CROWN CASTLE

1 Cityplace Dr, Suite 490

Creve Coeur, MO 63141

Phone: (314) 513-0147

www.crowncastle.com

May 26th, 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#876320; AT&T Site ID#CTL02083
528 Wheelers Farm Road., MILFORD, CT 06460
Latitude: 41° 14′ 54.27204″/ Longitude: -73° 4′ 44.69484″

Dear Ms. Bachman:

AT&T currently maintains (12) antennas at the 98-foot mounts on the existing 120-foot Monopole Tower located at 528 Wheelers Farm Road., MILFORD. The property is owned by Village Foundation, INC and the Tower by Crown Castle. AT&T now intends to replace six (9) 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) Quintel – QS66512-2 Antennas (**REMOVE**), (3) Quintel – QD6616-7 Antennas (**REPLACE**)
(3) POWERWAVE - 7770 Antennas (**REMOVE**), ERICSSON - AIR 6449 N77D Antennas (**REPLACE**)
(3) Kathrein – 800 – 10965 Antennas (**REMOVE**), (3) Ericsson – AIR6419 N77G antennas (**REPLACE**)

REMOVE:
(6) AT&T TMA Powerwave – LGP21401
(6) Coax Cables

INSTALL:
(6) Y Cables

RELOCATE
(3) Ericsson – RRUS 4478 B14 RRUS

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Ground:

REMOVE:

(1) XMU
(1) 5216

INSTALL:

(3) VERTIV -48v Rectifiers
(1) 6648

The Facility was approved by the City of Milford by way of a Special Permit Amendment on March 4, 1997.

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 Benjamin G. Blake, Mayor of the City of Milford, David B. Sulkis, City Planner for City of Milford, property owner, Village Foundation, Inc, and Crown Castle, the 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).

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Creve Coeur, MO 63141

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

Sincerely,

Colin Robinson
Project Manager
NETWORK BUILDING + CONSULTING
100 Apollo Drive Suite 303
Chelmsford, MA 01824
crobinson@nbcllc.com
(360) 561-3311

cc:

Benjamin G. Blake, Mayor
110 River Street
Milford, CT 06460
(203) 783- 3201
(Via Fedex)

David B Sulkis, City Planner
70 West River Street
Milford, CT 06460
(203) 783- 3245
(Via Fedex)

Village Foundation, Inc.
528 Wheelers Farm Road
Milford, CT 06461
(203) 877-0300
(Via Fedex)

Crown Castle, Tower Owner

Colin Robinson

From: TrackingUpdates@fedex.com
Sent: Friday, May 27, 2022 10:31 AM
To: Colin Robinson
Subject: FedEx Shipment 776963012246: Your package has been delivered

Hi. Your package was delivered Fri, 05/27/2022 at 10:27am.

Delivered to 110 RIVER ST, MILFORD, CT 06460

OBTAIN PROOF OF DELIVERY

TRACKING NUMBER	776963012246
FROM	NB+C 100 Apollo Dr. Suite 303 CHELMSFORD, MA, US, 01824
TO	Benjamin G. Blake, Mayor 110 River Street MILFORD, CT, US, 06460

REFERENCE	100788 NB+C
SHIPPER REFERENCE	100788 NB+C
SHIP DATE	Thu 5/26/2022 06:47 PM
PACKAGING TYPE	FedEx Envelope
ORIGIN	CHELMSFORD, MA, US, 01824
DESTINATION	MILFORD, CT, US, 06460
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	1.00 LB
SERVICE TYPE	FedEx Priority Overnight

Colin Robinson

From: TrackingUpdates@fedex.com
Sent: Friday, May 27, 2022 10:25 AM
To: Colin Robinson
Subject: FedEx Shipment 776963017580: Your package has been delivered

Hi. Your package was delivered Fri, 05/27/2022 at 10:19am.

Delivered to 70 W RIVER ST, MILFORD, CT 06460
Received by T.HALL

OBTAIN PROOF OF DELIVERY

TRACKING NUMBER	776963017580
FROM	NB+C 100 Apollo Dr. Suite 303 CHELMSFORD, MA, US, 01824
TO	City of Milford David B Sulkis, City Planner

	70 West River Street MILFORD, CT, US, 06460
REFERENCE	100788 NB+C
SHIPPER REFERENCE	100788 NB+C
SHIP DATE	Thu 5/26/2022 06:47 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	CHELMSFORD, MA, US, 01824
DESTINATION	MILFORD, CT, US, 06460
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Priority Overnight

Colin Robinson

From: TrackingUpdates@fedex.com
Sent: Friday, May 27, 2022 10:25 AM
To: Colin Robinson
Subject: FedEx Shipment 776963026882: Your package has been delivered

Hi. Your package was delivered Fri, 05/27/2022 at 10:22am.

Delivered to 528 WHEELERS FARMS RD, MILFORD, CT 06461
Received by V.VILLA

OBTAIN PROOF OF DELIVERY

TRACKING NUMBER	776963026882
FROM	NB+C 100 Apollo Dr. Suite 303 CHELMSFORD, MA, US, 01824

TO	Village Foundation, Inc. 528 Wheelers Farm Road MILFORD, CT, US, 06461
REFERENCE	100788 NB+C
SHIPPER REFERENCE	100788 NB+C
SHIP DATE	Thu 5/26/2022 06:47 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	CHELMSFORD, MA, US, 01824
DESTINATION	MILFORD, CT, US, 06461
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	1.00 LB
SERVICE TYPE	FedEx Priority Overnight

Exhibit A

Original Facility Approval

City of Milford, Connecticut

THIS IS TO CERTIFY THAT Sprint PCS

WAS GRANTED A SPECIAL PERMIT AMENDMENT

BY THE MILFORD PLANNING & ZONING BOARD ON MARCH 4, 1997

FOR PROPERTY LOCATED AT 528 WHEELERS FARMS ROAD

MAP 104 **BLOCK** 915 **PARCEL** 13

IN THE CITY OF MILFORD, COUNTY OF NEW HAVEN, STATE OF CONNECTICUT

FOR WHICH VILLAGE FOUNDATION, INC. **ARE THE OWNERS.**

THE SPECIAL PERMIT AMENDMENT WAS GRANTED TO:

construct a 120' telecommunications monopole and antenna with ancillary support facilities, i.e., 10' graveled access drive and fenced equipment area 20' x 27', at 528 Wheelers Farms Road, aka Boys Village, parcel 13, block 915, Assessor's map 104, of which Village Foundation, Inc. is the owner. This approval shall be in accordance with plans prepared by O'Brien and Gere Engineers, Inc. Said plans consisting of three sheets, Title Sheet dated December, 1996; Site Plan dated 12/4/96; Detail Plan and Elevations dated 11/18/96. With the following stipulations: construction and site development shall comply with Inland Wetland Office letter dated 12/21/96 and Permit #IWJR96-080; Fire Department letter dated 1/21/97; Director of Public Works memo dated 2/4/97 and United Technologies Sikorsky Aircraft letter dated 4/1/97 RE: Review of Sikorsky Aircraft Corporation Flight Operations related to the proposed telecommunication monopole location.

"NO VARIANCE, SPECIAL PERMIT OR SPECIAL EXCEPTION GRANTED PURSUANT TO CHAPTER 124 OF ANY SPECIAL ACT SHALL BE EFFECTIVE UNTIL A COPY THEREOF...IS RECORDED IN THE LAND RECORDS OF THE TOWN IN WHICH SUCH PREMISES ARE LOCATED."
P.A. 75-317

RECORDED ~~6-6-97~~ 6-12-97

CITY CLERK REC. NO. 5163

Nº 10574

PLANNING & ZONING BOARD

BY: Wade E. Pierce

WADE E. PIERCE
EXECUTIVE SECRETARY

SPCERT (REV.5/96)

Exhibit B

Property Card

City of Milford, CT

Property Listing Report

Map Block Lot	104 915 13	Bldg #	1	Sec #	1	PID	21152	Account	019893

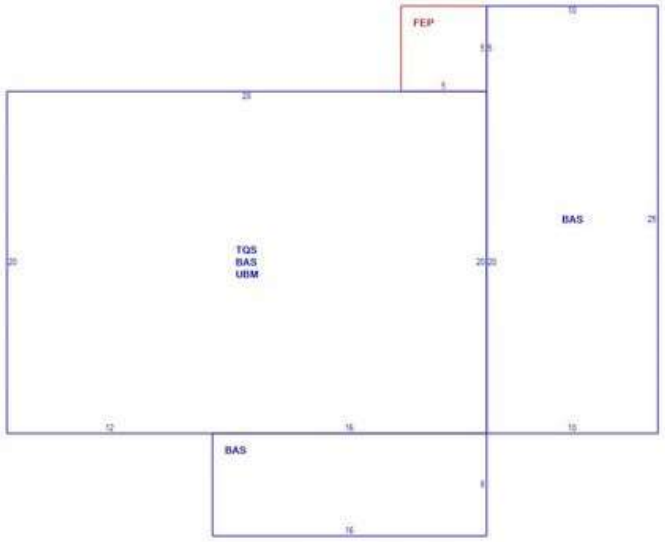
Property Information

Property Location	528 WHEELERS FARMS RD
Owner	VILLAGE FOUNDATION INC THE
Co-Owner	06-00
Mailing Address	528 WHEELERS FARM RD MILFORD CT 06461
Land Use	904R PVT SCHOOL MDL-01
Land Class	E
Zoning Code	DO25
Census Tract	

Neighborhood	GG
Acreage	11.34
Utilities	UNKNOWN
Lot Setting/Desc	UNKNOWN UNKNOWN
Book / Page	00259/0563
Fire District	2

Photo

Sketch



Primary Construction Details

Year Built	1900
Building Desc.	PVT SCHOOL
Building Style	Conventional
Building Grade	Average
Stories	2
Occupancy	1.00
Exterior Walls	Vinyl Siding
Exterior Walls 2	NA
Roof Style	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Walls	Drywall/Sheet
Interior Walls 2	NA
Interior Floors 1	Carpet
Interior Floors 2	NA

Heating Fuel	Gas
Heating Type	Hot Water
AC Type	XF Per Sq Ft
Bedrooms	00
Full Bathrooms	0
Half Bathrooms	1
Extra Fixtures	0
Total Rooms	0
Bath Style	Updated
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	

(*Industrial / Commercial Details)

Building Use	Residential
Building Condition	4
Sprinkler %	NA
Heat / AC	NA
Frame Type	NA
Baths / Plumbing	NA
Ceiling / Wall	NA
Rooms / Prtns	NA
Wall Height	NA
First Floor Use	NA
Foundation	NA

Report Created On 7/13/2021

City of Milford, CT

Property Listing Report

Map Block Lot	Bldg #	Sec #	PID	Account
104 915 13	1	1	21152	019893

Valuation Summary

(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	3235090	2264560
Extras	0	0
Improvements		
Outbuildings	35690	24980
Land	461440	323010
Total	3732220	2612550

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	906	906
Porch, Enclosed, Finished	25	0
Three Quarter Story	560	504
Basement, Unfinished	560	0
Total Area	2051	1410

Outbuilding and Extra Features

Type	Description
SHED FRAME	216 S.F.
SHED FRAME	192 S.F.
SHED FRAME	96 S.F.
OPN PRCH/SCRNHSE	120 S.F.
PAVING-ASPHALT	19000 S.F.
SHED FRAME	448 S.F.

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
VILLAGE FOUNDATION INC THE	00259/0563	1942-05-15	0

Report Created On 7/13/2021

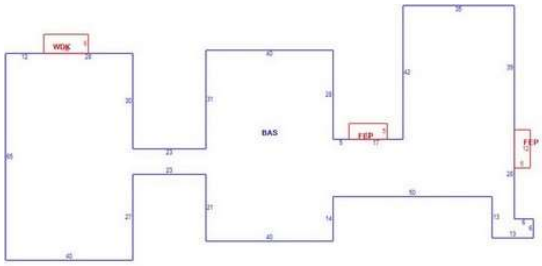
City of Milford, CT

Property Listing Report

Map Block Lot	104 915 13	Bldg #	2	Sec #	1	PID	21152	Account	019893

Photo

Sketch



Primary Construction Details

Year Built	1983
Building Desc.	Commercial
Building Style	School/College
Building Grade	AVERAGE
Stories	1
Occupancy	1.00
Exterior Walls	Concr/Cinder
Exterior Walls 2	Pre-Fab Wood
Roof Style	Flat
Roof Cover	Tar & Gravel
Interior Walls	Drywall/Sheet
Interior Walls 2	NA
Interior Floors 1	Carpet
Interior Floors 2	Vinyl/Asphalt

Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	

(*Industrial / Commercial Details)

Building Use	PVT SCHOOL MDL-94
Building Condition	4
Sprinkler %	NA
Heat / AC	HEAT/AC SPLIT
Frame Type	STEEL
Baths / Plumbing	AVERAGE
Ceiling / Wall	SUS-CEIL & WL
Rooms / Prtns	AVERAGE
Wall Height	12.00
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	7807	7807
Porch, Enclosed, Finished	120	0
Deck, Wood	84	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	8011	7807

Report Created On 7/13/2021

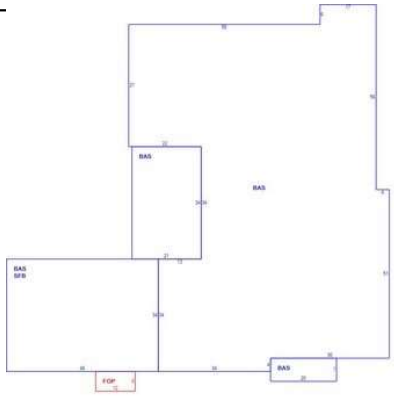
City of Milford, CT

Property Listing Report

Map Block Lot	104 915 13	Bldg #	3	Sec #	1	PID	21152	Account	019893

Photo

Sketch



Primary Construction Details

Year Built	1957
Building Desc.	Commercial
Building Style	School/College
Building Grade	AVERAGE
Stories	1
Occupancy	1.00
Exterior Walls	Concr/Cinder
Exterior Walls 2	NA
Roof Style	Flat
Roof Cover	Tar & Gravel
Interior Walls	Minim/Masonry
Interior Walls 2	Drywall/Sheet
Interior Floors 1	Carpet
Interior Floors 2	Vinyl/Asphalt

Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	

(*Industrial / Commercial Details)

Building Use	PVT SCHOOL MDL-94
Building Condition	3
Sprinkler %	NA
Heat / AC	NONE
Frame Type	STEEL
Baths / Plumbing	AVERAGE
Ceiling / Wall	CEIL & MIN WL
Rooms / Prtns	AVERAGE
Wall Height	10.00
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	9417	9417
Porch, Open, Finished	72	0
Base, SL/RR-Finished	1564	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	11053	9417

Report Created On 7/13/2021

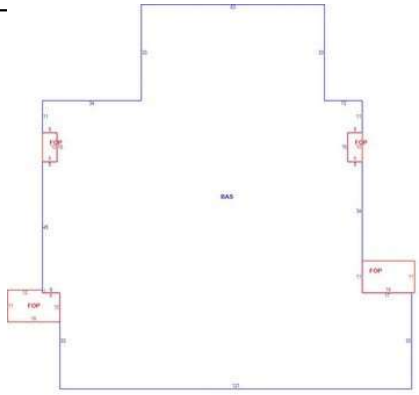
City of Milford, CT

Property Listing Report

Map Block Lot	104 915 13	Bldg #	4	Sec #	1	PID	21152	Account	019893

Photo

Sketch



Primary Construction Details

Year Built	1989
Building Desc.	Commercial
Building Style	Auditorium
Building Grade	AVERAGE
Stories	1
Occupancy	1.00
Exterior Walls	Concr/Cinder
Exterior Walls 2	NA
Roof Style	Flat
Roof Cover	Tar & Gravel
Interior Walls	Minim/Masonry
Interior Walls 2	Drywall/Sheet
Interior Floors 1	Vinyl/Asphalt
Interior Floors 2	NA

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

(*Industrial / Commercial Details)

Building Use	PVT SCHOOL MDL-94
Building Condition	3
Sprinkler %	NA
Heat / AC	HEAT/AC SPLIT
Frame Type	STEEL
Baths / Plumbing	AVERAGE
Ceiling / Wall	CEIL & MIN WL
Rooms / Prtns	AVERAGE
Wall Height	20.00
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	13232	13232
Porch, Open, Finished	490	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	13722	13232

Report Created On 7/13/2021

Exhibit C

Construction Drawings

AT&T

AT&T SITE NUMBER:	**CTL02083**
AT&T SITE NAME:	**MILFORD WHEELERS FARM**
AT&T FA CODE:	**10035336**
AT&T PACE NUMBER:	**MRCTB051688, MRCTB052328, MRCTB051680**
AT&T PROJECT:	**5G NR RADIO||5G NR 1SR CBAND**
BUSINESS UNIT #:	**876320**
SITE ADDRESS:	**528 WHEELERS FARM ROAD MILFORD, CT 06460**
COUNTY:	**NEW HAVEN**
SITE TYPE:	**MONOPOLE**
TOWER HEIGHT:	**120'-0"**

SITE INFORMATION

CROWN CASTLE USA INC. SITE NAME:	528 WHEELERS FARM RD
SITE ADDRESS:	528 WHEELERS FARM ROAD MILFORD, CT 06460
COUNTY:	NEW HAVEN
MAP/PARCEL #:	104 915 13 A
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41°14'54.27204"
LONGITUDE:	-73°4'44.69484"
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	214 FT
CURRENT ZONING:	DO-25
JURISDICTION:	CITY OF MILFORD
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	VILLAGE FOUNDATION, INC. 528 WHEELERS FARM ROAD MILFORD, CONNECTICUT 06492
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:	UNITED ILLUMINATING CO
TELCO PROVIDER:	LIGHTOWER

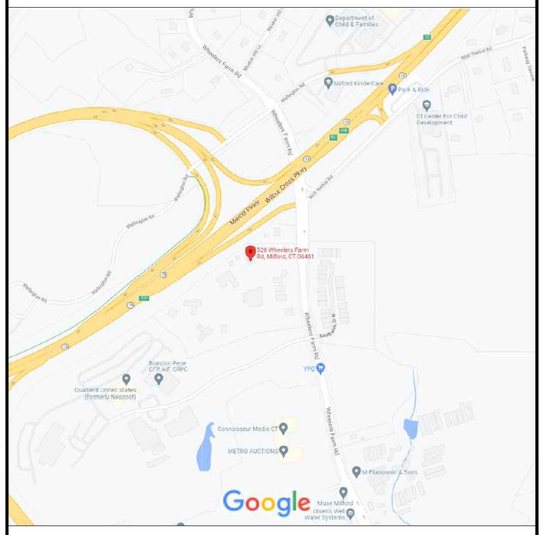
DRAWING INDEX

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
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!

LOCATION MAP



NO SCALE

SITE PHOTO

PROJECT TEAM

A&E FIRM:	CROWN CASTLE USA INC. 2000 CORPORATE DRIVE CANONSBURG, PA 15317 CROWNAE.APPROVAL@CROWNCASTLE.COM
CROWN CASTLE USA INC. DISTRICT CONTACTS:	3 CORPORATE PARK DRIVE, SUITE 101 CLIFTON PARK, NY 12065 JASON D'AMICO - CONSTRUCTION MANAGER JASON.DAMICO@CROWNCASTLE.COM PAUL PEDICONE - PM PAUL.PEDICONE@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:
- REMOVE (3) POWERWAVE - 7770 ANTENNAS
- REMOVE (3) QUINTEL - QS66512-3 ANTENNAS
- REMOVE (3) KATHREIN - 800-10965 ANTENNAS
- RELOCATE (3) ERICSSON - RRUS 4478 B14 RRUs
- REMOVE (6) COAX CABLES
- INSTALL (3) QUINTEL - QD6616-7 ANTENNAS
- INSTALL (3) ERICSSON - AIR 6449 N77D ANTENNAS
- INSTALL (3) ERICSSON - AIR 6419 N77G ANTENNAS
- INSTALL (6) Y CABLES

GROUND SCOPE OF WORK:
- REMOVE (1) XMU
- REMOVE (1) 5216
- INSTALL (3) VERTIV -48v RECTIFIERS
- INSTALL (1) 6648 WITH XCEDE CABLE

APPLICABLE CODES/REFERENCE DOCUMENTS

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

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

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS:	GPD
DATED:	SEPTEMBER 10, 2021
MOUNT ANALYSIS:	INFINIGY ENGINEERING, PLLC
DATED:	AUGUST 16, 2021
RFDS REVISION:	2
DATED:	03/02/2021
ORDER ID:	556503
REVISION:	0

575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

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

ENGINEERED TOWER SOLUTIONS
3227 WELLINGTON COURT
RALEIGH, NC 27615
919-782-2710
www.ets-pllc.com

AT&T SITE NUMBER:
CTL02083

BU #: **876320**
528 WHEELERS FARM RD

528 WHEELERS FARM ROAD
MILFORD, CT 06460

EXISTING 120'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	09/08/2021	CP/MC	PRELIMINARY	VA
0	09/14/2021	CP/MC	CONSTRUCTION	VA
1	01/31/2022	KR	REV. CONSTRUCTION	VA
2	03/15/2022	CP	REV. CONSTRUCTION	VA
3	04/27/2022	AM	REV. CONSTRUCTION	VA

STATE OF CONNECTICUT
FREDERIC BOST
PEN.0029929
LICENSED PROFESSIONAL ENGINEER

04/27/2022

SHEET NUMBER: T-1

REVISION: 3

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

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

GENERAL NOTES:

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

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

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

GREENFIELD GROUNDING NOTES:

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

ELECTRICAL INSTALLATION NOTES:

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

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

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

APWA UNIFORM COLOR CODE:

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

ABBREVIATIONS:

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

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AT&T SITE NUMBER:
CTL02083

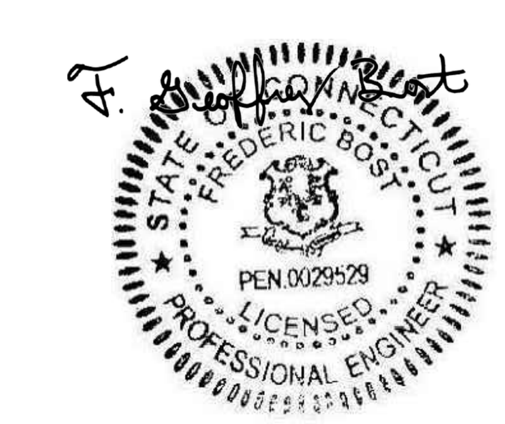
BU #: **876320**
528 WHEELERS FARM RD

528 WHEELERS FARM ROAD
MILFORD, CT 06460

EXISTING 120'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	09/08/2021	CP/MC	PRELIMINARY	VA
0	09/14/2021	CP/MC	CONSTRUCTION	VA
1	01/31/2022	KR	REV. CONSTRUCTION	VA
2	03/15/2022	CP	REV. CONSTRUCTION	VA
3	04/27/2022	AM	REV. CONSTRUCTION	VA

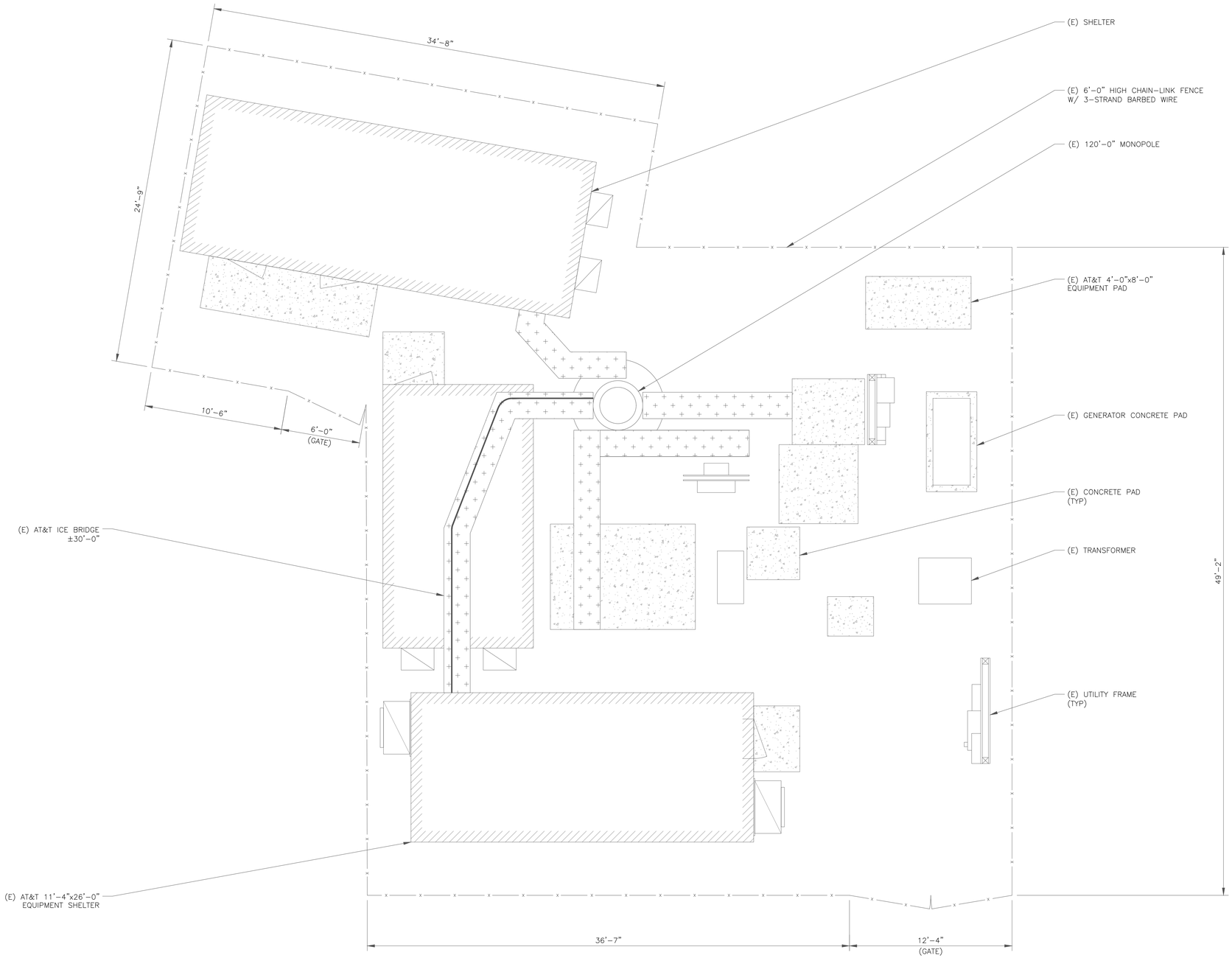


04/27/2022

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

SHEET NUMBER: T-2

REVISION: 3



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

N

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STATE OF CONNECTICUT
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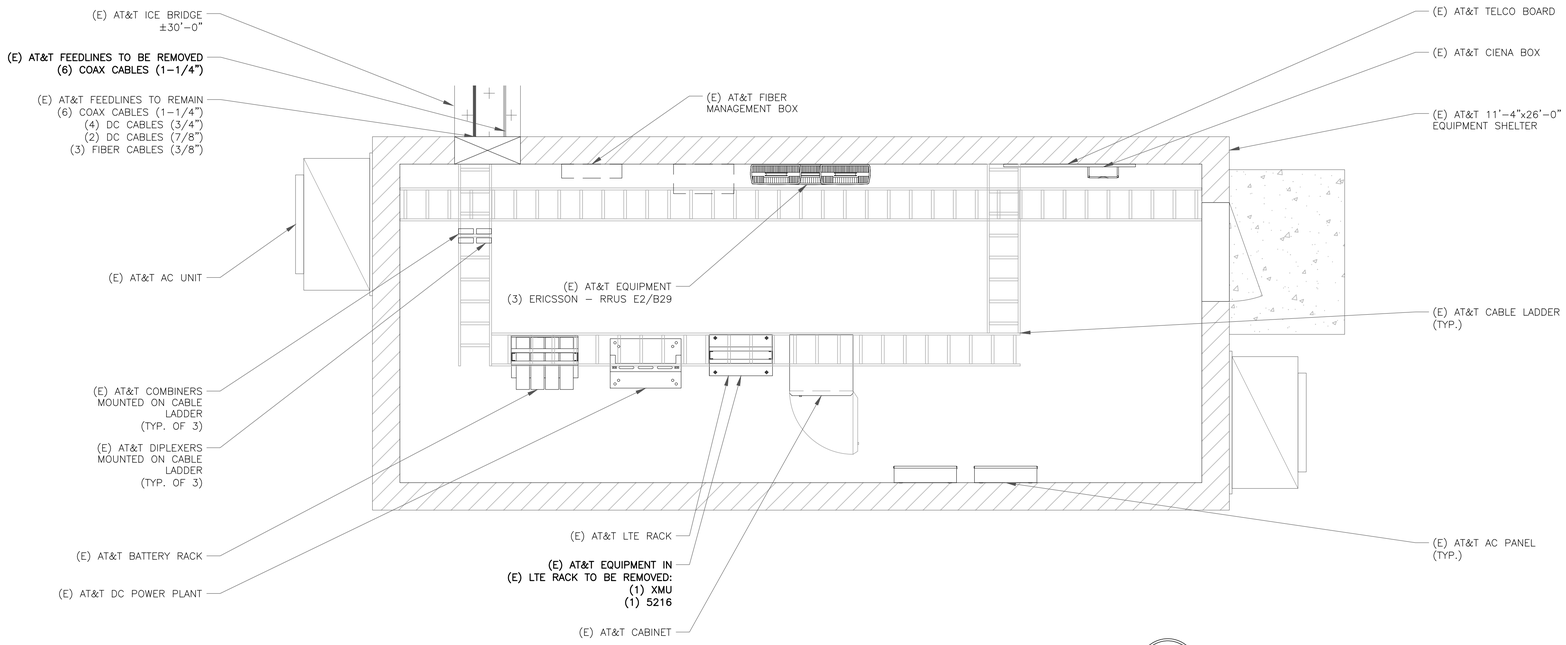
PEN.0029529
LICENSED PROFESSIONAL ENGINEER

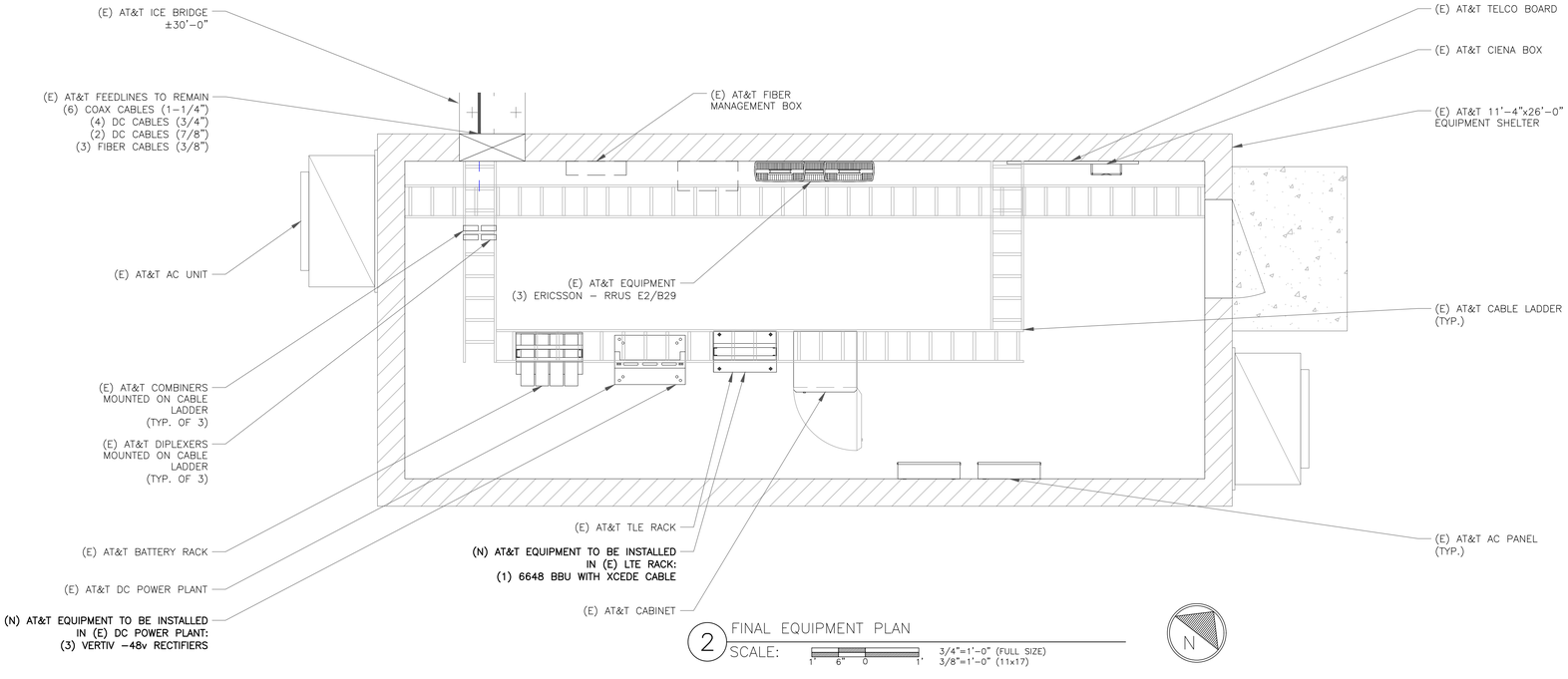
04/27/2022

SHEET NUMBER: C-1.1
REVISION: 3



1 EXISTING EQUIPMENT PLAN

SCALE: 1' 6" 0 1' 3/4"=1'-0" (FULL SIZE) 3/8"=1'-0" (11x17)



2 FINAL EQUIPMENT PLAN

SCALE: 1' 6" 0 1' 3/4"=1'-0" (FULL SIZE) 3/8"=1'-0" (11x17)

GROUND SCOPE OF WORK:

- REMOVE (1) XMU
- REMOVE (1) 5216
- INSTALL (3) VERTIV-48v RECTIFIERS
- INSTALL (1) 6648 WITH XCEDE CABLE

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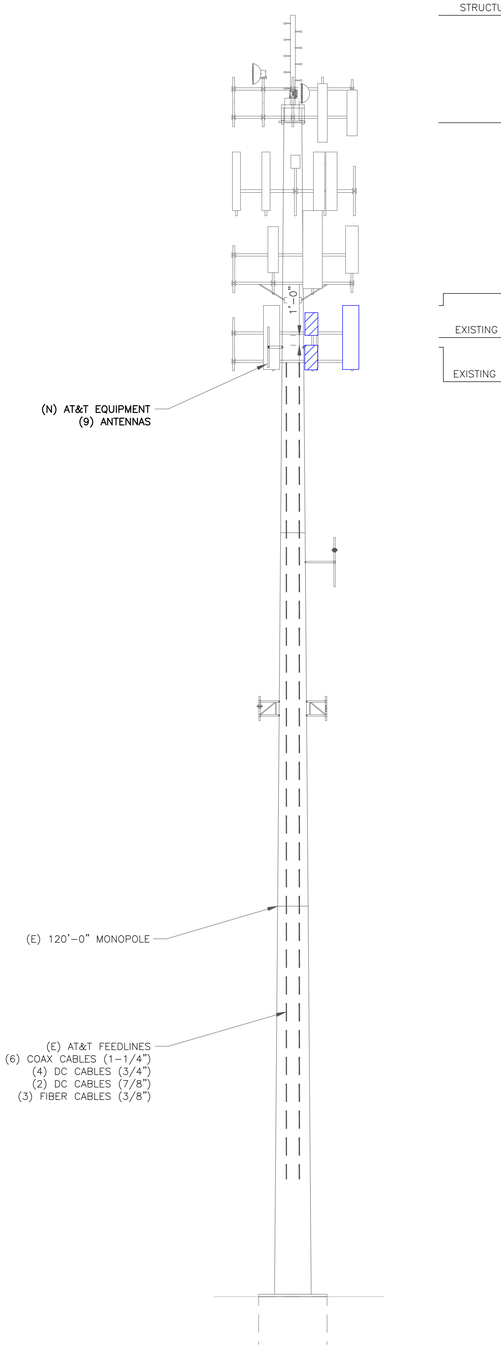
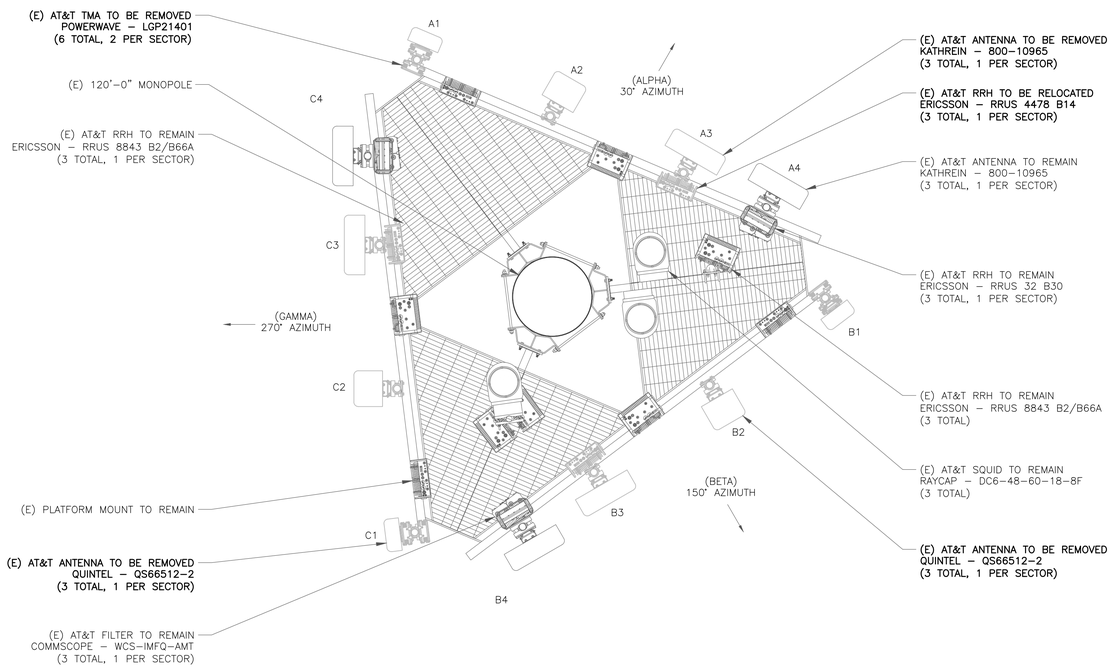
04/27/2022

SHEET NUMBER: C-1.2

REVISION: 3



1 FINAL ELEVATION
SCALE: NOT TO SCALE



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

N

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

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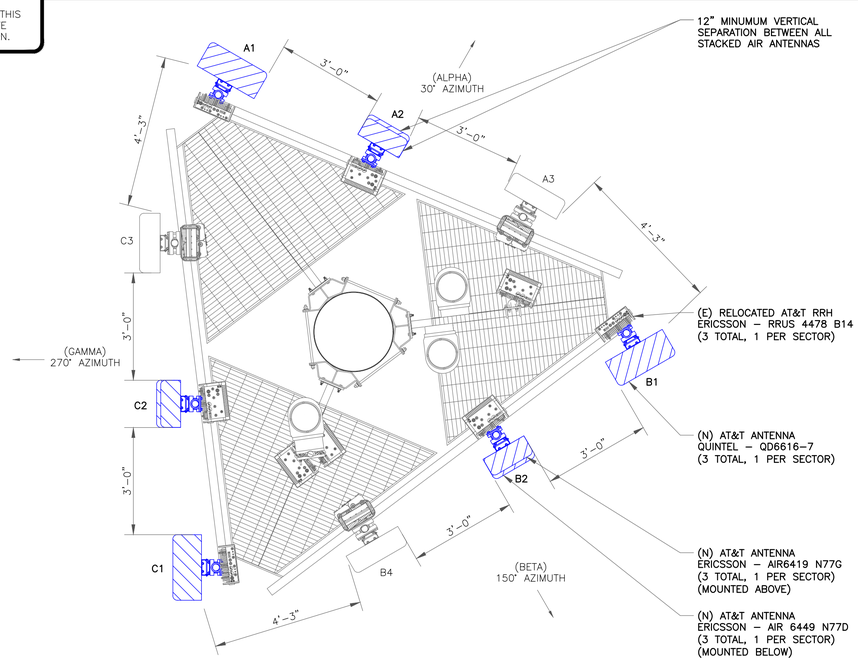

3 FINAL ANTENNA PLAN
SCALE: 1/2"=1'-0" (FULL SIZE) 1/4"=1'-0" (11x17)

N

"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:

1. REFERENCE C-3 FOR FINAL EQUIPMENT SCHEDULE.
2. REFERENCE C-4 FOR NEW EQUIPMENT SPECIFICATIONS.
3. CONTRACTOR TO VERIFY ALL ANTENNA TIP HEIGHTS DO NOT EXCEED BEACON BASE HEIGHT.
4. 3'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE ANTENNAS ON SAME SECTOR.
5. 6'-0" MINIMUM DISTANCE REQUIRED BETWEEN 700BC & 700DE ANTENNAS ON SAME SECTOR.
6. 4'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE 700 ANTENNAS ON OPPOSING SECTORS.
7. ALL ANTENNA MEASUREMENT DISTANCES MUST BE EDGE TO EDGE (RELOCATE ANTENNAS AS NEEDED).
8. 8" MINIMUM DISTANCE REQUIRED BETWEEN ANTENNA & RADIO. SEE GENERIC EXAMPLE DETAIL ON SHEET C-4.
9. 12' MINIMUM VERTICAL SEPERATION REQUIRED BETWEEN STACKED ANTENNAS

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04/27/2022

SHEET NUMBER: C-2

REVISION: 3

FINAL EQUIPMENT SCHEDULE
(VERIFY WITH CURRENT RFDS)

POSITION	ANTENNA				RADIO			DIPLEXER			TMA		SURGE PROTECTION		CABLES			
	TECH.	STATUS/MANUFACTURER MODEL	AZIMUTH	RAD CENTER	QTY.	STATUS/MODEL	LOCATION	QTY.	STATUS	LOCATION	QTY.	STATUS/MANUFACTURER MODEL	QTY.	STATUS/MODEL	QTY.	STATUS/TYPE	SIZE	LENGTH
ALPHA																		
A1	LTE 700/850 AWS/1900	(N) QUINTEL QD6616-7	30°	98'-0"	1	(E) RRUS 4478 B14	TOWER	–	–	–	–	–	–	(E) DC6-48-60-18-8F	2	(E) DC	#6	150'-0"
					1	(E) RRUS 8843 B2/B66A	TOWER	–	–	–					1	(E) FIBER	18 PAIR	150'-0"
					1	(E) RRUS E2 B29	SHELTER	2	(E)	GROUND			–	–	2	(E) COAX	1-1/4"	150'-0"
A2	LTE 5G	(N) ERICSSON AIR 6419 B77G	30°	98'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		(N) ERICSSON AIR 6449 B77D			–	–	–											
A3	LTE 700/850 WCS	(E) KATHREIN 800-10965	30°	98'-0"	1	(E) RRUS 4449 B5/B12	TOWER	–	–	–	–	–	–	–	–	–	–	–
					1	(E) RRUS 32 B30	TOWER											
B4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
BETA																		
B1	LTE 700/850 AWS/1900	(N) QUINTEL QD6616-7	150°	98'-0"	1	(E) RRUS 4478 B14	TOWER	–	–	–	–	–	–	(E) DC6-48-60-18-8F	2	(E) DC	#9	150'-0"
					1	(E) RRUS 8843 B2/B66A	TOWER	–	–	–					1	(E) FIBER	18 PAIR	150'-0"
					1	(E) RRUS E2 B29	SHELTER	2	(E)	GROUND			–	–	2	(E) COAX	1-1/4"	150'-0"
B2	LTE 5G	(N) ERICSSON AIR 6419 B77G	150°	98'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		(N) ERICSSON AIR 6449 B77D			–	–	–											
B3	LTE 700/850 WCS	(E) KATHREIN 800-10965	150°	98'-0"	1	(E) RRUS 4449 B5/B12	TOWER	–	–	–	–	–	–	–	–	–	–	–
					1	(E) RRUS 32 B30	TOWER											
B4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
GAMMA																		
C1	LTE 700/850 AWS/1900	(N) QUINTEL QD6616-7	270°	98'-0"	1	(E) RRUS 4478 B14	TOWER	–	–	–	–	–	–	(E) DC6-48-60-18-8F	2	(E) DC	#8	150'-0"
					1	(E) RRUS 8843 B2/B66A	TOWER	–	–	–					1	(E) FIBER	18 PAIR	150'-0"
					1	(E) RRUS E2 B29	SHELTER	2	(E)	GROUND			–	–	2	(E) COAX	1-1/4"	150'-0"
C2	LTE 5G	(N) ERICSSON AIR 6419 B77G	270°	98'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		(N) ERICSSON AIR 6449 B77D			–	–	–											
C3	LTE 700/850 WCS	(E) KATHREIN 800-10965	270°	98'-0"	1	(E) RRUS 4449 B5/B12	TOWER	–	–	–	–	–	–	–	–	–	–	–
					1	(E) RRUS 32 B30	TOWER											
C4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

NOTE:
(E) – EXISTING
(N) – NEW

1 FINAL EQUIPMENT SCHEDULE
SCALE: NOT TO SCALE

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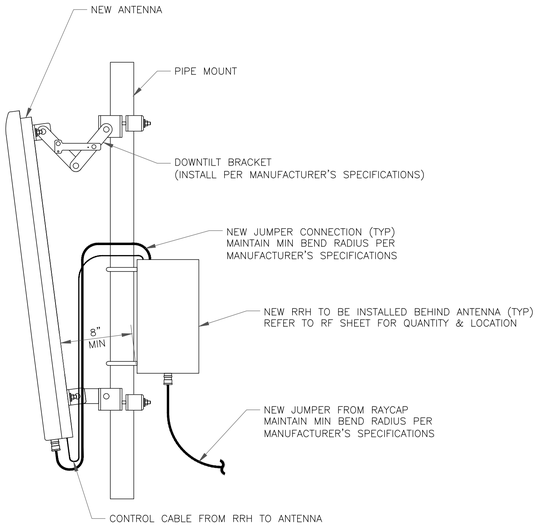
STATE OF CONNECTICUT
ERIC FREDERIC ROST
PEN.0029579
LICENSED PROFESSIONAL ENGINEER

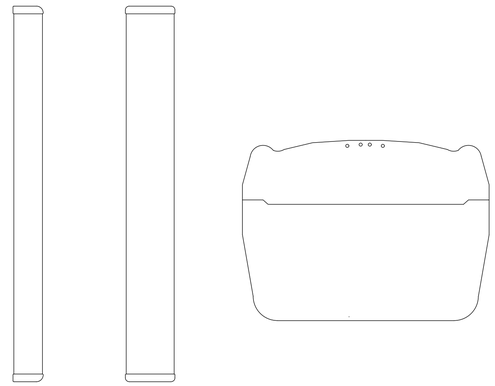
04/27/2022

SHEET NUMBER: C-3

REVISION: 3

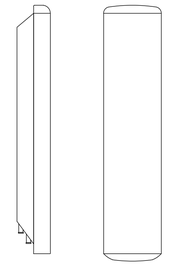


1 GENERIC ANTENNA MOUNTING ELEVATION
SCALE: NOT TO SCALE



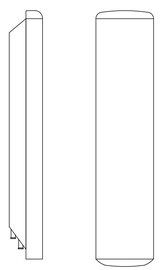
QUINTEL – QS6615-7
WEIGHT (WITHOUT MOUNTING HARDWARE): 130.0 LBS
SIZE (HxWxD): 72.0x22.0x9.6 IN.

2 QUINTEL – QS6616-7
SCALE: NOT TO SCALE



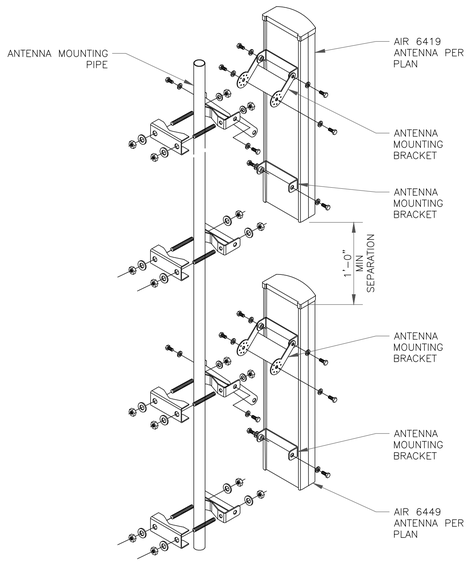
ERICSSON – AIR 6449 B77D
WEIGHT (WITHOUT MOUNTING HARDWARE): 81.6 LBS
SIZE (HxWxD): 30.39x15.87x8.07 IN.

3 ERICSSON – AIR 6449 B77D
SCALE: NOT TO SCALE



ERICSSON – AIR 6419 B77G
WEIGHT (WITHOUT MOUNTING HARDWARE): 66.2 LBS
SIZE (HxWxD): 27.95x15.75x6.68 IN.

4 ERICSSON – AIR 6419 B77G
SCALE: NOT TO SCALE



5 DUAL ANTENNA MOUNTING DETAIL
SCALE: NOT TO SCALE

6 NOT USED
SCALE: NOT TO SCALE

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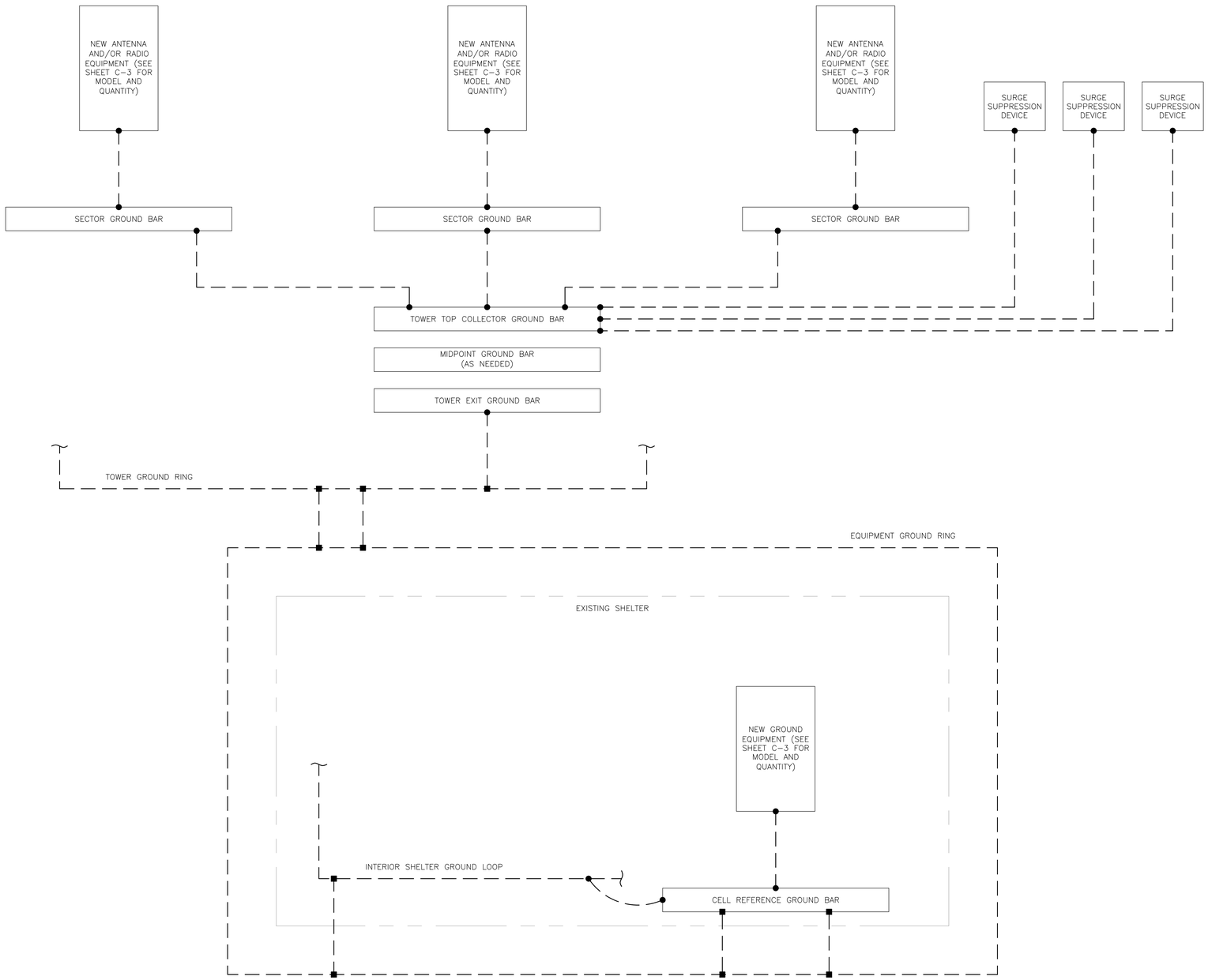
SHEET NUMBER: C-4

REVISION: 3



1 GROUNDING SCHEMATIC
SCALE: NOT TO SCALE

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 OUTS, 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.

