 0' 3'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8X20-25	C	From Leg	4.000 0' 3'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
10' x 2.375" Horizontal Mount Pipe	A	From Leg	4.000 0' 0'	0.000	100'	No Ice 1/2" Ice 1" Ice	2.375 3.403 4.448	0.061 0.124 0.209	0.040 0.058 0.082

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	5.911	0.443	0.151
10' x 2.375" Horizontal Mount Pipe	B	From Leg	4.000 0' 0'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	2.375 3.403 4.448 5.911	0.061 0.124 0.209 0.443	0.040 0.058 0.082 0.151
10' x 2.375" Horizontal Mount Pipe	C	From Leg	4.000 0' 0'	0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	2.375 3.403 4.448 5.911	0.061 0.124 0.209 0.443	0.040 0.058 0.082 0.151
Sector Mount [SM 406-3]	C	None		0.000	100'	No Ice 1/2" Ice 1" Ice 2" Ice	19.760 29.240 38.800 58.910	19.760 29.240 38.800 58.910	0.923 1.311 1.845 3.330
*									
(2) LPA-80063/4CF w/ Mount Pipe	A	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	6.385 6.784 7.192 8.035	6.603 7.232 7.876 9.214	0.038 0.104 0.176 0.344
(2) LPA-80063/4CF w/ Mount Pipe	B	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	6.385 6.784 7.192 8.035	6.603 7.232 7.876 9.214	0.038 0.104 0.176 0.344
(2) LPA-80063/4CF w/ Mount Pipe	C	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	6.385 6.784 7.192 8.035	6.603 7.232 7.876 9.214	0.038 0.104 0.176 0.344
(2) MX06FRO660-03 w/ Mount Pipe	A	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	6.540 7.060 7.600 8.700	5.550 6.050 6.570 7.650	0.103 0.185 0.277 0.496
(2) MX06FRO660-03 w/ Mount Pipe	B	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	6.540 7.060 7.600 8.700	5.550 6.050 6.570 7.650	0.103 0.185 0.277 0.496
(2) MX06FRO660-03 w/ Mount Pipe	C	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	6.540 7.060 7.600 8.700	5.550 6.050 6.570 7.650	0.103 0.185 0.277 0.496
MT6407-77A w/ Mount Pipe	A	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	4.907 5.256 5.615 6.362	2.682 3.145 3.624 4.631	0.096 0.136 0.180 0.288
MT6407-77A w/ Mount Pipe	B	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	4.907 5.256 5.615 6.362	2.682 3.145 3.624 4.631	0.096 0.136 0.180 0.288
MT6407-77A w/ Mount Pipe	C	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	4.907 5.256 5.615 6.362	2.682 3.145 3.624 4.631	0.096 0.136 0.180 0.288
RFV01U-D1A	A	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	1.875 2.045 2.223 2.601	1.250 1.393 1.543 1.865	0.084 0.103 0.124 0.175
RFV01U-D1A	B	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice	1.875 2.045 2.223	1.250 1.393 1.543	0.084 0.103 0.124

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	2.601	1.865	0.175
RFV01U-D1A	C	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	1.875 2.045 2.223 2.601	1.250 1.393 1.543 1.865	0.084 0.103 0.124 0.175
RFV01U-D2A	A	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	1.875 2.045 2.223 2.601	1.013 1.145 1.284 1.585	0.070 0.087 0.106 0.153
RFV01U-D2A	B	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	1.875 2.045 2.223 2.601	1.013 1.145 1.284 1.585	0.070 0.087 0.106 0.153
RFV01U-D2A	C	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	1.875 2.045 2.223 2.601	1.013 1.145 1.284 1.585	0.070 0.087 0.106 0.153
RVZDC-6627-PF-48_CCIV2	A	From Leg	4.000 0' 2'	0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	4.056 4.316 4.582 5.138	3.098 3.335 3.580 4.092	0.032 0.068 0.109 0.203
JMA 91900314-02	C	None		0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	3.600 4.180 4.750 5.900	3.600 4.180 4.750 5.900	0.075 0.105 0.135 0.195
Sector Mount [SM 408-3]	C	None		0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	22.380 33.310 44.350 67.760	22.380 33.310 44.350 67.760	1.019 1.459 2.064 3.750
Pipe Mount [PM 601-3]	C	None		0.000	88'	No Ice 1/2" Ice 1" Ice 2" Ice	3.170 3.790 4.420 5.760	3.170 3.790 4.420 5.760	0.195 0.232 0.279 0.401
*									
APXV18-206517S-C w/ Mount Pipe	A	From Leg	1.000 0' 0'	0.000	65'	No Ice 1/2" Ice 1" Ice 2" Ice	3.790 4.380 4.990 6.250	3.160 3.750 4.350 5.590	0.053 0.094 0.145 0.281
APXV18-206517S-C w/ Mount Pipe	B	From Leg	1.000 0' 0'	0.000	65'	No Ice 1/2" Ice 1" Ice 2" Ice	3.790 4.380 4.990 6.250	3.160 3.750 4.350 5.590	0.053 0.094 0.145 0.281
APXV18-206517S-C w/ Mount Pipe	C	From Leg	1.000 0' 0'	0.000	65'	No Ice 1/2" Ice 1" Ice 2" Ice	3.790 4.380 4.990 6.250	3.160 3.750 4.350 5.590	0.053 0.094 0.145 0.281
*									
GPS-TMG-HR-26NCM	C	From Leg	1.000 0' 0'	0.000	50'	No Ice 1/2" Ice 1" Ice 2" Ice	0.133 0.183 0.239 0.375	0.133 0.183 0.239 0.375	0.001 0.002 0.005 0.014
4' x 2" Pipe Mount	C	From Leg	0.500 0' 0'	0.000	50'	No Ice 1/2" Ice 1" Ice 2" Ice	0.785 1.028 1.281 1.814	0.785 1.028 1.281 1.814	0.029 0.035 0.044 0.072
*									
L3x3x3/16-Mid Girt	A	From Face	0.000	0.000	90'	No Ice	2.100	0.007	0.042

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0'			1/2" Ice	2.587	0.028	0.054
			0'			1" Ice	3.081	0.056	0.071
						2" Ice	4.093	0.135	0.124
L3x3x3/16-Mid Girt	B	From Face	0.000	0.000	90'	No Ice	2.100	0.007	0.042
			0'			1/2" Ice	2.587	0.028	0.054
			0'			1" Ice	3.081	0.056	0.071
						2" Ice	4.093	0.135	0.124
L3x3x3/16-Mid Girt	C	From Face	0.000	0.000	90'	No Ice	2.100	0.007	0.042
			0'			1/2" Ice	2.587	0.028	0.054
			0'			1" Ice	3.081	0.056	0.071
						2" Ice	4.093	0.135	0.124

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
HPLPD1-18	B	Paraboloid w/Shroud (HP)	From Leg	4.000 0' 1'	-27.000		150'	1.140	No Ice 1/2" Ice 1" Ice 2" Ice	1.021 1.175 1.330 1.639	0.017 0.023 0.029 0.041
HPLPD1-18	C	Paraboloid w/Shroud (HP)	From Leg	4.000 0' 1'	-11.000		150'	1.140	No Ice 1/2" Ice 1" Ice 2" Ice	1.021 1.175 1.330 1.639	0.017 0.023 0.029 0.041
*											

Truss-Leg Properties

Section Designation	Area in^2	Area Ice in^2	Self Weight K	Ice Weight K	Equiv. Diameter in	Equiv. Diameter Ice in	Leg Area in^2
Pirod 105244	1026.861	3022.418	0.563	0.444	7.131	20.989	3.682
Pirod 105216	1998.089	6207.095	0.505	0.833	6.938	21.552	3.682
Pirod 105217	2130.748	6248.170	0.619	0.819	7.398	21.695	5.301
Pirod 105218	2263.469	6279.964	0.755	0.796	7.859	21.805	7.216
Pirod 105218	2263.469	6221.454	0.755	0.737	7.859	21.602	7.216
Pirod 105219	2441.869	6177.301	0.944	0.658	8.479	21.449	9.425

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	150 - 147.583	Leg	Max Tension	23	4.441	0.000	0.000
			Max. Compression	18	-6.012	-0.224	0.097
			Max. Mx	18	-6.012	-0.224	0.097
			Max. My	2	1.513	0.106	-0.167
			Max. Vy	18	0.101	0.000	0.000
			Max. Vx	2	0.072	0.000	0.000
		Diagonal	Max Tension	5	2.846	0.000	0.000
			Max. Compression	4	-2.897	0.000	0.000
			Max. Mx	26	-0.069	0.005	0.000
			Max. Vy	26	-0.006	0.000	0.000
		Top Girt	Max Tension	15	1.904	0.000	0.000
			Max. Compression	2	-1.919	0.026	-0.000
			Max. Mx	2	-0.126	-0.112	-0.000
			Max. My	27	-0.009	-0.056	-0.000
			Max. Vy	31	0.069	-0.095	-0.000
			Max. Vx	27	-0.000	0.000	0.000
T2	147.583 - 130	Leg	Max Tension	7	37.484	-0.358	0.069
			Max. Compression	2	-43.159	0.367	0.050
			Max. Mx	6	33.382	0.758	-0.136
			Max. My	9	-2.699	-0.001	-0.754
			Max. Vy	7	3.348	-0.358	0.069
			Max. Vx	9	-3.186	0.004	0.308
		Diagonal	Max Tension	5	4.681	0.000	0.000
			Max. Compression	4	-4.696	0.000	0.000
			Max. Mx	27	1.062	-0.005	0.000
			Max. My	4	-4.360	-0.001	-0.001
			Max. Vy	27	0.008	-0.005	0.000
			Max. Vx	4	0.000	-0.001	-0.001
		Horizontal	Max Tension	14	0.888	0.000	0.000
			Max. Compression	3	-0.623	0.000	0.000
			Max. Mx	26	0.408	0.016	0.000
			Max. Vy	26	0.015	0.000	0.000
		Top Girt	Max Tension	10	0.133	0.000	0.000
			Max. Compression	7	-0.087	0.000	0.000
			Max. Mx	26	0.047	0.014	0.000
			Max. Vy	26	-0.014	0.000	0.000
		Bottom Girt	Max Tension	14	2.001	0.000	0.000
			Max. Compression	3	-1.860	0.000	0.000
			Max. Mx	26	0.058	0.017	0.000
			Max. Vy	26	-0.015	0.000	0.000
T3	130 - 110	Leg	Max Tension	7	86.931	-2.564	0.171
			Max. Compression	2	-96.892	2.489	0.172
			Max. Mx	6	85.520	-2.573	0.171
			Max. My	8	-6.456	-0.033	2.128
			Max. Vy	6	5.539	-2.573	0.171
			Max. Vx	9	-4.328	-0.022	2.128
		Diagonal	Max Tension	5	6.106	0.000	0.000
			Max. Compression	4	-6.138	0.000	0.000
			Max. Mx	27	1.449	-0.007	0.000
			Max. My	4	-5.447	-0.000	-0.002
			Max. Vy	27	0.011	-0.007	0.000
			Max. Vx	4	0.001	0.000	0.000
		Horizontal	Max Tension	14	1.286	0.000	0.000
			Max. Compression	3	-1.129	0.000	0.000
			Max. Mx	26	0.292	0.017	0.000
			Max. Vy	26	-0.014	0.000	0.000
		Top Girt	Max Tension	18	1.860	0.000	0.000
			Max. Compression	7	-1.846	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	26	0.033	0.017	0.000
			Max. Vy	26	-0.015	0.000	0.000
		Bottom Girt	Max Tension	14	2.372	0.000	0.000
			Max. Compression	3	-2.189	0.000	0.000
			Max. Mx	26	0.234	0.020	0.000
			Max. Vy	26	0.016	0.000	0.000
T4	110 - 100	Leg	Max Tension	7	89.164	-2.564	0.171
			Max. Compression	2	-97.606	8.362	0.185
			Max. Mx	2	-97.606	8.362	0.185
			Max. My	8	-5.872	0.547	2.127
			Max. Vy	2	-0.819	8.362	0.185
			Max. Vx	8	-0.274	0.547	2.127
		Diagonal	Max Tension	9	9.668	0.057	0.005
			Max. Compression	8	-11.205	0.000	0.000
			Max. Mx	8	4.133	0.085	0.003
			Max. My	4	-7.056	-0.069	0.011
			Max. Vy	28	0.027	0.049	-0.004
			Max. Vx	4	-0.002	0.000	0.000
		Top Girt	Max Tension	14	1.004	0.000	0.000
			Max. Compression	3	-0.650	0.000	0.000
			Max. Mx	26	0.457	-0.046	0.000
			Max. My	26	0.476	0.000	0.001
			Max. Vy	26	0.036	0.000	0.000
			Max. Vx	26	0.001	0.000	0.000
T5	100 - 80	Leg	Max Tension	7	130.319	-3.565	0.102
			Max. Compression	2	-148.908	9.152	-0.047
			Max. Mx	2	-148.908	9.152	-0.047
			Max. My	8	-8.612	-0.988	13.985
			Max. Vy	10	1.345	8.290	0.070
			Max. Vx	8	2.821	-0.988	13.985
		Diagonal	Max Tension	15	9.828	0.145	0.037
			Max. Compression	2	-10.377	0.000	0.000
			Max. Mx	2	5.811	0.235	0.045
			Max. My	4	-7.420	-0.137	0.054
			Max. Vy	28	-0.054	0.153	0.016
			Max. Vx	4	-0.010	0.000	0.000
		Top Girt	Max Tension	6	6.953	0.000	0.000
			Max. Compression	3	-5.880	0.000	0.000
			Max. Mx	26	1.446	-0.065	0.000
			Max. My	26	1.356	0.000	0.002
			Max. Vy	26	-0.043	0.000	0.000
			Max. Vx	26	-0.001	0.000	0.000
T6	80 - 60	Leg	Max Tension	7	173.333	-4.459	0.100
			Max. Compression	2	-197.997	6.493	0.049
			Max. Mx	2	-172.087	9.152	-0.047
			Max. My	9	-9.928	-0.447	9.924
			Max. Vy	10	0.686	9.041	0.011
			Max. Vx	8	-1.385	-0.600	9.923
		Diagonal	Max Tension	16	8.930	0.000	0.000
			Max. Compression	2	-9.441	0.000	0.000
			Max. Mx	2	6.727	0.138	0.011
			Max. My	4	-8.453	-0.075	0.025
			Max. Vy	27	-0.048	0.109	0.011
			Max. Vx	4	-0.004	0.000	0.000
		Top Girt	Max Tension	6	6.487	0.000	0.000
			Max. Compression	3	-5.640	0.000	0.000
			Max. Mx	26	1.273	-0.113	0.000
			Max. My	26	1.187	0.000	0.003
			Max. Vy	26	0.056	0.000	0.000
			Max. Vx	26	-0.002	0.000	0.000
T7	60 - 40	Leg	Max Tension	23	211.031	-5.614	-0.017

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	2	-240.288	7.011	0.219
			Max. Mx	2	-240.288	7.011	0.219
			Max. My	9	-11.991	0.072	6.998
			Max. Vy	10	-0.264	6.952	0.118
			Max. Vx	9	-0.410	0.072	6.998
		Diagonal	Max Tension	16	8.697	0.000	0.000
			Max. Compression	16	-8.741	0.000	0.000
			Max. Mx	2	6.692	0.105	0.011
			Max. My	36	-1.035	0.062	-0.013
			Max. Vy	37	0.053	0.091	-0.012
			Max. Vx	36	0.003	0.000	0.000
T8	40 - 20	Leg	Max Tension	23	246.374	-5.235	-0.018
			Max. Compression	2	-280.088	6.431	0.038
			Max. Mx	2	-260.186	7.011	0.219
			Max. My	9	-12.510	0.072	6.998
			Max. Vy	33	0.493	-4.428	-0.036
			Max. Vx	9	0.449	-0.140	6.527
		Diagonal	Max Tension	16	9.073	0.000	0.000
			Max. Compression	16	-9.282	0.000	0.000
			Max. Mx	2	6.338	0.163	0.013
			Max. My	30	2.692	0.127	0.018
			Max. Vy	37	0.071	0.130	0.016
			Max. Vx	30	-0.004	0.000	0.000
T9	20 - 0	Leg	Max Tension	23	278.246	-5.833	-0.031
			Max. Compression	2	-316.634	0.000	-0.000
			Max. Mx	2	-299.638	6.431	0.038
			Max. My	9	-15.092	-0.313	9.928
			Max. Vy	33	-0.815	-4.428	-0.036
			Max. Vx	9	1.155	-0.313	9.928
		Diagonal	Max Tension	15	10.374	0.000	0.000
			Max. Compression	18	-11.218	0.000	0.000
			Max. Mx	27	0.706	0.160	0.017
			Max. My	8	8.595	0.129	0.024
			Max. Vy	37	0.074	0.157	-0.017
			Max. Vx	36	0.004	0.000	0.000

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	320.430	27.869	-17.092
	Max. H_x	18	320.430	27.869	-17.092
	Max. H_z	7	-283.178	-24.919	15.315
	Min. Vert	7	-283.178	-24.919	15.315
	Min. H_x	7	-283.178	-24.919	15.315
	Min. H_z	18	320.430	27.869	-17.092
Leg B	Max. Vert	10	323.948	-28.723	-17.135
	Max. H_x	23	-287.784	25.701	15.355
	Max. H_z	23	-287.784	25.701	15.355
	Min. Vert	23	-287.784	25.701	15.355
	Min. H_x	10	323.948	-28.723	-17.135
	Min. H_z	10	323.948	-28.723	-17.135
Leg A	Max. Vert	2	327.666	-0.692	33.346
	Max. H_x	21	14.899	2.292	1.193
	Max. H_z	2	327.666	-0.692	33.346
	Min. Vert	15	-284.706	0.657	-29.582

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
	Min. H_x	8	21.424	-2.321	1.708
	Min. H_z	15	-284.706	0.657	-29.582

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	48.457	0.000	-0.000	-15.509	10.388	0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	58.148	0.078	-49.407	-4271.697	1.998	-18.735
0.9 Dead+1.0 Wind 0 deg - No Ice	43.611	0.078	-49.407	-4267.044	-1.119	-18.735
1.2 Dead+1.0 Wind 30 deg - No Ice	58.148	23.787	-41.193	-3608.728	-2062.651	-16.388
0.9 Dead+1.0 Wind 30 deg - No Ice	43.611	23.787	-41.193	-3604.075	-2065.767	-16.388
1.2 Dead+1.0 Wind 60 deg - No Ice	58.148	40.979	-23.734	-2087.841	-3557.588	-23.092
0.9 Dead+1.0 Wind 60 deg - No Ice	43.611	40.979	-23.734	-2083.189	-3560.705	-23.092
1.2 Dead+1.0 Wind 90 deg - No Ice	58.148	49.474	-0.073	-28.282	-4218.523	-27.736
0.9 Dead+1.0 Wind 90 deg - No Ice	43.611	49.474	-0.073	-23.629	-4221.640	-27.736
1.2 Dead+1.0 Wind 120 deg - No Ice	58.148	43.113	24.882	2099.248	-3661.050	-12.719
0.9 Dead+1.0 Wind 120 deg - No Ice	43.611	43.113	24.882	2103.901	-3664.166	-12.719
1.2 Dead+1.0 Wind 150 deg - No Ice	58.148	24.317	42.252	3613.078	-2075.918	13.219
0.9 Dead+1.0 Wind 150 deg - No Ice	43.611	24.317	42.252	3617.731	-2079.034	13.219
1.2 Dead+1.0 Wind 180 deg - No Ice	58.148	-0.065	47.976	4141.780	20.919	18.748
0.9 Dead+1.0 Wind 180 deg - No Ice	43.611	-0.065	47.976	4146.433	17.802	18.748
1.2 Dead+1.0 Wind 210 deg - No Ice	58.148	-23.694	41.020	3549.027	2075.579	16.369
0.9 Dead+1.0 Wind 210 deg - No Ice	43.611	-23.694	41.020	3553.680	2072.462	16.369
1.2 Dead+1.0 Wind 240 deg - No Ice	58.148	-41.893	24.255	2071.728	3620.645	23.044
0.9 Dead+1.0 Wind 240 deg - No Ice	43.611	-41.893	24.255	2076.381	3617.529	23.044
1.2 Dead+1.0 Wind 270 deg - No Ice	58.148	-49.289	0.068	-9.672	4219.669	27.704
0.9 Dead+1.0 Wind 270 deg - No Ice	43.611	-49.289	0.068	-5.020	4216.552	27.704
1.2 Dead+1.0 Wind 300 deg - No Ice	58.148	-42.047	-24.269	-2103.578	3628.446	12.675
0.9 Dead+1.0 Wind 300 deg - No Ice	43.611	-42.047	-24.269	-2098.926	3625.329	12.675
1.2 Dead+1.0 Wind 330 deg - No Ice	58.148	-24.327	-42.248	-3649.778	2102.347	-13.251
0.9 Dead+1.0 Wind 330 deg - No Ice	43.611	-24.327	-42.248	-3645.125	2099.231	-13.251

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
1.2 Dead+1.0 Ice+1.0 Temp	138.883	-0.000	-0.000	-57.012	30.506	0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	138.883	0.021	-13.532	-1240.806	27.780	-2.672
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	138.883	6.742	-11.693	-1080.970	-559.955	-2.603
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	138.883	11.824	-6.857	-654.239	-997.888	-4.404
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	138.883	13.836	-0.020	-59.554	-1165.847	-5.859
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	138.883	11.887	6.871	533.515	-991.341	-3.170
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	138.883	6.681	11.626	953.388	-549.292	1.210
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	138.883	-0.018	13.241	1100.700	32.766	2.675
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	138.883	-6.673	11.571	951.124	612.058	2.599
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	138.883	-11.835	6.862	535.153	1050.494	4.393
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	138.883	-13.698	0.018	-54.640	1209.092	5.852
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	138.883	-11.759	-6.797	-643.744	1045.650	3.160
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	138.883	-6.684	-11.625	-1067.291	610.652	-1.218
Dead+Wind 0 deg - Service	48.457	0.019	-11.985	-1047.370	7.849	-4.537
Dead+Wind 30 deg - Service	48.457	5.770	-9.993	-886.532	-493.070	-3.973
Dead+Wind 60 deg - Service	48.457	9.941	-5.757	-517.540	-855.769	-5.604
Dead+Wind 90 deg - Service	48.457	12.001	-0.018	-17.855	-1016.114	-6.734
Dead+Wind 120 deg - Service	48.457	10.458	6.036	498.315	-880.861	-3.094
Dead+Wind 150 deg - Service	48.457	5.899	10.249	865.596	-496.288	3.197
Dead+Wind 180 deg - Service	48.457	-0.016	11.638	993.871	12.438	4.541
Dead+Wind 210 deg - Service	48.457	-5.748	9.951	850.062	510.935	3.968
Dead+Wind 240 deg - Service	48.457	-10.162	5.884	491.641	885.792	5.592
Dead+Wind 270 deg - Service	48.457	-11.957	0.016	-13.341	1031.121	6.726
Dead+Wind 300 deg - Service	48.457	-10.200	-5.887	-521.356	887.684	3.084
Dead+Wind 330 deg - Service	48.457	-5.901	-10.249	-896.488	517.427	-3.204

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX	PY	PZ	PX	PY	PZ	% Error
	K	K	K	K	K	K	
1	0.000	-48.457	0.000	0.000	48.457	0.000	0.000%
2	0.078	-58.148	-49.407	-0.078	58.148	49.407	0.000%
3	0.078	-43.611	-49.407	-0.078	43.611	49.407	0.000%
4	23.787	-58.148	-41.193	-23.787	58.148	41.193	0.000%
5	23.787	-43.611	-41.193	-23.787	43.611	41.193	0.000%
6	40.979	-58.148	-23.734	-40.979	58.148	23.734	0.000%
7	40.979	-43.611	-23.734	-40.979	43.611	23.734	0.000%
8	49.474	-58.148	-0.073	-49.474	58.148	0.073	0.000%
9	49.474	-43.611	-0.073	-49.474	43.611	0.073	0.000%
10	43.113	-58.148	24.882	-43.113	58.148	-24.882	0.000%
11	43.113	-43.611	24.882	-43.113	43.611	-24.882	0.000%
12	24.317	-58.148	42.252	-24.317	58.148	-42.252	0.000%
13	24.317	-43.611	42.252	-24.317	43.611	-42.252	0.000%
14	-0.065	-58.148	47.976	0.065	58.148	-47.976	0.000%
15	-0.065	-43.611	47.976	0.065	43.611	-47.976	0.000%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
16	-23.694	-58.148	41.020	23.694	58.148	-41.020	0.000%
17	-23.694	-43.611	41.020	23.694	43.611	-41.020	0.000%
18	-41.893	-58.148	24.255	41.893	58.148	-24.255	0.000%
19	-41.893	-43.611	24.255	41.893	43.611	-24.255	0.000%
20	-49.289	-58.148	0.068	49.289	58.148	-0.068	0.000%
21	-49.289	-43.611	0.068	49.289	43.611	-0.068	0.000%
22	-42.047	-58.148	-24.269	42.047	58.148	24.269	0.000%
23	-42.047	-43.611	-24.269	42.047	43.611	24.269	0.000%
24	-24.327	-58.148	-42.248	24.327	58.148	42.248	0.000%
25	-24.327	-43.611	-42.248	24.327	43.611	42.248	0.000%
26	0.000	-138.883	0.000	0.000	138.883	0.000	0.000%
27	0.021	-138.883	-13.532	-0.021	138.883	13.532	0.000%
28	6.742	-138.883	-11.693	-6.742	138.883	11.693	0.000%
29	11.824	-138.883	-6.857	-11.824	138.883	6.857	0.000%
30	13.836	-138.883	-0.020	-13.836	138.883	0.020	0.000%
31	11.887	-138.883	6.871	-11.887	138.883	-6.871	0.000%
32	6.681	-138.883	11.626	-6.681	138.883	-11.626	0.000%
33	-0.018	-138.883	13.241	0.018	138.883	-13.241	0.000%
34	-6.673	-138.883	11.571	6.673	138.883	-11.571	0.000%
35	-11.835	-138.883	6.862	11.835	138.883	-6.862	0.000%
36	-13.698	-138.883	0.018	13.698	138.883	-0.018	0.000%
37	-11.759	-138.883	-6.797	11.759	138.883	6.797	0.000%
38	-6.684	-138.883	-11.625	6.684	138.883	11.625	0.000%
39	0.019	-48.457	-11.985	-0.019	48.457	11.985	0.000%
40	5.770	-48.457	-9.993	-5.770	48.457	9.993	0.000%
41	9.941	-48.457	-5.757	-9.941	48.457	5.757	0.000%
42	12.001	-48.457	-0.018	-12.001	48.457	0.018	0.000%
43	10.458	-48.457	6.036	-10.458	48.457	-6.036	0.000%
44	5.899	-48.457	10.249	-5.899	48.457	-10.249	0.000%
45	-0.016	-48.457	11.638	0.016	48.457	-11.638	0.000%
46	-5.748	-48.457	9.951	5.748	48.457	-9.951	0.000%
47	-10.162	-48.457	5.884	10.162	48.457	-5.884	0.000%
48	-11.957	-48.457	0.016	11.957	48.457	-0.016	0.000%
49	-10.200	-48.457	-5.887	10.200	48.457	5.887	0.000%
50	-5.901	-48.457	-10.249	5.901	48.457	10.249	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	150 - 147.583	6.213	39	0.411	0.087
T2	147.583 - 130	6.003	39	0.410	0.081
T3	130 - 110	4.505	39	0.372	0.046
T4	110 - 100	3.024	39	0.302	0.024
T5	100 - 80	2.419	39	0.264	0.020
T6	80 - 60	1.466	39	0.183	0.016
T7	60 - 40	0.793	39	0.123	0.011
T8	40 - 20	0.342	39	0.079	0.006
T9	20 - 0	0.088	39	0.034	0.003

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
151'	HPLPD1-18	39	6.213	0.411	0.087	151064
150'	SC226-SFXSNM	39	6.213	0.411	0.087	151064
144'	RRUS 32 B30	39	5.692	0.406	0.072	106779
141'	7770.00 w/ Mount Pipe	39	5.432	0.401	0.066	54468
130'	M5160160P10006	39	4.505	0.372	0.046	19454
118'	SC320	39	3.576	0.331	0.031	13865
114'	AIR6449 B41 w/ Mount Pipe	39	3.293	0.316	0.027	12716
103'	800MHZ 2X50W RRH W/FILTER	39	2.591	0.276	0.021	12993
100'	DT465B-2XR w/ Mount Pipe	39	2.419	0.264	0.020	13566
90'	L3x3x3/16-Mid Girt	39	1.903	0.223	0.018	15222
88'	(2) LPA-80063/4CF w/ Mount Pipe	39	1.810	0.215	0.017	15592
65'	APXV18-206517S-C w/ Mount Pipe	39	0.939	0.136	0.012	20812
50'	GPS-TMG-HR-26NCM	39	0.542	0.100	0.008	23565

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	150 - 147.583	25.401	2	1.682	0.361
T2	147.583 - 130	24.543	2	1.676	0.335
T3	130 - 110	18.415	2	1.521	0.189
T4	110 - 100	12.357	2	1.232	0.100
T5	100 - 80	9.885	2	1.079	0.081
T6	80 - 60	5.992	2	0.747	0.066
T7	60 - 40	3.243	2	0.502	0.045
T8	40 - 20	1.399	2	0.321	0.025
T9	20 - 0	0.362	2	0.138	0.013

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
151'	HPLPD1-18	2	25.401	1.682	0.361	37553
150'	SC226-SFXSNM	2	25.401	1.682	0.361	37553
144'	RRUS 32 B30	2	23.269	1.660	0.299	26382
141'	7770.00 w/ Mount Pipe	2	22.208	1.639	0.271	13291
130'	M5160160P10006	2	18.415	1.521	0.189	4768
118'	SC320	2	14.617	1.352	0.126	3391
114'	AIR6449 B41 w/ Mount Pipe	2	13.456	1.293	0.110	3110
103'	800MHZ 2X50W RRH W/FILTER	2	10.586	1.127	0.086	3168
100'	DT465B-2XR w/ Mount Pipe	2	9.885	1.079	0.081	3304
90'	L3x3x3/16-Mid Girt	2	7.777	0.911	0.072	3720
88'	(2) LPA-80063/4CF w/ Mount Pipe	2	7.396	0.877	0.071	3812
65'	APXV18-206517S-C w/ Mount Pipe	2	3.838	0.554	0.051	5097
50'	GPS-TMG-HR-26NCM	2	2.217	0.410	0.035	5768

