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

December 6, 2019

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

RE: **Notice of Exempt Modification for AT&T**
876345 – AT&T 10035292
33 Janowski Road, Ashford, CT 06278
Latitude: 41° 57′ 7.70″ / Longitude: -72° 11′ 43.90″

Dear Ms. Bachman:

AT&T currently maintains nine (9) antennas at the 140-foot mount on the existing 192-foot Self Support Tower, located at 33 Janowski Road, Ashford, CT. The tower is owned by Crown Castle and the property is owned by the Martin Family Trust. AT&T now intends to replace six (6) existing antennas with six (6) new antennas. The new antennas will be installed at the 140-ft level of the tower. Mount modifications are also proposed as shown on the enclosed Mount Analysis.

The facility was approved by the Town of Ashford Planning and Zoning Commission on November 12, 1996. The approval did not involve conditions that would be violated by this modification.

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 Ralph H. Fletcher, First Selectman for the Town of Ashford, Michael D'Amato, Zoning Enforcement Officer, Crown Castle as the tower owner, and Martin Family Trust, the property 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). Please send approval/rejection letter to Attn: Anne Marie Zsamba.

Sincerely,

Anne Marie Zsamba
Real Estate Specialist
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
(201) 236-9224
AnneMarie.Zsamba@crowncastle.com

Attachments
cc:

Ralph H. Fletcher, First Selectman
Town of Ashford
5 Town Hall Road
Ashford, CT 06278
860-487-4400

Michael D'Amato, ZEO
Town of Ashford
Planning Department
5 Town Hall Road
Warrenville, CT 06278
860-487-4415

Martin Family Living Trust, Property Owner
33 Janowski Road
Ashford, CT 06278

Crown Castle, Tower Owner

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

ORIGIN ID:ONHA (585) 445-5896
RICHARD ZAJAC
CROWN CASTLE
300 MERIDIAN CENTRE

ROCHESTER, NY 14618
UNITED STATES US

SHIP DATE: 05DEC19
ACTWGT: 4.00 LB
CAD: 104924194/INET4160

BILL SENDER

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

NEW BRITAIN CT 06051
(860) 827-2951
INV:
PO:
REF: 1765.6680
DEPT:

567J2/18DD/05A2

J192119091901uv

FedEx Express

FRI - 06 DEC 3:00P
STANDARD OVERNIGHT

TRK# 0201 **7771 6354 1457**

XE BDLA

06051
BDL
CT-US

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Exhibit A

Original Facility Approval

FILE SITE #204
SKY HILL
ZONING

RECEIVED
11-13-96

MINUTES - ASHFORD PLANNING AND ZONING COMMISSION

Annual Meeting - November 12, 1996

Members present: Organ, Lawrence, Nagy, Levaur, Rossman, McCarthy & White.

Alternates present: Bartok & Specyalski.

The meeting was called to order at 9:55 p.m. after the public hearing (Sprint Spectrum, tower & Moratorium, Lake Chaffee).

Specyalski is the voting alternate for this meeting.

At the Annual Town meeting, Alex Hastillo and Kevin McCarthy were elected to 4 year terms on the Commission ending in the year 2000 and Bartok was elected to a 3 year term as Alternate ending in 1999.

Moved and seconded to consider Old and New Business first. Passed without dissent.

The Commission considered the Sprint Spectrum application for a communications tower to be located on Sky Hill. There were no objections at tonights public hearing. The tower will be able to hold three sets of antennas. Sprint Spectrum will operate a PCS digital system. It is regulated by the FCC. There will be no lights on the tower. Access will be off Frontage Road to Janowski Road to avoid the wetlands on the east end of Janowski Road. Moved and seconded to approve with conditions the application for a Special Exception under Section 5.2.3 by Sprint Spectrum L.P., Meriden, CT for a 200' communications tower to be located on land leased from David H. Martin off Janowski Road on Sky Hill.

The conditions are:
1. Utilities to the site which is approximately 2500' from Janowski Road will be located underground in the right of way.
2. Space and installation of fire, emergency and municipal communications equipment to meet present and future needs will be provided at no cost.
3. A copy of the liability insurance will be submitted to the Commission.
4. A site plan including driveway design and sedimentation and erosion control measures will be submitted to the Commission before the construction begins.
5. A copy of the lease will be part of the land records.

Motion passed without dissent.

The Commission considered the proposed Moratorium at Lake Chaffee. Tim Backus, Chairman of the Water Pollution Control Authority was the only person to speak at the public hearing. Moved and seconded to approve the following:

Moratorium at Lake Chaffee

WHEREAS, the Department of Environmental Protection has cited the Town of Ashford and the Lake Chaffee Improvement Association, Inc. to study and report upon potential pollution at Lake Chaffee resulting from construction around the lake; and

WHEREAS, the Department of Environmental Protection has found pollution in the tributaries leading to the lake, and

WHEREAS, there is a reasonable expectation that the recommendation of the study may be to limit new construction in that area, or as an alterative to require that homes in the area be connected to an alternative type of sewage disposal system, and

WHEREAS, this Commission does not want to allow any deterioration of the water in the lake or tributaries;

The Planning and Zoning Commission of the Town of Ashford, pursuant to the authority vested in it by Section 8-2 of Connecticut General Statutes, hereby amends the zoning regulations of the Town of Ashford by adoption of the following Moratorium:

"Until December 31, 1997, there shall be no new house construction allowed within the area of Lake Chaffee Improvement Association, Inc. nor any enclosed addition to any existing house in that area. The Zoning Enforcement Officer may not in that period certify that any new construction is in conformity with the zoning regulations of the town."

Motion passed without dissent.

The reasons for reinstating the moratorium include:
1. There is need for more testing of the water and septic systems in the area.
2. There have been minimal applications for construction since the last moratorium was lifted.
3. The WPCA is seeking on-site solutions.
4. There are several sets of vacant lots that may be valuable for sewage disposal systems.

Specyalski stepped down for the next item of business.

Brialee Campground - Brian Specyalski submitted a plan for a six additional campsites at the campground. It was noted that three of these butt onto adjoining property that is owned by the State of Connecticut. The others have a 100' setback that has been the minimum acceptable to the Commission. Moved and seconded to receive the plan and hold a public hearing on December 9th. Passed without dissent. A new map showing only the three sites that meet the setback requirements will be submitted. The Commission will walk the site a 7 a.m. on Saturday November 16th.

The Commission returned to the top of the agenda.

Moved and seconded to approve the minutes of the October 15th meeting. Passed without dissent.

Moved and seconded to send a letter of appreciation to George Quirk Sr., retiring member for his many years of service to the Commission. Passed without dissent.

There were no bills.

A copy of the revised Small Cities Housing Plan was received from the Office of the Selectmen. It will go to a public hearing in December. Copies will be distributed to the Commission members for review.

The revised fee schedule was approved by Town Meeting in October.

Moved and seconded to add to the agenda the election of officers and reappointment of employees. Passed without dissent.

Moved and seconded to reelect the following officers to serve until the next annual meeting of the Commission: Sidney E. Organ, Chairman, Alex Hastillo, Vice Chairman and John Bartok, Secretary. Passed without dissent. The Secretary will cast one ballot for each.

Moved and seconded to reappoint Rudolph Makray, Zoning Enforcement Officer and John Bartok, Recording Secretary for one year or until the next annual meeting. Passed without dissent.

The Commission agreed to hold a Special Meeting on Monday, December 16th at 7 p.m. to review the draft of the revised Plan of Development.

The meeting adjourned at 10:55 p.m.

Respectfully submitted.

John W. Bartok, Jr.
Recording Secretary

LEGAL NOTICE

Town of Ashford

The Ashford Planning and Zoning Commission at its meeting on November 12, 1996 took the following aotions:

APPROVED with ooonditions the applioation of Sprint Speotrum, L.P., Meriden, CT for a 200' communioations tower to be built on the David Matin property looated off Route 89 on Sky Hill.

APPROVED a request by the Ashford Water Pollution Control Authority to reenstate the moratorium at Lake Chaffee until December 31, 1997 that prohibits oonstruction of new houses or enolosed additions to any existing house.

Dated in Ashford, Conneotiout this 14th day of November, 1996.

John W. Bartok,Jr.,Seo.
Ashford Planning and,
Zoning Commission

Exhibit B

Property Card


02-B-1.2
2.1 ac
02-B-2
75 ac
02-A-1
9.5 ac
02-B-1.3
3.7 ac
Ferrence Rd
01-D-1
1 ac
Janoski Rd
02-B-1.4
5.5 ac
-B-1
1 ac
02-E-1
5.4 ac
Hillside Rd
02-F-1
50.3 ac
02-F-2
9.87 ac
01-E-1
5.3 ac
02-F-2.1
2.97 ac
02-E-2
10 ac
1085 ft
02-F-3
11 ac
Mount Hope River
Sky Hill
04-B-1
57.9 ac
05-A-1.1
05-B-1.1

33 JANOSKI RD

Location	33 JANOSKI RD	**Mblu**	02/ F/ 1.1/ /
Acct#	00007410	**Owner**	MARTIN FAMILY LIV TR DTD 6/20/05,
Taxable Status		**Assessment**	$252,200
Appraisal	$360,200	**PID**	65
Building Count	1	**Legal Description**	
Lot Type		**topoTopo**	
Location			

Current Value

Appraisal					
Valuation Year	**Building**	**Extra Features**	**Outbuildings**	**Land**	**Total**
2018	$0	$0	$183,100	$177,100	$360,200
Assessment					
Valuation Year	**Building**	**Extra Features**	**Outbuildings**	**Land**	**Total**
2018	$0	$0	$128,200	$124,000	$252,200

Parcel Addreses

Additional Addresses		
Address	**City, State Zip**	**Type**
33 JANOSKI RD		Primary

Owner of Record

Owner	MARTIN FAMILY LIV TR DTD 6/20/05,
Co-Owner	MARTIN DAVID H + CAROLYN TRUSTEES
Care Of	
Address	C/O SPRINT SPECTRUM CT-03XC04 PO BOX 8430 KANSAS CITY, MO 64114-8430

Sale Price	$0
Certificate	
Book & Page	194/ 885
Sale Date	10/15/2018
Instrument	04
Qualified	U

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**

MARTIN DAVID H	$0	C	109/ 811		09/30/1996

Building Information

Building 1 : Section 1

Year Built:
Living Area: 0
Replacement Cost: $0
Building Percent Good:
Replacement Cost Less Depreciation: $0

Building Attributes	
Field	**Description**
Style	Outbuildings
Model	
Grade:	
Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Bsmt. Garages	

Building Photo

(http://images.vgsi.com/photos/AshfordCTPhotos//\00\00\25/30

Building Layout

Building Layout
(http://images.vgsi.com/photos/AshfordCTPhotos//Sketches/65_

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

Extra Features

Extra Features	Legend

No Data for Extra Features

Parcel Information

Use Code	201
Description	Commercial Vacant
Deeded Acres	0.7

Land

Land Use

Use Code	201
Description	Commercial Vacant
Zone	
Neighborhood	C3
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	0.7
Frontage	
Depth	
Assessed Value	$124,000
Appraised Value	$177,100

Outbuildings

Outbuildings								Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Assessed Value**	**Bldg #**	**Comment**
TWR1	Cell Tower			192 HEIGHT	$73,400	$51,400	1	
SHD2	Pre Cast Cell			240 S.F.	$34,400	$24,100	1	
FN3	Fence 6'			260 L.F.	$3,600	$2,500	1	
SHD2	Pre Cast Cell			360 S.F.	$34,400	$24,100	1	
SHD2	Pre Cast Cell			260 S.F.	$37,300	$26,100	1	

Valuation History

Appraisal					
Valuation Year	**Building**	**Extra Features**	**Outbuildings**	**Land**	**Total**
2017	$0	$0	$183,100	$177,100	$360,200
2016	$0	$0	$183,100	$177,100	$360,200
2015	$0	$0	$182,200	$189,000	$371,200

Assessment					
Valuation Year	**Building**	**Extra Features**	**Outbuildings**	**Land**	**Total**
2017	$0	$0	$128,200	$124,000	$252,200
2016	$0	$0	$128,200	$124,000	$252,200
2015	$0	$0	$127,600	$132,300	$259,900

Exhibit C

Construction Drawings

AT&T SITE NUMBER:	**CT1058**	**BUSINESS UNIT #:**	**876345**
AT&T SITE NAME:	**ASHFORD SPRINT TOWER**	**SITE ADDRESS:**	**36 JANOWSKI ROAD**
AT&T FA CODE:	**10035292**		**ASHFORD, CT 06278**
AT&T PACE NUMBER:	**MRCTB041413, MRCTB041456, MRCTB041856, MRCTB041649, MRCTB041562**	**COUNTY:**	**WINDHAM**
		TOWER HEIGHT:	**192'-0"**
SITE TYPE:	**SELF-SUPPORT TOWER**		

PROJECT: AT&T 2C, 3C, 4C, 5C, RETROFIT

SITE INFORMATION

CROWN CASTLE USA INC. SITE NAME:	SKY HILL
SITE ADDRESS:	36 JANOWSKI ROAD ASHFORD, CT 06278
COUNTY:	WINDHAM
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41.9521589
LONGITUDE:	-72.1955269
LAT/LONG TYPE:	NAD83
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
TOWER OWNER:	CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	AT&T MOBILITY ONE AT&T WAY BEDMINSTER, NJ 07921
CROWN CASTLE USA INC. APPLICATION ID:	492784

PROJECT TEAM

A&E FIRM:	B+T GROUP 1717 SOUTH BOULDER, SUITE 300 TULSA, OK 74119 MIKE OAKES (918) 217-8574
CROWN CASTLE USA INC. DISTRICT CONTACTS:	3200 HORIZON SRIVE, SUITE 150 KING OF PRUSSIA, PA 19406

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1	SITE PLAN
C-2	EQUIPMENT PLAN
C-3	TOWER ELEVATIONS
C-4	ANTENNA ORIENTATION
C-5	ANTENNA SCHEDULE
C-6	ANTENNA AND RRH SPECS.
C-7	ANTENNA AND RRH DETAIL
C-8	PLUMBING DIAGRAM
G-1	GROUNDING DETAILS
G-2	GROUNDING DETAILS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11x17. 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.

PROJECT DESCRIPTION

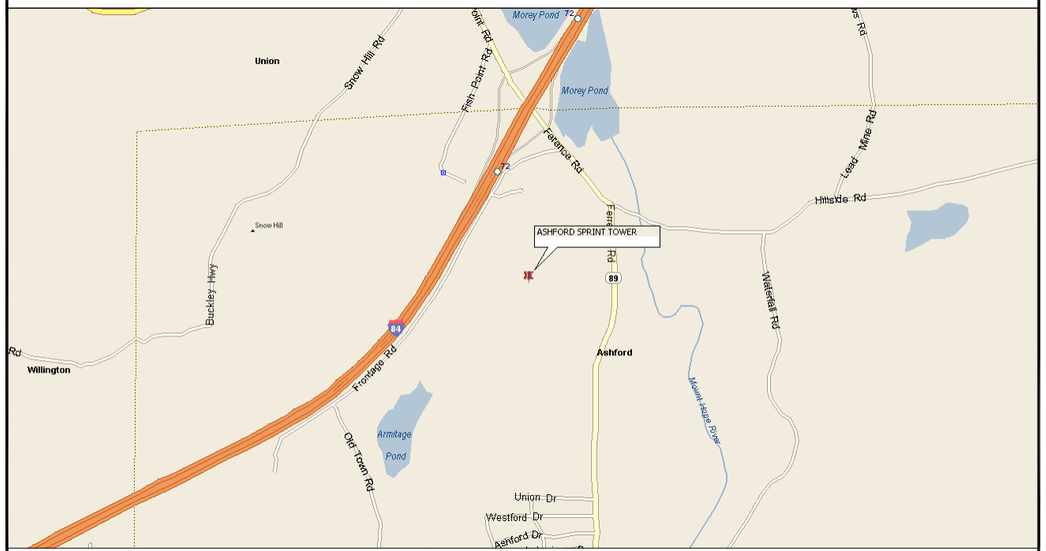
THE PURPOSE OF THIS PROJECT IS TO PROPOSE AN ANTENNA MODIFICATION ON AN EXISTING WIRELESS SITE.

TOWER SCOPE OF WORK

- REMOVE (2) KMW AM-X-CD-16-65-00T-RET ANTENNAS
- REMOVE (4) KMW AM-X-CD-14-65-00T-RET ANTENNAS
- REMOVE (3) CCI DTMABP7819VG12A TMAS
- REMOVE (6) POWERWAVE CM1007-DBPXC-003 DIPLEXERS
- REMOVE (3) ERICSSON RRUS11 B12 RRHS
- REMOVE (1) DUS41
- INSTALL (2) CCI DMP65R-BU6DA ANTENNAS
- INSTALL (4) CCI DMP65R-BU4DA ANTENNAS
- INSTALL (3) ERICSSON 4449 B5/B12 RRHS
- INSTALL (3) ERICSSON 4478 B14 RRHS
- INSTALL (3) ERICSSON 8843 B2/B66A RRHS
- INSTALL (1) RAYCAP DC6-48-60-0-8C-EV SURGE SUPPRESSOR
- INSTALL (3) VALMONT RRUDSM DUAL RRH MOUNTS
- INSTALL (1) ROSENBERGER LEONI FB-L98B-034-XXX FIBER CABLE
- INSTALL (3) ROSENBERGER LEONI WR-VG66ST-BRD DC CABLES
- INSTALL (2) BB 6630 + IDLe
- ANTENNA MOUNT MODIFICATION PER MOUNT MODIFICATION REPORT BY TOWER ENGINEERING PROFESSIONALS DATED 9/10/19

DESIGN PACKAGE BASED ON THE RFDS REVISION: PRELIMINARY DATE: 8/9/19	DESIGN PACKAGE BASED ON THE APPLICATION ID: 492784 REVISION: 0

LOCATION MAP



NO SCALE

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:

MOUNT ANALYSIS: TOWER ENGINEERING PROFESSIONALS SEPTEMBER 10, 2019

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

CALL CONNECTICUT ONE CALL
(800) 922-4455
CALL 3 WORKING DAYS
BEFORE YOU DIG!

AT&T
ONE AT&T WAY
BEDMINSTER, NJ 07921

CROWN CASTLE
3200 HORIZON DRIVE, SUITE 150
KING OF PRUSSIA, PA 19406

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

AT&T SITE NUMBER:
CT1058

BU #: **876345**
SKY HILL

36 JANOWSKI ROAD
ASHFORD, CT 06278

EXISTING 192'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	10/7/19	STH	CONSTRUCTION	FWP
1	11/5/19	STH	CONSTRUCTION	MDW
2	11/20/19	STH	CONSTRUCTION	MDW

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

SHEET NUMBER: T-1

REVISION: 2

SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES, SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.
3. 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 TIA 1019 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
4. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS.
5. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
6. 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, OWNER AND/OR LOCAL UTILITIES.
7. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
9. 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.
10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
11. 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 PROJECT SPECIFICATIONS.
12. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
13. NOTICE TO PROCEED- NO WORK TO COMMENCE PRIOR TO COMPANY'S WRITTEN NOTICE TO PROCEED AND THE ISSUANCE OF A PURCHASE ORDER.
14. 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 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 THE ANSI/TIA-322 (LATEST EDITION).

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.
2. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
3. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8"ø ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
4. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. SLAB FOUNDATION DESIGN ASSUMING ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER.....2 IN.
   #5 AND SMALLER & WWF.....1 1/2 IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALLS.....3/4 IN.
   BEAMS AND COLUMNS.....1 1/2 IN.
5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE. IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

MASONRY NOTES:

1. HOLLOW CONCRETE MASONRY UNITS SHALL MEET A.S.T.M. SPECIFICATION C90, GRADE N. TYPE 1. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (F'm) SHALL BE 1500 PSI.
2. MORTAR SHALL MEET THE PROPERTY SPECIFICATION OF A.S.T.M. C270 TYP. "S" MORTAR AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.
3. GROUT SHALL MEET A.S.T.M. SPECIFICATION C475 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI.
4. CONCRETE MASONRY SHALL BE LAID IN RUNNING (COMMON) BOND.
5. WALL SHALL RECEIVE TEMPORARY BRACING. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL GROUT IS FULLY CURED.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

CONTRACTOR-	
SUBCONTRACTOR-	GENERAL CONTRACTOR (CONSTRUCTION)
CARRIER-	AT&T
TOWER OWNER-	CROWN CASTLE USA INC.
OEM-	ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR AND CROWN CASTLE USA INC.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR AND CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWINGS.
10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

ABBREVIATIONS AND SYMBOLS:

ABBREVIATIONS:

AGL	ABOVE GRADE LEVEL
BTS	BASE TRANSCEIVER STATION
EXISTING	EXISTING
MIN.	MINIMUM
REF	REFERENCE
RF	RADIO FREQUENCY
T.B.D.	TO BE DETERMINED
T.B.R.	TO BE RESOLVED
TYP	TYPICAL
REQ	REQUIRED
EGR	EQUIPMENT GROUND RING
AWG	AMERICAN WIRE GAUGE
MGB	MASTER GROUND BAR
EG	EQUIPMENT GROUND
BCW	BARE COPPER WIRE
SIAD	SMART INTEGRATED ACCESS DEVICE
GEN	GENERATOR
IGR	INTERIOR GROUND RING (HALO)
RBS	RADIO BASE STATION

SYMBOLS:

- SOLID GROUND BUS BAR
- SOLID NEUTRAL BUS BAR
- SUPPLEMENTAL GROUND CONDUCTOR
- 2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
- SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
- CHEMICAL GROUND ROD
- TEST WELL
- DISCONNECT SWITCH
- METER
- EXOTHERMIC WELD (CADWELD) (UNLESS OTHERWISE NOTED)
- MECHANICAL CONNECTION
- GROUNDING WIRE

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. SUBCONTRACTOR 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. HILTI EPOXY ANCHORS ARE REQUIRED BY CROWN CASTLE USA INC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
5. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
6. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING AND T1 CONDUCTOR AND 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.
7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH PLASTIC TAPE PER COLOR SCHEDULE. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (I.E. PANEL BOARD AND CIRCUIT ID'S).
8. PANEL BOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
10. POWER, CONTROL AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET & DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.
11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET AND DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET AND DRY) OPERATION WITH OUTER JACKET LISTED OR LABELED FOR THE LOCATION USED UNLESS OTHERWISE SPECIFIED.
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 AT NO 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) OR RIGID NONMETALLIC CONDUIT (I.E. RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT) OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) 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 NEC.
21. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER).
22. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES 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 BUSHIN ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
23. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL; SHALL MEET OR EXCEED UL 50 AND RATED NEMA 1 (OR BETTER) INDOORS OR NEMA 3R (OR BETTER) OUTDOORS.
24. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
25. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
26. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
27. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
28. INSTALL PLASTIC LABEL ON THE METER CENTER TO SHOW "AT&T".
29. ALL CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

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 SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT 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 AWG 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 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 AWG 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 AWG 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 WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED IN THE FACILITY GROUND 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 PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., 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 TINNED SOLID IN 3/4" LIQUID TIGHT CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE LIQUID TIGHT CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).

NEC INSULATOR COLOR CODE

DESCRIPTION	PHASE/CODE LETTER	WIRE COLOR
240/120 1Ø	LEG 1	BLACK
	LEG 2	RED
AC NEUTRAL	N	WHITE
GROUND (EGC)	G	GREEN
VDC POS	+	*RED-POLARITY MARK AT TERMINATION
VDC NEG	-	*BLACK-POLARITY MARK AT TERMINATION
240V OR 208V, 3Ø	PHASE A	BLACK
	PHASE B	RED(ORG. IF HI LEG)
	PHASE C	BLUE
480V, 3Ø	PHASE A	BROWN
	PHASE B	ORANGE OR PURPLE
	PHASE C	YELLOW

* SEE NEC 210.5(C)(1) AND (2)

AT&T
ONE AT&T WAY
BEDMINSTER, NJ 07921

CROWN CASTLE
3200 HORIZON DRIVE, SUITE 150
KING OF PRUSSIA, PA 19406

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

AT&T SITE NUMBER:
CT1058

BU #: **876345**
SKY HILL

36 JANOWSKI ROAD
ASHFORD, CT 06278

EXISTING 192'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

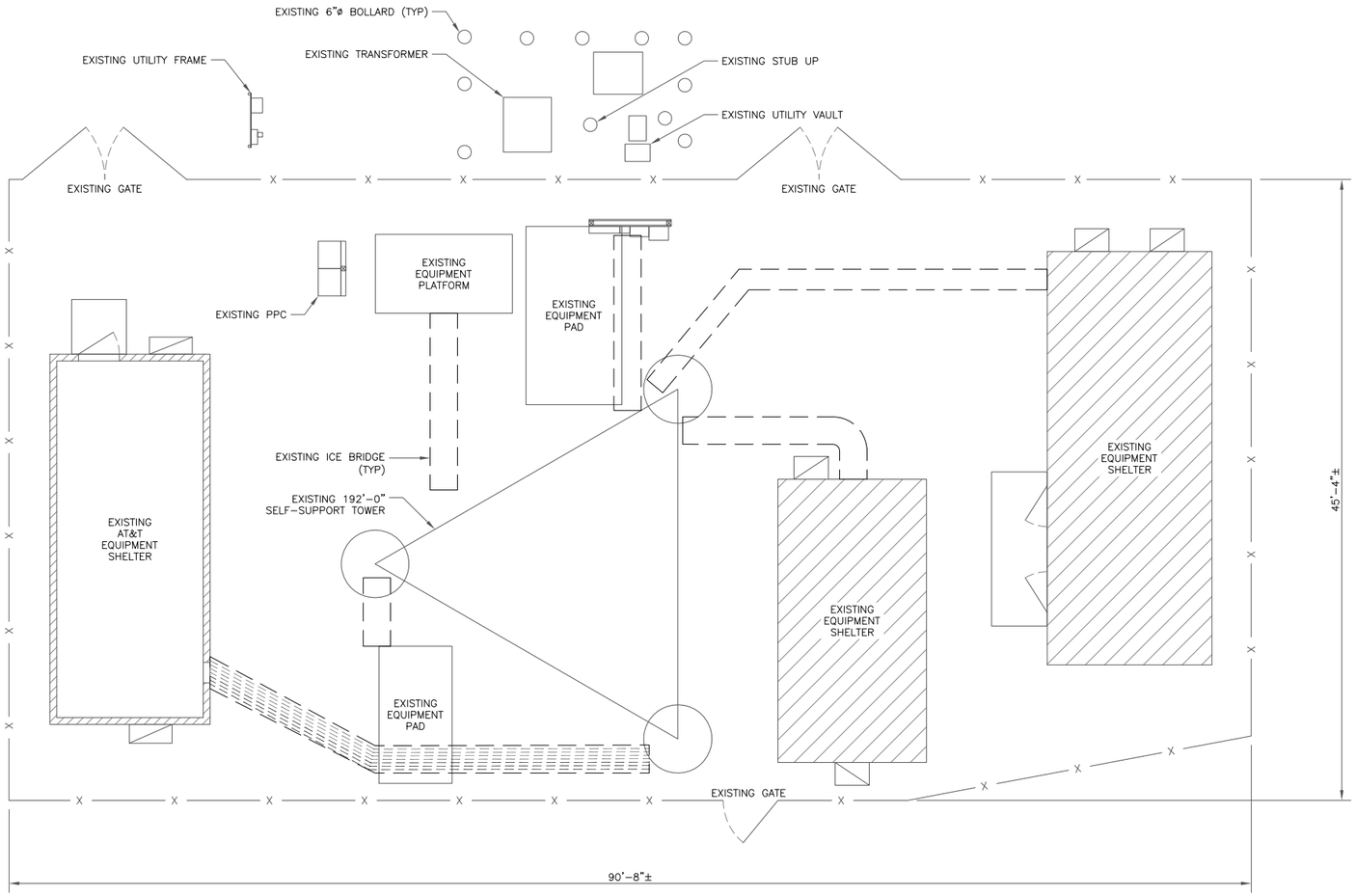
REV	DATE	DRWN	DESCRIPTION	DES./QA
0	10/7/19	STH	CONSTRUCTION	FWP
1	11/5/19	STH	CONSTRUCTION	MDW
2	11/20/19	STH	CONSTRUCTION	MDW

STATE OF CONNECTICUT
31627
LICENSED
PROFESSIONAL ENGINEER
11/20/19

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

SHEET NUMBER: T-2

REVISION: 2



1 SITE PLAN
SCALE: 4' 2' 0 4' 3/16"=1'-0" (FULL SIZE) 3/32"=1'-0" (11x17)

N

AT&T
ONE AT&T WAY
BEDMINSTER, NJ 07921

CROWN CASTLE
3200 HORIZON DRIVE, SUITE 150
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EXISTING 192'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
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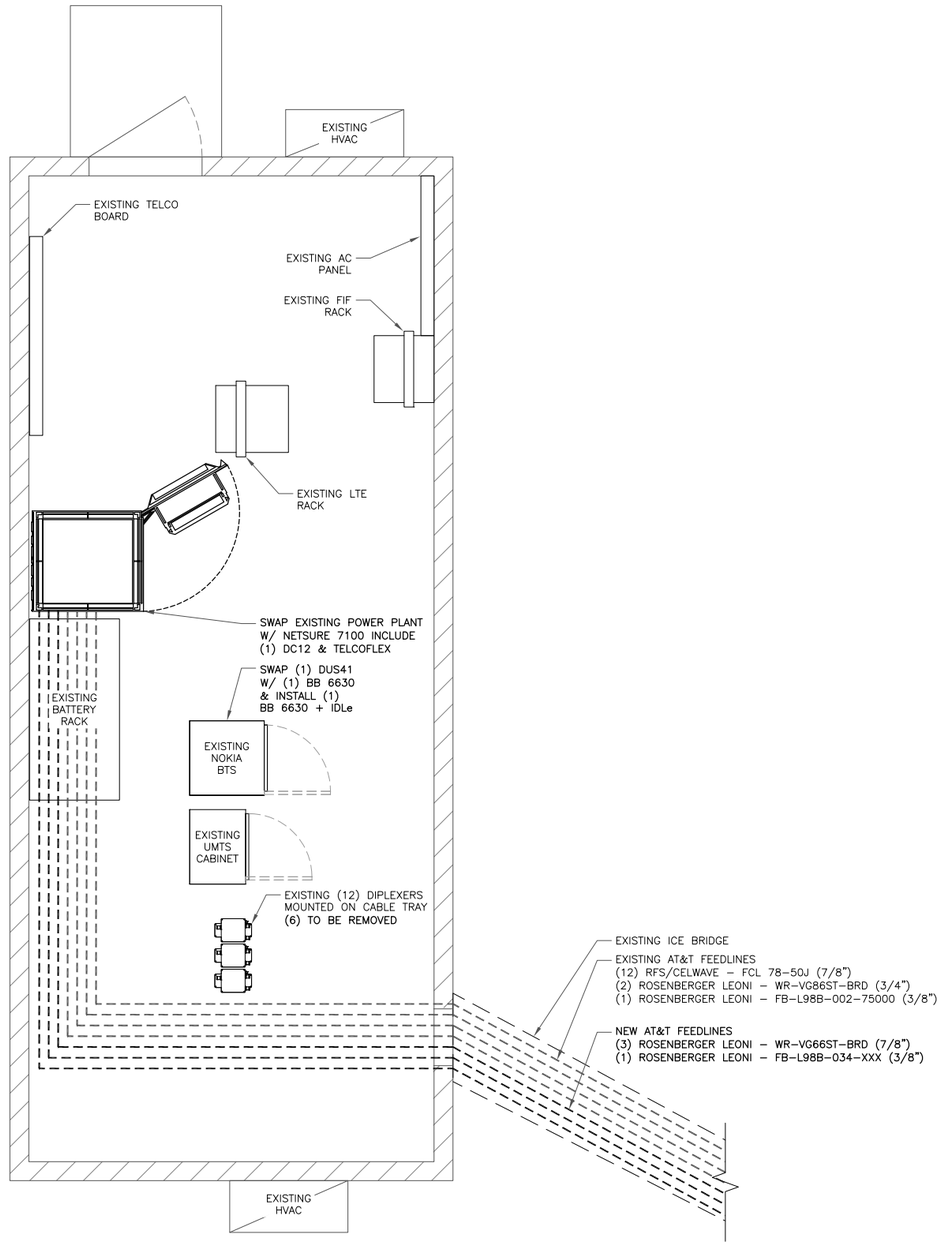
2	11/20/19	STH	CONSTRUCTION	MDW

STATE OF CONNECTICUT
SCOTT T. HESSE
31627
LICENSED
PROFESSIONAL ENGINEER
11/20/19

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

SHEET NUMBER: C-1
REVISION: 2



1 EXISTING EQUIPMENT PLAN

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

N

AT&T
ONE AT&T WAY
BEDMINSTER, NJ 07921

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EXISTING 192'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	10/7/19	STH	CONSTRUCTION	FWP
1	11/5/19	STH	CONSTRUCTION	MDW
2	11/20/19	STH	CONSTRUCTION	MDW

STATE OF CONNECTICUT
SCOTT T. HESKETH
31627
LICENSED
PROFESSIONAL ENGINEER
11/20/19

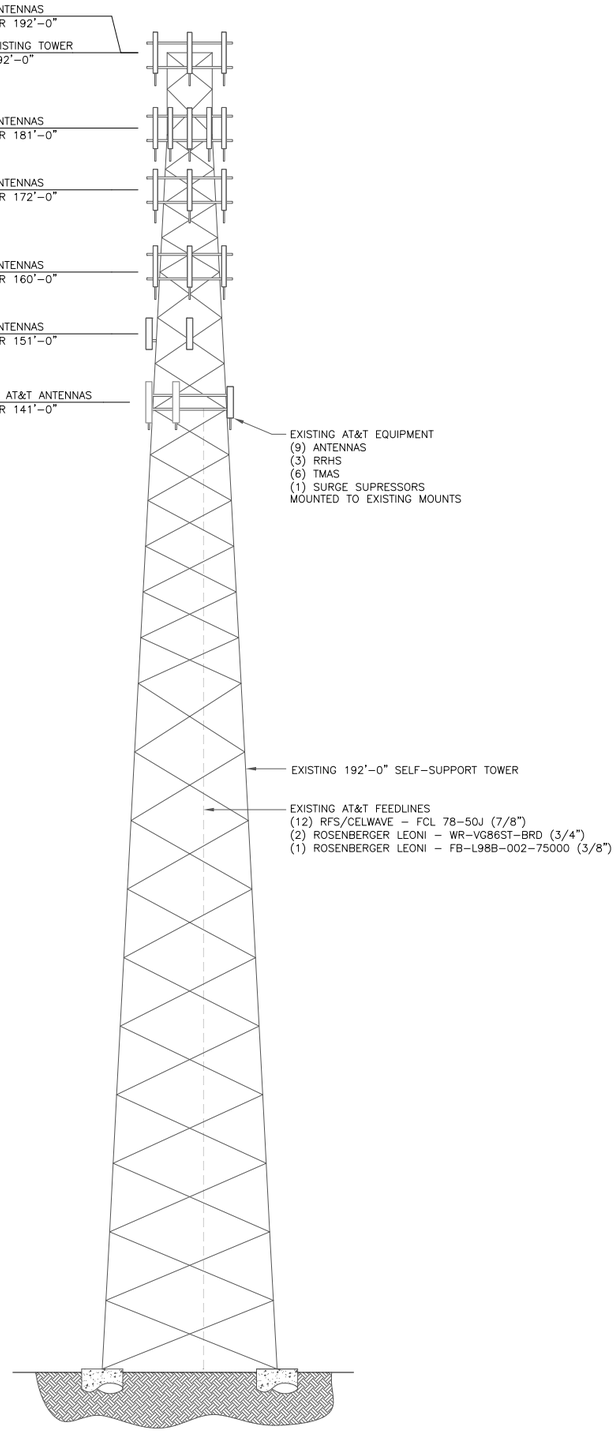
B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