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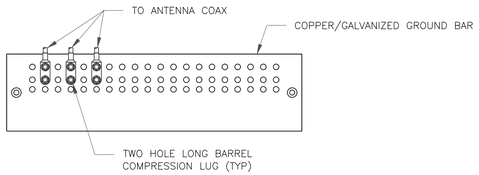
STATE OF CONNECTICUT
FREDERIC A. BOSTY
PEN.0029579
LICENSED PROFESSIONAL ENGINEER

04/27/2022

SHEET NUMBER: G-1

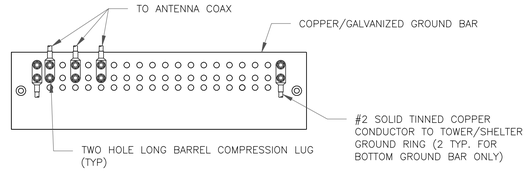
REVISION: 3



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

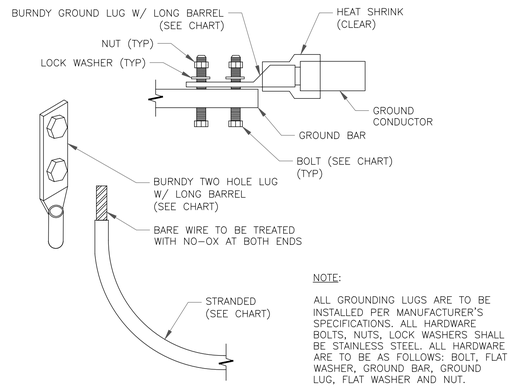


NOTES:

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

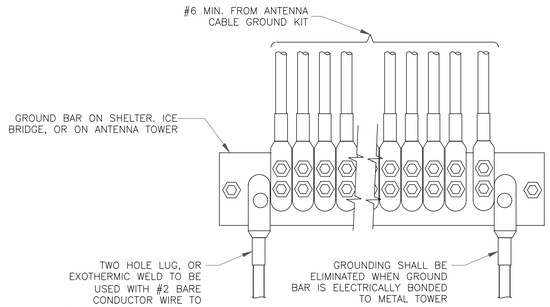
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 SOLID TINNED	YA3C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 STRANDED	YA2C-2TC38	3/8" - 16 NC SS 2 BOLT
#2/0 STRANDED	YA26-2TC38	3/8" - 16 NC SS 2 BOLT
#4/0 STRANDED	YA28-2N	1/2" - 16 NC SS 2 BOLT



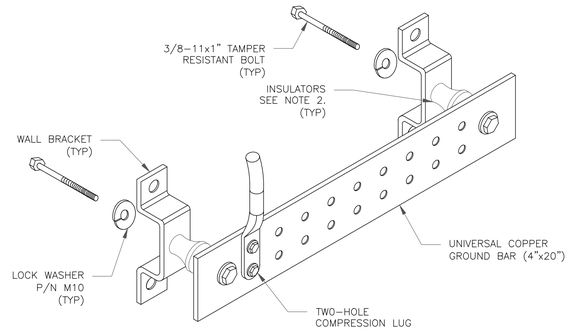
NOTE:

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

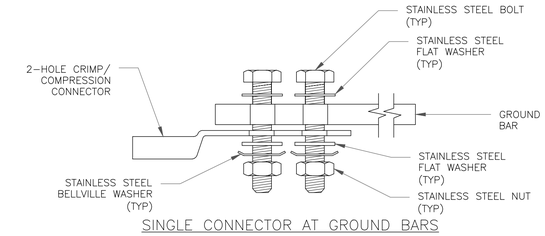


NOTES:

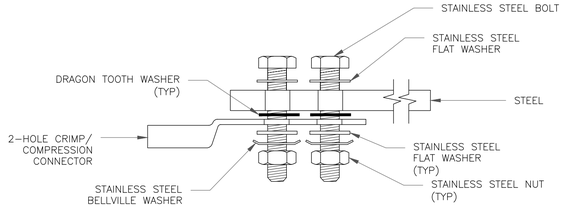
1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.

2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

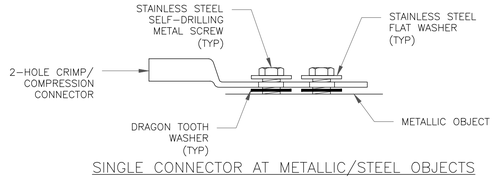
5 GROUND BAR DETAIL
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

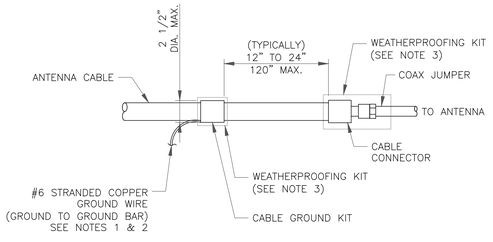


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

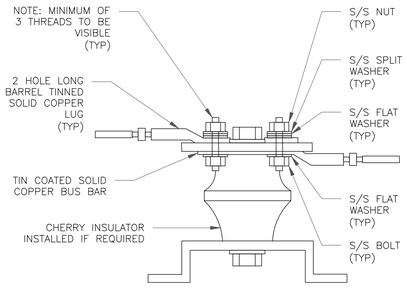
8 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



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

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

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

ENGINEERED TOWER SOLUTIONS
3227 WELLINGTON COURT
RALEIGH, NC 27615
919-782-2710
www.ets-pllc.com

AT&T SITE NUMBER:
CTL02083

BU #: **876320**
528 WHEELERS FARM RD

528 WHEELERS FARM ROAD
MILFORD, CT 06460

EXISTING 120'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	09/08/2021	CP/MC	PRELIMINARY	VA
0	09/14/2021	CP/MC	CONSTRUCTION	VA
1	01/31/2022	KR	REV. CONSTRUCTION	VA
2	03/15/2022	CP	REV. CONSTRUCTION	VA
3	04/27/2022	AM	REV. CONSTRUCTION	VA

04/27/2022

SHEET NUMBER: G-2

REVISION: 3

Diagram - Sector	A	Diagram File Name - CT2083_AC_C-BAND DOD.vsd					
Atoll Site Name -	CTL02083	Location Name -	MILFORD WHEELERS FARM	Market -	CONNECTICUT	Market Cluster -	NEW ENGLAND

Comments: Important Note: For detailed radio to antenna wiring refer to the latest field notice - Antenna_Radio Connection Drawings Playbook v6.0_Ericsson

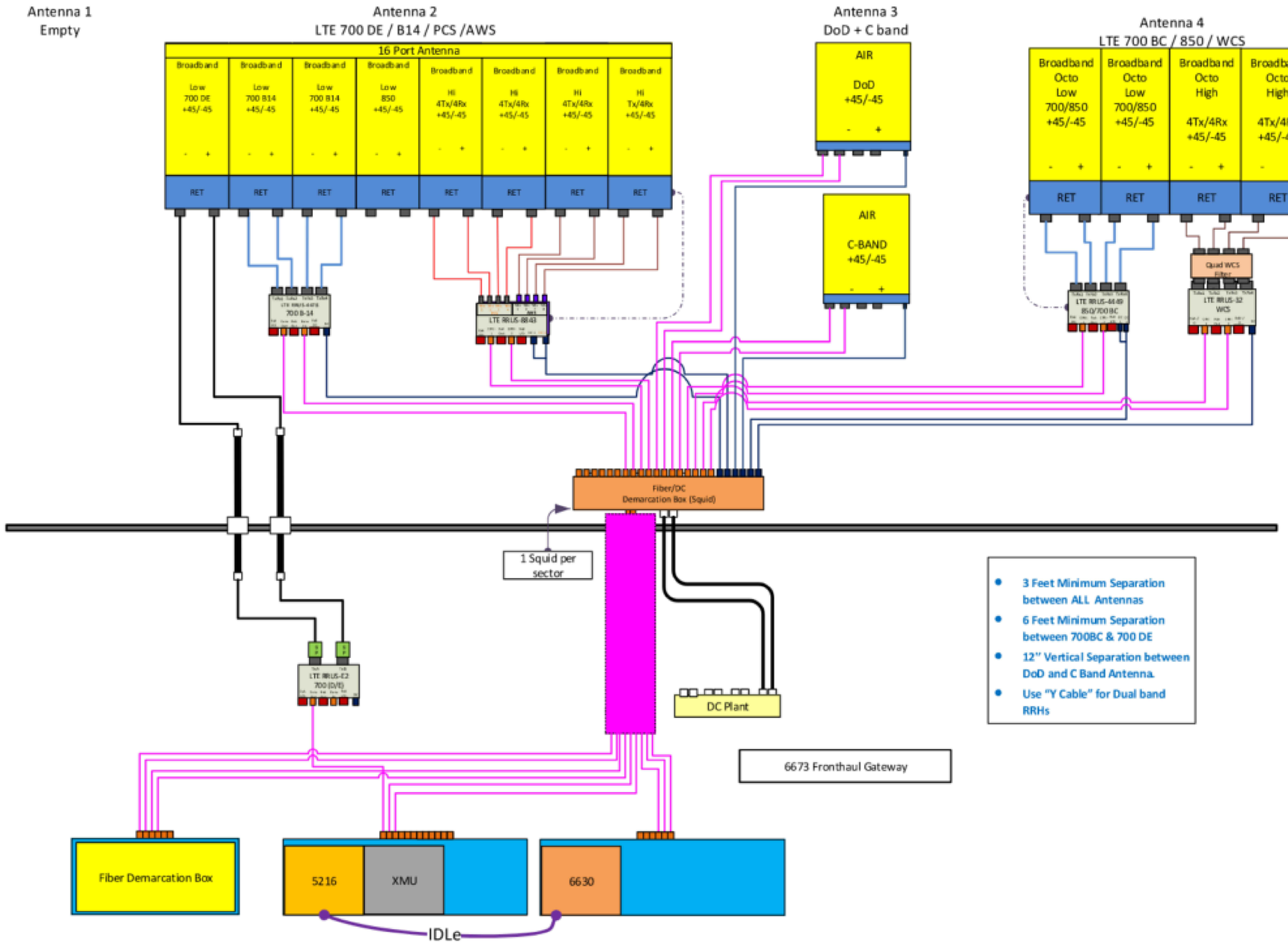


Diagram - Sector	B	Diagram File Name - CT2083_B_C-BAND DOD.vsd							
Atoll Site Name -	CTL02083	Location Name -	MILFORD WHEELERS FARM	Market -	CONNECTICUT			Market Cluster -	NEW ENGLAND
Comments: Important Note: For detailed radio to antenna wiring refer to the latest field notice - Antenna_Radio Connection Drawings Playbook v6.0_Ericsson									

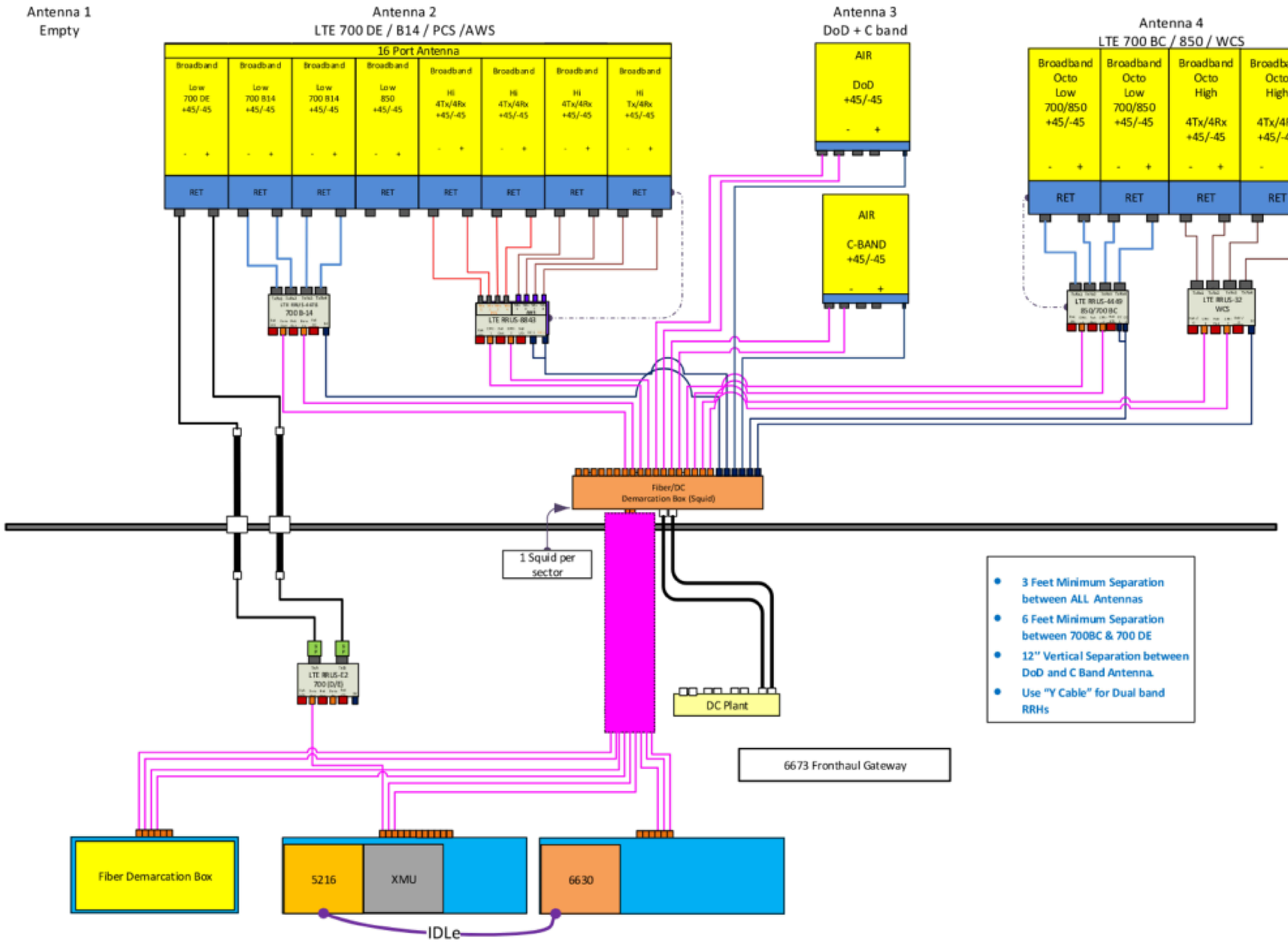


Diagram - Sector	C	Diagram File Name - CT2083_AC_C-BAND DOD.vsd					
Atoll Site Name -	CTL02083	Location Name -	MILFORD WHEELERS FARM	Market -	CONNECTICUT	Market Cluster -	NEW ENGLAND

Comments: Important Note: For detailed radio to antenna wiring refer to the latest field notice - Antenna_Radio Connection Drawings Playbook v6.0_Ericsson

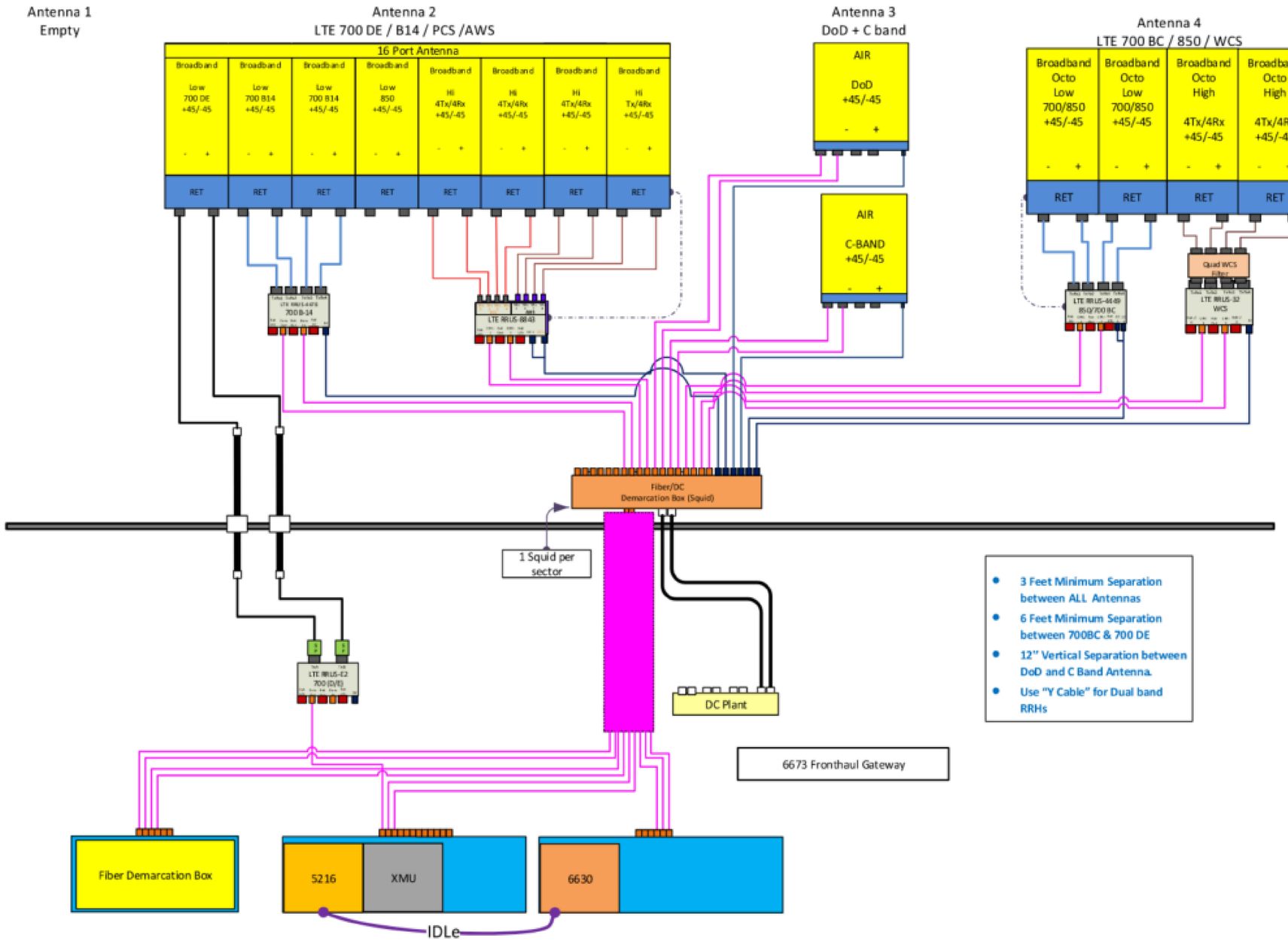


Exhibit D

Structural Analysis Report

Exhibit E

Mount Analysis

Date: **March 7, 2022**

Infinigy Engineering, PLLC
1033 Watervliet Shaker Road
Albany, NY 12205
518-690-0790
structural@infinigy.com

Subject:	**Mount Analysis Report**	
Carrier Designation:	**AT&T Mobility Direct**	
	Carrier Site Number:	CTL02083
	Carrier Site Name:	MILFORD WHEELERS FARM
	Carrier FA Number:	10035336
Crown Castle Designation:	**Crown Castle BU Number:**	876320
	Crown Castle Site Name:	528 WHEELERS FARM RD
	Crown Castle JDE Job Number:	649408
	Crown Castle Order Number:	556503 Rev.0
Engineering Firm Designation:	**Infinigy Engineering, PLLC Report Designation:**	1039-Z0001-B
Site Data:	**528 Wheelers Farm Road, Milford, New Haven County, CT, 06460** **Latitude 41°14'54.35" Longitude -73°4'44.67"**	
Structure Information:	**Tower Height & Type:**	**120.0 ft Monopole**
	Mount Elevation:	**96.0 ft**
	Mount Type:	**13.0 ft Platform**

Infinigy Engineering, PLLC is pleased to submit this **"Mount Analysis Report"** to determine the structural integrity of AT&T Mobility'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 **Sufficient**

This analysis utilizes an ultimate 3-second gust wind speed of 119 mph as required by the 2018 Internaional Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Mount analysis prepared by: Alex Mercado, E.I.T.

Respectfully Submitted by:
Emmanuel Poulin, P.E.
518-690-0790
structural@infinigy.com
CT PE License No. 22947

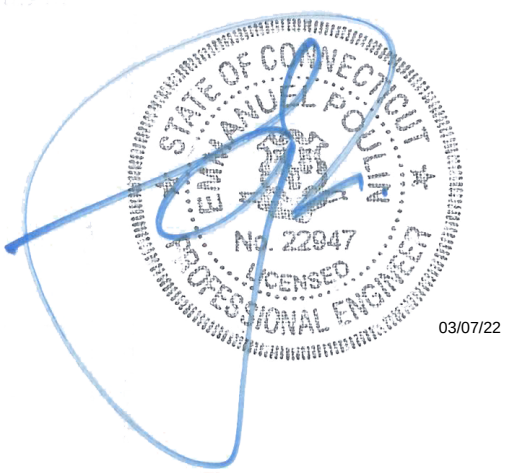


TABLE OF CONTENTS

1) INTRODUCTION

This is an existing 3 sector 13.0 ft Platform.

The mount has been modified per reinforcement drawings prepared by Infinigy Engineering, in January of 2019. Reinforcement consists of of braces and kickers for handrails.

2) ANALYSIS CRITERIA

Building Code:	2018 IBC
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	125 mph
Exposure Category:	C
Topographic Factor at Base:	1.0
Topographic Factor at Mount:	1.0
Ice Thickness:	1.0 in
Wind Speed with Ice:	50 mph
Seismic S_s:	0.203
Seismic S_1:	0.054
Live Loading Wind Speed:	30 mph
Man Live Load at Mid/End-Points:	250 lb
Man Live Load at Mount Pipes:	500 lb

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details
96.0	98.0	3	KATHREIN	80010965	13.0 ft Platform
		3	ERICSSON	RRUS E2 B29	
		1	RAYCAP	DC6-48-60-18-8F	
		3	COMMSCOPE	WCS-IMFQ-AMT	
		3	ERICSSON	RRUS 4449 B5/B12	
		3	ERICSSON	RRUS 4478 B14	
		3	ERICSSON	RRUS 8843 B2/B66A	
		3	ERICSSON	AIR 6419 B77G	
		3	ERICSSON	AIR 6449 B77D	
		3	QUINTEL TECHNOLOGY	QD6616-7	
	97.0	3	ERICSSON	RRUS 32 B30	
		2	RAYCAP	DC6-48-60-18-8F	

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Crown Application	AT&T Mobility Application	556503 Rev.0	CCI Sites
Previous Mount Analysis	Infinigy Engineering	9142768	CCI Sites
Loading Documents	AT&T Mobility	RFDS ID: 4391601	TSA

3.1) Analysis Method

RISA-3D (Version 17.0.4), 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.

Infinigy Mount Analysis Tool V2.1.7, a tool internally developed by Infinigy, was used to calculate wind loading on all appurtenances, dishes and mount members for various loading cases. Selected output from the analysis is included in Appendix B “Software Input Calculations”.

This analysis was performed in accordance with Crown Castle’s ENG-SOW-10208 *Mount Analysis* (Revision E). In addition, this analysis is in accordance with AT&T's Mount Technical Directive - v16.

3.2) Assumptions

1) The antenna mounting system was properly fabricated, installed and maintained in good condition in accordance with its original design and manufacturer's specifications.
2) The configuration of antennas, mounts, and other appurtenances are as specified in Table 1 and the referenced drawings.
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.
5) Prior structural modifications to the tower mounting system are assumed to be installed as shown per available data.
6) Steel grades have been assumed as follows, unless noted otherwise:

Channel, Solid Round, Angle, Plate	ASTM A36 (GR 36)
HSS (Rectangular)	ASTM A500 (GR B-46)
Pipe	ASTM A53 (GR 35)
Connection Bolts	ASTM A325

This analysis may be affected if any assumptions are not valid or have been made in error. Infinigy Engineering, PLLC 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 (Platform, All Sectors)

Notes	Component	Critical Member	Centerline (ft)	% Capacity	Pass / Fail
1,2	Mount Pipe(s)	MP11	96.0	63.7	Pass
	Horizontal(s)	H2		46.6	Pass
	Standoff(s)	S2		54.5	Pass
	Handrail(s)	HR2		57.6	Pass
	Threaded Rod(s)	M153		68.3	Pass
	Mount Connection(s)	--		95.9	Pass

Structure Rating (max from all components) =	95.9%

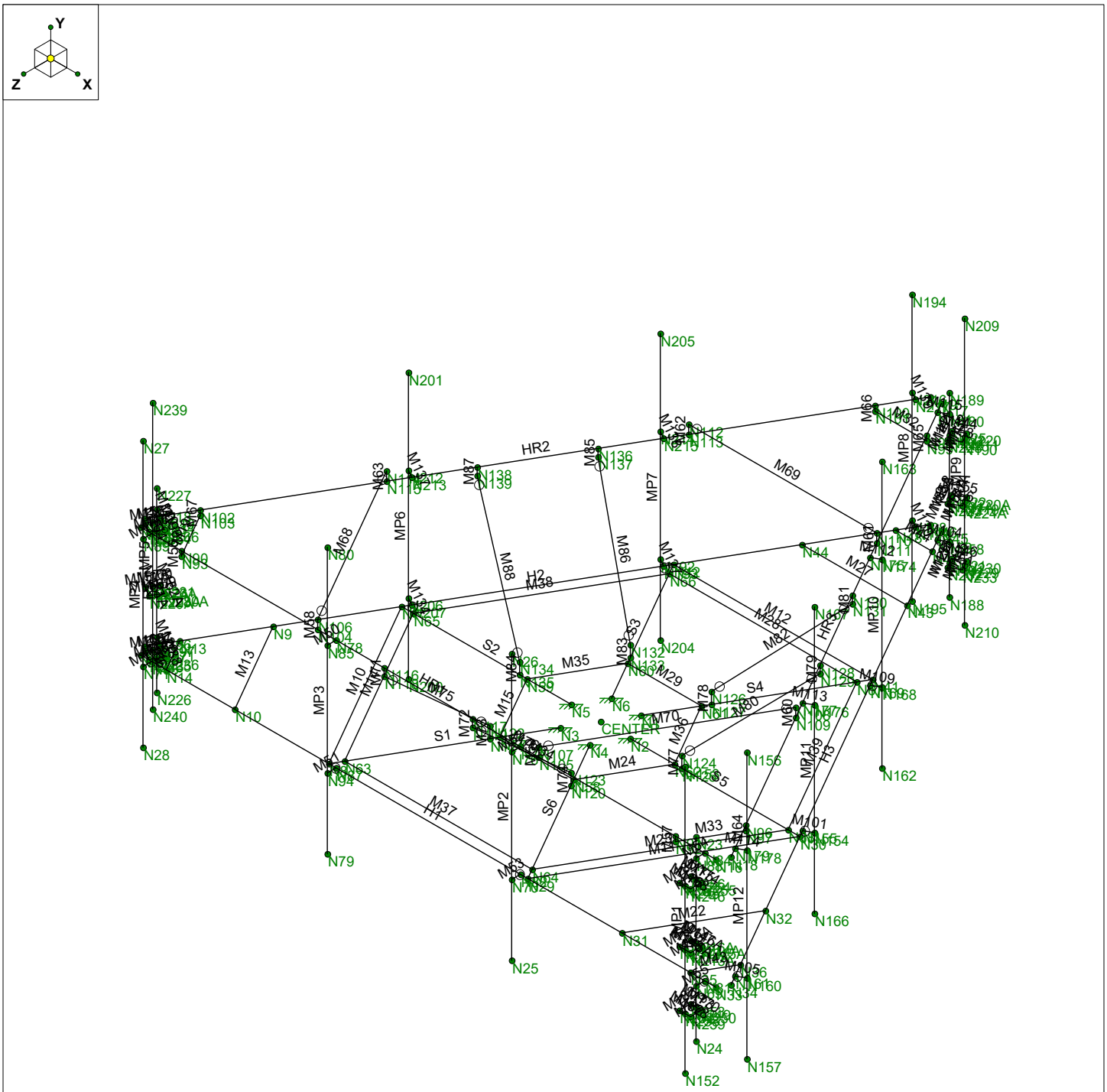
Notes:
1) See additional documentation in "Appendix C - Software Analysis Output" for calculations supporting the % capacity consumed.
2) See additional documentation in “Appendix D – Additional Calculations” for detailed mount connection calculations.

4.1) Recommendations

The mount has sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

APPENDIX A

WIRE FRAME AND RENDERED MODELS



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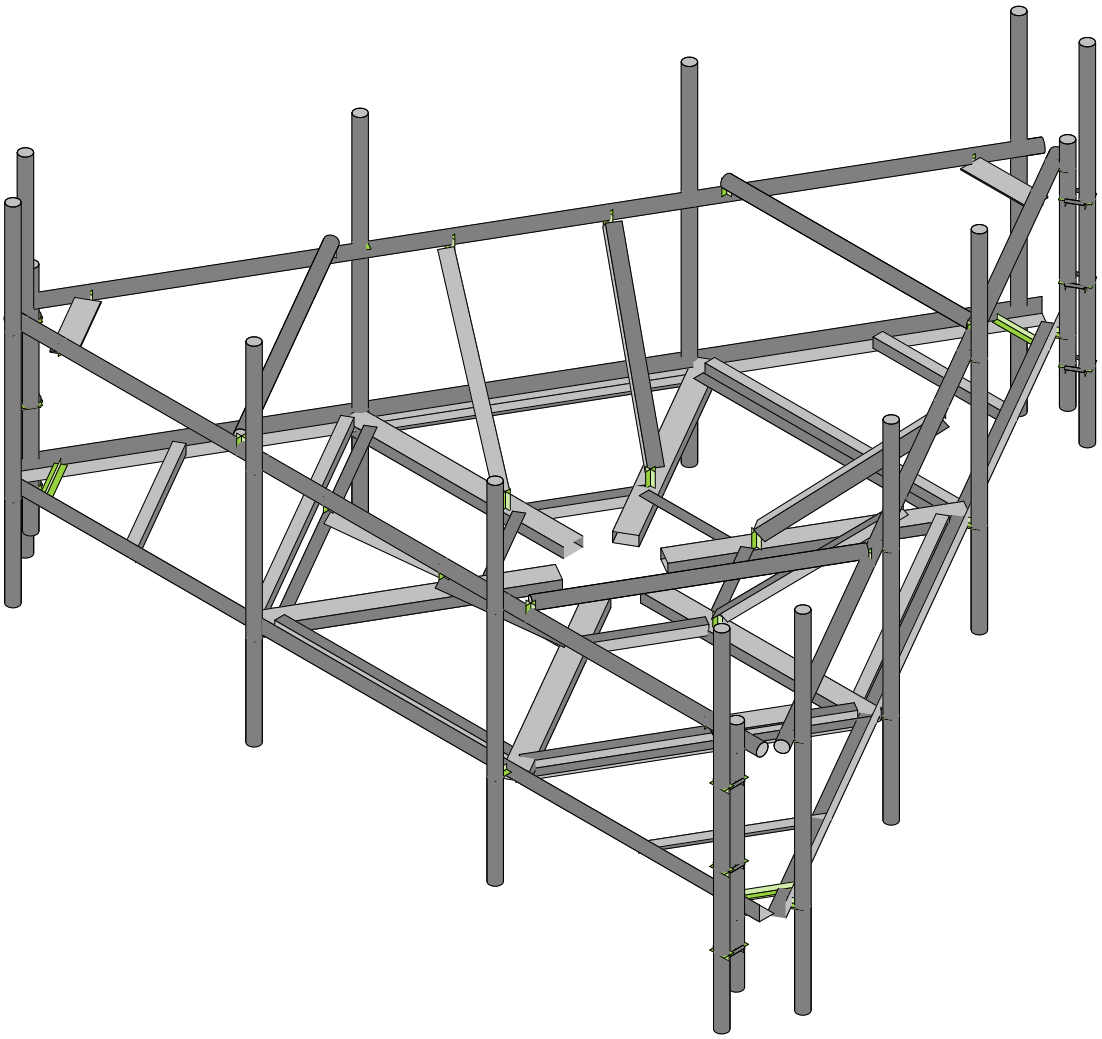

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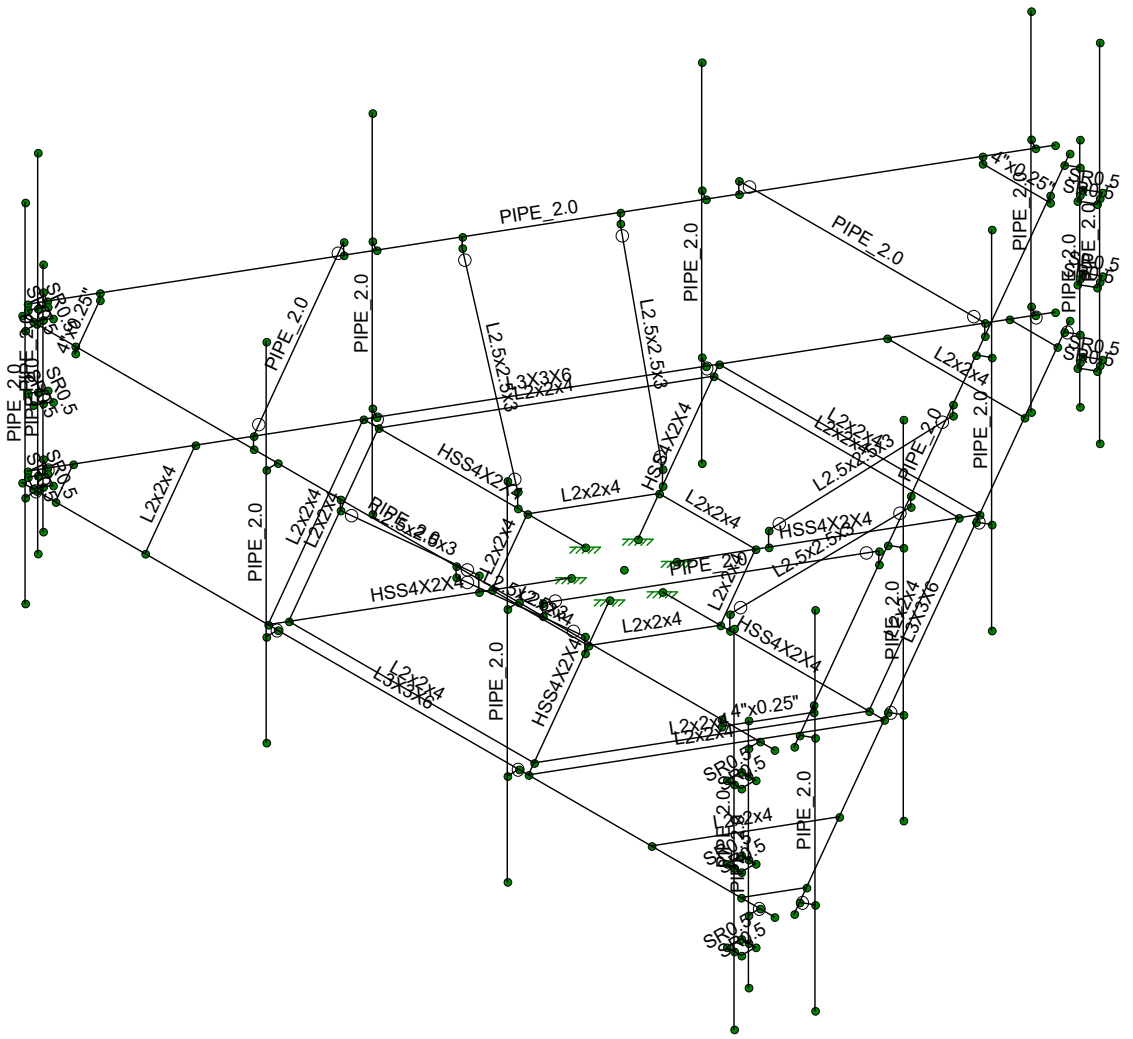

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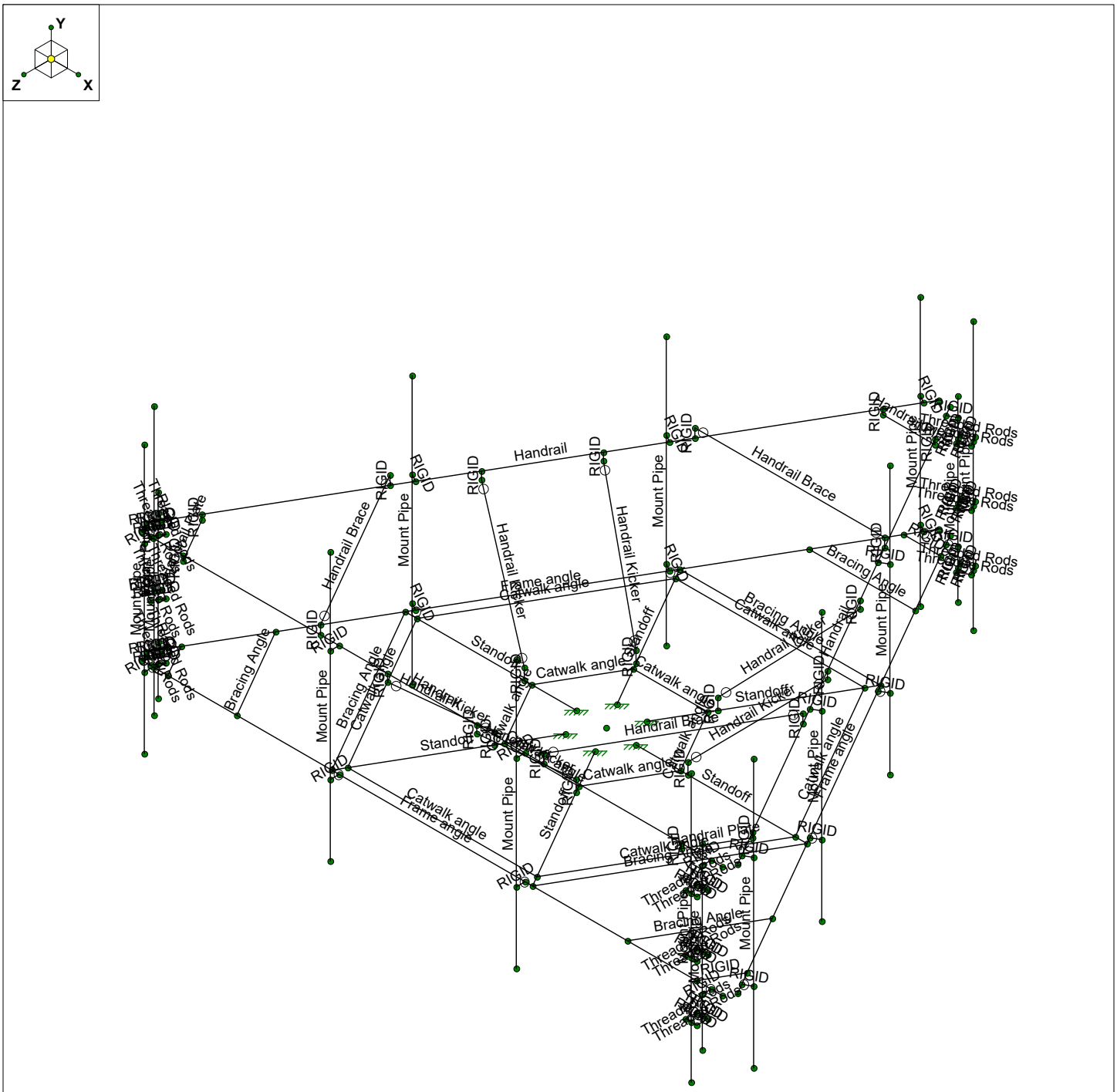

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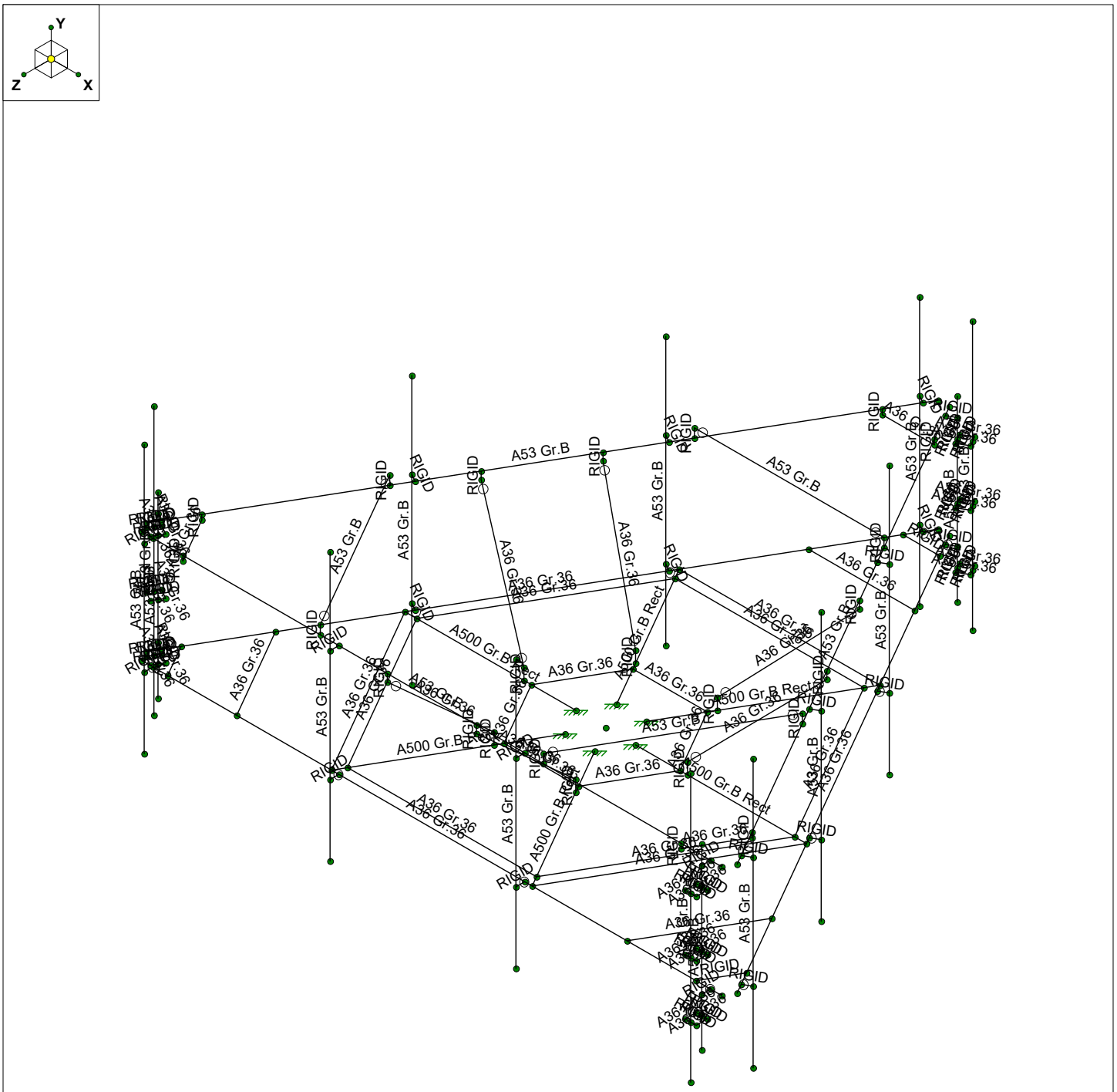

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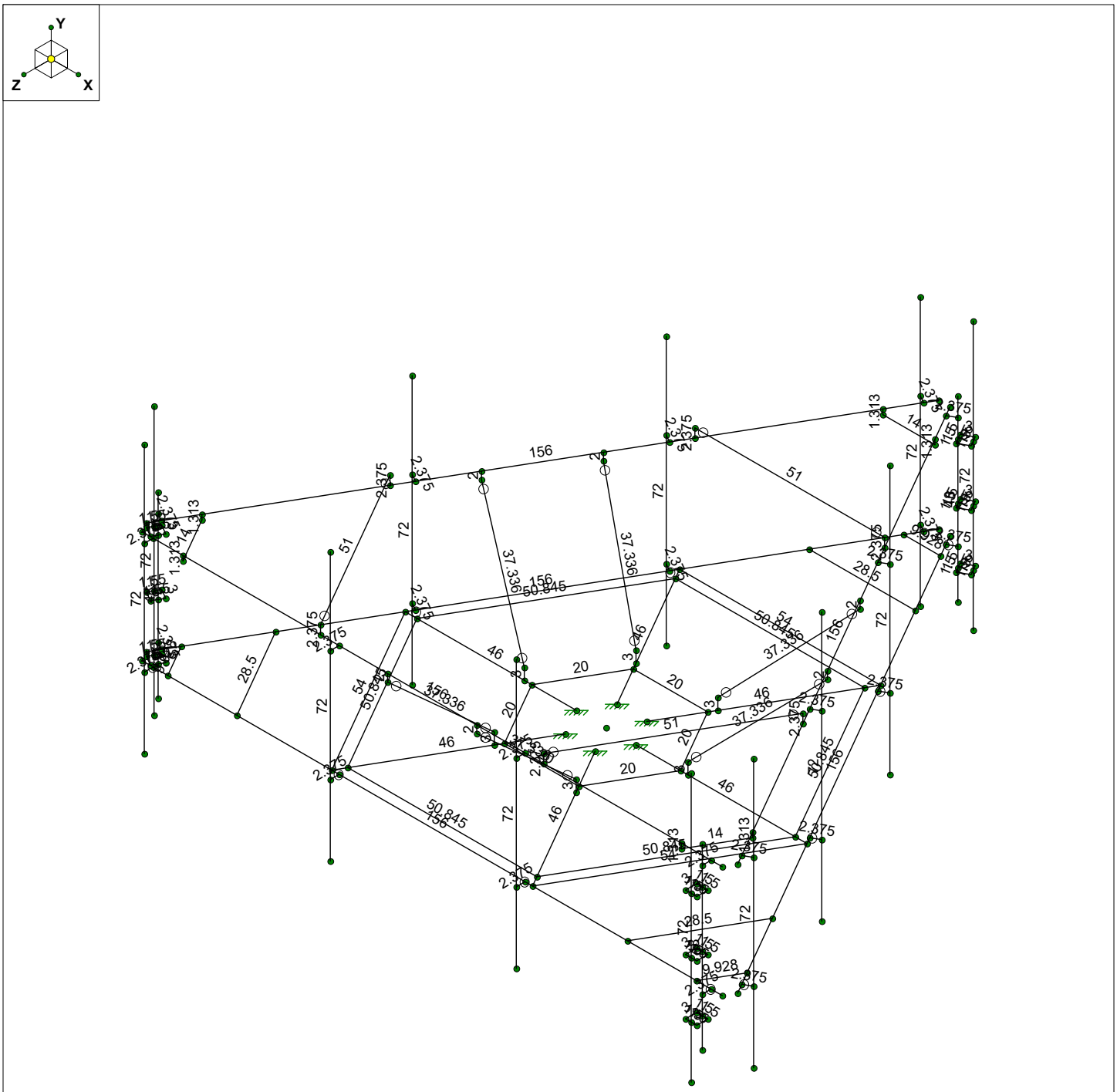

Member Length (in) Displayed

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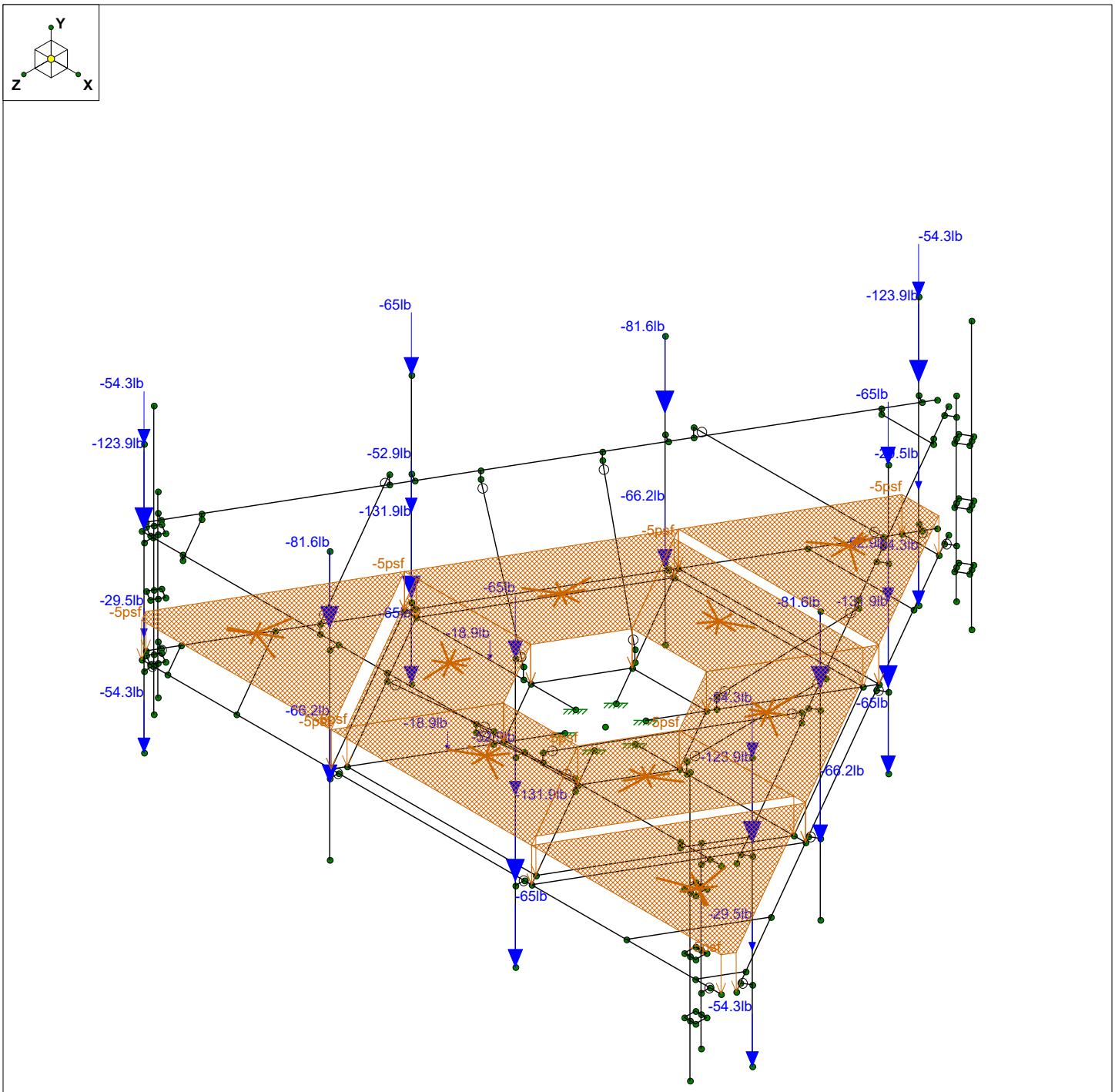

