



1 Cityplace Dr, Suite 490  
Creve Coeur, MO 63141

Phone: (314) 513-0147  
www.crowncastle.com

February 9, 2022

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

RE: **Notice of Exempt Modification for AT&T  
Crown Site ID#806369; AT&T Site ID#CTL05131  
439-455 Homestead Ave, HARTFORD, CT 06105  
Latitude: 41.783781 / Longitude: -72.703794**

Dear Ms. Bachman:

AT&T currently maintains (6) antennas at the 117-foot mounts on the existing 140-foot Monopole Tower located at **439-455 Homestead Ave, HARTFORD**. The property is owned by Talar Properties LLC and the Tower by Crown Castle. AT&T now intends to replace six (6) antennas. This modification/proposal includes hardware that is both 4G(LTE) and 5G capable through remote software configuration and either or both services may be turned on or off at various times.

**Planned Modifications:**

**Tower:**

**REMOVE AND REPLACE**

(3) Powerwave - 7770 Antennas (**REMOVE**), (1) CCI-TPA-65R-BU8DA-K antenna (alpha sector) (**REPLACE**), (2) CCI-TPA-65R-BU6DA-K antennas (beta& gamma sectors)

**(REPLACE)**

(1) CCI- TPA-65R-LCUUUU-H8 (alpha sector) antenna (**REMOVE**) (2) Quintel – QS66512-3 antennas (beta & gamma) (**REMOVE**), (3) Ericsson – AIR6449 N77D (**REPLACE**), (3)

Ericsson – AIR6419 N77G (antennas stacked) (**REPLACE**)

(6) Powerwave Tech – 21404 TMA (**REMOVE**)

(6) Coax Cables (1-5/8")

(4) DC cables (**REMOVE**), (4) DC Cables (**REPLACE**)

**RELOCATE**

(1) CCI – DMP65R-BU8DA antenna

(2) CCI – DMP65R-BU6DA antennas

(3) Ericsson – 8843 B2/B66A RRUs

(3) Ericsson – RRUS-32 B30 RRUs

(3) Ericsson – 4449 B5/B12

**INSTALL**

(3) Ericsson – 4478 B14 RRUS

**Ground:**

**REMOVE:**

---

The Foundation for a Wireless World.

CrownCastle.com



1 Cityplace Dr, Suite 490  
Creve Coeur, MO 63141

Phone: (314) 513-0147  
[www.crowncastle.com](http://www.crowncastle.com)

- (1) 6630
- (6) LGP21901 Diplexers
- INSTALL:**
- (1) 6673 FHG
- (3) Rectifiers in Existing Power Plant

The facility was approved by The Connecticut Siting Council by way of a Certificate of Environmental Compatibility Docket No. 126 on April 9, 1990. The approval was with conditions which this exempt modification complies with.

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 Luke Bronin, City of Hartford Mayor, I. Charles Mathews, City of Hartford Development Services Acting Director, property owner, Talar Properties LLC, and Crown Castle, tower owner.

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, AT&T respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. §16-50j-72(b)(2).

Sincerely,

Ersilia Davis  
Crown Castle, Agent for AT&T  
[edavis@nbcllc.com](mailto:edavis@nbcllc.com)  
(551)804-0667



1 Cityplace Dr, Suite 490  
Creve Coeur, MO 63141

Phone: (314) 513-0147  
[www.crowncastle.com](http://www.crowncastle.com)

cc:

Luke Bronin, Mayor  
Hartford City Hall  
550 Main Street, 2nd Floor, Room 200  
Hartford, CT 06103  
(860) 757-9500  
*(Via Fedex)*

I. Charles Mathews, Acting Director  
260 Constitution Plaza, 1st Floor  
Hartford, CT 06103  
(860) 757-9040  
*(Via Fedex)*

Talar Properties LLC *(Via Federal Express)*  
705 N Mountain RD  
Newington, CT 06111  
*(Via Fedex)*

Crown Castle, Tower Owner



FedEx Tracking



776010095634



ADD NICKNAME

ON TIME



We made a delivery attempt: 02/11/2022 10:11 AM. Delivery will be attempted again on the next business day. Click Manage Delivery below to take more control of your package(s).

Scheduled delivery:
Friday, February 11, 2022 by end of day



DELAY

WINDSOR LOCKS, CT

GET STATUS UPDATES



Want to know when your package will arrive?

Take more control of your delivery with FedEx Delivery Manager. Sign up or Log in

FROM

Ersilia Davis

1777 Sentry Parkway
VEVA 17, Suite 210
Blue Bell, PA US 19422
551-804-0667

TO

Luke Bronin, Mayor
City of Hartford

550 Main Street, 2nd Floor, Room 20
HARTFORD, CT US 06103
860-757-9500

MANAGE DELIVERY

Travel History

TIME ZONE

Local Scan Time

Friday, February 11, 2022

Table with 3 columns: Time, Location, and Status. Row 1: 10:11 AM, WINDSOR LOCKS, CT, Delay Customer not available or business closed. Row 2: 8:47 AM, WINDSOR LOCKS, CT, On FedEx vehicle for delivery



FedEx Tracking



776010134017



[ADD NICKNAME](#)



Sign up for [Status Updates](#) to get updated as we have more information.

**DELAYED**



We made a delivery attempt: 02/11/2022 09:42 AM. Don't wait until the next business day for your delivery. Pick up your package(s) today after 01:00 PM at FedEx Facility: 100 OLD COUNTY CIRCLE . Click Manage Delivery below to take more control of your package(s).

**Updated delivery:**  
**Saturday, February 12, 2022 before 10:30 am**

Initially expected: Friday, 2/11/2022



**DELAY**

WINDSOR LOCKS, CT

[GET STATUS UPDATES](#)

**FROM**

Ersilia Davis

1777 Sentry Parkway  
VEVA 17, Suite 210  
Blue Bell, PA US 19422  
551-804-0667

**TO**

I. Charles Mathews  
City of Hartford

260 Constitution Plaza, 1st FL  
HARTFORD, CT US 06103  
860-757-9040

[MANAGE DELIVERY](#)



Travel History

**TIME ZONE**

Local Scan Time



Friday, February 11,  
2022

11:04 AM

WINDSOR LOCKS, CT

Delay  
Package delayed



FedEx Tracking



776010044254



[ADD NICKNAME](#)

**ON TIME**

**Delivered**  
Friday, February 11, 2022 at 9:45 am



**DELIVERED**

Signature not required

[GET STATUS UPDATES](#)

[OBTAIN PROOF OF DELIVERY](#)

**FROM**

Ersilia Davis

1777 Sentry Parkway  
VEVA 17, Suite 210  
Blue Bell, PA US 19422  
551-804-0667

**TO**

Talar Properties LLC  
Talar Properties LLC

705 N Mountain RD  
NEWINGTON, CT US 06111  
551-804-0667

[MANAGE DELIVERY](#)

Travel History

**TIME ZONE**

Local Scan Time



Friday, February 11, 2022

9:45 AM	NEWINGTON, CT	Delivered Package delivered to recipient address - release authorized
9:16 AM	WINDSOR LOCKS, CT	At local FedEx facility
9:16 AM	WINDSOR LOCKS, CT	On FedEx vehicle for delivery
7:26 AM	WINDSOR LOCKS, CT	At local FedEx facility
5:09 AM	EAST GRANBY, CT	At destination sort facility

# Exhibit A

## **Original Facility Approval**

DOCKET NO. 126 - AN APPLICATION OF : Connecticut Siting  
METRO MOBILE CTS OF HARTFORD, INC., : Council  
FOR A CERTIFICATE OF ENVIRONMENTAL :  
COMPATIBILITY AND PUBLIC NEED FOR : April 9, 1990  
THE CONSTRUCTION, OPERATION, AND :  
MAINTENANCE OF A CELLULAR TELEPHONE :  
TOWER AND ASSOCIATED EQUIPMENT IN :  
THE CITY OF HARTFORD, CONNECTICUT. :

D E C I S I O N A N D O R D E R

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council finds that the effects associated with the construction, operation, and maintenance of a cellular telephone facility at the proposed Hartford site, including effects on the natural environment; ecological integrity and balance; forests and parks; air and water purity; and fish and wildlife are not significant either alone or cumulatively with other effects, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by Section 16-50k of the General Statutes of Connecticut (CGS), be issued to Metro Mobile CTS of Hartford, Inc., for the construction, operation, and maintenance of a cellular telecommunications tower, associated equipment, and building at the proposed site in Hartford, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The monopole tower including antennas and associated equipment shall not exceed a height of 153 feet above ground level, 215 feet AMSL.
2. The facility shall be constructed in accordance with the State of Connecticut Basic Building Code.
3. The tower shall be designed and constructed to withstand 125 mph winds with two-inch radial ice accumulation.
4. The Certificate Holder shall prepare a Development and Management (D&M) plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of State Agencies. The D&M plan shall include detailed plans of the site preparation with a soil boring report; plans, design details, and specifications for the tower foundation; and a site plan with placement of the tower as far removed from abutting properties and structures as possible.



5. The Certificate Holder shall prepare the D&M plan in consultation with the City of Hartford, which may provide its comments to the Council within 20 days of submission to the City.
6. The Certificate Holder shall comply with existing and any future radio frequency (RF) standard promulgated by State or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facility granted in this Decision and Order shall be brought into compliance with such standards.
7. The Certificate Holder shall provide the Council a recalculated report of power density if and when additional channels over the proposed 90 channels, higher wattage over the proposed 100 watts per channel, or if other circumstances in operation cause a change in power density above the levels originally calculated in the application.
8. The Certificate Holder shall permit public or private entities to share space on the tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
9. If this facility does not initially provide, or permanently ceases to provide, cellular service following the completion of construction, this Decision and Order shall be void, and the tower and all associated equipment in this application shall be dismantled and removed or reapplication of any new use shall be made to the Council before any such new use is made.
10. Unless otherwise approved by the Council, this Decision and Order shall be void if construction authorized herein is not completed within three years of the effective date of this Decision and Order.

Pursuant to Section 16-50p of the CGS, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below. A notice of issuance shall be published in the Hartford Courant.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of State Agencies.

The parties or intervenors to this proceeding are:

(Applicant)

Metro Mobile CTS of  
Hartford, Inc.  
100 Corporate Drive  
Windsor, CT 06095  
Attn: Gary N. Schulman  
Vice President and  
General Manager

(Its Representative)

Robinson & Cole  
One Commercial Plaza  
Hartford, CT 06103-3597  
Attn: Earl W. Phillips  
Jr., Esq.

(Intervenor)

SNET Cellular, Inc.  
227 Church Street  
New Haven, CT 06506

(Its Representative)

Peter J. Tyrrell  
Senior Attorney  
SNET Cellular, Inc.  
227 Church Street  
Room 1021  
New Haven, CT 06506

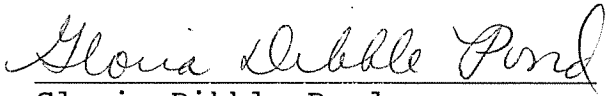
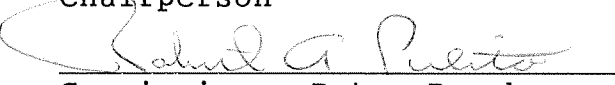

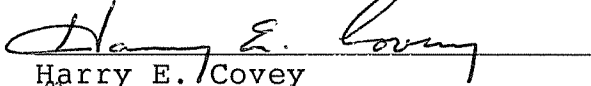
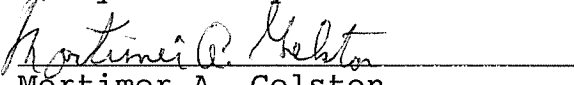

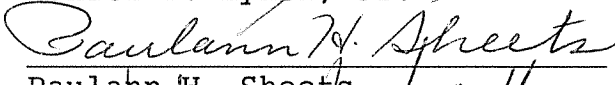
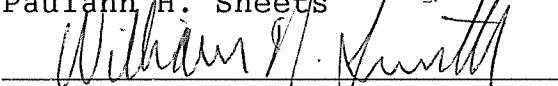
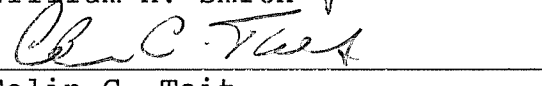
JAW

4248E

CERTIFICATION

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case in Docket No. 126 - An application of Metro Mobile CTS of Hartford, Inc., for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a cellular telephone tower and associated equipment in the City of Hartford, Connecticut, or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut the 9th day of April, 1990.

<u>Council Members</u>	<u>Vote Cast</u>
 Gloria Dibble Pond Chairperson	Yes
 Commissioner Peter Boucher Designee: Robert A. Pulito	Yes
 Commissioner Leslie Carothers Designee: Brian Emerick	Yes
 Harry E. Covey	Yes
 Mortimer A. Gelston	Yes
 Daniel P. Lynch, Jr.	Yes
 Paulann H. Sheets	Abstain
 William H. Smith	Yes
 Colin C. Tait	Yes

# Exhibit B

## Property Card

# Unofficial Property Record Card - Hartford, CT

## General Property Data

Parcel ID <b>152-181-002</b>	Account Number
Prior Parcel ID	Property Location <b>441-455 HOMESTEAD AVE</b>
Property Owner <b>TALAR PROPERTIES LLC</b>	Property Use <b>VAC LAND IND</b>
Mailing Address <b>705 N MOUNTAIN RD</b>	Most Recent Sale Date <b>3/7/2001</b>
City <b>NEWINGTON</b>	Legal Reference <b>04350-0044</b>
Mailing State <b>CT</b> Zip <b>06111-1412</b>	Grantor <b>HUDSON ASSOCIATES</b>
ParcelZoning <b>CX-1</b>	Sale Price <b>0</b>
	Land Area <b>79,715.000 acres</b>

## Current Property Assessment

Card 1 Value	Building Value <b>0</b>	Xtra Features Value <b>0</b>	Land Value <b>213,360</b>	Total Value <b>213,360</b>
--------------	-------------------------	------------------------------	---------------------------	----------------------------

## Building Description

Building Style <b>N/A</b>	Foundation Type <b>N/A</b>	Flooring Type <b>N/A</b>
# of Living Units <b>0</b>	Frame Type <b>N/A</b>	Basement Floor <b>N/A</b>
Year Built <b>N/A</b>	Roof Structure <b>N/A</b>	Heating Type <b>N/A</b>
Building Grade <b>N/A</b>	Roof Cover <b>N/A</b>	Heating Fuel <b>N/A</b>
Building Condition <b>N/A</b>	Siding <b>N/A</b>	Air Conditioning <b>0%</b>
Finished Area (SF) <b>0</b>	Interior Walls <b>N/A</b>	# of Bsmt Garages <b>0</b>
Number Rooms <b>0</b>	# of Bedrooms <b>0</b>	# of Full Baths <b>0</b>
# of 3/4 Baths <b>0</b>	# of 1/2 Baths <b>0</b>	# of Other Fixtures <b>0</b>

## Legal Description

## Narrative Description of Property

This property contains 79,715.000 acres of land mainly classified as VAC LAND IND with a(n) N/A style building, built about N/A , having N/A exterior and N/A roof cover, with 0 commercial unit(s) and 0 residential unit(s), 0 room(s), 0 bedroom(s), 0 bath(s), 0 half bath(s).

## Property Images



Disclaimer: This information is believed to be correct but is subject to change and is not warranted.

# Exhibit C

## **Construction Drawings**



THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION THAT IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS. PLEASE MAKE SURE THESE PAGES ARE NOT DISCLOSED. IF ANY REQUEST IS MADE FOR THIS INFORMATION, PLEASE CONTACT THE SENDER IN ADDITION TO ANY LEGAL NOTICE REQUIREMENTS UNDER APPLICABLE LAW.  
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



**AT&T SITE NUMBER:** CTL05131  
**AT&T SITE NAME:** HRT 094 943225  
**AT&T FA CODE:** 10071191  
**AT&T PACE NUMBER:** MRCTB052079, MRCTB050748, MRCTB050892  
**AT&T PROJECT:** 5G NR 1SR CBAND, LTE 6C & DOD PROJECT

**BUSINESS UNIT #:** 806369  
**SITE ADDRESS:** 439-455 HOMESTEAD AVE HARTFORD, CT 06105  
**COUNTY:** HARTFORD  
**SITE TYPE:** MONOPOLE  
**TOWER HEIGHT:** 140'-0"



AT&T SITE NUMBER: CTL05131

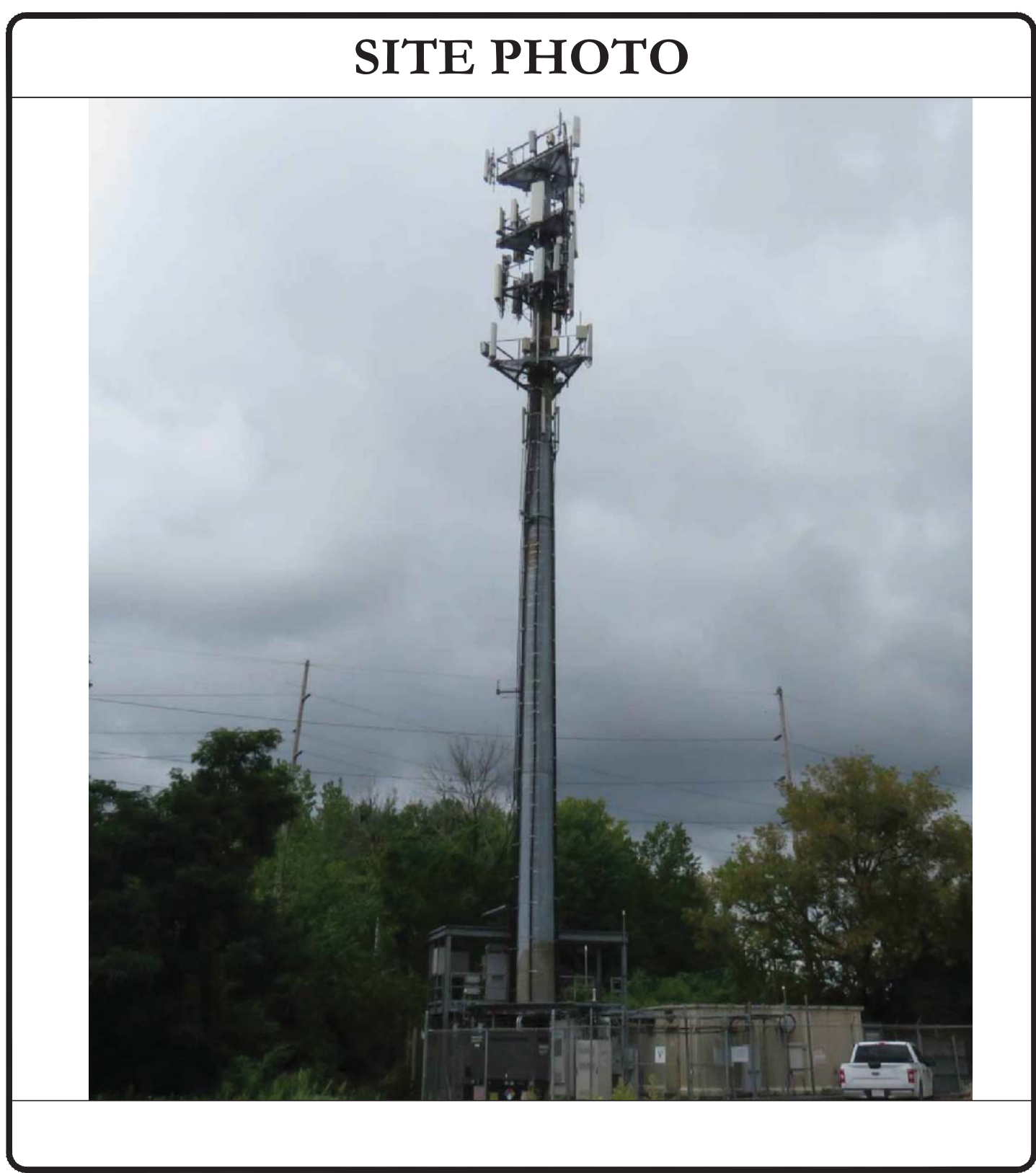
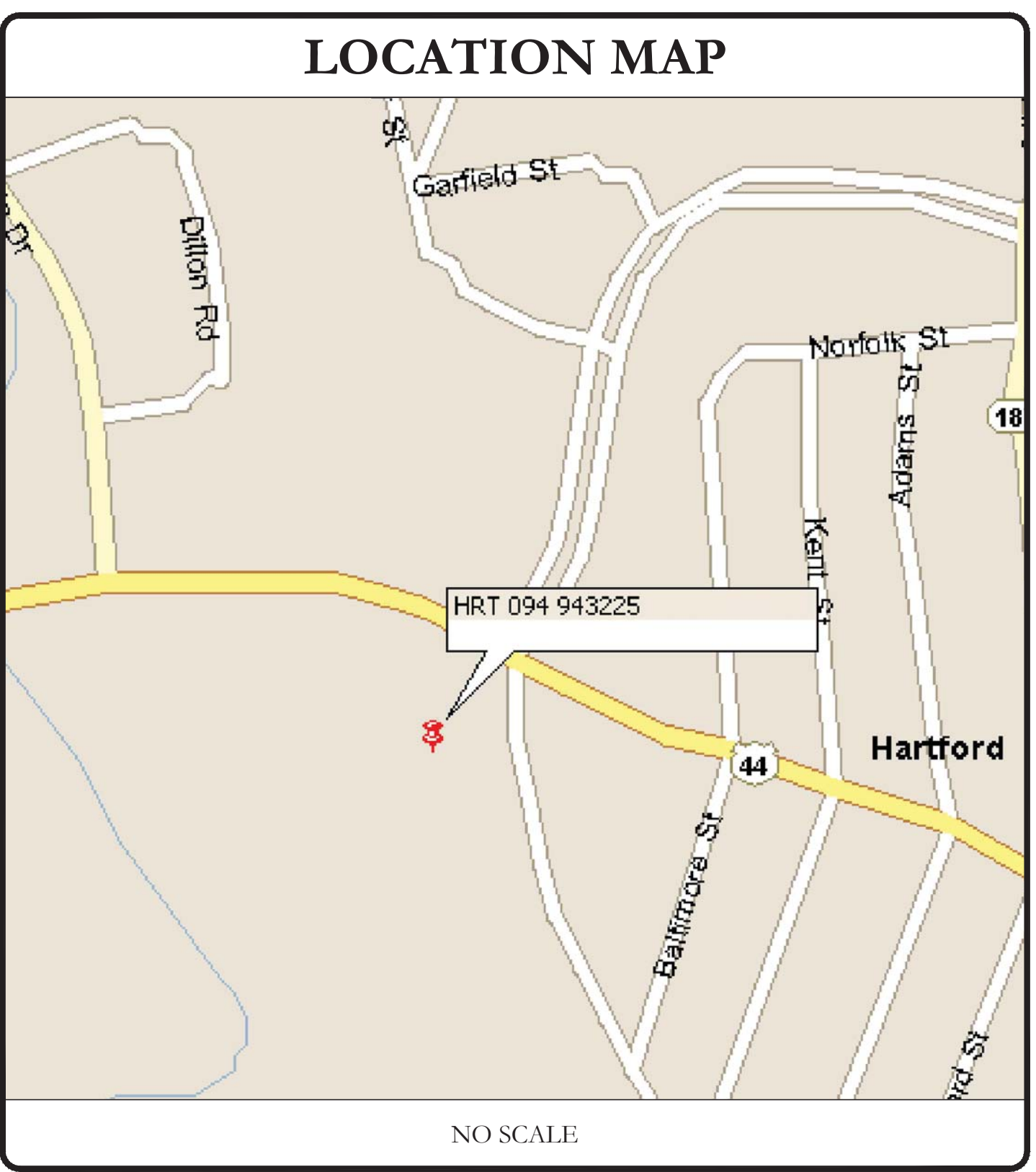
BU #: 806369  
 HRT 094 943225  
 439-455 HOMESTEAD AVE  
 HARTFORD, CT 06105  
 EXISTING  
 140'-0" MONOPOLE

SITE INFORMATION	
CROWN CASTLE USA INC. SITE NAME:	HRT 094 943225
SITE ADDRESS:	439-455 HOMESTEAD AVE HARTFORD, CT 06105
COUNTY:	HARTFORD
MAP/PARCEL #:	152181002
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41.783781
LONGITUDE:	-72.703794
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	60'
CURRENT ZONING:	CX-1 COMMERCIAL-INDUSTRIAL MIX
JURISDICTION:	CONNECTICUT SITING COUNCIL
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	TALAR PROPERTIES LLC 705 N MOUNTAIN RD NEWINGTON, CT 06111-1412
TOWER OWNER:	CROWN CASTLE USA INC 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	AT&T TOWER ASSET GROUP 575 MOROSGO DRIVE ATLANTA, GA 30324-3300
ELECTRIC PROVIDER:	CONNECTICUT LIGHT & POWER CO (800) 286-2000
TELCO PROVIDER:	LIGHTTOWER

DRAWING INDEX	
SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1.1	SITE PLAN
C-1.2	EXISTING & FINAL EQUIPMENT PLANS
C-2	FINAL ELEVATION & ANTENNA PLANS
C-3	FINAL EQUIPMENT SCHEDULE
C-4	EQUIPMENT SPECS
C-5	MOUNT SPECS
G-1	GROUNDING SCHEMATIC
G-2	GROUNDING DETAILS
ATTACHED	PLUMBING DIAGRAM

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR FULL SIZE. 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.

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



ISSUED FOR:				
REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/4/21	KT	PRELIMINARY REVIEW	KT
B	10/11/21	AJA	PRELIMINARY REVIEW	MTJ
C	10/22/21	AJA	PRELIMINARY REVIEW	JHW
0	12/22/21	GAC	CONSTRUCTION	JHW

PROJECT TEAM	
A&E FIRM:	B+T GROUP 1717 S BOULDER AVE, SUITE 300 TULSA, OK 74119 MARVIN PHILLIPS MARVIN.PHILLIS@BTGRP.COM
CROWN CASTLE USA INC. DISTRICT CONTACTS:	3530 TORINGDON WAY, SUITE 300 CHARLOTTE, NC 28277  PAUL PEDICONE - PROJECT MANAGER PAUL.PEDICONE@CROWNCastle.COM  JASON D'AMICO - CONSTRUCTION MANAGER JASON.DAMICO@CROWNCastle.COM

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

PROJECT DESCRIPTION
THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.
TOWER SCOPE OF WORK:
<ul style="list-style-type: none"> <li>REMOVE (3) POWERWAVE - 7770 ANTENNAS</li> <li>REMOVE (2) QS66512-3 ANTENNAS</li> <li>REMOVE (1) CCI - TPA-65R-LCUUUU-H8 ANTENNAS</li> <li>RELOCATE (1) CCI - DMP65R-BU8DA ANTENNAS</li> <li>RELOCATE (2) CCI - DMP65R-BU6DA ANTENNAS</li> <li>RELOCATE (3) ERICSSON - 4449 B5/B12 RRHs</li> <li>RELOCATE (3) ERICSSON - 8843 B2/B66A RRHs</li> <li>RELOCATE (3) ERICSSON - RRUS-32 B30</li> <li>REMOVE (6) POWERWAVE TECH - 21404 TMA's</li> <li>REMOVE (4) DC CABLE</li> <li>REMOVE (6) 1-5/8" COAX CABLE</li> <li>INSTALL (2) CCI - TPA-65R-BU6DA-K ANTENNAS</li> <li>INSTALL (1) CCI - TPA-65R-BU8DA-K ANTENNAS</li> <li>INSTALL (3+3) ERICSSON - AIR6449 N77D+AIR6419 N77G STACKED ANTENNAS</li> <li>INSTALL (3) ERICSSON - 4478 B14 RRHs</li> <li>INSTALL (4) DC CABLES</li> <li>INSTALL (3) Y CABLES</li> </ul>
GROUND SCOPE OF WORK:
<ul style="list-style-type: none"> <li>REMOVE (1) 6630</li> <li>REMOVE (6) LGP21901 DIPLEXERS</li> <li>INSTALL (1) 6673 FHG</li> <li>INSTALL (3) RECTIFIERS IN EXISTING POWER PLANT</li> </ul>

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:								
<table border="0"> <tr> <td>CODE TYPE</td> <td>CODE</td> </tr> <tr> <td>BUILDING</td> <td>2015 IBC</td> </tr> <tr> <td>MECHANICAL</td> <td>2015 IMC</td> </tr> <tr> <td>ELECTRICAL</td> <td>2017 NEC</td> </tr> </table>	CODE TYPE	CODE	BUILDING	2015 IBC	MECHANICAL	2015 IMC	ELECTRICAL	2017 NEC
CODE TYPE	CODE							
BUILDING	2015 IBC							
MECHANICAL	2015 IMC							
ELECTRICAL	2017 NEC							
REFERENCE DOCUMENTS:								
STRUCTURAL ANALYSIS: MORRISON HERSHFIELD DATED: 9/20/21 MOUNT ANALYSIS: KIMLEY-HORN AND ASSOCIATES, INC. DATED: 9/13/21 RFDS REVISION: PRELIMINARY DATED: 8/5/21 ORDER ID: 556516 REVISION: 0								

B&T ENGINEERING, INC.  
 2172  
 Expires 6/30/22

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

89233.009.01\_HRT\_094\_943225.dwg - SheetT-1 - User: jockie.weeter - Dec 22, 2021 - 2:57pm

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

- 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.
- "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.
- 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.
- 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).
- 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." 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.
- 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.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 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.
- ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
- 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.
- 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.
- 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.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 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.
- 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.
- 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.
- 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.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
- 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.

GREENFIELD GROUNDING NOTES:

- 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.
- THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL 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.
- 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.
- METAL CONDUIT AND TRAY SHALL BE GROUNDING AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- 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.
- 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.
- 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.
- ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
- COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
- ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
- APPROVED ANTI-OXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
- 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.
- 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).
- 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).

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:  
CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION  
CARRIER: AT&T  
TOWER OWNER: CROWN CASTLE USA INC.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 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.
- 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.
- 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.
- 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.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

- 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.
- UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f<sub>c</sub>) 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.
- 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.
- 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 (F<sub>y</sub>) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:  
#4 BARS AND SMALLER.....40 ksi  
#5 BARS AND LARGER.....60 ksi
- 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"
- 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.

ELECTRICAL INSTALLATION NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
- CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
- WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
- ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
- 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 AIG MINIMUM. VERIFY 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.
- 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.
- 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).
- PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
- ALL THE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- 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.
- 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.
- POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
- 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.
- 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).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE AND NEC.
- ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
- LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SLOW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE AND THE NEC.
- WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOULD SPECMATE WIREWAY).
- SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
- 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 LOCKOUT ON OUTSIDE AND INSIDE.
- 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.
- 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.
- 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.
- 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.
- 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.
- INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "AT&T".
- 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
277/480V, 3Ø	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
	NEUTRAL	GREY
DC VOLTAGE	GROUND	GREEN
	POS (+)	RED**
	NEG (-)	BLACK**

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

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

APWA UNIFORM COLOR CODE:

- PROPOSED EXCAVATION
- TEMPORARY SURVEY MARKINGS
- ELECTRIC POWER LINES, CABLES, CONDUIT, AND LIGHTING CABLES
- GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
- COMMUNICATION, ALARM OR SIGNAL LINES, CABLES, OR CONDUIT AND TRAFFIC LOOPS
- POTABLE WATER
- RECLAIMED WATER, IRRIGATION, AND SLURRY LINES
- SEWERS AND DRAIN LINES

575 MOROSGO DRIVE  
ATLANTA, GA 30324-3300

3530 TORINGDON WAY, SUITE 300  
CHARLOTTE, NC 28277

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

AT&T SITE NUMBER: **CTL05131**

BU #: **806369**  
HRT 094 943225

439-455 HOMESTEAD AVE  
HARTFORD, CT 06105

EXISTING  
140'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/4/21	KT	PRELIMINARY REVIEW	KT
B	10/11/21	AJA	PRELIMINARY REVIEW	MTJ
C	10/22/21	AJA	PRELIMINARY REVIEW	JHW
0	12/22/21	GAC	CONSTRUCTION	JHW

2/22/21

B&T ENGINEERING, INC.  
2172  
Expires 6/30/22

**THIS PAGE CONTAINS  
CONFIDENTIAL, PROPRIETARY  
OR TRADE SECRET INFORMATION  
EXEMPT FROM DISCLOSURE  
UNDER APPLICABLE LAW.**

DISCLAIMER PROVIDED BY AT&T: THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.

<b>SHEET NUMBER:</b> <b>T-2</b>	<b>REVISION:</b> <b>0</b>
------------------------------------	------------------------------



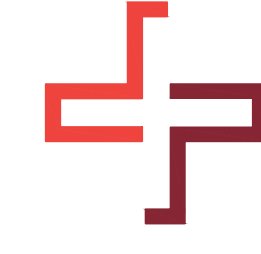
THIS PAGE CONTAINS  
 CONFIDENTIAL, PROPRIETARY  
 OR TRADE SECRET INFORMATION  
 EXEMPT FROM DISCLOSURE  
 UNDER APPLICABLE LAW.  
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



**AT&T**  
 575 MOROSGO DRIVE  
 ATLANTA, GA 30324-3300



**CROWN CASTLE**  
 3530 TORINGDON WAY, SUITE 300  
 CHARLOTTE, NC 28277



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

AT&T SITE NUMBER: CTL05131

BU #: 806369  
 HRT 094 943225  
 439-455 HOMESTEAD AVE  
 HARTFORD, CT 06105  
 EXISTING  
 140'-0" MONOPOLE

ISSUED FOR:

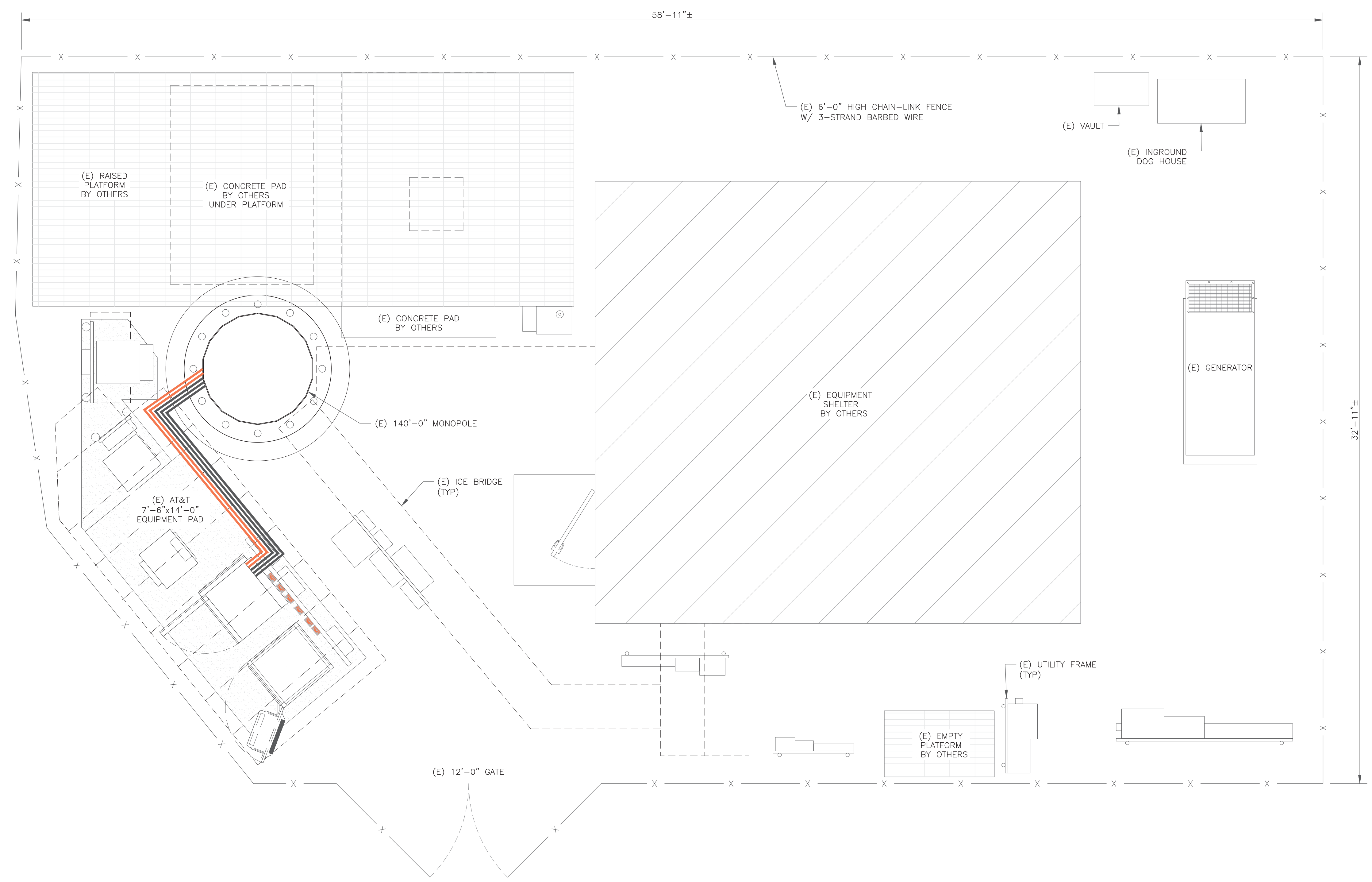
REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/4/21	KT	PRELIMINARY REVIEW	KT
B	10/11/21	AJA	PRELIMINARY REVIEW	MTJ
C	10/22/21	AJA	PRELIMINARY REVIEW	JHW
0	12/22/21	GAC	CONSTRUCTION	JHW

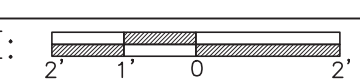


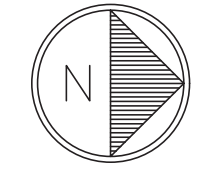
B&T ENGINEERING, INC.  
 2172  
 Expires 6/30/22

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: **C-1.1** REVISION: **0**

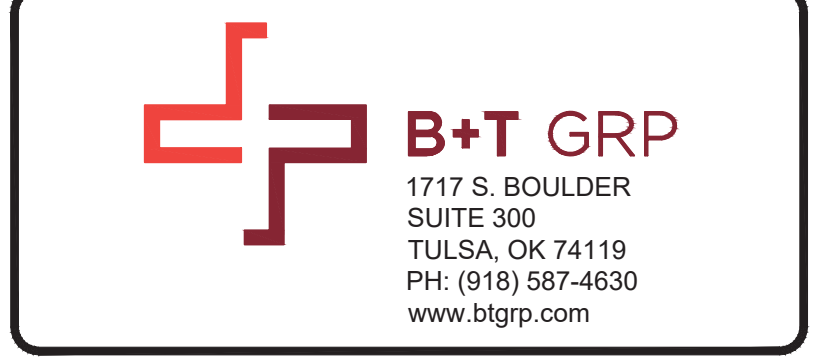


1 SITE PLAN  
 SCALE:  3/8"=1'-0" (FULL SIZE)  
 3/16"=1'-0" (11x17)



89233.009.01\_HRT\_094\_943225.dwg - Sheet:C-1.1 - User: jackie.weeter - Dec 22, 2021 - 2:57pm

THIS PAGE CONTAINS  
 CONFIDENTIAL, PROPRIETARY  
 OR TRADE SECRET INFORMATION  
 EXEMPT FROM DISCLOSURE  
 UNDER APPLICABLE LAW.  
DISCLAIMER PROVIDED BY AT&T: THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.

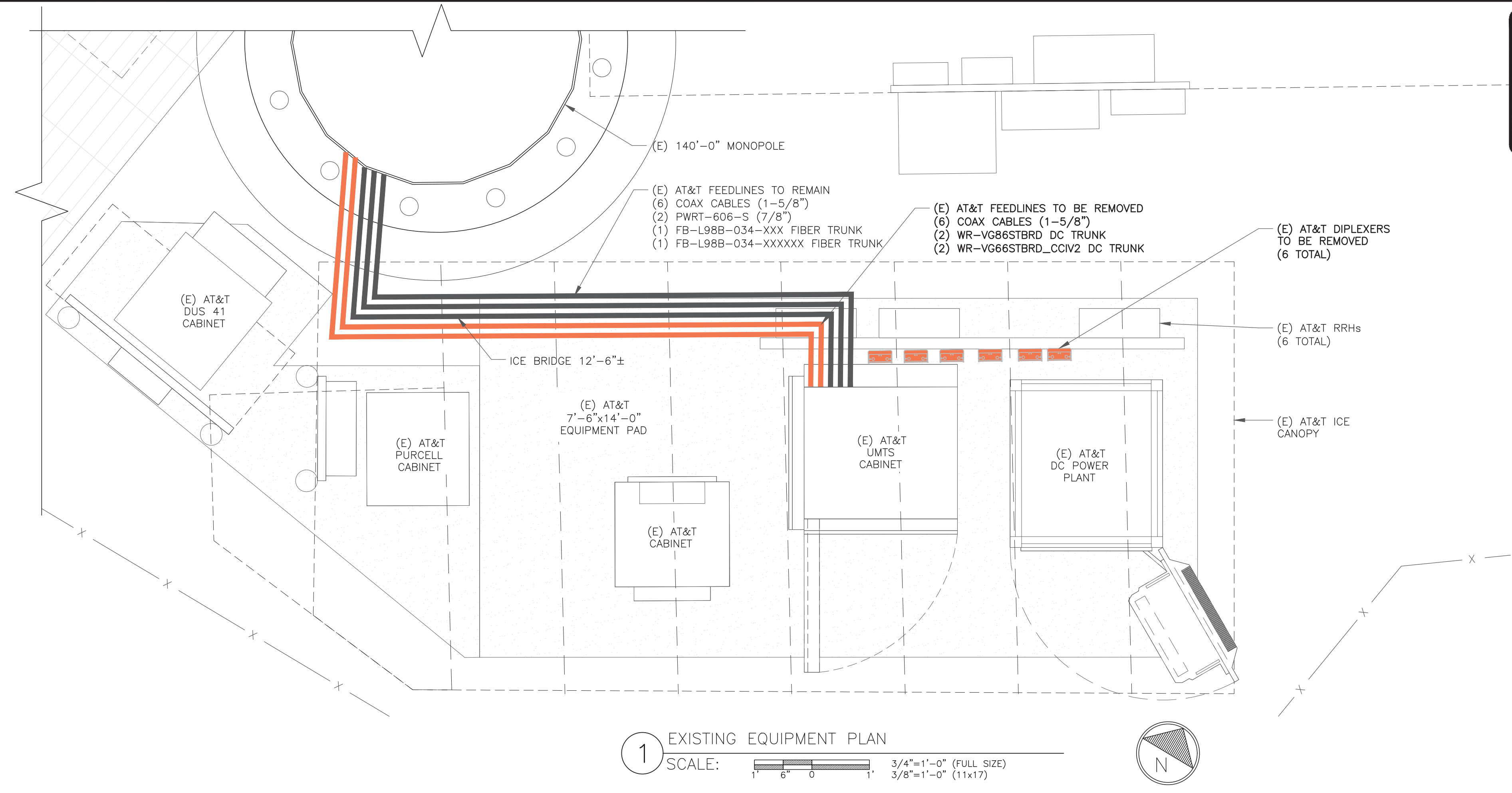


AT&T SITE NUMBER: CTL05131

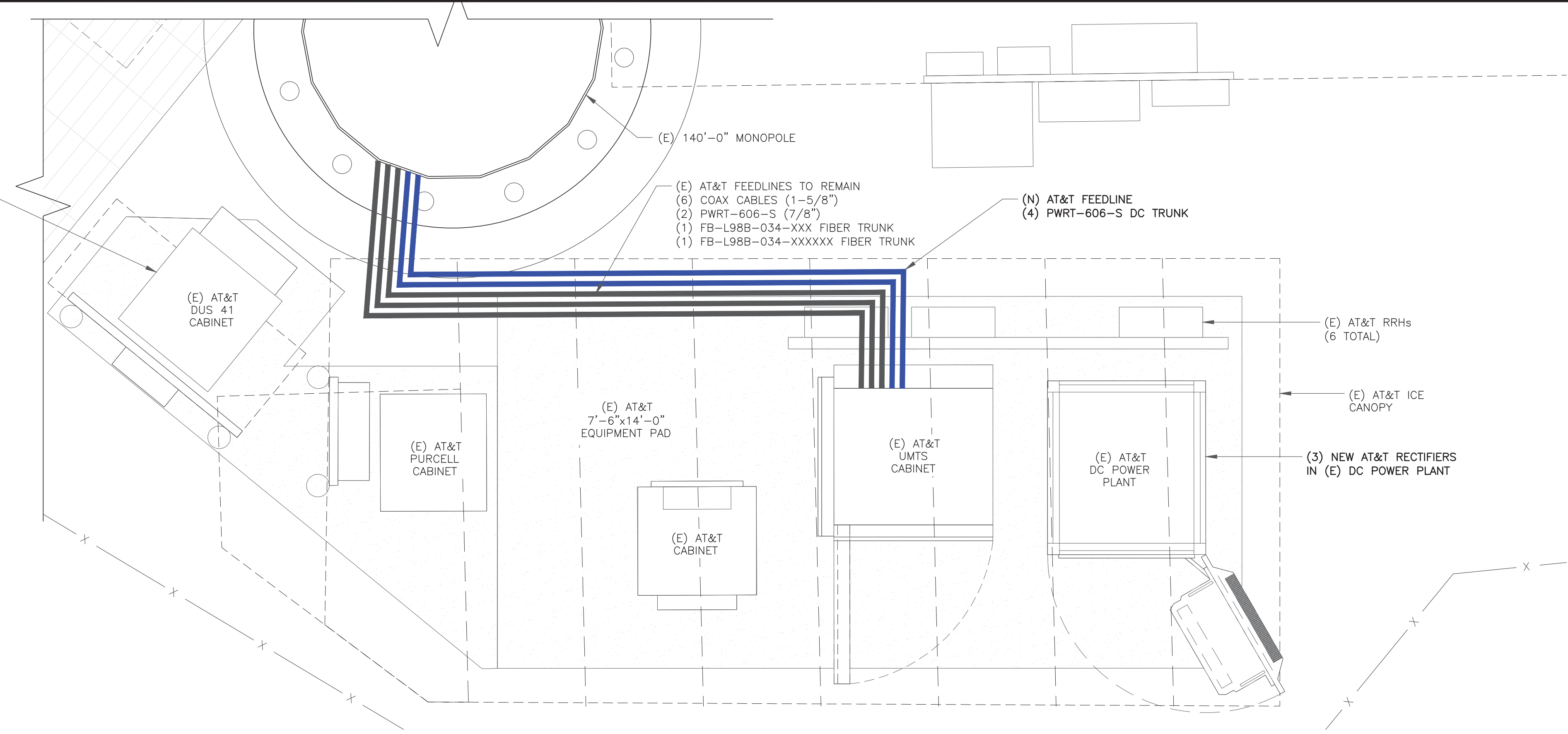
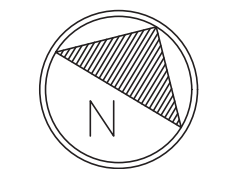
BU #: 806369  
 HRT 094 943225

439-455 HOMESTEAD AVE  
 HARTFORD, CT 06105

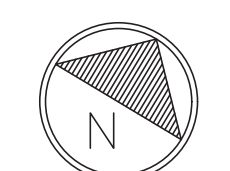
EXISTING  
 140'-0" MONOPOLE



1 EXISTING EQUIPMENT PLAN  
 SCALE: 3/4"=1'-0" (FULL SIZE)  
 3/8"=1'-0" (11x17)



2 FINAL EQUIPMENT PLAN  
 SCALE: 3/4"=1'-0" (FULL SIZE)  
 3/8"=1'-0" (11x17)



GROUND SCOPE OF WORK:  
 •INSTALL (1) 6673 FHG  
 •INSTALL (3) RECTIFIERS IN EXISTING POWER PLANT  
 •INSTALL (1) 6630

NOTE:  
 THE POWER DESIGN FOR ANY AC ELECTRICAL POWER CHANGES IS TO BE PERFORMED BY OTHERS AND IS SHOWN HERE FOR REFERENCE PURPOSES ONLY. AT&T IS SOLELY RESPONSIBLE FOR THE ELECTRICAL POWER DESIGN.

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/4/21	KT	PRELIMINARY REVIEW	KT
B	10/11/21	AJA	PRELIMINARY REVIEW	MTJ
C	10/22/21	AJA	PRELIMINARY REVIEW	JHW
0	12/22/21	GAC	CONSTRUCTION	JHW

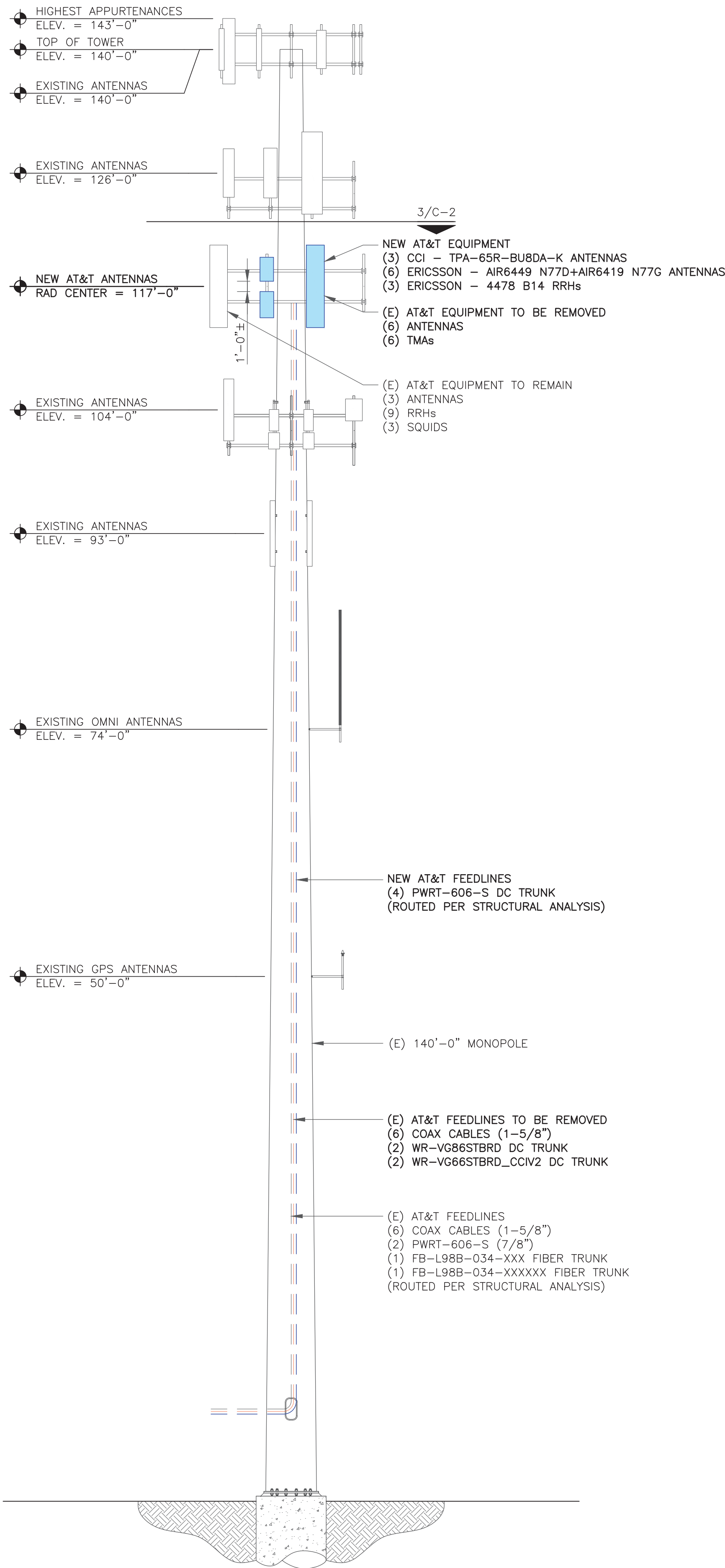


B&T ENGINEERING, INC.  
 2172  
 Expires 6/30/22

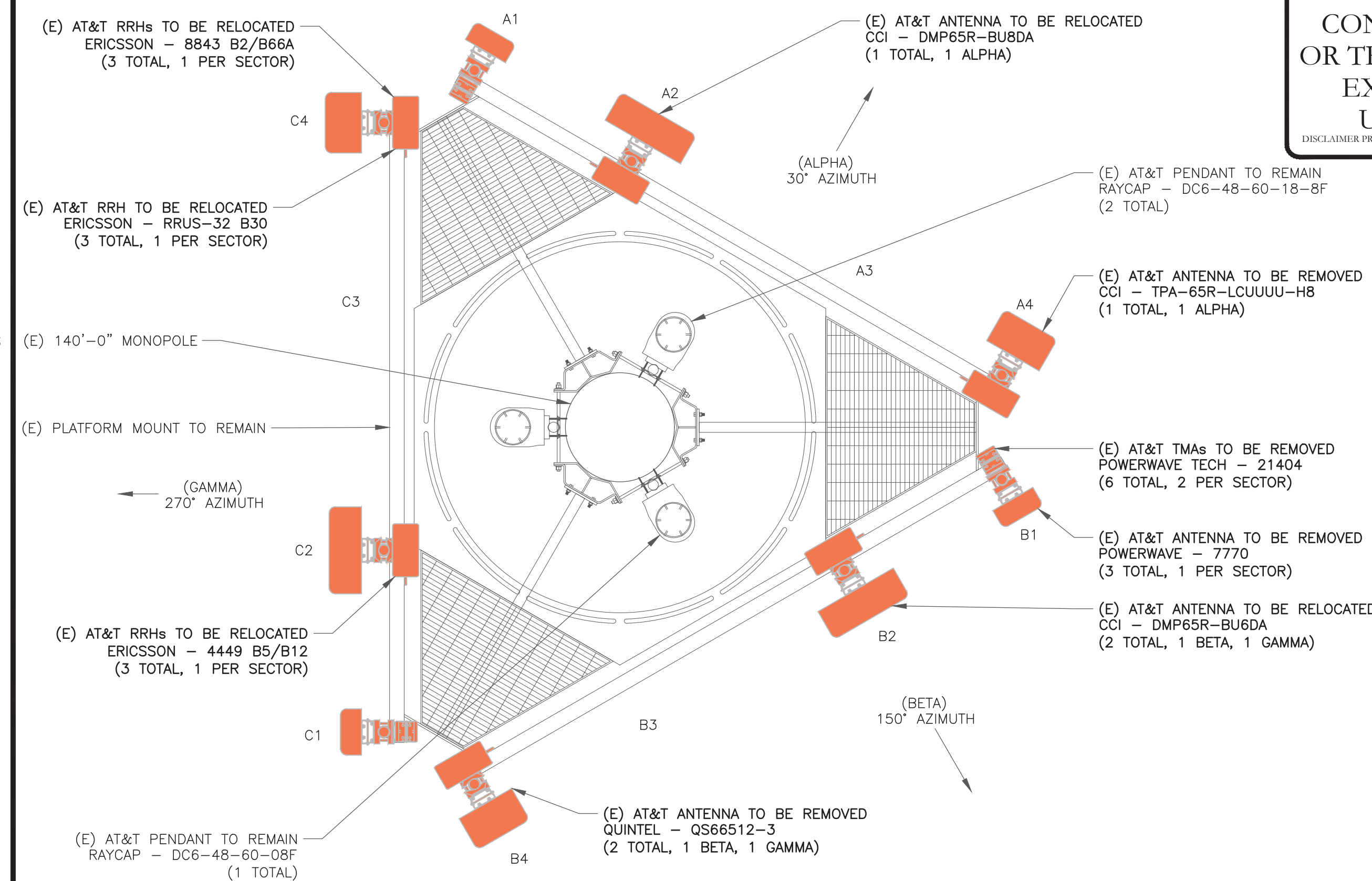
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: C-1.2  
 REVISION: 0

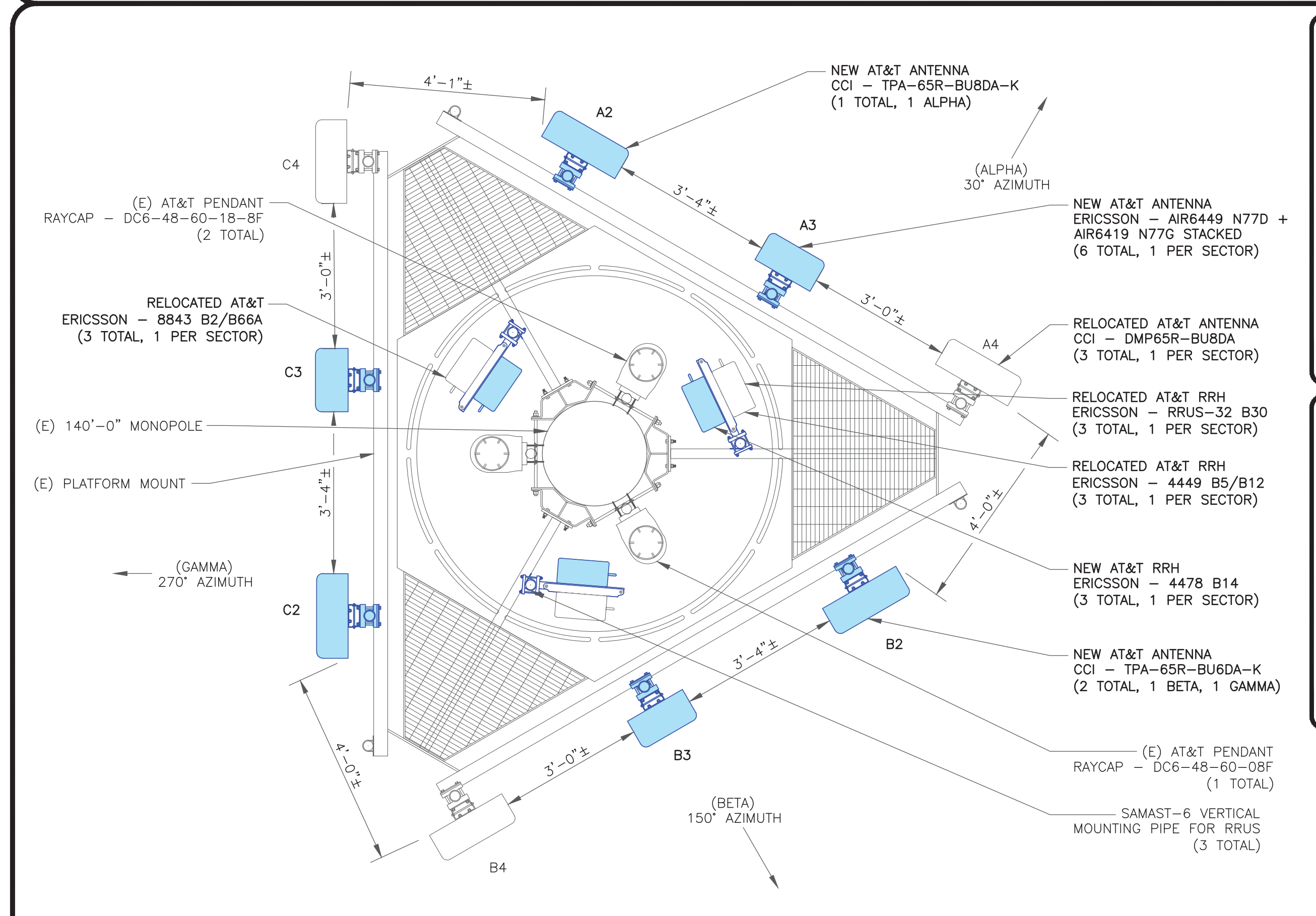
89233.009.01\_HRT\_094\_943225.dwg - Sheet: C-1.2 - User: jackie.weeter - Dec 22, 2021 - 2:57pm



1 FINAL ELEVATION  
SCALE: NOT TO SCALE



2 EXISTING ANTENNA PLAN  
SCALE: 1/2"=1'-0" (FULL SIZE)  
1/4"=1'-0" (11x17)



3 FINAL ANTENNA PLAN  
SCALE: 1/2"=1'-0" (FULL SIZE)  
1/4"=1'-0" (11x17)

THIS PAGE CONTAINS  
CONFIDENTIAL, PROPRIETARY  
OR TRADE SECRET INFORMATION  
EXEMPT FROM DISCLOSURE  
UNDER APPLICABLE LAW.  
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.

575 MOROSGO DRIVE  
ATLANTA, GA 30324-3300

3530 TORINGDON WAY, SUITE 300  
CHARLOTTE, NC 28277

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

AT&T SITE NUMBER: CTL05131

BU #: 806369  
HRT 094 943225

439-455 HOMESTEAD AVE  
HARTFORD, CT 06105

EXISTING  
140'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/4/21	KT	PRELIMINARY REVIEW	KT
B	10/11/21	AJA	PRELIMINARY REVIEW	MTJ
C	10/22/21	AJA	PRELIMINARY REVIEW	JHW
0	12/22/21	GAC	CONSTRUCTION	JHW

"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.

- INSTALLER NOTES:
- REFERENCE C-3 FOR FINAL EQUIPMENT SCHEDULE.
  - REFERENCE C-4 FOR NEW EQUIPMENT SPECIFICATIONS.
  - CONTRACTOR TO VERIFY ALL ANTENNA TIP HEIGHTS DO NOT EXCEED BEACON BASE HEIGHT.
  - 3'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE ANTENNAS ON SAME SECTOR.
  - 6'-0" MINIMUM DISTANCE REQUIRED BETWEEN 700BC & 700DE ANTENNAS ON SAME SECTOR.
  - 4'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE 700 ANTENNAS ON OPPOSING SECTORS.
  - ALL ANTENNA MEASUREMENT DISTANCES MUST BE EDGE TO EDGE (RELOCATE ANTENNAS AS NEEDED).
  - 8" MINIMUM DISTANCE REQUIRED BETWEEN ANTENNA & RADIO. SEE GENERIC EXAMPLE DETAIL ON SHEET C-4.



B&T ENGINEERING, INC.  
2172  
Expires 6/30/22

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: C-2  
REVISION: 0

89233.009.01\_HRT\_094\_943225.dwg - Sheet: C-2 - User: jackie.wester - Dec 22, 2021 - 2:57pm

THIS PAGE CONTAINS  
 CONFIDENTIAL, PROPRIETARY  
 OR TRADE SECRET INFORMATION  
 EXEMPT FROM DISCLOSURE  
 UNDER APPLICABLE LAW.  
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



### FINAL ANTENNA AND FEEDLINE SCHEDULE

POS.	TECH	STATUS	AZIMUTH	ANTENNA TYPE	ANTENNA RAD CENTER	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	MAIN COAX SIZE	MAIN COAX LENGTH	COAX QTY	TMA QTY AND MODEL	SURGE PROTECTION	DC/FIBER CABLES	RRHs QTY & MODEL ON TOWER	LOCATION	DIPLEXER ON TOWER	DIPLEXER ON GROUND	RET CABLE
ALPHA SECTOR																		
A1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TOWER	N	N	N
A2	LTE 700/LTE 1900/LTE AWS/5G 1900/5G AWS	NEW	30°	CCI - TPA-65R-BU6DA-K	117'-0"	0°	3° / 2° / 2° / 3° / 2° / 3° / 7°	-	-	-	-	DC6-48-60-08F	(1) FB-L98B-034-XXX FIBER TRUNK	(1) 8843 B2/B66A (1) 4478 B14	TOWER	N	N	N
A3	5G CBAND / 5G DoD	NEW	30°	ERICSSON - AIR6449 N77D + AIR6419 N77G STACKED	117'-0"	-	0° / 0°	-	-	-	-	DC6-48-60-08F	(1) FB-L98B-034-XXXXXX FIBER TRUNK	-	TOWER	N	N	N
A4	LTE 700/5G 850/LTE WCS	EXISTING	30°	CCI - DMP65R-BU6DA	117'-0"	0°	3° / 3° / 3°	1 5/8"	180'-0"	2	-	-	(2) 7/8" DC LINES	(1) 4449 B5/B12 (1) RRUS-32 B30	TOWER	N	N	N
BETA SECTOR																		
B1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TOWER	N	N	N
B2	LTE 700/LTE 1900/LTE AWS/5G 1900/5G AWS	NEW	150°	CCI - TPA-65R-BU8DA-K	117'-0"	0°	3° / 7° / 7° / 3° / 7° / 3° / 7°	-	-	-	-	DC6-48-60-18-8F	(2) 7/8" DC LINES	(1) 8843 B2/B66A (1) 4478 B14	TOWER	N	N	N
B3	5G CBAND / 5G DoD	NEW	150°	ERICSSON - AIR6449 N77D + AIR6419 N77G STACKED	117'-0"	-	0° / 0°	-	-	-	-	DC6-48-60-18-8F	(2) 7/8" DC LINES	-	TOWER	N	N	N
B4	LTE 700/5G 850/LTE WCS	EXISTING	150°	CCI - DMP65R-BU8DA	117'-0"	0°	3° / 3° / 2°	1 5/8"	180'-0"	2	-	-	(2) 7/8" DC LINES	(1) 4449 B5/B12 (1) RRUS-32 B30	TOWER	N	N	N
GAMMA SECTOR																		
C1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TOWER	N	N	N
C2	LTE 700/LTE 1900/LTE AWS/5G 1900/5G AWS	NEW	270°	CCI - TPA-65R-BU8DA-K	117'-0"	0°	3° / 4° / 4° / 3° / 4° / 3° / 4°	-	-	-	-	DC6-48-60-18-8F	(2) 7/8" DC LINES	(1) 8843 B2/B66A (1) 4478 B14	TOWER	N	N	N
C3	5G CBAND / 5G DoD	NEW	270°	ERICSSON - AIR6449 N77D + AIR6419 N77G STACKED	117'-0"	-	0° / 0°	-	-	-	-	DC6-48-60-18-8F	(2) 7/8" DC LINES	-	TOWER	N	N	N
C4	LTE 700/5G 850/LTE WCS	EXISTING	270°	CCI - DMP65R-BU8DA	117'-0"	0°	3° / 3° / 3°	1 5/8"	180'-0"	2	-	-	(2) 7/8" DC LINES	(1) 4449 B5/B12 (1) RRUS-32 B30	TOWER	N	N	N

NOTE: BOLD DENOTES NEW EQUIPMENT

AT&T SITE NUMBER: CTL05131

BU #: 806369  
 HRT 094 943225

439-455 HOMESTEAD AVE  
 HARTFORD, CT 06105

EXISTING  
 140'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/4/21	KT	PRELIMINARY REVIEW	KT
B	10/11/21	AJA	PRELIMINARY REVIEW	MTJ
C	10/22/21	AJA	PRELIMINARY REVIEW	JHW
0	12/22/21	GAC	CONSTRUCTION	JHW

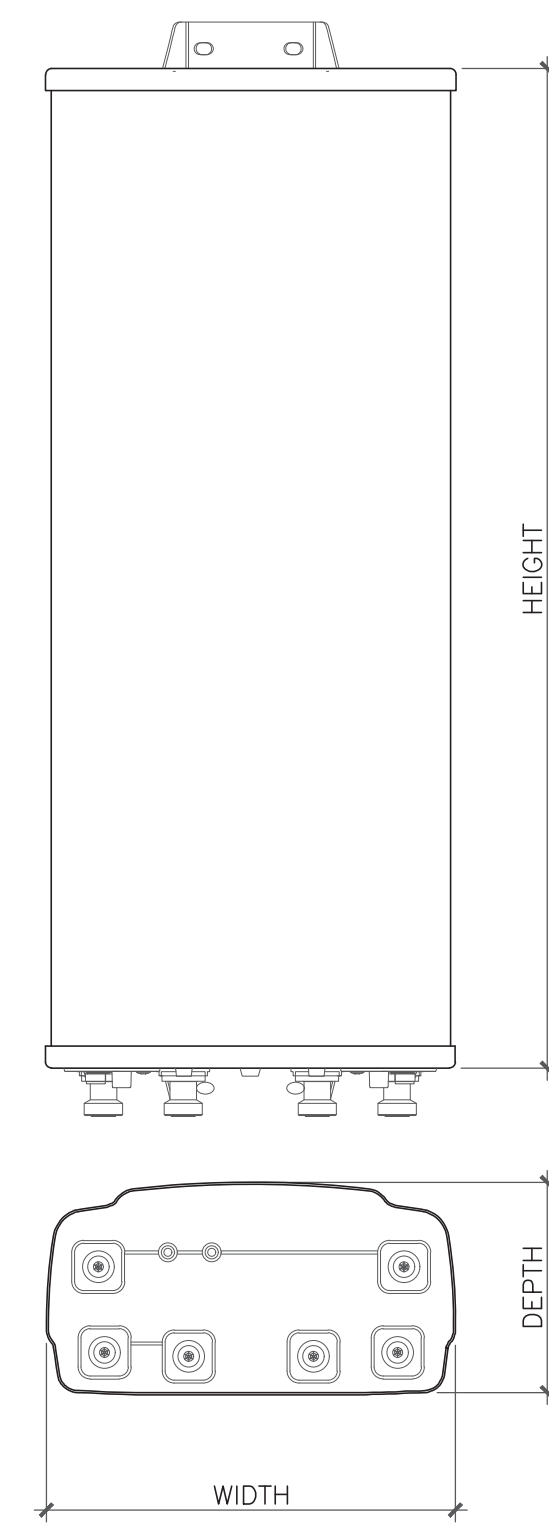


B&T ENGINEERING, INC.  
 2172  
 Expires 6/30/22

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.