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load / Allowable	Allowable Ratio	Criteria
T2	147.583	Leg	A325N	0.625	5	8.632	27.612	0.313 ✔	1.05	Bolt DS
T3	130	Leg	A325N	1.000	6	14.489	54.517	0.266 ✔	1.05	Bolt Tension
T4	110	Leg	A325N	1.000	6	14.861	54.517	0.273 ✔	1.05	Bolt Tension
		Diagonal	A325N	1.000	1	9.668	10.663	0.907 ✔	1.05	Member Block Shear
		Top Girt	A325N	1.000	1	1.693	11.682	0.145 ✔	1.05	Member Block Shear
T5	100	Leg	A325N	1.000	6	21.714	54.517	0.398 ✔	1.05	Bolt Tension
		Diagonal	A325N	1.000	1	9.828	21.326	0.461 ✔	1.05	Member Block Shear
		Top Girt	A325N	1.000	1	6.953	11.682	0.595 ✔	1.05	Member Block Shear
T6	80	Leg	A325N	1.000	6	28.889	54.517	0.530 ✔	1.05	Bolt Tension
		Diagonal	A325N	1.000	1	8.930	11.682	0.764 ✔	1.05	Member Block Shear
		Top Girt	A325N	1.000	1	6.487	11.682	0.555 ✔	1.05	Member Block Shear
T7	60	Leg	A325N	1.000	6	35.172	54.517	0.645 ✔	1.05	Bolt Tension
		Diagonal	A325N	1.000	1	8.697	11.682	0.744 ✔	1.05	Member Block Shear
T8	40	Leg	A325N	1.000	6	41.062	54.517	0.753 ✔	1.05	Bolt Tension
		Diagonal	A325N	1.000	1	9.073	19.471	0.466 ✔	1.05	Member Block Shear
T9	20	Diagonal	A325N	1.250	1	10.374	23.701	0.438 ✔	1.05	Member Block Shear

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 147.583	1 1/2	2'5"	2'5"	77.3 K=1.00	1.767	-6.012	51.350	0.117 [1] ✔
T2	147.583 - 130	1 1/2	17'7-1/32"	2'5"	77.3 K=1.00	1.767	-39.799	51.350	0.775 [1] ✔
T3	130 - 110	2	20'1/32"	2'4-3/8"	56.8 K=1.00	3.142	-92.422	111.705	0.827 [1] ✔
T4	110 - 100	Pirod 105244	10'7/32"	10'7/32"	45.4 K=1.00	3.682	-97.606	142.493	0.685 [1] ✔
T5	100 - 80	Pirod 105216	20'13/32"	10'7/32"	45.4 K=1.00	3.682	-148.908	142.493	1.045 [1] ✔
T6	80 - 60	Pirod 105217	20'13/32	10'7/32"	37.8	5.301	-197.997	214.859	0.922 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T7	60 - 40	Pirod 105218	20'13/32"	10'7/32"	32.4 K=1.00	7.216	-240.288	300.681	0.799 [1]
T8	40 - 20	Pirod 105218	20'13/32"	10'7/32"	32.4 K=1.00	7.216	-280.088	300.681	0.932 [1]
T9	20 - 0	Pirod 105219	20'13/32"	10'7/32"	28.4 K=1.00	9.425	-316.634	399.868	0.792 [1]

[1] P_u / ϕP_n controls

Truss-Leg Diagonal Data

Section No.	Elevation ft	Diagonal Size	L_d ft	Kl/r	ϕP_n K	A in^2	V_u K	ϕV_n K	Stress Ratio
T4	110 - 100	0.5	1'5-25/32"	121.0	165.670	0.196	0.820	3.389	0.242
T5	100 - 80	0.5	1'5-25/32"	121.0	165.670	0.196	2.805	3.292	0.853
T6	80 - 60	0.5	1'5-21/32"	120.0	238.565	0.196	1.395	3.335	0.419
T7	60 - 40	0.5	1'5-1/2"	119.0	324.713	0.196	0.411	3.378	0.123
T8	40 - 20	0.5	1'5-1/2"	119.0	324.713	0.196	0.493	3.378	0.146
T9	20 - 0	0.625	1'5-11/32"	94.4	424.115	0.307	1.156	6.958	0.167

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 147.583	3/4	3'1-7/8"	3'23/32"	137.1 K=0.70	0.442	-2.897	5.311	0.545 [1]
T2	147.583 - 130	3/4	5'7/8"	2'5-25/32"	143.0 K=0.90	0.442	-4.696	4.879	0.963 [1]
T3	130 - 110	7/8	5'5-29/32"	2'8-1/32"	131.8 K=0.90	0.601	-6.138	7.820	0.785 [1]
T4	110 - 100	L2 1/2x2 1/2x3/16	11'5"	4'11-25/32"	120.8 K=1.00	0.902	-11.206	17.576	0.638 [1]
T5	100 - 80	L2 1/2x2 1/2x3/8	12'6-1/32"	5'7-17/32"	138.7 K=1.00	1.730	-10.377	25.755	0.403 [1]
T6	80 - 60	L3x3x3/16	13'9-9/16"	6'3-15/16"	127.4 K=1.00	1.090	-8.848	19.221	0.460 [1]
T7	60 - 40	L3x3x3/16	15'2-29/32"	7'31/32"	142.6 K=1.00	1.090	-8.642	15.345	0.563 [1]
T8	40 - 20	L3x3x5/16	16'9-5/8'	7'10-19/	160.6	1.780	-9.282	19.756	0.470 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T9	20 - 0	L3x3x5/16	' 18'5-3/8" '	32" 8'8-1/8"	K=1.00 176.8 K=1.00	1.780	-11.218	16.304	✔ 0.688 [1] ✔

[1] P_u / ϕP_n controls

Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T2	147.583 - 130	7/8	4'5-3/16" '	4'3-11/16"	165.4 K=0.70	0.601	-0.746	4.967	0.150 [1] ✔
T3	130 - 110	3/4	4'11-1/8" '	4'9-1/8"	213.2 K=0.70	0.442	-1.671	2.195	0.761 [1] ✔
		KL/R > 200 (C) - 85							

[1] P_u / ϕP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 147.583	5x1/2	4'	2'10-7/8" '	241.6 K=1.00	2.500	-1.919	9.674	0.198 [1] ✔
		KL/R > 200 (C) - 6							
T2	147.583 - 130	7/8	4'27/32"	3'11-11/32"	151.5 K=0.70	0.601	-0.748	5.917	0.126 [1] ✔
T3	130 - 110	7/8	4'6-5/32" '	4'4-5/32" '	166.9 K=0.70	0.601	-1.846	4.878	0.378 [1] ✔
T4	110 - 100	L3x3x3/16	5'	3'7"	96.1 K=1.33	1.090	-1.693	27.281	0.062 [1] ✔
T5	100 - 80	L3x3x3/16	6'	4'7"	106.1 K=1.15	1.090	-5.880	24.936	0.236 [1] ✔
T6	80 - 60	L3x3x3/16	8'	6'7"	132.6 K=1.00	1.090	-5.640	17.757	0.318 [1] ✔

[1] P_u / ϕP_n controls

Bottom Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T2	147.583 - 130	7/8	4'5-29/32"	4'4-13/32"	167.7 K=0.70	0.601	-1.860	4.831	0.385 [1] ✔
T3	130 - 110	7/8	4'11-13/16"	4'9-13/16"	185.0 K=0.70	0.601	-2.189	3.967	0.552 [1] ✔

[1] P_u / ϕP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 147.583	1 1/2	2'5"	2'5"	77.3	1.767	4.441	79.522	0.056 [1] ✔
T2	147.583 - 130	1 1/2	17'7-1/32"	4"	10.7	1.767	37.484	79.522	0.471 [1] ✔
T3	130 - 110	2	20'1/32"	7"	14.0	3.142	86.931	141.372	0.615 [1] ✔
T4	110 - 100	Pirod 105244	10'7/32"	10'7/32"	45.4	3.682	89.164	165.670	0.538 [1] ✔
T5	100 - 80	Pirod 105216	20'13/32"	10'7/32"	45.4	3.682	130.283	165.670	0.786 [1] ✔
T6	80 - 60	Pirod 105217	20'13/32"	10'7/32"	37.8	5.301	173.333	238.565	0.727 [1] ✔
T7	60 - 40	Pirod 105218	20'13/32"	10'7/32"	32.4	7.216	211.032	324.713	0.650 [1] ✔
T8	40 - 20	Pirod 105218	20'13/32"	10'7/32"	32.4	7.216	246.374	324.713	0.759 [1] ✔
T9	20 - 0	Pirod 105219	20'13/32"	10'7/32"	28.4	9.425	278.246	424.115	0.656 [1] ✔

[1] P_u / ϕP_n controls

Truss-Leg Diagonal Data

Section No.	Elevation ft	Diagonal Size	L_d ft	Kl/r	ϕP_n K	A in^2	V_u K	ϕV_n K	Stress Ratio
T4	110 - 100	0.5	1'5-25/32"	121.0	165.670	0.196	0.820	3.389	0.242 ✔
T5	100 - 80	0.5	1'5-25/32"	121.0	165.670	0.196	2.805	3.292	0.853

Section No.	Elevation ft	Diagonal Size	L_d ft	Kl/r	ϕP_n K	A in^2	V_u K	ϕV_n K	Stress Ratio
T6	80 - 60	0.5	1'5-21/32"	120.0	238.565	0.196	1.395	3.335	0.419
T7	60 - 40	0.5	1'5-1/2"	119.0	324.713	0.196	0.411	3.378	0.123
T8	40 - 20	0.5	1'5-1/2"	119.0	324.713	0.196	0.493	3.378	0.146
T9	20 - 0	0.625	1'5-11/32"	94.4	424.115	0.307	1.156	6.958	0.167

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 147.583	3/4	3'1-7/8"	3'23/32"	195.8	0.442	2.846	19.880	0.143 [1]
T2	147.583 - 130	3/4	5'7/8"	2'5-25/32"	158.9	0.442	4.681	19.880	0.235 [1]
T3	130 - 110	7/8	5'5-29/32"	2'8-1/32"	146.4	0.601	6.106	27.059	0.226 [1]
T4	110 - 100	L2 1/2x2 1/2x3/16	11'5"	4'11-25/32"	80.1	0.518	9.668	22.546	0.429 [1]
T5	100 - 80	L2 1/2x2 1/2x3/8	12'6-1/32"	5'7-17/32"	93.0	0.981	9.828	42.678	0.230 [1]
T6	80 - 60	L3x3x3/16	13'9-9/16"	6'3-15/16"	83.5	0.659	8.930	28.679	0.311 [1]
T7	60 - 40	L3x3x3/16	14'6-1/32"	6'8-23/32"	88.6	0.659	8.697	28.679	0.303 [1]
T8	40 - 20	L3x3x5/16	16'1/8"	7'5-15/16"	100.3	1.071	9.073	46.603	0.195 [1]
T9	20 - 0	L3x3x5/16	18'5-3/8"	8'8-1/8"	116.2	1.013	10.374	44.054	0.235 [1]

[1] P_u / ϕP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T2	147.583 - 130	7/8	4'4-7/16"	4'2-15/16"	232.9	0.601	0.888	27.059	0.033 [1]
T3	130 - 110	3/4	4'10-13/32"	4'8-13/32"	300.8	0.442	1.671	19.880	0.084 [1]

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 147.583	5x1/2	4'	2'10-7/8"	241.6	2.500	1.904	81.000	0.024 [1] ✔
T2	147.583 - 130	7/8	4'27/32"	3'11-11/32"	216.5	0.601	0.748	27.059	0.028 [1] ✔
T3	130 - 110	7/8	4'6-5/32"	4'4-5/32"	238.4	0.601	1.860	27.059	0.069 [1] ✔
T4	110 - 100	L3x3x3/16	5'	3'7"	51.1	0.659	1.693	28.679	0.059 [1] ✔
T5	100 - 80	L3x3x3/16	6'	4'7"	63.9	0.659	6.953	28.679	0.242 [1] ✔
T6	80 - 60	L3x3x3/16	8'	6'7"	89.5	0.659	6.487	28.679	0.226 [1] ✔

[1] P_u / ϕP_n controls

Bottom Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T2	147.583 - 130	7/8	4'5-29/32"	4'4-13/32"	239.5	0.601	2.001	27.059	0.074 [1] ✔
T3	130 - 110	7/8	4'11-13/16"	4'9-13/16"	264.3	0.601	2.372	27.059	0.088 [1] ✔

[1] P_u / ϕP_n controls

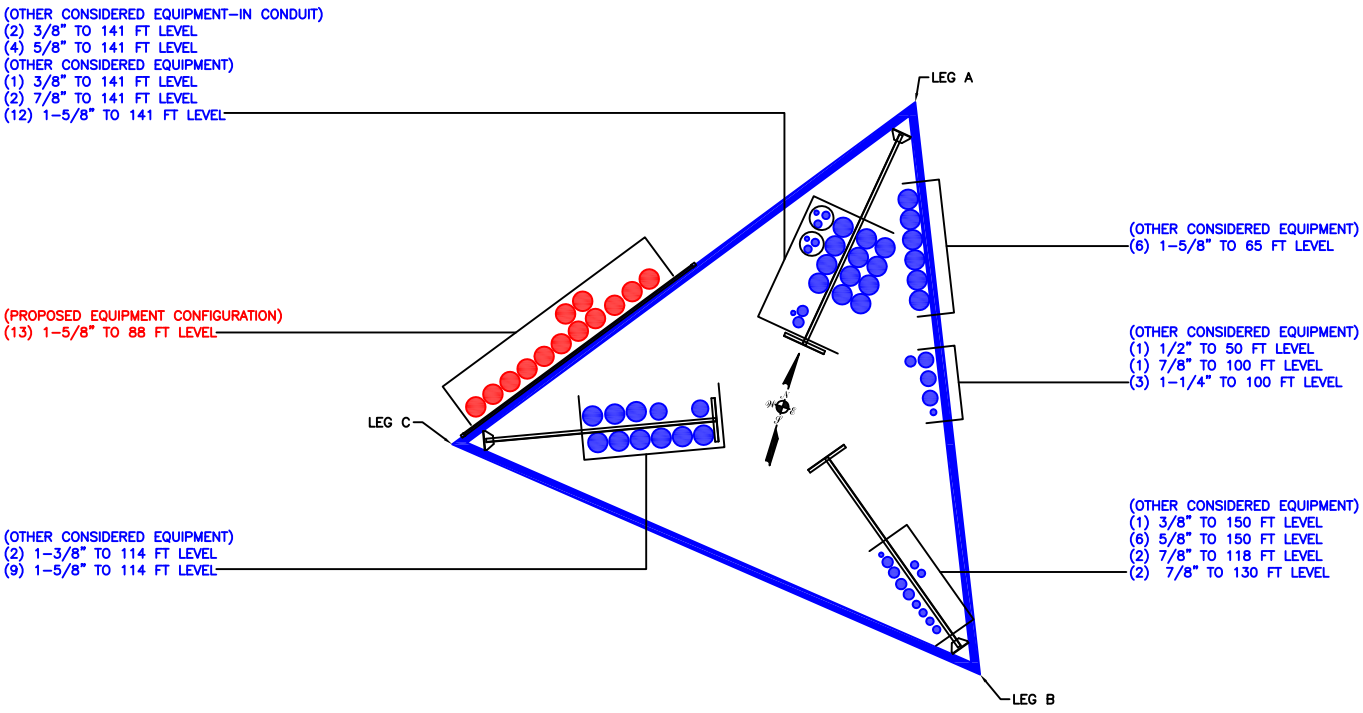
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	150 - 147.583	Leg	1 1/2	1	-6.012	53.917	11.2	Pass
T2	147.583 - 130	Leg	1 1/2	15	-39.799	53.917	73.8	Pass
T3	130 - 110	Leg	2	72	-92.422	117.290	78.8	Pass
T4	110 - 100	Leg	Pirod 105244	136	-97.606	149.618	65.2	Pass
T5	100 - 80	Leg	Pirod 105216	148	-148.908	149.618	99.5	Pass
T6	80 - 60	Leg	Pirod 105217	166	-197.997	225.602	87.8	Pass
T7	60 - 40	Leg	Pirod 105218	184	-240.288	315.715	76.1	Pass
T8	40 - 20	Leg	Pirod 105218	199	-280.088	315.715	88.7	Pass
T9	20 - 0	Leg	Pirod 105219	214	-316.634	419.861	75.4	Pass
T1	150 - 147.583	Diagonal	3/4	11	-2.897	5.577	52.0	Pass
T2	147.583 - 130	Diagonal	3/4	26	-4.696	5.123	91.7	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T3	130 - 110	Diagonal	7/8	83	-6.138	8.211	74.8	Pass
T4	110 - 100	Diagonal	L2 1/2x2 1/2x3/16	142	-11.206	18.455	60.7	Pass
T5	100 - 80	Diagonal	L2 1/2x2 1/2x3/8	156	-10.377	27.043	38.4	Pass
T6	80 - 60	Diagonal	L3x3x3/16	174	-8.848	20.182	43.8	Pass
T7	60 - 40	Diagonal	L3x3x3/16	190	-8.642	16.112	53.6	Pass
T8	40 - 20	Diagonal	L3x3x5/16	205	-9.282	20.744	44.7	Pass
T9	20 - 0	Diagonal	L3x3x5/16	220	-11.218	17.119	65.5	Pass
T2	147.583 - 130	Horizontal	7/8	28	-0.746	5.216	14.3	Pass
T3	130 - 110	Horizontal	3/4	85	-1.671	2.305	72.5	Pass
T1	150 - 147.583	Top Girt	5x1/2	6	-1.919	10.158	18.9	Pass
T2	147.583 - 130	Top Girt	7/8	17	-0.748	6.213	12.0	Pass
T3	130 - 110	Top Girt	7/8	74	-1.846	5.122	36.0	Pass
T4	110 - 100	Top Girt	L3x3x3/16	138	-1.693	28.645	5.9	Pass
T5	100 - 80	Top Girt	L3x3x3/16	150	6.953	30.113	23.1	Pass
T6	80 - 60	Top Girt	L3x3x3/16	167	-5.640	18.645	30.3	Pass
T2	147.583 - 130	Bottom Girt	7/8	19	-1.860	5.073	36.7	Pass
T3	130 - 110	Bottom Girt	7/8	76	-2.189	4.166	52.5	Pass
							Summary	
						Leg (T5)	99.5	Pass
						Diagonal (T2)	91.7	Pass
						Horizontal (T3)	72.5	Pass
						Top Girt (T3)	36.0	Pass
						Bottom Girt (T3)	52.5	Pass
						Bolt Checks	86.3	Pass
						RATING =	**99.5**	**Pass**

APPENDIX B

BASE LEVEL DRAWING



BUSINESS UNIT: 842870

APPENDIX C

ADDITIONAL CALCULATIONS

Self Support Anchor Rod Capacity

Site Info	
BU #	842870
Site Name	MILFORD, CT
Order #	568291 Rev. 0

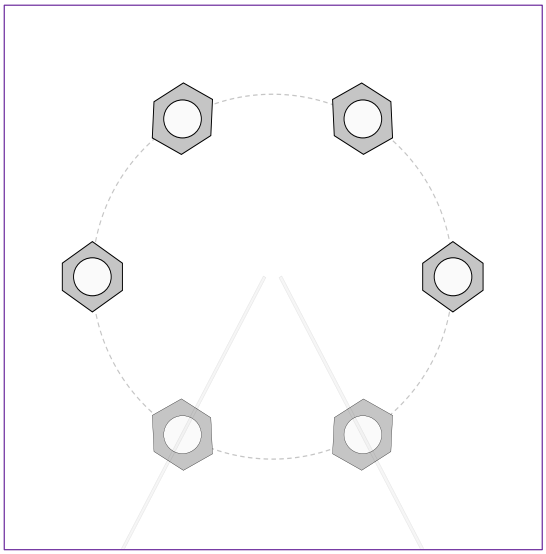
Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	Yes
l_{ar} (in)	3.25

Applied Loads		
	Comp.	Uplift
Axial Force (kips)	328.00	288.00
Shear Force (kips)	33.00	30.00

**TIA-222-H Section 15.5 Applied*

Considered Eccentricity	
Leg Mod Eccentricity (in)	0.000
Anchor Rod N.A Shift (in)	0.000
Total Eccentricity (in)	0.000

**Anchor Rod Eccentricity Applied*



Connection Properties

Anchor Rod Data

(6) 1-1/4" ø bolts (A687 N; Fy=105 ksi, Fu=125 ksi)

l_{ar} (in): 3.25

Analysis Results

Anchor Rod Summary *(units of kips, kip-in)*

Pu_t = 48	ϕPn_t = 90.84	**Stress Rating**
Vu = 5	ϕVn = 57.52	**50.3%**
Mu = n/a	ϕMn = n/a	**Pass**

SST Unit Base Foundation

BU # :	842870
Site Name:	MILFORD, CT
App. Number:	568291 Rev. 0

TIA-222 Revision: H

Top & Bot. Pad Rein. Different?:	☐
Tower Centroid Offset?:	☑
Block Foundation?:	☐
Rectangular Pad?:	☐

Superstructure Analysis Reactions		
Global Moment, **M**:	4272	ft-kips
Global Axial, **P**:	58	kips
Global Shear, **V**:	50	kips
Leg Compression, P_{comp}:	328	kips
Leg Comp. Shear, V_{u_comp}:	33	kips
Leg Uplift, P_{uplift}:	288	kips
Leg Uplift. Shear, V_{u_uplift}:	20	kips
Tower Height, **H**:	150	ft
Base Face Width, **BW**:	16	ft
BP Dist. Above Fdn, bp_{dist}:	4.5	in

Pier Properties		
Pier Shape:	Circular	
Pier Diameter, **dpier**:	4.5	ft
Ext. Above Grade, **E**:	0.50	ft
Pier Rebar Size, **Sc**:	8	
Pier Rebar Quantity, **mc**:	16	
Pier Tie/Spiral Size, **St**:	4	
Pier Tie/Spiral Quantity, **mt**:	7	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier}:	3	in

Pad Properties		
Depth, **D**:	6.50	ft
Pad Width, W_1:	29.50	ft
Pad Thickness, **T**:	3.75	ft
Pad Rebar Size (Bottom dir. 2), Sp_2:	9	
Pad Rebar Quantity (Bottom dir. 2), mp_2:	58	
Pad Clear Cover, cc_{pad}:	3	in

Material Properties		
Rebar Grade, **Fy**:	60	ksi
Concrete Compressive Strength, **F'c**:	3	ksi
Dry Concrete Density, δc:	150	pcf

Soil Properties		
Total Soil Unit Weight, γ:	125	pcf
Ultimate Gross Bearing, Qult:	12.000	ksf
Cohesion, **Cu**:	0.000	ksf
Friction Angle, φ:	34	degrees
SPT Blow Count, N_{blows}:		
Base Friction, μ:	0.6	
Neglected Depth, **N**:	3.5	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, **gw**:	7	ft

<-- Toggle between Gross and Net

Foundation Analysis Checks	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	488.50	50.00	**9.7%**	**Pass**
Bearing Pressure (ksf)	9.00	1.95	**20.6%**	**Pass**
*Overturning (kip*ft)*	10543.91	4789.55	**45.4%**	**Pass**
*Pier Flexure (Comp.) (kip*ft)*	1686.96	107.25	**6.1%**	**Pass**
*Pier Flexure (Tension) (kip*ft)*	810.60	65.00	**7.6%**	**Pass**
Pier Compression (kip)	7592.08	337.30	**4.2%**	**Pass**
*Pad Flexure (kip*ft)*	10017.30	496.04	**4.7%**	**Pass**
Pad Shear - 1-way (kips)	1172.32	82.34	**6.7%**	**Pass**
Pad Shear - Comp 2-way (ksi)	0.164	0.029	**16.6%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	9194.09	64.35	**0.7%**	**Pass**
Pad Shear - Tension 2-way (ksi)	0.164	0.026	**15.2%**	**Pass**
*Flexural 2-way (Tension) (kip*ft)*	9194.09	39.00	**0.4%**	**Pass**

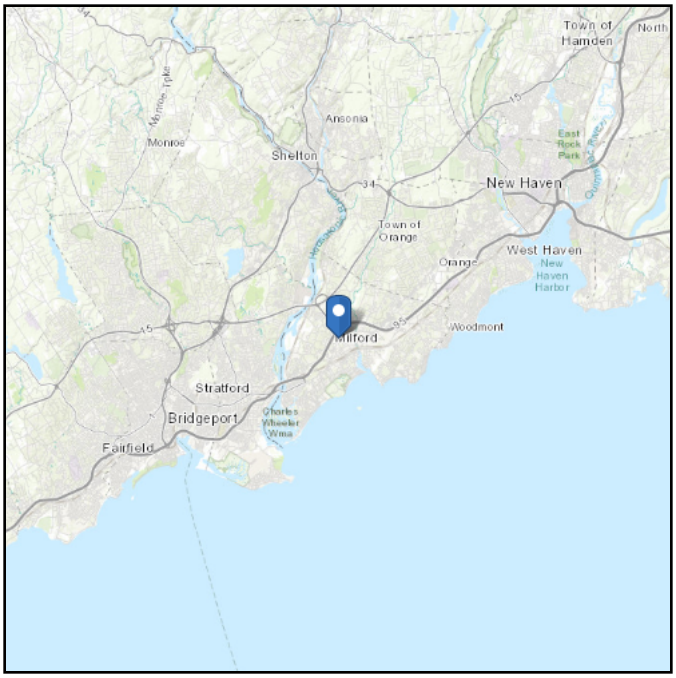
**Rating per TIA-222-H Section 15.5*

Soil Rating*:	**45.4%**
Structural Rating*:	**16.6%**

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard:	ASCE/SEI 7-10	**Elevation:**	68.18 ft (NAVD 88)
Risk Category:	II	**Latitude:**	41.228525
Soil Class:	D - Stiff Soil	**Longitude:**	-73.070131



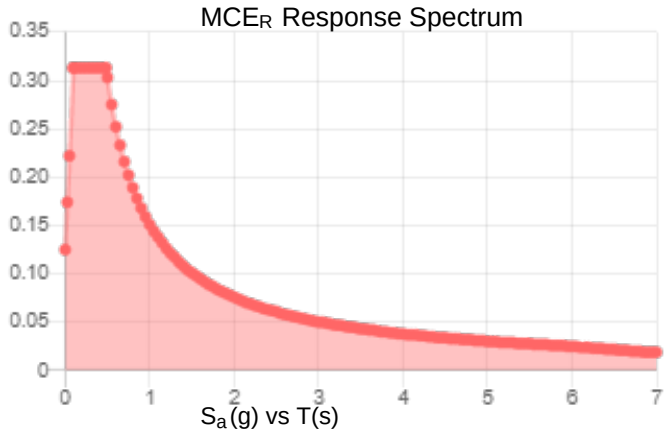
Seismic

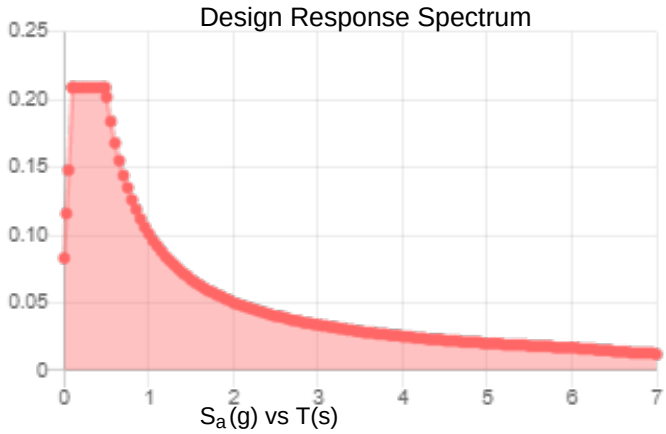
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.195	S_{DS} :	0.209
S_1 :	0.063	S_{D1} :	0.101
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.104
S_{MS} :	0.313	PGA_M :	0.166
S_{M1} :	0.151	F_{PGA} :	1.592
		I_e :	1

Seismic Design Category B





Data Accessed: Fri May 07 2021

Date Source: USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness:	0.75 in.
Concurrent Temperature:	15 F
Gust Speed:	50 mph
Data Source:	Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8
Date Accessed:	Fri May 07 2021

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Exhibit E

Mount Analysis

Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
856.797.0412
peter.albano@colliersengineering.com

New/Replacement Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10078045
Maser Consulting Connecticut Project #: 21777587A

June 30, 2021

Site Information	*Site ID:*	*469110-VZW / MILFORD CENTER CT*
	Site Name:	*MILFORD CENTER CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*434 BOSTON POST RD.* *Milford, Connecticut 06460* *New Haven County*
	Latitude:	*41.228528°*
	Longitude:	*-73.070139°*
Structure Information	*Tower Type:*	*150-Ft Self Support*
	Mount Type:	*12.50-Ft Sector Frame*

FUZE ID # 16231893

Analysis Results

Sector Frame: **36.6% Pass**

Digitally signed by Taqi Khawaja
Date: 2021.07.02 17:29:40-04'00'

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

Report Prepared By: Lauren Luzier

Executive Summary:

The objective of this report is to determine the capacity of the proposed antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. The proposed mount was assumed to be installed properly to the existing tower per the manufacturer's instructions. Maser Consulting cannot verify that the proposed mount will fit properly and is not liable for any fit-up issues during installation.

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS Site ID: 324371, dated April 8, 2021*
Mount Mapping Report	*Structural Components, Site Name: Milford Center CT, dated March 31, 2021*
Failing Mount Analysis Report	*Maser Consulting Connecticut Project #: 21777587A, dated June 11, 2021*
Mount Specification	*SitePro1 P/N VFA12-HD*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	120 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.998
Seismic Parameters:	S_S:	0.202
	S_1:	0.053
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
90.0	90.0	6	JMA Wireless	MX06FRO660-03	Added
		3	Samsung	MT6407-77A	
		1	Raycap	RVZDC-6627-PF-48	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		6	Amphenol Antel	LPA-80063/4CF	Retained

Any proposed antennas not currently installed should be mounted such that the centerline of the antennas does not exceed 6 inches vertically from the center of the antenna mount(s).