Loads: BLC 1, Self Weight

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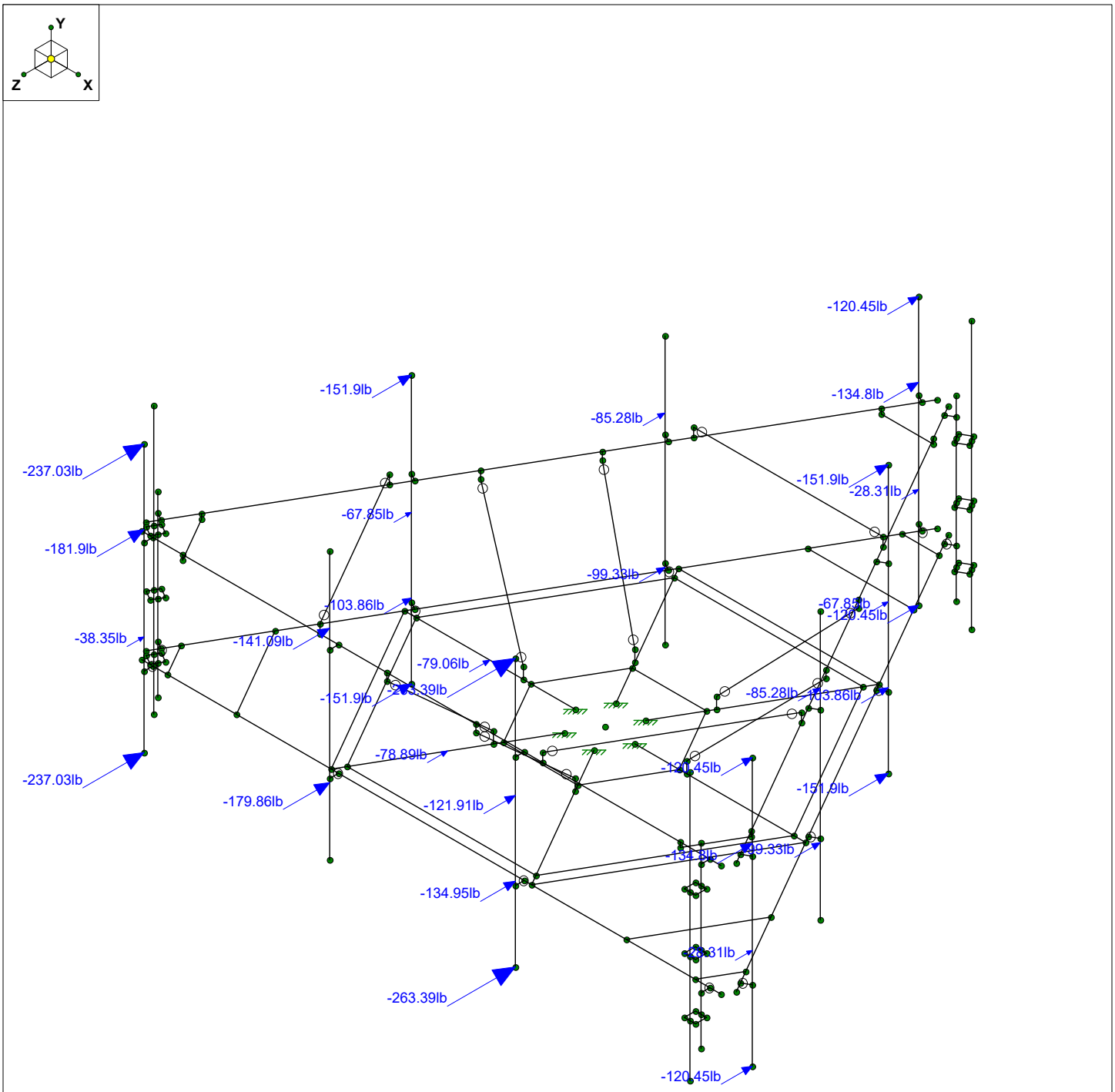

Loads: BLC 2, Wind Load AZI 0

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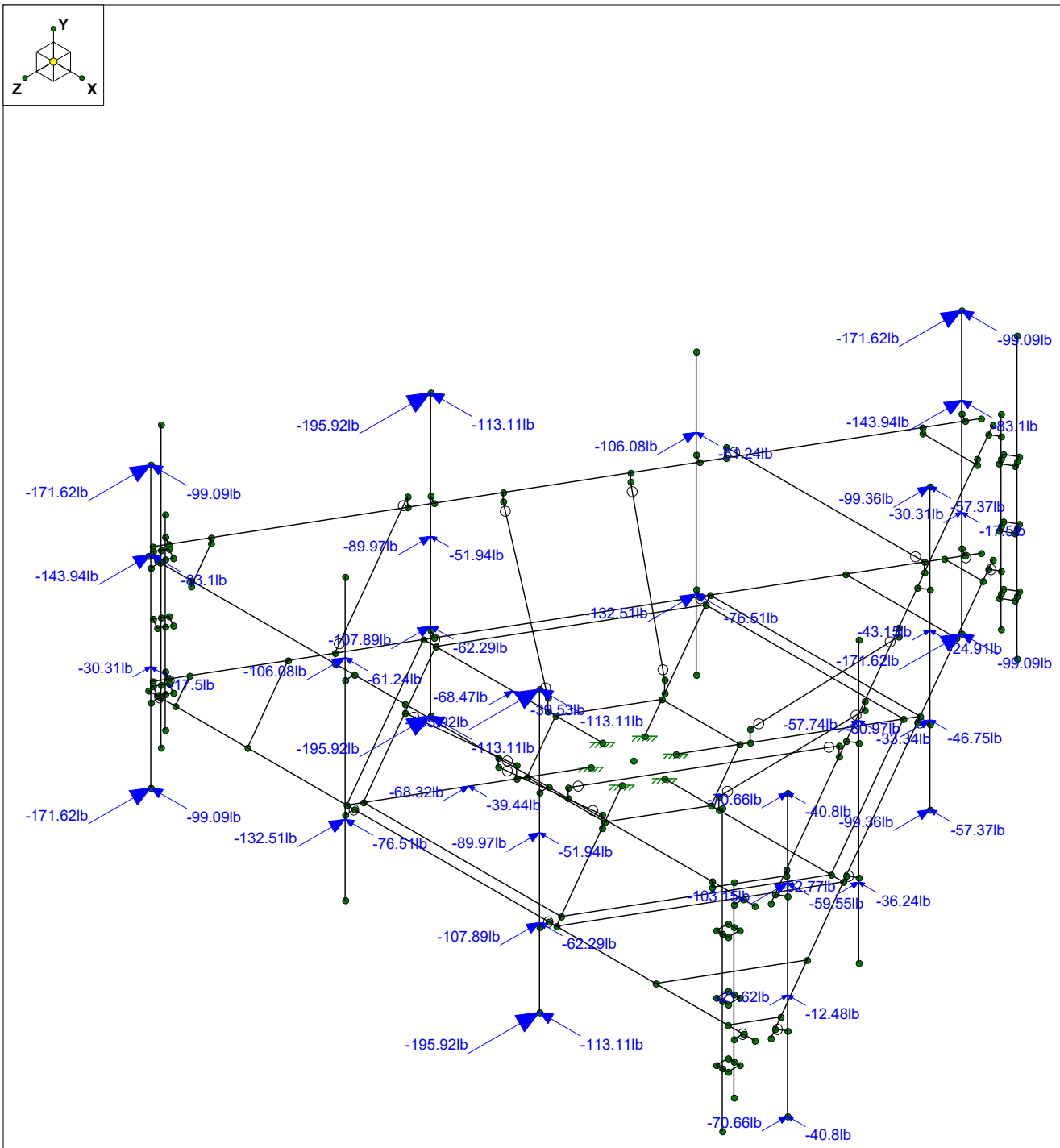

Loads: BLC 3, Wind Load AZI 30

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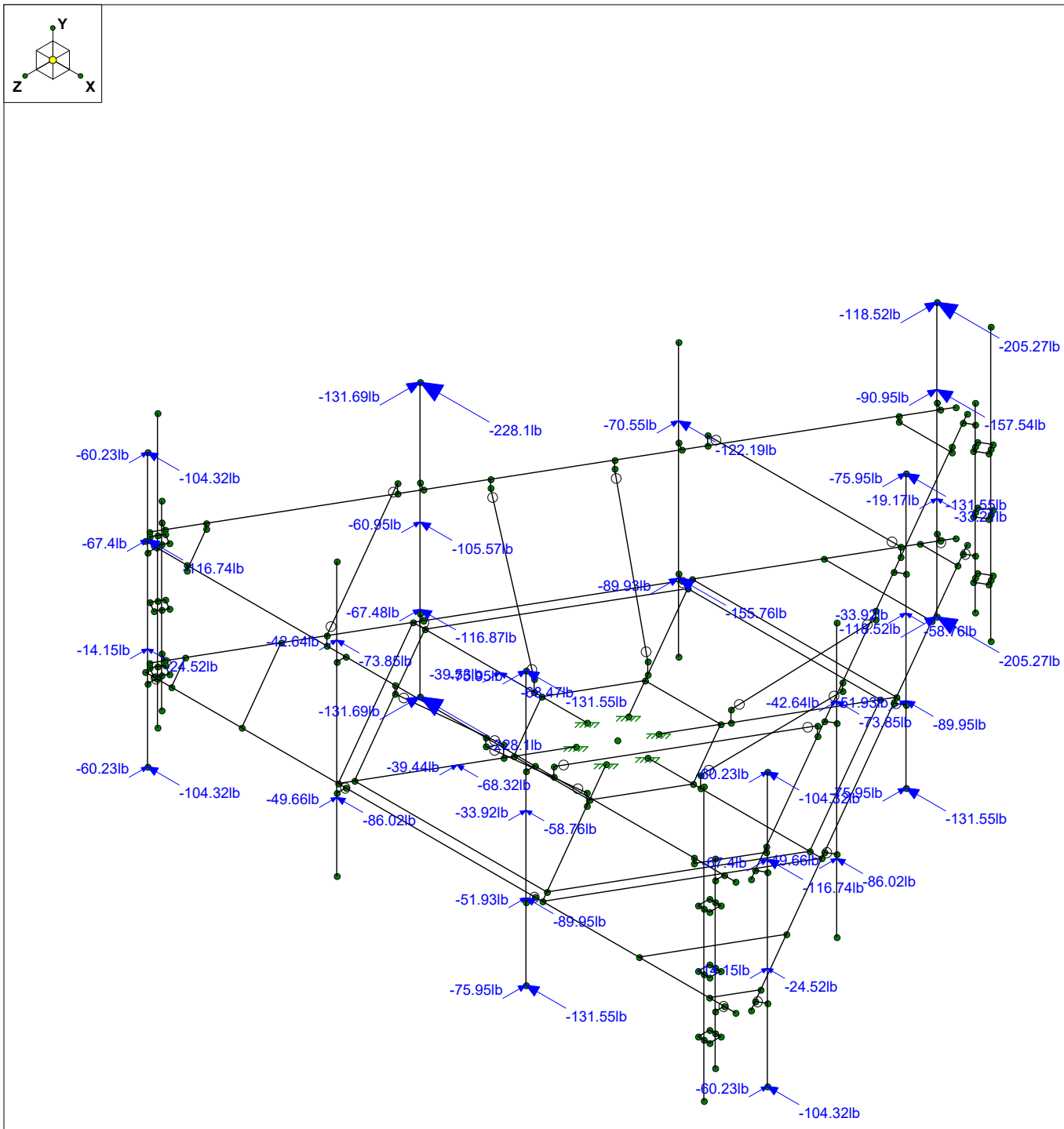

Loads: BLC 4, Wind Load AZI 60

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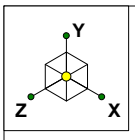

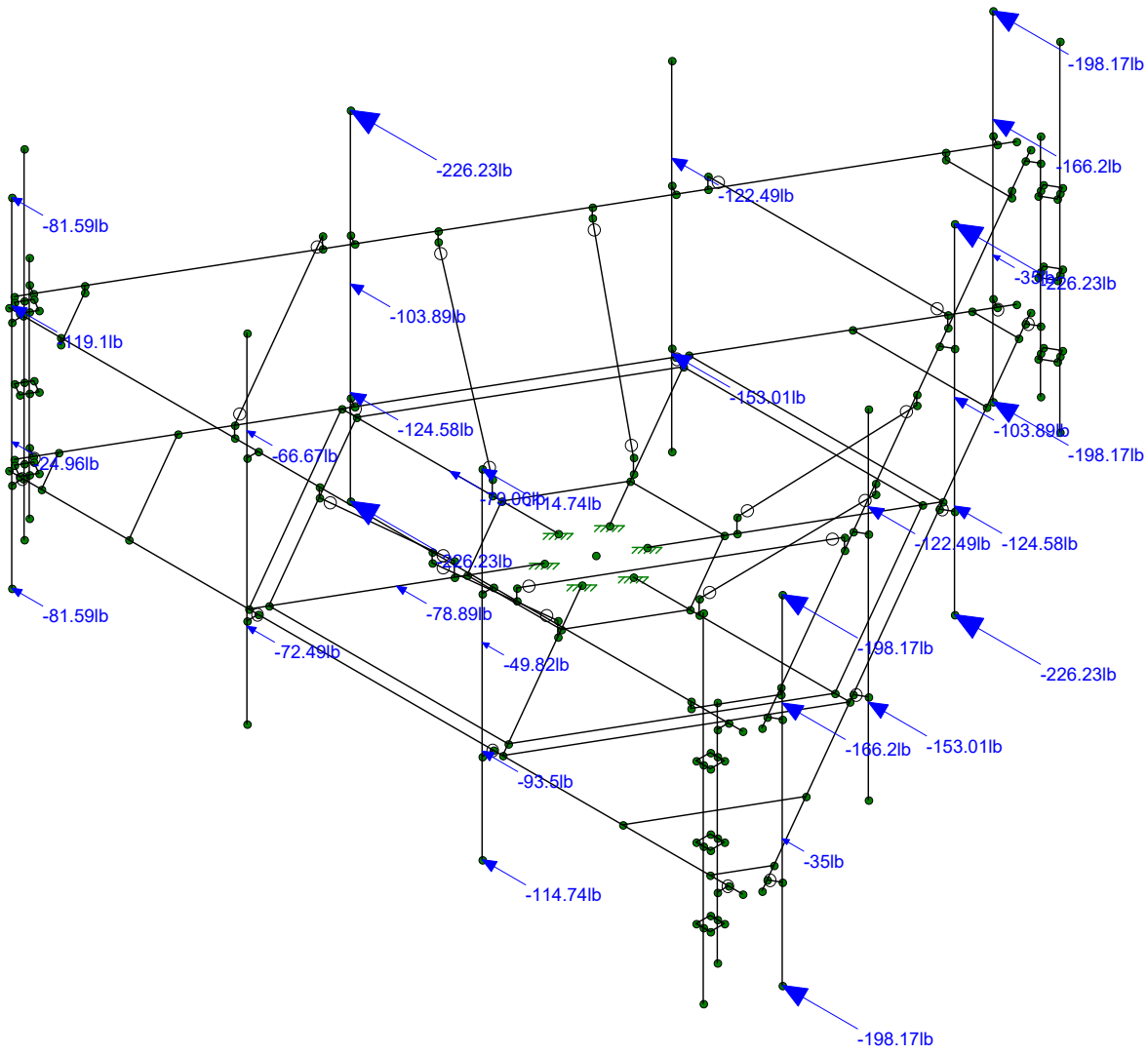

Loads: BLC 5, Wind Load AZI 90

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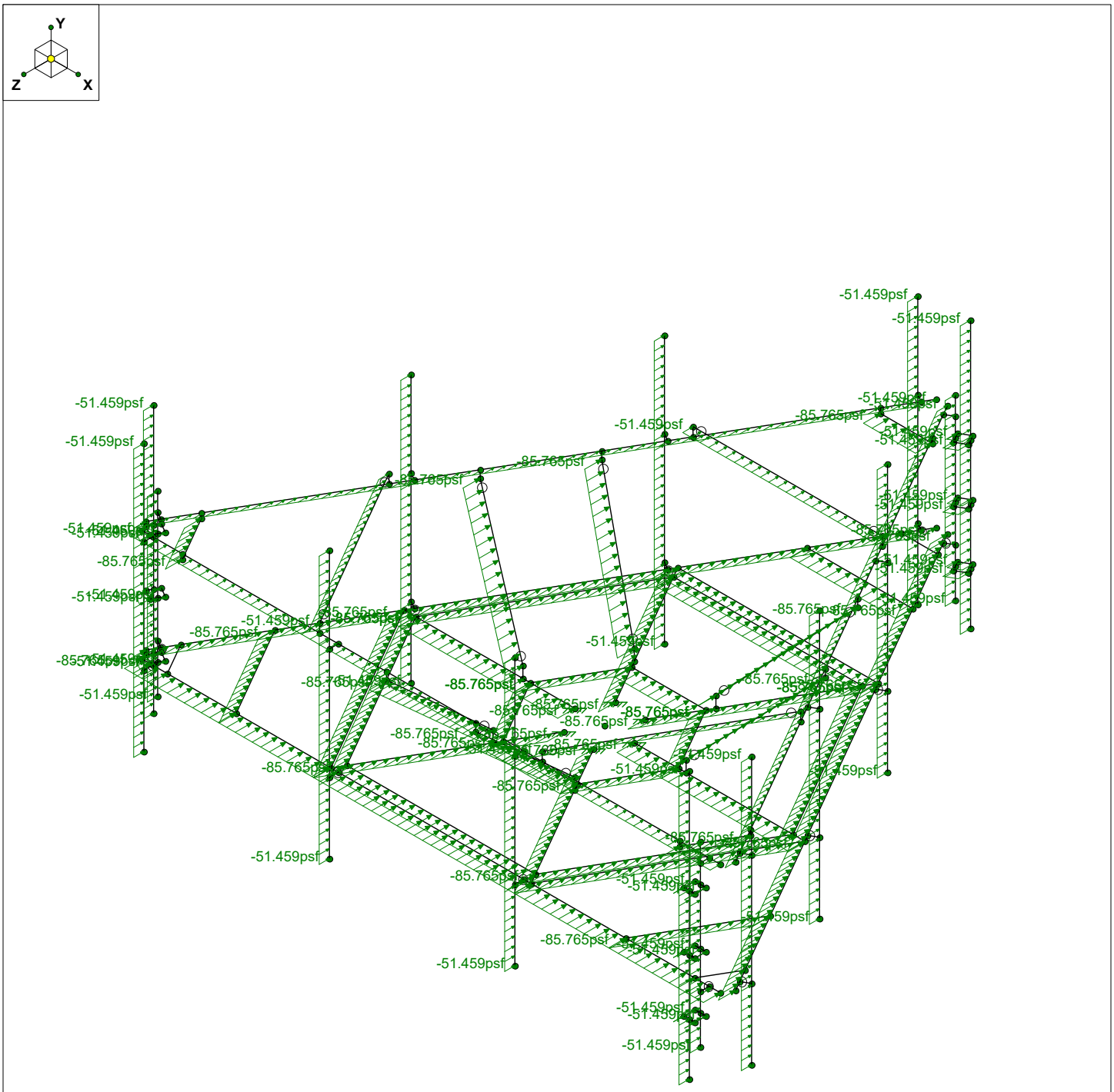

Loads: BLC 14, Distr. Wind Load Z

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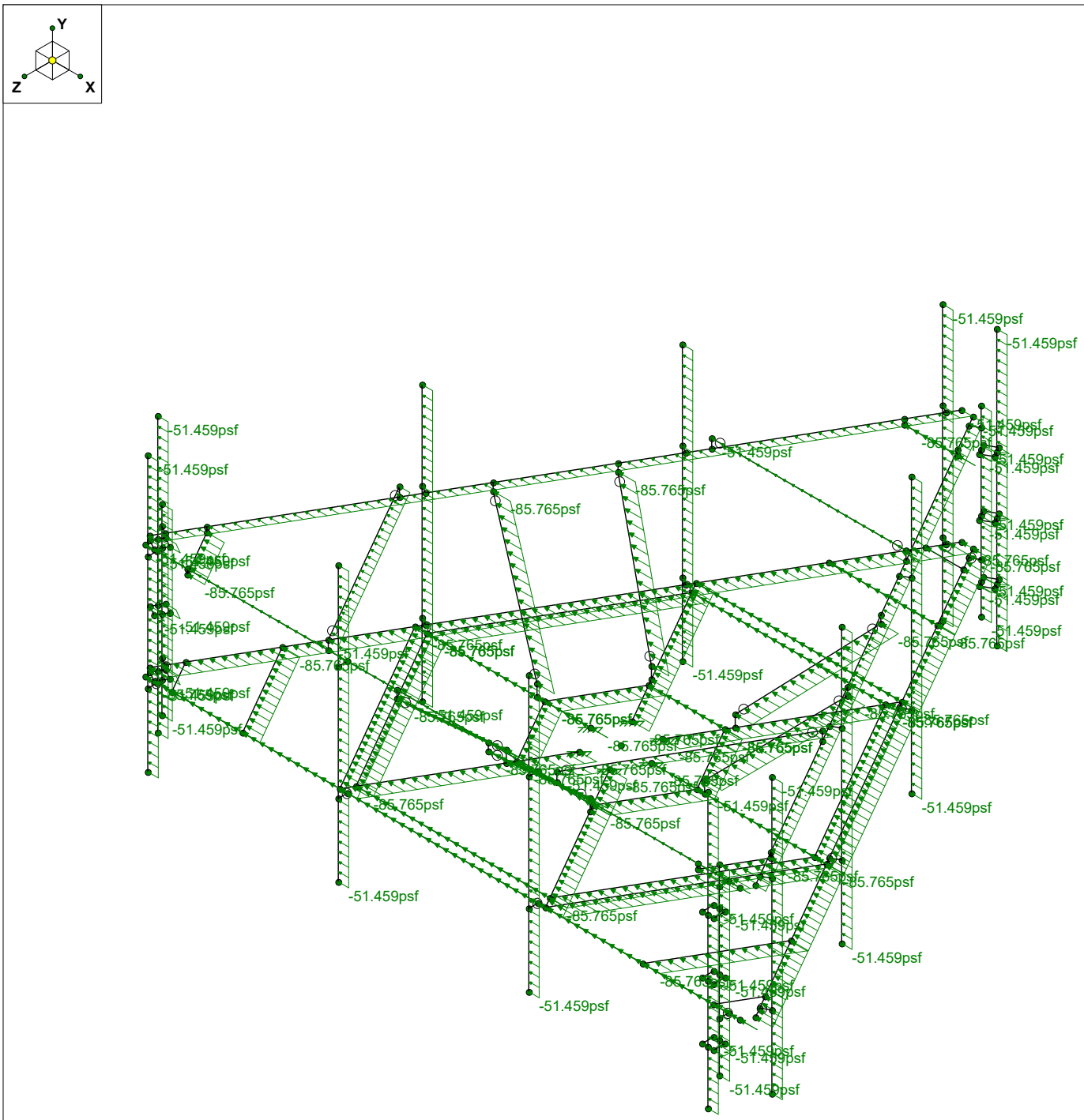

Loads: BLC 15, Distr. Wind Load X

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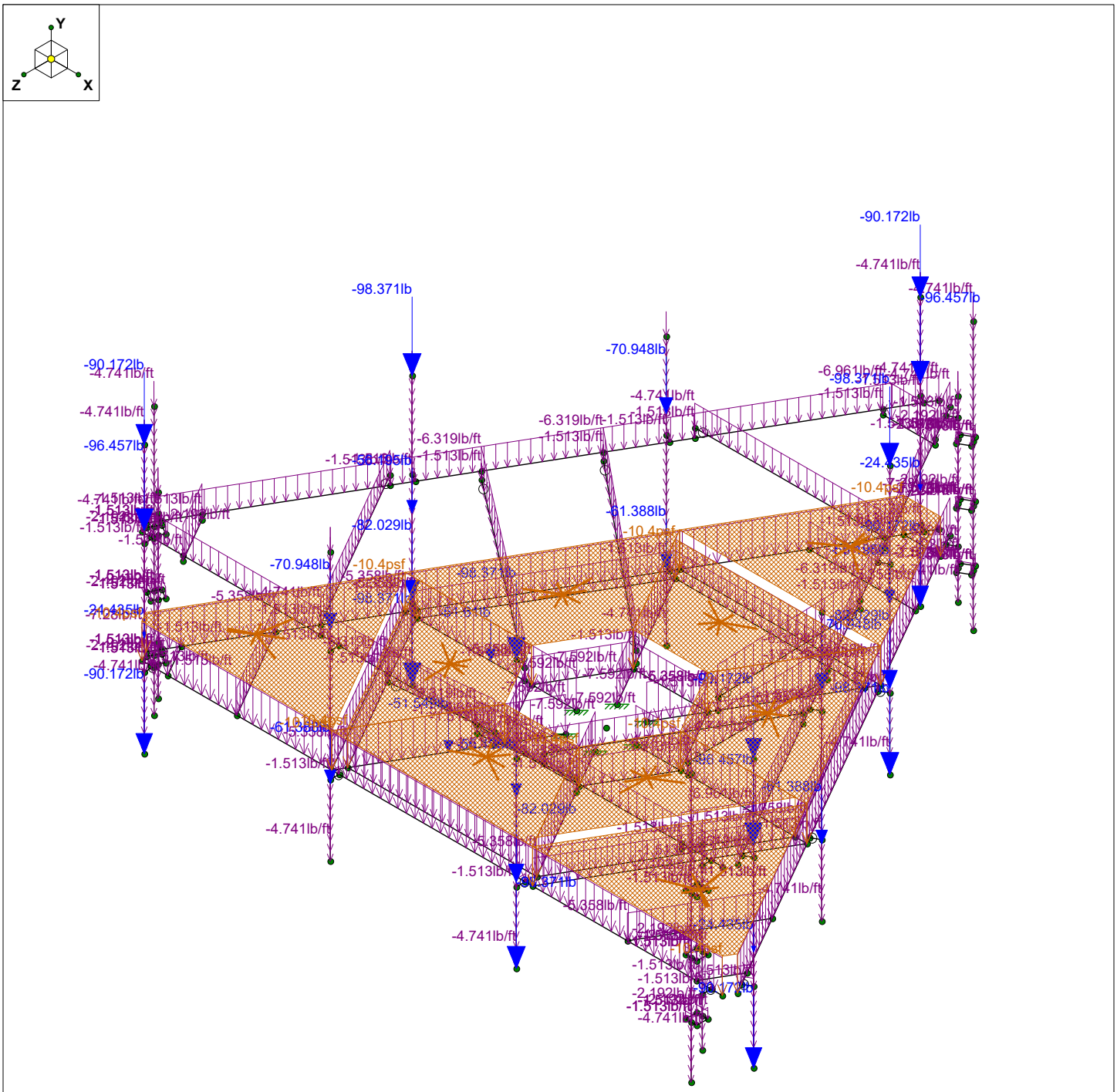

Loads: BLC 16, Ice Weight

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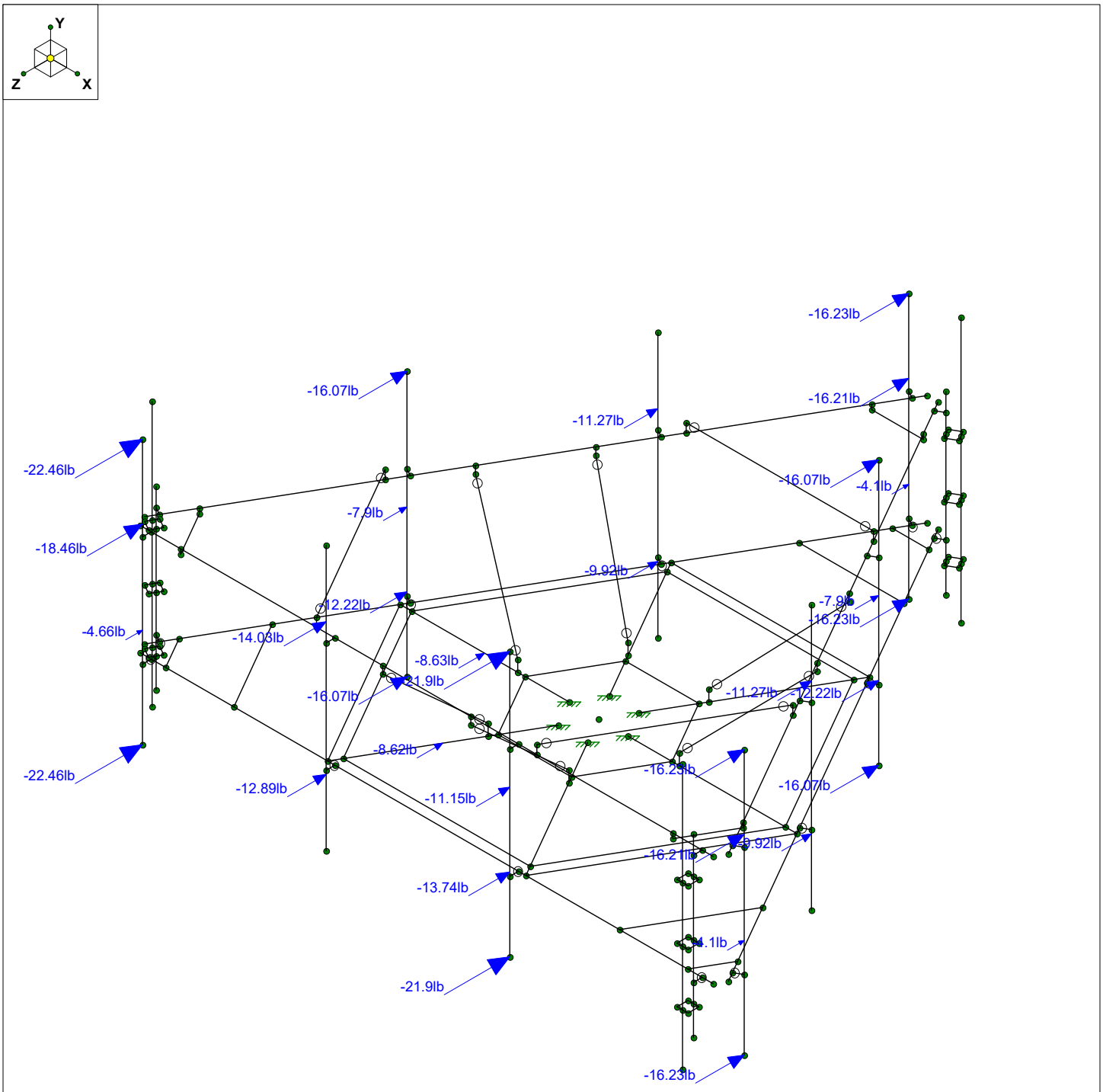

Loads: BLC 17, Ice Wind Load AZI 0

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AM		Mar 7, 2022 at 9:19 AM
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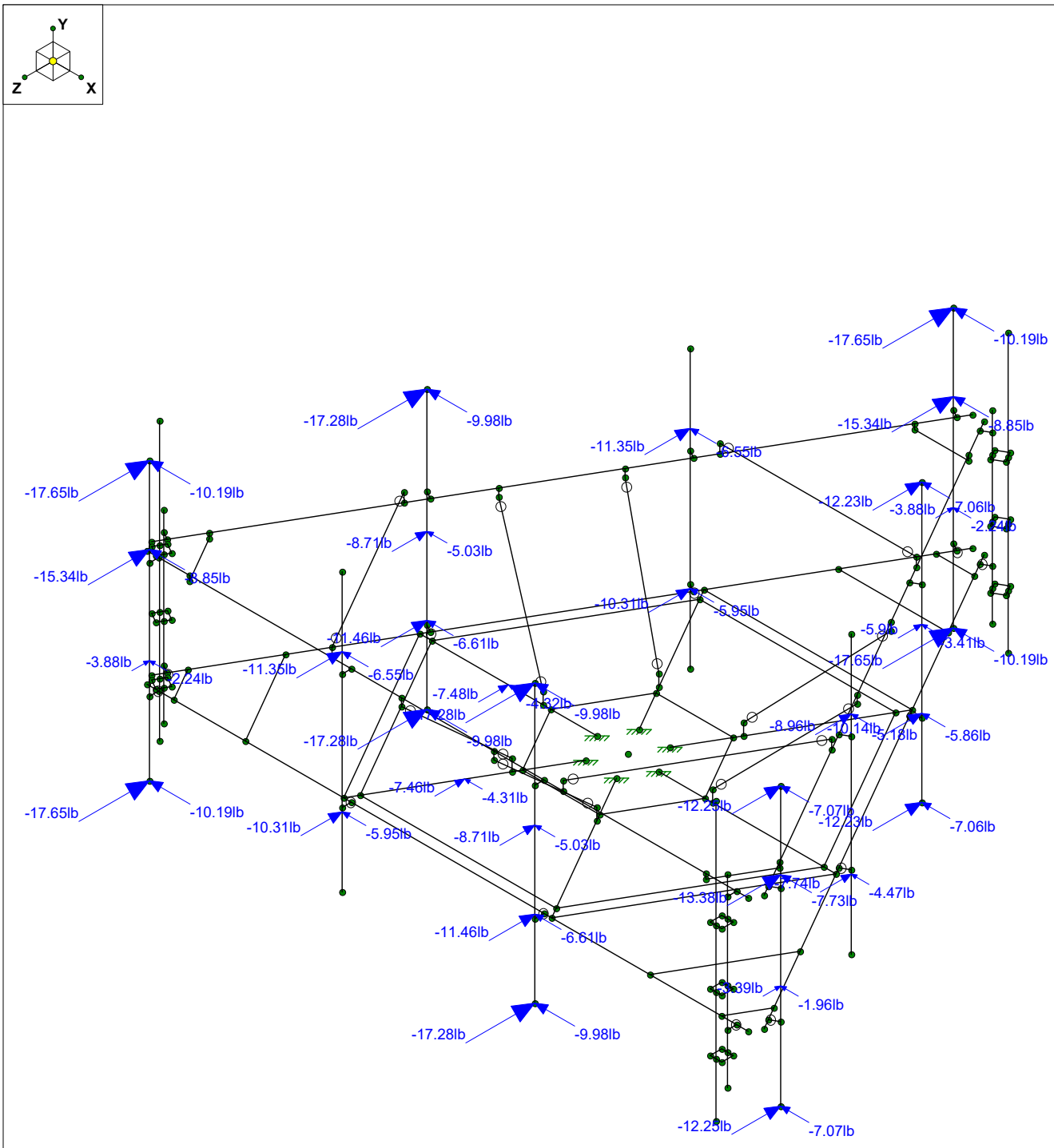
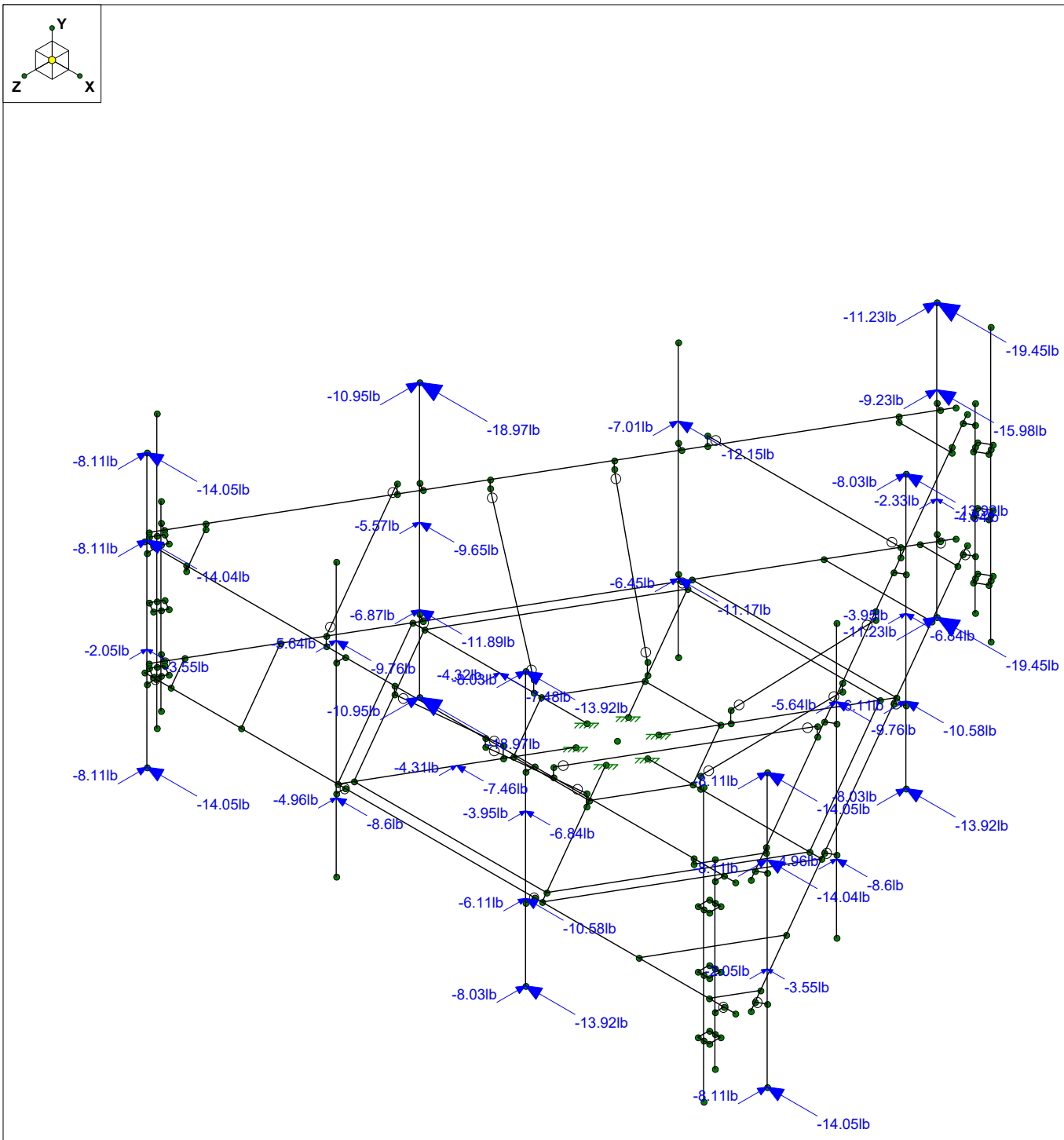


Loads: BLC 18, Ice Wind Load AZI 30

Infinigy Engineering	876320	Ice Wind Loading 30
AM		Mar 7, 2022 at 9:19 AM
1039-Z0001-B		876320_loaded.r3d



Loads: BLC 19, Ice Wind Load AZI 60

Infinigy Engineering	876320	Ice Wind Loading 60
AM		Mar 7, 2022 at 9:20 AM
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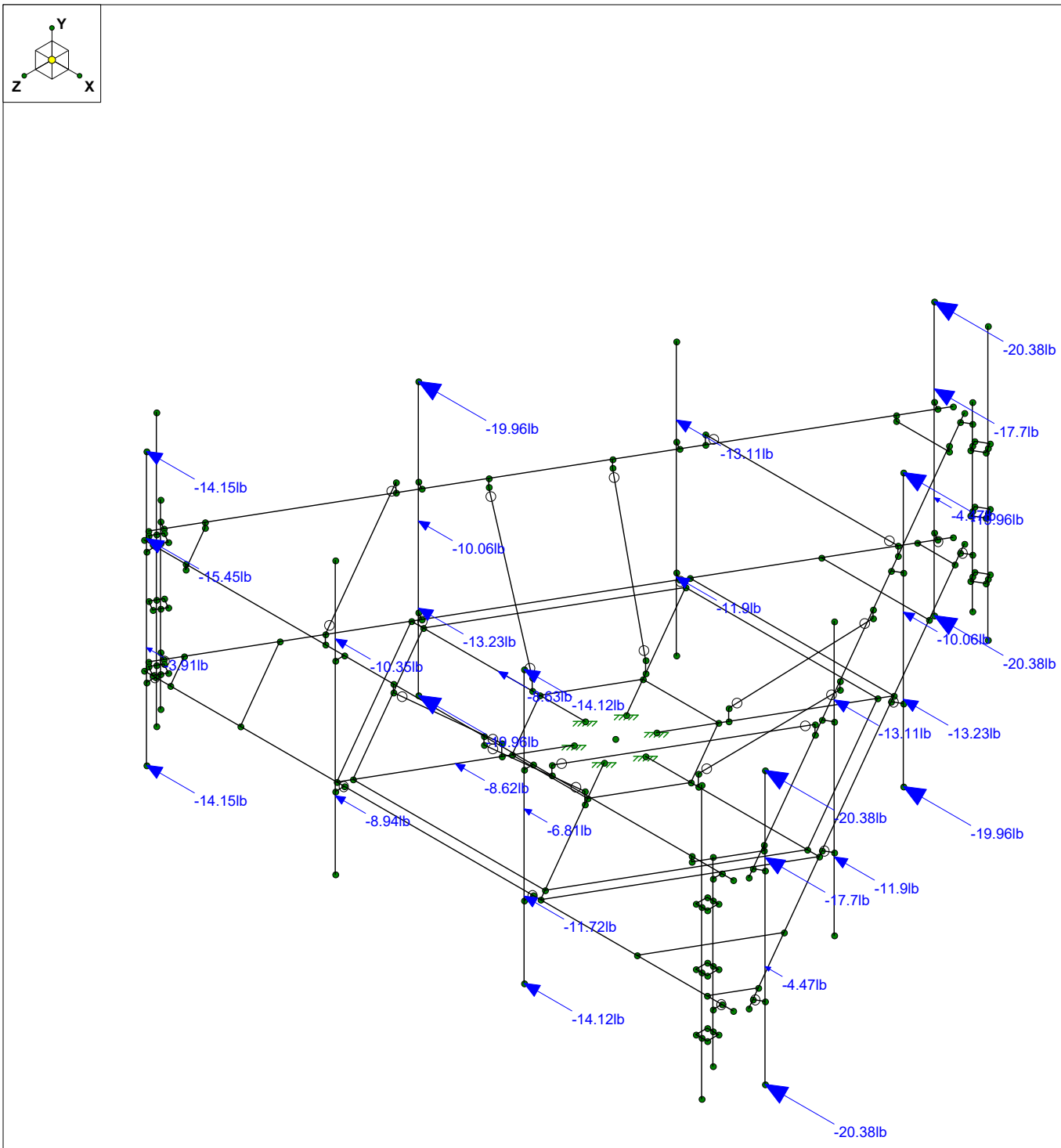

Loads: BLC 20, Ice Wind Load AZI 90

Infinigy Engineering	876320	Ice Wind Loading 90
AM		Mar 7, 2022 at 9:20 AM
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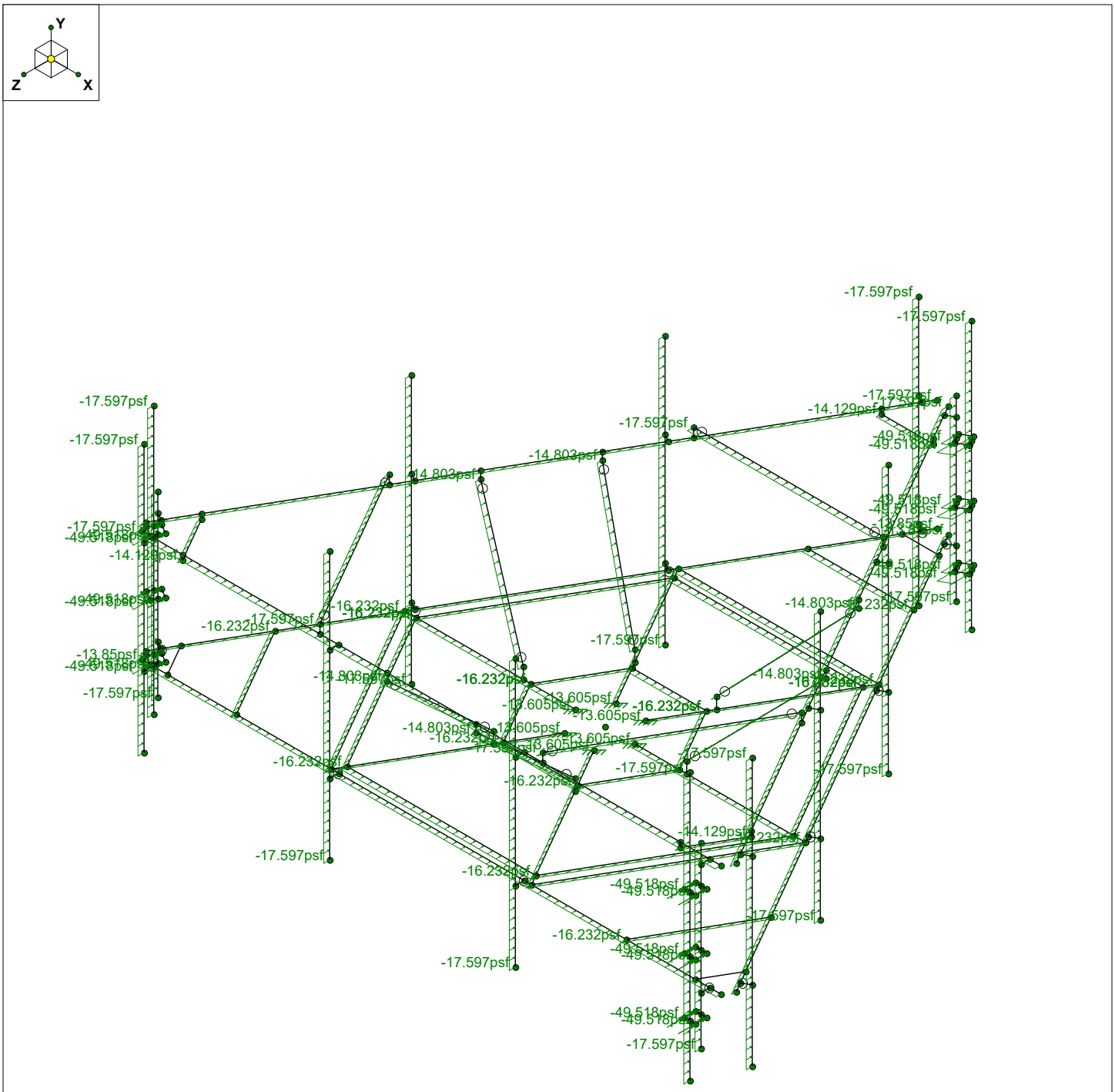
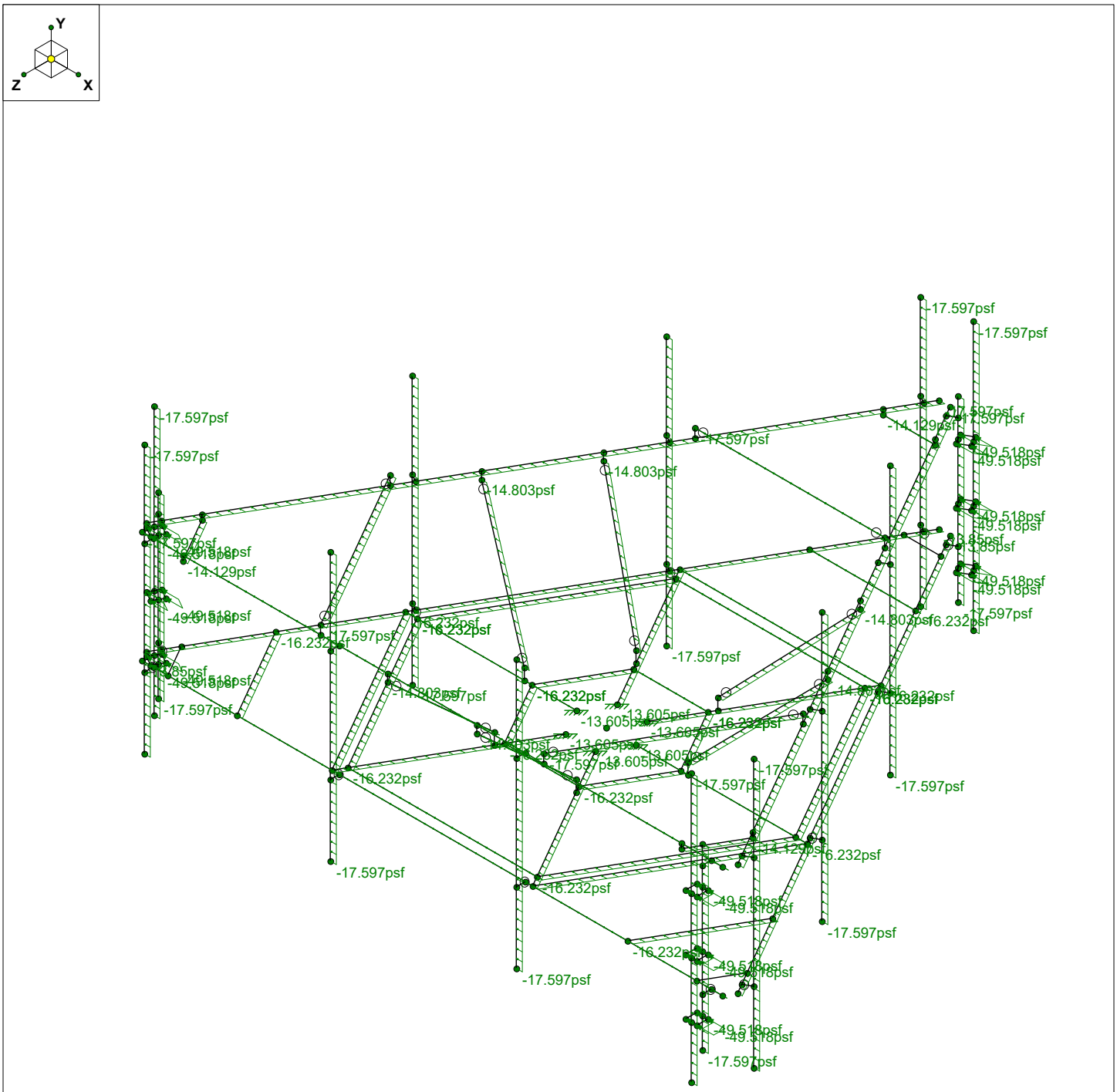


Loads: BLC 29, Distr. Ice Wind Load Z

Infinigy Engineering	876320	Dist. Ice Wind Loading 0
AM		Mar 7, 2022 at 9:20 AM
1039-Z0001-B		876320_loaded.r3d



Loads: BLC 30, Distr. Ice Wind Load X

Infinigy Engineering	876320	Dist. Ice Wind Loading 90
AM		Mar 7, 2022 at 9:20 AM
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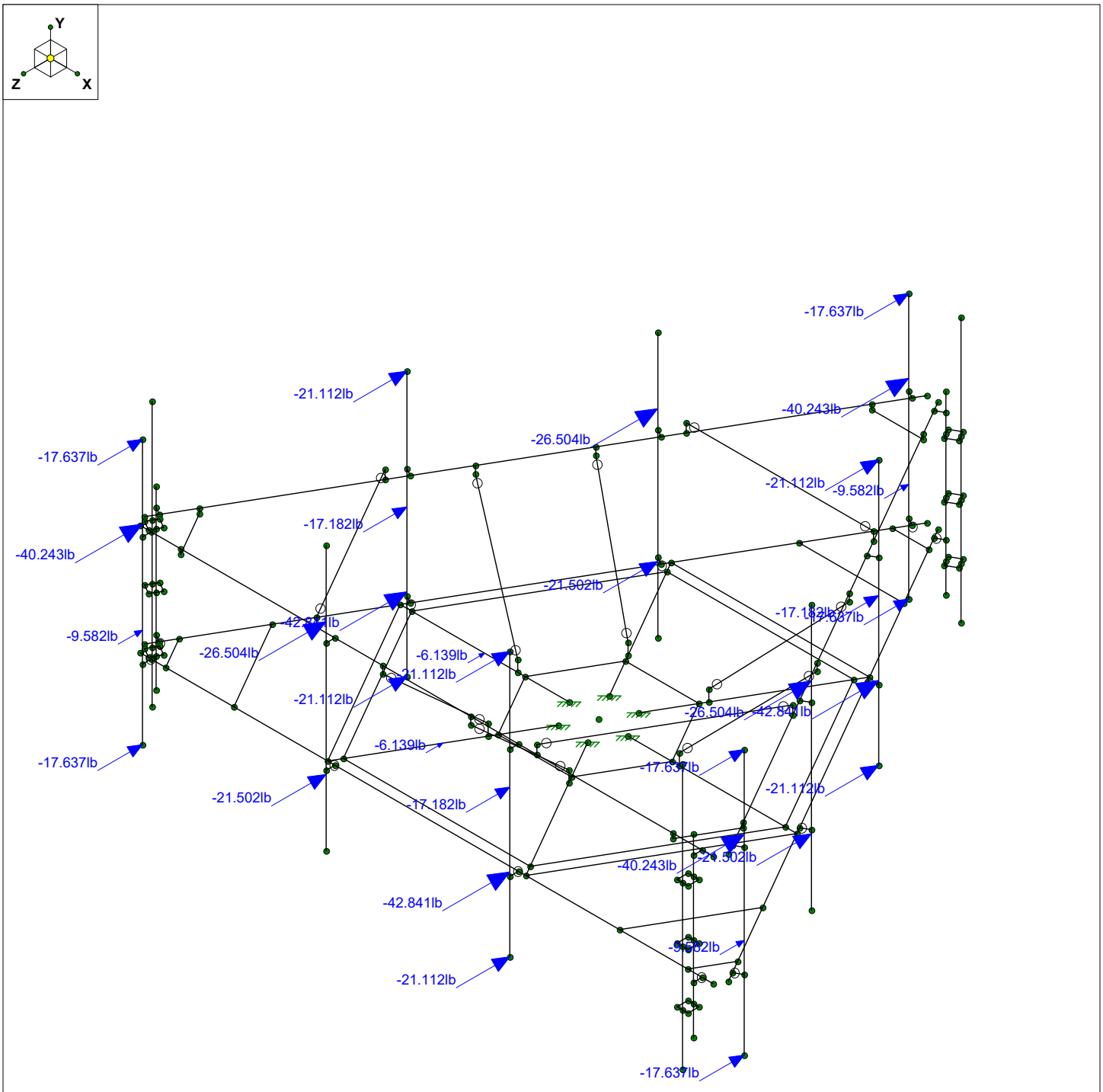