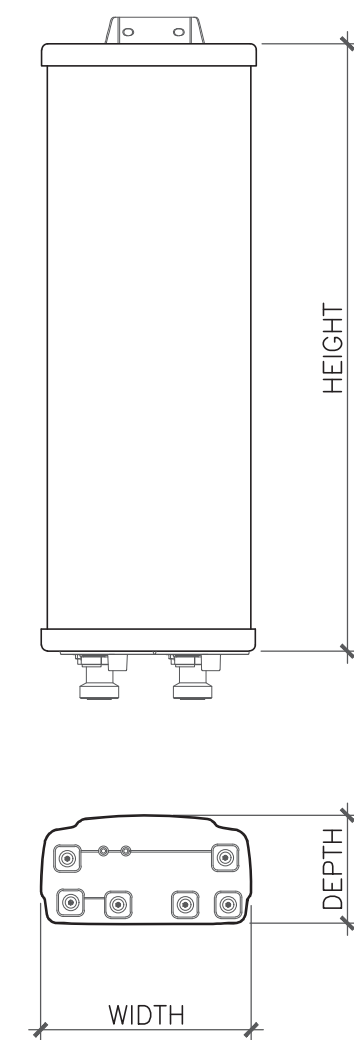
SHEET NUMBER: **C-3** REVISION: **0**

1 FINAL ANTENNA AND FEEDLINE SCHEDULE  
 SCALE: NOT TO SCALE



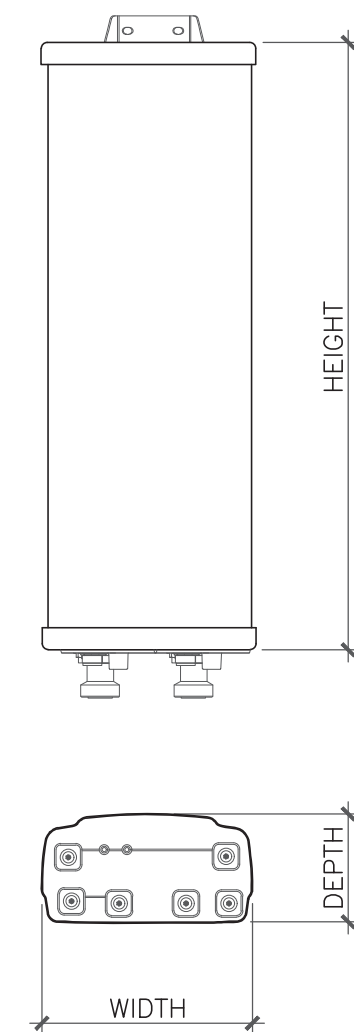
ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
TPA-65R-BU8DA-K	96"	21.0"	7.8"	87.50 lbs

1 ANTENNA DETAIL  
SCALE: NOT TO SCALE



ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
AIR 6419 N77G	27.95"	15.75"	6.68"	66.20 lbs

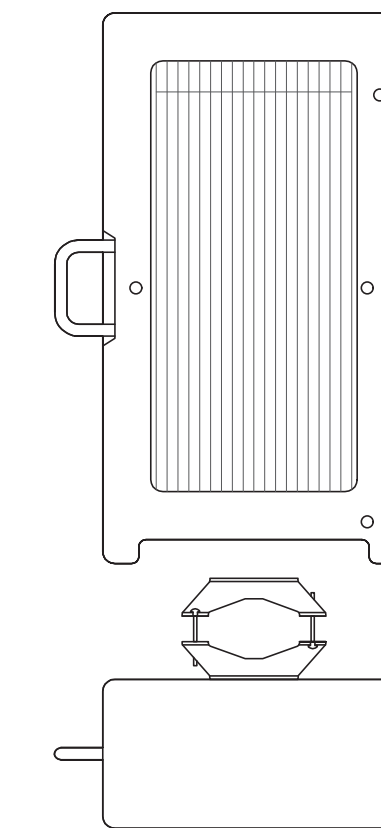
2 ANTENNA DETAIL  
SCALE: NOT TO SCALE



ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
AIR 6449 N77D	30.63"	15.87"	10.55"	83.78 lbs

3 ANTENNA DETAIL  
SCALE: NOT TO SCALE

THIS PAGE CONTAINS  
CONFIDENTIAL, PROPRIETARY  
OR TRADE SECRET INFORMATION  
EXEMPT FROM DISCLOSURE  
UNDER APPLICABLE LAW.  
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



ERICSSON - 4478 B14  
WEIGHT (FULLY EQUIPPED): 59.40 LBS  
SIZE (HxWxD): 18.10x13.40x8.26 IN.  
CONNECTOR TYPE: 4.3-10 FEMALE (4 TOTAL PORTS)

4 ERICSSON - RADIO 4478 B14  
SCALE: NOT TO SCALE

575 MOROSGO DRIVE  
ATLANTA, GA 30324-3300

3530 TORINGDON WAY, SUITE 300  
CHARLOTTE, NC 28277

1717 S. BOULDER  
SUITE 300  
TULSA, OK 74119  
PH: (918) 587-4630  
www.blgrp.com

AT&T SITE NUMBER: CTL05131

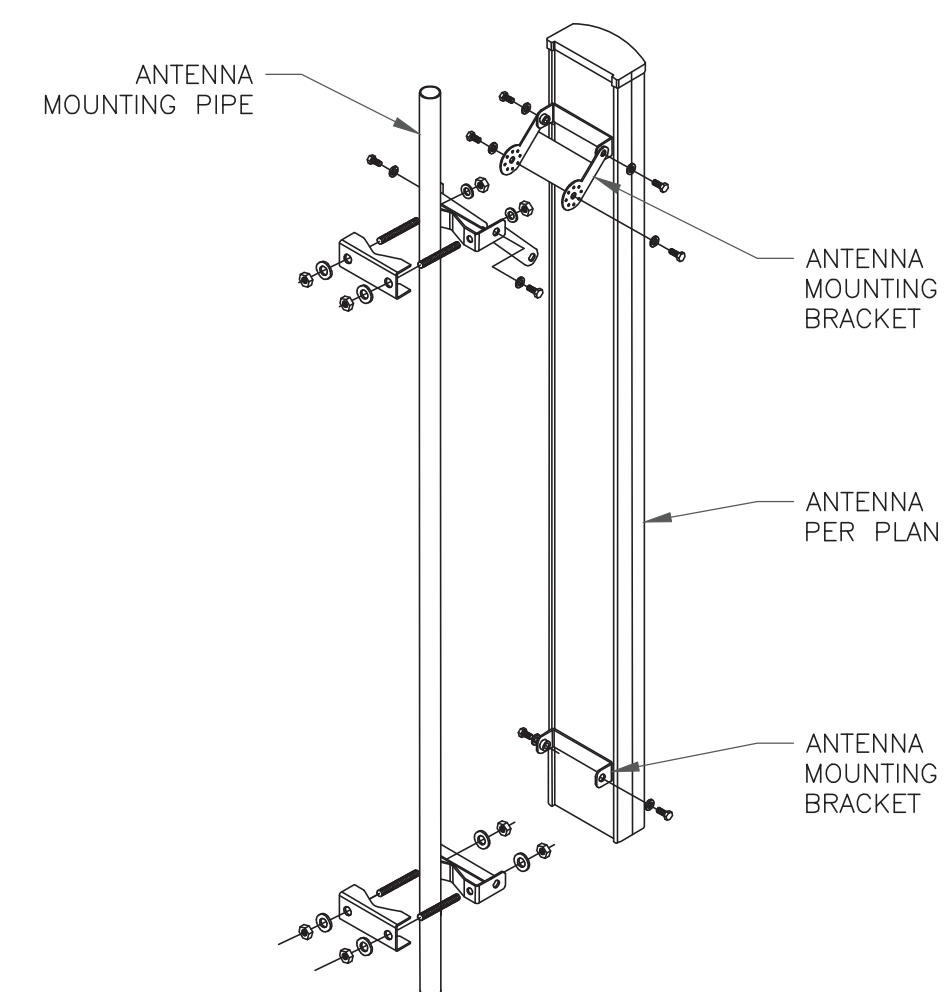
BU #: 806369  
HRT 094 943225

439-455 HOMESTEAD AVE  
HARTFORD, CT 06105

EXISTING  
140'-0" MONOPOLE

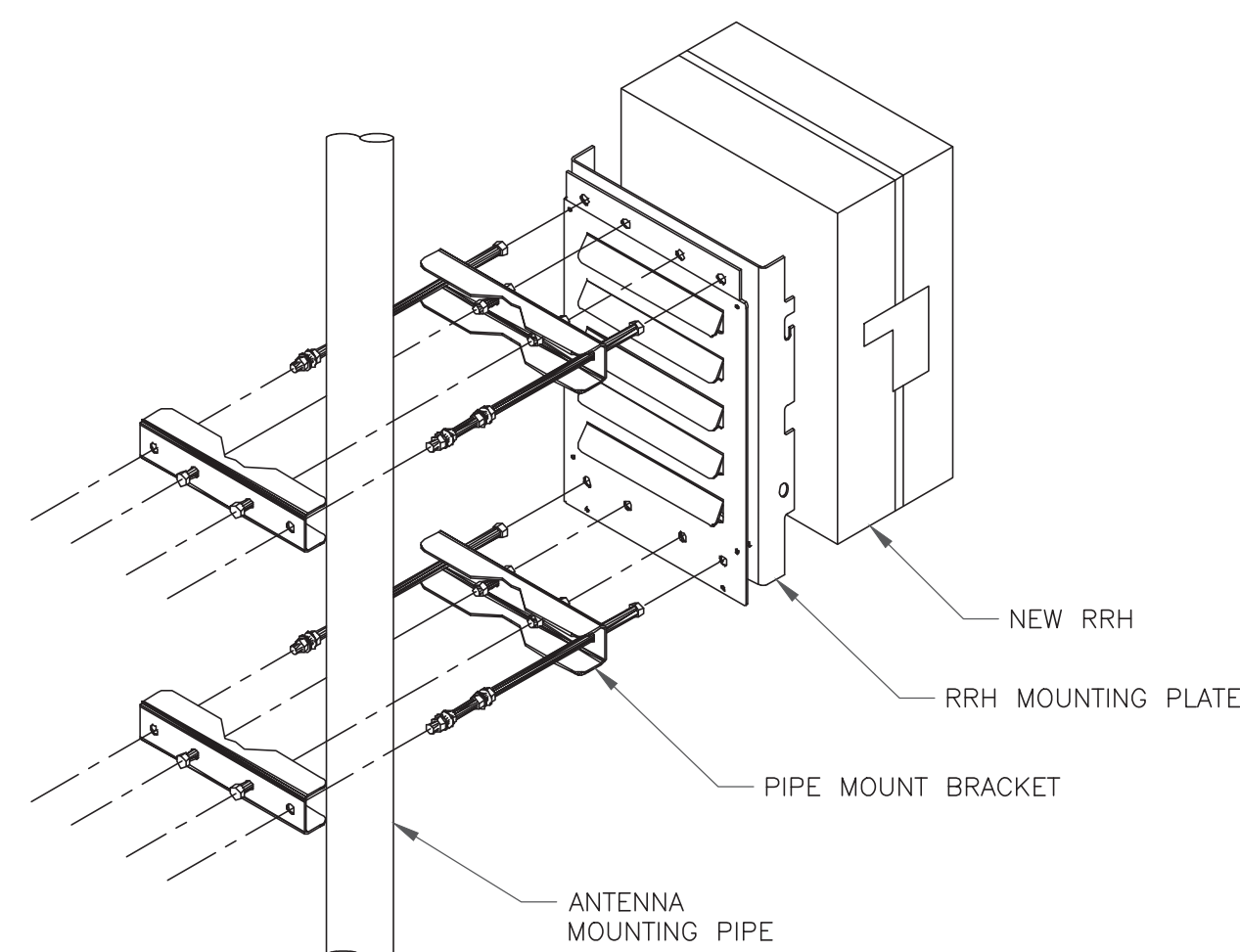
INSTALLER NOTES:

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



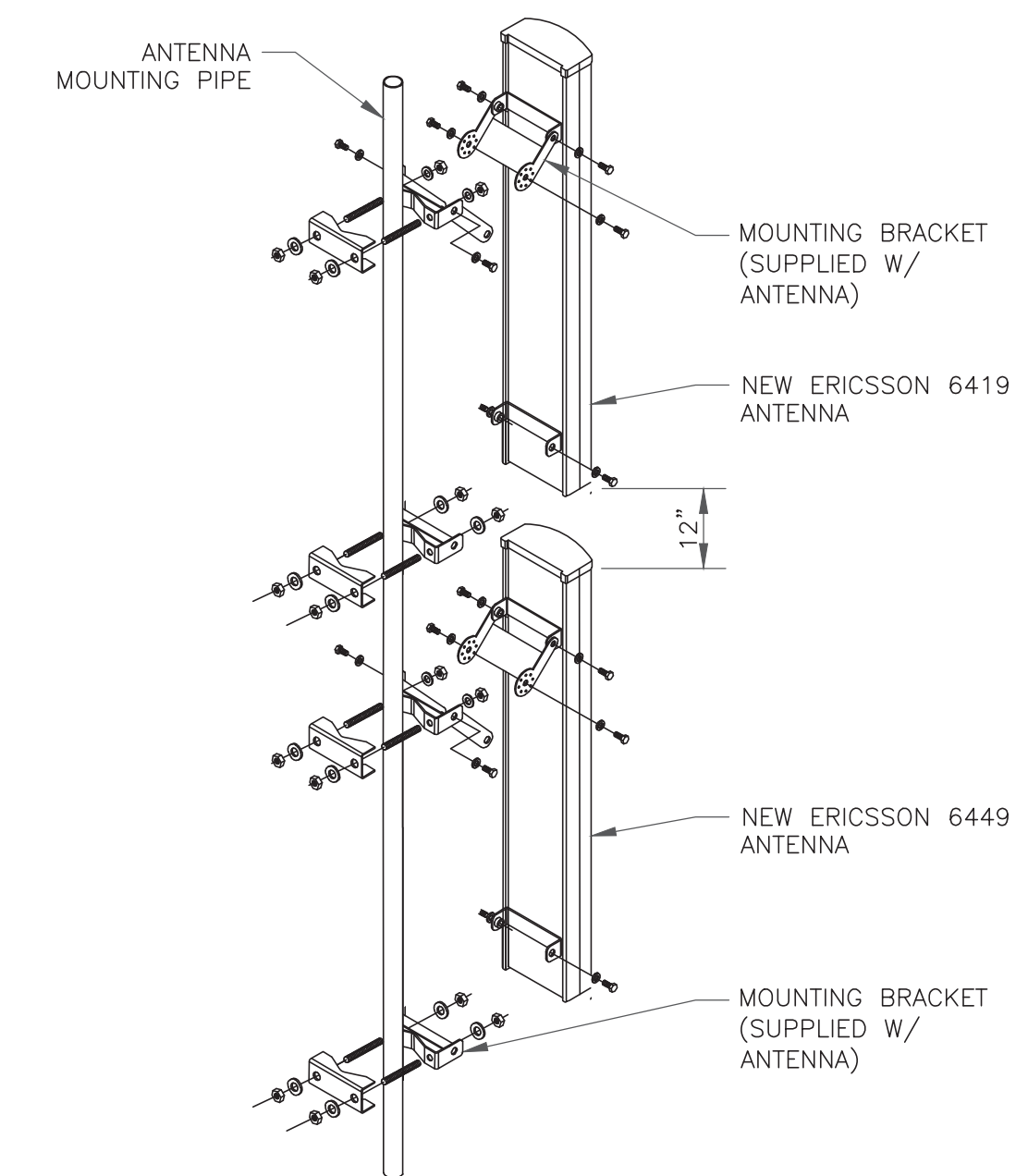
5 ANTENNA WITH RRH MOUNTING DETAIL  
SCALE: NOT TO SCALE

6 ANTENNA MOUNTING DETAIL  
SCALE: NOT TO SCALE



NOTE:  
ANTENNA NOT SHOWN FOR CLARITY

7 SINGLE RRH MOUNTING DETAIL  
SCALE: NOT TO SCALE



8 ANTENNA MOUNTING DETAIL  
SCALE: NOT TO SCALE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/4/21	KT	PRELIMINARY REVIEW	KT
B	10/11/21	AJA	PRELIMINARY REVIEW	MTJ
C	10/22/21	AJA	PRELIMINARY REVIEW	JHW
0	12/22/21	GAC	CONSTRUCTION	JHW



B&T ENGINEERING, INC.  
2172  
Expires 6/30/22

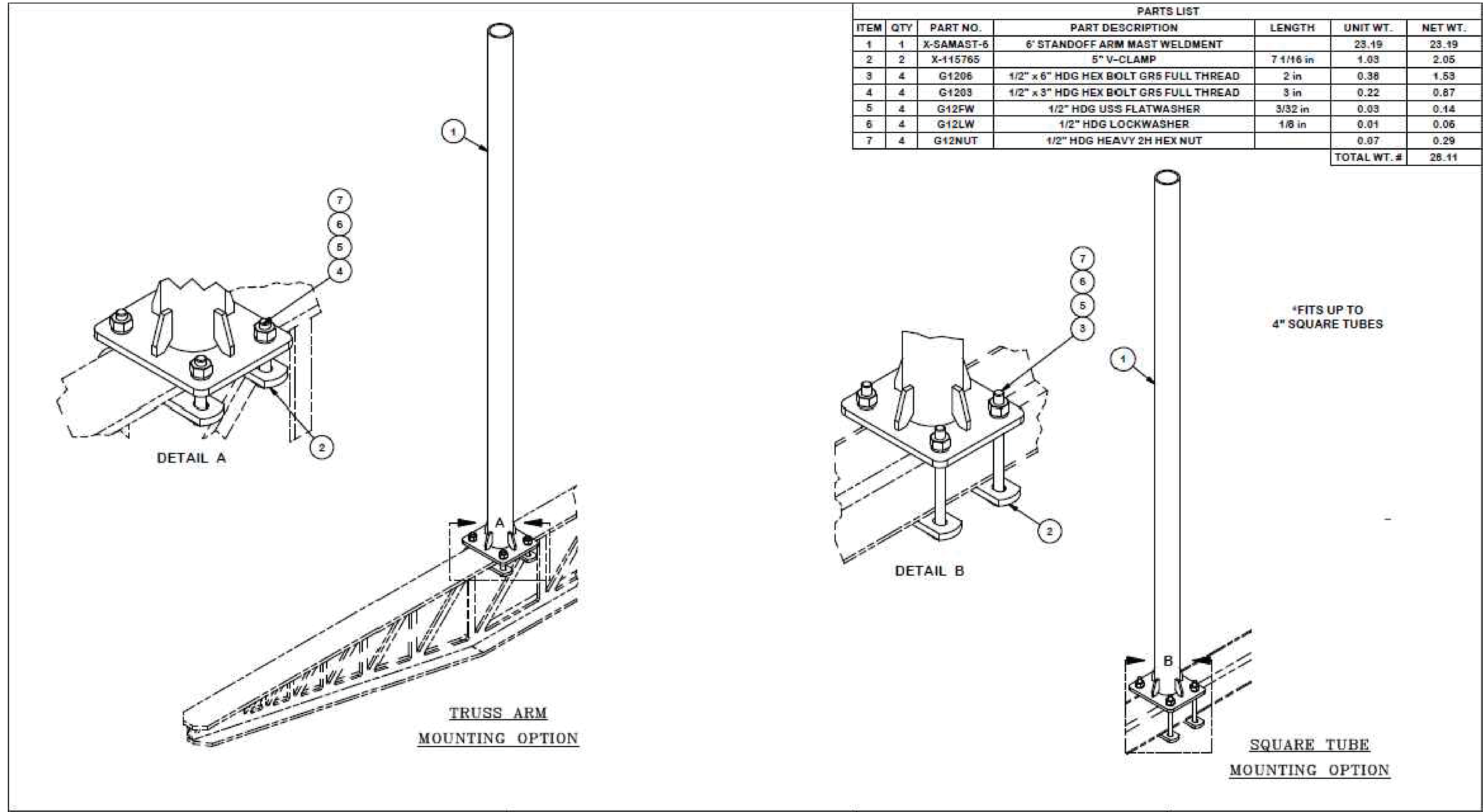
IT IS A VIOLATION OF LAW FOR ANY PERSON,  
UNLESS THEY ARE ACTING UNDER THE DIRECTION  
OF A LICENSED PROFESSIONAL ENGINEER,  
TO ALTER THIS DOCUMENT.

SHEET NUMBER: **C-4** REVISION: **0**

THIS PAGE CONTAINS  
 CONFIDENTIAL, PROPRIETARY  
 OR TRADE SECRET INFORMATION  
 EXEMPT FROM DISCLOSURE  
 UNDER APPLICABLE LAW.  
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	1	X-SAMAST-6	6" STANDOFF ARM MAST WELDMENT		23.19	23.19
2	2	X-115765	5" V-CLAMP	7 1/16 in	1.03	2.05
3	4	G1206	1/2" x 6" HDG HEX BOLT GR5 FULL THREAD	2 in	0.38	1.53
4	4	G1203	1/2" x 3" HDG HEX BOLT GR5 FULL THREAD	3 in	0.22	0.87
5	4	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	0.14
6	4	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.06
7	4	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	0.29
<b>TOTAL WT. #</b>					<b>28.11</b>	



AT&T SITE NUMBER: CTL05131

BU #: 806369  
 HRT 094 943225

439-455 HOMESTEAD AVE  
 HARTFORD, CT 06105

EXISTING  
 140'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/4/21	KT	PRELIMINARY REVIEW	KT
B	10/11/21	AJA	PRELIMINARY REVIEW	MTJ
C	10/22/21	AJA	PRELIMINARY REVIEW	JHW
0	12/22/21	GAC	CONSTRUCTION	JHW



B&T ENGINEERING, INC.  
 2172  
 Expires 6/30/22

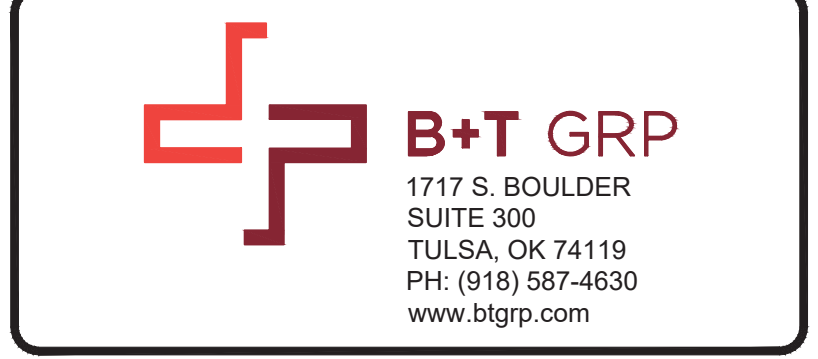
IT IS A VIOLATION OF LAW FOR ANY PERSON,  
 UNLESS THEY ARE ACTING UNDER THE DIRECTION  
 OF A LICENSED PROFESSIONAL ENGINEER,  
 TO ALTER THIS DOCUMENT.

SHEET NUMBER: **C-5** REVISION: **0**

1 MAST DETAIL  
 SCALE: NOT TO SCALE

89233.009.01\_HRT\_094\_943225.dwg - User: jockie.weater - Dec. 22, 2021 - 2:57pm

THIS PAGE CONTAINS  
 CONFIDENTIAL, PROPRIETARY  
 OR TRADE SECRET INFORMATION  
 EXEMPT FROM DISCLOSURE  
 UNDER APPLICABLE LAW.  
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



AT&T SITE NUMBER: CTL05131

BU #: 806369  
 HRT 094 943225

439-455 HOMESTEAD AVE  
 HARTFORD, CT 06105

EXISTING  
 140'-0" MONOPOLE

GROUNDING PLAN LEGEND:

- GROUND WIRE
- EXOTHERMIC WELD
- MECHANICAL CONNECTION
- ⊙ COPPER GROUND ROD
- ⊗ GROUND ROD W/ TEST WELL

CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUITS (ATT-TP-76416 7.6.7).

HATCH PLATE GROUND BAR: BOND TO THE INTERIOR GROUND RING WITH (2) #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT, THE CELL SITE REFERENCE GROUND BAR MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) #2 STRANDED GREEN INSULATED COPPER CONDUCTORS.

EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE (ATT-TP-76416 7.6.7.2).

DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTFS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICES CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR PER TP76300 SECTION H. 6 AND TP76416 FIGURE 7-11 REQUIREMENTS.

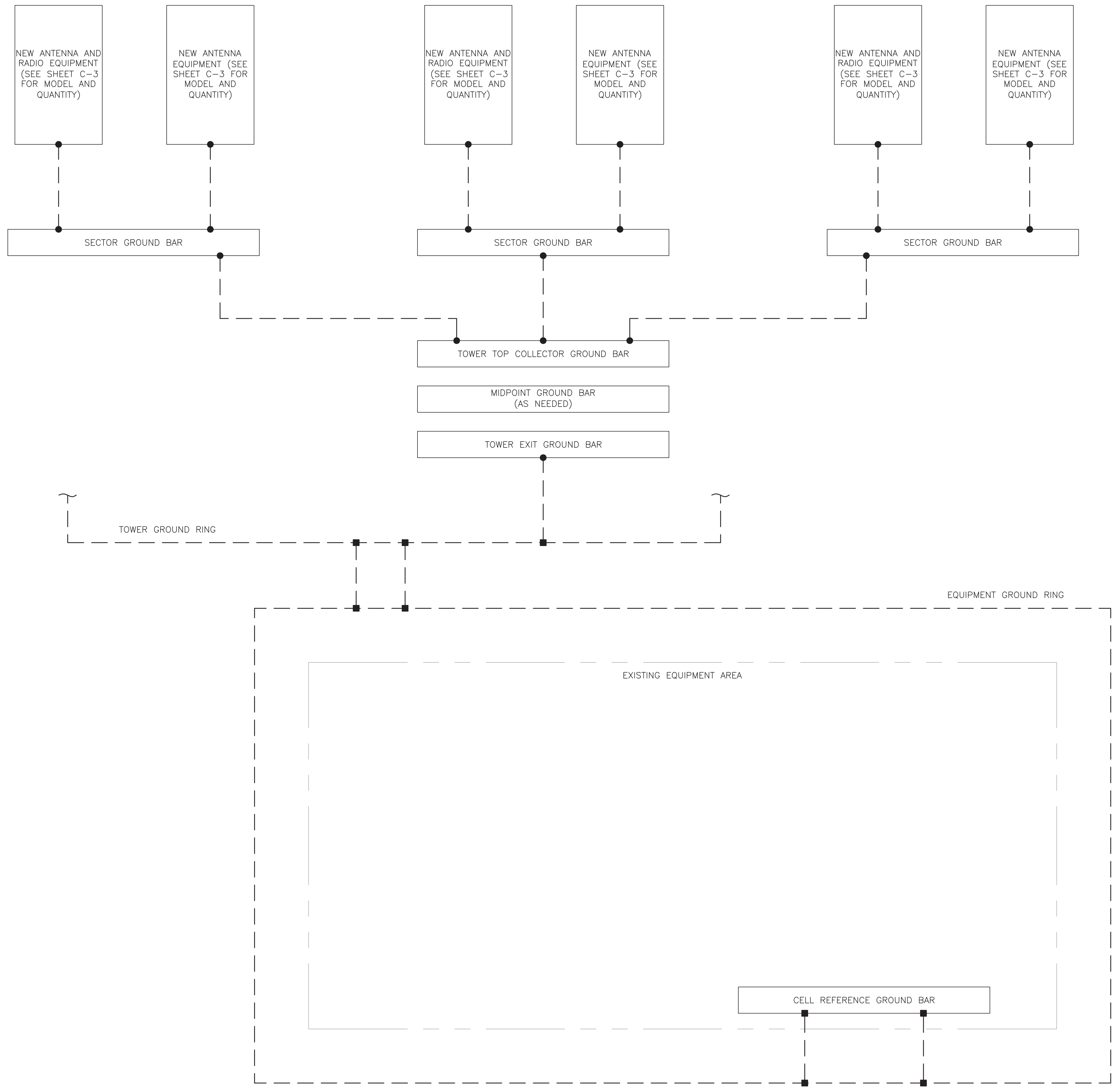
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/4/21	KT	PRELIMINARY REVIEW	KT
B	10/11/21	AJA	PRELIMINARY REVIEW	MTJ
C	10/22/21	AJA	PRELIMINARY REVIEW	JHW
0	12/22/21	GAC	CONSTRUCTION	JHW

B&T ENGINEERING, INC.  
 2172  
 Expires 6/30/22

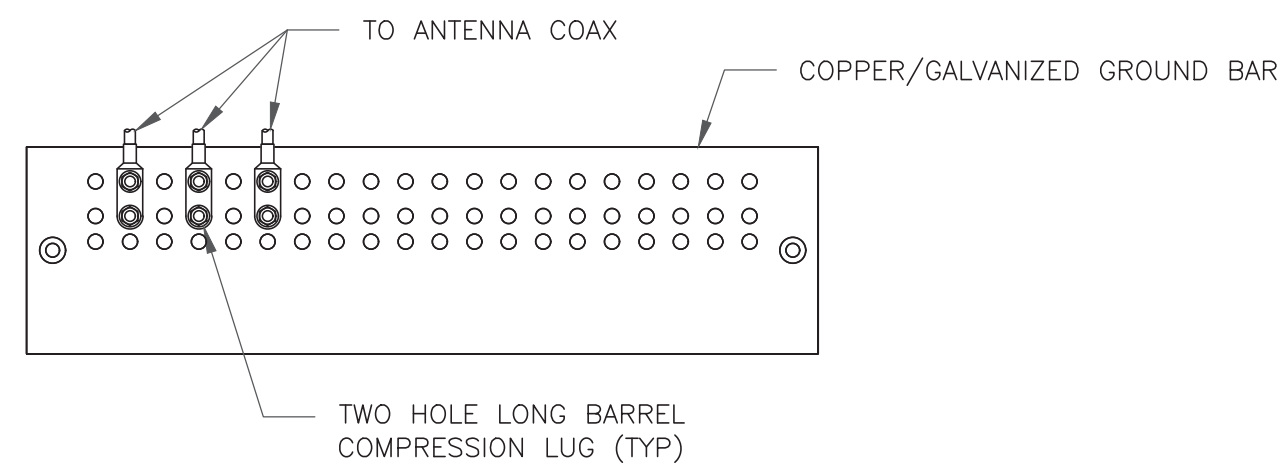
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: **G-1** REVISION: **0**



1 GROUNDING SCHEMATIC  
 SCALE: NOT TO SCALE

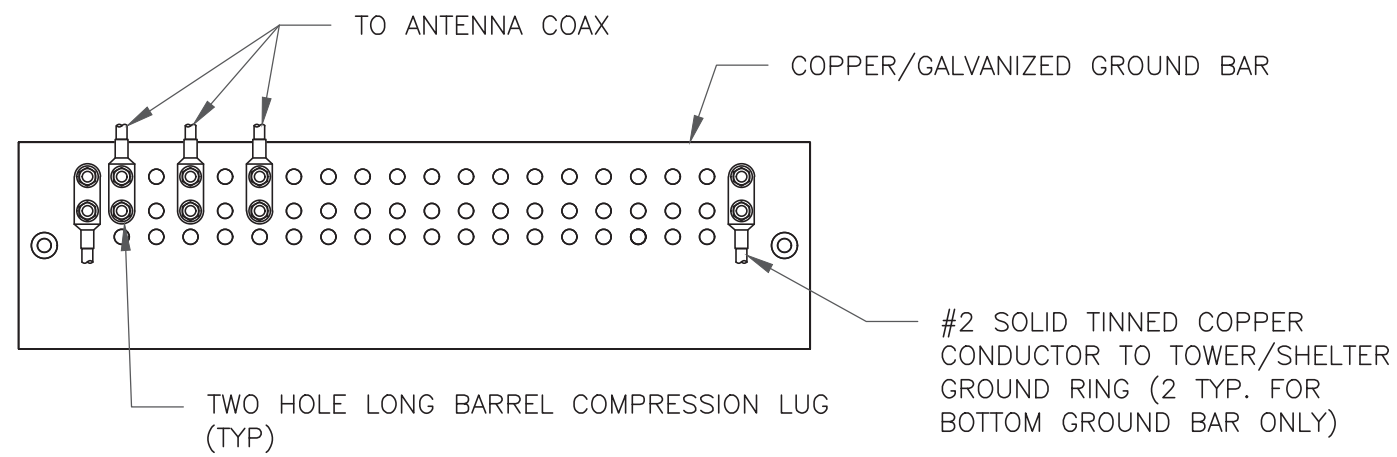
89233.009.01\_HRT\_094\_943225.dwg - Sheet:G-1 - User: jockie.weater - Dec. 22, 2021 - 2:57pm



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

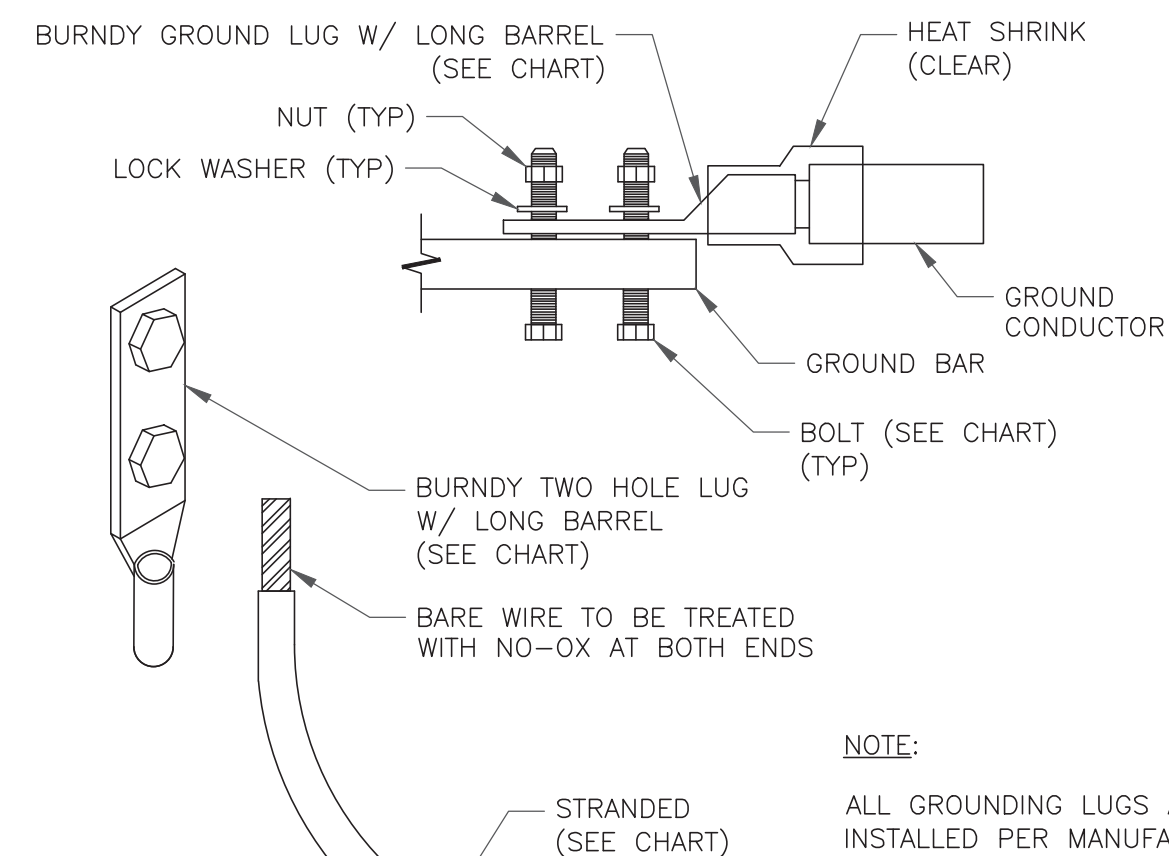


NOTES:

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

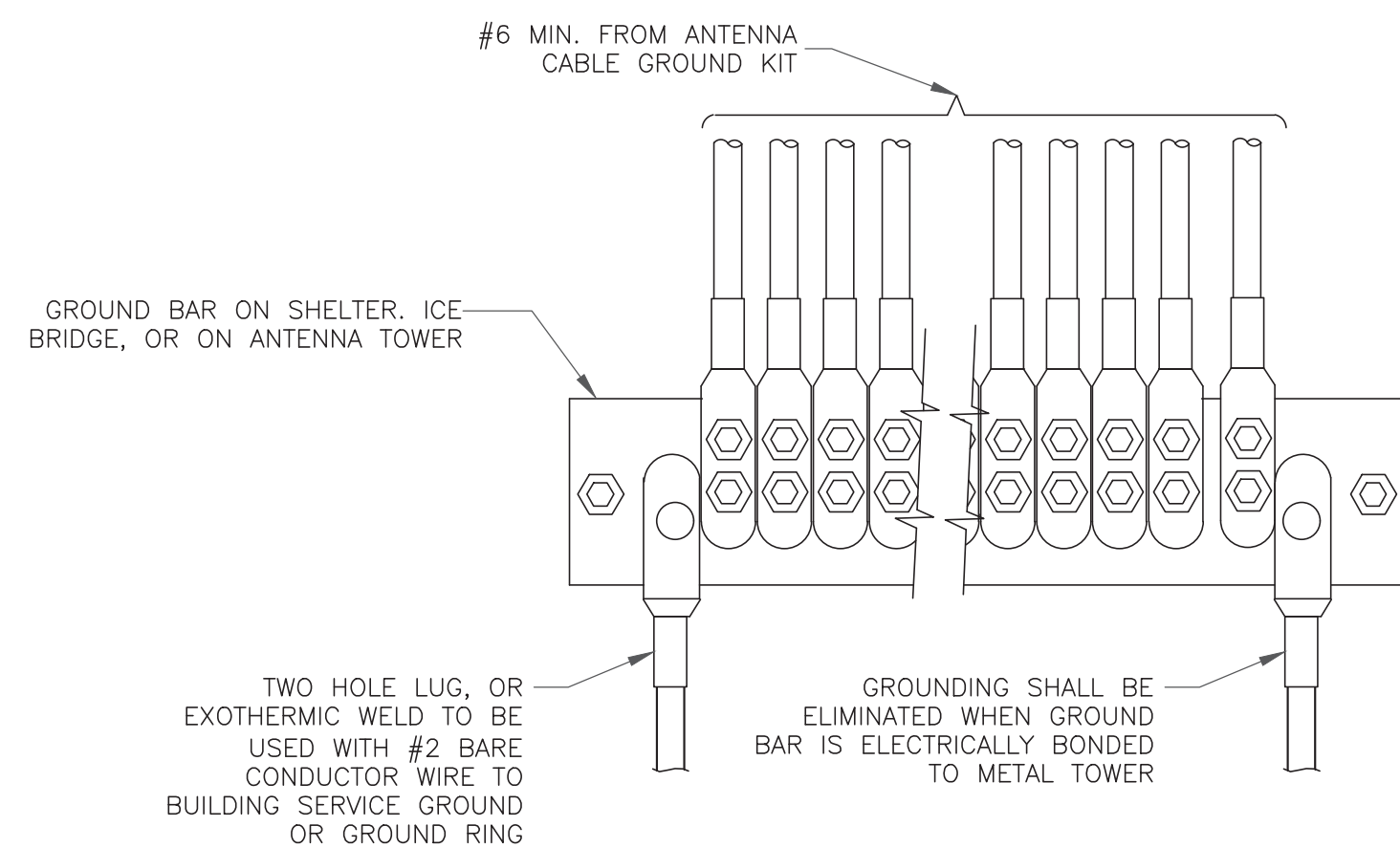
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 SOLID TINNED	YA3C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 STRANDED	YA2C-2TC38	3/8" - 16 NC SS 2 BOLT
#2/0 STRANDED	YA26-2TC38	3/8" - 16 NC SS 2 BOLT
#4/0 STRANDED	YA28-2N	1/2" - 16 NC SS 2 BOLT



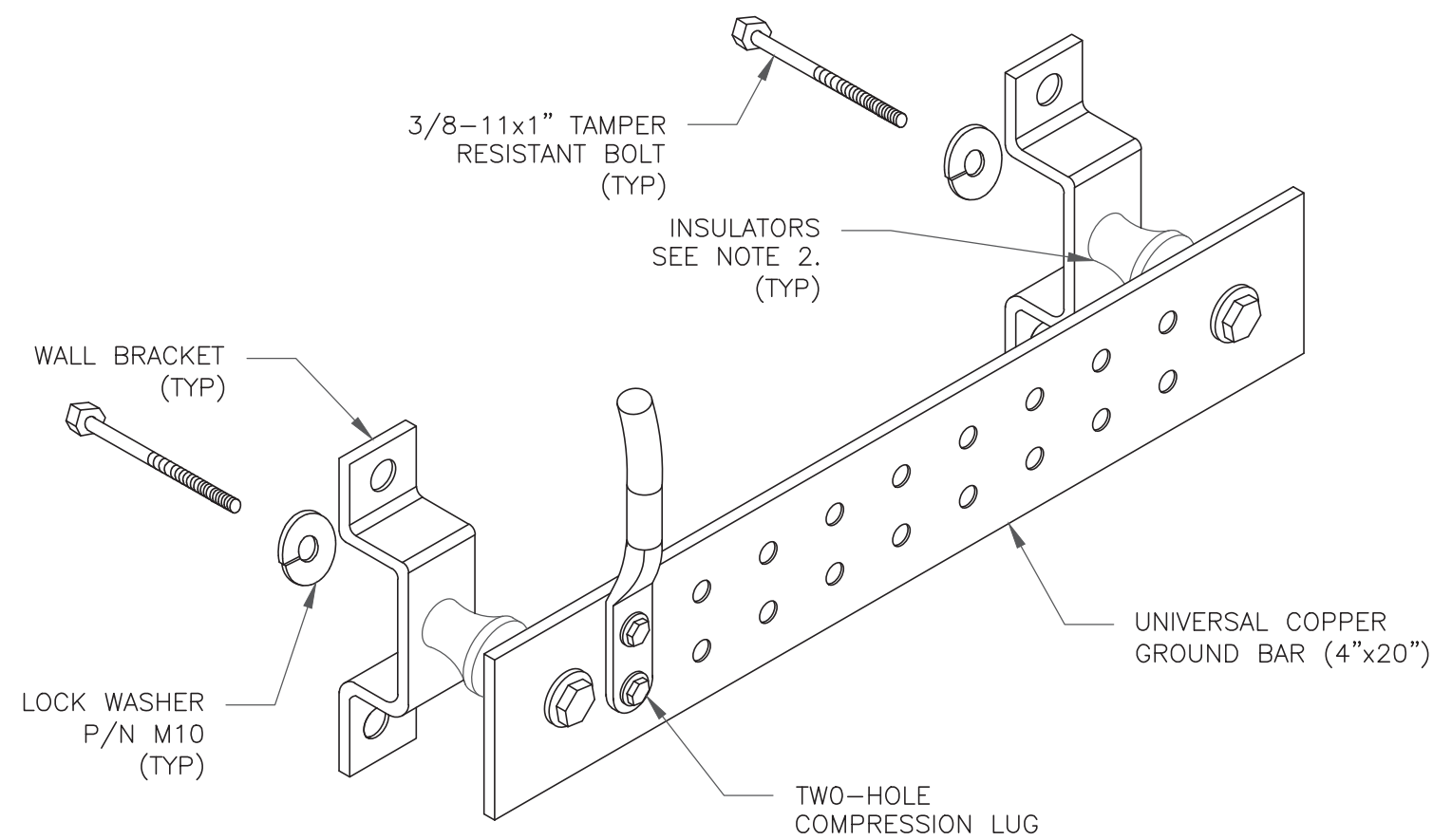
NOTE:

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.

3 MECHANICAL LUG CONNECTION  
SCALE: NOT TO SCALE



4 GROUNDWIRE INSTALLATION  
SCALE: NOT TO SCALE

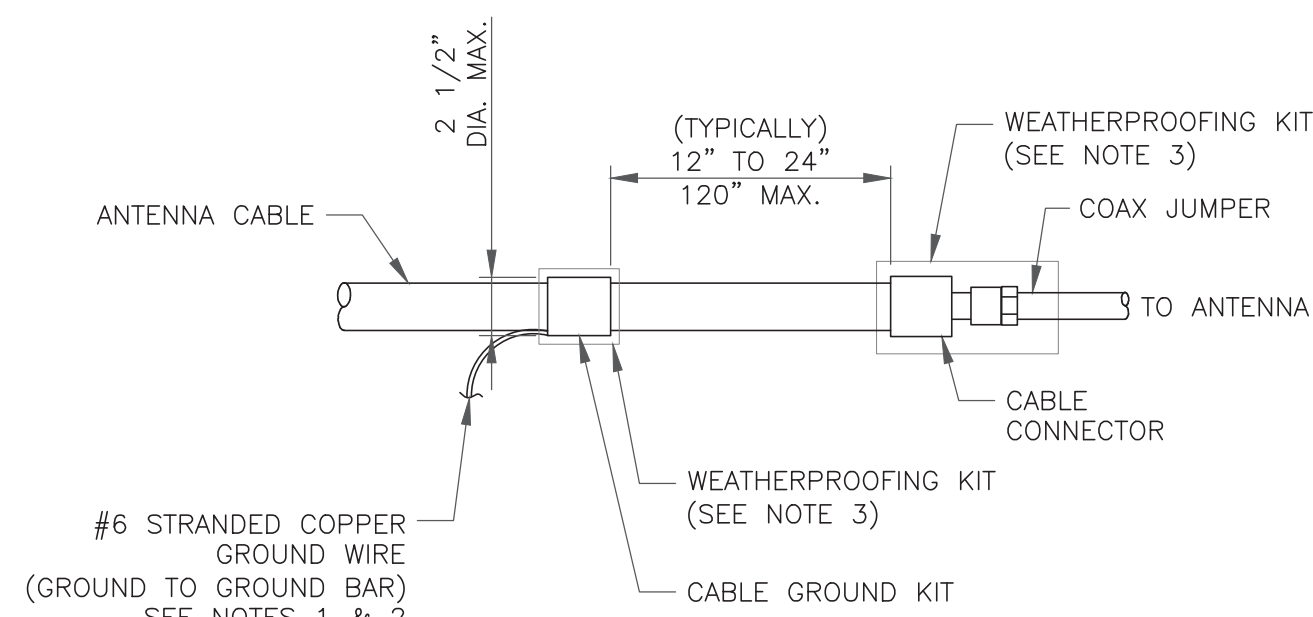


NOTES:

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.

5 GROUND BAR DETAIL  
SCALE: NOT TO SCALE

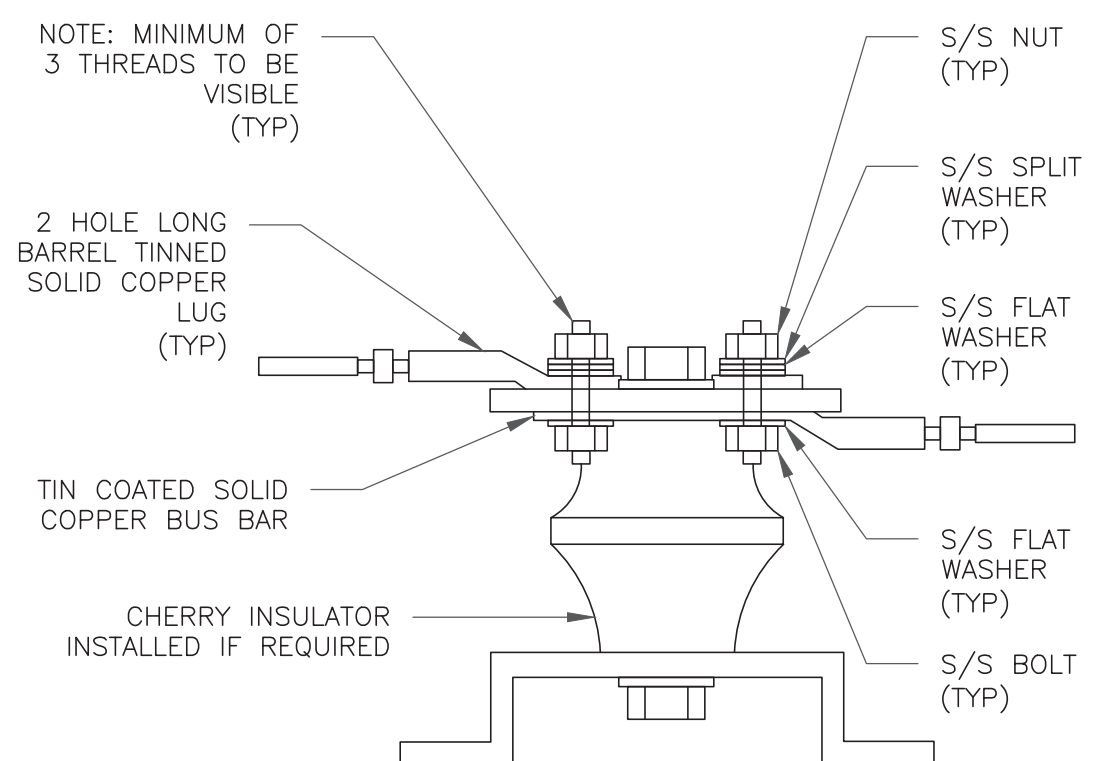
**THIS PAGE CONTAINS  
CONFIDENTIAL, PROPRIETARY  
OR TRADE SECRET INFORMATION  
EXEMPT FROM DISCLOSURE  
UNDER APPLICABLE LAW.**  
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



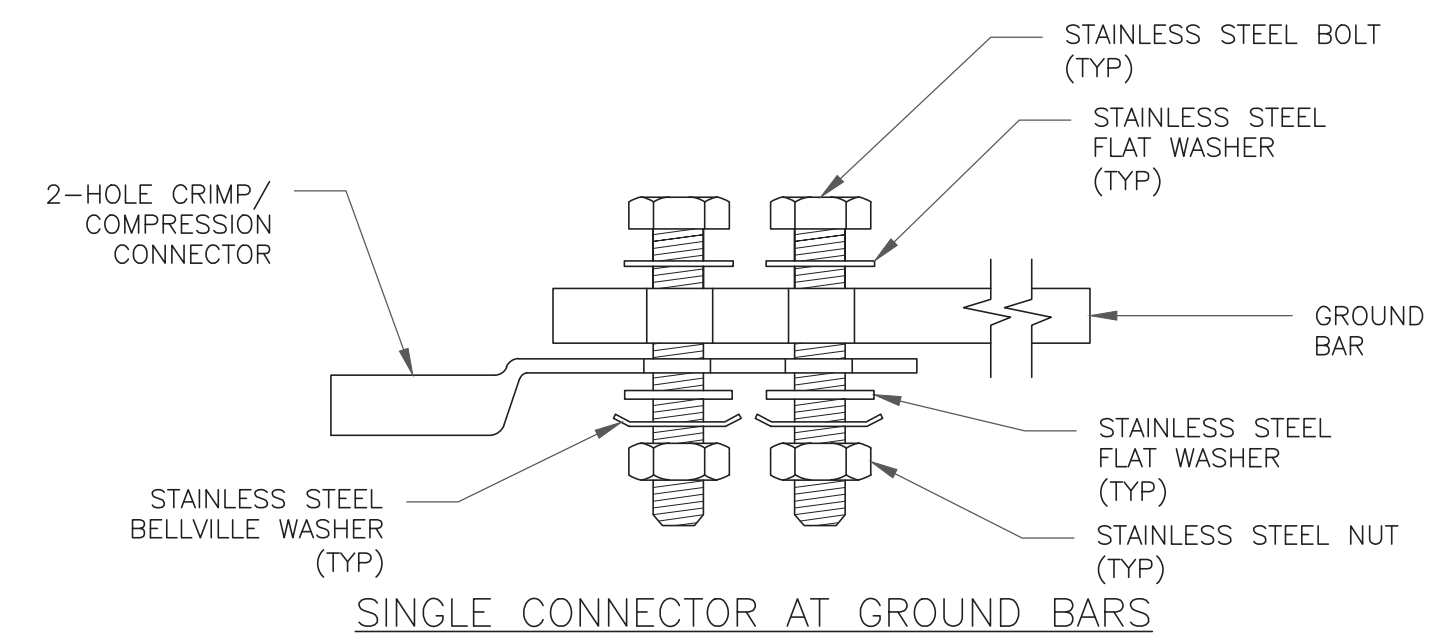
NOTES:

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.

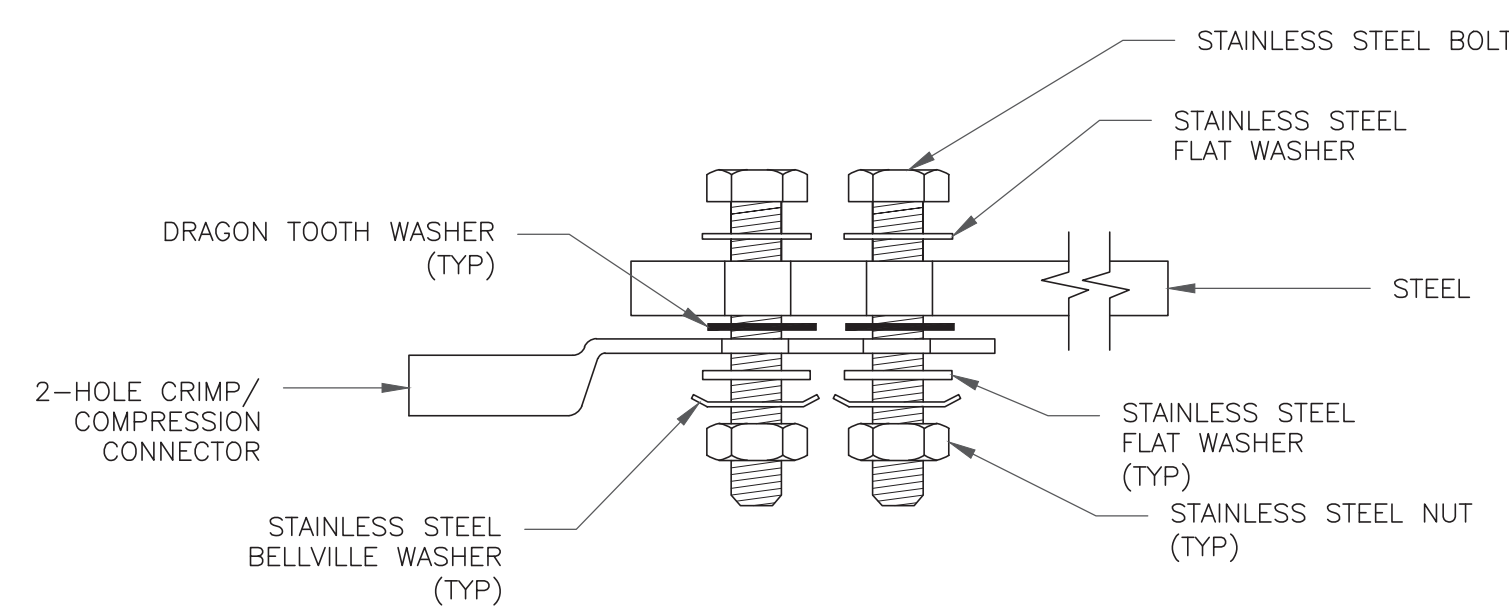
6 CABLE GROUND KIT CONNECTION  
SCALE: NOT TO SCALE



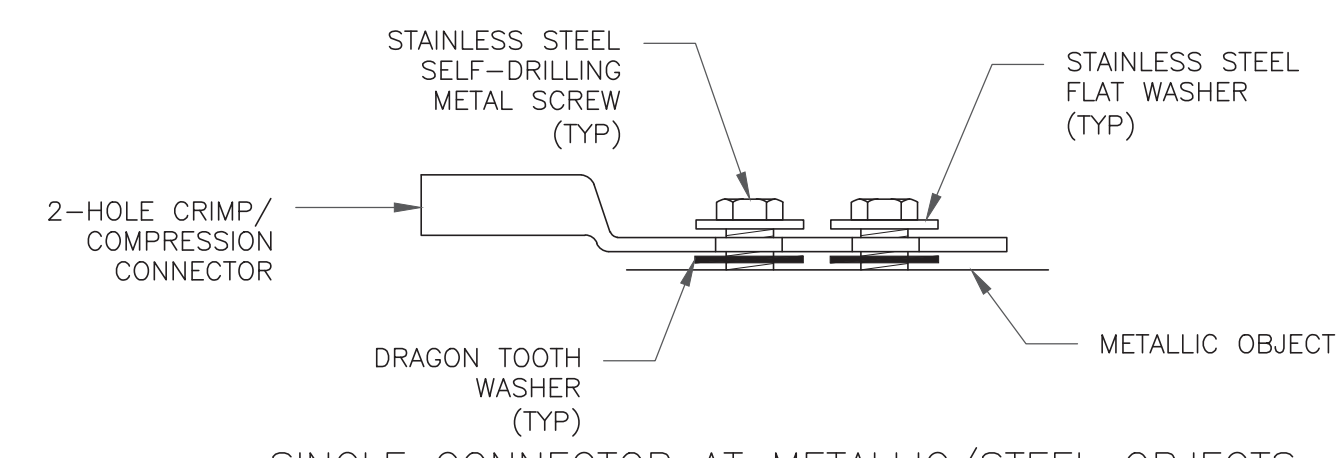
7 LUG DETAIL  
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

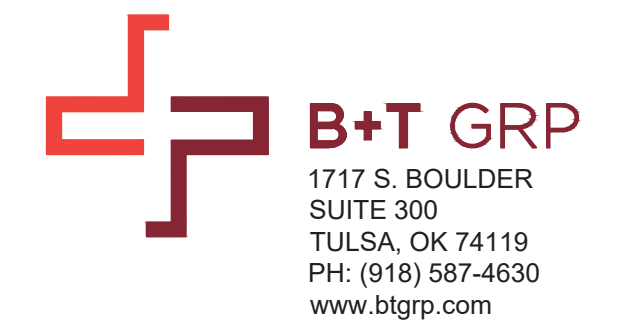


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

8 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS  
SCALE: NOT TO SCALE



AT&T SITE NUMBER: CTL05131

BU #: 806369  
HRT 094 943225

439-455 HOMESTEAD AVE  
HARTFORD, CT 06105

EXISTING  
140'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/4/21	KT	PRELIMINARY REVIEW	KT
B	10/11/21	AJA	PRELIMINARY REVIEW	MTJ
C	10/22/21	AJA	PRELIMINARY REVIEW	JHW
0	12/22/21	GAC	CONSTRUCTION	JHW

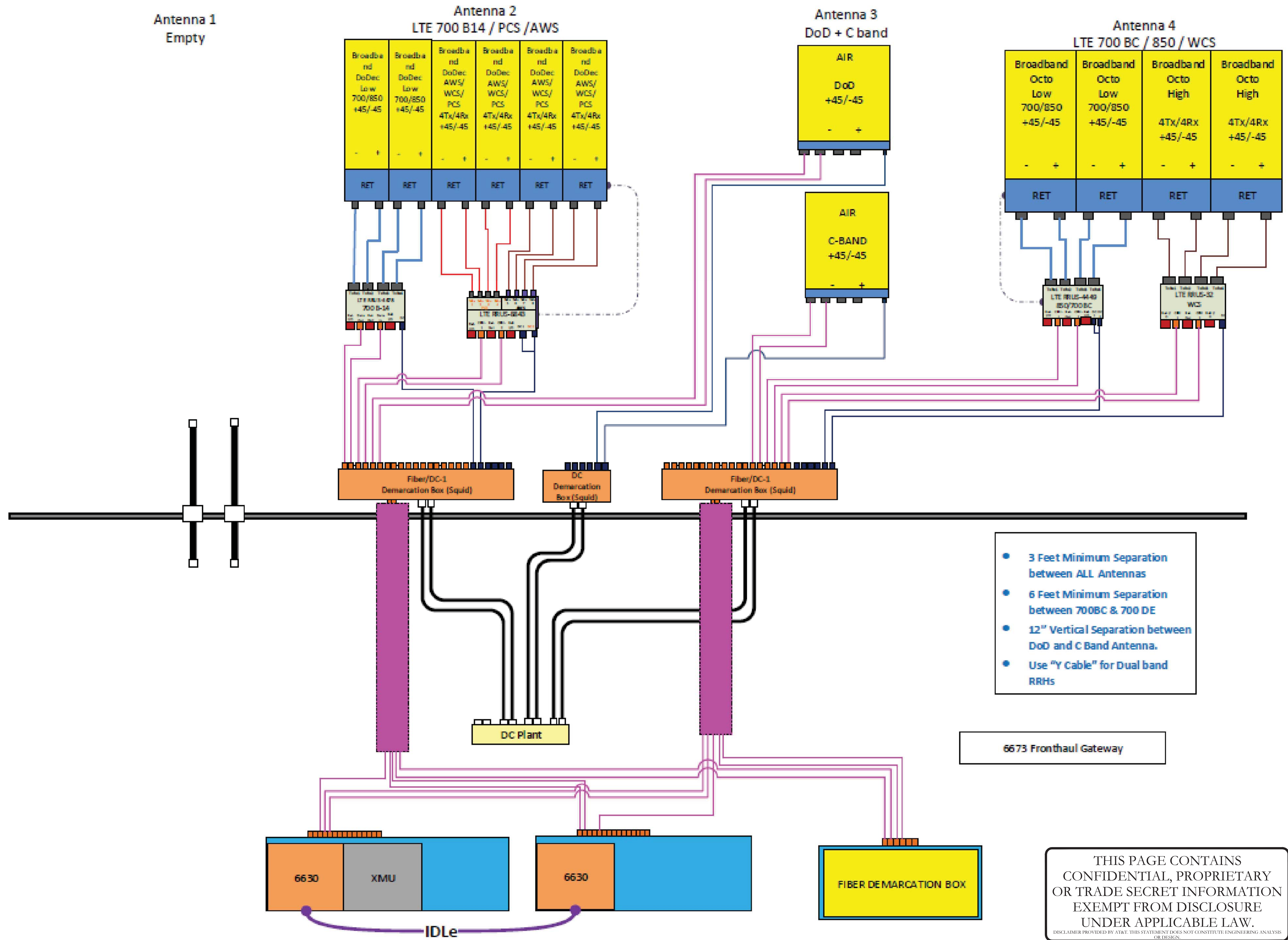


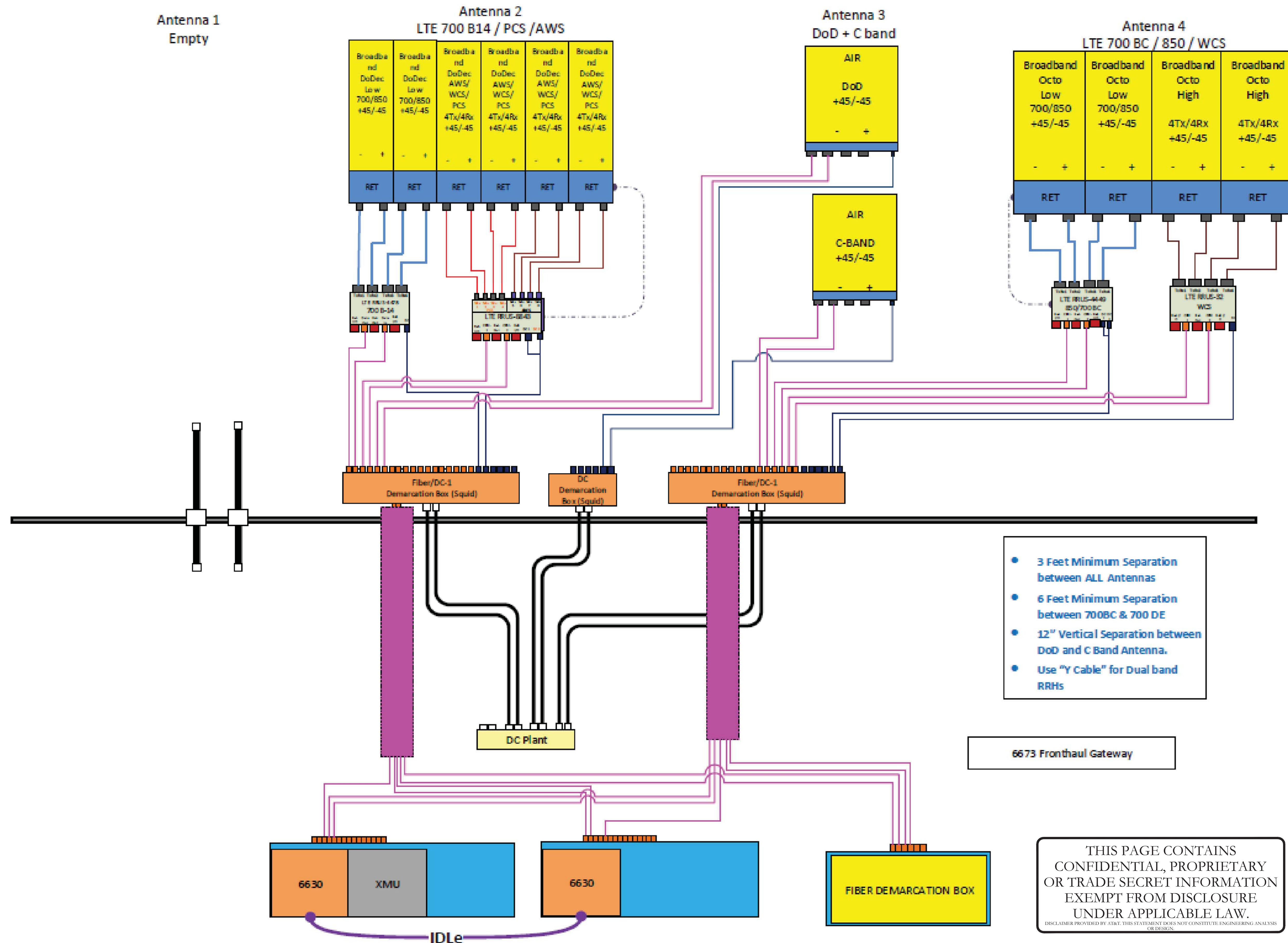
B&T ENGINEERING, INC.  
2172  
Expires 6/30/22

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: **G-2** REVISION: **0**







Antenna 1  
Empty

Antenna 2  
LTE 700 B14 / PCS / AWS

Antenna 3  
DoD + C band

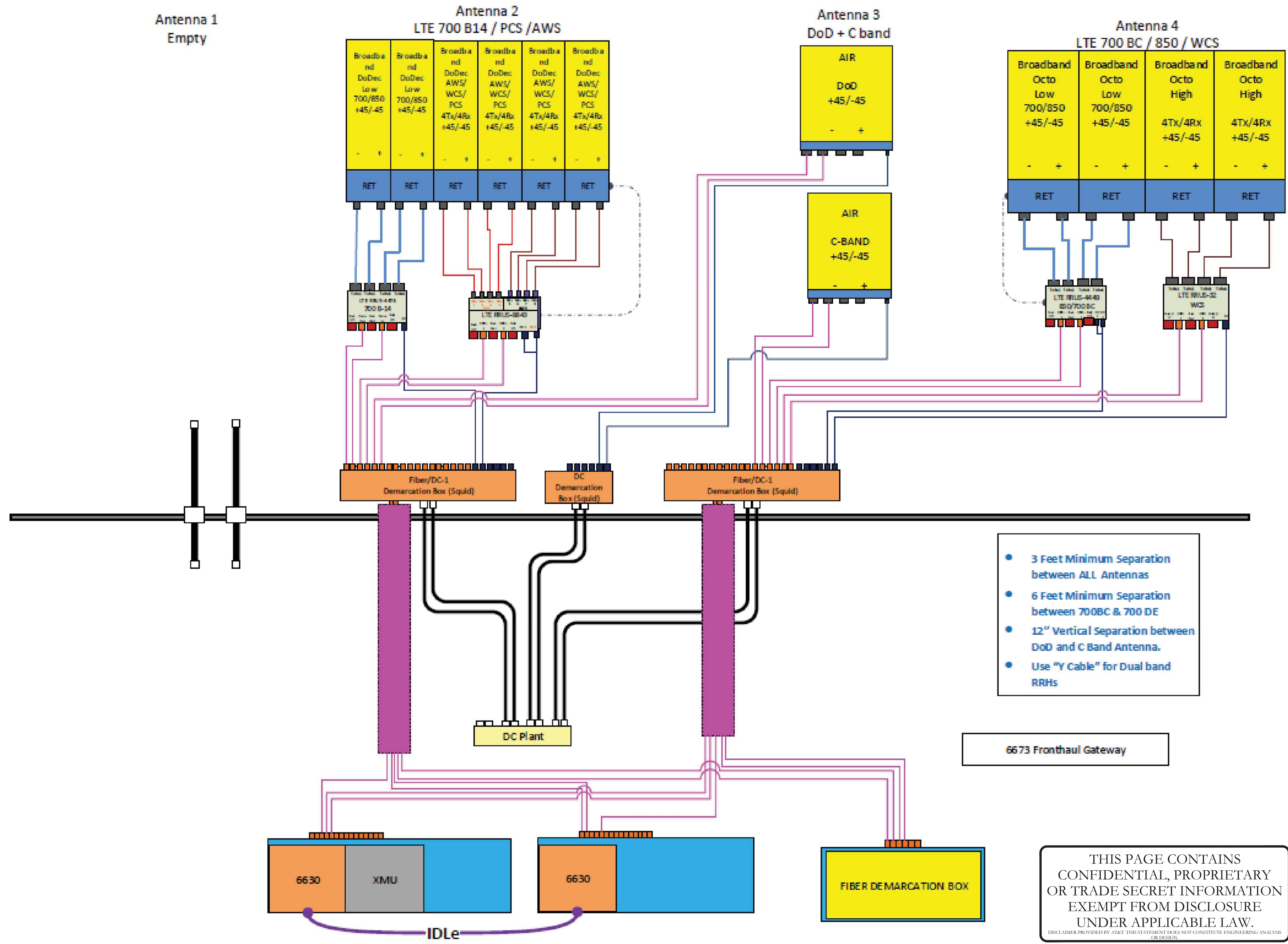
Antenna 4  
LTE 700 BC / 850 / WCS

- 3 Feet Minimum Separation between ALL Antennas
- 6 Feet Minimum Separation between 700BC & 700 DE
- 12" Vertical Separation between DoD and C Band Antenna.
- Use "Y Cable" for Dual band RRHs

6673 Fronthaul Gateway

THIS PAGE CONTAINS  
CONFIDENTIAL, PROPRIETARY  
OR TRADE SECRET INFORMATION  
EXEMPT FROM DISCLOSURE  
UNDER APPLICABLE LAW.  
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.

IDLe



- 3 Feet Minimum Separation between ALL Antennas
- 6 Feet Minimum Separation between 700BC & 700 DE
- 12" Vertical Separation between DoD and C Band Antenna.
- Use "Y Cable" for Dual band RRHs

6673 Fronthaul Gateway

THIS PAGE CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW.  
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.

# Exhibit D

## Structural Analysis Report



MORRISON HERSHFIELD

Morrison Hershfield  
1455 Lincoln Parkway, Suite 500  
Atlanta, GA 30346  
(770) 379-8500

Date: **September 20, 2021**

**Subject:** **Structural Analysis Report**

**Carrier Designation:** **AT&T Mobility Co-Locate**  
**Site Number:** CTL05131  
**Site Name:** HRT 094 943225  
**FA Number:** 10071191

**Crown Castle Designation:** **BU Number:** 806369  
**Site Name:** HRT 094 943225  
**JDE Job Number:** 649380  
**Work Order Number:** 2017896  
**Order Number:** 556516 Rev. 0

**Engineering Firm Designation:** **Morrison Hershfield Project Number:** CN9-394R2 / 2101398

**Site Data:** **439-455 Homestead Ave, Hartford, Hartford County, CT 06105**  
**Latitude 41° 47' 1.61", Longitude -72° 42' 13.66"**  
**140 Foot – Valmont Monopole Tower**

Morrison Hershfield 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:

LC7: Proposed Equipment Configuration

**Sufficient Capacity**

This analysis utilizes an ultimate 3-second gust wind speed of 117 mph as required by the 2018 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Respectfully submitted by:

G. Lance Cooke, P.E. (CT License No. PEN.0028133)  
Senior Engineer



Digitally signed by  
G. Lance Cooke  
Date: 2021.09.20  
08:08:32-07'00'

## **TABLE OF CONTENTS**

### **1) INTRODUCTION**

### **2) ANALYSIS CRITERIA**

Table 1 - Proposed Equipment Configuration

Table 2 - Other Considered Equipment

### **3) ANALYSIS PROCEDURE**

Table 3 - Documents Provided

3.1) Analysis Method

3.2) Assumptions

### **4) ANALYSIS RESULTS**

Table 4 - Section Capacity (Summary)

Table 5 – Tower Component Stresses vs. Capacity – LC7

4.1) Recommendations

### **5) APPENDIX A**

tnxTower Output

### **6) APPENDIX B**

Base Level Drawing

### **7) APPENDIX C**

Additional Calculations

## 1) INTRODUCTION

This tower is a 140 ft Monopole tower designed by Valmont Microflex and mapped by Tower Engineering Professionals, Inc., in July of 2008.