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

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

Standard Conditions:

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

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

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

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

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

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

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

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	31.4 %	Pass
Standoff Plate	36.6 %	Pass
Standoff Horizontal	24.4 %	Pass
Standoff Diagonal	8.5 %	Pass
Antenna Pipe	14.0 %	Pass
Standoff Vertical	4.4 %	Pass
Tieback	5.1 %	Pass
Mount Connection	16.0 %	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**36.6%**

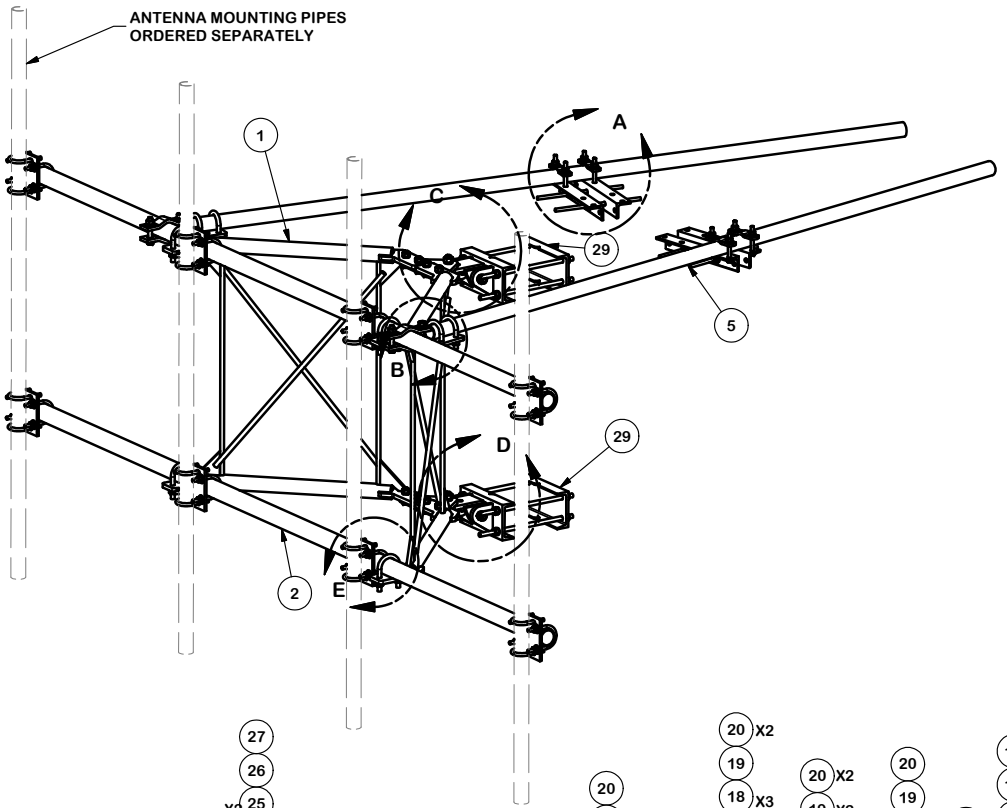
Recommendation:

The proposed antenna mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

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

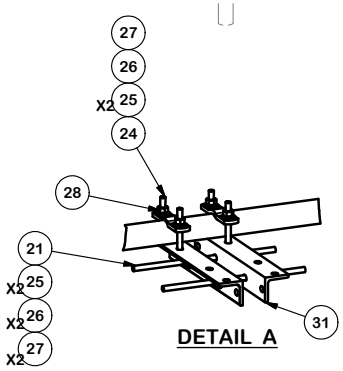
Attachments:

1. Mount Specifications
2. Analysis Calculations
3. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
4. Antenna Placement Diagrams
5. TIA Adoption and Wind Speed Usage Letter

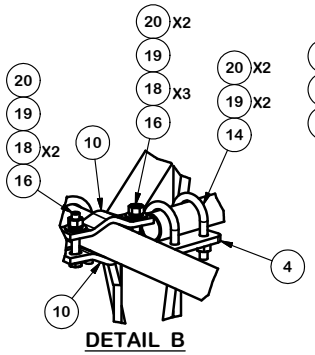


PARTS LIST

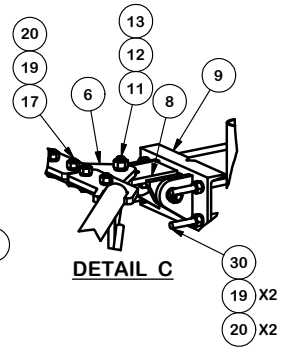
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	2	X-VFAW	SUPPORT ARM		66.80	133.59
2	2	P30150	2-7/8" X 150" (2-1/2" SCH. 40) GALVANIZED PIPE	150 in	76.94	153.87
3	8	SCX2	CROSSOVER PLATE	7 in	4.80	38.37
4	2	X-SPTB	SLIDING PIPE TIE BACK PLATE	5 1/2 in	5.87	11.74
5	2	P2126	2-3/8" OD X 126" SCH 40 GALVANIZED PIPE	126 in	40.75	81.50
6	2	X-VFAPL3	VFA-HD PIVOT PLATE	24 in	9.69	19.38
7	1	X-LPB	LOWER PIVOT BRACKET		8.84	8.84
8	1	X-UPB	UPPER PIVOT BRACKET		8.84	8.84
9	2	X-HDPMW	HEAVY DUTY PIPE MOUNT WELDMENT		18.61	37.21
10	4	DCP	1/2" THICK, 5-3/4" CNTER TO CENTER CLAMP HALF	8 1/8 in	2.42	9.68
11	6	A34212	3/4" x 2-1/2" UNC HEX BOLT (A325)	2 1/2 in	0.48	2.87
12	6	G34LW	3/4" HDG LOCKWASHER		0.04	0.26
13	6	G34NUT	3/4" HDG HEAVY 2H HEX NUT		0.21	1.27
14	4	X-UB5258	5/8" X 2-5/8" X 4-1/2" X 2" U-BOLT (HDG.)		1.00	4.00
15	4	X-UB5300	5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT (HDG.)		1.15	4.60
16	4	G5804	5/8" x 4" HDG HEX BOLT GR5		0.44	1.78
17	8	A582114	5/8" x 2-1/4" HDG A325 HEX BOLT	2 1/4 in	0.31	2.50
18	10	G58FW	5/8" HDG USS FLATWASHER	1/8 in	0.07	0.70
19	44	G58LW	5/8" HDG LOCKWASHER		0.03	1.15
20	46	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	5.98
21	4	G12R-15	1/2" x 15" THREADED ROD (HDG.)		0.40	1.60
22	16	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.26	4.11
23	32	X-UB1300	1/2" X 3" X 5" X 2" GALV U-BOLT		0.74	23.64
24	8	G12045	1/2" x 4.5" HDG HEX BOLT GR5 FULL THREAD	4 1/2 in	0.30	2.38
25	88	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	3.00
26	80	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	1.11
27	80	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	5.73
28	4	X-100064	CLAMP (4" V-CLAMP) GALVANIZED		0.91	3.65
29	2	X-HDPMBP	HEAVY DUTY PIPE MOUNT BACKING PLATE	12 in	13.44	26.89
30	8	G58R-18	5/8" x 18" THREADED ROD (HDG.)	18 in	0.40	3.19
31	4	X-LLTB	ANGLE BRACKET FOR LLTB	16 1/2 in	7.06	28.25
					TOTAL WT. #	648.71



DETAIL A



DETAIL B



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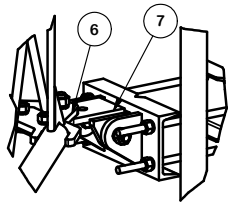

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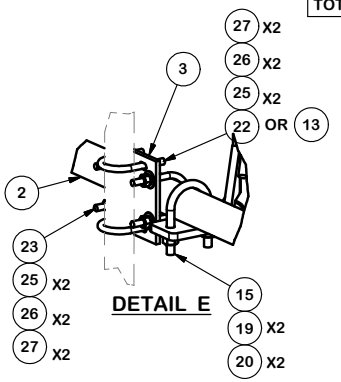


DETAIL E

TOLERANCE NOTES

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

DESCRIPTION
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO STIFF ARMS

SITE PRO 1 — A valmont COMPANY

Engineering Support Team: 1-888-753-7446

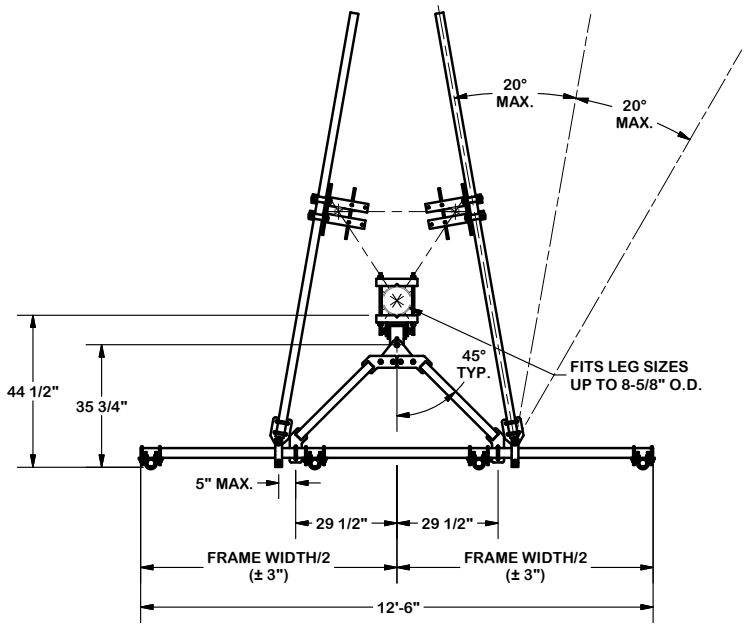
Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX

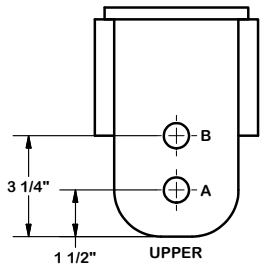
CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
	CEK 6/1/2015		VFA12-HD

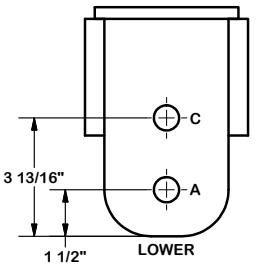
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	CUSTOMER	BMC 2/2/2017	VFA12-HD

REVISION HISTORY

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	CHANGED TIE-BACK FRONT CONNECTION		CEK	2/2/2017

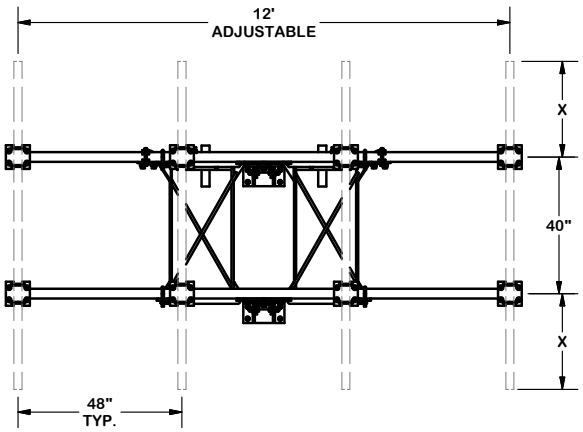




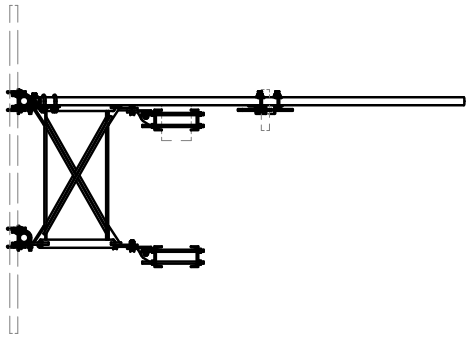


NOTES:

1. USE HOLE "A' IN UPPER AND LOWER BRACKETS FOR STRAIGHT LEGS.
2. USE HOLE "A" IN UPPER BRACKET AND HOLE "C" IN LOWER BRACKET FOR 2" IN 20' TAPER LEGS (3.309°)
3. USE HOLE "B" IN UPPER BRACKET AND HOLE "C" IN LOWER BRACKET FOR 6" IN 20' TAPER LEGS. (0.827°)



CENTER ANTENNA PIPE VERTICALLY ON V-FRAME FACE.



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BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

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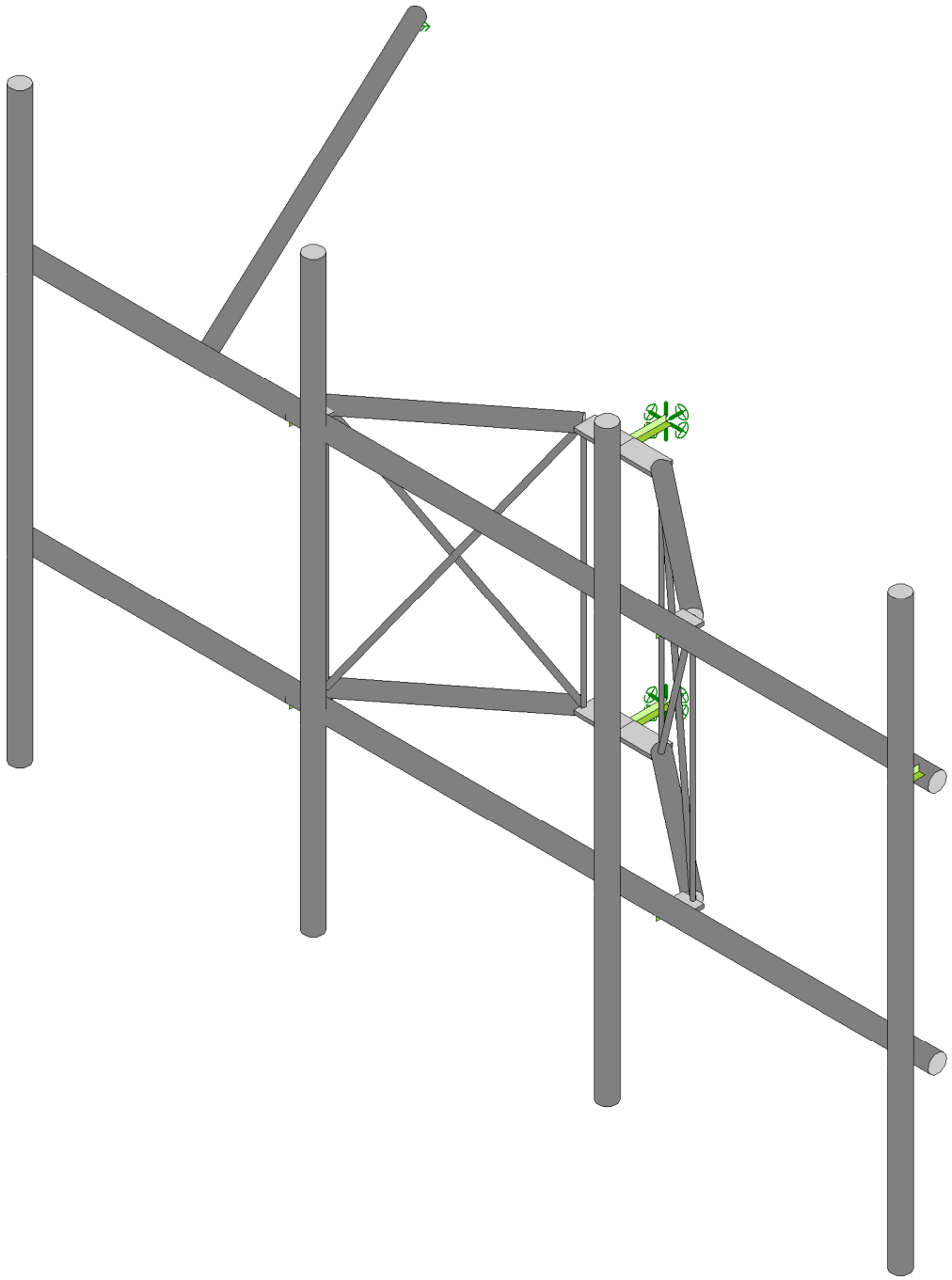
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	CUSTOMER	BMC 2/2/2017	VFA12-HD



Envelope Only Solution

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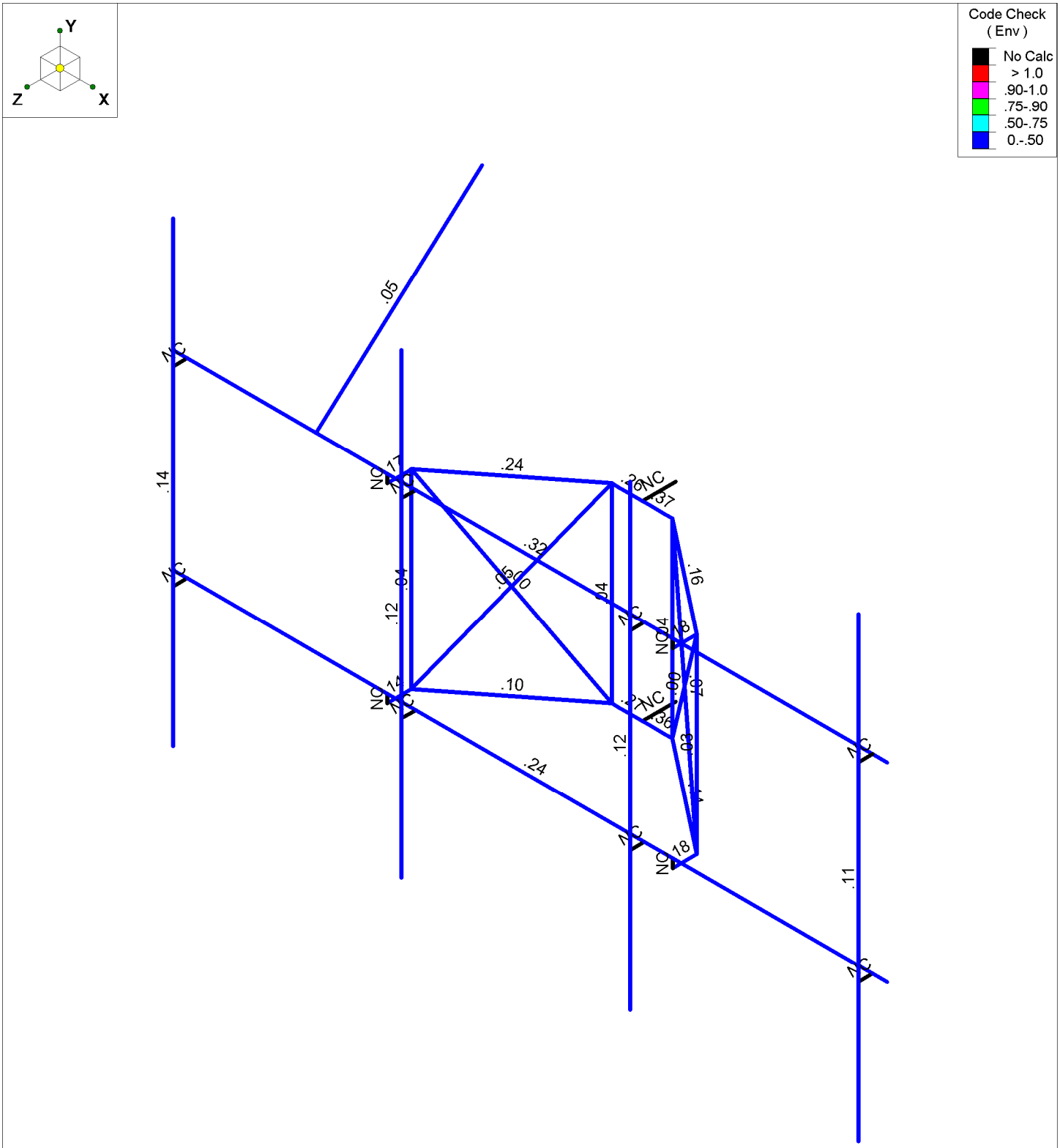

Member Code Checks Displayed (Enveloped)
Envelope Only Solution

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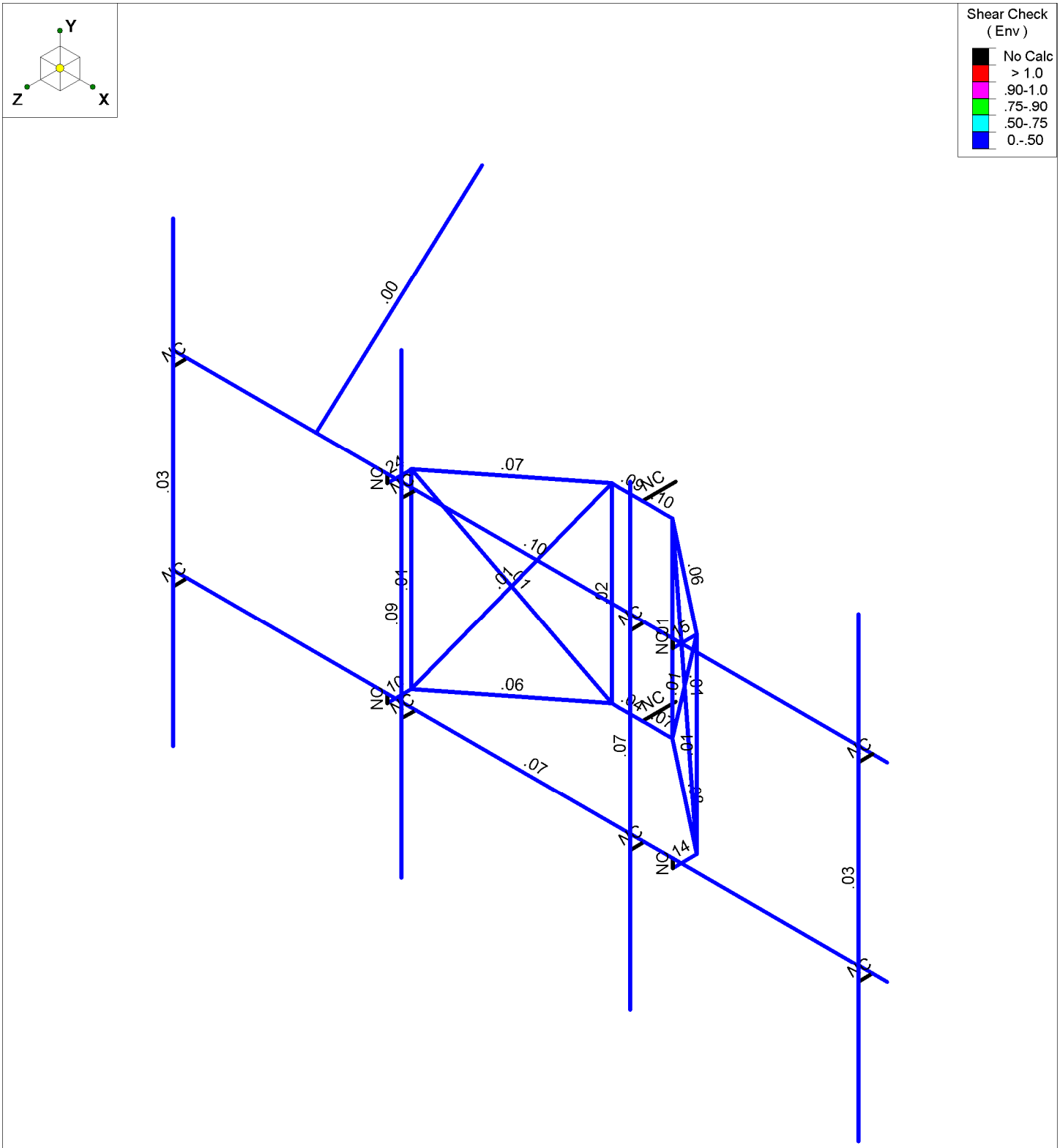

Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

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Basic Load Cases

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

Basic Load Cases (Continued)

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

Load Combinations

	Description	S...	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1																
2	1.2D+1.0Wo (30 Deg)	Yes	Y		1	1.2	39	1.2	4	1	42	1																
3	1.2D+1.0Wo (60 Deg)	Yes	Y		1	1.2	39	1.2	5	1	43	1																
4	1.2D+1.0Wo (90 Deg)	Yes	Y		1	1.2	39	1.2	6	1	44	1																
5	1.2D+1.0Wo (120 Deg)	Yes	Y		1	1.2	39	1.2	7	1	45	1																
6	1.2D+1.0Wo (150 Deg)	Yes	Y		1	1.2	39	1.2	8	1	46	1																
7	1.2D+1.0Wo (180 Deg)	Yes	Y		1	1.2	39	1.2	9	1	47	1																
8	1.2D+1.0Wo (210 Deg)	Yes	Y		1	1.2	39	1.2	10	1	48	1																
9	1.2D+1.0Wo (240 Deg)	Yes	Y		1	1.2	39	1.2	11	1	49	1																
10	1.2D+1.0Wo (270 Deg)	Yes	Y		1	1.2	39	1.2	12	1	50	1																
11	1.2D+1.0Wo (300 Deg)	Yes	Y		1	1.2	39	1.2	13	1	51	1																
12	1.2D+1.0Wo (330 Deg)	Yes	Y		1	1.2	39	1.2	14	1	52	1																
13	1.2D + 1.0Di + 1.0Wi (0 ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1												
14	1.2D + 1.0Di + 1.0Wi (30...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1												
15	1.2D + 1.0Di + 1.0Wi (60...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1												
16	1.2D + 1.0Di + 1.0Wi (90...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1												
17	1.2D + 1.0Di + 1.0Wi (12...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1												
18	1.2D + 1.0Di + 1.0Wi (15...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1												
19	1.2D + 1.0Di + 1.0Wi (18...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1												
20	1.2D + 1.0Di + 1.0Wi (21...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1												
21	1.2D + 1.0Di + 1.0Wi (24...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1												
22	1.2D + 1.0Di + 1.0Wi (27...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1												
23	1.2D + 1.0Di + 1.0Wi (30...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1												
24	1.2D + 1.0Di + 1.0Wi (33...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1												
25	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1														

Load Combinations (Continued)

	Description	S...	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
26	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + 1.0Wm...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																
52	Seismic Mass		Y		1	1	39	1																
53	1.2D + 1.0Ev + 1.0Eh (0 ...		Y		1	1.2	39	1.2	SX		SY	1	SZ	-1										
54	1.2D + 1.0Ev + 1.0Eh (3...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	-.8...										
55	1.2D + 1.0Ev + 1.0Eh (6...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	-.5										
56	1.2D + 1.0Ev + 1.0Eh (9...		Y		1	1.2	39	1.2	SX	1	SY	1	SZ											
57	1.2D + 1.0Ev + 1.0Eh (1...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	.5										
58	1.2D + 1.0Ev + 1.0Eh (1...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	.866										
59	1.2D + 1.0Ev + 1.0Eh (1...		Y		1	1.2	39	1.2	SX		SY	1	SZ	1										
60	1.2D + 1.0Ev + 1.0Eh (2...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	.866										
61	1.2D + 1.0Ev + 1.0Eh (2...		Y		1	1.2	39	1.2	SX	-.8...	SY	1	SZ	.5										
62	1.2D + 1.0Ev + 1.0Eh (2...		Y		1	1.2	39	1.2	SX	-1	SY	1	SZ											
63	1.2D + 1.0Ev + 1.0Eh (3...		Y		1	1.2	39	1.2	SX	-.8...	SY	1	SZ	-.5										
64	1.2D + 1.0Ev + 1.0Eh (3...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	-.8...										

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	3.416667	0.645833	8.083333	0	
2	N2	-9.083333	0.645833	8.083333	0	
3	N3	3.416667	3.979167	8.083333	0	
4	N4	-9.083333	3.979167	8.083333	0	
5	N5	-4.833333	0.645833	8.083333	0	
6	N6	-4.833333	3.979167	8.083333	0	
7	N9	-0.833333	0.645833	8.083333	0	
8	N10	-0.833333	3.979167	8.083333	0	
9	N11	3.166667	0.645833	8.083333	0	
10	N12	3.166667	3.979167	8.083333	0	
11	N13	-4.833333	0.645833	8.333333	0	
12	N14	-4.833333	3.979167	8.333333	0	
13	N17	-0.833333	0.645833	8.333333	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
14	N18	-0.833333	3.979167	8.333333	0	
15	N19	3.166667	0.645833	8.333333	0	
16	N20	3.166667	3.979167	8.333333	0	
17	N21	-5.333333	.5	8.083333	0	
18	N22	-5.333333	3.833333	8.083333	0	
19	N23	-0.333333	.5	8.083333	0	
20	N24	-0.333333	3.833333	8.083333	0	
21	N25	-5.333333	.5	7.661458	0	
22	N26	-5.333333	3.833333	7.661458	0	
23	N27	-0.333333	.5	7.661458	0	
24	N28	-0.333333	3.833333	7.661458	0	
25	N29	-2.833333	.5	6.119792	0	
26	N30	-2.833333	3.833333	6.119792	0	
27	N31	-3.364583	.5	6.119792	0	
28	N32	-3.364583	3.833333	6.119792	0	
29	N33	-2.302083	.5	6.119792	0	
30	N34	-2.302083	3.833333	6.119792	0	
31	N35	-2.833333	.5	5.536125	0	
32	N36	-2.833333	3.833333	5.536125	0	
33	N39	-4.833333	6.2285	8.333333	0	
34	N41	-0.833333	6.2285	8.333333	0	
35	N42	3.166667	6.2285	8.333333	0	
36	N43	-4.833333	-1.7715	8.333333	0	
37	N45	-0.833333	-1.7715	8.333333	0	
38	N46	3.166667	-1.7715	8.333333	0	
39	N58	-5.333333	3.833333	7.708333	0	
40	N76	-2.927083	.5	6.119792	0	
41	N77	-3.229167	.5	6.119792	0	
42	N78	-2.739583	.5	6.119792	0	
43	N79	-2.4375	.5	6.119792	0	
44	N80	-2.927083	3.833333	6.119792	0	
45	N81	-3.229167	3.833333	6.119792	0	
46	N82	-2.739583	3.833333	6.119792	0	
47	N83	-2.4375	3.833333	6.119792	0	
48	N59	-5.333333	0.645833	8.083333	0	
49	N60	-5.333333	3.979167	8.083333	0	
50	N61	-0.333333	0.645833	8.083333	0	
51	N62	-0.333333	3.979167	8.083333	0	
52	N61A	-9.177488	3.979167	2.577797	0	
53	N61B	-8.833333	0.645833	8.083333	0	
54	N62A	-8.833333	3.979167	8.083333	0	
55	N63	-8.833333	0.645833	8.333333	0	
56	N64	-8.833333	3.979167	8.333333	0	
57	N65	-8.833333	6.2285	8.333333	0	
58	N66	-8.833333	-1.7715	8.333333	0	
59	N65A	-6.583333	3.979167	8.083333	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Horizontal mount pipe	PIPE_2.5	Beam	Pipe	Q235	Typical	1.61	1.45	1.45	2.89
3	Standoff Horizontal	PIPE_2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
4	Standoff Diagonal	SR_0.75	Beam	BAR	Q235	Typical	.442	.016	.016	.031
5	Tieback	PIPE_2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
6	Standoff Vertical	SR_0.625	Beam	BAR	Q235	Typical	.307	.007	.007	.015

Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
7	Standoff Plate	PL5/8X3.5	Beam	BAR	Q235	Typical	2.188	.071	2.233	.253
8	Antenna Pipe (P2.5)	PIPE_2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N1			Horizontal mou...	Beam	Pipe	Q235	Typical
2	M2	N4	N3			Horizontal mou...	Beam	Pipe	Q235	Typical
3	M3	N5	N13			RIGID	None	None	RIGID	Typical
4	M4	N6	N14			RIGID	None	None	RIGID	Typical
5	M9	N10	N18			RIGID	None	None	RIGID	Typical
6	M10	N9	N17			RIGID	None	None	RIGID	Typical
7	M11	N12	N20			RIGID	None	None	RIGID	Typical
8	M12	N11	N19			RIGID	None	None	RIGID	Typical
9	M13	N22	N26		90	Standoff Plate	Beam	BAR	Q235	Typical
10	M14	N21	N25		90	Standoff Plate	Beam	BAR	Q235	Typical
11	M15	N23	N27		90	Standoff Plate	Beam	BAR	Q235	Typical
12	M16	N24	N28		90	Standoff Plate	Beam	BAR	Q235	Typical
13	OVP	N26	N32			Standoff Horiz...	Beam	Pipe	Q235	Typical
14	M18	N25	N31			Standoff Horiz...	Beam	Pipe	Q235	Typical
15	M19	N27	N33			Standoff Horiz...	Beam	Pipe	Q235	Typical
16	M20	N28	N34			Standoff Horiz...	Beam	Pipe	Q235	Typical
17	M21	N32	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
18	M22	N34	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
19	M23	N31	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
20	M24	N33	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
21	M25	N31	N26			Standoff Diago...	Beam	BAR	Q235	Typical
22	M26	N32	N25			Standoff Diago...	Beam	BAR	Q235	Typical
23	M27	N33	N28			Standoff Diago...	Beam	BAR	Q235	Typical
24	M28	N27	N34			Standoff Diago...	Beam	BAR	Q235	Typical
25	M29	N29	N35			RIGID	None	None	RIGID	Typical
26	M30	N30	N36			RIGID	None	None	RIGID	Typical
27	MP3A	N39	N43			Antenna Pipe (...	Column	Pipe	A53 Gr. B	Typical
28	MP2A	N41	N45			Antenna Pipe (...	Column	Pipe	A53 Gr. B	Typical
29	MP1A	N42	N46			Antenna Pipe (...	Column	Pipe	A53 Gr. B	Typical
30	M44	N25	N26			Standoff Vertical	Beam	BAR	Q235	Typical
31	M45	N31	N32			Standoff Vertical	Beam	BAR	Q235	Typical
32	M46	N33	N34			Standoff Vertical	Beam	BAR	Q235	Typical
33	M47	N27	N28			Standoff Vertical	Beam	BAR	Q235	Typical
34	M47B	N22	N60			RIGID	None	None	RIGID	Typical
35	M48A	N21	N59			RIGID	None	None	RIGID	Typical
36	M49A	N24	N62			RIGID	None	None	RIGID	Typical
37	M50A	N23	N61			RIGID	None	None	RIGID	Typical
38	M51A	N30	N36			RIGID	None	None	RIGID	Typical
39	M52A	N29	N35			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
40	M43	N65A	N61A			Tieback	Beam	Pipe	Q235	Typical
41	M44A	N61B	N63			RIGID	None	None	RIGID	Typical
42	M45A	N62A	N64			RIGID	None	None	RIGID	Typical
43	MP4A	N65	N66			Antenna Pipe (...	Column	Pipe	A53 Gr. B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes				None
3	M3						Yes	** NA **			None
4	M4						Yes	** NA **			None
5	M9						Yes	** NA **			None
6	M10						Yes	** NA **			None
7	M11						Yes	** NA **			None
8	M12						Yes	** NA **			None
9	M13						Yes	Default			None
10	M14						Yes	Default			None
11	M15						Yes				None
12	M16						Yes				None
13	OVP						Yes	Default			None
14	M18						Yes				None
15	M19						Yes				None
16	M20						Yes	Default			None
17	M21						Yes	Default			None
18	M22						Yes				None
19	M23						Yes				None
20	M24						Yes				None
21	M25	BenPIN	BenPIN			Euler Buc...	Yes	Default			None
22	M26	BenPIN	BenPIN			Euler Buc...	Yes	Default			None
23	M27	BenPIN	BenPIN			Euler Buc...	Yes				None
24	M28	BenPIN	BenPIN			Euler Buc...	Yes				None
25	M29						Yes	** NA **		Inactive	None
26	M30						Yes	** NA **		Inactive	None
27	MP3A						Yes	** NA **			None
28	MP2A						Yes	** NA **			None
29	MP1A						Yes	** NA **			None
30	M44	BenPIN	BenPIN				Yes				None
31	M45	BenPIN	BenPIN				Yes				None
32	M46	BenPIN	BenPIN				Yes				None
33	M47	BenPIN	BenPIN				Yes	Default			None
34	M47B		OOOXOO				Yes	** NA **			None
35	M48A		OOOXOO				Yes	** NA **			None
36	M49A		OOOXOO				Yes	** NA **			None
37	M50A		OOOXOO				Yes	** NA **			None
38	M51A						Yes	** NA **			None
39	M52A						Yes	** NA **			None
40	M43	BenPIN					Yes	Default			None
41	M44A						Yes	** NA **			None
42	M45A						Yes	** NA **			None
43	MP4A						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-23	2
2	MP2A	My	-.017	2
3	MP2A	Mz	.015	2
4	MP2A	Y	-23	6
5	MP2A	My	-.017	6
6	MP2A	Mz	.015	6
7	MP2A	Y	-23	2
8	MP2A	My	-.017	2
9	MP2A	Mz	-.015	2
10	MP2A	Y	-23	6
11	MP2A	My	-.017	6
12	MP2A	Mz	-.015	6
13	MP3A	Y	-43.55	3
14	MP3A	My	-.033	3
15	MP3A	Mz	0	3
16	MP3A	Y	-43.55	5
17	MP3A	My	-.033	5
18	MP3A	Mz	0	5
19	OVP	Y	-32	1.5
20	OVP	My	0	1.5
21	OVP	Mz	0	1.5
22	MP2A	Y	-84.4	4.5
23	MP2A	My	.042	4.5
24	MP2A	Mz	0	4.5
25	MP1A	Y	-70.3	4.5
26	MP1A	My	.035	4.5
27	MP1A	Mz	0	4.5
28	MP1A	Y	-10	2
29	MP1A	My	-.007	2
30	MP1A	Mz	0	2
31	MP1A	Y	-10	6
32	MP1A	My	-.007	6
33	MP1A	Mz	0	6
34	MP4A	Y	-10	2
35	MP4A	My	-.007	2
36	MP4A	Mz	0	2
37	MP4A	Y	-10	6
38	MP4A	My	-.007	6
39	MP4A	Mz	0	6

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-78.728	2
2	MP2A	My	-.059	2
3	MP2A	Mz	.052	2
4	MP2A	Y	-78.728	6
5	MP2A	My	-.059	6
6	MP2A	Mz	.052	6
7	MP2A	Y	-78.728	2
8	MP2A	My	-.059	2
9	MP2A	Mz	-.052	2
10	MP2A	Y	-78.728	6
11	MP2A	My	-.059	6
12	MP2A	Mz	-.052	6
13	MP3A	Y	-33.955	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
14	MP3A	My	-.025	3
15	MP3A	Mz	0	3
16	MP3A	Y	-33.955	5
17	MP3A	My	-.025	5
18	MP3A	Mz	0	5
19	OVP	Y	-72.444	1.5
20	OVP	My	0	1.5
21	OVP	Mz	0	1.5
22	MP2A	Y	-42.78	4.5
23	MP2A	My	.021	4.5
24	MP2A	Mz	0	4.5
25	MP1A	Y	-38.459	4.5
26	MP1A	My	.019	4.5
27	MP1A	Mz	0	4.5
28	MP1A	Y	-59.995	2
29	MP1A	My	-.045	2
30	MP1A	Mz	0	2
31	MP1A	Y	-59.995	6
32	MP1A	My	-.045	6
33	MP1A	Mz	0	6
34	MP4A	Y	-59.995	2
35	MP4A	My	-.045	2
36	MP4A	Mz	0	2
37	MP4A	Y	-59.995	6
38	MP4A	My	-.045	6
39	MP4A	Mz	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	-148.788	2
3	MP2A	Mx	-.099	2
4	MP2A	X	0	6
5	MP2A	Z	-148.788	6
6	MP2A	Mx	-.099	6
7	MP2A	X	0	2
8	MP2A	Z	-148.788	2
9	MP2A	Mx	.099	2
10	MP2A	X	0	6
11	MP2A	Z	-148.788	6
12	MP2A	Mx	.099	6
13	MP3A	X	0	3
14	MP3A	Z	-70.852	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	-70.852	5
18	MP3A	Mx	0	5
19	OVP	X	0	1.5
20	OVP	Z	-114.267	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	0	4.5
23	MP2A	Z	-56.38	4.5
24	MP2A	Mx	0	4.5
25	MP1A	X	0	4.5
26	MP1A	Z	-56.38	4.5
27	MP1A	Mx	0	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1A	X	0	2
29	MP1A	Z	-92.71	2
30	MP1A	Mx	0	2
31	MP1A	X	0	6
32	MP1A	Z	-92.71	6
33	MP1A	Mx	0	6
34	MP4A	X	0	2
35	MP4A	Z	-92.71	2
36	MP4A	Mx	0	2
37	MP4A	X	0	6
38	MP4A	Z	-92.71	6
39	MP4A	Mx	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	69.623	2
2	MP2A	Z	-120.59	2
3	MP2A	Mx	-.133	2
4	MP2A	X	69.623	6
5	MP2A	Z	-120.59	6
6	MP2A	Mx	-.133	6
7	MP2A	X	69.623	2
8	MP2A	Z	-120.59	2
9	MP2A	Mx	.028	2
10	MP2A	X	69.623	6
11	MP2A	Z	-120.59	6
12	MP2A	Mx	.028	6
13	MP3A	X	30.037	3
14	MP3A	Z	-52.025	3
15	MP3A	Mx	-.023	3
16	MP3A	X	30.037	5
17	MP3A	Z	-52.025	5
18	MP3A	Mx	-.023	5
19	OVP	X	52.305	1.5
20	OVP	Z	-90.594	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	25.853	4.5
23	MP2A	Z	-44.779	4.5
24	MP2A	Mx	.013	4.5
25	MP1A	X	24.958	4.5
26	MP1A	Z	-43.229	4.5
27	MP1A	Mx	.012	4.5
28	MP1A	X	44.921	2
29	MP1A	Z	-77.805	2
30	MP1A	Mx	-.034	2
31	MP1A	X	44.921	6
32	MP1A	Z	-77.805	6
33	MP1A	Mx	-.034	6
34	MP4A	X	44.921	2
35	MP4A	Z	-77.805	2
36	MP4A	Mx	-.034	2
37	MP4A	X	44.921	6
38	MP4A	Z	-77.805	6
39	MP4A	Mx	-.034	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	104.062	2
2	MP2A	Z	-60.08	2
3	MP2A	Mx	-.118	2
4	MP2A	X	104.062	6
5	MP2A	Z	-60.08	6
6	MP2A	Mx	-.118	6
7	MP2A	X	104.062	2
8	MP2A	Z	-60.08	2
9	MP2A	Mx	-.038	2
10	MP2A	X	104.062	6
11	MP2A	Z	-60.08	6
12	MP2A	Mx	-.038	6
13	MP3A	X	33.356	3
14	MP3A	Z	-19.258	3
15	MP3A	Mx	-.025	3
16	MP3A	X	33.356	5
17	MP3A	Z	-19.258	5
18	MP3A	Mx	-.025	5
19	OVP	X	73.866	1.5
20	OVP	Z	-42.647	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	36.685	4.5
23	MP2A	Z	-21.18	4.5
24	MP2A	Mx	.018	4.5
25	MP1A	X	32.034	4.5
26	MP1A	Z	-18.495	4.5
27	MP1A	Mx	.016	4.5
28	MP1A	X	72.836	2
29	MP1A	Z	-42.052	2
30	MP1A	Mx	-.055	2
31	MP1A	X	72.836	6
32	MP1A	Z	-42.052	6
33	MP1A	Mx	-.055	6
34	MP4A	X	72.836	2
35	MP4A	Z	-42.052	2
36	MP4A	Mx	-.055	2
37	MP4A	X	72.836	6
38	MP4A	Z	-42.052	6
39	MP4A	Mx	-.055	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	110.618	2
2	MP2A	Z	0	2
3	MP2A	Mx	-.083	2
4	MP2A	X	110.618	6
5	MP2A	Z	0	6
6	MP2A	Mx	-.083	6
7	MP2A	X	110.618	2
8	MP2A	Z	0	2
9	MP2A	Mx	-.083	2
10	MP2A	X	110.618	6
11	MP2A	Z	0	6
12	MP2A	Mx	-.083	6
13	MP3A	X	27.738	3
14	MP3A	Z	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	-.021	3
16	MP3A	X	27.738	5
17	MP3A	Z	0	5
18	MP3A	Mx	-.021	5
19	OVP	X	75.636	1.5
20	OVP	Z	0	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	37.687	4.5
23	MP2A	Z	0	4.5
24	MP2A	Mx	.019	4.5
25	MP1A	X	30.526	4.5
26	MP1A	Z	0	4.5
27	MP1A	Mx	.015	4.5
28	MP1A	X	81.235	2
29	MP1A	Z	0	2
30	MP1A	Mx	-.061	2
31	MP1A	X	81.235	6
32	MP1A	Z	0	6
33	MP1A	Mx	-.061	6
34	MP4A	X	81.235	2
35	MP4A	Z	0	2
36	MP4A	Mx	-.061	2
37	MP4A	X	81.235	6
38	MP4A	Z	0	6
39	MP4A	Mx	-.061	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	104.062	2
2	MP2A	Z	60.08	2
3	MP2A	Mx	-.038	2
4	MP2A	X	104.062	6
5	MP2A	Z	60.08	6
6	MP2A	Mx	-.038	6
7	MP2A	X	104.062	2
8	MP2A	Z	60.08	2
9	MP2A	Mx	-.118	2
10	MP2A	X	104.062	6
11	MP2A	Z	60.08	6
12	MP2A	Mx	-.118	6
13	MP3A	X	33.356	3
14	MP3A	Z	19.258	3
15	MP3A	Mx	-.025	3
16	MP3A	X	33.356	5
17	MP3A	Z	19.258	5
18	MP3A	Mx	-.025	5
19	OVP	X	73.866	1.5
20	OVP	Z	42.647	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	36.685	4.5
23	MP2A	Z	21.18	4.5
24	MP2A	Mx	.018	4.5
25	MP1A	X	32.034	4.5
26	MP1A	Z	18.495	4.5
27	MP1A	Mx	.016	4.5
28	MP1A	X	72.836	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP1A	Z	42.052	2
30	MP1A	Mx	-.055	2
31	MP1A	X	72.836	6
32	MP1A	Z	42.052	6
33	MP1A	Mx	-.055	6
34	MP4A	X	72.836	2
35	MP4A	Z	42.052	2
36	MP4A	Mx	-.055	2
37	MP4A	X	72.836	6
38	MP4A	Z	42.052	6
39	MP4A	Mx	-.055	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	69.623	2
2	MP2A	Z	120.59	2
3	MP2A	Mx	.028	2
4	MP2A	X	69.623	6
5	MP2A	Z	120.59	6
6	MP2A	Mx	.028	6
7	MP2A	X	69.623	2
8	MP2A	Z	120.59	2
9	MP2A	Mx	-.133	2
10	MP2A	X	69.623	6
11	MP2A	Z	120.59	6
12	MP2A	Mx	-.133	6
13	MP3A	X	30.037	3
14	MP3A	Z	52.025	3
15	MP3A	Mx	-.023	3
16	MP3A	X	30.037	5
17	MP3A	Z	52.025	5
18	MP3A	Mx	-.023	5
19	OVP	X	52.305	1.5
20	OVP	Z	90.594	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	25.853	4.5
23	MP2A	Z	44.779	4.5
24	MP2A	Mx	.013	4.5
25	MP1A	X	24.958	4.5
26	MP1A	Z	43.229	4.5
27	MP1A	Mx	.012	4.5
28	MP1A	X	44.921	2
29	MP1A	Z	77.805	2
30	MP1A	Mx	-.034	2
31	MP1A	X	44.921	6
32	MP1A	Z	77.805	6
33	MP1A	Mx	-.034	6
34	MP4A	X	44.921	2
35	MP4A	Z	77.805	2
36	MP4A	Mx	-.034	2
37	MP4A	X	44.921	6
38	MP4A	Z	77.805	6
39	MP4A	Mx	-.034	6

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	148.788	2
3	MP2A	Mx	.099	2
4	MP2A	X	0	6
5	MP2A	Z	148.788	6
6	MP2A	Mx	.099	6
7	MP2A	X	0	2
8	MP2A	Z	148.788	2
9	MP2A	Mx	-.099	2
10	MP2A	X	0	6
11	MP2A	Z	148.788	6
12	MP2A	Mx	-.099	6
13	MP3A	X	0	3
14	MP3A	Z	70.852	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	70.852	5
18	MP3A	Mx	0	5
19	OVP	X	0	1.5
20	OVP	Z	114.267	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	0	4.5
23	MP2A	Z	56.38	4.5
24	MP2A	Mx	0	4.5
25	MP1A	X	0	4.5
26	MP1A	Z	56.38	4.5
27	MP1A	Mx	0	4.5
28	MP1A	X	0	2
29	MP1A	Z	92.71	2
30	MP1A	Mx	0	2
31	MP1A	X	0	6
32	MP1A	Z	92.71	6
33	MP1A	Mx	0	6
34	MP4A	X	0	2
35	MP4A	Z	92.71	2
36	MP4A	Mx	0	2
37	MP4A	X	0	6
38	MP4A	Z	92.71	6
39	MP4A	Mx	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-69.623	2
2	MP2A	Z	120.59	2
3	MP2A	Mx	.133	2
4	MP2A	X	-69.623	6
5	MP2A	Z	120.59	6
6	MP2A	Mx	.133	6
7	MP2A	X	-69.623	2
8	MP2A	Z	120.59	2
9	MP2A	Mx	-.028	2
10	MP2A	X	-69.623	6
11	MP2A	Z	120.59	6
12	MP2A	Mx	-.028	6
13	MP3A	X	-30.037	3
14	MP3A	Z	52.025	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	.023	3
16	MP3A	X	-30.037	5
17	MP3A	Z	52.025	5
18	MP3A	Mx	.023	5
19	OVP	X	-52.305	1.5
20	OVP	Z	90.594	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-25.853	4.5
23	MP2A	Z	44.779	4.5
24	MP2A	Mx	-.013	4.5
25	MP1A	X	-24.958	4.5
26	MP1A	Z	43.229	4.5
27	MP1A	Mx	-.012	4.5
28	MP1A	X	-44.921	2
29	MP1A	Z	77.805	2
30	MP1A	Mx	.034	2
31	MP1A	X	-44.921	6
32	MP1A	Z	77.805	6
33	MP1A	Mx	.034	6
34	MP4A	X	-44.921	2
35	MP4A	Z	77.805	2
36	MP4A	Mx	.034	2
37	MP4A	X	-44.921	6
38	MP4A	Z	77.805	6
39	MP4A	Mx	.034	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-104.062	2
2	MP2A	Z	60.08	2
3	MP2A	Mx	.118	2
4	MP2A	X	-104.062	6
5	MP2A	Z	60.08	6
6	MP2A	Mx	.118	6
7	MP2A	X	-104.062	2
8	MP2A	Z	60.08	2
9	MP2A	Mx	.038	2
10	MP2A	X	-104.062	6
11	MP2A	Z	60.08	6
12	MP2A	Mx	.038	6
13	MP3A	X	-33.356	3
14	MP3A	Z	19.258	3
15	MP3A	Mx	.025	3
16	MP3A	X	-33.356	5
17	MP3A	Z	19.258	5
18	MP3A	Mx	.025	5
19	OVP	X	-73.866	1.5
20	OVP	Z	42.647	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-36.685	4.5
23	MP2A	Z	21.18	4.5
24	MP2A	Mx	-.018	4.5
25	MP1A	X	-32.034	4.5
26	MP1A	Z	18.495	4.5
27	MP1A	Mx	-.016	4.5
28	MP1A	X	-72.836	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP1A	Z	42.052	2
30	MP1A	Mx	.055	2
31	MP1A	X	-72.836	6
32	MP1A	Z	42.052	6
33	MP1A	Mx	.055	6
34	MP4A	X	-72.836	2
35	MP4A	Z	42.052	2
36	MP4A	Mx	.055	2
37	MP4A	X	-72.836	6
38	MP4A	Z	42.052	6
39	MP4A	Mx	.055	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-110.618	2
2	MP2A	Z	0	2
3	MP2A	Mx	.083	2
4	MP2A	X	-110.618	6
5	MP2A	Z	0	6
6	MP2A	Mx	.083	6
7	MP2A	X	-110.618	2
8	MP2A	Z	0	2
9	MP2A	Mx	.083	2
10	MP2A	X	-110.618	6
11	MP2A	Z	0	6
12	MP2A	Mx	.083	6
13	MP3A	X	-27.738	3
14	MP3A	Z	0	3
15	MP3A	Mx	.021	3
16	MP3A	X	-27.738	5
17	MP3A	Z	0	5
18	MP3A	Mx	.021	5
19	OVP	X	-75.636	1.5
20	OVP	Z	0	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-37.687	4.5
23	MP2A	Z	0	4.5
24	MP2A	Mx	-.019	4.5
25	MP1A	X	-30.526	4.5
26	MP1A	Z	0	4.5
27	MP1A	Mx	-.015	4.5
28	MP1A	X	-81.235	2
29	MP1A	Z	0	2
30	MP1A	Mx	.061	2
31	MP1A	X	-81.235	6
32	MP1A	Z	0	6
33	MP1A	Mx	.061	6
34	MP4A	X	-81.235	2
35	MP4A	Z	0	2
36	MP4A	Mx	.061	2
37	MP4A	X	-81.235	6
38	MP4A	Z	0	6
39	MP4A	Mx	.061	6

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-104.062	2
2	MP2A	Z	-60.08	2
3	MP2A	Mx	.038	2
4	MP2A	X	-104.062	6
5	MP2A	Z	-60.08	6
6	MP2A	Mx	.038	6
7	MP2A	X	-104.062	2
8	MP2A	Z	-60.08	2
9	MP2A	Mx	.118	2
10	MP2A	X	-104.062	6
11	MP2A	Z	-60.08	6
12	MP2A	Mx	.118	6
13	MP3A	X	-33.356	3
14	MP3A	Z	-19.258	3
15	MP3A	Mx	.025	3
16	MP3A	X	-33.356	5
17	MP3A	Z	-19.258	5
18	MP3A	Mx	.025	5
19	OVP	X	-73.866	1.5
20	OVP	Z	-42.647	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-36.685	4.5
23	MP2A	Z	-21.18	4.5
24	MP2A	Mx	-.018	4.5
25	MP1A	X	-32.034	4.5
26	MP1A	Z	-18.495	4.5
27	MP1A	Mx	-.016	4.5
28	MP1A	X	-72.836	2
29	MP1A	Z	-42.052	2
30	MP1A	Mx	.055	2
31	MP1A	X	-72.836	6
32	MP1A	Z	-42.052	6
33	MP1A	Mx	.055	6
34	MP4A	X	-72.836	2
35	MP4A	Z	-42.052	2
36	MP4A	Mx	.055	2
37	MP4A	X	-72.836	6
38	MP4A	Z	-42.052	6
39	MP4A	Mx	.055	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-69.623	2
2	MP2A	Z	-120.59	2
3	MP2A	Mx	-.028	2
4	MP2A	X	-69.623	6
5	MP2A	Z	-120.59	6
6	MP2A	Mx	-.028	6
7	MP2A	X	-69.623	2
8	MP2A	Z	-120.59	2
9	MP2A	Mx	.133	2
10	MP2A	X	-69.623	6
11	MP2A	Z	-120.59	6
12	MP2A	Mx	.133	6
13	MP3A	X	-30.037	3
14	MP3A	Z	-52.025	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	.023	3
16	MP3A	X	-30.037	5
17	MP3A	Z	-52.025	5
18	MP3A	Mx	.023	5
19	OVP	X	-52.305	1.5
20	OVP	Z	-90.594	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-25.853	4.5
23	MP2A	Z	-44.779	4.5
24	MP2A	Mx	-.013	4.5
25	MP1A	X	-24.958	4.5
26	MP1A	Z	-43.229	4.5
27	MP1A	Mx	-.012	4.5
28	MP1A	X	-44.921	2
29	MP1A	Z	-77.805	2
30	MP1A	Mx	.034	2
31	MP1A	X	-44.921	6
32	MP1A	Z	-77.805	6
33	MP1A	Mx	.034	6
34	MP4A	X	-44.921	2
35	MP4A	Z	-77.805	2
36	MP4A	Mx	.034	2
37	MP4A	X	-44.921	6
38	MP4A	Z	-77.805	6
39	MP4A	Mx	.034	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	-28.066	2
3	MP2A	Mx	-.019	2
4	MP2A	X	0	6
5	MP2A	Z	-28.066	6
6	MP2A	Mx	-.019	6
7	MP2A	X	0	2
8	MP2A	Z	-28.066	2
9	MP2A	Mx	.019	2
10	MP2A	X	0	6
11	MP2A	Z	-28.066	6
12	MP2A	Mx	.019	6
13	MP3A	X	0	3
14	MP3A	Z	-13.827	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	-13.827	5
18	MP3A	Mx	0	5
19	OVP	X	0	1.5
20	OVP	Z	-22.425	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	0	4.5
23	MP2A	Z	-11.627	4.5
24	MP2A	Mx	0	4.5
25	MP1A	X	0	4.5
26	MP1A	Z	-11.627	4.5
27	MP1A	Mx	0	4.5
28	MP1A	X	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP1A	Z	-17.76	2
30	MP1A	Mx	0	2
31	MP1A	X	0	6
32	MP1A	Z	-17.76	6
33	MP1A	Mx	0	6
34	MP4A	X	0	2
35	MP4A	Z	-17.76	2
36	MP4A	Mx	0	2
37	MP4A	X	0	6
38	MP4A	Z	-17.76	6
39	MP4A	Mx	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	13.177	2
2	MP2A	Z	-22.823	2
3	MP2A	Mx	-.025	2
4	MP2A	X	13.177	6
5	MP2A	Z	-22.823	6
6	MP2A	Mx	-.025	6
7	MP2A	X	13.177	2
8	MP2A	Z	-22.823	2
9	MP2A	Mx	.005	2
10	MP2A	X	13.177	6
11	MP2A	Z	-22.823	6
12	MP2A	Mx	.005	6
13	MP3A	X	5.919	3
14	MP3A	Z	-10.252	3
15	MP3A	Mx	-.004	3
16	MP3A	X	5.919	5
17	MP3A	Z	-10.252	5
18	MP3A	Mx	-.004	5
19	OVP	X	10.324	1.5
20	OVP	Z	-17.881	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	5.369	4.5
23	MP2A	Z	-9.3	4.5
24	MP2A	Mx	.003	4.5
25	MP1A	X	5.2	4.5
26	MP1A	Z	-9.007	4.5
27	MP1A	Mx	.003	4.5
28	MP1A	X	8.625	2
29	MP1A	Z	-14.939	2
30	MP1A	Mx	-.006	2
31	MP1A	X	8.625	6
32	MP1A	Z	-14.939	6
33	MP1A	Mx	-.006	6
34	MP4A	X	8.625	2
35	MP4A	Z	-14.939	2
36	MP4A	Mx	-.006	2
37	MP4A	X	8.625	6
38	MP4A	Z	-14.939	6
39	MP4A	Mx	-.006	6

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	19.857	2
2	MP2A	Z	-11.464	2
3	MP2A	Mx	-.023	2
4	MP2A	X	19.857	6
5	MP2A	Z	-11.464	6
6	MP2A	Mx	-.023	6
7	MP2A	X	19.857	2
8	MP2A	Z	-11.464	2
9	MP2A	Mx	-.007	2
10	MP2A	X	19.857	6
11	MP2A	Z	-11.464	6
12	MP2A	Mx	-.007	6
13	MP3A	X	6.806	3
14	MP3A	Z	-3.929	3
15	MP3A	Mx	-.005	3
16	MP3A	X	6.806	5
17	MP3A	Z	-3.929	5
18	MP3A	Mx	-.005	5
19	OVP	X	14.802	1.5
20	OVP	Z	-8.546	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	7.761	4.5
23	MP2A	Z	-4.481	4.5
24	MP2A	Mx	.004	4.5
25	MP1A	X	6.884	4.5
26	MP1A	Z	-3.975	4.5
27	MP1A	Mx	.003	4.5
28	MP1A	X	14.055	2
29	MP1A	Z	-8.115	2
30	MP1A	Mx	-.011	2
31	MP1A	X	14.055	6
32	MP1A	Z	-8.115	6
33	MP1A	Mx	-.011	6
34	MP4A	X	14.055	2
35	MP4A	Z	-8.115	2
36	MP4A	Mx	-.011	2
37	MP4A	X	14.055	6
38	MP4A	Z	-8.115	6
39	MP4A	Mx	-.011	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	21.216	2
2	MP2A	Z	0	2
3	MP2A	Mx	-.016	2
4	MP2A	X	21.216	6
5	MP2A	Z	0	6
6	MP2A	Mx	-.016	6
7	MP2A	X	21.216	2
8	MP2A	Z	0	2
9	MP2A	Mx	-.016	2
10	MP2A	X	21.216	6
11	MP2A	Z	0	6
12	MP2A	Mx	-.016	6
13	MP3A	X	5.869	3
14	MP3A	Z	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	-.004	3
16	MP3A	X	5.869	5
17	MP3A	Z	0	5
18	MP3A	Mx	-.004	5
19	OVP	X	15.314	1.5
20	OVP	Z	0	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	8.074	4.5
23	MP2A	Z	0	4.5
24	MP2A	Mx	.004	4.5
25	MP1A	X	6.724	4.5
26	MP1A	Z	0	4.5
27	MP1A	Mx	.003	4.5
28	MP1A	X	15.719	2
29	MP1A	Z	0	2
30	MP1A	Mx	-.012	2
31	MP1A	X	15.719	6
32	MP1A	Z	0	6
33	MP1A	Mx	-.012	6
34	MP4A	X	15.719	2
35	MP4A	Z	0	2
36	MP4A	Mx	-.012	2
37	MP4A	X	15.719	6
38	MP4A	Z	0	6
39	MP4A	Mx	-.012	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	19.857	2
2	MP2A	Z	11.464	2
3	MP2A	Mx	-.007	2
4	MP2A	X	19.857	6
5	MP2A	Z	11.464	6
6	MP2A	Mx	-.007	6
7	MP2A	X	19.857	2
8	MP2A	Z	11.464	2
9	MP2A	Mx	-.023	2
10	MP2A	X	19.857	6
11	MP2A	Z	11.464	6
12	MP2A	Mx	-.023	6
13	MP3A	X	6.806	3
14	MP3A	Z	3.929	3
15	MP3A	Mx	-.005	3
16	MP3A	X	6.806	5
17	MP3A	Z	3.929	5
18	MP3A	Mx	-.005	5
19	OVP	X	14.802	1.5
20	OVP	Z	8.546	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	7.761	4.5
23	MP2A	Z	4.481	4.5
24	MP2A	Mx	.004	4.5
25	MP1A	X	6.884	4.5
26	MP1A	Z	3.975	4.5
27	MP1A	Mx	.003	4.5
28	MP1A	X	14.055	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP1A	Z	8.115	2
30	MP1A	Mx	-.011	2
31	MP1A	X	14.055	6
32	MP1A	Z	8.115	6
33	MP1A	Mx	-.011	6
34	MP4A	X	14.055	2
35	MP4A	Z	8.115	2
36	MP4A	Mx	-.011	2
37	MP4A	X	14.055	6
38	MP4A	Z	8.115	6
39	MP4A	Mx	-.011	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	13.177	2
2	MP2A	Z	22.823	2
3	MP2A	Mx	.005	2
4	MP2A	X	13.177	6
5	MP2A	Z	22.823	6
6	MP2A	Mx	.005	6
7	MP2A	X	13.177	2
8	MP2A	Z	22.823	2
9	MP2A	Mx	-.025	2
10	MP2A	X	13.177	6
11	MP2A	Z	22.823	6
12	MP2A	Mx	-.025	6
13	MP3A	X	5.919	3
14	MP3A	Z	10.252	3
15	MP3A	Mx	-.004	3
16	MP3A	X	5.919	5
17	MP3A	Z	10.252	5
18	MP3A	Mx	-.004	5
19	OVP	X	10.324	1.5
20	OVP	Z	17.881	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	5.369	4.5
23	MP2A	Z	9.3	4.5
24	MP2A	Mx	.003	4.5
25	MP1A	X	5.2	4.5
26	MP1A	Z	9.007	4.5
27	MP1A	Mx	.003	4.5
28	MP1A	X	8.625	2
29	MP1A	Z	14.939	2
30	MP1A	Mx	-.006	2
31	MP1A	X	8.625	6
32	MP1A	Z	14.939	6
33	MP1A	Mx	-.006	6
34	MP4A	X	8.625	2
35	MP4A	Z	14.939	2
36	MP4A	Mx	-.006	2
37	MP4A	X	8.625	6
38	MP4A	Z	14.939	6
39	MP4A	Mx	-.006	6