SHEET NUMBER: C-2

REVISION: 2

AT&T EQUIPMENT

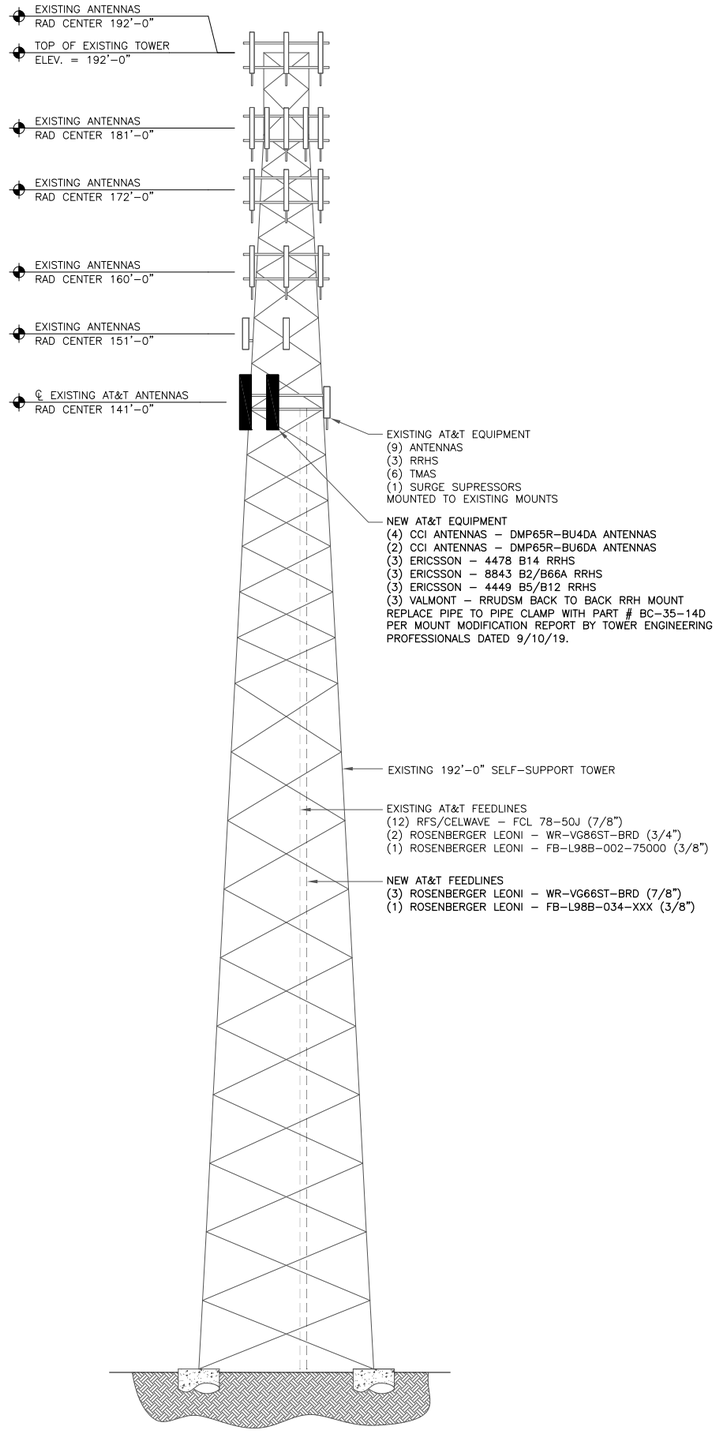
ANTENNA CL: 141'–0"
MOUNT CL: 140'–0"



1 EXISTING ELEVATION
SCALE: NOT TO SCALE

AT&T EQUIPMENT

ANTENNA CL: 141'–0"
MOUNT CL: 140'–0"



2 FINAL ELEVATION
SCALE: NOT TO SCALE

AT&T
ONE AT&T WAY
BEDMINSTER, NJ 07921

CROWN CASTLE
3200 HORIZON DRIVE, SUITE 150
KING OF PRUSSIA, PA 19406

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

AT&T SITE NUMBER:
CT1058

BU #: **876345**
SKY HILL

36 JANOWSKI ROAD
ASHFORD, CT 06278

EXISTING 192'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	10/7/19	STH	CONSTRUCTION	FWP
1	11/5/19	STH	CONSTRUCTION	MDW
2	11/20/19	STH	CONSTRUCTION	MDW

11/20/19

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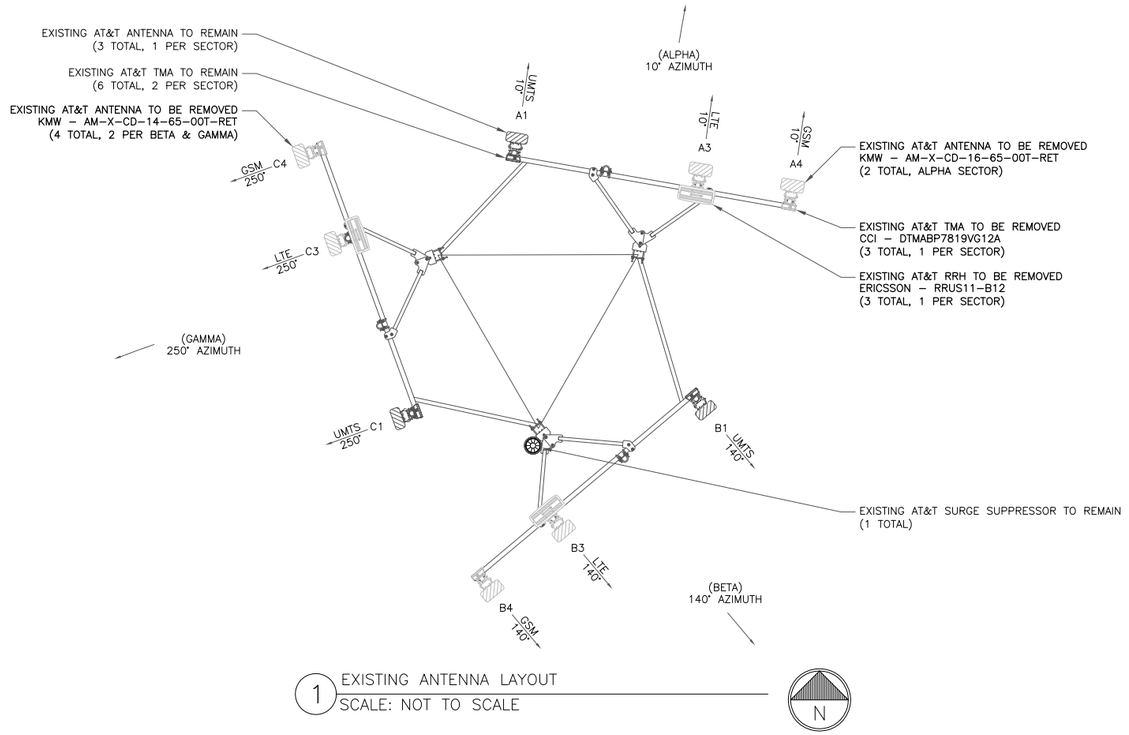
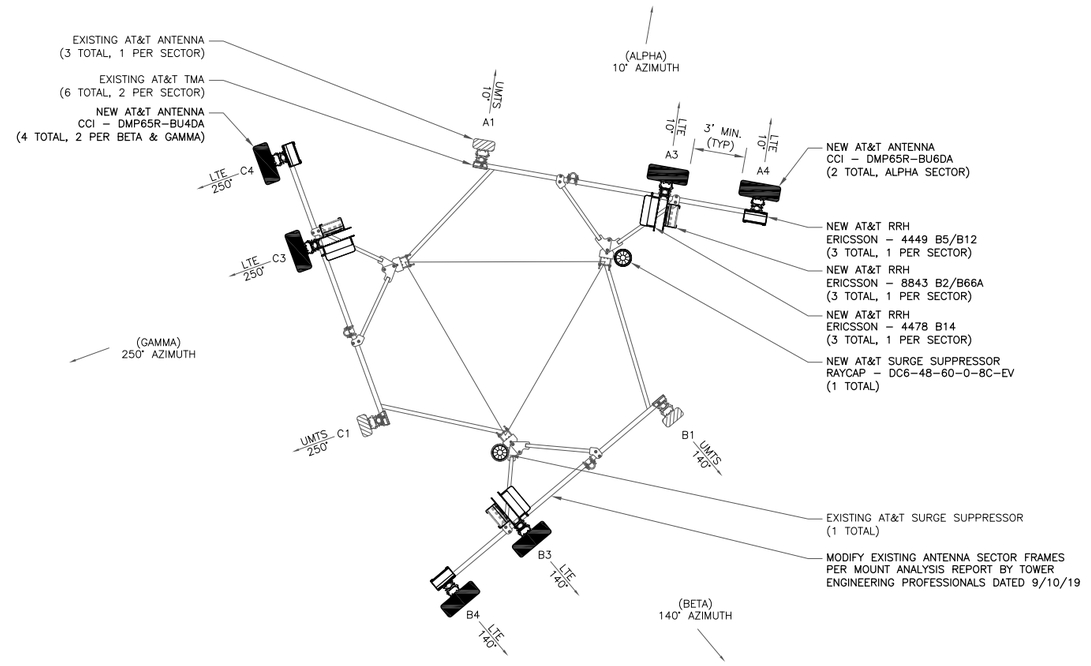
SHEET NUMBER: C-3

REVISION: 2



1 EXISTING ANTENNA LAYOUT
SCALE: NOT TO SCALE



2 FINAL ANTENNA LAYOUT
SCALE: NOT TO SCALE

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BEDMINSTER, NJ 07921

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3200 HORIZON DRIVE, SUITE 150
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EXISTING 192'-0"
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SHEET NUMBER: C-4
REVISION: 2

FINAL ANTENNA AND COAXIAL CABLE SCHEDULE

POS.	TECH	STATUS	AZIMUTH	ANTENNA TYPE	ANTENNA RAD CENTER	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	MAIN COAX SIZE	MAIN COAX LENGTH	COAX QTY	TMA QTY AND MODEL	RAYCAP	DC (WR-VG86ST-BRD) FIBER CABLES (FB-L98B-034-XXXXXX)	RRHs QTY ON TOWER	RRHs ON GROUND	DIPLEXER ON TOWER	DIPLEXER ON GROUND	RET CABLE
ALPHA SECTOR																		
A1	UMTS	EXISTING	140°	POWERWAVE 7770	141'-0"	2°	3°	7/8"	150'-0"	4	T19-08BP111-001	DC6-48-60-18-8F	(1) FIBER (2) DC LINES	–	–	–	Y	–
A3	LTE	NEW	10°	CCI DMP65R-BU6DA	141'-0"	0°	10°/8°	–	–	–	–			(1) 4478 B14 (1) 8843 B2/B66A	–	–	–	–
A4	LTE	NEW	10°	CCI DMP65R-BU6DA	141'-0"	0°	12°/2°/8°/2°	–	–	–	–			(1) 4449 B5/B12	–	–	–	–
BETA SECTOR																		
B1	UMTS	EXISTING	250°	POWERWAVE 7770	141'-0"	0°	5°	7/8"	150'-0"	4	T19-08BP111-001	DC6-48-60-0-8C-EV	(1) FIBER (2) DC LINES	–	–	–	Y	–
B3	LTE	NEW	140°	CCI DMP65R-BU4DA	141'-0"	0°	2°/3°	–	–	–	–			(1) 4478 B14 (1) 8843 B2/B66A	–	–	–	–
B4	LTE	NEW	140°	CCI DMP65R-BU4DA	141'-0"	0°	8°/2°/3°/2°	–	–	–	–			(1) 4449 B5/B12	–	–	–	–
GAMMA SECTOR																		
C1	UMTS	EXISTING	10°	POWERWAVE 7770	141'-0"	0°	10°	7/8"	150'-0"	4	T19-08BP111-001	–	(3) DC LINES	–	–	–	Y	–
C3	LTE	NEW	250°	CCI DMP65R-BU4DA	141'-0"	0°	6°/3°	–	–	–	–			(1) 4478 B14 (1) 8843 B2/B66A	–	–	–	–
C4	LTE	NEW	250°	CCI DMP65R-BU4DA	141'-0"	0°	9°/6°/3°/6°	–	–	–	–			(1) 4449 B5/B12	–	–	–	–

NOTE: BOLD DENOTES NEW EQUIPMENT

1 FINAL ANTENNA AND COAXIAL CABLE SCHEDULE
SCALE: NOT TO SCALE

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AT&T SITE NUMBER:
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BU #: **876345**
SKY HILL

36 JANOWSKI ROAD
ASHFORD, CT 06278

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STATE OF CONNECTICUT
31627
LICENSED
PROFESSIONAL ENGINEER
11/20/19

B&T ENGINEERING, INC.
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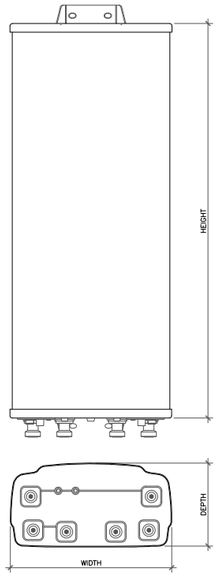
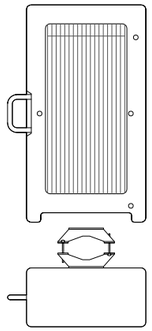
SHEET NUMBER: C-5
REVISION: 2



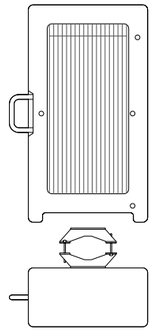
ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
DMP65R-BU4DA	48"	20.7"	7.7"	67.9 lbs
DMP65R-BU6DA	71.2"	20.7"	7.7"	79.4 lbs

1 ANTENNA DETAIL
SCALE: NOT TO SCALE



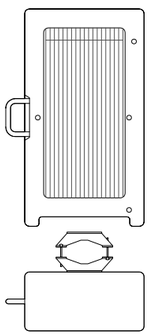
ERICSSON - 4449 B5/B12
WEIGHT (FULLY EQUIPPED): 71.0 LBS
SIZE (HxWxD): 17.9x13.19x9.44 IN.

2 RRH DETAIL
SCALE: NOT TO SCALE



ERICSSON - 8843 B2/B66A
WEIGHT (FULLY EQUIPPED): 72.0 LBS
SIZE (HxWxD): 14.9x13.2x10.9 IN.

3 RRH DETAIL
SCALE: NOT TO SCALE



ERICSSON - 4478 B14
WEIGHT (FULLY EQUIPPED): 59.9 LBS
SIZE (HxWxD): 16.5x13.4x7.7 IN.

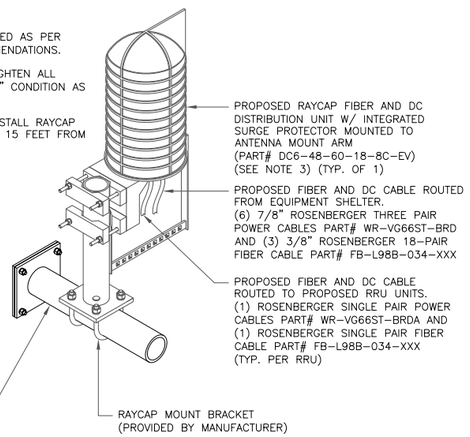
4 RRH DETAIL
SCALE: NOT TO SCALE

NOTES:

1. UNIT SHALL BE MOUNTED AS PER MANUFACTURER'S RECOMMENDATIONS.

2. CONTRACTOR SHALL TIGHTEN ALL BOLTS TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.

3. CONTRACTOR SHALL INSTALL RAYCAP DISTRIBUTION UNIT WITHIN 15 FEET FROM ALL RRHS.



5 SURGE UNIT MOUNTING DETAIL
SCALE: NOT TO SCALE

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AT&T SITE NUMBER:
CT1058

BU #: **876345**
SKY HILL

36 JANOWSKI ROAD
ASHFORD, CT 06278

EXISTING 192'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

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11/20/19

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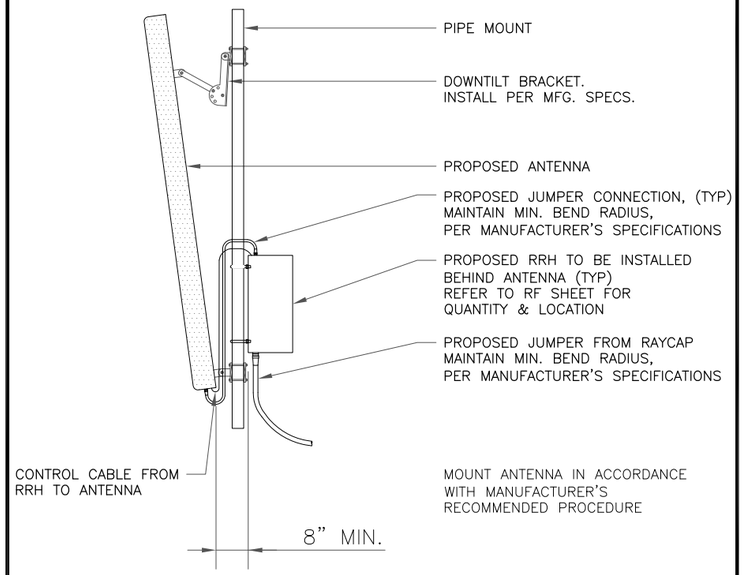
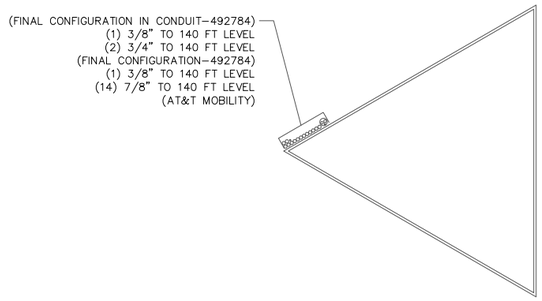
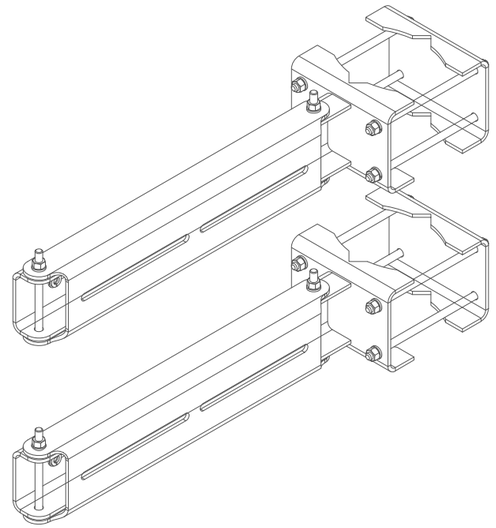
SHEET NUMBER: C-6
REVISION: 2



1 ANTENNA MOUNTING DETAIL
SCALE: NOT TO SCALE



2 BASE LEVEL DRAWING
SCALE: NOT TO SCALE



3 VALMONT – RRUDSM
SCALE: NOT TO SCALE

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BU #: **876345**
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ISSUED FOR:

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11/20/19

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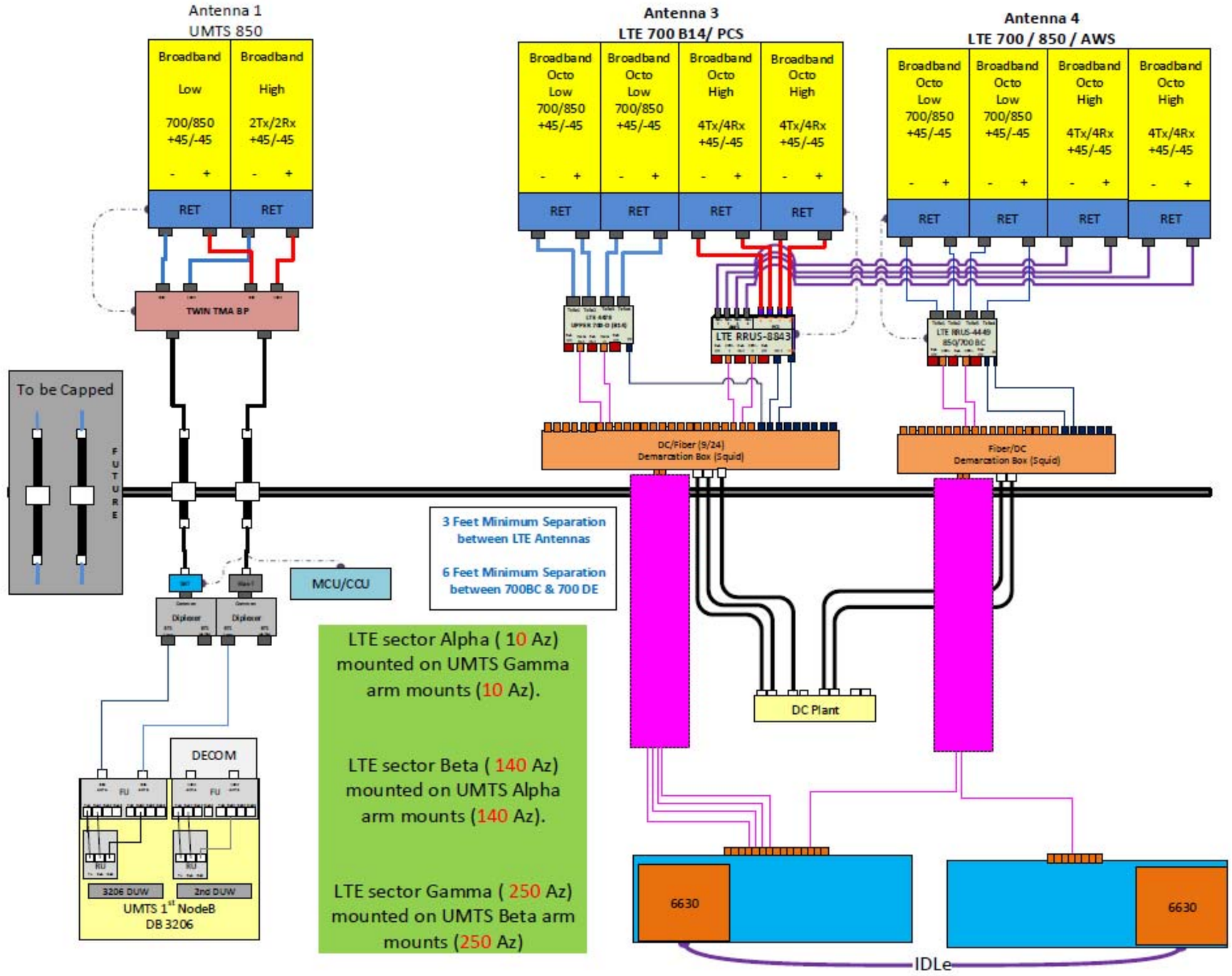
Expires 2/10/20

SHEET NUMBER: C-7
REVISION: 2



1 PLUMBING DIAGRAM
SCALE: NOT TO SCALE

AT&T
ONE AT&T WAY
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CROWN CASTLE
3200 HORIZON DRIVE, SUITE 150
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SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
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AT&T SITE NUMBER:
CT1058

BU #: **876345**
SKY HILL

36 JANOWSKI ROAD
ASHFORD, CT 06278

EXISTING 192'-0"
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ISSUED FOR:

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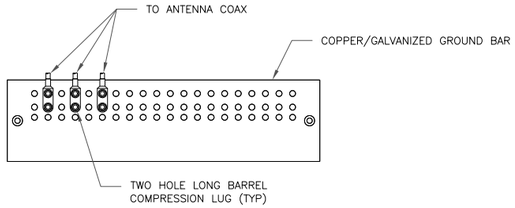
STATE OF CONNECTICUT
31627
LICENSED PROFESSIONAL ENGINEER
11/20/19

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

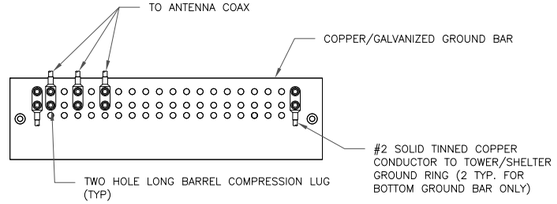
SHEET NUMBER: C-8
REVISION: 2



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 TOWER STEEL.

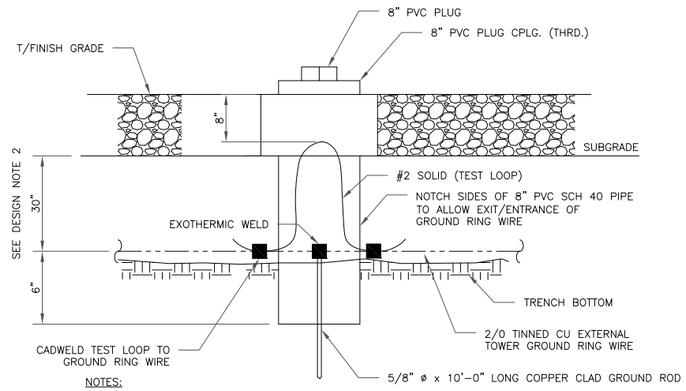
1 ANTENNA GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

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

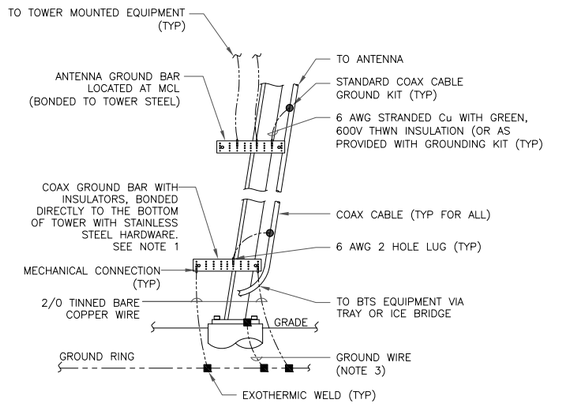
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

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

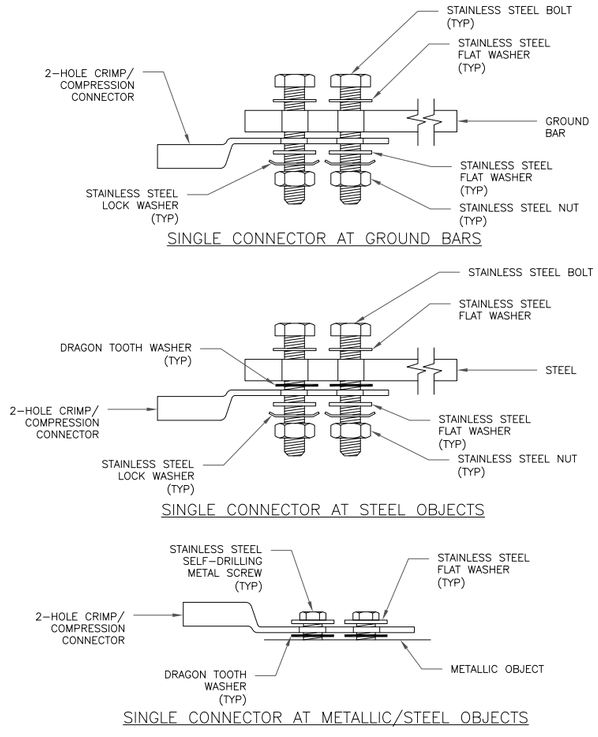
3 INSPECTION WELL DETAIL
SCALE: NOT TO SCALE



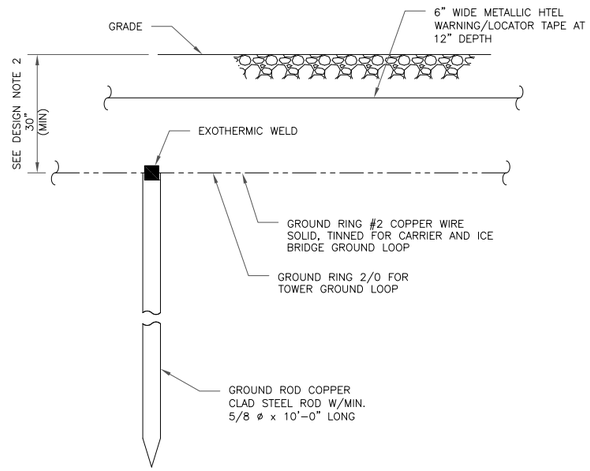
NOTES:

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

4 TYPICAL ANTENNA CABLE GROUNDING
SCALE: NOT TO SCALE



5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

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

6 GROUND ROD DETAIL
SCALE: NOT TO SCALE

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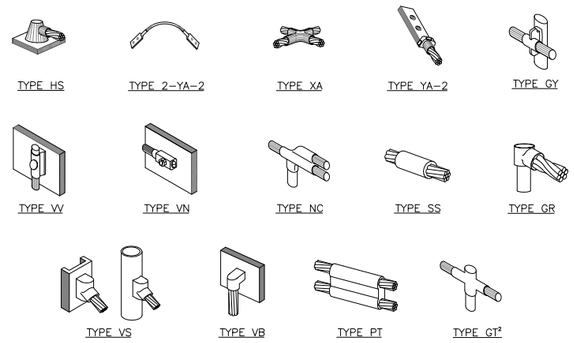
B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

SHEET NUMBER: G-1
REVISION: 2

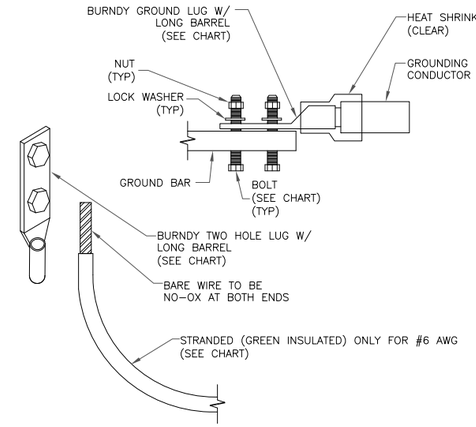


NOTE:

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

1 CADWELD GROUNDING CONNECTIONS
SCALE: NOT TO SCALE

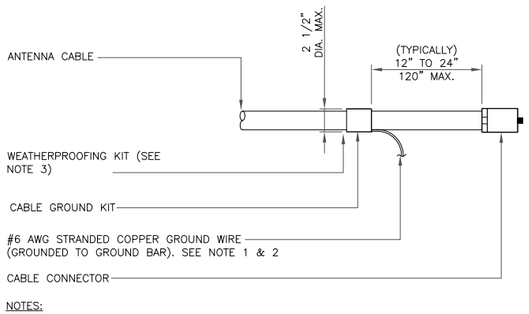
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



NOTES:

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

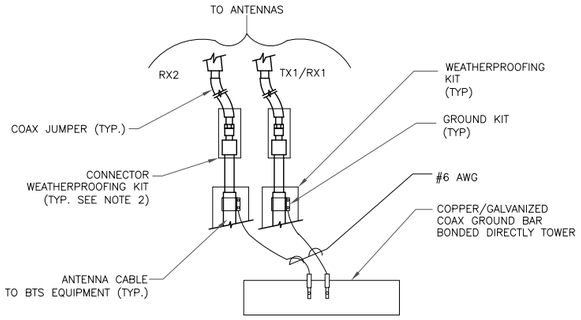
2 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



NOTES:

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

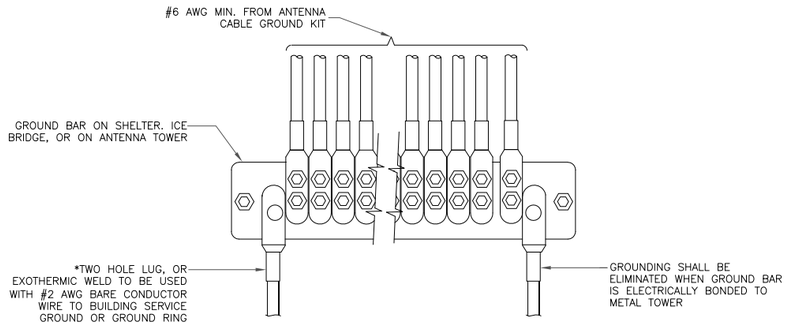
3 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



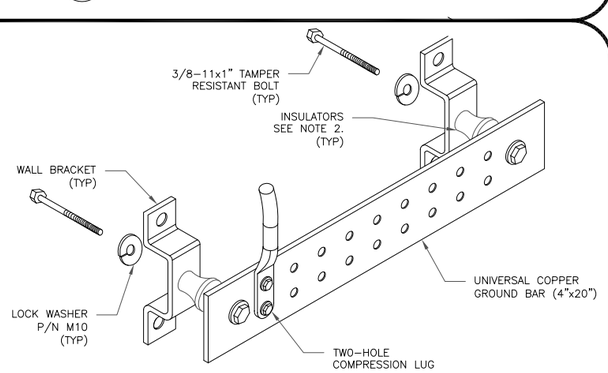
NOTES:

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

4 GROUND CABLE CONNECTION
SCALE: NOT TO SCALE



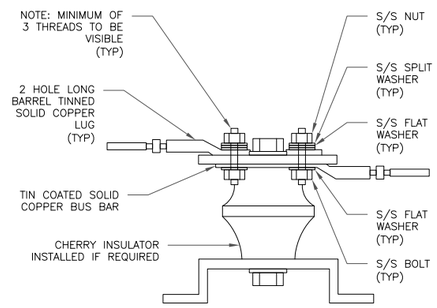
5 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



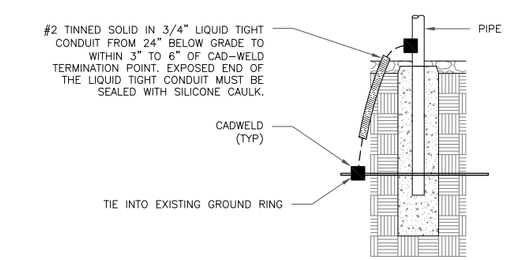
NOTES:

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

6 GROUND BAR DETAIL
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE



8 TRANSITIONING GROUND DETAIL
SCALE: NOT TO SCALE

AT&T
ONE AT&T WAY
BEDMINSTER, NJ 07921

CROWN CASTLE
3200 HORIZON DRIVE, SUITE 150
KING OF PRUSSIA, PA 19406

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

AT&T SITE NUMBER:
CT1058

BU #: **876345**
SKY HILL

36 JANOWSKI ROAD
ASHFORD, CT 06278

EXISTING 192'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	10/7/19	STH	CONSTRUCTION	FWP
1	11/5/19	STH	CONSTRUCTION	MDW
2	11/20/19	STH	CONSTRUCTION	MDW

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

SHEET NUMBER: G-2
REVISION: 2

Exhibit D

Structural Analysis Report

Date: **September 12, 2019**

Darcy Tarr
Crown Castle
3530 Toringdon Way Suite 300
Charlotte, NC 28277

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

Subject:	**Structural Analysis Report**	
Carrier Designation:	***AT&T Mobility* Co-Locate**	
	Carrier Site Number:	10035292
	Carrier Site Name:	Ashford Sprint TWR
Crown Castle Designation:	**Crown Castle BU Number:**	876345
	Crown Castle Site Name:	Sky Hill
	Crown Castle JDE Job Number:	574662
	Crown Castle Work Order Number:	1784327
	Crown Castle Order Number:	492784 Rev. 0
Engineering Firm Designation:	**B+T Group Project Number:**	77921.008.01
Site Data:	**33 Janowski Road, Ashford, Windham County, CT** **Latitude *41° 57' 7.7"*, Longitude *-72° 11' 43.9"*** **192 Foot - Self Support Tower**	

Dear Darcy Tarr,

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

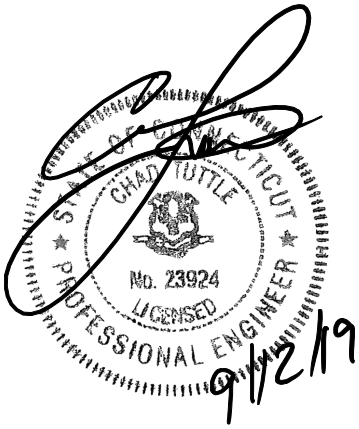
The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC7: Proposed Equipment Configuration **Sufficient Capacity – 78.0%**

This analysis utilizes an ultimate 3-second gust wind speed of 130 mph as required by the 2018 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Johnique Williams

Respectfully submitted by: B+T Engineering, Inc.
COA: PEC.0001564; Expires: 02/10/2020



Chad E. Tuttle, P.E.

tnxTower Report - version 8.0.5.0

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 192 ft. Self-Support tower designed by Rohn in December of 1996. The tower was originally designed for a wind speed of 90 mph per TIA/EIA-222-E.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	130 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	2 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft.)	Center Line Elevation (ft.)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
140.0	141.0	4	CCI Antennas	DMP65R-BU4D	14 2 2	7/8 3/4 3/8
		2	CCI Antennas	DMP65R-BU6D		
		3	Ericsson	RRUS 4449 B5/B12		
		3	Ericsson	RRUS 4478 B14		
		3	Ericsson	RRUS 8843 B2/B66A		
		3	Powerwave Tech.	7770.00		
		1	Raycap	DC6-48-60-0-8C-EV		
	140.0	3	Powerwave Tech.	TT19-08BP111-001		
		1	Raycap	DC6-48-60-18-8F		
		3	Commscope	BC-35-14D Pipe to Pipe Clamp		
		1	--	Sector Mount [SM 502-3]		

Table 2 - Other Considered Equipment

Mounting Level (ft.)	Center Line Elevation (ft.)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
190.0	192.0	3	Alcatel Lucent	PCS 1900MHz 4x45W-65MHz	4	1-1/4
		6	Alcatel Lucent	RRH2X50-800		
		3	Alcatel Lucent	TD-RRH8x20-25		
		3	Commscope	NNVV-65B-R4		
		3	RFS Celwave	APXVTM14-ALU-I20		
	190.0	1	--	Sector Mount [SM 504-3]		
180.0	184.0	1	Symmetricom	58532A	8 1	1-5/8 1/2
	181.0	3	Alcatel Lucent	RRH2X60-700		
		3	Alcatel Lucent	RRH4X45-AWS4 B66		
		6	Antel	LPA-80080/4CF		
		6	Commscope	JAHH-65B-R3B		
		3	Nokia	BAND 5 AHCA RRH4X40		

Mounting Level (ft.)	Center Line Elevation (ft.)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
		2	Raycap	RC3DC-3315-PF-48		
	180.0	1	--	Sector Mount [SM 303-3]		
170.0	172.0	9	Allgon	7130.16.33.00	9	1-5/8
	170.0	1	--	Sector Mount [SM 504-3]		
160.0	162.0	3	Andrew	HBX-6516DS-VTM	6	1-5/8
	160.0	1	--	Sector Mount [SM 104-3]		
153.0	153.0	3	Ericsson	RADIO 4415 B66A	3	1-5/8
		3	Ericsson	RADIO 4449 B12/B71		
		3	Ericsson	RRUS 4415 B25		
		3	RFS Celwave	APX16DWV-16DWV-S-E-A20		
		3	RFS Celwave	APXVAARR24_43-U-NA20		
		3	Site Pro	VFA12-HD Sector Mount		
98.0	102.0	1	Symmetricom	58532A	1	1/2
	98.0	1	--	Side Arm Mount [SO 306-1]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
Online Order Information	AT&T Mobility Co-Locate, Rev# 0	492784	CCI Sites
Tower Manufacturer Drawing	Rohn, File No. 34589PH	1631630	CCI Sites
Mount Modification Report	TEP, Date: 09/10/2019	8649663	CCI Sites
Foundation Drawing	Rohn, File No. 34589PH	1631622	CCI Sites
Geotech Report	FDH, Project No. 07-11436G	2189896	CCI Sites
Antenna Configuration	Crown CAD Package	Date: 08/23/2019	CCI Sites

3.1) Analysis Method

tnxTower (version 8.0.5.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

1) The tower and structures were built and have been maintained in accordance with the manufacturer's specification.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
3) Mount areas and weights are assumed based on photographs provided.
4) The existing base plate grout was considered in this analysis. Grout must be maintained and inspected periodically, and must be replaced if damaged or cracked. Refer to crown document ENG-STD-10323, Tower Base Plate Grout Inspection and Classification.

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T1	192 - 180	Leg	ROHN 2.5 STD	1	-6.952	66.738	10.4	Pass
T2	180 - 160	Leg	ROHN 2.5 STD	27	-34.103	59.996	56.8	Pass
T3	160 - 140	Leg	ROHN 3 EH	56	-66.874	99.054	67.5	Pass
T4	140 - 120	Leg	ROHN 4 EH	77	-107.185	167.894	63.8	Pass
T5	120 - 100	Leg	ROHN 5 EH	98	-144.949	251.347	57.7	Pass
T6	100 - 80	Leg	ROHN 6 EHS	119	-177.908	256.249	69.4	Pass
T7	80 - 60	Leg	ROHN 6 EH	134	-213.932	318.945	67.1	Pass
T8	60 - 40	Leg	ROHN 8 EHS	149	-247.979	405.672	61.1	Pass
T9	40 - 20	Leg	ROHN 8 EHS	163	-282.187	405.729	69.6	Pass
T10	20 - 0	Leg	ROHN 8 EHS	178	-316.547	405.717	78.0	Pass
T1	192 - 180	Diagonal	L1 3/4x1 3/4x3/16	7	-1.508	11.895	12.7 19.7 (b)	Pass
T2	180 - 160	Diagonal	L2x2x3/16	36	-3.844	10.392	37.0 45.9 (b)	Pass
T3	160 - 140	Diagonal	L2 1/2x2 1/2x1/4	63	-5.972	16.480	36.2 53.7 (b)	Pass
T4	140 - 120	Diagonal	L2 1/2x2 1/2x1/4	81	-7.402	12.587	58.8 66.7 (b)	Pass
T5	120 - 100	Diagonal	L3x3x1/4	102	-7.965	17.432	45.7 53.8 (b)	Pass
T6	100 - 80	Diagonal	L3 1/2x3 1/2x1/4	123	-9.347	19.016	49.2 62.6 (b)	Pass
T7	80 - 60	Diagonal	L4x4x1/4	138	-10.308	24.136	42.7 68.5 (b)	Pass
T8	60 - 40	Diagonal	L4x4x5/16	153	-9.958	24.922	40.0 53.7 (b)	Pass
T9	40 - 20	Diagonal	L4x4x5/16	168	-11.801	21.484	54.9 62.1 (b)	Pass
T10	20 - 0	Diagonal	L4x4x3/8	183	-12.479	21.926	56.9 60.2 (b)	Pass
T1	192 - 180	Top Girt	L1 3/4x1 3/4x3/16	5	-0.091	4.122	2.2	Pass
T2	180 - 160	Top Girt	L2x2x3/16	28	-0.769	6.245	12.3	Pass
							Summary	
						Leg (T10)	78.0	Pass
						Diagonal (T7)	68.5	Pass
						Top Girt (T2)	12.3	Pass
						Bolt Checks	68.5	Pass
						Rating =	78.0	Pass

Table 5 - Tower Component Stresses vs. Capacity – LC7

Notes	Component	Elevation	% Capacity	Pass / Fail
1	Anchor Rods	Base	22.4	Pass
1	Base Foundation (Structure)	Base	10.7	Pass
1	Base Foundation (Soil Interaction)	Base	44.5	Pass

Structure Rating (max from all components) =	78.0%

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

4.1) Recommendations

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

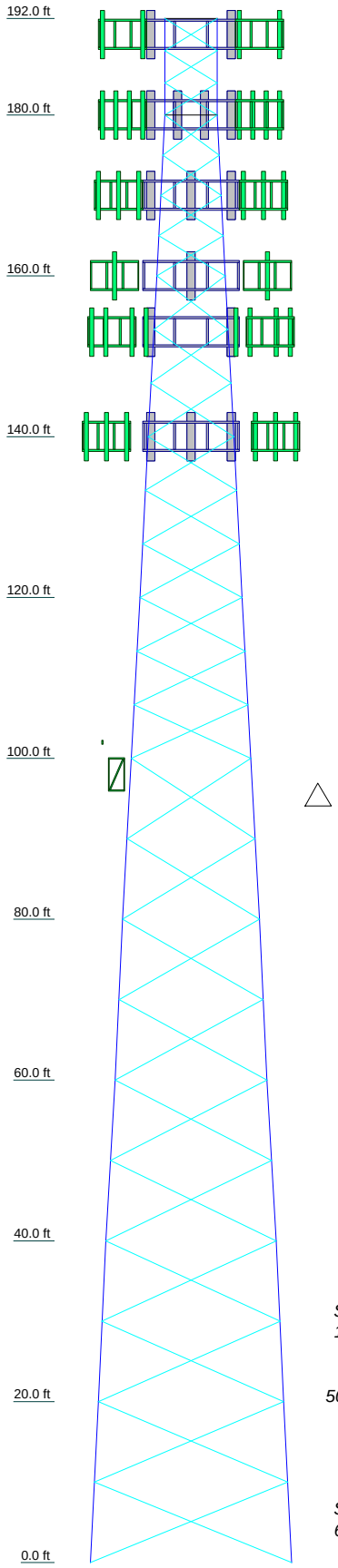
APPENDIX A

TNXTOWER OUTPUT

Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
Legs	ROHN 2.5 STD		ROHN 3 EH	ROHN 4 EH	ROHN 5 EH	ROHN 6 EHS	ROHN 6 EH		ROHN 8 EHS	
Leg Grade	A572-50									
Diagonals	A	L2x2x3/16	L2 1/2x2 1/2x1/4		L3x3x1/4	L3 1/2x3 1/2x1/4	L4x4x1/4		L4x4x5/16	L4x4x3/8
Diagonal Grade	A36				A572-50					
Top Girts	A	L2x2x3/16			N.A.					
Face Width (ft)	6.58		8.54	10.61	12.74	14.83	16.92	18.88	21.13	23.05
# Panels @ (ft)	3 @ 4	4 @ 5	9 @ 6.66667			10 @ 10				
Weight (K)	0.6	1.0	1.5	2.0	2.7	2.8	3.5	4.4	4.6	5.3

25.05

28.4



SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	L1 3/4x1 3/4x3/16		

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

1. Tower is located in Windham County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 130 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 2.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.000 ft
8. TIA-222-H Annex S
9. TOWER RATING: 78%

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 325 K
SHEAR: 37 K

UPLIFT: -271 K
SHEAR: 32 K

AXIAL 211 K
SHEAR 16 K
MOMENT 1885 kip-ft
TORQUE 14 kip-ft
50 mph WIND - 2.000 in ICE

AXIAL 71 K
SHEAR 60 K
MOMENT 6541 kip-ft
TORQUE 59 kip-ft
REACTIONS - 130 mph WIND

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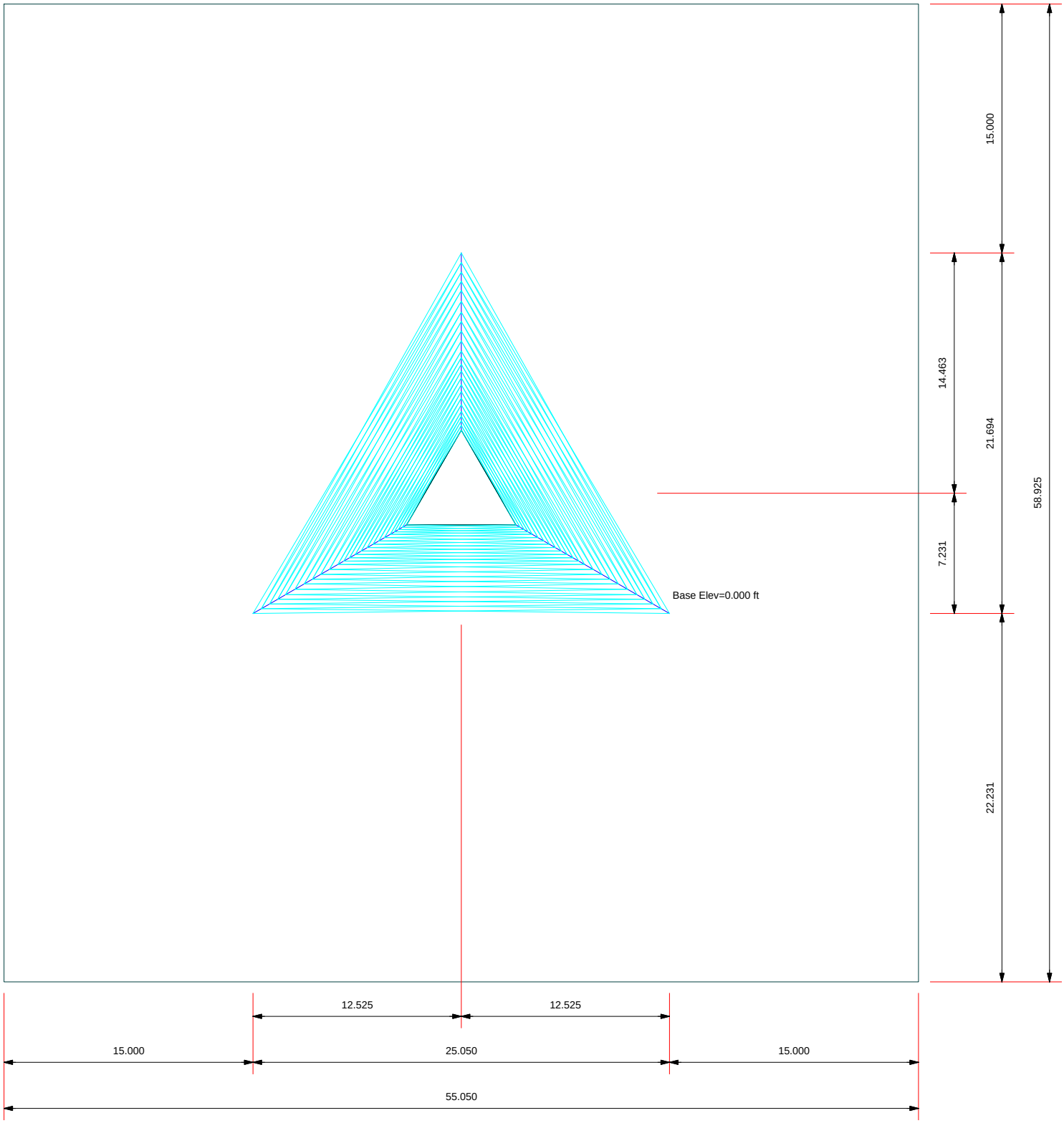
Tulsa, OK 74119
Phone: (918) 587-4630
FAX: (918) 295-0265

Job: 77921.008.01 - SKY HILL, CT (BU# 876345			
Project:			
Client: Crown Castle	Drawn by: Sampath	App'd:	
Code: TIA-222-H	Date: 09/12/19	Scale: NTS	
Path:		Dwg No. E-1	

Plot Plan

Total Area - 0.07 Acres



B+T GRP

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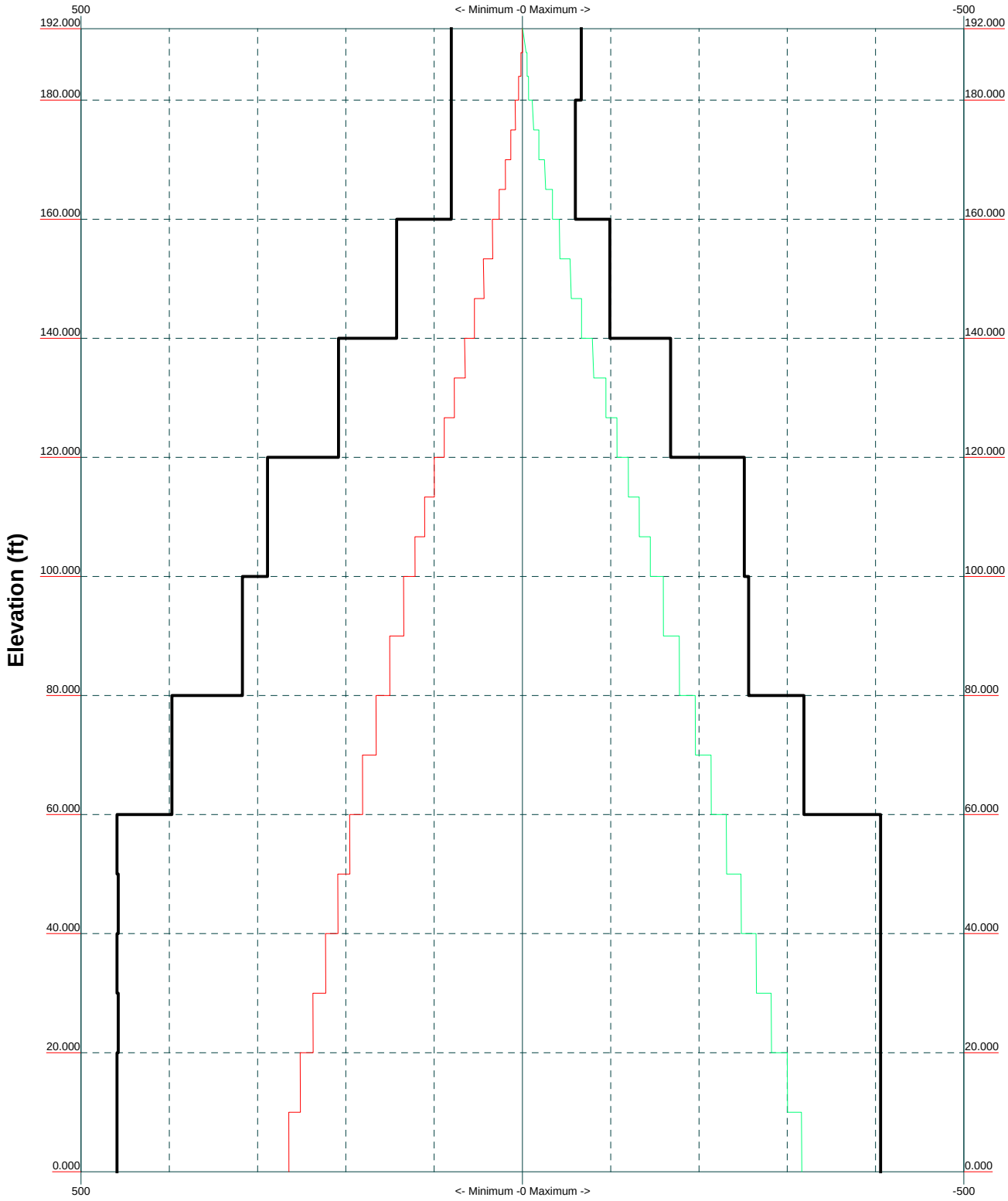
Job: ***77921.008.01 - SKY HILL, CT (BU# 876345***			
Project:			
Client: Crown Castle	Drawn by: Sampath	App'd:	
Code: TIA-222-H	Date: 09/12/19	Scale: NTS	
Path:		Dwg No. E-2	

TIA-222-H - 130 mph/50 mph 2.000 in Ice Exposure B

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



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Phone: (918) 587-4630
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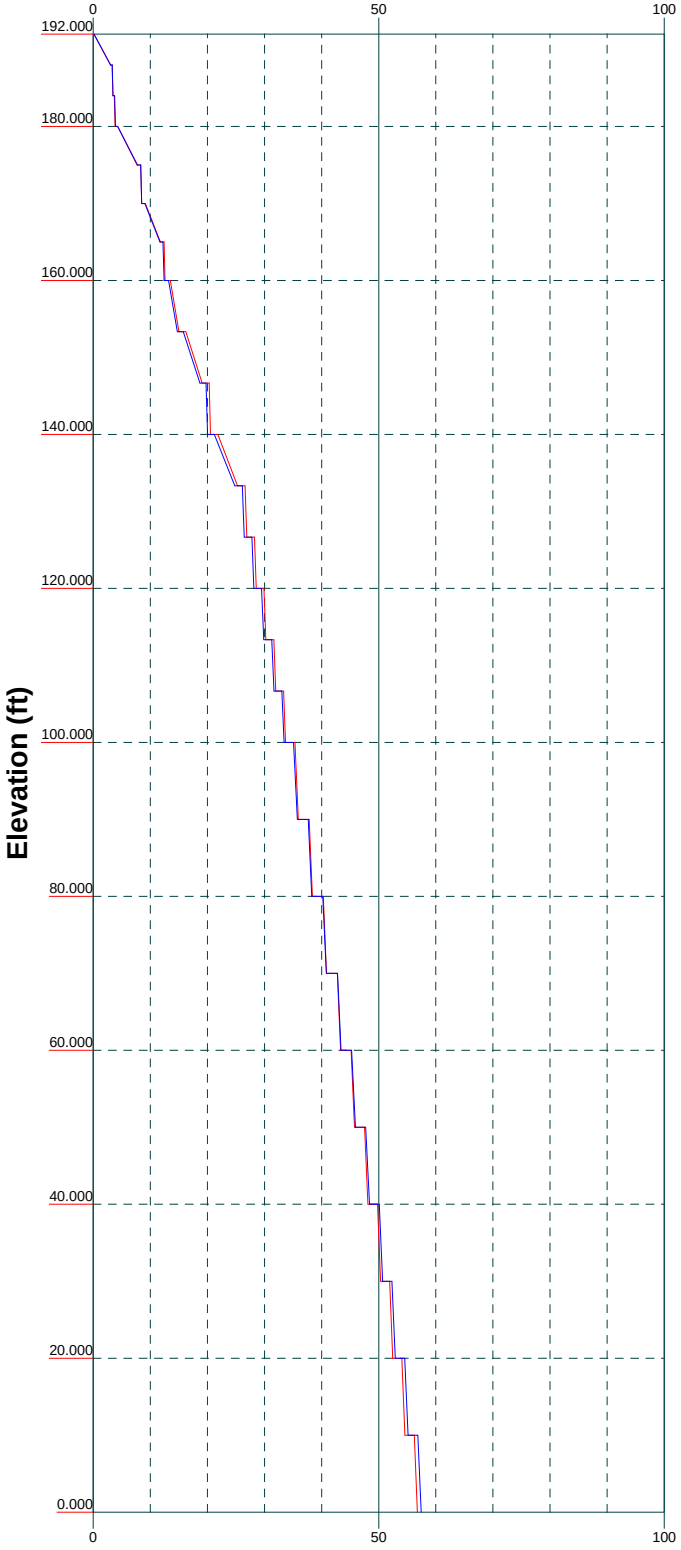
Job: 77921.008.01 - SKY HILL, CT (BU# 876345			
Project:			
Client: Crown Castle	Drawn by: Sampath	App'd:	
Code: TIA-222-H	Date: 09/12/19	Scale: NTS	
Path:		Dwg No. E-3	

TIA-222-H - 130 mph/50 mph 2.000 in Ice Exposure B

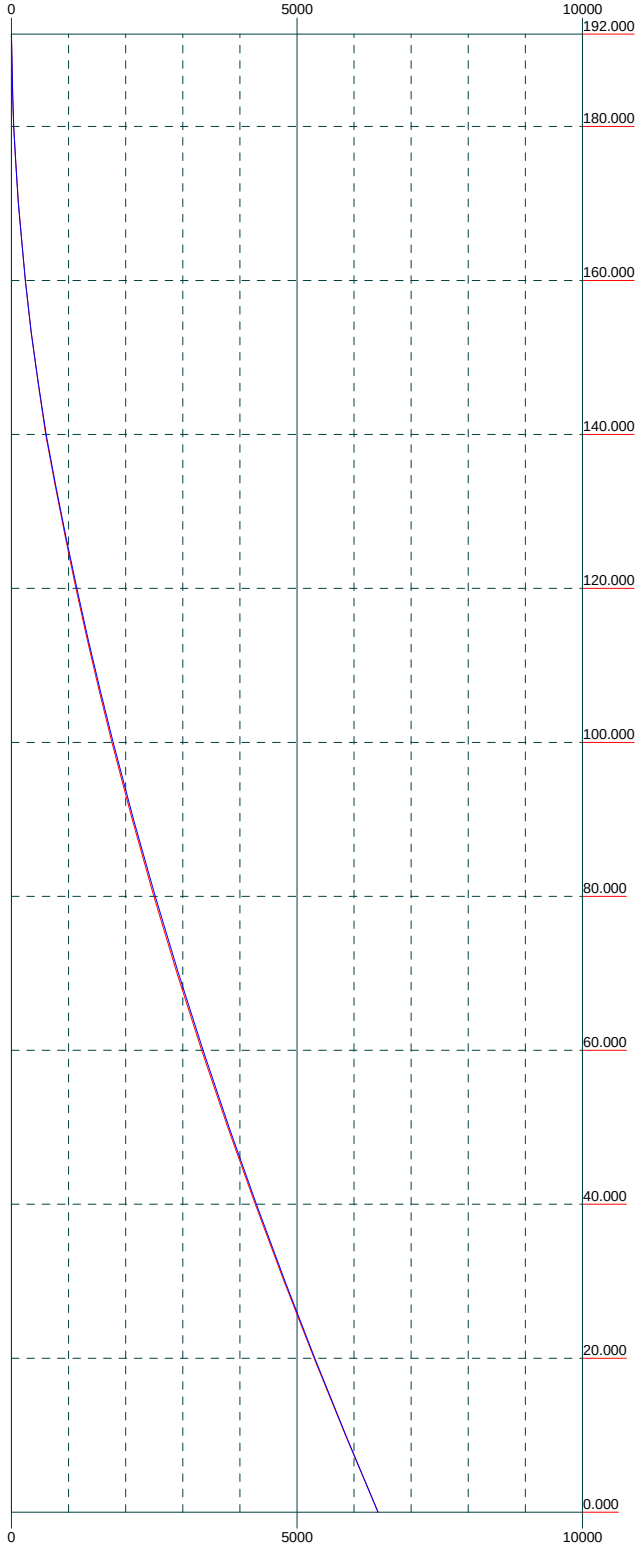
Maximum Values

Vx Vz Mx Mz

Global Mast Shear (K)



Global Mast Moment (kip-ft)



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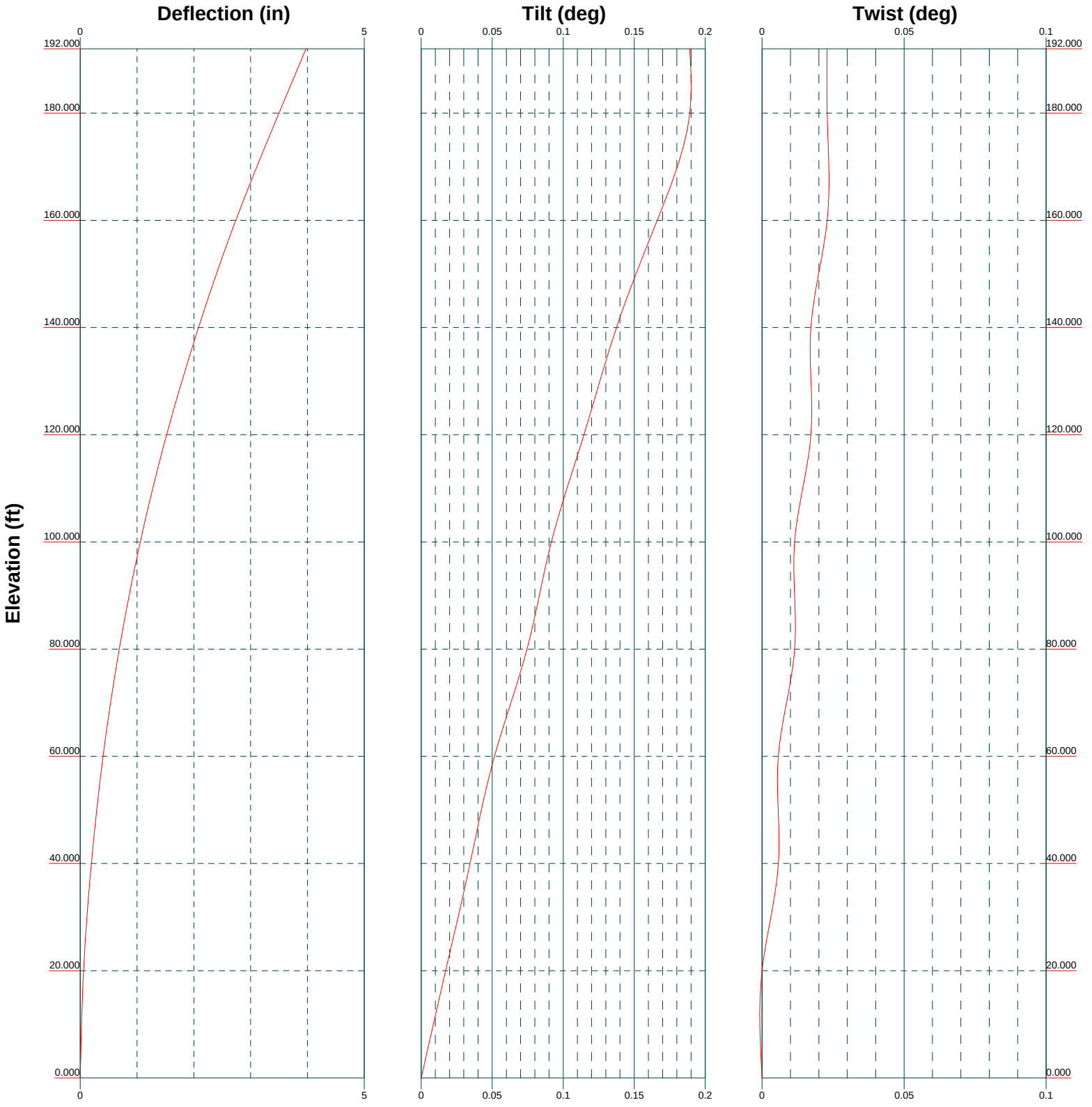
Phone: (918) 587-4630
FAX: (918) 295-0265

Job: *77921.008.01 - SKY HILL, CT (BU# 876345*			
Project:			
Client: Crown Castle	Drawn by: Sampath	App'd:	
Code: TIA-222-H	Date: 09/12/19	Scale: NTS	
Path:		Dwg No. E-4	

TIA-222-H - Service - 60 mph

Maximum Values



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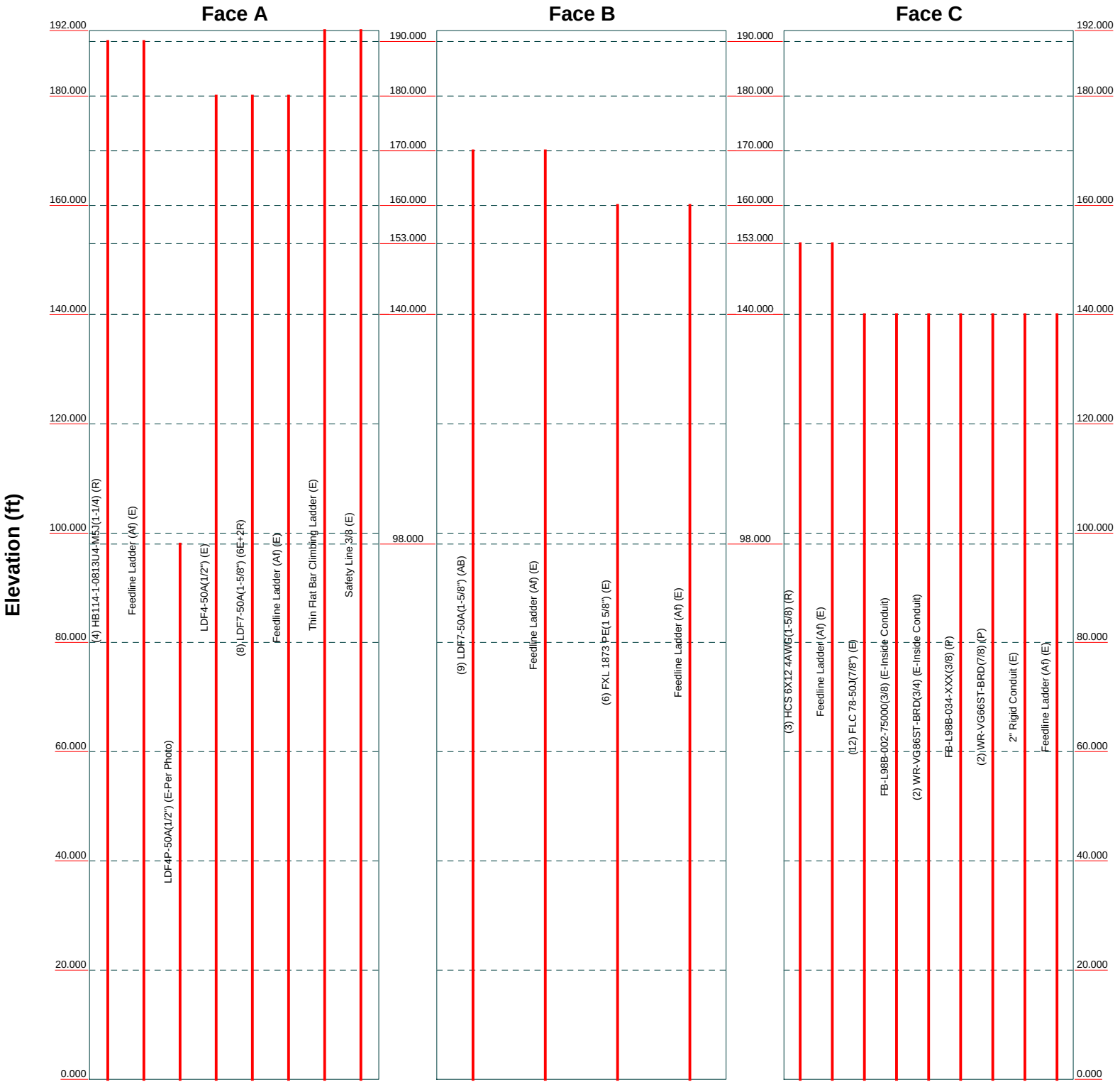
Phone: (918) 587-4630
FAX: (918) 295-0265