## 2) ANALYSIS CRITERIA

<b>TIA-222 Revision:</b>	TIA-222-H
<b>Risk Category:</b>	II
<b>Wind Speed:</b>	117 mph
<b>Exposure Category:</b>	B
<b>Topographic Factor:</b>	1
<b>Ice Thickness:</b>	1.5 in
<b>Wind Speed with Ice:</b>	50 mph
<b>Service Wind Speed:</b>	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)	
117.0	120.0	3	ericsson	RRUS 8843 B2/B66A_CCIV2	6	1-5/8 7/8 3/8 2C	
		3	raycap	DC6-48-60-18-8F			
	117.0	117.0	2	cci antennas			DMP65R-BU6D w/ Mount Pipe
			1	cci antennas			DMP65R-BU8D w/ Mount Pipe
			2	cci antennas			TPA65R-BU6D w/ Mount Pipe
			1	cci antennas			TPA65R-BU8D w/ Mount Pipe
			3	ericsson			AIR 6419 B77G w/ Mount Pipe
			3	ericsson			AIR 6449 N77 w/ Mount Pipe
			3	ericsson			RADIO 4478 B14
			3	ericsson			RRUS 32 B30
			3	ericsson			RRUS 4449 B5/B12
	1	-	Platform Mount [LP 303-1_HR-1]				

**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)	
140.0	142.0	2	raycap	RRFDC-3315-PF-48	8	1-5/8	
		3	amphenol	BXA-80063-4BF-EDIN-X w/ Mount Pipe			
	140.0	140.0	3	commscope			NHH-65B-R2B
			3	commscope			NHHSS-65B-R2B
			3	samsung telecommunications			MT6407-77A w/ Mount Pipe
			3	samsung telecommunications			CBRS RT4401-48A
			3	samsung telecommunications			RF4439D-25A
			6	samsung telecommunications			RF4440D-13A

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
140.0	140.0	3	Commscope	Side-By-Side Mounting Kit [#BSAMNT-SBS-1-2]	-	-
		1	-	Platform Mount [LP 713-1]		
126.0	128.0	3	ericsson	AIR -32 B2A/B66AA w/ Mount Pipe	9 3	1-5/8 1-3/8
		3	ericsson	AIR6449 B41 w/ Mount Pipe		
		3	ericsson	ERICSSON AIR 21 B2A B4P_T-MOBILE w/ Mount Pipe		
		3	rfs/celwave	APXVAARR24_43-U-NA20 w/ Mount Pipe		
		3	ericsson	RADIO 4449 B71 B85A_T-MOBILE		
	3	ericsson	RRUS 4415 B25_CCIV2			
	126.0	3	rfs/celwave	ATMAA1412D-1A20		
		1	Site Pro 1	Platform Reinforcement Kit [#PRK-1245]		
104.0	104.0	1	-	Platform Mount [LP 713-1]		
		3	alcatel lucent	800MHz 2X50W RRH W/FILTER	-	-
3	alcatel lucent	PCS 1900MHz 4x45W-65MHz				
103.0	105.0	1	-	Pipe Mount [PM 601-3]		
		3	ericsson	AIR6449 B41_T-MOBILE w/ Mount Pipe	3	1-5/8
		3	rfs/celwave	APXVAALL24_43-U-NA20_TMO w/ Mount Pipe		
		3	ericsson	RADIO 4460 B2/B25 B66_TMO		
	3	ericsson	Radio 4480_TMOV2			
103.0	1	-	Platform Mount [LP 713-1]			
93.0	93.0	3	jma wireless	MX08FRO665-21 w/ Mount Pipe	1	1-1/2
		3	fujitsu	TA08025-B604		
		3	fujitsu	TA08025-B605		
		1	raycap	RDIDC-9181-PF-48		
		1	tower mounts	Commscope MC-PK8-DSH		
74.0	80.0	1	antel	BCD-87010	1	7/8
	74.0	1	-	Side Arm Mount [SO 701-1]		
50.0	52.0	1	lucent	KS24019-L112A	1	7/8
	50.0	1	-	Side Arm Mount [SO 701-1]		



### 3) ANALYSIS PROCEDURE

**Table 3 - Documents Provided**

Document	Reference	Source
4-GEOTECHNICAL REPORTS	2294838	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	2294380	CCISITES
4-TOWER MANUFACTURER DRAWINGS	2294379	CCISITES

#### 3.1) Analysis Method

tnxTower (version 8.1.1.0), 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. Morrison Hershfield 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
L1	140 - 86.83	Pole	TP39.223x26.216x0.3125	1	-28.87	2319.28	34.8	Pass
L2	86.83 - 38	Pole	TP50.56x37.2109x0.4063	2	-44.39	3892.16	46.6	Pass
L3	38 - 0	Pole	TP59.05x48.0329x0.5	3	-65.63	5790.26	44.6	Pass
							Summary	
						Pole (L2)	46.6	Pass
						Rating =	46.6	Pass

**Table 5 - Tower Component Stresses vs. Capacity – LC7**

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	47.5	Pass
1	Base Plate		15.6	Pass
1	Base Foundation (Structure)	0	33.0	Pass
1	Base Foundation (Soil Interaction)		42.8	Pass

<b>Structure Rating (max from all components) =</b>	<b>47.5%*</b>
---	---------------

Notes:

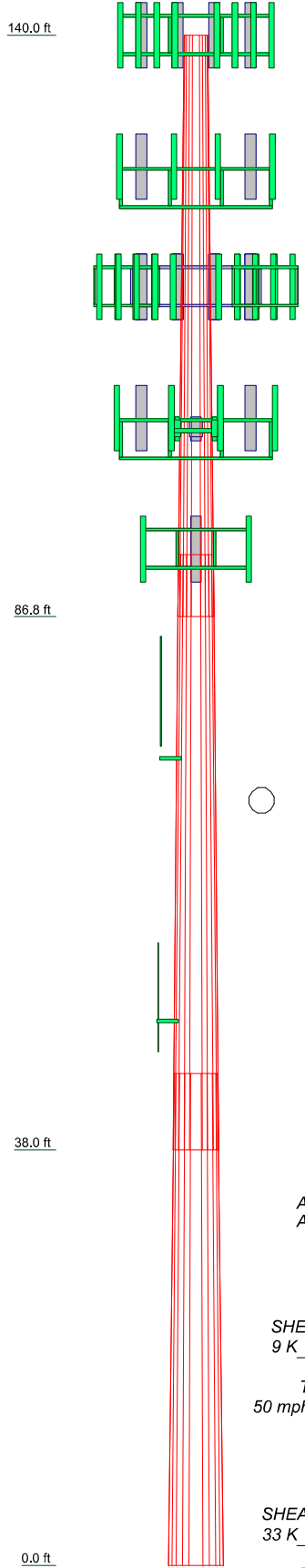
- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.
- 2) \*Rating per TIA-222-H, Section 15.5.

#### **4.1) Recommendations**

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

**APPENDIX A**  
**TNXTOWER OUTPUT**

Section	1	2	3
Length (ft)	53.17	54.50	45.00
Number of Sides	12	12	12
Thickness (in)	0.3125	0.4063	0.5000
Socket Length (ft)	5.67	7.00	
Top Dia (in)	26.2160	37.2109	48.0329
Bot Dia (in)	39.2230	50.5600	59.0500
Grade		A572-65	
Weight (K)	5.9	10.5	13.1



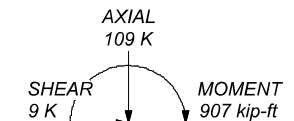
### MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

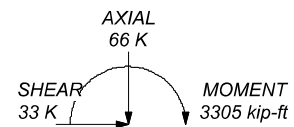
### TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 117 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 0.00 ft
8. TOWER RATING: 46.6%

ALL REACTIONS ARE FACTORED



TORQUE 0 kip-ft  
50 mph WIND - 1.5000 in ICE



TORQUE 1 kip-ft  
REACTIONS - 117 mph WIND

**Morrison Hershfield**  
 1455 Lincoln Parkway, Suite 500  
 Atlanta, GA 30346  
 Phone: (770) 379-8500  
 FAX: (770) 379-8501

Job: **CN9-394R2 / 2101398**  
 Project: **806369 / HRT 094 943225**  
 Client: Crown Castle USA  
 Code: TIA-222-H  
 Path: C:\Users\Apostol\Desktop\Old works\CN9-394R2 SAAnalysis\CN9-394R2 BU\_806369 WO\_2017856.dwg

Drawn by: AP	App'd:
Date: 09/20/21	Scale: NTS
Dwg No. E-1	

## Tower Input Data

The tower is a monopole.  
 This tower is designed using the TIA-222-H standard.  
 The following design criteria apply:

- Tower is located in Hartford County, Connecticut.
- Tower base elevation above sea level: 60.00 ft.
- Basic wind speed of 117 mph.
- Risk Category II.
- Exposure Category B.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.00 ft.
- Nominal ice thickness of 1.5000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Temperature drop of 50 °F.
- Deflections calculated using a wind speed of 60 mph.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in pole 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

- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>Consider Moments - Legs</li> <li>Consider Moments - Horizontals</li> <li>Consider Moments - Diagonals</li> <li>Use Moment Magnification</li> <li>√ Use Code Stress Ratios</li> <li>√ Use Code Safety Factors - Guys</li> <li>Escalate Ice</li> <li>Always Use Max Kz</li> <li>Use Special Wind Profile</li> <li>Include Bolts In Member Capacity</li> <li>Leg Bolts Are At Top Of Section</li> <li>Secondary Horizontal Braces Leg</li> <li>Use Diamond Inner Bracing (4 Sided)</li> <li>SR Members Have Cut Ends</li> <li>SR Members Are Concentric</li> </ul> | <ul style="list-style-type: none"> <li>Distribute Leg Loads As Uniform</li> <li>Assume Legs Pinned</li> <li>√ Assume Rigid Index Plate</li> <li>√ Use Clear Spans For Wind Area</li> <li>Use Clear Spans For KL/r</li> <li>Retension Guys To Initial Tension</li> <li>√ Bypass Mast Stability Checks</li> <li>√ Use Azimuth Dish Coefficients</li> <li>√ Project Wind Area of Appurt.</li> <li>Autocalc Torque Arm Areas</li> <li>Add IBC .6D+W Combination</li> <li>Sort Capacity Reports By Component</li> <li>Triangulate Diamond Inner Bracing</li> <li>Treat Feed Line Bundles As Cylinder</li> <li>Ignore KL/ry For 60 Deg. Angle Legs</li> </ul> | <ul style="list-style-type: none"> <li>Use ASCE 10 X-Brace Ly Rules</li> <li>Calculate Redundant Bracing Forces</li> <li>Ignore Redundant Members in FEA</li> <li>SR Leg Bolts Resist Compression</li> <li>All Leg Panels Have Same Allowable</li> <li>Offset Girt At Foundation</li> <li>√ Consider Feed Line Torque</li> <li>Include Angle Block Shear Check</li> <li>Use TIA-222-H Bracing Resist. Exemption</li> <li>Use TIA-222-H Tension Splice Exemption</li> <li style="text-align: center;">Poles</li> <li>√ Include Shear-Torsion Interaction</li> <li>Always Use Sub-Critical Flow</li> <li>Use Top Mounted Sockets</li> <li>Pole Without Linear Attachments</li> <li>Pole With Shroud Or No Appurtenances</li> <li>Outside and Inside Corner Radii Are Known</li> </ul> |
|--|---|---|

## Tapered Pole Section Geometry

Section	Elevation	Section Length	Splice Length	Number of Sides	Top Diameter	Bottom Diameter	Wall Thickness	Bend Radius	Pole Grade
	ft	ft	ft		in	in	in	in	
L1	140.00-86.83	53.17	5.67	12	26.2160	39.2230	0.3125	1.2500	A572-65 (65 ksi)
L2	86.83-38.00	54.50	7.00	12	37.2109	50.5600	0.4063	1.6250	A572-65 (65 ksi)
L3	38.00-0.00	45.00		12	48.0329	59.0500	0.5000	2.0000	A572-65 (65 ksi)

### Tapered Pole Properties

Section	Tip Dia. in	Area in <sup>2</sup>	I in <sup>4</sup>	r in	C in	I/C in <sup>3</sup>	J in <sup>4</sup>	It/Q in <sup>2</sup>	w in	w/t
L1	27.0306	26.0654	2232.3752	9.2735	13.5799	164.3883	4523.3974	12.8286	6.1884	19.803
	40.4964	39.1537	7566.4519	13.9300	20.3175	372.4103	15331.6830	19.2703	9.6743	30.958
L2	39.8181	48.1451	8324.2452	13.1761	19.2753	431.8614	16867.1776	23.6956	8.8838	21.868
	52.2003	65.6074	21064.2222	17.9550	26.1901	804.2825	42681.8251	32.2900	12.4613	30.674
L3	51.3252	76.5280	22069.6751	17.0168	24.8811	887.0069	44719.1451	37.6648	11.5328	23.066
	60.9567	94.2655	41247.0150	20.9609	30.5879	1348.4749	83577.6350	46.3946	14.4854	28.971

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A <sub>r</sub>	Adjust. Factor A <sub>r</sub>	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft <sup>2</sup>	in					in	in	in
L1 140.00-86.83				1	1	1			
L2 86.83-38.00				1	1	1			
L3 38.00-0.00				1	1	1			

### Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter r in	Perimeter r in	Weight plf
***** Climbing Pegs	A	No	Surface Ar (CaAa)	140.00 - 0.00	1	1	-0.050 0.050	0.7050		1.80
Safety Line 3/8"	A	No	Surface Ar (CaAa)	140.00 - 0.00	1	1	0.000 0.000	0.3750		0.22
LCF158-50JA(1-5/8)	A	No	Surface Ar (CaAa)	126.00 - 0.00	1	1	0.380 0.380	1.9800		0.80
LCF158-50JA(1-5/8)	C	No	Surface Ar (CaAa)	126.00 - 0.00	2	2	0.350 0.400	1.9800		0.80
HCS 6X12 6AWG(1-3/8) ***	C	No	Surface Ar (CaAa)	126.00 - 0.00	1	1	0.320 0.320	1.3800		1.70
HCS 6X12 4AWG(1-5/8) ***** ***	C	No	Surface Ar (CaAa)	126.00 - 0.00	3	3	0.400 0.500	1.6600		2.40
HB158-21U6S24-xxM_TMO(1-5/8) ***** ***	A	No	Surface Ar (CaAa)	103.00 - 0.00	3	2	-0.130 -0.100	1.9960		2.50
CU12PSM9P6XXX(1-1/2) *****	B	No	Surface Ar (CaAa)	93.00 - 0.00	1	1	0.000 0.000	1.6000		2.35
LDF5-50A(7/8)	B	No	Surface Ar (CaAa)	74.00 - 50.00	1	1	-0.100 -0.100	1.0900		0.33
LDF5-50A(7/8)	B	No	Surface Ar (CaAa)	50.00 - 0.00	2	2	-0.150 -0.100	1.0900		0.33
*****										

### Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Componen t Type	Placement ft	Total Number		C <sub>AA</sub> ft <sup>2</sup> /ft	Weight plf
*****									
LDF7-50A(1-5/8)	B	No	No	Inside Pole	140.00 - 0.00	6	No Ice	0.00	0.82
							1/2" Ice	0.00	0.82
							1" Ice	0.00	0.82
							2" Ice	0.00	0.82
HB158-1-08U8-S8J18(1-5/8)	B	No	No	Inside Pole	140.00 - 0.00	1	No Ice	0.00	1.30
							1/2" Ice	0.00	1.30
							1" Ice	0.00	1.30
							2" Ice	0.00	1.30
***									
HB158-21U6S12-XXXM-01(1-5/8)	B	No	No	Inside Pole	140.00 - 0.00	1	No Ice	0.00	1.90
							1/2" Ice	0.00	1.90
							1" Ice	0.00	1.90
							2" Ice	0.00	1.90
*****									
HCS 6X12 6AWG(1-3/8)	A	No	No	Inside Pole	126.00 - 0.00	2	No Ice	0.00	1.70
							1/2" Ice	0.00	1.70
							1" Ice	0.00	1.70
							2" Ice	0.00	1.70
LCF158-50JA(1-5/8)	A	No	No	Inside Pole	126.00 - 0.00	3	No Ice	0.00	0.80
							1/2" Ice	0.00	0.80
							1" Ice	0.00	0.80
							2" Ice	0.00	0.80
*****									
LDF7-50A(1-5/8)	C	No	No	Inside Pole	117.00 - 0.00	6	No Ice	0.00	0.82
							1/2" Ice	0.00	0.82
							1" Ice	0.00	0.82
							2" Ice	0.00	0.82
FB-L98B-034-XXX(3/8)	C	No	No	Inside Pole	117.00 - 0.00	1	No Ice	0.00	0.06
							1/2" Ice	0.00	0.06
							1" Ice	0.00	0.06
							2" Ice	0.00	0.06
FB-L98B-034-XXXXXX(3/8)	C	No	No	Inside Pole	117.00 - 0.00	1	No Ice	0.00	0.05
							1/2" Ice	0.00	0.05
							1" Ice	0.00	0.05
							2" Ice	0.00	0.05
2" Conduit	C	No	No	Inside Pole	117.00 - 0.00	3	No Ice	0.00	2.80
							1/2" Ice	0.00	2.80
							1" Ice	0.00	2.80
							2" Ice	0.00	2.80
***									
PWRT-606-S(7/8)	C	No	No	Inside Pole	117.00 - 0.00	6	No Ice	0.00	0.89
							1/2" Ice	0.00	0.89
							1" Ice	0.00	0.89
							2" Ice	0.00	0.89
2" Conduit	C	No	No	Inside Pole	117.00 - 0.00	1	No Ice	0.00	2.80
							1/2" Ice	0.00	2.80
							1" Ice	0.00	2.80
							2" Ice	0.00	2.80
*****									

### Feed Line/Linear Appurtenances Section Areas

Tower Sectio n	Tower Elevation ft	Face	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	Weight K
L1	140.00-86.83	A	0.000	0.000	19.953	0.000	0.49
		B	0.000	0.000	0.987	0.000	0.45
		C	0.000	0.000	40.423	0.000	1.06
L2	86.83-38.00	A	0.000	0.000	34.435	0.000	0.79
		B	0.000	0.000	13.045	0.000	0.53
		C	0.000	0.000	50.393	0.000	1.57
L3	38.00-0.00	A	0.000	0.000	26.798	0.000	0.61

Tower Section n	Tower Elevation ft	Face	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	Weight K
		B	0.000	0.000	14.364	0.000	0.42
		C	0.000	0.000	39.216	0.000	1.22

**Feed Line/Linear Appurtenances Section Areas - With Ice**

Tower Section n	Tower Elevation ft	Face or Leg	Ice Thickness in	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	Weight K
L1	140.00-86.83	A	1.441	0.000	0.000	69.323	0.000	1.27
		B		0.000	0.000	2.765	0.000	0.48
		C		0.000	0.000	88.684	0.000	1.97
L2	86.83-38.00	A	1.358	0.000	0.000	99.111	0.000	1.94
		B		0.000	0.000	39.009	0.000	0.96
		C		0.000	0.000	110.555	0.000	2.70
L3	38.00-0.00	A	1.203	0.000	0.000	74.454	0.000	1.44
		B		0.000	0.000	39.657	0.000	0.81
		C		0.000	0.000	83.832	0.000	2.03

**Feed Line Center of Pressure**

Section	Elevation ft	CP <sub>x</sub> in	CP <sub>z</sub> in	CP <sub>x</sub> Ice in	CP <sub>z</sub> Ice in
L1	140.00-86.83	-3.7999	1.2328	-4.8999	0.7964
L2	86.83-38.00	-4.4824	0.6667	-5.0308	-0.0269
L3	38.00-0.00	-4.3557	0.3743	-4.9287	-0.3928

Note: For pole sections, center of pressure calculations do not consider feed line shielding.

**Shielding Factor Ka**

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L1	2	Climbing Pegs	86.83 - 140.00	1.0000	1.0000
L1	3	Safety Line 3/8"	86.83 - 140.00	1.0000	1.0000
L1	13	LCF158-50JA(1-5/8)	86.83 - 126.00	1.0000	1.0000
L1	14	LCF158-50JA(1-5/8)	86.83 - 126.00	1.0000	1.0000
L1	15	HCS 6X12 6AWG(1-3/8)	86.83 - 126.00	1.0000	1.0000
L1	19	HCS 6X12 4AWG(1-5/8)	86.83 - 126.00	1.0000	1.0000
L1	35	HB158-21U6S24-xxM_TMO(1-5/8)	86.83 - 103.00	1.0000	1.0000
L1	39	CU12PSM9P6XXX(1-1/2)	86.83 - 93.00	1.0000	1.0000
L2	2	Climbing Pegs	38.00 - 86.83	1.0000	1.0000
L2	3	Safety Line 3/8"	38.00 - 86.83	1.0000	1.0000
L2	13	LCF158-50JA(1-5/8)	38.00 - 86.83	1.0000	1.0000
L2	14	LCF158-50JA(1-5/8)	38.00 - 86.83	1.0000	1.0000
L2	15	HCS 6X12 6AWG(1-3/8)	38.00 - 86.83	1.0000	1.0000
L2	19	HCS 6X12 4AWG(1-5/8)	38.00 - 86.83	1.0000	1.0000
L2	35	HB158-21U6S24-xxM_TMO(1-5/8)	38.00 - 86.83	1.0000	1.0000



Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L2	39	CU12PSM9P6XXX(1-1/2)	38.00 - 86.83	1.0000	1.0000
L2	41	LDF5-50A(7/8)	50.00 - 74.00	1.0000	1.0000
L2	42	LDF5-50A(7/8)	38.00 - 50.00	1.0000	1.0000
L3	2	Climbing Pegs	0.00 - 38.00	1.0000	1.0000
L3	3	Safety Line 3/8"	0.00 - 38.00	1.0000	1.0000
L3	13	LCF158-50JA(1-5/8)	0.00 - 38.00	1.0000	1.0000
L3	14	LCF158-50JA(1-5/8)	0.00 - 38.00	1.0000	1.0000
L3	15	HCS 6X12 6AWG(1-3/8)	0.00 - 38.00	1.0000	1.0000
L3	19	HCS 6X12 4AWG(1-5/8)	0.00 - 38.00	1.0000	1.0000
L3	35	HB158-21U6S24-xxM_TMO(1-5/8)	0.00 - 38.00	1.0000	1.0000
L3	39	CU12PSM9P6XXX(1-1/2)	0.00 - 38.00	1.0000	1.0000
L3	42	LDF5-50A(7/8)	0.00 - 38.00	1.0000	1.0000

### Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C <sub>A</sub> A <sub>A</sub> Front ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Side ft <sup>2</sup>	Weight K	
*****									
BXA-80063-4BF-EDIN-X w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	140.00	No Ice	4.62	3.47	0.03
						1/2" Ice	4.99	4.04	0.07
						Ice	5.36	4.63	0.12
						1" Ice	6.13	5.83	0.23
						2" Ice			
BXA-80063-4BF-EDIN-X w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	0.0000	140.00	No Ice	4.62	3.47	0.03
						1/2" Ice	4.99	4.04	0.07
						Ice	5.36	4.63	0.12
						1" Ice	6.13	5.83	0.23
						2" Ice			
BXA-80063-4BF-EDIN-X w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	0.0000	140.00	No Ice	4.62	3.47	0.03
						1/2" Ice	4.99	4.04	0.07
						Ice	5.36	4.63	0.12
						1" Ice	6.13	5.83	0.23
						2" Ice			
RRFDC-3315-PF-48	A	From Leg	4.00 0.00 2.00	0.0000	140.00	No Ice	3.79	2.51	0.03
						1/2" Ice	4.04	2.73	0.06
						Ice	4.30	2.95	0.10
						1" Ice	4.84	3.42	0.18
						2" Ice			
Side Arm Mount [SO 203-3]	A	None		0.0000	140.00	No Ice	6.68	6.68	0.38
						1/2" Ice	8.05	8.05	0.46
						Ice	9.55	9.55	0.57
						1" Ice	12.80	12.80	0.87
						2" Ice			
Platform Mount [LP 713-1]	C	None		0.0000	140.00	No Ice	32.89	32.89	1.51
						1/2" Ice	35.76	35.76	2.23
						Ice	38.76	38.76	3.03
						1" Ice	45.26	45.26	4.86
						2" Ice			
***									
NHH-65B-R2B	A	From Leg	4.00 0.00 0.00	0.0000	140.00	No Ice	4.16	2.49	0.04
						1/2" Ice	4.56	2.88	0.09
						Ice	4.98	3.27	0.15
						1" Ice	5.84	4.08	0.28
						2" Ice			
NHH-65B-R2B	B	From Leg	4.00 0.00 0.00	0.0000	140.00	No Ice	4.16	2.49	0.04
						1/2" Ice	4.56	2.88	0.09
						Ice	4.98	3.27	0.15
						1" Ice	5.84	4.08	0.28
						2" Ice			

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement	C <sub>AA</sub> <sub>Front</sub>	C <sub>AA</sub> <sub>Side</sub>	Weight	
			Horz	Lateral	Vert						ft
			ft	ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
NHH-65B-R2B	C	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	4.16	2.49	0.04
								1/2" Ice	4.56	2.88	0.09
								1" Ice	4.98	3.27	0.15
NHHSS-65B-R2B	A	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	3.97	2.38	0.07
								1/2" Ice	4.36	2.75	0.12
								1" Ice	4.76	3.12	0.17
NHHSS-65B-R2B	B	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	3.97	2.38	0.07
								1/2" Ice	4.36	2.75	0.12
								1" Ice	4.76	3.12	0.17
NHHSS-65B-R2B	C	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	3.97	2.38	0.07
								1/2" Ice	4.36	2.75	0.12
								1" Ice	4.76	3.12	0.17
MT6407-77A w/ Mount Pipe	A	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	4.91	2.68	0.10
								1/2" Ice	5.26	3.14	0.14
								1" Ice	5.61	3.62	0.18
MT6407-77A w/ Mount Pipe	B	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	4.91	2.68	0.10
								1/2" Ice	5.26	3.14	0.14
								1" Ice	5.61	3.62	0.18
MT6407-77A w/ Mount Pipe	C	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	4.91	2.68	0.10
								1/2" Ice	5.26	3.14	0.14
								1" Ice	5.61	3.62	0.18
CBRS RT4401-48A	A	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	0.99	0.50	0.02
								1/2" Ice	1.12	0.60	0.03
								1" Ice	1.26	0.70	0.04
CBRS RT4401-48A	B	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	0.99	0.50	0.02
								1/2" Ice	1.12	0.60	0.03
								1" Ice	1.26	0.70	0.04
CBRS RT4401-48A	C	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	0.99	0.50	0.02
								1/2" Ice	1.12	0.60	0.03
								1" Ice	1.26	0.70	0.04
RF4439D-25A	A	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	1.87	1.25	0.07
								1/2" Ice	2.03	1.39	0.09
								1" Ice	2.21	1.54	0.11
RF4439D-25A	B	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	1.87	1.25	0.07
								1/2" Ice	2.03	1.39	0.09
								1" Ice	2.21	1.54	0.11
RF4439D-25A	C	From Leg	4.00	0.00	0.00	0.0000	140.00	2" Ice			
								No Ice	1.87	1.25	0.07
								1/2" Ice	2.03	1.39	0.09
								1" Ice	2.21	1.54	0.11

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> <sub>Front</sub>	C <sub>AA</sub> <sub>Side</sub>	Weight	
			Horz	Lateral						Vert
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
(2) RF4440D-13A	A	From Leg	4.00	0.00	0.0000	140.00	2" Ice			
							No Ice	1.87	1.13	0.07
							1/2"	2.03	1.27	0.09
							Ice	2.21	1.41	0.11
							1" Ice	2.59	1.72	0.16
(2) RF4440D-13A	B	From Leg	4.00	0.00	0.0000	140.00	2" Ice			
							No Ice	1.87	1.13	0.07
							1/2"	2.03	1.27	0.09
							Ice	2.21	1.41	0.11
							1" Ice	2.59	1.72	0.16
(2) RF4440D-13A	C	From Leg	4.00	0.00	0.0000	140.00	2" Ice			
							No Ice	1.87	1.13	0.07
							1/2"	2.03	1.27	0.09
							Ice	2.21	1.41	0.11
							1" Ice	2.59	1.72	0.16
RRFDC-3315-PF-48	B	From Leg	4.00	0.00	0.0000	140.00	2" Ice			
							No Ice	3.79	2.51	0.03
							1/2"	4.04	2.73	0.06
							Ice	4.30	2.95	0.10
							1" Ice	4.84	3.42	0.18
Side-By-Side Mounting Kit [#BSAMNT-SBS-1-2]	A	From Leg	4.00	0.00	0.0000	140.00	2" Ice			
							No Ice	2.38	2.38	0.04
							1/2"	3.40	3.40	0.05
							Ice	4.45	4.45	0.08
							1" Ice	5.91	5.91	0.15
Side-By-Side Mounting Kit [#BSAMNT-SBS-1-2]	B	From Leg	4.00	0.00	0.0000	140.00	2" Ice			
							No Ice	2.38	2.38	0.04
							1/2"	3.40	3.40	0.05
							Ice	4.45	4.45	0.08
							1" Ice	5.91	5.91	0.15
Side-By-Side Mounting Kit [#BSAMNT-SBS-1-2]	C	From Leg	4.00	0.00	0.0000	140.00	2" Ice			
							No Ice	2.38	2.38	0.04
							1/2"	3.40	3.40	0.05
							Ice	4.45	4.45	0.08
							1" Ice	5.91	5.91	0.15
Mount Reinforcement Specifications	A	None			0.0000	140.00	2" Ice			
							No Ice	28.63	28.63	0.28
							1/2"	37.31	37.31	0.67
							Ice	45.80	45.80	0.94
							1" Ice	62.38	62.38	1.63
*****										
APXVAARR24_43-U-NA20 w/ Mount Pipe	A	From Leg	4.00	0.00	0.0000	126.00	2" Ice			
							No Ice	14.69	6.87	0.19
							1/2"	15.46	7.55	0.31
							Ice	16.23	8.25	0.46
							1" Ice	17.82	9.67	0.79
APXVAARR24_43-U-NA20 w/ Mount Pipe	B	From Leg	4.00	0.00	0.0000	126.00	2" Ice			
							No Ice	14.69	6.87	0.19
							1/2"	15.46	7.55	0.31
							Ice	16.23	8.25	0.46
							1" Ice	17.82	9.67	0.79
APXVAARR24_43-U-NA20 w/ Mount Pipe	C	From Leg	4.00	0.00	0.0000	126.00	2" Ice			
							No Ice	14.69	6.87	0.19
							1/2"	15.46	7.55	0.31
							Ice	16.23	8.25	0.46
							1" Ice	17.82	9.67	0.79
AIR -32 B2A/B66AA w/ Mount Pipe	A	From Leg	4.00	0.00	0.0000	126.00	2" Ice			
							No Ice	3.76	3.15	0.19
							1/2"	4.12	3.49	0.25
							Ice	4.48	3.84	0.32
							1" Ice	5.24	4.58	0.48
AIR -32 B2A/B66AA w/ Mount Pipe	B	From Leg	4.00	0.00	0.0000	126.00	2" Ice			
							No Ice	3.76	3.15	0.19
							1/2"	4.12	3.49	0.25
							Ice	4.48	3.84	0.32
							1" Ice	5.24	4.58	0.48

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement	C <sub>AA</sub> <sub>Front</sub>	C <sub>AA</sub> <sub>Side</sub>	Weight
			Horz	Lateral	Vert					
			ft	ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K
							1" Ice	5.24	4.58	0.48
							2" Ice			
AIR -32 B2A/B66AA w/ Mount Pipe	C	From Leg	4.00	0.0000	126.00		No Ice	3.76	3.15	0.19
			0.00				1/2"	4.12	3.49	0.25
			2.00				Ice	4.48	3.84	0.32
							1" Ice	5.24	4.58	0.48
							2" Ice			
RADIO 4449 B71 B85A_T-MOBILE	A	From Leg	4.00	0.0000	126.00		No Ice	1.97	1.59	0.07
			0.00				1/2"	2.15	1.75	0.09
			2.00				Ice	2.33	1.92	0.12
							1" Ice	2.72	2.28	0.17
							2" Ice			
RADIO 4449 B71 B85A_T-MOBILE	B	From Leg	4.00	0.0000	126.00		No Ice	1.97	1.59	0.07
			0.00				1/2"	2.15	1.75	0.09
			2.00				Ice	2.33	1.92	0.12
							1" Ice	2.72	2.28	0.17
							2" Ice			
RADIO 4449 B71 B85A_T-MOBILE	C	From Leg	4.00	0.0000	126.00		No Ice	1.97	1.59	0.07
			0.00				1/2"	2.15	1.75	0.09
			2.00				Ice	2.33	1.92	0.12
							1" Ice	2.72	2.28	0.17
							2" Ice			
ATMAA1412D-1A20	A	From Leg	4.00	0.0000	126.00		No Ice	0.41	1.00	0.01
			0.00				1/2"	0.50	1.13	0.02
			0.00				Ice	0.59	1.26	0.03
							1" Ice	0.81	1.55	0.06
							2" Ice			
ATMAA1412D-1A20	B	From Leg	4.00	0.0000	126.00		No Ice	0.41	1.00	0.01
			0.00				1/2"	0.50	1.13	0.02
			0.00				Ice	0.59	1.26	0.03
							1" Ice	0.81	1.55	0.06
							2" Ice			
ATMAA1412D-1A20	C	From Leg	4.00	0.0000	126.00		No Ice	0.41	1.00	0.01
			0.00				1/2"	0.50	1.13	0.02
			0.00				Ice	0.59	1.26	0.03
							1" Ice	0.81	1.55	0.06
							2" Ice			
12' Hor x 2.5" x 2.5" Angle Mount	A	From Leg	4.00	0.0000	126.00		No Ice	5.00	0.02	0.07
			0.00				1/2"	6.23	0.07	0.10
			2.00				Ice	7.48	0.14	0.14
							1" Ice	9.62	0.32	0.24
							2" Ice			
12' Hor x 2.5" x 2.5" Angle Mount	B	From Leg	4.00	0.0000	126.00		No Ice	5.00	0.02	0.07
			0.00				1/2"	6.23	0.07	0.10
			2.00				Ice	7.48	0.14	0.14
							1" Ice	9.62	0.32	0.24
							2" Ice			
12' Hor x 2.5" x 2.5" Angle Mount	C	From Leg	4.00	0.0000	126.00		No Ice	5.00	0.02	0.07
			0.00				1/2"	6.23	0.07	0.10
			2.00				Ice	7.48	0.14	0.14
							1" Ice	9.62	0.32	0.24
							2" Ice			
Platform Mount [LP 713-1]	C	None		0.0000	126.00		No Ice	32.89	32.89	1.51
							1/2"	35.76	35.76	2.23
							Ice	38.76	38.76	3.03
							1" Ice	45.26	45.26	4.86
							2" Ice			
***										
ERICSSON AIR 21 B2A B4P_T-MOBILE w/ Mount Pipe	A	From Leg	4.00	0.0000	126.00		No Ice	3.14	2.59	0.11
			0.00				1/2"	3.45	2.88	0.16
			2.00				Ice	3.77	3.19	0.23
							1" Ice	4.43	3.84	0.38
							2" Ice			
ERICSSON AIR 21 B2A B4P_T-MOBILE w/ Mount	B	From Leg	4.00	0.0000	126.00		No Ice	3.14	2.59	0.11
			0.00				1/2"	3.45	2.88	0.16

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustmen t °	Placement ft	C <sub>AA</sub> Front ft <sup>2</sup>	C <sub>AA</sub> Side ft <sup>2</sup>	Weight K
Pipe			2.00			Ice 3.77	3.19	0.23
						1" Ice 4.43	3.84	0.38
						2" Ice		
ERICSSON AIR 21 B2A	C	From Leg	4.00	0.0000	126.00	No Ice 3.14	2.59	0.11
B4P_T-MOBILE w/ Mount			0.00			1/2" 3.45	2.88	0.16
Pipe			2.00			Ice 3.77	3.19	0.23
						1" Ice 4.43	3.84	0.38
						2" Ice		
AIR6449 B41 w/ Mount	A	From Leg	4.00	0.0000	126.00	No Ice 5.18	2.72	0.12
Pipe			0.00			1/2" 5.59	3.05	0.16
			2.00			Ice 6.01	3.39	0.22
						1" Ice 6.90	4.13	0.34
						2" Ice		
AIR6449 B41 w/ Mount	B	From Leg	4.00	0.0000	126.00	No Ice 5.18	2.72	0.12
Pipe			0.00			1/2" 5.59	3.05	0.16
			2.00			Ice 6.01	3.39	0.22
						1" Ice 6.90	4.13	0.34
						2" Ice		
AIR6449 B41 w/ Mount	C	From Leg	4.00	0.0000	126.00	No Ice 5.18	2.72	0.12
Pipe			0.00			1/2" 5.59	3.05	0.16
			2.00			Ice 6.01	3.39	0.22
						1" Ice 6.90	4.13	0.34
						2" Ice		
RRUS 4415 B25_CCIV2	A	From Leg	4.00	0.0000	126.00	No Ice 1.84	0.82	0.05
			0.00			1/2" 2.01	0.94	0.06
			2.00			Ice 2.19	1.07	0.08
						1" Ice 2.57	1.37	0.12
						2" Ice		
RRUS 4415 B25_CCIV2	B	From Leg	4.00	0.0000	126.00	No Ice 1.84	0.82	0.05
			0.00			1/2" 2.01	0.94	0.06
			2.00			Ice 2.19	1.07	0.08
						1" Ice 2.57	1.37	0.12
						2" Ice		
RRUS 4415 B25_CCIV2	C	From Leg	4.00	0.0000	126.00	No Ice 1.84	0.82	0.05
			0.00			1/2" 2.01	0.94	0.06
			2.00			Ice 2.19	1.07	0.08
						1" Ice 2.57	1.37	0.12
						2" Ice		
Platform Reinforcement Kit	C	None		0.0000	126.00	No Ice 11.84	11.84	0.28
[#PRK-1245]						1/2" 16.96	16.96	0.30
						Ice 22.08	22.08	0.32
						1" Ice 32.32	32.32	0.36
						2" Ice		
*****								
DMP65R-BU8D w/ Mount	A	From Leg	4.00	0.0000	117.00	No Ice 15.89	7.89	0.14
Pipe			0.00			1/2" 16.81	8.74	0.25
			0.00			Ice 17.76	9.60	0.38
						1" Ice 19.70	11.37	0.68
						2" Ice		
DMP65R-BU6D w/ Mount	B	From Leg	4.00	0.0000	117.00	No Ice 11.96	5.97	0.11
Pipe			0.00			1/2" 12.70	6.63	0.20
			0.00			Ice 13.46	7.30	0.30
						1" Ice 15.02	8.69	0.53
						2" Ice		
DMP65R-BU6D w/ Mount	C	From Leg	4.00	0.0000	117.00	No Ice 11.96	5.97	0.11
Pipe			0.00			1/2" 12.70	6.63	0.20
			0.00			Ice 13.46	7.30	0.30
						1" Ice 15.02	8.69	0.53
						2" Ice		
DC6-48-60-18-8F	A	From Leg	1.00	0.0000	117.00	No Ice 0.92	0.92	0.02
			0.00			1/2" 1.46	1.46	0.04
			3.00			Ice 1.64	1.64	0.06
						1" Ice 2.04	2.04	0.11
						2" Ice		
DC6-48-60-18-8F	B	From Leg	1.00	0.0000	117.00	No Ice 0.92	0.92	0.02

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment °	Placement ft	C <sub>AA</sub> <sub>Front</sub>	C <sub>AA</sub> <sub>Side</sub>	Weight K	
			Horz ft	Lateral ft			ft <sup>2</sup>	ft <sup>2</sup>		
			0.00				1/2"	1.46	1.46	0.04
			3.00				Ice	1.64	1.64	0.06
							1" Ice	2.04	2.04	0.11
							2" Ice			
DC6-48-60-18-8F	C	From Leg	1.00	0.0000	117.00		No Ice	0.92	0.92	0.02
			0.00				1/2"	1.46	1.46	0.04
			3.00				Ice	1.64	1.64	0.06
							1" Ice	2.04	2.04	0.11
							2" Ice			
RRUS 32 B30	A	From Leg	4.00	0.0000	117.00		No Ice	2.69	1.57	0.06
			0.00				1/2"	2.91	1.76	0.08
			0.00				Ice	3.14	1.95	0.10
							1" Ice	3.61	2.35	0.16
							2" Ice			
RRUS 32 B30	B	From Leg	4.00	0.0000	117.00		No Ice	2.69	1.57	0.06
			0.00				1/2"	2.91	1.76	0.08
			0.00				Ice	3.14	1.95	0.10
							1" Ice	3.61	2.35	0.16
							2" Ice			
RRUS 32 B30	C	From Leg	4.00	0.0000	117.00		No Ice	2.69	1.57	0.06
			0.00				1/2"	2.91	1.76	0.08
			0.00				Ice	3.14	1.95	0.10
							1" Ice	3.61	2.35	0.16
							2" Ice			
RRUS 4449 B5/B12	A	From Leg	4.00	0.0000	117.00		No Ice	1.97	1.41	0.07
			0.00				1/2"	2.14	1.56	0.09
			0.00				Ice	2.33	1.73	0.11
							1" Ice	2.72	2.07	0.16
							2" Ice			
RRUS 4449 B5/B12	B	From Leg	4.00	0.0000	117.00		No Ice	1.97	1.41	0.07
			0.00				1/2"	2.14	1.56	0.09
			0.00				Ice	2.33	1.73	0.11
							1" Ice	2.72	2.07	0.16
							2" Ice			
RRUS 4449 B5/B12	C	From Leg	4.00	0.0000	117.00		No Ice	1.97	1.41	0.07
			0.00				1/2"	2.14	1.56	0.09
			0.00				Ice	2.33	1.73	0.11
							1" Ice	2.72	2.07	0.16
							2" Ice			
RRUS 8843 B2/B66A_CCIV2	A	From Leg	4.00	0.0000	117.00		No Ice	1.98	1.70	0.08
			0.00				1/2"	2.16	1.86	0.10
			3.00				Ice	2.34	2.04	0.12
							1" Ice	2.73	2.41	0.18
							2" Ice			
RRUS 8843 B2/B66A_CCIV2	B	From Leg	4.00	0.0000	117.00		No Ice	1.98	1.70	0.08
			0.00				1/2"	2.16	1.86	0.10
			3.00				Ice	2.34	2.04	0.12
							1" Ice	2.73	2.41	0.18
							2" Ice			
RRUS 8843 B2/B66A_CCIV2	C	From Leg	4.00	0.0000	117.00		No Ice	1.98	1.70	0.08
			0.00				1/2"	2.16	1.86	0.10
			3.00				Ice	2.34	2.04	0.12
							1" Ice	2.73	2.41	0.18
							2" Ice			
Platform Mount [LP 303- 1_HR-1]	C	None		0.0000	117.00		No Ice	17.09	17.09	1.50
							1/2"	21.47	21.47	1.88
							Ice	25.72	25.72	2.35
							1" Ice	33.96	33.96	3.52
							2" Ice			
***										
AIR 6419 B77G w/ Mount Pipe	A	From Leg	4.00	0.0000	117.00		No Ice	3.87	2.32	0.08
			0.00				1/2"	4.18	2.72	0.11
			0.00				Ice	4.50	3.13	0.15
							1" Ice	5.16	4.01	0.25
							2" Ice			

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> <sub>Front</sub>	C <sub>AA</sub> <sub>Side</sub>	Weight
			Horz	Lateral					
AIR 6419 B77G w/ Mount Pipe	B	From Leg	4.00	0.0000	117.00	No Ice	3.87	2.32	0.08
						1/2" Ice	4.18	2.72	0.11
						1" Ice	4.50	3.13	0.15
						2" Ice	5.16	4.01	0.25
AIR 6419 B77G w/ Mount Pipe	C	From Leg	4.00	0.0000	117.00	No Ice	3.87	2.32	0.08
						1/2" Ice	4.18	2.72	0.11
						1" Ice	4.50	3.13	0.15
						2" Ice	5.16	4.01	0.25
AIR 6449 N77 w/ Mount Pipe	A	From Leg	4.00	0.0000	117.00	No Ice	4.26	3.47	0.10
						1/2" Ice	4.58	3.91	0.14
						1" Ice	4.91	4.37	0.19
						2" Ice	5.61	5.34	0.30
AIR 6449 N77 w/ Mount Pipe	B	From Leg	4.00	0.0000	117.00	No Ice	4.26	3.47	0.10
						1/2" Ice	4.58	3.91	0.14
						1" Ice	4.91	4.37	0.19
						2" Ice	5.61	5.34	0.30
AIR 6449 N77 w/ Mount Pipe	C	From Leg	4.00	0.0000	117.00	No Ice	4.26	3.47	0.10
						1/2" Ice	4.58	3.91	0.14
						1" Ice	4.91	4.37	0.19
						2" Ice	5.61	5.34	0.30
TPA65R-BU8D w/ Mount Pipe	A	From Leg	4.00	0.0000	117.00	No Ice	15.94	7.91	0.12
						1/2" Ice	16.87	8.76	0.24
						1" Ice	17.82	9.63	0.36
						2" Ice	19.76	11.40	0.67
TPA65R-BU6D w/ Mount Pipe	B	From Leg	4.00	0.0000	117.00	No Ice	12.25	6.05	0.10
						1/2" Ice	13.00	6.71	0.19
						1" Ice	13.76	7.39	0.28
						2" Ice	15.34	8.79	0.52
TPA65R-BU6D w/ Mount Pipe	C	From Leg	4.00	0.0000	117.00	No Ice	12.25	6.05	0.10
						1/2" Ice	13.00	6.71	0.19
						1" Ice	13.76	7.39	0.28
						2" Ice	15.34	8.79	0.52
RADIO 4478 B14	A	From Leg	4.00	0.0000	117.00	No Ice	2.02	1.25	0.06
						1/2" Ice	2.20	1.40	0.08
						1" Ice	2.39	1.55	0.10
						2" Ice	2.78	1.89	0.15
RADIO 4478 B14	B	From Leg	4.00	0.0000	117.00	No Ice	2.02	1.25	0.06
						1/2" Ice	2.20	1.40	0.08
						1" Ice	2.39	1.55	0.10
						2" Ice	2.78	1.89	0.15
RADIO 4478 B14	C	From Leg	4.00	0.0000	117.00	No Ice	2.02	1.25	0.06
						1/2" Ice	2.20	1.40	0.08
						1" Ice	2.39	1.55	0.10
						2" Ice	2.78	1.89	0.15
*****									
PCS 1900MHz 4x45W-65MHz	A	From Leg	0.50	0.0000	104.00	No Ice	2.32	2.24	0.06
						1/2" Ice	2.53	2.44	0.08
						1" Ice	2.74	2.65	0.11
						2" Ice	3.19	3.09	0.17
PCS 1900MHz 4x45W-65MHz	B	From Leg	0.50	0.0000	104.00	No Ice	2.32	2.24	0.06
						1/2" Ice	2.53	2.44	0.08
						1" Ice	2.74	2.65	0.11
						2" Ice	3.19	3.09	0.17

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment t °	Placement ft		C <sub>AA</sub> Front ft <sup>2</sup>	C <sub>AA</sub> Side ft <sup>2</sup>	Weight K
PCS 1900MHz 4x45W-65MHz	C	From Leg	0.50 0.00 0.00	0.0000	104.00	2" Ice			
						No Ice	2.32	2.24	0.06
						1/2"	2.53	2.44	0.08
						Ice	2.74	2.65	0.11
						1" Ice	3.19	3.09	0.17
800MHz 2X50W RRH W/FILTER	A	From Leg	0.50 0.00 0.00	0.0000	104.00	2" Ice			
						No Ice	2.06	1.93	0.06
						1/2"	2.24	2.11	0.09
						Ice	2.43	2.29	0.11
						1" Ice	2.83	2.68	0.17
800MHz 2X50W RRH W/FILTER	B	From Leg	0.50 0.00 0.00	0.0000	104.00	2" Ice			
						No Ice	2.06	1.93	0.06
						1/2"	2.24	2.11	0.09
						Ice	2.43	2.29	0.11
						1" Ice	2.83	2.68	0.17
800MHz 2X50W RRH W/FILTER	C	From Leg	0.50 0.00 0.00	0.0000	104.00	2" Ice			
						No Ice	2.06	1.93	0.06
						1/2"	2.24	2.11	0.09
						Ice	2.43	2.29	0.11
						1" Ice	2.83	2.68	0.17
Pipe Mount [PM 601-3]	C	None		0.0000	104.00	2" Ice			
						No Ice	3.17	3.17	0.20
						1/2"	3.79	3.79	0.23
						Ice	4.42	4.42	0.28
						1" Ice	5.76	5.76	0.40
***** 6' x 2" Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	103.00	2" Ice			
						No Ice	1.43	1.43	0.02
						1/2"	1.92	1.92	0.03
						Ice	2.29	2.29	0.05
						1" Ice	3.06	3.06	0.09
6' x 2" Mount Pipe	B	From Leg	4.00 0.00 0.00	0.0000	103.00	2" Ice			
						No Ice	1.43	1.43	0.02
						1/2"	1.92	1.92	0.03
						Ice	2.29	2.29	0.05
						1" Ice	3.06	3.06	0.09
6' x 2" Mount Pipe	C	From Leg	4.00 0.00 0.00	0.0000	103.00	2" Ice			
						No Ice	1.43	1.43	0.02
						1/2"	1.92	1.92	0.03
						Ice	2.29	2.29	0.05
						1" Ice	3.06	3.06	0.09
Platform Mount [LP 713-1]	C	None		0.0000	103.00	2" Ice			
						No Ice	32.89	32.89	1.51
						1/2"	35.76	35.76	2.23
						Ice	38.76	38.76	3.03
						1" Ice	45.26	45.26	4.86
*** AIR6449 B41_T-MOBILE w/ Mount Pipe	A	From Leg	4.00 0.00 2.00	0.0000	103.00	2" Ice			
						No Ice	5.19	2.71	0.13
						1/2"	5.59	3.04	0.17
						Ice	6.02	3.38	0.23
						1" Ice	6.90	4.12	0.35
AIR6449 B41_T-MOBILE w/ Mount Pipe	B	From Leg	4.00 0.00 2.00	0.0000	103.00	2" Ice			
						No Ice	5.19	2.71	0.13
						1/2"	5.59	3.04	0.17
						Ice	6.02	3.38	0.23
						1" Ice	6.90	4.12	0.35
AIR6449 B41_T-MOBILE w/ Mount Pipe	C	From Leg	4.00 0.00 2.00	0.0000	103.00	2" Ice			
						No Ice	5.19	2.71	0.13
						1/2"	5.59	3.04	0.17
						Ice	6.02	3.38	0.23
						1" Ice	6.90	4.12	0.35
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	A	From Leg	4.00 0.00	0.0000	103.00	2" Ice			
						No Ice	14.69	6.87	0.18
						1/2"	15.46	7.55	0.31



Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment °	Placement ft	C <sub>AA</sub> Front ft <sup>2</sup>	C <sub>AA</sub> Side ft <sup>2</sup>	Weight K
			Horz Lateral ft	Vert ft					
				2.00					
						Ice	16.23	8.25	0.45
						1" Ice	17.82	9.67	0.78
						2" Ice			
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	B	From Leg	4.00	0.0000	103.00	No Ice	14.69	6.87	0.18
			0.00			1/2"	15.46	7.55	0.31
			2.00			Ice	16.23	8.25	0.45
						1" Ice	17.82	9.67	0.78
						2" Ice			
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	C	From Leg	4.00	0.0000	103.00	No Ice	14.69	6.87	0.18
			0.00			1/2"	15.46	7.55	0.31
			2.00			Ice	16.23	8.25	0.45
						1" Ice	17.82	9.67	0.78
						2" Ice			
Radio 4480_TMOV2	A	From Leg	4.00	0.0000	103.00	No Ice	2.88	1.40	0.08
			0.00			1/2"	3.09	1.56	0.10
			2.00			Ice	3.31	1.73	0.13
						1" Ice	3.78	2.09	0.19
						2" Ice			
Radio 4480_TMOV2	B	From Leg	4.00	0.0000	103.00	No Ice	2.88	1.40	0.08
			0.00			1/2"	3.09	1.56	0.10
			2.00			Ice	3.31	1.73	0.13
						1" Ice	3.78	2.09	0.19
						2" Ice			
Radio 4480_TMOV2	C	From Leg	4.00	0.0000	103.00	No Ice	2.88	1.40	0.08
			0.00			1/2"	3.09	1.56	0.10
			2.00			Ice	3.31	1.73	0.13
						1" Ice	3.78	2.09	0.19
						2" Ice			
RADIO 4460 B2/B25 B66_TMO	A	From Leg	4.00	0.0000	103.00	No Ice	2.14	1.69	0.11
			0.00			1/2"	2.32	1.85	0.13
			2.00			Ice	2.51	2.02	0.16
						1" Ice	2.91	2.39	0.22
						2" Ice			
RADIO 4460 B2/B25 B66_TMO	B	From Leg	4.00	0.0000	103.00	No Ice	2.14	1.69	0.11
			0.00			1/2"	2.32	1.85	0.13
			2.00			Ice	2.51	2.02	0.16
						1" Ice	2.91	2.39	0.22
						2" Ice			
RADIO 4460 B2/B25 B66_TMO	C	From Leg	4.00	0.0000	103.00	No Ice	2.14	1.69	0.11
			0.00			1/2"	2.32	1.85	0.13
			2.00			Ice	2.51	2.02	0.16
						1" Ice	2.91	2.39	0.22
						2" Ice			
*****									
*****									
MX08FRO665-21 w/ Mount Pipe	A	From Leg	4.00	0.0000	93.00	No Ice	8.01	4.23	0.11
			0.00			1/2"	8.52	4.69	0.19
			0.00			Ice	9.04	5.16	0.29
						1" Ice	10.11	6.12	0.52
						2" Ice			
MX08FRO665-21 w/ Mount Pipe	B	From Leg	4.00	0.0000	93.00	No Ice	8.01	4.23	0.11
			0.00			1/2"	8.52	4.69	0.19
			0.00			Ice	9.04	5.16	0.29
						1" Ice	10.11	6.12	0.52
						2" Ice			
MX08FRO665-21 w/ Mount Pipe	C	From Leg	4.00	0.0000	93.00	No Ice	8.01	4.23	0.11
			0.00			1/2"	8.52	4.69	0.19
			0.00			Ice	9.04	5.16	0.29
						1" Ice	10.11	6.12	0.52
						2" Ice			
RDIDC-9181-PF-48	A	From Leg	4.00	0.0000	93.00	No Ice	2.01	1.17	0.02
			0.00			1/2"	2.19	1.31	0.04
			0.00			Ice	2.37	1.46	0.06
						1" Ice	2.76	1.78	0.11
						2" Ice			

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> <sub>Front</sub>	C <sub>AA</sub> <sub>Side</sub>	Weight	
			Horz	Lateral						Vert
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
TA08025-B604	A	From Leg	4.00		0.0000	93.00	No Ice	1.96	0.98	0.06
			0.00				1/2"	2.14	1.11	0.08
			0.00				Ice	2.32	1.25	0.10
							1" Ice	2.71	1.55	0.15
TA08025-B604	B	From Leg	4.00		0.0000	93.00	No Ice	1.96	0.98	0.06
			0.00				1/2"	2.14	1.11	0.08
			0.00				Ice	2.32	1.25	0.10
							1" Ice	2.71	1.55	0.15
TA08025-B604	C	From Leg	4.00		0.0000	93.00	No Ice	1.96	0.98	0.06
			0.00				1/2"	2.14	1.11	0.08
			0.00				Ice	2.32	1.25	0.10
							1" Ice	2.71	1.55	0.15
TA08025-B605	A	From Leg	4.00		0.0000	93.00	No Ice	1.96	1.13	0.08
			0.00				1/2"	2.14	1.27	0.09
			0.00				Ice	2.32	1.41	0.11
							1" Ice	2.71	1.72	0.16
TA08025-B605	B	From Leg	4.00		0.0000	93.00	No Ice	1.96	1.13	0.08
			0.00				1/2"	2.14	1.27	0.09
			0.00				Ice	2.32	1.41	0.11
							1" Ice	2.71	1.72	0.16
TA08025-B605	C	From Leg	4.00		0.0000	93.00	No Ice	1.96	1.13	0.08
			0.00				1/2"	2.14	1.27	0.09
			0.00				Ice	2.32	1.41	0.11
							1" Ice	2.71	1.72	0.16
(2) 8' x 2" Mount Pipe	A	From Leg	4.00		0.0000	93.00	No Ice	1.90	1.90	0.03
			0.00				1/2"	2.73	2.73	0.04
			0.00				Ice	3.40	3.40	0.06
							1" Ice	4.40	4.40	0.12
(2) 8' x 2" Mount Pipe	B	From Leg	4.00		0.0000	93.00	No Ice	1.90	1.90	0.03
			0.00				1/2"	2.73	2.73	0.04
			0.00				Ice	3.40	3.40	0.06
							1" Ice	4.40	4.40	0.12
(2) 8' x 2" Mount Pipe	C	From Leg	4.00		0.0000	93.00	No Ice	1.90	1.90	0.03
			0.00				1/2"	2.73	2.73	0.04
			0.00				Ice	3.40	3.40	0.06
							1" Ice	4.40	4.40	0.12
Commscope MC-PK8-DSH	C	None			0.0000	93.00	No Ice	34.24	34.24	1.75
							1/2"	62.95	62.95	2.10
							Ice	91.66	91.66	2.45
							1" Ice	149.08	149.08	3.15
***** BCD-87010	C	From Leg	2.00		0.0000	74.00	No Ice	2.90	2.90	0.03
			0.00				1/2"	4.05	4.05	0.05
			6.00				Ice	5.21	5.21	0.08
							1" Ice	7.01	7.01	0.16
Side Arm Mount [SO 701-1]	C	From Leg	1.00		0.0000	74.00	No Ice	0.85	1.67	0.07
			0.00				1/2"	1.14	2.34	0.08
			0.00				Ice	1.43	3.01	0.09
							1" Ice	2.01	4.35	0.12
***** KS24019-L112A	C	From Leg	2.00		0.0000	50.00	No Ice	0.14	0.14	0.01
			0.00				1/2"	0.20	0.20	0.01
			2.00				Ice	0.26	0.26	0.01

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C <sub>AA</sub> Front ft <sup>2</sup>	C <sub>AA</sub> Side ft <sup>2</sup>	Weight K
						1" Ice 2" Ice	0.41 0.41	0.02
Side Arm Mount [SO 701-1]	C	From Leg	1.00 0.00 0.00	0.0000	50.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.85 1.14 3.01 4.35	0.07 0.08 0.09 0.12
*****								

## 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
L1	140 - 86.83	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-59.71	0.58	0.97
			Max. M <sub>x</sub>	20	-28.88	640.94	1.08
			Max. M <sub>y</sub>	2	-28.87	1.25	644.85
			Max. V <sub>y</sub>	20	-23.78	640.94	1.08
			Max. V <sub>x</sub>	14	23.94	-0.79	-644.68
			Max. Torque	22			-1.04
L2	86.83 - 38	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-81.57	3.43	-0.64
			Max. M <sub>x</sub>	20	-44.40	1890.76	1.68
			Max. M <sub>y</sub>	14	-44.39	-0.86	-1902.03
			Max. V <sub>y</sub>	20	-28.70	1890.76	1.68
			Max. V <sub>x</sub>	14	28.88	-0.86	-1902.03
			Max. Torque	22			-1.04
L3	38 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-109.05	5.34	-1.65
			Max. M <sub>x</sub>	20	-65.63	3277.07	3.04
			Max. M <sub>y</sub>	14	-65.63	-1.85	-3296.16
			Max. V <sub>y</sub>	20	-32.82	3277.07	3.04
			Max. V <sub>x</sub>	14	33.00	-1.85	-3296.16
			Max. Torque	20			-0.65

### Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	33	109.05	-0.01	-8.70
	Max. H <sub>x</sub>	20	65.64	32.80	0.04
	Max. H <sub>z</sub>	2	65.64	0.04	32.97
	Max. M <sub>x</sub>	2	3293.92	0.04	32.97
	Max. M <sub>z</sub>	8	3272.44	-32.80	-0.04
	Max. Torsion	6	0.65	-28.38	16.45
	Min. Vert	7	49.23	-28.38	16.45
	Min. H <sub>x</sub>	8	65.64	-32.80	-0.04
	Min. H <sub>z</sub>	14	65.64	-0.04	-32.97
	Min. M <sub>x</sub>	14	-3296.16	-0.04	-32.97
	Min. M <sub>z</sub>	20	-3277.07	32.80	0.04
	Min. Torsion	20		-0.65	32.80

### Tower Mast Reaction Summary

Load Combination	Vertical K	Shear <sub>x</sub> K	Shear <sub>z</sub> K	Overturning Moment, M <sub>x</sub> kip-ft	Overturning Moment, M <sub>z</sub> kip-ft	Torque kip-ft
Dead Only	54.70	0.00	0.00	0.91	1.87	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	65.64	-0.04	-32.97	-3293.92	6.47	-0.17
0.9 Dead+1.0 Wind 0 deg - No Ice	49.23	-0.04	-32.97	-3267.51	5.84	-0.18
1.2 Dead+1.0 Wind 30 deg - No Ice	65.64	16.36	-28.54	-2850.40	-1631.46	-0.48
0.9 Dead+1.0 Wind 30 deg - No Ice	49.23	16.36	-28.54	-2827.58	-1618.82	-0.48
1.2 Dead+1.0 Wind 60 deg - No Ice	65.64	28.38	-16.45	-1642.81	-2831.64	-0.65
0.9 Dead+1.0 Wind 60 deg - No Ice	49.23	28.38	-16.45	-1629.77	-2809.27	-0.65
1.2 Dead+1.0 Wind 90 deg - No Ice	65.64	32.80	0.04	5.28	-3272.44	-0.65

Load Combination	Vertical K	Shear <sub>x</sub> K	Shear <sub>z</sub> K	Overturning Moment, M <sub>x</sub> kip-ft	Overturning Moment, M <sub>z</sub> kip-ft	Torque kip-ft
0.9 Dead+1.0 Wind 90 deg - No Ice	49.23	32.80	0.04	4.96	-3246.51	-0.65
1.2 Dead+1.0 Wind 120 deg - No Ice	65.64	28.42	16.52	1652.25	-2835.79	-0.48
0.9 Dead+1.0 Wind 120 deg - No Ice	49.23	28.42	16.52	1638.58	-2813.39	-0.47
1.2 Dead+1.0 Wind 150 deg - No Ice	65.64	16.52	28.73	2866.49	-1644.26	-0.18
0.9 Dead+1.0 Wind 150 deg - No Ice	49.23	16.52	28.73	2843.02	-1631.53	-0.17
1.2 Dead+1.0 Wind 180 deg - No Ice	65.64	0.04	32.97	3296.16	-1.85	0.17
0.9 Dead+1.0 Wind 180 deg - No Ice	49.23	0.04	32.97	3269.18	-2.40	0.17
1.2 Dead+1.0 Wind 210 deg - No Ice	65.64	-16.36	28.54	2852.64	1636.09	0.47
0.9 Dead+1.0 Wind 210 deg - No Ice	49.23	-16.36	28.54	2829.25	1622.26	0.47
1.2 Dead+1.0 Wind 240 deg - No Ice	65.64	-28.38	16.45	1645.05	2836.26	0.65
0.9 Dead+1.0 Wind 240 deg - No Ice	49.23	-28.38	16.45	1631.44	2812.71	0.65
1.2 Dead+1.0 Wind 270 deg - No Ice	65.64	-32.80	-0.04	-3.04	3277.07	0.65
0.9 Dead+1.0 Wind 270 deg - No Ice	49.23	-32.80	-0.04	-3.29	3249.95	0.65
1.2 Dead+1.0 Wind 300 deg - No Ice	65.64	-28.42	-16.52	-1650.00	2840.41	0.48
0.9 Dead+1.0 Wind 300 deg - No Ice	49.23	-28.42	-16.52	-1636.91	2816.83	0.48
1.2 Dead+1.0 Wind 330 deg - No Ice	65.64	-16.52	-28.73	-2864.25	1648.89	0.18
0.9 Dead+1.0 Wind 330 deg - No Ice	49.23	-16.52	-28.73	-2841.35	1634.97	0.17
1.2 Dead+1.0 Ice+1.0 Temp	109.05	0.00	0.00	1.65	5.34	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	109.05	-0.01	-8.70	-902.67	6.90	-0.10
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	109.05	4.32	-7.53	-780.93	-443.28	-0.15
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	109.05	7.49	-4.34	-449.44	-773.14	-0.16
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	109.05	8.66	0.01	2.90	-894.32	-0.12
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	109.05	7.51	4.36	454.93	-774.37	-0.05
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	109.05	4.34	7.54	785.52	-445.37	0.03
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	109.05	0.01	8.70	906.05	4.48	0.10
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	109.05	-4.32	7.53	784.31	454.66	0.15
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	109.05	-7.49	4.34	452.84	784.54	0.16
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	109.05	-8.66	-0.01	0.48	905.70	0.12
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	109.05	-7.51	-4.36	-451.55	785.75	0.05
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	109.05	-4.34	-7.54	-782.14	456.76	-0.03
Dead+Wind 0 deg - Service	54.70	-0.01	-8.17	-811.49	2.94	-0.04
Dead+Wind 30 deg - Service	54.70	4.05	-7.07	-702.14	-400.91	-0.12
Dead+Wind 60 deg - Service	54.70	7.03	-4.08	-404.40	-696.82	-0.16
Dead+Wind 90 deg - Service	54.70	8.13	0.01	1.95	-805.50	-0.16
Dead+Wind 120 deg - Service	54.70	7.04	4.09	408.03	-697.84	-0.12
Dead+Wind 150 deg - Service	54.70	4.09	7.12	707.42	-404.06	-0.04
Dead+Wind 180 deg - Service	54.70	0.01	8.17	813.35	0.89	0.04

Load Combination	Vertical	Shear <sub>x</sub>	Shear <sub>z</sub>	Overturing Moment, M <sub>x</sub>	Overturing Moment, M <sub>z</sub>	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
Dead+Wind 210 deg - Service	54.70	-4.05	7.07	704.00	404.74	0.12
Dead+Wind 240 deg - Service	54.70	-7.03	4.08	406.25	700.65	0.16
Dead+Wind 270 deg - Service	54.70	-8.13	-0.01	-0.10	809.34	0.16
Dead+Wind 300 deg - Service	54.70	-7.04	-4.09	-406.17	701.68	0.12
Dead+Wind 330 deg - Service	54.70	-4.09	-7.12	-705.56	407.90	0.04

## Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-54.70	0.00	0.00	54.70	0.00	0.000%
2	-0.04	-65.64	-32.97	0.04	65.64	32.97	0.000%
3	-0.04	-49.23	-32.97	0.04	49.23	32.97	0.000%
4	16.36	-65.64	-28.54	-16.36	65.64	28.54	0.000%
5	16.36	-49.23	-28.54	-16.36	49.23	28.54	0.000%
6	28.38	-65.64	-16.45	-28.38	65.64	16.45	0.000%
7	28.38	-49.23	-16.45	-28.38	49.23	16.45	0.000%
8	32.80	-65.64	0.04	-32.80	65.64	-0.04	0.000%
9	32.80	-49.23	0.04	-32.80	49.23	-0.04	0.000%
10	28.42	-65.64	16.52	-28.42	65.64	-16.52	0.000%
11	28.42	-49.23	16.52	-28.42	49.23	-16.52	0.000%
12	16.52	-65.64	28.73	-16.52	65.64	-28.73	0.000%
13	16.52	-49.23	28.73	-16.52	49.23	-28.73	0.000%
14	0.04	-65.64	32.97	-0.04	65.64	-32.97	0.000%
15	0.04	-49.23	32.97	-0.04	49.23	-32.97	0.000%
16	-16.36	-65.64	28.54	16.36	65.64	-28.54	0.000%
17	-16.36	-49.23	28.54	16.36	49.23	-28.54	0.000%
18	-28.38	-65.64	16.45	28.38	65.64	-16.45	0.000%
19	-28.38	-49.23	16.45	28.38	49.23	-16.45	0.000%
20	-32.80	-65.64	-0.04	32.80	65.64	0.04	0.000%
21	-32.80	-49.23	-0.04	32.80	49.23	0.04	0.000%
22	-28.42	-65.64	-16.52	28.42	65.64	16.52	0.000%
23	-28.42	-49.23	-16.52	28.42	49.23	16.52	0.000%
24	-16.52	-65.64	-28.73	16.52	65.64	28.73	0.000%
25	-16.52	-49.23	-28.73	16.52	49.23	28.73	0.000%
26	0.00	-109.05	0.00	0.00	109.05	0.00	0.000%
27	-0.01	-109.05	-8.70	0.01	109.05	8.70	0.000%
28	4.32	-109.05	-7.53	-4.32	109.05	7.53	0.000%
29	7.49	-109.05	-4.34	-7.49	109.05	4.34	0.000%
30	8.66	-109.05	0.01	-8.66	109.05	-0.01	0.000%
31	7.51	-109.05	4.36	-7.51	109.05	-4.36	0.000%
32	4.34	-109.05	7.54	-4.34	109.05	-7.54	0.000%
33	0.01	-109.05	8.70	-0.01	109.05	-8.70	0.000%
34	-4.32	-109.05	7.53	4.32	109.05	-7.53	0.000%
35	-7.49	-109.05	4.34	7.49	109.05	-4.34	0.000%
36	-8.66	-109.05	-0.01	8.66	109.05	0.01	0.000%
37	-7.51	-109.05	-4.36	7.51	109.05	4.36	0.000%
38	-4.34	-109.05	-7.54	4.34	109.05	7.54	0.000%
39	-0.01	-54.70	-8.17	0.01	54.70	8.17	0.000%
40	4.05	-54.70	-7.07	-4.05	54.70	7.07	0.000%
41	7.03	-54.70	-4.08	-7.03	54.70	4.08	0.000%
42	8.13	-54.70	0.01	-8.13	54.70	-0.01	0.000%
43	7.04	-54.70	4.09	-7.04	54.70	-4.09	0.000%
44	4.09	-54.70	7.12	-4.09	54.70	-7.12	0.000%
45	0.01	-54.70	8.17	-0.01	54.70	-8.17	0.000%
46	-4.05	-54.70	7.07	4.05	54.70	-7.07	0.000%
47	-7.03	-54.70	4.08	7.03	54.70	-4.08	0.000%
48	-8.13	-54.70	-0.01	8.13	54.70	0.01	0.000%
49	-7.04	-54.70	-4.09	7.04	54.70	4.09	0.000%
50	-4.09	-54.70	-7.12	4.09	54.70	7.12	0.000%

### Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	4	0.00000001	0.00007297
3	Yes	4	0.00000001	0.00003663
4	Yes	5	0.00000001	0.00006809
5	Yes	5	0.00000001	0.00003331
6	Yes	5	0.00000001	0.00006970
7	Yes	5	0.00000001	0.00003416
8	Yes	4	0.00000001	0.00009695
9	Yes	4	0.00000001	0.00005726
10	Yes	5	0.00000001	0.00006776
11	Yes	5	0.00000001	0.00003312
12	Yes	5	0.00000001	0.00007043
13	Yes	5	0.00000001	0.00003445
14	Yes	4	0.00000001	0.00007425
15	Yes	4	0.00000001	0.00003783
16	Yes	5	0.00000001	0.00006946
17	Yes	5	0.00000001	0.00003398
18	Yes	5	0.00000001	0.00006763
19	Yes	5	0.00000001	0.00003305
20	Yes	4	0.00000001	0.00010441
21	Yes	4	0.00000001	0.00006295
22	Yes	5	0.00000001	0.00007061
23	Yes	5	0.00000001	0.00003457
24	Yes	5	0.00000001	0.00006867
25	Yes	5	0.00000001	0.00003353
26	Yes	4	0.00000001	0.00000001
27	Yes	4	0.00000001	0.00094903
28	Yes	5	0.00000001	0.00008426
29	Yes	4	0.00000001	0.00099906
30	Yes	4	0.00000001	0.00093903
31	Yes	5	0.00000001	0.00008419
32	Yes	5	0.00000001	0.00008454
33	Yes	4	0.00000001	0.00094940
34	Yes	5	0.00000001	0.00008502
35	Yes	5	0.00000001	0.00008490
36	Yes	4	0.00000001	0.00095057
37	Yes	5	0.00000001	0.00008517
38	Yes	5	0.00000001	0.00008517
39	Yes	4	0.00000001	0.00001377
40	Yes	4	0.00000001	0.00003354
41	Yes	4	0.00000001	0.00003546
42	Yes	4	0.00000001	0.00001428
43	Yes	4	0.00000001	0.00003315
44	Yes	4	0.00000001	0.00003572
45	Yes	4	0.00000001	0.00001380
46	Yes	4	0.00000001	0.00003514
47	Yes	4	0.00000001	0.00003330
48	Yes	4	0.00000001	0.00001439
49	Yes	4	0.00000001	0.00003626
50	Yes	4	0.00000001	0.00003387

### Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	140 - 86.83	11.740	50	0.7063	0.0010
L2	92.5 - 38	5.257	50	0.5427	0.0003
L3	45 - 0	1.217	50	0.2450	0.0001

### Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
140.00	BXA-80063-4BF-EDIN-X w/ Mount Pipe	50	11.740	0.7063	0.0010	92455
126.00	APXVAARR24_43-U-NA20 w/ Mount Pipe	50	9.705	0.6684	0.0008	33019
117.00	DMP65R-BU8D w/ Mount Pipe	50	8.429	0.6413	0.0006	20098
104.00	PCS 1900MHz 4x45W-65MHz	50	6.677	0.5947	0.0005	12840
103.00	6' x 2" Mount Pipe	50	6.548	0.5906	0.0004	12493
93.00	MX08FRO665-21 w/ Mount Pipe	50	5.316	0.5452	0.0003	9929
74.00	BCD-87010	50	3.312	0.4349	0.0002	8810
50.00	KS24019-L112A	50	1.489	0.2768	0.0001	7845

### Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	140 - 86.83	47.659	24	2.8692	0.0040
L2	92.5 - 38	21.339	24	2.2040	0.0014
L3	45 - 0	4.939	24	0.9944	0.0003

### Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
140.00	BXA-80063-4BF-EDIN-X w/ Mount Pipe	24	47.659	2.8692	0.0040	22836
126.00	APXVAARR24_43-U-NA20 w/ Mount Pipe	24	39.395	2.7153	0.0030	8155
117.00	DMP65R-BU8D w/ Mount Pipe	24	34.217	2.6051	0.0025	4963
104.00	PCS 1900MHz 4x45W-65MHz	24	27.104	2.4155	0.0018	3169
103.00	6' x 2" Mount Pipe	24	26.581	2.3990	0.0018	3083
93.00	MX08FRO665-21 w/ Mount Pipe	24	21.577	2.2143	0.0014	2450
74.00	BCD-87010	24	13.442	1.7660	0.0009	2173
50.00	KS24019-L112A	24	6.043	1.1235	0.0004	1933

### Compression Checks

#### Pole Design Data

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	KI/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
L1	140 - 86.83 (1)	TP39.223x26.216x0.3125	53.17	0.00	0.0	37.758 0	-28.87	2208.84	0.013
L2	86.83 - 38 (2)	TP50.56x37.2109x0.4063	54.50	0.00	0.0	63.364 5	-44.39	3706.82	0.012
L3	38 - 0 (3)	TP59.05x48.0329x0.5	45.00	0.00	0.0	94.265 5	-65.63	5514.53	0.012

#### Pole Bending Design Data

Section No.	Elevation ft	Size	M <sub>ux</sub> kip-ft	φM <sub>nx</sub> kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M <sub>uy</sub> kip-ft	φM <sub>ny</sub> kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	140 - 86.83	TP39.223x26.216x0.3125	644.87	1838.14	0.351	0.00	1838.14	0.000



Section No.	Elevation ft	Size	$M_{ux}$ kip-ft	$\phi M_{nx}$ kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	$M_{uy}$ kip-ft	$\phi M_{ny}$ kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
	(1)							
L2	86.83 - 38 (2)	TP50.56x37.2109x0.4063	1903.81	3995.66	0.476	0.00	3995.66	0.000
L3	38 - 0 (3)	TP59.05x48.0329x0.5	3304.96	7247.00	0.456	0.00	7247.00	0.000

### Pole Shear Design Data

Section No.	Elevation ft	Size	Actual $V_u$ K	$\phi V_n$ K	Ratio $\frac{V_u}{\phi V_n}$	Actual $T_u$ kip-ft	$\phi T_n$ kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	140 - 86.83 (1)	TP39.223x26.216x0.3125	23.92	662.65	0.036	0.82	2187.20	0.000
L2	86.83 - 38 (2)	TP50.56x37.2109x0.4063	29.02	1112.05	0.026	0.18	4738.27	0.000
L3	38 - 0 (3)	TP59.05x48.0329x0.5	33.17	1654.36	0.020	0.18	8520.33	0.000

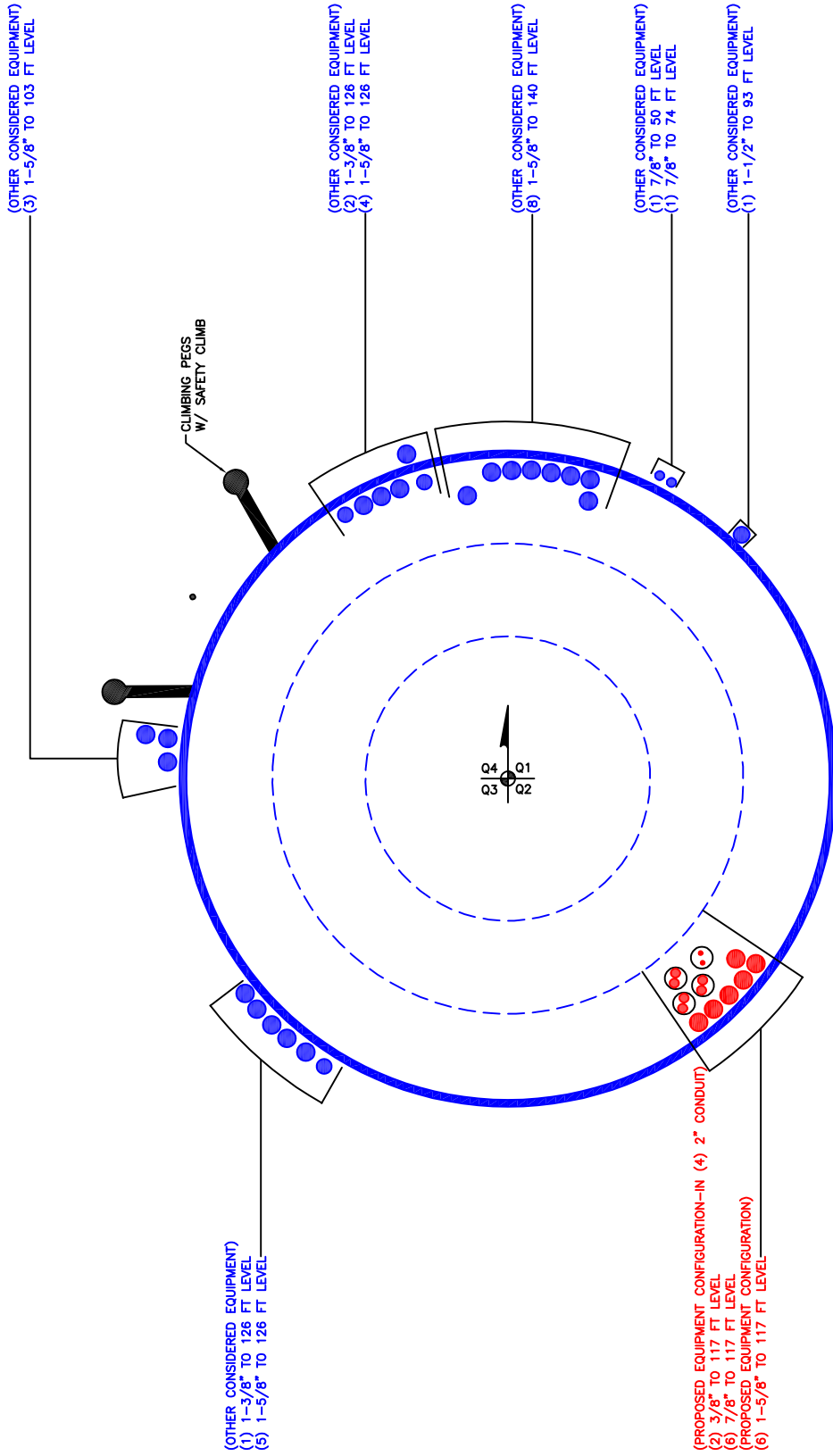
### Pole Interaction Design Data

Section No.	Elevation ft	Ratio $P_u$	Ratio $M_{ux}$	Ratio $M_{uy}$	Ratio $V_u$	Ratio $T_u$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		$\phi P_n$	$\phi M_{nx}$	$\phi M_{ny}$	$\phi V_n$	$\phi T_n$			
L1	140 - 86.83 (1)	0.013	0.351	0.000	0.036	0.000	0.365	1.050	4.8.2
L2	86.83 - 38 (2)	0.012	0.476	0.000	0.026	0.000	0.489	1.050	4.8.2
L3	38 - 0 (3)	0.012	0.456	0.000	0.020	0.000	0.468	1.050	4.8.2

### Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\phi P_{allow}$ K	% Capacity	Pass Fail	
L1	140 - 86.83	Pole	TP39.223x26.216x0.3125	1	-28.87	2319.28	34.8	Pass	
L2	86.83 - 38	Pole	TP50.56x37.2109x0.4063	2	-44.39	3892.16	46.6	Pass	
L3	38 - 0	Pole	TP59.05x48.0329x0.5	3	-65.63	5790.26	44.6	Pass	
							Summary		
							Pole (L2)	46.6	Pass
							<b>RATING =</b>	<b>46.6</b>	<b>Pass</b>

**APPENDIX B**  
**BASE LEVEL DRAWING**



**APPENDIX C**  
**ADDITIONAL CALCULATIONS**

# Monopole Base Plate Connection

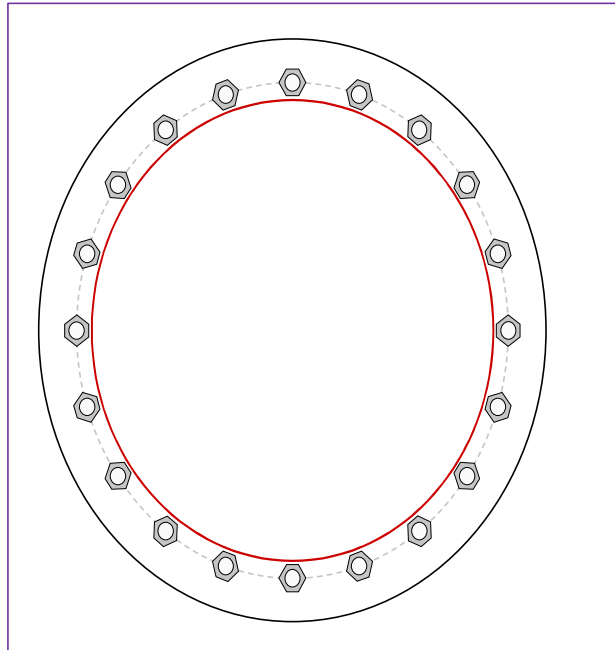


Site Info	
BU #	806369
Site Name	HRT 094 943225
Order #	556516 Rev. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
$l_{ar}$ (in)	0.25

Applied Loads	
Moment (kip-ft)	3304.96
Axial Force (kips)	65.63
Shear Force (kips)	33.17

\*TIA-222-H Section 15.5 Applied



Connection Properties	Analysis Results
-----------------------	------------------

Anchor Rod Data	
(20) 2-1/4" $\phi$ bolts (A615-75 N; $F_y=75$ ksi, $F_u=100$ ksi) on 63.5" BC	
Base Plate Data	
74.641" OD x 3" Plate (A572-60; $F_y=60$ ksi, $F_u=75$ ksi)	
Stiffener Data	
N/A	
Pole Data	
59.05" x 0.5" 12-sided pole (A572-65; $F_y=65$ ksi, $F_u=80$ ksi)	

Anchor Rod Summary		<i>(units of kips, kip-in)</i>	
$P_{u_t} = 121.57$	$\phi P_{n_t} = 243.75$		<b>Stress Rating</b>
$V_u = 1.66$	$\phi V_n = 149.1$		<b>47.5%</b>
$M_u = n/a$	$\phi M_n = n/a$		<b>Pass</b>
Base Plate Summary			
Max Stress (ksi):	8.84		(Flexural)
Allowable Stress (ksi):	54		
Stress Rating:	<b>15.6%</b>		<b>Pass</b>

## Drilled Pier Foundation

BU # :	806369
Site Name:	HRT_094_943225
Order Number:	566516 Rev. 0
TIA-222 Revision:	H
Tower Type:	Monopole



<b>Check Limitation</b>	
Apply TIA-222-H Section 15.5:	<input checked="" type="checkbox"/>
	N/A <input type="checkbox"/>
<b>Additional Longitudinal Rebar</b>	
Input Effective Depths (else Actual):	<input type="checkbox"/>
<b>Shear Design Options</b>	
Check Shear along Depth of Pier:	<input checked="" type="checkbox"/>
Utilize Shear-Friction Methodology:	<input type="checkbox"/>
Override Critical Depth:	<input type="checkbox"/>

[Go to Soil Calculations](#)

### Analysis Results

Soil Lateral Check	Compression	Uplift
D <sub>50</sub> (ft from TOC)	7.47	-
Soil Safety Factor	7.72	-
Max Moment (kip-ft)	3509.18	-
Rating*	16.4%	-
<b>Soil Vertical Check</b>		
	Compression	Uplift
Skin Friction (kips)	406.44	-
End Bearing (kips)	298.21	-
Weight of Concrete (kips)	251.31	-
Total Capacity (kips)	704.65	-
Axial (kips)	316.95	-
Rating*	42.8%	-
<b>Reinforced Concrete Flexure</b>		
	Compression	Uplift
Critical Depth (ft from TOC)	7.40	-
Critical Moment (kip-ft)	3509.15	-
Critical Moment Capacity	10735.24	-
Rating*	31.1%	-
<b>Reinforced Concrete Shear</b>		
	Compression	Uplift
Critical Depth (ft from TOC)	25.50	-
Critical Shear (kip)	196.10	-
Critical Shear Capacity	565.62	-
Rating*	33.0%	-

[Rebar & Pier Options](#)  
[Embedded Pole Inputs](#)  
[Belled Pier Inputs](#)

<b>Structural Foundation Rating*</b>	33.0%
<b>Soil Interaction Rating*</b>	42.8%

\*Rating per TIA-222-H Section 15.5

Groundwater Depth	10
<b>Soil Profile</b>	
# of Layers	8

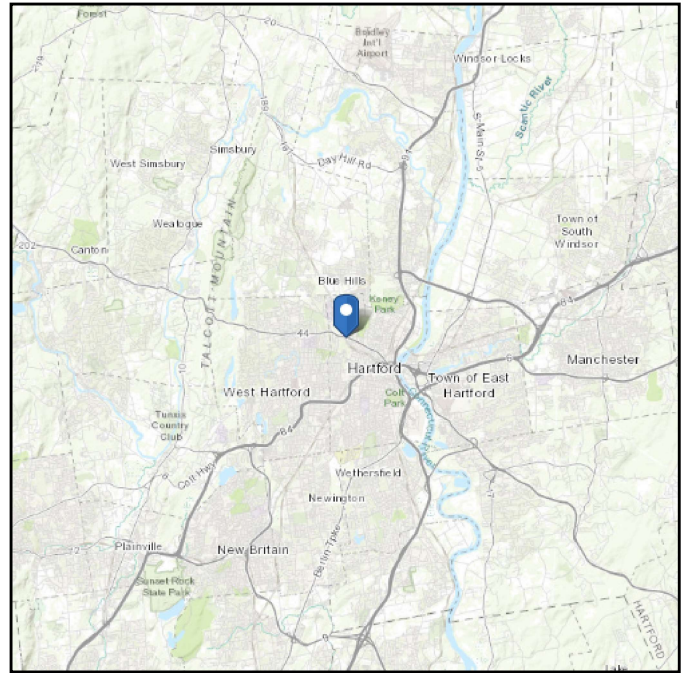
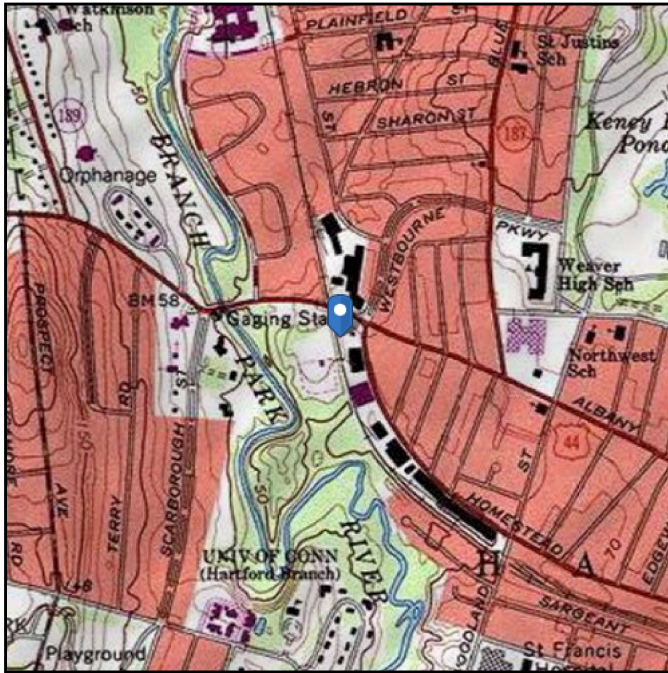
Layer	Top (ft)	Bottom (ft)	Thickness (ft)	V <sub>soil</sub> (pcf)	V <sub>concrete</sub> (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	2	2	105	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	2	3.75	1.75	100	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
3	3.75	5	1.25	100	150	0.5	30	0.000	0.000	0.00	0.00			Cohesionless
4	5	10	5	100	150	0.5	30	0.000	0.000	0.60	0.60			Cohesionless
5	10	25	15	36	87.6	0.1	27	0.000	0.000	0.40	0.40			Cohesionless
6	25	35	10	36	87.6	0.1	27	0.000	0.000	0.60	0.60			Cohesionless
7	35	45	10	41	87.6	0.2	0	0.11	0.11	0.60	0.60			Cohesive
8	45	47	2	41	87.6	0	32	0.00	0.00	1.00	1.00	9		Cohesionless

# ASCE 7 Hazards Report

**Address:**  
No Address at This  
Location

**Standard:** ASCE/SEI 7-16  
**Risk Category:** II  
**Soil Class:** D - Stiff Soil

**Elevation:** 60.06 ft (NAVD 88)  
**Latitude:** 41.783781  
**Longitude:** -72.703794



## Wind

### Results:

Wind Speed:	117 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	97 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2  
Date Accessed: Mon Sep 20 2021

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

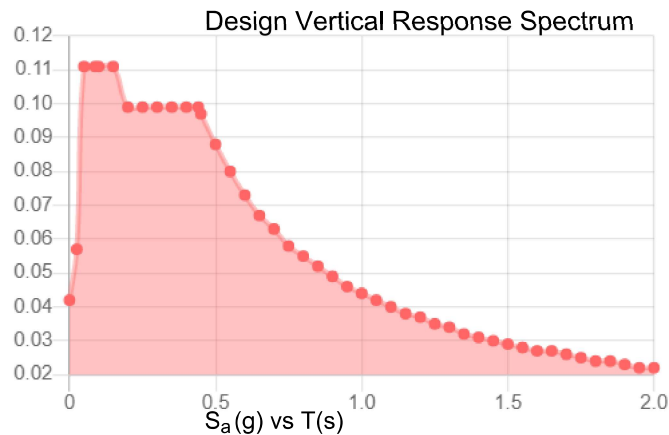
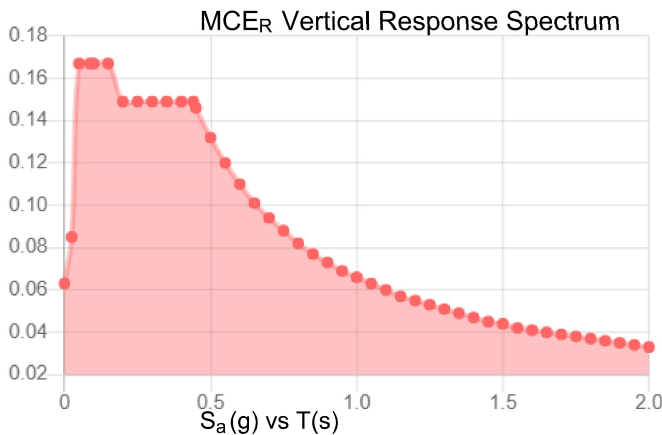
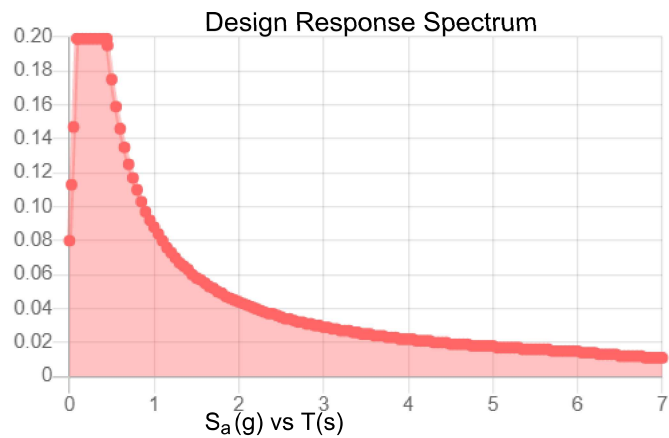
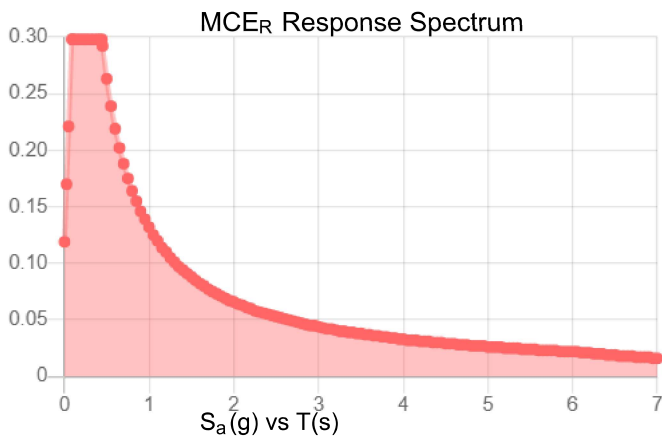
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

**Site Soil Class:** D - Stiff Soil

**Results:**

$S_s$ :	0.186	$S_{D1}$ :	0.088
$S_1$ :	0.055	$T_L$ :	6
$F_a$ :	1.6	PGA :	0.1
$F_v$ :	2.4	PGA <sub>M</sub> :	0.16
$S_{MS}$ :	0.298	$F_{PGA}$ :	1.6
$S_{M1}$ :	0.132	$I_e$ :	1
$S_{DS}$ :	0.199	$C_v$ :	0.7

**Seismic Design Category** B



**Data Accessed:**

Mon Sep 20 2021

**Date Source:**

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.



## Ice

---

**Results:**

Ice Thickness: 1.50 in.

Concurrent Temperature: 5 F

Gust Speed: 50 mph

**Data Source:** Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8

**Date Accessed:** Mon Sep 20 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 500-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.

---

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE 7 standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE 7 Hazard Tool.

# Exhibit E

## **Mount Analysis**

Date: September 13, 2021

**Kimley»Horn**

Kimley-Horn and Associates, Inc.  
421 Fayetteville Street, Suite 600  
Raleigh, NC 27601  
(919) 677-2000  
CrownMounts@kimley-horn.com

**Subject:** Mount Analysis Report

**Carrier Designation:** AT&T Equipment Change-Out  
**Carrier Site Number:** CTL05131  
**Carrier Site Name:** HRT 094 943225  
**Carrier FA Number:** 10071191

**Crown Castle Designation:** BU Number: 806369  
Site Name: HRT 094 943225  
JDE Job Number: 649380  
Order Number: 556516, Rev. 0

**Engineering Firm Designation:** Kimley-Horn Project Number: 019558056

**Site Data:** 439-455 Homestead Ave, Hartford, Hartford County, CT 06105  
Latitude 41° 47' 1.61" Longitude -72° 42' 13.66"

**Structure Information:** Tower Height & Type: 140 ft Monopole  
Mount Elevation: 117 ft  
Mount Type: 12 ft Platform w/ Support Rails

Kimley-Horn is pleased to submit this "Mount Analysis Report" to determine the structural integrity of AT&T's antenna mounting system with the proposed appurtenance and equipment addition on the abovementioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis. Analysis of the antenna mounting system as a tie-off point for fall protection or rigging is not part of this document.

The purpose of the analysis is to determine acceptability of the mount stress level. Based on our analysis we have determined the mount stress level to be:

**Platform w/ Support Rails**

**Sufficient**

This analysis utilizes an ultimate 3-second gust wind speed of 122 mph as required by the 2018 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Mount analysis prepared by Elliot Ziebart, E.I. under supervision by Steven C. Ball, P.E., S.E.



9.14.21

## TABLE OF CONTENTS

### 1) INTRODUCTION

### 2) ANALYSIS CRITERIA

Table 1 - Proposed Equipment Configuration

### 3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

3.1) Analysis Method

3.2) Assumptions

### 4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity

4.1) Recommendations

### 5) APPENDIX A

Wire Frame and Rendered Models

### 6) APPENDIX B

Software Input Calculations

### 7) APPENDIX C

Software Analysis Output

## 1) INTRODUCTION

The mounting configuration consists of an existing 12 ft Platform w/ Support Rails designed by Engineered Endeavors.

## 2) ANALYSIS CRITERIA

<b>Building Code:</b>	2018 Connecticut State Building Code
<b>TIA-222 Revision:</b>	TIA-222-H
<b>Risk Category:</b>	II
<b>Ultimate Wind Speed:</b>	122 mph
<b>Exposure Category:</b>	B
<b>Topographic Factor at Base:</b>	1.0
<b>Topographic Factor at Mount:</b>	1.0
<b>Ice Thickness:</b>	2 in
<b>Wind Speed with Ice:</b>	50 mph
<b>Live Loading Wind Speed:</b>	30 mph
<b>Man Live Load at Mid/End-Points:</b>	250 lb
<b>Man Live Load at Mount Pipes:</b>	500 lb

**Table 1 – Proposed Equipment Configuration**

Elevation (ft)		Antennas			Mount / Modification Details
Mount	Centerline	#	Manufacturer	Model	
117	117	2	CCI Antennas	DMP65R-BU6D	Existing 12 ft Platform w/ Support Rails designed by Engineered Endeavors
		2	CCI Antennas	TPA65R-BU6D	
		1	CCI Antennas	DMP65R-BU8D	
		1	CCI Antennas	TPA65R-BU8D	
		3	Ericsson	RADIO 4449 B5/B12	
		3	Ericsson	RRUS 8843 B2/B66A_CCIV2	
		3	Ericsson	RRUS 4478 B14	
		3	Ericsson	AIR 6419 B77G	
		3	Ericsson	RRUS-32 B30	
		3	Ericsson	AIR 6449 N77	
		3	Raycap	DC6-48-60-18-8F	

### 3) ANALYSIS PROCEDURE

**Table 2 – Documents Provided**

Document	Remarks	Reference	Source
Structural Analysis	Morrison Hershfield	9942251	CCISites
Mount Analysis	Tower Engineering Professionals	8638221	CCISites
Mount Mapping	Tower Engineering Professionals	8500477	CCISites
Site Photos	-	-	CCISites
Supplemental Loading	AT&T RFDS	8/5/2021	TSA

#### 3.1) Analysis Method

RISA-3D (version 17.02.00), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases.

A proprietary tool internally developed by Kimley-Horn was used to calculate wind loading on all appurtenances, dishes and mount members for various load cases. Selected output from the analysis is included in Appendix B.

This analysis was performed in accordance with Crown Castle’s ENG-SOW-10208 *Mount Analysis* (Revision D).

#### 3.2) Assumptions

- 1) The antenna mounting system (including any considered modifications) was properly fabricated, installed and maintained in good condition in accordance with its original design, TIA standards, and/or manufacturer specifications.
- 2) The configuration of antennas, mounts, and other appurtenances are as specified in Table 1 and the provided reference information.
- 3) 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.
- 4) The analysis will be required to be revised if the existing conditions in the field differ from those shown in the above-referenced documents or assumed in this analysis. No allowance was made for any damaged, missing, or rusted members that could not be verified at this time.
- 5) Any referenced prior structural modifications to the tower mounting system are assumed to be installed as shown per available data unless noted otherwise.
- 6) Steel grades have been assumed as follows, unless noted otherwise:
 

Channel, Solid Round, Angle, Plate	ASTM A36 (Gr. 36)
HSS (Rectangular)	ASTM A36 (Gr. 36)
Pipe	ASTM A53 (Gr. B-35)
Connection Bolts	ASTM A325
Threaded Rods	ASTM A36 (Gr. 36)

This analysis may be affected if any assumptions are not valid or have been made in error. Kimley-Horn should be notified to determine the effect on the structural integrity of the antenna mounting system.

#### 4) ANALYSIS RESULTS

**Table 3 – Mount Component Stresses vs. Capacity**

Notes	Component	Critical Member	Centerline (ft)	% Capacity	Pass / Fail
1, 2	Stand Off Horizontals	M82	117	85%	Pass
1, 2	Mount Pipes	M200		67%	Pass
1, 2	Bracing Members	M30		58%	Pass
1, 2	Face Horizontals	M56		58%	Pass
1, 2	Support Rails	SR19		35%	Pass
1, 2	Connections	M272B		34%	Pass
1, 2	Corner Plates	M66		31%	Pass

<b>Structure Rating (max from all components) =</b>	<b>85%</b>
---	------------

Notes:

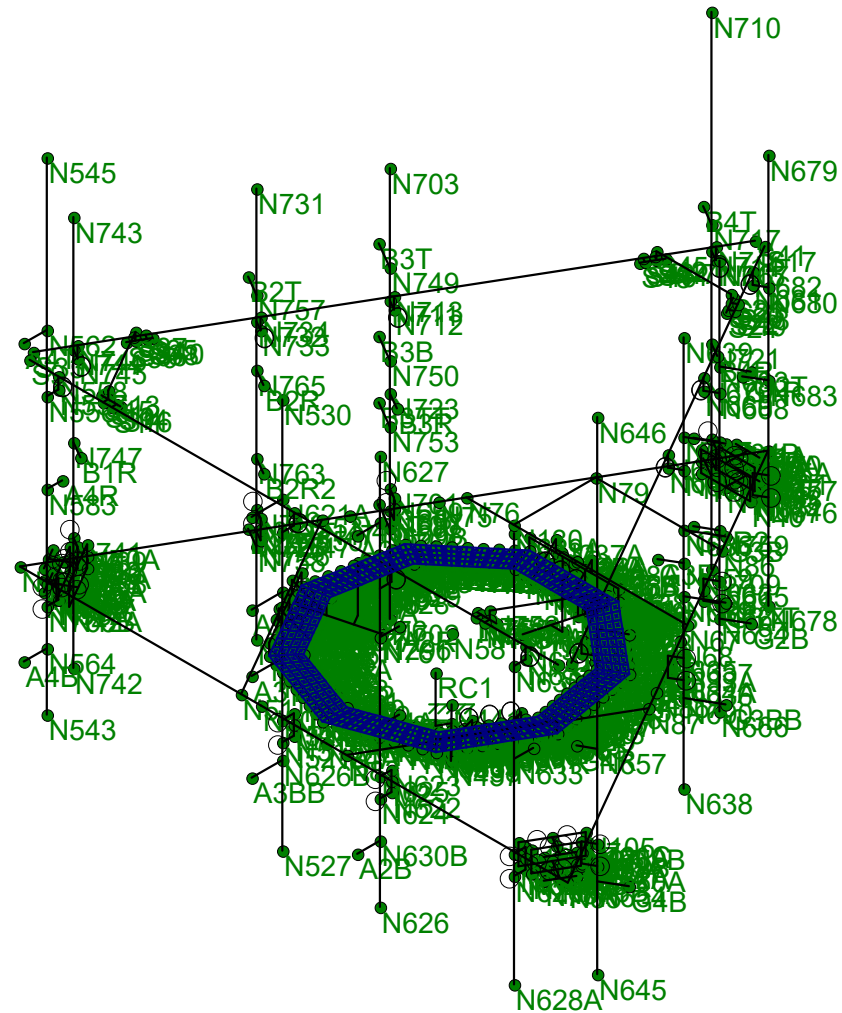
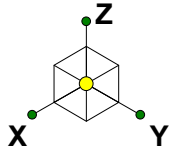
- 1) See additional documentation in "Appendix C - Software Analysis Output" for calculations supporting the % capacity consumed.
- 2) A structure rating of 105% or less is within engineering tolerances and considered acceptable.

#### 4.1) Recommendations

The mounting configuration has sufficient design capacity to carry the referenced loading. No modifications are required at this time.

**APPENDIX A**  
**WIRE FRAME AND RENDERED MODELS**





Envelope Only Solution

Kimley-Horn and Associates, Inc.

EJZ

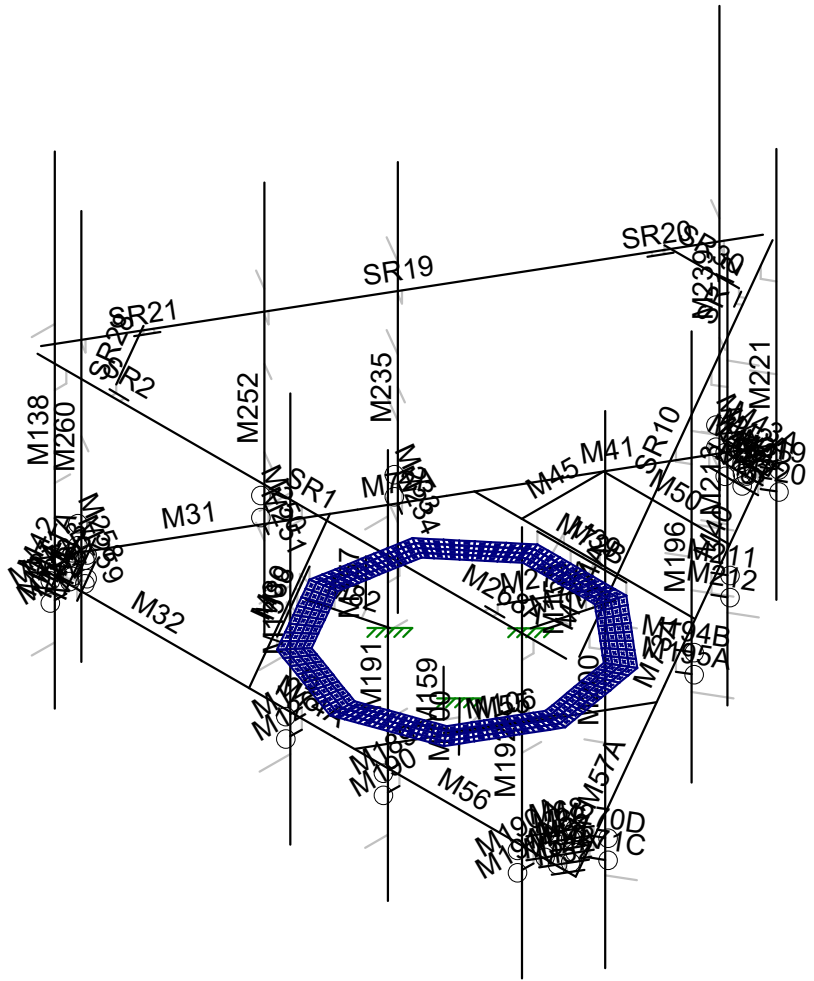
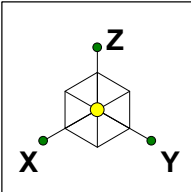
019558056

806369

SK - 1

Sept 9, 2021 at 12:53 PM

806369.r3d

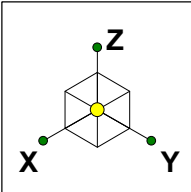


Envelope Only Solution

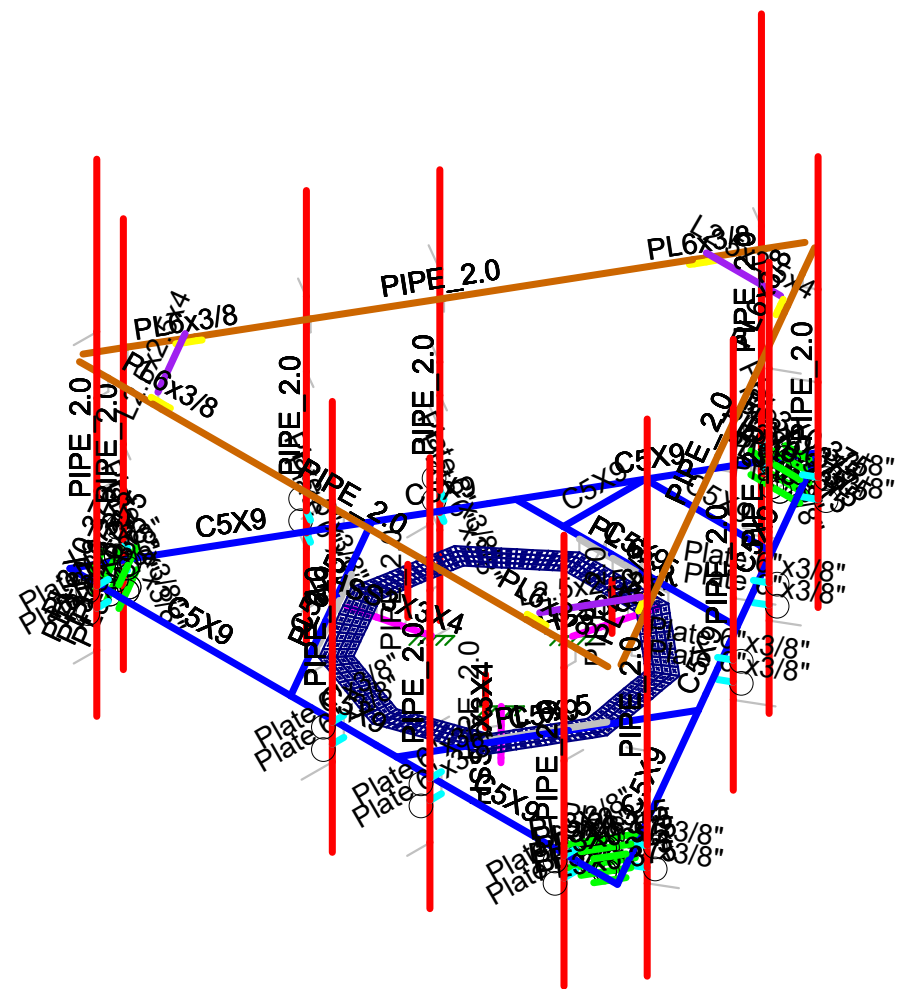
Kimley-Horn and Associates, Inc.  
 EJZ  
 019558056

806369

SK - 2  
 Sept 9, 2021 at 12:54 PM  
 806369.r3d

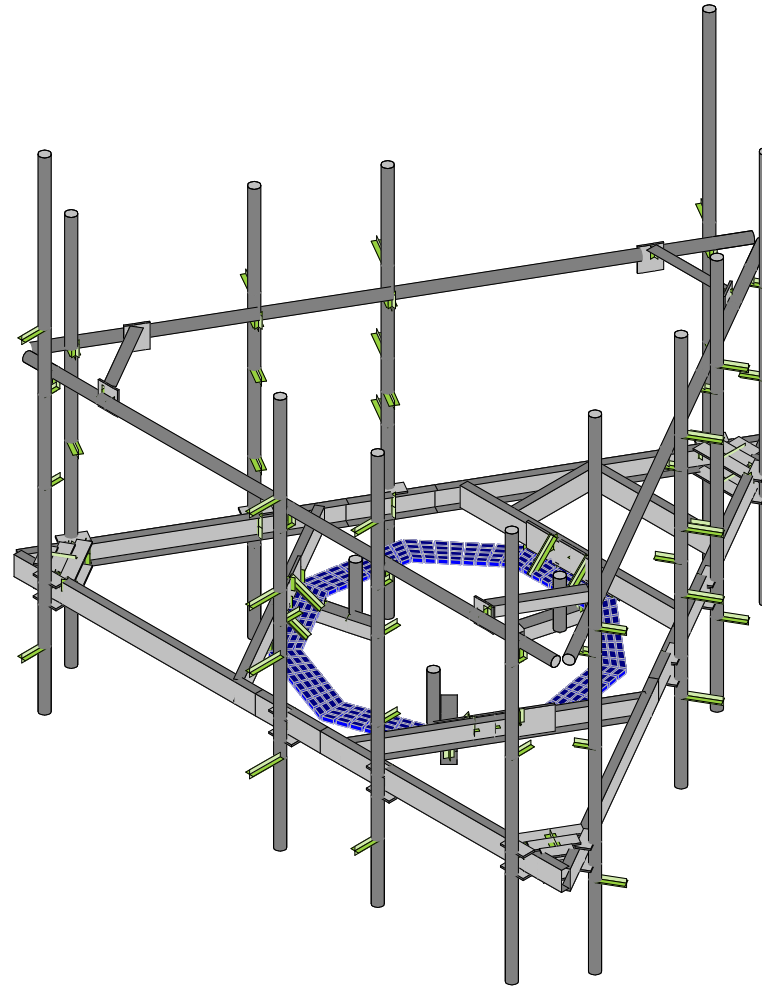
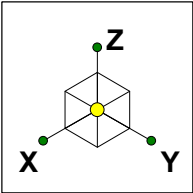


- Section Sets
- █ Grating Channel
  - █ Corner Plate
  - █ Mount Pipe
  - █ Connection Plate
  - █ offset
  - █ MP connection Plate
  - █ HRK12 Pipe
  - █ HRK12 Plate
  - █ HRK12 Angle
  - █ RIGID



Envelope Only Solution

Kimley-Horn and Associates, Inc.		SK - 3
EJZ	806369	Sept 9, 2021 at 12:54 PM
019558056		806369.r3d



Envelope Only Solution

Kimley-Horn and Associates, Inc.

EJZ

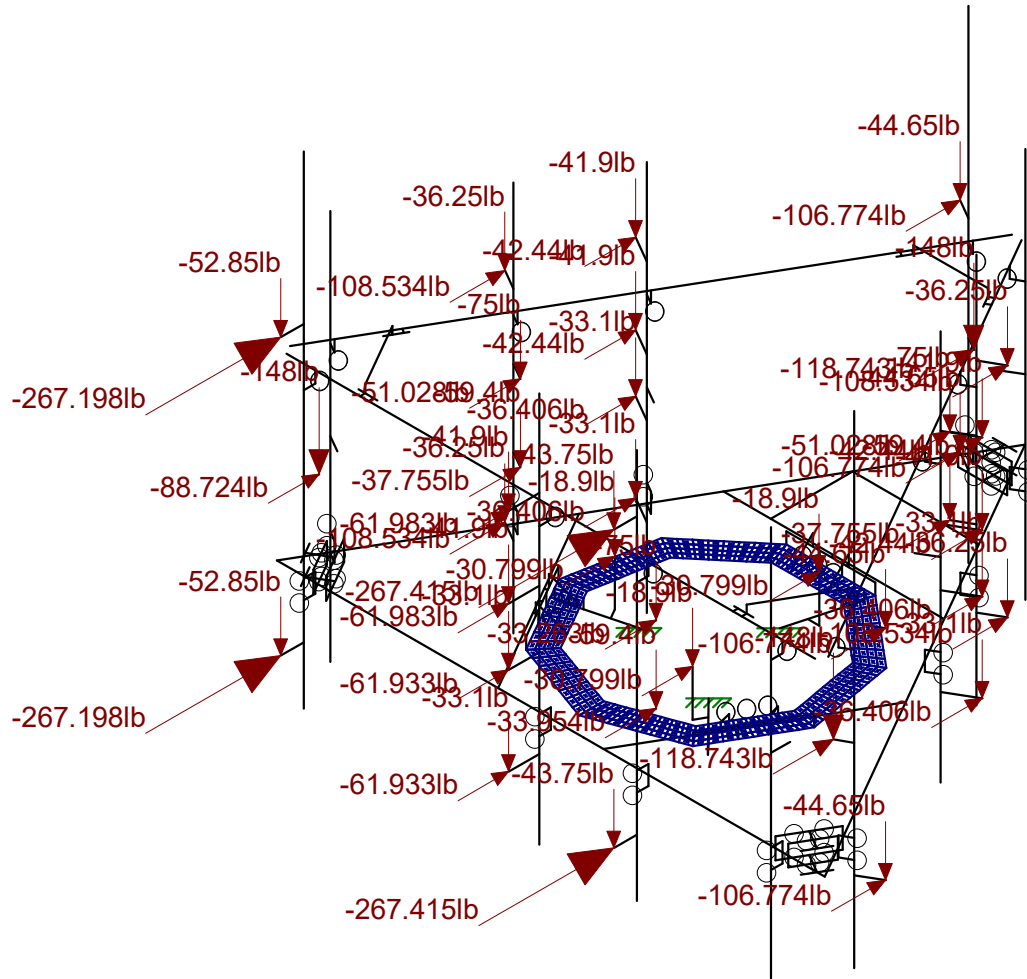
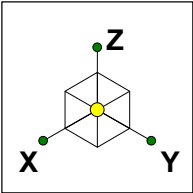
019558056

806369

SK - 4

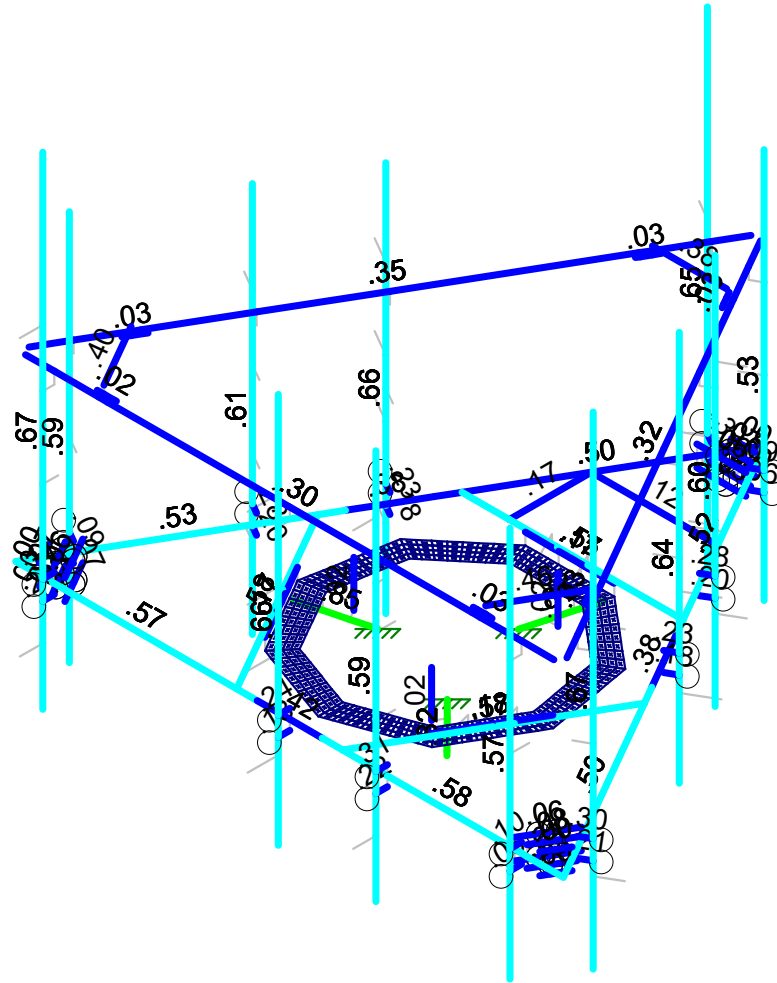
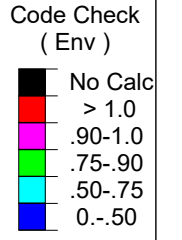
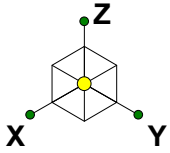
Sept 9, 2021 at 12:55 PM

806369.r3d



Loads: LC 1, Summary: 1.0D + 1.0W  
Envelope Only Solution

Kimley-Horn and Associates, Inc.	806369	SK - 5
EJZ		Sept 9, 2021 at 12:55 PM
019558056		806369.r3d



Member Code Checks Displayed (Enveloped)  
Envelope Only Solution

Kimley-Horn and Associates, Inc.

EJZ

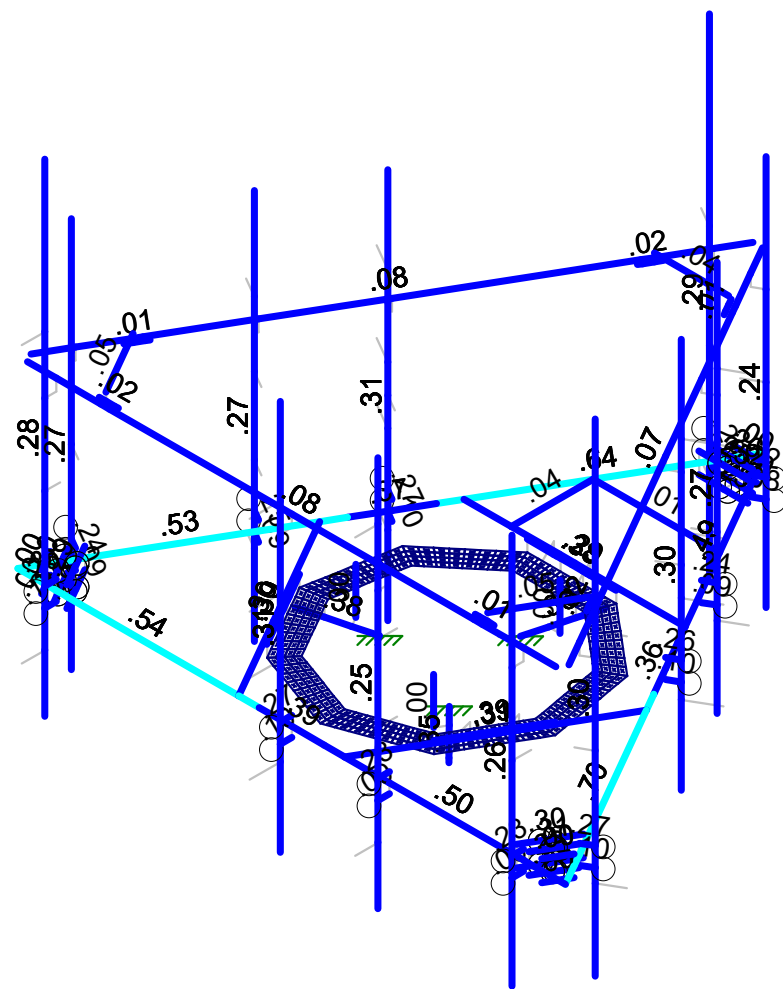
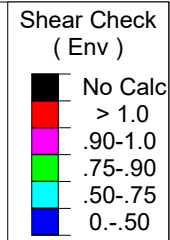
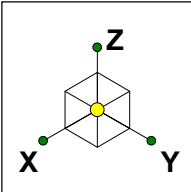
019558056

806369

SK - 6

Sept 9, 2021 at 12:56 PM

806369.r3d



Member Shear Checks Displayed (Enveloped)  
Envelope Only Solution

Kimley-Horn and Associates, Inc.  
EJZ  
019558056

806369

SK - 7  
Sept 9, 2021 at 12:56 PM  
806369.r3d

**APPENDIX B**  
**SOFTWARE INPUT CALCULATIONS**





Date	September 09, 2021
Client	Crown Castle
Site #	806369
Site Name	HRT 094 943225
Project #	19558056

General Criteria	
TIA Standard	H
IBC Edition	2015
Structure Class	-
Risk Category	II

Wind Summary	
Basic Wind Speed w/o Ice, V (mph)	122.00
Velocity Pressure Coeff., K <sub>z</sub>	1.03
Velocity Pressure, q <sub>z</sub> (w/o Ice) (psf)	37.33

Site-Specific Criteria	
Exposure Category	B
Topographic Factor, K <sub>zt</sub>	1.00
Structure Base Elev. (AMSL), z <sub>s</sub> (ft)	60.06
Ground Effect Factor, K <sub>e</sub>	1.00

Ice Load Summary	
Basic Wind Speed w/ Ice, V <sub>i</sub> (mph)	50.00
Design Ice Thick. (ASCE 7-10), t <sub>i</sub> (in)	1
Velocity Pressure, q <sub>z</sub> (w/ Ice) (psf)	6.27
Escalated Ice Thick. @ Mount, t <sub>iz</sub> (in)	2.27

Mount & Structure Criteria	
Mount Elevation (AGL) (ft)	117.00
Structure Height (ft)	140.00
Structure Type	Monopole

Seismic Load Summary	
Spectral Response (Short Periods), S <sub>s</sub>	-
Spectral Response (1-Sec. Period), S <sub>1</sub>	-
Site Class	-
Seismic Design Category	-
Seismic Risk Category	-

Constants	
Wind Direction Probability Factor, K <sub>d</sub>	0.95
Gust Effect Factor, G <sub>h</sub>	1
Shielding Factor, K <sub>a</sub> (antenna)	0.9
Shielding Factor, K <sub>a</sub> (mount)	0.9

Snow Load Summary	
Ground Snow Load, p <sub>g</sub> (psf)	-
Snow Load on Flat Roofs, p <sub>f</sub> (psf)	-

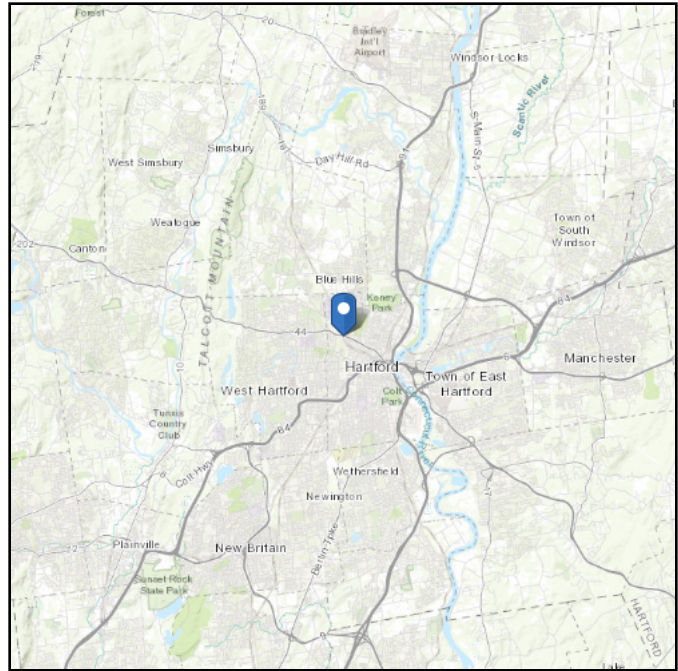
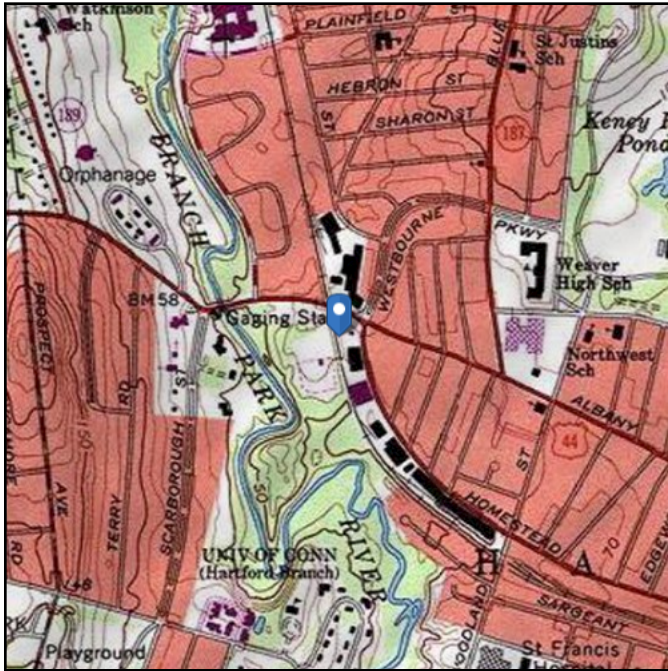
Antenna Name	Qty	Shape	Dimensions (in)			Weight (lb)	Joint Labels				EPA (ft <sup>2</sup> )		Wind Force, F <sub>A</sub> (lb)							
			H	W	D		Alpha	Beta	Gamma	Delta	Front	Side	No Ice		With Ice					
													Front	Side	Front	Side				
DMP65R-BU8D	1	Flat	96	20.7	7.7	105.7	A4T	A4B					15.91	5.93	534.4	199.21	112.05	50.71		
DMP65R-BU6D	2	Flat	71.2	20.7	7.7	89.3			B4T	B4B	G4T	G4B			11.95	4.49	401.4	150.93	86.08	39.64
TPA65R-BU8D	1	Flat	96	21	7.8	87.5	A2T	A2B							15.92	5.99	534.83	201.12	111.92	51.05
TPA65R-BU6D	2	Flat	71.2	21	7.8	72.5			B2T	B2B	G2T	G2B			12.23	4.54	410.82	152.48	87.91	39.9
AIR 6449 N77	3	Flat	30.6	15.9	10.6	83.8	A3T	A3B	B3T	B3B	G3T	G3B			3.69	2.14	123.97	71.85	30.74	19.52
AIR 6419 B77G	3	Flat	28	15.8	6.7	66.2	A3TT	A3BB	B3TT	B3BB	G3TT	G3BB			3.69	1.66	123.87	55.79	31.13	17.45
RRUS 4478 B14	3	Flat	18.1	13.4	7.7	59.4	A2R2		B2R2		G2R2				1.01	1.16	33.95	39.02	9.55	13.03
RADIO 4449 B5/B12	3	Flat	17.9	13.2	9.4	71	A4R		B4R		G4R				0.98	1.41	33.05	47.31	9.36	14.75
RRUS 8843 B2/B66A_CCIV2	3	Flat	18	13.2	11.3	75	A2R		B2R		G2R				0.99	1.7	33.26	56.95	9.4	16.79
RRUS-32 B30	3	Flat	29.9	13.3	9.5	77	A4R		B4R		G4R				1.66	2.42	55.67	81.44	14.45	22.74
DC6-48-60-18-8F	3	Round	24	11	11	18.9	RC1		RC2		RC3				0.92	0.92	30.8	30.8	9.45	9.45

# ASCE 7 Hazards Report

**Address:**  
No Address at This Location

**Standard:** ASCE/SEI 7-10  
**Risk Category:** II  
**Soil Class:** D - Stiff Soil

**Elevation:** 60.06 ft (NAVD 88)  
**Latitude:** 41.783781  
**Longitude:** -72.703794



## Wind

### Results:

Wind Speed:	122 Vmph
10-year MRI	76 Vmph
25-year MRI	86 Vmph
50-year MRI	92 Vmph
100-year MRI	99 Vmph

**Data Source:** ASCE 7-10, Fig. 26.5-1A and Figs. CC-1–CC-4, and Section 26.5.2, incorporating errata of March 12, 2014

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-10 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

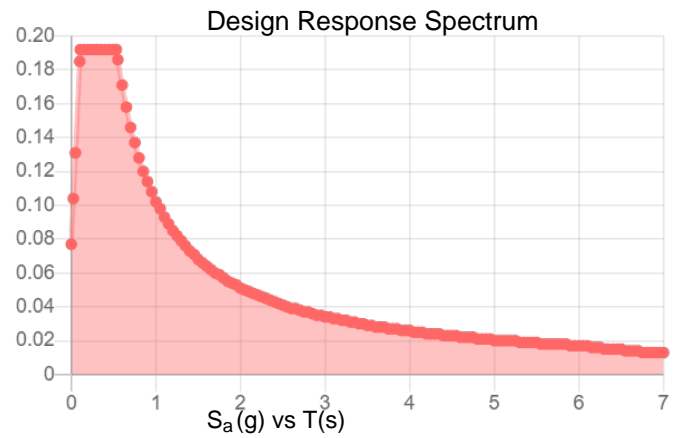
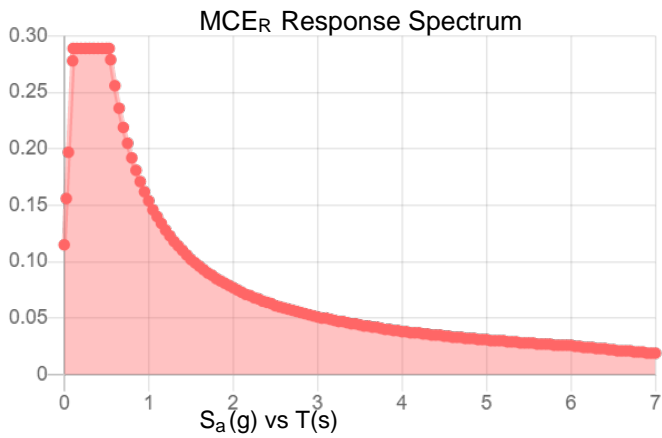
Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.

**Site Soil Class:** D - Stiff Soil

**Results:**

$S_s$ :	0.18	$S_{DS}$ :	0.192
$S_1$ :	0.064	$S_{D1}$ :	0.102
$F_a$ :	1.6	$T_L$ :	6
$F_v$ :	2.4	PGA :	0.091
$S_{MS}$ :	0.289	PGA <sub>M</sub> :	0.145
$S_{M1}$ :	0.154	F <sub>PGA</sub> :	1.6
		$I_e$ :	1

**Seismic Design Category** B



**Data Accessed:**

Thu Sep 09 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: 1.00 in.

Concurrent Temperature: 5 F

Gust Speed: 50 mph

**Data Source:** Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8

**Date Accessed:** Thu Sep 09 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.

---

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE 7 standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE 7 Hazard Tool.