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	28.066	2
3	MP2A	Mx	.019	2
4	MP2A	X	0	6
5	MP2A	Z	28.066	6
6	MP2A	Mx	.019	6
7	MP2A	X	0	2
8	MP2A	Z	28.066	2
9	MP2A	Mx	-.019	2
10	MP2A	X	0	6
11	MP2A	Z	28.066	6
12	MP2A	Mx	-.019	6
13	MP3A	X	0	3
14	MP3A	Z	13.827	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	13.827	5
18	MP3A	Mx	0	5
19	OVP	X	0	1.5
20	OVP	Z	22.425	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	0	4.5
23	MP2A	Z	11.627	4.5
24	MP2A	Mx	0	4.5
25	MP1A	X	0	4.5
26	MP1A	Z	11.627	4.5
27	MP1A	Mx	0	4.5
28	MP1A	X	0	2
29	MP1A	Z	17.76	2
30	MP1A	Mx	0	2
31	MP1A	X	0	6
32	MP1A	Z	17.76	6
33	MP1A	Mx	0	6
34	MP4A	X	0	2
35	MP4A	Z	17.76	2
36	MP4A	Mx	0	2
37	MP4A	X	0	6
38	MP4A	Z	17.76	6
39	MP4A	Mx	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-13.177	2
2	MP2A	Z	22.823	2
3	MP2A	Mx	.025	2
4	MP2A	X	-13.177	6
5	MP2A	Z	22.823	6
6	MP2A	Mx	.025	6
7	MP2A	X	-13.177	2
8	MP2A	Z	22.823	2
9	MP2A	Mx	-.005	2
10	MP2A	X	-13.177	6
11	MP2A	Z	22.823	6
12	MP2A	Mx	-.005	6
13	MP3A	X	-5.919	3
14	MP3A	Z	10.252	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	.004	3
16	MP3A	X	-5.919	5
17	MP3A	Z	10.252	5
18	MP3A	Mx	.004	5
19	OVP	X	-10.324	1.5
20	OVP	Z	17.881	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-5.369	4.5
23	MP2A	Z	9.3	4.5
24	MP2A	Mx	-.003	4.5
25	MP1A	X	-5.2	4.5
26	MP1A	Z	9.007	4.5
27	MP1A	Mx	-.003	4.5
28	MP1A	X	-8.625	2
29	MP1A	Z	14.939	2
30	MP1A	Mx	.006	2
31	MP1A	X	-8.625	6
32	MP1A	Z	14.939	6
33	MP1A	Mx	.006	6
34	MP4A	X	-8.625	2
35	MP4A	Z	14.939	2
36	MP4A	Mx	.006	2
37	MP4A	X	-8.625	6
38	MP4A	Z	14.939	6
39	MP4A	Mx	.006	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-19.857	2
2	MP2A	Z	11.464	2
3	MP2A	Mx	.023	2
4	MP2A	X	-19.857	6
5	MP2A	Z	11.464	6
6	MP2A	Mx	.023	6
7	MP2A	X	-19.857	2
8	MP2A	Z	11.464	2
9	MP2A	Mx	.007	2
10	MP2A	X	-19.857	6
11	MP2A	Z	11.464	6
12	MP2A	Mx	.007	6
13	MP3A	X	-6.806	3
14	MP3A	Z	3.929	3
15	MP3A	Mx	.005	3
16	MP3A	X	-6.806	5
17	MP3A	Z	3.929	5
18	MP3A	Mx	.005	5
19	OVP	X	-14.802	1.5
20	OVP	Z	8.546	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-7.761	4.5
23	MP2A	Z	4.481	4.5
24	MP2A	Mx	-.004	4.5
25	MP1A	X	-6.884	4.5
26	MP1A	Z	3.975	4.5
27	MP1A	Mx	-.003	4.5
28	MP1A	X	-14.055	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP1A	Z	8.115	2
30	MP1A	Mx	.011	2
31	MP1A	X	-14.055	6
32	MP1A	Z	8.115	6
33	MP1A	Mx	.011	6
34	MP4A	X	-14.055	2
35	MP4A	Z	8.115	2
36	MP4A	Mx	.011	2
37	MP4A	X	-14.055	6
38	MP4A	Z	8.115	6
39	MP4A	Mx	.011	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-21.216	2
2	MP2A	Z	0	2
3	MP2A	Mx	.016	2
4	MP2A	X	-21.216	6
5	MP2A	Z	0	6
6	MP2A	Mx	.016	6
7	MP2A	X	-21.216	2
8	MP2A	Z	0	2
9	MP2A	Mx	.016	2
10	MP2A	X	-21.216	6
11	MP2A	Z	0	6
12	MP2A	Mx	.016	6
13	MP3A	X	-5.869	3
14	MP3A	Z	0	3
15	MP3A	Mx	.004	3
16	MP3A	X	-5.869	5
17	MP3A	Z	0	5
18	MP3A	Mx	.004	5
19	OVP	X	-15.314	1.5
20	OVP	Z	0	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-8.074	4.5
23	MP2A	Z	0	4.5
24	MP2A	Mx	-.004	4.5
25	MP1A	X	-6.724	4.5
26	MP1A	Z	0	4.5
27	MP1A	Mx	-.003	4.5
28	MP1A	X	-15.719	2
29	MP1A	Z	0	2
30	MP1A	Mx	.012	2
31	MP1A	X	-15.719	6
32	MP1A	Z	0	6
33	MP1A	Mx	.012	6
34	MP4A	X	-15.719	2
35	MP4A	Z	0	2
36	MP4A	Mx	.012	2
37	MP4A	X	-15.719	6
38	MP4A	Z	0	6
39	MP4A	Mx	.012	6

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-19.857	2
2	MP2A	Z	-11.464	2
3	MP2A	Mx	.007	2
4	MP2A	X	-19.857	6
5	MP2A	Z	-11.464	6
6	MP2A	Mx	.007	6
7	MP2A	X	-19.857	2
8	MP2A	Z	-11.464	2
9	MP2A	Mx	.023	2
10	MP2A	X	-19.857	6
11	MP2A	Z	-11.464	6
12	MP2A	Mx	.023	6
13	MP3A	X	-6.806	3
14	MP3A	Z	-3.929	3
15	MP3A	Mx	.005	3
16	MP3A	X	-6.806	5
17	MP3A	Z	-3.929	5
18	MP3A	Mx	.005	5
19	OVP	X	-14.802	1.5
20	OVP	Z	-8.546	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-7.761	4.5
23	MP2A	Z	-4.481	4.5
24	MP2A	Mx	-.004	4.5
25	MP1A	X	-6.884	4.5
26	MP1A	Z	-3.975	4.5
27	MP1A	Mx	-.003	4.5
28	MP1A	X	-14.055	2
29	MP1A	Z	-8.115	2
30	MP1A	Mx	.011	2
31	MP1A	X	-14.055	6
32	MP1A	Z	-8.115	6
33	MP1A	Mx	.011	6
34	MP4A	X	-14.055	2
35	MP4A	Z	-8.115	2
36	MP4A	Mx	.011	2
37	MP4A	X	-14.055	6
38	MP4A	Z	-8.115	6
39	MP4A	Mx	.011	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-13.177	2
2	MP2A	Z	-22.823	2
3	MP2A	Mx	-.005	2
4	MP2A	X	-13.177	6
5	MP2A	Z	-22.823	6
6	MP2A	Mx	-.005	6
7	MP2A	X	-13.177	2
8	MP2A	Z	-22.823	2
9	MP2A	Mx	.025	2
10	MP2A	X	-13.177	6
11	MP2A	Z	-22.823	6
12	MP2A	Mx	.025	6
13	MP3A	X	-5.919	3
14	MP3A	Z	-10.252	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	.004	3
16	MP3A	X	-5.919	5
17	MP3A	Z	-10.252	5
18	MP3A	Mx	.004	5
19	OVP	X	-10.324	1.5
20	OVP	Z	-17.881	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-5.369	4.5
23	MP2A	Z	-9.3	4.5
24	MP2A	Mx	-.003	4.5
25	MP1A	X	-5.2	4.5
26	MP1A	Z	-9.007	4.5
27	MP1A	Mx	-.003	4.5
28	MP1A	X	-8.625	2
29	MP1A	Z	-14.939	2
30	MP1A	Mx	.006	2
31	MP1A	X	-8.625	6
32	MP1A	Z	-14.939	6
33	MP1A	Mx	.006	6
34	MP4A	X	-8.625	2
35	MP4A	Z	-14.939	2
36	MP4A	Mx	.006	2
37	MP4A	X	-8.625	6
38	MP4A	Z	-14.939	6
39	MP4A	Mx	.006	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	-9.299	2
3	MP2A	Mx	-.006	2
4	MP2A	X	0	6
5	MP2A	Z	-9.299	6
6	MP2A	Mx	-.006	6
7	MP2A	X	0	2
8	MP2A	Z	-9.299	2
9	MP2A	Mx	.006	2
10	MP2A	X	0	6
11	MP2A	Z	-9.299	6
12	MP2A	Mx	.006	6
13	MP3A	X	0	3
14	MP3A	Z	-4.428	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	-4.428	5
18	MP3A	Mx	0	5
19	OVP	X	0	1.5
20	OVP	Z	-7.142	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	0	4.5
23	MP2A	Z	-3.524	4.5
24	MP2A	Mx	0	4.5
25	MP1A	X	0	4.5
26	MP1A	Z	-3.524	4.5
27	MP1A	Mx	0	4.5
28	MP1A	X	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP1A	Z	-5.794	2
30	MP1A	Mx	0	2
31	MP1A	X	0	6
32	MP1A	Z	-5.794	6
33	MP1A	Mx	0	6
34	MP4A	X	0	2
35	MP4A	Z	-5.794	2
36	MP4A	Mx	0	2
37	MP4A	X	0	6
38	MP4A	Z	-5.794	6
39	MP4A	Mx	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	4.351	2
2	MP2A	Z	-7.537	2
3	MP2A	Mx	-.008	2
4	MP2A	X	4.351	6
5	MP2A	Z	-7.537	6
6	MP2A	Mx	-.008	6
7	MP2A	X	4.351	2
8	MP2A	Z	-7.537	2
9	MP2A	Mx	.002	2
10	MP2A	X	4.351	6
11	MP2A	Z	-7.537	6
12	MP2A	Mx	.002	6
13	MP3A	X	1.877	3
14	MP3A	Z	-3.252	3
15	MP3A	Mx	-.001	3
16	MP3A	X	1.877	5
17	MP3A	Z	-3.252	5
18	MP3A	Mx	-.001	5
19	OVP	X	3.269	1.5
20	OVP	Z	-5.662	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	1.616	4.5
23	MP2A	Z	-2.799	4.5
24	MP2A	Mx	.000808	4.5
25	MP1A	X	1.56	4.5
26	MP1A	Z	-2.702	4.5
27	MP1A	Mx	.00078	4.5
28	MP1A	X	2.808	2
29	MP1A	Z	-4.863	2
30	MP1A	Mx	-.002	2
31	MP1A	X	2.808	6
32	MP1A	Z	-4.863	6
33	MP1A	Mx	-.002	6
34	MP4A	X	2.808	2
35	MP4A	Z	-4.863	2
36	MP4A	Mx	-.002	2
37	MP4A	X	2.808	6
38	MP4A	Z	-4.863	6
39	MP4A	Mx	-.002	6

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	6.504	2
2	MP2A	Z	-3.755	2
3	MP2A	Mx	-.007	2
4	MP2A	X	6.504	6
5	MP2A	Z	-3.755	6
6	MP2A	Mx	-.007	6
7	MP2A	X	6.504	2
8	MP2A	Z	-3.755	2
9	MP2A	Mx	-.002	2
10	MP2A	X	6.504	6
11	MP2A	Z	-3.755	6
12	MP2A	Mx	-.002	6
13	MP3A	X	2.085	3
14	MP3A	Z	-1.204	3
15	MP3A	Mx	-.002	3
16	MP3A	X	2.085	5
17	MP3A	Z	-1.204	5
18	MP3A	Mx	-.002	5
19	OVP	X	4.617	1.5
20	OVP	Z	-2.665	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	2.293	4.5
23	MP2A	Z	-1.324	4.5
24	MP2A	Mx	.001	4.5
25	MP1A	X	2.002	4.5
26	MP1A	Z	-1.156	4.5
27	MP1A	Mx	.001	4.5
28	MP1A	X	4.552	2
29	MP1A	Z	-2.628	2
30	MP1A	Mx	-.003	2
31	MP1A	X	4.552	6
32	MP1A	Z	-2.628	6
33	MP1A	Mx	-.003	6
34	MP4A	X	4.552	2
35	MP4A	Z	-2.628	2
36	MP4A	Mx	-.003	2
37	MP4A	X	4.552	6
38	MP4A	Z	-2.628	6
39	MP4A	Mx	-.003	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	6.914	2
2	MP2A	Z	0	2
3	MP2A	Mx	-.005	2
4	MP2A	X	6.914	6
5	MP2A	Z	0	6
6	MP2A	Mx	-.005	6
7	MP2A	X	6.914	2
8	MP2A	Z	0	2
9	MP2A	Mx	-.005	2
10	MP2A	X	6.914	6
11	MP2A	Z	0	6
12	MP2A	Mx	-.005	6
13	MP3A	X	1.734	3
14	MP3A	Z	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	-.001	3
16	MP3A	X	1.734	5
17	MP3A	Z	0	5
18	MP3A	Mx	-.001	5
19	OVP	X	4.727	1.5
20	OVP	Z	0	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	2.355	4.5
23	MP2A	Z	0	4.5
24	MP2A	Mx	.001	4.5
25	MP1A	X	1.908	4.5
26	MP1A	Z	0	4.5
27	MP1A	Mx	.000954	4.5
28	MP1A	X	5.077	2
29	MP1A	Z	0	2
30	MP1A	Mx	-.004	2
31	MP1A	X	5.077	6
32	MP1A	Z	0	6
33	MP1A	Mx	-.004	6
34	MP4A	X	5.077	2
35	MP4A	Z	0	2
36	MP4A	Mx	-.004	2
37	MP4A	X	5.077	6
38	MP4A	Z	0	6
39	MP4A	Mx	-.004	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	6.504	2
2	MP2A	Z	3.755	2
3	MP2A	Mx	-.002	2
4	MP2A	X	6.504	6
5	MP2A	Z	3.755	6
6	MP2A	Mx	-.002	6
7	MP2A	X	6.504	2
8	MP2A	Z	3.755	2
9	MP2A	Mx	-.007	2
10	MP2A	X	6.504	6
11	MP2A	Z	3.755	6
12	MP2A	Mx	-.007	6
13	MP3A	X	2.085	3
14	MP3A	Z	1.204	3
15	MP3A	Mx	-.002	3
16	MP3A	X	2.085	5
17	MP3A	Z	1.204	5
18	MP3A	Mx	-.002	5
19	OVP	X	4.617	1.5
20	OVP	Z	2.665	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	2.293	4.5
23	MP2A	Z	1.324	4.5
24	MP2A	Mx	.001	4.5
25	MP1A	X	2.002	4.5
26	MP1A	Z	1.156	4.5
27	MP1A	Mx	.001	4.5
28	MP1A	X	4.552	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP1A	Z	2.628	2
30	MP1A	Mx	-.003	2
31	MP1A	X	4.552	6
32	MP1A	Z	2.628	6
33	MP1A	Mx	-.003	6
34	MP4A	X	4.552	2
35	MP4A	Z	2.628	2
36	MP4A	Mx	-.003	2
37	MP4A	X	4.552	6
38	MP4A	Z	2.628	6
39	MP4A	Mx	-.003	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	4.351	2
2	MP2A	Z	7.537	2
3	MP2A	Mx	.002	2
4	MP2A	X	4.351	6
5	MP2A	Z	7.537	6
6	MP2A	Mx	.002	6
7	MP2A	X	4.351	2
8	MP2A	Z	7.537	2
9	MP2A	Mx	-.008	2
10	MP2A	X	4.351	6
11	MP2A	Z	7.537	6
12	MP2A	Mx	-.008	6
13	MP3A	X	1.877	3
14	MP3A	Z	3.252	3
15	MP3A	Mx	-.001	3
16	MP3A	X	1.877	5
17	MP3A	Z	3.252	5
18	MP3A	Mx	-.001	5
19	OVP	X	3.269	1.5
20	OVP	Z	5.662	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	1.616	4.5
23	MP2A	Z	2.799	4.5
24	MP2A	Mx	.000808	4.5
25	MP1A	X	1.56	4.5
26	MP1A	Z	2.702	4.5
27	MP1A	Mx	.00078	4.5
28	MP1A	X	2.808	2
29	MP1A	Z	4.863	2
30	MP1A	Mx	-.002	2
31	MP1A	X	2.808	6
32	MP1A	Z	4.863	6
33	MP1A	Mx	-.002	6
34	MP4A	X	2.808	2
35	MP4A	Z	4.863	2
36	MP4A	Mx	-.002	2
37	MP4A	X	2.808	6
38	MP4A	Z	4.863	6
39	MP4A	Mx	-.002	6

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	9.299	2
3	MP2A	Mx	.006	2
4	MP2A	X	0	6
5	MP2A	Z	9.299	6
6	MP2A	Mx	.006	6
7	MP2A	X	0	2
8	MP2A	Z	9.299	2
9	MP2A	Mx	-.006	2
10	MP2A	X	0	6
11	MP2A	Z	9.299	6
12	MP2A	Mx	-.006	6
13	MP3A	X	0	3
14	MP3A	Z	4.428	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	4.428	5
18	MP3A	Mx	0	5
19	OVP	X	0	1.5
20	OVP	Z	7.142	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	0	4.5
23	MP2A	Z	3.524	4.5
24	MP2A	Mx	0	4.5
25	MP1A	X	0	4.5
26	MP1A	Z	3.524	4.5
27	MP1A	Mx	0	4.5
28	MP1A	X	0	2
29	MP1A	Z	5.794	2
30	MP1A	Mx	0	2
31	MP1A	X	0	6
32	MP1A	Z	5.794	6
33	MP1A	Mx	0	6
34	MP4A	X	0	2
35	MP4A	Z	5.794	2
36	MP4A	Mx	0	2
37	MP4A	X	0	6
38	MP4A	Z	5.794	6
39	MP4A	Mx	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-4.351	2
2	MP2A	Z	7.537	2
3	MP2A	Mx	.008	2
4	MP2A	X	-4.351	6
5	MP2A	Z	7.537	6
6	MP2A	Mx	.008	6
7	MP2A	X	-4.351	2
8	MP2A	Z	7.537	2
9	MP2A	Mx	-.002	2
10	MP2A	X	-4.351	6
11	MP2A	Z	7.537	6
12	MP2A	Mx	-.002	6
13	MP3A	X	-1.877	3
14	MP3A	Z	3.252	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	.001	3
16	MP3A	X	-1.877	5
17	MP3A	Z	3.252	5
18	MP3A	Mx	.001	5
19	OVP	X	-3.269	1.5
20	OVP	Z	5.662	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-1.616	4.5
23	MP2A	Z	2.799	4.5
24	MP2A	Mx	-.000808	4.5
25	MP1A	X	-1.56	4.5
26	MP1A	Z	2.702	4.5
27	MP1A	Mx	-.00078	4.5
28	MP1A	X	-2.808	2
29	MP1A	Z	4.863	2
30	MP1A	Mx	.002	2
31	MP1A	X	-2.808	6
32	MP1A	Z	4.863	6
33	MP1A	Mx	.002	6
34	MP4A	X	-2.808	2
35	MP4A	Z	4.863	2
36	MP4A	Mx	.002	2
37	MP4A	X	-2.808	6
38	MP4A	Z	4.863	6
39	MP4A	Mx	.002	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-6.504	2
2	MP2A	Z	3.755	2
3	MP2A	Mx	.007	2
4	MP2A	X	-6.504	6
5	MP2A	Z	3.755	6
6	MP2A	Mx	.007	6
7	MP2A	X	-6.504	2
8	MP2A	Z	3.755	2
9	MP2A	Mx	.002	2
10	MP2A	X	-6.504	6
11	MP2A	Z	3.755	6
12	MP2A	Mx	.002	6
13	MP3A	X	-2.085	3
14	MP3A	Z	1.204	3
15	MP3A	Mx	.002	3
16	MP3A	X	-2.085	5
17	MP3A	Z	1.204	5
18	MP3A	Mx	.002	5
19	OVP	X	-4.617	1.5
20	OVP	Z	2.665	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-2.293	4.5
23	MP2A	Z	1.324	4.5
24	MP2A	Mx	-.001	4.5
25	MP1A	X	-2.002	4.5
26	MP1A	Z	1.156	4.5
27	MP1A	Mx	-.001	4.5
28	MP1A	X	-4.552	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP1A	Z	2.628	2
30	MP1A	Mx	.003	2
31	MP1A	X	-4.552	6
32	MP1A	Z	2.628	6
33	MP1A	Mx	.003	6
34	MP4A	X	-4.552	2
35	MP4A	Z	2.628	2
36	MP4A	Mx	.003	2
37	MP4A	X	-4.552	6
38	MP4A	Z	2.628	6
39	MP4A	Mx	.003	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-6.914	2
2	MP2A	Z	0	2
3	MP2A	Mx	.005	2
4	MP2A	X	-6.914	6
5	MP2A	Z	0	6
6	MP2A	Mx	.005	6
7	MP2A	X	-6.914	2
8	MP2A	Z	0	2
9	MP2A	Mx	.005	2
10	MP2A	X	-6.914	6
11	MP2A	Z	0	6
12	MP2A	Mx	.005	6
13	MP3A	X	-1.734	3
14	MP3A	Z	0	3
15	MP3A	Mx	.001	3
16	MP3A	X	-1.734	5
17	MP3A	Z	0	5
18	MP3A	Mx	.001	5
19	OVP	X	-4.727	1.5
20	OVP	Z	0	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-2.355	4.5
23	MP2A	Z	0	4.5
24	MP2A	Mx	-.001	4.5
25	MP1A	X	-1.908	4.5
26	MP1A	Z	0	4.5
27	MP1A	Mx	-.000954	4.5
28	MP1A	X	-5.077	2
29	MP1A	Z	0	2
30	MP1A	Mx	.004	2
31	MP1A	X	-5.077	6
32	MP1A	Z	0	6
33	MP1A	Mx	.004	6
34	MP4A	X	-5.077	2
35	MP4A	Z	0	2
36	MP4A	Mx	.004	2
37	MP4A	X	-5.077	6
38	MP4A	Z	0	6
39	MP4A	Mx	.004	6

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-6.504	2
2	MP2A	Z	-3.755	2
3	MP2A	Mx	.002	2
4	MP2A	X	-6.504	6
5	MP2A	Z	-3.755	6
6	MP2A	Mx	.002	6
7	MP2A	X	-6.504	2
8	MP2A	Z	-3.755	2
9	MP2A	Mx	.007	2
10	MP2A	X	-6.504	6
11	MP2A	Z	-3.755	6
12	MP2A	Mx	.007	6
13	MP3A	X	-2.085	3
14	MP3A	Z	-1.204	3
15	MP3A	Mx	.002	3
16	MP3A	X	-2.085	5
17	MP3A	Z	-1.204	5
18	MP3A	Mx	.002	5
19	OVP	X	-4.617	1.5
20	OVP	Z	-2.665	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-2.293	4.5
23	MP2A	Z	-1.324	4.5
24	MP2A	Mx	-.001	4.5
25	MP1A	X	-2.002	4.5
26	MP1A	Z	-1.156	4.5
27	MP1A	Mx	-.001	4.5
28	MP1A	X	-4.552	2
29	MP1A	Z	-2.628	2
30	MP1A	Mx	.003	2
31	MP1A	X	-4.552	6
32	MP1A	Z	-2.628	6
33	MP1A	Mx	.003	6
34	MP4A	X	-4.552	2
35	MP4A	Z	-2.628	2
36	MP4A	Mx	.003	2
37	MP4A	X	-4.552	6
38	MP4A	Z	-2.628	6
39	MP4A	Mx	.003	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-4.351	2
2	MP2A	Z	-7.537	2
3	MP2A	Mx	-.002	2
4	MP2A	X	-4.351	6
5	MP2A	Z	-7.537	6
6	MP2A	Mx	-.002	6
7	MP2A	X	-4.351	2
8	MP2A	Z	-7.537	2
9	MP2A	Mx	.008	2
10	MP2A	X	-4.351	6
11	MP2A	Z	-7.537	6
12	MP2A	Mx	.008	6
13	MP3A	X	-1.877	3
14	MP3A	Z	-3.252	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	.001	3
16	MP3A	X	-1.877	5
17	MP3A	Z	-3.252	5
18	MP3A	Mx	.001	5
19	OVP	X	-3.269	1.5
20	OVP	Z	-5.662	1.5
21	OVP	Mx	0	1.5
22	MP2A	X	-1.616	4.5
23	MP2A	Z	-2.799	4.5
24	MP2A	Mx	-.000808	4.5
25	MP1A	X	-1.56	4.5
26	MP1A	Z	-2.702	4.5
27	MP1A	Mx	-.00078	4.5
28	MP1A	X	-2.808	2
29	MP1A	Z	-4.863	2
30	MP1A	Mx	.002	2
31	MP1A	X	-2.808	6
32	MP1A	Z	-4.863	6
33	MP1A	Mx	.002	6
34	MP4A	X	-2.808	2
35	MP4A	Z	-4.863	2
36	MP4A	Mx	.002	2
37	MP4A	X	-2.808	6
38	MP4A	Z	-4.863	6
39	MP4A	Mx	.002	6

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M3	Y	-500	%97

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M3	Y	-500	%53

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M2	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M3	Y	-250	%13