Loads: BLC 31, Seismic Load Z

Infinigy Engineering	876320	Seismic Loading 0
AM		Mar 7, 2022 at 9:20 AM
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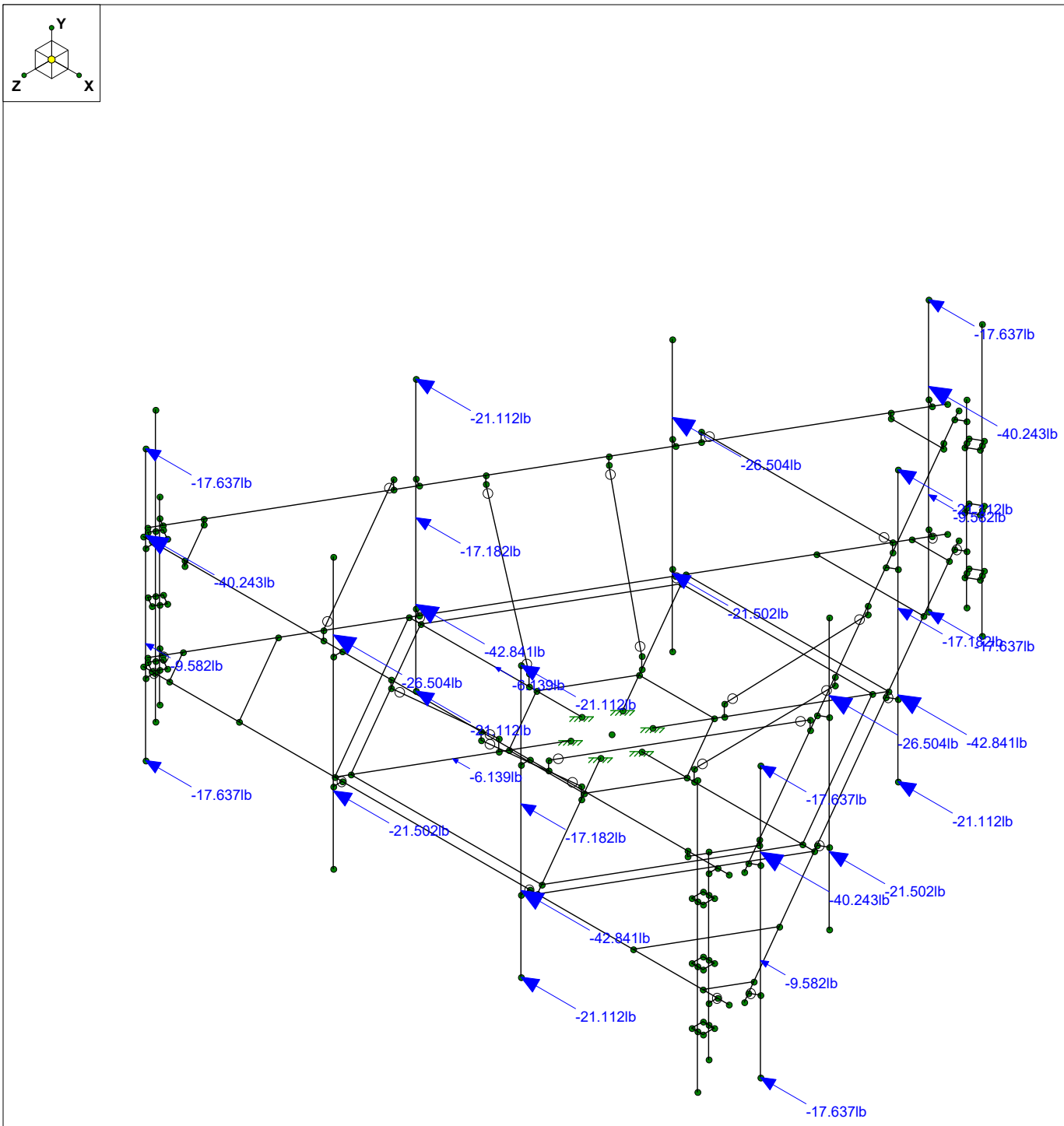

Loads: BLC 32, Seismic Load X

Infinigy Engineering	876320	Seismic Loading 90
AM		Mar 7, 2022 at 9:20 AM
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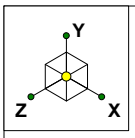
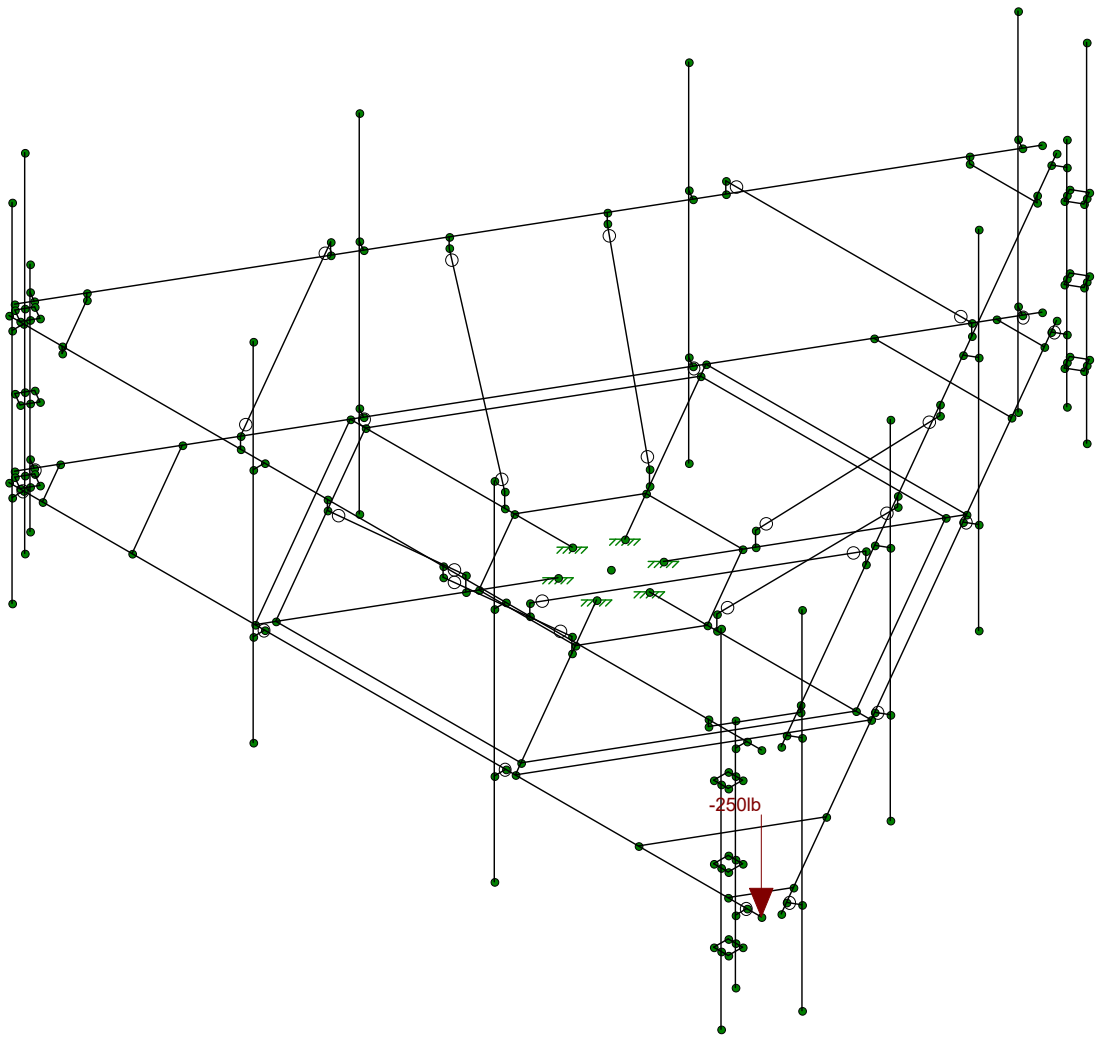
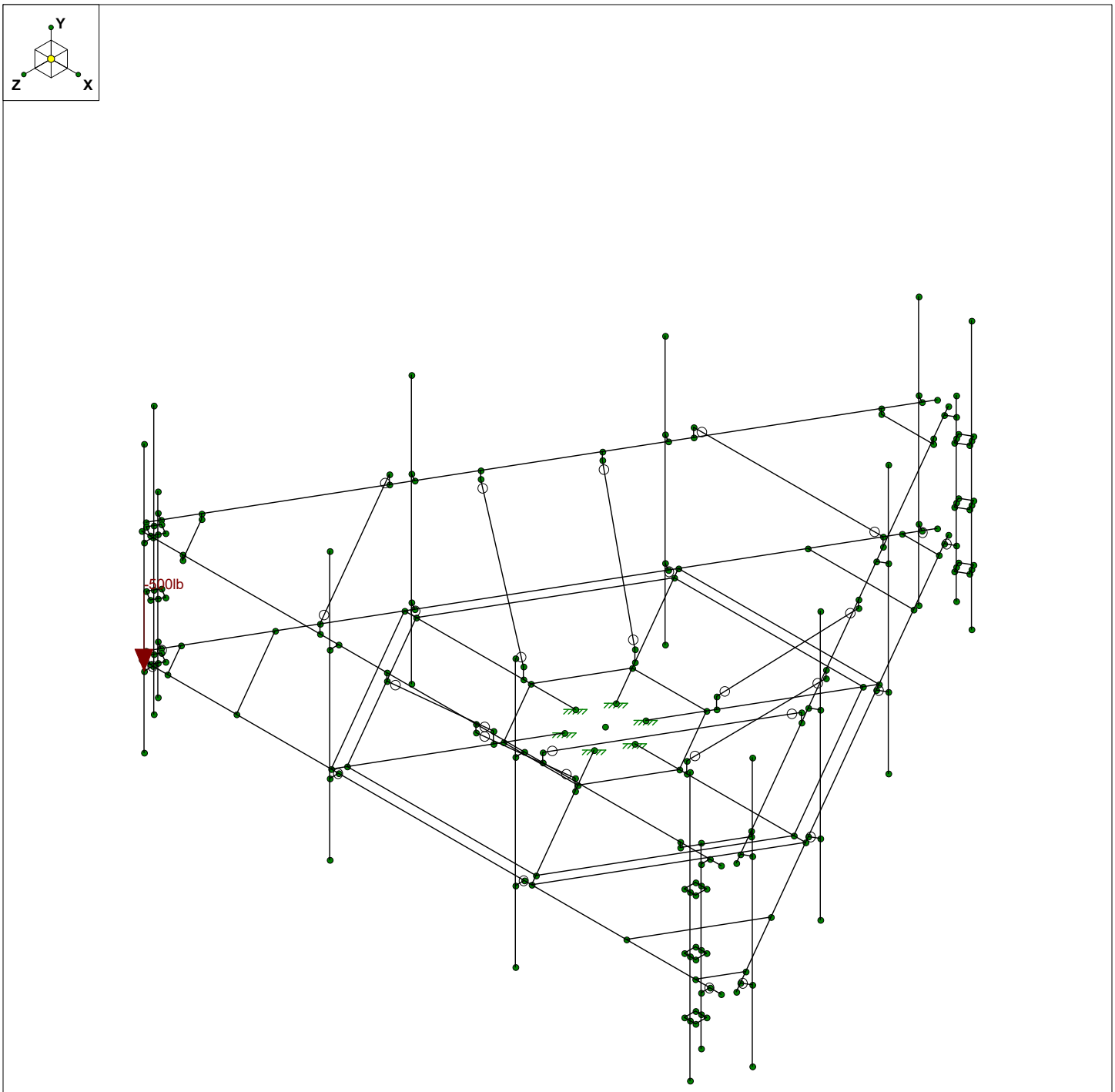




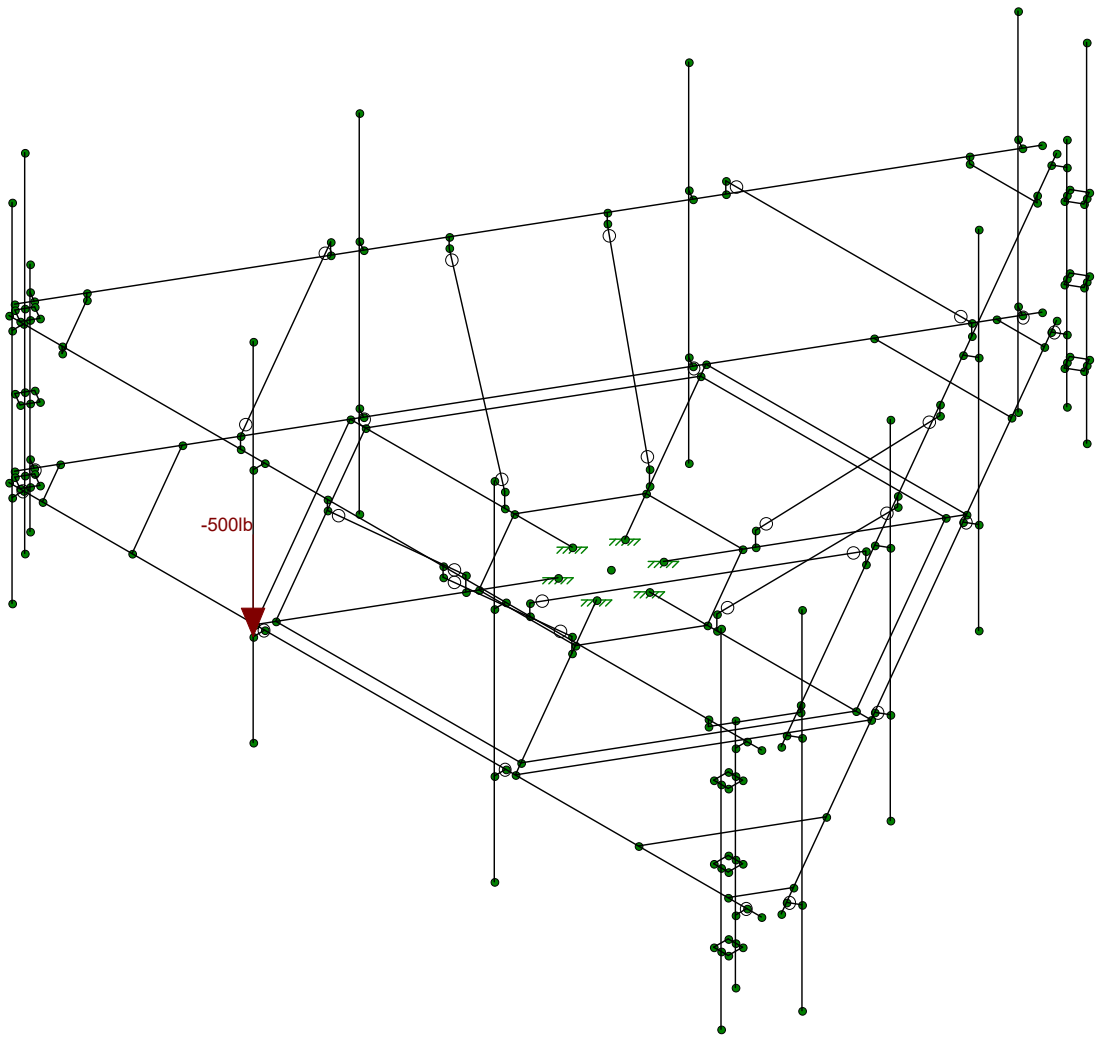
Loads: BLC 33, Service Live Loads

Infinigy Engineering	876320	Service
AM		Mar 7, 2022 at 9:20 AM
1039-Z0001-B		876320_loaded.r3d



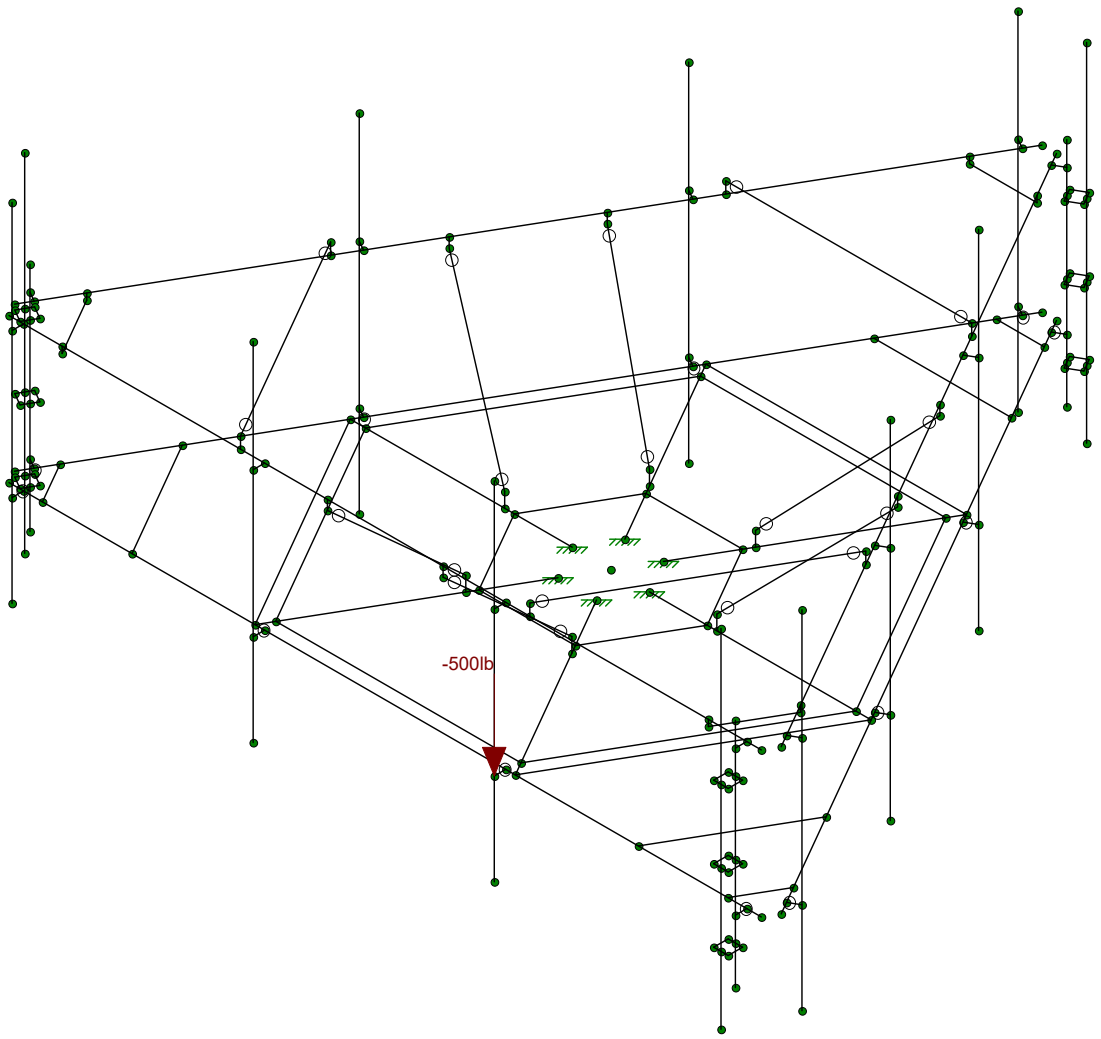
Loads: BLC 35, Maintenance Load 2

Infinigy Engineering	876320	Maintenance Load 2
AM		Mar 7, 2022 at 9:21 AM
1039-Z0001-B		876320_loaded.r3d



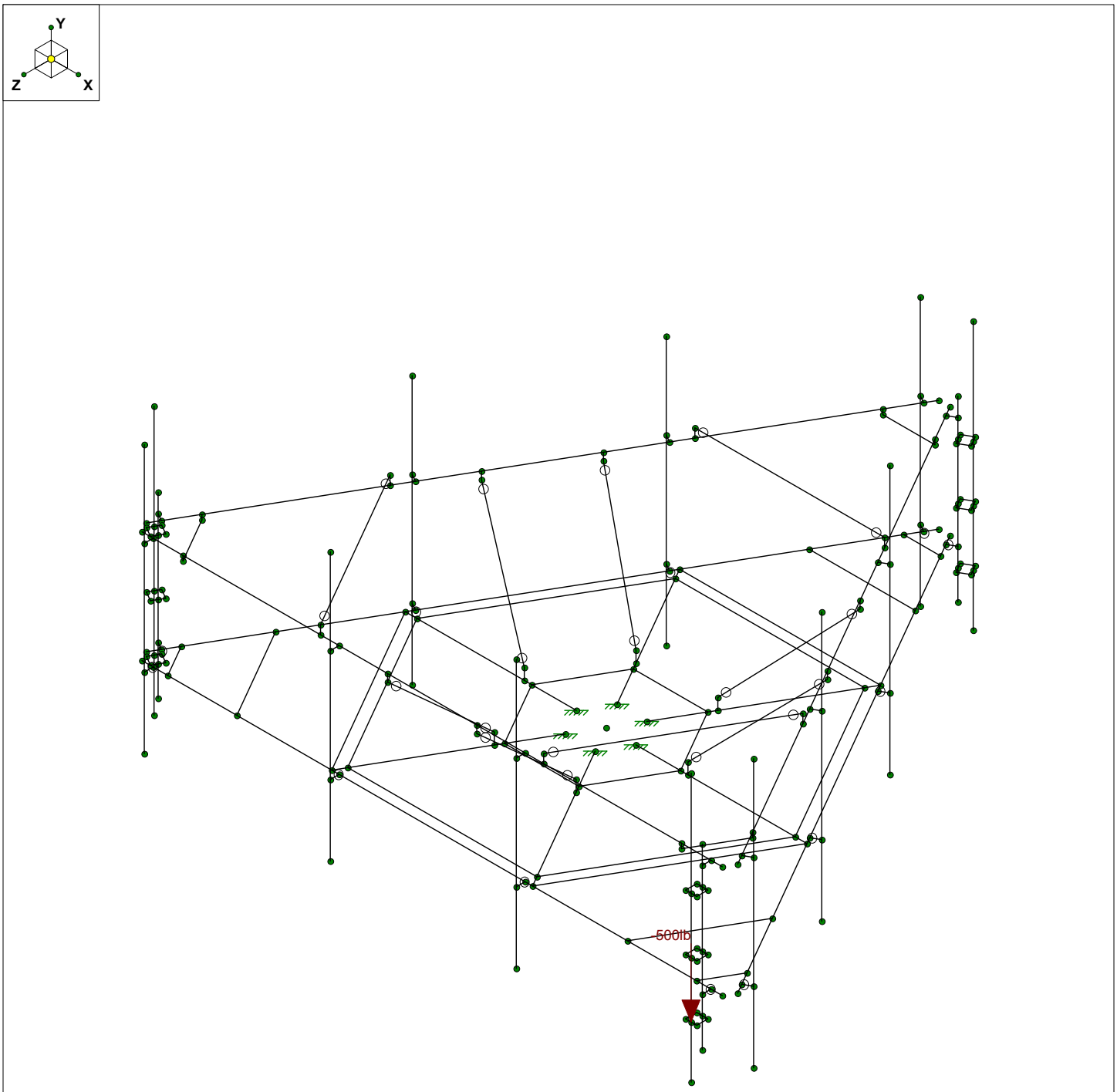
Loads: BLC 36, Maintenance Load 3

Infinigy Engineering	876320	Maintenance Load 3
AM		Mar 7, 2022 at 9:21 AM
1039-Z0001-B		876320_loaded.r3d



Loads: BLC 34, Maintenance Load 1

Infinigy Engineering	876320	Maintenance Load 1
AM		Mar 7, 2022 at 9:21 AM
1039-Z0001-B		876320_loaded.r3d



Loads: BLC 37, Maintenance Load 4

Infinigy Engineering	876320	Maintenance Load 4
AM		Mar 7, 2022 at 9:21 AM
1039-Z0001-B		876320_loaded.r3d

APPENDIX B

SOFTWARE INPUT CALCULATIONS

Program Inputs

PROJECT INFORMATION	
Client:	Crown Castle
Carrier:	AT&T Mobility
Engineer:	Alex Mercado

SITE INFORMATION		
Risk Category:	II	
Exposure Category:	C	
Topo Factor Procedure:	Method 1, Category 1	
Site Class:	D - Stiff Soil (Assumed)	
Ground Elevation:	212.97	ft *Rev H

MOUNT INFORMATION		
Mount Type:	Platform	
Num Sectors:	3	
Centerline AGL:	96.00	ft
Tower Height AGL:	120.00	ft

TOPOGRAPHIC DATA		
Topo Feature:	N/A	
Slope Distance:	N/A	ft
Crest Distance:	N/A	ft
Crest Height:	N/A	ft

FACTORS		
Directionality Fact. (K_d):	0.950	
Ground Ele. Factor (K_e):	0.992	*Rev H Only
Rooftop Speed-Up (K_s):	1.000	*Rev H Only
Topographic Factor (K_{zt}):	1.000	
Gust Effect Factor (G_h):	1.000	

CODE STANDARDS		
Building Code:	2018 IBC	
TIA Standard:	TIA-222-H	
ASCE Standard:	ASCE 7-16	

WIND AND ICE DATA		
Ultimate Wind (V_{ult}):	119	mph
Design Wind (V):	N/A	mph
Ice Wind (V_{ice}):	50	mph
Base Ice Thickness (t_i):	1	in
Flat Pressure:	85.765	psf
Round Pressure:	51.459	psf
Ice Wind Pressure:	9.085	psf

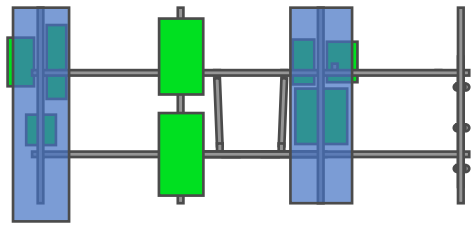
SEISMIC DATA		
Short-Period Accel. (S_s):	0.203	g
1-Second Accel. (S_1):	0.054	g
Short-Period Design (S_{DS}):	0.217	
1-Second Design (S_{D1}):	0.086	
Short-Period Coeff. (F_a):	1.600	
1-Second Coeff. (F_v):	2.400	
Amplification Factor (A_s):	3.000	
Response Mod. Coeff. (R):	2.000	

INFINIGY
FROM ZERO TO INFINIGY
the solutions are endless

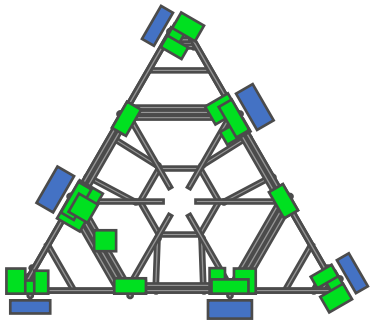
Infinigy Load Calculator V2.1.7

Program Inputs

ELEVATION VIEW



PLAN VIEW



INFINIGY
FROM ZERO TO INFINIGY
the solutions are endless

Infinigy Load Calculator V2.1.7

APPURTENANCE INFORMATION

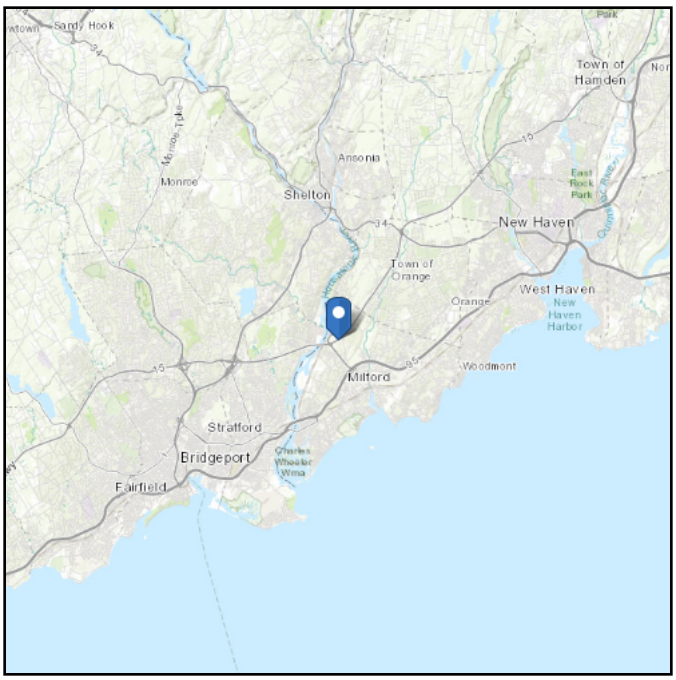
Appurtenance Name	Elevation	Qty.	K_a	q_z (psf)	EPA_N (ft^2)	EPA_T (ft^2)	Wind F_z (lbs)	Wind F_x (lbs)	Weight (lbs)	Seismic F (lbs)	Member (α sector)
KATHREIN 80010965	98.0	3	0.90	43.07	12.23	4.21	474.06	163.19	108.60	35.27	MP4
ERICSSON AIR 6419 B77G	98.0	3	0.90	43.07	4.64	1.87	179.86	72.49	66.20	21.50	MP3
ERICSSON AIR 6449 B77D	98.0	3	0.90	43.07	3.64	1.72	141.09	66.67	81.60	26.50	MP3
QUINTEL TECHNOLOGY QD6616-7	98.0	3	0.90	43.07	13.59	5.92	526.78	229.47	130.00	42.22	MP2
COMMSCOPE WCS-IMFQ-AMT	98.0	3	0.90	43.07	0.99	0.64	38.35	24.96	29.50	9.58	MP4
ERICSSON RRUS 4449 B5/B12	98.0	3	0.90	43.07	1.97	1.41	76.26	54.58	71.00	23.06	MP4
ERICSSON TME-RRUS 4478 B14	98.0	3	0.90	43.07	1.84	1.06	71.42	41.04	59.90	19.46	MP2
ERICSSON RRUS 8843 B2/B66A	98.0	3	0.90	43.07	1.64	1.35	63.53	52.46	72.00	23.39	MP2
ERICSSON TME-RRUS E2 B29	98.0	3	0.90	43.07	3.15	1.29	121.91	49.82	52.90	17.18	MP2
ERICSSON TME-RRUS 32 B30	97.0	3	0.90	42.98	2.73	1.67	105.64	64.52	52.90	17.18	MP4
RAYCAP DC6-48-60-18-8F	97.0	2	0.90	42.98	2.04	2.04	78.89	78.89	18.90	6.14	S1
RAYCAP DC6-48-60-18-8F	98.0	1	0.90	43.07	2.04	2.04	79.06	79.06	18.90	6.14	Leg/Flush

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-16
Risk Category: II
Soil Class: D - Default (see Section 11.4.3)

Elevation: 212.97 ft (NAVD 88)
Latitude: 41.248431
Longitude: -73.079075



Wind

Results:

Wind Speed	119 Vmph
10-year MRI	75 Vmph
25-year MRI	85 Vmph
50-year MRI	90 Vmph
100-year MRI	98 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:	Thu Mar 03 2022

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.

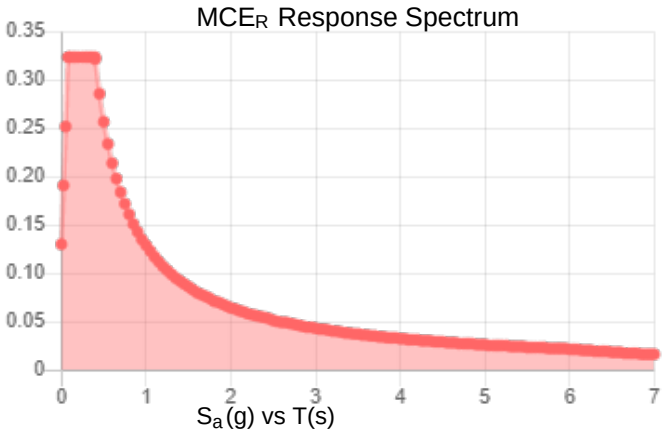
Seismic

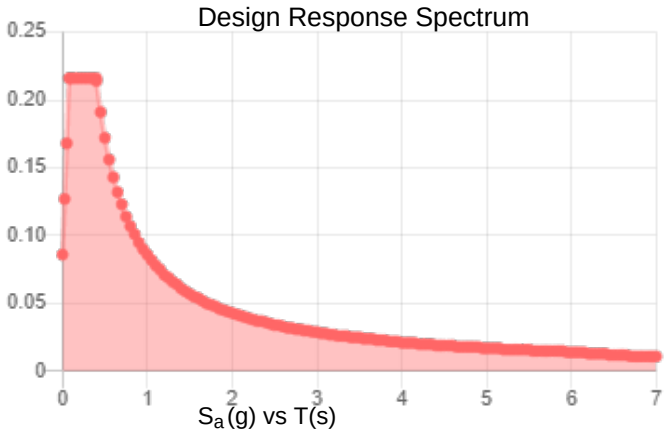
Site Soil Class: D - Default (see Section 11.4.3)

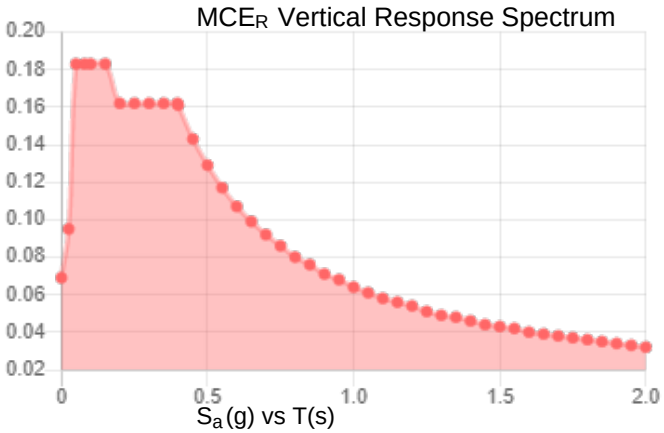
Results:

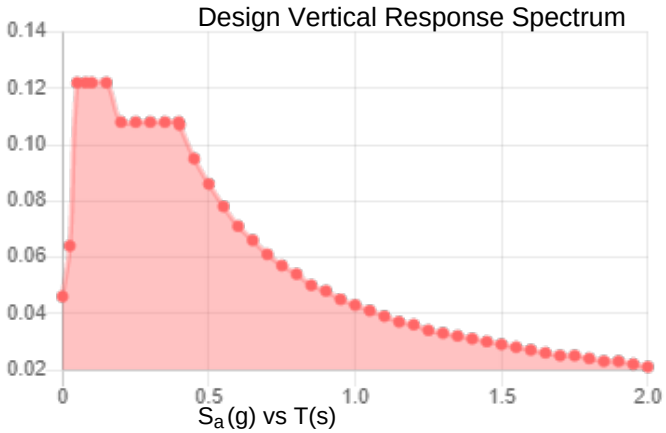
S_S :	0.203	S_{D1} :	0.086
S_1 :	0.054	T_L :	6
F_a :	1.6	PGA :	0.114
F_v :	2.4	PGA_M :	0.179
S_{MS} :	0.324	F_{PGA} :	1.572
S_{M1} :	0.129	I_e :	1
S_{DS} :	0.216	C_v :	0.705

Seismic Design Category B









Data Accessed: **Thu Mar 03 2022**

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:	1.00 in.
Concurrent Temperature:	15 F
Gust Speed	50 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Thu Mar 03 2022

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.

APPENDIX C

SOFTWARE ANALYSIS OUTPUT

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
1	H1	N12	N33		270	Frame angle	Beam	Single Angle	A36 Gr.36	Typical
2	H3	N45	N34			Frame angle	Beam	Single Angle	A36 Gr.36	Typical
3	H2	N46	N11		270	Frame angle	Beam	Single Angle	A36 Gr.36	Typical
4	S4	N1	N41		90	Standoff	Beam	Tube	A500 Gr....	Typical
5	S5	N2	N30		90	Standoff	Beam	Tube	A500 Gr....	Typical
6	S1	N3	N8		90	Standoff	Beam	Tube	A500 Gr....	Typical
7	S6	N4	N29		90	Standoff	Beam	Tube	A500 Gr....	Typical
8	S2	N5	N7		90	Standoff	Beam	Tube	A500 Gr....	Typical
9	S3	N6	N42		90	Standoff	Beam	Tube	A500 Gr....	Typical
10	M10	N7	N8		90	Bracing Angle	Beam	Single Angle	A36 Gr.36	Typical
11	M11	N30	N29		180	Bracing Angle	Beam	Single Angle	A36 Gr.36	Typical
12	M12	N41	N42		90	Bracing Angle	Beam	Single Angle	A36 Gr.36	Typical
13	M13	N9	N10		90	Bracing Angle	Beam	Single Angle	A36 Gr.36	Typical
14	M14	N65	N63		180	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
15	M15	N59	N57		180	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
16	HR1	N15	N16		90	Handrail	Beam	Pipe	A53 Gr.B	Typical
17	HR3	N17	N18		90	Handrail	Beam	Pipe	A53 Gr.B	Typical
18	HR2	N19	N20		90	Handrail	Beam	Pipe	A53 Gr.B	Typical
19	M19	N93	N103		90	Handrail Plate	Beam	BAR	A36 Gr.36	Typical
20	MP2	N25	N26		90	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
21	MP4	N27	N28		90	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
22	M22	N31	N32		90	Bracing Angle	Beam	Single Angle	A36 Gr.36	Typical
23	M23	N64	N68		180	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
24	M24	N58	N62		180	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
25	M27	N43	N44		90	Bracing Angle	Beam	Single Angle	A36 Gr.36	Typical
26	M28	N67	N66		180	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
27	M29	N61	N60		180	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
28	M32	N101	N99		90	Handrail Plate	Beam	BAR	A36 Gr.36	Typical
29	M33	N97	N92		90	Handrail Plate	Beam	BAR	A36 Gr.36	Typical
30	M34	N57	N58		180	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
31	M35	N59	N60		180	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
32	M36	N61	N62		180	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
33	M37	N63	N64		180	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
34	M38	N65	N66		90	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
35	M39	N67	N68		90	Catwalk angle	Beam	Single Angle	A36 Gr.36	Typical
36	MP3	N79	N80		90	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
37	M43	N35	N36			RIGID	None	None	RIGID	Typical
38	M44	N48	N47			RIGID	None	None	RIGID	Typical
39	M45	N14	N13			RIGID	None	None	RIGID	Typical
40	R1	N24	N23			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
41	M47	N89	N86			RIGID	None	None	RIGID	Typical
42	M48	N71	N83			RIGID	None	None	RIGID	Typical
43	M50	N85	N78			RIGID	None	None	RIGID	Typical
44	M51	N94	N87			RIGID	None	None	RIGID	Typical
45	M52	N76	N77			RIGID	None	None	RIGID	Typical
46	M53	N70	N82			RIGID	None	None	RIGID	Typical
47	M54	N88	N84			RIGID	None	None	RIGID	Typical
48	M55	N69	N81			RIGID	None	None	RIGID	Typical
49	M56	N90	N93			RIGID	None	None	RIGID	Typical
50	M57	N91	N92			RIGID	None	None	RIGID	Typical
51	M64	N96	N97			RIGID	None	None	RIGID	Typical
52	M65	N98	N99			RIGID	None	None	RIGID	Typical
53	M66	N100	N101			RIGID	None	None	RIGID	Typical
54	M67	N102	N103			RIGID	None	None	RIGID	Typical
55	M58	N106	N104			RIGID	None	None	RIGID	Typical
56	M59	N107	N105			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
57	M60	N108	N109			RIGID	None	None	RIGID	Typical
58	M61	N110	N111			RIGID	None	None	RIGID	Typical
59	M62	N112	N113			RIGID	None	None	RIGID	Typical
60	M63	N114	N115			RIGID	None	None	RIGID	Typical
61	M68	N106	N114			Handrail Brace	Beam	Pipe	A53 Gr.B	Typical
62	M69	N112	N110			Handrail Brace	Beam	Pipe	A53 Gr.B	Typical
63	M70	N107	N108			Handrail Brace	Beam	Pipe	A53 Gr.B	Typical
64	M71	N116	N118			RIGID	None	None	RIGID	Typical
65	M72	N117	N119			RIGID	None	None	RIGID	Typical
66	M73	N122	N121			RIGID	None	None	RIGID	Typical
67	M74	N123	N120			RIGID	None	None	RIGID	Typical
68	M75	N118	N122		180	Handrail Kicker	Beam	Single Angle	A36 Gr.36	Typical
69	M76	N119	N123		90	Handrail Kicker	Beam	Single Angle	A36 Gr.36	Typical
70	M77	N124	N125			RIGID	None	None	RIGID	Typical
71	M78	N126	N127			RIGID	None	None	RIGID	Typical
72	M79	N128	N129			RIGID	None	None	RIGID	Typical
73	M80	N129	N124		180	Handrail Kicker	Beam	Single Angle	A36 Gr.36	Typical
74	M81	N130	N131			RIGID	None	None	RIGID	Typical
75	M82	N131	N126		90	Handrail Kicker	Beam	Single Angle	A36 Gr.36	Typical
76	M83	N132	N133			RIGID	None	None	RIGID	Typical
77	M84	N134	N135			RIGID	None	None	RIGID	Typical
78	M85	N136	N137			RIGID	None	None	RIGID	Typical
79	M86	N137	N132		180	Handrail Kicker	Beam	Single Angle	A36 Gr.36	Typical
80	M87	N138	N139			RIGID	None	None	RIGID	Typical
81	M88	N139	N134		90	Handrail Kicker	Beam	Single Angle	A36 Gr.36	Typical
82	MP1	N153	N152			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
83	M101	N154	N155			RIGID	None	None	RIGID	Typical
84	MP12	N156	N157		90	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
85	M104	N158	N159			RIGID	None	None	RIGID	Typical
86	M105	N160	N161			RIGID	None	None	RIGID	Typical
87	MP10	N162	N163		90	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
88	MP11	N166	N167		90	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
89	M109	N168	N169			RIGID	None	None	RIGID	Typical
90	M112	N174	N175			RIGID	None	None	RIGID	Typical
91	M113	N176	N177			RIGID	None	None	RIGID	Typical
92	M114	N178	N179			RIGID	None	None	RIGID	Typical
93	M115	N180	N181			RIGID	None	None	RIGID	Typical
94	R9	N188	N189			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
95	M127	N192	N193			RIGID	None	None	RIGID	Typical
96	MP8	N194	N195		90	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
97	M129	N196	N197			RIGID	None	None	RIGID	Typical
98	M130	N198	N199			RIGID	None	None	RIGID	Typical
99	MP6	N200	N201		90	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
100	MP7	N204	N205		90	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
101	M134	N206	N207			RIGID	None	None	RIGID	Typical
102	M137	N212	N213			RIGID	None	None	RIGID	Typical
103	M138	N214	N215			RIGID	None	None	RIGID	Typical
104	M139	N216	N217			RIGID	None	None	RIGID	Typical
105	M140	N218	N219			RIGID	None	None	RIGID	Typical
106	R5	N226	N227			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
107	M168	N245	N246			RIGID	None	None	RIGID	Typical
108	M170	N249	N250			RIGID	None	None	RIGID	Typical
109	M173	N249	N253			RIGID	None	None	RIGID	Typical
110	M174	N254	N255			RIGID	None	None	RIGID	Typical
111	M175	N254	N256			RIGID	None	None	RIGID	Typical
112	M176	N245	N257			RIGID	None	None	RIGID	Typical
113	M177	N255	N246			Threaded Rods	Beam	BAR	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
114	M178	N258	N259			RIGID	None	None	RIGID	Typical
115	M179	N250	N259			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
116	M182	N258	N262			RIGID	None	None	RIGID	Typical
117	M183	N253	N262			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
118	M185	N256	N257			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
119	M126	N191	N202			RIGID	None	None	RIGID	Typical
120	MP9	N209	N210			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
121	M132	N211	N220			RIGID	None	None	RIGID	Typical
122	M133	N191	N221			RIGID	None	None	RIGID	Typical
123	M141	N224	N225			RIGID	None	None	RIGID	Typical
124	M142	N224	N228			RIGID	None	None	RIGID	Typical
125	M143	N211	N190			RIGID	None	None	RIGID	Typical
126	M144	N225	N220			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
127	M145	N229	N230			RIGID	None	None	RIGID	Typical
128	M146	N221	N230			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
129	M149	N229	N233			RIGID	None	None	RIGID	Typical
130	M151	N202	N233			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
131	M153	N228	N190			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
132	M154	N235	N236			RIGID	None	None	RIGID	Typical
133	MP5	N239	N240			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
134	M157	N241	N242			RIGID	None	None	RIGID	Typical
135	M158	N235	N243			RIGID	None	None	RIGID	Typical
136	M161	N264	N265			RIGID	None	None	RIGID	Typical
137	M162	N264	N266			RIGID	None	None	RIGID	Typical
138	M163	N241	N234			RIGID	None	None	RIGID	Typical
139	M164	N265	N242			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
140	M165	N267	N268			RIGID	None	None	RIGID	Typical
141	M166	N243	N268			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
142	M187	N267	N271			RIGID	None	None	RIGID	Typical
143	M188	N236	N271			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
144	M190	N266	N234			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
145	M145A	N212A	N213A			RIGID	None	None	RIGID	Typical
146	M146A	N214A	N215A			RIGID	None	None	RIGID	Typical
147	M147	N214A	N216A			RIGID	None	None	RIGID	Typical
148	M148	N212A	N217A			RIGID	None	None	RIGID	Typical
149	M149A	N215A	N213A			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
150	M150	N216A	N217A			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
151	M151A	N219A	N220A			RIGID	None	None	RIGID	Typical
152	M152	N221A	N222			RIGID	None	None	RIGID	Typical
153	M153A	N221A	N223			RIGID	None	None	RIGID	Typical
154	M154A	N219A	N224A			RIGID	None	None	RIGID	Typical
155	M155	N222	N220A			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
156	M156	N223	N224A			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
157	M157A	N226A	N227A			RIGID	None	None	RIGID	Typical
158	M158A	N228A	N229A			RIGID	None	None	RIGID	Typical
159	M159	N228A	N230A			RIGID	None	None	RIGID	Typical
160	M160	N226A	N231			RIGID	None	None	RIGID	Typical
161	M161A	N229A	N227A			Threaded Rods	Beam	BAR	A36 Gr.36	Typical
162	M162A	N230A	N231			Threaded Rods	Beam	BAR	A36 Gr.36	Typical

Material Takeoff

	Material	Size	Pieces	Length[in]	Weight[K]
1	General				
2	RIGID		87	192.9	0
3	Total General		87	192.9	0

Material Takeoff (Continued)

	Material	Size	Pieces	Length[in]	Weight[K]
4					
5	Hot Rolled Steel				
6	A36 Gr.36	4"x0.25"	3	42	.012
7	A36 Gr.36	L2.5x2.5x3	6	224	.057
8	A36 Gr.36	L2x2x4	18	672.6	.18
9	A36 Gr.36	L3X3X6	3	468	.28
10	A36 Gr.36	SR0.5	18	54	.003
11	A500 Gr.B Rect	HSS4X2X4	6	276	.205
12	A53 Gr.B	PIPE_2.0	21	1629	.471
13	Total HR Steel		75	3365.6	1.209

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(M...	Surface(Plate/Wall)
1	Self Weight	DL		-1			38		9	
2	Wind Load AZI 0	WLZ					76			
3	Wind Load AZI 30	None					76			
4	Wind Load AZI 60	None					76			
5	Wind Load AZI 90	WLX					76			
6	Wind Load AZI 120	None					76			
7	Wind Load AZI 150	None					76			
8	Wind Load AZI 180	None					76			
9	Wind Load AZI 210	None					76			
10	Wind Load AZI 240	None					76			
11	Wind Load AZI 270	None					76			
12	Wind Load AZI 300	None					76			
13	Wind Load AZI 330	None					76			
14	Distr. Wind Load Z	WLZ						162		
15	Distr. Wind Load X	WLX						162		
16	Ice Weight	OL1					38	162	9	
17	Ice Wind Load AZI 0	OL2					76			
18	Ice Wind Load AZI ...	None					76			
19	Ice Wind Load AZI ...	None					76			
20	Ice Wind Load AZI ...	OL3					76			
21	Ice Wind Load AZI ...	None					76			
22	Ice Wind Load AZI ...	None					76			
23	Ice Wind Load AZI ...	None					76			
24	Ice Wind Load AZI ...	None					76			
25	Ice Wind Load AZI ...	None					76			
26	Ice Wind Load AZI ...	None					76			
27	Ice Wind Load AZI ...	None					76			
28	Ice Wind Load AZI ...	None					76			
29	Distr. Ice Wind Loa...	OL2						162		
30	Distr. Ice Wind Loa...	OL3						162		
31	Seismic Load Z	ELZ			-.325		38			
32	Seismic Load X	ELX	-.325				38			
33	Service Live Loads	LL				1				
34	Maintenance Load 1	LL				1				
35	Maintenance Load 2	LL				1				
36	Maintenance Load 3	LL				1				
37	Maintenance Load 4	LL				1				
38	Maintenance Load 5	LL				1				
39	Maintenance Load 6	LL				1				
40	Maintenance Load 7	LL				1				
41	Maintenance Load 8	LL				1				
42	Maintenance Load 9	LL				1				

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(M...	Surface(Plate/Wall)
43	Maintenance Load ...	LL				1				
44	Maintenance Load ...	LL				1				
45	Maintenance Load ...	LL				1				
46	BLC 1 Transient Ar...	None						141		
47	BLC 16 Transient ...	None						141		

Load Combinations

	Description	Solve	PDelta	SRSS	BLC	Factor	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4DL	Yes	Y		1	1.4																		
2	1.2DL + 1WL AZI 0	Yes	Y		1	1.2	2	1	14	1	15													
3	1.2DL + 1WL AZI 30	Yes	Y		1	1.2	3	1	14	.866	15	.5												
4	1.2DL + 1WL AZI 60	Yes	Y		1	1.2	4	1	14	.5	15	.866												
5	1.2DL + 1WL AZI 90	Yes	Y		1	1.2	5	1	14		15	1												
6	1.2DL + 1WL AZI 120	Yes	Y		1	1.2	6	1	14	-.5	15	.866												
7	1.2DL + 1WL AZI 150	Yes	Y		1	1.2	7	1	14	-.8...	15	.5												
8	1.2DL + 1WL AZI 180	Yes	Y		1	1.2	8	1	14	-1	15													
9	1.2DL + 1WL AZI 210	Yes	Y		1	1.2	9	1	14	-.8...	15	-.5												
10	1.2DL + 1WL AZI 240	Yes	Y		1	1.2	10	1	14	-.5	15	-.8...												
11	1.2DL + 1WL AZI 270	Yes	Y		1	1.2	11	1	14		15	-1												
12	1.2DL + 1WL AZI 300	Yes	Y		1	1.2	12	1	14	.5	15	-.8...												
13	1.2DL + 1WL AZI 330	Yes	Y		1	1.2	13	1	14	.866	15	-.5												
14	0.9DL + 1WL AZI 0	Yes	Y		1	.9	2	1	14	1	15													
15	0.9DL + 1WL AZI 30	Yes	Y		1	.9	3	1	14	.866	15	.5												
16	0.9DL + 1WL AZI 60	Yes	Y		1	.9	4	1	14	.5	15	.866												
17	0.9DL + 1WL AZI 90	Yes	Y		1	.9	5	1	14		15	1												
18	0.9DL + 1WL AZI 120	Yes	Y		1	.9	6	1	14	-.5	15	.866												
19	0.9DL + 1WL AZI 150	Yes	Y		1	.9	7	1	14	-.8...	15	.5												
20	0.9DL + 1WL AZI 180	Yes	Y		1	.9	8	1	14	-1	15													
21	0.9DL + 1WL AZI 210	Yes	Y		1	.9	9	1	14	-.8...	15	-.5												
22	0.9DL + 1WL AZI 240	Yes	Y		1	.9	10	1	14	-.5	15	-.8...												
23	0.9DL + 1WL AZI 270	Yes	Y		1	.9	11	1	14		15	-1												
24	0.9DL + 1WL AZI 300	Yes	Y		1	.9	12	1	14	.5	15	-.8...												
25	0.9DL + 1WL AZI 330	Yes	Y		1	.9	13	1	14	.866	15	-.5												
26	1.2D + 1.0Di	Yes	Y		1	1.2	16	1																
27	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	17	1	29	1	30											
28	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	18	1	29	.866	30	.5										
29	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	19	1	29	.5	30	.866										
30	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	20	1	29		30	1										
31	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	21	1	29	-.5	30	.866										
32	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	22	1	29	-.8...	30	.5										
33	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	23	1	29	-1	30											
34	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	24	1	29	-.8...	30	-.5										
35	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	25	1	29	-.5	30	-.8...										
36	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	26	1	29		30	-1										
37	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	27	1	29	.5	30	-.8...										
38	1.2D + 1.0Di +1.0Wi A...	Yes	Y		1	1.2	16	1	28	1	29	.866	30	-.5										
39	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31	1	32															
40	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31	.866	32	.5														
41	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31	.5	32	.866														
42	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31		32	1														
43	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31	-.5	32	.866														
44	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31	-.8...	32	.5														
45	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31	-1	32															
46	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31	-.8...	32	-.5														
47	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31	-.5	32	-.8...														