**APPENDIX C**  
**SOFTWARE ANALYSIS OUTPUT**

### Hot Rolled Steel Properties

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

### Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Ru...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Grating Channel	C5X9	Beam	None	A36 Gr.36	Typical	2.64	.624	8.89	.109
2	Corner Plate	PL3X0.375	Beam	None	A36 Gr.36	Typical	1.125	.013	.844	.049
3	Bracing	1.75X1.75X.25	Beam	None	A36 Gr.36	Typical	.813	.227	.227	.015
4	Corner Angle	L2x2x4	Beam	None	A36 Gr.36	Typical	.944	.346	.346	.021
5	Corner Plate 2	PL4x0.375	Beam	None	A36 Gr.36	Typical	1.56	.02	2.08	.074
6	Mount Pipe	PIPE 2.0	Beam	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
7	Connection Plate	PL 6x.5	Beam	None	A36 Gr.36	Typical	3	.063	9	.237
8	offset	HSS3X3X4	Beam	None	A36 Gr.36	Typical	2.44	3.02	3.02	5.08
9	MP connection Plate	Plate 6"x3/8"	Beam	None	A36 Gr.36	Typical	2.25	.026	6.75	.101
10	Antenna Mount Pipe	HSS2.375X0.1...	Beam	None	A36 Gr.36	Typical	.823	.527	.527	1.05
11	threaded rod	1/2" SR	Beam	None	A36 Gr.36	Typical	.196	.003	.003	.006
12	HRK12 Pipe	PIPE 2.0	Beam	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
13	HRK12 Plate	PL6x3/8	Beam	None	A36 Gr.36	Typical	2.25	.026	6.75	.101
14	HRK12 Angle	L2.5x2.5x4	Beam	None	A36 Gr.36	Typical	1.19	.692	.692	.026

### Joint Coordinates and Temperatures

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
1	S48	-60.321543	-11.324492	48	0	
2	S47	-64.65167	-8.824492	48	0	
3	S46	-61.187568	-10.824492	48	0	
4	S45	-63.136126	-9.699492	50	0	
5	S44	-63.136126	-9.699492	48	0	
6	S43	-61.843818	-11.96115	48	0	
7	S42	-63.792376	-10.83615	48	0	
8	S41	-80.396037	-1.250021	48	0	
9	S40	20.353474	-57.902235	48	0	
10	S39	24.683601	-60.402235	48	0	
11	S38	21.219499	-58.402235	48	0	
12	S37	23.168057	-59.527235	50	0	
13	S36	23.168057	-59.527235	48	0	
14	S35	20.563249	-59.538893	48	0	
15	S34	22.511807	-60.663893	48	0	
16	S33	39.115468	-70.250021	48	0	
17	S25	39.115468	70.250021	48	0	
18	S24	-60.321543	11.324492	48	0	
19	S23	-64.65167	8.824492	48	0	
20	S22	-61.187568	10.824492	48	0	
21	S21	-63.136126	9.699492	50	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
22	S20	-63.136126	9.699492	48	0	
23	S19	-61.843818	11.96115	48	0	
24	S18	-63.792376	10.83615	48	0	
25	S17	-80.396037	1.250021	48	0	
26	S16	39.968069	-46.577743	48	0	
27	S15	39.968069	-51.577743	48	0	
28	S14	39.968069	-47.577743	48	0	
29	S13	39.968069	-49.827743	50	0	
30	S12	39.968069	-49.827743	48	0	
31	S11	41.280569	-47.577743	48	0	
32	S10	41.280569	-49.827743	48	0	
33	S9	41.280569	-69	48	0	
34	S1	41.280569	69	48	0	
35	RC3	-20.267255	8.532508	6.5	0	
36	RC2	2.744259	-21.818212	6.5	0	
37	RC1	17.522997	13.285704	6.5	0	
38	N758	-0.056637	-51.098098	-6	0	
39	N757	-0.056637	-51.098098	51	0	
40	N754	-22.140284	-38.348098	-6.5	0	
41	N753	-22.140284	-38.348098	16.5	0	
42	N750	-22.140284	-38.348098	31.5	0	
43	N749	-22.140284	-38.348098	52.5	0	
44	N747	30.254252	-68.598098	24	0	
45	N746	31.754252	-66.000021	48	0	
46	N745	31.754252	-66.000021	45	0	
47	N744	30.254252	-68.598098	45	0	
48	N743	30.254252	-68.598098	75	0	
49	N742	30.254252	-68.598098	-27	0	
50	N741	30.254252	-68.598098	2.5	0	
51	N740	30.254252	-68.598098	-2.5	0	
52	N739	31.754252	-66.000021	2.5	0	
53	N738	31.754252	-66.000021	-2.5	0	
54	N737	31.754252	-66.000021	0	0	
55	N734	1.443363	-48.500021	48	0	
56	N733	1.443363	-48.500021	45	0	
57	N732	-0.056637	-51.098098	45	0	
58	N731	-0.056637	-51.098098	75	0	
59	N730	-0.056637	-51.098098	-27	0	
60	N729	-0.056637	-51.098098	2.5	0	
61	N728	-0.056637	-51.098098	-2.5	0	
62	N727	1.443363	-48.500021	2.5	0	
63	N726	1.443363	-48.500021	-2.5	0	
64	N725	1.443363	-48.500021	0	0	
65	N723	-22.140284	-38.348098	24	0	
66	N721	-75.400847	-7.598098	24	0	
67	N718	-75.400847	-7.598098	-6	0	
68	N717	-75.400847	-7.598098	51	0	
69	N716	-73.900847	-5.000021	48	0	
70	N715	-73.900847	-5.000021	45	0	
71	N714	-75.400847	-7.598098	45	0	
72	N713	-20.640284	-35.750021	48	0	
73	N712	-20.640284	-35.750021	45	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
74	N711	-22.140284	-38.348098	45	0	
75	N710	-75.400847	-7.598098	99	0	
76	N709	-75.400847	-7.598098	-27	0	
77	N703	-22.140284	-38.348098	75	0	
78	N702	-22.140284	-38.348098	-27	0	
79	N701	-22.140284	-38.348098	2.5	0	
80	N700	-22.140284	-38.348098	-2.5	0	
81	N699	-20.640284	-35.750021	2.5	0	
82	N698	-20.640284	-35.750021	-2.5	0	
83	N697	-20.640284	-35.750021	0	0	
84	N694	-44.223932	25.598098	-6	0	
85	N693	-44.223932	25.598098	51	0	
86	N690	-22.140284	38.348098	-6.5	0	
87	N689	-22.140284	38.348098	16.5	0	
88	N686	-22.140284	38.348098	31.5	0	
89	N685	-22.140284	38.348098	52.5	0	
90	N683	-74.534821	8.098098	24	0	
91	N682	-73.034821	5.500021	48	0	
92	N681	-73.034821	5.500021	45	0	
93	N680	-74.534821	8.098098	45	0	
94	N679	-74.534821	8.098098	75	0	
95	N678	-74.534821	8.098098	-27	0	
96	N677	-74.534821	8.098098	2.5	0	
97	N676	-74.534821	8.098098	-2.5	0	
98	N675	-73.034821	5.500021	2.5	0	
99	N674	-73.034821	5.500021	-2.5	0	
100	N673	-73.034821	5.500021	0	0	
101	N670	-42.723932	23.000021	48	0	
102	N669	-42.723932	23.000021	45	0	
103	N668	-44.223932	25.598098	45	0	
104	N667	-44.223932	25.598098	75	0	
105	N666	-44.223932	25.598098	-27	0	
106	N665	-44.223932	25.598098	2.5	0	
107	N664	-44.223932	25.598098	-2.5	0	
108	N663	-42.723932	23.000021	2.5	0	
109	N662	-42.723932	23.000021	-2.5	0	
110	N661	-42.723932	23.000021	0	0	
111	N659	-22.140284	38.348098	24	0	
112	N657	31.120278	69.098098	24	0	
113	N654	31.120278	69.098098	-6	0	
114	N653	31.120278	69.098098	51	0	
115	N652	32.620278	66.500021	48	0	
116	N651	32.620278	66.500021	45	0	
117	N650	31.120278	69.098098	45	0	
118	N649	-20.640284	35.750021	48	0	
119	N648	-20.640284	35.750021	45	0	
120	N647	-22.140284	38.348098	45	0	
121	N646	31.120278	69.098098	99	0	
122	N645	31.120278	69.098098	-27	0	
123	N639	-22.140284	38.348098	75	0	
124	N638	-22.140284	38.348098	-27	0	
125	N637	-22.140284	38.348098	2.5	0	



**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
126	N636	-22.140284	38.348098	-2.5	0	
127	N635	-20.640284	35.750021	2.5	0	
128	N634A	-20.640284	35.750021	-2.5	0	
129	N633A	-20.640284	35.750021	0	0	
130	N633	44.280569	60.5	24	0	
131	N632A	41.280569	60.5	48	0	
132	N631A	41.280569	60.5	45	0	
133	N631	44.280569	25.5	14	0	
134	N630B	44.280569	25.5	-12	0	
135	N630A	44.280569	60.5	45	0	
136	N630	41.280569	25.5	48	0	
137	N629B	44.280569	25.5	60	0	
138	N629A	44.280569	60.5	75	0	
139	N629	41.280569	25.5	45	0	
140	N628A	44.280569	60.5	-27	0	
141	N628	44.280569	25.5	45	0	
142	N627A	44.280569	60.5	2.5	0	
143	N627	44.280569	25.5	75	0	
144	N626B	44.280569	0	-6.5	0	
145	N626A	44.280569	60.5	-2.5	0	
146	N626	44.280569	25.5	-27	0	
147	N625B	44.280569	0	16.5	0	
148	N625A	41.280569	60.5	2.5	0	
149	N625	44.280569	25.5	2.5	0	
150	N624A	41.280569	60.5	-2.5	0	
151	N624	44.280569	25.5	-2.5	0	
152	N623	41.280569	25.5	2.5	0	
153	N622A	44.280569	0	31.5	0	
154	N622	41.280569	25.5	-2.5	0	
155	N621A	44.280569	0	52.5	0	
156	N598	39.280569	0	24	0	
157	N597	44.280569	0	24	0	
158	N583	44.280569	-61.5	24	0	
159	N579	17.522997	13.285704	-5.5	0	
160	N576	2.744259	-21.818212	-5.5	0	
161	N573	-20.267255	8.532508	-5.5	0	
162	N572	14.92492	14.785704	-5.5	0	
163	N571	5.342335	-20.318212	-5.5	0	
164	N570	-20.267255	5.532508	-5.5	0	
165	N564	44.280569	-61.5	-12	0	
166	N562	44.280569	-61.5	60	0	
167	N558	41.280569	-61.5	48	0	
168	N557	41.280569	-61.5	45	0	
169	N556	44.280569	-61.5	45	0	
170	N553	41.280569	0	48	0	
171	N550	41.280569	0	45	0	
172	N547	44.280569	0	45	0	
173	N545	44.280569	-61.5	99	0	
174	N543	44.280569	-61.5	-27	0	
175	N537	41.280567	-59.5	0	0	
176	N535	41.280567	-63.5	0	0	
177	N530	44.280569	0	75	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
178	N527	44.280569	0	-27	0	
179	N526	19.385944	25.57744	0	0	
180	N525	19.760944	26.226959	0	0	
181	N524A	44.280569	0	2.5	0	
182	N524	12.457741	29.57744	0	0	
183	N523	12.832741	30.226959	0	0	
184	N522	19.994904	25.225857	3	0	
185	N521A	44.280569	0	-2.5	0	
186	N521	11.848781	29.929023	3	0	
187	N520	19.994904	25.225857	0	0	
188	N519	11.848781	29.929023	0	0	
189	N518A	41.280569	0	2.5	0	
190	N518	26.697986	2.209765	-3	0	
191	N517	25.893698	4.41953	-3	0	
192	N516	25.089409	6.629296	-3	0	
193	N515A	41.280569	0	-2.5	0	
194	N515	24.28512	8.839061	-3	0	
195	N514	23.480831	11.048826	-3	0	
196	N513	22.676543	13.258591	-3	0	
197	N512	21.872254	15.468356	-3	0	
198	N510	28.247571	2.338023	-3	0	
199	N509	27.3966	4.676046	-3	0	
200	N508	26.54563	7.014068	-3	0	
201	N507	25.694659	9.352091	-3	0	
202	N506	24.843688	11.690114	-3	0	
203	N505	23.992718	14.028137	-3	0	
204	N504	23.141747	16.366159	-3	0	
205	N502	29.797156	2.46628	-3	0	
206	N501	28.899503	4.932561	-3	0	
207	N500	28.001851	7.398841	-3	0	
208	N499	27.104198	9.865121	-3	0	
209	N498	26.206545	12.331402	-3	0	
210	N497	25.308893	14.797682	-3	0	
211	N496	24.41124	17.263962	-3	0	
212	N494	31.346741	2.594538	-3	0	
213	N493	30.402406	5.189076	-3	0	
214	N492	29.458071	7.783614	-3	0	
215	N491	28.513737	10.378151	-3	0	
216	N490	27.569402	12.972689	-3	0	
217	N489	26.625068	15.567227	-3	0	
218	N488	25.680733	18.161765	-3	0	
219	N487	32.896325	2.722795	-3	0	
220	N486	31.905309	5.445591	-3	0	
221	N485	30.914292	8.168386	-3	0	
222	N484	29.923276	10.891182	-3	0	
223	N483	28.932259	13.613977	-3	0	
224	N482	27.941243	16.336773	-3	0	
225	N481	26.950226	19.059568	-3	0	
226	N480	2.459863	26.676106	-3	0	
227	N479	0.144006	26.267758	-3	0	
228	N478	-2.171852	25.859409	-3	0	
229	N477	-4.487709	25.451061	-3	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
230	N476	-6.803566	25.042713	-3	0	
231	N475	-9.119423	24.634365	-3	0	
232	N474	-11.43528	24.226017	-3	0	
233	N473	2.602636	28.22442	-3	0	
234	N472	0.152364	27.792371	-3	0	
235	N471	-2.297909	27.360322	-3	0	
236	N470	-4.748181	26.928273	-3	0	
237	N469	-7.198454	26.496224	-3	0	
238	N468	-9.648726	26.064175	-3	0	
239	N467	-12.098998	25.632126	-3	0	
240	N465	2.74541	29.772735	-3	0	
241	N464	0.160722	29.316985	-3	0	
242	N463	-2.423966	28.861235	-3	0	
243	N462	-5.008653	28.405485	-3	0	
244	N461	-7.593341	27.949734	-3	0	
245	N460	-10.178029	27.493984	-3	0	
246	N459	-12.762717	27.038234	-3	0	
247	N457	2.888183	31.32105	-3	0	
248	N456	0.16908	30.841599	-3	0	
249	N455	-2.550023	30.362147	-3	0	
250	N454	-5.269126	29.882696	-3	0	
251	N453	-7.988229	29.403245	-3	0	
252	N452	-10.707332	28.923794	-3	0	
253	N451	-13.426435	28.444343	-3	0	
254	N449	3.030957	32.869365	-3	0	
255	N448	0.177439	32.366212	-3	0	
256	N447	-2.67608	31.86306	-3	0	
257	N446	-5.529598	31.359908	-3	0	
258	N445	-8.383116	30.856756	-3	0	
259	N444	-11.236634	30.353603	-3	0	
260	N443	-14.090153	29.850451	-3	0	
261	N442	19.031434	18.853913	-5.5	0	
262	N441	10.662446	10.562989	-5.5	0	
263	N440	20.136043	19.948218	-5.5	0	
264	N439	21.240651	21.042523	-5.5	0	
265	N438	22.34526	22.136828	-5.5	0	
266	N437	23.449868	23.231133	-5.5	0	
267	N436	19.031434	18.853913	-3	0	
268	N435	16.994904	20.029705	-3	0	
269	N434	14.958373	21.205496	-3	0	
270	N433	12.921843	22.381288	-3	0	
271	N432	10.885312	23.557079	-3	0	
272	N431	8.848781	24.732871	-3	0	
273	N430	6.812251	25.908662	-3	0	
274	N429	22.290776	18.704182	-3	0	
275	N428	20.136043	19.948218	-3	0	
276	N427	17.981309	21.192254	-3	0	
277	N426	15.826576	22.43629	-3	0	
278	N425	13.671843	23.680326	-3	0	
279	N424	11.517109	24.924362	-3	0	
280	N423	9.362376	26.168398	-3	0	
281	N422	7.207642	27.412434	-3	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
282	N421	5.052909	28.65647	-3	0	
283	N420	23.513587	19.730243	-3	0	
284	N419	21.240651	21.042523	-3	0	
285	N418	18.967715	22.354803	-3	0	
286	N417	16.694779	23.667084	-3	0	
287	N416	14.421843	24.979364	-3	0	
288	N415	12.148906	26.291644	-3	0	
289	N414	9.87597	27.603925	-3	0	
290	N413	7.603034	28.916205	-3	0	
291	N412	5.330098	30.228485	-3	0	
292	N411	24.736399	20.756303	-3	0	
293	N410	22.34526	22.136828	-3	0	
294	N409	19.954121	23.517353	-3	0	
295	N408	17.562982	24.897877	-3	0	
296	N407	15.171843	26.278402	-3	0	
297	N406	12.780703	27.658927	-3	0	
298	N405	10.389564	29.039452	-3	0	
299	N404	7.998425	30.419976	-3	0	
300	N403	5.607286	31.800501	-3	0	
301	N402	23.449868	23.231133	-3	0	
302	N401	20.940526	24.679902	-3	0	
303	N400	18.431184	26.128671	-3	0	
304	N399	15.921843	27.57744	-3	0	
305	N398	13.412501	29.026209	-3	0	
306	N397	10.903159	30.474979	-3	0	
307	N396	8.393817	31.923748	-3	0	
308	N395	25.95921	21.782363	0	0	
309	N394	18.431184	26.128671	0	0	
310	N393	13.412501	29.026209	0	0	
311	N392	5.884475	33.372517	0	0	
312	N391	21.067965	17.678122	-3	0	
313	N388	4.77572	27.084454	-3	0	
314	N386	25.95921	21.782363	-3	0	
315	N385	5.884475	33.372517	-3	0	
316	N383	15.921843	27.57744	0	0	
317	N382	16.296843	28.226959	0	0	
318	N381	12.457741	-29.57744	0	0	
319	N380	12.832741	-30.226959	0	0	
320	N379	19.385944	-25.57744	0	0	
321	N378	19.760944	-26.226959	0	0	
322	N377	11.848781	-29.929023	3	0	
323	N376	19.994904	-25.225857	3	0	
324	N375	11.848781	-29.929023	0	0	
325	N374	19.994904	-25.225857	0	0	
326	N373	-11.43528	-24.226017	-3	0	
327	N372	-9.119423	-24.634365	-3	0	
328	N371	-6.803566	-25.042713	-3	0	
329	N370	-4.487709	-25.451061	-3	0	
330	N369	-2.171852	-25.859409	-3	0	
331	N368	0.144006	-26.267758	-3	0	
332	N367	2.459863	-26.676106	-3	0	
333	N365	-12.098998	-25.632126	-3	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
334	N364	-9.648726	-26.064175	-3	0	
335	N363	-7.198454	-26.496224	-3	0	
336	N362	-4.748181	-26.928273	-3	0	
337	N361	-2.297909	-27.360322	-3	0	
338	N360	0.152364	-27.792371	-3	0	
339	N359	2.602636	-28.22442	-3	0	
340	N357	-12.762717	-27.038234	-3	0	
341	N356	-10.178029	-27.493984	-3	0	
342	N355	-7.593341	-27.949734	-3	0	
343	N354	-5.008653	-28.405485	-3	0	
344	N353	-2.423966	-28.861235	-3	0	
345	N352	0.160722	-29.316985	-3	0	
346	N351	2.74541	-29.772735	-3	0	
347	N349	-13.426435	-28.444343	-3	0	
348	N348	-10.707332	-28.923794	-3	0	
349	N347	-7.988229	-29.403245	-3	0	
350	N346	-5.269126	-29.882696	-3	0	
351	N345	-2.550023	-30.362147	-3	0	
352	N344	0.16908	-30.841599	-3	0	
353	N343	2.888183	-31.32105	-3	0	
354	N342	-14.090153	-29.850451	-3	0	
355	N341	-11.236634	-30.353603	-3	0	
356	N340	-8.383116	-30.856756	-3	0	
357	N339	-5.529598	-31.359908	-3	0	
358	N338	-2.67608	-31.86306	-3	0	
359	N337	0.177439	-32.366212	-3	0	
360	N336	3.030957	-32.869365	-3	0	
361	N335	21.872254	-15.468356	-3	0	
362	N334	22.676543	-13.258591	-3	0	
363	N333	23.480831	-11.048826	-3	0	
364	N332	24.28512	-8.839061	-3	0	
365	N331	25.089409	-6.629296	-3	0	
366	N330	25.893698	-4.41953	-3	0	
367	N329	26.697986	-2.209765	-3	0	
368	N328	23.141747	-16.366159	-3	0	
369	N327	23.992718	-14.028137	-3	0	
370	N326	24.843688	-11.690114	-3	0	
371	N325	25.694659	-9.352091	-3	0	
372	N324	26.54563	-7.014068	-3	0	
373	N323	27.3966	-4.676046	-3	0	
374	N322	28.247571	-2.338023	-3	0	
375	N321	29.098542	0.	-3	0	
376	N320	24.41124	-17.263962	-3	0	
377	N319	25.308893	-14.797682	-3	0	
378	N318	26.206545	-12.331402	-3	0	
379	N317	27.104198	-9.865121	-3	0	
380	N316	28.001851	-7.398841	-3	0	
381	N315	28.899503	-4.932561	-3	0	
382	N314	29.797156	-2.46628	-3	0	
383	N313	30.694808	0.	-3	0	
384	N312	25.680733	-18.161765	-3	0	
385	N311	26.625068	-15.567227	-3	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
386	N310	27.569402	-12.972689	-3	0	
387	N309	28.513737	-10.378151	-3	0	
388	N308	29.458071	-7.783614	-3	0	
389	N307	30.402406	-5.189076	-3	0	
390	N306	31.346741	-2.594538	-3	0	
391	N305	32.291075	0.	-3	0	
392	N304	26.950226	-19.059568	-3	0	
393	N303	27.941243	-16.336773	-3	0	
394	N302	28.932259	-13.613977	-3	0	
395	N301	29.923276	-10.891182	-3	0	
396	N300	30.914292	-8.168386	-3	0	
397	N299	31.905309	-5.445591	-3	0	
398	N298	32.896325	-2.722795	-3	0	
399	N297	6.812251	-25.908662	-5.5	0	
400	N296	3.816594	-14.515444	-5.5	0	
401	N295	7.207642	-27.412434	-5.5	0	
402	N294	7.603034	-28.916205	-5.5	0	
403	N293	7.998425	-30.419976	-5.5	0	
404	N292	8.393817	-31.923748	-5.5	0	
405	N291	6.812251	-25.908662	-3	0	
406	N290	8.848781	-24.732871	-3	0	
407	N289	10.885312	-23.557079	-3	0	
408	N288	12.921843	-22.381288	-3	0	
409	N287	14.958373	-21.205496	-3	0	
410	N286	16.994904	-20.029705	-3	0	
411	N285	19.031434	-18.853913	-3	0	
412	N284	5.052909	-28.65647	-3	0	
413	N283	7.207642	-27.412434	-3	0	
414	N282	9.362376	-26.168398	-3	0	
415	N281	11.517109	-24.924362	-3	0	
416	N280	13.671843	-23.680326	-3	0	
417	N279	15.826576	-22.43629	-3	0	
418	N278	17.981309	-21.192254	-3	0	
419	N277	20.136043	-19.948218	-3	0	
420	N276	22.290776	-18.704182	-3	0	
421	N275	5.330098	-30.228485	-3	0	
422	N274	7.603034	-28.916205	-3	0	
423	N273	9.87597	-27.603925	-3	0	
424	N272	12.148906	-26.291644	-3	0	
425	N271	14.421843	-24.979364	-3	0	
426	N270	16.694779	-23.667084	-3	0	
427	N269	18.967715	-22.354803	-3	0	
428	N268	21.240651	-21.042523	-3	0	
429	N267A	23.513587	-19.730243	-3	0	
430	N267	-15.262706	22.016252	-3	0	
431	N266A	5.607286	-31.800501	-3	0	
432	N266	-16.774274	20.214835	-3	0	
433	N265A	7.998425	-30.419976	-3	0	
434	N265	-18.285843	18.413418	-3	0	
435	N264A	10.389564	-29.039452	-3	0	
436	N264	-19.797411	16.612001	-3	0	
437	N263A	12.780703	-27.658927	-3	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
438	N263	-21.30898	14.810583	-3	0	
439	N262A	15.171843	-26.278402	-3	0	
440	N262	-22.820548	13.009166	-3	0	
441	N261A	17.562982	-24.897877	-3	0	
442	N261	-24.332117	11.207749	-3	0	
443	N260A	19.954121	-23.517353	-3	0	
444	N260	-14.549271	25.200076	-3	0	
445	N259A	22.34526	-22.136828	-3	0	
446	N259	-16.148573	23.294103	-3	0	
447	N258A	24.736399	-20.756303	-3	0	
448	N258	-17.747874	21.388129	-3	0	
449	N257A	8.393817	-31.923748	-3	0	
450	N257	-19.347176	19.482156	-3	0	
451	N256A	10.903159	-30.474979	-3	0	
452	N256	-20.946478	17.576182	-3	0	
453	N255A	13.412501	-29.026209	-3	0	
454	N255	-22.54578	15.670208	-3	0	
455	N254A	15.921843	-27.57744	-3	0	
456	N254	-24.145081	13.764235	-3	0	
457	N253A	18.431184	-26.128671	-3	0	
458	N253	-25.744383	11.858261	-3	0	
459	N252A	20.940526	-24.679902	-3	0	
460	N252	-15.347404	26.582484	-3	0	
461	N251A	23.449868	-23.231133	-3	0	
462	N251	-17.034439	24.571954	-3	0	
463	N250A	5.884475	-33.372517	0	0	
464	N250	-18.721474	22.561424	-3	0	
465	N249A	13.412501	-29.026209	0	0	
466	N249	-20.40851	20.550893	-3	0	
467	N248A	18.431184	-26.128671	0	0	
468	N248	-22.095545	18.540363	-3	0	
469	N247A	25.95921	-21.782363	0	0	
470	N247	-23.78258	16.529833	-3	0	
471	N246A	4.77572	-27.084454	-3	0	
472	N246	-25.469615	14.519303	-3	0	
473	N245	-27.15665	12.508773	-3	0	
474	N244A	27.502275	0.	-3	0	
475	N244	-16.145538	27.964891	-3	0	
476	N243A	21.067965	-17.678122	-3	0	
477	N243	-17.920306	25.849805	-3	0	
478	N242	-19.695074	23.734718	-3	0	
479	N241A	5.884475	-33.372517	-3	0	
480	N241	-21.469843	21.619631	-3	0	
481	N240A	25.95921	-21.782363	-3	0	
482	N240	-23.244611	19.504545	-3	0	
483	N239A	33.887342	0.	-3	0	
484	N239	-25.01938	17.389458	-3	0	
485	N238B	15.921843	-27.57744	0	0	
486	N238A	-31.843685	4.703166	3	0	
487	N238	-26.794148	15.274371	-3	0	
488	N237B	16.296843	-28.226959	0	0	
489	N237A	-31.843685	-4.703166	3	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
490	N237	-28.568917	13.159285	-3	0	
491	N236B	-31.843685	4	0	0	
492	N236A	-31.843685	4.703166	0	0	
493	N236	-18.806173	27.127656	-3	0	
494	N235B	-32.593685	4	0	0	
495	N235A	-31.843685	-4.703166	0	0	
496	N235	-20.668674	24.908013	-3	0	
497	N234A	-31.843685	-4	0	0	
498	N234	-22.531176	22.688369	-3	0	
499	N233A	-32.593685	-4	0	0	
500	N233	-24.393678	20.468726	-3	0	
501	N232	-26.25618	18.249083	-3	0	
502	N231	-28.118681	16.02944	-3	0	
503	N230	-29.981183	13.809797	-3	0	
504	N229	-24.332117	-11.207749	-3	0	
505	N228	-22.820548	-13.009166	-3	0	
506	N227	-21.30898	-14.810583	-3	0	
507	N226	-19.797411	-16.612001	-3	0	
508	N225	-18.285843	-18.413418	-3	0	
509	N224	-16.774274	-20.214835	-3	0	
510	N223	-15.262706	-22.016252	-3	0	
511	N222	-25.744383	-11.858261	-3	0	
512	N221	-24.145081	-13.764235	-3	0	
513	N220	-22.54578	-15.670208	-3	0	
514	N219	-20.946478	-17.576182	-3	0	
515	N218	-19.347176	-19.482156	-3	0	
516	N217	-17.747874	-21.388129	-3	0	
517	N216	-16.148573	-23.294103	-3	0	
518	N215	-14.549271	-25.200076	-3	0	
519	N214	-27.15665	-12.508773	-3	0	
520	N213	-25.469615	-14.519303	-3	0	
521	N212	-23.78258	-16.529833	-3	0	
522	N211	-22.095545	-18.540363	-3	0	
523	N210	-20.40851	-20.550893	-3	0	
524	N209	-18.721474	-22.561424	-3	0	
525	N208	-17.034439	-24.571954	-3	0	
526	N207	-15.347404	-26.582484	-3	0	
527	N206	-28.568917	-13.159285	-3	0	
528	N205	-26.794148	-15.274371	-3	0	
529	N204	-25.01938	-17.389458	-3	0	
530	N203	-23.244611	-19.504545	-3	0	
531	N202	-21.469843	-21.619631	-3	0	
532	N201	-19.695074	-23.734718	-3	0	
533	N200	-17.920306	-25.849805	-3	0	
534	N199	-16.145538	-27.964891	-3	0	
535	N198	-29.981183	-13.809797	-3	0	
536	N197	-28.118681	-16.02944	-3	0	
537	N196	-26.25618	-18.249083	-3	0	
538	N195	-24.393678	-20.468726	-3	0	
539	N194B	-22.531176	-22.688369	-3	0	
540	N194A	-27.343685	7.464216	-5.5	0	
541	N193C	-20.668674	-24.908013	-3	0	



**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
542	N193B	-14.47904	3.952455	-5.5	0	
543	N193A	-28.843685	7.873682	-5.5	0	
544	N192C	-18.806173	-27.127656	-3	0	
545	N192B	-30.343685	8.283149	-5.5	0	
546	N191C	-25.843685	7.054749	-5.5	0	
547	N191B	-31.843685	8.692615	-5.5	0	
548	N188	-25.843685	7.054749	-3	0	
549	N187	-25.843685	4.703166	-3	0	
550	N186	-25.843685	2.351583	-3	0	
551	N185	-25.843685	0	-3	0	
552	N184	-25.843685	-2.351583	-3	0	
553	N183	-25.843685	-4.703166	-3	0	
554	N182	-25.843685	-7.054749	-3	0	
555	N181	-27.343685	9.952287	-3	0	
556	N180	-27.343685	7.464216	-3	0	
557	N179	-27.343685	4.976144	-3	0	
558	N178	-27.343685	2.488072	-3	0	
559	N177	-27.343685	0	-3	0	
560	N176	-27.343685	-2.488072	-3	0	
561	N175	-27.343685	-4.976144	-3	0	
562	N174	-27.343685	-7.464216	-3	0	
563	N173	-27.343685	-9.952287	-3	0	
564	N172	-28.843685	10.498243	-3	0	
565	N171	-28.843685	7.873682	-3	0	
566	N170	-28.843685	5.249121	-3	0	
567	N169	-28.843685	2.624561	-3	0	
568	N168	-28.843685	0	-3	0	
569	N167	-28.843685	-2.624561	-3	0	
570	N166	-28.843685	-5.249121	-3	0	
571	N165	-28.843685	-7.873682	-3	0	
572	N164	-28.843685	-10.498243	-3	0	
573	N163B	-30.343685	11.044198	-3	0	
574	N162	-30.343685	8.283149	-3	0	
575	N161	-30.343685	5.522099	-3	0	
576	N160	-30.343685	2.76105	-3	0	
577	N159	-30.343685	0	-3	0	
578	N158	-30.343685	-2.76105	-3	0	
579	N157	-30.343685	-5.522099	-3	0	
580	N156	-30.343685	-8.283149	-3	0	
581	N155	-30.343685	-11.044198	-3	0	
582	N154	-31.843685	8.692615	-3	0	
583	N153	-31.843685	5.795077	-3	0	
584	N152	-31.843685	2.897538	-3	0	
585	N151	-31.843685	0	-3	0	
586	N150	-31.843685	-2.897538	-3	0	
587	N149	-31.843685	-5.795077	-3	0	
588	N148	-31.843685	-8.692615	-3	0	
589	N138	-31.843685	11.590153	0	0	
590	N135	-31.843685	2.897538	0	0	
591	N134	-31.843685	-2.897538	0	0	
592	N131	-31.843685	-11.590153	0	0	
593	N130	-32.593685	-16.500001	0	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
594	N129A	-25.843685	9.406332	-3	0	
595	N129	-16.943671	29.347299	-3	0	
596	N128	-31.843685	11.590153	-3	0	
597	N127	-13.751138	23.817669	-3	0	
598	N118	-13.751138	-23.817669	-3	0	
599	N113A	-25.843685	-9.406332	-3	0	
600	N108A	-31.843685	-11.590153	-3	0	
601	N108	38.595889	66.85004	2.6875	0	
602	N107A	-16.943671	-29.347299	-3	0	
603	N107	35.738005	61.90004	2.6875	0	
604	N106	41.280569	58.700039	2.6875	0	
605	N105	30.195441	65.100041	2.6875	0	
606	N104	41.280569	65.300039	2.6875	0	
607	N103A	35.911208	68.400041	2.6875	0	
608	N103	-71.476007	6.400002	0	0	
609	N102A	37.166947	64.37504	2.6875	0	
610	N102	-71.476007	-6.400002	0	0	
611	N101A	41.280569	62.000039	2.6875	0	
612	N101	-77.191775	3.100002	0	0	
613	N100A	33.053325	66.750041	2.6875	0	
614	N100	-77.191775	-3.100002	0	0	
615	N98	41.280569	58.700037	0	0	
616	N97	30.19544	65.100039	0	0	
617	N96	41.280568	65.300037	0	0	
618	N95B	-31.843685	-0.	0	0	
619	N95A	35.911207	68.400039	0	0	
620	N91	41.280569	62.000037	0	0	
621	N89	33.053323	66.750039	0	0	
622	N87	-8.686884	42.65132	0	0	
623	N86A	-13.279034	40.000041	0	0	
624	N86	-53.982297	16.500001	0	0	
625	N85	41.280567	71.50004	0	0	
626	N84A	41.280569	8.500039	0	0	
627	N84	-74.333891	4.750002	0	0	
628	N83	41.280569	13.802598	0	0	
629	N82	-32.593685	-0.	0	0	
630	N81	38.595889	66.85004	-2.6875	0	
631	N80A	35.738005	61.90004	-2.6875	0	
632	N80	-74.333891	-4.750002	0	0	
633	N79B	41.280569	58.700039	-2.6875	0	
634	N79A	-77.191777	-0.	2.6875	0	
635	N79	-53.982297	-16.500001	0	0	
636	N78A	30.195441	65.100041	-2.6875	0	
637	N78	-71.47601	0	2.6875	0	
638	N77A	41.280569	65.300039	-2.6875	0	
639	N77	-71.47601	6.400002	2.6875	0	
640	N76B	35.911208	68.400041	-2.6875	0	
641	N76A	-71.47601	-6.400002	2.6875	0	
642	N76	-32.593685	-28.848722	0	0	
643	N75B	37.166947	64.37504	-2.6875	0	
644	N75A	-77.191777	3.100002	2.6875	0	
645	N75	-28.001535	-31.500002	0	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
646	N74A	-77.191777	-3.100002	2.6875	0	
647	N74	41.280569	62.000039	-2.6875	0	
648	N73A	-74.333894	-0.	2.6875	0	
649	N73	33.053325	66.750041	-2.6875	0	
650	N72A	38.595889	-66.85004	2.6875	0	
651	N72	-74.333894	4.750002	2.6875	0	
652	N71A	35.738005	-61.90004	2.6875	0	
653	N71	-74.333894	-4.750002	2.6875	0	
654	N70A	30.195441	-65.100041	2.6875	0	
655	N70	-82.561135	-0.	0	0	
656	N69	41.280569	-58.700039	2.6875	0	
657	N68A	35.911208	-68.400041	2.6875	0	
658	N68	-28.001535	31.500002	0	0	
659	N67A	41.280569	-65.300039	2.6875	0	
660	N67	-32.593685	28.848722	0	0	
661	N66	37.166947	-64.37504	2.6875	0	
662	N65	33.053325	-66.750041	2.6875	0	
663	N64	41.280569	-62.000039	2.6875	0	
664	N62	30.19544	-65.100039	0	0	
665	N61	41.280567	-58.700037	0	0	
666	N60	35.911207	-68.400039	0	0	
667	N59	41.280568	-65.300037	0	0	
668	N58	0	0	0	0	
669	N55	33.053323	-66.750039	0	0	
670	M4	41.280567	-62.000037	0	0	
671	N51	41.280567	-13.802599	0	0	
672	N50	41.280569	-8.500039	0	0	
673	N49	41.280567	-71.50004	0	0	
674	N48	-13.279034	-40.000041	0	0	
675	N47	-8.686884	-42.65132	0	0	
676	N45	38.595889	-66.85004	-2.6875	0	
677	N44	35.738005	-61.90004	-2.6875	0	
678	N43	30.195441	-65.100041	-2.6875	0	
679	N42A	41.280569	-58.700039	-2.6875	0	
680	N42	-77.191777	-0.	-2.6875	0	
681	N41A	35.911208	-68.400041	-2.6875	0	
682	N41	-71.47601	0	-2.6875	0	
683	N40A	41.280569	-65.300039	-2.6875	0	
684	N40	-71.47601	6.400002	-2.6875	0	
685	N39A	37.166947	-64.37504	-2.6875	0	
686	N39	-71.47601	-6.400002	-2.6875	0	
687	N38A	33.053325	-66.750041	-2.6875	0	
688	N38	-77.191777	3.100002	-2.6875	0	
689	N37A	41.280569	-62.000039	-2.6875	0	
690	N37	-77.191777	-3.100002	-2.6875	0	
691	N34	-74.333894	-0.	-2.6875	0	
692	N33	-74.333894	4.750002	-2.6875	0	
693	N32	-74.333894	-4.750002	-2.6875	0	
694	M1	41.280569	60.5	0	0	
695	M3	41.280569	0	0	0	
696	M2	41.280569	25.5	0	0	
697	G4T	28.120278	74.29425	51	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
698	G4R	33.120278	65.633996	24	0	
699	G4B	28.120278	74.29425	-6	0	
700	G3TT	-26.140285	45.276301	16.5	0	
701	G3T	-26.140285	45.276301	52.5	0	
702	G3R	-19.640285	34.017971	24	0	
703	G3BB	-26.140285	45.276301	-6.5	0	
704	G3B	-26.140285	45.276301	31.5	0	
705	G2T	-47.223932	30.79425	51	0	
706	G2B	-47.223932	30.79425	-6	0	
707	G1R	-72.034821	3.767971	24	0	
708	B4T	-78.400847	-12.79425	51	0	
709	B4R	-73.400847	-4.133996	24	0	
710	B4B	-78.400847	-12.79425	-6	0	
711	B3TT	-26.140284	-45.276301	16.5	0	
712	B3T	-26.140284	-45.276301	52.5	0	
713	B3R	-19.640284	-34.017971	24	0	
714	B3BB	-26.140284	-45.276301	-6.5	0	
715	B3B	-26.140284	-45.276301	31.5	0	
716	B2T	-3.056637	-56.29425	51	0	
717	B2B	-3.056637	-56.29425	-6	0	
718	B1R	32.754252	-64.267971	24	0	
719	A4T	50.280569	-61.5	60	0	
720	A4R	40.280569	-61.5	24	0	
721	A4B	50.280569	-61.5	-12	0	
722	A3TT	52.280569	0	16.5	0	
723	A3T	52.280569	0	52.5	0	
724	A3BB	52.280569	0	-6.5	0	
725	A3B	52.280569	0	31.5	0	
726	A2T	50.280569	25.5	60	0	
727	A2R2	39.280569	25.5	14	0	
728	A2B	50.280569	25.5	-12	0	
729	A1R	39.280569	60.5	24	0	
730	N761	44.280569	25.5	34	0	
731	A2R	39.280569	25.5	34	0	
732	N759	-44.223932	25.598098	14	0	
733	G2R2	-41.723932	21.267971	14	0	
734	N761A	-44.223932	25.598098	34	0	
735	G2R	-41.723932	21.267971	34	0	
736	N763	-0.056637	-51.098098	14	0	
737	B2R2	2.443363	-46.767971	14	0	
738	N765	-0.056637	-51.098098	34	0	
739	B2R	2.443363	-46.767971	34	0	
740	N753A	39.968069	46.577743	48	0	
741	N754A	39.968069	51.577743	48	0	
742	N755	39.968069	47.577743	48	0	
743	N756	39.968069	49.827743	50	0	
744	N757A	39.968069	49.827743	48	0	
745	N758A	41.280569	47.577743	48	0	
746	N759A	41.280569	49.827743	48	0	
747	N760	20.353474	57.902235	48	0	
748	N761B	24.683601	60.402235	48	0	
749	N762	21.219499	58.402235	48	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
750	N763A	23.168057	59.527235	50	0	
751	N764	23.168057	59.527235	48	0	
752	N765A	20.563249	59.538893	48	0	
753	N766	22.511807	60.663893	48	0	
754	N764A	44.280569	-61.5	2.5	0	
755	N765B	44.280569	-61.5	-2.5	0	
756	N766A	41.280569	-61.5	2.5	0	
757	N767	41.280569	-61.5	-2.5	0	
758	N768	41.280569	-61.5	0	0	
759	N759B	31.120278	69.098098	2.5	0	
760	N760A	31.120278	69.098098	-2.5	0	
761	N761C	32.620278	66.500021	2.5	0	
762	N762A	32.620278	66.500021	-2.5	0	
763	N763B	32.620278	66.500021	0	0	
764	N764B	-75.400847	-7.598098	2.5	0	
765	N765C	-75.400847	-7.598098	-2.5	0	
766	N766B	-73.900847	-5.000021	2.5	0	
767	N767A	-73.900847	-5.000021	-2.5	0	
768	N768A	-73.900847	-5.000021	0	0	

**Hot Rolled Steel Design Parameters**

	Label	Shape	Lengt...	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp b...	L-torque[in]	Kyy	Kzz	Cb	Function
1	M21	Corner Plate	9.5			Lbyy						Lateral
2	M22	Corner Plate	6.2			Lbyy						Lateral
3	M23	Corner Plate	12.8			Lbyy						Lateral
4	M39	Grating Channel	57.697			Lbyy						Lateral
5	M40	Grating Channel	63			Lbyy						Lateral
6	M41	Grating Channel	63			Lbyy						Lateral
7	M45	Grating Channel	21.389			Lbyy						Lateral
8	M50	Grating Channel	33			Lbyy						Lateral
9	M42A	Corner Plate	9.5			Lbyy						Lateral
10	M43A	Corner Plate	6.2			Lbyy						Lateral
11	M44A	Corner Plate	12.8			Lbyy						Lateral
12	M26	Corner Plate	9.5			Lbyy						Lateral
13	M27	Corner Plate	6.2			Lbyy						Lateral
14	M28	Corner Plate	12.8			Lbyy						Lateral
15	M30	Grating Channel	57.697			Lbyy						Lateral
16	M31	Grating Channel	63			Lbyy						Lateral
17	M32	Grating Channel	63			Lbyy						Lateral
18	M41A	Corner Plate	9.5			Lbyy						Lateral
19	M42	Corner Plate	6.2			Lbyy						Lateral
20	M43	Corner Plate	12.8			Lbyy						Lateral
21	M51A	Corner Plate	9.5			Lbyy						Lateral
22	M52	Corner Plate	6.2			Lbyy						Lateral
23	M53	Corner Plate	12.8			Lbyy						Lateral
24	M55	Grating Channel	57.697			Lbyy						Lateral
25	M56	Grating Channel	63			Lbyy						Lateral
26	M57A	Grating Channel	63			Lbyy						Lateral
27	M66	Corner Plate	9.5			Lbyy						Lateral
28	M67	Corner Plate	6.2			Lbyy						Lateral

**Hot Rolled Steel Design Parameters (Continued)**

	Label	Shape	Length	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp b...	L-torque[in]	Kyy	Kzz	Cb	Function
29	M68	Corner Plate	12.8			Lbyy						Lateral
30	M72A	Grating Channel	17			Lbyy						Lateral
31	M73A	Grating Channel	17			Lbyy						Lateral
32	M74A	Grating Channel	17			Lbyy						Lateral
33	M71A	offset	18			Lbyy						Lateral
34	M72B	Connection Plate	23.18			Lbyy						Lateral
35	M82	offset	18			Lbyy						Lateral
36	M88	Connection Plate	23.18			Lbyy						Lateral
37	M100	offset	18			Lbyy						Lateral
38	M106	Connection Plate	23.18			Lbyy						Lateral
39	M125	MP connection Plate	3			Lbyy						Lateral
40	M126	MP connection Plate	3			Lbyy						Lateral
41	M130	Mount Pipe	102			Lbyy						Lateral
42	M138	Mount Pipe	126			Lbyy						Lateral
43	M155	Mount Pipe	12			Lbyy						Lateral
44	M157	Mount Pipe	12			Lbyy						Lateral
45	M159	Mount Pipe	12			Lbyy						Lateral
46	SR1	HRK12 Pipe	138									Lateral
47	SR2	HRK12 Plate	5									Lateral
48	SR10	HRK12 Pipe	138									Lateral
49	SR12	HRK12 Plate	5									Lateral
50	SR19	HRK12 Pipe	138									Lateral
51	SR20	HRK12 Plate	5									Lateral
52	SR21	HRK12 Plate	5									Lateral
53	SR28	HRK12 Angle	19.399									Lateral
54	SR30	HRK12 Angle	19.399									Lateral
55	M189	MP connection Plate	3			Lbyy						Lateral
56	M190	MP connection Plate	3			Lbyy						Lateral
57	M191	Mount Pipe	102			Lbyy						Lateral
58	M190A	MP connection Plate	3			Lbyy						Lateral
59	M191A	MP connection Plate	3			Lbyy						Lateral
60	M192A	Mount Pipe	102			Lbyy						Lateral
61	M194B	MP connection Plate	3			Lbyy						Lateral
62	M195A	MP connection Plate	3			Lbyy						Lateral
63	M196	Mount Pipe	102			Lbyy						Lateral
64	M200	Mount Pipe	126			Lbyy						Lateral
65	M211	MP connection Plate	3			Lbyy						Lateral
66	M212	MP connection Plate	3			Lbyy						Lateral
67	M213	Mount Pipe	102			Lbyy						Lateral
68	M219	MP connection Plate	3			Lbyy						Lateral
69	M220	MP connection Plate	3			Lbyy						Lateral
70	M221	Mount Pipe	102			Lbyy						Lateral
71	M233	MP connection Plate	3			Lbyy						Lateral
72	M234	MP connection Plate	3			Lbyy						Lateral
73	M235	Mount Pipe	102			Lbyy						Lateral
74	M239	Mount Pipe	126			Lbyy						Lateral
75	M250	MP connection Plate	3			Lbyy						Lateral
76	M251	MP connection Plate	3			Lbyy						Lateral
77	M252	Mount Pipe	102			Lbyy						Lateral
78	M258	MP connection Plate	3			Lbyy						Lateral
79	M259	MP connection Plate	3			Lbyy						Lateral
80	M260	Mount Pipe	102			Lbyy						Lateral

**Hot Rolled Steel Design Parameters (Continued)**

	Label	Shape	Lengt...	Lbby[in]	Lbzz[in]	Lcomp top[in]	Lcomp b...	L-torque[in]	Kyy	Kzz	Cb	Function
81	M264A	HRK12 Plate	5									Lateral
82	M268A	HRK12 Plate	5									Lateral
83	M272A	HRK12 Angle	19.399									Lateral
84	M272B	MP connection Plate	3			Lbby						Lateral
85	M273	MP connection Plate	3			Lbby						Lateral
86	M270D	MP connection Plate	3			Lbby						Lateral
87	M271C	MP connection Plate	3			Lbby						Lateral
88	M274	MP connection Plate	3			Lbby						Lateral
89	M275	MP connection Plate	3			Lbby						Lateral

**Basic Load Cases**

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	DistributedArea(Me...	Surface(...
1	Dead	DL			-1	39			
2	Dead of Ice	RL				39		92	
4	Structure Wind (0)	None						184	
5	Structure Wind (30)	None						184	
6	Structure Wind (45)	None						184	
7	Structure Wind (60)	None						184	
8	Structure Wind (90)	None						184	
9	Structure Wind (120)	None						184	
10	Structure Wind (135)	None						184	
11	Structure Wind (150)	None						184	
12	Structure Wind w/ Ice (0)	None						184	
13	Structure Wind w/ Ice (30)	None						184	
14	Structure Wind w/ Ice (45)	None						184	
15	Structure Wind w/ Ice (60)	None						184	
16	Structure Wind w/ Ice (90)	None						184	
17	Structure Wind w/ Ice (120)	None						184	
18	Structure Wind w/ Ice (135)	None						184	
19	Structure Wind w/ Ice (150)	None						184	
20	Antenna Wind (0)	None				78			
21	Antenna Wind (30)	None				78			
22	Antenna Wind (45)	None				78			
23	Antenna Wind (60)	None				78			
24	Antenna Wind (90)	None				78			
25	Antenna Wind (120)	None				78			
26	Antenna Wind (135)	None				78			
27	Antenna Wind (150)	None				78			
28	Antenna Wind w/ Ice (0)	None				78			
29	Antenna Wind w/ Ice (30)	None				78			
30	Antenna Wind w/ Ice (45)	None				78			
31	Antenna Wind w/ Ice (60)	None				78			
32	Antenna Wind w/ Ice (90)	None				78			
33	Antenna Wind w/ Ice (120)	None				78			
34	Antenna Wind w/ Ice (135)	None				78			
35	Antenna Wind w/ Ice (150)	None				78			
36	Maintenance Live Lm (1)	OL1				1			
37	Maintenance Live Lm (2)	OL2				1			
38	Maintenance Live Lm (3)	OL3				4			
39	Maintenance Live Lm (4)	OL4				1			

**Basic Load Cases (Continued)**

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...)	Surface(...)
41	Maintenance Live Lv (1)	OL6					1			
42	Maintenance Live Lv (2)	OL7					1			
43	Maintenance Live Lv (3)	OL8					1			

**Load Combinations**

	Description	So...P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
1	Summary: 1.0D + ...	Yes	Y	DL	1	20	1							
2	1.4D	Yes	Y	DL	1.4									
3	1.2D + 1.0W(0)	Yes	Y	DL	1.2	4	1	20	1					
4	1.2D + 1.0W(30)	Yes	Y	DL	1.2	5	1	21	1					
5	1.2D + 1.0W(45)	Yes	Y	DL	1.2	6	1	22	1					
6	1.2D + 1.0W(60)	Yes	Y	DL	1.2	7	1	23	1					
7	1.2D + 1.0W(90)	Yes	Y	DL	1.2	8	1	24	1					
8	1.2D + 1.0W(120)	Yes	Y	DL	1.2	9	1	25	1					
9	1.2D + 1.0W(135)	Yes	Y	DL	1.2	10	1	26	1					
10	1.2D + 1.0W(150)	Yes	Y	DL	1.2	11	1	27	1					
11	1.2D + 1.0W(180)	Yes	Y	DL	1.2	4	-1	20	-1					
12	1.2D + 1.0W(210)	Yes	Y	DL	1.2	5	-1	21	-1					
13	1.2D + 1.0W(225)	Yes	Y	DL	1.2	6	-1	22	-1					
14	1.2D + 1.0W(240)	Yes	Y	DL	1.2	7	-1	23	-1					
15	1.2D + 1.0W(270)	Yes	Y	DL	1.2	8	-1	24	-1					
16	1.2D + 1.0W(300)	Yes	Y	DL	1.2	9	-1	25	-1					
17	1.2D + 1.0W(315)	Yes	Y	DL	1.2	10	-1	26	-1					
18	1.2D + 1.0W(330)	Yes	Y	DL	1.2	11	-1	27	-1					
19	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	12	1	28	1			
20	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	13	1	29	1			
21	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	14	1	30	1			
22	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	15	1	31	1			
23	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	16	1	32	1			
24	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	17	1	33	1			
25	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	18	1	34	1			
26	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	19	1	35	1			
27	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	12	-1	28	-1			
28	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	13	-1	39	-1			
29	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	14	-1	30	-1			
30	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	15	-1	31	-1			
31	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	16	-1	32	-1			
32	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	17	-1	33	-1			
33	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	18	-1	34	-1			
34	1.2D + 1.0Di + 1.0...	Yes	Y	DL	1.2	RL	1	19	-1	35	-1			
35	1.2D + 1.5Lm(1) +...	Yes	Y	DL	1.2	4	.06	20	.06	OL1	1.5			
36	1.2D + 1.5Lm(1) +...	Yes	Y	DL	1.2	5	.06	21	.06	OL1	1.5			
37	1.2D + 1.5Lm(1) +...	Yes	Y	DL	1.2	6	.06	22	.06	OL1	1.5			
38	1.2D + 1.5Lm(1) +...	Yes	Y	DL	1.2	7	.06	23	.06	OL1	1.5			
39	1.2D + 1.5Lm(1) +...	Yes	Y	DL	1.2	8	.06	24	.06	OL1	1.5			
40	1.2D + 1.5Lm(1) +...	Yes	Y	DL	1.2	9	.06	25	.06	OL1	1.5			
41	1.2D + 1.5Lm(1) +...	Yes	Y	DL	1.2	10	.06	26	.06	OL1	1.5			
42	1.2D + 1.5Lm(1) +...	Yes	Y	DL	1.2	11	.06	27	.06	OL1	1.5			
43	1.2D + 1.5Lm(1) +...	Yes	Y	DL	1.2	4	-.06	20	-.06	OL1	1.5			
44	1.2D + 1.5Lm(1) +...	Yes	Y	DL	1.2	5	-.06	21	-.06	OL1	1.5			



**Load Combinations (Continued)**

	Description	So...	P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
45	1.2D + 1.5Lm(1) +...	Yes	Y		DL	1.2	6	-.06	22	-.06	OL1	1.5										
46	1.2D + 1.5Lm(1) +...	Yes	Y		DL	1.2	7	-.06	23	-.06	OL1	1.5										
47	1.2D + 1.5Lm(1) +...	Yes	Y		DL	1.2	8	-.06	24	-.06	OL1	1.5										
48	1.2D + 1.5Lm(1) +...	Yes	Y		DL	1.2	9	-.06	25	-.06	OL1	1.5										
49	1.2D + 1.5Lm(1) +...	Yes	Y		DL	1.2	10	-.06	26	-.06	OL1	1.5										
50	1.2D + 1.5Lm(1) +...	Yes	Y		DL	1.2	11	-.06	27	-.06	OL1	1.5										
51	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	4	.06	20	.06	OL2	1.5										
52	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	5	.06	21	.06	OL2	1.5										
53	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	6	.06	22	.06	OL2	1.5										
54	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	7	.06	23	.06	OL2	1.5										
55	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	8	.06	24	.06	OL2	1.5										
56	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	9	.06	25	.06	OL2	1.5										
57	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	10	.06	26	.06	OL2	1.5										
58	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	11	.06	27	.06	OL2	1.5										
59	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	4	-.06	20	-.06	OL2	1.5										
60	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	5	-.06	21	-.06	OL2	1.5										
61	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	6	-.06	22	-.06	OL2	1.5										
62	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	7	-.06	23	-.06	OL2	1.5										
63	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	8	-.06	24	-.06	OL2	1.5										
64	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	9	-.06	25	-.06	OL2	1.5										
65	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	10	-.06	26	-.06	OL2	1.5										
66	1.2D + 1.5Lm(2) +...	Yes	Y		DL	1.2	11	-.06	27	-.06	OL2	1.5										
67	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	4	.06	20	.06	OL3	1.5										
68	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	5	.06	21	.06	OL3	1.5										
69	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	6	.06	22	.06	OL3	1.5										
70	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	7	.06	23	.06	OL3	1.5										
71	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	8	.06	24	.06	OL3	1.5										
72	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	9	.06	25	.06	OL3	1.5										
73	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	10	.06	26	.06	OL3	1.5										
74	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	11	.06	27	.06	OL3	1.5										
75	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	4	-.06	20	-.06	OL3	1.5										
76	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	5	-.06	21	-.06	OL3	1.5										
77	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	6	-.06	22	-.06	OL3	1.5										
78	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	7	-.06	23	-.06	OL3	1.5										
79	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	8	-.06	24	-.06	OL3	1.5										
80	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	9	-.06	25	-.06	OL3	1.5										
81	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	10	-.06	26	-.06	OL3	1.5										
82	1.2D + 1.5Lm(3) +...	Yes	Y		DL	1.2	11	-.06	27	-.06	OL3	1.5										
83	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	4	.06	20	.06	OL4	1.5										
84	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	5	.06	21	.06	OL4	1.5										
85	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	6	.06	22	.06	OL4	1.5										
86	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	7	.06	23	.06	OL4	1.5										
87	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	8	.06	24	.06	OL4	1.5										
88	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	9	.06	25	.06	OL4	1.5										
89	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	10	.06	26	.06	OL4	1.5										
90	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	11	.06	27	.06	OL4	1.5										
91	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	4	-.06	20	-.06	OL4	1.5										
92	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	5	-.06	21	-.06	OL4	1.5										
93	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	6	-.06	22	-.06	OL4	1.5										
94	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	7	-.06	23	-.06	OL4	1.5										
95	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	8	-.06	24	-.06	OL4	1.5										
96	1.2D + 1.5Lm(4) +...	Yes	Y		DL	1.2	9	-.06	25	-.06	OL4	1.5										

**Load Combinations (Continued)**

	Description	So...	P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
97	1.2D + 1.5Lm(4) + ...	Yes	Y		DL 1.2	10	-.06	26	-.06	OL4	1.5				
98	1.2D + 1.5Lm(4) + ...	Yes	Y		DL 1.2	11	-.06	27	-.06	OL4	1.5				
99	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	4	.06	20	.06	OL6	1.5				
100	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	5	.06	21	.06	OL6	1.5				
101	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	6	.06	22	.06	OL6	1.5				
102	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	7	.06	23	.06	OL6	1.5				
103	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	8	.06	24	.06	OL6	1.5				
104	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	9	.06	25	.06	OL6	1.5				
105	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	10	.06	26	.06	OL6	1.5				
106	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	11	.06	27	.06	OL6	1.5				
107	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	4	-.06	20	-.06	OL6	1.5				
108	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	5	-.06	21	-.06	OL6	1.5				
109	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	6	-.06	22	-.06	OL6	1.5				
110	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	7	-.06	23	-.06	OL6	1.5				
111	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	8	-.06	24	-.06	OL6	1.5				
112	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	9	-.06	25	-.06	OL6	1.5				
113	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	10	-.06	26	-.06	OL6	1.5				
114	1.2D + 1.5Lv(1) + ...	Yes	Y		DL 1.2	11	-.06	27	-.06	OL6	1.5				
115	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	4	.06	20	.06	OL7	1.5				
116	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	5	.06	21	.06	OL7	1.5				
117	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	6	.06	22	.06	OL7	1.5				
118	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	7	.06	23	.06	OL7	1.5				
119	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	8	.06	24	.06	OL7	1.5				
120	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	9	.06	25	.06	OL7	1.5				
121	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	10	.06	26	.06	OL7	1.5				
122	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	11	.06	27	.06	OL7	1.5				
123	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	4	-.06	20	-.06	OL7	1.5				
124	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	5	-.06	21	-.06	OL7	1.5				
125	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	6	-.06	22	-.06	OL7	1.5				
126	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	7	-.06	23	-.06	OL7	1.5				
127	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	8	-.06	24	-.06	OL7	1.5				
128	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	9	-.06	25	-.06	OL7	1.5				
129	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	10	-.06	26	-.06	OL7	1.5				
130	1.2D + 1.5Lv(2) + ...	Yes	Y		DL 1.2	11	-.06	27	-.06	OL7	1.5				
131	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	4	.06	20	.06	OL8	1.5				
132	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	5	.06	21	.06	OL8	1.5				
133	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	6	.06	22	.06	OL8	1.5				
134	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	7	.06	23	.06	OL8	1.5				
135	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	8	.06	24	.06	OL8	1.5				
136	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	9	.06	25	.06	OL8	1.5				
137	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	10	.06	26	.06	OL8	1.5				
138	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	11	.06	27	.06	OL8	1.5				
139	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	4	-.06	20	-.06	OL8	1.5				
140	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	5	-.06	21	-.06	OL8	1.5				
141	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	6	-.06	22	-.06	OL8	1.5				
142	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	7	-.06	23	-.06	OL8	1.5				
143	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	8	-.06	24	-.06	OL8	1.5				
144	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	9	-.06	25	-.06	OL8	1.5				
145	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	10	-.06	26	-.06	OL8	1.5				
146	1.2D + 1.5Lv(3) + ...	Yes	Y		DL 1.2	11	-.06	27	-.06	OL8	1.5				

**Joint Loads and Enforced Displacements (BLC 1 : Dead)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	Z	-52.85
2	A4B	L	Z	-52.85
3	B4T	L	Z	-44.65
4	B4B	L	Z	-44.65
5	G4T	L	Z	-44.65
6	G4B	L	Z	-44.65
7	A2T	L	Z	-43.75
8	A2B	L	Z	-43.75
9	B2T	L	Z	-36.25
10	B2B	L	Z	-36.25
11	G2T	L	Z	-36.25
12	G2B	L	Z	-36.25
13	A3T	L	Z	-41.9
14	A3B	L	Z	-41.9
15	B3T	L	Z	-41.9
16	B3B	L	Z	-41.9
17	G3T	L	Z	-41.9
18	G3B	L	Z	-41.9
19	A3TT	L	Z	-33.1
20	A3BB	L	Z	-33.1
21	B3TT	L	Z	-33.1
22	B3BB	L	Z	-33.1
23	G3TT	L	Z	-33.1
24	G3BB	L	Z	-33.1
25	A2R2	L	Z	-59.4
26	B2R2	L	Z	-59.4
27	G2R2	L	Z	-59.4
28	A4R	L	Z	-71
29	B4R	L	Z	-71
30	G4R	L	Z	-71
31	A2R	L	Z	-75
32	B2R	L	Z	-75
33	G2R	L	Z	-75
34	A4R	L	Z	-77
35	B4R	L	Z	-77
36	G4R	L	Z	-77
37	RC1	L	Z	-18.9
38	RC2	L	Z	-18.9
39	RC3	L	Z	-18.9

**Joint Loads and Enforced Displacements (BLC 2 : Dead of Ice)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	Z	-244.906
2	A4B	L	Z	-244.906
3	B4T	L	Z	-186.592
4	B4B	L	Z	-186.592
5	G4T	L	Z	-186.592
6	G4B	L	Z	-186.592
7	A2T	L	Z	-248.16
8	A2B	L	Z	-248.16

**Joint Loads and Enforced Displacements (BLC 2 : Dead of Ice) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
9	B2T	L	Z	-189.116
10	B2B	L	Z	-189.116
11	G2T	L	Z	-189.116
12	G2B	L	Z	-189.116
13	A3T	L	Z	-87.024
14	A3B	L	Z	-87.024
15	B3T	L	Z	-87.024
16	B3B	L	Z	-87.024
17	G3T	L	Z	-87.024
18	G3B	L	Z	-87.024
19	A3TT	L	Z	-67.375
20	A3BB	L	Z	-67.375
21	B3TT	L	Z	-67.375
22	B3BB	L	Z	-67.375
23	G3TT	L	Z	-67.375
24	G3BB	L	Z	-67.375
25	A2R2	L	Z	-91.929
26	B2R2	L	Z	-91.929
27	G2R2	L	Z	-91.929
28	A4R	L	Z	-99.173
29	B4R	L	Z	-99.173
30	G4R	L	Z	-99.173
31	A2R	L	Z	-109.118
32	B2R	L	Z	-109.118
33	G2R	L	Z	-109.118
34	A4R	L	Z	-146.527
35	B4R	L	Z	-146.527
36	G4R	L	Z	-146.527
37	RC1	L	Z	-90.97
38	RC2	L	Z	-90.97
39	RC3	L	Z	-90.97

**Joint Loads and Enforced Displacements (BLC 20 : Antenna Wind (0))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	-267.198
2	A4T	L	Y	0
3	A4B	L	X	-267.198
4	A4B	L	Y	0
5	B4T	L	X	-106.774
6	B4T	L	Y	0
7	B4B	L	X	-106.774
8	B4B	L	Y	0
9	G4T	L	X	-106.774
10	G4T	L	Y	0
11	G4B	L	X	-106.774
12	G4B	L	Y	0
13	A2T	L	X	-267.415
14	A2T	L	Y	0
15	A2B	L	X	-267.415
16	A2B	L	Y	0
17	B2T	L	X	-108.534

**Joint Loads and Enforced Displacements (BLC 20 : Antenna Wind (0)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
18	B2T	L	Y	0
19	B2B	L	X	-108.534
20	B2B	L	Y	0
21	G2T	L	X	-108.534
22	G2T	L	Y	0
23	G2B	L	X	-108.534
24	G2B	L	Y	0
25	A3T	L	X	-61.983
26	A3T	L	Y	0
27	A3B	L	X	-61.983
28	A3B	L	Y	0
29	B3T	L	X	-42.44
30	B3T	L	Y	0
31	B3B	L	X	-42.44
32	B3B	L	Y	0
33	G3T	L	X	-42.44
34	G3T	L	Y	0
35	G3B	L	X	-42.44
36	G3B	L	Y	0
37	A3TT	L	X	-61.934
38	A3TT	L	Y	0
39	A3BB	L	X	-61.934
40	A3BB	L	Y	0
41	B3TT	L	X	-36.406
42	B3TT	L	Y	0
43	B3BB	L	X	-36.406
44	B3BB	L	Y	0
45	G3TT	L	X	-36.406
46	G3TT	L	Y	0
47	G3BB	L	X	-36.406
48	G3BB	L	Y	0
49	A2R2	L	X	-33.954
50	A2R2	L	Y	0
51	B2R2	L	X	-37.755
52	B2R2	L	Y	0
53	G2R2	L	X	-37.755
54	G2R2	L	Y	0
55	A4R	L	X	-33.053
56	A4R	L	Y	0
57	B4R	L	X	-43.747
58	B4R	L	Y	0
59	G4R	L	X	-43.747
60	G4R	L	Y	0
61	A2R	L	X	-33.263
62	A2R	L	Y	0
63	B2R	L	X	-51.028
64	B2R	L	Y	0
65	G2R	L	X	-51.028
66	G2R	L	Y	0
67	A4R	L	X	-55.672
68	A4R	L	Y	0
69	B4R	L	X	-74.996

**Joint Loads and Enforced Displacements (BLC 20 : Antenna Wind (0)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
70	B4R	L	Y	0
71	G4R	L	X	-74.996
72	G4R	L	Y	0
73	RC1	L	X	-30.799
74	RC1	L	Y	0
75	RC2	L	X	-30.799
76	RC2	L	Y	0
77	RC3	L	X	-30.799
78	RC3	L	Y	0

**Joint Loads and Enforced Displacements (BLC 21 : Antenna Wind (30))**

	Joint Label	L,D,M	Direction	Magnitude(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	-195.116
2	A4T	L	Y	112.65
3	A4B	L	X	-195.116
4	A4B	L	Y	112.65
5	B4T	L	X	-65.355
6	B4T	L	Y	37.733
7	B4B	L	X	-65.355
8	B4B	L	Y	37.733
9	G4T	L	X	-146.697
10	G4T	L	Y	84.695
11	G4B	L	X	-146.697
12	G4B	L	Y	84.695
13	A2T	L	X	-195.463
14	A2T	L	Y	112.851
15	A2B	L	X	-195.463
16	A2B	L	Y	112.851
17	B2T	L	X	-66.027
18	B2T	L	Y	38.121
19	B2B	L	X	-66.027
20	B2B	L	Y	38.121
21	G2T	L	X	-149.926
22	G2T	L	Y	86.56
23	G2B	L	X	-149.926
24	G2B	L	Y	86.56
25	A3T	L	X	-48.037
26	A3T	L	Y	27.734
27	A3B	L	X	-48.037
28	A3B	L	Y	27.734
29	B3T	L	X	-31.113
30	B3T	L	Y	17.963
31	B3B	L	X	-31.113
32	B3B	L	Y	17.963
33	G3T	L	X	-48.037
34	G3T	L	Y	27.734
35	G3B	L	X	-48.037
36	G3B	L	Y	27.734
37	A3TT	L	X	-46.267
38	A3TT	L	Y	26.712
39	A3BB	L	X	-46.267

**Joint Loads and Enforced Displacements (BLC 21 : Antenna Wind (30)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
40	A3BB	L	Y	26.712
41	B3TT	L	X	-24.159
42	B3TT	L	Y	13.948
43	B3BB	L	X	-24.159
44	B3BB	L	Y	13.948
45	G3TT	L	X	-46.267
46	G3TT	L	Y	26.712
47	G3BB	L	X	-46.267
48	G3BB	L	Y	26.712
49	A2R2	L	X	-30.502
50	A2R2	L	Y	17.611
51	B2R2	L	X	-33.794
52	B2R2	L	Y	19.511
53	G2R2	L	X	-30.502
54	G2R2	L	Y	17.611
55	A4R	L	X	-31.712
56	A4R	L	Y	18.309
57	B4R	L	X	-40.973
58	B4R	L	Y	23.656
59	G4R	L	X	-31.712
60	G4R	L	Y	18.309
61	A2R	L	X	-33.935
62	A2R	L	Y	19.592
63	B2R	L	X	-49.32
64	B2R	L	Y	28.475
65	G2R	L	X	-33.935
66	G2R	L	Y	19.592
67	A4R	L	X	-53.792
68	A4R	L	Y	31.057
69	B4R	L	X	-70.527
70	B4R	L	Y	40.719
71	G4R	L	X	-53.791
72	G4R	L	Y	31.057
73	RC1	L	X	-26.673
74	RC1	L	Y	15.399
75	RC2	L	X	-26.673
76	RC2	L	Y	15.399
77	RC3	L	X	-26.673
78	RC3	L	Y	15.399

**Joint Loads and Enforced Displacements (BLC 22 : Antenna Wind (45))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	-129.685
2	A4T	L	Y	129.685
3	A4B	L	X	-129.685
4	A4B	L	Y	129.685
5	B4T	L	X	-59.294
6	B4T	L	Y	59.294
7	B4B	L	X	-59.294
8	B4B	L	Y	59.294
9	G4T	L	X	-135.984

**Joint Loads and Enforced Displacements (BLC 22 : Antenna Wind (45)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
10	G4T	L	Y	135.984
11	G4B	L	X	-135.984
12	G4B	L	Y	135.984
13	A2T	L	X	-130.099
14	A2T	L	Y	130.099
15	A2B	L	X	-130.099
16	A2B	L	Y	130.099
17	B2T	L	X	-60.029
18	B2T	L	Y	60.029
19	B2B	L	X	-60.029
20	B2B	L	Y	60.029
21	G2T	L	X	-139.13
22	G2T	L	Y	139.13
23	G2B	L	X	-139.13
24	G2B	L	Y	139.13
25	A3T	L	X	-34.616
26	A3T	L	Y	34.616
27	A3B	L	X	-34.616
28	A3B	L	Y	34.616
29	B3T	L	X	-26.638
30	B3T	L	Y	26.638
31	B3B	L	X	-26.638
32	B3B	L	Y	26.638
33	G3T	L	X	-42.594
34	G3T	L	Y	42.594
35	G3B	L	X	-42.594
36	G3B	L	Y	42.594
37	A3TT	L	X	-31.76
38	A3TT	L	Y	31.76
39	A3BB	L	X	-31.76
40	A3BB	L	Y	31.76
41	B3TT	L	X	-21.338
42	B3TT	L	Y	21.338
43	B3BB	L	X	-21.338
44	B3BB	L	Y	21.338
45	G3TT	L	X	-42.181
46	G3TT	L	Y	42.181
47	G3BB	L	X	-42.181
48	G3BB	L	Y	42.181
49	A2R2	L	X	-25.801
50	A2R2	L	Y	25.801
51	B2R2	L	X	-27.353
52	B2R2	L	Y	27.353
53	G2R2	L	X	-24.249
54	G2R2	L	Y	24.249
55	A4R	L	X	-28.413
56	A4R	L	Y	28.413
57	B4R	L	X	-32.779
58	B4R	L	Y	32.779
59	G4R	L	X	-24.047
60	G4R	L	Y	24.047
61	A2R	L	X	-31.895



**Joint Loads and Enforced Displacements (BLC 22 : Antenna Wind (45)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
62	A2R	L	Y	31.895
63	B2R	L	X	-39.148
64	B2R	L	Y	39.148
65	G2R	L	X	-24.642
66	G2R	L	Y	24.642
67	A4R	L	X	-48.475
68	A4R	L	Y	48.475
69	B4R	L	X	-56.365
70	B4R	L	Y	56.365
71	G4R	L	X	-40.586
72	G4R	L	Y	40.586
73	RC1	L	X	-21.778
74	RC1	L	Y	21.778
75	RC2	L	X	-21.778
76	RC2	L	Y	21.778
77	RC3	L	X	-21.778
78	RC3	L	Y	21.778

**Joint Loads and Enforced Displacements (BLC 23 : Antenna Wind (60))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	-70.752
2	A4T	L	Y	122.547
3	A4B	L	X	-70.752
4	A4B	L	Y	122.547
5	B4T	L	X	-53.387
6	B4T	L	Y	92.469
7	B4B	L	X	-53.387
8	B4B	L	Y	92.469
9	G4T	L	X	-100.35
10	G4T	L	Y	173.81
11	G4B	L	X	-100.35
12	G4B	L	Y	173.81
13	A2T	L	X	-71.137
14	A2T	L	Y	123.213
15	A2B	L	X	-71.137
16	A2B	L	Y	123.213
17	B2T	L	X	-54.267
18	B2T	L	Y	93.993
19	B2B	L	X	-54.267
20	B2B	L	Y	93.993
21	G2T	L	X	-102.706
22	G2T	L	Y	177.892
23	G2B	L	X	-102.706
24	G2B	L	Y	177.892
25	A3T	L	X	-21.22
26	A3T	L	Y	36.754
27	A3B	L	X	-21.22
28	A3B	L	Y	36.754
29	B3T	L	X	-21.22
30	B3T	L	Y	36.754
31	B3B	L	X	-21.22

**Joint Loads and Enforced Displacements (BLC 23 : Antenna Wind (60)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
32	B3B	L	Y	36.754
33	G3T	L	X	-30.991
34	G3T	L	Y	53.679
35	G3B	L	X	-30.991
36	G3B	L	Y	53.679
37	A3TT	L	X	-18.203
38	A3TT	L	Y	31.528
39	A3BB	L	X	-18.203
40	A3BB	L	Y	31.528
41	B3TT	L	X	-18.203
42	B3TT	L	Y	31.528
43	B3BB	L	X	-18.203
44	B3BB	L	Y	31.528
45	G3TT	L	X	-30.967
46	G3TT	L	Y	53.636
47	G3BB	L	X	-30.967
48	G3BB	L	Y	53.636
49	A2R2	L	X	-18.878
50	A2R2	L	Y	32.697
51	B2R2	L	X	-18.878
52	B2R2	L	Y	32.697
53	G2R2	L	X	-16.977
54	G2R2	L	Y	29.405
55	A4R	L	X	-21.873
56	A4R	L	Y	37.886
57	B4R	L	X	-21.873
58	B4R	L	Y	37.886
59	G4R	L	X	-16.526
60	G4R	L	Y	28.625
61	A2R	L	X	-25.514
62	A2R	L	Y	44.191
63	B2R	L	X	-25.514
64	B2R	L	Y	44.191
65	G2R	L	X	-16.631
66	G2R	L	Y	28.806
67	A4R	L	X	-37.498
68	A4R	L	Y	64.949
69	B4R	L	X	-37.498
70	B4R	L	Y	64.949
71	G4R	L	X	-27.836
72	G4R	L	Y	48.213
73	RC1	L	X	-15.399
74	RC1	L	Y	26.673
75	RC2	L	X	-15.399
76	RC2	L	Y	26.673
77	RC3	L	X	-15.399
78	RC3	L	Y	26.673

**Joint Loads and Enforced Displacements (BLC 24 : Antenna Wind (90))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	-2.3e-5

**Joint Loads and Enforced Displacements (BLC 24 : Antenna Wind (90)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
2	A4T	L	Y	99.607
3	A4B	L	X	-2.3e-5
4	A4B	L	Y	99.607
5	B4T	L	X	-3.8e-5
6	B4T	L	Y	169.391
7	B4B	L	X	-3.8e-5
8	B4B	L	Y	169.391
9	G4T	L	X	-3.8e-5
10	G4T	L	Y	169.391
11	G4B	L	X	-3.8e-5
12	G4B	L	Y	169.391
13	A2T	L	X	-2.3e-5
14	A2T	L	Y	100.561
15	A2B	L	X	-2.3e-5
16	A2B	L	Y	100.561
17	B2T	L	X	-3.9e-5
18	B2T	L	Y	173.119
19	B2B	L	X	-3.9e-5
20	B2B	L	Y	173.119
21	G2T	L	X	-3.9e-5
22	G2T	L	Y	173.119
23	G2B	L	X	-3.9e-5
24	G2B	L	Y	173.119
25	A3T	L	X	-8e-6
26	A3T	L	Y	35.926
27	A3B	L	X	-8e-6
28	A3B	L	Y	35.926
29	B3T	L	X	-1.3e-5
30	B3T	L	Y	55.469
31	B3B	L	X	-1.3e-5
32	B3B	L	Y	55.469
33	G3T	L	X	-1.3e-5
34	G3T	L	Y	55.469
35	G3B	L	X	-1.3e-5
36	G3B	L	Y	55.469
37	A3TT	L	X	-6e-6
38	A3TT	L	Y	27.896
39	A3BB	L	X	-6e-6
40	A3BB	L	Y	27.896
41	B3TT	L	X	-1.2e-5
42	B3TT	L	Y	53.424
43	B3BB	L	X	-1.2e-5
44	B3BB	L	Y	53.424
45	G3TT	L	X	-1.2e-5
46	G3TT	L	Y	53.424
47	G3BB	L	X	-1.2e-5
48	G3BB	L	Y	53.424
49	A2R2	L	X	-9e-6
50	A2R2	L	Y	39.022
51	B2R2	L	X	-8e-6
52	B2R2	L	Y	35.221
53	G2R2	L	X	-8e-6

**Joint Loads and Enforced Displacements (BLC 24 : Antenna Wind (90)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
54	G2R2	L	Y	35.221
55	A4R	L	X	-1.1e-5
56	A4R	L	Y	47.311
57	B4R	L	X	-8e-6
58	B4R	L	Y	36.617
59	G4R	L	X	-8e-6
60	G4R	L	Y	36.617
61	A2R	L	X	-1.3e-5
62	A2R	L	Y	56.95
63	B2R	L	X	-9e-6
64	B2R	L	Y	39.184
65	G2R	L	X	-9e-6
66	G2R	L	Y	39.184
67	A4R	L	X	-1.8e-5
68	A4R	L	Y	81.438
69	B4R	L	X	-1.4e-5
70	B4R	L	Y	62.113
71	G4R	L	X	-1.4e-5
72	G4R	L	Y	62.113
73	RC1	L	X	-7e-6
74	RC1	L	Y	30.799
75	RC2	L	X	-7e-6
76	RC2	L	Y	30.799
77	RC3	L	X	-7e-6
78	RC3	L	Y	30.799

**Joint Loads and Enforced Displacements (BLC 25 : Antenna Wind (120))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	70.752
2	A4T	L	Y	122.547
3	A4B	L	X	70.752
4	A4B	L	Y	122.547
5	B4T	L	X	100.349
6	B4T	L	Y	173.811
7	B4B	L	X	100.349
8	B4B	L	Y	173.811
9	G4T	L	X	53.387
10	G4T	L	Y	92.469
11	G4B	L	X	53.387
12	G4B	L	Y	92.469
13	A2T	L	X	71.137
14	A2T	L	Y	123.213
15	A2B	L	X	71.137
16	A2B	L	Y	123.213
17	B2T	L	X	102.706
18	B2T	L	Y	177.892
19	B2B	L	X	102.706
20	B2B	L	Y	177.892
21	G2T	L	X	54.267
22	G2T	L	Y	93.993
23	G2B	L	X	54.267