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	Y	-5.376	-5.376	0	%100
2	M2	Y	-5.376	-5.376	0	%100
3	M13	Y	-6.295	-6.295	0	%100
4	M14	Y	-6.295	-6.295	0	%100
5	M15	Y	-6.295	-6.295	0	%100
6	M16	Y	-6.295	-6.295	0	%100
7	OVP	Y	-4.701	-4.701	0	%100
8	M18	Y	-4.701	-4.701	0	%100
9	M19	Y	-4.701	-4.701	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
10	M20	Y	-4.701	-4.701	0	%100
11	M21	Y	-6.295	-6.295	0	%100
12	M22	Y	-6.295	-6.295	0	%100
13	M23	Y	-6.295	-6.295	0	%100
14	M24	Y	-6.295	-6.295	0	%100
15	M25	Y	-2.506	-2.506	0	%100
16	M26	Y	-2.506	-2.506	0	%100
17	M27	Y	-2.506	-2.506	0	%100
18	M28	Y	-2.506	-2.506	0	%100
19	MP3A	Y	-5.376	-5.376	0	%100
20	MP2A	Y	-5.376	-5.376	0	%100
21	MP1A	Y	-5.376	-5.376	0	%100
22	M44	Y	-2.337	-2.337	0	%100
23	M45	Y	-2.337	-2.337	0	%100
24	M46	Y	-2.337	-2.337	0	%100
25	M47	Y	-2.337	-2.337	0	%100
26	M43	Y	-4.701	-4.701	0	%100
27	MP4A	Y	-5.376	-5.376	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-8.668	-8.668	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-8.668	-8.668	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	-3.422	-3.422	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-3.422	-3.422	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-3.422	-3.422	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-3.422	-3.422	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-1.884	-1.884	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-1.884	-1.884	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-1.884	-1.884	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-1.884	-1.884	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-1.952	-1.952	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-1.952	-1.952	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-1.952	-1.952	0	%100
35	M28	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
36	M28	Z	-1.952	-1.952	0	%100
37	MP3A	X	0	0	0	%100
38	MP3A	Z	-8.668	-8.668	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	-8.668	-8.668	0	%100
41	MP1A	X	0	0	0	%100
42	MP1A	Z	-8.668	-8.668	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	-1.884	-1.884	0	%100
45	M45	X	0	0	0	%100
46	M45	Z	-1.884	-1.884	0	%100
47	M46	X	0	0	0	%100
48	M46	Z	-1.884	-1.884	0	%100
49	M47	X	0	0	0	%100
50	M47	Z	-1.884	-1.884	0	%100
51	M43	X	0	0	0	%100
52	M43	Z	-1.301	-1.301	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	-8.668	-8.668	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	3.251	3.251	0	%100
2	M1	Z	-5.63	-5.63	0	%100
3	M2	X	3.251	3.251	0	%100
4	M2	Z	-5.63	-5.63	0	%100
5	M13	X	.236	.236	0	%100
6	M13	Z	-.408	-.408	0	%100
7	M14	X	.236	.236	0	%100
8	M14	Z	-.408	-.408	0	%100
9	M15	X	.236	.236	0	%100
10	M15	Z	-.408	-.408	0	%100
11	M16	X	.236	.236	0	%100
12	M16	Z	-.408	-.408	0	%100
13	OVP	X	.385	.385	0	%100
14	OVP	Z	-.667	-.667	0	%100
15	M18	X	.385	.385	0	%100
16	M18	Z	-.667	-.667	0	%100
17	M19	X	2.706	2.706	0	%100
18	M19	Z	-4.687	-4.687	0	%100
19	M20	X	2.706	2.706	0	%100
20	M20	Z	-4.687	-4.687	0	%100
21	M21	X	.707	.707	0	%100
22	M21	Z	-1.224	-1.224	0	%100
23	M22	X	.707	.707	0	%100
24	M22	Z	-1.224	-1.224	0	%100
25	M23	X	.707	.707	0	%100
26	M23	Z	-1.224	-1.224	0	%100
27	M24	X	.707	.707	0	%100
28	M24	Z	-1.224	-1.224	0	%100
29	M25	X	.78	.78	0	%100
30	M25	Z	-1.352	-1.352	0	%100
31	M26	X	.78	.78	0	%100
32	M26	Z	-1.352	-1.352	0	%100
33	M27	X	1.123	1.123	0	%100
34	M27	Z	-1.944	-1.944	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
35	M28	X	1.123	1.123	0	%100
36	M28	Z	-1.944	-1.944	0	%100
37	MP3A	X	4.334	4.334	0	%100
38	MP3A	Z	-7.507	-7.507	0	%100
39	MP2A	X	4.334	4.334	0	%100
40	MP2A	Z	-7.507	-7.507	0	%100
41	MP1A	X	4.334	4.334	0	%100
42	MP1A	Z	-7.507	-7.507	0	%100
43	M44	X	.942	.942	0	%100
44	M44	Z	-1.632	-1.632	0	%100
45	M45	X	.942	.942	0	%100
46	M45	Z	-1.632	-1.632	0	%100
47	M46	X	.942	.942	0	%100
48	M46	Z	-1.632	-1.632	0	%100
49	M47	X	.942	.942	0	%100
50	M47	Z	-1.632	-1.632	0	%100
51	M43	X	2.416	2.416	0	%100
52	M43	Z	-4.184	-4.184	0	%100
53	MP4A	X	4.334	4.334	0	%100
54	MP4A	Z	-7.507	-7.507	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	1.877	1.877	0	%100
2	M1	Z	-1.084	-1.084	0	%100
3	M2	X	1.877	1.877	0	%100
4	M2	Z	-1.084	-1.084	0	%100
5	M13	X	1.224	1.224	0	%100
6	M13	Z	-.707	-.707	0	%100
7	M14	X	1.224	1.224	0	%100
8	M14	Z	-.707	-.707	0	%100
9	M15	X	1.224	1.224	0	%100
10	M15	Z	-.707	-.707	0	%100
11	M16	X	1.224	1.224	0	%100
12	M16	Z	-.707	-.707	0	%100
13	OVP	X	.094	.094	0	%100
14	OVP	Z	-.054	-.054	0	%100
15	M18	X	.094	.094	0	%100
16	M18	Z	-.054	-.054	0	%100
17	M19	X	4.114	4.114	0	%100
18	M19	Z	-2.375	-2.375	0	%100
19	M20	X	4.114	4.114	0	%100
20	M20	Z	-2.375	-2.375	0	%100
21	M21	X	.408	.408	0	%100
22	M21	Z	-.236	-.236	0	%100
23	M22	X	.408	.408	0	%100
24	M22	Z	-.236	-.236	0	%100
25	M23	X	.408	.408	0	%100
26	M23	Z	-.236	-.236	0	%100
27	M24	X	.408	.408	0	%100
28	M24	Z	-.236	-.236	0	%100
29	M25	X	1.267	1.267	0	%100
30	M25	Z	-.731	-.731	0	%100
31	M26	X	1.267	1.267	0	%100
32	M26	Z	-.731	-.731	0	%100
33	M27	X	1.86	1.86	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
34	M27	Z	-1.074	-1.074	0	%100
35	M28	X	1.86	1.86	0	%100
36	M28	Z	-1.074	-1.074	0	%100
37	MP3A	X	7.507	7.507	0	%100
38	MP3A	Z	-4.334	-4.334	0	%100
39	MP2A	X	7.507	7.507	0	%100
40	MP2A	Z	-4.334	-4.334	0	%100
41	MP1A	X	7.507	7.507	0	%100
42	MP1A	Z	-4.334	-4.334	0	%100
43	M44	X	1.632	1.632	0	%100
44	M44	Z	-.942	-.942	0	%100
45	M45	X	1.632	1.632	0	%100
46	M45	Z	-.942	-.942	0	%100
47	M46	X	1.632	1.632	0	%100
48	M46	Z	-.942	-.942	0	%100
49	M47	X	1.632	1.632	0	%100
50	M47	Z	-.942	-.942	0	%100
51	M43	X	6.158	6.158	0	%100
52	M43	Z	-3.556	-3.556	0	%100
53	MP4A	X	7.507	7.507	0	%100
54	MP4A	Z	-4.334	-4.334	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	1.884	1.884	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	1.884	1.884	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	1.884	1.884	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	1.884	1.884	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	2.099	2.099	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	2.099	2.099	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	2.099	2.099	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	2.099	2.099	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	1.756	1.756	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	1.756	1.756	0	%100
32	M26	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
33	M27	X	1.756	1.756	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	1.756	1.756	0	%100
36	M28	Z	0	0	0	%100
37	MP3A	X	8.668	8.668	0	%100
38	MP3A	Z	0	0	0	%100
39	MP2A	X	8.668	8.668	0	%100
40	MP2A	Z	0	0	0	%100
41	MP1A	X	8.668	8.668	0	%100
42	MP1A	Z	0	0	0	%100
43	M44	X	1.884	1.884	0	%100
44	M44	Z	0	0	0	%100
45	M45	X	1.884	1.884	0	%100
46	M45	Z	0	0	0	%100
47	M46	X	1.884	1.884	0	%100
48	M46	Z	0	0	0	%100
49	M47	X	1.884	1.884	0	%100
50	M47	Z	0	0	0	%100
51	M43	X	5.86	5.86	0	%100
52	M43	Z	0	0	0	%100
53	MP4A	X	8.668	8.668	0	%100
54	MP4A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	1.877	1.877	0	%100
2	M1	Z	1.084	1.084	0	%100
3	M2	X	1.877	1.877	0	%100
4	M2	Z	1.084	1.084	0	%100
5	M13	X	1.224	1.224	0	%100
6	M13	Z	.707	.707	0	%100
7	M14	X	1.224	1.224	0	%100
8	M14	Z	.707	.707	0	%100
9	M15	X	1.224	1.224	0	%100
10	M15	Z	.707	.707	0	%100
11	M16	X	1.224	1.224	0	%100
12	M16	Z	.707	.707	0	%100
13	OVP	X	4.114	4.114	0	%100
14	OVP	Z	2.375	2.375	0	%100
15	M18	X	4.114	4.114	0	%100
16	M18	Z	2.375	2.375	0	%100
17	M19	X	.094	.094	0	%100
18	M19	Z	.054	.054	0	%100
19	M20	X	.094	.094	0	%100
20	M20	Z	.054	.054	0	%100
21	M21	X	.408	.408	0	%100
22	M21	Z	.236	.236	0	%100
23	M22	X	.408	.408	0	%100
24	M22	Z	.236	.236	0	%100
25	M23	X	.408	.408	0	%100
26	M23	Z	.236	.236	0	%100
27	M24	X	.408	.408	0	%100
28	M24	Z	.236	.236	0	%100
29	M25	X	1.86	1.86	0	%100
30	M25	Z	1.074	1.074	0	%100
31	M26	X	1.86	1.86	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
32	M26	Z	1.074	1.074	0	%100
33	M27	X	1.267	1.267	0	%100
34	M27	Z	.731	.731	0	%100
35	M28	X	1.267	1.267	0	%100
36	M28	Z	.731	.731	0	%100
37	MP3A	X	7.507	7.507	0	%100
38	MP3A	Z	4.334	4.334	0	%100
39	MP2A	X	7.507	7.507	0	%100
40	MP2A	Z	4.334	4.334	0	%100
41	MP1A	X	7.507	7.507	0	%100
42	MP1A	Z	4.334	4.334	0	%100
43	M44	X	1.632	1.632	0	%100
44	M44	Z	.942	.942	0	%100
45	M45	X	1.632	1.632	0	%100
46	M45	Z	.942	.942	0	%100
47	M46	X	1.632	1.632	0	%100
48	M46	Z	.942	.942	0	%100
49	M47	X	1.632	1.632	0	%100
50	M47	Z	.942	.942	0	%100
51	M43	X	2.017	2.017	0	%100
52	M43	Z	1.164	1.164	0	%100
53	MP4A	X	7.507	7.507	0	%100
54	MP4A	Z	4.334	4.334	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	3.251	3.251	0	%100
2	M1	Z	5.63	5.63	0	%100
3	M2	X	3.251	3.251	0	%100
4	M2	Z	5.63	5.63	0	%100
5	M13	X	.236	.236	0	%100
6	M13	Z	.408	.408	0	%100
7	M14	X	.236	.236	0	%100
8	M14	Z	.408	.408	0	%100
9	M15	X	.236	.236	0	%100
10	M15	Z	.408	.408	0	%100
11	M16	X	.236	.236	0	%100
12	M16	Z	.408	.408	0	%100
13	OVP	X	2.706	2.706	0	%100
14	OVP	Z	4.687	4.687	0	%100
15	M18	X	2.706	2.706	0	%100
16	M18	Z	4.687	4.687	0	%100
17	M19	X	.385	.385	0	%100
18	M19	Z	.667	.667	0	%100
19	M20	X	.385	.385	0	%100
20	M20	Z	.667	.667	0	%100
21	M21	X	.707	.707	0	%100
22	M21	Z	1.224	1.224	0	%100
23	M22	X	.707	.707	0	%100
24	M22	Z	1.224	1.224	0	%100
25	M23	X	.707	.707	0	%100
26	M23	Z	1.224	1.224	0	%100
27	M24	X	.707	.707	0	%100
28	M24	Z	1.224	1.224	0	%100
29	M25	X	1.123	1.123	0	%100
30	M25	Z	1.944	1.944	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
31	M26	X	1.123	1.123	0	%100
32	M26	Z	1.944	1.944	0	%100
33	M27	X	.78	.78	0	%100
34	M27	Z	1.352	1.352	0	%100
35	M28	X	.78	.78	0	%100
36	M28	Z	1.352	1.352	0	%100
37	MP3A	X	4.334	4.334	0	%100
38	MP3A	Z	7.507	7.507	0	%100
39	MP2A	X	4.334	4.334	0	%100
40	MP2A	Z	7.507	7.507	0	%100
41	MP1A	X	4.334	4.334	0	%100
42	MP1A	Z	7.507	7.507	0	%100
43	M44	X	.942	.942	0	%100
44	M44	Z	1.632	1.632	0	%100
45	M45	X	.942	.942	0	%100
46	M45	Z	1.632	1.632	0	%100
47	M46	X	.942	.942	0	%100
48	M46	Z	1.632	1.632	0	%100
49	M47	X	.942	.942	0	%100
50	M47	Z	1.632	1.632	0	%100
51	M43	X	.025	.025	0	%100
52	M43	Z	.043	.043	0	%100
53	MP4A	X	4.334	4.334	0	%100
54	MP4A	Z	7.507	7.507	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	8.668	8.668	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	8.668	8.668	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	3.422	3.422	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	3.422	3.422	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	3.422	3.422	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	3.422	3.422	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	1.884	1.884	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	1.884	1.884	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	1.884	1.884	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	1.884	1.884	0	%100
29	M25	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
30	M25	Z	1.952	1.952	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	1.952	1.952	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	1.952	1.952	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	1.952	1.952	0	%100
37	MP3A	X	0	0	0	%100
38	MP3A	Z	8.668	8.668	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	8.668	8.668	0	%100
41	MP1A	X	0	0	0	%100
42	MP1A	Z	8.668	8.668	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	1.884	1.884	0	%100
45	M45	X	0	0	0	%100
46	M45	Z	1.884	1.884	0	%100
47	M46	X	0	0	0	%100
48	M46	Z	1.884	1.884	0	%100
49	M47	X	0	0	0	%100
50	M47	Z	1.884	1.884	0	%100
51	M43	X	0	0	0	%100
52	M43	Z	1.301	1.301	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	8.668	8.668	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-3.251	-3.251	0	%100
2	M1	Z	5.63	5.63	0	%100
3	M2	X	-3.251	-3.251	0	%100
4	M2	Z	5.63	5.63	0	%100
5	M13	X	-.236	-.236	0	%100
6	M13	Z	.408	.408	0	%100
7	M14	X	-.236	-.236	0	%100
8	M14	Z	.408	.408	0	%100
9	M15	X	-.236	-.236	0	%100
10	M15	Z	.408	.408	0	%100
11	M16	X	-.236	-.236	0	%100
12	M16	Z	.408	.408	0	%100
13	OVP	X	-.385	-.385	0	%100
14	OVP	Z	.667	.667	0	%100
15	M18	X	-.385	-.385	0	%100
16	M18	Z	.667	.667	0	%100
17	M19	X	-2.706	-2.706	0	%100
18	M19	Z	4.687	4.687	0	%100
19	M20	X	-2.706	-2.706	0	%100
20	M20	Z	4.687	4.687	0	%100
21	M21	X	-.707	-.707	0	%100
22	M21	Z	1.224	1.224	0	%100
23	M22	X	-.707	-.707	0	%100
24	M22	Z	1.224	1.224	0	%100
25	M23	X	-.707	-.707	0	%100
26	M23	Z	1.224	1.224	0	%100
27	M24	X	-.707	-.707	0	%100
28	M24	Z	1.224	1.224	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
29	M25	X	-.78	-.78	0	%100
30	M25	Z	1.352	1.352	0	%100
31	M26	X	-.78	-.78	0	%100
32	M26	Z	1.352	1.352	0	%100
33	M27	X	-1.123	-1.123	0	%100
34	M27	Z	1.944	1.944	0	%100
35	M28	X	-1.123	-1.123	0	%100
36	M28	Z	1.944	1.944	0	%100
37	MP3A	X	-4.334	-4.334	0	%100
38	MP3A	Z	7.507	7.507	0	%100
39	MP2A	X	-4.334	-4.334	0	%100
40	MP2A	Z	7.507	7.507	0	%100
41	MP1A	X	-4.334	-4.334	0	%100
42	MP1A	Z	7.507	7.507	0	%100
43	M44	X	-.942	-.942	0	%100
44	M44	Z	1.632	1.632	0	%100
45	M45	X	-.942	-.942	0	%100
46	M45	Z	1.632	1.632	0	%100
47	M46	X	-.942	-.942	0	%100
48	M46	Z	1.632	1.632	0	%100
49	M47	X	-.942	-.942	0	%100
50	M47	Z	1.632	1.632	0	%100
51	M43	X	-2.416	-2.416	0	%100
52	M43	Z	4.184	4.184	0	%100
53	MP4A	X	-4.334	-4.334	0	%100
54	MP4A	Z	7.507	7.507	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-1.877	-1.877	0	%100
2	M1	Z	1.084	1.084	0	%100
3	M2	X	-1.877	-1.877	0	%100
4	M2	Z	1.084	1.084	0	%100
5	M13	X	-1.224	-1.224	0	%100
6	M13	Z	.707	.707	0	%100
7	M14	X	-1.224	-1.224	0	%100
8	M14	Z	.707	.707	0	%100
9	M15	X	-1.224	-1.224	0	%100
10	M15	Z	.707	.707	0	%100
11	M16	X	-1.224	-1.224	0	%100
12	M16	Z	.707	.707	0	%100
13	OVP	X	-.094	-.094	0	%100
14	OVP	Z	.054	.054	0	%100
15	M18	X	-.094	-.094	0	%100
16	M18	Z	.054	.054	0	%100
17	M19	X	-4.114	-4.114	0	%100
18	M19	Z	2.375	2.375	0	%100
19	M20	X	-4.114	-4.114	0	%100
20	M20	Z	2.375	2.375	0	%100
21	M21	X	-.408	-.408	0	%100
22	M21	Z	.236	.236	0	%100
23	M22	X	-.408	-.408	0	%100
24	M22	Z	.236	.236	0	%100
25	M23	X	-.408	-.408	0	%100
26	M23	Z	.236	.236	0	%100
27	M24	X	-.408	-.408	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
28	M24	Z	.236	.236	0	%100
29	M25	X	-1.267	-1.267	0	%100
30	M25	Z	.731	.731	0	%100
31	M26	X	-1.267	-1.267	0	%100
32	M26	Z	.731	.731	0	%100
33	M27	X	-1.86	-1.86	0	%100
34	M27	Z	1.074	1.074	0	%100
35	M28	X	-1.86	-1.86	0	%100
36	M28	Z	1.074	1.074	0	%100
37	MP3A	X	-7.507	-7.507	0	%100
38	MP3A	Z	4.334	4.334	0	%100
39	MP2A	X	-7.507	-7.507	0	%100
40	MP2A	Z	4.334	4.334	0	%100
41	MP1A	X	-7.507	-7.507	0	%100
42	MP1A	Z	4.334	4.334	0	%100
43	M44	X	-1.632	-1.632	0	%100
44	M44	Z	.942	.942	0	%100
45	M45	X	-1.632	-1.632	0	%100
46	M45	Z	.942	.942	0	%100
47	M46	X	-1.632	-1.632	0	%100
48	M46	Z	.942	.942	0	%100
49	M47	X	-1.632	-1.632	0	%100
50	M47	Z	.942	.942	0	%100
51	M43	X	-6.158	-6.158	0	%100
52	M43	Z	3.556	3.556	0	%100
53	MP4A	X	-7.507	-7.507	0	%100
54	MP4A	Z	4.334	4.334	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-1.884	-1.884	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-1.884	-1.884	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-1.884	-1.884	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-1.884	-1.884	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	-2.099	-2.099	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	-2.099	-2.099	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-2.099	-2.099	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-2.099	-2.099	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-1.756	-1.756	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-1.756	-1.756	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-1.756	-1.756	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-1.756	-1.756	0	%100
36	M28	Z	0	0	0	%100
37	MP3A	X	-8.668	-8.668	0	%100
38	MP3A	Z	0	0	0	%100
39	MP2A	X	-8.668	-8.668	0	%100
40	MP2A	Z	0	0	0	%100
41	MP1A	X	-8.668	-8.668	0	%100
42	MP1A	Z	0	0	0	%100
43	M44	X	-1.884	-1.884	0	%100
44	M44	Z	0	0	0	%100
45	M45	X	-1.884	-1.884	0	%100
46	M45	Z	0	0	0	%100
47	M46	X	-1.884	-1.884	0	%100
48	M46	Z	0	0	0	%100
49	M47	X	-1.884	-1.884	0	%100
50	M47	Z	0	0	0	%100
51	M43	X	-5.86	-5.86	0	%100
52	M43	Z	0	0	0	%100
53	MP4A	X	-8.668	-8.668	0	%100
54	MP4A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-1.877	-1.877	0	%100
2	M1	Z	-1.084	-1.084	0	%100
3	M2	X	-1.877	-1.877	0	%100
4	M2	Z	-1.084	-1.084	0	%100
5	M13	X	-1.224	-1.224	0	%100
6	M13	Z	-.707	-.707	0	%100
7	M14	X	-1.224	-1.224	0	%100
8	M14	Z	-.707	-.707	0	%100
9	M15	X	-1.224	-1.224	0	%100
10	M15	Z	-.707	-.707	0	%100
11	M16	X	-1.224	-1.224	0	%100
12	M16	Z	-.707	-.707	0	%100
13	OVP	X	-4.114	-4.114	0	%100
14	OVP	Z	-2.375	-2.375	0	%100
15	M18	X	-4.114	-4.114	0	%100
16	M18	Z	-2.375	-2.375	0	%100
17	M19	X	-.094	-.094	0	%100
18	M19	Z	-.054	-.054	0	%100
19	M20	X	-.094	-.094	0	%100
20	M20	Z	-.054	-.054	0	%100
21	M21	X	-.408	-.408	0	%100
22	M21	Z	-.236	-.236	0	%100
23	M22	X	-.408	-.408	0	%100
24	M22	Z	-.236	-.236	0	%100
25	M23	X	-.408	-.408	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
26	M23	Z	-.236	-.236	0	%100
27	M24	X	-.408	-.408	0	%100
28	M24	Z	-.236	-.236	0	%100
29	M25	X	-1.86	-1.86	0	%100
30	M25	Z	-1.074	-1.074	0	%100
31	M26	X	-1.86	-1.86	0	%100
32	M26	Z	-1.074	-1.074	0	%100
33	M27	X	-1.267	-1.267	0	%100
34	M27	Z	-.731	-.731	0	%100
35	M28	X	-1.267	-1.267	0	%100
36	M28	Z	-.731	-.731	0	%100
37	MP3A	X	-7.507	-7.507	0	%100
38	MP3A	Z	-4.334	-4.334	0	%100
39	MP2A	X	-7.507	-7.507	0	%100
40	MP2A	Z	-4.334	-4.334	0	%100
41	MP1A	X	-7.507	-7.507	0	%100
42	MP1A	Z	-4.334	-4.334	0	%100
43	M44	X	-1.632	-1.632	0	%100
44	M44	Z	-.942	-.942	0	%100
45	M45	X	-1.632	-1.632	0	%100
46	M45	Z	-.942	-.942	0	%100
47	M46	X	-1.632	-1.632	0	%100
48	M46	Z	-.942	-.942	0	%100
49	M47	X	-1.632	-1.632	0	%100
50	M47	Z	-.942	-.942	0	%100
51	M43	X	-2.017	-2.017	0	%100
52	M43	Z	-1.164	-1.164	0	%100
53	MP4A	X	-7.507	-7.507	0	%100
54	MP4A	Z	-4.334	-4.334	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-3.251	-3.251	0	%100
2	M1	Z	-5.63	-5.63	0	%100
3	M2	X	-3.251	-3.251	0	%100
4	M2	Z	-5.63	-5.63	0	%100
5	M13	X	-.236	-.236	0	%100
6	M13	Z	-.408	-.408	0	%100
7	M14	X	-.236	-.236	0	%100
8	M14	Z	-.408	-.408	0	%100
9	M15	X	-.236	-.236	0	%100
10	M15	Z	-.408	-.408	0	%100
11	M16	X	-.236	-.236	0	%100
12	M16	Z	-.408	-.408	0	%100
13	OVP	X	-2.706	-2.706	0	%100
14	OVP	Z	-4.687	-4.687	0	%100
15	M18	X	-2.706	-2.706	0	%100
16	M18	Z	-4.687	-4.687	0	%100
17	M19	X	-.385	-.385	0	%100
18	M19	Z	-.667	-.667	0	%100
19	M20	X	-.385	-.385	0	%100
20	M20	Z	-.667	-.667	0	%100
21	M21	X	-.707	-.707	0	%100
22	M21	Z	-1.224	-1.224	0	%100
23	M22	X	-.707	-.707	0	%100
24	M22	Z	-1.224	-1.224	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
25	M23	X	-.707	-.707	0	%100
26	M23	Z	-1.224	-1.224	0	%100
27	M24	X	-.707	-.707	0	%100
28	M24	Z	-1.224	-1.224	0	%100
29	M25	X	-1.123	-1.123	0	%100
30	M25	Z	-1.944	-1.944	0	%100
31	M26	X	-1.123	-1.123	0	%100
32	M26	Z	-1.944	-1.944	0	%100
33	M27	X	-.78	-.78	0	%100
34	M27	Z	-1.352	-1.352	0	%100
35	M28	X	-.78	-.78	0	%100
36	M28	Z	-1.352	-1.352	0	%100
37	MP3A	X	-4.334	-4.334	0	%100
38	MP3A	Z	-7.507	-7.507	0	%100
39	MP2A	X	-4.334	-4.334	0	%100
40	MP2A	Z	-7.507	-7.507	0	%100
41	MP1A	X	-4.334	-4.334	0	%100
42	MP1A	Z	-7.507	-7.507	0	%100
43	M44	X	-.942	-.942	0	%100
44	M44	Z	-1.632	-1.632	0	%100
45	M45	X	-.942	-.942	0	%100
46	M45	Z	-1.632	-1.632	0	%100
47	M46	X	-.942	-.942	0	%100
48	M46	Z	-1.632	-1.632	0	%100
49	M47	X	-.942	-.942	0	%100
50	M47	Z	-1.632	-1.632	0	%100
51	M43	X	-.025	-.025	0	%100
52	M43	Z	-.043	-.043	0	%100
53	MP4A	X	-4.334	-4.334	0	%100
54	MP4A	Z	-7.507	-7.507	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-2.662	-2.662	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-2.662	-2.662	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	-1.16	-1.16	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-1.16	-1.16	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-1.16	-1.16	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-1.16	-1.16	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-1.01	-1.01	0	%100
23	M22	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
24	M22	Z	-1.01	-1.01	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-1.01	-1.01	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-1.01	-1.01	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-1.294	-1.294	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-1.294	-1.294	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-1.294	-1.294	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-1.294	-1.294	0	%100
37	MP3A	X	0	0	0	%100
38	MP3A	Z	-2.662	-2.662	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	-2.662	-2.662	0	%100
41	MP1A	X	0	0	0	%100
42	MP1A	Z	-2.662	-2.662	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	-1.336	-1.336	0	%100
45	M45	X	0	0	0	%100
46	M45	Z	-1.336	-1.336	0	%100
47	M46	X	0	0	0	%100
48	M46	Z	-1.336	-1.336	0	%100
49	M47	X	0	0	0	%100
50	M47	Z	-1.336	-1.336	0	%100
51	M43	X	0	0	0	%100
52	M43	Z	-.436	-.436	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	-2.662	-2.662	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	.998	.998	0	%100
2	M1	Z	-1.729	-1.729	0	%100
3	M2	X	.998	.998	0	%100
4	M2	Z	-1.729	-1.729	0	%100
5	M13	X	.125	.125	0	%100
6	M13	Z	-.217	-.217	0	%100
7	M14	X	.125	.125	0	%100
8	M14	Z	-.217	-.217	0	%100
9	M15	X	.125	.125	0	%100
10	M15	Z	-.217	-.217	0	%100
11	M16	X	.125	.125	0	%100
12	M16	Z	-.217	-.217	0	%100
13	OVP	X	.131	.131	0	%100
14	OVP	Z	-.226	-.226	0	%100
15	M18	X	.131	.131	0	%100
16	M18	Z	-.226	-.226	0	%100
17	M19	X	.917	.917	0	%100
18	M19	Z	-1.588	-1.588	0	%100
19	M20	X	.917	.917	0	%100
20	M20	Z	-1.588	-1.588	0	%100
21	M21	X	.379	.379	0	%100
22	M21	Z	-.656	-.656	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
23	M22	X	.379	.379	0	%100
24	M22	Z	-.656	-.656	0	%100
25	M23	X	.379	.379	0	%100
26	M23	Z	-.656	-.656	0	%100
27	M24	X	.379	.379	0	%100
28	M24	Z	-.656	-.656	0	%100
29	M25	X	.517	.517	0	%100
30	M25	Z	-.896	-.896	0	%100
31	M26	X	.517	.517	0	%100
32	M26	Z	-.896	-.896	0	%100
33	M27	X	.744	.744	0	%100
34	M27	Z	-1.289	-1.289	0	%100
35	M28	X	.744	.744	0	%100
36	M28	Z	-1.289	-1.289	0	%100
37	MP3A	X	1.331	1.331	0	%100
38	MP3A	Z	-2.306	-2.306	0	%100
39	MP2A	X	1.331	1.331	0	%100
40	MP2A	Z	-2.306	-2.306	0	%100
41	MP1A	X	1.331	1.331	0	%100
42	MP1A	Z	-2.306	-2.306	0	%100
43	M44	X	.668	.668	0	%100
44	M44	Z	-1.157	-1.157	0	%100
45	M45	X	.668	.668	0	%100
46	M45	Z	-1.157	-1.157	0	%100
47	M46	X	.668	.668	0	%100
48	M46	Z	-1.157	-1.157	0	%100
49	M47	X	.668	.668	0	%100
50	M47	Z	-1.157	-1.157	0	%100
51	M43	X	.81	.81	0	%100
52	M43	Z	-1.403	-1.403	0	%100
53	MP4A	X	1.331	1.331	0	%100
54	MP4A	Z	-2.306	-2.306	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	.576	.576	0	%100
2	M1	Z	-.333	-.333	0	%100
3	M2	X	.576	.576	0	%100
4	M2	Z	-.333	-.333	0	%100
5	M13	X	.651	.651	0	%100
6	M13	Z	-.376	-.376	0	%100
7	M14	X	.651	.651	0	%100
8	M14	Z	-.376	-.376	0	%100
9	M15	X	.651	.651	0	%100
10	M15	Z	-.376	-.376	0	%100
11	M16	X	.651	.651	0	%100
12	M16	Z	-.376	-.376	0	%100
13	OVP	X	.032	.032	0	%100
14	OVP	Z	-.018	-.018	0	%100
15	M18	X	.032	.032	0	%100
16	M18	Z	-.018	-.018	0	%100
17	M19	X	1.394	1.394	0	%100
18	M19	Z	-.805	-.805	0	%100
19	M20	X	1.394	1.394	0	%100
20	M20	Z	-.805	-.805	0	%100
21	M21	X	.219	.219	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
22	M21	Z	-.126	-.126	0	%100
23	M22	X	.219	.219	0	%100
24	M22	Z	-.126	-.126	0	%100
25	M23	X	.219	.219	0	%100
26	M23	Z	-.126	-.126	0	%100
27	M24	X	.219	.219	0	%100
28	M24	Z	-.126	-.126	0	%100
29	M25	X	.84	.84	0	%100
30	M25	Z	-.485	-.485	0	%100
31	M26	X	.84	.84	0	%100
32	M26	Z	-.485	-.485	0	%100
33	M27	X	1.233	1.233	0	%100
34	M27	Z	-.712	-.712	0	%100
35	M28	X	1.233	1.233	0	%100
36	M28	Z	-.712	-.712	0	%100
37	MP3A	X	2.306	2.306	0	%100
38	MP3A	Z	-1.331	-1.331	0	%100
39	MP2A	X	2.306	2.306	0	%100
40	MP2A	Z	-1.331	-1.331	0	%100
41	MP1A	X	2.306	2.306	0	%100
42	MP1A	Z	-1.331	-1.331	0	%100
43	M44	X	1.157	1.157	0	%100
44	M44	Z	-.668	-.668	0	%100
45	M45	X	1.157	1.157	0	%100
46	M45	Z	-.668	-.668	0	%100
47	M46	X	1.157	1.157	0	%100
48	M46	Z	-.668	-.668	0	%100
49	M47	X	1.157	1.157	0	%100
50	M47	Z	-.668	-.668	0	%100
51	M43	X	2.065	2.065	0	%100
52	M43	Z	-1.192	-1.192	0	%100
53	MP4A	X	2.306	2.306	0	%100
54	MP4A	Z	-1.331	-1.331	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	1.002	1.002	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	1.002	1.002	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	1.002	1.002	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	1.002	1.002	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	.711	.711	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	.711	.711	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	.711	.711	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	.711	.711	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	1.164	1.164	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	1.164	1.164	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	1.164	1.164	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	1.164	1.164	0	%100
36	M28	Z	0	0	0	%100
37	MP3A	X	2.662	2.662	0	%100
38	MP3A	Z	0	0	0	%100
39	MP2A	X	2.662	2.662	0	%100
40	MP2A	Z	0	0	0	%100
41	MP1A	X	2.662	2.662	0	%100
42	MP1A	Z	0	0	0	%100
43	M44	X	1.336	1.336	0	%100
44	M44	Z	0	0	0	%100
45	M45	X	1.336	1.336	0	%100
46	M45	Z	0	0	0	%100
47	M46	X	1.336	1.336	0	%100
48	M46	Z	0	0	0	%100
49	M47	X	1.336	1.336	0	%100
50	M47	Z	0	0	0	%100
51	M43	X	1.964	1.964	0	%100
52	M43	Z	0	0	0	%100
53	MP4A	X	2.662	2.662	0	%100
54	MP4A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	.576	.576	0	%100
2	M1	Z	.333	.333	0	%100
3	M2	X	.576	.576	0	%100
4	M2	Z	.333	.333	0	%100
5	M13	X	.651	.651	0	%100
6	M13	Z	.376	.376	0	%100
7	M14	X	.651	.651	0	%100
8	M14	Z	.376	.376	0	%100
9	M15	X	.651	.651	0	%100
10	M15	Z	.376	.376	0	%100
11	M16	X	.651	.651	0	%100
12	M16	Z	.376	.376	0	%100
13	OVP	X	1.394	1.394	0	%100
14	OVP	Z	.805	.805	0	%100
15	M18	X	1.394	1.394	0	%100
16	M18	Z	.805	.805	0	%100
17	M19	X	.032	.032	0	%100
18	M19	Z	.018	.018	0	%100
19	M20	X	.032	.032	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
20	M20	Z	.018	.018	0	%100
21	M21	X	.219	.219	0	%100
22	M21	Z	.126	.126	0	%100
23	M22	X	.219	.219	0	%100
24	M22	Z	.126	.126	0	%100
25	M23	X	.219	.219	0	%100
26	M23	Z	.126	.126	0	%100
27	M24	X	.219	.219	0	%100
28	M24	Z	.126	.126	0	%100
29	M25	X	1.233	1.233	0	%100
30	M25	Z	.712	.712	0	%100
31	M26	X	1.233	1.233	0	%100
32	M26	Z	.712	.712	0	%100
33	M27	X	.84	.84	0	%100
34	M27	Z	.485	.485	0	%100
35	M28	X	.84	.84	0	%100
36	M28	Z	.485	.485	0	%100
37	MP3A	X	2.306	2.306	0	%100
38	MP3A	Z	1.331	1.331	0	%100
39	MP2A	X	2.306	2.306	0	%100
40	MP2A	Z	1.331	1.331	0	%100
41	MP1A	X	2.306	2.306	0	%100
42	MP1A	Z	1.331	1.331	0	%100
43	M44	X	1.157	1.157	0	%100
44	M44	Z	.668	.668	0	%100
45	M45	X	1.157	1.157	0	%100
46	M45	Z	.668	.668	0	%100
47	M46	X	1.157	1.157	0	%100
48	M46	Z	.668	.668	0	%100
49	M47	X	1.157	1.157	0	%100
50	M47	Z	.668	.668	0	%100
51	M43	X	.676	.676	0	%100
52	M43	Z	.39	.39	0	%100
53	MP4A	X	2.306	2.306	0	%100
54	MP4A	Z	1.331	1.331	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	.998	.998	0	%100
2	M1	Z	1.729	1.729	0	%100
3	M2	X	.998	.998	0	%100
4	M2	Z	1.729	1.729	0	%100
5	M13	X	.125	.125	0	%100
6	M13	Z	.217	.217	0	%100
7	M14	X	.125	.125	0	%100
8	M14	Z	.217	.217	0	%100
9	M15	X	.125	.125	0	%100
10	M15	Z	.217	.217	0	%100
11	M16	X	.125	.125	0	%100
12	M16	Z	.217	.217	0	%100
13	OVP	X	.917	.917	0	%100
14	OVP	Z	1.588	1.588	0	%100
15	M18	X	.917	.917	0	%100
16	M18	Z	1.588	1.588	0	%100
17	M19	X	.131	.131	0	%100
18	M19	Z	.226	.226	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
19	M20	X	.131	.131	0	%100
20	M20	Z	.226	.226	0	%100
21	M21	X	.379	.379	0	%100
22	M21	Z	.656	.656	0	%100
23	M22	X	.379	.379	0	%100
24	M22	Z	.656	.656	0	%100
25	M23	X	.379	.379	0	%100
26	M23	Z	.656	.656	0	%100
27	M24	X	.379	.379	0	%100
28	M24	Z	.656	.656	0	%100
29	M25	X	.744	.744	0	%100
30	M25	Z	1.289	1.289	0	%100
31	M26	X	.744	.744	0	%100
32	M26	Z	1.289	1.289	0	%100
33	M27	X	.517	.517	0	%100
34	M27	Z	.896	.896	0	%100
35	M28	X	.517	.517	0	%100
36	M28	Z	.896	.896	0	%100
37	MP3A	X	1.331	1.331	0	%100
38	MP3A	Z	2.306	2.306	0	%100
39	MP2A	X	1.331	1.331	0	%100
40	MP2A	Z	2.306	2.306	0	%100
41	MP1A	X	1.331	1.331	0	%100
42	MP1A	Z	2.306	2.306	0	%100
43	M44	X	.668	.668	0	%100
44	M44	Z	1.157	1.157	0	%100
45	M45	X	.668	.668	0	%100
46	M45	Z	1.157	1.157	0	%100
47	M46	X	.668	.668	0	%100
48	M46	Z	1.157	1.157	0	%100
49	M47	X	.668	.668	0	%100
50	M47	Z	1.157	1.157	0	%100
51	M43	X	.008	.008	0	%100
52	M43	Z	.014	.014	0	%100
53	MP4A	X	1.331	1.331	0	%100
54	MP4A	Z	2.306	2.306	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	2.662	2.662	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	2.662	2.662	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	1.16	1.16	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	1.16	1.16	0	%100
17	M19	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
18	M19	Z	1.16	1.16	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	1.16	1.16	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	1.01	1.01	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	1.01	1.01	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	1.01	1.01	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	1.01	1.01	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	1.294	1.294	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	1.294	1.294	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	1.294	1.294	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	1.294	1.294	0	%100
37	MP3A	X	0	0	0	%100
38	MP3A	Z	2.662	2.662	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	2.662	2.662	0	%100
41	MP1A	X	0	0	0	%100
42	MP1A	Z	2.662	2.662	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	1.336	1.336	0	%100
45	M45	X	0	0	0	%100
46	M45	Z	1.336	1.336	0	%100
47	M46	X	0	0	0	%100
48	M46	Z	1.336	1.336	0	%100
49	M47	X	0	0	0	%100
50	M47	Z	1.336	1.336	0	%100
51	M43	X	0	0	0	%100
52	M43	Z	.436	.436	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	2.662	2.662	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-.998	-.998	0	%100
2	M1	Z	1.729	1.729	0	%100
3	M2	X	-.998	-.998	0	%100
4	M2	Z	1.729	1.729	0	%100
5	M13	X	-.125	-.125	0	%100
6	M13	Z	.217	.217	0	%100
7	M14	X	-.125	-.125	0	%100
8	M14	Z	.217	.217	0	%100
9	M15	X	-.125	-.125	0	%100
10	M15	Z	.217	.217	0	%100
11	M16	X	-.125	-.125	0	%100
12	M16	Z	.217	.217	0	%100
13	OVP	X	-.131	-.131	0	%100
14	OVP	Z	.226	.226	0	%100
15	M18	X	-.131	-.131	0	%100
16	M18	Z	.226	.226	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
17	M19	X	-.917	-.917	0	%100
18	M19	Z	1.588	1.588	0	%100
19	M20	X	-.917	-.917	0	%100
20	M20	Z	1.588	1.588	0	%100
21	M21	X	-.379	-.379	0	%100
22	M21	Z	.656	.656	0	%100
23	M22	X	-.379	-.379	0	%100
24	M22	Z	.656	.656	0	%100
25	M23	X	-.379	-.379	0	%100
26	M23	Z	.656	.656	0	%100
27	M24	X	-.379	-.379	0	%100
28	M24	Z	.656	.656	0	%100
29	M25	X	-.517	-.517	0	%100
30	M25	Z	.896	.896	0	%100
31	M26	X	-.517	-.517	0	%100
32	M26	Z	.896	.896	0	%100
33	M27	X	-.744	-.744	0	%100
34	M27	Z	1.289	1.289	0	%100
35	M28	X	-.744	-.744	0	%100
36	M28	Z	1.289	1.289	0	%100
37	MP3A	X	-1.331	-1.331	0	%100
38	MP3A	Z	2.306	2.306	0	%100
39	MP2A	X	-1.331	-1.331	0	%100
40	MP2A	Z	2.306	2.306	0	%100
41	MP1A	X	-1.331	-1.331	0	%100
42	MP1A	Z	2.306	2.306	0	%100
43	M44	X	-.668	-.668	0	%100
44	M44	Z	1.157	1.157	0	%100
45	M45	X	-.668	-.668	0	%100
46	M45	Z	1.157	1.157	0	%100
47	M46	X	-.668	-.668	0	%100
48	M46	Z	1.157	1.157	0	%100
49	M47	X	-.668	-.668	0	%100
50	M47	Z	1.157	1.157	0	%100
51	M43	X	-.81	-.81	0	%100
52	M43	Z	1.403	1.403	0	%100
53	MP4A	X	-1.331	-1.331	0	%100
54	MP4A	Z	2.306	2.306	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-.576	-.576	0	%100
2	M1	Z	.333	.333	0	%100
3	M2	X	-.576	-.576	0	%100
4	M2	Z	.333	.333	0	%100
5	M13	X	-.651	-.651	0	%100
6	M13	Z	.376	.376	0	%100
7	M14	X	-.651	-.651	0	%100
8	M14	Z	.376	.376	0	%100
9	M15	X	-.651	-.651	0	%100
10	M15	Z	.376	.376	0	%100
11	M16	X	-.651	-.651	0	%100
12	M16	Z	.376	.376	0	%100
13	OVP	X	-.032	-.032	0	%100
14	OVP	Z	.018	.018	0	%100
15	M18	X	-.032	-.032	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
16	M18	Z	.018	.018	0	%100
17	M19	X	-1.394	-1.394	0	%100
18	M19	Z	.805	.805	0	%100
19	M20	X	-1.394	-1.394	0	%100
20	M20	Z	.805	.805	0	%100
21	M21	X	-.219	-.219	0	%100
22	M21	Z	.126	.126	0	%100
23	M22	X	-.219	-.219	0	%100
24	M22	Z	.126	.126	0	%100
25	M23	X	-.219	-.219	0	%100
26	M23	Z	.126	.126	0	%100
27	M24	X	-.219	-.219	0	%100
28	M24	Z	.126	.126	0	%100
29	M25	X	-.84	-.84	0	%100
30	M25	Z	.485	.485	0	%100
31	M26	X	-.84	-.84	0	%100
32	M26	Z	.485	.485	0	%100
33	M27	X	-1.233	-1.233	0	%100
34	M27	Z	.712	.712	0	%100
35	M28	X	-1.233	-1.233	0	%100
36	M28	Z	.712	.712	0	%100
37	MP3A	X	-2.306	-2.306	0	%100
38	MP3A	Z	1.331	1.331	0	%100
39	MP2A	X	-2.306	-2.306	0	%100
40	MP2A	Z	1.331	1.331	0	%100
41	MP1A	X	-2.306	-2.306	0	%100
42	MP1A	Z	1.331	1.331	0	%100
43	M44	X	-1.157	-1.157	0	%100
44	M44	Z	.668	.668	0	%100
45	M45	X	-1.157	-1.157	0	%100
46	M45	Z	.668	.668	0	%100
47	M46	X	-1.157	-1.157	0	%100
48	M46	Z	.668	.668	0	%100
49	M47	X	-1.157	-1.157	0	%100
50	M47	Z	.668	.668	0	%100
51	M43	X	-2.065	-2.065	0	%100
52	M43	Z	1.192	1.192	0	%100
53	MP4A	X	-2.306	-2.306	0	%100
54	MP4A	Z	1.331	1.331	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-1.002	-1.002	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-1.002	-1.002	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-1.002	-1.002	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-1.002	-1.002	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	-.711	-.711	0	%100
14	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
15	M18	X	-.711	-.711	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-.711	-.711	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-.711	-.711	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-1.164	-1.164	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-1.164	-1.164	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-1.164	-1.164	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-1.164	-1.164	0	%100
36	M28	Z	0	0	0	%100
37	MP3A	X	-2.662	-2.662	0	%100
38	MP3A	Z	0	0	0	%100
39	MP2A	X	-2.662	-2.662	0	%100
40	MP2A	Z	0	0	0	%100
41	MP1A	X	-2.662	-2.662	0	%100
42	MP1A	Z	0	0	0	%100
43	M44	X	-1.336	-1.336	0	%100
44	M44	Z	0	0	0	%100
45	M45	X	-1.336	-1.336	0	%100
46	M45	Z	0	0	0	%100
47	M46	X	-1.336	-1.336	0	%100
48	M46	Z	0	0	0	%100
49	M47	X	-1.336	-1.336	0	%100
50	M47	Z	0	0	0	%100
51	M43	X	-1.964	-1.964	0	%100
52	M43	Z	0	0	0	%100
53	MP4A	X	-2.662	-2.662	0	%100
54	MP4A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-.576	-.576	0	%100
2	M1	Z	-.333	-.333	0	%100
3	M2	X	-.576	-.576	0	%100
4	M2	Z	-.333	-.333	0	%100
5	M13	X	-.651	-.651	0	%100
6	M13	Z	-.376	-.376	0	%100
7	M14	X	-.651	-.651	0	%100
8	M14	Z	-.376	-.376	0	%100
9	M15	X	-.651	-.651	0	%100
10	M15	Z	-.376	-.376	0	%100
11	M16	X	-.651	-.651	0	%100
12	M16	Z	-.376	-.376	0	%100
13	OVP	X	-1.394	-1.394	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
14	OVP	Z	-.805	-.805	0	%100
15	M18	X	-1.394	-1.394	0	%100
16	M18	Z	-.805	-.805	0	%100
17	M19	X	-.032	-.032	0	%100
18	M19	Z	-.018	-.018	0	%100
19	M20	X	-.032	-.032	0	%100
20	M20	Z	-.018	-.018	0	%100
21	M21	X	-.219	-.219	0	%100
22	M21	Z	-.126	-.126	0	%100
23	M22	X	-.219	-.219	0	%100
24	M22	Z	-.126	-.126	0	%100
25	M23	X	-.219	-.219	0	%100
26	M23	Z	-.126	-.126	0	%100
27	M24	X	-.219	-.219	0	%100
28	M24	Z	-.126	-.126	0	%100
29	M25	X	-1.233	-1.233	0	%100
30	M25	Z	-.712	-.712	0	%100
31	M26	X	-1.233	-1.233	0	%100
32	M26	Z	-.712	-.712	0	%100
33	M27	X	-.84	-.84	0	%100
34	M27	Z	-.485	-.485	0	%100
35	M28	X	-.84	-.84	0	%100
36	M28	Z	-.485	-.485	0	%100
37	MP3A	X	-2.306	-2.306	0	%100
38	MP3A	Z	-1.331	-1.331	0	%100
39	MP2A	X	-2.306	-2.306	0	%100
40	MP2A	Z	-1.331	-1.331	0	%100
41	MP1A	X	-2.306	-2.306	0	%100
42	MP1A	Z	-1.331	-1.331	0	%100
43	M44	X	-1.157	-1.157	0	%100
44	M44	Z	-.668	-.668	0	%100
45	M45	X	-1.157	-1.157	0	%100
46	M45	Z	-.668	-.668	0	%100
47	M46	X	-1.157	-1.157	0	%100
48	M46	Z	-.668	-.668	0	%100
49	M47	X	-1.157	-1.157	0	%100
50	M47	Z	-.668	-.668	0	%100
51	M43	X	-.676	-.676	0	%100
52	M43	Z	-.39	-.39	0	%100
53	MP4A	X	-2.306	-2.306	0	%100
54	MP4A	Z	-1.331	-1.331	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-.998	-.998	0	%100
2	M1	Z	-1.729	-1.729	0	%100
3	M2	X	-.998	-.998	0	%100
4	M2	Z	-1.729	-1.729	0	%100
5	M13	X	-.125	-.125	0	%100
6	M13	Z	-.217	-.217	0	%100
7	M14	X	-.125	-.125	0	%100
8	M14	Z	-.217	-.217	0	%100
9	M15	X	-.125	-.125	0	%100
10	M15	Z	-.217	-.217	0	%100
11	M16	X	-.125	-.125	0	%100
12	M16	Z	-.217	-.217	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
13	OVP	X	-.917	-.917	0	%100
14	OVP	Z	-1.588	-1.588	0	%100
15	M18	X	-.917	-.917	0	%100
16	M18	Z	-1.588	-1.588	0	%100
17	M19	X	-.131	-.131	0	%100
18	M19	Z	-.226	-.226	0	%100
19	M20	X	-.131	-.131	0	%100
20	M20	Z	-.226	-.226	0	%100
21	M21	X	-.379	-.379	0	%100
22	M21	Z	-.656	-.656	0	%100
23	M22	X	-.379	-.379	0	%100
24	M22	Z	-.656	-.656	0	%100
25	M23	X	-.379	-.379	0	%100
26	M23	Z	-.656	-.656	0	%100
27	M24	X	-.379	-.379	0	%100
28	M24	Z	-.656	-.656	0	%100
29	M25	X	-.744	-.744	0	%100
30	M25	Z	-1.289	-1.289	0	%100
31	M26	X	-.744	-.744	0	%100
32	M26	Z	-1.289	-1.289	0	%100
33	M27	X	-.517	-.517	0	%100
34	M27	Z	-.896	-.896	0	%100
35	M28	X	-.517	-.517	0	%100
36	M28	Z	-.896	-.896	0	%100
37	MP3A	X	-1.331	-1.331	0	%100
38	MP3A	Z	-2.306	-2.306	0	%100
39	MP2A	X	-1.331	-1.331	0	%100
40	MP2A	Z	-2.306	-2.306	0	%100
41	MP1A	X	-1.331	-1.331	0	%100
42	MP1A	Z	-2.306	-2.306	0	%100
43	M44	X	-.668	-.668	0	%100
44	M44	Z	-1.157	-1.157	0	%100
45	M45	X	-.668	-.668	0	%100
46	M45	Z	-1.157	-1.157	0	%100
47	M46	X	-.668	-.668	0	%100
48	M46	Z	-1.157	-1.157	0	%100
49	M47	X	-.668	-.668	0	%100
50	M47	Z	-1.157	-1.157	0	%100
51	M43	X	-.008	-.008	0	%100
52	M43	Z	-.014	-.014	0	%100
53	MP4A	X	-1.331	-1.331	0	%100
54	MP4A	Z	-2.306	-2.306	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.542	-.542	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.542	-.542	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	-.214	-.214	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-.214	-.214	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-.214	-.214	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-.214	-.214	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-.118	-.118	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-.118	-.118	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-.118	-.118	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-.118	-.118	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-.122	-.122	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-.122	-.122	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-.122	-.122	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-.122	-.122	0	%100
37	MP3A	X	0	0	0	%100
38	MP3A	Z	-.542	-.542	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	-.542	-.542	0	%100
41	MP1A	X	0	0	0	%100
42	MP1A	Z	-.542	-.542	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	-.118	-.118	0	%100
45	M45	X	0	0	0	%100
46	M45	Z	-.118	-.118	0	%100
47	M46	X	0	0	0	%100
48	M46	Z	-.118	-.118	0	%100
49	M47	X	0	0	0	%100
50	M47	Z	-.118	-.118	0	%100
51	M43	X	0	0	0	%100
52	M43	Z	-.081	-.081	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	-.542	-.542	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	.203	.203	0	%100
2	M1	Z	-.352	-.352	0	%100
3	M2	X	.203	.203	0	%100
4	M2	Z	-.352	-.352	0	%100
5	M13	X	.015	.015	0	%100
6	M13	Z	-.025	-.025	0	%100
7	M14	X	.015	.015	0	%100
8	M14	Z	-.025	-.025	0	%100
9	M15	X	.015	.015	0	%100
10	M15	Z	-.025	-.025	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
11	M16	X	.015	.015	0	%100
12	M16	Z	-.025	-.025	0	%100
13	OVP	X	.024	.024	0	%100
14	OVP	Z	-.042	-.042	0	%100
15	M18	X	.024	.024	0	%100
16	M18	Z	-.042	-.042	0	%100
17	M19	X	.169	.169	0	%100
18	M19	Z	-.293	-.293	0	%100
19	M20	X	.169	.169	0	%100
20	M20	Z	-.293	-.293	0	%100
21	M21	X	.044	.044	0	%100
22	M21	Z	-.076	-.076	0	%100
23	M22	X	.044	.044	0	%100
24	M22	Z	-.076	-.076	0	%100
25	M23	X	.044	.044	0	%100
26	M23	Z	-.076	-.076	0	%100
27	M24	X	.044	.044	0	%100
28	M24	Z	-.076	-.076	0	%100
29	M25	X	.049	.049	0	%100
30	M25	Z	-.084	-.084	0	%100
31	M26	X	.049	.049	0	%100
32	M26	Z	-.084	-.084	0	%100
33	M27	X	.07	.07	0	%100
34	M27	Z	-.122	-.122	0	%100
35	M28	X	.07	.07	0	%100
36	M28	Z	-.122	-.122	0	%100
37	MP3A	X	.271	.271	0	%100
38	MP3A	Z	-.469	-.469	0	%100
39	MP2A	X	.271	.271	0	%100
40	MP2A	Z	-.469	-.469	0	%100
41	MP1A	X	.271	.271	0	%100
42	MP1A	Z	-.469	-.469	0	%100
43	M44	X	.059	.059	0	%100
44	M44	Z	-.102	-.102	0	%100
45	M45	X	.059	.059	0	%100
46	M45	Z	-.102	-.102	0	%100
47	M46	X	.059	.059	0	%100
48	M46	Z	-.102	-.102	0	%100
49	M47	X	.059	.059	0	%100
50	M47	Z	-.102	-.102	0	%100
51	M43	X	.151	.151	0	%100
52	M43	Z	-.262	-.262	0	%100
53	MP4A	X	.271	.271	0	%100
54	MP4A	Z	-.469	-.469	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	.117	.117	0	%100
2	M1	Z	-.068	-.068	0	%100
3	M2	X	.117	.117	0	%100
4	M2	Z	-.068	-.068	0	%100
5	M13	X	.076	.076	0	%100
6	M13	Z	-.044	-.044	0	%100
7	M14	X	.076	.076	0	%100
8	M14	Z	-.044	-.044	0	%100
9	M15	X	.076	.076	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
10	M15	Z	-.044	-.044	0	%100
11	M16	X	.076	.076	0	%100
12	M16	Z	-.044	-.044	0	%100
13	OVP	X	.006	.006	0	%100
14	OVP	Z	-.003	-.003	0	%100
15	M18	X	.006	.006	0	%100
16	M18	Z	-.003	-.003	0	%100
17	M19	X	.257	.257	0	%100
18	M19	Z	-.148	-.148	0	%100
19	M20	X	.257	.257	0	%100
20	M20	Z	-.148	-.148	0	%100
21	M21	X	.025	.025	0	%100
22	M21	Z	-.015	-.015	0	%100
23	M22	X	.025	.025	0	%100
24	M22	Z	-.015	-.015	0	%100
25	M23	X	.025	.025	0	%100
26	M23	Z	-.015	-.015	0	%100
27	M24	X	.025	.025	0	%100
28	M24	Z	-.015	-.015	0	%100
29	M25	X	.079	.079	0	%100
30	M25	Z	-.046	-.046	0	%100
31	M26	X	.079	.079	0	%100
32	M26	Z	-.046	-.046	0	%100
33	M27	X	.116	.116	0	%100
34	M27	Z	-.067	-.067	0	%100
35	M28	X	.116	.116	0	%100
36	M28	Z	-.067	-.067	0	%100
37	MP3A	X	.469	.469	0	%100
38	MP3A	Z	-.271	-.271	0	%100
39	MP2A	X	.469	.469	0	%100
40	MP2A	Z	-.271	-.271	0	%100
41	MP1A	X	.469	.469	0	%100
42	MP1A	Z	-.271	-.271	0	%100
43	M44	X	.102	.102	0	%100
44	M44	Z	-.059	-.059	0	%100
45	M45	X	.102	.102	0	%100
46	M45	Z	-.059	-.059	0	%100
47	M46	X	.102	.102	0	%100
48	M46	Z	-.059	-.059	0	%100
49	M47	X	.102	.102	0	%100
50	M47	Z	-.059	-.059	0	%100
51	M43	X	.385	.385	0	%100
52	M43	Z	-.222	-.222	0	%100
53	MP4A	X	.469	.469	0	%100
54	MP4A	Z	-.271	-.271	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	.118	.118	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	.118	.118	0	%100
8	M14	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
9	M15	X	.118	.118	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	.118	.118	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	.131	.131	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	.131	.131	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	.131	.131	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	.131	.131	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	.11	.11	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	.11	.11	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	.11	.11	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	.11	.11	0	%100
36	M28	Z	0	0	0	%100
37	MP3A	X	.542	.542	0	%100
38	MP3A	Z	0	0	0	%100
39	MP2A	X	.542	.542	0	%100
40	MP2A	Z	0	0	0	%100
41	MP1A	X	.542	.542	0	%100
42	MP1A	Z	0	0	0	%100
43	M44	X	.118	.118	0	%100
44	M44	Z	0	0	0	%100
45	M45	X	.118	.118	0	%100
46	M45	Z	0	0	0	%100
47	M46	X	.118	.118	0	%100
48	M46	Z	0	0	0	%100
49	M47	X	.118	.118	0	%100
50	M47	Z	0	0	0	%100
51	M43	X	.366	.366	0	%100
52	M43	Z	0	0	0	%100
53	MP4A	X	.542	.542	0	%100
54	MP4A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	.117	.117	0	%100
2	M1	Z	.068	.068	0	%100
3	M2	X	.117	.117	0	%100
4	M2	Z	.068	.068	0	%100
5	M13	X	.076	.076	0	%100
6	M13	Z	.044	.044	0	%100
7	M14	X	.076	.076	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
8	M14	Z	.044	.044	0	%100
9	M15	X	.076	.076	0	%100
10	M15	Z	.044	.044	0	%100
11	M16	X	.076	.076	0	%100
12	M16	Z	.044	.044	0	%100
13	OVP	X	.257	.257	0	%100
14	OVP	Z	.148	.148	0	%100
15	M18	X	.257	.257	0	%100
16	M18	Z	.148	.148	0	%100
17	M19	X	.006	.006	0	%100
18	M19	Z	.003	.003	0	%100
19	M20	X	.006	.006	0	%100
20	M20	Z	.003	.003	0	%100
21	M21	X	.025	.025	0	%100
22	M21	Z	.015	.015	0	%100
23	M22	X	.025	.025	0	%100
24	M22	Z	.015	.015	0	%100
25	M23	X	.025	.025	0	%100
26	M23	Z	.015	.015	0	%100
27	M24	X	.025	.025	0	%100
28	M24	Z	.015	.015	0	%100
29	M25	X	.116	.116	0	%100
30	M25	Z	.067	.067	0	%100
31	M26	X	.116	.116	0	%100
32	M26	Z	.067	.067	0	%100
33	M27	X	.079	.079	0	%100
34	M27	Z	.046	.046	0	%100
35	M28	X	.079	.079	0	%100
36	M28	Z	.046	.046	0	%100
37	MP3A	X	.469	.469	0	%100
38	MP3A	Z	.271	.271	0	%100
39	MP2A	X	.469	.469	0	%100
40	MP2A	Z	.271	.271	0	%100
41	MP1A	X	.469	.469	0	%100
42	MP1A	Z	.271	.271	0	%100
43	M44	X	.102	.102	0	%100
44	M44	Z	.059	.059	0	%100
45	M45	X	.102	.102	0	%100
46	M45	Z	.059	.059	0	%100
47	M46	X	.102	.102	0	%100
48	M46	Z	.059	.059	0	%100
49	M47	X	.102	.102	0	%100
50	M47	Z	.059	.059	0	%100
51	M43	X	.126	.126	0	%100
52	M43	Z	.073	.073	0	%100
53	MP4A	X	.469	.469	0	%100
54	MP4A	Z	.271	.271	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	.203	.203	0	%100
2	M1	Z	.352	.352	0	%100
3	M2	X	.203	.203	0	%100
4	M2	Z	.352	.352	0	%100
5	M13	X	.015	.015	0	%100
6	M13	Z	.025	.025	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
7	M14	X	.015	.015	0	%100
8	M14	Z	.025	.025	0	%100
9	M15	X	.015	.015	0	%100
10	M15	Z	.025	.025	0	%100
11	M16	X	.015	.015	0	%100
12	M16	Z	.025	.025	0	%100
13	OVP	X	.169	.169	0	%100
14	OVP	Z	.293	.293	0	%100
15	M18	X	.169	.169	0	%100
16	M18	Z	.293	.293	0	%100
17	M19	X	.024	.024	0	%100
18	M19	Z	.042	.042	0	%100
19	M20	X	.024	.024	0	%100
20	M20	Z	.042	.042	0	%100
21	M21	X	.044	.044	0	%100
22	M21	Z	.076	.076	0	%100
23	M22	X	.044	.044	0	%100
24	M22	Z	.076	.076	0	%100
25	M23	X	.044	.044	0	%100
26	M23	Z	.076	.076	0	%100
27	M24	X	.044	.044	0	%100
28	M24	Z	.076	.076	0	%100
29	M25	X	.07	.07	0	%100
30	M25	Z	.122	.122	0	%100
31	M26	X	.07	.07	0	%100
32	M26	Z	.122	.122	0	%100
33	M27	X	.049	.049	0	%100
34	M27	Z	.084	.084	0	%100
35	M28	X	.049	.049	0	%100
36	M28	Z	.084	.084	0	%100
37	MP3A	X	.271	.271	0	%100
38	MP3A	Z	.469	.469	0	%100
39	MP2A	X	.271	.271	0	%100
40	MP2A	Z	.469	.469	0	%100
41	MP1A	X	.271	.271	0	%100
42	MP1A	Z	.469	.469	0	%100
43	M44	X	.059	.059	0	%100
44	M44	Z	.102	.102	0	%100
45	M45	X	.059	.059	0	%100
46	M45	Z	.102	.102	0	%100
47	M46	X	.059	.059	0	%100
48	M46	Z	.102	.102	0	%100
49	M47	X	.059	.059	0	%100
50	M47	Z	.102	.102	0	%100
51	M43	X	.002	.002	0	%100
52	M43	Z	.003	.003	0	%100
53	MP4A	X	.271	.271	0	%100
54	MP4A	Z	.469	.469	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.542	.542	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.542	.542	0	%100
5	M13	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	.214	.214	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	.214	.214	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	.214	.214	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	.214	.214	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	.118	.118	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	.118	.118	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	.118	.118	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	.118	.118	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	.122	.122	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	.122	.122	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	.122	.122	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	.122	.122	0	%100
37	MP3A	X	0	0	0	%100
38	MP3A	Z	.542	.542	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	.542	.542	0	%100
41	MP1A	X	0	0	0	%100
42	MP1A	Z	.542	.542	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	.118	.118	0	%100
45	M45	X	0	0	0	%100
46	M45	Z	.118	.118	0	%100
47	M46	X	0	0	0	%100
48	M46	Z	.118	.118	0	%100
49	M47	X	0	0	0	%100
50	M47	Z	.118	.118	0	%100
51	M43	X	0	0	0	%100
52	M43	Z	.081	.081	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	.542	.542	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-.203	-.203	0	%100
2	M1	Z	.352	.352	0	%100
3	M2	X	-.203	-.203	0	%100
4	M2	Z	.352	.352	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
5	M13	X	-.015	-.015	0	%100
6	M13	Z	.025	.025	0	%100
7	M14	X	-.015	-.015	0	%100
8	M14	Z	.025	.025	0	%100
9	M15	X	-.015	-.015	0	%100
10	M15	Z	.025	.025	0	%100
11	M16	X	-.015	-.015	0	%100
12	M16	Z	.025	.025	0	%100
13	OVP	X	-.024	-.024	0	%100
14	OVP	Z	.042	.042	0	%100
15	M18	X	-.024	-.024	0	%100
16	M18	Z	.042	.042	0	%100
17	M19	X	-.169	-.169	0	%100
18	M19	Z	.293	.293	0	%100
19	M20	X	-.169	-.169	0	%100
20	M20	Z	.293	.293	0	%100
21	M21	X	-.044	-.044	0	%100
22	M21	Z	.076	.076	0	%100
23	M22	X	-.044	-.044	0	%100
24	M22	Z	.076	.076	0	%100
25	M23	X	-.044	-.044	0	%100
26	M23	Z	.076	.076	0	%100
27	M24	X	-.044	-.044	0	%100
28	M24	Z	.076	.076	0	%100
29	M25	X	-.049	-.049	0	%100
30	M25	Z	.084	.084	0	%100
31	M26	X	-.049	-.049	0	%100
32	M26	Z	.084	.084	0	%100
33	M27	X	-.07	-.07	0	%100
34	M27	Z	.122	.122	0	%100
35	M28	X	-.07	-.07	0	%100
36	M28	Z	.122	.122	0	%100
37	MP3A	X	-.271	-.271	0	%100
38	MP3A	Z	.469	.469	0	%100
39	MP2A	X	-.271	-.271	0	%100
40	MP2A	Z	.469	.469	0	%100
41	MP1A	X	-.271	-.271	0	%100
42	MP1A	Z	.469	.469	0	%100
43	M44	X	-.059	-.059	0	%100
44	M44	Z	.102	.102	0	%100
45	M45	X	-.059	-.059	0	%100
46	M45	Z	.102	.102	0	%100
47	M46	X	-.059	-.059	0	%100
48	M46	Z	.102	.102	0	%100
49	M47	X	-.059	-.059	0	%100
50	M47	Z	.102	.102	0	%100
51	M43	X	-.151	-.151	0	%100
52	M43	Z	.262	.262	0	%100
53	MP4A	X	-.271	-.271	0	%100
54	MP4A	Z	.469	.469	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-.117	-.117	0	%100
2	M1	Z	.068	.068	0	%100
3	M2	X	-.117	-.117	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
4	M2	Z	.068	.068	0	%100
5	M13	X	-.076	-.076	0	%100
6	M13	Z	.044	.044	0	%100
7	M14	X	-.076	-.076	0	%100
8	M14	Z	.044	.044	0	%100
9	M15	X	-.076	-.076	0	%100
10	M15	Z	.044	.044	0	%100
11	M16	X	-.076	-.076	0	%100
12	M16	Z	.044	.044	0	%100
13	OVP	X	-.006	-.006	0	%100
14	OVP	Z	.003	.003	0	%100
15	M18	X	-.006	-.006	0	%100
16	M18	Z	.003	.003	0	%100
17	M19	X	-.257	-.257	0	%100
18	M19	Z	.148	.148	0	%100
19	M20	X	-.257	-.257	0	%100
20	M20	Z	.148	.148	0	%100
21	M21	X	-.025	-.025	0	%100
22	M21	Z	.015	.015	0	%100
23	M22	X	-.025	-.025	0	%100
24	M22	Z	.015	.015	0	%100
25	M23	X	-.025	-.025	0	%100
26	M23	Z	.015	.015	0	%100
27	M24	X	-.025	-.025	0	%100
28	M24	Z	.015	.015	0	%100
29	M25	X	-.079	-.079	0	%100
30	M25	Z	.046	.046	0	%100
31	M26	X	-.079	-.079	0	%100
32	M26	Z	.046	.046	0	%100
33	M27	X	-.116	-.116	0	%100
34	M27	Z	.067	.067	0	%100
35	M28	X	-.116	-.116	0	%100
36	M28	Z	.067	.067	0	%100
37	MP3A	X	-.469	-.469	0	%100
38	MP3A	Z	.271	.271	0	%100
39	MP2A	X	-.469	-.469	0	%100
40	MP2A	Z	.271	.271	0	%100
41	MP1A	X	-.469	-.469	0	%100
42	MP1A	Z	.271	.271	0	%100
43	M44	X	-.102	-.102	0	%100
44	M44	Z	.059	.059	0	%100
45	M45	X	-.102	-.102	0	%100
46	M45	Z	.059	.059	0	%100
47	M46	X	-.102	-.102	0	%100
48	M46	Z	.059	.059	0	%100
49	M47	X	-.102	-.102	0	%100
50	M47	Z	.059	.059	0	%100
51	M43	X	-.385	-.385	0	%100
52	M43	Z	.222	.222	0	%100
53	MP4A	X	-.469	-.469	0	%100
54	MP4A	Z	.271	.271	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-.118	-.118	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-.118	-.118	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-.118	-.118	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-.118	-.118	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	-.131	-.131	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	-.131	-.131	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-.131	-.131	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-.131	-.131	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-.11	-.11	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-.11	-.11	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-.11	-.11	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-.11	-.11	0	%100
36	M28	Z	0	0	0	%100
37	MP3A	X	-.542	-.542	0	%100
38	MP3A	Z	0	0	0	%100
39	MP2A	X	-.542	-.542	0	%100
40	MP2A	Z	0	0	0	%100
41	MP1A	X	-.542	-.542	0	%100
42	MP1A	Z	0	0	0	%100
43	M44	X	-.118	-.118	0	%100
44	M44	Z	0	0	0	%100
45	M45	X	-.118	-.118	0	%100
46	M45	Z	0	0	0	%100
47	M46	X	-.118	-.118	0	%100
48	M46	Z	0	0	0	%100
49	M47	X	-.118	-.118	0	%100
50	M47	Z	0	0	0	%100
51	M43	X	-.366	-.366	0	%100
52	M43	Z	0	0	0	%100
53	MP4A	X	-.542	-.542	0	%100
54	MP4A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-.117	-.117	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
2	M1	Z	-.068	-.068	0	%100
3	M2	X	-.117	-.117	0	%100
4	M2	Z	-.068	-.068	0	%100
5	M13	X	-.076	-.076	0	%100
6	M13	Z	-.044	-.044	0	%100
7	M14	X	-.076	-.076	0	%100
8	M14	Z	-.044	-.044	0	%100
9	M15	X	-.076	-.076	0	%100
10	M15	Z	-.044	-.044	0	%100
11	M16	X	-.076	-.076	0	%100
12	M16	Z	-.044	-.044	0	%100
13	OVP	X	-.257	-.257	0	%100
14	OVP	Z	-.148	-.148	0	%100
15	M18	X	-.257	-.257	0	%100
16	M18	Z	-.148	-.148	0	%100
17	M19	X	-.006	-.006	0	%100
18	M19	Z	-.003	-.003	0	%100
19	M20	X	-.006	-.006	0	%100
20	M20	Z	-.003	-.003	0	%100
21	M21	X	-.025	-.025	0	%100
22	M21	Z	-.015	-.015	0	%100
23	M22	X	-.025	-.025	0	%100
24	M22	Z	-.015	-.015	0	%100
25	M23	X	-.025	-.025	0	%100
26	M23	Z	-.015	-.015	0	%100
27	M24	X	-.025	-.025	0	%100
28	M24	Z	-.015	-.015	0	%100
29	M25	X	-.116	-.116	0	%100
30	M25	Z	-.067	-.067	0	%100
31	M26	X	-.116	-.116	0	%100
32	M26	Z	-.067	-.067	0	%100
33	M27	X	-.079	-.079	0	%100
34	M27	Z	-.046	-.046	0	%100
35	M28	X	-.079	-.079	0	%100
36	M28	Z	-.046	-.046	0	%100
37	MP3A	X	-.469	-.469	0	%100
38	MP3A	Z	-.271	-.271	0	%100
39	MP2A	X	-.469	-.469	0	%100
40	MP2A	Z	-.271	-.271	0	%100
41	MP1A	X	-.469	-.469	0	%100
42	MP1A	Z	-.271	-.271	0	%100
43	M44	X	-.102	-.102	0	%100
44	M44	Z	-.059	-.059	0	%100
45	M45	X	-.102	-.102	0	%100
46	M45	Z	-.059	-.059	0	%100
47	M46	X	-.102	-.102	0	%100
48	M46	Z	-.059	-.059	0	%100
49	M47	X	-.102	-.102	0	%100
50	M47	Z	-.059	-.059	0	%100
51	M43	X	-.126	-.126	0	%100
52	M43	Z	-.073	-.073	0	%100
53	MP4A	X	-.469	-.469	0	%100
54	MP4A	Z	-.271	-.271	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[l...	Start Location[ft,...	End Location[ft,%]
1	M1	X	-.203	-.203	0	%100
2	M1	Z	-.352	-.352	0	%100
3	M2	X	-.203	-.203	0	%100
4	M2	Z	-.352	-.352	0	%100
5	M13	X	-.015	-.015	0	%100
6	M13	Z	-.025	-.025	0	%100
7	M14	X	-.015	-.015	0	%100
8	M14	Z	-.025	-.025	0	%100
9	M15	X	-.015	-.015	0	%100
10	M15	Z	-.025	-.025	0	%100
11	M16	X	-.015	-.015	0	%100
12	M16	Z	-.025	-.025	0	%100
13	OVP	X	-.169	-.169	0	%100
14	OVP	Z	-.293	-.293	0	%100
15	M18	X	-.169	-.169	0	%100
16	M18	Z	-.293	-.293	0	%100
17	M19	X	-.024	-.024	0	%100
18	M19	Z	-.042	-.042	0	%100
19	M20	X	-.024	-.024	0	%100
20	M20	Z	-.042	-.042	0	%100
21	M21	X	-.044	-.044	0	%100
22	M21	Z	-.076	-.076	0	%100
23	M22	X	-.044	-.044	0	%100
24	M22	Z	-.076	-.076	0	%100
25	M23	X	-.044	-.044	0	%100
26	M23	Z	-.076	-.076	0	%100
27	M24	X	-.044	-.044	0	%100
28	M24	Z	-.076	-.076	0	%100
29	M25	X	-.07	-.07	0	%100
30	M25	Z	-.122	-.122	0	%100
31	M26	X	-.07	-.07	0	%100
32	M26	Z	-.122	-.122	0	%100
33	M27	X	-.049	-.049	0	%100
34	M27	Z	-.084	-.084	0	%100
35	M28	X	-.049	-.049	0	%100
36	M28	Z	-.084	-.084	0	%100
37	MP3A	X	-.271	-.271	0	%100
38	MP3A	Z	-.469	-.469	0	%100
39	MP2A	X	-.271	-.271	0	%100
40	MP2A	Z	-.469	-.469	0	%100
41	MP1A	X	-.271	-.271	0	%100
42	MP1A	Z	-.469	-.469	0	%100
43	M44	X	-.059	-.059	0	%100
44	M44	Z	-.102	-.102	0	%100
45	M45	X	-.059	-.059	0	%100
46	M45	Z	-.102	-.102	0	%100
47	M46	X	-.059	-.059	0	%100
48	M46	Z	-.102	-.102	0	%100
49	M47	X	-.059	-.059	0	%100
50	M47	Z	-.102	-.102	0	%100
51	M43	X	-.002	-.002	0	%100
52	M43	Z	-.003	-.003	0	%100
53	MP4A	X	-.271	-.271	0	%100
54	MP4A	Z	-.469	-.469	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N35	max	739.707	10	1161.135	21	1655.046	13	-.263	6	0	51	.134	9
2		min	-461.414	49	479.326	3	-238.325	7	-.7	24	0	1	-.094	49
3	N36	max	461.541	49	1090.611	15	1036.021	2	-.201	8	0	51	.136	9
4		min	-565.525	5	453.777	9	-2251.087	8	-.645	14	0	1	-.09	49
5	N61A	max	437.993	9	27.109	15	881.911	9	0	51	0	51	0	51
6		min	-439.899	3	12.638	12	-880.14	3	0	1	0	1	0	1
7	Totals:	max	1358.337	10	2265.021	21	1932.524	1						
8		min	-1358.338	4	1009.517	3	-1932.519	7						