Load Combinations (Continued)

	Description	Solve	PDelta	SRSS	BLC	Factor	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
48	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31		32	-1																
49	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31	.5	32	-.8...																
50	(1.2 + 0.2Sds)DL + 1.0...	Yes	Y		1	1.243	31	.866	32	-.5																
51	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31	1	32																	
52	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31	.866	32	.5																
53	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31	.5	32	.866																
54	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31		32	1																
55	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31	-.5	32	.866																
56	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31	-.8...	32	.5																
57	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31	-1	32																	
58	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31	-.8...	32	-.5																
59	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31	-.5	32	-.8...																
60	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31		32	-1																
61	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31	.5	32	-.8...																
62	(0.9 - 0.2Sds)DL + 1.0...	Yes	Y		1	.857	31	.866	32	-.5																
63	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	2	.254	14	.254	15		33	1.5												
64	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	3	.254	14	.22	15	.127	33	1.5												
65	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	4	.254	14	.127	15	.22	33	1.5												
66	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	5	.254	14		15	.254	33	1.5												
67	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	6	.254	14	-.1...	15	.22	33	1.5												
68	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	7	.254	14	-.22	15	.127	33	1.5												
69	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	8	.254	14	-.2...	15		33	1.5												
70	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	9	.254	14	-.22	15	-.1...	33	1.5												
71	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	10	.254	14	-.1...	15	-.22	33	1.5												
72	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	11	.254	14		15	-.2...	33	1.5												
73	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	12	.254	14	.127	15	-.22	33	1.5												
74	1.0DL + 1.5LL + 1.0SW...	Yes	Y		1	1	13	.254	14	.22	15	-.1...	33	1.5												
75	1.2DL + 1.5LL	Yes	Y		1	1.2	33	1.5																		
76	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	2	.064	14	.064	15													
77	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	3	.064	14	.055	15	.032												
78	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	4	.064	14	.032	15	.055												
79	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	5	.064	14		15	.064												
80	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	6	.064	14	-.0...	15	.055												
81	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	7	.064	14	-.0...	15	.032												
82	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	8	.064	14	-.0...	15													
83	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	9	.064	14	-.0...	15	-.0...												
84	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	10	.064	14	-.0...	15	-.0...												
85	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	11	.064	14		15	-.0...												
86	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	12	.064	14	.032	15	-.0...												
87	1.2DL + 1.5LM-MP1 + ...	Yes	Y		1	1.2	34	1.5	13	.064	14	.055	15	-.0...												
88	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	2	.064	14	.064	15													
89	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	3	.064	14	.055	15	.032												
90	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	4	.064	14	.032	15	.055												
91	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	5	.064	14		15	.064												
92	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	6	.064	14	-.0...	15	.055												
93	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	7	.064	14	-.0...	15	.032												
94	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	8	.064	14	-.0...	15													
95	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	9	.064	14	-.0...	15	-.0...												
96	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	10	.064	14	-.0...	15	-.0...												
97	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	11	.064	14		15	-.0...												
98	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	12	.064	14	.032	15	-.0...												
99	1.2DL + 1.5LM-MP2 + ...	Yes	Y		1	1.2	35	1.5	13	.064	14	.055	15	-.0...												
100	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	2	.064	14	.064	15													
101	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	3	.064	14	.055	15	.032												
102	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	4	.064	14	.032	15	.055												
103	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	5	.064	14		15	.064												
104	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	6	.064	14	-.0...	15	.055												

Load Combinations (Continued)

	Description	Solve	PDelta	SRSS	BLC	Factor	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
105	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	7	.064	14	-.0...	15	.032										
106	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	8	.064	14	-.0...	15											
107	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	9	.064	14	-.0...	15	-.0...										
108	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	10	.064	14	-.0...	15	-.0...										
109	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	11	.064	14		15	-.0...										
110	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	12	.064	14	.032	15	-.0...										
111	1.2DL + 1.5LM-MP3 + ...	Yes	Y		1	1.2	36	1.5	13	.064	14	.055	15	-.0...										
112	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	2	.064	14	.064	15											
113	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	3	.064	14	.055	15	.032										
114	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	4	.064	14	.032	15	.055										
115	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	5	.064	14		15	.064										
116	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	6	.064	14	-.0...	15	.055										
117	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	7	.064	14	-.0...	15	.032										
118	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	8	.064	14	-.0...	15											
119	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	9	.064	14	-.0...	15	-.0...										
120	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	10	.064	14	-.0...	15	-.0...										
121	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	11	.064	14		15	-.0...										
122	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	12	.064	14	.032	15	-.0...										
123	1.2DL + 1.5LM-MP4 + ...	Yes	Y		1	1.2	37	1.5	13	.064	14	.055	15	-.0...										
124	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	2	.064	14	.064	15											
125	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	3	.064	14	.055	15	.032										
126	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	4	.064	14	.032	15	.055										
127	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	5	.064	14		15	.064										
128	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	6	.064	14	-.0...	15	.055										
129	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	7	.064	14	-.0...	15	.032										
130	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	8	.064	14	-.0...	15											
131	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	9	.064	14	-.0...	15	-.0...										
132	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	10	.064	14	-.0...	15	-.0...										
133	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	11	.064	14		15	-.0...										
134	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	12	.064	14	.032	15	-.0...										
135	1.2DL + 1.5LM-MP5 + ...	Yes	Y		1	1.2	38	1.5	13	.064	14	.055	15	-.0...										
136	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	2	.064	14	.064	15											
137	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	3	.064	14	.055	15	.032										
138	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	4	.064	14	.032	15	.055										
139	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	5	.064	14		15	.064										
140	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	6	.064	14	-.0...	15	.055										
141	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	7	.064	14	-.0...	15	.032										
142	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	8	.064	14	-.0...	15											
143	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	9	.064	14	-.0...	15	-.0...										
144	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	10	.064	14	-.0...	15	-.0...										
145	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	11	.064	14		15	-.0...										
146	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	12	.064	14	.032	15	-.0...										
147	1.2DL + 1.5LM-MP6 + ...	Yes	Y		1	1.2	39	1.5	13	.064	14	.055	15	-.0...										
148	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	2	.064	14	.064	15											
149	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	3	.064	14	.055	15	.032										
150	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	4	.064	14	.032	15	.055										
151	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	5	.064	14		15	.064										
152	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	6	.064	14	-.0...	15	.055										
153	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	7	.064	14	-.0...	15	.032										
154	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	8	.064	14	-.0...	15											
155	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	9	.064	14	-.0...	15	-.0...										
156	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	10	.064	14	-.0...	15	-.0...										
157	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	11	.064	14		15	-.0...										
158	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	12	.064	14	.032	15	-.0...										
159	1.2DL + 1.5LM-MP7 + ...	Yes	Y		1	1.2	40	1.5	13	.064	14	.055	15	-.0...										
160	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	2	.064	14	.064	15											
161	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	3	.064	14	.055	15	.032										

Load Combinations (Continued)

	Description	Solve	PDelta	SRSS	BLC	Factor	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
162	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	4	.064	14	.032	15	.055										
163	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	5	.064	14		15	.064										
164	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	6	.064	14	-.0...	15	.055										
165	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	7	.064	14	-.0...	15	.032										
166	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	8	.064	14	-.0...	15											
167	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	9	.064	14	-.0...	15	-.0...										
168	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	10	.064	14	-.0...	15	-.0...										
169	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	11	.064	14		15	-.0...										
170	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	12	.064	14	.032	15	-.0...										
171	1.2DL + 1.5LM-MP8 + ...	Yes	Y		1	1.2	41	1.5	13	.064	14	.055	15	-.0...										
172	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	2	.064	14	.064	15											
173	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	3	.064	14	.055	15	.032										
174	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	4	.064	14	.032	15	.055										
175	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	5	.064	14		15	.064										
176	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	6	.064	14	-.0...	15	.055										
177	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	7	.064	14	-.0...	15	.032										
178	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	8	.064	14	-.0...	15											
179	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	9	.064	14	-.0...	15	-.0...										
180	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	10	.064	14	-.0...	15	-.0...										
181	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	11	.064	14		15	-.0...										
182	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	12	.064	14	.032	15	-.0...										
183	1.2DL + 1.5LM-MP9 + ...	Yes	Y		1	1.2	42	1.5	13	.064	14	.055	15	-.0...										
184	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	2	.064	14	.064	15											
185	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	3	.064	14	.055	15	.032										
186	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	4	.064	14	.032	15	.055										
187	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	5	.064	14		15	.064										
188	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	6	.064	14	-.0...	15	.055										
189	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	7	.064	14	-.0...	15	.032										
190	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	8	.064	14	-.0...	15											
191	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	9	.064	14	-.0...	15	-.0...										
192	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	10	.064	14	-.0...	15	-.0...										
193	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	11	.064	14		15	-.0...										
194	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	12	.064	14	.032	15	-.0...										
195	1.2DL + 1.5LM-MP10 +...	Yes	Y		1	1.2	43	1.5	13	.064	14	.055	15	-.0...										
196	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	2	.064	14	.064	15											
197	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	3	.064	14	.055	15	.032										
198	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	4	.064	14	.032	15	.055										
199	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	5	.064	14		15	.064										
200	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	6	.064	14	-.0...	15	.055										
201	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	7	.064	14	-.0...	15	.032										
202	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	8	.064	14	-.0...	15											
203	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	9	.064	14	-.0...	15	-.0...										
204	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	10	.064	14	-.0...	15	-.0...										
205	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	11	.064	14		15	-.0...										
206	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	12	.064	14	.032	15	-.0...										
207	1.2DL + 1.5LM-MP11 +...	Yes	Y		1	1.2	44	1.5	13	.064	14	.055	15	-.0...										
208	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	2	.064	14	.064	15											
209	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	3	.064	14	.055	15	.032										
210	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	4	.064	14	.032	15	.055										
211	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	5	.064	14		15	.064										
212	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	6	.064	14	-.0...	15	.055										
213	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	7	.064	14	-.0...	15	.032										
214	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	8	.064	14	-.0...	15											
215	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	9	.064	14	-.0...	15	-.0...										
216	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	10	.064	14	-.0...	15	-.0...										
217	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	11	.064	14		15	-.0...										
218	1.2DL + 1.5LM-MP12 +...	Yes	Y		1	1.2	45	1.5	12	.064	14	.032	15	-.0...										

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	N1	max	1178.415	6	1607.456	38	1936.14	25	2611.271	13	466.626	23	1506.577	12
2		min	-667.405	24	30.379	19	-2412.6...	7	-892.664	19	-522.723	5	-705.073	18
3	N6	max	686.792	16	1580.362	27	1788.755	15	2528.298	3	523.391	11	696.519	22
4		min	-1199.878	10	-2.4	21	-2269.6...	9	-881.456	21	-461.719	17	-1460.8...	4
5	N3	max	1061.377	19	1653.738	32	2181.335	13	949.261	25	449.264	3	536.883	24
6		min	-1436.85	13	56.631	25	-1518.4...	19	-2473.0...	7	-429.844	21	-1686.2...	92
7	N4	max	1564.02	3	1624.684	34	2294.606	3	976.329	15	367.694	19	1697.793	120
8		min	-1199.217	21	65.689	15	-1625.5...	21	-2550.3...	9	-383.881	13	-521.878	16
9	N2	max	2452.353	5	1566.476	36	309.797	17	458.935	14	497.701	11	2863.593	11
10		min	-1774.794	23	-6.563	17	-494.131	11	-617.858	8	-446.676	17	-1066.1...	17
11	N5	max	2077.479	17	1686.769	30	310.459	23	437.359	14	439.243	23	1053.933	23
12		min	-2741.475	11	38.867	23	-500.219	5	-590.99	8	-485.949	5	-3006.32	5
13	Totals:	max	6743.746	17	9213.384	38	6958.325	14						
14		min	-6743.747	11	3223.048	56	-6958.3...	8						

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Handrail Plate	4"x0.25"	Beam	BAR	A36 Gr.36	Typical	1	.005	1.333	.02
2	Catwalk angle	L2x2x4	Beam	Single Angle	A36 Gr.36	Typical	.944	.346	.346	.021
3	Bracing Angle	L2x2x4	Beam	Single Angle	A36 Gr.36	Typical	.944	.346	.346	.021
4	Frame angle	L3X3X6	Beam	Single Angle	A36 Gr.36	Typical	2.11	1.75	1.75	.101
5	Standoff	HSS4X2X4	Beam	Tube	A500 Gr.B Rect	Typical	2.44	1.48	4.49	3.82
6	Mount Pipe	PIPE_2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
7	Handrail	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
8	Handrail Brace	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
9	Handrail Kicker	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical	.901	.535	.535	.011
10	Threaded Rods	SR0.5	Beam	BAR	A36 Gr.36	Typical	.196	.003	.003	.006

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	N1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N6	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N3	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N4	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	N2	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	N5	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	H1						Yes				None
2	H3						Yes				None
3	H2						Yes				None
4	S4						Yes				None
5	S5						Yes				None
6	S1						Yes				None
7	S6						Yes				None
8	S2						Yes				None
9	S3						Yes				None
10	M10						Yes	Default			None
11	M11						Yes				None
12	M12						Yes	Default			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
13	M13						Yes				None
14	M14						Yes				None
15	M15						Yes				None
16	HR1						Yes				None
17	HR3						Yes				None
18	HR2						Yes				None
19	M19						Yes	Default			None
20	MP2						Yes	** NA **			None
21	MP4						Yes	** NA **			None
22	M22						Yes				None
23	M23						Yes				None
24	M24						Yes				None
25	M27						Yes				None
26	M28						Yes				None
27	M29						Yes				None
28	M32						Yes	Default			None
29	M33						Yes	Default			None
30	M34						Yes				None
31	M35						Yes				None
32	M36						Yes				None
33	M37						Yes				None
34	M38						Yes	Default			None
35	M39						Yes	Default			None
36	MP3						Yes	** NA **			None
37	M43						Yes	** NA **			None
38	M44						Yes	** NA **			None
39	M45						Yes	** NA **			None
40	R1						Yes	** NA **			None
41	M47						Yes	** NA **			None
42	M48	OOOXOO					Yes	** NA **			None
43	M50						Yes	** NA **			None
44	M51	OOOXOO					Yes	** NA **			None
45	M52						Yes	** NA **			None
46	M53	OOOXOO					Yes	** NA **			None
47	M54						Yes	** NA **			None
48	M55	OOOXOO					Yes	** NA **			None
49	M56						Yes	** NA **			None
50	M57						Yes	** NA **			None
51	M64						Yes	** NA **			None
52	M65						Yes	** NA **			None
53	M66						Yes	** NA **			None
54	M67						Yes	** NA **			None
55	M58						Yes	** NA **			None
56	M59						Yes	** NA **			None
57	M60						Yes	** NA **			None
58	M61						Yes	** NA **			None
59	M62						Yes	** NA **			None
60	M63						Yes	** NA **			None
61	M68	BenPIN	BenPIN				Yes	Default			None
62	M69	BenPIN	BenPIN				Yes	Default			None
63	M70	BenPIN	BenPIN				Yes	Default			None
64	M71						Yes	** NA **			None
65	M72						Yes	** NA **			None
66	M73						Yes	** NA **			None
67	M74						Yes	** NA **			None
68	M75	BenPIN	BenPIN				Yes	Default			None
69	M76	BenPIN	BenPIN				Yes	Default			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
70	M77						Yes	** NA **			None
71	M78						Yes	** NA **			None
72	M79						Yes	** NA **			None
73	M80	BenPIN	BenPIN				Yes	Default			None
74	M81						Yes	** NA **			None
75	M82	BenPIN	BenPIN				Yes	Default			None
76	M83						Yes	** NA **			None
77	M84						Yes	** NA **			None
78	M85						Yes	** NA **			None
79	M86	BenPIN	BenPIN				Yes	Default			None
80	M87						Yes	** NA **			None
81	M88	BenPIN	BenPIN				Yes	Default			None
82	MP1						Yes	** NA **			None
83	M101	OOOXOO					Yes	** NA **			None
84	MP12						Yes	** NA **			None
85	M104	OOOXOO					Yes	** NA **			None
86	M105	OOOXOO					Yes	** NA **			None
87	MP10						Yes	** NA **			None
88	MP11						Yes	** NA **			None
89	M109	OOOXOO					Yes	** NA **			None
90	M112						Yes	** NA **			None
91	M113						Yes	** NA **			None
92	M114						Yes	** NA **			None
93	M115						Yes	** NA **			None
94	R9						Yes	** NA **			None
95	M127	OOOXOO					Yes	** NA **			None
96	MP8						Yes	** NA **			None
97	M129	OOOXOO					Yes	** NA **			None
98	M130	OOOXOO					Yes	** NA **			None
99	MP6						Yes	** NA **			None
100	MP7						Yes	** NA **			None
101	M134	OOOXOO					Yes	** NA **			None
102	M137						Yes	** NA **			None
103	M138						Yes	** NA **			None
104	M139						Yes	** NA **			None
105	M140						Yes	** NA **			None
106	R5						Yes	** NA **			None
107	M168						Yes	** NA **			None
108	M170						Yes	** NA **			None
109	M173						Yes	** NA **			None
110	M174						Yes	** NA **			None
111	M175						Yes	** NA **			None
112	M176						Yes	** NA **			None
113	M177						Yes	Default			None
114	M178						Yes	** NA **			None
115	M179						Yes	Default			None
116	M182						Yes	** NA **			None
117	M183						Yes	Default			None
118	M185						Yes	Default			None
119	M126						Yes	** NA **			None
120	MP9						Yes	** NA **			None
121	M132						Yes	** NA **			None
122	M133						Yes	** NA **			None
123	M141						Yes	** NA **			None
124	M142						Yes	** NA **			None
125	M143						Yes	** NA **			None
126	M144						Yes	Default			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
127	M145						Yes	** NA **			None
128	M146						Yes	Default			None
129	M149						Yes	** NA **			None
130	M151						Yes	Default			None
131	M153						Yes	Default			None
132	M154						Yes	** NA **			None
133	MP5						Yes	** NA **			None
134	M157						Yes	** NA **			None
135	M158						Yes	** NA **			None
136	M161						Yes	** NA **			None
137	M162						Yes	** NA **			None
138	M163						Yes	** NA **			None
139	M164						Yes	Default			None
140	M165						Yes	** NA **			None
141	M166						Yes	Default			None
142	M187						Yes	** NA **			None
143	M188						Yes	Default			None
144	M190						Yes	Default			None
145	M145A						Yes	** NA **			None
146	M146A						Yes	** NA **			None
147	M147						Yes	** NA **			None
148	M148						Yes	** NA **			None
149	M149A						Yes	Default			None
150	M150						Yes	Default			None
151	M151A						Yes	** NA **			None
152	M152						Yes	** NA **			None
153	M153A						Yes	** NA **			None
154	M154A						Yes	** NA **			None
155	M155						Yes	Default			None
156	M156						Yes	Default			None
157	M157A						Yes	** NA **			None
158	M158A						Yes	** NA **			None
159	M159						Yes	** NA **			None
160	M160						Yes	** NA **			None
161	M161A						Yes	Default			None
162	M162A						Yes	Default			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
1	H1	Frame angle	156	6	6	6	6					Lateral
2	H3	Frame angle	156	6	6	6	6					Lateral
3	H2	Frame angle	156	6	6	6	6					Lateral
4	S4	Standoff	46			Lbyy						Lateral
5	S5	Standoff	46			Lbyy						Lateral
6	S1	Standoff	46			Lbyy						Lateral
7	S6	Standoff	46			Lbyy						Lateral
8	S2	Standoff	46			Lbyy						Lateral
9	S3	Standoff	46			Lbyy						Lateral
10	M10	Bracing Ang...	54			Lbyy			.7	.7		Lateral
11	M11	Bracing Ang...	54			Lbyy			.7	.7		Lateral
12	M12	Bracing Ang...	54			Lbyy			.7	.7		Lateral
13	M13	Bracing Ang...	28.5			Lbyy			.7	.7		Lateral
14	M14	Catwalk an...	50.845			Lbyy						Lateral
15	M15	Catwalk an...	20			Lbyy						Lateral
16	HR1	Handrail	156			Lbyy						Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
17	HR3	Handrail	156			Lbyy						Lateral
18	HR2	Handrail	156			Lbyy						Lateral
19	M19	Handrail Pla...	14			Lbyy						Lateral
20	MP2	Mount Pipe	72			Lbyy						Lateral
21	MP4	Mount Pipe	72			Lbyy						Lateral
22	M22	Bracing Ang...	28.5			Lbyy			.7	.7		Lateral
23	M23	Catwalk an...	50.845			Lbyy						Lateral
24	M24	Catwalk an...	20			Lbyy						Lateral
25	M27	Bracing Ang...	28.5			Lbyy			.7	.7		Lateral
26	M28	Catwalk an...	50.845			Lbyy						Lateral
27	M29	Catwalk an...	20			Lbyy						Lateral
28	M32	Handrail Pla...	14			Lbyy						Lateral
29	M33	Handrail Pla...	14			Lbyy						Lateral
30	M34	Catwalk an...	20			Lbyy						Lateral
31	M35	Catwalk an...	20			Lbyy						Lateral
32	M36	Catwalk an...	20			Lbyy						Lateral
33	M37	Catwalk an...	50.845			Lbyy						Lateral
34	M38	Catwalk an...	50.845			Lbyy						Lateral
35	M39	Catwalk an...	50.845			Lbyy						Lateral
36	MP3	Mount Pipe	72			Lbyy						Lateral
37	R1	Mount Pipe	48									Lateral
38	M68	Handrail Br...	51			Lbyy						Lateral
39	M69	Handrail Br...	51			Lbyy						Lateral
40	M70	Handrail Br...	51			Lbyy						Lateral
41	M75	Handrail Kic...	37.336			Lbyy						Lateral
42	M76	Handrail Kic...	37.336			Lbyy						Lateral
43	M80	Handrail Kic...	37.336			Lbyy						Lateral
44	M82	Handrail Kic...	37.336			Lbyy						Lateral
45	M86	Handrail Kic...	37.336			Lbyy						Lateral
46	M88	Handrail Kic...	37.336			Lbyy						Lateral
47	MP1	Mount Pipe	72			Lbyy						Lateral
48	MP12	Mount Pipe	72			Lbyy						Lateral
49	MP10	Mount Pipe	72			Lbyy						Lateral
50	MP11	Mount Pipe	72			Lbyy						Lateral
51	R9	Mount Pipe	48									Lateral
52	MP8	Mount Pipe	72			Lbyy						Lateral
53	MP6	Mount Pipe	72			Lbyy						Lateral
54	MP7	Mount Pipe	72			Lbyy						Lateral
55	R5	Mount Pipe	48									Lateral
56	M177	Threaded R...	3			Lbyy						Lateral
57	M179	Threaded R...	3			Lbyy						Lateral
58	M183	Threaded R...	3			Lbyy						Lateral
59	M185	Threaded R...	3			Lbyy						Lateral
60	MP9	Mount Pipe	72			Lbyy						Lateral
61	M144	Threaded R...	3			Lbyy						Lateral
62	M146	Threaded R...	3			Lbyy						Lateral
63	M151	Threaded R...	3			Lbyy						Lateral
64	M153	Threaded R...	3			Lbyy						Lateral
65	MP5	Mount Pipe	72			Lbyy						Lateral
66	M164	Threaded R...	3			Lbyy						Lateral
67	M166	Threaded R...	3			Lbyy						Lateral
68	M188	Threaded R...	3			Lbyy						Lateral
69	M190	Threaded R...	3			Lbyy						Lateral
70	M149A	Threaded R...	3			Lbyy						Lateral
71	M150	Threaded R...	3			Lbyy						Lateral
72	M155	Threaded R...	3			Lbyy						Lateral
73	M156	Threaded R...	3			Lbyy						Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
74	M161A	Threaded R...	3			Lbyy						Lateral
75	M162A	Threaded R...	3			Lbyy						Lateral

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Ther...	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

Joint Loads and Enforced Displacements (BLC 33 : Service Live Loads)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N33	L	Y	-250

Joint Loads and Enforced Displacements (BLC 34 : Maintenance Load 1)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N70	L	Y	-500

Joint Loads and Enforced Displacements (BLC 35 : Maintenance Load 2)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N71	L	Y	-500

Joint Loads and Enforced Displacements (BLC 36 : Maintenance Load 3)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N94	L	Y	-500

Joint Loads and Enforced Displacements (BLC 37 : Maintenance Load 4)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N258	L	Y	-500

Joint Loads and Enforced Displacements (BLC 38 : Maintenance Load 5)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N160	L	Y	-500

Joint Loads and Enforced Displacements (BLC 39 : Maintenance Load 6)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N168	L	Y	-500

Joint Loads and Enforced Displacements (BLC 40 : Maintenance Load 7)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N154	L	Y	-500

Joint Loads and Enforced Displacements (BLC 41 : Maintenance Load 8)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N198	L	Y	-500

Joint Loads and Enforced Displacements (BLC 42 : Maintenance Load 9)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N206	L	Y	-500

Joint Loads and Enforced Displacements (BLC 43 : Maintenance Load 10)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N192	L	Y	-500

Joint Loads and Enforced Displacements (BLC 44 : Maintenance Load 11)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N229	L	Y	-500

Joint Loads and Enforced Displacements (BLC 45 : Maintenance Load 12)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (l...
1	N267	L	Y	-500

Member Point Loads (BLC 1 : Self Weight)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	Y	-54.3	0
2	MP4	Y	-54.3	%100
3	MP3	Y	-66.2	18
4	MP3	Y	-81.6	54
5	MP2	Y	-65	0
6	MP2	Y	-65	%100
7	MP4	Y	-29.5	45
8	MP4	Y	-71	20
9	MP2	Y	-59.9	20
10	MP2	Y	-72	20
11	MP2	Y	-52.9	40
12	MP4	Y	-52.9	20
13	S1	Y	-18.9	%50
14	MP8	Y	-54.3	0
15	MP8	Y	-54.3	%100
16	MP7	Y	-66.2	18
17	MP7	Y	-81.6	54
18	MP6	Y	-65	0
19	MP6	Y	-65	%100
20	MP8	Y	-29.5	45
21	MP8	Y	-71	20
22	MP6	Y	-59.9	20
23	MP6	Y	-72	20
24	MP6	Y	-52.9	40
25	MP8	Y	-52.9	20
26	S2	Y	-18.9	%50
27	MP12	Y	-54.3	0
28	MP12	Y	-54.3	%100
29	MP11	Y	-66.2	18
30	MP11	Y	-81.6	54
31	MP10	Y	-65	0
32	MP10	Y	-65	%100
33	MP12	Y	-29.5	45
34	MP12	Y	-71	20
35	MP10	Y	-59.9	20
36	MP10	Y	-72	20
37	MP10	Y	-52.9	40
38	MP12	Y	-52.9	20

Member Point Loads (BLC 2 : Wind Load AZI 0)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	0	0
2	MP4	Z	-237.03	0
3	MP4	X	0	%100
4	MP4	Z	-237.03	%100
5	MP3	X	0	18
6	MP3	Z	-179.86	18
7	MP3	X	0	54
8	MP3	Z	-141.09	54
9	MP2	X	0	0
10	MP2	Z	-263.39	0
11	MP2	X	0	%100
12	MP2	Z	-263.39	%100
13	MP4	X	0	45
14	MP4	Z	-38.35	45
15	MP4	X	0	20
16	MP4	Z	-76.26	20
17	MP2	X	0	20
18	MP2	Z	-71.42	20
19	MP2	X	0	20
20	MP2	Z	-63.53	20
21	MP2	X	0	40
22	MP2	Z	-121.91	40
23	MP4	X	0	20
24	MP4	Z	-105.64	20
25	S1	X	0	%50
26	S1	Z	-78.89	%50
27	MP8	X	0	0
28	MP8	Z	-120.45	0
29	MP8	X	0	%100
30	MP8	Z	-120.45	%100
31	MP7	X	0	18
32	MP7	Z	-99.33	18
33	MP7	X	0	54
34	MP7	Z	-85.28	54
35	MP6	X	0	0
36	MP6	Z	-151.9	0
37	MP6	X	0	%100
38	MP6	Z	-151.9	%100
39	MP8	X	0	45
40	MP8	Z	-28.31	45
41	MP8	X	0	20
42	MP8	Z	-60	20
43	MP6	X	0	20
44	MP6	Z	-48.63	20
45	MP6	X	0	20
46	MP6	Z	-55.23	20
47	MP6	X	0	40
48	MP6	Z	-67.85	40
49	MP8	X	0	20
50	MP8	Z	-74.8	20
51	S2	X	0	%50
52	S2	Z	-79.06	%50
53	MP12	X	0	0
54	MP12	Z	-120.45	0
55	MP12	X	0	%100
56	MP12	Z	-120.45	%100
57	MP11	X	0	18

Member Point Loads (BLC 2 : Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
58	MP11	Z	-99.33	18
59	MP11	X	0	54
60	MP11	Z	-85.28	54
61	MP10	X	0	0
62	MP10	Z	-151.9	0
63	MP10	X	0	%100
64	MP10	Z	-151.9	%100
65	MP12	X	0	45
66	MP12	Z	-28.31	45
67	MP12	X	0	20
68	MP12	Z	-60	20
69	MP10	X	0	20
70	MP10	Z	-48.63	20
71	MP10	X	0	20
72	MP10	Z	-55.23	20
73	MP10	X	0	40
74	MP10	Z	-67.85	40
75	MP12	X	0	20
76	MP12	Z	-74.8	20

Member Point Loads (BLC 3 : Wind Load AZI 30)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-99.09	0
2	MP4	Z	-171.62	0
3	MP4	X	-99.09	%100
4	MP4	Z	-171.62	%100
5	MP3	X	-76.51	18
6	MP3	Z	-132.51	18
7	MP3	X	-61.24	54
8	MP3	Z	-106.08	54
9	MP2	X	-113.11	0
10	MP2	Z	-195.92	0
11	MP2	X	-113.11	%100
12	MP2	Z	-195.92	%100
13	MP4	X	-17.5	45
14	MP4	Z	-30.31	45
15	MP4	X	-35.42	20
16	MP4	Z	-61.35	20
17	MP2	X	-31.91	20
18	MP2	Z	-55.27	20
19	MP2	X	-30.38	20
20	MP2	Z	-52.62	20
21	MP2	X	-51.94	40
22	MP2	Z	-89.97	40
23	MP4	X	-47.68	20
24	MP4	Z	-82.59	20
25	S1	X	-39.44	%50
26	S1	Z	-68.32	%50
27	MP8	X	-99.09	0
28	MP8	Z	-171.62	0
29	MP8	X	-99.09	%100
30	MP8	Z	-171.62	%100
31	MP7	X	-76.51	18
32	MP7	Z	-132.51	18
33	MP7	X	-61.24	54
34	MP7	Z	-106.08	54

Member Point Loads (BLC 3 : Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
35	MP6	X	-113.11	0
36	MP6	Z	-195.92	0
37	MP6	X	-113.11	%100
38	MP6	Z	-195.92	%100
39	MP8	X	-17.5	45
40	MP8	Z	-30.31	45
41	MP8	X	-35.42	20
42	MP8	Z	-61.35	20
43	MP6	X	-31.91	20
44	MP6	Z	-55.27	20
45	MP6	X	-30.38	20
46	MP6	Z	-52.62	20
47	MP6	X	-51.94	40
48	MP6	Z	-89.97	40
49	MP8	X	-47.68	20
50	MP8	Z	-82.59	20
51	S2	X	-39.53	%50
52	S2	Z	-68.47	%50
53	MP12	X	-40.8	0
54	MP12	Z	-70.66	0
55	MP12	X	-40.8	%100
56	MP12	Z	-70.66	%100
57	MP11	X	-36.24	18
58	MP11	Z	-62.77	18
59	MP11	X	-33.34	54
60	MP11	Z	-57.74	54
61	MP10	X	-57.37	0
62	MP10	Z	-99.36	0
63	MP10	X	-57.37	%100
64	MP10	Z	-99.36	%100
65	MP12	X	-12.48	45
66	MP12	Z	-21.62	45
67	MP12	X	-27.29	20
68	MP12	Z	-47.27	20
69	MP10	X	-20.52	20
70	MP10	Z	-35.54	20
71	MP10	X	-26.23	20
72	MP10	Z	-45.43	20
73	MP10	X	-24.91	40
74	MP10	Z	-43.15	40
75	MP12	X	-32.26	20
76	MP12	Z	-55.88	20

Member Point Loads (BLC 4 : Wind Load AZI 60)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-104.32	0
2	MP4	Z	-60.23	0
3	MP4	X	-104.32	%100
4	MP4	Z	-60.23	%100
5	MP3	X	-86.02	18
6	MP3	Z	-49.66	18
7	MP3	X	-73.85	54
8	MP3	Z	-42.64	54
9	MP2	X	-131.55	0
10	MP2	Z	-75.95	0
11	MP2	X	-131.55	%100

Member Point Loads (BLC 4 : Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
12	MP2	Z	-75.95	%100
13	MP4	X	-24.52	45
14	MP4	Z	-14.15	45
15	MP4	X	-51.96	20
16	MP4	Z	-30	20
17	MP2	X	-42.12	20
18	MP2	Z	-24.32	20
19	MP2	X	-47.83	20
20	MP2	Z	-27.61	20
21	MP2	X	-58.76	40
22	MP2	Z	-33.92	40
23	MP4	X	-64.78	20
24	MP4	Z	-37.4	20
25	S1	X	-68.32	%50
26	S1	Z	-39.44	%50
27	MP8	X	-205.27	0
28	MP8	Z	-118.52	0
29	MP8	X	-205.27	%100
30	MP8	Z	-118.52	%100
31	MP7	X	-155.76	18
32	MP7	Z	-89.93	18
33	MP7	X	-122.19	54
34	MP7	Z	-70.55	54
35	MP6	X	-228.1	0
36	MP6	Z	-131.69	0
37	MP6	X	-228.1	%100
38	MP6	Z	-131.69	%100
39	MP8	X	-33.21	45
40	MP8	Z	-19.17	45
41	MP8	X	-66.05	20
42	MP8	Z	-38.13	20
43	MP6	X	-61.85	20
44	MP6	Z	-35.71	20
45	MP6	X	-55.02	20
46	MP6	Z	-31.77	20
47	MP6	X	-105.57	40
48	MP6	Z	-60.95	40
49	MP8	X	-91.49	20
50	MP8	Z	-52.82	20
51	S2	X	-68.47	%50
52	S2	Z	-39.53	%50
53	MP12	X	-104.32	0
54	MP12	Z	-60.23	0
55	MP12	X	-104.32	%100
56	MP12	Z	-60.23	%100
57	MP11	X	-86.02	18
58	MP11	Z	-49.66	18
59	MP11	X	-73.85	54
60	MP11	Z	-42.64	54
61	MP10	X	-131.55	0
62	MP10	Z	-75.95	0
63	MP10	X	-131.55	%100
64	MP10	Z	-75.95	%100
65	MP12	X	-24.52	45
66	MP12	Z	-14.15	45
67	MP12	X	-51.96	20
68	MP12	Z	-30	20

Member Point Loads (BLC 4 : Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
69	MP10	X	-42.12	20
70	MP10	Z	-24.32	20
71	MP10	X	-47.83	20
72	MP10	Z	-27.61	20
73	MP10	X	-58.76	40
74	MP10	Z	-33.92	40
75	MP12	X	-64.78	20
76	MP12	Z	-37.4	20

Member Point Loads (BLC 5 : Wind Load AZI 90)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-81.59	0
2	MP4	Z	0	0
3	MP4	X	-81.59	%100
4	MP4	Z	0	%100
5	MP3	X	-72.49	18
6	MP3	Z	0	18
7	MP3	X	-66.67	54
8	MP3	Z	0	54
9	MP2	X	-114.74	0
10	MP2	Z	0	0
11	MP2	X	-114.74	%100
12	MP2	Z	0	%100
13	MP4	X	-24.96	45
14	MP4	Z	0	45
15	MP4	X	-54.58	20
16	MP4	Z	0	20
17	MP2	X	-41.04	20
18	MP2	Z	0	20
19	MP2	X	-52.46	20
20	MP2	Z	0	20
21	MP2	X	-49.82	40
22	MP2	Z	0	40
23	MP4	X	-64.52	20
24	MP4	Z	0	20
25	S1	X	-78.89	%50
26	S1	Z	0	%50
27	MP8	X	-198.17	0
28	MP8	Z	0	0
29	MP8	X	-198.17	%100
30	MP8	Z	0	%100
31	MP7	X	-153.01	18
32	MP7	Z	0	18
33	MP7	X	-122.49	54
34	MP7	Z	0	54
35	MP6	X	-226.23	0
36	MP6	Z	0	0
37	MP6	X	-226.23	%100
38	MP6	Z	0	%100
39	MP8	X	-35	45
40	MP8	Z	0	45
41	MP8	X	-70.84	20
42	MP8	Z	0	20
43	MP6	X	-63.82	20
44	MP6	Z	0	20
45	MP6	X	-60.76	20

Member Point Loads (BLC 5 : Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
46	MP6	Z	0	20
47	MP6	X	-103.89	40
48	MP6	Z	0	40
49	MP8	X	-95.36	20
50	MP8	Z	0	20
51	S2	X	-79.06	%50
52	S2	Z	0	%50
53	MP12	X	-198.17	0
54	MP12	Z	0	0
55	MP12	X	-198.17	%100
56	MP12	Z	0	%100
57	MP11	X	-153.01	18
58	MP11	Z	0	18
59	MP11	X	-122.49	54
60	MP11	Z	0	54
61	MP10	X	-226.23	0
62	MP10	Z	0	0
63	MP10	X	-226.23	%100
64	MP10	Z	0	%100
65	MP12	X	-35	45
66	MP12	Z	0	45
67	MP12	X	-70.84	20
68	MP12	Z	0	20
69	MP10	X	-63.82	20
70	MP10	Z	0	20
71	MP10	X	-60.76	20
72	MP10	Z	0	20
73	MP10	X	-103.89	40
74	MP10	Z	0	40
75	MP12	X	-95.36	20
76	MP12	Z	0	20

Member Point Loads (BLC 6 : Wind Load AZI 120)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-104.32	0
2	MP4	Z	60.23	0
3	MP4	X	-104.32	%100
4	MP4	Z	60.23	%100
5	MP3	X	-86.02	18
6	MP3	Z	49.66	18
7	MP3	X	-73.85	54
8	MP3	Z	42.64	54
9	MP2	X	-131.55	0
10	MP2	Z	75.95	0
11	MP2	X	-131.55	%100
12	MP2	Z	75.95	%100
13	MP4	X	-24.52	45
14	MP4	Z	14.15	45
15	MP4	X	-51.96	20
16	MP4	Z	30	20
17	MP2	X	-42.12	20
18	MP2	Z	24.32	20
19	MP2	X	-47.83	20
20	MP2	Z	27.61	20
21	MP2	X	-58.76	40
22	MP2	Z	33.92	40

Member Point Loads (BLC 6 : Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
23	MP4	X	-64.78	20
24	MP4	Z	37.4	20
25	S1	X	-68.32	%50
26	S1	Z	39.44	%50
27	MP8	X	-104.32	0
28	MP8	Z	60.23	0
29	MP8	X	-104.32	%100
30	MP8	Z	60.23	%100
31	MP7	X	-86.02	18
32	MP7	Z	49.66	18
33	MP7	X	-73.85	54
34	MP7	Z	42.64	54
35	MP6	X	-131.55	0
36	MP6	Z	75.95	0
37	MP6	X	-131.55	%100
38	MP6	Z	75.95	%100
39	MP8	X	-24.52	45
40	MP8	Z	14.15	45
41	MP8	X	-51.96	20
42	MP8	Z	30	20
43	MP6	X	-42.12	20
44	MP6	Z	24.32	20
45	MP6	X	-47.83	20
46	MP6	Z	27.61	20
47	MP6	X	-58.76	40
48	MP6	Z	33.92	40
49	MP8	X	-64.78	20
50	MP8	Z	37.4	20
51	S2	X	-68.47	%50
52	S2	Z	39.53	%50
53	MP12	X	-205.27	0
54	MP12	Z	118.52	0
55	MP12	X	-205.27	%100
56	MP12	Z	118.52	%100
57	MP11	X	-155.76	18
58	MP11	Z	89.93	18
59	MP11	X	-122.19	54
60	MP11	Z	70.55	54
61	MP10	X	-228.1	0
62	MP10	Z	131.69	0
63	MP10	X	-228.1	%100
64	MP10	Z	131.69	%100
65	MP12	X	-33.21	45
66	MP12	Z	19.17	45
67	MP12	X	-66.05	20
68	MP12	Z	38.13	20
69	MP10	X	-61.85	20
70	MP10	Z	35.71	20
71	MP10	X	-55.02	20
72	MP10	Z	31.77	20
73	MP10	X	-105.57	40
74	MP10	Z	60.95	40
75	MP12	X	-91.49	20
76	MP12	Z	52.82	20

Member Point Loads (BLC 7 : Wind Load AZI 150)

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

Member Point Loads (BLC 7 : Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-99.09	0
2	MP4	Z	171.62	0
3	MP4	X	-99.09	%100
4	MP4	Z	171.62	%100
5	MP3	X	-76.51	18
6	MP3	Z	132.51	18
7	MP3	X	-61.24	54
8	MP3	Z	106.08	54
9	MP2	X	-113.11	0
10	MP2	Z	195.92	0
11	MP2	X	-113.11	%100
12	MP2	Z	195.92	%100
13	MP4	X	-17.5	45
14	MP4	Z	30.31	45
15	MP4	X	-35.42	20
16	MP4	Z	61.35	20
17	MP2	X	-31.91	20
18	MP2	Z	55.27	20
19	MP2	X	-30.38	20
20	MP2	Z	52.62	20
21	MP2	X	-51.94	40
22	MP2	Z	89.97	40
23	MP4	X	-47.68	20
24	MP4	Z	82.59	20
25	S1	X	-39.44	%50
26	S1	Z	68.32	%50
27	MP8	X	-40.8	0
28	MP8	Z	70.66	0
29	MP8	X	-40.8	%100
30	MP8	Z	70.66	%100
31	MP7	X	-36.24	18
32	MP7	Z	62.77	18
33	MP7	X	-33.34	54
34	MP7	Z	57.74	54
35	MP6	X	-57.37	0
36	MP6	Z	99.36	0
37	MP6	X	-57.37	%100
38	MP6	Z	99.36	%100
39	MP8	X	-12.48	45
40	MP8	Z	21.62	45
41	MP8	X	-27.29	20
42	MP8	Z	47.27	20
43	MP6	X	-20.52	20
44	MP6	Z	35.54	20
45	MP6	X	-26.23	20
46	MP6	Z	45.43	20
47	MP6	X	-24.91	40
48	MP6	Z	43.15	40
49	MP8	X	-32.26	20
50	MP8	Z	55.88	20
51	S2	X	-39.53	%50
52	S2	Z	68.47	%50
53	MP12	X	-99.09	0
54	MP12	Z	171.62	0
55	MP12	X	-99.09	%100
56	MP12	Z	171.62	%100
57	MP11	X	-76.51	18

Member Point Loads (BLC 7 : Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
58	MP11	Z	132.51	18
59	MP11	X	-61.24	54
60	MP11	Z	106.08	54
61	MP10	X	-113.11	0
62	MP10	Z	195.92	0
63	MP10	X	-113.11	%100
64	MP10	Z	195.92	%100
65	MP12	X	-17.5	45
66	MP12	Z	30.31	45
67	MP12	X	-35.42	20
68	MP12	Z	61.35	20
69	MP10	X	-31.91	20
70	MP10	Z	55.27	20
71	MP10	X	-30.38	20
72	MP10	Z	52.62	20
73	MP10	X	-51.94	40
74	MP10	Z	89.97	40
75	MP12	X	-47.68	20
76	MP12	Z	82.59	20

Member Point Loads (BLC 8 : Wind Load AZI 180)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	0	0
2	MP4	Z	237.03	0
3	MP4	X	0	%100
4	MP4	Z	237.03	%100
5	MP3	X	0	18
6	MP3	Z	179.86	18
7	MP3	X	0	54
8	MP3	Z	141.09	54
9	MP2	X	0	0
10	MP2	Z	263.39	0
11	MP2	X	0	%100
12	MP2	Z	263.39	%100
13	MP4	X	0	45
14	MP4	Z	38.35	45
15	MP4	X	0	20
16	MP4	Z	76.26	20
17	MP2	X	0	20
18	MP2	Z	71.42	20
19	MP2	X	0	20
20	MP2	Z	63.53	20
21	MP2	X	0	40
22	MP2	Z	121.91	40
23	MP4	X	0	20
24	MP4	Z	105.64	20
25	S1	X	0	%50
26	S1	Z	78.89	%50
27	MP8	X	0	0
28	MP8	Z	120.45	0
29	MP8	X	0	%100
30	MP8	Z	120.45	%100
31	MP7	X	0	18
32	MP7	Z	99.33	18
33	MP7	X	0	54
34	MP7	Z	85.28	54

Member Point Loads (BLC 8 : Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
35	MP6	X	0	0
36	MP6	Z	151.9	0
37	MP6	X	0	%100
38	MP6	Z	151.9	%100
39	MP8	X	0	45
40	MP8	Z	28.31	45
41	MP8	X	0	20
42	MP8	Z	60	20
43	MP6	X	0	20
44	MP6	Z	48.63	20
45	MP6	X	0	20
46	MP6	Z	55.23	20
47	MP6	X	0	40
48	MP6	Z	67.85	40
49	MP8	X	0	20
50	MP8	Z	74.8	20
51	S2	X	0	%50
52	S2	Z	79.06	%50
53	MP12	X	0	0
54	MP12	Z	120.45	0
55	MP12	X	0	%100
56	MP12	Z	120.45	%100
57	MP11	X	0	18
58	MP11	Z	99.33	18
59	MP11	X	0	54
60	MP11	Z	85.28	54
61	MP10	X	0	0
62	MP10	Z	151.9	0
63	MP10	X	0	%100
64	MP10	Z	151.9	%100
65	MP12	X	0	45
66	MP12	Z	28.31	45
67	MP12	X	0	20
68	MP12	Z	60	20
69	MP10	X	0	20
70	MP10	Z	48.63	20
71	MP10	X	0	20
72	MP10	Z	55.23	20
73	MP10	X	0	40
74	MP10	Z	67.85	40
75	MP12	X	0	20
76	MP12	Z	74.8	20

Member Point Loads (BLC 9 : Wind Load AZI 210)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	99.09	0
2	MP4	Z	171.62	0
3	MP4	X	99.09	%100
4	MP4	Z	171.62	%100
5	MP3	X	76.51	18
6	MP3	Z	132.51	18
7	MP3	X	61.24	54
8	MP3	Z	106.08	54
9	MP2	X	113.11	0
10	MP2	Z	195.92	0
11	MP2	X	113.11	%100

Member Point Loads (BLC 9 : Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
12	MP2	Z	195.92	%100
13	MP4	X	17.5	45
14	MP4	Z	30.31	45
15	MP4	X	35.42	20
16	MP4	Z	61.35	20
17	MP2	X	31.91	20
18	MP2	Z	55.27	20
19	MP2	X	30.38	20
20	MP2	Z	52.62	20
21	MP2	X	51.94	40
22	MP2	Z	89.97	40
23	MP4	X	47.68	20
24	MP4	Z	82.59	20
25	S1	X	39.44	%50
26	S1	Z	68.32	%50
27	MP8	X	99.09	0
28	MP8	Z	171.62	0
29	MP8	X	99.09	%100
30	MP8	Z	171.62	%100
31	MP7	X	76.51	18
32	MP7	Z	132.51	18
33	MP7	X	61.24	54
34	MP7	Z	106.08	54
35	MP6	X	113.11	0
36	MP6	Z	195.92	0
37	MP6	X	113.11	%100
38	MP6	Z	195.92	%100
39	MP8	X	17.5	45
40	MP8	Z	30.31	45
41	MP8	X	35.42	20
42	MP8	Z	61.35	20
43	MP6	X	31.91	20
44	MP6	Z	55.27	20
45	MP6	X	30.38	20
46	MP6	Z	52.62	20
47	MP6	X	51.94	40
48	MP6	Z	89.97	40
49	MP8	X	47.68	20
50	MP8	Z	82.59	20
51	S2	X	39.53	%50
52	S2	Z	68.47	%50
53	MP12	X	40.8	0
54	MP12	Z	70.66	0
55	MP12	X	40.8	%100
56	MP12	Z	70.66	%100
57	MP11	X	36.24	18
58	MP11	Z	62.77	18
59	MP11	X	33.34	54
60	MP11	Z	57.74	54
61	MP10	X	57.37	0
62	MP10	Z	99.36	0
63	MP10	X	57.37	%100
64	MP10	Z	99.36	%100
65	MP12	X	12.48	45
66	MP12	Z	21.62	45
67	MP12	X	27.29	20
68	MP12	Z	47.27	20

Member Point Loads (BLC 9 : Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
69	MP10	X	20.52	20
70	MP10	Z	35.54	20
71	MP10	X	26.23	20
72	MP10	Z	45.43	20
73	MP10	X	24.91	40
74	MP10	Z	43.15	40
75	MP12	X	32.26	20
76	MP12	Z	55.88	20

Member Point Loads (BLC 10 : Wind Load AZI 240)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	104.32	0
2	MP4	Z	60.23	0
3	MP4	X	104.32	%100
4	MP4	Z	60.23	%100
5	MP3	X	86.02	18
6	MP3	Z	49.66	18
7	MP3	X	73.85	54
8	MP3	Z	42.64	54
9	MP2	X	131.55	0
10	MP2	Z	75.95	0
11	MP2	X	131.55	%100
12	MP2	Z	75.95	%100
13	MP4	X	24.52	45
14	MP4	Z	14.15	45
15	MP4	X	51.96	20
16	MP4	Z	30	20
17	MP2	X	42.12	20
18	MP2	Z	24.32	20
19	MP2	X	47.83	20
20	MP2	Z	27.61	20
21	MP2	X	58.76	40
22	MP2	Z	33.92	40
23	MP4	X	64.78	20
24	MP4	Z	37.4	20
25	S1	X	68.32	%50
26	S1	Z	39.44	%50
27	MP8	X	205.27	0
28	MP8	Z	118.52	0
29	MP8	X	205.27	%100
30	MP8	Z	118.52	%100
31	MP7	X	155.76	18
32	MP7	Z	89.93	18
33	MP7	X	122.19	54
34	MP7	Z	70.55	54
35	MP6	X	228.1	0
36	MP6	Z	131.69	0
37	MP6	X	228.1	%100
38	MP6	Z	131.69	%100
39	MP8	X	33.21	45
40	MP8	Z	19.17	45
41	MP8	X	66.05	20
42	MP8	Z	38.13	20
43	MP6	X	61.85	20
44	MP6	Z	35.71	20
45	MP6	X	55.02	20

Member Point Loads (BLC 10 : Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
46	MP6	Z	31.77	20
47	MP6	X	105.57	40
48	MP6	Z	60.95	40
49	MP8	X	91.49	20
50	MP8	Z	52.82	20
51	S2	X	68.47	%50
52	S2	Z	39.53	%50
53	MP12	X	104.32	0
54	MP12	Z	60.23	0
55	MP12	X	104.32	%100
56	MP12	Z	60.23	%100
57	MP11	X	86.02	18
58	MP11	Z	49.66	18
59	MP11	X	73.85	54
60	MP11	Z	42.64	54
61	MP10	X	131.55	0
62	MP10	Z	75.95	0
63	MP10	X	131.55	%100
64	MP10	Z	75.95	%100
65	MP12	X	24.52	45
66	MP12	Z	14.15	45
67	MP12	X	51.96	20
68	MP12	Z	30	20
69	MP10	X	42.12	20
70	MP10	Z	24.32	20
71	MP10	X	47.83	20
72	MP10	Z	27.61	20
73	MP10	X	58.76	40
74	MP10	Z	33.92	40
75	MP12	X	64.78	20
76	MP12	Z	37.4	20