**Joint Loads and Enforced Displacements (BLC 25 : Antenna Wind (120)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
24	G2B	L	Y	93.993
25	A3T	L	X	21.22
26	A3T	L	Y	36.754
27	A3B	L	X	21.22
28	A3B	L	Y	36.754
29	B3T	L	X	30.991
30	B3T	L	Y	53.679
31	B3B	L	X	30.991
32	B3B	L	Y	53.679
33	G3T	L	X	21.22
34	G3T	L	Y	36.754
35	G3B	L	X	21.22
36	G3B	L	Y	36.754
37	A3TT	L	X	18.203
38	A3TT	L	Y	31.528
39	A3BB	L	X	18.203
40	A3BB	L	Y	31.528
41	B3TT	L	X	30.967
42	B3TT	L	Y	53.636
43	B3BB	L	X	30.967
44	B3BB	L	Y	53.636
45	G3TT	L	X	18.203
46	G3TT	L	Y	31.528
47	G3BB	L	X	18.203
48	G3BB	L	Y	31.528
49	A2R2	L	X	18.878
50	A2R2	L	Y	32.697
51	B2R2	L	X	16.977
52	B2R2	L	Y	29.405
53	G2R2	L	X	18.878
54	G2R2	L	Y	32.697
55	A4R	L	X	21.873
56	A4R	L	Y	37.886
57	B4R	L	X	16.526
58	B4R	L	Y	28.625
59	G4R	L	X	21.873
60	G4R	L	Y	37.886
61	A2R	L	X	25.514
62	A2R	L	Y	44.192
63	B2R	L	X	16.631
64	B2R	L	Y	28.806
65	G2R	L	X	25.514
66	G2R	L	Y	44.192
67	A4R	L	X	37.498
68	A4R	L	Y	64.949
69	B4R	L	X	27.836
70	B4R	L	Y	48.213
71	G4R	L	X	37.498
72	G4R	L	Y	64.949
73	RC1	L	X	15.399
74	RC1	L	Y	26.673
75	RC2	L	X	15.399

**Joint Loads and Enforced Displacements (BLC 25 : Antenna Wind (120)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
76	RC2	L	Y	26.673
77	RC3	L	X	15.399
78	RC3	L	Y	26.673

**Joint Loads and Enforced Displacements (BLC 26 : Antenna Wind (135))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	129.685
2	A4T	L	Y	129.685
3	A4B	L	X	129.685
4	A4B	L	Y	129.685
5	B4T	L	X	135.984
6	B4T	L	Y	135.984
7	B4B	L	X	135.984
8	B4B	L	Y	135.984
9	G4T	L	X	59.294
10	G4T	L	Y	59.294
11	G4B	L	X	59.294
12	G4B	L	Y	59.294
13	A2T	L	X	130.099
14	A2T	L	Y	130.099
15	A2B	L	X	130.099
16	A2B	L	Y	130.099
17	B2T	L	X	139.13
18	B2T	L	Y	139.13
19	B2B	L	X	139.13
20	B2B	L	Y	139.13
21	G2T	L	X	60.029
22	G2T	L	Y	60.029
23	G2B	L	X	60.029
24	G2B	L	Y	60.029
25	A3T	L	X	34.616
26	A3T	L	Y	34.616
27	A3B	L	X	34.616
28	A3B	L	Y	34.616
29	B3T	L	X	42.594
30	B3T	L	Y	42.594
31	B3B	L	X	42.594
32	B3B	L	Y	42.594
33	G3T	L	X	26.638
34	G3T	L	Y	26.638
35	G3B	L	X	26.638
36	G3B	L	Y	26.638
37	A3TT	L	X	31.76
38	A3TT	L	Y	31.76
39	A3BB	L	X	31.76
40	A3BB	L	Y	31.76
41	B3TT	L	X	42.181
42	B3TT	L	Y	42.181
43	B3BB	L	X	42.181
44	B3BB	L	Y	42.181
45	G3TT	L	X	21.338

**Joint Loads and Enforced Displacements (BLC 26 : Antenna Wind (135)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
46	G3TT	L	Y	21.338
47	G3BB	L	X	21.338
48	G3BB	L	Y	21.338
49	A2R2	L	X	25.801
50	A2R2	L	Y	25.801
51	B2R2	L	X	24.249
52	B2R2	L	Y	24.249
53	G2R2	L	X	27.353
54	G2R2	L	Y	27.353
55	A4R	L	X	28.413
56	A4R	L	Y	28.413
57	B4R	L	X	24.047
58	B4R	L	Y	24.047
59	G4R	L	X	32.779
60	G4R	L	Y	32.779
61	A2R	L	X	31.895
62	A2R	L	Y	31.895
63	B2R	L	X	24.642
64	B2R	L	Y	24.642
65	G2R	L	X	39.148
66	G2R	L	Y	39.148
67	A4R	L	X	48.475
68	A4R	L	Y	48.475
69	B4R	L	X	40.586
70	B4R	L	Y	40.586
71	G4R	L	X	56.365
72	G4R	L	Y	56.365
73	RC1	L	X	21.778
74	RC1	L	Y	21.778
75	RC2	L	X	21.778
76	RC2	L	Y	21.778
77	RC3	L	X	21.778
78	RC3	L	Y	21.778

**Joint Loads and Enforced Displacements (BLC 27 : Antenna Wind (150))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	195.116
2	A4T	L	Y	112.65
3	A4B	L	X	195.116
4	A4B	L	Y	112.65
5	B4T	L	X	146.697
6	B4T	L	Y	84.695
7	B4B	L	X	146.697
8	B4B	L	Y	84.695
9	G4T	L	X	65.355
10	G4T	L	Y	37.733
11	G4B	L	X	65.355
12	G4B	L	Y	37.733
13	A2T	L	X	195.463
14	A2T	L	Y	112.851
15	A2B	L	X	195.463

**Joint Loads and Enforced Displacements (BLC 27 : Antenna Wind (150)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
16	A2B	L	Y	112.851
17	B2T	L	X	149.926
18	B2T	L	Y	86.56
19	B2B	L	X	149.926
20	B2B	L	Y	86.56
21	G2T	L	X	66.027
22	G2T	L	Y	38.121
23	G2B	L	X	66.027
24	G2B	L	Y	38.121
25	A3T	L	X	48.037
26	A3T	L	Y	27.734
27	A3B	L	X	48.037
28	A3B	L	Y	27.734
29	B3T	L	X	48.037
30	B3T	L	Y	27.734
31	B3B	L	X	48.037
32	B3B	L	Y	27.734
33	G3T	L	X	31.113
34	G3T	L	Y	17.963
35	G3B	L	X	31.113
36	G3B	L	Y	17.963
37	A3TT	L	X	46.267
38	A3TT	L	Y	26.712
39	A3BB	L	X	46.267
40	A3BB	L	Y	26.712
41	B3TT	L	X	46.267
42	B3TT	L	Y	26.712
43	B3BB	L	X	46.267
44	B3BB	L	Y	26.712
45	G3TT	L	X	24.159
46	G3TT	L	Y	13.948
47	G3BB	L	X	24.159
48	G3BB	L	Y	13.948
49	A2R2	L	X	30.502
50	A2R2	L	Y	17.611
51	B2R2	L	X	30.502
52	B2R2	L	Y	17.611
53	G2R2	L	X	33.794
54	G2R2	L	Y	19.511
55	A4R	L	X	31.712
56	A4R	L	Y	18.309
57	B4R	L	X	31.712
58	B4R	L	Y	18.309
59	G4R	L	X	40.973
60	G4R	L	Y	23.656
61	A2R	L	X	33.935
62	A2R	L	Y	19.592
63	B2R	L	X	33.935
64	B2R	L	Y	19.592
65	G2R	L	X	49.32
66	G2R	L	Y	28.475
67	A4R	L	X	53.792



**Joint Loads and Enforced Displacements (BLC 27 : Antenna Wind (150)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
68	A4R	L	Y	31.057
69	B4R	L	X	53.791
70	B4R	L	Y	31.057
71	G4R	L	X	70.527
72	G4R	L	Y	40.719
73	RC1	L	X	26.672
74	RC1	L	Y	15.399
75	RC2	L	X	26.672
76	RC2	L	Y	15.399
77	RC3	L	X	26.672
78	RC3	L	Y	15.399

**Joint Loads and Enforced Displacements (BLC 28 : Antenna Wind w/ Ice (0))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	-56.024
2	A4T	L	Y	0
3	A4B	L	X	-56.024
4	A4B	L	Y	0
5	B4T	L	X	-25.625
6	B4T	L	Y	0
7	B4B	L	X	-25.625
8	B4B	L	Y	0
9	G4T	L	X	-25.625
10	G4T	L	Y	0
11	G4B	L	X	-25.625
12	G4B	L	Y	0
13	A2T	L	X	-55.96
14	A2T	L	Y	0
15	A2B	L	X	-55.96
16	A2B	L	Y	0
17	B2T	L	X	-25.952
18	B2T	L	Y	0
19	B2B	L	X	-25.952
20	B2B	L	Y	0
21	G2T	L	X	-25.952
22	G2T	L	Y	0
23	G2B	L	X	-25.952
24	G2B	L	Y	0
25	A3T	L	X	-15.369
26	A3T	L	Y	0
27	A3B	L	X	-15.369
28	A3B	L	Y	0
29	B3T	L	X	-11.16
30	B3T	L	Y	0
31	B3B	L	X	-11.16
32	B3B	L	Y	0
33	G3T	L	X	-11.16
34	G3T	L	Y	0
35	G3B	L	X	-11.16
36	G3B	L	Y	0
37	A3TT	L	X	-15.563

**Joint Loads and Enforced Displacements (BLC 28 : Antenna Wind w/ Ice (0)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
38	A3TT	L	Y	0
39	A3BB	L	X	-15.563
40	A3BB	L	Y	0
41	B3TT	L	X	-10.435
42	B3TT	L	Y	0
43	B3BB	L	X	-10.435
44	B3BB	L	Y	0
45	G3TT	L	X	-10.435
46	G3TT	L	Y	0
47	G3BB	L	X	-10.435
48	G3BB	L	Y	0
49	A2R2	L	X	-9.55
50	A2R2	L	Y	0
51	B2R2	L	X	-12.161
52	B2R2	L	Y	0
53	G2R2	L	X	-12.161
54	G2R2	L	Y	0
55	A4R	L	X	-9.355
56	A4R	L	Y	0
57	B4R	L	X	-13.403
58	B4R	L	Y	0
59	G4R	L	X	-13.403
60	G4R	L	Y	0
61	A2R	L	X	-9.402
62	A2R	L	Y	0
63	B2R	L	X	-14.943
64	B2R	L	Y	0
65	G2R	L	X	-14.943
66	G2R	L	Y	0
67	A4R	L	X	-14.447
68	A4R	L	Y	0
69	B4R	L	X	-20.666
70	B4R	L	Y	0
71	G4R	L	X	-20.666
72	G4R	L	Y	0
73	RC1	L	X	-9.449
74	RC1	L	Y	0
75	RC2	L	X	-9.449
76	RC2	L	Y	0
77	RC3	L	X	-9.449
78	RC3	L	Y	0

**Joint Loads and Enforced Displacements (BLC 29 : Antenna Wind w/ Ice (30))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	-41.878
2	A4T	L	Y	24.178
3	A4B	L	X	-41.878
4	A4B	L	Y	24.178
5	B4T	L	X	-17.165
6	B4T	L	Y	9.91
7	B4B	L	X	-17.165

**Joint Loads and Enforced Displacements (BLC 29 : Antenna Wind w/ Ice (30)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
8	B4B	L	Y	9.91
9	G4T	L	X	-32.245
10	G4T	L	Y	18.617
11	G4B	L	X	-32.245
12	G4B	L	Y	18.617
13	A2T	L	X	-41.873
14	A2T	L	Y	24.176
15	A2B	L	X	-41.873
16	A2B	L	Y	24.176
17	B2T	L	X	-17.277
18	B2T	L	Y	9.975
19	B2B	L	X	-17.277
20	B2B	L	Y	9.975
21	G2T	L	X	-32.87
22	G2T	L	Y	18.977
23	G2B	L	X	-32.87
24	G2B	L	Y	18.977
25	A3T	L	X	-12.095
26	A3T	L	Y	6.983
27	A3B	L	X	-12.095
28	A3B	L	Y	6.983
29	B3T	L	X	-8.45
30	B3T	L	Y	4.879
31	B3B	L	X	-8.45
32	B3B	L	Y	4.879
33	G3T	L	X	-12.095
34	G3T	L	Y	6.983
35	G3B	L	X	-12.095
36	G3B	L	Y	6.983
37	A3TT	L	X	-11.998
38	A3TT	L	Y	6.927
39	A3BB	L	X	-11.998
40	A3BB	L	Y	6.927
41	B3TT	L	X	-7.557
42	B3TT	L	Y	4.363
43	B3BB	L	X	-7.557
44	B3BB	L	Y	4.363
45	G3TT	L	X	-11.998
46	G3TT	L	Y	6.927
47	G3BB	L	X	-11.998
48	G3BB	L	Y	6.927
49	A2R2	L	X	-9.025
50	A2R2	L	Y	5.21
51	B2R2	L	X	-11.286
52	B2R2	L	Y	6.516
53	G2R2	L	X	-9.025
54	G2R2	L	Y	5.21
55	A4R	L	X	-9.27
56	A4R	L	Y	5.352
57	B4R	L	X	-12.776
58	B4R	L	Y	7.376
59	G4R	L	X	-9.27

***Joint Loads and Enforced Displacements (BLC 29 : Antenna Wind w/ Ice (30)) (Continued)***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
60	G4R	L	Y	5.352
61	A2R	L	X	-9.742
62	A2R	L	Y	5.625
63	B2R	L	X	-14.541
64	B2R	L	Y	8.395
65	G2R	L	X	-9.742
66	G2R	L	Y	5.625
67	A4R	L	X	-14.307
68	A4R	L	Y	8.26
69	B4R	L	X	-19.693
70	B4R	L	Y	11.37
71	G4R	L	X	-14.307
72	G4R	L	Y	8.26
73	RC1	L	X	-8.183
74	RC1	L	Y	4.724
75	RC2	L	X	-8.183
76	RC2	L	Y	4.724
77	RC3	L	X	-8.183
78	RC3	L	Y	4.724

***Joint Loads and Enforced Displacements (BLC 30 : Antenna Wind w/ Ice (45))***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	-28.772
2	A4T	L	Y	28.772
3	A4B	L	X	-28.772
4	A4B	L	Y	28.772
5	B4T	L	X	-15.115
6	B4T	L	Y	15.115
7	B4B	L	X	-15.115
8	B4B	L	Y	15.115
9	G4T	L	X	-29.332
10	G4T	L	Y	29.332
11	G4B	L	X	-29.332
12	G4B	L	Y	29.332
13	A2T	L	X	-28.809
14	A2T	L	Y	28.809
15	A2B	L	X	-28.809
16	A2B	L	Y	28.809
17	B2T	L	X	-15.244
18	B2T	L	Y	15.244
19	B2B	L	X	-15.244
20	B2B	L	Y	15.244
21	G2T	L	X	-29.945
22	G2T	L	Y	29.945
23	G2B	L	X	-29.945
24	G2B	L	Y	29.945
25	A3T	L	X	-8.884
26	A3T	L	Y	8.884
27	A3B	L	X	-8.884
28	A3B	L	Y	8.884
29	B3T	L	X	-7.165

***Joint Loads and Enforced Displacements (BLC 30 : Antenna Wind w/ Ice (45)) (Continued)***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
30	B3T	L	Y	7.165
31	B3B	L	X	-7.165
32	B3B	L	Y	7.165
33	G3T	L	X	-10.602
34	G3T	L	Y	10.602
35	G3B	L	X	-10.602
36	G3B	L	Y	10.602
37	A3TT	L	X	-8.587
38	A3TT	L	Y	8.587
39	A3BB	L	X	-8.587
40	A3BB	L	Y	8.587
41	B3TT	L	X	-6.494
42	B3TT	L	Y	6.494
43	B3BB	L	X	-6.494
44	B3BB	L	Y	6.494
45	G3TT	L	X	-10.681
46	G3TT	L	Y	10.681
47	G3BB	L	X	-10.681
48	G3BB	L	Y	10.681
49	A2R2	L	X	-7.984
50	A2R2	L	Y	7.984
51	B2R2	L	X	-9.05
52	B2R2	L	Y	9.05
53	G2R2	L	X	-6.918
54	G2R2	L	Y	6.918
55	A4R	L	X	-8.523
56	A4R	L	Y	8.523
57	B4R	L	X	-10.176
58	B4R	L	Y	10.176
59	G4R	L	X	-6.871
60	G4R	L	Y	6.871
61	A2R	L	X	-9.26
62	A2R	L	Y	9.26
63	B2R	L	X	-11.523
64	B2R	L	Y	11.523
65	G2R	L	X	-6.998
66	G2R	L	Y	6.998
67	A4R	L	X	-13.147
68	A4R	L	Y	13.147
69	B4R	L	X	-15.686
70	B4R	L	Y	15.686
71	G4R	L	X	-10.608
72	G4R	L	Y	10.608
73	RC1	L	X	-6.681
74	RC1	L	Y	6.681
75	RC2	L	X	-6.681
76	RC2	L	Y	6.681
77	RC3	L	X	-6.681
78	RC3	L	Y	6.681

***Joint Loads and Enforced Displacements (BLC 31 : Antenna Wind w/ Ice (60))***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
--	-------------	-------	-----------	--

***Joint Loads and Enforced Displacements (BLC 31 : Antenna Wind w/ Ice (60)) (Continued)***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	-16.512
2	A4T	L	Y	28.599
3	A4B	L	X	-16.512
4	A4B	L	Y	28.599
5	B4T	L	X	-12.812
6	B4T	L	Y	22.192
7	B4B	L	X	-12.812
8	B4B	L	Y	22.192
9	G4T	L	X	-21.519
10	G4T	L	Y	37.272
11	G4B	L	X	-21.519
12	G4B	L	Y	37.272
13	A2T	L	X	-16.567
14	A2T	L	Y	28.694
15	A2B	L	X	-16.567
16	A2B	L	Y	28.694
17	B2T	L	X	-12.976
18	B2T	L	Y	22.475
19	B2B	L	X	-12.976
20	B2B	L	Y	22.475
21	G2T	L	X	-21.978
22	G2T	L	Y	38.067
23	G2B	L	X	-21.978
24	G2B	L	Y	38.067
25	A3T	L	X	-5.58
26	A3T	L	Y	9.665
27	A3B	L	X	-5.58
28	A3B	L	Y	9.665
29	B3T	L	X	-5.58
30	B3T	L	Y	9.665
31	B3B	L	X	-5.58
32	B3B	L	Y	9.665
33	G3T	L	X	-7.684
34	G3T	L	Y	13.31
35	G3B	L	X	-7.684
36	G3B	L	Y	13.31
37	A3TT	L	X	-5.218
38	A3TT	L	Y	9.037
39	A3BB	L	X	-5.218
40	A3BB	L	Y	9.037
41	B3TT	L	X	-5.218
42	B3TT	L	Y	9.037
43	B3BB	L	X	-5.218
44	B3BB	L	Y	9.037
45	G3TT	L	X	-7.781
46	G3TT	L	Y	13.478
47	G3BB	L	X	-7.781
48	G3BB	L	Y	13.478
49	A2R2	L	X	-6.081
50	A2R2	L	Y	10.532
51	B2R2	L	X	-6.081
52	B2R2	L	Y	10.532

**Joint Loads and Enforced Displacements (BLC 31 : Antenna Wind w/ Ice (60)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
53	G2R2	L	X	-4.775
54	G2R2	L	Y	8.271
55	A4R	L	X	-6.702
56	A4R	L	Y	11.608
57	B4R	L	X	-6.702
58	B4R	L	Y	11.608
59	G4R	L	X	-4.678
60	G4R	L	Y	8.102
61	A2R	L	X	-7.472
62	A2R	L	Y	12.941
63	B2R	L	X	-7.472
64	B2R	L	Y	12.941
65	G2R	L	X	-4.701
66	G2R	L	Y	8.142
67	A4R	L	X	-10.333
68	A4R	L	Y	17.898
69	B4R	L	X	-10.333
70	B4R	L	Y	17.898
71	G4R	L	X	-7.224
72	G4R	L	Y	12.511
73	RC1	L	X	-4.724
74	RC1	L	Y	8.183
75	RC2	L	X	-4.724
76	RC2	L	Y	8.183
77	RC3	L	X	-4.724
78	RC3	L	Y	8.183

**Joint Loads and Enforced Displacements (BLC 32 : Antenna Wind w/ Ice (90))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	-6e-6
2	A4T	L	Y	25.356
3	A4B	L	X	-6e-6
4	A4B	L	Y	25.356
5	B4T	L	X	-8e-6
6	B4T	L	Y	37.233
7	B4B	L	X	-8e-6
8	B4B	L	Y	37.233
9	G4T	L	X	-8e-6
10	G4T	L	Y	37.233
11	G4B	L	X	-8e-6
12	G4B	L	Y	37.233
13	A2T	L	X	-6e-6
14	A2T	L	Y	25.524
15	A2B	L	X	-6e-6
16	A2B	L	Y	25.524
17	B2T	L	X	-9e-6
18	B2T	L	Y	37.955
19	B2B	L	X	-9e-6
20	B2B	L	Y	37.955
21	G2T	L	X	-9e-6
22	G2T	L	Y	37.955

***Joint Loads and Enforced Displacements (BLC 32 : Antenna Wind w/ Ice (90)) (Continued)***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
23	G2B	L	X	-9e-6
24	G2B	L	Y	37.955
25	A3T	L	X	-2e-6
26	A3T	L	Y	9.758
27	A3B	L	X	-2e-6
28	A3B	L	Y	9.758
29	B3T	L	X	-3e-6
30	B3T	L	Y	13.966
31	B3B	L	X	-3e-6
32	B3B	L	Y	13.966
33	G3T	L	X	-3e-6
34	G3T	L	Y	13.966
35	G3B	L	X	-3e-6
36	G3B	L	Y	13.966
37	A3TT	L	X	-2e-6
38	A3TT	L	Y	8.726
39	A3BB	L	X	-2e-6
40	A3BB	L	Y	8.726
41	B3TT	L	X	-3e-6
42	B3TT	L	Y	13.854
43	B3BB	L	X	-3e-6
44	B3BB	L	Y	13.854
45	G3TT	L	X	-3e-6
46	G3TT	L	Y	13.854
47	G3BB	L	X	-3e-6
48	G3BB	L	Y	13.854
49	A2R2	L	X	-3e-6
50	A2R2	L	Y	13.032
51	B2R2	L	X	-2e-6
52	B2R2	L	Y	10.421
53	G2R2	L	X	-2e-6
54	G2R2	L	Y	10.421
55	A4R	L	X	-3e-6
56	A4R	L	Y	14.753
57	B4R	L	X	-2e-6
58	B4R	L	Y	10.705
59	G4R	L	X	-2e-6
60	G4R	L	Y	10.705
61	A2R	L	X	-4e-6
62	A2R	L	Y	16.79
63	B2R	L	X	-3e-6
64	B2R	L	Y	11.249
65	G2R	L	X	-3e-6
66	G2R	L	Y	11.249
67	A4R	L	X	-5e-6
68	A4R	L	Y	22.739
69	B4R	L	X	-4e-6
70	B4R	L	Y	16.52
71	G4R	L	X	-4e-6
72	G4R	L	Y	16.52
73	RC1	L	X	-2e-6
74	RC1	L	Y	9.449



**Joint Loads and Enforced Displacements (BLC 32 : Antenna Wind w/ Ice (90)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
75	RC2	L	X	-2e-6
76	RC2	L	Y	9.449
77	RC3	L	X	-2e-6
78	RC3	L	Y	9.449

**Joint Loads and Enforced Displacements (BLC 33 : Antenna Wind w/ Ice (120))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	16.512
2	A4T	L	Y	28.599
3	A4B	L	X	16.512
4	A4B	L	Y	28.599
5	B4T	L	X	21.519
6	B4T	L	Y	37.272
7	B4B	L	X	21.519
8	B4B	L	Y	37.272
9	G4T	L	X	12.812
10	G4T	L	Y	22.192
11	G4B	L	X	12.812
12	G4B	L	Y	22.192
13	A2T	L	X	16.567
14	A2T	L	Y	28.694
15	A2B	L	X	16.567
16	A2B	L	Y	28.694
17	B2T	L	X	21.978
18	B2T	L	Y	38.067
19	B2B	L	X	21.978
20	B2B	L	Y	38.067
21	G2T	L	X	12.976
22	G2T	L	Y	22.475
23	G2B	L	X	12.976
24	G2B	L	Y	22.475
25	A3T	L	X	5.58
26	A3T	L	Y	9.665
27	A3B	L	X	5.58
28	A3B	L	Y	9.665
29	B3T	L	X	7.684
30	B3T	L	Y	13.31
31	B3B	L	X	7.684
32	B3B	L	Y	13.31
33	G3T	L	X	5.58
34	G3T	L	Y	9.665
35	G3B	L	X	5.58
36	G3B	L	Y	9.665
37	A3TT	L	X	5.218
38	A3TT	L	Y	9.037
39	A3BB	L	X	5.218
40	A3BB	L	Y	9.037
41	B3TT	L	X	7.781
42	B3TT	L	Y	13.478
43	B3BB	L	X	7.781
44	B3BB	L	Y	13.478

**Joint Loads and Enforced Displacements (BLC 33 : Antenna Wind w/ Ice (120)) (Continued)**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
45	G3TT	L	X	5.218
46	G3TT	L	Y	9.037
47	G3BB	L	X	5.218
48	G3BB	L	Y	9.037
49	A2R2	L	X	6.081
50	A2R2	L	Y	10.532
51	B2R2	L	X	4.775
52	B2R2	L	Y	8.271
53	G2R2	L	X	6.081
54	G2R2	L	Y	10.532
55	A4R	L	X	6.702
56	A4R	L	Y	11.608
57	B4R	L	X	4.678
58	B4R	L	Y	8.102
59	G4R	L	X	6.702
60	G4R	L	Y	11.608
61	A2R	L	X	7.472
62	A2R	L	Y	12.941
63	B2R	L	X	4.701
64	B2R	L	Y	8.142
65	G2R	L	X	7.472
66	G2R	L	Y	12.941
67	A4R	L	X	10.333
68	A4R	L	Y	17.898
69	B4R	L	X	7.223
70	B4R	L	Y	12.511
71	G4R	L	X	10.333
72	G4R	L	Y	17.898
73	RC1	L	X	4.724
74	RC1	L	Y	8.183
75	RC2	L	X	4.724
76	RC2	L	Y	8.183
77	RC3	L	X	4.724
78	RC3	L	Y	8.183

**Joint Loads and Enforced Displacements (BLC 34 : Antenna Wind w/ Ice (135))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	28.772
2	A4T	L	Y	28.772
3	A4B	L	X	28.772
4	A4B	L	Y	28.772
5	B4T	L	X	29.332
6	B4T	L	Y	29.332
7	B4B	L	X	29.332
8	B4B	L	Y	29.332
9	G4T	L	X	15.115
10	G4T	L	Y	15.115
11	G4B	L	X	15.115
12	G4B	L	Y	15.115
13	A2T	L	X	28.809
14	A2T	L	Y	28.809

***Joint Loads and Enforced Displacements (BLC 34 : Antenna Wind w/ Ice (135)) (Continued)***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
15	A2B	L	X	28.809
16	A2B	L	Y	28.809
17	B2T	L	X	29.945
18	B2T	L	Y	29.945
19	B2B	L	X	29.945
20	B2B	L	Y	29.945
21	G2T	L	X	15.244
22	G2T	L	Y	15.244
23	G2B	L	X	15.244
24	G2B	L	Y	15.244
25	A3T	L	X	8.884
26	A3T	L	Y	8.884
27	A3B	L	X	8.884
28	A3B	L	Y	8.884
29	B3T	L	X	10.602
30	B3T	L	Y	10.602
31	B3B	L	X	10.602
32	B3B	L	Y	10.602
33	G3T	L	X	7.165
34	G3T	L	Y	7.165
35	G3B	L	X	7.165
36	G3B	L	Y	7.165
37	A3TT	L	X	8.587
38	A3TT	L	Y	8.587
39	A3BB	L	X	8.587
40	A3BB	L	Y	8.587
41	B3TT	L	X	10.681
42	B3TT	L	Y	10.681
43	B3BB	L	X	10.681
44	B3BB	L	Y	10.681
45	G3TT	L	X	6.494
46	G3TT	L	Y	6.494
47	G3BB	L	X	6.494
48	G3BB	L	Y	6.494
49	A2R2	L	X	7.984
50	A2R2	L	Y	7.984
51	B2R2	L	X	6.918
52	B2R2	L	Y	6.918
53	G2R2	L	X	9.05
54	G2R2	L	Y	9.05
55	A4R	L	X	8.523
56	A4R	L	Y	8.523
57	B4R	L	X	6.871
58	B4R	L	Y	6.871
59	G4R	L	X	10.176
60	G4R	L	Y	10.176
61	A2R	L	X	9.26
62	A2R	L	Y	9.26
63	B2R	L	X	6.998
64	B2R	L	Y	6.998
65	G2R	L	X	11.523
66	G2R	L	Y	11.523

***Joint Loads and Enforced Displacements (BLC 34 : Antenna Wind w/ Ice (135)) (Continued)***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
67	A4R	L	X	13.147
68	A4R	L	Y	13.147
69	B4R	L	X	10.608
70	B4R	L	Y	10.608
71	G4R	L	X	15.686
72	G4R	L	Y	15.686
73	RC1	L	X	6.681
74	RC1	L	Y	6.681
75	RC2	L	X	6.681
76	RC2	L	Y	6.681
77	RC3	L	X	6.681
78	RC3	L	Y	6.681

***Joint Loads and Enforced Displacements (BLC 35 : Antenna Wind w/ Ice (150))***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	A4T	L	X	41.878
2	A4T	L	Y	24.178
3	A4B	L	X	41.878
4	A4B	L	Y	24.178
5	B4T	L	X	32.245
6	B4T	L	Y	18.617
7	B4B	L	X	32.245
8	B4B	L	Y	18.617
9	G4T	L	X	17.165
10	G4T	L	Y	9.91
11	G4B	L	X	17.165
12	G4B	L	Y	9.91
13	A2T	L	X	41.873
14	A2T	L	Y	24.176
15	A2B	L	X	41.873
16	A2B	L	Y	24.176
17	B2T	L	X	32.87
18	B2T	L	Y	18.977
19	B2B	L	X	32.87
20	B2B	L	Y	18.977
21	G2T	L	X	17.277
22	G2T	L	Y	9.975
23	G2B	L	X	17.277
24	G2B	L	Y	9.975
25	A3T	L	X	12.095
26	A3T	L	Y	6.983
27	A3B	L	X	12.095
28	A3B	L	Y	6.983
29	B3T	L	X	12.095
30	B3T	L	Y	6.983
31	B3B	L	X	12.095
32	B3B	L	Y	6.983
33	G3T	L	X	8.45
34	G3T	L	Y	4.879
35	G3B	L	X	8.45
36	G3B	L	Y	4.879

***Joint Loads and Enforced Displacements (BLC 35 : Antenna Wind w/ Ice (150)) (Continued)***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
37	A3TT	L	X	11.998
38	A3TT	L	Y	6.927
39	A3BB	L	X	11.998
40	A3BB	L	Y	6.927
41	B3TT	L	X	11.998
42	B3TT	L	Y	6.927
43	B3BB	L	X	11.998
44	B3BB	L	Y	6.927
45	G3TT	L	X	7.557
46	G3TT	L	Y	4.363
47	G3BB	L	X	7.557
48	G3BB	L	Y	4.363
49	A2R2	L	X	9.025
50	A2R2	L	Y	5.21
51	B2R2	L	X	9.025
52	B2R2	L	Y	5.21
53	G2R2	L	X	11.286
54	G2R2	L	Y	6.516
55	A4R	L	X	9.27
56	A4R	L	Y	5.352
57	B4R	L	X	9.27
58	B4R	L	Y	5.352
59	G4R	L	X	12.776
60	G4R	L	Y	7.376
61	A2R	L	X	9.742
62	A2R	L	Y	5.625
63	B2R	L	X	9.742
64	B2R	L	Y	5.625
65	G2R	L	X	14.541
66	G2R	L	Y	8.395
67	A4R	L	X	14.307
68	A4R	L	Y	8.26
69	B4R	L	X	14.307
70	B4R	L	Y	8.26
71	G4R	L	X	19.693
72	G4R	L	Y	11.37
73	RC1	L	X	8.183
74	RC1	L	Y	4.724
75	RC2	L	X	8.183
76	RC2	L	Y	4.724
77	RC3	L	X	8.183
78	RC3	L	Y	4.724

***Joint Loads and Enforced Displacements (BLC 36 : Maintenance Live Lm (1))***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	M1	L	Z	-500

***Joint Loads and Enforced Displacements (BLC 37 : Maintenance Live Lm (2))***

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	M2	L	Z	-500

**Joint Loads and Enforced Displacements (BLC 38 : Maintenance Live Lm (3))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	M3	L	Z	-500
2	N768	L	Z	-500
3	N763B	L	Z	-500
4	N768A	L	Z	-500

**Joint Loads and Enforced Displacements (BLC 39 : Maintenance Live Lm (4))**

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^...
1	M4	L	Z	-500

**Member Distributed Loads (BLC 2 : Dead of Ice)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	Z	-12.253	-12.253	0	0
2	M22	Z	-12.253	-12.253	0	0
3	M23	Z	-12.253	-12.253	0	0
4	M39	Z	-21.118	-21.118	0	0
5	M40	Z	-21.118	-21.118	0	0
6	M41	Z	-21.118	-21.118	0	0
7	M45	Z	-21.118	-21.118	0	0
8	M50	Z	-21.118	-21.118	0	0
9	M42A	Z	-12.253	-12.253	0	0
10	M43A	Z	-12.253	-12.253	0	0
11	M44A	Z	-12.253	-12.253	0	0
12	M26	Z	-12.253	-12.253	0	0
13	M27	Z	-12.253	-12.253	0	0
14	M28	Z	-12.253	-12.253	0	0
15	M30	Z	-21.118	-21.118	0	0
16	M31	Z	-21.118	-21.118	0	0
17	M32	Z	-21.118	-21.118	0	0
18	M41A	Z	-12.253	-12.253	0	0
19	M42	Z	-12.253	-12.253	0	0
20	M43	Z	-12.253	-12.253	0	0
21	M51A	Z	-12.253	-12.253	0	0
22	M52	Z	-12.253	-12.253	0	0
23	M53	Z	-12.253	-12.253	0	0
24	M55	Z	-21.118	-21.118	0	0
25	M56	Z	-21.118	-21.118	0	0
26	M57A	Z	-21.118	-21.118	0	0
27	M66	Z	-12.253	-12.253	0	0
28	M67	Z	-12.253	-12.253	0	0
29	M68	Z	-12.253	-12.253	0	0
30	M72A	Z	-21.118	-21.118	0	0
31	M73A	Z	-21.118	-21.118	0	0
32	M74A	Z	-21.118	-21.118	0	0
33	M71A	Z	-16.887	-16.887	0	0
34	M72B	Z	-17.77	-17.77	0	0
35	M82	Z	-16.887	-16.887	0	0
36	M88	Z	-17.77	-17.77	0	0
37	M100	Z	-16.887	-16.887	0	0
38	M106	Z	-17.77	-17.77	0	0
39	M125	Z	-17.549	-17.549	0	0

**Member Distributed Loads (BLC 2 : Dead of Ice) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
40	M126	Z	-17.549	-17.549	0	0
41	M130	Z	-12.881	-12.881	0	0
42	M138	Z	-12.881	-12.881	0	0
43	M155	Z	-12.881	-12.881	0	0
44	M157	Z	-12.881	-12.881	0	0
45	M159	Z	-12.881	-12.881	0	0
46	SR1	Z	-12.881	-12.881	0	0
47	SR2	Z	-17.549	-17.549	0	0
48	SR10	Z	-12.881	-12.881	0	0
49	SR12	Z	-17.549	-17.549	0	0
50	SR19	Z	-12.881	-12.881	0	0
51	SR20	Z	-17.549	-17.549	0	0
52	SR21	Z	-17.549	-17.549	0	0
53	SR28	Z	-14.692	-14.692	0	0
54	SR30	Z	-14.692	-14.692	0	0
55	M189	Z	-17.549	-17.549	0	0
56	M190	Z	-17.549	-17.549	0	0
57	M191	Z	-12.881	-12.881	0	0
58	M190A	Z	-17.549	-17.549	0	0
59	M191A	Z	-17.549	-17.549	0	0
60	M192A	Z	-12.881	-12.881	0	0
61	M194B	Z	-17.549	-17.549	0	0
62	M195A	Z	-17.549	-17.549	0	0
63	M196	Z	-12.881	-12.881	0	0
64	M200	Z	-12.881	-12.881	0	0
65	M211	Z	-17.549	-17.549	0	0
66	M212	Z	-17.549	-17.549	0	0
67	M213	Z	-12.881	-12.881	0	0
68	M219	Z	-17.549	-17.549	0	0
69	M220	Z	-17.549	-17.549	0	0
70	M221	Z	-12.881	-12.881	0	0
71	M233	Z	-17.549	-17.549	0	0
72	M234	Z	-17.549	-17.549	0	0
73	M235	Z	-12.881	-12.881	0	0
74	M239	Z	-12.881	-12.881	0	0
75	M250	Z	-17.549	-17.549	0	0
76	M251	Z	-17.549	-17.549	0	0
77	M252	Z	-12.881	-12.881	0	0
78	M258	Z	-17.549	-17.549	0	0
79	M259	Z	-17.549	-17.549	0	0
80	M260	Z	-12.881	-12.881	0	0
81	M264A	Z	-17.549	-17.549	0	0
82	M268A	Z	-17.549	-17.549	0	0
83	M272A	Z	-14.692	-14.692	0	0
84	SR20	Z	-17.549	-17.549	%.67	4.33
85	SR12	Z	-17.549	-17.549	0	5
86	SR30	Z	-14.692	-14.692	0	19.399
87	M272B	Z	-17.549	-17.549	0	0
88	M273	Z	-17.549	-17.549	0	0
89	M270D	Z	-17.549	-17.549	0	0
90	M271C	Z	-17.549	-17.549	0	0
91	M274	Z	-17.549	-17.549	0	0

**Member Distributed Loads (BLC 2 : Dead of Ice) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
92	M275	Z	-17.549	-17.549	0	0

**Member Distributed Loads (BLC 4 : Structure Wind (0))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	-16.799	-16.799	0	0
2	M21	Y	0	0	0	0
3	M22	X	-16.799	-16.799	0	0
4	M22	Y	0	0	0	0
5	M23	X	-16.799	-16.799	0	0
6	M23	Y	0	0	0	0
7	M39	X	-27.999	-27.999	0	0
8	M39	Y	0	0	0	0
9	M40	X	-7	-7	0	0
10	M40	Y	0	0	0	0
11	M41	X	-7	-7	0	0
12	M41	Y	0	0	0	0
13	M45	X	0	0	0	0
14	M45	Y	0	0	0	0
15	M50	X	-27.999	-27.999	0	0
16	M50	Y	0	0	0	0
17	M42A	X	-16.799	-16.799	0	0
18	M42A	Y	0	0	0	0
19	M43A	X	-16.799	-16.799	0	0
20	M43A	Y	0	0	0	0
21	M44A	X	-16.799	-16.799	0	0
22	M44A	Y	0	0	0	0
23	M26	X	-4.2	-4.2	0	0
24	M26	Y	0	0	0	0
25	M27	X	-4.2	-4.2	0	0
26	M27	Y	0	0	0	0
27	M28	X	-4.2	-4.2	0	0
28	M28	Y	0	0	0	0
29	M30	X	-7	-7	0	0
30	M30	Y	0	0	0	0
31	M31	X	-7	-7	0	0
32	M31	Y	0	0	0	0
33	M32	X	-27.999	-27.999	0	0
34	M32	Y	0	0	0	0
35	M41A	X	-4.2	-4.2	0	0
36	M41A	Y	0	0	0	0
37	M42	X	-4.2	-4.2	0	0
38	M42	Y	0	0	0	0
39	M43	X	-4.2	-4.2	0	0
40	M43	Y	0	0	0	0
41	M51A	X	-4.2	-4.2	0	0
42	M51A	Y	0	0	0	0
43	M52	X	-4.2	-4.2	0	0
44	M52	Y	0	0	0	0
45	M53	X	-4.2	-4.2	0	0
46	M53	Y	0	0	0	0
47	M55	X	-7	-7	0	0



**Member Distributed Loads (BLC 4 : Structure Wind (0)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
48	M55	Y	0	0	0	0
49	M56	X	-27.999	-27.999	0	0
50	M56	Y	0	0	0	0
51	M57A	X	-7	-7	0	0
52	M57A	Y	0	0	0	0
53	M66	X	-4.2	-4.2	0	0
54	M66	Y	0	0	0	0
55	M67	X	-4.2	-4.2	0	0
56	M67	Y	0	0	0	0
57	M68	X	-4.2	-4.2	0	0
58	M68	Y	0	0	0	0
59	M72A	X	-7	-7	0	0
60	M72A	Y	0	0	0	0
61	M73A	X	-7	-7	0	0
62	M73A	Y	0	0	0	0
63	M74A	X	-27.999	-27.999	0	0
64	M74A	Y	0	0	0	0
65	M71A	X	-1.165	-1.165	0	0
66	M71A	Y	0	0	0	0
67	M72B	X	-33.599	-33.599	0	0
68	M72B	Y	0	0	0	0
69	M82	X	-15.713	-15.713	0	0
70	M82	Y	0	0	0	0
71	M88	X	-8.4	-8.4	0	0
72	M88	Y	0	0	0	0
73	M100	X	-8.321	-8.321	0	0
74	M100	Y	0	0	0	0
75	M106	X	-8.4	-8.4	0	0
76	M106	Y	0	0	0	0
77	M125	X	0	0	0	0
78	M125	Y	0	0	0	0
79	M126	X	0	0	0	0
80	M126	Y	0	0	0	0
81	M130	X	-7.98	-7.98	0	0
82	M130	Y	0	0	0	0
83	M138	X	-7.98	-7.98	0	0
84	M138	Y	0	0	0	0
85	M155	X	-7.98	-7.98	0	0
86	M155	Y	0	0	0	0
87	M157	X	-7.98	-7.98	0	0
88	M157	Y	0	0	0	0
89	M159	X	-7.98	-7.98	0	0
90	M159	Y	0	0	0	0
91	SR1	X	-7.98	-7.98	0	0
92	SR1	Y	0	0	0	0
93	SR2	X	-33.599	-33.599	0	0
94	SR2	Y	0	0	0	0
95	SR10	X	-1.995	-1.995	0	0
96	SR10	Y	0	0	0	0
97	SR12	X	-8.4	-8.4	0	0
98	SR12	Y	0	0	0	0
99	SR19	X	-1.995	-1.995	0	0

**Member Distributed Loads (BLC 4 : Structure Wind (0)) (Continued)**

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
100	SR19	Y	0	0	0
101	SR20	X	-8.4	-8.4	0
102	SR20	Y	0	0	0
103	SR21	X	-8.4	-8.4	0
104	SR21	Y	0	0	0
105	SR28	X	-3.5	-3.5	0
106	SR28	Y	0	0	0
107	SR30	X	-13.999	-13.999	0
108	SR30	Y	0	0	0
109	M189	X	0	0	0
110	M189	Y	0	0	0
111	M190	X	0	0	0
112	M190	Y	0	0	0
113	M191	X	-7.98	-7.98	0
114	M191	Y	0	0	0
115	M190A	X	0	0	0
116	M190A	Y	0	0	0
117	M191A	X	0	0	0
118	M191A	Y	0	0	0
119	M192A	X	-7.98	-7.98	0
120	M192A	Y	0	0	0
121	M194B	X	-25.199	-25.199	0
122	M194B	Y	0	0	0
123	M195A	X	-25.199	-25.199	0
124	M195A	Y	0	0	0
125	M196	X	-7.98	-7.98	0
126	M196	Y	0	0	0
127	M200	X	-7.98	-7.98	0
128	M200	Y	0	0	0
129	M211	X	-25.199	-25.199	0
130	M211	Y	0	0	0
131	M212	X	-25.199	-25.199	0
132	M212	Y	0	0	0
133	M213	X	-7.98	-7.98	0
134	M213	Y	0	0	0
135	M219	X	-25.199	-25.199	0
136	M219	Y	0	0	0
137	M220	X	-25.199	-25.199	0
138	M220	Y	0	0	0
139	M221	X	-7.98	-7.98	0
140	M221	Y	0	0	0
141	M233	X	-25.199	-25.199	0
142	M233	Y	0	0	0
143	M234	X	-25.199	-25.199	0
144	M234	Y	0	0	0
145	M235	X	-7.98	-7.98	0
146	M235	Y	0	0	0
147	M239	X	-7.98	-7.98	0
148	M239	Y	0	0	0
149	M250	X	-25.199	-25.199	0
150	M250	Y	0	0	0
151	M251	X	-25.199	-25.199	0

**Member Distributed Loads (BLC 4 : Structure Wind (0)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
152	M251	Y	0	0	0	0
153	M252	X	-7.98	-7.98	0	0
154	M252	Y	0	0	0	0
155	M258	X	-25.199	-25.199	0	0
156	M258	Y	0	0	0	0
157	M259	X	-25.199	-25.199	0	0
158	M259	Y	0	0	0	0
159	M260	X	-7.98	-7.98	0	0
160	M260	Y	0	0	0	0
161	M264A	X	-33.599	-33.599	0	0
162	M264A	Y	0	0	0	0
163	M268A	X	-8.4	-8.4	0	0
164	M268A	Y	0	0	0	0
165	M272A	X	-3.5	-3.5	0	0
166	M272A	Y	0	0	0	0
167	SR20	X	-33.599	-33.599	%.67	4.33
168	SR20	Y	0	0	%.67	4.33
169	SR12	X	-8.4	-8.4	0	5
170	SR12	Y	0	0	0	5
171	SR30	X	-3.5	-3.5	0	19.399
172	SR30	Y	0	0	0	19.399
173	M272B	X	0	0	0	0
174	M272B	Y	0	0	0	0
175	M273	X	0	0	0	0
176	M273	Y	0	0	0	0
177	M270D	X	0	0	0	0
178	M270D	Y	0	0	0	0
179	M271C	X	0	0	0	0
180	M271C	Y	0	0	0	0
181	M274	X	0	0	0	0
182	M274	Y	0	0	0	0
183	M275	X	0	0	0	0
184	M275	Y	0	0	0	0

**Member Distributed Loads (BLC 5 : Structure Wind (30))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	-10.911	-10.911	0	0
2	M21	Y	6.3	6.3	0	0
3	M22	X	-10.911	-10.911	0	0
4	M22	Y	6.3	6.3	0	0
5	M23	X	-10.911	-10.911	0	0
6	M23	Y	6.3	6.3	0	0
7	M39	X	-18.186	-18.186	0	0
8	M39	Y	10.5	10.5	0	0
9	M40	X	-18.186	-18.186	0	0
10	M40	Y	10.5	10.5	0	0
11	M41	X	0	0	0	0
12	M41	Y	0	0	0	0
13	M45	X	-6.062	-6.062	0	0
14	M45	Y	3.5	3.5	0	0
15	M50	X	-18.186	-18.186	0	0

**Member Distributed Loads (BLC 5 : Structure Wind (30)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
16	M50	Y	10.5	10.5	0	0
17	M42A	X	-10.911	-10.911	0	0
18	M42A	Y	6.3	6.3	0	0
19	M43A	X	-10.911	-10.911	0	0
20	M43A	Y	6.3	6.3	0	0
21	M44A	X	-10.911	-10.911	0	0
22	M44A	Y	6.3	6.3	0	0
23	M26	X	-10.911	-10.911	0	0
24	M26	Y	6.3	6.3	0	0
25	M27	X	-10.911	-10.911	0	0
26	M27	Y	6.3	6.3	0	0
27	M28	X	-10.911	-10.911	0	0
28	M28	Y	6.3	6.3	0	0
29	M30	X	-18.186	-18.186	0	0
30	M30	Y	10.5	10.5	0	0
31	M31	X	0	0	0	0
32	M31	Y	0	0	0	0
33	M32	X	-18.186	-18.186	0	0
34	M32	Y	10.5	10.5	0	0
35	M41A	X	-10.911	-10.911	0	0
36	M41A	Y	6.3	6.3	0	0
37	M42	X	-10.911	-10.911	0	0
38	M42	Y	6.3	6.3	0	0
39	M43	X	-10.911	-10.911	0	0
40	M43	Y	6.3	6.3	0	0
41	M51A	X	0	0	0	0
42	M51A	Y	0	0	0	0
43	M52	X	0	0	0	0
44	M52	Y	0	0	0	0
45	M53	X	0	0	0	0
46	M53	Y	0	0	0	0
47	M55	X	0	0	0	0
48	M55	Y	0	0	0	0
49	M56	X	-18.186	-18.186	0	0
50	M56	Y	10.5	10.5	0	0
51	M57A	X	-18.186	-18.186	0	0
52	M57A	Y	10.5	10.5	0	0
53	M66	X	0	0	0	0
54	M66	Y	0	0	0	0
55	M67	X	0	0	0	0
56	M67	Y	0	0	0	0
57	M68	X	0	0	0	0
58	M68	Y	0	0	0	0
59	M72A	X	0	0	0	0
60	M72A	Y	0	0	0	0
61	M73A	X	-18.186	-18.186	0	0
62	M73A	Y	10.5	10.5	0	0
63	M74A	X	-18.186	-18.186	0	0
64	M74A	Y	10.5	10.5	0	0
65	M71A	X	-.941	-.941	0	0
66	M71A	Y	.543	.543	0	0
67	M72B	X	-21.823	-21.823	0	0

**Member Distributed Loads (BLC 5 : Structure Wind (30)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
68	M72B	Y	12.599	12.599	0	0
69	M82	X	-7.342	-7.342	0	0
70	M82	Y	4.239	4.239	0	0
71	M88	X	-21.823	-21.823	0	0
72	M88	Y	12.599	12.599	0	0
73	M100	X	-13.54	-13.54	0	0
74	M100	Y	7.817	7.817	0	0
75	M106	X	0	0	0	0
76	M106	Y	0	0	0	0
77	M125	X	-7.274	-7.274	0	0
78	M125	Y	4.2	4.2	0	0
79	M126	X	-7.274	-7.274	0	0
80	M126	Y	4.2	4.2	0	0
81	M130	X	-6.911	-6.911	0	0
82	M130	Y	3.99	3.99	0	0
83	M138	X	-6.911	-6.911	0	0
84	M138	Y	3.99	3.99	0	0
85	M155	X	-6.911	-6.911	0	0
86	M155	Y	3.99	3.99	0	0
87	M157	X	-6.911	-6.911	0	0
88	M157	Y	3.99	3.99	0	0
89	M159	X	-6.911	-6.911	0	0
90	M159	Y	3.99	3.99	0	0
91	SR1	X	-5.183	-5.183	0	0
92	SR1	Y	2.992	2.992	0	0
93	SR2	X	-21.823	-21.823	0	0
94	SR2	Y	12.599	12.599	0	0
95	SR10	X	-5.183	-5.183	0	0
96	SR10	Y	2.992	2.992	0	0
97	SR12	X	-21.823	-21.823	0	0
98	SR12	Y	12.599	12.599	0	0
99	SR19	X	0	0	0	0
100	SR19	Y	0	0	0	0
101	SR20	X	0	0	0	0
102	SR20	Y	0	0	0	0
103	SR21	X	0	0	0	0
104	SR21	Y	0	0	0	0
105	SR28	X	-9.093	-9.093	0	0
106	SR28	Y	5.25	5.25	0	0
107	SR30	X	-9.093	-9.093	0	0
108	SR30	Y	5.25	5.25	0	0
109	M189	X	-7.274	-7.274	0	0
110	M189	Y	4.2	4.2	0	0
111	M190	X	-7.274	-7.274	0	0
112	M190	Y	4.2	4.2	0	0
113	M191	X	-6.911	-6.911	0	0
114	M191	Y	3.99	3.99	0	0
115	M190A	X	-7.274	-7.274	0	0
116	M190A	Y	4.2	4.2	0	0
117	M191A	X	-7.274	-7.274	0	0
118	M191A	Y	4.2	4.2	0	0
119	M192A	X	-6.911	-6.911	0	0

**Member Distributed Loads (BLC 5 : Structure Wind (30)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
120	M192A	Y	3.99	3.99	0	0
121	M194B	X	-7.274	-7.274	0	0
122	M194B	Y	4.2	4.2	0	0
123	M195A	X	-7.274	-7.274	0	0
124	M195A	Y	4.2	4.2	0	0
125	M196	X	-6.911	-6.911	0	0
126	M196	Y	3.99	3.99	0	0
127	M200	X	-6.911	-6.911	0	0
128	M200	Y	3.99	3.99	0	0
129	M211	X	-7.274	-7.274	0	0
130	M211	Y	4.2	4.2	0	0
131	M212	X	-7.274	-7.274	0	0
132	M212	Y	4.2	4.2	0	0
133	M213	X	-6.911	-6.911	0	0
134	M213	Y	3.99	3.99	0	0
135	M219	X	-7.274	-7.274	0	0
136	M219	Y	4.2	4.2	0	0
137	M220	X	-7.274	-7.274	0	0
138	M220	Y	4.2	4.2	0	0
139	M221	X	-6.911	-6.911	0	0
140	M221	Y	3.99	3.99	0	0
141	M233	X	-29.097	-29.097	0	0
142	M233	Y	16.799	16.799	0	0
143	M234	X	-29.097	-29.097	0	0
144	M234	Y	16.799	16.799	0	0
145	M235	X	-6.911	-6.911	0	0
146	M235	Y	3.99	3.99	0	0
147	M239	X	-6.911	-6.911	0	0
148	M239	Y	3.99	3.99	0	0
149	M250	X	-29.097	-29.097	0	0
150	M250	Y	16.799	16.799	0	0
151	M251	X	-29.097	-29.097	0	0
152	M251	Y	16.799	16.799	0	0
153	M252	X	-6.911	-6.911	0	0
154	M252	Y	3.99	3.99	0	0
155	M258	X	-29.097	-29.097	0	0
156	M258	Y	16.799	16.799	0	0
157	M259	X	-29.097	-29.097	0	0
158	M259	Y	16.799	16.799	0	0
159	M260	X	-6.911	-6.911	0	0
160	M260	Y	3.99	3.99	0	0
161	M264A	X	-21.823	-21.823	0	0
162	M264A	Y	12.599	12.599	0	0
163	M268A	X	0	0	0	0
164	M268A	Y	0	0	0	0
165	M272A	X	-9.093	-9.093	0	0
166	M272A	Y	5.25	5.25	0	0
167	SR20	X	-21.823	-21.823	%.67	4.33
168	SR20	Y	12.599	12.599	%.67	4.33
169	SR12	X	0	0	0	5
170	SR12	Y	0	0	0	5
171	SR30	X	-9.093	-9.093	0	19.399

**Member Distributed Loads (BLC 5 : Structure Wind (30)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
172	SR30	Y	5.25	5.25	0	19.399
173	M272B	X	-7.274	-7.274	0	0
174	M272B	Y	4.2	4.2	0	0
175	M273	X	-7.274	-7.274	0	0
176	M273	Y	4.2	4.2	0	0
177	M270D	X	-7.274	-7.274	0	0
178	M270D	Y	4.2	4.2	0	0
179	M271C	X	-7.274	-7.274	0	0
180	M271C	Y	4.2	4.2	0	0
181	M274	X	-7.274	-7.274	0	0
182	M274	Y	4.2	4.2	0	0
183	M275	X	-7.274	-7.274	0	0
184	M275	Y	4.2	4.2	0	0

**Member Distributed Loads (BLC 6 : Structure Wind (45))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	-5.939	-5.939	0	0
2	M21	Y	5.939	5.939	0	0
3	M22	X	-5.939	-5.939	0	0
4	M22	Y	5.939	5.939	0	0
5	M23	X	-5.939	-5.939	0	0
6	M23	Y	5.939	5.939	0	0
7	M39	X	-9.899	-9.899	0	0
8	M39	Y	9.899	9.899	0	0
9	M40	X	-18.472	-18.472	0	0
10	M40	Y	18.472	18.472	0	0
11	M41	X	-1.326	-1.326	0	0
12	M41	Y	1.326	1.326	0	0
13	M45	X	-9.899	-9.899	0	0
14	M45	Y	9.899	9.899	0	0
15	M50	X	-9.899	-9.899	0	0
16	M50	Y	9.899	9.899	0	0
17	M42A	X	-5.939	-5.939	0	0
18	M42A	Y	5.939	5.939	0	0
19	M43A	X	-5.939	-5.939	0	0
20	M43A	Y	5.939	5.939	0	0
21	M44A	X	-5.939	-5.939	0	0
22	M44A	Y	5.939	5.939	0	0
23	M26	X	-11.083	-11.083	0	0
24	M26	Y	11.083	11.083	0	0
25	M27	X	-11.083	-11.083	0	0
26	M27	Y	11.083	11.083	0	0
27	M28	X	-11.083	-11.083	0	0
28	M28	Y	11.083	11.083	0	0
29	M30	X	-18.472	-18.472	0	0
30	M30	Y	18.472	18.472	0	0
31	M31	X	-1.326	-1.326	0	0
32	M31	Y	1.326	1.326	0	0
33	M32	X	-9.899	-9.899	0	0
34	M32	Y	9.899	9.899	0	0
35	M41A	X	-11.083	-11.083	0	0

**Member Distributed Loads (BLC 6 : Structure Wind (45)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
36	M41A	Y	11.083	11.083	0	0
37	M42	X	-11.083	-11.083	0	0
38	M42	Y	11.083	11.083	0	0
39	M43	X	-11.083	-11.083	0	0
40	M43	Y	11.083	11.083	0	0
41	M51A	X	-.796	-.796	0	0
42	M51A	Y	.796	.796	0	0
43	M52	X	-.796	-.796	0	0
44	M52	Y	.796	.796	0	0
45	M53	X	-.796	-.796	0	0
46	M53	Y	.796	.796	0	0
47	M55	X	-1.326	-1.326	0	0
48	M55	Y	1.326	1.326	0	0
49	M56	X	-9.899	-9.899	0	0
50	M56	Y	9.899	9.899	0	0
51	M57A	X	-18.472	-18.472	0	0
52	M57A	Y	18.472	18.472	0	0
53	M66	X	-.796	-.796	0	0
54	M66	Y	.796	.796	0	0
55	M67	X	-.796	-.796	0	0
56	M67	Y	.796	.796	0	0
57	M68	X	-.796	-.796	0	0
58	M68	Y	.796	.796	0	0
59	M72A	X	-1.326	-1.326	0	0
60	M72A	Y	1.326	1.326	0	0
61	M73A	X	-18.472	-18.472	0	0
62	M73A	Y	18.472	18.472	0	0
63	M74A	X	-9.899	-9.899	0	0
64	M74A	Y	9.899	9.899	0	0
65	M71A	X	-2.922	-2.922	0	0
66	M71A	Y	2.922	2.922	0	0
67	M72B	X	-11.879	-11.879	0	0
68	M72B	Y	11.879	11.879	0	0
69	M82	X	-3.018	-3.018	0	0
70	M82	Y	3.018	3.018	0	0
71	M88	X	-22.166	-22.166	0	0
72	M88	Y	22.166	22.166	0	0
73	M100	X	-11.879	-11.879	0	0
74	M100	Y	11.879	11.879	0	0
75	M106	X	-1.591	-1.591	0	0
76	M106	Y	1.591	1.591	0	0
77	M125	X	-11.879	-11.879	0	0
78	M125	Y	11.879	11.879	0	0
79	M126	X	-11.879	-11.879	0	0
80	M126	Y	11.879	11.879	0	0
81	M130	X	-5.642	-5.642	0	0
82	M130	Y	5.642	5.642	0	0
83	M138	X	-5.642	-5.642	0	0
84	M138	Y	5.642	5.642	0	0
85	M155	X	-5.642	-5.642	0	0
86	M155	Y	5.642	5.642	0	0
87	M157	X	-5.642	-5.642	0	0



**Member Distributed Loads (BLC 6 : Structure Wind (45)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
88	M157	Y	5.642	5.642	0	0
89	M159	X	-5.642	-5.642	0	0
90	M159	Y	5.642	5.642	0	0
91	SR1	X	-2.821	-2.821	0	0
92	SR1	Y	2.821	2.821	0	0
93	SR2	X	-11.879	-11.879	0	0
94	SR2	Y	11.879	11.879	0	0
95	SR10	X	-5.265	-5.265	0	0
96	SR10	Y	5.265	5.265	0	0
97	SR12	X	-22.166	-22.166	0	0
98	SR12	Y	22.166	22.166	0	0
99	SR19	X	-.378	-.378	0	0
100	SR19	Y	.378	.378	0	0
101	SR20	X	-1.591	-1.591	0	0
102	SR20	Y	1.591	1.591	0	0
103	SR21	X	-1.591	-1.591	0	0
104	SR21	Y	1.591	1.591	0	0
105	SR28	X	-9.236	-9.236	0	0
106	SR28	Y	9.236	9.236	0	0
107	SR30	X	-4.95	-4.95	0	0
108	SR30	Y	4.95	4.95	0	0
109	M189	X	-11.879	-11.879	0	0
110	M189	Y	11.879	11.879	0	0
111	M190	X	-11.879	-11.879	0	0
112	M190	Y	11.879	11.879	0	0
113	M191	X	-5.642	-5.642	0	0
114	M191	Y	5.642	5.642	0	0
115	M190A	X	-11.879	-11.879	0	0
116	M190A	Y	11.879	11.879	0	0
117	M191A	X	-11.879	-11.879	0	0
118	M191A	Y	11.879	11.879	0	0
119	M192A	X	-5.642	-5.642	0	0
120	M192A	Y	5.642	5.642	0	0
121	M194B	X	-1.591	-1.591	0	0
122	M194B	Y	1.591	1.591	0	0
123	M195A	X	-1.591	-1.591	0	0
124	M195A	Y	1.591	1.591	0	0
125	M196	X	-5.642	-5.642	0	0
126	M196	Y	5.642	5.642	0	0
127	M200	X	-5.642	-5.642	0	0
128	M200	Y	5.642	5.642	0	0
129	M211	X	-1.591	-1.591	0	0
130	M211	Y	1.591	1.591	0	0
131	M212	X	-1.591	-1.591	0	0
132	M212	Y	1.591	1.591	0	0
133	M213	X	-5.642	-5.642	0	0
134	M213	Y	5.642	5.642	0	0
135	M219	X	-1.591	-1.591	0	0
136	M219	Y	1.591	1.591	0	0
137	M220	X	-1.591	-1.591	0	0
138	M220	Y	1.591	1.591	0	0
139	M221	X	-5.642	-5.642	0	0

**Member Distributed Loads (BLC 6 : Structure Wind (45)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in, %]	End Location[in, %]
140	M221	Y	5.642	5.642	0	0
141	M233	X	-22.166	-22.166	0	0
142	M233	Y	22.166	22.166	0	0
143	M234	X	-22.166	-22.166	0	0
144	M234	Y	22.166	22.166	0	0
145	M235	X	-5.642	-5.642	0	0
146	M235	Y	5.642	5.642	0	0
147	M239	X	-5.642	-5.642	0	0
148	M239	Y	5.642	5.642	0	0
149	M250	X	-22.166	-22.166	0	0
150	M250	Y	22.166	22.166	0	0
151	M251	X	-22.166	-22.166	0	0
152	M251	Y	22.166	22.166	0	0
153	M252	X	-5.642	-5.642	0	0
154	M252	Y	5.642	5.642	0	0
155	M258	X	-22.166	-22.166	0	0
156	M258	Y	22.166	22.166	0	0
157	M259	X	-22.166	-22.166	0	0
158	M259	Y	22.166	22.166	0	0
159	M260	X	-5.642	-5.642	0	0
160	M260	Y	5.642	5.642	0	0
161	M264A	X	-11.879	-11.879	0	0
162	M264A	Y	11.879	11.879	0	0
163	M268A	X	-1.591	-1.591	0	0
164	M268A	Y	1.591	1.591	0	0
165	M272A	X	-9.236	-9.236	0	0
166	M272A	Y	9.236	9.236	0	0
167	SR20	X	-11.879	-11.879	%.67	4.33
168	SR20	Y	11.879	11.879	%.67	4.33
169	SR12	X	-1.591	-1.591	0	5
170	SR12	Y	1.591	1.591	0	5
171	SR30	X	-9.236	-9.236	0	19.399
172	SR30	Y	9.236	9.236	0	19.399
173	M272B	X	-11.879	-11.879	0	0
174	M272B	Y	11.879	11.879	0	0
175	M273	X	-11.879	-11.879	0	0
176	M273	Y	11.879	11.879	0	0
177	M270D	X	-11.879	-11.879	0	0
178	M270D	Y	11.879	11.879	0	0
179	M271C	X	-11.879	-11.879	0	0
180	M271C	Y	11.879	11.879	0	0
181	M274	X	-11.879	-11.879	0	0
182	M274	Y	11.879	11.879	0	0
183	M275	X	-11.879	-11.879	0	0
184	M275	Y	11.879	11.879	0	0

**Member Distributed Loads (BLC 7 : Structure Wind (60))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in, %]	End Location[in, %]
1	M21	X	-2.1	-2.1	0	0
2	M21	Y	3.637	3.637	0	0
3	M22	X	-2.1	-2.1	0	0

**Member Distributed Loads (BLC 7 : Structure Wind (60)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
4	M22	Y	3.637	3.637	0	0
5	M23	X	-2.1	-2.1	0	0
6	M23	Y	3.637	3.637	0	0
7	M39	X	-3.5	-3.5	0	0
8	M39	Y	6.062	6.062	0	0
9	M40	X	-13.999	-13.999	0	0
10	M40	Y	24.248	24.248	0	0
11	M41	X	-3.5	-3.5	0	0
12	M41	Y	6.062	6.062	0	0
13	M45	X	-10.5	-10.5	0	0
14	M45	Y	18.186	18.186	0	0
15	M50	X	-3.5	-3.5	0	0
16	M50	Y	6.062	6.062	0	0
17	M42A	X	-2.1	-2.1	0	0
18	M42A	Y	3.637	3.637	0	0
19	M43A	X	-2.1	-2.1	0	0
20	M43A	Y	3.637	3.637	0	0
21	M44A	X	-2.1	-2.1	0	0
22	M44A	Y	3.637	3.637	0	0
23	M26	X	-8.4	-8.4	0	0
24	M26	Y	14.549	14.549	0	0
25	M27	X	-8.4	-8.4	0	0
26	M27	Y	14.549	14.549	0	0
27	M28	X	-8.4	-8.4	0	0
28	M28	Y	14.549	14.549	0	0
29	M30	X	-13.999	-13.999	0	0
30	M30	Y	24.248	24.248	0	0
31	M31	X	-3.5	-3.5	0	0
32	M31	Y	6.062	6.062	0	0
33	M32	X	-3.5	-3.5	0	0
34	M32	Y	6.062	6.062	0	0
35	M41A	X	-8.4	-8.4	0	0
36	M41A	Y	14.549	14.549	0	0
37	M42	X	-8.4	-8.4	0	0
38	M42	Y	14.549	14.549	0	0
39	M43	X	-8.4	-8.4	0	0
40	M43	Y	14.549	14.549	0	0
41	M51A	X	-2.1	-2.1	0	0
42	M51A	Y	3.637	3.637	0	0
43	M52	X	-2.1	-2.1	0	0
44	M52	Y	3.637	3.637	0	0
45	M53	X	-2.1	-2.1	0	0
46	M53	Y	3.637	3.637	0	0
47	M55	X	-3.5	-3.5	0	0
48	M55	Y	6.062	6.062	0	0
49	M56	X	-3.5	-3.5	0	0
50	M56	Y	6.062	6.062	0	0
51	M57A	X	-13.999	-13.999	0	0
52	M57A	Y	24.248	24.248	0	0
53	M66	X	-2.1	-2.1	0	0
54	M66	Y	3.637	3.637	0	0
55	M67	X	-2.1	-2.1	0	0

**Member Distributed Loads (BLC 7 : Structure Wind (60)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
56	M67	Y	3.637	3.637	0	0
57	M68	X	-2.1	-2.1	0	0
58	M68	Y	3.637	3.637	0	0
59	M72A	X	-3.5	-3.5	0	0
60	M72A	Y	6.062	6.062	0	0
61	M73A	X	-13.999	-13.999	0	0
62	M73A	Y	24.248	24.248	0	0
63	M74A	X	-3.5	-3.5	0	0
64	M74A	Y	6.062	6.062	0	0
65	M71A	X	-4.16	-4.16	0	0
66	M71A	Y	7.206	7.206	0	0
67	M72B	X	-4.2	-4.2	0	0
68	M72B	Y	7.274	7.274	0	0
69	M82	X	-5.83	-5.83	0	0
70	M82	Y	1.009	1.009	0	0
71	M88	X	-16.799	-16.799	0	0
72	M88	Y	29.097	29.097	0	0
73	M100	X	-7.857	-7.857	0	0
74	M100	Y	13.608	13.608	0	0
75	M106	X	-4.2	-4.2	0	0
76	M106	Y	7.274	7.274	0	0
77	M125	X	-12.599	-12.599	0	0
78	M125	Y	21.823	21.823	0	0
79	M126	X	-12.599	-12.599	0	0
80	M126	Y	21.823	21.823	0	0
81	M130	X	-3.99	-3.99	0	0
82	M130	Y	6.911	6.911	0	0
83	M138	X	-3.99	-3.99	0	0
84	M138	Y	6.911	6.911	0	0
85	M155	X	-3.99	-3.99	0	0
86	M155	Y	6.911	6.911	0	0
87	M157	X	-3.99	-3.99	0	0
88	M157	Y	6.911	6.911	0	0
89	M159	X	-3.99	-3.99	0	0
90	M159	Y	6.911	6.911	0	0
91	SR1	X	-9.97	-9.97	0	0
92	SR1	Y	1.728	1.728	0	0
93	SR2	X	-4.2	-4.2	0	0
94	SR2	Y	7.274	7.274	0	0
95	SR10	X	-3.99	-3.99	0	0
96	SR10	Y	6.911	6.911	0	0
97	SR12	X	-16.799	-16.799	0	0
98	SR12	Y	29.097	29.097	0	0
99	SR19	X	-9.97	-9.97	0	0
100	SR19	Y	1.728	1.728	0	0
101	SR20	X	-4.2	-4.2	0	0
102	SR20	Y	7.274	7.274	0	0
103	SR21	X	-4.2	-4.2	0	0
104	SR21	Y	7.274	7.274	0	0
105	SR28	X	-7	-7	0	0
106	SR28	Y	12.124	12.124	0	0
107	SR30	X	-1.75	-1.75	0	0