Job: ***77921.008.01 - SKY HILL, CT (BU# 876345***			
Project:			
Client: Crown Castle	Drawn by: Sampath	App'd:	
Code: TIA-222-H	Date: 09/12/19	Scale: NTS	
Path:		Dwg No. E-5	

Feed Line Distribution Chart
0' - 192'

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



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1717 S. Boulder, Suite 300
Tulsa, OK 74119
Phone: (918) 587-4630
FAX: (918) 295-0265

Job:	77921.008.01 - SKY HILL, CT (BU# 876345		
Project:			
Client: Crown Castle	Drawn by: Sampath	App'd:	
Code: TIA-222-H	Date: 09/12/19	Scale: NTS	
Path:		Dwg No. E-7	

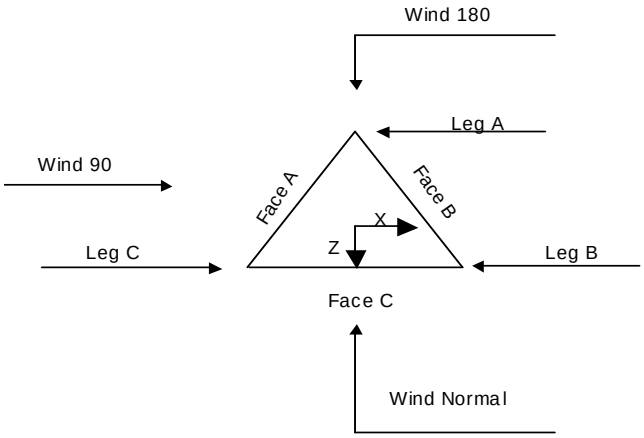
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 192.000 ft above the ground line.
The base of the tower is set at an elevation of 0.000 ft above the ground line.
The face width of the tower is 6.580 ft at the top and 25.050 ft at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower is located in Windham County, Connecticut.
Tower base elevation above sea level: 1068.000 ft.
Basic wind speed of 130 mph.
Risk Category II.
Exposure Category B.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0.000 ft.
Nominal ice thickness of 2.000 in.
Ice thickness is considered to increase with height.
Ice density of 56.000 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50.000 °F.
Deflections calculated using a wind speed of 60 mph.
TIA-222-H Annex S.
Pressures are calculated at each section.
Tower analysis based on target reliabilities in accordance with Annex S.
Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
Stress ratio used in tower member design is 1.05.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

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



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	192.000-180.000			6.580	1	12.000
T2	180.000-160.000			6.580	1	20.000
T3	160.000-140.000			8.540	1	20.000
T4	140.000-120.000			10.610	1	20.000
T5	120.000-100.000			12.740	1	20.000
T6	100.000-80.000			14.830	1	20.000
T7	80.000-60.000			16.920	1	20.000
T8	60.000-40.000			18.880	1	20.000
T9	40.000-20.000			21.130	1	20.000
T10	20.000-0.000			23.050	1	20.000

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	192.000-180.000	4.000	X Brace	No	No	0.000	0.000
T2	180.000-160.000	5.000	X Brace	No	No	0.000	0.000
T3	160.000-140.000	6.667	X Brace	No	No	0.000	0.000
T4	140.000-120.000	6.667	X Brace	No	No	0.000	0.000
T5	120.000-100.000	6.667	X Brace	No	No	0.000	0.000

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T6	100.000-80.000	10.000	X Brace	No	No	0.000	0.000
T7	80.000-60.000	10.000	X Brace	No	No	0.000	0.000
T8	60.000-40.000	10.000	X Brace	No	No	0.000	0.000
T9	40.000-20.000	10.000	X Brace	No	No	0.000	0.000
T10	20.000-0.000	10.000	X Brace	No	No	0.000	0.000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 192.000-180.000	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36 (36 ksi)
T2 180.000-160.000	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L2x2x3/16	A36 (36 ksi)
T3 160.000-140.000	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)
T4 140.000-120.000	Pipe	ROHN 4 EH	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)
T5 120.000-100.000	Pipe	ROHN 5 EH	A572-50 (50 ksi)	Equal Angle	L3x3x1/4	A572-50 (50 ksi)
T6 100.000-80.000	Pipe	ROHN 6 EHS	A572-50 (50 ksi)	Equal Angle	L3 1/2x3 1/2x1/4	A572-50 (50 ksi)
T7 80.000-60.000	Pipe	ROHN 6 EH	A572-50 (50 ksi)	Equal Angle	L4x4x1/4	A572-50 (50 ksi)
T8 60.000-40.000	Pipe	ROHN 8 EHS	A572-50 (50 ksi)	Equal Angle	L4x4x5/16	A572-50 (50 ksi)
T9 40.000-20.000	Pipe	ROHN 8 EHS	A572-50 (50 ksi)	Equal Angle	L4x4x5/16	A572-50 (50 ksi)
T10 20.000-0.000	Pipe	ROHN 8 EHS	A572-50 (50 ksi)	Equal Angle	L4x4x3/8	A572-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 192.000-180.000	Equal Angle	L1 3/4x1 3/4x3/16	A36 (36 ksi)	Single Angle		A36 (36 ksi)
T2 180.000-160.000	Equal Angle	L2x2x3/16	A36 (36 ksi)	Single Angle		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft²	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1 192.000-180.000	0.000	0.250	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T2 180.000-160.000	0.000	0.250	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T3 160.000-140.000	0.000	0.250	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T4 140.000-120.000	0.000	0.250	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T5 120.000-100.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T6 100.000-80.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T7 80.000-60.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T8 60.000-40.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T9 40.000-20.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T10 20.000-0.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1 192.000-180.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T2 180.000-160.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T3 160.000-140.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T4 140.000-120.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T5 120.000-100.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T6 100.000-80.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T7 80.000-60.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T8	Yes	No	1	1	1	1	1	1	1	1
60.000-40.000				1	1	1	1	1	1	1
T9	Yes	No	1	1	1	1	1	1	1	1
40.000-20.000				1	1	1	1	1	1	1
T10	Yes	No	1	1	1	1	1	1	1	1
20.000-0.000				1	1	1	1	1	1	1

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

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Net Width Deduct in	Leg U	Diagonal Net Width Deduct in	Diagonal U	Top Girt Net Width Deduct in	Top Girt U	Bottom Girt Net Width Deduct in	Bottom Girt U	Mid Girt Net Width Deduct in	Mid Girt U	Long Horizontal Net Width Deduct in	Long Horizontal U	Short Horizontal Net Width Deduct in	Short Horizontal U
T1	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
192.000-180.000														
T2	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
180.000-160.000														
T3	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
160.000-140.000														
T4	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
140.000-120.000														
T5	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
120.000-100.000														
T6	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
100.000-80.000														
T7	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
80.000-60.000														
T8	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
60.000-40.000														
T9	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
40.000-20.000														
T10	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
20.000-0.000														

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 192.000-180.000	Flange	0.625 A325N	4	0.625 A325N	1	0.625 A325N	1	0.000 A325N	0	0.625 A325X	0	0.000 A325N	0	0.625 A325X	0
T2 180.000-160.000	Flange	0.625 A325N	4	0.625 A325N	1	0.625 A325N	1	0.000 A325N	0	0.625 A325X	0	0.000 A325N	0	0.625 A325X	0
T3 160.000-140.000	Flange	0.875 A325N	4	0.625 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325X	0	0.000 A325N	0	0.625 A325X	0
T4 140.000-120.000	Flange	1.000 A325N	4	0.625 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325X	0	0.000 A325N	0	0.625 A325X	0
T5 120.000-100.000	Flange	1.000 A325N	6	0.750 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325X	0	0.000 A325N	0	0.625 A325X	0
T6 100.000-80.000	Flange	1.000 A325N	6	0.750 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325X	0	0.000 A325N	0	0.625 A325X	0
T7 80.000-60.000	Flange	1.000 A325N	8	0.750 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325X	0	0.000 A325N	0	0.625 A325X	0
T8 60.000-40.000	Flange	1.000 A325N	8	0.750 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325X	0	0.000 A325N	0	0.625 A325X	0
T9 40.000-20.000	Flange	1.000 A325N	8	0.750 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325X	0	0.000 A325N	0	0.625 A325X	0
T10 20.000-0.000	Flange	0.000 A354-BC	0	0.750 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325X	0	0.000 A325N	0	0.625 A325X	0

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight klf
HB114-1-0813U4-M5J(1-1/4) (R)	A	No	No	Ar (CaAa)	190.000 - 0.000	0.000	-0.45	4	4	0.850 0.750	1.540		0.001
Feedline Ladder (Af) (E) **********	A	No	No	Af (CaAa)	190.000 - 0.000	0.000	-0.45	1	1	3.000	3.000		0.008
LDF4P-50A(1/2") (E-Per Photo) **********	A	No	No	Ar (CaAa)	98.000 - 0.000	0.000	-0.43	1	1	0.500	0.630		0.000
LDF4-50A(1/2") (E)	A	No	No	Ar (CaAa)	180.000 - 0.000	0.000	0.47	1	1	0.500	0.630		0.000
LDF7-50A(1-5/8") (6E+2R)	A	No	No	Ar (CaAa)	180.000 - 0.000	0.000	0.43	8	8	0.850 0.750	1.980		0.001
Feedline Ladder (Af) (E)	A	No	No	Af (CaAa)	180.000 - 0.000	0.000	0.43	1	1	3.000	3.000		0.008

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight klf
**********													
LDF7-50A(1-5/8") (AB)	B	No	No	Ar (CaAa)	170.000 - 0.000	0.000	-0.42	9	9	0.850 0.750	1.980		0.001
Feedline Ladder (Af) (E)	B	No	No	Af (CaAa)	170.000 - 0.000	0.000	-0.42	1	1	3.000	3.000		0.008
**********													
FXL 1873 PE(1 5/8") (E)	B	No	No	Ar (CaAa)	160.000 - 0.000	-3.000	0.45	6	3	0.850 0.750	1.980		0.000
Feedline Ladder (Af) (E)	B	No	No	Af (CaAa)	160.000 - 0.000	-1.000	0.45	1	1	3.000	3.000		0.008
**********													
HCS 6X12 4AWG(1-5/8) (R)	C	No	No	Ar (CaAa)	153.000 - 0.000	0.000	0.45	3	3	0.850 0.750	1.660		0.002
Feedline Ladder (Af) (E)	C	No	No	Af (CaAa)	153.000 - 0.000	0.000	0.44	1	1	3.000	3.000		0.008
**********													
FLC 78-50J(7/8") (E)	C	No	No	Ar (CaAa)	140.000 - 0.000	0.000	-0.45	12	12	1.000 0.750	1.112		0.000
FB-L98B-002-75000(3/8) (E-Inside Conduit)	C	No	No	Ar (CaAa)	140.000 - 0.000	1.500	-0.41	1	1	0.300	0.394		0.000
WR-VG86ST-BRD(3/4) (E-Inside Conduit)	C	No	No	Ar (CaAa)	140.000 - 0.000	1.500	-0.41	2	2	0.300	0.795		0.001
FB-L98B-034-XXX(3/8) (P)	C	No	No	Ar (CaAa)	140.000 - 0.000	1.500	-0.475	1	1	0.500	0.394		0.000
WR-VG66ST-BRD(7/8) (P)	C	No	No	Ar (CaAa)	140.000 - 0.000	1.500	-0.485	2	2	0.850 0.750	0.957		0.001
2" Rigid Conduit (E)	C	No	No	Ar (CaAa)	140.000 - 0.000	0.000	-0.41	1	1	2.000	2.000		0.003
Feedline Ladder (Af) (E)	C	No	No	Af (CaAa)	140.000 - 0.000	0.000	-0.45	1	1	3.000	3.000		0.008
**********													
Thin Flat Bar Climbing Ladder (E)	A	No	No	Af (CaAa)	192.000 - 0.000	-6.000	0.45	1	1	2.000	2.000		0.004
Safety Line 3/8 (E)	A	No	No	Ar (CaAa)	192.000 - 0.000	-6.000	0.45	1	1	0.375	0.375		0.000
**********													

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C_AA_A ft^2/ft	Weight klf
**********								

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	192.000-180.000	A	0.000	0.000	15.610	0.000	0.183
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.000
T2	180.000-160.000	A	0.000	0.000	72.677	0.000	0.651
		B	0.000	0.000	22.820	0.000	0.158
		C	0.000	0.000	0.000	0.000	0.000
T3	160.000-140.000	A	0.000	0.000	72.677	0.000	0.651
		B	0.000	0.000	79.400	0.000	0.484
		C	0.000	0.000	12.974	0.000	0.203
T4	140.000-120.000	A	0.000	0.000	72.677	0.000	0.651
		B	0.000	0.000	79.400	0.000	0.484
		C	0.000	0.000	69.231	0.000	0.694
T5	120.000-100.000	A	0.000	0.000	72.677	0.000	0.651
		B	0.000	0.000	79.400	0.000	0.484
		C	0.000	0.000	69.231	0.000	0.694
T6	100.000-80.000	A	0.000	0.000	73.811	0.000	0.653
		B	0.000	0.000	79.400	0.000	0.484
		C	0.000	0.000	69.231	0.000	0.694
T7	80.000-60.000	A	0.000	0.000	73.937	0.000	0.654
		B	0.000	0.000	79.400	0.000	0.484
		C	0.000	0.000	69.231	0.000	0.694
T8	60.000-40.000	A	0.000	0.000	73.937	0.000	0.654
		B	0.000	0.000	79.400	0.000	0.484
		C	0.000	0.000	69.231	0.000	0.694
T9	40.000-20.000	A	0.000	0.000	73.937	0.000	0.654
		B	0.000	0.000	79.400	0.000	0.484
		C	0.000	0.000	69.231	0.000	0.694
T10	20.000-0.000	A	0.000	0.000	73.937	0.000	0.654
		B	0.000	0.000	79.400	0.000	0.484
		C	0.000	0.000	69.231	0.000	0.694

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	192.000-180.000	A	2.021	0.000	0.000	40.592	0.000	0.777
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.000
T2	180.000-160.000	A	2.003	0.000	0.000	169.616	0.000	3.137
		B		0.000	0.000	45.562	0.000	0.839
		C		0.000	0.000	0.000	0.000	0.000
T3	160.000-140.000	A	1.978	0.000	0.000	168.805	0.000	3.099

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		B		0.000	0.000	144.978	0.000	2.708
		C		0.000	0.000	31.187	0.000	0.633
T4	140.000-120.000	A	1.950	0.000	0.000	167.890	0.000	3.057
		B		0.000	0.000	144.391	0.000	2.675
		C		0.000	0.000	205.410	0.000	3.385
T5	120.000-100.000	A	1.918	0.000	0.000	166.838	0.000	3.009
		B		0.000	0.000	143.716	0.000	2.636
		C		0.000	0.000	203.906	0.000	3.329
T6	100.000-80.000	A	1.879	0.000	0.000	173.498	0.000	3.058
		B		0.000	0.000	142.920	0.000	2.592
		C		0.000	0.000	202.133	0.000	3.263
T7	80.000-60.000	A	1.833	0.000	0.000	172.673	0.000	2.997
		B		0.000	0.000	141.946	0.000	2.537
		C		0.000	0.000	199.963	0.000	3.184
T8	60.000-40.000	A	1.772	0.000	0.000	170.459	0.000	2.903
		B		0.000	0.000	140.680	0.000	2.467
		C		0.000	0.000	197.144	0.000	3.082
T9	40.000-20.000	A	1.684	0.000	0.000	167.241	0.000	2.768
		B		0.000	0.000	138.840	0.000	2.367
		C		0.000	0.000	193.044	0.000	2.937
T10	20.000-0.000	A	1.509	0.000	0.000	160.864	0.000	2.511
		B		0.000	0.000	135.193	0.000	2.172
		C		0.000	0.000	184.917	0.000	2.660

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	192.000-180.000	-4.733	0.916	-4.787	-0.936
T2	180.000-160.000	-4.835	-17.023	-5.462	-17.229
T3	160.000-140.000	-1.628	-16.161	-3.239	-16.317
T4	140.000-120.000	7.074	-13.721	9.848	-10.680
T5	120.000-100.000	7.488	-14.688	10.865	-11.921
T6	100.000-80.000	8.246	-16.613	11.156	-13.031
T7	80.000-60.000	8.512	-17.366	11.882	-14.117
T8	60.000-40.000	9.031	-18.465	12.710	-15.223
T9	40.000-20.000	9.592	-19.689	13.719	-16.627
T10	20.000-0.000	10.086	-20.778	14.734	-18.185

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	2	HB114-1-0813U4-M5J(1-1/4)	180.00 - 190.00	0.6000	0.5487
T1	3	Feedline Ladder (Af)	180.00 - 190.00	0.6000	0.5487
T1	30	Thin Flat Bar Climbing Ladder	180.00 - 192.00	0.6000	0.5487
T1	31	Safety Line 3/8	180.00 -	0.6000	0.5487

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
			192.00		
T2	2	HB114-1-0813U4-M5J(1-1/4)	160.00 - 180.00	0.6000	0.6000
T2	3	Feedline Ladder (Af)	160.00 - 180.00	0.6000	0.6000
T2	8	LDF4-50A(1/2")	160.00 - 180.00	0.6000	0.6000
T2	9	LDF7-50A(1-5/8")	160.00 - 180.00	0.6000	0.6000
T2	10	Feedline Ladder (Af)	160.00 - 180.00	0.6000	0.6000
T2	12	LDF7-50A(1-5/8")	160.00 - 170.00	0.6000	0.6000
T2	13	Feedline Ladder (Af)	160.00 - 170.00	0.6000	0.6000
T2	30	Thin Flat Bar Climbing Ladder	160.00 - 180.00	0.6000	0.6000
T2	31	Safety Line 3/8	160.00 - 180.00	0.6000	0.6000
T3	2	HB114-1-0813U4-M5J(1-1/4)	140.00 - 160.00	0.6000	0.6000
T3	3	Feedline Ladder (Af)	140.00 - 160.00	0.6000	0.6000
T3	8	LDF4-50A(1/2")	140.00 - 160.00	0.6000	0.6000
T3	9	LDF7-50A(1-5/8")	140.00 - 160.00	0.6000	0.6000
T3	10	Feedline Ladder (Af)	140.00 - 160.00	0.6000	0.6000
T3	12	LDF7-50A(1-5/8")	140.00 - 160.00	0.6000	0.6000
T3	13	Feedline Ladder (Af)	140.00 - 160.00	0.6000	0.6000
T3	15	FXL 1873 PE(1 5/8")	140.00 - 160.00	0.6000	0.6000
T3	16	Feedline Ladder (Af)	140.00 - 160.00	0.6000	0.6000
T3	19	HCS 6X12 4AWG(1-5/8)	140.00 - 153.00	0.6000	0.6000
T3	20	Feedline Ladder (Af)	140.00 - 153.00	0.6000	0.6000
T3	30	Thin Flat Bar Climbing Ladder	140.00 - 160.00	0.6000	0.6000
T3	31	Safety Line 3/8	140.00 - 160.00	0.6000	0.6000
T4	2	HB114-1-0813U4-M5J(1-1/4)	120.00 - 140.00	0.6000	0.6000
T4	3	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T4	8	LDF4-50A(1/2")	120.00 - 140.00	0.6000	0.6000
T4	9	LDF7-50A(1-5/8")	120.00 - 140.00	0.6000	0.6000
T4	10	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T4	12	LDF7-50A(1-5/8")	120.00 - 140.00	0.6000	0.6000
T4	13	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T4	15	FXL 1873 PE(1 5/8")	120.00 - 140.00	0.6000	0.6000
T4	16	Feedline Ladder (Af)	120.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T4	19	HCS 6X12 4AWG(1-5/8)	120.00 - 140.00	0.6000	0.6000
T4	20	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T4	22	FLC 78-50J(7/8")	120.00 - 140.00	0.6000	0.6000
T4	23	FB-L98B-002-75000(3/8)	120.00 - 140.00	0.0000	0.0000
T4	24	WR-VG86ST-BRD(3/4)	120.00 - 140.00	0.0000	0.0000
T4	25	FB-L98B-034-XXX(3/8)	120.00 - 140.00	0.6000	0.6000
T4	26	WR-VG66ST-BRD(7/8)	120.00 - 140.00	0.6000	0.6000
T4	27	2" Rigid Conduit	120.00 - 140.00	0.6000	0.6000
T4	28	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T4	30	Thin Flat Bar Climbing Ladder	120.00 - 140.00	0.6000	0.6000
T4	31	Safety Line 3/8	120.00 - 140.00	0.6000	0.6000
T5	2	HB114-1-0813U4-M5J(1-1/4)	100.00 - 120.00	0.6000	0.6000
T5	3	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	8	LDF4-50A(1/2")	100.00 - 120.00	0.6000	0.6000
T5	9	LDF7-50A(1-5/8")	100.00 - 120.00	0.6000	0.6000
T5	10	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	12	LDF7-50A(1-5/8")	100.00 - 120.00	0.6000	0.6000
T5	13	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	15	FXL 1873 PE(1 5/8")	100.00 - 120.00	0.6000	0.6000
T5	16	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	19	HCS 6X12 4AWG(1-5/8)	100.00 - 120.00	0.6000	0.6000
T5	20	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	22	FLC 78-50J(7/8")	100.00 - 120.00	0.6000	0.6000
T5	23	FB-L98B-002-75000(3/8)	100.00 - 120.00	0.0000	0.0000
T5	24	WR-VG86ST-BRD(3/4)	100.00 - 120.00	0.0000	0.0000
T5	25	FB-L98B-034-XXX(3/8)	100.00 - 120.00	0.6000	0.6000
T5	26	WR-VG66ST-BRD(7/8)	100.00 - 120.00	0.6000	0.6000
T5	27	2" Rigid Conduit	100.00 - 120.00	0.6000	0.6000
T5	28	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	30	Thin Flat Bar Climbing Ladder	100.00 - 120.00	0.6000	0.6000
T5	31	Safety Line 3/8	100.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
			120.00		
T6	2	HB114-1-0813U4-M5J(1-1/4)	80.00 - 100.00	0.6000	0.6000
T6	3	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	5	LDF4P-50A(1/2")	80.00 - 98.00	0.6000	0.6000
T6	8	LDF4-50A(1/2")	80.00 - 100.00	0.6000	0.6000
T6	9	LDF7-50A(1-5/8")	80.00 - 100.00	0.6000	0.6000
T6	10	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	12	LDF7-50A(1-5/8")	80.00 - 100.00	0.6000	0.6000
T6	13	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	15	FXL 1873 PE(1 5/8")	80.00 - 100.00	0.6000	0.6000
T6	16	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	19	HCS 6X12 4AWG(1-5/8)	80.00 - 100.00	0.6000	0.6000
T6	20	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	22	FLC 78-50J(7/8")	80.00 - 100.00	0.6000	0.6000
T6	23	FB-L98B-002-75000(3/8)	80.00 - 100.00	0.0000	0.0000
T6	24	WR-VG86ST-BRD(3/4)	80.00 - 100.00	0.0000	0.0000
T6	25	FB-L98B-034-XXX(3/8)	80.00 - 100.00	0.6000	0.6000
T6	26	WR-VG66ST-BRD(7/8)	80.00 - 100.00	0.6000	0.6000
T6	27	2" Rigid Conduit	80.00 - 100.00	0.6000	0.6000
T6	28	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	30	Thin Flat Bar Climbing Ladder	80.00 - 100.00	0.6000	0.6000
T6	31	Safety Line 3/8	80.00 - 100.00	0.6000	0.6000
T7	2	HB114-1-0813U4-M5J(1-1/4)	60.00 - 80.00	0.6000	0.6000
T7	3	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	5	LDF4P-50A(1/2")	60.00 - 80.00	0.6000	0.6000
T7	8	LDF4-50A(1/2")	60.00 - 80.00	0.6000	0.6000
T7	9	LDF7-50A(1-5/8")	60.00 - 80.00	0.6000	0.6000
T7	10	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	12	LDF7-50A(1-5/8")	60.00 - 80.00	0.6000	0.6000
T7	13	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	15	FXL 1873 PE(1 5/8")	60.00 - 80.00	0.6000	0.6000
T7	16	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	19	HCS 6X12 4AWG(1-5/8)	60.00 - 80.00	0.6000	0.6000
T7	20	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	22	FLC 78-50J(7/8")	60.00 - 80.00	0.6000	0.6000
T7	23	FB-L98B-002-75000(3/8)	60.00 - 80.00	0.0000	0.0000
T7	24	WR-VG86ST-BRD(3/4)	60.00 - 80.00	0.0000	0.0000
T7	25	FB-L98B-034-XXX(3/8)	60.00 - 80.00	0.6000	0.6000
T7	26	WR-VG66ST-BRD(7/8)	60.00 - 80.00	0.6000	0.6000
T7	27	2" Rigid Conduit	60.00 - 80.00	0.6000	0.6000
T7	28	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	30	Thin Flat Bar Climbing Ladder	60.00 - 80.00	0.6000	0.6000
T7	31	Safety Line 3/8	60.00 - 80.00	0.6000	0.6000
T8	2	HB114-1-0813U4-M5J(1-1/4)	40.00 - 60.00	0.6000	0.6000
T8	3	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	5	LDF4P-50A(1/2")	40.00 - 60.00	0.6000	0.6000
T8	8	LDF4-50A(1/2")	40.00 - 60.00	0.6000	0.6000
T8	9	LDF7-50A(1-5/8")	40.00 - 60.00	0.6000	0.6000
T8	10	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	12	LDF7-50A(1-5/8")	40.00 - 60.00	0.6000	0.6000
T8	13	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	15	FXL 1873 PE(1 5/8")	40.00 - 60.00	0.6000	0.6000
T8	16	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	19	HCS 6X12 4AWG(1-5/8)	40.00 - 60.00	0.6000	0.6000
T8	20	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	22	FLC 78-50J(7/8")	40.00 - 60.00	0.6000	0.6000
T8	23	FB-L98B-002-75000(3/8)	40.00 - 60.00	0.0000	0.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T8	24	WR-VG86ST-BRD(3/4)	40.00 - 60.00	0.0000	0.0000
T8	25	FB-L98B-034-XXX(3/8)	40.00 - 60.00	0.6000	0.6000
T8	26	WR-VG66ST-BRD(7/8)	40.00 - 60.00	0.6000	0.6000
T8	27	2" Rigid Conduit	40.00 - 60.00	0.6000	0.6000
T8	28	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	30	Thin Flat Bar Climbing Ladder	40.00 - 60.00	0.6000	0.6000
T8	31	Safety Line 3/8	40.00 - 60.00	0.6000	0.6000
T9	2	HB114-1-0813U4-M5J(1-1/4)	20.00 - 40.00	0.6000	0.6000
T9	3	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	5	LDF4P-50A(1/2")	20.00 - 40.00	0.6000	0.6000
T9	8	LDF4-50A(1/2")	20.00 - 40.00	0.6000	0.6000
T9	9	LDF7-50A(1-5/8")	20.00 - 40.00	0.6000	0.6000
T9	10	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	12	LDF7-50A(1-5/8")	20.00 - 40.00	0.6000	0.6000
T9	13	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	15	FXL 1873 PE(1 5/8")	20.00 - 40.00	0.6000	0.6000
T9	16	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	19	HCS 6X12 4AWG(1-5/8)	20.00 - 40.00	0.6000	0.6000
T9	20	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	22	FLC 78-50J(7/8")	20.00 - 40.00	0.6000	0.6000
T9	23	FB-L98B-002-75000(3/8)	20.00 - 40.00	0.0000	0.0000
T9	24	WR-VG86ST-BRD(3/4)	20.00 - 40.00	0.0000	0.0000
T9	25	FB-L98B-034-XXX(3/8)	20.00 - 40.00	0.6000	0.6000
T9	26	WR-VG66ST-BRD(7/8)	20.00 - 40.00	0.6000	0.6000
T9	27	2" Rigid Conduit	20.00 - 40.00	0.6000	0.6000
T9	28	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	30	Thin Flat Bar Climbing Ladder	20.00 - 40.00	0.6000	0.6000
T9	31	Safety Line 3/8	20.00 - 40.00	0.6000	0.6000
T10	2	HB114-1-0813U4-M5J(1-1/4)	0.00 - 20.00	0.6000	0.6000
T10	3	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T10	5	LDF4P-50A(1/2")	0.00 - 20.00	0.6000	0.6000
T10	8	LDF4-50A(1/2")	0.00 - 20.00	0.6000	0.6000
T10	9	LDF7-50A(1-5/8")	0.00 - 20.00	0.6000	0.6000
T10	10	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T10	12	LDF7-50A(1-5/8")	0.00 - 20.00	0.6000	0.6000
T10	13	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T10	15	FXL 1873 PE(1 5/8")	0.00 - 20.00	0.6000	0.6000
T10	16	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T10	19	HCS 6X12 4AWG(1-5/8)	0.00 - 20.00	0.6000	0.6000
T10	20	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T10	22	FLC 78-50J(7/8")	0.00 - 20.00	0.6000	0.6000
T10	23	FB-L98B-002-75000(3/8)	0.00 - 20.00	0.0000	0.0000
T10	24	WR-VG86ST-BRD(3/4)	0.00 - 20.00	0.0000	0.0000
T10	25	FB-L98B-034-XXX(3/8)	0.00 - 20.00	0.6000	0.6000
T10	26	WR-VG66ST-BRD(7/8)	0.00 - 20.00	0.6000	0.6000
T10	27	2" Rigid Conduit	0.00 - 20.00	0.6000	0.6000
T10	28	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T10	30	Thin Flat Bar Climbing Ladder	0.00 - 20.00	0.6000	0.6000
T10	31	Safety Line 3/8	0.00 - 20.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
NNVV-65B-R4 w/ Mount Pipe (R)	A	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.550 8.040 8.530 9.560	4.230 4.670 5.120 6.050	0.110 0.197 0.296 0.529
NNVV-65B-R4 w/ Mount Pipe (R)	B	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.550 8.040 8.530 9.560	4.230 4.670 5.120 6.050	0.110 0.197 0.296 0.529
NNVV-65B-R4 w/ Mount Pipe (R)	C	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.550 8.040 8.530 9.560	4.230 4.670 5.120 6.050	0.110 0.197 0.296 0.529
APXVTM14-ALU-I20 w/ Mount Pipe (R)	A	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
APXVTM14-ALU-I20 w/ Mount Pipe (R)	B	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
APXVTM14-ALU-I20 w/ Mount Pipe (R)	C	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
TD-RRH8x20-25 (R)	A	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8x20-25 (R)	B	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8x20-25 (R)	C	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
PCS 1900MHz 4x45W-65MHz (R)	A	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.322 2.527 2.739 3.185	2.238 2.441 2.651 3.093	0.060 0.083 0.110 0.173
PCS 1900MHz 4x45W-65MHz (R)	B	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.322 2.527 2.739 3.185	2.238 2.441 2.651 3.093	0.060 0.083 0.110 0.173
PCS 1900MHz 4x45W-65MHz (R)	C	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.322 2.527 2.739 3.185	2.238 2.441 2.651 3.093	0.060 0.083 0.110 0.173
(2) RRH2X50-800 (R)	A	From Leg	4.000 0.000 2.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.701 1.864 2.035 2.398	1.282 1.428 1.580 1.908	0.053 0.070 0.090 0.138
(2) RRH2X50-800 (R)	B	From Leg	4.000 0.000	0.000	190.000	No Ice 1/2" Ice	1.701 1.864	1.282 1.428	0.053 0.070

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			2.000			1" Ice	2.035	1.580	0.090
						2" Ice	2.398	1.908	0.138
(2) RRH2X50-800	C	From Leg	4.000	0.000	190.000	No Ice	1.701	1.282	0.053
(R)			0.000			1/2" Ice	1.864	1.428	0.070
			2.000			1" Ice	2.035	1.580	0.090
						2" Ice	2.398	1.908	0.138
6' x 2" Mount Pipe	A	From Leg	4.000	0.000	190.000	No Ice	1.425	1.425	0.022
(E)			0.000			1/2" Ice	1.925	1.925	0.033
			0.000			1" Ice	2.294	2.294	0.048
						2" Ice	3.060	3.060	0.090
6' x 2" Mount Pipe	B	From Leg	4.000	0.000	190.000	No Ice	1.425	1.425	0.022
(E)			0.000			1/2" Ice	1.925	1.925	0.033
			0.000			1" Ice	2.294	2.294	0.048
						2" Ice	3.060	3.060	0.090
6' x 2" Mount Pipe	C	From Leg	4.000	0.000	190.000	No Ice	1.425	1.425	0.022
(E)			0.000			1/2" Ice	1.925	1.925	0.033
			0.000			1" Ice	2.294	2.294	0.048
						2" Ice	3.060	3.060	0.090
Sector Mount [SM 504-3]	C	None		0.000	190.000	No Ice	31.050	31.050	1.708
(E)						1/2" Ice	43.830	43.830	2.326
						1" Ice	56.440	56.440	3.143
						2" Ice	81.280	81.280	5.358
**********									
(2) JAHH-65B-R3B	A	From Leg	4.000	0.000	180.000	No Ice	5.290	3.050	0.063
(R)			0.000			1/2" Ice	5.750	3.480	0.121
			1.000			1" Ice	6.220	3.930	0.186
						2" Ice	7.200	4.840	0.334
(2) JAHH-65B-R3B	B	From Leg	4.000	0.000	180.000	No Ice	5.290	3.050	0.063
(R)			0.000			1/2" Ice	5.750	3.480	0.121
			1.000			1" Ice	6.220	3.930	0.186
						2" Ice	7.200	4.840	0.334
(2) JAHH-65B-R3B	C	From Leg	4.000	0.000	180.000	No Ice	5.290	3.050	0.063
(R)			0.000			1/2" Ice	5.750	3.480	0.121
			1.000			1" Ice	6.220	3.930	0.186
						2" Ice	7.200	4.840	0.334
BAND 5 AHCA RRH4X40	A	From Leg	4.000	0.000	180.000	No Ice	1.313	0.746	0.040
(R)			0.000			1/2" Ice	1.456	0.860	0.052
			1.000			1" Ice	1.607	0.982	0.066
						2" Ice	1.931	1.247	0.102
BAND 5 AHCA RRH4X40	B	From Leg	4.000	0.000	180.000	No Ice	1.313	0.746	0.040
(R)			0.000			1/2" Ice	1.456	0.860	0.052
			1.000			1" Ice	1.607	0.982	0.066
						2" Ice	1.931	1.247	0.102
BAND 5 AHCA RRH4X40	C	From Leg	4.000	0.000	180.000	No Ice	1.313	0.746	0.040
(R)			0.000			1/2" Ice	1.456	0.860	0.052
			1.000			1" Ice	1.607	0.982	0.066
						2" Ice	1.931	1.247	0.102
RRH2X60-700	A	From Leg	4.000	0.000	180.000	No Ice	3.500	1.816	0.060
(R)			0.000			1/2" Ice	3.761	2.052	0.083
			1.000			1" Ice	4.029	2.289	0.109
						2" Ice	4.585	2.785	0.173
RRH2X60-700	B	From Leg	4.000	0.000	180.000	No Ice	3.500	1.816	0.060
(R)			0.000			1/2" Ice	3.761	2.052	0.083
			1.000			1" Ice	4.029	2.289	0.109
						2" Ice	4.585	2.785	0.173
RRH2X60-700	C	From Leg	4.000	0.000	180.000	No Ice	3.500	1.816	0.060
(R)			0.000			1/2" Ice	3.761	2.052	0.083