Member Point Loads (BLC 11 : Wind Load AZI 270)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	81.59	0
2	MP4	Z	0	0
3	MP4	X	81.59	%100
4	MP4	Z	0	%100
5	MP3	X	72.49	18
6	MP3	Z	0	18
7	MP3	X	66.67	54
8	MP3	Z	0	54
9	MP2	X	114.74	0
10	MP2	Z	0	0
11	MP2	X	114.74	%100
12	MP2	Z	0	%100
13	MP4	X	24.96	45
14	MP4	Z	0	45
15	MP4	X	54.58	20
16	MP4	Z	0	20
17	MP2	X	41.04	20
18	MP2	Z	0	20
19	MP2	X	52.46	20
20	MP2	Z	0	20
21	MP2	X	49.82	40
22	MP2	Z	0	40

Member Point Loads (BLC 11 : Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
23	MP4	X	64.52	20
24	MP4	Z	0	20
25	S1	X	78.89	%50
26	S1	Z	0	%50
27	MP8	X	198.17	0
28	MP8	Z	0	0
29	MP8	X	198.17	%100
30	MP8	Z	0	%100
31	MP7	X	153.01	18
32	MP7	Z	0	18
33	MP7	X	122.49	54
34	MP7	Z	0	54
35	MP6	X	226.23	0
36	MP6	Z	0	0
37	MP6	X	226.23	%100
38	MP6	Z	0	%100
39	MP8	X	35	45
40	MP8	Z	0	45
41	MP8	X	70.84	20
42	MP8	Z	0	20
43	MP6	X	63.82	20
44	MP6	Z	0	20
45	MP6	X	60.76	20
46	MP6	Z	0	20
47	MP6	X	103.89	40
48	MP6	Z	0	40
49	MP8	X	95.36	20
50	MP8	Z	0	20
51	S2	X	79.06	%50
52	S2	Z	0	%50
53	MP12	X	198.17	0
54	MP12	Z	0	0
55	MP12	X	198.17	%100
56	MP12	Z	0	%100
57	MP11	X	153.01	18
58	MP11	Z	0	18
59	MP11	X	122.49	54
60	MP11	Z	0	54
61	MP10	X	226.23	0
62	MP10	Z	0	0
63	MP10	X	226.23	%100
64	MP10	Z	0	%100
65	MP12	X	35	45
66	MP12	Z	0	45
67	MP12	X	70.84	20
68	MP12	Z	0	20
69	MP10	X	63.82	20
70	MP10	Z	0	20
71	MP10	X	60.76	20
72	MP10	Z	0	20
73	MP10	X	103.89	40
74	MP10	Z	0	40
75	MP12	X	95.36	20
76	MP12	Z	0	20

Member Point Loads (BLC 12 : Wind Load AZI 300)

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

Member Point Loads (BLC 12 : Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	104.32	0
2	MP4	Z	-60.23	0
3	MP4	X	104.32	%100
4	MP4	Z	-60.23	%100
5	MP3	X	86.02	18
6	MP3	Z	-49.66	18
7	MP3	X	73.85	54
8	MP3	Z	-42.64	54
9	MP2	X	131.55	0
10	MP2	Z	-75.95	0
11	MP2	X	131.55	%100
12	MP2	Z	-75.95	%100
13	MP4	X	24.52	45
14	MP4	Z	-14.15	45
15	MP4	X	51.96	20
16	MP4	Z	-30	20
17	MP2	X	42.12	20
18	MP2	Z	-24.32	20
19	MP2	X	47.83	20
20	MP2	Z	-27.61	20
21	MP2	X	58.76	40
22	MP2	Z	-33.92	40
23	MP4	X	64.78	20
24	MP4	Z	-37.4	20
25	S1	X	68.32	%50
26	S1	Z	-39.44	%50
27	MP8	X	104.32	0
28	MP8	Z	-60.23	0
29	MP8	X	104.32	%100
30	MP8	Z	-60.23	%100
31	MP7	X	86.02	18
32	MP7	Z	-49.66	18
33	MP7	X	73.85	54
34	MP7	Z	-42.64	54
35	MP6	X	131.55	0
36	MP6	Z	-75.95	0
37	MP6	X	131.55	%100
38	MP6	Z	-75.95	%100
39	MP8	X	24.52	45
40	MP8	Z	-14.15	45
41	MP8	X	51.96	20
42	MP8	Z	-30	20
43	MP6	X	42.12	20
44	MP6	Z	-24.32	20
45	MP6	X	47.83	20
46	MP6	Z	-27.61	20
47	MP6	X	58.76	40
48	MP6	Z	-33.92	40
49	MP8	X	64.78	20
50	MP8	Z	-37.4	20
51	S2	X	68.47	%50
52	S2	Z	-39.53	%50
53	MP12	X	205.27	0
54	MP12	Z	-118.52	0
55	MP12	X	205.27	%100
56	MP12	Z	-118.52	%100
57	MP11	X	155.76	18

Member Point Loads (BLC 12 : Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
58	MP11	Z	-89.93	18
59	MP11	X	122.19	54
60	MP11	Z	-70.55	54
61	MP10	X	228.1	0
62	MP10	Z	-131.69	0
63	MP10	X	228.1	%100
64	MP10	Z	-131.69	%100
65	MP12	X	33.21	45
66	MP12	Z	-19.17	45
67	MP12	X	66.05	20
68	MP12	Z	-38.13	20
69	MP10	X	61.85	20
70	MP10	Z	-35.71	20
71	MP10	X	55.02	20
72	MP10	Z	-31.77	20
73	MP10	X	105.57	40
74	MP10	Z	-60.95	40
75	MP12	X	91.49	20
76	MP12	Z	-52.82	20

Member Point Loads (BLC 13 : Wind Load AZI 330)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	99.09	0
2	MP4	Z	-171.62	0
3	MP4	X	99.09	%100
4	MP4	Z	-171.62	%100
5	MP3	X	76.51	18
6	MP3	Z	-132.51	18
7	MP3	X	61.24	54
8	MP3	Z	-106.08	54
9	MP2	X	113.11	0
10	MP2	Z	-195.92	0
11	MP2	X	113.11	%100
12	MP2	Z	-195.92	%100
13	MP4	X	17.5	45
14	MP4	Z	-30.31	45
15	MP4	X	35.42	20
16	MP4	Z	-61.35	20
17	MP2	X	31.91	20
18	MP2	Z	-55.27	20
19	MP2	X	30.38	20
20	MP2	Z	-52.62	20
21	MP2	X	51.94	40
22	MP2	Z	-89.97	40
23	MP4	X	47.68	20
24	MP4	Z	-82.59	20
25	S1	X	39.44	%50
26	S1	Z	-68.32	%50
27	MP8	X	40.8	0
28	MP8	Z	-70.66	0
29	MP8	X	40.8	%100
30	MP8	Z	-70.66	%100
31	MP7	X	36.24	18
32	MP7	Z	-62.77	18
33	MP7	X	33.34	54
34	MP7	Z	-57.74	54

Member Point Loads (BLC 13 : Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
35	MP6	X	57.37	0
36	MP6	Z	-99.36	0
37	MP6	X	57.37	%100
38	MP6	Z	-99.36	%100
39	MP8	X	12.48	45
40	MP8	Z	-21.62	45
41	MP8	X	27.29	20
42	MP8	Z	-47.27	20
43	MP6	X	20.52	20
44	MP6	Z	-35.54	20
45	MP6	X	26.23	20
46	MP6	Z	-45.43	20
47	MP6	X	24.91	40
48	MP6	Z	-43.15	40
49	MP8	X	32.26	20
50	MP8	Z	-55.88	20
51	S2	X	39.53	%50
52	S2	Z	-68.47	%50
53	MP12	X	99.09	0
54	MP12	Z	-171.62	0
55	MP12	X	99.09	%100
56	MP12	Z	-171.62	%100
57	MP11	X	76.51	18
58	MP11	Z	-132.51	18
59	MP11	X	61.24	54
60	MP11	Z	-106.08	54
61	MP10	X	113.11	0
62	MP10	Z	-195.92	0
63	MP10	X	113.11	%100
64	MP10	Z	-195.92	%100
65	MP12	X	17.5	45
66	MP12	Z	-30.31	45
67	MP12	X	35.42	20
68	MP12	Z	-61.35	20
69	MP10	X	31.91	20
70	MP10	Z	-55.27	20
71	MP10	X	30.38	20
72	MP10	Z	-52.62	20
73	MP10	X	51.94	40
74	MP10	Z	-89.97	40
75	MP12	X	47.68	20
76	MP12	Z	-82.59	20

Member Point Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	Y	-90.172	0
2	MP4	Y	-90.172	%100
3	MP3	Y	-61.388	18
4	MP3	Y	-70.948	54
5	MP2	Y	-98.371	0
6	MP2	Y	-98.371	%100
7	MP4	Y	-24.435	45
8	MP4	Y	-45.163	20
9	MP2	Y	-39.036	20
10	MP2	Y	-42.993	20
11	MP2	Y	-56.195	40

Member Point Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
12	MP4	Y	-51.294	20
13	S1	Y	-51.549	%50
14	MP8	Y	-90.172	0
15	MP8	Y	-90.172	%100
16	MP7	Y	-61.388	18
17	MP7	Y	-70.948	54
18	MP6	Y	-98.371	0
19	MP6	Y	-98.371	%100
20	MP8	Y	-24.435	45
21	MP8	Y	-45.163	20
22	MP6	Y	-39.036	20
23	MP6	Y	-42.993	20
24	MP6	Y	-56.195	40
25	MP8	Y	-51.294	20
26	S2	Y	-51.61	%50
27	MP12	Y	-90.172	0
28	MP12	Y	-90.172	%100
29	MP11	Y	-61.388	18
30	MP11	Y	-70.948	54
31	MP10	Y	-98.371	0
32	MP10	Y	-98.371	%100
33	MP12	Y	-24.435	45
34	MP12	Y	-45.163	20
35	MP10	Y	-39.036	20
36	MP10	Y	-42.993	20
37	MP10	Y	-56.195	40
38	MP12	Y	-51.294	20

Member Point Loads (BLC 17 : Ice Wind Load AZI 0)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	0	0
2	MP4	Z	-22.46	0
3	MP4	X	0	%100
4	MP4	Z	-22.46	%100
5	MP3	X	0	18
6	MP3	Z	-12.89	18
7	MP3	X	0	54
8	MP3	Z	-14.03	54
9	MP2	X	0	0
10	MP2	Z	-21.9	0
11	MP2	X	0	%100
12	MP2	Z	-21.9	%100
13	MP4	X	0	45
14	MP4	Z	-4.66	45
15	MP4	X	0	20
16	MP4	Z	-7.68	20
17	MP2	X	0	20
18	MP2	Z	-7.2	20
19	MP2	X	0	20
20	MP2	Z	-6.54	20
21	MP2	X	0	40
22	MP2	Z	-11.15	40
23	MP4	X	0	20
24	MP4	Z	-10.78	20
25	S1	X	0	%50
26	S1	Z	-8.62	%50

Member Point Loads (BLC 17 : Ice Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
27	MP8	X	0	0
28	MP8	Z	-16.23	0
29	MP8	X	0	%100
30	MP8	Z	-16.23	%100
31	MP7	X	0	18
32	MP7	Z	-9.92	18
33	MP7	X	0	54
34	MP7	Z	-11.27	54
35	MP6	X	0	0
36	MP6	Z	-16.07	0
37	MP6	X	0	%100
38	MP6	Z	-16.07	%100
39	MP8	X	0	45
40	MP8	Z	-4.1	45
41	MP8	X	0	20
42	MP8	Z	-6.91	20
43	MP6	X	0	20
44	MP6	Z	-6.07	20
45	MP6	X	0	20
46	MP6	Z	-6.15	20
47	MP6	X	0	40
48	MP6	Z	-7.9	40
49	MP8	X	0	20
50	MP8	Z	-9.3	20
51	S2	X	0	%50
52	S2	Z	-8.63	%50
53	MP12	X	0	0
54	MP12	Z	-16.23	0
55	MP12	X	0	%100
56	MP12	Z	-16.23	%100
57	MP11	X	0	18
58	MP11	Z	-9.92	18
59	MP11	X	0	54
60	MP11	Z	-11.27	54
61	MP10	X	0	0
62	MP10	Z	-16.07	0
63	MP10	X	0	%100
64	MP10	Z	-16.07	%100
65	MP12	X	0	45
66	MP12	Z	-4.1	45
67	MP12	X	0	20
68	MP12	Z	-6.91	20
69	MP10	X	0	20
70	MP10	Z	-6.07	20
71	MP10	X	0	20
72	MP10	Z	-6.15	20
73	MP10	X	0	40
74	MP10	Z	-7.9	40
75	MP12	X	0	20
76	MP12	Z	-9.3	20

Member Point Loads (BLC 18 : Ice Wind Load AZI 30)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-10.19	0
2	MP4	Z	-17.65	0
3	MP4	X	-10.19	%100

Member Point Loads (BLC 18 : Ice Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
4	MP4	Z	-17.65	%100
5	MP3	X	-5.95	18
6	MP3	Z	-10.31	18
7	MP3	X	-6.55	54
8	MP3	Z	-11.35	54
9	MP2	X	-9.98	0
10	MP2	Z	-17.28	0
11	MP2	X	-9.98	%100
12	MP2	Z	-17.28	%100
13	MP4	X	-2.24	45
14	MP4	Z	-3.88	45
15	MP4	X	-3.71	20
16	MP4	Z	-6.43	20
17	MP2	X	-3.41	20
18	MP2	Z	-5.91	20
19	MP2	X	-3.2	20
20	MP2	Z	-5.55	20
21	MP2	X	-5.03	40
22	MP2	Z	-8.71	40
23	MP4	X	-5.14	20
24	MP4	Z	-8.91	20
25	S1	X	-4.31	%50
26	S1	Z	-7.46	%50
27	MP8	X	-10.19	0
28	MP8	Z	-17.65	0
29	MP8	X	-10.19	%100
30	MP8	Z	-17.65	%100
31	MP7	X	-5.95	18
32	MP7	Z	-10.31	18
33	MP7	X	-6.55	54
34	MP7	Z	-11.35	54
35	MP6	X	-9.98	0
36	MP6	Z	-17.28	0
37	MP6	X	-9.98	%100
38	MP6	Z	-17.28	%100
39	MP8	X	-2.24	45
40	MP8	Z	-3.88	45
41	MP8	X	-3.71	20
42	MP8	Z	-6.43	20
43	MP6	X	-3.41	20
44	MP6	Z	-5.91	20
45	MP6	X	-3.2	20
46	MP6	Z	-5.55	20
47	MP6	X	-5.03	40
48	MP6	Z	-8.71	40
49	MP8	X	-5.14	20
50	MP8	Z	-8.91	20
51	S2	X	-4.32	%50
52	S2	Z	-7.48	%50
53	MP12	X	-7.07	0
54	MP12	Z	-12.25	0
55	MP12	X	-7.07	%100
56	MP12	Z	-12.25	%100
57	MP11	X	-4.47	18
58	MP11	Z	-7.74	18
59	MP11	X	-5.18	54
60	MP11	Z	-8.96	54

Member Point Loads (BLC 18 : Ice Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
61	MP10	X	-7.06	0
62	MP10	Z	-12.23	0
63	MP10	X	-7.06	%100
64	MP10	Z	-12.23	%100
65	MP12	X	-1.96	45
66	MP12	Z	-3.39	45
67	MP12	X	-3.33	20
68	MP12	Z	-5.76	20
69	MP10	X	-2.85	20
70	MP10	Z	-4.93	20
71	MP10	X	-3.01	20
72	MP10	Z	-5.21	20
73	MP10	X	-3.41	40
74	MP10	Z	-5.9	40
75	MP12	X	-4.4	20
76	MP12	Z	-7.62	20

Member Point Loads (BLC 19 : Ice Wind Load AZI 60)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-14.05	0
2	MP4	Z	-8.11	0
3	MP4	X	-14.05	%100
4	MP4	Z	-8.11	%100
5	MP3	X	-8.6	18
6	MP3	Z	-4.96	18
7	MP3	X	-9.76	54
8	MP3	Z	-5.64	54
9	MP2	X	-13.92	0
10	MP2	Z	-8.03	0
11	MP2	X	-13.92	%100
12	MP2	Z	-8.03	%100
13	MP4	X	-3.55	45
14	MP4	Z	-2.05	45
15	MP4	X	-5.99	20
16	MP4	Z	-3.46	20
17	MP2	X	-5.26	20
18	MP2	Z	-3.04	20
19	MP2	X	-5.32	20
20	MP2	Z	-3.07	20
21	MP2	X	-6.84	40
22	MP2	Z	-3.95	40
23	MP4	X	-8.05	20
24	MP4	Z	-4.65	20
25	S1	X	-7.46	%50
26	S1	Z	-4.31	%50
27	MP8	X	-19.45	0
28	MP8	Z	-11.23	0
29	MP8	X	-19.45	%100
30	MP8	Z	-11.23	%100
31	MP7	X	-11.17	18
32	MP7	Z	-6.45	18
33	MP7	X	-12.15	54
34	MP7	Z	-7.01	54
35	MP6	X	-18.97	0
36	MP6	Z	-10.95	0
37	MP6	X	-18.97	%100

Member Point Loads (BLC 19 : Ice Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
38	MP6	Z	-10.95	%100
39	MP8	X	-4.04	45
40	MP8	Z	-2.33	45
41	MP8	X	-6.65	20
42	MP8	Z	-3.84	20
43	MP6	X	-6.23	20
44	MP6	Z	-3.6	20
45	MP6	X	-5.66	20
46	MP6	Z	-3.27	20
47	MP6	X	-9.65	40
48	MP6	Z	-5.57	40
49	MP8	X	-9.33	20
50	MP8	Z	-5.39	20
51	S2	X	-7.48	%50
52	S2	Z	-4.32	%50
53	MP12	X	-14.05	0
54	MP12	Z	-8.11	0
55	MP12	X	-14.05	%100
56	MP12	Z	-8.11	%100
57	MP11	X	-8.6	18
58	MP11	Z	-4.96	18
59	MP11	X	-9.76	54
60	MP11	Z	-5.64	54
61	MP10	X	-13.92	0
62	MP10	Z	-8.03	0
63	MP10	X	-13.92	%100
64	MP10	Z	-8.03	%100
65	MP12	X	-3.55	45
66	MP12	Z	-2.05	45
67	MP12	X	-5.99	20
68	MP12	Z	-3.46	20
69	MP10	X	-5.26	20
70	MP10	Z	-3.04	20
71	MP10	X	-5.32	20
72	MP10	Z	-3.07	20
73	MP10	X	-6.84	40
74	MP10	Z	-3.95	40
75	MP12	X	-8.05	20
76	MP12	Z	-4.65	20

Member Point Loads (BLC 20 : Ice Wind Load AZI 90)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-14.15	0
2	MP4	Z	0	0
3	MP4	X	-14.15	%100
4	MP4	Z	0	%100
5	MP3	X	-8.94	18
6	MP3	Z	0	18
7	MP3	X	-10.35	54
8	MP3	Z	0	54
9	MP2	X	-14.12	0
10	MP2	Z	0	0
11	MP2	X	-14.12	%100
12	MP2	Z	0	%100
13	MP4	X	-3.91	45
14	MP4	Z	0	45

Member Point Loads (BLC 20 : Ice Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
15	MP4	X	-6.65	20
16	MP4	Z	0	20
17	MP2	X	-5.7	20
18	MP2	Z	0	20
19	MP2	X	-6.02	20
20	MP2	Z	0	20
21	MP2	X	-6.81	40
22	MP2	Z	0	40
23	MP4	X	-8.8	20
24	MP4	Z	0	20
25	S1	X	-8.62	%50
26	S1	Z	0	%50
27	MP8	X	-20.38	0
28	MP8	Z	0	0
29	MP8	X	-20.38	%100
30	MP8	Z	0	%100
31	MP7	X	-11.9	18
32	MP7	Z	0	18
33	MP7	X	-13.11	54
34	MP7	Z	0	54
35	MP6	X	-19.96	0
36	MP6	Z	0	0
37	MP6	X	-19.96	%100
38	MP6	Z	0	%100
39	MP8	X	-4.47	45
40	MP8	Z	0	45
41	MP8	X	-7.42	20
42	MP8	Z	0	20
43	MP6	X	-6.82	20
44	MP6	Z	0	20
45	MP6	X	-6.41	20
46	MP6	Z	0	20
47	MP6	X	-10.06	40
48	MP6	Z	0	40
49	MP8	X	-10.28	20
50	MP8	Z	0	20
51	S2	X	-8.63	%50
52	S2	Z	0	%50
53	MP12	X	-20.38	0
54	MP12	Z	0	0
55	MP12	X	-20.38	%100
56	MP12	Z	0	%100
57	MP11	X	-11.9	18
58	MP11	Z	0	18
59	MP11	X	-13.11	54
60	MP11	Z	0	54
61	MP10	X	-19.96	0
62	MP10	Z	0	0
63	MP10	X	-19.96	%100
64	MP10	Z	0	%100
65	MP12	X	-4.47	45
66	MP12	Z	0	45
67	MP12	X	-7.42	20
68	MP12	Z	0	20
69	MP10	X	-6.82	20
70	MP10	Z	0	20
71	MP10	X	-6.41	20

Member Point Loads (BLC 20 : Ice Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
72	MP10	Z	0	20
73	MP10	X	-10.06	40
74	MP10	Z	0	40
75	MP12	X	-10.28	20
76	MP12	Z	0	20

Member Point Loads (BLC 21 : Ice Wind Load AZI 120)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-14.05	0
2	MP4	Z	8.11	0
3	MP4	X	-14.05	%100
4	MP4	Z	8.11	%100
5	MP3	X	-8.6	18
6	MP3	Z	4.96	18
7	MP3	X	-9.76	54
8	MP3	Z	5.64	54
9	MP2	X	-13.92	0
10	MP2	Z	8.03	0
11	MP2	X	-13.92	%100
12	MP2	Z	8.03	%100
13	MP4	X	-3.55	45
14	MP4	Z	2.05	45
15	MP4	X	-5.99	20
16	MP4	Z	3.46	20
17	MP2	X	-5.26	20
18	MP2	Z	3.04	20
19	MP2	X	-5.32	20
20	MP2	Z	3.07	20
21	MP2	X	-6.84	40
22	MP2	Z	3.95	40
23	MP4	X	-8.05	20
24	MP4	Z	4.65	20
25	S1	X	-7.46	%50
26	S1	Z	4.31	%50
27	MP8	X	-14.05	0
28	MP8	Z	8.11	0
29	MP8	X	-14.05	%100
30	MP8	Z	8.11	%100
31	MP7	X	-8.6	18
32	MP7	Z	4.96	18
33	MP7	X	-9.76	54
34	MP7	Z	5.64	54
35	MP6	X	-13.92	0
36	MP6	Z	8.03	0
37	MP6	X	-13.92	%100
38	MP6	Z	8.03	%100
39	MP8	X	-3.55	45
40	MP8	Z	2.05	45
41	MP8	X	-5.99	20
42	MP8	Z	3.46	20
43	MP6	X	-5.26	20
44	MP6	Z	3.04	20
45	MP6	X	-5.32	20
46	MP6	Z	3.07	20
47	MP6	X	-6.84	40
48	MP6	Z	3.95	40

Member Point Loads (BLC 21 : Ice Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
49	MP8	X	-8.05	20
50	MP8	Z	4.65	20
51	S2	X	-7.48	%50
52	S2	Z	4.32	%50
53	MP12	X	-19.45	0
54	MP12	Z	11.23	0
55	MP12	X	-19.45	%100
56	MP12	Z	11.23	%100
57	MP11	X	-11.17	18
58	MP11	Z	6.45	18
59	MP11	X	-12.15	54
60	MP11	Z	7.01	54
61	MP10	X	-18.97	0
62	MP10	Z	10.95	0
63	MP10	X	-18.97	%100
64	MP10	Z	10.95	%100
65	MP12	X	-4.04	45
66	MP12	Z	2.33	45
67	MP12	X	-6.65	20
68	MP12	Z	3.84	20
69	MP10	X	-6.23	20
70	MP10	Z	3.6	20
71	MP10	X	-5.66	20
72	MP10	Z	3.27	20
73	MP10	X	-9.65	40
74	MP10	Z	5.57	40
75	MP12	X	-9.33	20
76	MP12	Z	5.39	20

Member Point Loads (BLC 22 : Ice Wind Load AZI 150)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-10.19	0
2	MP4	Z	17.65	0
3	MP4	X	-10.19	%100
4	MP4	Z	17.65	%100
5	MP3	X	-5.95	18
6	MP3	Z	10.31	18
7	MP3	X	-6.55	54
8	MP3	Z	11.35	54
9	MP2	X	-9.98	0
10	MP2	Z	17.28	0
11	MP2	X	-9.98	%100
12	MP2	Z	17.28	%100
13	MP4	X	-2.24	45
14	MP4	Z	3.88	45
15	MP4	X	-3.71	20
16	MP4	Z	6.43	20
17	MP2	X	-3.41	20
18	MP2	Z	5.91	20
19	MP2	X	-3.2	20
20	MP2	Z	5.55	20
21	MP2	X	-5.03	40
22	MP2	Z	8.71	40
23	MP4	X	-5.14	20
24	MP4	Z	8.91	20
25	S1	X	-4.31	%50

Member Point Loads (BLC 22 : Ice Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
26	S1	Z	7.46	%50
27	MP8	X	-7.07	0
28	MP8	Z	12.25	0
29	MP8	X	-7.07	%100
30	MP8	Z	12.25	%100
31	MP7	X	-4.47	18
32	MP7	Z	7.74	18
33	MP7	X	-5.18	54
34	MP7	Z	8.96	54
35	MP6	X	-7.06	0
36	MP6	Z	12.23	0
37	MP6	X	-7.06	%100
38	MP6	Z	12.23	%100
39	MP8	X	-1.96	45
40	MP8	Z	3.39	45
41	MP8	X	-3.33	20
42	MP8	Z	5.76	20
43	MP6	X	-2.85	20
44	MP6	Z	4.93	20
45	MP6	X	-3.01	20
46	MP6	Z	5.21	20
47	MP6	X	-3.41	40
48	MP6	Z	5.9	40
49	MP8	X	-4.4	20
50	MP8	Z	7.62	20
51	S2	X	-4.32	%50
52	S2	Z	7.48	%50
53	MP12	X	-10.19	0
54	MP12	Z	17.65	0
55	MP12	X	-10.19	%100
56	MP12	Z	17.65	%100
57	MP11	X	-5.95	18
58	MP11	Z	10.31	18
59	MP11	X	-6.55	54
60	MP11	Z	11.35	54
61	MP10	X	-9.98	0
62	MP10	Z	17.28	0
63	MP10	X	-9.98	%100
64	MP10	Z	17.28	%100
65	MP12	X	-2.24	45
66	MP12	Z	3.88	45
67	MP12	X	-3.71	20
68	MP12	Z	6.43	20
69	MP10	X	-3.41	20
70	MP10	Z	5.91	20
71	MP10	X	-3.2	20
72	MP10	Z	5.55	20
73	MP10	X	-5.03	40
74	MP10	Z	8.71	40
75	MP12	X	-5.14	20
76	MP12	Z	8.91	20

Member Point Loads (BLC 23 : Ice Wind Load AZI 180)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	0	0
2	MP4	Z	22.46	0

Member Point Loads (BLC 23 : Ice Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
3	MP4	X	0	%100
4	MP4	Z	22.46	%100
5	MP3	X	0	18
6	MP3	Z	12.89	18
7	MP3	X	0	54
8	MP3	Z	14.03	54
9	MP2	X	0	0
10	MP2	Z	21.9	0
11	MP2	X	0	%100
12	MP2	Z	21.9	%100
13	MP4	X	0	45
14	MP4	Z	4.66	45
15	MP4	X	0	20
16	MP4	Z	7.68	20
17	MP2	X	0	20
18	MP2	Z	7.2	20
19	MP2	X	0	20
20	MP2	Z	6.54	20
21	MP2	X	0	40
22	MP2	Z	11.15	40
23	MP4	X	0	20
24	MP4	Z	10.78	20
25	S1	X	0	%50
26	S1	Z	8.62	%50
27	MP8	X	0	0
28	MP8	Z	16.23	0
29	MP8	X	0	%100
30	MP8	Z	16.23	%100
31	MP7	X	0	18
32	MP7	Z	9.92	18
33	MP7	X	0	54
34	MP7	Z	11.27	54
35	MP6	X	0	0
36	MP6	Z	16.07	0
37	MP6	X	0	%100
38	MP6	Z	16.07	%100
39	MP8	X	0	45
40	MP8	Z	4.1	45
41	MP8	X	0	20
42	MP8	Z	6.91	20
43	MP6	X	0	20
44	MP6	Z	6.07	20
45	MP6	X	0	20
46	MP6	Z	6.15	20
47	MP6	X	0	40
48	MP6	Z	7.9	40
49	MP8	X	0	20
50	MP8	Z	9.3	20
51	S2	X	0	%50
52	S2	Z	8.63	%50
53	MP12	X	0	0
54	MP12	Z	16.23	0
55	MP12	X	0	%100
56	MP12	Z	16.23	%100
57	MP11	X	0	18
58	MP11	Z	9.92	18
59	MP11	X	0	54

Member Point Loads (BLC 23 : Ice Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
60	MP11	Z	11.27	54
61	MP10	X	0	0
62	MP10	Z	16.07	0
63	MP10	X	0	%100
64	MP10	Z	16.07	%100
65	MP12	X	0	45
66	MP12	Z	4.1	45
67	MP12	X	0	20
68	MP12	Z	6.91	20
69	MP10	X	0	20
70	MP10	Z	6.07	20
71	MP10	X	0	20
72	MP10	Z	6.15	20
73	MP10	X	0	40
74	MP10	Z	7.9	40
75	MP12	X	0	20
76	MP12	Z	9.3	20

Member Point Loads (BLC 24 : Ice Wind Load AZI 210)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	10.19	0
2	MP4	Z	17.65	0
3	MP4	X	10.19	%100
4	MP4	Z	17.65	%100
5	MP3	X	5.95	18
6	MP3	Z	10.31	18
7	MP3	X	6.55	54
8	MP3	Z	11.35	54
9	MP2	X	9.98	0
10	MP2	Z	17.28	0
11	MP2	X	9.98	%100
12	MP2	Z	17.28	%100
13	MP4	X	2.24	45
14	MP4	Z	3.88	45
15	MP4	X	3.71	20
16	MP4	Z	6.43	20
17	MP2	X	3.41	20
18	MP2	Z	5.91	20
19	MP2	X	3.2	20
20	MP2	Z	5.55	20
21	MP2	X	5.03	40
22	MP2	Z	8.71	40
23	MP4	X	5.14	20
24	MP4	Z	8.91	20
25	S1	X	4.31	%50
26	S1	Z	7.46	%50
27	MP8	X	10.19	0
28	MP8	Z	17.65	0
29	MP8	X	10.19	%100
30	MP8	Z	17.65	%100
31	MP7	X	5.95	18
32	MP7	Z	10.31	18
33	MP7	X	6.55	54
34	MP7	Z	11.35	54
35	MP6	X	9.98	0
36	MP6	Z	17.28	0

Member Point Loads (BLC 24 : Ice Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
37	MP6	X	9.98	%100
38	MP6	Z	17.28	%100
39	MP8	X	2.24	45
40	MP8	Z	3.88	45
41	MP8	X	3.71	20
42	MP8	Z	6.43	20
43	MP6	X	3.41	20
44	MP6	Z	5.91	20
45	MP6	X	3.2	20
46	MP6	Z	5.55	20
47	MP6	X	5.03	40
48	MP6	Z	8.71	40
49	MP8	X	5.14	20
50	MP8	Z	8.91	20
51	S2	X	4.32	%50
52	S2	Z	7.48	%50
53	MP12	X	7.07	0
54	MP12	Z	12.25	0
55	MP12	X	7.07	%100
56	MP12	Z	12.25	%100
57	MP11	X	4.47	18
58	MP11	Z	7.74	18
59	MP11	X	5.18	54
60	MP11	Z	8.96	54
61	MP10	X	7.06	0
62	MP10	Z	12.23	0
63	MP10	X	7.06	%100
64	MP10	Z	12.23	%100
65	MP12	X	1.96	45
66	MP12	Z	3.39	45
67	MP12	X	3.33	20
68	MP12	Z	5.76	20
69	MP10	X	2.85	20
70	MP10	Z	4.93	20
71	MP10	X	3.01	20
72	MP10	Z	5.21	20
73	MP10	X	3.41	40
74	MP10	Z	5.9	40
75	MP12	X	4.4	20
76	MP12	Z	7.62	20

Member Point Loads (BLC 25 : Ice Wind Load AZI 240)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	14.05	0
2	MP4	Z	8.11	0
3	MP4	X	14.05	%100
4	MP4	Z	8.11	%100
5	MP3	X	8.6	18
6	MP3	Z	4.96	18
7	MP3	X	9.76	54
8	MP3	Z	5.64	54
9	MP2	X	13.92	0
10	MP2	Z	8.03	0
11	MP2	X	13.92	%100
12	MP2	Z	8.03	%100
13	MP4	X	3.55	45

Member Point Loads (BLC 25 : Ice Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
14	MP4	Z	2.05	45
15	MP4	X	5.99	20
16	MP4	Z	3.46	20
17	MP2	X	5.26	20
18	MP2	Z	3.04	20
19	MP2	X	5.32	20
20	MP2	Z	3.07	20
21	MP2	X	6.84	40
22	MP2	Z	3.95	40
23	MP4	X	8.05	20
24	MP4	Z	4.65	20
25	S1	X	7.46	%50
26	S1	Z	4.31	%50
27	MP8	X	19.45	0
28	MP8	Z	11.23	0
29	MP8	X	19.45	%100
30	MP8	Z	11.23	%100
31	MP7	X	11.17	18
32	MP7	Z	6.45	18
33	MP7	X	12.15	54
34	MP7	Z	7.01	54
35	MP6	X	18.97	0
36	MP6	Z	10.95	0
37	MP6	X	18.97	%100
38	MP6	Z	10.95	%100
39	MP8	X	4.04	45
40	MP8	Z	2.33	45
41	MP8	X	6.65	20
42	MP8	Z	3.84	20
43	MP6	X	6.23	20
44	MP6	Z	3.6	20
45	MP6	X	5.66	20
46	MP6	Z	3.27	20
47	MP6	X	9.65	40
48	MP6	Z	5.57	40
49	MP8	X	9.33	20
50	MP8	Z	5.39	20
51	S2	X	7.48	%50
52	S2	Z	4.32	%50
53	MP12	X	14.05	0
54	MP12	Z	8.11	0
55	MP12	X	14.05	%100
56	MP12	Z	8.11	%100
57	MP11	X	8.6	18
58	MP11	Z	4.96	18
59	MP11	X	9.76	54
60	MP11	Z	5.64	54
61	MP10	X	13.92	0
62	MP10	Z	8.03	0
63	MP10	X	13.92	%100
64	MP10	Z	8.03	%100
65	MP12	X	3.55	45
66	MP12	Z	2.05	45
67	MP12	X	5.99	20
68	MP12	Z	3.46	20
69	MP10	X	5.26	20
70	MP10	Z	3.04	20

Member Point Loads (BLC 25 : Ice Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
71	MP10	X	5.32	20
72	MP10	Z	3.07	20
73	MP10	X	6.84	40
74	MP10	Z	3.95	40
75	MP12	X	8.05	20
76	MP12	Z	4.65	20

Member Point Loads (BLC 26 : Ice Wind Load AZI 270)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	14.15	0
2	MP4	Z	0	0
3	MP4	X	14.15	%100
4	MP4	Z	0	%100
5	MP3	X	8.94	18
6	MP3	Z	0	18
7	MP3	X	10.35	54
8	MP3	Z	0	54
9	MP2	X	14.12	0
10	MP2	Z	0	0
11	MP2	X	14.12	%100
12	MP2	Z	0	%100
13	MP4	X	3.91	45
14	MP4	Z	0	45
15	MP4	X	6.65	20
16	MP4	Z	0	20
17	MP2	X	5.7	20
18	MP2	Z	0	20
19	MP2	X	6.02	20
20	MP2	Z	0	20
21	MP2	X	6.81	40
22	MP2	Z	0	40
23	MP4	X	8.8	20
24	MP4	Z	0	20
25	S1	X	8.62	%50
26	S1	Z	0	%50
27	MP8	X	20.38	0
28	MP8	Z	0	0
29	MP8	X	20.38	%100
30	MP8	Z	0	%100
31	MP7	X	11.9	18
32	MP7	Z	0	18
33	MP7	X	13.11	54
34	MP7	Z	0	54
35	MP6	X	19.96	0
36	MP6	Z	0	0
37	MP6	X	19.96	%100
38	MP6	Z	0	%100
39	MP8	X	4.47	45
40	MP8	Z	0	45
41	MP8	X	7.42	20
42	MP8	Z	0	20
43	MP6	X	6.82	20
44	MP6	Z	0	20
45	MP6	X	6.41	20
46	MP6	Z	0	20
47	MP6	X	10.06	40

Member Point Loads (BLC 26 : Ice Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
48	MP6	Z	0	40
49	MP8	X	10.28	20
50	MP8	Z	0	20
51	S2	X	8.63	%50
52	S2	Z	0	%50
53	MP12	X	20.38	0
54	MP12	Z	0	0
55	MP12	X	20.38	%100
56	MP12	Z	0	%100
57	MP11	X	11.9	18
58	MP11	Z	0	18
59	MP11	X	13.11	54
60	MP11	Z	0	54
61	MP10	X	19.96	0
62	MP10	Z	0	0
63	MP10	X	19.96	%100
64	MP10	Z	0	%100
65	MP12	X	4.47	45
66	MP12	Z	0	45
67	MP12	X	7.42	20
68	MP12	Z	0	20
69	MP10	X	6.82	20
70	MP10	Z	0	20
71	MP10	X	6.41	20
72	MP10	Z	0	20
73	MP10	X	10.06	40
74	MP10	Z	0	40
75	MP12	X	10.28	20
76	MP12	Z	0	20

Member Point Loads (BLC 27 : Ice Wind Load AZI 300)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	14.05	0
2	MP4	Z	-8.11	0
3	MP4	X	14.05	%100
4	MP4	Z	-8.11	%100
5	MP3	X	8.6	18
6	MP3	Z	-4.96	18
7	MP3	X	9.76	54
8	MP3	Z	-5.64	54
9	MP2	X	13.92	0
10	MP2	Z	-8.03	0
11	MP2	X	13.92	%100
12	MP2	Z	-8.03	%100
13	MP4	X	3.55	45
14	MP4	Z	-2.05	45
15	MP4	X	5.99	20
16	MP4	Z	-3.46	20
17	MP2	X	5.26	20
18	MP2	Z	-3.04	20
19	MP2	X	5.32	20
20	MP2	Z	-3.07	20
21	MP2	X	6.84	40
22	MP2	Z	-3.95	40
23	MP4	X	8.05	20
24	MP4	Z	-4.65	20

Member Point Loads (BLC 27 : Ice Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
25	S1	X	7.46	%50
26	S1	Z	-4.31	%50
27	MP8	X	14.05	0
28	MP8	Z	-8.11	0
29	MP8	X	14.05	%100
30	MP8	Z	-8.11	%100
31	MP7	X	8.6	18
32	MP7	Z	-4.96	18
33	MP7	X	9.76	54
34	MP7	Z	-5.64	54
35	MP6	X	13.92	0
36	MP6	Z	-8.03	0
37	MP6	X	13.92	%100
38	MP6	Z	-8.03	%100
39	MP8	X	3.55	45
40	MP8	Z	-2.05	45
41	MP8	X	5.99	20
42	MP8	Z	-3.46	20
43	MP6	X	5.26	20
44	MP6	Z	-3.04	20
45	MP6	X	5.32	20
46	MP6	Z	-3.07	20
47	MP6	X	6.84	40
48	MP6	Z	-3.95	40
49	MP8	X	8.05	20
50	MP8	Z	-4.65	20
51	S2	X	7.48	%50
52	S2	Z	-4.32	%50
53	MP12	X	19.45	0
54	MP12	Z	-11.23	0
55	MP12	X	19.45	%100
56	MP12	Z	-11.23	%100
57	MP11	X	11.17	18
58	MP11	Z	-6.45	18
59	MP11	X	12.15	54
60	MP11	Z	-7.01	54
61	MP10	X	18.97	0
62	MP10	Z	-10.95	0
63	MP10	X	18.97	%100
64	MP10	Z	-10.95	%100
65	MP12	X	4.04	45
66	MP12	Z	-2.33	45
67	MP12	X	6.65	20
68	MP12	Z	-3.84	20
69	MP10	X	6.23	20
70	MP10	Z	-3.6	20
71	MP10	X	5.66	20
72	MP10	Z	-3.27	20
73	MP10	X	9.65	40
74	MP10	Z	-5.57	40
75	MP12	X	9.33	20
76	MP12	Z	-5.39	20

Member Point Loads (BLC 28 : Ice Wind Load AZI 330)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	10.19	0

Member Point Loads (BLC 28 : Ice Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
2	MP4	Z	-17.65	0
3	MP4	X	10.19	%100
4	MP4	Z	-17.65	%100
5	MP3	X	5.95	18
6	MP3	Z	-10.31	18
7	MP3	X	6.55	54
8	MP3	Z	-11.35	54
9	MP2	X	9.98	0
10	MP2	Z	-17.28	0
11	MP2	X	9.98	%100
12	MP2	Z	-17.28	%100
13	MP4	X	2.24	45
14	MP4	Z	-3.88	45
15	MP4	X	3.71	20
16	MP4	Z	-6.43	20
17	MP2	X	3.41	20
18	MP2	Z	-5.91	20
19	MP2	X	3.2	20
20	MP2	Z	-5.55	20
21	MP2	X	5.03	40
22	MP2	Z	-8.71	40
23	MP4	X	5.14	20
24	MP4	Z	-8.91	20
25	S1	X	4.31	%50
26	S1	Z	-7.46	%50
27	MP8	X	7.07	0
28	MP8	Z	-12.25	0
29	MP8	X	7.07	%100
30	MP8	Z	-12.25	%100
31	MP7	X	4.47	18
32	MP7	Z	-7.74	18
33	MP7	X	5.18	54
34	MP7	Z	-8.96	54
35	MP6	X	7.06	0
36	MP6	Z	-12.23	0
37	MP6	X	7.06	%100
38	MP6	Z	-12.23	%100
39	MP8	X	1.96	45
40	MP8	Z	-3.39	45
41	MP8	X	3.33	20
42	MP8	Z	-5.76	20
43	MP6	X	2.85	20
44	MP6	Z	-4.93	20
45	MP6	X	3.01	20
46	MP6	Z	-5.21	20
47	MP6	X	3.41	40
48	MP6	Z	-5.9	40
49	MP8	X	4.4	20
50	MP8	Z	-7.62	20
51	S2	X	4.32	%50
52	S2	Z	-7.48	%50
53	MP12	X	10.19	0
54	MP12	Z	-17.65	0
55	MP12	X	10.19	%100
56	MP12	Z	-17.65	%100
57	MP11	X	5.95	18
58	MP11	Z	-10.31	18

Member Point Loads (BLC 28 : Ice Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
59	MP11	X	6.55	54
60	MP11	Z	-11.35	54
61	MP10	X	9.98	0
62	MP10	Z	-17.28	0
63	MP10	X	9.98	%100
64	MP10	Z	-17.28	%100
65	MP12	X	2.24	45
66	MP12	Z	-3.88	45
67	MP12	X	3.71	20
68	MP12	Z	-6.43	20
69	MP10	X	3.41	20
70	MP10	Z	-5.91	20
71	MP10	X	3.2	20
72	MP10	Z	-5.55	20
73	MP10	X	5.03	40
74	MP10	Z	-8.71	40
75	MP12	X	5.14	20
76	MP12	Z	-8.91	20

Member Point Loads (BLC 31 : Seismic Load Z)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	Z	-17.637	0
2	MP4	Z	-17.637	%100
3	MP3	Z	-21.502	18
4	MP3	Z	-26.504	54
5	MP2	Z	-21.112	0
6	MP2	Z	-21.112	%100
7	MP4	Z	-9.582	45
8	MP4	Z	-23.061	20
9	MP2	Z	-19.456	20
10	MP2	Z	-23.386	20
11	MP2	Z	-17.182	40
12	MP4	Z	-17.182	20
13	S1	Z	-6.139	%50
14	MP8	Z	-17.637	0
15	MP8	Z	-17.637	%100
16	MP7	Z	-21.502	18
17	MP7	Z	-26.504	54
18	MP6	Z	-21.112	0
19	MP6	Z	-21.112	%100
20	MP8	Z	-9.582	45
21	MP8	Z	-23.061	20
22	MP6	Z	-19.456	20
23	MP6	Z	-23.386	20
24	MP6	Z	-17.182	40
25	MP8	Z	-17.182	20
26	S2	Z	-6.139	%50
27	MP12	Z	-17.637	0
28	MP12	Z	-17.637	%100
29	MP11	Z	-21.502	18
30	MP11	Z	-26.504	54
31	MP10	Z	-21.112	0
32	MP10	Z	-21.112	%100
33	MP12	Z	-9.582	45
34	MP12	Z	-23.061	20
35	MP10	Z	-19.456	20

Member Point Loads (BLC 31 : Seismic Load Z) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
36	MP10	Z	-23.386	20
37	MP10	Z	-17.182	40
38	MP12	Z	-17.182	20

Member Point Loads (BLC 32 : Seismic Load X)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP4	X	-17.637	0
2	MP4	X	-17.637	%100
3	MP3	X	-21.502	18
4	MP3	X	-26.504	54
5	MP2	X	-21.112	0
6	MP2	X	-21.112	%100
7	MP4	X	-9.582	45
8	MP4	X	-23.061	20
9	MP2	X	-19.456	20
10	MP2	X	-23.386	20
11	MP2	X	-17.182	40
12	MP4	X	-17.182	20
13	S1	X	-6.139	%50
14	MP8	X	-17.637	0
15	MP8	X	-17.637	%100
16	MP7	X	-21.502	18
17	MP7	X	-26.504	54
18	MP6	X	-21.112	0
19	MP6	X	-21.112	%100
20	MP8	X	-9.582	45
21	MP8	X	-23.061	20
22	MP6	X	-19.456	20
23	MP6	X	-23.386	20
24	MP6	X	-17.182	40
25	MP8	X	-17.182	20
26	S2	X	-6.139	%50
27	MP12	X	-17.637	0
28	MP12	X	-17.637	%100
29	MP11	X	-21.502	18
30	MP11	X	-26.504	54
31	MP10	X	-21.112	0
32	MP10	X	-21.112	%100
33	MP12	X	-9.582	45
34	MP12	X	-23.061	20
35	MP10	X	-19.456	20
36	MP10	X	-23.386	20
37	MP10	X	-17.182	40
38	MP12	X	-17.182	20

Member Distributed Loads (BLC 14 : Distr. Wind Load Z)

	Member Label	Direction	Start Magnitude...	End Magnitude[...	Start Location[i...	End Location[in...
1	H1	SZ	-85.765	-85.765	0	%100
2	H3	SZ	-85.765	-85.765	0	%100
3	H2	SZ	-85.765	-85.765	0	%100
4	S4	SZ	-85.765	-85.765	0	%100
5	S5	SZ	-85.765	-85.765	0	%100
6	S1	SZ	-85.765	-85.765	0	%100
7	S6	SZ	-85.765	-85.765	0	%100
8	S2	SZ	-85.765	-85.765	0	%100

Member Distributed Loads (BLC 14 : Distr. Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
9	S3	SZ	-85.765	-85.765	0	%100
10	M10	SZ	-85.765	-85.765	0	%100
11	M11	SZ	-85.765	-85.765	0	%100
12	M12	SZ	-85.765	-85.765	0	%100
13	M13	SZ	-85.765	-85.765	0	%100
14	M14	SZ	-85.765	-85.765	0	%100
15	M15	SZ	-85.765	-85.765	0	%100
16	HR1	SZ	-51.459	-51.459	0	%100
17	HR3	SZ	-51.459	-51.459	0	%100
18	HR2	SZ	-51.459	-51.459	0	%100
19	M19	SZ	-85.765	-85.765	0	%100
20	MP2	SZ	-51.459	-51.459	0	%100
21	MP4	SZ	-51.459	-51.459	0	%100
22	M22	SZ	-85.765	-85.765	0	%100
23	M23	SZ	-85.765	-85.765	0	%100
24	M24	SZ	-85.765	-85.765	0	%100
25	M27	SZ	-85.765	-85.765	0	%100
26	M28	SZ	-85.765	-85.765	0	%100
27	M29	SZ	-85.765	-85.765	0	%100
28	M32	SZ	-85.765	-85.765	0	%100
29	M33	SZ	-85.765	-85.765	0	%100
30	M34	SZ	-85.765	-85.765	0	%100
31	M35	SZ	-85.765	-85.765	0	%100
32	M36	SZ	-85.765	-85.765	0	%100
33	M37	SZ	-85.765	-85.765	0	%100
34	M38	SZ	-85.765	-85.765	0	%100
35	M39	SZ	-85.765	-85.765	0	%100
36	MP3	SZ	-51.459	-51.459	0	%100
37	M43	SZ	0	0	0	%100
38	M44	SZ	0	0	0	%100
39	M45	SZ	0	0	0	%100
40	R1	SZ	-51.459	-51.459	0	%100
41	M47	SZ	0	0	0	%100
42	M48	SZ	0	0	0	%100
43	M50	SZ	0	0	0	%100
44	M51	SZ	0	0	0	%100
45	M52	SZ	0	0	0	%100
46	M53	SZ	0	0	0	%100
47	M54	SZ	0	0	0	%100
48	M55	SZ	0	0	0	%100
49	M56	SZ	0	0	0	%100
50	M57	SZ	0	0	0	%100
51	M64	SZ	0	0	0	%100
52	M65	SZ	0	0	0	%100
53	M66	SZ	0	0	0	%100
54	M67	SZ	0	0	0	%100
55	M58	SZ	0	0	0	%100
56	M59	SZ	0	0	0	%100
57	M60	SZ	0	0	0	%100
58	M61	SZ	0	0	0	%100
59	M62	SZ	0	0	0	%100
60	M63	SZ	0	0	0	%100
61	M68	SZ	-51.459	-51.459	0	%100
62	M69	SZ	-51.459	-51.459	0	%100
63	M70	SZ	-51.459	-51.459	0	%100
64	M71	SZ	0	0	0	%100
65	M72	SZ	0	0	0	%100

Member Distributed Loads (BLC 14 : Distr. Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
66	M73	SZ	0	0	0	%100
67	M74	SZ	0	0	0	%100
68	M75	SZ	-85.765	-85.765	0	%100
69	M76	SZ	-85.765	-85.765	0	%100
70	M77	SZ	0	0	0	%100
71	M78	SZ	0	0	0	%100
72	M79	SZ	0	0	0	%100
73	M80	SZ	-85.765	-85.765	0	%100
74	M81	SZ	0	0	0	%100
75	M82	SZ	-85.765	-85.765	0	%100
76	M83	SZ	0	0	0	%100
77	M84	SZ	0	0	0	%100
78	M85	SZ	0	0	0	%100
79	M86	SZ	-85.765	-85.765	0	%100
80	M87	SZ	0	0	0	%100
81	M88	SZ	-85.765	-85.765	0	%100
82	MP1	SZ	-51.459	-51.459	0	%100
83	M101	SZ	0	0	0	%100
84	MP12	SZ	-51.459	-51.459	0	%100
85	M104	SZ	0	0	0	%100
86	M105	SZ	0	0	0	%100
87	MP10	SZ	-51.459	-51.459	0	%100
88	MP11	SZ	-51.459	-51.459	0	%100
89	M109	SZ	0	0	0	%100
90	M112	SZ	0	0	0	%100
91	M113	SZ	0	0	0	%100
92	M114	SZ	0	0	0	%100
93	M115	SZ	0	0	0	%100
94	R9	SZ	-51.459	-51.459	0	%100
95	M127	SZ	0	0	0	%100
96	MP8	SZ	-51.459	-51.459	0	%100
97	M129	SZ	0	0	0	%100
98	M130	SZ	0	0	0	%100
99	MP6	SZ	-51.459	-51.459	0	%100
100	MP7	SZ	-51.459	-51.459	0	%100
101	M134	SZ	0	0	0	%100
102	M137	SZ	0	0	0	%100
103	M138	SZ	0	0	0	%100
104	M139	SZ	0	0	0	%100
105	M140	SZ	0	0	0	%100
106	R5	SZ	-51.459	-51.459	0	%100
107	M168	SZ	0	0	0	%100
108	M170	SZ	0	0	0	%100
109	M173	SZ	0	0	0	%100
110	M174	SZ	0	0	0	%100
111	M175	SZ	0	0	0	%100
112	M176	SZ	0	0	0	%100
113	M177	SZ	-51.459	-51.459	0	%100
114	M178	SZ	0	0	0	%100
115	M179	SZ	-51.459	-51.459	0	%100
116	M182	SZ	0	0	0	%100
117	M183	SZ	-51.459	-51.459	0	%100
118	M185	SZ	-51.459	-51.459	0	%100
119	M126	SZ	0	0	0	%100
120	MP9	SZ	-51.459	-51.459	0	%100
121	M132	SZ	0	0	0	%100
122	M133	SZ	0	0	0	%100