**Member Distributed Loads (BLC 7 : Structure Wind (60)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
108	SR30	Y	3.031	3.031	0	0
109	M189	X	-12.599	-12.599	0	0
110	M189	Y	21.823	21.823	0	0
111	M190	X	-12.599	-12.599	0	0
112	M190	Y	21.823	21.823	0	0
113	M191	X	-3.99	-3.99	0	0
114	M191	Y	6.911	6.911	0	0
115	M190A	X	-12.599	-12.599	0	0
116	M190A	Y	21.823	21.823	0	0
117	M191A	X	-12.599	-12.599	0	0
118	M191A	Y	21.823	21.823	0	0
119	M192A	X	-3.99	-3.99	0	0
120	M192A	Y	6.911	6.911	0	0
121	M194B	X	0	0	0	0
122	M194B	Y	0	0	0	0
123	M195A	X	0	0	0	0
124	M195A	Y	0	0	0	0
125	M196	X	-3.99	-3.99	0	0
126	M196	Y	6.911	6.911	0	0
127	M200	X	-3.99	-3.99	0	0
128	M200	Y	6.911	6.911	0	0
129	M211	X	0	0	0	0
130	M211	Y	0	0	0	0
131	M212	X	0	0	0	0
132	M212	Y	0	0	0	0
133	M213	X	-3.99	-3.99	0	0
134	M213	Y	6.911	6.911	0	0
135	M219	X	0	0	0	0
136	M219	Y	0	0	0	0
137	M220	X	0	0	0	0
138	M220	Y	0	0	0	0
139	M221	X	-3.99	-3.99	0	0
140	M221	Y	6.911	6.911	0	0
141	M233	X	-12.599	-12.599	0	0
142	M233	Y	21.823	21.823	0	0
143	M234	X	-12.599	-12.599	0	0
144	M234	Y	21.823	21.823	0	0
145	M235	X	-3.99	-3.99	0	0
146	M235	Y	6.911	6.911	0	0
147	M239	X	-3.99	-3.99	0	0
148	M239	Y	6.911	6.911	0	0
149	M250	X	-12.599	-12.599	0	0
150	M250	Y	21.823	21.823	0	0
151	M251	X	-12.599	-12.599	0	0
152	M251	Y	21.823	21.823	0	0
153	M252	X	-3.99	-3.99	0	0
154	M252	Y	6.911	6.911	0	0
155	M258	X	-12.599	-12.599	0	0
156	M258	Y	21.823	21.823	0	0
157	M259	X	-12.599	-12.599	0	0
158	M259	Y	21.823	21.823	0	0
159	M260	X	-3.99	-3.99	0	0

**Member Distributed Loads (BLC 7 : Structure Wind (60)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
160	M260	Y	6.911	6.911	0	0
161	M264A	X	-4.2	-4.2	0	0
162	M264A	Y	7.274	7.274	0	0
163	M268A	X	-4.2	-4.2	0	0
164	M268A	Y	7.274	7.274	0	0
165	M272A	X	-7	-7	0	0
166	M272A	Y	12.124	12.124	0	0
167	SR20	X	-4.2	-4.2	%.67	4.33
168	SR20	Y	7.274	7.274	%.67	4.33
169	SR12	X	-4.2	-4.2	0	5
170	SR12	Y	7.274	7.274	0	5
171	SR30	X	-7	-7	0	19.399
172	SR30	Y	12.124	12.124	0	19.399
173	M272B	X	-12.599	-12.599	0	0
174	M272B	Y	21.823	21.823	0	0
175	M273	X	-12.599	-12.599	0	0
176	M273	Y	21.823	21.823	0	0
177	M270D	X	-12.599	-12.599	0	0
178	M270D	Y	21.823	21.823	0	0
179	M271C	X	-12.599	-12.599	0	0
180	M271C	Y	21.823	21.823	0	0
181	M274	X	-12.599	-12.599	0	0
182	M274	Y	21.823	21.823	0	0
183	M275	X	-12.599	-12.599	0	0
184	M275	Y	21.823	21.823	0	0

**Member Distributed Loads (BLC 8 : Structure Wind (90))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	0	0	0	0
2	M21	Y	0	0	0	0
3	M22	X	0	0	0	0
4	M22	Y	0	0	0	0
5	M23	X	0	0	0	0
6	M23	Y	0	0	0	0
7	M39	X	0	0	0	0
8	M39	Y	0	0	0	0
9	M40	X	-5e-6	-5e-6	0	0
10	M40	Y	20.999	20.999	0	0
11	M41	X	-5e-6	-5e-6	0	0
12	M41	Y	20.999	20.999	0	0
13	M45	X	-6e-6	-6e-6	0	0
14	M45	Y	27.999	27.999	0	0
15	M50	X	0	0	0	0
16	M50	Y	0	0	0	0
17	M42A	X	0	0	0	0
18	M42A	Y	0	0	0	0
19	M43A	X	0	0	0	0
20	M43A	Y	0	0	0	0
21	M44A	X	0	0	0	0
22	M44A	Y	0	0	0	0
23	M26	X	-3e-6	-3e-6	0	0

**Member Distributed Loads (BLC 8 : Structure Wind (90)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
24	M26	Y	12.599	12.599	0	0
25	M27	X	-3e-6	-3e-6	0	0
26	M27	Y	12.599	12.599	0	0
27	M28	X	-3e-6	-3e-6	0	0
28	M28	Y	12.599	12.599	0	0
29	M30	X	-5e-6	-5e-6	0	0
30	M30	Y	20.999	20.999	0	0
31	M31	X	-5e-6	-5e-6	0	0
32	M31	Y	20.999	20.999	0	0
33	M32	X	0	0	0	0
34	M32	Y	0	0	0	0
35	M41A	X	-3e-6	-3e-6	0	0
36	M41A	Y	12.599	12.599	0	0
37	M42	X	-3e-6	-3e-6	0	0
38	M42	Y	12.599	12.599	0	0
39	M43	X	-3e-6	-3e-6	0	0
40	M43	Y	12.599	12.599	0	0
41	M51A	X	-3e-6	-3e-6	0	0
42	M51A	Y	12.599	12.599	0	0
43	M52	X	-3e-6	-3e-6	0	0
44	M52	Y	12.599	12.599	0	0
45	M53	X	-3e-6	-3e-6	0	0
46	M53	Y	12.599	12.599	0	0
47	M55	X	-5e-6	-5e-6	0	0
48	M55	Y	20.999	20.999	0	0
49	M56	X	0	0	0	0
50	M56	Y	0	0	0	0
51	M57A	X	-5e-6	-5e-6	0	0
52	M57A	Y	20.999	20.999	0	0
53	M66	X	-3e-6	-3e-6	0	0
54	M66	Y	12.599	12.599	0	0
55	M67	X	-3e-6	-3e-6	0	0
56	M67	Y	12.599	12.599	0	0
57	M68	X	-3e-6	-3e-6	0	0
58	M68	Y	12.599	12.599	0	0
59	M72A	X	-5e-6	-5e-6	0	0
60	M72A	Y	20.999	20.999	0	0
61	M73A	X	-5e-6	-5e-6	0	0
62	M73A	Y	20.999	20.999	0	0
63	M74A	X	0	0	0	0
64	M74A	Y	0	0	0	0
65	M71A	X	-4e-6	-4e-6	0	0
66	M71A	Y	15.634	15.634	0	0
67	M72B	X	0	0	0	0
68	M72B	Y	0	0	0	0
69	M82	X	0	0	0	0
70	M82	Y	1.086	1.086	0	0
71	M88	X	-6e-6	-6e-6	0	0
72	M88	Y	25.199	25.199	0	0
73	M100	X	-2e-6	-2e-6	0	0
74	M100	Y	8.478	8.478	0	0
75	M106	X	-6e-6	-6e-6	0	0

**Member Distributed Loads (BLC 8 : Structure Wind (90)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
76	M106	Y	25.199	25.199	0	0
77	M125	X	-8e-6	-8e-6	0	0
78	M125	Y	33.599	33.599	0	0
79	M126	X	-8e-6	-8e-6	0	0
80	M126	Y	33.599	33.599	0	0
81	M130	X	-2e-6	-2e-6	0	0
82	M130	Y	7.98	7.98	0	0
83	M138	X	-2e-6	-2e-6	0	0
84	M138	Y	7.98	7.98	0	0
85	M155	X	-2e-6	-2e-6	0	0
86	M155	Y	7.98	7.98	0	0
87	M157	X	-2e-6	-2e-6	0	0
88	M157	Y	7.98	7.98	0	0
89	M159	X	-2e-6	-2e-6	0	0
90	M159	Y	7.98	7.98	0	0
91	SR1	X	0	0	0	0
92	SR1	Y	0	0	0	0
93	SR2	X	0	0	0	0
94	SR2	Y	0	0	0	0
95	SR10	X	-1e-6	-1e-6	0	0
96	SR10	Y	5.985	5.985	0	0
97	SR12	X	-6e-6	-6e-6	0	0
98	SR12	Y	25.199	25.199	0	0
99	SR19	X	-1e-6	-1e-6	0	0
100	SR19	Y	5.985	5.985	0	0
101	SR20	X	-6e-6	-6e-6	0	0
102	SR20	Y	25.199	25.199	0	0
103	SR21	X	-6e-6	-6e-6	0	0
104	SR21	Y	25.199	25.199	0	0
105	SR28	X	-2e-6	-2e-6	0	0
106	SR28	Y	10.5	10.5	0	0
107	SR30	X	0	0	0	0
108	SR30	Y	0	0	0	0
109	M189	X	-8e-6	-8e-6	0	0
110	M189	Y	33.599	33.599	0	0
111	M190	X	-8e-6	-8e-6	0	0
112	M190	Y	33.599	33.599	0	0
113	M191	X	-2e-6	-2e-6	0	0
114	M191	Y	7.98	7.98	0	0
115	M190A	X	-8e-6	-8e-6	0	0
116	M190A	Y	33.599	33.599	0	0
117	M191A	X	-8e-6	-8e-6	0	0
118	M191A	Y	33.599	33.599	0	0
119	M192A	X	-2e-6	-2e-6	0	0
120	M192A	Y	7.98	7.98	0	0
121	M194B	X	-2e-6	-2e-6	0	0
122	M194B	Y	8.4	8.4	0	0
123	M195A	X	-2e-6	-2e-6	0	0
124	M195A	Y	8.4	8.4	0	0
125	M196	X	-2e-6	-2e-6	0	0
126	M196	Y	7.98	7.98	0	0
127	M200	X	-2e-6	-2e-6	0	0



**Member Distributed Loads (BLC 8 : Structure Wind (90)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
128	M200	Y	7.98	7.98	0	0
129	M211	X	-2e-6	-2e-6	0	0
130	M211	Y	8.4	8.4	0	0
131	M212	X	-2e-6	-2e-6	0	0
132	M212	Y	8.4	8.4	0	0
133	M213	X	-2e-6	-2e-6	0	0
134	M213	Y	7.98	7.98	0	0
135	M219	X	-2e-6	-2e-6	0	0
136	M219	Y	8.4	8.4	0	0
137	M220	X	-2e-6	-2e-6	0	0
138	M220	Y	8.4	8.4	0	0
139	M221	X	-2e-6	-2e-6	0	0
140	M221	Y	7.98	7.98	0	0
141	M233	X	-2e-6	-2e-6	0	0
142	M233	Y	8.4	8.4	0	0
143	M234	X	-2e-6	-2e-6	0	0
144	M234	Y	8.4	8.4	0	0
145	M235	X	-2e-6	-2e-6	0	0
146	M235	Y	7.98	7.98	0	0
147	M239	X	-2e-6	-2e-6	0	0
148	M239	Y	7.98	7.98	0	0
149	M250	X	-2e-6	-2e-6	0	0
150	M250	Y	8.4	8.4	0	0
151	M251	X	-2e-6	-2e-6	0	0
152	M251	Y	8.4	8.4	0	0
153	M252	X	-2e-6	-2e-6	0	0
154	M252	Y	7.98	7.98	0	0
155	M258	X	-2e-6	-2e-6	0	0
156	M258	Y	8.4	8.4	0	0
157	M259	X	-2e-6	-2e-6	0	0
158	M259	Y	8.4	8.4	0	0
159	M260	X	-2e-6	-2e-6	0	0
160	M260	Y	7.98	7.98	0	0
161	M264A	X	0	0	0	0
162	M264A	Y	0	0	0	0
163	M268A	X	-6e-6	-6e-6	0	0
164	M268A	Y	25.199	25.199	0	0
165	M272A	X	-2e-6	-2e-6	0	0
166	M272A	Y	10.5	10.5	0	0
167	SR20	X	0	0	%.67	4.33
168	SR20	Y	0	0	%.67	4.33
169	SR12	X	-6e-6	-6e-6	0	5
170	SR12	Y	25.199	25.199	0	5
171	SR30	X	-2e-6	-2e-6	0	19.399
172	SR30	Y	10.5	10.5	0	19.399
173	M272B	X	-8e-6	-8e-6	0	0
174	M272B	Y	33.599	33.599	0	0
175	M273	X	-8e-6	-8e-6	0	0
176	M273	Y	33.599	33.599	0	0
177	M270D	X	-8e-6	-8e-6	0	0
178	M270D	Y	33.599	33.599	0	0
179	M271C	X	-8e-6	-8e-6	0	0

**Member Distributed Loads (BLC 8 : Structure Wind (90)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
180	M271C	Y	33.599	33.599	0	0
181	M274	X	-8e-6	-8e-6	0	0
182	M274	Y	33.599	33.599	0	0
183	M275	X	-8e-6	-8e-6	0	0
184	M275	Y	33.599	33.599	0	0

**Member Distributed Loads (BLC 9 : Structure Wind (120))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	2.1	2.1	0	0
2	M21	Y	3.637	3.637	0	0
3	M22	X	2.1	2.1	0	0
4	M22	Y	3.637	3.637	0	0
5	M23	X	2.1	2.1	0	0
6	M23	Y	3.637	3.637	0	0
7	M39	X	3.5	3.5	0	0
8	M39	Y	6.062	6.062	0	0
9	M40	X	3.5	3.5	0	0
10	M40	Y	6.062	6.062	0	0
11	M41	X	13.999	13.999	0	0
12	M41	Y	24.248	24.248	0	0
13	M45	X	10.5	10.5	0	0
14	M45	Y	18.186	18.186	0	0
15	M50	X	3.5	3.5	0	0
16	M50	Y	6.062	6.062	0	0
17	M42A	X	2.1	2.1	0	0
18	M42A	Y	3.637	3.637	0	0
19	M43A	X	2.1	2.1	0	0
20	M43A	Y	3.637	3.637	0	0
21	M44A	X	2.1	2.1	0	0
22	M44A	Y	3.637	3.637	0	0
23	M26	X	2.1	2.1	0	0
24	M26	Y	3.637	3.637	0	0
25	M27	X	2.1	2.1	0	0
26	M27	Y	3.637	3.637	0	0
27	M28	X	2.1	2.1	0	0
28	M28	Y	3.637	3.637	0	0
29	M30	X	3.5	3.5	0	0
30	M30	Y	6.062	6.062	0	0
31	M31	X	13.999	13.999	0	0
32	M31	Y	24.248	24.248	0	0
33	M32	X	3.5	3.5	0	0
34	M32	Y	6.062	6.062	0	0
35	M41A	X	2.1	2.1	0	0
36	M41A	Y	3.637	3.637	0	0
37	M42	X	2.1	2.1	0	0
38	M42	Y	3.637	3.637	0	0
39	M43	X	2.1	2.1	0	0
40	M43	Y	3.637	3.637	0	0
41	M51A	X	8.4	8.4	0	0
42	M51A	Y	14.549	14.549	0	0
43	M52	X	8.4	8.4	0	0

**Member Distributed Loads (BLC 9 : Structure Wind (120)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
44	M52	Y	14.549	14.549	0	0
45	M53	X	8.4	8.4	0	0
46	M53	Y	14.549	14.549	0	0
47	M55	X	13.999	13.999	0	0
48	M55	Y	24.248	24.248	0	0
49	M56	X	3.5	3.5	0	0
50	M56	Y	6.062	6.062	0	0
51	M57A	X	3.5	3.5	0	0
52	M57A	Y	6.062	6.062	0	0
53	M66	X	8.4	8.4	0	0
54	M66	Y	14.549	14.549	0	0
55	M67	X	8.4	8.4	0	0
56	M67	Y	14.549	14.549	0	0
57	M68	X	8.4	8.4	0	0
58	M68	Y	14.549	14.549	0	0
59	M72A	X	13.999	13.999	0	0
60	M72A	Y	24.248	24.248	0	0
61	M73A	X	3.5	3.5	0	0
62	M73A	Y	6.062	6.062	0	0
63	M74A	X	3.5	3.5	0	0
64	M74A	Y	6.062	6.062	0	0
65	M71A	X	7.857	7.857	0	0
66	M71A	Y	13.608	13.608	0	0
67	M72B	X	4.2	4.2	0	0
68	M72B	Y	7.274	7.274	0	0
69	M82	X	4.16	4.16	0	0
70	M82	Y	7.206	7.206	0	0
71	M88	X	4.2	4.2	0	0
72	M88	Y	7.274	7.274	0	0
73	M100	X	.583	.583	0	0
74	M100	Y	1.009	1.009	0	0
75	M106	X	16.799	16.799	0	0
76	M106	Y	29.097	29.097	0	0
77	M125	X	12.599	12.599	0	0
78	M125	Y	21.823	21.823	0	0
79	M126	X	12.599	12.599	0	0
80	M126	Y	21.823	21.823	0	0
81	M130	X	3.99	3.99	0	0
82	M130	Y	6.911	6.911	0	0
83	M138	X	3.99	3.99	0	0
84	M138	Y	6.911	6.911	0	0
85	M155	X	3.99	3.99	0	0
86	M155	Y	6.911	6.911	0	0
87	M157	X	3.99	3.99	0	0
88	M157	Y	6.911	6.911	0	0
89	M159	X	3.99	3.99	0	0
90	M159	Y	6.911	6.911	0	0
91	SR1	X	.997	.997	0	0
92	SR1	Y	1.728	1.728	0	0
93	SR2	X	4.2	4.2	0	0
94	SR2	Y	7.274	7.274	0	0
95	SR10	X	.997	.997	0	0

**Member Distributed Loads (BLC 9 : Structure Wind (120)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
96	SR10	Y	1.728	1.728	0	0
97	SR12	X	4.2	4.2	0	0
98	SR12	Y	7.274	7.274	0	0
99	SR19	X	3.99	3.99	0	0
100	SR19	Y	6.911	6.911	0	0
101	SR20	X	16.799	16.799	0	0
102	SR20	Y	29.097	29.097	0	0
103	SR21	X	16.799	16.799	0	0
104	SR21	Y	29.097	29.097	0	0
105	SR28	X	1.75	1.75	0	0
106	SR28	Y	3.031	3.031	0	0
107	SR30	X	1.75	1.75	0	0
108	SR30	Y	3.031	3.031	0	0
109	M189	X	12.599	12.599	0	0
110	M189	Y	21.823	21.823	0	0
111	M190	X	12.599	12.599	0	0
112	M190	Y	21.823	21.823	0	0
113	M191	X	3.99	3.99	0	0
114	M191	Y	6.911	6.911	0	0
115	M190A	X	12.599	12.599	0	0
116	M190A	Y	21.823	21.823	0	0
117	M191A	X	12.599	12.599	0	0
118	M191A	Y	21.823	21.823	0	0
119	M192A	X	3.99	3.99	0	0
120	M192A	Y	6.911	6.911	0	0
121	M194B	X	12.599	12.599	0	0
122	M194B	Y	21.823	21.823	0	0
123	M195A	X	12.599	12.599	0	0
124	M195A	Y	21.823	21.823	0	0
125	M196	X	3.99	3.99	0	0
126	M196	Y	6.911	6.911	0	0
127	M200	X	3.99	3.99	0	0
128	M200	Y	6.911	6.911	0	0
129	M211	X	12.599	12.599	0	0
130	M211	Y	21.823	21.823	0	0
131	M212	X	12.599	12.599	0	0
132	M212	Y	21.823	21.823	0	0
133	M213	X	3.99	3.99	0	0
134	M213	Y	6.911	6.911	0	0
135	M219	X	12.599	12.599	0	0
136	M219	Y	21.823	21.823	0	0
137	M220	X	12.599	12.599	0	0
138	M220	Y	21.823	21.823	0	0
139	M221	X	3.99	3.99	0	0
140	M221	Y	6.911	6.911	0	0
141	M233	X	0	0	0	0
142	M233	Y	0	0	0	0
143	M234	X	0	0	0	0
144	M234	Y	0	0	0	0
145	M235	X	3.99	3.99	0	0
146	M235	Y	6.911	6.911	0	0
147	M239	X	3.99	3.99	0	0

**Member Distributed Loads (BLC 9 : Structure Wind (120)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
148	M239	Y	6.911	6.911	0	0
149	M250	X	0	0	0	0
150	M250	Y	0	0	0	0
151	M251	X	0	0	0	0
152	M251	Y	0	0	0	0
153	M252	X	3.99	3.99	0	0
154	M252	Y	6.911	6.911	0	0
155	M258	X	0	0	0	0
156	M258	Y	0	0	0	0
157	M259	X	0	0	0	0
158	M259	Y	0	0	0	0
159	M260	X	3.99	3.99	0	0
160	M260	Y	6.911	6.911	0	0
161	M264A	X	4.2	4.2	0	0
162	M264A	Y	7.274	7.274	0	0
163	M268A	X	16.799	16.799	0	0
164	M268A	Y	29.097	29.097	0	0
165	M272A	X	1.75	1.75	0	0
166	M272A	Y	3.031	3.031	0	0
167	SR20	X	4.2	4.2	%.67	4.33
168	SR20	Y	7.274	7.274	%.67	4.33
169	SR12	X	16.799	16.799	0	5
170	SR12	Y	29.097	29.097	0	5
171	SR30	X	1.75	1.75	0	19.399
172	SR30	Y	3.031	3.031	0	19.399
173	M272B	X	12.599	12.599	0	0
174	M272B	Y	21.823	21.823	0	0
175	M273	X	12.599	12.599	0	0
176	M273	Y	21.823	21.823	0	0
177	M270D	X	12.599	12.599	0	0
178	M270D	Y	21.823	21.823	0	0
179	M271C	X	12.599	12.599	0	0
180	M271C	Y	21.823	21.823	0	0
181	M274	X	12.599	12.599	0	0
182	M274	Y	21.823	21.823	0	0
183	M275	X	12.599	12.599	0	0
184	M275	Y	21.823	21.823	0	0

**Member Distributed Loads (BLC 10 : Structure Wind (135))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	5.939	5.939	0	0
2	M21	Y	5.939	5.939	0	0
3	M22	X	5.939	5.939	0	0
4	M22	Y	5.939	5.939	0	0
5	M23	X	5.939	5.939	0	0
6	M23	Y	5.939	5.939	0	0
7	M39	X	9.899	9.899	0	0
8	M39	Y	9.899	9.899	0	0
9	M40	X	1.326	1.326	0	0
10	M40	Y	1.326	1.326	0	0
11	M41	X	18.472	18.472	0	0

**Member Distributed Loads (BLC 10 : Structure Wind (135)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
12	M41	Y	18.472	18.472	0	0
13	M45	X	9.899	9.899	0	0
14	M45	Y	9.899	9.899	0	0
15	M50	X	9.899	9.899	0	0
16	M50	Y	9.899	9.899	0	0
17	M42A	X	5.939	5.939	0	0
18	M42A	Y	5.939	5.939	0	0
19	M43A	X	5.939	5.939	0	0
20	M43A	Y	5.939	5.939	0	0
21	M44A	X	5.939	5.939	0	0
22	M44A	Y	5.939	5.939	0	0
23	M26	X	.796	.796	0	0
24	M26	Y	.796	.796	0	0
25	M27	X	.796	.796	0	0
26	M27	Y	.796	.796	0	0
27	M28	X	.796	.796	0	0
28	M28	Y	.796	.796	0	0
29	M30	X	1.326	1.326	0	0
30	M30	Y	1.326	1.326	0	0
31	M31	X	18.472	18.472	0	0
32	M31	Y	18.472	18.472	0	0
33	M32	X	9.899	9.899	0	0
34	M32	Y	9.899	9.899	0	0
35	M41A	X	.796	.796	0	0
36	M41A	Y	.796	.796	0	0
37	M42	X	.796	.796	0	0
38	M42	Y	.796	.796	0	0
39	M43	X	.796	.796	0	0
40	M43	Y	.796	.796	0	0
41	M51A	X	11.083	11.083	0	0
42	M51A	Y	11.083	11.083	0	0
43	M52	X	11.083	11.083	0	0
44	M52	Y	11.083	11.083	0	0
45	M53	X	11.083	11.083	0	0
46	M53	Y	11.083	11.083	0	0
47	M55	X	18.472	18.472	0	0
48	M55	Y	18.472	18.472	0	0
49	M56	X	9.899	9.899	0	0
50	M56	Y	9.899	9.899	0	0
51	M57A	X	1.326	1.326	0	0
52	M57A	Y	1.326	1.326	0	0
53	M66	X	11.083	11.083	0	0
54	M66	Y	11.083	11.083	0	0
55	M67	X	11.083	11.083	0	0
56	M67	Y	11.083	11.083	0	0
57	M68	X	11.083	11.083	0	0
58	M68	Y	11.083	11.083	0	0
59	M72A	X	18.472	18.472	0	0
60	M72A	Y	18.472	18.472	0	0
61	M73A	X	1.326	1.326	0	0
62	M73A	Y	1.326	1.326	0	0
63	M74A	X	9.899	9.899	0	0

**Member Distributed Loads (BLC 10 : Structure Wind (135)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
64	M74A	Y	9.899	9.899	0	0
65	M71A	X	8.957	8.957	0	0
66	M71A	Y	8.957	8.957	0	0
67	M72B	X	11.879	11.879	0	0
68	M72B	Y	11.879	11.879	0	0
69	M82	X	8.861	8.861	0	0
70	M82	Y	8.861	8.861	0	0
71	M88	X	1.591	1.591	0	0
72	M88	Y	1.591	1.591	0	0
73	M100	X	.000261	.000261	0	0
74	M100	Y	.000261	.000261	0	0
75	M106	X	22.166	22.166	0	0
76	M106	Y	22.166	22.166	0	0
77	M125	X	11.879	11.879	0	0
78	M125	Y	11.879	11.879	0	0
79	M126	X	11.879	11.879	0	0
80	M126	Y	11.879	11.879	0	0
81	M130	X	5.642	5.642	0	0
82	M130	Y	5.642	5.642	0	0
83	M138	X	5.642	5.642	0	0
84	M138	Y	5.642	5.642	0	0
85	M155	X	5.642	5.642	0	0
86	M155	Y	5.642	5.642	0	0
87	M157	X	5.642	5.642	0	0
88	M157	Y	5.642	5.642	0	0
89	M159	X	5.642	5.642	0	0
90	M159	Y	5.642	5.642	0	0
91	SR1	X	2.821	2.821	0	0
92	SR1	Y	2.821	2.821	0	0
93	SR2	X	11.879	11.879	0	0
94	SR2	Y	11.879	11.879	0	0
95	SR10	X	.378	.378	0	0
96	SR10	Y	.378	.378	0	0
97	SR12	X	1.591	1.591	0	0
98	SR12	Y	1.591	1.591	0	0
99	SR19	X	5.265	5.265	0	0
100	SR19	Y	5.265	5.265	0	0
101	SR20	X	22.166	22.166	0	0
102	SR20	Y	22.166	22.166	0	0
103	SR21	X	22.166	22.166	0	0
104	SR21	Y	22.166	22.166	0	0
105	SR28	X	.663	.663	0	0
106	SR28	Y	.663	.663	0	0
107	SR30	X	4.95	4.95	0	0
108	SR30	Y	4.95	4.95	0	0
109	M189	X	11.879	11.879	0	0
110	M189	Y	11.879	11.879	0	0
111	M190	X	11.879	11.879	0	0
112	M190	Y	11.879	11.879	0	0
113	M191	X	5.642	5.642	0	0
114	M191	Y	5.642	5.642	0	0
115	M190A	X	11.879	11.879	0	0

**Member Distributed Loads (BLC 10 : Structure Wind (135)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
116	M190A	Y	11.879	11.879	0	0
117	M191A	X	11.879	11.879	0	0
118	M191A	Y	11.879	11.879	0	0
119	M192A	X	5.642	5.642	0	0
120	M192A	Y	5.642	5.642	0	0
121	M194B	X	22.166	22.166	0	0
122	M194B	Y	22.166	22.166	0	0
123	M195A	X	22.166	22.166	0	0
124	M195A	Y	22.166	22.166	0	0
125	M196	X	5.642	5.642	0	0
126	M196	Y	5.642	5.642	0	0
127	M200	X	5.642	5.642	0	0
128	M200	Y	5.642	5.642	0	0
129	M211	X	22.166	22.166	0	0
130	M211	Y	22.166	22.166	0	0
131	M212	X	22.166	22.166	0	0
132	M212	Y	22.166	22.166	0	0
133	M213	X	5.642	5.642	0	0
134	M213	Y	5.642	5.642	0	0
135	M219	X	22.166	22.166	0	0
136	M219	Y	22.166	22.166	0	0
137	M220	X	22.166	22.166	0	0
138	M220	Y	22.166	22.166	0	0
139	M221	X	5.642	5.642	0	0
140	M221	Y	5.642	5.642	0	0
141	M233	X	1.591	1.591	0	0
142	M233	Y	1.591	1.591	0	0
143	M234	X	1.591	1.591	0	0
144	M234	Y	1.591	1.591	0	0
145	M235	X	5.642	5.642	0	0
146	M235	Y	5.642	5.642	0	0
147	M239	X	5.642	5.642	0	0
148	M239	Y	5.642	5.642	0	0
149	M250	X	1.591	1.591	0	0
150	M250	Y	1.591	1.591	0	0
151	M251	X	1.591	1.591	0	0
152	M251	Y	1.591	1.591	0	0
153	M252	X	5.642	5.642	0	0
154	M252	Y	5.642	5.642	0	0
155	M258	X	1.591	1.591	0	0
156	M258	Y	1.591	1.591	0	0
157	M259	X	1.591	1.591	0	0
158	M259	Y	1.591	1.591	0	0
159	M260	X	5.642	5.642	0	0
160	M260	Y	5.642	5.642	0	0
161	M264A	X	11.879	11.879	0	0
162	M264A	Y	11.879	11.879	0	0
163	M268A	X	22.166	22.166	0	0
164	M268A	Y	22.166	22.166	0	0
165	M272A	X	.663	.663	0	0
166	M272A	Y	.663	.663	0	0
167	SR20	X	11.879	11.879	%.67	4.33



**Member Distributed Loads (BLC 10 : Structure Wind (135)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
168	SR20	Y	11.879	11.879	%.67	4.33
169	SR12	X	22.166	22.166	0	5
170	SR12	Y	22.166	22.166	0	5
171	SR30	X	.663	.663	0	19.399
172	SR30	Y	.663	.663	0	19.399
173	M272B	X	11.879	11.879	0	0
174	M272B	Y	11.879	11.879	0	0
175	M273	X	11.879	11.879	0	0
176	M273	Y	11.879	11.879	0	0
177	M270D	X	11.879	11.879	0	0
178	M270D	Y	11.879	11.879	0	0
179	M271C	X	11.879	11.879	0	0
180	M271C	Y	11.879	11.879	0	0
181	M274	X	11.879	11.879	0	0
182	M274	Y	11.879	11.879	0	0
183	M275	X	11.879	11.879	0	0
184	M275	Y	11.879	11.879	0	0

**Member Distributed Loads (BLC 11 : Structure Wind (150))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	10.911	10.911	0	0
2	M21	Y	6.3	6.3	0	0
3	M22	X	10.911	10.911	0	0
4	M22	Y	6.3	6.3	0	0
5	M23	X	10.911	10.911	0	0
6	M23	Y	6.3	6.3	0	0
7	M39	X	18.186	18.186	0	0
8	M39	Y	10.5	10.5	0	0
9	M40	X	0	0	0	0
10	M40	Y	0	0	0	0
11	M41	X	18.186	18.186	0	0
12	M41	Y	10.5	10.5	0	0
13	M45	X	6.062	6.062	0	0
14	M45	Y	3.5	3.5	0	0
15	M50	X	18.186	18.186	0	0
16	M50	Y	10.5	10.5	0	0
17	M42A	X	10.911	10.911	0	0
18	M42A	Y	6.3	6.3	0	0
19	M43A	X	10.911	10.911	0	0
20	M43A	Y	6.3	6.3	0	0
21	M44A	X	10.911	10.911	0	0
22	M44A	Y	6.3	6.3	0	0
23	M26	X	0	0	0	0
24	M26	Y	0	0	0	0
25	M27	X	0	0	0	0
26	M27	Y	0	0	0	0
27	M28	X	0	0	0	0
28	M28	Y	0	0	0	0
29	M30	X	0	0	0	0
30	M30	Y	0	0	0	0
31	M31	X	18.186	18.186	0	0

**Member Distributed Loads (BLC 11 : Structure Wind (150)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
32	M31	Y	10.5	10.5	0	0
33	M32	X	18.186	18.186	0	0
34	M32	Y	10.5	10.5	0	0
35	M41A	X	0	0	0	0
36	M41A	Y	0	0	0	0
37	M42	X	0	0	0	0
38	M42	Y	0	0	0	0
39	M43	X	0	0	0	0
40	M43	Y	0	0	0	0
41	M51A	X	10.911	10.911	0	0
42	M51A	Y	6.3	6.3	0	0
43	M52	X	10.911	10.911	0	0
44	M52	Y	6.3	6.3	0	0
45	M53	X	10.911	10.911	0	0
46	M53	Y	6.3	6.3	0	0
47	M55	X	18.186	18.186	0	0
48	M55	Y	10.5	10.5	0	0
49	M56	X	18.186	18.186	0	0
50	M56	Y	10.5	10.5	0	0
51	M57A	X	0	0	0	0
52	M57A	Y	0	0	0	0
53	M66	X	10.911	10.911	0	0
54	M66	Y	6.3	6.3	0	0
55	M67	X	10.911	10.911	0	0
56	M67	Y	6.3	6.3	0	0
57	M68	X	10.911	10.911	0	0
58	M68	Y	6.3	6.3	0	0
59	M72A	X	18.186	18.186	0	0
60	M72A	Y	10.5	10.5	0	0
61	M73A	X	0	0	0	0
62	M73A	Y	0	0	0	0
63	M74A	X	18.186	18.186	0	0
64	M74A	Y	10.5	10.5	0	0
65	M71A	X	7.342	7.342	0	0
66	M71A	Y	4.239	4.239	0	0
67	M72B	X	21.823	21.823	0	0
68	M72B	Y	12.599	12.599	0	0
69	M82	X	13.54	13.54	0	0
70	M82	Y	7.817	7.817	0	0
71	M88	X	0	0	0	0
72	M88	Y	0	0	0	0
73	M100	X	.941	.941	0	0
74	M100	Y	.543	.543	0	0
75	M106	X	21.823	21.823	0	0
76	M106	Y	12.6	12.6	0	0
77	M125	X	7.274	7.274	0	0
78	M125	Y	4.2	4.2	0	0
79	M126	X	7.274	7.274	0	0
80	M126	Y	4.2	4.2	0	0
81	M130	X	6.911	6.911	0	0
82	M130	Y	3.99	3.99	0	0
83	M138	X	6.911	6.911	0	0

**Member Distributed Loads (BLC 11 : Structure Wind (150)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
84	M138	Y	3.99	3.99	0	0
85	M155	X	6.911	6.911	0	0
86	M155	Y	3.99	3.99	0	0
87	M157	X	6.911	6.911	0	0
88	M157	Y	3.99	3.99	0	0
89	M159	X	6.911	6.911	0	0
90	M159	Y	3.99	3.99	0	0
91	SR1	X	5.183	5.183	0	0
92	SR1	Y	2.992	2.992	0	0
93	SR2	X	21.823	21.823	0	0
94	SR2	Y	12.599	12.599	0	0
95	SR10	X	0	0	0	0
96	SR10	Y	0	0	0	0
97	SR12	X	0	0	0	0
98	SR12	Y	0	0	0	0
99	SR19	X	5.183	5.183	0	0
100	SR19	Y	2.992	2.992	0	0
101	SR20	X	21.823	21.823	0	0
102	SR20	Y	12.6	12.6	0	0
103	SR21	X	21.823	21.823	0	0
104	SR21	Y	12.6	12.6	0	0
105	SR28	X	0	0	0	0
106	SR28	Y	0	0	0	0
107	SR30	X	9.093	9.093	0	0
108	SR30	Y	5.25	5.25	0	0
109	M189	X	7.274	7.274	0	0
110	M189	Y	4.2	4.2	0	0
111	M190	X	7.274	7.274	0	0
112	M190	Y	4.2	4.2	0	0
113	M191	X	6.911	6.911	0	0
114	M191	Y	3.99	3.99	0	0
115	M190A	X	7.274	7.274	0	0
116	M190A	Y	4.2	4.2	0	0
117	M191A	X	7.274	7.274	0	0
118	M191A	Y	4.2	4.2	0	0
119	M192A	X	6.911	6.911	0	0
120	M192A	Y	3.99	3.99	0	0
121	M194B	X	29.097	29.097	0	0
122	M194B	Y	16.799	16.799	0	0
123	M195A	X	29.097	29.097	0	0
124	M195A	Y	16.799	16.799	0	0
125	M196	X	6.911	6.911	0	0
126	M196	Y	3.99	3.99	0	0
127	M200	X	6.911	6.911	0	0
128	M200	Y	3.99	3.99	0	0
129	M211	X	29.097	29.097	0	0
130	M211	Y	16.799	16.799	0	0
131	M212	X	29.097	29.097	0	0
132	M212	Y	16.799	16.799	0	0
133	M213	X	6.911	6.911	0	0
134	M213	Y	3.99	3.99	0	0
135	M219	X	29.097	29.097	0	0

**Member Distributed Loads (BLC 11 : Structure Wind (150)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
136	M219	Y	16.799	16.799	0	0
137	M220	X	29.097	29.097	0	0
138	M220	Y	16.799	16.799	0	0
139	M221	X	6.911	6.911	0	0
140	M221	Y	3.99	3.99	0	0
141	M233	X	7.274	7.274	0	0
142	M233	Y	4.2	4.2	0	0
143	M234	X	7.274	7.274	0	0
144	M234	Y	4.2	4.2	0	0
145	M235	X	6.911	6.911	0	0
146	M235	Y	3.99	3.99	0	0
147	M239	X	6.911	6.911	0	0
148	M239	Y	3.99	3.99	0	0
149	M250	X	7.274	7.274	0	0
150	M250	Y	4.2	4.2	0	0
151	M251	X	7.274	7.274	0	0
152	M251	Y	4.2	4.2	0	0
153	M252	X	6.911	6.911	0	0
154	M252	Y	3.99	3.99	0	0
155	M258	X	7.274	7.274	0	0
156	M258	Y	4.2	4.2	0	0
157	M259	X	7.274	7.274	0	0
158	M259	Y	4.2	4.2	0	0
159	M260	X	6.911	6.911	0	0
160	M260	Y	3.99	3.99	0	0
161	M264A	X	21.823	21.823	0	0
162	M264A	Y	12.599	12.599	0	0
163	M268A	X	21.823	21.823	0	0
164	M268A	Y	12.6	12.6	0	0
165	M272A	X	0	0	0	0
166	M272A	Y	0	0	0	0
167	SR20	X	21.823	21.823	%.67	4.33
168	SR20	Y	12.599	12.599	%.67	4.33
169	SR12	X	21.823	21.823	0	5
170	SR12	Y	12.6	12.6	0	5
171	SR30	X	0	0	0	19.399
172	SR30	Y	0	0	0	19.399
173	M272B	X	7.274	7.274	0	0
174	M272B	Y	4.2	4.2	0	0
175	M273	X	7.274	7.274	0	0
176	M273	Y	4.2	4.2	0	0
177	M270D	X	7.274	7.274	0	0
178	M270D	Y	4.2	4.2	0	0
179	M271C	X	7.274	7.274	0	0
180	M271C	Y	4.2	4.2	0	0
181	M274	X	7.274	7.274	0	0
182	M274	Y	4.2	4.2	0	0
183	M275	X	7.274	7.274	0	0
184	M275	Y	4.2	4.2	0	0

**Member Distributed Loads (BLC 12 : Structure Wind w/ Ice (0))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
--	--------------	-----------	------------------------------	------------------------	----------------------	--------------------

**Member Distributed Loads (BLC 12 : Structure Wind w/ Ice (0)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	-4.268	-4.268	0	0
2	M21	Y	0	0	0	0
3	M22	X	-4.268	-4.268	0	0
4	M22	Y	0	0	0	0
5	M23	X	-4.268	-4.268	0	0
6	M23	Y	0	0	0	0
7	M39	X	-5.579	-5.579	0	0
8	M39	Y	0	0	0	0
9	M40	X	-1.395	-1.395	0	0
10	M40	Y	0	0	0	0
11	M41	X	-1.395	-1.395	0	0
12	M41	Y	0	0	0	0
13	M45	X	0	0	0	0
14	M45	Y	0	0	0	0
15	M50	X	-5.579	-5.579	0	0
16	M50	Y	0	0	0	0
17	M42A	X	-4.268	-4.268	0	0
18	M42A	Y	0	0	0	0
19	M43A	X	-4.268	-4.268	0	0
20	M43A	Y	0	0	0	0
21	M44A	X	-4.268	-4.268	0	0
22	M44A	Y	0	0	0	0
23	M26	X	-1.067	-1.067	0	0
24	M26	Y	0	0	0	0
25	M27	X	-1.067	-1.067	0	0
26	M27	Y	0	0	0	0
27	M28	X	-1.067	-1.067	0	0
28	M28	Y	0	0	0	0
29	M30	X	-1.395	-1.395	0	0
30	M30	Y	0	0	0	0
31	M31	X	-1.395	-1.395	0	0
32	M31	Y	0	0	0	0
33	M32	X	-5.579	-5.579	0	0
34	M32	Y	0	0	0	0
35	M41A	X	-1.067	-1.067	0	0
36	M41A	Y	0	0	0	0
37	M42	X	-1.067	-1.067	0	0
38	M42	Y	0	0	0	0
39	M43	X	-1.067	-1.067	0	0
40	M43	Y	0	0	0	0
41	M51A	X	-1.067	-1.067	0	0
42	M51A	Y	0	0	0	0
43	M52	X	-1.067	-1.067	0	0
44	M52	Y	0	0	0	0
45	M53	X	-1.067	-1.067	0	0
46	M53	Y	0	0	0	0
47	M55	X	-1.395	-1.395	0	0
48	M55	Y	0	0	0	0
49	M56	X	-5.579	-5.579	0	0
50	M56	Y	0	0	0	0
51	M57A	X	-1.395	-1.395	0	0
52	M57A	Y	0	0	0	0

**Member Distributed Loads (BLC 12 : Structure Wind w/ Ice (0)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
53	M66	X	-1.067	-1.067	0	0
54	M66	Y	0	0	0	0
55	M67	X	-1.067	-1.067	0	0
56	M67	Y	0	0	0	0
57	M68	X	-1.067	-1.067	0	0
58	M68	Y	0	0	0	0
59	M72A	X	-1.395	-1.395	0	0
60	M72A	Y	0	0	0	0
61	M73A	X	-1.395	-1.395	0	0
62	M73A	Y	0	0	0	0
63	M74A	X	-5.579	-5.579	0	0
64	M74A	Y	0	0	0	0
65	M71A	X	-.194	-.194	0	0
66	M71A	Y	0	0	0	0
67	M72B	X	-5.96	-5.96	0	0
68	M72B	Y	0	0	0	0
69	M82	X	-2.616	-2.616	0	0
70	M82	Y	0	0	0	0
71	M88	X	-1.49	-1.49	0	0
72	M88	Y	0	0	0	0
73	M100	X	-1.385	-1.385	0	0
74	M100	Y	0	0	0	0
75	M106	X	-1.49	-1.49	0	0
76	M106	Y	0	0	0	0
77	M125	X	0	0	0	0
78	M125	Y	0	0	0	0
79	M126	X	0	0	0	0
80	M126	Y	0	0	0	0
81	M130	X	-3.902	-3.902	0	0
82	M130	Y	0	0	0	0
83	M138	X	-3.902	-3.902	0	0
84	M138	Y	0	0	0	0
85	M155	X	-3.902	-3.902	0	0
86	M155	Y	0	0	0	0
87	M157	X	-3.902	-3.902	0	0
88	M157	Y	0	0	0	0
89	M159	X	-3.902	-3.902	0	0
90	M159	Y	0	0	0	0
91	SR1	X	-3.902	-3.902	0	0
92	SR1	Y	0	0	0	0
93	SR2	X	-5.955	-5.955	0	0
94	SR2	Y	0	0	0	0
95	SR10	X	-.976	-.976	0	0
96	SR10	Y	0	0	0	0
97	SR12	X	-1.489	-1.489	0	0
98	SR12	Y	0	0	0	0
99	SR19	X	-.976	-.976	0	0
100	SR19	Y	0	0	0	0
101	SR20	X	-1.489	-1.489	0	0
102	SR20	Y	0	0	0	0
103	SR21	X	-1.489	-1.489	0	0
104	SR21	Y	0	0	0	0

**Member Distributed Loads (BLC 12 : Structure Wind w/ Ice (0)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
105	SR28	X	-.689	-.689	0	0
106	SR28	Y	0	0	0	0
107	SR30	X	-2.758	-2.758	0	0
108	SR30	Y	0	0	0	0
109	M189	X	0	0	0	0
110	M189	Y	0	0	0	0
111	M190	X	0	0	0	0
112	M190	Y	0	0	0	0
113	M191	X	-3.902	-3.902	0	0
114	M191	Y	0	0	0	0
115	M190A	X	0	0	0	0
116	M190A	Y	0	0	0	0
117	M191A	X	0	0	0	0
118	M191A	Y	0	0	0	0
119	M192A	X	-3.902	-3.902	0	0
120	M192A	Y	0	0	0	0
121	M194B	X	-4.466	-4.466	0	0
122	M194B	Y	0	0	0	0
123	M195A	X	-4.466	-4.466	0	0
124	M195A	Y	0	0	0	0
125	M196	X	-3.902	-3.902	0	0
126	M196	Y	0	0	0	0
127	M200	X	-3.902	-3.902	0	0
128	M200	Y	0	0	0	0
129	M211	X	-4.466	-4.466	0	0
130	M211	Y	0	0	0	0
131	M212	X	-4.466	-4.466	0	0
132	M212	Y	0	0	0	0
133	M213	X	-3.902	-3.902	0	0
134	M213	Y	0	0	0	0
135	M219	X	-4.466	-4.466	0	0
136	M219	Y	0	0	0	0
137	M220	X	-4.466	-4.466	0	0
138	M220	Y	0	0	0	0
139	M221	X	-3.902	-3.902	0	0
140	M221	Y	0	0	0	0
141	M233	X	-4.466	-4.466	0	0
142	M233	Y	0	0	0	0
143	M234	X	-4.466	-4.466	0	0
144	M234	Y	0	0	0	0
145	M235	X	-3.902	-3.902	0	0
146	M235	Y	0	0	0	0
147	M239	X	-3.902	-3.902	0	0
148	M239	Y	0	0	0	0
149	M250	X	-4.466	-4.466	0	0
150	M250	Y	0	0	0	0
151	M251	X	-4.466	-4.466	0	0
152	M251	Y	0	0	0	0
153	M252	X	-3.902	-3.902	0	0
154	M252	Y	0	0	0	0
155	M258	X	-4.466	-4.466	0	0
156	M258	Y	0	0	0	0

**Member Distributed Loads (BLC 12 : Structure Wind w/ Ice (0)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
157	M259	X	-4.466	-4.466	0	0
158	M259	Y	0	0	0	0
159	M260	X	-3.902	-3.902	0	0
160	M260	Y	0	0	0	0
161	M264A	X	-5.955	-5.955	0	0
162	M264A	Y	0	0	0	0
163	M268A	X	-1.489	-1.489	0	0
164	M268A	Y	0	0	0	0
165	M272A	X	-.689	-.689	0	0
166	M272A	Y	0	0	0	0
167	SR20	X	-5.955	-5.955	%.67	4.33
168	SR20	Y	0	0	%.67	4.33
169	SR12	X	-1.489	-1.489	0	5
170	SR12	Y	0	0	0	5
171	SR30	X	-.689	-.689	0	19.399
172	SR30	Y	0	0	0	19.399
173	M272B	X	0	0	0	0
174	M272B	Y	0	0	0	0
175	M273	X	0	0	0	0
176	M273	Y	0	0	0	0
177	M270D	X	0	0	0	0
178	M270D	Y	0	0	0	0
179	M271C	X	0	0	0	0
180	M271C	Y	0	0	0	0
181	M274	X	0	0	0	0
182	M274	Y	0	0	0	0
183	M275	X	0	0	0	0
184	M275	Y	0	0	0	0

**Member Distributed Loads (BLC 13 : Structure Wind w/ Ice (30))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	-2.772	-2.772	0	0
2	M21	Y	1.601	1.601	0	0
3	M22	X	-2.772	-2.772	0	0
4	M22	Y	1.601	1.601	0	0
5	M23	X	-2.772	-2.772	0	0
6	M23	Y	1.601	1.601	0	0
7	M39	X	-3.623	-3.623	0	0
8	M39	Y	2.092	2.092	0	0
9	M40	X	-3.623	-3.623	0	0
10	M40	Y	2.092	2.092	0	0
11	M41	X	0	0	0	0
12	M41	Y	0	0	0	0
13	M45	X	-1.208	-1.208	0	0
14	M45	Y	.697	.697	0	0
15	M50	X	-3.623	-3.623	0	0
16	M50	Y	2.092	2.092	0	0
17	M42A	X	-2.772	-2.772	0	0
18	M42A	Y	1.601	1.601	0	0
19	M43A	X	-2.772	-2.772	0	0
20	M43A	Y	1.601	1.601	0	0



**Member Distributed Loads (BLC 13 : Structure Wind w/ Ice (30)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
21	M44A	X	-2.772	-2.772	0	0
22	M44A	Y	1.601	1.601	0	0
23	M26	X	-2.772	-2.772	0	0
24	M26	Y	1.601	1.601	0	0
25	M27	X	-2.772	-2.772	0	0
26	M27	Y	1.601	1.601	0	0
27	M28	X	-2.772	-2.772	0	0
28	M28	Y	1.601	1.601	0	0
29	M30	X	-3.623	-3.623	0	0
30	M30	Y	2.092	2.092	0	0
31	M31	X	0	0	0	0
32	M31	Y	0	0	0	0
33	M32	X	-3.623	-3.623	0	0
34	M32	Y	2.092	2.092	0	0
35	M41A	X	-2.772	-2.772	0	0
36	M41A	Y	1.601	1.601	0	0
37	M42	X	-2.772	-2.772	0	0
38	M42	Y	1.601	1.601	0	0
39	M43	X	-2.772	-2.772	0	0
40	M43	Y	1.601	1.601	0	0
41	M51A	X	0	0	0	0
42	M51A	Y	0	0	0	0
43	M52	X	0	0	0	0
44	M52	Y	0	0	0	0
45	M53	X	0	0	0	0
46	M53	Y	0	0	0	0
47	M55	X	0	0	0	0
48	M55	Y	0	0	0	0
49	M56	X	-3.623	-3.623	0	0
50	M56	Y	2.092	2.092	0	0
51	M57A	X	-3.623	-3.623	0	0
52	M57A	Y	2.092	2.092	0	0
53	M66	X	0	0	0	0
54	M66	Y	0	0	0	0
55	M67	X	0	0	0	0
56	M67	Y	0	0	0	0
57	M68	X	0	0	0	0
58	M68	Y	0	0	0	0
59	M72A	X	0	0	0	0
60	M72A	Y	0	0	0	0
61	M73A	X	-3.623	-3.623	0	0
62	M73A	Y	2.092	2.092	0	0
63	M74A	X	-3.623	-3.623	0	0
64	M74A	Y	2.092	2.092	0	0
65	M71A	X	-.157	-.157	0	0
66	M71A	Y	.09	.09	0	0
67	M72B	X	-3.871	-3.871	0	0
68	M72B	Y	2.235	2.235	0	0
69	M82	X	-1.223	-1.223	0	0
70	M82	Y	.706	.706	0	0
71	M88	X	-3.871	-3.871	0	0
72	M88	Y	2.235	2.235	0	0

**Member Distributed Loads (BLC 13 : Structure Wind w/ Ice (30)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
73	M100	X	-2.254	-2.254	0	0
74	M100	Y	1.302	1.302	0	0
75	M106	X	0	0	0	0
76	M106	Y	0	0	0	0
77	M125	X	-1.289	-1.289	0	0
78	M125	Y	.744	.744	0	0
79	M126	X	-1.289	-1.289	0	0
80	M126	Y	.744	.744	0	0
81	M130	X	-3.379	-3.379	0	0
82	M130	Y	1.951	1.951	0	0
83	M138	X	-3.379	-3.379	0	0
84	M138	Y	1.951	1.951	0	0
85	M155	X	-3.379	-3.379	0	0
86	M155	Y	1.951	1.951	0	0
87	M157	X	-3.379	-3.379	0	0
88	M157	Y	1.951	1.951	0	0
89	M159	X	-3.379	-3.379	0	0
90	M159	Y	1.951	1.951	0	0
91	SR1	X	-2.535	-2.535	0	0
92	SR1	Y	1.463	1.463	0	0
93	SR2	X	-3.868	-3.868	0	0
94	SR2	Y	2.233	2.233	0	0
95	SR10	X	-2.535	-2.535	0	0
96	SR10	Y	1.463	1.463	0	0
97	SR12	X	-3.868	-3.868	0	0
98	SR12	Y	2.233	2.233	0	0
99	SR19	X	0	0	0	0
100	SR19	Y	0	0	0	0
101	SR20	X	0	0	0	0
102	SR20	Y	0	0	0	0
103	SR21	X	0	0	0	0
104	SR21	Y	0	0	0	0
105	SR28	X	-1.791	-1.791	0	0
106	SR28	Y	1.034	1.034	0	0
107	SR30	X	-1.791	-1.791	0	0
108	SR30	Y	1.034	1.034	0	0
109	M189	X	-1.289	-1.289	0	0
110	M189	Y	.744	.744	0	0
111	M190	X	-1.289	-1.289	0	0
112	M190	Y	.744	.744	0	0
113	M191	X	-3.379	-3.379	0	0
114	M191	Y	1.951	1.951	0	0
115	M190A	X	-1.289	-1.289	0	0
116	M190A	Y	.744	.744	0	0
117	M191A	X	-1.289	-1.289	0	0
118	M191A	Y	.744	.744	0	0
119	M192A	X	-3.379	-3.379	0	0
120	M192A	Y	1.951	1.951	0	0
121	M194B	X	-1.289	-1.289	0	0
122	M194B	Y	.744	.744	0	0
123	M195A	X	-1.289	-1.289	0	0
124	M195A	Y	.744	.744	0	0

**Member Distributed Loads (BLC 13 : Structure Wind w/ Ice (30)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
125	M196	X	-3.379	-3.379	0	0
126	M196	Y	1.951	1.951	0	0
127	M200	X	-3.379	-3.379	0	0
128	M200	Y	1.951	1.951	0	0
129	M211	X	-1.289	-1.289	0	0
130	M211	Y	.744	.744	0	0
131	M212	X	-1.289	-1.289	0	0
132	M212	Y	.744	.744	0	0
133	M213	X	-3.379	-3.379	0	0
134	M213	Y	1.951	1.951	0	0
135	M219	X	-1.289	-1.289	0	0
136	M219	Y	.744	.744	0	0
137	M220	X	-1.289	-1.289	0	0
138	M220	Y	.744	.744	0	0
139	M221	X	-3.379	-3.379	0	0
140	M221	Y	1.951	1.951	0	0
141	M233	X	-5.157	-5.157	0	0
142	M233	Y	2.977	2.977	0	0
143	M234	X	-5.157	-5.157	0	0
144	M234	Y	2.977	2.977	0	0
145	M235	X	-3.379	-3.379	0	0
146	M235	Y	1.951	1.951	0	0
147	M239	X	-3.379	-3.379	0	0
148	M239	Y	1.951	1.951	0	0
149	M250	X	-5.157	-5.157	0	0
150	M250	Y	2.977	2.977	0	0
151	M251	X	-5.157	-5.157	0	0
152	M251	Y	2.977	2.977	0	0
153	M252	X	-3.379	-3.379	0	0
154	M252	Y	1.951	1.951	0	0
155	M258	X	-5.157	-5.157	0	0
156	M258	Y	2.977	2.977	0	0
157	M259	X	-5.157	-5.157	0	0
158	M259	Y	2.977	2.977	0	0
159	M260	X	-3.379	-3.379	0	0
160	M260	Y	1.951	1.951	0	0
161	M264A	X	-3.868	-3.868	0	0
162	M264A	Y	2.233	2.233	0	0
163	M268A	X	0	0	0	0
164	M268A	Y	0	0	0	0
165	M272A	X	-1.791	-1.791	0	0
166	M272A	Y	1.034	1.034	0	0
167	SR20	X	-3.868	-3.868	%.67	4.33
168	SR20	Y	2.233	2.233	%.67	4.33
169	SR12	X	0	0	0	5
170	SR12	Y	0	0	0	5
171	SR30	X	-1.791	-1.791	0	19.399
172	SR30	Y	1.034	1.034	0	19.399
173	M272B	X	-1.289	-1.289	0	0
174	M272B	Y	.744	.744	0	0
175	M273	X	-1.289	-1.289	0	0
176	M273	Y	.744	.744	0	0

**Member Distributed Loads (BLC 13 : Structure Wind w/ Ice (30)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
177	M270D	X	-1.289	-1.289	0	0
178	M270D	Y	.744	.744	0	0
179	M271C	X	-1.289	-1.289	0	0
180	M271C	Y	.744	.744	0	0
181	M274	X	-1.289	-1.289	0	0
182	M274	Y	.744	.744	0	0
183	M275	X	-1.289	-1.289	0	0
184	M275	Y	.744	.744	0	0

**Member Distributed Loads (BLC 14 : Structure Wind w/ Ice (45))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	-1.509	-1.509	0	0
2	M21	Y	1.509	1.509	0	0
3	M22	X	-1.509	-1.509	0	0
4	M22	Y	1.509	1.509	0	0
5	M23	X	-1.509	-1.509	0	0
6	M23	Y	1.509	1.509	0	0
7	M39	X	-1.972	-1.972	0	0
8	M39	Y	1.972	1.972	0	0
9	M40	X	-3.68	-3.68	0	0
10	M40	Y	3.68	3.68	0	0
11	M41	X	-.264	-.264	0	0
12	M41	Y	.264	.264	0	0
13	M45	X	-1.972	-1.972	0	0
14	M45	Y	1.972	1.972	0	0
15	M50	X	-1.972	-1.972	0	0
16	M50	Y	1.972	1.972	0	0
17	M42A	X	-1.509	-1.509	0	0
18	M42A	Y	1.509	1.509	0	0
19	M43A	X	-1.509	-1.509	0	0
20	M43A	Y	1.509	1.509	0	0
21	M44A	X	-1.509	-1.509	0	0
22	M44A	Y	1.509	1.509	0	0
23	M26	X	-2.816	-2.816	0	0
24	M26	Y	2.816	2.816	0	0
25	M27	X	-2.816	-2.816	0	0
26	M27	Y	2.816	2.816	0	0
27	M28	X	-2.816	-2.816	0	0
28	M28	Y	2.816	2.816	0	0
29	M30	X	-3.68	-3.68	0	0
30	M30	Y	3.68	3.68	0	0
31	M31	X	-.264	-.264	0	0
32	M31	Y	.264	.264	0	0
33	M32	X	-1.972	-1.972	0	0
34	M32	Y	1.972	1.972	0	0
35	M41A	X	-2.816	-2.816	0	0
36	M41A	Y	2.816	2.816	0	0
37	M42	X	-2.816	-2.816	0	0
38	M42	Y	2.816	2.816	0	0
39	M43	X	-2.816	-2.816	0	0
40	M43	Y	2.816	2.816	0	0

**Member Distributed Loads (BLC 14 : Structure Wind w/ Ice (45)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
41	M51A	X	-.202	-.202	0	0
42	M51A	Y	.202	.202	0	0
43	M52	X	-.202	-.202	0	0
44	M52	Y	.202	.202	0	0
45	M53	X	-.202	-.202	0	0
46	M53	Y	.202	.202	0	0
47	M55	X	-.264	-.264	0	0
48	M55	Y	.264	.264	0	0
49	M56	X	-1.972	-1.972	0	0
50	M56	Y	1.972	1.972	0	0
51	M57A	X	-3.68	-3.68	0	0
52	M57A	Y	3.68	3.68	0	0
53	M66	X	-.202	-.202	0	0
54	M66	Y	.202	.202	0	0
55	M67	X	-.202	-.202	0	0
56	M67	Y	.202	.202	0	0
57	M68	X	-.202	-.202	0	0
58	M68	Y	.202	.202	0	0
59	M72A	X	-.264	-.264	0	0
60	M72A	Y	.264	.264	0	0
61	M73A	X	-3.68	-3.68	0	0
62	M73A	Y	3.68	3.68	0	0
63	M74A	X	-1.972	-1.972	0	0
64	M74A	Y	1.972	1.972	0	0
65	M71A	X	-.486	-.486	0	0
66	M71A	Y	.486	.486	0	0
67	M72B	X	-2.107	-2.107	0	0
68	M72B	Y	2.107	2.107	0	0
69	M82	X	-.503	-.503	0	0
70	M82	Y	.503	.503	0	0
71	M88	X	-3.932	-3.932	0	0
72	M88	Y	3.932	3.932	0	0
73	M100	X	-1.978	-1.978	0	0
74	M100	Y	1.978	1.978	0	0
75	M106	X	-.282	-.282	0	0
76	M106	Y	.282	.282	0	0
77	M125	X	-2.105	-2.105	0	0
78	M125	Y	2.105	2.105	0	0
79	M126	X	-2.105	-2.105	0	0
80	M126	Y	2.105	2.105	0	0
81	M130	X	-2.759	-2.759	0	0
82	M130	Y	2.759	2.759	0	0
83	M138	X	-2.759	-2.759	0	0
84	M138	Y	2.759	2.759	0	0
85	M155	X	-2.759	-2.759	0	0
86	M155	Y	2.759	2.759	0	0
87	M157	X	-2.759	-2.759	0	0
88	M157	Y	2.759	2.759	0	0
89	M159	X	-2.759	-2.759	0	0
90	M159	Y	2.759	2.759	0	0
91	SR1	X	-1.38	-1.38	0	0
92	SR1	Y	1.38	1.38	0	0

**Member Distributed Loads (BLC 14 : Structure Wind w/ Ice (45)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
93	SR2	X	-2.105	-2.105	0	0
94	SR2	Y	2.105	2.105	0	0
95	SR10	X	-2.574	-2.574	0	0
96	SR10	Y	2.574	2.574	0	0
97	SR12	X	-3.928	-3.928	0	0
98	SR12	Y	3.928	3.928	0	0
99	SR19	X	-.185	-.185	0	0
100	SR19	Y	.185	.185	0	0
101	SR20	X	-.282	-.282	0	0
102	SR20	Y	.282	.282	0	0
103	SR21	X	-.282	-.282	0	0
104	SR21	Y	.282	.282	0	0
105	SR28	X	-1.819	-1.819	0	0
106	SR28	Y	1.819	1.819	0	0
107	SR30	X	-.975	-.975	0	0
108	SR30	Y	.975	.975	0	0
109	M189	X	-2.105	-2.105	0	0
110	M189	Y	2.105	2.105	0	0
111	M190	X	-2.105	-2.105	0	0
112	M190	Y	2.105	2.105	0	0
113	M191	X	-2.759	-2.759	0	0
114	M191	Y	2.759	2.759	0	0
115	M190A	X	-2.105	-2.105	0	0
116	M190A	Y	2.105	2.105	0	0
117	M191A	X	-2.105	-2.105	0	0
118	M191A	Y	2.105	2.105	0	0
119	M192A	X	-2.759	-2.759	0	0
120	M192A	Y	2.759	2.759	0	0
121	M194B	X	-.282	-.282	0	0
122	M194B	Y	.282	.282	0	0
123	M195A	X	-.282	-.282	0	0
124	M195A	Y	.282	.282	0	0
125	M196	X	-2.759	-2.759	0	0
126	M196	Y	2.759	2.759	0	0
127	M200	X	-2.759	-2.759	0	0
128	M200	Y	2.759	2.759	0	0
129	M211	X	-.282	-.282	0	0
130	M211	Y	.282	.282	0	0
131	M212	X	-.282	-.282	0	0
132	M212	Y	.282	.282	0	0
133	M213	X	-2.759	-2.759	0	0
134	M213	Y	2.759	2.759	0	0
135	M219	X	-.282	-.282	0	0
136	M219	Y	.282	.282	0	0
137	M220	X	-.282	-.282	0	0
138	M220	Y	.282	.282	0	0
139	M221	X	-2.759	-2.759	0	0
140	M221	Y	2.759	2.759	0	0
141	M233	X	-3.928	-3.928	0	0
142	M233	Y	3.928	3.928	0	0
143	M234	X	-3.928	-3.928	0	0
144	M234	Y	3.928	3.928	0	0

**Member Distributed Loads (BLC 14 : Structure Wind w/ Ice (45)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
145	M235	X	-2.759	-2.759	0	0
146	M235	Y	2.759	2.759	0	0
147	M239	X	-2.759	-2.759	0	0
148	M239	Y	2.759	2.759	0	0
149	M250	X	-3.928	-3.928	0	0
150	M250	Y	3.928	3.928	0	0
151	M251	X	-3.928	-3.928	0	0
152	M251	Y	3.928	3.928	0	0
153	M252	X	-2.759	-2.759	0	0
154	M252	Y	2.759	2.759	0	0
155	M258	X	-3.928	-3.928	0	0
156	M258	Y	3.928	3.928	0	0
157	M259	X	-3.928	-3.928	0	0
158	M259	Y	3.928	3.928	0	0
159	M260	X	-2.759	-2.759	0	0
160	M260	Y	2.759	2.759	0	0
161	M264A	X	-2.105	-2.105	0	0
162	M264A	Y	2.105	2.105	0	0
163	M268A	X	-.282	-.282	0	0
164	M268A	Y	.282	.282	0	0
165	M272A	X	-1.819	-1.819	0	0
166	M272A	Y	1.819	1.819	0	0
167	SR20	X	-2.105	-2.105	%.67	4.33
168	SR20	Y	2.105	2.105	%.67	4.33
169	SR12	X	-.282	-.282	0	5
170	SR12	Y	.282	.282	0	5
171	SR30	X	-1.819	-1.819	0	19.399
172	SR30	Y	1.819	1.819	0	19.399
173	M272B	X	-2.105	-2.105	0	0
174	M272B	Y	2.105	2.105	0	0
175	M273	X	-2.105	-2.105	0	0
176	M273	Y	2.105	2.105	0	0
177	M270D	X	-2.105	-2.105	0	0
178	M270D	Y	2.105	2.105	0	0
179	M271C	X	-2.105	-2.105	0	0
180	M271C	Y	2.105	2.105	0	0
181	M274	X	-2.105	-2.105	0	0
182	M274	Y	2.105	2.105	0	0
183	M275	X	-2.105	-2.105	0	0
184	M275	Y	2.105	2.105	0	0

**Member Distributed Loads (BLC 15 : Structure Wind w/ Ice (60))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	-.534	-.534	0	0
2	M21	Y	.924	.924	0	0
3	M22	X	-.534	-.534	0	0
4	M22	Y	.924	.924	0	0
5	M23	X	-.534	-.534	0	0
6	M23	Y	.924	.924	0	0
7	M39	X	-.697	-.697	0	0
8	M39	Y	1.208	1.208	0	0

**Member Distributed Loads (BLC 15 : Structure Wind w/ Ice (60)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
9	M40	X	-2.789	-2.789	0	0
10	M40	Y	4.831	4.831	0	0
11	M41	X	-.697	-.697	0	0
12	M41	Y	1.208	1.208	0	0
13	M45	X	-2.092	-2.092	0	0
14	M45	Y	3.623	3.623	0	0
15	M50	X	-.697	-.697	0	0
16	M50	Y	1.208	1.208	0	0
17	M42A	X	-.534	-.534	0	0
18	M42A	Y	.924	.924	0	0
19	M43A	X	-.534	-.534	0	0
20	M43A	Y	.924	.924	0	0
21	M44A	X	-.534	-.534	0	0
22	M44A	Y	.924	.924	0	0
23	M26	X	-2.134	-2.134	0	0
24	M26	Y	3.696	3.696	0	0
25	M27	X	-2.134	-2.134	0	0
26	M27	Y	3.696	3.696	0	0
27	M28	X	-2.134	-2.134	0	0
28	M28	Y	3.696	3.696	0	0
29	M30	X	-2.789	-2.789	0	0
30	M30	Y	4.831	4.831	0	0
31	M31	X	-.697	-.697	0	0
32	M31	Y	1.208	1.208	0	0
33	M32	X	-.697	-.697	0	0
34	M32	Y	1.208	1.208	0	0
35	M41A	X	-2.134	-2.134	0	0
36	M41A	Y	3.696	3.696	0	0
37	M42	X	-2.134	-2.134	0	0
38	M42	Y	3.696	3.696	0	0
39	M43	X	-2.134	-2.134	0	0
40	M43	Y	3.696	3.696	0	0
41	M51A	X	-.534	-.534	0	0
42	M51A	Y	.924	.924	0	0
43	M52	X	-.534	-.534	0	0
44	M52	Y	.924	.924	0	0
45	M53	X	-.534	-.534	0	0
46	M53	Y	.924	.924	0	0
47	M55	X	-.697	-.697	0	0
48	M55	Y	1.208	1.208	0	0
49	M56	X	-.697	-.697	0	0
50	M56	Y	1.208	1.208	0	0
51	M57A	X	-2.789	-2.789	0	0
52	M57A	Y	4.831	4.831	0	0
53	M66	X	-.534	-.534	0	0
54	M66	Y	.924	.924	0	0
55	M67	X	-.534	-.534	0	0
56	M67	Y	.924	.924	0	0
57	M68	X	-.534	-.534	0	0
58	M68	Y	.924	.924	0	0
59	M72A	X	-.697	-.697	0	0
60	M72A	Y	1.208	1.208	0	0



**Member Distributed Loads (BLC 15 : Structure Wind w/ Ice (60)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
61	M73A	X	-2.789	-2.789	0	0
62	M73A	Y	4.831	4.831	0	0
63	M74A	X	-.697	-.697	0	0
64	M74A	Y	1.208	1.208	0	0
65	M71A	X	-.693	-.693	0	0
66	M71A	Y	1.2	1.2	0	0
67	M72B	X	-.745	-.745	0	0
68	M72B	Y	1.29	1.29	0	0
69	M82	X	-.097	-.097	0	0
70	M82	Y	.168	.168	0	0
71	M88	X	-2.98	-2.98	0	0
72	M88	Y	5.161	5.161	0	0
73	M100	X	-1.308	-1.308	0	0
74	M100	Y	2.266	2.266	0	0
75	M106	X	-.745	-.745	0	0
76	M106	Y	1.29	1.29	0	0
77	M125	X	-2.233	-2.233	0	0
78	M125	Y	3.868	3.868	0	0
79	M126	X	-2.233	-2.233	0	0
80	M126	Y	3.868	3.868	0	0
81	M130	X	-1.951	-1.951	0	0
82	M130	Y	3.379	3.379	0	0
83	M138	X	-1.951	-1.951	0	0
84	M138	Y	3.379	3.379	0	0
85	M155	X	-1.951	-1.951	0	0
86	M155	Y	3.379	3.379	0	0
87	M157	X	-1.951	-1.951	0	0
88	M157	Y	3.379	3.379	0	0
89	M159	X	-1.951	-1.951	0	0
90	M159	Y	3.379	3.379	0	0
91	SR1	X	-.488	-.488	0	0
92	SR1	Y	.845	.845	0	0
93	SR2	X	-.744	-.744	0	0
94	SR2	Y	1.289	1.289	0	0
95	SR10	X	-1.951	-1.951	0	0
96	SR10	Y	3.379	3.379	0	0
97	SR12	X	-2.977	-2.977	0	0
98	SR12	Y	5.157	5.157	0	0
99	SR19	X	-.488	-.488	0	0
100	SR19	Y	.845	.845	0	0
101	SR20	X	-.744	-.744	0	0
102	SR20	Y	1.289	1.289	0	0
103	SR21	X	-.744	-.744	0	0
104	SR21	Y	1.289	1.289	0	0
105	SR28	X	-1.379	-1.379	0	0
106	SR28	Y	2.388	2.388	0	0
107	SR30	X	-.345	-.345	0	0
108	SR30	Y	.597	.597	0	0
109	M189	X	-2.233	-2.233	0	0
110	M189	Y	3.868	3.868	0	0
111	M190	X	-2.233	-2.233	0	0
112	M190	Y	3.868	3.868	0	0