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			1.000			1" Ice	4.029	2.289	0.109
						2" Ice	4.585	2.785	0.173
RRH4X45-AWS4 B66	A	From Leg	4.000	0.000	180.000	No Ice	2.660	1.586	0.064
(R)			0.000			1/2" Ice	2.878	1.769	0.084
			1.000			1" Ice	3.104	1.959	0.108
						2" Ice	3.577	2.359	0.165
RRH4X45-AWS4 B66	B	From Leg	4.000	0.000	180.000	No Ice	2.660	1.586	0.064
(R)			0.000			1/2" Ice	2.878	1.769	0.084
			1.000			1" Ice	3.104	1.959	0.108
						2" Ice	3.577	2.359	0.165
RRH4X45-AWS4 B66	C	From Leg	4.000	0.000	180.000	No Ice	2.660	1.586	0.064
(R)			0.000			1/2" Ice	2.878	1.769	0.084
			1.000			1" Ice	3.104	1.959	0.108
						2" Ice	3.577	2.359	0.165
(2) RC3DC-3315-PF-48	A	From Leg	0.500	0.000	180.000	No Ice	3.012	1.963	0.021
(R)			0.000			1/2" Ice	3.231	2.151	0.048
			1.000			1" Ice	3.457	2.347	0.077
						2" Ice	3.932	2.761	0.147
(2) LPA-80080/4CF	A	From Leg	4.000	0.000	180.000	No Ice	2.619	5.399	0.012
(E)			0.000			1/2" Ice	2.922	5.726	0.045
			1.000			1" Ice	3.232	6.061	0.083
						2" Ice	3.847	6.750	0.172
(2) LPA-80080/4CF	B	From Leg	4.000	0.000	180.000	No Ice	2.619	5.399	0.012
(E)			0.000			1/2" Ice	2.922	5.726	0.045
			1.000			1" Ice	3.232	6.061	0.083
						2" Ice	3.847	6.750	0.172
(2) LPA-80080/4CF	C	From Leg	4.000	0.000	180.000	No Ice	2.619	5.399	0.012
(E)			0.000			1/2" Ice	2.922	5.726	0.045
			1.000			1" Ice	3.232	6.061	0.083
						2" Ice	3.847	6.750	0.172
58532A	C	From Leg	4.000	0.000	180.000	No Ice	0.189	0.189	0.000
(E)			0.000			1/2" Ice	0.248	0.248	0.003
			4.000			1" Ice	0.315	0.315	0.006
						2" Ice	0.470	0.470	0.017
Sector Mount [SM 303-3]	C	None		0.000	180.000	No Ice	39.830	39.830	1.879
(E-4 M.P./Sector)						1/2" Ice	56.050	56.050	2.648
						1" Ice	71.960	71.960	3.658
						2" Ice	103.040	103.040	6.382
**********									
(3) 7130.16.33.00 w/ Mount Pipe	A	From Leg	4.000	0.000	170.000	No Ice	5.555	6.584	0.037
			0.000			1/2" Ice	5.968	7.295	0.096
(AB)			2.000			1" Ice	6.382	7.978	0.162
						2" Ice	7.235	9.391	0.316
(3) 7130.16.33.00 w/ Mount Pipe	B	From Leg	4.000	0.000	170.000	No Ice	5.555	6.584	0.037
			0.000			1/2" Ice	5.968	7.295	0.096
(AB)			2.000			1" Ice	6.382	7.978	0.162
						2" Ice	7.235	9.391	0.316
(3) 7130.16.33.00 w/ Mount Pipe	C	From Leg	4.000	0.000	170.000	No Ice	5.555	6.584	0.037
			0.000			1/2" Ice	5.968	7.295	0.096
(AB)			2.000			1" Ice	6.382	7.978	0.162
						2" Ice	7.235	9.391	0.316
Sector Mount [SM 504-3]	C	None		0.000	170.000	No Ice	31.050	31.050	1.708
(AB)						1/2" Ice	43.830	43.830	2.326
						1" Ice	56.440	56.440	3.143
						2" Ice	81.280	81.280	5.358
**********									
HBX-6516DS-VTM w/	A	From Leg	4.000	0.000	160.000	No Ice	2.220	1.940	0.029

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Offsets: Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
Mount Pipe			0.000				1/2" Ice	2.580	2.290	0.058
(E-CL Per Photo)			2.000				1" Ice	2.960	2.660	0.094
							2" Ice	3.740	3.430	0.191
HBX-6516DS-VTM w/	B	From Leg	4.000		0.000	160.000	No Ice	2.220	1.940	0.029
Mount Pipe			0.000				1/2" Ice	2.580	2.290	0.058
(E-CL Per Photo)			2.000				1" Ice	2.960	2.660	0.094
							2" Ice	3.740	3.430	0.191
HBX-6516DS-VTM w/	C	From Leg	4.000		0.000	160.000	No Ice	2.220	1.940	0.029
Mount Pipe			0.000				1/2" Ice	2.580	2.290	0.058
(E-CL Per Photo)			2.000				1" Ice	2.960	2.660	0.094
							2" Ice	3.740	3.430	0.191
6' x 2" Mount Pipe	A	From Leg	4.000		0.000	160.000	No Ice	1.425	1.425	0.022
(E)			0.000				1/2" Ice	1.925	1.925	0.033
			2.000				1" Ice	2.294	2.294	0.048
							2" Ice	3.060	3.060	0.090
6' x 2" Mount Pipe	B	From Leg	4.000		0.000	160.000	No Ice	1.425	1.425	0.022
(E)			0.000				1/2" Ice	1.925	1.925	0.033
			2.000				1" Ice	2.294	2.294	0.048
							2" Ice	3.060	3.060	0.090
6' x 2" Mount Pipe	C	From Leg	4.000		0.000	160.000	No Ice	1.425	1.425	0.022
(E)			0.000				1/2" Ice	1.925	1.925	0.033
			2.000				1" Ice	2.294	2.294	0.048
							2" Ice	3.060	3.060	0.090
Sector Mount [SM 104-3]	C	None			0.000	160.000	No Ice	30.210	30.210	0.953
(E)							1/2" Ice	38.120	38.120	1.432
							1" Ice	46.010	46.010	2.031
							2" Ice	62.030	62.030	3.577
**********										
APX16DWV-16DWV-S-E-A	A	From Leg	4.000		0.000	153.000	No Ice	6.290	2.760	0.061
20 w/ Mount Pipe			0.000				1/2" Ice	6.860	3.270	0.105
(R)			0.000				1" Ice	7.450	3.790	0.157
							2" Ice	8.680	4.900	0.290
APX16DWV-16DWV-S-E-A	B	From Leg	4.000		0.000	153.000	No Ice	6.290	2.760	0.061
20 w/ Mount Pipe			0.000				1/2" Ice	6.860	3.270	0.105
(R)			0.000				1" Ice	7.450	3.790	0.157
							2" Ice	8.680	4.900	0.290
APX16DWV-16DWV-S-E-A	C	From Leg	4.000		0.000	153.000	No Ice	6.290	2.760	0.061
20 w/ Mount Pipe			0.000				1/2" Ice	6.860	3.270	0.105
(R)			0.000				1" Ice	7.450	3.790	0.157
							2" Ice	8.680	4.900	0.290
APXVAARR24_43-U-NA20	A	From Leg	4.000		0.000	153.000	No Ice	14.690	6.870	0.186
w/ Mount Pipe			0.000				1/2" Ice	15.460	7.550	0.315
(R)			0.000				1" Ice	16.230	8.250	0.458
							2" Ice	17.820	9.670	0.788
APXVAARR24_43-U-NA20	B	From Leg	4.000		0.000	153.000	No Ice	14.690	6.870	0.186
w/ Mount Pipe			0.000				1/2" Ice	15.460	7.550	0.315
(R)			0.000				1" Ice	16.230	8.250	0.458
							2" Ice	17.820	9.670	0.788
APXVAARR24_43-U-NA20	C	From Leg	4.000		0.000	153.000	No Ice	14.690	6.870	0.186
w/ Mount Pipe			0.000				1/2" Ice	15.460	7.550	0.315
(R)			0.000				1" Ice	16.230	8.250	0.458
							2" Ice	17.820	9.670	0.788
(2) RRUS 4415 B25	A	From Leg	4.000		0.000	153.000	No Ice	1.644	0.679	0.044
(R)			0.000				1/2" Ice	1.804	0.791	0.056
			0.000				1" Ice	1.972	0.913	0.071
							2" Ice	2.329	1.183	0.109
RRUS 4415 B25	B	From Leg	4.000		0.000	153.000	No Ice	1.644	0.679	0.044

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(R)			0.000			1/2" Ice	1.804	0.791	0.056
			0.000			1" Ice	1.972	0.913	0.071
						2" Ice	2.329	1.183	0.109
(2) RADIO 4415 B66A	A	From Leg	4.000	0.000	153.000	No Ice	1.856	0.870	0.050
(R)			0.000			1/2" Ice	2.027	0.997	0.064
			0.000			1" Ice	2.204	1.134	0.081
						2" Ice	2.582	1.432	0.124
RADIO 4415 B66A	B	From Leg	4.000	0.000	153.000	No Ice	1.856	0.870	0.050
(R)			0.000			1/2" Ice	2.027	0.997	0.064
			0.000			1" Ice	2.204	1.134	0.081
						2" Ice	2.582	1.432	0.124
RADIO 4449 B12/B71	B	From Leg	4.000	0.000	153.000	No Ice	1.650	1.300	0.075
(R)			0.000			1/2" Ice	1.810	1.445	0.092
			0.000			1" Ice	1.978	1.597	0.112
						2" Ice	2.336	1.924	0.161
(2) RADIO 4449 B12/B71	C	From Leg	4.000	0.000	153.000	No Ice	1.650	1.300	0.075
(R)			0.000			1/2" Ice	1.810	1.445	0.092
			0.000			1" Ice	1.978	1.597	0.112
						2" Ice	2.336	1.924	0.161
10.5' x 2.375" horizontal mount pipe	A	From Leg	4.000	0.000	153.000	No Ice	2.494	2.494	0.035
			0.000			1/2" Ice	3.572	3.572	0.054
(R- Tieback)			0.000			1" Ice	4.667	4.667	0.079
						2" Ice	6.317	6.317	0.151
10.5' x 2.375" horizontal mount pipe	B	From Leg	4.000	0.000	153.000	No Ice	2.494	2.494	0.035
			0.000			1/2" Ice	3.572	3.572	0.054
(R- Tieback)			0.000			1" Ice	4.667	4.667	0.079
						2" Ice	6.317	6.317	0.151
10.5' x 2.375" horizontal mount pipe	C	From Leg	4.000	0.000	153.000	No Ice	2.494	2.494	0.035
			0.000			1/2" Ice	3.572	3.572	0.054
(R- Tieback)			0.000			1" Ice	4.667	4.667	0.079
						2" Ice	6.317	6.317	0.151
Sector Mount [SM 502-3]	C	None		0.000	153.000	No Ice	29.820	29.820	1.673
(R-VFA12-HD)						1/2" Ice	42.210	42.210	2.266
						1" Ice	54.430	54.430	3.052
						2" Ice	78.490	78.490	5.180
**********									
7770.00 w/ Mount Pipe	A	From Leg	4.000	0.000	140.000	No Ice	5.746	4.254	0.055
(E)			0.000			1/2" Ice	6.179	5.014	0.103
			1.000			1" Ice	6.607	5.711	0.157
						2" Ice	7.488	7.155	0.287
7770.00 w/ Mount Pipe	B	From Leg	4.000	0.000	140.000	No Ice	5.746	4.254	0.055
(E)			0.000			1/2" Ice	6.179	5.014	0.103
			1.000			1" Ice	6.607	5.711	0.157
						2" Ice	7.488	7.155	0.287
7770.00 w/ Mount Pipe	C	From Leg	4.000	0.000	140.000	No Ice	5.746	4.254	0.055
(E)			0.000			1/2" Ice	6.179	5.014	0.103
			1.000			1" Ice	6.607	5.711	0.157
						2" Ice	7.488	7.155	0.287
DC6-48-60-18-8F	A	From Leg	4.000	0.000	140.000	No Ice	1.212	1.212	0.033
(E)			0.000			1/2" Ice	1.892	1.892	0.055
			0.000			1" Ice	2.105	2.105	0.080
						2" Ice	2.570	2.570	0.138
TT19-08BP111-001	A	From Leg	4.000	0.000	140.000	No Ice	0.545	0.442	0.016
(E)			0.000			1/2" Ice	0.641	0.530	0.022
			0.000			1" Ice	0.743	0.626	0.029
						2" Ice	0.971	0.840	0.049
TT19-08BP111-001	B	From Leg	4.000	0.000	140.000	No Ice	0.545	0.442	0.016

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(E)			0.000			1/2" Ice	0.641	0.530	0.022
			0.000			1" Ice	0.743	0.626	0.029
						2" Ice	0.971	0.840	0.049
TT19-08BP111-001	C	From Leg	4.000	0.000	140.000	No Ice	0.545	0.442	0.016
(E)			0.000			1/2" Ice	0.641	0.530	0.022
			0.000			1" Ice	0.743	0.626	0.029
						2" Ice	0.971	0.840	0.049
(2) DMP65R-BU6D w/	A	From Leg	4.000	0.000	140.000	No Ice	12.947	7.262	0.105
Mount Pipe			0.000			1/2" Ice	13.547	8.433	0.197
(P)			1.000			1" Ice	14.111	9.315	0.298
						2" Ice	15.264	11.128	0.529
(2) DMP65R-BU4D w/	B	From Leg	4.000	0.000	140.000	No Ice	8.518	4.693	0.086
Mount Pipe			0.000			1/2" Ice	8.964	5.306	0.151
(P)			1.000			1" Ice	9.420	5.928	0.223
						2" Ice	10.358	7.222	0.389
(2) DMP65R-BU4D w/	C	From Leg	4.000	0.000	140.000	No Ice	8.518	4.693	0.086
Mount Pipe			0.000			1/2" Ice	8.964	5.306	0.151
(P)			1.000			1" Ice	9.420	5.928	0.223
						2" Ice	10.358	7.222	0.389
RRUS 8843 B2/B66A	A	From Leg	4.000	0.000	140.000	No Ice	1.639	1.353	0.072
(P)			0.000			1/2" Ice	1.799	1.500	0.090
			1.000			1" Ice	1.966	1.655	0.110
						2" Ice	2.323	1.986	0.159
RRUS 8843 B2/B66A	B	From Leg	4.000	0.000	140.000	No Ice	1.639	1.353	0.072
(P)			0.000			1/2" Ice	1.799	1.500	0.090
			1.000			1" Ice	1.966	1.655	0.110
						2" Ice	2.323	1.986	0.159
RRUS 8843 B2/B66A	C	From Leg	4.000	0.000	140.000	No Ice	1.639	1.353	0.072
(P)			0.000			1/2" Ice	1.799	1.500	0.090
			1.000			1" Ice	1.966	1.655	0.110
						2" Ice	2.323	1.986	0.159
RRUS 4478 B14	A	From Leg	4.000	0.000	140.000	No Ice	1.843	1.059	0.060
(P)			0.000			1/2" Ice	2.012	1.197	0.076
			1.000			1" Ice	2.190	1.342	0.094
						2" Ice	2.566	1.656	0.140
RRUS 4478 B14	B	From Leg	4.000	0.000	140.000	No Ice	1.843	1.059	0.060
(P)			0.000			1/2" Ice	2.012	1.197	0.076
			1.000			1" Ice	2.190	1.342	0.094
						2" Ice	2.566	1.656	0.140
RRUS 4478 B14	C	From Leg	4.000	0.000	140.000	No Ice	1.843	1.059	0.060
(P)			0.000			1/2" Ice	2.012	1.197	0.076
			1.000			1" Ice	2.190	1.342	0.094
						2" Ice	2.566	1.656	0.140
RRUS 4449 B5/B12	A	From Leg	4.000	0.000	140.000	No Ice	1.968	1.408	0.071
(P)			0.000			1/2" Ice	2.144	1.564	0.090
			1.000			1" Ice	2.328	1.727	0.111
						2" Ice	2.718	2.075	0.163
RRUS 4449 B5/B12	B	From Leg	4.000	0.000	140.000	No Ice	1.968	1.408	0.071
(P)			0.000			1/2" Ice	2.144	1.564	0.090
			1.000			1" Ice	2.328	1.727	0.111
						2" Ice	2.718	2.075	0.163
RRUS 4449 B5/B12	C	From Leg	4.000	0.000	140.000	No Ice	1.968	1.408	0.071
(P)			0.000			1/2" Ice	2.144	1.564	0.090
			1.000			1" Ice	2.328	1.727	0.111
						2" Ice	2.718	2.075	0.163
DC6-48-60-0-8C-EV	B	From Leg	4.000	0.000	140.000	No Ice	2.736	4.783	0.026
(P)			0.000			1/2" Ice	2.962	5.063	0.063

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			1.000			1" Ice	3.195	5.350	0.104
						2" Ice	3.683	5.947	0.200
BC-35-14D	A	From Leg	4.000	0.000	140.000	No Ice	1.500	1.500	0.050
(P-Antenna Connection)			0.000			1/2" Ice	1.740	1.740	0.074
			2.000			1" Ice	1.980	1.980	0.099
						2" Ice	2.460	2.460	0.147
BC-35-14D	A	From Leg	4.000	0.000	140.000	No Ice	1.500	1.500	0.050
(P-Antenna Connection)			0.000			1/2" Ice	1.740	1.740	0.074
			-2.000			1" Ice	1.980	1.980	0.099
						2" Ice	2.460	2.460	0.147
BC-35-14D	B	From Leg	4.000	0.000	140.000	No Ice	1.500	1.500	0.050
(P-Antenna Connection)			0.000			1/2" Ice	1.740	1.740	0.074
			2.000			1" Ice	1.980	1.980	0.099
						2" Ice	2.460	2.460	0.147
BC-35-14D	B	From Leg	4.000	0.000	140.000	No Ice	1.500	1.500	0.050
(P-Antenna Connection)			0.000			1/2" Ice	1.740	1.740	0.074
			-2.000			1" Ice	1.980	1.980	0.099
						2" Ice	2.460	2.460	0.147
BC-35-14D	C	From Leg	4.000	0.000	140.000	No Ice	1.500	1.500	0.050
(P-Antenna Connection)			0.000			1/2" Ice	1.740	1.740	0.074
			2.000			1" Ice	1.980	1.980	0.099
						2" Ice	2.460	2.460	0.147
BC-35-14D	C	From Leg	4.000	0.000	140.000	No Ice	1.500	1.500	0.050
(P-Antenna Connection)			0.000			1/2" Ice	1.740	1.740	0.074
			-2.000			1" Ice	1.980	1.980	0.099
						2" Ice	2.460	2.460	0.147
Sector Mount [SM 502-3]	C	None		0.000	140.000	No Ice	29.820	29.820	1.673
(E)						1/2" Ice	42.210	42.210	2.266
						1" Ice	54.430	54.430	3.052
						2" Ice	78.490	78.490	5.180
**********									
58532A	C	From Leg	4.000	0.000	98.000	No Ice	0.189	0.189	0.000
(E)			0.000			1/2" Ice	0.248	0.248	0.003
			4.000			1" Ice	0.315	0.315	0.006
						2" Ice	0.470	0.470	0.017
Side Arm Mount [SO 306-1]	C	From Leg	2.000	0.000	98.000	No Ice	0.410	2.260	0.042
(E)			0.000			1/2" Ice	0.810	3.830	0.062
			0.000			1" Ice	1.230	5.480	0.094
						2" Ice	2.080	9.370	0.187
**********									

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice

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

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	192 - 180	Leg	Max Tension	23	4.305	-0.077	-0.054
			Max. Compression	18	-6.952	0.059	-0.059
			Max. Mx	20	-1.272	-0.785	0.002
			Max. My	2	-0.898	-0.026	-0.783
			Max. Vy	20	-0.581	0.380	-0.032
			Max. Vx	2	-0.588	-0.006	0.401
		Diagonal	Max Tension	8	1.474	0.000	0.000
			Max. Compression	20	-1.508	0.000	0.000
			Max. Mx	36	0.160	0.026	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	16	1.468	0.005	-0.002
			Max. Vy	36	-0.029	0.026	0.000
			Max. Vx	16	-0.000	0.004	-0.002
		Top Girt	Max Tension	14	0.103	0.000	0.000
			Max. Compression	19	-0.091	0.000	0.000
			Max. Mx	26	0.002	-0.074	0.000
			Max. Vy	26	0.045	0.000	0.000
T2	180 - 160	Leg	Max Tension	23	26.437	-0.058	-0.031
			Max. Compression	2	-34.103	0.074	0.009
			Max. Mx	10	-11.068	0.082	0.015
			Max. My	20	-2.828	-0.016	-0.144
			Max. Vy	14	-1.172	-0.056	-0.006
			Max. Vx	8	1.155	0.010	0.005
		Diagonal	Max Tension	16	3.920	0.000	0.000
			Max. Compression	16	-3.935	0.000	0.000
			Max. Mx	27	1.199	0.048	-0.005
			Max. My	28	-1.278	0.032	0.005
			Max. Vy	27	-0.040	0.048	-0.005
			Max. Vx	28	-0.002	0.000	0.000
		Top Girt	Max Tension	3	0.746	0.000	0.000
			Max. Compression	14	-0.769	0.000	0.000
			Max. Mx	26	-0.047	-0.081	0.000
			Max. My	26	-0.045	0.000	0.002
			Max. Vy	26	0.049	0.000	0.000
			Max. Vx	26	-0.001	0.000	0.000
T3	160 - 140	Leg	Max Tension	23	54.301	-0.161	-0.029
			Max. Compression	10	-66.874	0.124	0.041
			Max. Mx	14	31.197	-0.283	-0.004
			Max. My	20	-6.962	-0.015	-0.385
			Max. Vy	14	-0.976	-0.283	-0.004
			Max. Vx	20	-0.900	-0.015	-0.207
		Diagonal	Max Tension	16	5.891	0.000	0.000
			Max. Compression	16	-5.972	0.000	0.000
			Max. Mx	38	0.638	0.094	-0.011
			Max. My	30	1.350	0.076	0.012
			Max. Vy	38	-0.061	0.094	-0.011
			Max. Vx	30	-0.004	0.000	0.000
T4	140 - 120	Leg	Max Tension	23	88.527	-0.232	-0.025
			Max. Compression	10	-107.185	0.339	0.036
			Max. Mx	10	-107.185	0.339	0.036
			Max. My	20	-10.249	0.002	-0.420
			Max. Vy	14	-1.203	-0.161	0.001
			Max. Vx	20	-1.136	0.004	-0.019
		Diagonal	Max Tension	12	7.314	0.000	0.000
			Max. Compression	12	-7.402	0.000	0.000
			Max. Mx	27	1.588	0.111	-0.014
			Max. My	30	-1.491	0.104	0.015
			Max. Vy	37	0.072	0.105	0.013
			Max. Vx	30	-0.004	0.000	0.000
T5	120 - 100	Leg	Max Tension	23	121.709	-0.334	-0.021
			Max. Compression	10	-144.949	0.761	0.049
			Max. Mx	10	-144.949	0.761	0.049
			Max. My	20	-12.080	0.010	-0.677
			Max. Vy	11	-0.121	0.760	0.049
			Max. Vx	8	-0.158	-0.000	0.676
		Diagonal	Max Tension	12	7.993	0.000	0.000
			Max. Compression	12	-7.965	0.000	0.000
			Max. Mx	27	2.062	0.155	-0.019
			Max. My	30	-1.389	0.142	0.021
			Max. Vy	29	0.095	0.152	0.020
			Max. Vx	30	-0.005	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T6	100 - 80	Leg	Max Tension	23	150.366	-0.626	-0.051
			Max. Compression	10	-177.908	0.917	0.065
			Max. Mx	10	-177.908	0.917	0.065
			Max. My	20	-12.846	-0.059	-1.093
			Max. Vy	18	-0.131	0.916	-0.025
			Max. Vx	20	-0.201	-0.059	-1.093
		Diagonal	Max Tension	12	9.299	0.000	0.000
			Max. Compression	12	-9.347	0.000	0.000
			Max. Mx	27	2.247	0.251	-0.033
			Max. My	36	2.572	0.245	-0.034
			Max. Vy	29	0.121	0.243	-0.032
			Max. Vx	36	0.007	0.000	0.000
T7	80 - 60	Leg	Max Tension	23	181.201	-0.590	-0.044
			Max. Compression	10	-213.932	1.232	0.076
			Max. Mx	10	-213.932	1.232	0.076
			Max. My	20	-15.903	0.036	-1.098
			Max. Vy	10	-0.163	1.232	0.076
			Max. Vx	20	0.172	-0.066	-0.875
		Diagonal	Max Tension	12	10.168	0.000	0.000
			Max. Compression	12	-10.308	0.000	0.000
			Max. Mx	27	2.403	0.324	-0.040
			Max. My	36	2.304	0.313	-0.041
			Max. Vy	29	0.148	0.316	-0.038
			Max. Vx	36	0.008	0.000	0.000
T8	60 - 40	Leg	Max Tension	23	209.198	-1.331	-0.039
			Max. Compression	10	-247.979	1.147	0.038
			Max. Mx	37	7.410	-2.004	-0.029
			Max. My	20	-17.987	-0.071	-1.304
			Max. Vy	33	0.306	-1.989	0.023
			Max. Vx	20	0.172	-0.071	-1.304
		Diagonal	Max Tension	12	9.961	0.000	0.000
			Max. Compression	12	-9.958	0.000	0.000
			Max. Mx	29	2.308	0.390	0.056
			Max. My	30	-1.268	0.367	0.058
			Max. Vy	29	0.172	0.390	0.056
			Max. Vx	30	-0.010	0.000	0.000
T9	40 - 20	Leg	Max Tension	23	237.317	-1.193	-0.034
			Max. Compression	18	-282.187	1.939	-0.027
			Max. Mx	37	8.691	-4.009	-0.020
			Max. My	20	-20.444	-0.121	-1.603
			Max. Vy	33	0.658	-3.988	0.020
			Max. Vx	20	-0.232	-0.121	-1.603
		Diagonal	Max Tension	12	11.519	0.000	0.000
			Max. Compression	12	-11.801	0.000	0.000
			Max. Mx	27	2.006	0.460	-0.051
			Max. My	30	3.620	0.412	0.056
			Max. Vy	29	0.179	0.414	-0.053
			Max. Vx	30	-0.009	0.000	0.000
T10	20 - 0	Leg	Max Tension	23	264.737	-1.250	-0.048
			Max. Compression	18	-316.547	0.000	0.000
			Max. Mx	35	-137.942	4.060	0.010
			Max. My	20	-23.263	-0.204	-2.903
			Max. Vy	33	-0.783	-3.988	0.020
			Max. Vx	20	-0.425	-0.204	-2.903
		Diagonal	Max Tension	12	11.969	0.000	0.000
			Max. Compression	10	-12.479	0.000	0.000
			Max. Mx	29	-0.484	0.589	0.059
			Max. My	30	5.076	0.417	0.069
			Max. Vy	29	0.198	0.589	0.059
			Max. Vx	30	-0.010	0.000	0.000

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	325.115	32.097	-19.028
	Max. H_x	18	325.115	32.097	-19.028
	Max. H_z	7	-270.920	-27.467	16.331
	Min. Vert	7	-270.920	-27.467	16.331
	Min. H_x	7	-270.920	-27.467	16.331
	Min. H_z	18	325.115	32.097	-19.028
Leg B	Max. Vert	10	324.858	-31.819	-19.312
	Max. H_x	23	-271.451	27.198	16.629
	Max. H_z	23	-271.451	27.198	16.629
	Min. Vert	23	-271.451	27.198	16.629
	Min. H_x	10	324.858	-31.819	-19.312
	Min. H_z	10	324.858	-31.819	-19.312
Leg A	Max. Vert	2	319.669	0.520	36.535
	Max. H_x	21	18.237	5.579	1.521
	Max. H_z	2	319.669	0.520	36.535
	Min. Vert	15	-264.318	-0.528	-31.156
	Min. H_x	8	24.123	-5.588	2.003
	Min. H_z	15	-264.318	-0.528	-31.156

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	59.039	0.000	0.000	-10.673	4.700	0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	70.847	-0.018	-58.284	-6422.569	7.436	22.683
0.9 Dead+1.0 Wind 0 deg - No Ice	53.135	-0.018	-58.284	-6419.367	6.026	22.683
1.2 Dead+1.0 Wind 30 deg - No Ice	70.847	27.881	-48.537	-5379.078	-3072.161	20.320
0.9 Dead+1.0 Wind 30 deg - No Ice	53.135	27.881	-48.537	-5375.876	-3073.572	20.320
1.2 Dead+1.0 Wind 60 deg - No Ice	70.847	48.793	-28.291	-3156.772	-5408.096	-17.967
0.9 Dead+1.0 Wind 60 deg - No Ice	53.135	48.793	-28.291	-3153.570	-5409.506	-17.967
1.2 Dead+1.0 Wind 90 deg - No Ice	70.847	57.598	0.018	-11.013	-6409.048	-59.329
0.9 Dead+1.0 Wind 90 deg - No Ice	53.135	57.598	0.018	-7.811	-6410.458	-59.329
1.2 Dead+1.0 Wind 120 deg - No Ice	70.847	51.424	29.831	3275.710	-5654.880	-34.811
0.9 Dead+1.0 Wind 120 deg - No Ice	53.135	51.424	29.831	3278.912	-5656.290	-34.811
1.2 Dead+1.0 Wind 150 deg - No Ice	70.847	28.090	48.862	5417.420	-3111.161	-18.664
0.9 Dead+1.0 Wind 150 deg - No Ice	53.135	28.090	48.862	5420.622	-3112.571	-18.664
1.2 Dead+1.0 Wind 180 deg - No Ice	70.847	0.018	55.046	6115.139	3.845	-22.683

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
0.9 Dead+1.0 Wind 180 deg - No Ice	53.135	0.018	55.046	6118.341	2.435	-22.683
1.2 Dead+1.0 Wind 210 deg - No Ice	70.847	-27.881	48.537	5353.462	3083.442	-20.320
0.9 Dead+1.0 Wind 210 deg - No Ice	53.135	-27.881	48.537	5356.664	3082.032	-20.320
1.2 Dead+1.0 Wind 240 deg - No Ice	70.847	-51.597	29.910	3272.064	5663.435	17.967
0.9 Dead+1.0 Wind 240 deg - No Ice	53.135	-51.597	29.910	3275.266	5662.025	17.967
1.2 Dead+1.0 Wind 270 deg - No Ice	70.847	-57.598	-0.018	-14.603	6420.329	59.329
0.9 Dead+1.0 Wind 270 deg - No Ice	53.135	-57.598	-0.018	-11.401	6418.918	59.329
1.2 Dead+1.0 Wind 300 deg - No Ice	70.847	-48.619	-28.212	-3160.419	5422.102	34.811
0.9 Dead+1.0 Wind 300 deg - No Ice	53.135	-48.619	-28.212	-3157.217	5420.692	34.811
1.2 Dead+1.0 Wind 330 deg - No Ice	70.847	-28.090	-48.862	-5443.036	3122.442	18.664
0.9 Dead+1.0 Wind 330 deg - No Ice	53.135	-28.090	-48.862	-5439.834	3121.032	18.664
1.2 Dead+1.0 Ice+1.0 Temp	211.443	0.000	0.000	-75.399	-61.761	0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	211.443	-0.012	-16.223	-1884.148	-60.571	8.526
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	211.443	7.907	-13.747	-1617.713	-948.347	5.394
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	211.443	13.690	-7.920	-970.636	-1608.035	-6.999
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	211.443	16.036	0.012	-74.209	-1877.418	-13.963
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	211.443	14.190	8.222	850.218	-1658.275	-9.369
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	211.443	8.004	13.891	1487.354	-961.522	-5.819
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	211.443	0.012	15.813	1698.939	-62.951	-8.526
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	211.443	-7.907	13.747	1466.915	824.825	-5.394
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	211.443	-14.046	8.125	837.043	1514.314	6.999
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	211.443	-16.036	-0.012	-76.589	1753.896	13.963
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	211.443	-13.835	-8.017	-983.811	1504.952	9.369
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	211.443	-8.004	-13.891	-1638.152	838.000	5.819
Dead+Wind 0 deg - Service	59.039	-0.004	-13.069	-1447.929	5.103	5.086
Dead+Wind 30 deg - Service	59.039	6.252	-10.883	-1213.948	-685.433	4.556
Dead+Wind 60 deg - Service	59.039	10.941	-6.344	-715.642	-1209.217	-4.029
Dead+Wind 90 deg - Service	59.039	12.915	0.004	-10.271	-1433.660	-13.303
Dead+Wind 120 deg - Service	59.039	11.531	6.689	726.709	-1264.554	-7.806
Dead+Wind 150 deg - Service	59.039	6.299	10.956	1206.942	-694.177	-4.185
Dead+Wind 180 deg - Service	59.039	0.004	12.343	1363.391	4.298	-5.086
Dead+Wind 210 deg - Service	59.039	-6.252	10.883	1192.601	694.834	-4.556
Dead+Wind 240 deg - Service	59.039	-11.570	6.707	725.891	1273.343	4.029
Dead+Wind 270 deg - Service	59.039	-12.915	-0.004	-11.076	1443.061	13.303
Dead+Wind 300 deg - Service	59.039	-10.902	-6.326	-716.460	1219.229	7.806
Dead+Wind 330 deg - Service	59.039	-6.299	-10.956	-1228.289	703.578	4.185