Member Distributed Loads (BLC 14 : Distr. Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
123	M141	SZ	0	0	0	%100
124	M142	SZ	0	0	0	%100
125	M143	SZ	0	0	0	%100
126	M144	SZ	-51.459	-51.459	0	%100
127	M145	SZ	0	0	0	%100
128	M146	SZ	-51.459	-51.459	0	%100
129	M149	SZ	0	0	0	%100
130	M151	SZ	-51.459	-51.459	0	%100
131	M153	SZ	-51.459	-51.459	0	%100
132	M154	SZ	0	0	0	%100
133	MP5	SZ	-51.459	-51.459	0	%100
134	M157	SZ	0	0	0	%100
135	M158	SZ	0	0	0	%100
136	M161	SZ	0	0	0	%100
137	M162	SZ	0	0	0	%100
138	M163	SZ	0	0	0	%100
139	M164	SZ	-51.459	-51.459	0	%100
140	M165	SZ	0	0	0	%100
141	M166	SZ	-51.459	-51.459	0	%100
142	M187	SZ	0	0	0	%100
143	M188	SZ	-51.459	-51.459	0	%100
144	M190	SZ	-51.459	-51.459	0	%100
145	M145A	SZ	0	0	0	%100
146	M146A	SZ	0	0	0	%100
147	M147	SZ	0	0	0	%100
148	M148	SZ	0	0	0	%100
149	M149A	SZ	-51.459	-51.459	0	%100
150	M150	SZ	-51.459	-51.459	0	%100
151	M151A	SZ	0	0	0	%100
152	M152	SZ	0	0	0	%100
153	M153A	SZ	0	0	0	%100
154	M154A	SZ	0	0	0	%100
155	M155	SZ	-51.459	-51.459	0	%100
156	M156	SZ	-51.459	-51.459	0	%100
157	M157A	SZ	0	0	0	%100
158	M158A	SZ	0	0	0	%100
159	M159	SZ	0	0	0	%100
160	M160	SZ	0	0	0	%100
161	M161A	SZ	-51.459	-51.459	0	%100
162	M162A	SZ	-51.459	-51.459	0	%100

Member Distributed Loads (BLC 15 : Distr. Wind Load X)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
1	H1	SX	-85.765	-85.765	0	%100
2	H3	SX	-85.765	-85.765	0	%100
3	H2	SX	-85.765	-85.765	0	%100
4	S4	SX	-85.765	-85.765	0	%100
5	S5	SX	-85.765	-85.765	0	%100
6	S1	SX	-85.765	-85.765	0	%100
7	S6	SX	-85.765	-85.765	0	%100
8	S2	SX	-85.765	-85.765	0	%100
9	S3	SX	-85.765	-85.765	0	%100
10	M10	SX	-85.765	-85.765	0	%100
11	M11	SX	-85.765	-85.765	0	%100
12	M12	SX	-85.765	-85.765	0	%100
13	M13	SX	-85.765	-85.765	0	%100

Member Distributed Loads (BLC 15 : Distr. Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
14	M14	SX	-85.765	-85.765	0	%100
15	M15	SX	-85.765	-85.765	0	%100
16	HR1	SX	-51.459	-51.459	0	%100
17	HR3	SX	-51.459	-51.459	0	%100
18	HR2	SX	-51.459	-51.459	0	%100
19	M19	SX	-85.765	-85.765	0	%100
20	MP2	SX	-51.459	-51.459	0	%100
21	MP4	SX	-51.459	-51.459	0	%100
22	M22	SX	-85.765	-85.765	0	%100
23	M23	SX	-85.765	-85.765	0	%100
24	M24	SX	-85.765	-85.765	0	%100
25	M27	SX	-85.765	-85.765	0	%100
26	M28	SX	-85.765	-85.765	0	%100
27	M29	SX	-85.765	-85.765	0	%100
28	M32	SX	-85.765	-85.765	0	%100
29	M33	SX	-85.765	-85.765	0	%100
30	M34	SX	-85.765	-85.765	0	%100
31	M35	SX	-85.765	-85.765	0	%100
32	M36	SX	-85.765	-85.765	0	%100
33	M37	SX	-85.765	-85.765	0	%100
34	M38	SX	-85.765	-85.765	0	%100
35	M39	SX	-85.765	-85.765	0	%100
36	MP3	SX	-51.459	-51.459	0	%100
37	M43	SX	0	0	0	%100
38	M44	SX	0	0	0	%100
39	M45	SX	0	0	0	%100
40	R1	SX	-51.459	-51.459	0	%100
41	M47	SX	0	0	0	%100
42	M48	SX	0	0	0	%100
43	M50	SX	0	0	0	%100
44	M51	SX	0	0	0	%100
45	M52	SX	0	0	0	%100
46	M53	SX	0	0	0	%100
47	M54	SX	0	0	0	%100
48	M55	SX	0	0	0	%100
49	M56	SX	0	0	0	%100
50	M57	SX	0	0	0	%100
51	M64	SX	0	0	0	%100
52	M65	SX	0	0	0	%100
53	M66	SX	0	0	0	%100
54	M67	SX	0	0	0	%100
55	M58	SX	0	0	0	%100
56	M59	SX	0	0	0	%100
57	M60	SX	0	0	0	%100
58	M61	SX	0	0	0	%100
59	M62	SX	0	0	0	%100
60	M63	SX	0	0	0	%100
61	M68	SX	-51.459	-51.459	0	%100
62	M69	SX	-51.459	-51.459	0	%100
63	M70	SX	-51.459	-51.459	0	%100
64	M71	SX	0	0	0	%100
65	M72	SX	0	0	0	%100
66	M73	SX	0	0	0	%100
67	M74	SX	0	0	0	%100
68	M75	SX	-85.765	-85.765	0	%100
69	M76	SX	-85.765	-85.765	0	%100
70	M77	SX	0	0	0	%100

Member Distributed Loads (BLC 15 : Distr. Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
71	M78	SX	0	0	0	%100
72	M79	SX	0	0	0	%100
73	M80	SX	-85.765	-85.765	0	%100
74	M81	SX	0	0	0	%100
75	M82	SX	-85.765	-85.765	0	%100
76	M83	SX	0	0	0	%100
77	M84	SX	0	0	0	%100
78	M85	SX	0	0	0	%100
79	M86	SX	-85.765	-85.765	0	%100
80	M87	SX	0	0	0	%100
81	M88	SX	-85.765	-85.765	0	%100
82	MP1	SX	-51.459	-51.459	0	%100
83	M101	SX	0	0	0	%100
84	MP12	SX	-51.459	-51.459	0	%100
85	M104	SX	0	0	0	%100
86	M105	SX	0	0	0	%100
87	MP10	SX	-51.459	-51.459	0	%100
88	MP11	SX	-51.459	-51.459	0	%100
89	M109	SX	0	0	0	%100
90	M112	SX	0	0	0	%100
91	M113	SX	0	0	0	%100
92	M114	SX	0	0	0	%100
93	M115	SX	0	0	0	%100
94	R9	SX	-51.459	-51.459	0	%100
95	M127	SX	0	0	0	%100
96	MP8	SX	-51.459	-51.459	0	%100
97	M129	SX	0	0	0	%100
98	M130	SX	0	0	0	%100
99	MP6	SX	-51.459	-51.459	0	%100
100	MP7	SX	-51.459	-51.459	0	%100
101	M134	SX	0	0	0	%100
102	M137	SX	0	0	0	%100
103	M138	SX	0	0	0	%100
104	M139	SX	0	0	0	%100
105	M140	SX	0	0	0	%100
106	R5	SX	-51.459	-51.459	0	%100
107	M168	SX	0	0	0	%100
108	M170	SX	0	0	0	%100
109	M173	SX	0	0	0	%100
110	M174	SX	0	0	0	%100
111	M175	SX	0	0	0	%100
112	M176	SX	0	0	0	%100
113	M177	SX	-51.459	-51.459	0	%100
114	M178	SX	0	0	0	%100
115	M179	SX	-51.459	-51.459	0	%100
116	M182	SX	0	0	0	%100
117	M183	SX	-51.459	-51.459	0	%100
118	M185	SX	-51.459	-51.459	0	%100
119	M126	SX	0	0	0	%100
120	MP9	SX	-51.459	-51.459	0	%100
121	M132	SX	0	0	0	%100
122	M133	SX	0	0	0	%100
123	M141	SX	0	0	0	%100
124	M142	SX	0	0	0	%100
125	M143	SX	0	0	0	%100
126	M144	SX	-51.459	-51.459	0	%100
127	M145	SX	0	0	0	%100

Member Distributed Loads (BLC 15 : Distr. Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
128	M146	SX	-51.459	-51.459	0	%100
129	M149	SX	0	0	0	%100
130	M151	SX	-51.459	-51.459	0	%100
131	M153	SX	-51.459	-51.459	0	%100
132	M154	SX	0	0	0	%100
133	MP5	SX	-51.459	-51.459	0	%100
134	M157	SX	0	0	0	%100
135	M158	SX	0	0	0	%100
136	M161	SX	0	0	0	%100
137	M162	SX	0	0	0	%100
138	M163	SX	0	0	0	%100
139	M164	SX	-51.459	-51.459	0	%100
140	M165	SX	0	0	0	%100
141	M166	SX	-51.459	-51.459	0	%100
142	M187	SX	0	0	0	%100
143	M188	SX	-51.459	-51.459	0	%100
144	M190	SX	-51.459	-51.459	0	%100
145	M145A	SX	0	0	0	%100
146	M146A	SX	0	0	0	%100
147	M147	SX	0	0	0	%100
148	M148	SX	0	0	0	%100
149	M149A	SX	-51.459	-51.459	0	%100
150	M150	SX	-51.459	-51.459	0	%100
151	M151A	SX	0	0	0	%100
152	M152	SX	0	0	0	%100
153	M153A	SX	0	0	0	%100
154	M154A	SX	0	0	0	%100
155	M155	SX	-51.459	-51.459	0	%100
156	M156	SX	-51.459	-51.459	0	%100
157	M157A	SX	0	0	0	%100
158	M158A	SX	0	0	0	%100
159	M159	SX	0	0	0	%100
160	M160	SX	0	0	0	%100
161	M161A	SX	-51.459	-51.459	0	%100
162	M162A	SX	-51.459	-51.459	0	%100

Member Distributed Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
1	H1	Y	-7.28	-7.28	0	%100
2	H3	Y	-7.28	-7.28	0	%100
3	H2	Y	-7.28	-7.28	0	%100
4	S4	Y	-7.592	-7.592	0	%100
5	S5	Y	-7.592	-7.592	0	%100
6	S1	Y	-7.592	-7.592	0	%100
7	S6	Y	-7.592	-7.592	0	%100
8	S2	Y	-7.592	-7.592	0	%100
9	S3	Y	-7.592	-7.592	0	%100
10	M10	Y	-5.358	-5.358	0	%100
11	M11	Y	-5.358	-5.358	0	%100
12	M12	Y	-5.358	-5.358	0	%100
13	M13	Y	-5.358	-5.358	0	%100
14	M14	Y	-5.358	-5.358	0	%100
15	M15	Y	-5.358	-5.358	0	%100
16	HR1	Y	-4.741	-4.741	0	%100
17	HR3	Y	-4.741	-4.741	0	%100
18	HR2	Y	-4.741	-4.741	0	%100

Member Distributed Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
19	M19	Y	-6.961	-6.961	0	%100
20	MP2	Y	-4.741	-4.741	0	%100
21	MP4	Y	-4.741	-4.741	0	%100
22	M22	Y	-5.358	-5.358	0	%100
23	M23	Y	-5.358	-5.358	0	%100
24	M24	Y	-5.358	-5.358	0	%100
25	M27	Y	-5.358	-5.358	0	%100
26	M28	Y	-5.358	-5.358	0	%100
27	M29	Y	-5.358	-5.358	0	%100
28	M32	Y	-6.961	-6.961	0	%100
29	M33	Y	-6.961	-6.961	0	%100
30	M34	Y	-5.358	-5.358	0	%100
31	M35	Y	-5.358	-5.358	0	%100
32	M36	Y	-5.358	-5.358	0	%100
33	M37	Y	-5.358	-5.358	0	%100
34	M38	Y	-5.358	-5.358	0	%100
35	M39	Y	-5.358	-5.358	0	%100
36	MP3	Y	-4.741	-4.741	0	%100
37	M43	Y	-1.513	-1.513	0	%100
38	M44	Y	-1.513	-1.513	0	%100
39	M45	Y	-1.513	-1.513	0	%100
40	R1	Y	-4.741	-4.741	0	%100
41	M47	Y	-1.513	-1.513	0	%100
42	M48	Y	-1.513	-1.513	0	%100
43	M50	Y	-1.513	-1.513	0	%100
44	M51	Y	-1.513	-1.513	0	%100
45	M52	Y	-1.513	-1.513	0	%100
46	M53	Y	-1.513	-1.513	0	%100
47	M54	Y	-1.513	-1.513	0	%100
48	M55	Y	-1.513	-1.513	0	%100
49	M56	Y	-1.513	-1.513	0	%100
50	M57	Y	-1.513	-1.513	0	%100
51	M64	Y	-1.513	-1.513	0	%100
52	M65	Y	-1.513	-1.513	0	%100
53	M66	Y	-1.513	-1.513	0	%100
54	M67	Y	-1.513	-1.513	0	%100
55	M58	Y	-1.513	-1.513	0	%100
56	M59	Y	-1.513	-1.513	0	%100
57	M60	Y	-1.513	-1.513	0	%100
58	M61	Y	-1.513	-1.513	0	%100
59	M62	Y	-1.513	-1.513	0	%100
60	M63	Y	-1.513	-1.513	0	%100
61	M68	Y	-4.741	-4.741	0	%100
62	M69	Y	-4.741	-4.741	0	%100
63	M70	Y	-4.741	-4.741	0	%100
64	M71	Y	-1.513	-1.513	0	%100
65	M72	Y	-1.513	-1.513	0	%100
66	M73	Y	-1.513	-1.513	0	%100
67	M74	Y	-1.513	-1.513	0	%100
68	M75	Y	-6.319	-6.319	0	%100
69	M76	Y	-6.319	-6.319	0	%100
70	M77	Y	-1.513	-1.513	0	%100
71	M78	Y	-1.513	-1.513	0	%100
72	M79	Y	-1.513	-1.513	0	%100
73	M80	Y	-6.319	-6.319	0	%100
74	M81	Y	-1.513	-1.513	0	%100
75	M82	Y	-6.319	-6.319	0	%100

Member Distributed Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
76	M83	Y	-1.513	-1.513	0	%100
77	M84	Y	-1.513	-1.513	0	%100
78	M85	Y	-1.513	-1.513	0	%100
79	M86	Y	-6.319	-6.319	0	%100
80	M87	Y	-1.513	-1.513	0	%100
81	M88	Y	-6.319	-6.319	0	%100
82	MP1	Y	-4.741	-4.741	0	%100
83	M101	Y	-1.513	-1.513	0	%100
84	MP12	Y	-4.741	-4.741	0	%100
85	M104	Y	-1.513	-1.513	0	%100
86	M105	Y	-1.513	-1.513	0	%100
87	MP10	Y	-4.741	-4.741	0	%100
88	MP11	Y	-4.741	-4.741	0	%100
89	M109	Y	-1.513	-1.513	0	%100
90	M112	Y	-1.513	-1.513	0	%100
91	M113	Y	-1.513	-1.513	0	%100
92	M114	Y	-1.513	-1.513	0	%100
93	M115	Y	-1.513	-1.513	0	%100
94	R9	Y	-4.741	-4.741	0	%100
95	M127	Y	-1.513	-1.513	0	%100
96	MP8	Y	-4.741	-4.741	0	%100
97	M129	Y	-1.513	-1.513	0	%100
98	M130	Y	-1.513	-1.513	0	%100
99	MP6	Y	-4.741	-4.741	0	%100
100	MP7	Y	-4.741	-4.741	0	%100
101	M134	Y	-1.513	-1.513	0	%100
102	M137	Y	-1.513	-1.513	0	%100
103	M138	Y	-1.513	-1.513	0	%100
104	M139	Y	-1.513	-1.513	0	%100
105	M140	Y	-1.513	-1.513	0	%100
106	R5	Y	-4.741	-4.741	0	%100
107	M168	Y	-1.513	-1.513	0	%100
108	M170	Y	-1.513	-1.513	0	%100
109	M173	Y	-1.513	-1.513	0	%100
110	M174	Y	-1.513	-1.513	0	%100
111	M175	Y	-1.513	-1.513	0	%100
112	M176	Y	-1.513	-1.513	0	%100
113	M177	Y	-2.192	-2.192	0	%100
114	M178	Y	-1.513	-1.513	0	%100
115	M179	Y	-2.192	-2.192	0	%100
116	M182	Y	-1.513	-1.513	0	%100
117	M183	Y	-2.192	-2.192	0	%100
118	M185	Y	-2.192	-2.192	0	%100
119	M126	Y	-1.513	-1.513	0	%100
120	MP9	Y	-4.741	-4.741	0	%100
121	M132	Y	-1.513	-1.513	0	%100
122	M133	Y	-1.513	-1.513	0	%100
123	M141	Y	-1.513	-1.513	0	%100
124	M142	Y	-1.513	-1.513	0	%100
125	M143	Y	-1.513	-1.513	0	%100
126	M144	Y	-2.192	-2.192	0	%100
127	M145	Y	-1.513	-1.513	0	%100
128	M146	Y	-2.192	-2.192	0	%100
129	M149	Y	-1.513	-1.513	0	%100
130	M151	Y	-2.192	-2.192	0	%100
131	M153	Y	-2.192	-2.192	0	%100
132	M154	Y	-1.513	-1.513	0	%100

Member Distributed Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
133	MP5	Y	-4.741	-4.741	0	%100
134	M157	Y	-1.513	-1.513	0	%100
135	M158	Y	-1.513	-1.513	0	%100
136	M161	Y	-1.513	-1.513	0	%100
137	M162	Y	-1.513	-1.513	0	%100
138	M163	Y	-1.513	-1.513	0	%100
139	M164	Y	-2.192	-2.192	0	%100
140	M165	Y	-1.513	-1.513	0	%100
141	M166	Y	-2.192	-2.192	0	%100
142	M187	Y	-1.513	-1.513	0	%100
143	M188	Y	-2.192	-2.192	0	%100
144	M190	Y	-2.192	-2.192	0	%100
145	M145A	Y	-1.513	-1.513	0	%100
146	M146A	Y	-1.513	-1.513	0	%100
147	M147	Y	-1.513	-1.513	0	%100
148	M148	Y	-1.513	-1.513	0	%100
149	M149A	Y	-2.192	-2.192	0	%100
150	M150	Y	-2.192	-2.192	0	%100
151	M151A	Y	-1.513	-1.513	0	%100
152	M152	Y	-1.513	-1.513	0	%100
153	M153A	Y	-1.513	-1.513	0	%100
154	M154A	Y	-1.513	-1.513	0	%100
155	M155	Y	-2.192	-2.192	0	%100
156	M156	Y	-2.192	-2.192	0	%100
157	M157A	Y	-1.513	-1.513	0	%100
158	M158A	Y	-1.513	-1.513	0	%100
159	M159	Y	-1.513	-1.513	0	%100
160	M160	Y	-1.513	-1.513	0	%100
161	M161A	Y	-2.192	-2.192	0	%100
162	M162A	Y	-2.192	-2.192	0	%100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
1	H1	SZ	-13.85	-13.85	0	%100
2	H3	SZ	-13.85	-13.85	0	%100
3	H2	SZ	-13.85	-13.85	0	%100
4	S4	SZ	-13.605	-13.605	0	%100
5	S5	SZ	-13.605	-13.605	0	%100
6	S1	SZ	-13.605	-13.605	0	%100
7	S6	SZ	-13.605	-13.605	0	%100
8	S2	SZ	-13.605	-13.605	0	%100
9	S3	SZ	-13.605	-13.605	0	%100
10	M10	SZ	-16.232	-16.232	0	%100
11	M11	SZ	-16.232	-16.232	0	%100
12	M12	SZ	-16.232	-16.232	0	%100
13	M13	SZ	-16.232	-16.232	0	%100
14	M14	SZ	-16.232	-16.232	0	%100
15	M15	SZ	-16.232	-16.232	0	%100
16	HR1	SZ	-17.597	-17.597	0	%100
17	HR3	SZ	-17.597	-17.597	0	%100
18	HR2	SZ	-17.597	-17.597	0	%100
19	M19	SZ	-14.129	-14.129	0	%100
20	MP2	SZ	-17.597	-17.597	0	%100
21	MP4	SZ	-17.597	-17.597	0	%100
22	M22	SZ	-16.232	-16.232	0	%100
23	M23	SZ	-16.232	-16.232	0	%100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
24	M24	SZ	-16.232	-16.232	0	%100
25	M27	SZ	-16.232	-16.232	0	%100
26	M28	SZ	-16.232	-16.232	0	%100
27	M29	SZ	-16.232	-16.232	0	%100
28	M32	SZ	-14.129	-14.129	0	%100
29	M33	SZ	-14.129	-14.129	0	%100
30	M34	SZ	-16.232	-16.232	0	%100
31	M35	SZ	-16.232	-16.232	0	%100
32	M36	SZ	-16.232	-16.232	0	%100
33	M37	SZ	-16.232	-16.232	0	%100
34	M38	SZ	-16.232	-16.232	0	%100
35	M39	SZ	-16.232	-16.232	0	%100
36	MP3	SZ	-17.597	-17.597	0	%100
37	M43	SZ	0	0	0	%100
38	M44	SZ	0	0	0	%100
39	M45	SZ	0	0	0	%100
40	R1	SZ	-17.597	-17.597	0	%100
41	M47	SZ	0	0	0	%100
42	M48	SZ	0	0	0	%100
43	M50	SZ	0	0	0	%100
44	M51	SZ	0	0	0	%100
45	M52	SZ	0	0	0	%100
46	M53	SZ	0	0	0	%100
47	M54	SZ	0	0	0	%100
48	M55	SZ	0	0	0	%100
49	M56	SZ	0	0	0	%100
50	M57	SZ	0	0	0	%100
51	M64	SZ	0	0	0	%100
52	M65	SZ	0	0	0	%100
53	M66	SZ	0	0	0	%100
54	M67	SZ	0	0	0	%100
55	M58	SZ	0	0	0	%100
56	M59	SZ	0	0	0	%100
57	M60	SZ	0	0	0	%100
58	M61	SZ	0	0	0	%100
59	M62	SZ	0	0	0	%100
60	M63	SZ	0	0	0	%100
61	M68	SZ	-17.597	-17.597	0	%100
62	M69	SZ	-17.597	-17.597	0	%100
63	M70	SZ	-17.597	-17.597	0	%100
64	M71	SZ	0	0	0	%100
65	M72	SZ	0	0	0	%100
66	M73	SZ	0	0	0	%100
67	M74	SZ	0	0	0	%100
68	M75	SZ	-14.803	-14.803	0	%100
69	M76	SZ	-14.803	-14.803	0	%100
70	M77	SZ	0	0	0	%100
71	M78	SZ	0	0	0	%100
72	M79	SZ	0	0	0	%100
73	M80	SZ	-14.803	-14.803	0	%100
74	M81	SZ	0	0	0	%100
75	M82	SZ	-14.803	-14.803	0	%100
76	M83	SZ	0	0	0	%100
77	M84	SZ	0	0	0	%100
78	M85	SZ	0	0	0	%100
79	M86	SZ	-14.803	-14.803	0	%100
80	M87	SZ	0	0	0	%100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
81	M88	SZ	-14.803	-14.803	0	%100
82	MP1	SZ	-17.597	-17.597	0	%100
83	M101	SZ	0	0	0	%100
84	MP12	SZ	-17.597	-17.597	0	%100
85	M104	SZ	0	0	0	%100
86	M105	SZ	0	0	0	%100
87	MP10	SZ	-17.597	-17.597	0	%100
88	MP11	SZ	-17.597	-17.597	0	%100
89	M109	SZ	0	0	0	%100
90	M112	SZ	0	0	0	%100
91	M113	SZ	0	0	0	%100
92	M114	SZ	0	0	0	%100
93	M115	SZ	0	0	0	%100
94	R9	SZ	-17.597	-17.597	0	%100
95	M127	SZ	0	0	0	%100
96	MP8	SZ	-17.597	-17.597	0	%100
97	M129	SZ	0	0	0	%100
98	M130	SZ	0	0	0	%100
99	MP6	SZ	-17.597	-17.597	0	%100
100	MP7	SZ	-17.597	-17.597	0	%100
101	M134	SZ	0	0	0	%100
102	M137	SZ	0	0	0	%100
103	M138	SZ	0	0	0	%100
104	M139	SZ	0	0	0	%100
105	M140	SZ	0	0	0	%100
106	R5	SZ	-17.597	-17.597	0	%100
107	M168	SZ	0	0	0	%100
108	M170	SZ	0	0	0	%100
109	M173	SZ	0	0	0	%100
110	M174	SZ	0	0	0	%100
111	M175	SZ	0	0	0	%100
112	M176	SZ	0	0	0	%100
113	M177	SZ	-49.518	-49.518	0	%100
114	M178	SZ	0	0	0	%100
115	M179	SZ	-49.518	-49.518	0	%100
116	M182	SZ	0	0	0	%100
117	M183	SZ	-49.518	-49.518	0	%100
118	M185	SZ	-49.518	-49.518	0	%100
119	M126	SZ	0	0	0	%100
120	MP9	SZ	-17.597	-17.597	0	%100
121	M132	SZ	0	0	0	%100
122	M133	SZ	0	0	0	%100
123	M141	SZ	0	0	0	%100
124	M142	SZ	0	0	0	%100
125	M143	SZ	0	0	0	%100
126	M144	SZ	-49.518	-49.518	0	%100
127	M145	SZ	0	0	0	%100
128	M146	SZ	-49.518	-49.518	0	%100
129	M149	SZ	0	0	0	%100
130	M151	SZ	-49.518	-49.518	0	%100
131	M153	SZ	-49.518	-49.518	0	%100
132	M154	SZ	0	0	0	%100
133	MP5	SZ	-17.597	-17.597	0	%100
134	M157	SZ	0	0	0	%100
135	M158	SZ	0	0	0	%100
136	M161	SZ	0	0	0	%100
137	M162	SZ	0	0	0	%100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude...	End Magnitude[...	Start Location[i...	End Location[in...
138	M163	SZ	0	0	0	%100
139	M164	SZ	-49.518	-49.518	0	%100
140	M165	SZ	0	0	0	%100
141	M166	SZ	-49.518	-49.518	0	%100
142	M187	SZ	0	0	0	%100
143	M188	SZ	-49.518	-49.518	0	%100
144	M190	SZ	-49.518	-49.518	0	%100
145	M145A	SZ	0	0	0	%100
146	M146A	SZ	0	0	0	%100
147	M147	SZ	0	0	0	%100
148	M148	SZ	0	0	0	%100
149	M149A	SZ	-49.518	-49.518	0	%100
150	M150	SZ	-49.518	-49.518	0	%100
151	M151A	SZ	0	0	0	%100
152	M152	SZ	0	0	0	%100
153	M153A	SZ	0	0	0	%100
154	M154A	SZ	0	0	0	%100
155	M155	SZ	-49.518	-49.518	0	%100
156	M156	SZ	-49.518	-49.518	0	%100
157	M157A	SZ	0	0	0	%100
158	M158A	SZ	0	0	0	%100
159	M159	SZ	0	0	0	%100
160	M160	SZ	0	0	0	%100
161	M161A	SZ	-49.518	-49.518	0	%100
162	M162A	SZ	-49.518	-49.518	0	%100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X)

	Member Label	Direction	Start Magnitude...	End Magnitude[...	Start Location[i...	End Location[in...
1	H1	SX	-13.85	-13.85	0	%100
2	H3	SX	-13.85	-13.85	0	%100
3	H2	SX	-13.85	-13.85	0	%100
4	S4	SX	-13.605	-13.605	0	%100
5	S5	SX	-13.605	-13.605	0	%100
6	S1	SX	-13.605	-13.605	0	%100
7	S6	SX	-13.605	-13.605	0	%100
8	S2	SX	-13.605	-13.605	0	%100
9	S3	SX	-13.605	-13.605	0	%100
10	M10	SX	-16.232	-16.232	0	%100
11	M11	SX	-16.232	-16.232	0	%100
12	M12	SX	-16.232	-16.232	0	%100
13	M13	SX	-16.232	-16.232	0	%100
14	M14	SX	-16.232	-16.232	0	%100
15	M15	SX	-16.232	-16.232	0	%100
16	HR1	SX	-17.597	-17.597	0	%100
17	HR3	SX	-17.597	-17.597	0	%100
18	HR2	SX	-17.597	-17.597	0	%100
19	M19	SX	-14.129	-14.129	0	%100
20	MP2	SX	-17.597	-17.597	0	%100
21	MP4	SX	-17.597	-17.597	0	%100
22	M22	SX	-16.232	-16.232	0	%100
23	M23	SX	-16.232	-16.232	0	%100
24	M24	SX	-16.232	-16.232	0	%100
25	M27	SX	-16.232	-16.232	0	%100
26	M28	SX	-16.232	-16.232	0	%100
27	M29	SX	-16.232	-16.232	0	%100
28	M32	SX	-14.129	-14.129	0	%100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude...	End Magnitude[...	Start Location[i...	End Location[in...
29	M33	SX	-14.129	-14.129	0	%100
30	M34	SX	-16.232	-16.232	0	%100
31	M35	SX	-16.232	-16.232	0	%100
32	M36	SX	-16.232	-16.232	0	%100
33	M37	SX	-16.232	-16.232	0	%100
34	M38	SX	-16.232	-16.232	0	%100
35	M39	SX	-16.232	-16.232	0	%100
36	MP3	SX	-17.597	-17.597	0	%100
37	M43	SX	0	0	0	%100
38	M44	SX	0	0	0	%100
39	M45	SX	0	0	0	%100
40	R1	SX	-17.597	-17.597	0	%100
41	M47	SX	0	0	0	%100
42	M48	SX	0	0	0	%100
43	M50	SX	0	0	0	%100
44	M51	SX	0	0	0	%100
45	M52	SX	0	0	0	%100
46	M53	SX	0	0	0	%100
47	M54	SX	0	0	0	%100
48	M55	SX	0	0	0	%100
49	M56	SX	0	0	0	%100
50	M57	SX	0	0	0	%100
51	M64	SX	0	0	0	%100
52	M65	SX	0	0	0	%100
53	M66	SX	0	0	0	%100
54	M67	SX	0	0	0	%100
55	M58	SX	0	0	0	%100
56	M59	SX	0	0	0	%100
57	M60	SX	0	0	0	%100
58	M61	SX	0	0	0	%100
59	M62	SX	0	0	0	%100
60	M63	SX	0	0	0	%100
61	M68	SX	-17.597	-17.597	0	%100
62	M69	SX	-17.597	-17.597	0	%100
63	M70	SX	-17.597	-17.597	0	%100
64	M71	SX	0	0	0	%100
65	M72	SX	0	0	0	%100
66	M73	SX	0	0	0	%100
67	M74	SX	0	0	0	%100
68	M75	SX	-14.803	-14.803	0	%100
69	M76	SX	-14.803	-14.803	0	%100
70	M77	SX	0	0	0	%100
71	M78	SX	0	0	0	%100
72	M79	SX	0	0	0	%100
73	M80	SX	-14.803	-14.803	0	%100
74	M81	SX	0	0	0	%100
75	M82	SX	-14.803	-14.803	0	%100
76	M83	SX	0	0	0	%100
77	M84	SX	0	0	0	%100
78	M85	SX	0	0	0	%100
79	M86	SX	-14.803	-14.803	0	%100
80	M87	SX	0	0	0	%100
81	M88	SX	-14.803	-14.803	0	%100
82	MP1	SX	-17.597	-17.597	0	%100
83	M101	SX	0	0	0	%100
84	MP12	SX	-17.597	-17.597	0	%100
85	M104	SX	0	0	0	%100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude...	End Magnitude[...	Start Location[i...	End Location[in...
86	M105	SX	0	0	0	%100
87	MP10	SX	-17.597	-17.597	0	%100
88	MP11	SX	-17.597	-17.597	0	%100
89	M109	SX	0	0	0	%100
90	M112	SX	0	0	0	%100
91	M113	SX	0	0	0	%100
92	M114	SX	0	0	0	%100
93	M115	SX	0	0	0	%100
94	R9	SX	-17.597	-17.597	0	%100
95	M127	SX	0	0	0	%100
96	MP8	SX	-17.597	-17.597	0	%100
97	M129	SX	0	0	0	%100
98	M130	SX	0	0	0	%100
99	MP6	SX	-17.597	-17.597	0	%100
100	MP7	SX	-17.597	-17.597	0	%100
101	M134	SX	0	0	0	%100
102	M137	SX	0	0	0	%100
103	M138	SX	0	0	0	%100
104	M139	SX	0	0	0	%100
105	M140	SX	0	0	0	%100
106	R5	SX	-17.597	-17.597	0	%100
107	M168	SX	0	0	0	%100
108	M170	SX	0	0	0	%100
109	M173	SX	0	0	0	%100
110	M174	SX	0	0	0	%100
111	M175	SX	0	0	0	%100
112	M176	SX	0	0	0	%100
113	M177	SX	-49.518	-49.518	0	%100
114	M178	SX	0	0	0	%100
115	M179	SX	-49.518	-49.518	0	%100
116	M182	SX	0	0	0	%100
117	M183	SX	-49.518	-49.518	0	%100
118	M185	SX	-49.518	-49.518	0	%100
119	M126	SX	0	0	0	%100
120	MP9	SX	-17.597	-17.597	0	%100
121	M132	SX	0	0	0	%100
122	M133	SX	0	0	0	%100
123	M141	SX	0	0	0	%100
124	M142	SX	0	0	0	%100
125	M143	SX	0	0	0	%100
126	M144	SX	-49.518	-49.518	0	%100
127	M145	SX	0	0	0	%100
128	M146	SX	-49.518	-49.518	0	%100
129	M149	SX	0	0	0	%100
130	M151	SX	-49.518	-49.518	0	%100
131	M153	SX	-49.518	-49.518	0	%100
132	M154	SX	0	0	0	%100
133	MP5	SX	-17.597	-17.597	0	%100
134	M157	SX	0	0	0	%100
135	M158	SX	0	0	0	%100
136	M161	SX	0	0	0	%100
137	M162	SX	0	0	0	%100
138	M163	SX	0	0	0	%100
139	M164	SX	-49.518	-49.518	0	%100
140	M165	SX	0	0	0	%100
141	M166	SX	-49.518	-49.518	0	%100
142	M187	SX	0	0	0	%100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
143	M188	SX	-49.518	-49.518	0	%100
144	M190	SX	-49.518	-49.518	0	%100
145	M145A	SX	0	0	0	%100
146	M146A	SX	0	0	0	%100
147	M147	SX	0	0	0	%100
148	M148	SX	0	0	0	%100
149	M149A	SX	-49.518	-49.518	0	%100
150	M150	SX	-49.518	-49.518	0	%100
151	M151A	SX	0	0	0	%100
152	M152	SX	0	0	0	%100
153	M153A	SX	0	0	0	%100
154	M154A	SX	0	0	0	%100
155	M155	SX	-49.518	-49.518	0	%100
156	M156	SX	-49.518	-49.518	0	%100
157	M157A	SX	0	0	0	%100
158	M158A	SX	0	0	0	%100
159	M159	SX	0	0	0	%100
160	M160	SX	0	0	0	%100
161	M161A	SX	-49.518	-49.518	0	%100
162	M162A	SX	-49.518	-49.518	0	%100

Member Distributed Loads (BLC 46 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
1	H1	Y	-.06	-1.891	0	9.36
2	H1	Y	-1.891	-2.55	9.36	18.72
3	H1	Y	-2.55	-1.859	18.72	28.08
4	H1	Y	-1.859	-1.741	28.08	37.44
5	H1	Y	-1.741	-2.187	37.44	46.8
6	H2	Y	-2.162	-1.714	109.2	118.56
7	H2	Y	-1.714	-1.809	118.56	127.92
8	H2	Y	-1.809	-2.072	127.92	137.28
9	H2	Y	-2.072	-1.474	137.28	146.64
10	H2	Y	-1.474	-.394	146.64	156
11	M10	Y	-1.58	-2.963	0	10.8
12	M10	Y	-2.963	-5.28	10.8	21.6
13	M10	Y	-5.28	-5.28	21.6	32.4
14	M10	Y	-5.28	-2.963	32.4	43.2
15	M10	Y	-2.963	-1.581	43.2	54
16	M13	Y	-.855	-4.745	0	5.7
17	M13	Y	-4.745	-7.249	5.7	11.4
18	M13	Y	-7.249	-7.005	11.4	17.1
19	M13	Y	-7.005	-4.496	17.1	22.8
20	M13	Y	-4.496	-1.088	22.8	28.5
21	M45	Y	-.165	-3.684	0	3.309
22	M45	Y	-3.684	-3.693	3.309	6.619
23	M45	Y	-3.693	-.165	6.619	9.928
24	M48	Y	-.437	-.437	0	2.375
25	S1	Y	-4.194	-4.194	9.416	39.584
26	S2	Y	-4.445	-4.445	16.866	39.268
27	M14	Y	-4.753	-4.753	12.891	34.623
28	M15	Y	-5.406	-5.406	2.09	14.09
29	H3	Y	-2.907	-2.187	0	31.2
30	H3	Y	-2.187	-1.467	31.2	62.4
31	H2	Y	-2.898	-2.217	0	31.2
32	H2	Y	-2.217	-1.535	31.2	62.4
33	M12	Y	-4.64	-4.64	15.048	38.615

Member Distributed Loads (BLC 46 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
34	M27	Y	-4.631	-4.644	2.85	14.25
35	M27	Y	-4.644	-4.657	14.25	25.65
36	M44	Y	-1.844	-1.844	0	9.928
37	S4	Y	-4.246	-4.246	10.037	40.205
38	S3	Y	-4.246	-4.246	10.037	40.204
39	M28	Y	-4.071	-4.071	15.425	35.421
40	M29	Y	-4.724	-4.724	4	16
41	S5	Y	-4.445	-4.445	16.866	39.268
42	S6	Y	-4.194	-4.194	9.416	39.584
43	M23	Y	-4.753	-4.753	16.222	37.954
44	M24	Y	-5.406	-5.406	5.91	17.91
45	H1	Y	-2.148	-1.7	109.2	118.56
46	H1	Y	-1.7	-1.778	118.56	127.92
47	H1	Y	-1.778	-2.322	127.92	137.28
48	H1	Y	-2.322	-1.492	137.28	146.64
49	H1	Y	-1.492	-.018	146.64	156
50	H3	Y	-2.187	-1.741	109.2	118.56
51	H3	Y	-1.741	-1.847	118.56	127.92
52	H3	Y	-1.847	-2.366	127.92	137.28
53	H3	Y	-2.366	-1.719	137.28	146.64
54	H3	Y	-1.719	-.06	146.64	156
55	M11	Y	-1.581	-2.963	0	10.8
56	M11	Y	-2.963	-5.28	10.8	21.6
57	M11	Y	-5.28	-5.28	21.6	32.4
58	M11	Y	-5.28	-2.963	32.4	43.2
59	M11	Y	-2.963	-1.58	43.2	54
60	M22	Y	-1.121	-4.417	0	5.7
61	M22	Y	-4.417	-7.485	5.7	11.4
62	M22	Y	-7.485	-7.526	11.4	17.1
63	M22	Y	-7.526	-4.454	17.1	22.8
64	M22	Y	-4.454	-1.068	22.8	28.5
65	M43	Y	-2.6	-2.457	0	2.482
66	M43	Y	-2.457	-3.594	2.482	4.964
67	M43	Y	-3.594	-2.775	4.964	7.446
68	M43	Y	-2.775	-.075	7.446	9.928
69	M55	Y	-.437	-.437	0	2.375
70	H2	Y	-.1	-.466	46.8	59.28
71	H2	Y	-.466	-.621	59.28	71.76
72	H2	Y	-.621	-.622	71.76	84.24
73	H2	Y	-.622	-.48	84.24	96.72
74	H2	Y	-.48	-.14	96.72	109.2
75	S2	Y	-.132	-3.148	9.2	16.56
76	S2	Y	-3.148	-4.179	16.56	23.92
77	S2	Y	-4.179	-2.693	23.92	31.28
78	S2	Y	-2.693	-1.438	31.28	38.64
79	S2	Y	-1.438	-.132	38.64	46
80	S3	Y	-1.279	-2.661	9.2	16.56
81	S3	Y	-2.661	-3.773	16.56	23.92
82	S3	Y	-3.773	-3.287	23.92	31.28
83	S3	Y	-3.287	-1.497	31.28	38.64
84	S3	Y	-1.497	-.119	38.64	46
85	M35	Y	-1.205	-3.674	0	5
86	M35	Y	-3.674	-4.9	5	10
87	M35	Y	-4.9	-3.627	10	15
88	M35	Y	-3.627	-1.097	15	20
89	M38	Y	-.561	-3.277	0	10.169
90	M38	Y	-3.277	-5.631	10.169	20.338

Member Distributed Loads (BLC 46 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
91	M38	Y	-5.631	-5.453	20.338	30.507
92	M38	Y	-5.453	-3.146	30.507	40.676
93	M38	Y	-3.146	-.879	40.676	50.845
94	H1	Y	-.101	-.468	46.8	59.28
95	H1	Y	-.468	-.623	59.28	71.76
96	H1	Y	-.623	-.622	71.76	84.24
97	H1	Y	-.622	-.467	84.24	96.72
98	H1	Y	-.467	-.101	96.72	109.2
99	S1	Y	-.069	-2.221	4.6	12.88
100	S1	Y	-2.221	-4.133	12.88	21.16
101	S1	Y	-4.133	-3.049	21.16	29.44
102	S1	Y	-3.049	-1.482	29.44	37.72
103	S1	Y	-1.482	-.069	37.72	46
104	S6	Y	-.069	-1.951	4.6	12.88
105	S6	Y	-1.951	-3.959	12.88	21.16
106	S6	Y	-3.959	-3.189	21.16	29.44
107	S6	Y	-3.189	-1.527	29.44	37.72
108	S6	Y	-1.527	-.069	37.72	46
109	M34	Y	-.548	-3.357	0	5
110	M34	Y	-3.357	-5.187	5	10
111	M34	Y	-5.187	-3.758	10	15
112	M34	Y	-3.758	-.367	15	20
113	M37	Y	-.569	-3.252	0	10.169
114	M37	Y	-3.252	-5.495	10.169	20.338
115	M37	Y	-5.495	-5.328	20.338	30.507
116	M37	Y	-5.328	-3.136	30.507	40.676
117	M37	Y	-3.136	-.887	40.676	50.845
118	H3	Y	-.1	-.466	46.8	59.28
119	H3	Y	-.466	-.622	59.28	71.76
120	H3	Y	-.622	-.62	71.76	84.24
121	H3	Y	-.62	-.478	84.24	96.72
122	H3	Y	-.478	-.142	96.72	109.2
123	S4	Y	-1.274	-2.654	9.2	16.56
124	S4	Y	-2.654	-3.766	16.56	23.92
125	S4	Y	-3.766	-3.284	23.92	31.28
126	S4	Y	-3.284	-1.499	31.28	38.64
127	S4	Y	-1.499	-.119	38.64	46
128	S5	Y	-.132	-3.153	9.2	16.56
129	S5	Y	-3.153	-4.186	16.56	23.92
130	S5	Y	-4.186	-2.696	23.92	31.28
131	S5	Y	-2.696	-1.438	31.28	38.64
132	S5	Y	-1.438	-.132	38.64	46
133	M36	Y	-1.079	-3.617	0	5
134	M36	Y	-3.617	-4.917	5	10
135	M36	Y	-4.917	-3.693	10	15
136	M36	Y	-3.693	-1.183	15	20
137	M39	Y	-1.073	-3.128	0	10.169
138	M39	Y	-3.128	-5.396	10.169	20.338
139	M39	Y	-5.396	-5.628	20.338	30.507
140	M39	Y	-5.628	-3.265	30.507	40.676
141	M39	Y	-3.265	-.553	40.676	50.845

Member Distributed Loads (BLC 47 : BLC 16 Transient Area Loads)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
1	H1	Y	-.125	-3.934	0	9.36
2	H1	Y	-3.934	-5.304	9.36	18.72

Member Distributed Loads (BLC 47 : BLC 16 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
3	H1	Y	-5.304	-3.866	18.72	28.08
4	H1	Y	-3.866	-3.621	28.08	37.44
5	H1	Y	-3.621	-4.55	37.44	46.8
6	H2	Y	-4.496	-3.564	109.2	118.56
7	H2	Y	-3.564	-3.763	118.56	127.92
8	H2	Y	-3.763	-4.309	127.92	137.28
9	H2	Y	-4.309	-3.067	137.28	146.64
10	H2	Y	-3.067	-.82	146.64	156
11	M10	Y	-3.287	-6.164	0	10.8
12	M10	Y	-6.164	-10.983	10.8	21.6
13	M10	Y	-10.983	-10.983	21.6	32.4
14	M10	Y	-10.983	-6.163	32.4	43.2
15	M10	Y	-6.163	-3.288	43.2	54
16	M13	Y	-1.778	-9.869	0	5.7
17	M13	Y	-9.869	-15.078	5.7	11.4
18	M13	Y	-15.078	-14.57	11.4	17.1
19	M13	Y	-14.57	-9.353	17.1	22.8
20	M13	Y	-9.353	-2.263	22.8	28.5
21	M45	Y	-.343	-7.663	0	3.309
22	M45	Y	-7.663	-7.681	3.309	6.619
23	M45	Y	-7.681	-.343	6.619	9.928
24	M48	Y	-.908	-.908	0	2.375
25	S1	Y	-8.723	-8.723	9.416	39.584
26	S2	Y	-9.245	-9.245	16.866	39.268
27	M14	Y	-9.887	-9.887	12.891	34.623
28	M15	Y	-11.244	-11.244	2.09	14.09
29	H3	Y	-6.046	-4.549	0	31.2
30	H3	Y	-4.549	-3.052	31.2	62.4
31	H2	Y	-6.028	-4.611	0	31.2
32	H2	Y	-4.611	-3.193	31.2	62.4
33	M12	Y	-9.651	-9.651	15.048	38.615
34	M27	Y	-9.633	-9.659	2.85	14.25
35	M27	Y	-9.659	-9.686	14.25	25.65
36	M44	Y	-3.836	-3.836	0	9.928
37	S4	Y	-8.832	-8.832	10.037	40.205
38	S3	Y	-8.831	-8.831	10.037	40.204
39	M28	Y	-8.467	-8.467	15.425	35.421
40	M29	Y	-9.825	-9.825	4	16
41	S5	Y	-9.245	-9.245	16.866	39.268
42	S6	Y	-8.723	-8.723	9.416	39.584
43	M23	Y	-9.887	-9.887	16.222	37.954
44	M24	Y	-11.244	-11.244	5.91	17.91
45	H1	Y	-4.468	-3.536	109.2	118.56
46	H1	Y	-3.536	-3.699	118.56	127.92
47	H1	Y	-3.699	-4.829	127.92	137.28
48	H1	Y	-4.829	-3.104	137.28	146.64
49	H1	Y	-3.104	-.038	146.64	156
50	H3	Y	-4.549	-3.62	109.2	118.56
51	H3	Y	-3.62	-3.841	118.56	127.92
52	H3	Y	-3.841	-4.922	127.92	137.28
53	H3	Y	-4.922	-3.576	137.28	146.64
54	H3	Y	-3.576	-.125	146.64	156
55	M11	Y	-3.288	-6.163	0	10.8
56	M11	Y	-6.163	-10.983	10.8	21.6
57	M11	Y	-10.983	-10.983	21.6	32.4
58	M11	Y	-10.983	-6.164	32.4	43.2
59	M11	Y	-6.164	-3.287	43.2	54

Member Distributed Loads (BLC 47 : BLC 16 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
60	M22	Y	-2.331	-9.187	0	5.7
61	M22	Y	-9.187	-15.568	5.7	11.4
62	M22	Y	-15.568	-15.654	11.4	17.1
63	M22	Y	-15.654	-9.265	17.1	22.8
64	M22	Y	-9.265	-2.222	22.8	28.5
65	M43	Y	-5.407	-5.11	0	2.482
66	M43	Y	-5.11	-7.476	2.482	4.964
67	M43	Y	-7.476	-5.772	4.964	7.446
68	M43	Y	-5.772	-.156	7.446	9.928
69	M55	Y	-.909	-.909	0	2.375
70	H2	Y	-.208	-.969	46.8	59.28
71	H2	Y	-.969	-1.292	59.28	71.76
72	H2	Y	-1.292	-1.293	71.76	84.24
73	H2	Y	-1.293	-.999	84.24	96.72
74	H2	Y	-.999	-.292	96.72	109.2
75	S2	Y	-.275	-6.549	9.2	16.56
76	S2	Y	-6.549	-8.693	16.56	23.92
77	S2	Y	-8.693	-5.601	23.92	31.28
78	S2	Y	-5.601	-2.99	31.28	38.64
79	S2	Y	-2.99	-.275	38.64	46
80	S3	Y	-2.661	-5.534	9.2	16.56
81	S3	Y	-5.534	-7.848	16.56	23.92
82	S3	Y	-7.848	-6.838	23.92	31.28
83	S3	Y	-6.838	-3.113	31.28	38.64
84	S3	Y	-3.113	-.247	38.64	46
85	M35	Y	-2.505	-7.641	0	5
86	M35	Y	-7.641	-10.192	5	10
87	M35	Y	-10.192	-7.543	10	15
88	M35	Y	-7.543	-2.283	15	20
89	M38	Y	-1.167	-6.816	0	10.169
90	M38	Y	-6.816	-11.713	10.169	20.338
91	M38	Y	-11.713	-11.343	20.338	30.507
92	M38	Y	-11.343	-6.543	30.507	40.676
93	M38	Y	-6.543	-1.828	40.676	50.845
94	H1	Y	-.21	-.973	46.8	59.28
95	H1	Y	-.973	-1.296	59.28	71.76
96	H1	Y	-1.296	-1.295	71.76	84.24
97	H1	Y	-1.295	-.972	84.24	96.72
98	H1	Y	-.972	-.211	96.72	109.2
99	S1	Y	-.143	-4.62	4.6	12.88
100	S1	Y	-4.62	-8.596	12.88	21.16
101	S1	Y	-8.596	-6.341	21.16	29.44
102	S1	Y	-6.341	-3.082	29.44	37.72
103	S1	Y	-3.082	-.143	37.72	46
104	S6	Y	-.144	-4.058	4.6	12.88
105	S6	Y	-4.058	-8.235	12.88	21.16
106	S6	Y	-8.235	-6.633	21.16	29.44
107	S6	Y	-6.633	-3.176	29.44	37.72
108	S6	Y	-3.176	-.144	37.72	46
109	M34	Y	-1.139	-6.982	0	5
110	M34	Y	-6.982	-10.79	5	10
111	M34	Y	-10.79	-7.817	10	15
112	M34	Y	-7.817	-.764	15	20
113	M37	Y	-1.183	-6.764	0	10.169
114	M37	Y	-6.764	-11.429	10.169	20.338
115	M37	Y	-11.429	-11.082	20.338	30.507
116	M37	Y	-11.082	-6.522	30.507	40.676