**Member Distributed Loads (BLC 15 : Structure Wind w/ Ice (60)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
113	M191	X	-1.951	-1.951	0	0
114	M191	Y	3.379	3.379	0	0
115	M190A	X	-2.233	-2.233	0	0
116	M190A	Y	3.868	3.868	0	0
117	M191A	X	-2.233	-2.233	0	0
118	M191A	Y	3.868	3.868	0	0
119	M192A	X	-1.951	-1.951	0	0
120	M192A	Y	3.379	3.379	0	0
121	M194B	X	0	0	0	0
122	M194B	Y	0	0	0	0
123	M195A	X	0	0	0	0
124	M195A	Y	0	0	0	0
125	M196	X	-1.951	-1.951	0	0
126	M196	Y	3.379	3.379	0	0
127	M200	X	-1.951	-1.951	0	0
128	M200	Y	3.379	3.379	0	0
129	M211	X	0	0	0	0
130	M211	Y	0	0	0	0
131	M212	X	0	0	0	0
132	M212	Y	0	0	0	0
133	M213	X	-1.951	-1.951	0	0
134	M213	Y	3.379	3.379	0	0
135	M219	X	0	0	0	0
136	M219	Y	0	0	0	0
137	M220	X	0	0	0	0
138	M220	Y	0	0	0	0
139	M221	X	-1.951	-1.951	0	0
140	M221	Y	3.379	3.379	0	0
141	M233	X	-2.233	-2.233	0	0
142	M233	Y	3.868	3.868	0	0
143	M234	X	-2.233	-2.233	0	0
144	M234	Y	3.868	3.868	0	0
145	M235	X	-1.951	-1.951	0	0
146	M235	Y	3.379	3.379	0	0
147	M239	X	-1.951	-1.951	0	0
148	M239	Y	3.379	3.379	0	0
149	M250	X	-2.233	-2.233	0	0
150	M250	Y	3.868	3.868	0	0
151	M251	X	-2.233	-2.233	0	0
152	M251	Y	3.868	3.868	0	0
153	M252	X	-1.951	-1.951	0	0
154	M252	Y	3.379	3.379	0	0
155	M258	X	-2.233	-2.233	0	0
156	M258	Y	3.868	3.868	0	0
157	M259	X	-2.233	-2.233	0	0
158	M259	Y	3.868	3.868	0	0
159	M260	X	-1.951	-1.951	0	0
160	M260	Y	3.379	3.379	0	0
161	M264A	X	-.744	-.744	0	0
162	M264A	Y	1.289	1.289	0	0
163	M268A	X	-.744	-.744	0	0
164	M268A	Y	1.289	1.289	0	0

**Member Distributed Loads (BLC 15 : Structure Wind w/ Ice (60)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
165	M272A	X	-1.379	-1.379	0	0
166	M272A	Y	2.388	2.388	0	0
167	SR20	X	-.744	-.744	%.67	4.33
168	SR20	Y	1.289	1.289	%.67	4.33
169	SR12	X	-.744	-.744	0	5
170	SR12	Y	1.289	1.289	0	5
171	SR30	X	-1.379	-1.379	0	19.399
172	SR30	Y	2.388	2.388	0	19.399
173	M272B	X	-2.233	-2.233	0	0
174	M272B	Y	3.868	3.868	0	0
175	M273	X	-2.233	-2.233	0	0
176	M273	Y	3.868	3.868	0	0
177	M270D	X	-2.233	-2.233	0	0
178	M270D	Y	3.868	3.868	0	0
179	M271C	X	-2.233	-2.233	0	0
180	M271C	Y	3.868	3.868	0	0
181	M274	X	-2.233	-2.233	0	0
182	M274	Y	3.868	3.868	0	0
183	M275	X	-2.233	-2.233	0	0
184	M275	Y	3.868	3.868	0	0

**Member Distributed Loads (BLC 16 : Structure Wind w/ Ice (90))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	0	0	0	0
2	M21	Y	0	0	0	0
3	M22	X	0	0	0	0
4	M22	Y	0	0	0	0
5	M23	X	0	0	0	0
6	M23	Y	0	0	0	0
7	M39	X	0	0	0	0
8	M39	Y	0	0	0	0
9	M40	X	-1e-6	-1e-6	0	0
10	M40	Y	4.184	4.184	0	0
11	M41	X	-1e-6	-1e-6	0	0
12	M41	Y	4.184	4.184	0	0
13	M45	X	-1e-6	-1e-6	0	0
14	M45	Y	5.579	5.579	0	0
15	M50	X	0	0	0	0
16	M50	Y	0	0	0	0
17	M42A	X	0	0	0	0
18	M42A	Y	0	0	0	0
19	M43A	X	0	0	0	0
20	M43A	Y	0	0	0	0
21	M44A	X	0	0	0	0
22	M44A	Y	0	0	0	0
23	M26	X	-1e-6	-1e-6	0	0
24	M26	Y	3.201	3.201	0	0
25	M27	X	-1e-6	-1e-6	0	0
26	M27	Y	3.201	3.201	0	0
27	M28	X	-1e-6	-1e-6	0	0
28	M28	Y	3.201	3.201	0	0

**Member Distributed Loads (BLC 16 : Structure Wind w/ Ice (90)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
29	M30	X	-1e-6	-1e-6	0	0
30	M30	Y	4.184	4.184	0	0
31	M31	X	-1e-6	-1e-6	0	0
32	M31	Y	4.184	4.184	0	0
33	M32	X	0	0	0	0
34	M32	Y	0	0	0	0
35	M41A	X	-1e-6	-1e-6	0	0
36	M41A	Y	3.201	3.201	0	0
37	M42	X	-1e-6	-1e-6	0	0
38	M42	Y	3.201	3.201	0	0
39	M43	X	-1e-6	-1e-6	0	0
40	M43	Y	3.201	3.201	0	0
41	M51A	X	-1e-6	-1e-6	0	0
42	M51A	Y	3.201	3.201	0	0
43	M52	X	-1e-6	-1e-6	0	0
44	M52	Y	3.201	3.201	0	0
45	M53	X	-1e-6	-1e-6	0	0
46	M53	Y	3.201	3.201	0	0
47	M55	X	-1e-6	-1e-6	0	0
48	M55	Y	4.184	4.184	0	0
49	M56	X	0	0	0	0
50	M56	Y	0	0	0	0
51	M57A	X	-1e-6	-1e-6	0	0
52	M57A	Y	4.184	4.184	0	0
53	M66	X	-1e-6	-1e-6	0	0
54	M66	Y	3.201	3.201	0	0
55	M67	X	-1e-6	-1e-6	0	0
56	M67	Y	3.201	3.201	0	0
57	M68	X	-1e-6	-1e-6	0	0
58	M68	Y	3.201	3.201	0	0
59	M72A	X	-1e-6	-1e-6	0	0
60	M72A	Y	4.184	4.184	0	0
61	M73A	X	-1e-6	-1e-6	0	0
62	M73A	Y	4.184	4.184	0	0
63	M74A	X	0	0	0	0
64	M74A	Y	0	0	0	0
65	M71A	X	-1e-6	-1e-6	0	0
66	M71A	Y	2.603	2.603	0	0
67	M72B	X	0	0	0	0
68	M72B	Y	0	0	0	0
69	M82	X	0	0	0	0
70	M82	Y	.181	.181	0	0
71	M88	X	-1e-6	-1e-6	0	0
72	M88	Y	4.47	4.47	0	0
73	M100	X	0	0	0	0
74	M100	Y	1.412	1.412	0	0
75	M106	X	-1e-6	-1e-6	0	0
76	M106	Y	4.47	4.47	0	0
77	M125	X	-1e-6	-1e-6	0	0
78	M125	Y	5.955	5.955	0	0
79	M126	X	-1e-6	-1e-6	0	0
80	M126	Y	5.955	5.955	0	0

**Member Distributed Loads (BLC 16 : Structure Wind w/ Ice (90)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
81	M130	X	-1e-6	-1e-6	0	0
82	M130	Y	3.902	3.902	0	0
83	M138	X	-1e-6	-1e-6	0	0
84	M138	Y	3.902	3.902	0	0
85	M155	X	-1e-6	-1e-6	0	0
86	M155	Y	3.902	3.902	0	0
87	M157	X	-1e-6	-1e-6	0	0
88	M157	Y	3.902	3.902	0	0
89	M159	X	-1e-6	-1e-6	0	0
90	M159	Y	3.902	3.902	0	0
91	SR1	X	0	0	0	0
92	SR1	Y	0	0	0	0
93	SR2	X	0	0	0	0
94	SR2	Y	0	0	0	0
95	SR10	X	-1e-6	-1e-6	0	0
96	SR10	Y	2.927	2.927	0	0
97	SR12	X	-1e-6	-1e-6	0	0
98	SR12	Y	4.466	4.466	0	0
99	SR19	X	-1e-6	-1e-6	0	0
100	SR19	Y	2.927	2.927	0	0
101	SR20	X	-1e-6	-1e-6	0	0
102	SR20	Y	4.466	4.466	0	0
103	SR21	X	-1e-6	-1e-6	0	0
104	SR21	Y	4.466	4.466	0	0
105	SR28	X	0	0	0	0
106	SR28	Y	2.068	2.068	0	0
107	SR30	X	0	0	0	0
108	SR30	Y	0	0	0	0
109	M189	X	-1e-6	-1e-6	0	0
110	M189	Y	5.955	5.955	0	0
111	M190	X	-1e-6	-1e-6	0	0
112	M190	Y	5.955	5.955	0	0
113	M191	X	-1e-6	-1e-6	0	0
114	M191	Y	3.902	3.902	0	0
115	M190A	X	-1e-6	-1e-6	0	0
116	M190A	Y	5.955	5.955	0	0
117	M191A	X	-1e-6	-1e-6	0	0
118	M191A	Y	5.955	5.955	0	0
119	M192A	X	-1e-6	-1e-6	0	0
120	M192A	Y	3.902	3.902	0	0
121	M194B	X	0	0	0	0
122	M194B	Y	1.489	1.489	0	0
123	M195A	X	0	0	0	0
124	M195A	Y	1.489	1.489	0	0
125	M196	X	-1e-6	-1e-6	0	0
126	M196	Y	3.902	3.902	0	0
127	M200	X	-1e-6	-1e-6	0	0
128	M200	Y	3.902	3.902	0	0
129	M211	X	0	0	0	0
130	M211	Y	1.489	1.489	0	0
131	M212	X	0	0	0	0
132	M212	Y	1.489	1.489	0	0

**Member Distributed Loads (BLC 16 : Structure Wind w/ Ice (90)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
133	M213	X	-1e-6	-1e-6	0	0
134	M213	Y	3.902	3.902	0	0
135	M219	X	0	0	0	0
136	M219	Y	1.489	1.489	0	0
137	M220	X	0	0	0	0
138	M220	Y	1.489	1.489	0	0
139	M221	X	-1e-6	-1e-6	0	0
140	M221	Y	3.902	3.902	0	0
141	M233	X	0	0	0	0
142	M233	Y	1.489	1.489	0	0
143	M234	X	0	0	0	0
144	M234	Y	1.489	1.489	0	0
145	M235	X	-1e-6	-1e-6	0	0
146	M235	Y	3.902	3.902	0	0
147	M239	X	-1e-6	-1e-6	0	0
148	M239	Y	3.902	3.902	0	0
149	M250	X	0	0	0	0
150	M250	Y	1.489	1.489	0	0
151	M251	X	0	0	0	0
152	M251	Y	1.489	1.489	0	0
153	M252	X	-1e-6	-1e-6	0	0
154	M252	Y	3.902	3.902	0	0
155	M258	X	0	0	0	0
156	M258	Y	1.489	1.489	0	0
157	M259	X	0	0	0	0
158	M259	Y	1.489	1.489	0	0
159	M260	X	-1e-6	-1e-6	0	0
160	M260	Y	3.902	3.902	0	0
161	M264A	X	0	0	0	0
162	M264A	Y	0	0	0	0
163	M268A	X	-1e-6	-1e-6	0	0
164	M268A	Y	4.466	4.466	0	0
165	M272A	X	0	0	0	0
166	M272A	Y	2.068	2.068	0	0
167	SR20	X	0	0	%.67	4.33
168	SR20	Y	0	0	%.67	4.33
169	SR12	X	-1e-6	-1e-6	0	5
170	SR12	Y	4.466	4.466	0	5
171	SR30	X	0	0	0	19.399
172	SR30	Y	2.068	2.068	0	19.399
173	M272B	X	-1e-6	-1e-6	0	0
174	M272B	Y	5.955	5.955	0	0
175	M273	X	-1e-6	-1e-6	0	0
176	M273	Y	5.955	5.955	0	0
177	M270D	X	-1e-6	-1e-6	0	0
178	M270D	Y	5.955	5.955	0	0
179	M271C	X	-1e-6	-1e-6	0	0
180	M271C	Y	5.955	5.955	0	0
181	M274	X	-1e-6	-1e-6	0	0
182	M274	Y	5.955	5.955	0	0
183	M275	X	-1e-6	-1e-6	0	0
184	M275	Y	5.955	5.955	0	0

**Member Distributed Loads (BLC 17 : Structure Wind w/ Ice (120))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	.534	.534	0	0
2	M21	Y	.924	.924	0	0
3	M22	X	.534	.534	0	0
4	M22	Y	.924	.924	0	0
5	M23	X	.534	.534	0	0
6	M23	Y	.924	.924	0	0
7	M39	X	.697	.697	0	0
8	M39	Y	1.208	1.208	0	0
9	M40	X	.697	.697	0	0
10	M40	Y	1.208	1.208	0	0
11	M41	X	2.789	2.789	0	0
12	M41	Y	4.831	4.831	0	0
13	M45	X	2.092	2.092	0	0
14	M45	Y	3.623	3.623	0	0
15	M50	X	.697	.697	0	0
16	M50	Y	1.208	1.208	0	0
17	M42A	X	.534	.534	0	0
18	M42A	Y	.924	.924	0	0
19	M43A	X	.534	.534	0	0
20	M43A	Y	.924	.924	0	0
21	M44A	X	.534	.534	0	0
22	M44A	Y	.924	.924	0	0
23	M26	X	.534	.534	0	0
24	M26	Y	.924	.924	0	0
25	M27	X	.534	.534	0	0
26	M27	Y	.924	.924	0	0
27	M28	X	.534	.534	0	0
28	M28	Y	.924	.924	0	0
29	M30	X	.697	.697	0	0
30	M30	Y	1.208	1.208	0	0
31	M31	X	2.789	2.789	0	0
32	M31	Y	4.831	4.831	0	0
33	M32	X	.697	.697	0	0
34	M32	Y	1.208	1.208	0	0
35	M41A	X	.534	.534	0	0
36	M41A	Y	.924	.924	0	0
37	M42	X	.534	.534	0	0
38	M42	Y	.924	.924	0	0
39	M43	X	.534	.534	0	0
40	M43	Y	.924	.924	0	0
41	M51A	X	2.134	2.134	0	0
42	M51A	Y	3.696	3.696	0	0
43	M52	X	2.134	2.134	0	0
44	M52	Y	3.696	3.696	0	0
45	M53	X	2.134	2.134	0	0
46	M53	Y	3.696	3.696	0	0
47	M55	X	2.789	2.789	0	0
48	M55	Y	4.831	4.831	0	0
49	M56	X	.697	.697	0	0
50	M56	Y	1.208	1.208	0	0
51	M57A	X	.697	.697	0	0
52	M57A	Y	1.208	1.208	0	0

**Member Distributed Loads (BLC 17 : Structure Wind w/ Ice (120)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
53	M66	X	2.134	2.134	0	0
54	M66	Y	3.696	3.696	0	0
55	M67	X	2.134	2.134	0	0
56	M67	Y	3.696	3.696	0	0
57	M68	X	2.134	2.134	0	0
58	M68	Y	3.696	3.696	0	0
59	M72A	X	2.789	2.789	0	0
60	M72A	Y	4.831	4.831	0	0
61	M73A	X	.697	.697	0	0
62	M73A	Y	1.208	1.208	0	0
63	M74A	X	.697	.697	0	0
64	M74A	Y	1.208	1.208	0	0
65	M71A	X	1.308	1.308	0	0
66	M71A	Y	2.266	2.266	0	0
67	M72B	X	.745	.745	0	0
68	M72B	Y	1.29	1.29	0	0
69	M82	X	.693	.693	0	0
70	M82	Y	1.2	1.2	0	0
71	M88	X	.745	.745	0	0
72	M88	Y	1.29	1.29	0	0
73	M100	X	.097	.097	0	0
74	M100	Y	.168	.168	0	0
75	M106	X	2.98	2.98	0	0
76	M106	Y	5.161	5.161	0	0
77	M125	X	2.233	2.233	0	0
78	M125	Y	3.868	3.868	0	0
79	M126	X	2.233	2.233	0	0
80	M126	Y	3.868	3.868	0	0
81	M130	X	1.951	1.951	0	0
82	M130	Y	3.379	3.379	0	0
83	M138	X	1.951	1.951	0	0
84	M138	Y	3.379	3.379	0	0
85	M155	X	1.951	1.951	0	0
86	M155	Y	3.379	3.379	0	0
87	M157	X	1.951	1.951	0	0
88	M157	Y	3.379	3.379	0	0
89	M159	X	1.951	1.951	0	0
90	M159	Y	3.379	3.379	0	0
91	SR1	X	.488	.488	0	0
92	SR1	Y	.845	.845	0	0
93	SR2	X	.744	.744	0	0
94	SR2	Y	1.289	1.289	0	0
95	SR10	X	.488	.488	0	0
96	SR10	Y	.845	.845	0	0
97	SR12	X	.744	.744	0	0
98	SR12	Y	1.289	1.289	0	0
99	SR19	X	1.951	1.951	0	0
100	SR19	Y	3.379	3.379	0	0
101	SR20	X	2.977	2.977	0	0
102	SR20	Y	5.157	5.157	0	0
103	SR21	X	2.977	2.977	0	0
104	SR21	Y	5.157	5.157	0	0



**Member Distributed Loads (BLC 17 : Structure Wind w/ Ice (120)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
105	SR28	X	.345	.345	0	0
106	SR28	Y	.597	.597	0	0
107	SR30	X	.345	.345	0	0
108	SR30	Y	.597	.597	0	0
109	M189	X	2.233	2.233	0	0
110	M189	Y	3.868	3.868	0	0
111	M190	X	2.233	2.233	0	0
112	M190	Y	3.868	3.868	0	0
113	M191	X	1.951	1.951	0	0
114	M191	Y	3.379	3.379	0	0
115	M190A	X	2.233	2.233	0	0
116	M190A	Y	3.868	3.868	0	0
117	M191A	X	2.233	2.233	0	0
118	M191A	Y	3.868	3.868	0	0
119	M192A	X	1.951	1.951	0	0
120	M192A	Y	3.379	3.379	0	0
121	M194B	X	2.233	2.233	0	0
122	M194B	Y	3.868	3.868	0	0
123	M195A	X	2.233	2.233	0	0
124	M195A	Y	3.868	3.868	0	0
125	M196	X	1.951	1.951	0	0
126	M196	Y	3.379	3.379	0	0
127	M200	X	1.951	1.951	0	0
128	M200	Y	3.379	3.379	0	0
129	M211	X	2.233	2.233	0	0
130	M211	Y	3.868	3.868	0	0
131	M212	X	2.233	2.233	0	0
132	M212	Y	3.868	3.868	0	0
133	M213	X	1.951	1.951	0	0
134	M213	Y	3.379	3.379	0	0
135	M219	X	2.233	2.233	0	0
136	M219	Y	3.868	3.868	0	0
137	M220	X	2.233	2.233	0	0
138	M220	Y	3.868	3.868	0	0
139	M221	X	1.951	1.951	0	0
140	M221	Y	3.379	3.379	0	0
141	M233	X	0	0	0	0
142	M233	Y	0	0	0	0
143	M234	X	0	0	0	0
144	M234	Y	0	0	0	0
145	M235	X	1.951	1.951	0	0
146	M235	Y	3.379	3.379	0	0
147	M239	X	1.951	1.951	0	0
148	M239	Y	3.379	3.379	0	0
149	M250	X	0	0	0	0
150	M250	Y	0	0	0	0
151	M251	X	0	0	0	0
152	M251	Y	0	0	0	0
153	M252	X	1.951	1.951	0	0
154	M252	Y	3.379	3.379	0	0
155	M258	X	0	0	0	0
156	M258	Y	0	0	0	0

**Member Distributed Loads (BLC 17 : Structure Wind w/ Ice (120)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
157	M259	X	0	0	0	0
158	M259	Y	0	0	0	0
159	M260	X	1.951	1.951	0	0
160	M260	Y	3.379	3.379	0	0
161	M264A	X	.744	.744	0	0
162	M264A	Y	1.289	1.289	0	0
163	M268A	X	2.977	2.977	0	0
164	M268A	Y	5.157	5.157	0	0
165	M272A	X	.345	.345	0	0
166	M272A	Y	.597	.597	0	0
167	SR20	X	.744	.744	%.67	4.33
168	SR20	Y	1.289	1.289	%.67	4.33
169	SR12	X	2.977	2.977	0	5
170	SR12	Y	5.157	5.157	0	5
171	SR30	X	.345	.345	0	19.399
172	SR30	Y	.597	.597	0	19.399
173	M272B	X	2.233	2.233	0	0
174	M272B	Y	3.868	3.868	0	0
175	M273	X	2.233	2.233	0	0
176	M273	Y	3.868	3.868	0	0
177	M270D	X	2.233	2.233	0	0
178	M270D	Y	3.868	3.868	0	0
179	M271C	X	2.233	2.233	0	0
180	M271C	Y	3.868	3.868	0	0
181	M274	X	2.233	2.233	0	0
182	M274	Y	3.868	3.868	0	0
183	M275	X	2.233	2.233	0	0
184	M275	Y	3.868	3.868	0	0

**Member Distributed Loads (BLC 18 : Structure Wind w/ Ice (135))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	1.509	1.509	0	0
2	M21	Y	1.509	1.509	0	0
3	M22	X	1.509	1.509	0	0
4	M22	Y	1.509	1.509	0	0
5	M23	X	1.509	1.509	0	0
6	M23	Y	1.509	1.509	0	0
7	M39	X	1.972	1.972	0	0
8	M39	Y	1.972	1.972	0	0
9	M40	X	.264	.264	0	0
10	M40	Y	.264	.264	0	0
11	M41	X	3.68	3.68	0	0
12	M41	Y	3.68	3.68	0	0
13	M45	X	1.972	1.972	0	0
14	M45	Y	1.972	1.972	0	0
15	M50	X	1.972	1.972	0	0
16	M50	Y	1.972	1.972	0	0
17	M42A	X	1.509	1.509	0	0
18	M42A	Y	1.509	1.509	0	0
19	M43A	X	1.509	1.509	0	0
20	M43A	Y	1.509	1.509	0	0

**Member Distributed Loads (BLC 18 : Structure Wind w/ Ice (135)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
21	M44A	X	1.509	1.509	0	0
22	M44A	Y	1.509	1.509	0	0
23	M26	X	.202	.202	0	0
24	M26	Y	.202	.202	0	0
25	M27	X	.202	.202	0	0
26	M27	Y	.202	.202	0	0
27	M28	X	.202	.202	0	0
28	M28	Y	.202	.202	0	0
29	M30	X	.264	.264	0	0
30	M30	Y	.264	.264	0	0
31	M31	X	3.68	3.68	0	0
32	M31	Y	3.68	3.68	0	0
33	M32	X	1.972	1.972	0	0
34	M32	Y	1.972	1.972	0	0
35	M41A	X	.202	.202	0	0
36	M41A	Y	.202	.202	0	0
37	M42	X	.202	.202	0	0
38	M42	Y	.202	.202	0	0
39	M43	X	.202	.202	0	0
40	M43	Y	.202	.202	0	0
41	M51A	X	2.816	2.816	0	0
42	M51A	Y	2.816	2.816	0	0
43	M52	X	2.816	2.816	0	0
44	M52	Y	2.816	2.816	0	0
45	M53	X	2.816	2.816	0	0
46	M53	Y	2.816	2.816	0	0
47	M55	X	3.68	3.68	0	0
48	M55	Y	3.68	3.68	0	0
49	M56	X	1.972	1.972	0	0
50	M56	Y	1.972	1.972	0	0
51	M57A	X	.264	.264	0	0
52	M57A	Y	.264	.264	0	0
53	M66	X	2.816	2.816	0	0
54	M66	Y	2.816	2.816	0	0
55	M67	X	2.816	2.816	0	0
56	M67	Y	2.816	2.816	0	0
57	M68	X	2.816	2.816	0	0
58	M68	Y	2.816	2.816	0	0
59	M72A	X	3.68	3.68	0	0
60	M72A	Y	3.68	3.68	0	0
61	M73A	X	.264	.264	0	0
62	M73A	Y	.264	.264	0	0
63	M74A	X	1.972	1.972	0	0
64	M74A	Y	1.972	1.972	0	0
65	M71A	X	1.491	1.491	0	0
66	M71A	Y	1.491	1.491	0	0
67	M72B	X	2.107	2.107	0	0
68	M72B	Y	2.107	2.107	0	0
69	M82	X	1.475	1.475	0	0
70	M82	Y	1.475	1.475	0	0
71	M88	X	.282	.282	0	0
72	M88	Y	.282	.282	0	0

**Member Distributed Loads (BLC 18 : Structure Wind w/ Ice (135)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
73	M100	X	4.3e-5	4.3e-5	0	0
74	M100	Y	4.3e-5	4.3e-5	0	0
75	M106	X	3.932	3.932	0	0
76	M106	Y	3.932	3.932	0	0
77	M125	X	2.105	2.105	0	0
78	M125	Y	2.105	2.105	0	0
79	M126	X	2.105	2.105	0	0
80	M126	Y	2.105	2.105	0	0
81	M130	X	2.759	2.759	0	0
82	M130	Y	2.759	2.759	0	0
83	M138	X	2.759	2.759	0	0
84	M138	Y	2.759	2.759	0	0
85	M155	X	2.759	2.759	0	0
86	M155	Y	2.759	2.759	0	0
87	M157	X	2.759	2.759	0	0
88	M157	Y	2.759	2.759	0	0
89	M159	X	2.759	2.759	0	0
90	M159	Y	2.759	2.759	0	0
91	SR1	X	1.38	1.38	0	0
92	SR1	Y	1.38	1.38	0	0
93	SR2	X	2.105	2.105	0	0
94	SR2	Y	2.105	2.105	0	0
95	SR10	X	.185	.185	0	0
96	SR10	Y	.185	.185	0	0
97	SR12	X	.282	.282	0	0
98	SR12	Y	.282	.282	0	0
99	SR19	X	2.574	2.574	0	0
100	SR19	Y	2.574	2.574	0	0
101	SR20	X	3.928	3.928	0	0
102	SR20	Y	3.928	3.928	0	0
103	SR21	X	3.928	3.928	0	0
104	SR21	Y	3.928	3.928	0	0
105	SR28	X	.131	.131	0	0
106	SR28	Y	.131	.131	0	0
107	SR30	X	.975	.975	0	0
108	SR30	Y	.975	.975	0	0
109	M189	X	2.105	2.105	0	0
110	M189	Y	2.105	2.105	0	0
111	M190	X	2.105	2.105	0	0
112	M190	Y	2.105	2.105	0	0
113	M191	X	2.759	2.759	0	0
114	M191	Y	2.759	2.759	0	0
115	M190A	X	2.105	2.105	0	0
116	M190A	Y	2.105	2.105	0	0
117	M191A	X	2.105	2.105	0	0
118	M191A	Y	2.105	2.105	0	0
119	M192A	X	2.759	2.759	0	0
120	M192A	Y	2.759	2.759	0	0
121	M194B	X	3.928	3.928	0	0
122	M194B	Y	3.928	3.928	0	0
123	M195A	X	3.928	3.928	0	0
124	M195A	Y	3.928	3.928	0	0

**Member Distributed Loads (BLC 18 : Structure Wind w/ Ice (135)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
125	M196	X	2.759	2.759	0	0
126	M196	Y	2.759	2.759	0	0
127	M200	X	2.759	2.759	0	0
128	M200	Y	2.759	2.759	0	0
129	M211	X	3.928	3.928	0	0
130	M211	Y	3.928	3.928	0	0
131	M212	X	3.928	3.928	0	0
132	M212	Y	3.928	3.928	0	0
133	M213	X	2.759	2.759	0	0
134	M213	Y	2.759	2.759	0	0
135	M219	X	3.928	3.928	0	0
136	M219	Y	3.928	3.928	0	0
137	M220	X	3.928	3.928	0	0
138	M220	Y	3.928	3.928	0	0
139	M221	X	2.759	2.759	0	0
140	M221	Y	2.759	2.759	0	0
141	M233	X	.282	.282	0	0
142	M233	Y	.282	.282	0	0
143	M234	X	.282	.282	0	0
144	M234	Y	.282	.282	0	0
145	M235	X	2.759	2.759	0	0
146	M235	Y	2.759	2.759	0	0
147	M239	X	2.759	2.759	0	0
148	M239	Y	2.759	2.759	0	0
149	M250	X	.282	.282	0	0
150	M250	Y	.282	.282	0	0
151	M251	X	.282	.282	0	0
152	M251	Y	.282	.282	0	0
153	M252	X	2.759	2.759	0	0
154	M252	Y	2.759	2.759	0	0
155	M258	X	.282	.282	0	0
156	M258	Y	.282	.282	0	0
157	M259	X	.282	.282	0	0
158	M259	Y	.282	.282	0	0
159	M260	X	2.759	2.759	0	0
160	M260	Y	2.759	2.759	0	0
161	M264A	X	2.105	2.105	0	0
162	M264A	Y	2.105	2.105	0	0
163	M268A	X	3.928	3.928	0	0
164	M268A	Y	3.928	3.928	0	0
165	M272A	X	.131	.131	0	0
166	M272A	Y	.131	.131	0	0
167	SR20	X	2.105	2.105	%.67	4.33
168	SR20	Y	2.105	2.105	%.67	4.33
169	SR12	X	3.928	3.928	0	5
170	SR12	Y	3.928	3.928	0	5
171	SR30	X	.131	.131	0	19.399
172	SR30	Y	.131	.131	0	19.399
173	M272B	X	2.105	2.105	0	0
174	M272B	Y	2.105	2.105	0	0
175	M273	X	2.105	2.105	0	0
176	M273	Y	2.105	2.105	0	0

**Member Distributed Loads (BLC 18 : Structure Wind w/ Ice (135)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
177	M270D	X	2.105	2.105	0	0
178	M270D	Y	2.105	2.105	0	0
179	M271C	X	2.105	2.105	0	0
180	M271C	Y	2.105	2.105	0	0
181	M274	X	2.105	2.105	0	0
182	M274	Y	2.105	2.105	0	0
183	M275	X	2.105	2.105	0	0
184	M275	Y	2.105	2.105	0	0

**Member Distributed Loads (BLC 19 : Structure Wind w/ Ice (150))**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
1	M21	X	2.772	2.772	0	0
2	M21	Y	1.601	1.601	0	0
3	M22	X	2.772	2.772	0	0
4	M22	Y	1.601	1.601	0	0
5	M23	X	2.772	2.772	0	0
6	M23	Y	1.601	1.601	0	0
7	M39	X	3.623	3.623	0	0
8	M39	Y	2.092	2.092	0	0
9	M40	X	0	0	0	0
10	M40	Y	0	0	0	0
11	M41	X	3.623	3.623	0	0
12	M41	Y	2.092	2.092	0	0
13	M45	X	1.208	1.208	0	0
14	M45	Y	.697	.697	0	0
15	M50	X	3.623	3.623	0	0
16	M50	Y	2.092	2.092	0	0
17	M42A	X	2.772	2.772	0	0
18	M42A	Y	1.601	1.601	0	0
19	M43A	X	2.772	2.772	0	0
20	M43A	Y	1.601	1.601	0	0
21	M44A	X	2.772	2.772	0	0
22	M44A	Y	1.601	1.601	0	0
23	M26	X	0	0	0	0
24	M26	Y	0	0	0	0
25	M27	X	0	0	0	0
26	M27	Y	0	0	0	0
27	M28	X	0	0	0	0
28	M28	Y	0	0	0	0
29	M30	X	0	0	0	0
30	M30	Y	0	0	0	0
31	M31	X	3.623	3.623	0	0
32	M31	Y	2.092	2.092	0	0
33	M32	X	3.623	3.623	0	0
34	M32	Y	2.092	2.092	0	0
35	M41A	X	0	0	0	0
36	M41A	Y	0	0	0	0
37	M42	X	0	0	0	0
38	M42	Y	0	0	0	0
39	M43	X	0	0	0	0
40	M43	Y	0	0	0	0

**Member Distributed Loads (BLC 19 : Structure Wind w/ Ice (150)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
41	M51A	X	2.772	2.772	0	0
42	M51A	Y	1.601	1.601	0	0
43	M52	X	2.772	2.772	0	0
44	M52	Y	1.601	1.601	0	0
45	M53	X	2.772	2.772	0	0
46	M53	Y	1.601	1.601	0	0
47	M55	X	3.623	3.623	0	0
48	M55	Y	2.092	2.092	0	0
49	M56	X	3.623	3.623	0	0
50	M56	Y	2.092	2.092	0	0
51	M57A	X	0	0	0	0
52	M57A	Y	0	0	0	0
53	M66	X	2.772	2.772	0	0
54	M66	Y	1.601	1.601	0	0
55	M67	X	2.772	2.772	0	0
56	M67	Y	1.601	1.601	0	0
57	M68	X	2.772	2.772	0	0
58	M68	Y	1.601	1.601	0	0
59	M72A	X	3.623	3.623	0	0
60	M72A	Y	2.092	2.092	0	0
61	M73A	X	0	0	0	0
62	M73A	Y	0	0	0	0
63	M74A	X	3.623	3.623	0	0
64	M74A	Y	2.092	2.092	0	0
65	M71A	X	1.223	1.223	0	0
66	M71A	Y	.706	.706	0	0
67	M72B	X	3.871	3.871	0	0
68	M72B	Y	2.235	2.235	0	0
69	M82	X	2.254	2.254	0	0
70	M82	Y	1.302	1.302	0	0
71	M88	X	0	0	0	0
72	M88	Y	0	0	0	0
73	M100	X	.157	.157	0	0
74	M100	Y	.09	.09	0	0
75	M106	X	3.871	3.871	0	0
76	M106	Y	2.235	2.235	0	0
77	M125	X	1.289	1.289	0	0
78	M125	Y	.744	.744	0	0
79	M126	X	1.289	1.289	0	0
80	M126	Y	.744	.744	0	0
81	M130	X	3.379	3.379	0	0
82	M130	Y	1.951	1.951	0	0
83	M138	X	3.379	3.379	0	0
84	M138	Y	1.951	1.951	0	0
85	M155	X	3.379	3.379	0	0
86	M155	Y	1.951	1.951	0	0
87	M157	X	3.379	3.379	0	0
88	M157	Y	1.951	1.951	0	0
89	M159	X	3.379	3.379	0	0
90	M159	Y	1.951	1.951	0	0
91	SR1	X	2.535	2.535	0	0
92	SR1	Y	1.463	1.463	0	0

**Member Distributed Loads (BLC 19 : Structure Wind w/ Ice (150)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
93	SR2	X	3.868	3.868	0	0
94	SR2	Y	2.233	2.233	0	0
95	SR10	X	0	0	0	0
96	SR10	Y	0	0	0	0
97	SR12	X	0	0	0	0
98	SR12	Y	0	0	0	0
99	SR19	X	2.535	2.535	0	0
100	SR19	Y	1.463	1.463	0	0
101	SR20	X	3.868	3.868	0	0
102	SR20	Y	2.233	2.233	0	0
103	SR21	X	3.868	3.868	0	0
104	SR21	Y	2.233	2.233	0	0
105	SR28	X	0	0	0	0
106	SR28	Y	0	0	0	0
107	SR30	X	1.791	1.791	0	0
108	SR30	Y	1.034	1.034	0	0
109	M189	X	1.289	1.289	0	0
110	M189	Y	.744	.744	0	0
111	M190	X	1.289	1.289	0	0
112	M190	Y	.744	.744	0	0
113	M191	X	3.379	3.379	0	0
114	M191	Y	1.951	1.951	0	0
115	M190A	X	1.289	1.289	0	0
116	M190A	Y	.744	.744	0	0
117	M191A	X	1.289	1.289	0	0
118	M191A	Y	.744	.744	0	0
119	M192A	X	3.379	3.379	0	0
120	M192A	Y	1.951	1.951	0	0
121	M194B	X	5.157	5.157	0	0
122	M194B	Y	2.977	2.977	0	0
123	M195A	X	5.157	5.157	0	0
124	M195A	Y	2.977	2.977	0	0
125	M196	X	3.379	3.379	0	0
126	M196	Y	1.951	1.951	0	0
127	M200	X	3.379	3.379	0	0
128	M200	Y	1.951	1.951	0	0
129	M211	X	5.157	5.157	0	0
130	M211	Y	2.977	2.977	0	0
131	M212	X	5.157	5.157	0	0
132	M212	Y	2.977	2.977	0	0
133	M213	X	3.379	3.379	0	0
134	M213	Y	1.951	1.951	0	0
135	M219	X	5.157	5.157	0	0
136	M219	Y	2.977	2.977	0	0
137	M220	X	5.157	5.157	0	0
138	M220	Y	2.977	2.977	0	0
139	M221	X	3.379	3.379	0	0
140	M221	Y	1.951	1.951	0	0
141	M233	X	1.289	1.289	0	0
142	M233	Y	.744	.744	0	0
143	M234	X	1.289	1.289	0	0
144	M234	Y	.744	.744	0	0



**Member Distributed Loads (BLC 19 : Structure Wind w/ Ice (150)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft...	Start Location[in,%]	End Location[in,%]
145	M235	X	3.379	3.379	0	0
146	M235	Y	1.951	1.951	0	0
147	M239	X	3.379	3.379	0	0
148	M239	Y	1.951	1.951	0	0
149	M250	X	1.289	1.289	0	0
150	M250	Y	.744	.744	0	0
151	M251	X	1.289	1.289	0	0
152	M251	Y	.744	.744	0	0
153	M252	X	3.379	3.379	0	0
154	M252	Y	1.951	1.951	0	0
155	M258	X	1.289	1.289	0	0
156	M258	Y	.744	.744	0	0
157	M259	X	1.289	1.289	0	0
158	M259	Y	.744	.744	0	0
159	M260	X	3.379	3.379	0	0
160	M260	Y	1.951	1.951	0	0
161	M264A	X	3.868	3.868	0	0
162	M264A	Y	2.233	2.233	0	0
163	M268A	X	3.868	3.868	0	0
164	M268A	Y	2.233	2.233	0	0
165	M272A	X	0	0	0	0
166	M272A	Y	0	0	0	0
167	SR20	X	3.868	3.868	%.67	4.33
168	SR20	Y	2.233	2.233	%.67	4.33
169	SR12	X	3.868	3.868	0	5
170	SR12	Y	2.233	2.233	0	5
171	SR30	X	0	0	0	19.399
172	SR30	Y	0	0	0	19.399
173	M272B	X	1.289	1.289	0	0
174	M272B	Y	.744	.744	0	0
175	M273	X	1.289	1.289	0	0
176	M273	Y	.744	.744	0	0
177	M270D	X	1.289	1.289	0	0
178	M270D	Y	.744	.744	0	0
179	M271C	X	1.289	1.289	0	0
180	M271C	Y	.744	.744	0	0
181	M274	X	1.289	1.289	0	0
182	M274	Y	.744	.744	0	0
183	M275	X	1.289	1.289	0	0
184	M275	Y	.744	.744	0	0

**Joint Boundary Conditions**

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	N193B	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N296	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N441	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

**Envelope Joint Reactions**

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC	
1	N193B	max	-1161.955	4	3031.36	31	4939.817	19	1107.386	6	5073.887	3	1233.096	7
2		min	-9492.818	27	-1268.467	7	-1065.23	11	-746.183	14	-2540.143	11	-1236.23	15
3	N296	max	2931.175	34	-1029.162	15	5162.812	30	2121.18	6	1106.643	5	1357.904	18
4		min	-1182.351	10	-9540.082	23	-1002.435	6	-4916.08	30	-2046.614	29	-1354.725	10
5	N441	max	7165.625	19	6992.289	31	4998.176	25	3995.979	24	1527.972	18	1242.976	12
6		min	268.232	12	577.13	6	-1077.814	17	-2015.633	16	-3230.066	26	-1267.131	4
7	Totals:	max	5387.606	3	5256.412	15	12779.037	19						
8		min	-5387.614	11	-5256.434	7	3424.605	1						

**Envelope AISC 14th(360-10): LRFD Steel Code Checks**

Member	Shape	Code C...	Loc[i...]	LC	Shear Ch...	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt ..	phi*Mn y...	phi*Mn z-z ...	Cb	Eqn	
1	M82	HSS3X3X4	.849	18	31	.377	18	y	29	77974.003	79056	6696	6696	2.2...	H1-1b
2	M100	HSS3X3X4	.820	18	24	.349	18	y	23	77974.003	79056	6696	6696	2.2...	H1-1b
3	M71A	HSS3X3X4	.810	18	19	.360	18	y	34	77974.003	79056	6696	6696	2.2...	H1-1b
4	M200	PIPE 2.0	.672	29.8...	3	.303	29.179		3	8922.084	32130	1871.625	1871.625	2.0...	H1-1b
5	M138	PIPE 2.0	.668	29.8...	8	.282	29.179		8	8922.084	32130	1871.625	1871.625	1.8...	H1-1b
6	M235	PIPE 2.0	.662	29.5...	12	.307	28.989		12	13511.278	32130	1871.625	1871.625	2.4...	H1-1b
7	M130	PIPE 2.0	.658	29.5...	7	.305	28.989		7	13511.278	32130	1871.625	1871.625	2.5...	H1-1b
8	M239	PIPE 2.0	.652	29.8...	12	.292	29.179		13	8922.084	32130	1871.625	1871.625	1.8...	H1-1b
9	M196	PIPE 2.0	.645	29.5...	18	.299	28.989		18	13511.278	32130	1871.625	1871.625	2.5...	H1-1b
10	M252	PIPE 2.0	.613	29.5...	3	.274	28.989		3	13511.278	32130	1871.625	1871.625	2.4...	H1-1b
11	M213	PIPE 2.0	.595	29.5...	9	.267	28.989		9	13511.278	32130	1871.625	1871.625	2.5...	H1-1b
12	M260	PIPE 2.0	.590	29.5...	3	.270	28.989		3	13511.278	32130	1871.625	1871.625	2.5...	H1-1b
13	M191	PIPE 2.0	.586	29.5...	14	.246	28.989		15	13511.278	32130	1871.625	1871.625	2.2...	H1-1b
14	M30	C5X9	.583	24.9...	34	.302	28.241	y	31	40751.07	85536	1909.122	11853	1.5...	H1-1b
15	M56	C5X9	.582	4.974	8	.497	52.058	z	3	35337.193	85536	1909.122	11853	1.6...	H1-1b
16	M192A	PIPE 2.0	.570	29.5...	14	.262	28.989		14	13511.278	32130	1871.625	1871.625	2.52	H1-1b
17	M32	C5X9	.570	57.6...	9	.542	9.947	z	10	35337.193	85536	1909.122	11853	2.3...	H1-1b
18	M55	C5X9	.566	24.9...	29	.305	28.241	y	25	40751.069	85536	1909.122	11853	1.5...	H1-1b
19	M39	C5X9	.546	24.9...	3	.288	28.241	y	20	40751.069	85536	1909.122	11853	1.5...	H1-1b
20	M221	PIPE 2.0	.532	29.5...	9	.244	28.989		9	13511.278	32130	1871.625	1871.625	2.4...	H1-1b
21	M31	C5X9	.527	4.974	14	.532	52.058	z	9	35337.193	85536	1909.122	11853	1.6...	H1-1b
22	M40	C5X9	.520	4.974	3	.485	52.058	z	14	35337.193	85536	1909.122	11853	1.6...	H1-1b
23	M57A	C5X9	.502	57.6...	3	.698	9.947	z	5	35337.193	85536	1909.122	11853	2.2...	H1-1b
24	M41	C5X9	.500	57.6...	15	.640	9.947	z	16	35337.193	85536	1909.122	11853	2.4...	H1-1b
25	M272A	L2.5x2.5x4	.458	19.3...	11	.050	19.399	z	4	35404.46	38556	1113.554	2537.388	1.85	H2-1
26	M74A	C5X9	.417	17	9	.385	8.5	y	3	80203.632	85536	1909.122	11853	1.0...	H1-1b
27	SR28	L2.5x2.5x4	.402	19.3...	16	.051	0	z	10	35404.46	38556	1113.554	2537.388	1.7...	H2-1
28	SR30	L2.5x2.5x4	.382	19.3...	6	.045	19.399	z	15	35404.46	38556	1113.554	2537.388	1.7...	H2-1
29	M72A	C5X9	.378	17	15	.373	0	z	9	80203.632	85536	1909.122	11853	1.06	H1-1b
30	M73A	C5X9	.378	17	4	.361	8.5	y	5	80203.632	85536	1909.122	11853	1.0...	H1-1b
31	SR19	PIPE 2.0	.346	118...	12	.076	69		32	7437.881	32130	1871.625	1871.625	1.6...	H1-1a
32	M272B	Plate 6"x3/8"	.340	3	19	.264	0	y	8	69866.147	72900	569.533	9112.5	1.6...	H1-1b
33	SR10	PIPE 2.0	.319	19.6...	11	.073	69		21	7437.881	32130	1871.625	1871.625	1.8...	H1-1a
34	M189	Plate 6"x3/8"	.313	3	20	.231	0	y	15	69866.147	72900	569.533	9112.5	1.1...	H1-1b
35	M274	Plate 6"x3/8"	.307	3	24	.264	0	y	13	69866.147	72900	569.533	9112.5	1.5...	H1-1b
36	M270D	Plate 6"x3/8"	.304	3	29	.272	0	y	3	69866.147	72900	569.533	9112.5	1.57	H1-1b
37	SR1	PIPE 2.0	.303	95.1...	11	.079	69		26	7437.881	32130	1871.625	1871.625	1.5...	H1-1b
38	M211	Plate 6"x3/8"	.283	3	31	.240	0	y	9	69866.147	72900	569.533	9112.5	1.3...	H1-1b

**Envelope AISC 14th(360-10): LRFD Steel Code Checks (Continued)**

Member	Shape	Code C...	Loc[i]...	LC	Shear Ch...	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt ...	phi*Mn y-...	phi*Mn z-z ...	Cb	Eqn	
39	M250	Plate 6"x3/8"	.281	3	26	.246	0	y	3	69866.147	72900	569.533	9112.5	1.0...	H1-1b
40	M125	Plate 6"x3/8"	.236	3	34	.268	0	y	7	69866.147	72900	569.533	9112.5	1.5...	H1-1b
41	M233	Plate 6"x3/8"	.233	3	23	.270	0	y	12	69866.147	72900	569.533	9112.5	1.5...	H1-1b
42	M273	Plate 6"x3/8"	.231	3	28	.106	3	y	8	69866.147	72900	569.533	9112.5	1.7...	H1-1b
43	M194B	Plate 6"x3/8"	.231	3	29	.263	0	y	18	69866.147	72900	569.533	9112.5	1.5...	H1-1b
44	M190	Plate 6"x3/8"	.221	3	27	.093	3	y	14	69866.147	72900	569.533	9112.5	1.6...	H1-1b
45	M275	Plate 6"x3/8"	.209	3	32	.101	3	y	13	69866.147	72900	569.533	9112.5	1.7...	H1-1b
46	M271C	Plate 6"x3/8"	.206	3	22	.104	0	y	3	69866.147	72900	569.533	9112.5	1.7...	H1-1b
47	M212	Plate 6"x3/8"	.203	3	21	.092	3	y	9	69866.147	72900	569.533	9112.5	1.5...	H1-1b
48	M251	Plate 6"x3/8"	.198	3	31	.094	3	y	3	69866.147	72900	569.533	9112.5	1.4...	H1-1b
49	M126	Plate 6"x3/8"	.183	3	27	.101	3	y	7	69866.147	72900	569.533	9112.5	1.7...	H1-1b
50	M106	PL 6x.5	.182	15.6...	24	.394	14.518	y	25	26277.346	97200	1012.5	12150	2.2...	H1-1b
51	M234	Plate 6"x3/8"	.182	3	33	.102	3	y	12	69866.147	72900	569.533	9112.5	1.2...	H1-1b
52	M195A	Plate 6"x3/8"	.177	3	22	.099	3	y	18	69866.147	72900	569.533	9112.5	1.7...	H1-1b
53	M72B	PL 6x.5	.174	15.6...	32	.377	14.518	y	19	26277.346	97200	1012.5	12150	2.1...	H1-1b
54	M45	C5X9	.169	21.3...	3	.044	10.694	z	19	77249.934	85536	1909.122	11853	1.7...	H1-1b
55	M88	PL 6x.5	.168	15.6...	30	.393	14.518	y	30	26277.346	97200	1012.5	12150	2.21	H1-1b
56	M50	C5X9	.123	0	14	.011	18.584	y	28	67113.701	85536	1909.122	11853	1.3...	H1-1b
57	M190A	Plate 6"x3/8"	.096	3	3	.233	0	y	14	69866.147	72900	569.533	9112.5	1.1...	H1-1b
58	M258	Plate 6"x3/8"	.093	3	9	.239	0	y	3	69866.147	72900	569.533	9112.5	2.1...	H1-1b
59	M219	Plate 6"x3/8"	.088	3	14	.218	0	y	9	69866.147	72900	569.533	9112.5	1.0...	H1-1b
60	M66	PL3X0.375	.075	4.75	13	.307	4.75	y	4	24301.093	36450	284.766	2278.125	1.35	H1-1b
61	M42A	PL3X0.375	.070	4.75	8	.258	4.75	y	15	24301.093	36450	284.766	2278.125	1.3...	H1-1b
62	M41A	PL3X0.375	.067	4.75	3	.297	4.75	y	10	24301.093	36450	284.766	2278.125	1.36	H1-1b
63	M259	Plate 6"x3/8"	.066	0	3	.092	3	y	3	69866.147	72900	569.533	9112.5	1.71	H1-1b
64	M191A	Plate 6"x3/8"	.063	0	14	.090	3	y	14	69866.147	72900	569.533	9112.5	1.7...	H1-1b
65	M43	PL3X0.375	.063	0	9	.290	6.4	y	10	17460.5	36450	284.766	2278.125	1.3...	H1-1b*
66	M68	PL3X0.375	.060	6.4	4	.300	6.4	y	4	17460.5	36450	284.766	2278.125	1.3...	H1-1b
67	M220	Plate 6"x3/8"	.059	0	8	.084	3	y	9	69866.147	72900	569.533	9112.5	1.7...	H1-1b
68	M44A	PL3X0.375	.058	6.4	14	.250	6.4	y	15	17460.5	36450	284.766	2278.125	1.4...	H1-1b
69	M21	PL3X0.375	.035	4.75	3	.244	4.75	y	15	24301.093	36450	284.766	2278.125	1.5	H1-1b
70	SR21	PL6x3/8	.035	3.237	12	.012	3.237	y	33	64927.873	72900	569.7	9112.5	1.3...	H1-1b
71	M268A	PL6x3/8	.032	3.237	10	.014	3.237	y	28	64927.873	72900	569.7	9112.5	1.4...	H1-1b
72	SR12	PL6x3/8	.031	3.237	3	.012	3.237	y	23	64927.873	72900	569.7	9112.5	1.3...	H1-1b
73	M51A	PL3X0.375	.031	4.75	9	.292	4.75	y	4	24301.093	36450	284.766	2278.125	1.42	H1-1b
74	M28	PL3X0.375	.030	6.4	24	.285	0	y	10	17460.5	36450	284.766	2278.125	1.4...	H1-1b
75	M23	PL3X0.375	.030	6.4	30	.245	0	y	15	17460.5	36450	284.766	2278.125	1.4...	H1-1b
76	M264A	PL6x3/8	.028	3.237	10	.020	3.237	y	21	64927.873	72900	569.7	9112.5	1.4...	H1-1b
77	SR20	PL6x3/8	.027	1.763	4	.021	1.763	y	31	64927.873	72900	569.7	9112.5	1.4...	H1-1b
78	M53	PL3X0.375	.027	6.4	19	.295	0	y	4	17460.5	36450	284.766	2278.125	1.4...	H1-1b
79	M26	PL3X0.375	.027	4.75	28	.283	4.75	y	10	24301.093	36450	284.766	2278.125	1.3...	H1-1b
80	SR2	PL6x3/8	.024	3.237	15	.022	3.237	y	26	64927.873	72900	569.7	9112.5	1.6...	H1-1b
81	M155	PIPE 2.0	.019	0	3	.004	0		3	31747.067	32130	1871.625	1871.625	1.6...	H1-1b
82	M157	PIPE 2.0	.019	0	14	.004	0		14	31747.067	32130	1871.625	1871.625	1.6...	H1-1b
83	M159	PIPE 2.0	.019	0	8	.004	0		8	31747.067	32130	1871.625	1871.625	1.6...	H1-1b
84	M27	PL3X0.375	.002	3.1	30	.000	3.1	y	14	30669.283	36450	284.766	2278.125	1.5...	H1-1b
85	M42	PL3X0.375	.002	3.1	30	.000	3.1	y	14	30669.283	36450	284.766	2278.125	1.5...	H1-1b
86	M52	PL3X0.375	.002	3.1	32	.000	3.1	y	16	30669.283	36450	284.766	2278.125	1.5...	H1-1b
87	M67	PL3X0.375	.002	3.1	32	.000	3.1	y	16	30669.283	36450	284.766	2278.125	1.5...	H1-1b
88	M22	PL3X0.375	.002	3.1	27	.000	3.1	y	11	30669.283	36450	284.766	2278.125	1.5...	H1-1b
89	M43A	PL3X0.375	.002	3.1	27	.000	3.1	y	11	30669.283	36450	284.766	2278.125	1.5...	H1-1b

**Envelope Plate/Shell Principal Stresses**

	Plate	Sur...	Sigma1 [ksi]	LC	Sigma2 [ksi]	LC	Tau Max [k...	LC	Angle [rad]	LC	Von Mises [ksi]	LC	
1	P103A	max	T	15.205	29	2.516	29	6.344	29	1.025	4	14.116	29
2		min		-.876	5	-3.516	5	.236	1	-.328	14	.413	1
3		max	B	6.456	5	1.161	5	3.832	13	1.124	13	8.739	13
4		min		-1.854	13	-9.517	13	.647	9	-.25	5	1.156	37
5	P42	max	T	14.759	19	2.419	19	6.175	34	1.049	10	13.711	19
6		min		-.962	11	-4.019	11	.658	13	-.333	3	1.144	13
7		max	B	6.749	11	1.24	11	3.994	3	1.113	3	9.088	3
8		min		-1.899	3	-9.887	3	.637	44	-.275	11	1.104	44
9	P199	max	T	14.38	24	2.349	24	6.016	23	1.045	15	13.361	24
10		min		-.913	16	-3.616	16	.158	13	-.325	8	.306	13
11		max	B	6.555	16	1.188	16	3.759	8	1.124	8	8.585	8
12		min		-1.837	8	-9.355	8	.567	1	-.251	16	1.042	1
13	P161	max	T	10.851	30	-.14	1	6.178	30	1.034	6	11.677	30
14		min		.548	7	-1.506	29	.69	3	-.149	13	1.3	7
15		max	B	3.93	7	-.036	38	3.41	14	2.283	3	6.354	15
16		min		.097	1	-5.783	15	.251	35	-.241	4	.455	35
17	P257	max	T	10.428	24	-.122	13	5.926	24	1.091	17	11.208	24
18		min		.542	18	-1.453	16	.553	14	-.144	8	1.04	14
19		max	B	4.143	17	-.073	1	3.485	9	1.7	13	6.476	9
20		min		.085	13	-5.832	9	.283	128	-.71	14	.496	128
21	P102A	max	T	10.37	19	-.143	8	5.909	19	1.074	11	11.165	19
22		min		.586	12	-1.55	11	.572	8	-.152	3	1.023	13
23		max	B	4.032	12	-.017	91	3.448	3	1.527	7	6.397	4
24		min		.156	43	-5.796	4	.211	59	-.736	8	.38	59
25	P111A	max	T	11.079	29	2.236	13	4.499	29	1.062	3	10.2	29
26		min		-1.217	5	-4.333	5	.194	1	-.478	18	.61	1
27		max	B	5.482	5	1.022	5	3.856	29	1.092	13	8.828	13
28		min		-2.158	13	-9.707	13	.487	8	-.31	5	.844	8
29	P50	max	T	10.638	19	2.281	3	4.344	19	1.037	8	9.809	19
30		min		-1.216	11	-4.727	11	.406	7	-.457	7	.884	7
31		max	B	5.685	11	1.065	10	3.919	3	1.082	3	9.117	3
32		min		-2.181	18	-10.005	3	.441	14	-.336	11	.773	14
33	P207	max	T	10.273	24	2.224	8	4.191	24	1.104	13	9.47	24
34		min		-1.26	16	-4.441	16	.232	13	-.469	12	.68	13
35		max	B	5.544	16	1.042	16	3.681	8	1.096	8	8.628	8
36		min		-2.131	8	-9.494	8	.401	1	-.306	16	.699	1
37	P58	max	T	9.078	3	1.747	3	3.665	3	2.182	7	8.343	3
38		min		-1.15	11	-5.556	11	.12	7	-.581	6	.337	90
39		max	B	4.398	11	.585	10	4.282	19	1.073	16	9.699	19
40		min		-1.985	34	-10.532	19	.29	14	-.414	11	.842	14
41	P66	max	T	8.797	18	1.153	3	3.888	18	2.355	95	8.334	18
42		min		-1.855	11	-6.87	10	.16	92	-.779	84	.621	86
43		max	B	3.101	11	.348	10	5.441	19	1.318	14	11.587	19
44		min		-1.405	33	-12.182	19	.25	14	-.245	13	.6	13
45	P127A	max	T	8.766	13	1.143	13	3.812	13	2.355	120	8.254	13
46		min		-1.814	5	-6.89	5	.068	8	-.785	35	.561	35
47		max	B	2.987	5	.253	4	5.665	30	1.51	8	12.038	29
48		min		-1.355	27	-12.654	29	.133	8	-.263	7	.757	8
49	P162	max	T	8.036	30	.036	17	4.112	30	.937	7	8.132	30
50		min		.292	7	-.795	6	.444	7	-.151	11	.783	7
51		max	B	3.808	7	.035	10	1.994	7	2.353	118	3.901	7

# Exhibit F

## **Power Density/RF Emissions Report**

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT  
EVALUATION OF HUMAN EXPOSURE POTENTIAL  
TO NON-IONIZING EMISSIONS

AT&T Existing Facility

Site ID: CTL05131

806369

439-455 Homestead Ave  
Hartford, Connecticut 06105

**February 6, 2022**

**EBI Project Number: 6222000315**

Site Compliance Summary	
Compliance Status:	<b>COMPLIANT</b>
Site total MPE% of FCC general population allowable limit:	<b>45.70%</b>

February 6, 2022

AT&T

Emissions Analysis for Site: CTL05131 - 806369

EBI Consulting was directed to analyze the proposed AT&T facility located at **439-455 Homestead Ave** in **Hartford, Connecticut** for the purpose of determining whether the emissions from the Proposed AT&T Antenna Installation located on this property are within specified federal limits.

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

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

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The general population exposure limits for the 600 MHz and 700 MHz frequency bands are approximately  $400 \mu\text{W}/\text{cm}^2$  and  $467 \mu\text{W}/\text{cm}^2$ , respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 11 GHz frequency bands is  $1000 \mu\text{W}/\text{cm}^2$ . Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully

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

Additional details can be found in FCC OET 65.

## **CALCULATIONS**

Calculations were done for the proposed AT&T Wireless antenna facility located at 439-455 Homestead Ave in Hartford, Connecticut using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was focused at the base of the tower. For this report, the sample point is the top of a 6-foot person standing at the base of the tower. For power density calculations, the broadcast footprint of the AIR6449 antenna has been considered. Due to the beamforming nature of this antenna, the actual beam locations vary depending on demand and are narrow in nature. Using the broadcast footprint accounts for the potential location of beams at any given time.

For all calculations, all equipment was calculated using the following assumptions:

- 1) 4 LTE channels (700 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.
- 2) 4 LTE FN channels (700 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.
- 3) 4 5G channels (850 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.
- 4) 4 LTE / 5G channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.
- 5) 4 LTE / 5G channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.



- 6) 4 LTE channels (WCS Band – 2300 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 25 Watts per Channel.
- 7) 2 C-Band Channels (3700 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 144.58 Watts per Channel.
- 8) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 9) For the following calculations, the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 10) The antennas used in this modeling are the CCI TPA-65R-BU8DA-K for the 700 MHz / 1900 MHz / 2100 MHz channel(s), the Ericsson AIR 6419 for the 3700 MHz channel(s), the Ericsson AIR 6449 for the 3700 MHz channel(s), the CCI DMP65R-BU8DA for the 700 MHz / 850 MHz / 2300 MHz channel(s) in Sector A, the CCI TPA-65R-BU6DA-K for the 700 MHz / 1900 MHz / 2100 MHz channel(s), the Ericsson AIR 6419 for the 3700 MHz channel(s), the Ericsson AIR 6449 for the 3700 MHz channel(s), the CCI DMP65R-BU8DA for the 700 MHz / 850 MHz / 2300 MHz channel(s) in Sector B, the CCI TPA-65R-BU6DA-K for the 700 MHz / 1900 MHz / 2100 MHz channel(s), the Ericsson AIR 6419 for the 3700 MHz channel(s), the Ericsson AIR 6449 for the 3700 MHz channel(s), the CCI DMP65R-BU6DA for the 700 MHz / 850 MHz / 2300 MHz channel(s) in Sector C. This is based on feedback from the carrier with regard to anticipated antenna selection. All Antenna gain values and associated transmit power levels are shown in the Site Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 11) The antenna mounting height centerline of the proposed antennas is 117 feet above ground level (AGL).

- 12) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.
- 13) All calculations were done with respect to uncontrolled / general population threshold limits.

## AT&T Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	CCI TPA-65R-BU8DA-K	Make / Model:	CCI TPA-65R-BU6DA-K	Make / Model:	CCI TPA-65R-BU6DA-K
Frequency Bands:	700 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	700 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	700 MHz / 1900 MHz / 2100 MHz
Gain:	13.45 dBd / 15.95 dBd / 16.15 dBd	Gain:	11.75 dBd / 14.55 dBd / 15.55 dBd	Gain:	11.75 dBd / 14.55 dBd / 15.55 dBd
Height (AGL):	117 feet	Height (AGL):	117 feet	Height (AGL):	117 feet
Channel Count:	12	Channel Count:	12	Channel Count:	12
Total TX Power (W):	480 Watts	Total TX Power (W):	480 Watts	Total TX Power (W):	480 Watts
ERP (W):	16,431.31	ERP (W):	12,698.36	ERP (W):	12,698.36
Antenna A1 MPE %:	<b>5.97%</b>	Antenna B1 MPE %:	<b>4.50%</b>	Antenna C1 MPE %:	<b>4.50%</b>
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Ericsson AIR 6419	Make / Model:	Ericsson AIR 6419	Make / Model:	Ericsson AIR 6419
Frequency Bands:	3700 MHz	Frequency Bands:	3700 MHz	Frequency Bands:	3700 MHz
Gain:	23.45 dBd	Gain:	23.45 dBd	Gain:	23.45 dBd
Height (AGL):	117 feet	Height (AGL):	117 feet	Height (AGL):	117 feet
Channel Count:	1	Channel Count:	1	Channel Count:	1
Total TX Power (W):	144.58	Total TX Power (W):	144.58	Total TX Power (W):	144.58
ERP (W):	31,996.92	ERP (W):	31,996.92	ERP (W):	31,996.92
Antenna A2 MPE %:	<b>9.34%</b>	Antenna B2 MPE %:	<b>9.34%</b>	Antenna C2 MPE %:	<b>9.34%</b>
Antenna #:	3	Antenna #:	3	Antenna #:	3
Make / Model:	Ericsson AIR 6449	Make / Model:	Ericsson AIR 6449	Make / Model:	Ericsson AIR 6449
Frequency Bands:	3700 MHz	Frequency Bands:	3700 MHz	Frequency Bands:	3700 MHz
Gain:	23.45 dBd	Gain:	23.45 dBd	Gain:	23.45 dBd
Height (AGL):	117 feet	Height (AGL):	117 feet	Height (AGL):	117 feet
Channel Count:	1	Channel Count:	1	Channel Count:	1
Total TX Power (W):	144.58	Total TX Power (W):	144.58	Total TX Power (W):	144.58
ERP (W):	31,996.92	ERP (W):	31,996.92	ERP (W):	31,996.92
Antenna A3 MPE %:	<b>9.34%</b>	Antenna B3 MPE %:	<b>9.34%</b>	Antenna C3 MPE %:	<b>9.34%</b>
Antenna #:	4	Antenna #:	4	Antenna #:	4
Make / Model:	CCI DMP65R-BU8DA	Make / Model:	CCI DMP65R-BU8DA	Make / Model:	CCI DMP65R-BU6DA
Frequency Bands:	700 MHz / 850 MHz / 2300 MHz	Frequency Bands:	700 MHz / 850 MHz / 2300 MHz	Frequency Bands:	700 MHz / 850 MHz / 2300 MHz
Gain:	11.85 dBd / 12.45 dBd / 15.95 dBd	Gain:	11.85 dBd / 12.45 dBd / 16.25 dBd	Gain:	11.85 dBd / 12.45 dBd / 16.25 dBd
Height (AGL):	177 feet	Height (AGL):	177 feet	Height (AGL):	177 feet
Channel Count:	12	Channel Count:	12	Channel Count:	12
Total TX Power (W):	420 Watts	Total TX Power (W):	420 Watts	Total TX Power (W):	420 Watts
ERP (W):	9,197.92	ERP (W):	9,479.38	ERP (W):	9,479.38
Antenna A4 MPE %:	<b>1.74%</b>	Antenna B4 MPE %:	<b>1.77%</b>	Antenna C4 MPE %:	<b>1.77%</b>

- An adjusted power reduction factor of 0.32 was applied to the AIR 6449 antennas per guidance from AT&T.
- Specifications were not available for the Ericsson AIR 6419 antenna. Per AT&T, specifications for the AIR 6449 antenna were used to model the 6419 due to its similarity.

Site Composite MPE %	
Carrier	MPE %
AT&T (Max at Sector A):	26.39%
Sprint	1.23%
Clearwire	0.19%
Sensus (CL&P)	0.25%
Metro PCS	1.57%
T-Mobile	13.2%
Verizon	2.87%
<b>Site Total MPE % :</b>	<b>45.70%</b>

AT&T MPE % Per Sector	
AT&T Sector A Total:	26.39%
AT&T Sector B Total:	24.95%
AT&T Sector C Total:	24.95%
Site Total MPE % :	45.70%

AT&T Maximum MPE Power Values (Sector A)							
AT&T Frequency Band / Technology (Sector A)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ( $\mu\text{W}/\text{cm}^2$ )	Frequency (MHz)	Allowable MPE ( $\mu\text{W}/\text{cm}^2$ )	Calculated % MPE
AT&T 700 MHz LTE FN	4	885.24	117.0	10.33	700 MHz LTE FN	467	2.21%
AT&T 1900 MHz LTE/5G	4	1574.20	117.0	18.37	1900 MHz LTE/5G	1000	1.84%
AT&T 2100 MHz LTE/5G	4	1648.39	117.0	19.24	2100 MHz LTE/5G	1000	1.92%
AT&T 3700 MHz C-Band	1	31996.92	117.0	93.36	3700 MHz C-Band	1000	9.34%
AT&T 3700 MHz C-Band	1	31996.92	117.0	93.36	3700 MHz C-Band	1000	9.34%
AT&T 700 MHz LTE	4	612.43	177.0	3.01	700 MHz LTE	467	0.64%
AT&T 850 MHz 5G	4	703.17	177.0	3.46	850 MHz 5G	567	0.61%
AT&T 2300 MHz LTE	4	983.88	177.0	4.84	2300 MHz LTE	1000	0.48%
						<b>Total:</b>	<b>26.39%</b>

• NOTE: Totals may vary by approximately 0.01% due to summation of remainders in calculations.

## Summary

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

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

AT&T Sector	Power Density Value (%)
Sector A:	26.39%
Sector B:	24.95%
Sector C:	24.95%
AT&T Maximum MPE % (Sector A):	26.39%
Site Total:	45.70%
Site Compliance Status:	<b>COMPLIANT</b>

The anticipated composite MPE value for this site assuming all carriers present is **45.70%** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

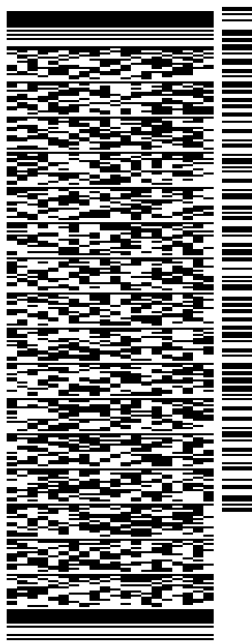
FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100%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

ORIGIN ID:QFMA (551) 804-0667  
ERSILIA DAVIS  
1777 SENTRY PARKWAY  
VEVA 17, SUITE 210  
BLUE BELL, PA 19422  
UNITED STATES US

SHIP DATE: 11FEB22  
ACTWGT: 1.00 LB  
CAD: 108980334IN/NET4460  
BILL SENDER

TO **MELANIE A. BACHMAN**  
**CONNECTICUT SITING COUNCIL**  
**10 FRANKLIN SQUARE**

**NEW BRITAIN CT 06051**  
(860) 827-2935 REF: 100789NBC  
INV/ PO: DEPT: 806369

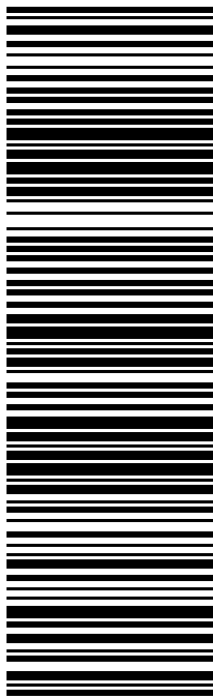


56DJ2027C/FE4A

TRK# 7760 2508 1582  
0201

MON - 14 FEB 10:30A  
PRIORITY OVERNIGHT

**XE BDLA**  
06051  
CT-US BDL



**After printing this label:**

- 1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
- 2. Fold the printed page along the horizontal line.
- 3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

**Warning:** Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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