Solution Summary

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
1	0.000	-59.039	0.000	0.000	59.039	-0.000	0.000%
2	-0.018	-70.847	-58.284	0.018	70.847	58.284	0.000%
3	-0.018	-53.135	-58.284	0.018	53.135	58.284	0.000%
4	27.881	-70.847	-48.537	-27.881	70.847	48.537	0.000%
5	27.881	-53.135	-48.537	-27.881	53.135	48.537	0.000%
6	48.793	-70.847	-28.291	-48.793	70.847	28.291	0.000%
7	48.793	-53.135	-28.291	-48.793	53.135	28.291	0.000%
8	57.598	-70.847	0.018	-57.598	70.847	-0.018	0.000%
9	57.598	-53.135	0.018	-57.598	53.135	-0.018	0.000%
10	51.424	-70.847	29.831	-51.424	70.847	-29.831	0.000%
11	51.424	-53.135	29.831	-51.424	53.135	-29.831	0.000%
12	28.090	-70.847	48.862	-28.090	70.847	-48.862	0.000%
13	28.090	-53.135	48.862	-28.090	53.135	-48.862	0.000%
14	0.018	-70.847	55.046	-0.018	70.847	-55.046	0.000%
15	0.018	-53.135	55.046	-0.018	53.135	-55.046	0.000%
16	-27.881	-70.847	48.537	27.881	70.847	-48.537	0.000%
17	-27.881	-53.135	48.537	27.881	53.135	-48.537	0.000%
18	-51.597	-70.847	29.910	51.597	70.847	-29.910	0.000%
19	-51.597	-53.135	29.910	51.597	53.135	-29.910	0.000%
20	-57.598	-70.847	-0.018	57.598	70.847	0.018	0.000%
21	-57.598	-53.135	-0.018	57.598	53.135	0.018	0.000%
22	-48.619	-70.847	-28.212	48.619	70.847	28.212	0.000%
23	-48.619	-53.135	-28.212	48.619	53.135	28.212	0.000%
24	-28.090	-70.847	-48.862	28.090	70.847	48.862	0.000%
25	-28.090	-53.135	-48.862	28.090	53.135	48.862	0.000%
26	0.000	-211.443	0.000	0.000	211.443	-0.000	0.000%
27	-0.012	-211.443	-16.223	0.012	211.443	16.223	0.000%
28	7.907	-211.443	-13.747	-7.907	211.443	13.747	0.000%
29	13.690	-211.443	-7.920	-13.690	211.443	7.920	0.000%
30	16.036	-211.443	0.012	-16.036	211.443	-0.012	0.000%
31	14.190	-211.443	8.222	-14.190	211.443	-8.222	0.000%
32	8.004	-211.443	13.891	-8.004	211.443	-13.891	0.000%
33	0.012	-211.443	15.813	-0.012	211.443	-15.813	0.000%
34	-7.907	-211.443	13.747	7.907	211.443	-13.747	0.000%
35	-14.046	-211.443	8.125	14.046	211.443	-8.125	0.000%
36	-16.036	-211.443	-0.012	16.036	211.443	0.012	0.000%
37	-13.835	-211.443	-8.017	13.835	211.443	8.017	0.000%
38	-8.004	-211.443	-13.891	8.004	211.443	13.891	0.000%
39	-0.004	-59.039	-13.069	0.004	59.039	13.069	0.000%
40	6.252	-59.039	-10.883	-6.252	59.039	10.883	0.000%
41	10.941	-59.039	-6.344	-10.941	59.039	6.344	0.000%
42	12.915	-59.039	0.004	-12.915	59.039	-0.004	0.000%
43	11.531	-59.039	6.689	-11.531	59.039	-6.689	0.000%
44	6.299	-59.039	10.956	-6.299	59.039	-10.956	0.000%
45	0.004	-59.039	12.343	-0.004	59.039	-12.343	0.000%
46	-6.252	-59.039	10.883	6.252	59.039	-10.883	0.000%
47	-11.570	-59.039	6.707	11.570	59.039	-6.707	0.000%
48	-12.915	-59.039	-0.004	12.915	59.039	0.004	0.000%
49	-10.902	-59.039	-6.326	10.902	59.039	6.326	0.000%
50	-6.299	-59.039	-10.956	6.299	59.039	10.956	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	192 - 180	3.974	47	0.189	0.026
T2	180 - 160	3.498	47	0.187	0.026
T3	160 - 140	2.738	47	0.165	0.023
T4	140 - 120	2.082	47	0.139	0.020
T5	120 - 100	1.521	47	0.115	0.015
T6	100 - 80	1.057	47	0.094	0.012
T7	80 - 60	0.687	47	0.072	0.009
T8	60 - 40	0.402	47	0.053	0.006
T9	40 - 20	0.196	47	0.036	0.004
T10	20 - 0	0.059	47	0.018	0.002

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
190.000	NNVV-65B-R4 w/ Mount Pipe	47	3.894	0.189	0.026	570133
180.000	(2) JAHH-65B-R3B	47	3.498	0.187	0.026	204142
170.000	(3) 7130.16.33.00 w/ Mount Pipe	47	3.109	0.178	0.025	62189
160.000	HBX-6516DS-VTM w/ Mount Pipe	47	2.738	0.165	0.023	37574
153.000	APX16DWV-16DWV-S-E-A20 w/ Mount Pipe	47	2.496	0.156	0.022	40636
140.000	7770.00 w/ Mount Pipe	47	2.082	0.139	0.020	53131
98.000	58532A	47	1.016	0.092	0.011	50773

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	192 - 180	17.764	11	0.840	0.114
T2	180 - 160	15.640	11	0.830	0.115
T3	160 - 140	12.238	11	0.734	0.103
T4	140 - 120	9.301	11	0.623	0.088
T5	120 - 100	6.792	11	0.514	0.069
T6	100 - 80	4.718	11	0.419	0.052
T7	80 - 60	3.065	19	0.322	0.039
T8	60 - 40	1.794	19	0.237	0.027
T9	40 - 20	0.874	19	0.161	0.018
T10	20 - 0	0.262	19	0.082	0.008

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
190.000	NNVV-65B-R4 w/ Mount Pipe	11	17.409	0.840	0.115	139481
180.000	(2) JAHH-65B-R3B	11	15.640	0.830	0.115	49116

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
170.000	(3) 7130.16.33.00 w/ Mount Pipe	11	13.898	0.790	0.110	14374
160.000	HBX-6516DS-VTM w/ Mount Pipe	11	12.238	0.734	0.103	8636
153.000	APX16DWV-16DWV-S-E-A20 w/ Mount Pipe	11	11.154	0.694	0.098	9354
140.000	7770.00 w/ Mount Pipe	11	9.301	0.623	0.088	12107
98.000	58532A	11	4.534	0.410	0.050	11418

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	192	Leg	A325N	0.625	4	1.076	20.340	0.053 ✓	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	1.474	7.116	0.207 ✓	1.05	Member Block Shear
		Top Girt	A325N	0.625	1	0.103	7.116	0.014 ✓	1.05	Member Block Shear
T2	180	Leg	A325N	0.625	4	6.609	20.340	0.325 ✓	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	3.920	8.135	0.482 ✓	1.05	Member Block Shear
		Top Girt	A325N	0.625	1	0.746	8.135	0.092 ✓	1.05	Member Block Shear
T3	160	Leg	A325N	0.875	4	13.575	41.556	0.327 ✓	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	5.891	10.440	0.564 ✓	1.05	Gusset Bearing
T4	140	Leg	A325N	1.000	4	22.132	54.517	0.406 ✓	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	7.314	10.440	0.701 ✓	1.05	Gusset Bearing
T5	120	Leg	A325N	1.000	6	20.285	54.517	0.372 ✓	1.05	Bolt Tension
		Diagonal	A325N	0.750	1	7.993	14.137	0.565 ✓	1.05	Member Bearing
T6	100	Leg	A325N	1.000	6	25.061	54.517	0.460 ✓	1.05	Bolt Tension
		Diagonal	A325N	0.750	1	9.299	14.137	0.658 ✓	1.05	Member Bearing
T7	80	Leg	A325N	1.000	8	22.650	54.517	0.415 ✓	1.05	Bolt Tension
		Diagonal	A325N	0.750	1	10.168	14.137	0.719 ✓	1.05	Member Bearing
T8	60	Leg	A325N	1.000	8	26.150	54.517	0.480 ✓	1.05	Bolt Tension
		Diagonal	A325X	0.750	1	9.961	17.672	0.564 ✓	1.05	Member Bearing
T9	40	Leg	A325N	1.000	8	29.665	54.517	0.544 ✓	1.05	Bolt Tension
		Diagonal	A325X	0.750	1	11.519	17.672	0.652 ✓	1.05	Member Bearing
T10	20	Diagonal	A325X	0.750	1	11.969	18.922	0.633 ✓	1.05	Gusset Bearing

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	192 - 180	ROHN 2.5 STD	12.000	4.000	50.7 K=1.00	1.704	-6.952	63.560	0.109 [1]
T2	180 - 160	ROHN 2.5 STD	20.032	5.008	63.4 K=1.00	1.704	-34.103	57.139	0.597 [1]
T3	160 - 140	ROHN 3 EH	20.036	6.679	70.5 K=1.00	3.016	-66.874	94.337	0.709 [1]
T4	140 - 120	ROHN 4 EH	20.038	6.679	54.3 K=1.00	4.407	-107.185	159.899	0.670 [1]
T5	120 - 100	ROHN 5 EH	20.036	6.679	43.6 K=1.00	6.112	-144.949	239.378	0.606 [1]
T6	100 - 80	ROHN 6 EHS	20.036	10.018	54.0 K=1.00	6.713	-177.908	244.047	0.729 [1]
T7	80 - 60	ROHN 6 EH	20.032	10.016	54.8 K=1.00	8.405	-213.932	303.757	0.704 [1]
T8	60 - 40	ROHN 8 EHS	20.042	10.021	41.2 K=1.00	9.719	-247.979	386.354	0.642 [1]
T9	40 - 20	ROHN 8 EHS	20.031	10.015	41.2 K=1.00	9.719	-282.187	386.409	0.730 [1]
T10	20 - 0	ROHN 8 EHS	20.033	10.017	41.2 K=1.00	9.719	-316.547	386.397	0.819 [1]

[1] $P_u / \phi P_n$ controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	192 - 180	L1 3/4x1 3/4x3/16	7.700	3.585	125.3 K=1.00	0.621	-1.508	11.328	0.133 [1]
T2	180 - 160	L2x2x3/16	9.686	4.721	143.8 K=1.00	0.715	-3.844	9.897	0.388 [1]
T3	160 - 140	L2 1/2x2 1/2x1/4	12.241	6.028	147.3 K=1.00	1.190	-5.972	15.695	0.380 [1]
T4	140 - 120	L2 1/2x2 1/2x1/4	14.067	6.897	168.6 K=1.00	1.190	-7.402	11.987	0.617 [1]
T5	120 - 100	L3x3x1/4	15.944	7.773	157.6 K=1.00	1.440	-7.965	16.602	0.480 [1]
T6	100 - 80	L3 1/2x3 1/2x1/4	19.209	9.452	163.4 K=1.00	1.690	-9.347	18.110	0.516 [1]
T7	80 - 60	L4x4x1/4	20.935	10.297	155.4 K=1.00	1.940	-10.308	22.986	0.448 [1]
T8	60 - 40	L4x4x5/16	22.872	11.214	170.1 K=1.00	2.400	-9.958	23.735	0.420 [1]
T9	40 - 20	L4x4x5/16	24.688	12.078	183.2 K=1.00	2.400	-11.801	20.461	0.577 [1]
T10	20 - 0	L4x4x3/8	26.510	13.002	198.0	2.860	-12.479	20.882	0.598 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
					K=1.00				✔

[1] P_u / ϕP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	192 - 180	L1 3/4x1 3/4x3/16	6.580	6.090	212.8 K=1.00	0.621	-0.091	3.926	0.023 [1] ✔
T2	180 - 160	KL/R > 200 (C) - 5 L2x2x3/16	6.580	6.090	185.5 K=1.00	0.715	-0.769	5.948	0.129 [1] ✔

[1] P_u / ϕP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	192 - 180	ROHN 2.5 STD	12.000	4.000	50.7	1.704	4.305	76.682	0.056 [1] ✔
T2	180 - 160	ROHN 2.5 STD	20.032	5.008	63.4	1.704	26.437	76.682	0.345 [1] ✔
T3	160 - 140	ROHN 3 EH	20.036	6.679	70.5	3.016	54.301	135.717	0.400 [1] ✔
T4	140 - 120	ROHN 4 EH	20.038	6.679	54.3	4.407	88.527	198.335	0.446 [1] ✔
T5	120 - 100	ROHN 5 EH	20.036	6.679	43.6	6.112	121.709	275.039	0.443 [1] ✔
T6	100 - 80	ROHN 6 EHS	20.036	10.018	54.0	6.713	150.366	302.097	0.498 [1] ✔
T7	80 - 60	ROHN 6 EH	20.032	10.016	54.8	8.405	181.202	378.222	0.479 [1] ✔
T8	60 - 40	ROHN 8 EHS	20.042	10.021	41.2	9.719	209.198	437.369	0.478 [1] ✔
T9	40 - 20	ROHN 8 EHS	20.031	10.015	41.2	9.719	237.317	437.369	0.543 [1] ✔
T10	20 - 0	ROHN 8 EHS	20.033	10.017	41.2	9.719	264.737	437.369	0.605 [1] ✔

[1] P_u / ϕP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	192 - 180	L1 3/4x1 3/4x3/16	7.700	3.585	82.9	0.360	1.474	15.675	0.094 [1] ✔
T2	180 - 160	L2x2x3/16	9.686	4.721	94.3	0.431	3.920	18.739	0.209 [1] ✔
T3	160 - 140	L2 1/2x2 1/2x1/4	12.241	6.028	96.0	0.752	5.891	32.707	0.180 [1] ✔
T4	140 - 120	L2 1/2x2 1/2x1/4	14.067	6.897	109.6	0.752	7.314	32.707	0.224 [1] ✔
T5	120 - 100	L3x3x1/4	15.944	7.773	102.0	0.916	7.993	44.652	0.179 [1] ✔
T6	100 - 80	L3 1/2x3 1/2x1/4	19.209	9.452	105.5	1.103	9.299	53.793	0.173 [1] ✔
T7	80 - 60	L4x4x1/4	20.935	10.297	100.1	1.291	10.168	62.933	0.162 [1] ✔
T8	60 - 40	L4x4x5/16	22.872	11.214	109.8	1.595	9.961	77.752	0.128 [1] ✔
T9	40 - 20	L4x4x5/16	24.688	12.078	118.2	1.595	11.519	77.752	0.148 [1] ✔
T10	20 - 0	L4x4x3/8	26.510	13.002	128.2	1.899	11.969	92.572	0.129 [1] ✔

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	192 - 180	L1 3/4x1 3/4x3/16	6.580	6.090	141.7	0.360	0.103	15.675	0.007 [1] ✔
T2	180 - 160	L2x2x3/16	6.580	6.090	123.3	0.431	0.746	18.739	0.040 [1] ✔

[1] P_u / ϕP_n controls

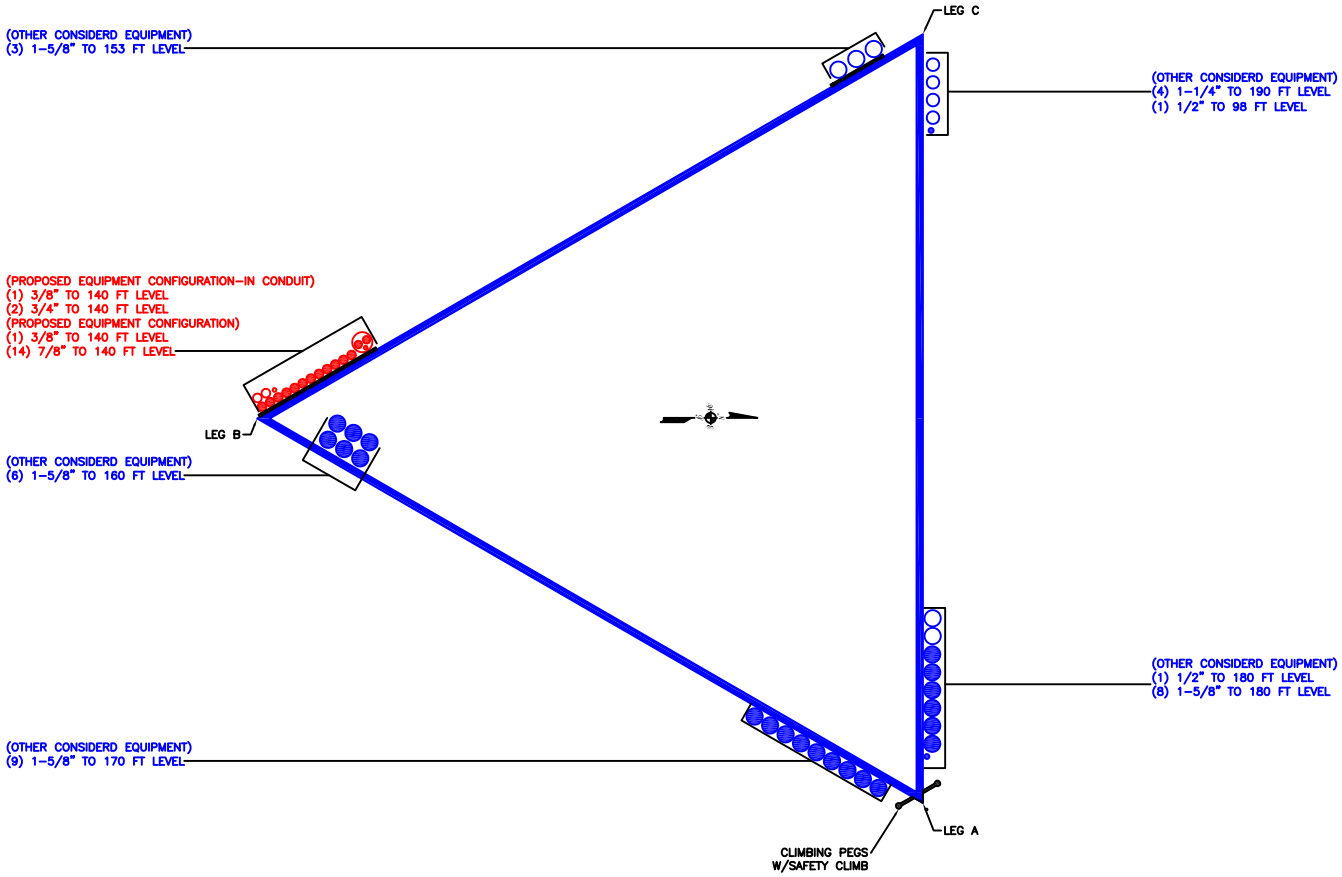
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	192 - 180	Leg	ROHN 2.5 STD	1	-6.952	66.738	10.4	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T2	180 - 160	Leg	ROHN 2.5 STD	27	-34.103	59.996	56.8	Pass
T3	160 - 140	Leg	ROHN 3 EH	56	-66.874	99.054	67.5	Pass
T4	140 - 120	Leg	ROHN 4 EH	77	-107.185	167.894	63.8	Pass
T5	120 - 100	Leg	ROHN 5 EH	98	-144.949	251.347	57.7	Pass
T6	100 - 80	Leg	ROHN 6 EHS	119	-177.908	256.249	69.4	Pass
T7	80 - 60	Leg	ROHN 6 EH	134	-213.932	318.945	67.1	Pass
T8	60 - 40	Leg	ROHN 8 EHS	149	-247.979	405.672	61.1	Pass
T9	40 - 20	Leg	ROHN 8 EHS	163	-282.187	405.729	69.6	Pass
T10	20 - 0	Leg	ROHN 8 EHS	178	-316.547	405.717	78.0	Pass
T1	192 - 180	Diagonal	L1 3/4x1 3/4x3/16	7	-1.508	11.895	12.7 19.7 (b)	Pass
T2	180 - 160	Diagonal	L2x2x3/16	36	-3.844	10.392	37.0 45.9 (b)	Pass
T3	160 - 140	Diagonal	L2 1/2x2 1/2x1/4	63	-5.972	16.480	36.2 53.7 (b)	Pass
T4	140 - 120	Diagonal	L2 1/2x2 1/2x1/4	81	-7.402	12.587	58.8 66.7 (b)	Pass
T5	120 - 100	Diagonal	L3x3x1/4	102	-7.965	17.432	45.7 53.8 (b)	Pass
T6	100 - 80	Diagonal	L3 1/2x3 1/2x1/4	123	-9.347	19.016	49.2 62.6 (b)	Pass
T7	80 - 60	Diagonal	L4x4x1/4	138	-10.308	24.136	42.7 68.5 (b)	Pass
T8	60 - 40	Diagonal	L4x4x5/16	153	-9.958	24.922	40.0 53.7 (b)	Pass
T9	40 - 20	Diagonal	L4x4x5/16	168	-11.801	21.484	54.9 62.1 (b)	Pass
T10	20 - 0	Diagonal	L4x4x3/8	183	-12.479	21.926	56.9 60.2 (b)	Pass
T1	192 - 180	Top Girt	L1 3/4x1 3/4x3/16	5	-0.091	4.122	2.2	Pass
T2	180 - 160	Top Girt	L2x2x3/16	28	-0.769	6.245	12.3	Pass
							Summary	
						Leg (T10)	78.0	Pass
						Diagonal (T7)	68.5	Pass
						Top Girt (T2)	12.3	Pass
						Bolt Checks	68.5	Pass
						RATING =	**78.0**	**Pass**

APPENDIX B

BASE LEVEL DRAWING



BUSINESS UNIT: 876345

APPENDIX C

ADDITIONAL CALCULATIONS

CCIplate

Project Information

BU #	876345
Site Name	SKY HILL, CT
Order #	492784, Rev.0

Tower Information

Tower Type	Self Support
TIA-222 Rev	H

☑ Apply TIA-222-H Section 15.5

Applied Loads

	Comp.	Uplift
Axial (k)	0.00	271.00
Shear (k)	0.00	32.00

Anchor Rod Data

Quantity:	10	
Diameter (in):	1	
Material Grade:	A354-BC	Fy=109 ksi Fu=125 ksi
Grout Considered:	Yes	Not Considered, lar<=1(d)
l_{ar} (in):	0	
Eta Factor, η:	0.55	
Thread Type:	N-Included	
Configuration:	Symmetrical	

Anchor Rod Results

Axial, Pu_t (kips)	27.10
Shear, Vu (kips)	3.20
Moment, Mu (kip-in)	-
Axial Cap., φPn_t (kips)	56.81
Shear Cap., ϕVn (kips)	36.82
Moment Cap., ϕMn (kip-in)	-
Stress Rating	22.4%

Pass

LPile Plus for Windows, Version 2013-07.007

Analysis of Individual Piles and Drilled Shafts
Subjected to Lateral Loading Using the p-y Method

This copy of LPile is used by:

B&T Engineering
Tulsa, OK

Serial Number of Security Device: 136081582
This copy of LPile is licensed for exclusive use by: B&T Engineering, Tulsa, OK

Files Used for Analysis

Path to file locations: C:\Users\E3\Desktop\Working Job (RA)\77921_876345_Sky Hill_Compile-----Sampath------Akshaykumar\77921_008_01_L-Pile\
Name of input data file: 77921_LPile (USCS units).lp7d
Name of output report file: 77921_LPile (USCS units).lp7o
Name of plot output file: 77921_LPile (USCS units).lp7p
Name of runtime messeage file: 77921_LPile (USCS units).lp7r

Date and Time of Analysis

Date: September 12, 2019 Time: 16:12:02

Problem Title

Project Name: SKY HILL, CT

Job Number: 876345

Client: CCI

Engineer:

Description:

Program Options and Settings

Engineering Units of Input Data and Computations:
 - Engineering units are US Customary Units (pounds, feet, inches)

Analysis Control Options:

- Maximum number of iterations allowed	=	500
- Deflection tolerance for convergence	=	1.0000E-05 in
- Maximum allowable deflection	=	100.0000 in
- Number of pile increments	=	100

Loading Type and Number of Cycles of Loading:
 - Static loading specified

Computational Options:
 - Use unfactored loads in computations (conventional analysis)
 - Compute pile response under loading and nonlinear bending properties of pile (only if nonlinear pile properties are input)
 - Use of p-y modification factors for p-y curves not selected
 - Loading by lateral soil movements acting on pile not selected
 - Input of shear resistance at the pile tip not selected
 - Computation of pile-head foundation stiffness matrix not selected
 - Push-over analysis of pile not selected

 - Buckling analysis of pile not selected

Output Options:
 - No p-y curves to be computed and reported for user-specified depths
 - Values of pile-head deflection, bending moment, shear force, and
   soil reaction are printed for full length of pile.
 - Printing Increment (nodal spacing of output points) = 1

Pile Structural Properties and Geometry

Total number of pile sections = 1

Total length of pile = 26.50 ft

Depth of ground surface below top of pile = 0.50 ft

Pile diameter values used for p-y curve computations are defined using 2 points.

p-y curves are computed using pile diameter values interpolated with depth over the length of the pile.

Point	Depth X ft	Pile Diameter in
1	0.00000	60.0000000
2	26.500000	60.0000000

Input Structural Properties:

Pile Section No. 1:

Section Type = Drilled Shaft (Bored Pile)
Section Length = 26.50000 ft
Section Diameter = 60.00000 in

Ground Slope and Pile Batter Angles

Ground Slope Angle = 0.000 degrees

	=	0.000 radians
Pile Batter Angle	=	0.000 degrees
	=	0.000 radians

Soil and Rock Layering Information

The soil profile is modelled using 3 layers

Layer 1 is soft clay, p-y criteria by Matlock, 1970

Distance from top of pile to top of layer	=	0.50000 ft
Distance from top of pile to bottom of layer	=	3.83000 ft
Effective unit weight at top of layer	=	120.00000 pcf
Effective unit weight at bottom of layer	=	120.00000 pcf
Undrained cohesion at top of layer	=	0.10000 psf
Undrained cohesion at bottom of layer	=	0.10000 psf
Epsilon-50 at top of layer	=	0.0000
Epsilon-50 at bottom of layer	=	0.0000

NOTE: Internal default values for Epsilon-50 will be computed for this soil layer.

Layer 2 is stiff clay without free water

Distance from top of pile to top of layer	=	3.83000 ft
Distance from top of pile to bottom of layer	=	5.50000 ft
Effective unit weight at top of layer	=	130.00000 pcf
Effective unit weight at bottom of layer	=	130.00000 pcf
Undrained cohesion at top of layer	=	3000.00000 psf
Undrained cohesion at bottom of layer	=	3000.00000 psf
Epsilon-50 at top of layer	=	0.00400
Epsilon-50 at bottom of layer	=	0.00400

Layer 3 is stiff clay without free water

Distance from top of pile to top of layer	=	5.50000 ft
Distance from top of pile to bottom of layer	=	26.50000 ft
Effective unit weight at top of layer	=	135.00000 pcf
Effective unit weight at bottom of layer	=	135.00000 pcf
Undrained cohesion at top of layer	=	5000.00000 psf
Undrained cohesion at bottom of layer	=	5000.00000 psf
Epsilon-50 at top of layer	=	0.00200

Epsilon-50 at bottom of layer = 0.00200

(Depth of lowest soil layer extends 0.00 ft below pile tip)

Summary of Soil Properties

Layer Num.	Soil Type (p-y Curve Criteria)	Layer Depth ft	Effective Unit Wt. pcf	Undrained Cohesion psf	Strain Factor Epsilon 50
1	Soft Clay	0.500	120.000	0.10000	default
		3.830	120.000	0.10000	default
2	Stiff Clay w/o Free Water	3.830	130.000	3000.000	0.00400
		5.500	130.000	3000.000	0.00400
3	Stiff Clay w/o Free Water	5.500	135.000	5000.000	0.00200
		26.500	135.000	5000.000	0.00200

Loading Type

Static loading criteria were used when computing p-y curves for all analyses.

Pile-head Loading and Pile-head Fixity Conditions

Number of loads specified = 2

Load No.	Load Compute Type	Condition 1	Condition 2	Axial Thrust Force, lbs Top y vs. Pile Length
1	1 No	V = 37000. lbs	M = 0.0000 in-lbs	325000.
2	1 No	V = 32000. lbs	M = 0.0000 in-lbs	-271000.

V = perpendicular shear force applied to pile head
M = bending moment applied to pile head
y = lateral deflection relative to pile axis
S = pile slope relative to original pile batter angle
R = rotational stiffness applie to pile head
Axial thrust is assumed to be acting axially for all pile batter angles.

Computations of Nominal Moment Capacity and Nonlinear Bending Stiffness

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Axial thrust force values were determined from pile-head loading conditions

Number of Pile Sections Analyzed = 1

Pile Section No. 1:

Dimensions and Properties of Drilled Shaft (Bored Pile):

Length of Section	=	26.50000 ft
Shaft Diameter	=	60.00000 in
Concrete Cover Thickness	=	3.30000 in
Number of Reinforcing Bars	=	18 bars
Yield Stress of Reinforcing Bars	=	60000. psi
Modulus of Elasticity of Reinforcing Bars	=	29000000. psi
Gross Area of Shaft	=	2827.43339 sq. in.
Total Area of Reinforcing Steel	=	18.00000 sq. in.
Area Ratio of Steel Reinforcement	=	0.64 percent
Edge-to-Edge Bar Spacing	=	7.94894 in
Maximum Concrete Aggregate Size	=	0.75000 in
Ratio of Bar Spacing to Aggregate Size	=	10.60
Offset of Center of Rebar Cage from Center of Pile	=	0.0000 in

Axial Structural Capacities:

Nom. Axial Structural Capacity = 0.85 Fc Ac + Fy As = 8244.055 kips
Tensile Load for Cracking of Concrete = -1077.607 kips
Nominal Axial Tensile Capacity = -1080.000 kips

Reinforcing Bar Dimensions and Positions Used in Computations:

Bar Number	Bar Diam. inches	Bar Area sq. in.	X inches	Y inches
1	1.12800	1.00000	26.13600	0.00000
2	1.12800	1.00000	24.55981	8.93904
3	1.12800	1.00000	20.02134	16.79990
4	1.12800	1.00000	13.06800	22.63444
5	1.12800	1.00000	4.53847	25.73894
6	1.12800	1.00000	-4.53847	25.73894
7	1.12800	1.00000	-13.06800	22.63444
8	1.12800	1.00000	-20.02134	16.79990
9	1.12800	1.00000	-24.55981	8.93904
10	1.12800	1.00000	-26.13600	0.00000
11	1.12800	1.00000	-24.55981	-8.93904
12	1.12800	1.00000	-20.02134	-16.79990
13	1.12800	1.00000	-13.06800	-22.63444
14	1.12800	1.00000	-4.53847	-25.73894
15	1.12800	1.00000	4.53847	-25.73894
16	1.12800	1.00000	13.06800	-22.63444
17	1.12800	1.00000	20.02134	-16.79990
18	1.12800	1.00000	24.55981	-8.93904

NOTE: The positions of the above rebars were computed by LPile

Minimum spacing between any two bars not equal to zero = 7.94894 inches
between Bars 17 and 18

Spacing to aggregate size ratio = 10.59858

Concrete Properties:

Compressive Strength of Concrete = 3000.00000 psi
Modulus of Elasticity of Concrete = 3122019. psi
Modulus of Rupture of Concrete = -410.79191 psi
Compression Strain at Peak Stress = 0.00163
Tensile Strain at Fracture of Concrete = -0.0001160

Maximum Coarse Aggregate Size = 0.75000 in

Number of Axial Thrust Force Values Determined from Pile-head Loadings = 2

Number	Axial Thrust Force kips
1	-271.000
2	325.000

Definitions of Run Messages and Notes:

C = concrete in section has cracked in tension.
Y = stress in reinforcing steel has reached yield stress.
T = ACI 318-08 criteria for tension-controlled section met, tensile strain in reinforcement exceeds 0.005 while simultaneously compressive strain in concrete more than than 0.003. See ACI 318-08, Section 10.3.4.
Z = depth of tensile zone in concrete section is less than 10 percent of section depth.

Bending Stiffness (EI) = Computed Bending Moment / Curvature.
Position of neutral axis is measured from edge of compression side of pile.
Compressive stresses and strains are positive in sign.
Tensile stresses and strains are negative in sign.