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*...	phi*...	phi*...	...	Eqn
1	M22	PL5/8X...	.366	.531	20	.097	.531	y	8	67591.76	6890...	.897	5.024	...	H1-...
2	M24	PL5/8X...	.361	.531	23	.073	.437	y	1	67591.76	6890...	.897	5.024	...	H1-...
3	M2	PIPE_...	.321	3.776	8	.105	3.646		9	14558.792	50715	3.596	3.596	...	H1-...
4	M23	PL5/8X...	.268	.531	26	.044	.531	y	1	67591.76	6890...	.897	5.024	...	H1-...
5	M21	PL5/8X...	.261	.531	32	.091	.531	y	8	67591.76	6890...	.897	5.024	...	H1-...
6	OVP	PIPE_...	.244	0	8	.066	2.501		2	31128.25	32130	1.872	1.872	...	H1-...
7	M1	PIPE_...	.241	4.297	8	.065	8.724		20	14558.792	50715	3.596	3.596	...	H1-...
8	M16	PL5/8X...	.180	.422	20	.153	0	y	7	66184.77	6890...	.897	5.024	...	H1-...
9	M15	PL5/8X...	.180	0	21	.142	0	y	1	66184.77	6890...	.897	5.024	...	H1-...
10	M13	PL5/8X...	.173	.422	8	.245	.422	y	8	66184.77	6890...	.897	5.024	...	H1-...
11	M20	PIPE_...	.160	0	7	.063	0		24	31128.25	32130	1.872	1.872	...	H1-...
12	M14	PL5/8X...	.143	0	39	.101	.422	y	2	66184.77	6890...	.897	5.024	...	H1-...
13	M19	PIPE_...	.138	0	1	.077	0		24	31128.25	32130	1.872	1.872	...	H1-...
14	MP4A	PIPE_...	.137	2.25	49	.026	5.583		10	30038.461	50715	3.596	3.596	...	H1-...
15	MP3A	PIPE_...	.122	2.25	9	.086	2.25		9	30038.461	50715	3.596	3.596	...	H1-...
16	MP2A	PIPE_...	.120	2.25	9	.068	5.583		4	30038.461	50715	3.596	3.596	...	H1-...
17	MP1A	PIPE_...	.107	2.25	17	.026	5.583		4	30038.461	50715	3.596	3.596	...	H1-...
18	M18	PIPE_...	.099	0	2	.057	0		26	31128.25	32130	1.872	1.872	...	H1-...
19	M28	SR_0.75	.067	4.167	20	.015	0		11	2863.936	1391...	.174	.174	...	H1-...
20	M26	SR_0.75	.051	0	41	.013	4.167		2	2863.936	1391...	.174	.174	...	H1-...
21	M43	PIPE_...	.048	0	9	.003	0		21	20608.012	32130	1.872	1.872	...	H1-...
22	M45	SR_0....	.042	1.667	8	.017	0		9	2158.269	9664...	.101	.101	...	H1-...
23	M44	SR_0....	.042	1.667	8	.005	0		49	2158.269	9664...	.101	.101	...	H1-...
24	M46	SR_0....	.042	1.667	7	.012	0		9	2158.269	9664...	.101	.101	1	H1-...
25	M47	SR_0....	.030	1.667	3	.011	0		9	2158.269	9664...	.101	.101	...	H1-...
26	M27	SR_0.75	.000	0	51	.010	0		8	2863.936	1391...	.174	.174	...	H1-...
27	M25	SR_0.75	.000	0	51	.007	4.167		4	2863.936	1391...	.174	.174	...	H1-...