Member Distributed Loads (BLC 47 : BLC 16 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude..	End Magnitude[...	Start Location[i...	End Location[in...
117	M37	Y	-6.522	-1.845	40.676	50.845
118	H3	Y	-.207	-.969	46.8	59.28
119	H3	Y	-.969	-1.293	59.28	71.76
120	H3	Y	-1.293	-1.29	71.76	84.24
121	H3	Y	-1.29	-.994	84.24	96.72
122	H3	Y	-.994	-.294	96.72	109.2
123	S4	Y	-2.65	-5.52	9.2	16.56
124	S4	Y	-5.52	-7.833	16.56	23.92
125	S4	Y	-7.833	-6.83	23.92	31.28
126	S4	Y	-6.83	-3.117	31.28	38.64
127	S4	Y	-3.117	-.247	38.64	46
128	S5	Y	-.275	-6.559	9.2	16.56
129	S5	Y	-6.559	-8.707	16.56	23.92
130	S5	Y	-8.707	-5.607	23.92	31.28
131	S5	Y	-5.607	-2.991	31.28	38.64
132	S5	Y	-2.991	-.275	38.64	46
133	M36	Y	-2.244	-7.523	0	5
134	M36	Y	-7.523	-10.227	5	10
135	M36	Y	-10.227	-7.681	10	15
136	M36	Y	-7.681	-2.46	15	20
137	M39	Y	-2.231	-6.506	0	10.169
138	M39	Y	-6.506	-11.224	10.169	20.338
139	M39	Y	-11.224	-11.707	20.338	30.507
140	M39	Y	-11.707	-6.791	30.507	40.676
141	M39	Y	-6.791	-1.149	40.676	50.845

Member Area Loads (BLC 1 : Self Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N12	N11	N7	N8	Y	Two Way	-5
2	N63	N65	N59	N57	Y	Two Way	-5
3	N48	N42	N41	N47	Y	Two Way	-5
4	N66	N60	N61	N67	Y	Two Way	-5
5	N58	N64	N68	N62	Y	Two Way	-5
6	N33	N29	N30	N34	Y	Two Way	-5
7	N7	N59	N60	N42	Y	Two Way	-5
8	N8	N57	N58	N29	Y	Two Way	-5
9	N62	N61	N41	N30	Y	Two Way	-5

Member Area Loads (BLC 16 : Ice Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N12	N11	N7	N8	Y	Two Way	-10.4
2	N63	N65	N59	N57	Y	Two Way	-10.4
3	N48	N42	N41	N47	Y	Two Way	-10.4
4	N66	N60	N61	N67	Y	Two Way	-10.4
5	N58	N64	N68	N62	Y	Two Way	-10.4
6	N33	N29	N30	N34	Y	Two Way	-10.4
7	N7	N59	N60	N42	Y	Two Way	-10.4
8	N8	N57	N58	N29	Y	Two Way	-10.4
9	N62	N61	N41	N30	Y	Two Way	-10.4

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

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*...	phi*...	phi*...	phi*...	...	Eqn
1	M153	SR0.5	.683	0	204	.212	0		204	6171..	6361..	53.0...	53.0...		H1-...
2	M190	SR0.5	.683	0	208	.212	0		208	6171..	6361..	53.0...	53.0...		H1-...
3	M185	SR0.5	.683	0	116	.212	0		116	6171..	6361..	53.0...	53.0...		H1-...
4	MP11	PIPE_2.0	.637	48.75	4	.235	19.5		30	2086..	32130	1871...	1871...		H1-...
5	MP7	PIPE_2.0	.636	48.75	8	.236	19.5		34	2086..	32130	1871...	1871...		H1-...
6	MP3	PIPE_2.0	.624	48.75	12	.237	19.5		38	2086..	32130	1871...	1871...		H1-...
7	MP6	PIPE_2.0	.606	48.75	13	.236	19.5		36	2086..	32130	1871...	1871...		H1-...
8	MP10	PIPE_2.0	.604	48.75	9	.236	19.5		32	2086..	32130	1871...	1871...		H1-...
9	MP2	PIPE_2.0	.590	48.75	5	.237	19.5		28	2086..	32130	1871...	1871...		H1-...
10	HR2	PIPE_2.0	.576	89.375	34	.278	91		35	5820..	32130	1871...	1871...		H1-...
11	HR3	PIPE_2.0	.571	66.625	30	.275	65		31	5820..	32130	1871...	1871...		H1-...
12	HR1	PIPE_2.0	.569	89.375	38	.275	91		27	5820..	32130	1871...	1871...		H1-...
13	S2	HSS4X2X4	.545	0	5	.177	12.458	z	94	7988..	1010..	6175...	10143		H1-...
14	S4	HSS4X2X4	.530	0	13	.175	12.458	z	162	7988..	1010..	6175...	10143		H1-...
15	S6	HSS4X2X4	.529	0	9	.175	12.458	z	134	7988..	1010..	6175...	10143		H1-...
16	S5	HSS4X2X4	.521	0	11	.177	12.458	z	118	7988..	1010..	6175...	10143		H1-...
17	S3	HSS4X2X4	.521	0	3	.176	12.458	z	206	7988..	1010..	6175...	10143		H1-...
18	S1	HSS4X2X4	.509	0	7	.179	12.458	z	210	7988..	1010..	6175...	10143		H1-...
19	H2	L3X3X6	.466	50.375	207	.431	149.5	y	9	6798..	68364	2307...	5322...	1	H2-1
20	H1	L3X3X6	.465	50.375	211	.433	149.5	y	13	6798..	68364	2307...	5322...	1	H2-1
21	H3	L3X3X6	.465	105.625	119	.437	6.5	z	5	6798..	68364	2307...	5322...	1	H2-1
22	M155	SR0.5	.445	0	203	.090	0		204	6171..	6361..	53.0...	53.0...		H1-...
23	M149A	SR0.5	.445	0	115	.090	0		116	6171..	6361..	53.0...	53.0...		H1-...
24	M161A	SR0.5	.444	0	208	.090	0		208	6171..	6361..	53.0...	53.0...		H1-...
25	R5	PIPE_2.0	.442	43	2	.084	38		3	2652..	32130	1871...	1871...		H1-...
26	R9	PIPE_2.0	.441	43	10	.087	38		11	2652..	32130	1871...	1871...		H1-...
27	R1	PIPE_2.0	.435	43	6	.084	38		7	2652..	32130	1871...	1871...		H1-...
28	M164	SR0.5	.375	3	2	.201	3		2	6171..	6361..	53.0...	53.0...		H1-...
29	M144	SR0.5	.374	3	10	.200	3		10	6171..	6361..	53.0...	53.0...		H1-...
30	M177	SR0.5	.368	3	6	.198	0		6	6171..	6361..	53.0...	53.0...		H1-...
31	M15	L2x2x4	.364	20	8	.046	0	y	3	2657..	3058..	690....	1576...		H2-1
32	MP8	PIPE_2.0	.359	23.25	31	.104	52.5		5	2086..	32130	1871...	1871...		H1-...
33	M24	L2x2x4	.357	0	8	.047	0	y	7	2657..	3058..	690....	1576...		H2-1
34	MP12	PIPE_2.0	.355	23.25	27	.102	52.5		13	2086..	32130	1871...	1871...		H1-...
35	MP4	PIPE_2.0	.354	23.25	35	.102	52.5		9	2086..	32130	1871...	1871...		H1-...
36	M33	4"x0.25"	.354	0	18	.122	14	y	12	6002..	32400	168....	2700		H1-...
37	M35	L2x2x4	.353	20	3	.041	0	y	7	2657..	3058..	690....	1576...		H2-1
38	M19	4"x0.25"	.353	0	14	.122	14	y	8	6002..	32400	168....	2700		H1-...
39	M29	L2x2x4	.353	20	4	.045	0	y	11	2657..	3058..	690....	1576...		H2-1
40	M32	4"x0.25"	.351	0	22	.122	14	y	4	6002..	32400	168....	2700		H1-...
41	M36	L2x2x4	.349	20	11	.040	0	y	3	2657..	3058..	690....	1576...		H2-1
42	M156	SR0.5	.346	0	203	.075	0		204	6171..	6361..	53.0...	53.0...		H1-...
43	M150	SR0.5	.346	0	115	.075	0		116	6171..	6361..	53.0...	53.0...		H1-...
44	M162A	SR0.5	.346	0	218	.075	0		208	6171..	6361..	53.0...	53.0...		H1-...
45	M34	L2x2x4	.339	0	7	.044	20	y	11	2657..	3058..	690....	1576...		H2-1
46	M38	L2x2x4	.325	50.845	28	.022	0	z	7	1232..	3058..	690....	1481...		H2-1
47	M39	L2x2x4	.321	50.845	37	.022	0	z	3	1232..	3058..	690....	1479...		H2-1
48	M37	L2x2x4	.316	0	32	.022	50.845	y	11	1232..	3058..	690....	1478...		H2-1
49	M12	L2x2x4	.266	54	2	.016	0	z	11	1850..	3058..	690....	1404...		H2-1
50	M11	L2x2x4	.262	0	10	.016	54	y	7	1850..	3058..	690....	1401...		H2-1
51	M10	L2x2x4	.262	54	6	.016	0	z	3	1850..	3058..	690....	1405...		H2-1
52	M23	L2x2x4	.241	50.845	10	.017	0	z	7	1232..	3058..	690....	1481...		H2-1
53	M28	L2x2x4	.236	50.845	2	.017	50.845	y	11	1232..	3058..	690....	1483...		H2-1
54	M14	L2x2x4	.236	50.845	6	.017	50.845	z	3	1232..	3058..	690....	1470...		H2-1
55	M179	SR0.5	.217	3	117	.032	0		117	6171..	6361..	53.0...	53.0...		H1-...
56	M166	SR0.5	.217	3	209	.032	0		208	6171..	6361..	53.0...	53.0...		H1-...
57	M146	SR0.5	.217	3	205	.032	0		204	6171..	6361..	53.0...	53.0...		H1-...

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

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*...	phi*...	phi*...	phi*...	...	Eqn
58	M183	SR0.5	.210	3	117	.031	0		117	6171..	6361..	53.0...	53.0...	...	H1-..
59	M188	SR0.5	.210	3	209	.031	0		209	6171..	6361..	53.0...	53.0...	...	H1-..
60	M151	SR0.5	.210	3	205	.031	0		205	6171..	6361..	53.0...	53.0...	...	H1-..
61	MP9	PIPE_2.0	.099	42.75	202	.038	28.5		11	2086..	32130	1871..	1871..	...	H1-..
62	MP1	PIPE_2.0	.099	42.75	114	.037	28.5		7	2086..	32130	1871..	1871..	...	H1-..
63	MP5	PIPE_2.0	.099	42.75	218	.037	28.5		3	2086..	32130	1871..	1871..	...	H1-..
64	M76	L2.5x2.5x3	.087	18.668	12	.020	0	y	5	2128..	2919..	872....	1808..	...	H2-1
65	M88	L2.5x2.5x3	.084	19.446	34	.019	37.336	y	13	2128..	2919..	872....	1808..	...	H2-1
66	M75	L2.5x2.5x3	.083	18.668	4	.020	0	z	11	2128..	2919..	872....	1808..	...	H2-1
67	M82	L2.5x2.5x3	.083	19.057	29	.019	0	y	9	2128..	2919..	872....	1808..	...	H2-1
68	M80	L2.5x2.5x3	.079	19.446	32	.020	37.336	z	3	2128..	2919..	872....	1808..	...	H2-1
69	M86	L2.5x2.5x3	.079	19.057	37	.020	0	z	7	2128..	2919..	872....	1808..	...	H2-1
70	M22	L2x2x4	.051	0	12	.011	0	y	13	2659..	3058..	690....	1576..	...	H2-1
71	M27	L2x2x4	.049	0	4	.011	0	y	4	2659..	3058..	690....	1576..	...	H2-1
72	M13	L2x2x4	.047	0	8	.011	28.5	y	9	2659..	3058..	690....	1576..	...	H2-1
73	M69	PIPE_2.0	.035	25.5	33	.060	0		11	2587..	32130	1871..	1871..	...	H1-..
74	M68	PIPE_2.0	.035	25.5	37	.061	51		3	2587..	32130	1871..	1871..	...	H1-..
75	M70	PIPE_2.0	.035	25.5	29	.061	51		7	2587..	32130	1871..	1871..	...	H1-..

APPENDIX D

ADDITIONAL CALCUATIONS

INFINIGY

FROM ZERO TO INFINIGY

the solutions are endless

Welded Calculation Tool, V1.0

PROJECT DATA	
Site Name:	CTL02083
Site Number:	876320
Job Code:	1039-Z0001-B
Date:	3/7/2022

WELD INFORMATION		
Design:	LRFD	-
Weld Strength (F_EXX):	70	ksi
Weld Thickness:	0.19	in

MAIN SHAPE INFORMATION		
Main Shape:	Rectangle	-
Main Shape Material:	A 500 Gr. B Rect.	-
Main Shape Thickness:	0.250	in
Main Shape Size:	2X4	in

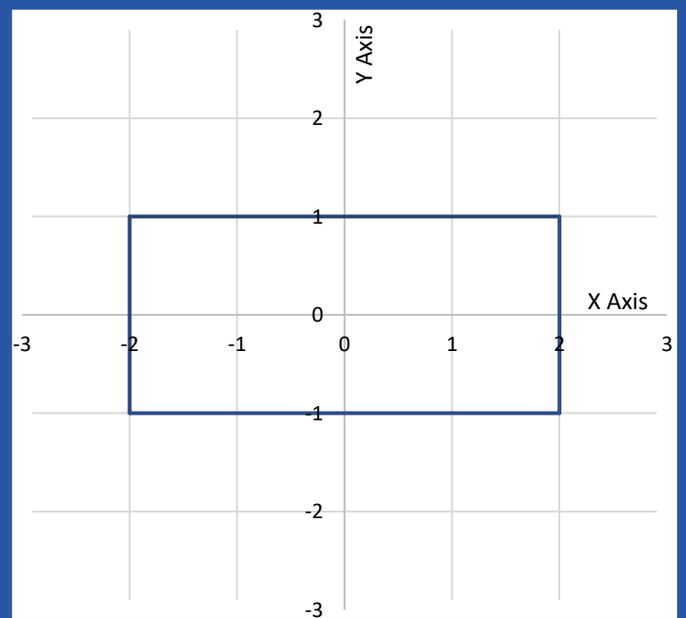
TOTAL SUM OF LINES PROPERTIES		
Polar Moment of Inertia:	36.000	in^3
Section Modulus X-X dir.:	9.333	in^2
Section Modulus Y-Y dir.:	13.333	in^2
Critical Usage Mode*:	Weld Critical	-
Critical Thickness Used:	0.190	in

SECONDARY SHAPE INFORMATION		
Secondary Shape:	N/A	-
Secondary Shape Material:	N/A	-
Secondary Shape Thickness:	N/A	in
Secondary Shape Size:	N/A	in

WELD DESCRIPTION
Standoff Anchorage

RESULTS		
Critical Risa Combination:	LC 5	-
Critical Member Label:	S2	-
Member End:	i	-
Weld Strength (Phi*Rn):	4232.034	lb/in
Weld Demand (Ru):	4056.786	lb/in
Usage ratio:	95.9%	OK

WELD DIAGRAM (NOT TO SCALE)



NOTES
*The strength of the weld governs the design compared to the effective strength of the welded object.

Exhibit F

Power Density/RF Emissions Report

Radio Frequency Safety Survey Report Predictive (RFSSRP) Prepared For AT&T

Site Name:	MILFORD WHEELERS FARM
FA#	10035336
USID:	61173
Site ID:	CTL02083
Address:	528 WHEELERS FARM ROAD MILFORD, CT 06460
County:	NEW HAVEN
Latitude:	41.2484089
Longitude:	-73.0790819
Structure Type:	MONOPOLE
Property Owner:	VILLAGE FOUNDATION, INC.
Pace Job:	MRCTB052328
RFDS Technology:	5G NR 1SR CBAND

Report Information

Report Writer: Sumit Singh

Report Generated Date: 05-18-2022

Compliance Statement

AT&T Mobility Compliance Statement: Based on the information collected, AT&T Mobility will be Compliant when the remediation recommended in section 5 or appropriate remediation determined by AT&T is implemented

Table of Contents

1. Executive Summary

1.1 Site Summary

Max Predictive Spatial Average MPE% & Location on Site (General Public)	51380.50% on Antennas Centerline Level & at AT&T Sec-C antenna no. #C2-2
Max Predictive Spatial Average MPE% at Ground level (General Public)	2.32%
AT&T Mobility Site Compliance	AT&T Mobility will be Compliant by implementing remediation recommended as per section 5 in this report.

TABLE 1: Site Summary

1.2 Signage Summary (Proposed)

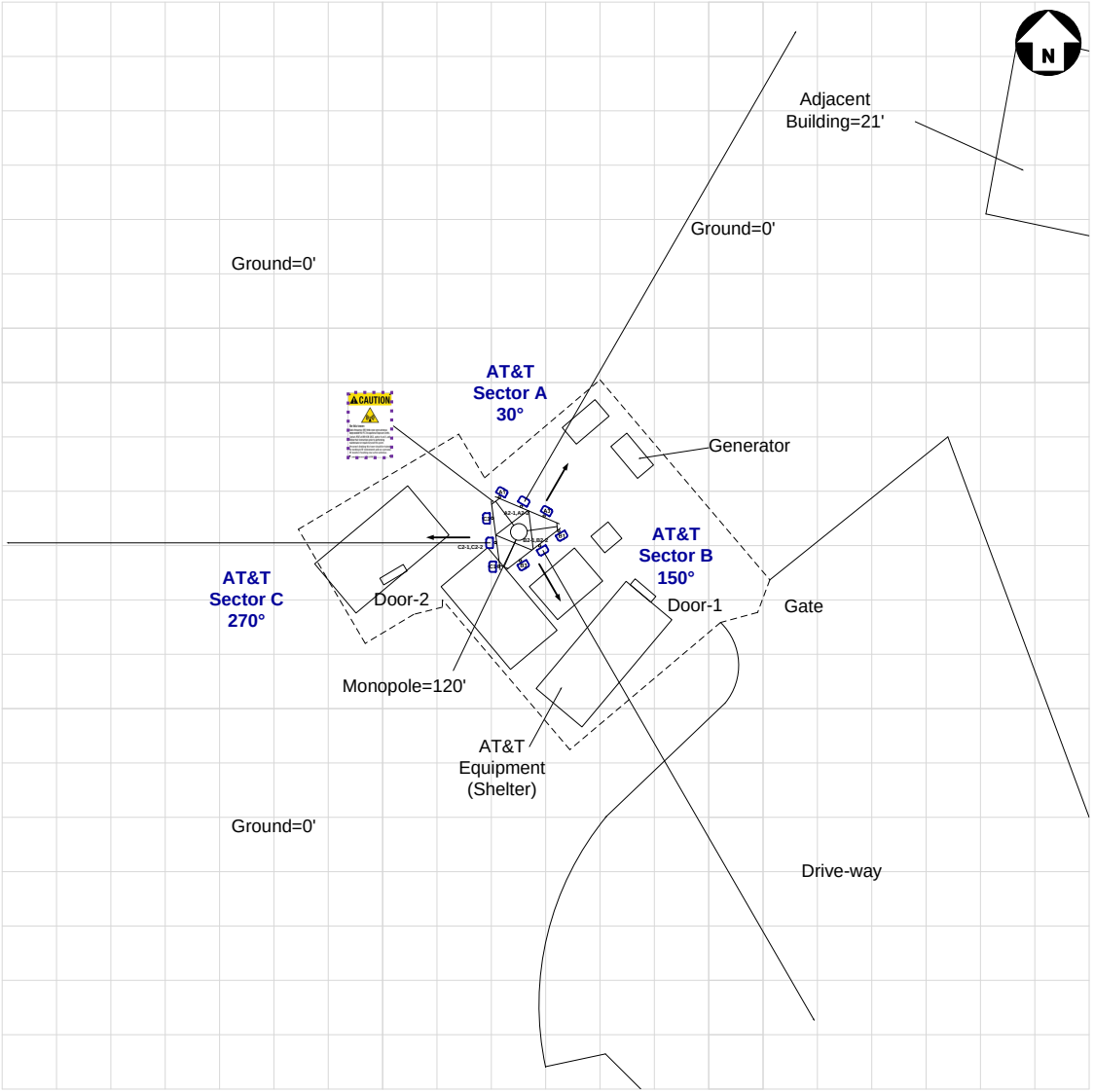
AT&T Signage Locations	Sign Type									
	Safety Instructions	Notice Sign 2	Caution Sign 2	Caution Sign 2B	Caution Sign 2C	Caution 7"x7"	Warning Sign 1B	RF Exposure Map	Lock	Barriers
Access Point(s)				1						
Alpha										
Beta										
Gamma										

TABLE 2: Signage Summary (Proposed)

1.3 List of Documents used to prepare this Report

- *876320_556503 CD*
- *876320_556503 RFDS*

2. Site Scale Map



AT&T Antenna	Proposed	Proposed Signage									
Panel	Barrier	Safety Instructions	Notice 2	Caution 2	Caution 2B	Caution 2C	Caution 7"x7"	Warning 1B	RF Exposure Map	Lock	***Map Scale = 10 ft***
OMNI	Posts										

3. Antenna Inventory

Ant ID	Operator	Antenna Mfg	Antenna Model	Antenna Type	FREQ. (MHz)	TECH.	AZ. (0)	HBW (0)	Antenna Gain (dBd)	Antenna Aperture (ft)	Transmitter Power (Watts)	Total Loss (dB)	Total ERP (Watts)	Total EIRP (Watts)
A1	AT&T	Quintel	QD6616-7	Panel	700	LTE (FN)	30	71	12.05	6	120.00	0.5	1714.67	2813.07
A1	AT&T	Quintel	QD6616-7	Panel	700	LTE (B29)	30	71	12.05	6	60.00	0.5	857.34	1406.54
A1	AT&T	Quintel	QD6616-7	Panel	1900	LTE/5G	30	67	15.05	6	120.00	0.5	3421.22	5612.82
A1	AT&T	Quintel	QD6616-7	Panel	2100	LTE/5G	30	62	15.55	6	120.00	0.5	3838.67	6297.69
A2-1	AT&T	Ericsson	AIR 6419 B77G^	Panel	3450	5G	30	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
A2-2	AT&T	Ericsson	AIR 6449 B77D^	Panel	3840	5G	30	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
A3	AT&T	Kathrein	80010965	Panel	700	LTE	30	62	12.65	6.5	120.00	0.5	1968.71	3229.84
A3	AT&T	Kathrein	80010965	Panel	850	LTE	30	60	13.45	6.5	120.00	0.5	2366.91	3883.12
A3	AT&T	Kathrein	80010965	Panel	2300	LTE	30	56	15.95	6.5	75.00	0.8	2455.06	4027.74
B1	AT&T	Quintel	QD6616-7	Panel	700	LTE (FN)	150	71	12.05	6	120.00	0.5	1714.67	2813.07
B1	AT&T	Quintel	QD6616-7	Panel	700	LTE (B29)	150	71	12.05	6	60.00	0.5	857.34	1406.54
B1	AT&T	Quintel	QD6616-7	Panel	1900	LTE/5G	150	67	15.05	6	120.00	0.5	3421.22	5612.82
B1	AT&T	Quintel	QD6616-7	Panel	2100	LTE/5G	150	62	15.55	6	120.00	0.5	3838.67	6297.69
B2-1	AT&T	Ericsson	AIR 6419 B77G^	Panel	3450	5G	150	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
B2-2	AT&T	Ericsson	AIR 6449 B77D^	Panel	3840	5G	150	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
B3	AT&T	Kathrein	80010965	Panel	700	LTE	150	62	12.65	6.5	120.00	0.5	1968.71	3229.84
B3	AT&T	Kathrein	80010965	Panel	850	LTE	150	60	13.45	6.5	120.00	0.5	2366.91	3883.12
B3	AT&T	Kathrein	80010965	Panel	2300	LTE	150	56	15.95	6.5	75.00	0.5	2630.64	4315.80
C1	AT&T	Quintel	QD6616-7	Panel	700	LTE (FN)	270	71	12.05	6	120.00	0.5	1714.67	2813.07
C1	AT&T	Quintel	QD6616-7	Panel	700	LTE (B29)	270	71	12.05	6	60.00	0.5	857.34	1406.54
C1	AT&T	Quintel	QD6616-7	Panel	1900	LTE/5G	270	67	15.05	6	120.00	0.5	3421.22	5612.82
C1	AT&T	Quintel	QD6616-7	Panel	2100	LTE/5G	270	62	15.55	6	120.00	0.5	3838.67	6297.69
C2-1	AT&T	Ericsson	AIR 6419 B77G^	Panel	3450	5G	270	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
C2-2	AT&T	Ericsson	AIR 6449 B77D^	Panel	3840	5G	270	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
C3	AT&T	Kathrein	80010965	Panel	700	LTE	270	62	12.65	6.5	120.00	0.5	1968.71	3229.84
C3	AT&T	Kathrein	80010965	Panel	850	LTE	270	60	13.45	6.5	120.00	0.5	2366.91	3883.12
C3	AT&T	Kathrein	80010965	Panel	2300	LTE	270	56	15.95	6.5	75.00	0.8	2455.06	4027.74

Table 3.1: Antenna Inventory Table

Note: **^ <u>Mechanical Tilt value of "0°" MUST be retained for C-BAND and/or DoD AAS antenna(s) at all times to ensure that "EME (Predictive) Study" shall remain valid.</u>**
* 75% TDD duty Cycle, 1.5dB Power Tolerance & 0.32 Power Reduction factor[1] are used to calculate Transmitter Power & ERP/EiRP

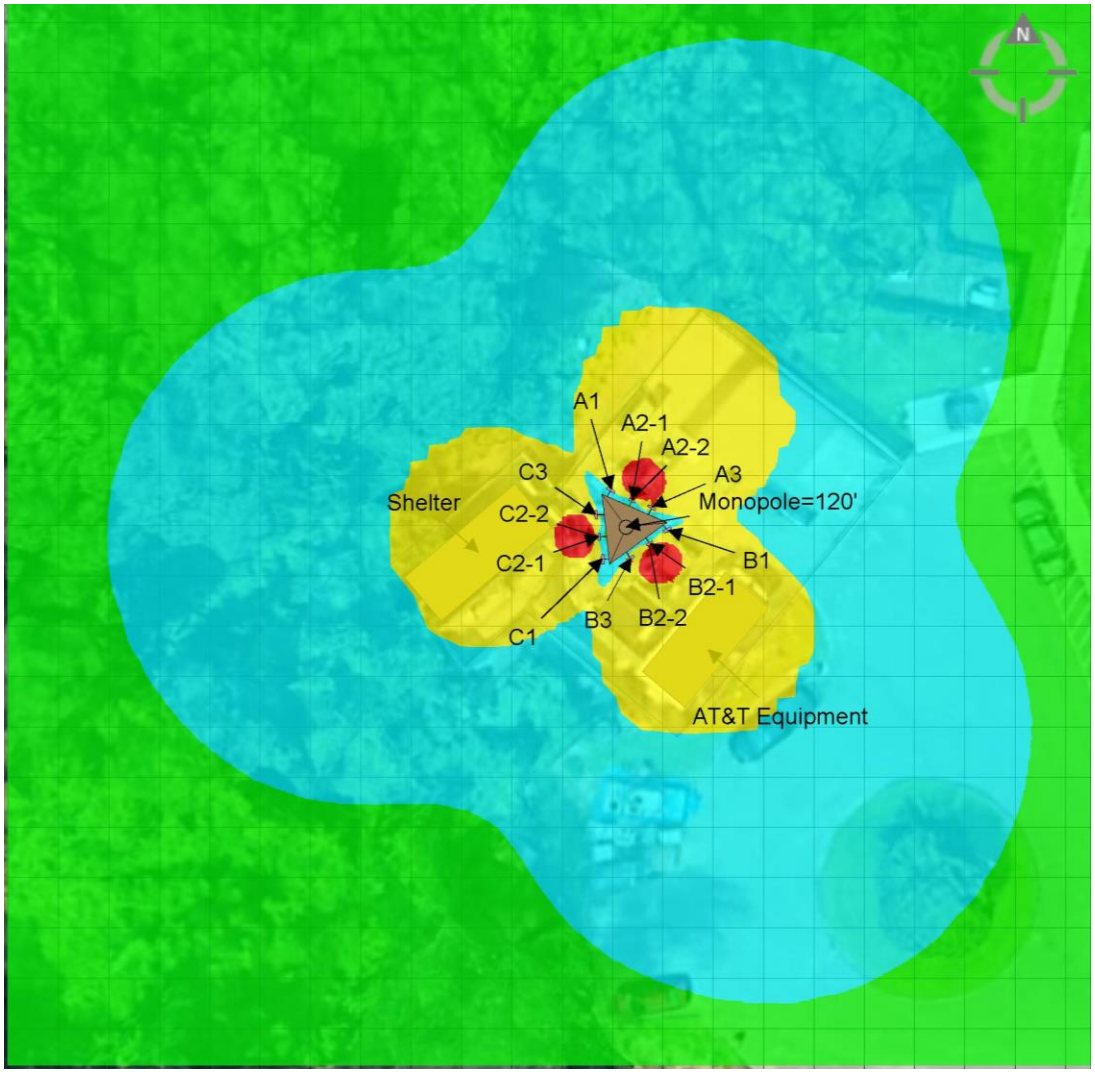
Antenna Heights (Z)

Ant ID	Operator	Antenna Radiation Centerline	Z-Height from Ground
A1	AT&T	98.00	95.00
A2-1	AT&T	99.78	98.50
A2-2	AT&T	96.23	94.95
A3	AT&T	98.00	94.75
B1	AT&T	98.00	95.00
B2-1	AT&T	99.78	98.50
B2-2	AT&T	96.23	94.95
B3	AT&T	98.00	94.75
C1	AT&T	98.00	95.00
C2-1	AT&T	99.78	98.50
C2-2	AT&T	96.23	94.95
C3	AT&T	98.00	94.75

Table 3.2: Antenna Height(s) Summary Table

4. Predicted Emission

4.1 Predictive Cumulative MPE Contribution from All Sources at Antennas Centerline Level (98 ft.)



Max. Predictive Spatial Average MPE% = **51380.50%**

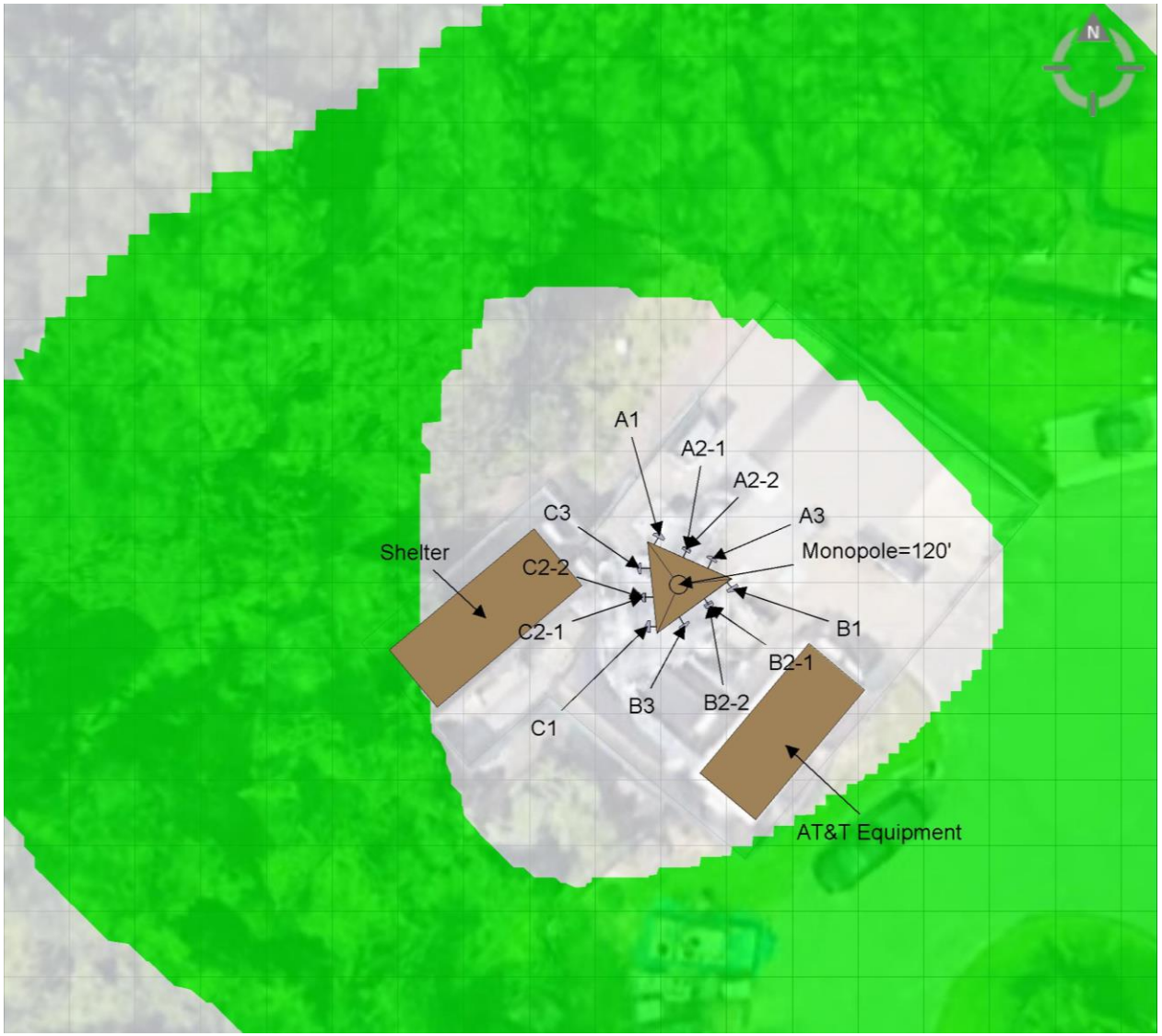
Proposed Barrier
Proposed Posts

% of FCC General Public Exposure Limit (Predictive Spatial Average)

Non-Simulated	0-1	1-100	100-500	500-5000	>5000

Map Scale = 10 ft

4.2 Predictive Cumulative MPE Contribution from All Sources at Ground Level (0 ft.)



Max. Predictive Spatial Average MPE% = **2.32%**

Proposed Barrier
Proposed Posts

% of FCC General Public Exposure Limit (Predictive Spatial Average)

Non-Simulated	0-1	1-100	100-500	500-5000	>5000

Map Scale = 10 ft

5. Statement of Compliance

5.1 Statement of AT&T Mobility Compliance

At the time of our Analysis, AT&T Mobility is required to take action to fulfill their Obligations to comply with the FCC's mandate as defined in OET-65

Recommendations

AT&T Alpha Sector:

- No action required

AT&T Beta Sector:

- No action required

AT&T Gamma Sector:

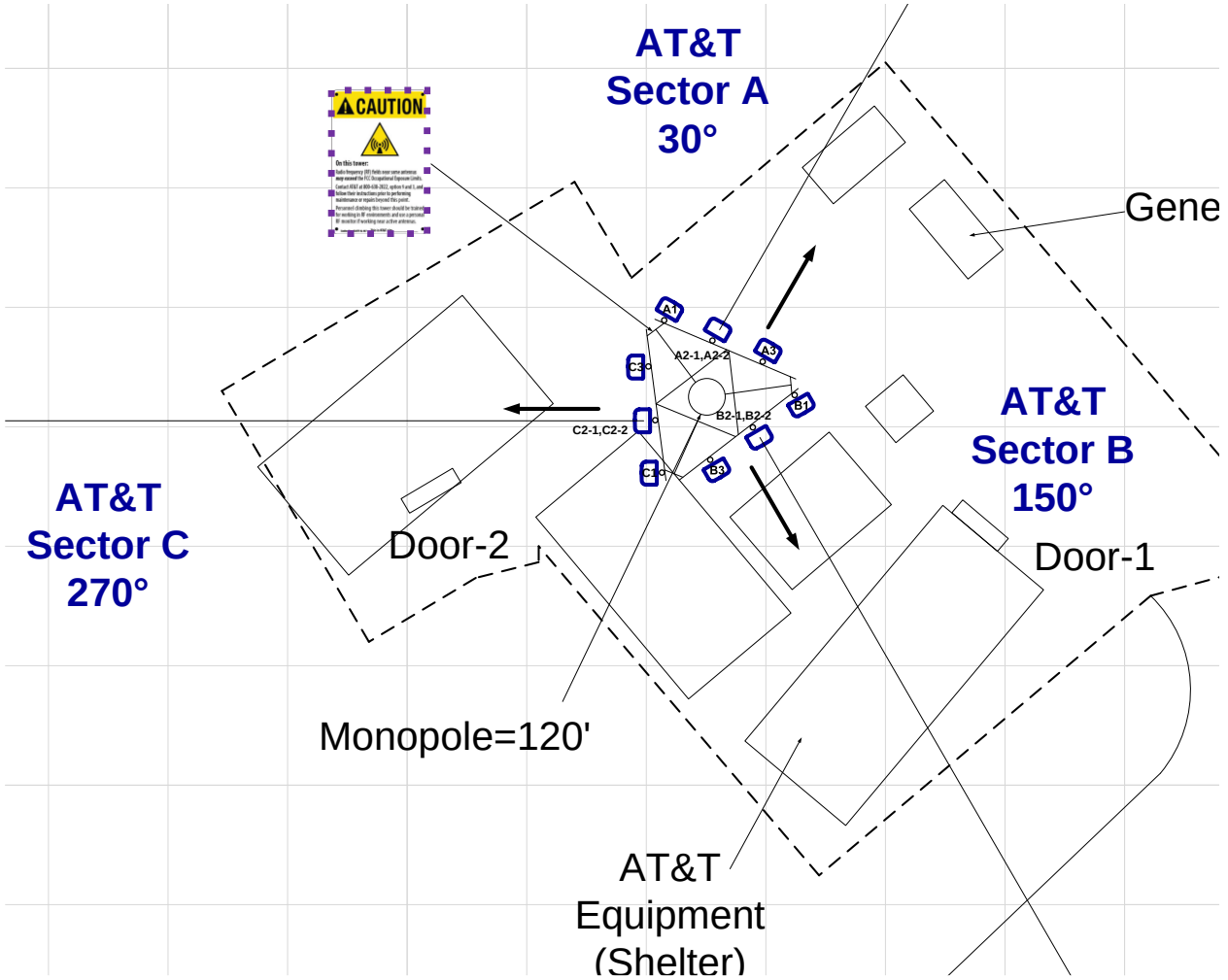
- No action required

Monopole:

- One Caution 2B Sign to be posted on Monopole at climbing access, facing outwards so approaching people can see as shown in "Recommendations Map – Detailed View" on page 10. (1 Total Sign)

Recommendations Map – Detailed View

AT&T Alpha, Beta & Gamma Sectors



AT&T Antenna	Proposed	Proposed Signage									
Panel	Barrier	Safety Instructions	Notice 2	Caution 2	Caution 2B	Caution 2C	Caution 7"x7"	Warning 1B	RF Exposure Map	Lock	*Map Scale = 10 ft*
OMNI	Posts										

Appendix A – Statement of Limiting Conditions

General Model Assumptions

In this site compliance report, it is assumed that all antennas are operating at full power at all times. AT&T has further recommended to assume a 75% duty cycle of maximum radiated power for all LTE & 5G carriers (& consider 100% duty cycle for all UMTS carriers).

In this site compliance report, it is assumed that Mechanical Tilt value of "0°" MUST be retained for C-BAND and/or DoD AAS^ antenna(s) at all times to ensure that "EME (Predictive) Study" shall remain valid.

AT&T recommended to consider - For C-BAND and/or DoD AAS^ antenna(s) 75% TDD duty Cycle, 1.5dB Power Tolerance & 0.32 Power Reduction factor[1] are used to calculate Transmitter Power & ERP/EiRP.

AT&T recommended to use worst-case tilts for the simulations.

*[1] **Power Reduction Factor**: IEC Standard 62232: 2017 allows for a statistically conservative power density model to more realistically define the RF exposure area. AT&T recommends a "0.32" factor to calculate the "Actual Maximum" (time averaged) power value, which accounts for "Beam Scanning," "Scheduling," and "RBS Utilization" This recommended value is a conservative figure modelled and supported by other vendors and through measurements published in scientific articles and white papers by IEEE and others. Those publication are listed below:*

1. IEEE Access, Time-Averaged Realistic Maximum Power Levels for the Assessment of RF Exposure for 5G Radio Base Stations Using Massive MIMO (Published Sept. 18, 2017 / BJÖRN THORS, ANDERS FURUSKÄR, DAVIDE COLOMBI, AND CHRISTER TÖRNEVIK)
2. IEEE Explore, A Statistical Approach for RF Exposure Compliance Boundary Assessment in Massive MIMO Systems (Published Jan. 25, 2018 / Paolo Baracca, Andreas Weber, Thorsten Wild, Christophe Grangeat)
3. IEEE Access, In-situ Measurement Methodology for the Assessment of 5G NR Massive MIMO Base Station Exposure at Sub-6 GHz Frequencies (Published Dec. 20, 2019 / SAM AERTS, LEEN VERLOOCK, MATTHIAS VAN DEN BOSSCHE, DAVIDE COLOMBI, LUC MARTENS, CHRISTER TÖRNEVIK AND WOUT JOSEPH)
4. Applied Sciences, Analysis of the Actual Power and EMF Exposure from Base Stations in a Commercial 5G Network (Published July 30, 2020 / Davide Colombi, Paramananda Joshi, Bo Xu, Fatemeh Ghasemifard, Vignesh Narasaraju and Christer Törnevik)
5. Ofcom Technical Report, Electromagnetic Field (EMF) measurements near 5G mobile phone base stations (Published Feb. 21, 2020 / Davide Colombi, Paramananda Joshi, Bo Xu, Fatemeh Ghasemifard, Vignesh Narasaraju and Christer Törnevik)

MobileComm believes these areas to be safe for entry by occupationally trained personnel utilizing appropriate personal protective equipment (in most cases, a personal monitor). Thus, at any time, if power density measurements were made, we believe the real time measurements would indicate levels below those depicted in the RF emission diagram(s) in this report. By modelling in this way, MobileComm has conservatively shown exclusion areas – areas that should not be entered without the use of a personal monitor, carriers reducing power, or performing real-time measurements to indicate real-time exposure levels.

Use of Generic Antennas

For the purposes of this report, the use of "Generic" as an antenna model, or "Other Carrier" for an operator means the information about a carrier, their FCC license and/or antenna information was not provided and could not be obtained while on site. In the event of unknown information, MobileComm will use our industry specific knowledge of equipment, antenna models, and transmit power to model the site. Information about similar facilities is used when the service is identified and associated with a particular antenna. If no information is available regarding the transmitting service associated with an unidentified antenna, using the antenna manufacturer's published data regarding the antenna's physical characteristics makes more conservative assumptions.

Where the frequency is unknown, MobileComm uses the closest frequency in the antenna's range that corresponds to the highest Maximum Exposure Limit (MPE), resulting in a conservative analysis.

Appendix B – FCC Guidelines and Emissions Threshold Limits

All power density values used in this report were analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (µW/cm2).The number of µW/cm2 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 public 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 public 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 (µW/cm2). The general population exposure limit for the 700 and 800 MHz Bands is approximately 467 µW/cm2 and 567 µW/cm2 respectively, and the general population exposure limit for the 1900 MHz PCS and 2100 MHz AWS bands is 1000 µW/cm2. 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, have been properly trained in RF safety 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, have been trained in RF safety and can exercise control over his or her exposure by leaving the area or by some other appropriate means. The Occupational/Controlled exposure limits all utilized frequency bands is five (5) times the FCC's General Public / Uncontrolled exposure limit.

Additional details can be found in FCC OET 65.

Table 1: Limits for Maximum Permissible Exposure (MPE)				
(A) Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-I,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Public/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-I,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

Appendix C – Rules & Regulations

Explanation of Applicable Rules and Regulations

FCC has set forth guidelines in OET Bulletin 65 for human exposure to radio frequency electromagnetic fields. Currently, there are two different levels of MPE - General Public MPE and Occupational MPE. An individual classified as Occupational can be defined as an individual who has received appropriate RF training and meets the conditions outlined below. General Public is defined as anyone who does not meet the conditions of being Occupational. FCC Rules and Regulations define compliance in terms of total exposure to total RF energy, regardless of location of or proximity to the sources of energy.

It is the responsibility of all licensees to ensure these guidelines are maintained at all times. It is the ongoing responsibility of all licensees composing the site to maintain ongoing compliance with FCC rules and regulations.

A building owner or site manager can use this report as part of an overall RF Health and Safety Policy. It is important for building owners/site managers to identify areas in excess of the General Population MPE and ensure that only persons qualified as Occupational are granted access to those areas.

Occupational Environment Explained

The FCC definition of Occupational exposure limits apply to persons who:

- *are exposed to RF energy as a consequence of their employment;*
- *have been made aware of the possibility of exposure; and*
- *can exercise control over their exposure.*

FCC guidelines go further to state that persons must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

In order to consider this site an Occupational Environment, the site must be controlled to prevent access by any individuals classified as the General Public. Compliance is also maintained when any non-occupational individuals (the General Public) are prevented from accessing areas indicated as Red or Yellow in the attached RF Emissions diagram. In addition, a person must be aware of the RF environment into which they are entering. This can be accomplished by an RF Safety Awareness class, and by appropriate written documentation such as this Site Compliance Report.

Appendix D – General Safety Recommendations

The following are general recommendations appropriate for any site with accessible areas in excess of 100% General Public MPE. These recommendations are not specific to this site. These are safety recommendations appropriate for typical site management, building management, and other tenant operations.

1. All individuals needing access to the main site should be instructed to read and obey all posted placards and signs.

2. The site should be routinely inspected and this or similar report updated with the addition of any antennas or upon any changes to the RF environment including:

- *adding new antennas that may have been located on the site*
- *removing of any existing antennas*
- *changes in the radiating power or number of RF emitters*

3. Post the appropriate SAFETY INSTRUCTIONS, NOTICE, CAUTION & WARNING sign at the main site access point(s) and other locations as required. Note: Please refer to RF Exposure Diagrams in the report section above, to inform everyone who has access to this site that beyond posted signs there may be levels in excess of the limits prescribed by the FCC. The signs below are examples of signs meeting FCC guidelines.

4. Ensure that the site door remains locked (or appropriately controlled) to deny access to the general public if deemed as policy by the building/site owner.

5. For a General Public environment the five color levels identified in measured RF emission diagram can be interpreted in the following manner:

- *White represents areas predicted to be greater than or equal to 0% and less than 1% of the MPE general public limits*
- *Green represents areas predicted to be greater than or equal to 1% and less than 100% of the MPE general public limits*
- *Blue represents areas predicted to be greater than or equal to 100% and lesser than 500% of the MPE general public limits.*
- *Yellow represents areas predicted to be greater than or equal to 500% and lesser than 5000% of the MPE general public limits.*
- *Red areas indicates predicted levels greater than or equal to 5000% of the MPE general public limits.*

Appendix E – References

1 - FCC Definition

FCC defines an Occupational or Controlled environment as one where persons are exposed to RF fields as a consequence of their employment and where those persons exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Typical criteria for an Occupational or Controlled environment is restricted access (i.e. locked doors, gates, etc.) to areas where antennas are located coupled with proper RF warning signage.

FCC defines a site as a General Public or Uncontrolled environment when human exposure to RF fields occurs to the general public or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over the exposure. Typical criteria for a General Public or Uncontrolled environment are unrestricted access (i.e. unlocked or no restrictions) to areas where antennas are located without proper RF warning signage being posted.

2 - Physical Testing measurement procedure and Tools

The Narda Broadband Field Meter NBM-550 can make rapid conformance measurements with evaluation in the time domain when used in conjunction EA5091 probe. This probe is a so-called Shaped Probe, i.e. it is frequency weighted so that it automatically takes account of the FCC Occupational limit values. To collect data, the probe is pointed towards the potential source(s) of EME radiation and moved slowly from ground level up to slightly above head height (approx. 6 ft).

Spatial Average Measurement A technique used to average a minimum of ten (10) measurements taken in a ten (10) second interval from zero (0) to six (6) feet. This measurement is intended to model the average energy an average sized human body will absorb while present in an electromagnetic field of energy.

3 - Site Safety Procedures

The following items are general safety recommendations that should be administered on a site by site basis as needed by the carrier.

General Maintenance Work: *Any maintenance personnel required to work immediately in front of antennas and / or in areas indicated as above 100% of the Occupational MPE limits should coordinate with the wireless operators to disable transmitters during their work activities.*

Training and Qualification Verification: *All personnel accessing areas indicated as exceeding the General Population MPE limits should have a basic understanding of EME awareness and RF Safety procedures when working around transmitting antennas. Awareness training increases a workers understanding to potential RF exposure scenarios. Awareness can be achieved in a number of ways (e.g. videos, formal classroom lecture or internet based courses).*

Physical Access Control: *Access restrictions to transmitting antennas locations is the primary element in a site safety plan. Examples of access restrictions are as follows:*

- *Locked door or gate*
- *Alarmed door*
- *Locked ladder access*
- *Restrictive Barrier at antenna locations (e.g. Chain link with posted RF Sign)*

RF Signage: *Everyone should obey all posted signs at all times. RF signs play an important role in properly warning a worker prior to entering into a potential RF Exposure area.*

Assume all antennas are active: *Due to the nature of telecommunications transmissions, an antenna transmits intermittently. Always assume an antenna is transmitting. Never stop in front of an antenna. If you have to pass by an antenna, move through as quickly and safely as possible thereby reducing any exposure to a minimum.*

Maintain a 3 foot clearance from all antennas: *There is a direct correlation between the strength of an EME field and the distance from the transmitting antenna. The further away from an antenna, the lower the corresponding EME field is.*

Rooftop RF Emissions Diagram: *Section 4 of this report contains an RF Emissions Diagram that outlines various theoretical Maximum Permissible Exposure (MPE) areas on the rooftop. This analysis is all theoretical and assumes a duty cycle of 75% for each transmitting antenna at full power. This analysis is a worst case scenario. This analysis is based on one of two access control criteria: General Public criteria means the access to the site is uncontrolled and anyone can gain access. Occupational criteria means the access is restricted and only properly trained individuals can gain access to the antenna locations.*

4 - Definitions

Compliance- *The determination of whether a site is safe or not with regards to Human Exposure to Radio Frequency Radiation from transmitting antennas.*

Decibel (dB) – *A unit for measuring power or strength of a signal.*

Duty Cycle – *The percent of pulse duration to the pulse period of a periodic pulse train. Also, may be a measure of the temporal transmission characteristic of an intermittently transmitting RF source such as a paging antenna by dividing average transmission duration by the average period for transmission. A duty cycle of 75% corresponds to continuous operation.*

Effective (or Equivalent) Isotropic Radiated Power (EIRP) – *The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna, this product is divided by the cable losses*

Effective Radiated Power (ERP) – *In a given direction, the relative gain of a transmitting antenna with respect to the maximum directivity of a half wave dipole multiplied by the net power accepted by the antenna from the connecting transmitter.*

Gain (of an antenna in dbd) – *The ratio of the maximum intensity in a given direction to the maximum radiation in the same direction from a reference dipole. Gain is a measure of the relative efficiency of a directional antennas as compared to a reference dipole.*

General Population/Uncontrolled Environment – *Defined by the FCC, as an area where RFR exposure may occur to persons who are unaware of the potential for exposure and who have no control of their exposure. General Population is also referenced as General Public.*

Generic Antenna – *For the purposes of this report, the use of "Generic" as an antenna model means the antenna information was not provided and could not be obtained while on site. In the event of unknown information, MobileComm will use our industry specific knowledge of antenna models to select a worst case scenario antenna to model the site.*

Isotropic Antenna – *An antenna that is completely non-directional. In other words, an antenna that radiates energy equally in all directions.*

Maximum Measurement – *This measurement represents the single largest measurement recorded when performing a spatial average measurement.*

Maximum Exposure Limit (MPE) – *The RMS and peak electric and magnetic field strength, their squares, or the plane-wave equivalent power densities associated with these fields to which a person may be exposed without harmful effect and with acceptable safety factor.*

Occupational/Controlled Environment – *Defined by the FCC, as an area where Radio Frequency Radiation (RFR) exposure may occur to persons who are aware of the potential for exposure as a condition of employment or specific activity and can exercise control over their exposure.*

Radio Frequency Radiation – *Electromagnetic waves that are propagated from antennas through space.*

Spatial Average Measurement – *A technique used to average a minimum of ten (10) measurements taken in a ten (10) second interval from zero (0) to six (6) feet. This measurement is intended to model the average energy an average sized human body will absorb while present in an electromagnetic field of energy.*

Transmitter Power Output (TPO) – *The radio frequency output power of a transmitter's final radio frequency stage as measured at the output terminal while connected to a load.*

Appendix F – Proprietary Statement

This report was prepared for the use of AT&T Mobility, LLC to meet requirements specified in AT&T's corporate RF safety guidelines. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by MobileComm are based solely on the information provided by AT&T Mobility and all observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to MobileComm so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.