Axial Thrust Force = -271.000 kips

Bending Max Concrete Curvature Stress rad/in. ksi	Bending Max Steel Moment Stress in-kip ksi	Bending Run Stiffness kip-in2	Depth to N Axis in	Max Comp Strain in/in	Max Tens Strain in/in	Msg
0.000000417	1023.8211131	2457170671.	-30.4658156	-0.0000127	-0.0000377	-0.0468993	-1.0895036	
0.000000833	2047.5995954	2457119515.	-0.2743516	-0.000000229	-0.0000502	-0.0017577	-1.4493802	
0.000001250	3070.6760122	2456540810.	9.7727926	0.0000122	-0.0000628	0.0433339	-1.8098613	
0.000001667	4090.5405152	2454324309.	14.7896833	0.0000246	-0.0000754	0.0880445	-2.1706653	
0.000002083	5105.9941821	2450877207.	17.7972949	0.0000371				

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-0.0000879     0.1323955    -2.5316218
   0.000002500  6116.6848408   2446673936.    19.8011834     0.0000495
-0.0001005     0.1763957    -2.8926642
   0.000002917  6116.6848408   2097149088.  -147.9965541    -0.0004317
-0.0006067      0.000000   -17.5676669  C
   0.000003333  6116.6848408   1835005452.  -125.7469646    -0.0004192
-0.0006192      0.000000   -17.9265399  C
   0.000003750  6116.6848408   1631115958.  -108.4417283    -0.0004067
-0.0006317      0.000000   -18.2854129  C
   0.000004167  6116.6848408   1468004362.   -94.5975393    -0.0003942
-0.0006442      0.000000   -18.6442860  C
   0.000004583  6116.6848408   1334549420.   -83.2704756    -0.0003817
-0.0006567      0.000000   -19.0031591  C
   0.000005000  6116.6848408   1223336968.   -73.8312558    -0.0003692
-0.0006692      0.000000   -19.3620321  C
   0.000005417  6116.6848408   1129234124.   -65.8442237    -0.0003567
-0.0006817      0.000000   -19.7209051  C
   0.000005833  6116.6848408   1048574544.   -58.9981961    -0.0003442
-0.0006942      0.000000   -20.0797782  C
   0.000006250  6116.6848408    978669575.   -53.0649723    -0.0003317
-0.0007067      0.000000   -20.4386512  C
   0.000006667  6116.6848408    917502726.   -47.8734014    -0.0003192
-0.0007192      0.000000   -20.7975243  C
   0.000007083  6116.6848408    863531978.   -43.2926036    -0.0003067
-0.0007317      0.000000   -21.1563973  C
   0.000007500  6116.6848408    815557979.   -39.2207833    -0.0002942
-0.0007442      0.000000   -21.5152703  C
   0.000007917  6116.6848408    772633875.   -35.5775756    -0.0002817
-0.0007567      0.000000   -21.8741434  C
   0.000008333  6116.6848408    734002181.   -32.2986888    -0.0002692
-0.0007692      0.000000   -22.2330164  C
   0.000008750  6116.6848408    699049696.   -29.3320768    -0.0002567
-0.0007817      0.000000   -22.5918895  C
   0.000009167  6116.6848408    667274710.   -26.6351569    -0.0002442
-0.0007942      0.000000   -22.9507625  C
   0.000009583  6116.6848408    638262766.   -24.1727517    -0.0002317
-0.0008067      0.000000   -23.3096355  C
     0.0000100  6116.6848408    611668484.   -21.9155470    -0.0002192
-0.0008192      0.000000   -23.6685086  C
     0.0000104  6116.6848408    587201745.   -19.8389186    -0.0002067
-0.0008317      0.000000   -24.0273817  C
     0.0000108  6116.6848408    564617062.   -17.9220309    -0.0001942
-0.0008442      0.000000   -24.3862547  C
     0.0000113  6116.6848408    543705319.   -16.1471349    -0.0001817
-0.0008567      0.000000   -24.7451277  C
     0.0000117  6116.6848408    524287272.   -14.4990172    -0.0001692
-0.0008692      0.000000   -25.1040008  C
     0.0000121  6116.6848408    506208401.   -12.9645627    -0.0001567
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-0.0008817      0.000000   -25.4628738  C
     0.0000125  6116.6848408    489334787.   -11.5324052    -0.0001442
-0.0008942      0.000000   -25.8217469  C
     0.0000129  6116.6848408    473549794.   -10.1926450    -0.0001317
-0.0009067      0.000000   -26.1806199  C
     0.0000133  6116.6848408    458751363.    -8.9366198    -0.0001192
-0.0009192      0.000000   -26.5394930  C
     0.0000138  6116.6848408    444849807.    -7.7567173    -0.0001067
-0.0009317      0.000000   -26.8983660  C
     0.0000142  6116.6848408    431765989.    -6.6462209    -0.0000942
-0.0009442      0.000000   -27.2572390  C
     0.0000146  6116.6848408    419429818.    -5.5991814    -0.0000817
-0.0009567      0.000000   -27.6161121  C
     0.0000150  6116.6848408    407778989.    -4.6103107    -0.0000692
-0.0009692      0.000000   -27.9749851  C
     0.0000154  6116.6848408    396757936.    -3.6748925    -0.0000567
-0.0009817      0.000000   -28.3338581  C
     0.0000158  6116.6848408    386316937.    -2.7887069    -0.0000442
-0.0009942      0.000000   -28.6927312  C
     0.0000163  6116.6848408    376411375.    -1.9479667    -0.0000317
-0.0010067      0.000000   -29.0516043  C
     0.0000171  6116.6848408    358049844.    -0.3895214  -0.000006654
-0.0010317      0.000000   -29.7693503  C
     0.0000179  6116.6848408    341396363.     0.9948358     0.0000178
-0.0010572     0.0455510   -30.5022251  C
     0.0000188  6116.6848408    326223192.     2.1249513     0.0000398
-0.0010852     0.1243645   -31.3064327  C
     0.0000196  6116.6848408    312341354.     3.0303213     0.0000593
-0.0011157     0.1931748   -32.1836550  C
     0.0000204  6116.6848408    299592727.     3.7828296     0.0000772
-0.0011478     0.2554918   -33.1076246  C
     0.0000213  6116.6848408    287843993.     4.4176660     0.0000939
-0.0011811     0.3127783   -34.0677383  C
     0.0000221  6116.6848408    276981955.     4.9622606     0.0001096
-0.0012154     0.3662447   -35.0549606  C
     0.0000229  6116.6848408    266909884.     5.4359258     0.0001246
-0.0012504     0.4167278   -36.0629992  C
     0.0000238  6116.6848408    257544625.     5.8558147     0.0001391
-0.0012859     0.4650758   -37.0851830  C
     0.0000246  6116.6848408    248814299.     6.2304688     0.0001532
-0.0013218     0.5115886   -38.1193199  C
     0.0000254  6116.6848408    240656453.     6.5615783     0.0001668
-0.0013582     0.5560718   -39.1674449  C
     0.0000263  6116.6848408    233016565.     6.8683048     0.0001803
-0.0013947     0.5998641   -40.2181279  C
     0.0000271  6242.7339645    230500946.     7.1397159     0.0001934
-0.0014316     0.6418108   -41.2817231  C
     0.0000279  6553.5661638    234754609.     7.3940545     0.0002064
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-0.0014686     0.6833094   -42.3460216  C
     0.0000288  6866.3866615    238830840.     7.6259540     0.0002192
-0.0015058     0.7237318   -43.4167361  C
     0.0000296  7180.6478806    242726126.     7.8392554     0.0002319
-0.0015431     0.7632795   -44.4921971  C
     0.0000304  7494.4693526    246393513.     8.0418797     0.0002446
-0.0015804     0.8025771   -45.5667668  C
     0.0000313  7810.3815899    249932211.     8.2256465     0.0002571
-0.0016179     0.8407426   -46.6486332  C
     0.0000321  8126.9501417    253307537.     8.3970468     0.0002694
-0.0016556     0.8782943   -47.7331226  C
     0.0000329  8443.1091113    256499517.     8.5606291     0.0002818
-0.0016932     0.9156033   -48.8167910  C
     0.0000338  8759.1644808    259530799.     8.7158654     0.0002942
-0.0017308     0.9525539   -49.9007217  C
     0.0000346  9077.3083924    262476387.     8.8556676     0.0003063
-0.0017687     0.9883469   -50.9926282  C
     0.0000354  9395.0690468    265272538.     8.9896283     0.0003184
-0.0018066     1.0239021   -52.0837775  C
     0.0000363  9712.4429528    267929461.     9.1181573     0.0003305
-0.0018445     1.0592183   -53.1741621  C
     0.0000371        10029.    270456447.     9.2416276     0.0003427
-0.0018823     1.0942939   -54.2637746  C
     0.0000379        10347.    272890934.     9.3565040     0.0003548
-0.0019202     1.1287014   -55.3568691  C
     0.0000387        10665.    275237980.     9.4634891     0.0003667
-0.0019583     1.1624668   -56.4532790  C
     0.0000396        10983.    277476899.     9.5665909     0.0003787
-0.0019963     1.1959948   -57.5489758  C
     0.0000404        11301.    279614302.     9.6660553     0.0003907
-0.0020343     1.2292842   -58.6439526  C
     0.0000412        11618.    281656261.     9.7621085     0.0004027
-0.0020723     1.2623337   -59.7382026  C
     0.0000421        11935.    283608367.     9.8549590     0.0004147
-0.0021103     1.2951419   -60.0000000  CY
     0.0000429        12252.    285494703.     9.9419817     0.0004267
-0.0021483     1.3273758   -60.0000000  CY
     0.0000437        12570.    287319243.    10.0235008     0.0004385
-0.0021865     1.3590421   -60.0000000  CY
     0.0000446        12888.    289067509.    10.1024983     0.0004504
-0.0022246     1.3904688   -60.0000000  CY
     0.0000454        13187.    290354766.    10.1730996     0.0004620
-0.0022630     1.4209265   -60.0000000  CY
     0.0000462        13432.    290428280.    10.2234585     0.0004728
-0.0023022     1.4489322   -60.0000000  CY
     0.0000471        13663.    290177247.    10.2674128     0.0004834
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-0.0023810     1.5031057   -60.0000000  CY
     0.0000487         14111.    289455324.    10.3479645     0.0005045
-0.0024205     1.5294104   -60.0000000  CY
     0.0000496         14286.    288128771.    10.3700667     0.0005142
-0.0024608     1.5536605   -60.0000000  CY
     0.0000529         14884.    281281832.    10.4205366     0.0005514
-0.0026236     1.6446009   -60.0000000  CY
     0.0000562         15479.    275184768.    10.4679327     0.0005888
-0.0027862     1.7329792   -60.0000000  CY
     0.0000596         15871.    266371058.    10.4444768     0.0006223
-0.0029527     1.8093580   -60.0000000  CY
     0.0000629         16208.    257614139.    10.4079246     0.0006548
-0.0031202     1.8811648   -60.0000000  CY
     0.0000662         16544.    249721982.    10.3769602     0.0006875
-0.0032875     1.9510131   -60.0000000  CY
     0.0000696         16879.    242570032.    10.3508178     0.0007202
-0.0034548     2.0188815   -60.0000000  CY
     0.0000729         17179.    235599993.    10.3167763     0.0007523
-0.0036227     2.0829574   -60.0000000  CY
     0.0000762         17341.    227426776.    10.2386704     0.0007807
-0.0037943     2.1378215   -60.0000000  CY
     0.0000796         17502.    219925600.    10.1680520     0.0008092
-0.0039658     2.1911368   -60.0000000  CY
     0.0000829         17663.    213020264.    10.1041697     0.0008378
-0.0041372     2.2429125   -60.0000000  CY
     0.0000862         17823.    206641587.    10.0462577     0.0008665
-0.0043085     2.2931347   -60.0000000  CY
     0.0000896         17982.    200730682.     9.9936646     0.0008953
-0.0044797     2.3417890   -60.0000000  CY
     0.0000929         18141.    195237109.     9.9458328     0.0009241
-0.0046509     2.3888607   -60.0000000  CY
     0.0000963         18299.    190117413.     9.9022825     0.0009531
-0.0048219     2.4343350   -60.0000000  CY
     0.0000996         18456.    185329258.     9.8591932     0.0009818
-0.0049932     2.4776767   -60.0000000  CY
     0.0001029         18587.    180601601.     9.8091990     0.0010095
-0.0051655     2.5178231   -60.0000000  CY
     0.0001063         18664.    175658143.     9.7408712     0.0010350
-0.0053400     2.5531362   -60.0000000  CY
     0.0001096         18726.    170883693.     9.6716200     0.0010598
-0.0055152     2.5863477   -60.0000000  CY
     0.0001129         18788.    166388261.     9.6070626     0.0010848
-0.0056902     2.6183664   -60.0000000  CY
     0.0001163         18850.    162147810.     9.5468021     0.0011098
-0.0058652     2.6491824   -60.0000000  CY
     0.0001196         18911.    158140980.     9.4904860     0.0011349
-0.0060401     2.6787854   -60.0000000  CY
     0.0001229         18972.    154348730.     9.4378001     0.0011601
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-0.0062149     2.7071649   -60.0000000  CY
     0.0001263        19033.    150754026.     9.3884638     0.0011853
-0.0063897     2.7343104   -60.0000000  CY
     0.0001296        19093.    147341588.     9.3422253     0.0012106
-0.0065644     2.7602111   -60.0000000  CY
     0.0001329        19153.    144097465.     9.2987348     0.0012360
-0.0067390     2.7848399   -60.0000000  CY
     0.0001363        19212.    141002504.     9.2535995     0.0012608
-0.0069142     2.8076567   -60.0000000  CY
     0.0001396        19270.    138053027.     9.2111609     0.0012857
-0.0070893     2.8292610   -60.0000000  CY
     0.0001429        19328.    135238822.     9.1712379     0.0013107
-0.0072643     2.8496417   -60.0000000  CY
     0.0001462        19386.    132550610.     9.1336662     0.0013358
-0.0074392     2.8687872   -60.0000000  CY
     0.0001496        19443.    129979933.     9.0982963     0.0013610
-0.0076140     2.8866857   -60.0000000  CY
     0.0001529        19500.    127519075.     9.0649921     0.0013862
-0.0077888     2.9033251   -60.0000000  CY
     0.0001562        19556.    125160973.     9.0336293     0.0014115
-0.0079635     2.9186932   -60.0000000  CY
     0.0001596        19613.    122899158.     9.0040941     0.0014369
-0.0081381     2.9327772   -60.0000000  CY
     0.0001629        19668.    120726635.     8.9761952     0.0014624
-0.0083126     2.9455571   -60.0000000  CY
     0.0001662        19724.    118638726.     8.9499011     0.0014879
-0.0084871     2.9570265   -60.0000000  CY
     0.0001696        19765.    116550029.     8.9180514     0.0015124
-0.0086626     2.9667098   -60.0000000  CY
     0.0001729        19799.    114498117.     8.8841607     0.0015362
-0.0088388     2.9749694   -60.0000000  CY
     0.0001762        19825.    112484198.     8.8484292     0.0015595
-0.0090155     2.9818966   -60.0000000  CY
     0.0001796        19843.    110493722.     8.8097457     0.0015821
-0.0091929     2.9875227   -60.0000000  CY
     0.0001829        19860.    108574665.     8.7728298     0.0016047
-0.0093703     2.9921171   -60.0000000  CY
     0.0002029        19955.     98338894.     8.5673892     0.0017385
-0.0104365     2.9932097   -60.0000000  CY
     0.0002229        20039.     89896592.     8.4018251     0.0018729
-0.0115021     2.9919567   -60.0000000  CY
     0.0002429        20118.     82819067.     8.2732653     0.0020097
-0.0125653     2.9975530   -60.0000000  CY
     0.0002629        20191.     76797212.     8.1728540     0.0021488
-0.0136262     2.9984689    60.0000000  CY
     0.0002829        20260.     71609773.     8.0927703     0.0022896
-0.0146854     2.9871433    60.0000000  CY
     0.0003029        20323.     67090070.     8.0180839     0.0024288
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-0.0157462     2.9994247    60.0000000  CY
     0.0003229        20383.     63120117.     7.9586785     0.0025700
-0.0168050     2.9865907    60.0000000  CY
     0.0003429        20440.     59607020.     7.9104165     0.0027126
-0.0178624     2.9968931    60.0000000  CY
     0.0003629        20496.     56475034.     7.8717346     0.0028568
-0.0189182     2.9946825    60.0000000  CY
     0.0003829        20530.     53615530.     7.8228228     0.0029955
-0.0199795     2.9805761    60.0000000  CY
     0.0004029        20559.     51025404.     7.7761341     0.0031331
-0.0210419     2.9942045    60.0000000  CYT
     0.0004229        20565.     48627731.     7.7143349     0.0032625
-0.0221125     2.9995316    60.0000000  CYT
     0.0004429        20570.     46443240.     7.6593269     0.0033924
-0.0231826     2.9934549    60.0000000  CYT
     0.0004629        20575.     44446687.     7.6103644     0.0035230
-0.0242520     2.9825456    60.0000000  CYT
     0.0004829        20580.     42615134.     7.5662615     0.0036539
-0.0253211     2.9737485    60.0000000  CYT
     0.0005029        20584.     40928879.     7.5264559     0.0037852
-0.0263898     2.9860225    60.0000000  CYT
     0.0005229        20587.     39370296.     7.4875230     0.0039154
-0.0274596     2.9942795    60.0000000  CYT


Axial Thrust Force =    325.000 kips

    Bending       Bending       Bending       Depth to      Max Comp      Max Tens
   Max Concrete   Max Steel    Run
   Curvature      Moment       Stiffness       N Axis        Strain        Strain
      Stress        Stress     Msg
    rad/in.       in-kip        kip-in2          in          in/in         in/in
       ksi           ksi
 ------------ ------------ ------------ ------------ ------------
------------ ------------ ------------  ---
   0.000000417  1020.8283689   2449988085.   102.6168093     0.0000428
0.0000178     0.1545425     1.2363281
   0.000000833  2041.6180658   2449941679.    66.3499798     0.0000553
0.000005292     0.1987600     1.5962078
   0.000001250  3062.2239283   2449779143.    54.2792401     0.0000678
-0.000007151     0.2427114     1.9567475
   0.000001667  4080.8813204   2448528792.    48.2537306     0.0000804
-0.0000196     0.2863726     2.3177636
   0.000002083  5095.7000734   2445936035.    44.6424769     0.0000930
-0.0000320     0.3297147     2.6790247
   0.000002500  6106.0044727   2442401789.    42.2368794     0.0001056
-0.0000444     0.3727242     3.0404238
   0.000002917  7111.5401724   2438242345.    40.5196382     0.0001182
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-0.0000568     0.4153949     3.4019111
   0.000003333  8112.1966610   2433658998.    39.2323527     0.0001308
-0.0000692     0.4577235     3.7634608
   0.000003750  9107.9200657   2428778684.    38.2315706     0.0001434
-0.0000816     0.4997081     4.1250583
   0.000004167        10099.   2423683800.    37.4312706     0.0001560
-0.0000940     0.5413477     4.4866952
   0.000004583        11084.   2418429222.    36.7767333     0.0001686
-0.0001064     0.5826415     4.8483658
   0.000005000        11084.   2216893453.    30.2185055     0.0001511
-0.0001489     0.5242901     4.3381833  C
   0.000005417        11084.   2046363187.    29.3228802     0.0001588
-0.0001662     0.5496323    -4.7717392  C
   0.000005833        11084.   1900194388.    28.5315291     0.0001664
-0.0001836     0.5743882    -5.2726664  C
   0.000006250        11084.   1773514762.    27.8226125     0.0001739
-0.0002011     0.5985443    -5.7777766  C
   0.000006667        11084.   1662670090.    27.1846254     0.0001812
-0.0002188     0.6221941    -6.2863057  C
   0.000007083        11084.   1564865967.    26.6073221     0.0001885
-0.0002365     0.6453955    -6.7977876  C
   0.000007500        11084.   1477928969.    26.0822745     0.0001956
-0.0002544     0.6681945    -7.3118553  C
   0.000007917        11084.   1400143234.    25.6000541     0.0002027
-0.0002723     0.6905651    -7.8287792  C
   0.000008333        11084.   1330136072.    25.1567658     0.0002096
-0.0002904     0.7125797    -8.3479483  C
   0.000008750        11084.   1266796259.    24.7491012     0.0002166
-0.0003084     0.7343046    -8.8687905  C
   0.000009167        11084.   1209214611.    24.3719008     0.0002234
-0.0003266     0.7557338    -9.3913863  C
   0.000009583        11084.   1156640062.    24.0194563     0.0002302
-0.0003448     0.7768175    -9.9162178  C
     0.0000100        11084.   1108446727.    23.6945959     0.0002369
-0.0003631     0.7977454   -10.4415672  C
     0.0000104        11084.   1064108857.    23.3866846     0.0002436
-0.0003814     0.8182794   -10.9696473  C
     0.0000108        11084.   1023181594.    23.1028556     0.0002503
-0.0003997     0.8387307   -11.4976028  C
     0.0000113        11084.    985285979.    22.8318137     0.0002569
-0.0004181     0.8587981   -12.0282458  C
     0.0000117        11084.    950097194.    22.5804006     0.0002634
-0.0004366     0.8787815   -12.5587978  C
     0.0000121        11084.    917335222.    22.3414274     0.0002700
-0.0004550     0.8984894   -13.0910665  C
     0.0000125        11084.    886757381.    22.1161459     0.0002765
-0.0004735     0.9180195   -13.6241471  C
     0.0000129        11084.    858152304.    21.9057115     0.0002829
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-0.0004921     0.9374708   -14.1571105  C
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-0.0005106     0.9565705   -14.6925651  C
     0.0000138        11084.    806143074.    21.5107057     0.0002958
-0.0005292     0.9755852   -15.2279811  C
     0.0000142        11084.    782432983.    21.3309539     0.0003022
-0.0005478     0.9945230   -15.7632831  C
     0.0000146        11084.    760077755.    21.1568805     0.0003085
-0.0005665     1.0131715   -16.3005276  C
     0.0000150        11084.    738964484.    20.9917066     0.0003149
-0.0005851     1.0316984   -16.8381076  C
     0.0000154        11196.    726195834.    20.8357102     0.0003212
-0.0006038     1.0501500   -17.3755762  C
     0.0000158        11363.    717638123.    20.6877349     0.0003276
-0.0006224     1.0685058   -17.9131317  C
     0.0000163        11528.    709422913.    20.5428792     0.0003338
-0.0006412     1.0865619   -18.4527931  C
     0.0000171        11859.    694175031.    20.2750285     0.0003464
-0.0006786     1.1224524   -19.5317879  C
     0.0000179        12188.    680276720.    20.0303346     0.0003589
-0.0007161     1.1579124   -20.6116969  C
     0.0000188        12515.    667486704.    19.8020086     0.0003713
-0.0007537     1.1927467   -21.6945328  C
     0.0000196        12842.    655763019.    19.5938770     0.0003837
-0.0007913     1.2272906   -22.7769356  C
     0.0000204        13167.    644918184.    19.3995818     0.0003961
-0.0008289     1.2613211   -23.8612060  C
     0.0000213        13491.    634853195.    19.2177467     0.0004084
-0.0008666     1.2948583   -24.9471885  C
     0.0000221        13814.    625528741.    19.0503089     0.0004207
-0.0009043     1.3281097   -26.0327396  C
     0.0000229        14136.    616861680.    18.8955212     0.0004330
-0.0009420     1.3610631   -27.1179764  C
     0.0000238        14457.    608712261.    18.7463947     0.0004452
-0.0009798     1.3933565   -28.2067956  C
     0.0000246        14777.    601098688.    18.6079857     0.0004574
-0.0010176     1.4253683   -29.2951818  C
     0.0000254        15097.    593968160.    18.4792431     0.0004697
-0.0010553     1.4570975   -30.3831328  C
     0.0000263        15416.    587274583.    18.3592495     0.0004819
-0.0010931     1.4885430   -31.4706462  C
     0.0000271        15734.    580953549.    18.2448955     0.0004941
-0.0011309     1.5195430   -32.5595299  C
     0.0000279        16051.    574970109.    18.1354875     0.0005063
-0.0011687     1.5500876   -33.6499365  C
     0.0000288        16368.    569319496.    18.0329529     0.0005184
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-0.0013578     1.6985253   -39.0960911  C
     0.0000329        17944.    545135698.    17.6008577     0.0005794
-0.0013956     1.7271013   -40.1871395  C
     0.0000338        18257.    540958012.    17.5260764     0.0005915
-0.0014335     1.7553975   -41.2777277  C
     0.0000346        18570.    536969971.    17.4553608     0.0006037
-0.0014713     1.7834131   -42.3678526  C
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-0.0015092     1.8111469   -43.4575115  C
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     0.0000371        19506.    526015210.    17.2648948     0.0006402
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     0.0000387        20128.    519443997.    17.1536803     0.0006647
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     0.0000412        21057.    510479075.    17.0021968     0.0007013
-0.0017737     1.9969069   -51.0772470  C
     0.0000421        21366.    507702974.    16.9557205     0.0007136
-0.0018114     2.0221530   -52.1658310  C
     0.0000429        21674.    505024998.    16.9114523     0.0007258
-0.0018492     2.0471132   -53.2539132  C
     0.0000437        21982.    502439479.    16.8692689     0.0007380
-0.0018870     2.0717862   -54.3414899  C
     0.0000446        22289.    499941174.    16.8290562     0.0007503
-0.0019247     2.0961711   -55.4285576  C
     0.0000454        22596.    497525220.    16.7907084     0.0007626
-0.0019624     2.1202665   -56.5151127  C
     0.0000462        22902.    495187107.    16.7541275     0.0007749
-0.0020001     2.1440712   -57.6011513  C
     0.0000471        23208.    492922643.    16.7192224     0.0007872
-0.0020378     2.1675842   -58.6866699  C
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-0.0020755     2.1908042   -59.7716645  C
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     0.0000696        28327.    407094198.    15.6551040     0.0010893
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-0.0040515     2.8723462   -60.0000000  CY
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     0.0001263        31650.    250690245.    13.6474463     0.0017230
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     0.0001496        32047.    214243035.    13.1103578     0.0019611
-0.0070139     2.9972151   -60.0000000  CY
     0.0001529        32095.    209888367.    13.0485297     0.0019953
-0.0071797     2.9970649   -60.0000000  CY
     0.0001562        32143.    205715152.    12.9901200     0.0020297
-0.0073453     2.9992559   -60.0000000  CY
     0.0001596        32190.    201711926.    12.9349270     0.0020642
-0.0075108     2.9999999   -60.0000000  CY
     0.0001629        32235.    197860077.    12.8813213     0.0020986
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-0.0078425     2.9972214    60.0000000  CY
     0.0001696        32320.    190582812.    12.7752100     0.0021665
-0.0080085     2.9991973    60.0000000  CY
     0.0001729        32361.    187150260.    12.7261603     0.0022006
-0.0081744     2.9999853    60.0000000  CY
     0.0001762        32402.    183842255.    12.6799538     0.0022348
-0.0083402     2.9959167    60.0000000  CY
     0.0001796        32443.    180654388.    12.6360509     0.0022692
-0.0085058     2.9952925    60.0000000  CY
     0.0001829        32482.    177580531.    12.5942610     0.0023037
-0.0086713     2.9978987    60.0000000  CY
     0.0002029        32712.    161209533.    12.3833833     0.0025128
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     0.0002229        32924.    147696152.    12.2152831     0.0027230
-0.0106520     2.9974695    60.0000000  CY
     0.0002429        33050.    136055006.    12.0401639     0.0029248
-0.0116502     2.9901871    60.0000000  CY
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-0.0126540     2.9998586    60.0000000  CYT
     0.0002829        33137.    117126914.    11.7448619     0.0033228
-0.0136522     2.9902523    60.0000000  CYT
     0.0003029        33149.    109431457.    11.6487568     0.0035286
-0.0146464     2.9998002    60.0000000  CYT
     0.0003229        33151.    102660824.    11.5673481     0.0037353
-0.0156397     2.9860092    60.0000000  CYT
     0.0003429        33151.     96673315.    11.5794352     0.0039708
```

-0.0166042 2.9990609 60.0000000 CYT

Summary of Results for Nominal (Unfactored) Moment Capacity for Section 1

Moment values interpolated at maximum compressive strain = 0.003
or maximum developed moment if pile fails at smaller strains.

Load No.	Axial Thrust kips	Nominal Mom. Cap. in-kip	Max. Comp. Strain
1	-271.000	20531.221	0.00300000
2	325.000	33070.241	0.00300000

Note note that the values of moment capacity in the table above are not
factored by a strength reduction factor (phi-factor).

In ACI 318-08, the value of the strength reduction factor depends on whether
the transverse reinforcing steel bars are tied hoops (0.65) or spirals (0.70).

The above values should be multiplied by the appropriate strength reduction
factor to compute ultimate moment capacity according to ACI 318-08, Section
9.3.2.2 or the value required by the design standard being followed.

The following table presents factored moment capacities and corresponding
bending stiffnesses computed for common resistance factor values used for
reinforced concrete sections.

Axial Load No.	Resistance Factor for Moment	Nominal Moment Capacity in-kip	Ultimate (Factored) Axial Thrust kips	Ultimate (Factored) Moment Capacity in-kip	Bending Stiffness at Ult. Mom. Cap. kip-in^2
1	0.65	20531.221	-176.150	13345.293	290402208.991
2	0.65	33070.241	211.250	21495.656	506574774.291
1	0.70	20531.221	-189.700	14371.854	287150353.195
2	0.70	33070.241	227.500	23149.168	493361219.479

```
   1          0.75               20531.221                -203.250
15398.416           276012489.001
   2          0.75               33070.241                 243.750
24802.681           481846021.809
```

Computed Values of Pile Loading and Deflection
for Lateral Loading for Load Case Number 1

Pile-head conditions are Shear and Moment (Loading Type 1)

Shear force at pile head = 37000.0 lbs
Applied moment at pile head = 0.0 in-lbs
Axial thrust load on pile head = 325000.0 lbs

Depth X	Deflect. y	Bending Moment	Shear Force	Slope S	Total Stress	Bending Stiffness	Soil Res. Es*h	Soil Spr. Lat. Load	Distrib. p
feet	inches	in-lbs	lbs	radians	psi*	lb-in^2	lb/in	lb/inch	lb/inch
0.00	0.0113	-1.597E-05	37000.	-0.000123	0.000	2.450E+12	0.000	0.000	0.000
0.265	0.0109	117787.	37000.	-0.000123	0.000	2.450E+12	0.000	0.000	0.000
0.530	0.0105	235573.	37000.	-0.000122	0.000	2.450E+12	-0.0285	8.6328	0.000
0.795	0.0101	353359.	37000.	-0.000122	0.000	2.450E+12	-0.0281	8.8528	0.000
1.060	0.009713	471144.	37000.	-0.000121	0.000	2.450E+12	-0.0278	9.0865	0.000
1.325	0.009328	588929.	37000.	-0.000121	0.000	2.450E+12	-0.0274	9.3350	0.000
1.590	0.008945	706712.	37000.	-0.000120	0.000	2.450E+12	-0.0270	9.5994	0.000
1.855	0.008565	824494.	37000.	-0.000119	0.000	2.450E+12	-0.0266	9.8811	0.000
2.120	0.008189	942275.	36999.	-0.000118	0.000	2.450E+12	-0.0262	10.1816	0.000
2.385	0.007817	1060054.	36999.	-0.000116	0.000	2.450E+12	-0.0258	10.5026	0.000
2.650	0.007449	1177831.	36999.	-0.000115	0.000	2.450E+12			

```
-0.0254    10.8458      0.000
     2.915   0.007086   1295607.     36999.  -0.000113      0.000  2.450E+12
-0.0250    11.2134      0.000
     3.180   0.006728   1413380.     36999.  -0.000112      0.000  2.450E+12
-0.0246    11.6077      0.000
     3.445   0.006376   1531152.     36999.  -0.000110      0.000  2.450E+12
-0.0241    12.0313      0.000
     3.710   0.006030   1648921.     36999.  -0.000108      0.000  2.450E+12
-0.0237    12.4869      0.000
     3.975   0.005691   1766687.     36062.  -0.000105      0.000  2.450E+12
-589.5683    329420.      0.000
     4.240   0.005360   1878490.     34189.  -0.000103      0.000  2.450E+12
-587.9584    348843.      0.000
     4.505   0.005036   1984344.     32323.  -0.000101      0.000  2.450E+12
-585.9497    370004.      0.000
     4.770   0.004720   2084270.     30463. -9.789E-05      0.000  2.450E+12
-583.5279    393111.      0.000
     5.035   0.004413   2178293.     28612. -9.513E-05      0.000  2.450E+12
-580.6791    418403.      0.000
     5.300   0.004115   2266440.     26771. -9.224E-05      0.000  2.450E+12
-577.3900    446160.      0.000
     5.565   0.003827   2348746.     24112. -8.925E-05      0.000  2.450E+12
-1094.8683    909843.      0.000
     5.830   0.003548   2419977.     20645. -8.615E-05      0.000  2.450E+12
-1085.7893    973246.      0.000
     6.095   0.003279   2480224.     17208. -8.297E-05      0.000  2.450E+12
-1075.8362   1043433.      0.000
     6.360   0.003020   2529589.     13804. -7.972E-05      0.000  2.450E+12
-1064.9802   1121395.      0.000
     6.625   0.002772   2568181.     10436. -7.641E-05      0.000  2.450E+12
-1053.1889   1208321.      0.000
     6.890   0.002534   2596120.  7107.0794 -7.306E-05      0.000  2.450E+12
-1040.4262   1305644.      0.000
     7.155   0.002307   2613533.  3820.4268 -6.968E-05      0.000  2.450E+12
-1026.6509   1415109.      0.000
     7.420   0.002091   2620561.   579.2663 -6.628E-05      0.000  2.450E+12
-1011.8148   1538859.      0.000
     7.685   0.001886   2617354. -2612.9389 -6.288E-05      0.000  2.450E+12
-995.8615   1679565.      0.000
     7.950   0.001691   2604073. -5752.5284 -5.949E-05      0.000  2.450E+12
-978.7231   1840589.      0.000
     8.215   0.001507   2580891. -8835.6029 -5.613E-05      0.000  2.450E+12
-960.3175   2026239.      0.000
     8.480   0.001334   2547995.    -11858. -5.280E-05      0.000  2.450E+12
-940.5426   2242125.      0.000
     8.745   0.001171   2505584.    -14787. -4.952E-05      0.000  2.450E+12
-901.3619   2447085.      0.000
     9.010   0.001019   2454054.    -17478. -4.630E-05      0.000  2.450E+12
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-791.6085   2470325.      0.000
     9.275   0.000877   2394517.    -19830. -4.315E-05      0.000  2.450E+12
-687.5743   2493571.      0.000
     9.540   0.000745   2328023.    -21861. -4.009E-05      0.000  2.450E+12
-589.2857   2516825.      0.000
     9.805   0.000622   2255567.    -23587. -3.711E-05      0.000  2.450E+12
-496.7393   2540085.      0.000
    10.070   0.000509   2178084.    -25029. -3.424E-05      0.000  2.450E+12
-409.9040   2563351.      0.000
    10.335   0.000404   2096454.    -26203. -3.146E-05      0.000  2.450E+12
-328.7233   2586622.      0.000
    10.600   0.000308   2011496.    -27128. -2.880E-05      0.000  2.450E+12
-253.1174   2609897.      0.000
    10.865   0.000221   1923976.    -27822. -2.624E-05      0.000  2.450E+12
-182.9855   2633178.      0.000
    11.130   0.000142   1834604.    -28301. -2.380E-05      0.000  2.450E+12
-118.2076   2656462.      0.000
    11.395  6.960E-05   1744033.    -28582. -2.148E-05      0.000  2.450E+12
-58.6472   2679750.      0.000
    11.660  4.885E-06   1652867.    -28682. -1.928E-05      0.000  2.450E+12
-4.1526   2703042.      0.000
    11.925 -5.300E-05   1561657.    -28616. -1.719E-05      0.000  2.450E+12
45.4410   2726337.      0.000
    12.190  -0.000104   1470904.    -28400. -1.522E-05      0.000  2.450E+12
90.3093   2749636.      0.000
    12.455  -0.000150   1381063.    -28049. -1.337E-05      0.000  2.450E+12
130.6375   2772937.      0.000
    12.720  -0.000189   1292540.    -27576. -1.164E-05      0.000  2.450E+12
166.6181   2796241.      0.000
    12.985  -0.000224   1205701.    -26996. -1.001E-05      0.000  2.450E+12
198.4501   2819547.      0.000
    13.250  -0.000253   1120867.    -26320. -8.505E-06      0.000  2.450E+12
226.3366   2842856.      0.000
    13.515  -0.000278   1038321.    -25562. -7.104E-06      0.000  2.450E+12
250.4838   2866167.      0.000
    13.780  -0.000298    958306.    -24733. -5.808E-06      0.000  2.450E+12
271.0996   2889480.      0.000
    14.045  -0.000315    881031.    -23843. -4.614E-06      0.000  2.450E+12
288.3924   2912795.      0.000
    14.310  -0.000328    806671.    -22904. -3.519E-06      0.000  2.450E+12
302.5696   2936112.      0.000
    14.575  -0.000337    735370.    -21924. -2.518E-06      0.000  2.450E+12
313.8368   2959431.      0.000
    14.840  -0.000344    667242.    -20912. -1.608E-06      0.000  2.450E+12
322.3970   2982751.      0.000
    15.105  -0.000347    602372.    -19877. -7.838E-07      0.000  2.450E+12
328.4490   3006073.      0.000
    15.370  -0.000349    540824.    -18827. -4.187E-08      0.000  2.450E+12
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332.1875   3029397.      0.000
    15.635  -0.000348    482634.    -17768.  6.223E-07      0.000  2.450E+12
333.8015   3052722.      0.000
    15.900  -0.000345    427819.    -16707.  1.213E-06      0.000  2.450E+12
333.4743   3076048.      0.000
    16.165  -0.000340    376375.    -15650.  1.735E-06      0.000  2.450E+12
331.3825   3099375.      0.000
    16.430  -0.000334    328282.    -14602.  2.192E-06      0.000  2.450E+12
327.6958   3122704.      0.000
    16.695  -0.000326    283503.    -13568.  2.589E-06      0.000  2.450E+12
322.5763   3146034.      0.000
    16.960  -0.000317    241985.    -12552.  2.930E-06      0.000  2.450E+12
316.1784   3169364.      0.000
    17.225  -0.000307    203664.    -11559.  3.220E-06      0.000  2.450E+12
308.6485   3192696.      0.000
    17.490  -0.000297    168464.    -10591.  3.461E-06      0.000  2.450E+12
300.1244   3216029.      0.000
    17.755  -0.000285    136299. -9651.4343  3.659E-06      0.000  2.450E+12
290.7356   3239363.      0.000
    18.020  -0.000273    107073. -8743.0058  3.817E-06      0.000  2.450E+12
280.6031   3262698.      0.000
    18.285  -0.000261     80685. -7867.8029  3.939E-06      0.000  2.450E+12
269.8390   3286033.      0.000
    18.550  -0.000248     57026. -7027.6688  4.028E-06      0.000  2.450E+12
258.5471   3309370.      0.000
    18.815  -0.000236     35981. -6224.1315  4.089E-06      0.000  2.450E+12
246.8223   3332707.      0.000
    19.080  -0.000222     17432. -5458.4299  4.123E-06      0.000  2.450E+12
234.7510   3356045.      0.000
    19.345  -0.000209  1256.8167 -4731.5415  4.135E-06      0.000  2.450E+12
222.4115   3379384.      0.000
    19.610  -0.000196    -12669. -4044.2086  4.128E-06      0.000  2.450E+12
209.8734   3402723.      0.000
    19.875  -0.000183    -24473. -3396.9641  4.104E-06      0.000  2.450E+12
197.1986   3426063.      0.000
    20.140  -0.000170    -34282. -2790.1570  4.066E-06      0.000  2.450E+12
184.4411   3449404.      0.000
    20.405  -0.000157    -42227. -2223.9763  4.016E-06      0.000  2.450E+12
171.6474   3472745.      0.000
    20.670  -0.000144    -48435. -1698.4752  3.957E-06      0.000  2.450E+12
158.8565   3496087.      0.000
    20.935  -0.000132    -53037. -1213.5932  3.891E-06      0.000  2.450E+12
146.1007   3519429.      0.000
    21.200  -0.000120    -56162.  -769.1783  3.820E-06      0.000  2.450E+12
133.4055   3542772.      0.000
    21.465  -0.000108    -57937.  -365.0069  3.746E-06      0.000  2.450E+12
120.7903   3566116.      0.000
    21.730 -9.592E-05    -58491.    -0.8037  3.671E-06      0.000  2.450E+12
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108.2683   3589460.      0.000
    21.995 -8.437E-05    -57950.   323.7405  3.595E-06      0.000  2.450E+12
95.8475   3612804.      0.000
    22.260 -7.305E-05    -56439.   608.9516  3.521E-06      0.000  2.450E+12
83.5306   3636149.      0.000
    22.525 -6.197E-05    -54084.   855.1569  3.449E-06      0.000  2.450E+12
71.3156   3659494.      0.000
    22.790 -5.111E-05    -51008.  1062.6711  3.381E-06      0.000  2.450E+12
59.1965   3682840.      0.000
    23.055 -4.047E-05    -47332.  1231.7832  3.317E-06      0.000  2.450E+12
47.1633   3706186.      0.000
    23.320 -3.002E-05    -43180.  1362.7457  3.259E-06      0.000  2.450E+12
35.2030   3729533.      0.000
    23.585 -1.974E-05    -38672.  1455.7646  3.205E-06      0.000  2.450E+12
23.2995   3752880.      0.000
    23.850 -9.629E-06    -33928.  1510.9921  3.158E-06      0.000  2.450E+12
11.4348   3776227.      0.000
    24.115  3.441E-07    -29069.  1528.5196  3.117E-06      0.000  2.450E+12
-0.4112   3799575.      0.000
    24.380  1.020E-05    -24213.  1508.3734  3.083E-06      0.000  2.450E+12
-12.2594   3822923.      0.000
    24.645  1.995E-05    -19482.  1450.5122  3.055E-06      0.000  2.450E+12
-24.1313   3846272.      0.000
    24.910  2.962E-05    -14994.  1354.8260  3.032E-06      0.000  2.450E+12
-36.0487   3869621.      0.000
    25.175  3.924E-05    -10871.  1221.1372  3.015E-06      0.000  2.450E+12
-48.0323   3892970.      0.000
    25.440  4.880E-05 -7234.2192  1049.2039  3.004E-06      0.000  2.450E+12
-60.1018   3916319.      0.000
    25.705  5.834E-05 -4204.7371   838.7249  2.996E-06      0.000  2.450E+12
-72.2749   3939669.      0.000
    25.970  6.786E-05 -1906.1217   589.3475  2.992E-06      0.000  2.450E+12
-84.5663   3963019.      0.000
    26.235  7.737E-05  -462.6721   300.6766  2.991E-06      0.000  2.450E+12
-96.9877   3986369.      0.000
    26.500  8.688E-05      0.000      0.000  2.990E-06      0.000  2.450E+12
-92.1171   1685879.      0.000