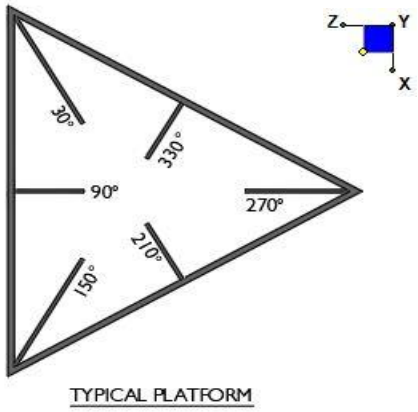
Client:	Verizon Wireless	Date:	6/30/2021
Site Name:	Milford Center CT		
Project No.	21777587A		
Title:	Mount Replacement	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

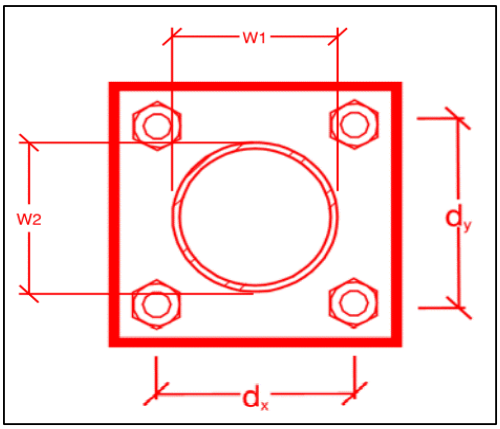
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N35	90
N36	90



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	9.5
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	3.5
Bolt Type:	A307
Bolt Diameter (in):	0.625
Required Tensile Strength (kips):	6.4
Required Shear Strength (kips):	2.4
Tensile Strength / bolt (kips):	10.0
Shear Strength / bolt (kips):	6.0
Tensile Capacity Overall:	**16.0%***
Shear Capacity Overall:	**9.9%**



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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – New Mount Passing MA

Purpose – to provide MASER CONSULTING the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

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

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the passing MA
- Verification that loading is as communicated in the Mount Analysis. NOTE If loading is different than what is conveyed in the modification drawing contact MASER CONSULTING immediately.
- Verification that the New Mount Installed is as specified in the MA
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded **to** https://pmi.vzwsmart.com as depicted on the drawings

Photo Requirements:

- *Base and "During Installation Photos"*
  - Base pictures include
    - Photo of Gate Signs showing the tower owner, site name, and number
    - Photo of carrier shelter showing the carrier site name and number if available
    - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
  - "During Installation Photos if provided - must be placed only in this folder
- *Photos taken at ground level*
  - Overall tower structure before and after installation of the modifications
  - Photos of the appropriate mount before and after installation of the new mount;
- *Photos taken at Mount Elevation*
  - Photos showing each individual sector before and also after installation of equipment.
    - These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
  - Photos showing the newly installed mount that is as specified in the Mount Analysis
  - Photos showing the safety climb wire rope above and below the mount prior to modification.

- Photos showing the climbing facility and safety climb if present.
- Photos showing the climbing facility and safety climb if present.

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.

☐ The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual: Company _____

Name _____

Signature _____

New Mount Certification:

- The contractor must certify that the New Mount installed is as specified

☐ The contractor certifies that the New Mount installed is as specified in the Passing Mount Analysis

☐ The contractor notes that the New Mount installed is not as specified and engineering approval was received for the New Mount Installed

☐ The contractor did not install the New Mount specified in the Passing Mount Analysis

Certifying Individual: Company _____

Name _____

Signature _____

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

Issue:

Remove and replace mounts with SitePro1 VFA12-HD mount. Install 8’ long P2.5 STD pipes in all positions. All mount pipes shall be spaced equally apart. Contractor shall install the proposed OVP on the right-side standoff arm when looking out from the mount. The Tie back shall attach to the right side of face horizontal and the other end to the adjust tower leg.

Response:

Schedule A – Photo & Document File Structure

- VzW Site Number / Name
  - Base & “During Installation” Photos
  - Pre-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
  - Post-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
    - Photos of climbing facility and safety climb – If Present
  - Certifications – Submission of this document including certifications
  - Specific Required Additional Photos

Structure: 46911 -VZW - MILFORD CENTER CT

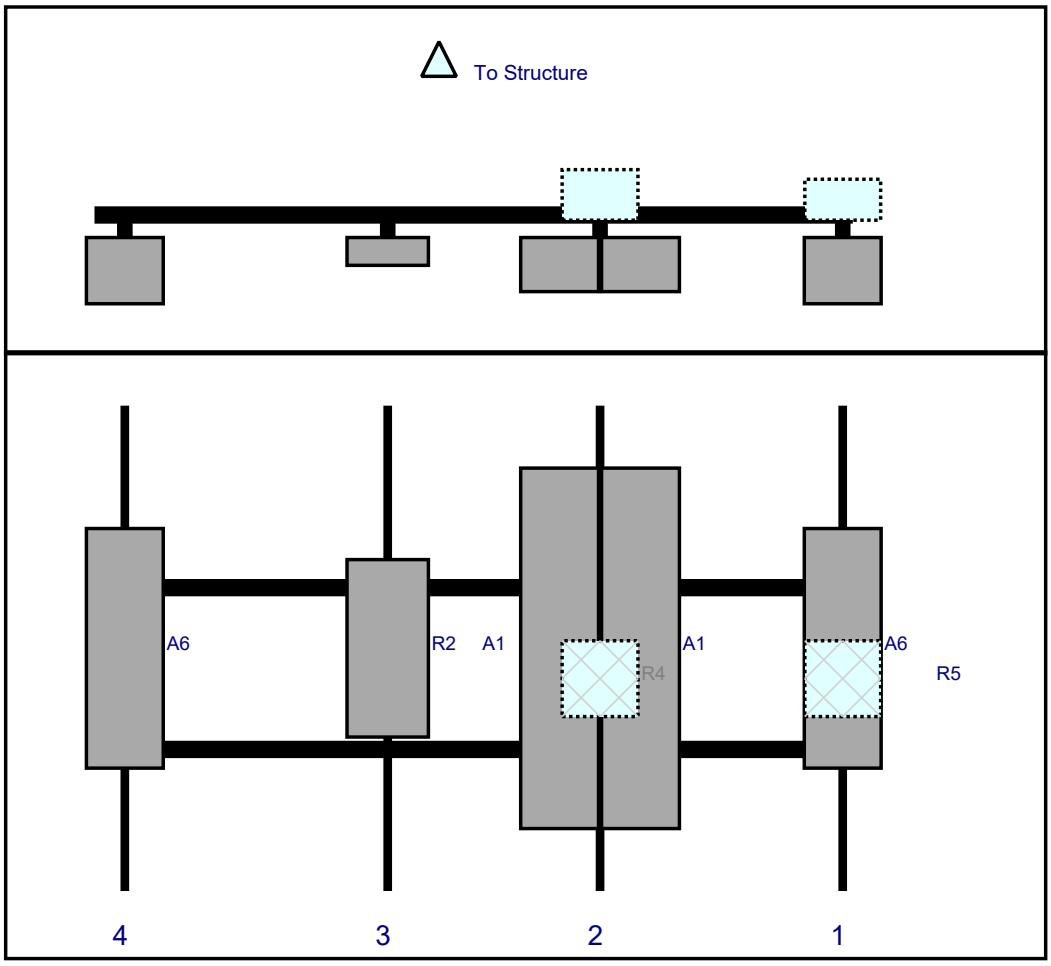
Sector: **A** 7/2/2021

Structure Type: Self Support 10078045

Mount Elev: 90.00 Page: 1

Plan View

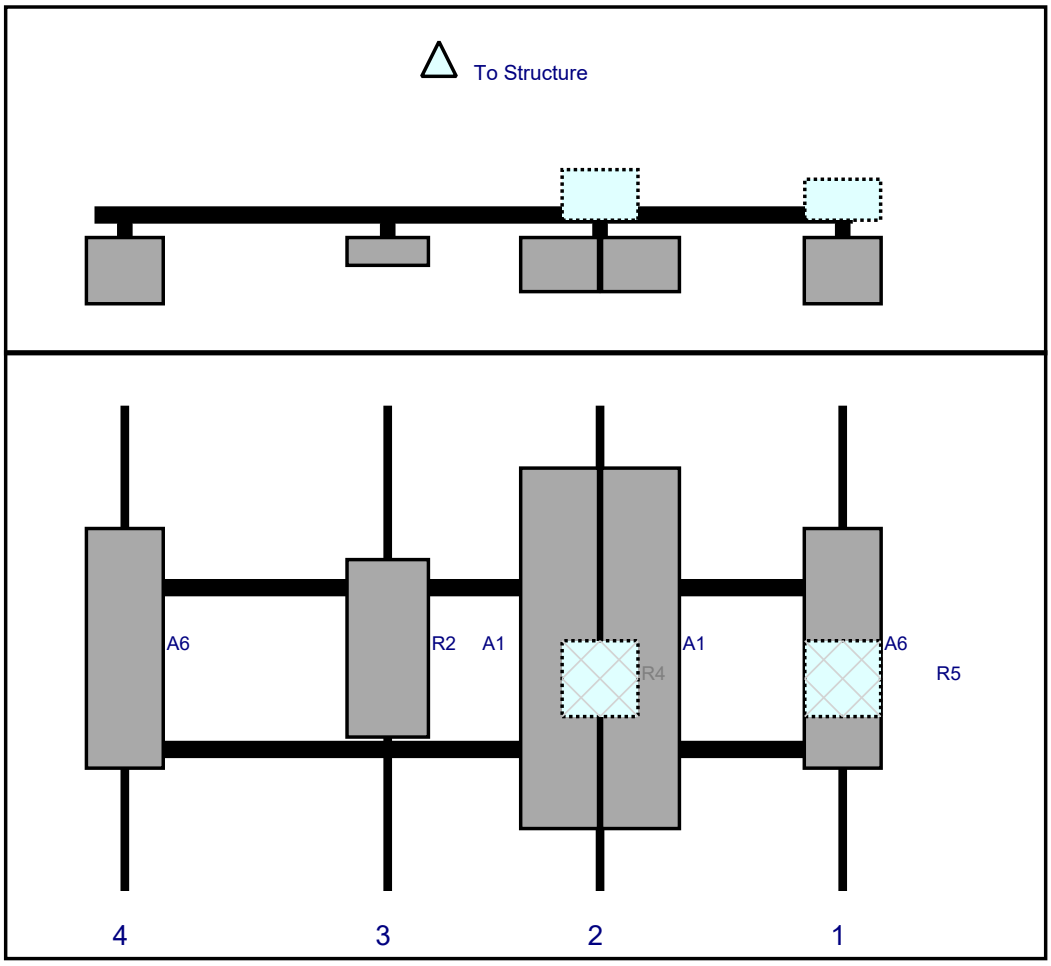
Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	LPA-80063/4CF	47.4	15.2	148	1	a	Front	48	0	Retained	03/31/2021
R5	B5/B13 RRH-BR04C	15	15	148	1	a	Behind	54	0	Added	
A1	MX06FRO660-03	71.3	15.4	100	2	a	Front	48	8	Added	
A1	MX06FRO660-03	71.3	15.4	100	2	b	Front	48	-8	Added	
R4	B2/B66A RRH-BR049	15	15	100	2	a	Behind	54	0	Added	
R2	MT6407-77A	35.1	16.1	58	3	a	Front	48	0	Added	
A6	LPA-80063/4CF	47.4	15.2	6	4	a	Front	48	0	Retained	03/31/2021

Plan View

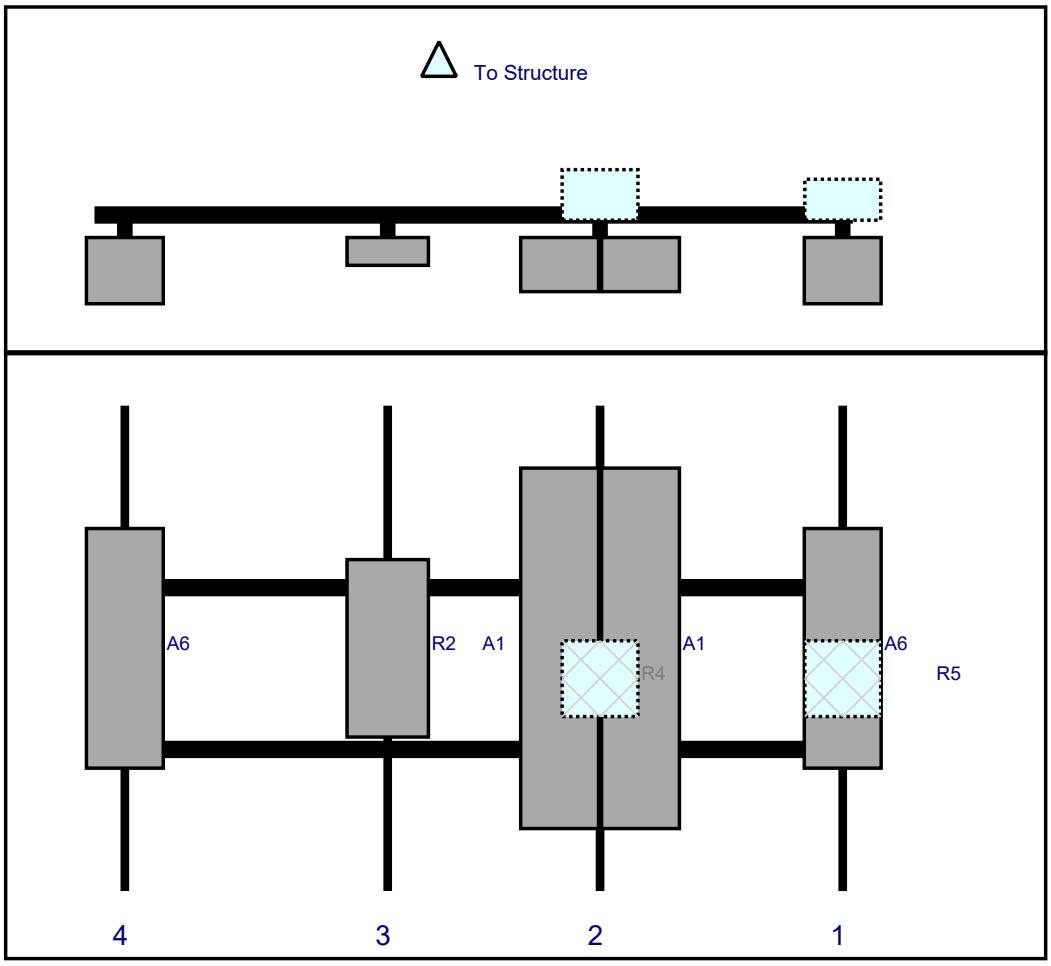
Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	LPA-80063/4CF	47.4	15.2	148	1	a	Front	48	0	Retained	03/31/2021
R5	B5/B13 RRH-BR04C	15	15	148	1	a	Behind	54	0	Added	
A1	MX06FRO660-03	71.3	15.4	100	2	a	Front	48	8	Added	
A1	MX06FRO660-03	71.3	15.4	100	2	b	Front	48	-8	Added	
R4	B2/B66A RRH-BR049	15	15	100	2	a	Behind	54	0	Added	
R2	MT6407-77A	35.1	16.1	58	3	a	Front	48	0	Added	
A6	LPA-80063/4CF	47.4	15.2	6	4	a	Front	48	0	Retained	03/31/2021

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	LPA-80063/4CF	47.4	15.2	148	1	a	Front	48	0	Retained	03/31/2021
R5	B5/B13 RRH-BR04C	15	15	148	1	a	Behind	54	0	Added	
A1	MX06FRO660-03	71.3	15.4	100	2	a	Front	48	8	Added	
A1	MX06FRO660-03	71.3	15.4	100	2	b	Front	48	-8	Added	
R4	B2/B66A RRH-BR049	15	15	100	2	a	Behind	54	0	Added	
R2	MT6407-77A	35.1	16.1	58	3	a	Front	48	0	Added	
A6	LPA-80063/4CF	47.4	15.2	6	4	a	Front	48	0	Retained	03/31/2021

Maser Consulting Connecticut

Subject:	*TIA-222-H Usage*	
Site Information	*Site ID:*	*469110-VZW / MILFORD CENTER CT*
	Site Name:	*MILFORD CENTER CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*434 Boston Post Road* *Milford, Connecticut 06460* *New Haven County*
	Latitude:	*41.228528°*
	Longitude:	*-73.070139°*
Structure Information	*Tower Type:*	*150-Ft Self Support*
	Mount Type:	*13.00-Ft Sector Mount*

To Whom It May Concern,

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

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

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

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

Sincerely,

Taqi Khawaja, PE
Technical Manager

Exhibit F

Power Density/RF Emissions Report

Site Name: ***MILFORD CENTER CT***
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)
VZW 700	751	4	623	2494	90	0.0111
VZW Cellular	874	4	638	2552	90	0.0113
VZW PCS	1975	4	1462	5846	90	0.0260
VZW AWS	2120	4	1566	6264	90	0.0278
VZW CBAND	3730.08	4	6531	26125	90	0.1160

Total Percentage of Maximum Permissible Exposure

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IE
**Calculation includes a -10 dB Off Beam Antenna Pattern Adjustment pursuant to Attachments B and C of the Siting Council's

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case maximum values used.

Maximum Permissible Exposure*	Fraction of MPE
(mW/cm^2)	(%)
0.5007	2.21%
0.5827	1.94%
1.0000	2.60%
1.0000	2.78%
1.0000	11.60%
	21.13%

ΞEE C95.1-1992
s November 10, 2015 Memorandum for Exempt Modification filings