* This analysis computed pile response using nonlinear moment-curvature
relationships.
  Values of total stress due to combined axial and bending stresses are computed
only
  for elastic sections only and do not equal the actual stresses in concrete and
steel.
  Stresses in concrete and steel may be interpolated from the output for nonlinear

  bending properties relative to the magnitude of bending moment developed in the
pile.
```

Output Summary for Load Case No. 1:

```
Pile-head deflection             =      0.0112673 inches
Computed slope at pile head      =     -0.0001226 radians
Maximum bending moment           =       2620561. inch-lbs
Maximum shear force              =         37000. lbs
Depth of maximum bending moment  =      7.4200000 feet below pile head
Depth of maximum shear force     =      0.2650000 feet below pile head
Number of iterations             =              9
Number of zero deflection points =              2
```

Computed Values of Pile Loading and Deflection
for Lateral Loading for Load Case Number 2

Pile-head conditions are Shear and Moment (Loading Type 1)

```
Shear force at pile head                              =      32000.0 lbs
Applied moment at pile head                           =          0.0 in-lbs
Axial thrust load on pile head                        =    -271000.0 lbs
```

Depth X	Deflect. y	Bending Moment	Shear Force	Slope S	Total Stress	Bending Stiffness	Soil Res. p	Soil Spr. Es*h	Distrib. Lat. Load
feet	inches	in-lbs	lbs	radians	psi*	lb-in^2	lb/in	lb/inch	lb/inch
0.00	0.009024	4.215E-06	32000.	-0.000101	0.000	2.457E+12	0.000	0.000	0.000
0.265	0.008704	101673.	32000.	-0.000101	0.000	2.457E+12	0.000	0.000	0.000
0.530	0.008384	203347.	32000.	-0.000100	0.000	2.457E+12	-0.0264	10.0238	0.000
0.795	0.008065	305020.	32000.	-0.000100	0.000	2.457E+12	-0.0261	10.2864	0.000
1.060	0.007747	406693.	32000.	-9.962E-05	0.000	2.457E+12	-0.0257	10.5658	0.000
1.325	0.007431	508367.	32000.	-9.903E-05	0.000	2.457E+12	-0.0254	10.8633	0.000
1.590	0.007117	610041.	32000.	-9.831E-05	0.000	2.457E+12	-0.0250	11.1805	0.000

```
     1.855   0.006806    711715.     32000. -9.745E-05      0.000  2.457E+12
-0.0247    11.5191      0.000
     2.120   0.006498    813390.     31999. -9.647E-05      0.000  2.457E+12
-0.0243    11.8809      0.000
     2.385   0.006193    915065.     31999. -9.535E-05      0.000  2.457E+12
-0.0239    12.2682      0.000
     2.650   0.005891   1016742.     31999. -9.410E-05      0.000  2.457E+12
-0.0235    12.6832      0.000
     2.915   0.005594   1118419.     31999. -9.272E-05      0.000  2.457E+12
-0.0231    13.1287      0.000
     3.180   0.005302   1220097.     31999. -9.120E-05      0.000  2.457E+12
-0.0227    13.6075      0.000
     3.445   0.005014   1321777.     31999. -8.956E-05      0.000  2.457E+12
-0.0223    14.1231      0.000
     3.710   0.004732   1423457.     31999. -8.778E-05      0.000  2.457E+12
-0.0218    14.6792      0.000
     3.975   0.004456   1525139.     31117. -8.587E-05      0.000  2.457E+12
-554.6635    395853.      0.000
     4.240   0.004186   1621214.     29356. -8.384E-05      0.000  2.457E+12
-552.8096    419973.      0.000
     4.505   0.003923   1711700.     27602. -8.168E-05      0.000  2.457E+12
-550.5596    446336.      0.000
     4.770   0.003666   1796621.     25855. -7.941E-05      0.000  2.457E+12
-547.8992    475221.      0.000
     5.035   0.003418   1876003.     24118. -7.703E-05      0.000  2.457E+12
-544.8145    506952.      0.000
     5.300   0.003176   1949878.     22391. -7.456E-05      0.000  2.457E+12
-541.2920    541907.      0.000
     5.565   0.002943   2018281.     19900. -7.199E-05      0.000  2.457E+12
-1025.5303   1108001.      0.000
     5.830   0.002719   2076316.     16654. -6.934E-05      0.000  2.457E+12
-1016.0811   1188562.      0.000
     6.095   0.002502   2124078.     13439. -6.662E-05      0.000  2.457E+12
-1005.7596   1278154.      0.000
     6.360   0.002295   2161672.     10258. -6.385E-05      0.000  2.457E+12
-994.5350   1378168.      0.000
     6.625   0.002096   2189211.  7115.0821 -6.103E-05      0.000  2.457E+12
-982.3729   1490286.      0.000
     6.890   0.001907   2206819.  4012.0277 -5.819E-05      0.000  2.457E+12
-969.2336   1616557.      0.000
     7.155   0.001726   2214627.   952.3838 -5.533E-05      0.000  2.457E+12
-955.0707   1759511.      0.000
     7.420   0.001555   2212780. -2060.5076 -5.246E-05      0.000  2.457E+12
-939.8295   1922298.      0.000
     7.685   0.001392   2201432. -5023.1123 -4.961E-05      0.000  2.457E+12
-923.4439   2108907.      0.000
     7.950   0.001239   2180748. -7931.6620 -4.677E-05      0.000  2.457E+12
-905.8326   2324462.      0.000
```

```
     8.215   0.001095   2150906.    -10686. -4.397E-05      0.000  2.457E+12
-826.6237   2400632.      0.000
     8.480   0.000960   2112708.    -13164. -4.121E-05      0.000  2.457E+12
-731.4218   2423854.      0.000
     8.745   0.000833   2067115.    -15346. -3.850E-05      0.000  2.457E+12
-640.9360   2447085.      0.000
     9.010   0.000715   2015043.    -17247. -3.586E-05      0.000  2.457E+12
-555.2097   2470325.      0.000
     9.275   0.000605   1957359.    -18884. -3.329E-05      0.000  2.457E+12
-474.2603   2493571.      0.000
     9.540   0.000503   1894881.    -20271. -3.080E-05      0.000  2.457E+12
-398.0808   2516825.      0.000
     9.805   0.000409   1828380.    -21424. -2.839E-05      0.000  2.457E+12
-326.6419   2540085.      0.000
    10.070   0.000322   1758578.    -22356. -2.607E-05      0.000  2.457E+12
-259.8934   2563351.      0.000
    10.335   0.000243   1686149.    -23084. -2.384E-05      0.000  2.457E+12
-197.7663   2586622.      0.000
    10.600   0.000171   1611723.    -23621. -2.171E-05      0.000  2.457E+12
-140.1745   2609897.      0.000
    10.865   0.000105   1535881.    -23982. -1.967E-05      0.000  2.457E+12
-87.0163   2633178.      0.000
    11.130  4.570E-05   1459160.    -24182. -1.773E-05      0.000  2.457E+12
-38.1764   2656462.      0.000
    11.395 -7.681E-06   1382056.    -24232. -1.589E-05      0.000  2.457E+12
6.4726   2679750.      0.000
    11.660 -5.537E-05   1305018.    -24147. -1.415E-05      0.000  2.457E+12
47.0689   2703042.      0.000
    11.925 -9.770E-05   1228457.    -23939. -1.251E-05      0.000  2.457E+12
83.7592   2726337.      0.000
    12.190  -0.000135   1152745.    -23620. -1.097E-05      0.000  2.457E+12
116.6984   2749636.      0.000
    12.455  -0.000167   1078215.    -23202. -9.530E-06      0.000  2.457E+12
146.0469   2772937.      0.000
    12.720  -0.000196   1005162.    -22697. -8.181E-06      0.000  2.457E+12
171.9703   2796241.      0.000
    12.985  -0.000220    933850.    -22114. -6.927E-06      0.000  2.457E+12
194.6377   2819547.      0.000
    13.250  -0.000240    864506.    -21464. -5.763E-06      0.000  2.457E+12
214.2206   2842856.      0.000
    13.515  -0.000256    797331.    -20756. -4.688E-06      0.000  2.457E+12
230.8917   2866167.      0.000
    13.780  -0.000269    732491.    -20000. -3.698E-06      0.000  2.457E+12
244.8240   2889480.      0.000
    14.045  -0.000280    670127.    -19203. -2.790E-06      0.000  2.457E+12
256.1897   2912795.      0.000
    14.310  -0.000287    610355.    -18374. -1.962E-06      0.000  2.457E+12
265.1595   2936112.      0.000
```

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    14.575  -0.000292    553265.    -17520. -1.209E-06      0.000  2.457E+12
271.9018   2959431.      0.000
    14.840  -0.000295    498925.    -16648. -5.278E-07      0.000  2.457E+12
276.5815   2982751.      0.000
    15.105  -0.000296    447383.    -15764.  8.458E-08      0.000  2.457E+12
279.3601   3006073.      0.000
    15.370  -0.000294    398666.    -14874.  6.320E-07      0.000  2.457E+12
280.3943   3029397.      0.000
    15.635  -0.000292    352785.    -13983.  1.118E-06      0.000  2.457E+12
279.8363   3052722.      0.000
    15.900  -0.000287    309734.    -13097.  1.547E-06      0.000  2.457E+12
277.8324   3076048.      0.000
    16.165  -0.000282    269493.    -12218.  1.922E-06      0.000  2.457E+12
274.5234   3099375.      0.000
    16.430  -0.000275    232029.    -11352.  2.246E-06      0.000  2.457E+12
270.0439   3122704.      0.000
    16.695  -0.000267    197296.    -10503.  2.524E-06      0.000  2.457E+12
264.5219   3146034.      0.000
    16.960  -0.000259    165237. -9671.5765  2.759E-06      0.000  2.457E+12
258.0790   3169364.      0.000
    17.225  -0.000250    135789. -8862.4116  2.954E-06      0.000  2.457E+12
250.8297   3192696.      0.000
    17.490  -0.000240    108877. -8077.4106  3.112E-06      0.000  2.457E+12
242.8816   3216029.      0.000
    17.755  -0.000230     84422. -7318.6359  3.237E-06      0.000  2.457E+12
234.3352   3239363.      0.000
    18.020  -0.000220     62337. -6587.8417  3.332E-06      0.000  2.457E+12
225.2838   3262698.      0.000
    18.285  -0.000209     42529. -5886.4965  3.400E-06      0.000  2.457E+12
215.8138   3286033.      0.000
    18.550  -0.000198     24904. -5215.8056  3.443E-06      0.000  2.457E+12
206.0043   3309370.      0.000
    18.815  -0.000187  9362.5708 -4576.7340  3.466E-06      0.000  2.457E+12
195.9275   3332707.      0.000
    19.080  -0.000176 -4197.8029 -3970.0280  3.469E-06      0.000  2.457E+12
185.6486   3356045.      0.000
    19.345  -0.000165    -15881. -3396.2373  3.456E-06      0.000  2.457E+12
175.2260   3379384.      0.000
    19.610  -0.000154    -25792. -2855.7363  3.429E-06      0.000  2.457E+12
164.7117   3402723.      0.000
    19.875  -0.000143    -34037. -2348.7449  3.390E-06      0.000  2.457E+12
154.1508   3426063.      0.000
    20.140  -0.000132    -40724. -1875.3486  3.342E-06      0.000  2.457E+12
143.5827   3449404.      0.000
    20.405  -0.000122    -45959. -1435.5179  3.286E-06      0.000  2.457E+12
133.0404   3472745.      0.000
    20.670  -0.000111    -49848. -1029.1272  3.224E-06      0.000  2.457E+12
122.5512   3496087.      0.000
```

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    20.935  -0.000101    -52499.  -655.9727  3.158E-06      0.000  2.457E+12
112.1372   3519429.      0.000
    21.200 -9.139E-05    -54015.  -315.7890  3.089E-06      0.000  2.457E+12
101.8148   3542772.      0.000
    21.465 -8.168E-05    -54502.    -8.2659  3.018E-06      0.000  2.457E+12
91.5959   3566116.      0.000
    21.730 -7.219E-05    -54062.   266.9371  2.948E-06      0.000  2.457E+12
81.4877   3589460.      0.000
    21.995 -6.293E-05    -52799.   510.1763  2.879E-06      0.000  2.457E+12
71.4929   3612804.      0.000
    22.260 -5.388E-05    -50813.   721.8110  2.812E-06      0.000  2.457E+12
61.6107   3636149.      0.000
    22.525 -4.504E-05    -48203.   902.1915  2.748E-06      0.000  2.457E+12
51.8362   3659494.      0.000
    22.790 -3.641E-05    -45070.  1051.6482  2.688E-06      0.000  2.457E+12
42.1617   3682840.      0.000
    23.055 -2.795E-05    -41510.  1170.4821  2.632E-06      0.000  2.457E+12
32.5766   3706186.      0.000
    23.320 -1.967E-05    -37621.  1258.9565  2.580E-06      0.000  2.457E+12
23.0677   3729533.      0.000
    23.585 -1.154E-05    -33499.  1317.2898  2.534E-06      0.000  2.457E+12
13.6199   3752880.      0.000
    23.850 -3.551E-06    -29239.  1345.6496  2.494E-06      0.000  2.457E+12
4.2165   3776227.      0.000
    24.115  4.319E-06    -24936.  1344.1485  2.459E-06      0.000  2.457E+12
-5.1605   3799575.      0.000
    24.380  1.209E-05    -20686.  1312.8411  2.429E-06      0.000  2.457E+12
-14.5297   3822923.      0.000
    24.645  1.977E-05    -16582.  1251.7220  2.405E-06      0.000  2.457E+12
-23.9100   3846272.      0.000
    24.910  2.738E-05    -12721.  1160.7264  2.386E-06      0.000  2.457E+12
-33.3200   3869621.      0.000
    25.175  3.494E-05 -9195.9377  1039.7310  2.372E-06      0.000  2.457E+12
-42.7777   3892970.      0.000
    25.440  4.247E-05 -6103.8470   888.5575  2.362E-06      0.000  2.457E+12
-52.2999   3916319.      0.000
    25.705  4.997E-05 -3540.6408   706.9773  2.356E-06      0.000  2.457E+12
-61.9015   3939669.      0.000
    25.970  5.745E-05 -1603.4111   494.7179  2.352E-06      0.000  2.457E+12
-71.5950   3963019.      0.000
    26.235  6.493E-05  -390.1805   251.4715  2.351E-06      0.000  2.457E+12
-81.3902   3986369.      0.000
    26.500  7.240E-05      0.000      0.000  2.351E-06      0.000  2.457E+12
-76.7680   1685879.      0.000

* This analysis computed pile response using nonlinear moment-curvature
relationships.
  Values of total stress due to combined axial and bending stresses are computed
```

only
  for elastic sections only and do not equal the actual stresses in concrete and steel.
  Stresses in concrete and steel may be interpolated from the output for nonlinear

  bending properties relative to the magnitude of bending moment developed in the pile.

Output Summary for Load Case No. 2:

Pile-head deflection	=	0.0090238 inches
Computed slope at pile head	=	-0.0001007 radians
Maximum bending moment	=	2214627. inch-lbs
Maximum shear force	=	32000. lbs
Depth of maximum bending moment	=	7.1550000 feet below pile head
Depth of maximum shear force	=	0.000000 feet below pile head
Number of iterations	=	8
Number of zero deflection points	=	2

Summary of Pile Response(s)

Definitions of Pile-head Loading Conditions:

Load Type 1: Load 1 = Shear, lbs, and Load 2 = Moment, in-lbs
Load Type 2: Load 1 = Shear, lbs, and Load 2 = Slope, radians
Load Type 3: Load 1 = Shear, lbs, and Load 2 = Rotational Stiffness, in-lbs/radian
Load Type 4: Load 1 = Top Deflection, inches, and Load 2 = Moment, in-lbs
Load Type 5: Load 1 = Top Deflection, inches, and Load 2 = Moment, in-lbs

Load Case No.	Load Type	Pile-head Condition 1 V(lbs) or y(inches)		Pile-head Condition 2 in-lb, rad., or in-lb/rad.		Axial Loading lbs	Pile-head Deflection inches	Maximum Moment in Pile in-lbs	Maximum Shear in Pile lbs
1	1	V =	37000.	M =	0.000	325000.	0.01126734		

2620561. 37000. -0.00012261
  2 1 V = 32000. M = 0.000 -271000. 0.00902377
2214627. 32000. -0.00010068

The analysis ended normally.

Drilled Pier Foundation

BU # :	876345
Site Name:	SKY HILL, CT
Order Number:	492784, Rev.0

TIA-222 Revison:	H
Tower Type:	Self Support

Applied Loads	Comp.	Uplift
Moment (kip-ft)	0	0
Axial Force (kips)	325	271
Shear Force (kips)	37	32

Material Properties		
Concrete Strength, f'c:	3	ksi
Rebar Strength, Fy:	60	ksi

Pier Design Data		
Depth	26	ft
Ext. Above Grade	0.5	ft
Pier Section 1		
From 0.5' above grade to 26' below grade		
Pier Diameter	5	ft
Rebar Quantity	18	
Rebar Size	9	
Rebar Cage Diameter	51	in
Tie Size	5	

Analysis Results		
Soil Lateral Capacity	*Compression*	*Uplift*
$D_{v=0}$ (ft from TOC)	11.53	11.53
Soil Safety Factor	38.00	43.94
Max Moment (kip-ft)	294.95	255.09
Rating*	*3.3%*	*2.9%*
Soil Vertical Capacity	*Compression*	*Uplift*
Skin Friction (kips)	520.43	520.43
End Bearing (kips)	375.00	-
Weight of Concrete (kips)	93.66	70.24
Total Capacity (kips)	895.43	590.68
Axial (kips)	418.66	271.00
Rating*	*44.5%*	*43.7%*
Reinforced Concrete Capacity	*Compression*	*Uplift*
Critical Depth (ft from TOC)	11.83	10.77
Critical Moment (kip-ft)	218.38	184.55
Critical Moment Capacity	2357.20	1648.01
Rating*	*8.8%*	*10.7%*

Soil Interaction Rating*	**44.5%**
Structural Foundation Rating*	**10.7%**

Check Limitation	
Apply TIA-222-H Section 15.5:	☑
N/A	☐

*Rating per TIA-222-H Section 15.5

Soil Profile

Groundwater Depth	N/A	ft	# of Layers: 4

Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ_{soil} (pcf)	$\gamma_{concrete}$ (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	2	2	120	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	2	3.33	1.33	130	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
3	3.33	5	1.67	130	150	3	0	1.650	1.650	0.00	0.00			Cohesive
4	5	26	21	135	150	5	0	2.321	2.321	2.10	2.10	25.46479		Cohesive

Exhibit E

Mount Analysis

September 10, 2019

Charles McGuirt
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Charlotte, NC 28277
(704) 405-6607

Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351
Structures@tepgroup.net

Subject:	**Mount Modification Analysis**	
Carrier Designation:	***AT&T Mobility* Reconfiguration**	
	Client Site Number:	10035292
	Client Site Name:	Ashford Sprint TWR
Crown Castle Designation:	**Crown Castle BU Number:**	876345
	Crown Castle Site Name:	Sky Hill
	Crown Castle JDE Job Number:	574662
	Crown Castle Order Number:	492784 Rev. 0
Engineering Firm Designation:	**TEP Project Number:**	155517.296090
Site Data:	**33 Janowski Road, Ashford, Windham County, CT 06278** **Latitude *41° 57' 7.70"*, Longitude *-72° 11' 43.90"***	
Structure Information:	**Tower Height & Type:**	192.0± ft Self-Supporting Tower
	Mount Elevation:	140.0 ft
	Mount Width & Type:	12.0 ft Sector Mount

Dear Charles McGuirt,

Tower Engineering Professionals is pleased to submit this **"Mount Modification Analysis"** to determine the structural integrity of AT&T Mobility's antenna mounting system with proposed appurtenance and equipment addition on the above mentioned 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:

Sector Mount **Sufficient Capacity**

The analysis has been performed in accordance with the 2018 International Building Code based upon an ultimate 3-second gust wind speed of 130 mph. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Nicholas P. Danyluk / WHW

Respectfully submitted by:

Aaron T. Rucker, P.E.
Structural Division Manager

Electronic Copy

09/10/2019

TABLE OF CONTENTS

1) INTRODUCTION

The mount is an existing 12.0-ft Sector mount, designed by Rohn, and mapped by Tower Engineering Professionals.

2) ANALYSIS CRITERIA

Building Code:	2018 IBC
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	130 mph
Exposure Category:	C
Topographic Category at Base:	1.0
Topographic Category at Mount:	1.0
Ice Thickness:	1.5 in
Wind Speed with Ice:	50 mph
Seismic Design Category:	B
Seismic S_s:	0.178
Seismic S_1:	0.055
Live Loading Wind Speed:	30 mph
Live Loading at Mid/End-Points:	250 lb
Man Live Loading 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
140.0	141.0	4	CCI Antennas	DMP65R-BU4D	(3) Sector Mounts
		2	CCI Antennas	DMP65R-BU6D	
		3	Powerwave Technologies	7770.00	
		3	Ericsson	RRUS 4449 B5/B12	
		3	Ericsson	RRUS 4478 B14	
		3	Ericsson	RRUS 8843 B2/B66A	
		1	Raycap	DC6-48-60-0-8C-EV	
	140.0	3	Powerwave Technologies	TT19-08BP111-001	
		1	Raycap	DC6-48-60-18-8F	

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Mount Mapping	Tower Engineering Professionals	8500541	CCIsites
Previous Mount Analysis	Tower Engineering Professionals	8629472	CCIsites
Loading Application	AT&T Mobility	Order 492784 Rev. 0	CCIsites

3.1) Analysis Method

RISA-3D (Version 17.0.1), a commercially available analysis software package, was used to create a three-dimensional model of the mount and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A and Appendix C.

TEP Mount Analysis Tool, a tool internally developed by TEP using Microsoft Excel, was used to calculate member loading for various load cases. Selected output from the analysis is included in Appendix B.

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

In addition, this analysis is in accordance with AT&T's *Mount Technical Directive – R14.1*.

3.2) Assumptions

1) The mount was built in accordance with the manufacturer's specifications.
2) The mount has been maintained in accordance with the manufacturer's specification.
3) The configuration of antennas, mounts and other appurtenances are as specified in Table 1. All mount components have been assumed to be in sufficient condition to carry their full design capacity for this analysis. Refer to the issued mapping for any structural and/or maintenance issues found during our site visit if applicable.
4) All mount components are in sufficient condition to carry their full design capacity.
5) All material grades used for this analysis, unless verified by mount manufacturer design, were assumed per AISC Table 2-4, 15th Edition. See RISA-3D output for confirmation on grades used in this analysis.

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

4) ANALYSIS RESULTS

Table 3(a) - Mount Component Stresses vs. Capacity (Sector Mount, Alpha Mount)

Notes	Component	Critical Member	Mount Centerline (ft)	% Capacity	Pass / Fail
1	Face Horizontals	FFBH-2	140.0	18.7	Pass
1	Support Horizontals	SF3-BH	140.0	26.7	Pass
1	Bracing	V3	140.0	59.9	Pass
1	Mount Pipes	MP-1	140.0	13.5	Pass
1	Standoff Bolts	M28	140.0	34.1	Pass
2	Connection Bolts	-	140.0	17.6	Pass

Table 3(b) - Mount Component Stresses vs. Capacity (Sector Mount, Beta Mount)

Notes	Component	Critical Member	Mount Centerline (ft)	% Capacity	Pass / Fail
1	Face Horizontals	FFBH-2	140.0	15.2	Pass
1	Support Horizontals	SF3-BH	140.0	24.0	Pass
1	Bracing	V3	140.0	47.7	Pass
1	Mount Pipes	MP-1	140.0	11.3	Pass
1	Standoff Bolts	M28	140.0	20.8	Pass
2	Connection Bolts	-	140.0	15.8	Pass

Structure Rating (max from all components) =	59.9%

Notes:
1) See additional documentation in “Appendix C - Analysis Output” for calculations supporting the % capacity listed.
2) See additional documentation in “Appendix D - Additional Calculations” for calculations supporting the % capacity listed.
3) Beta and Gamma Mounts are Typical.

Table 4 - Tieback Connection Data Table

Tower Connection Node No.	Existing/ Proposed	Resultant End Reaction (lb)	Connected Member Type	Connected Member Size	Member Compressive Capacity (lb)[3]	Notes
SA-1B	Existing	1,366	Leg	Rohn 3 EH	4,717	1,4
SA-1B	Existing	1,087	Leg	Rohn 3 EH	4,717	1,5

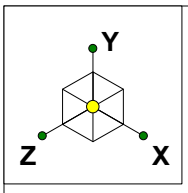
Notes:
1) Tieback connection point is within 25% of either end of the connected tower member.
2) Tower connection point is NOT within 25% of either end of the connected tower member.
3) Reduced member compressive capacity according to CED-STD-10294 *Standard for Installation of Mounts and Appurtenances.*
4) Alpha Sector
5) Beta and Gamma Sector

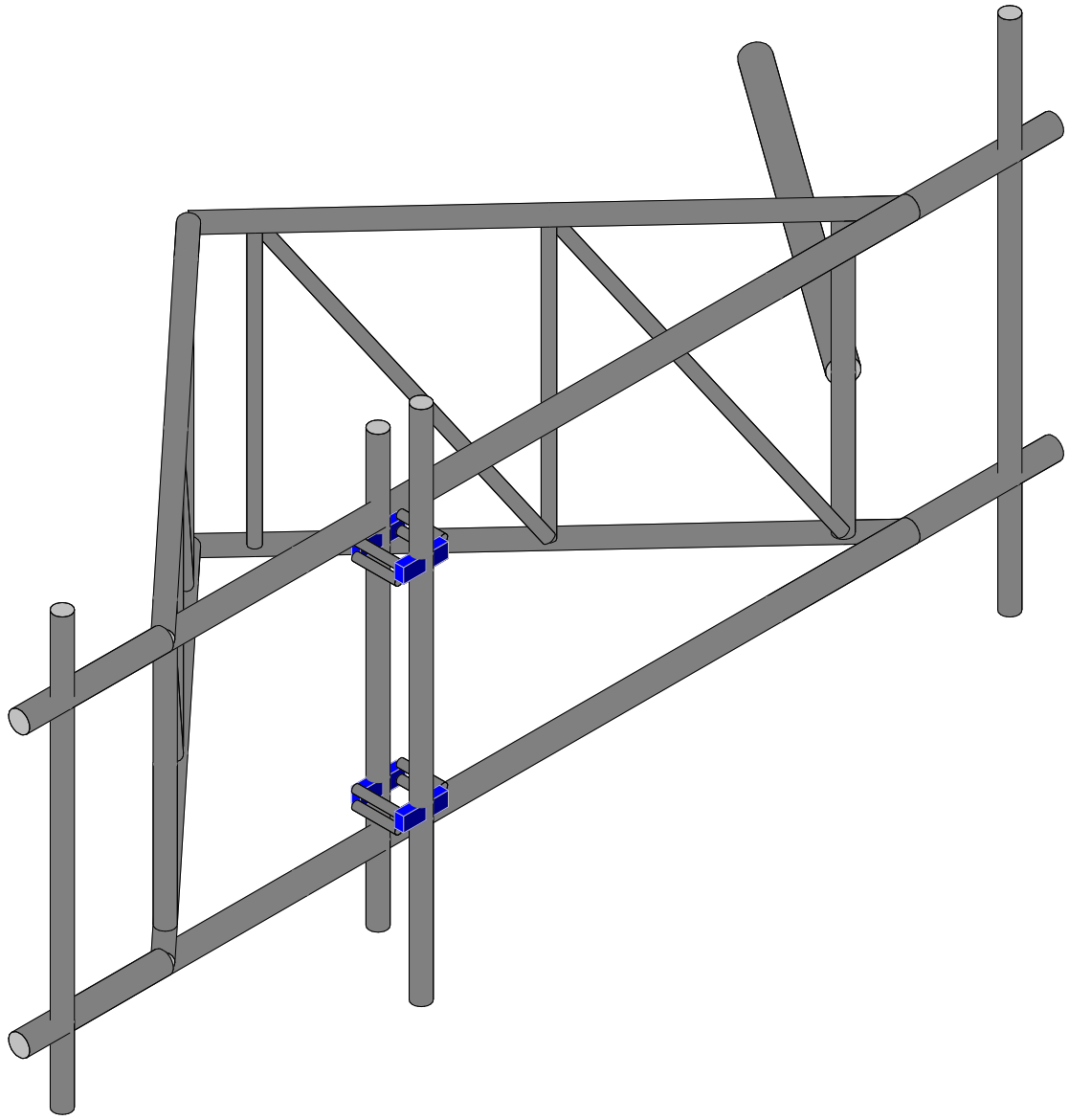
4.1) Recommendations

1) If the load differs from that described in Table 1 of this report or the provisions of this analysis are found to be invalid, another structural analysis should be performed.
2) The modifications depicted in “Appendix E – Mount Modification Design Drawings” shall be installed and, upon completion, inspected. The mount has sufficient capacity to support the proposed loading configuration once the proposed modifications listed below are completed.
   a) Pipe to Pipe Clamp, Commscope Part No. BC-35-14D

APPENDIX A

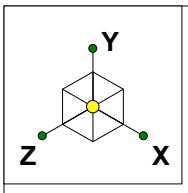
WIRE FRAME AND RENDERED MODELS

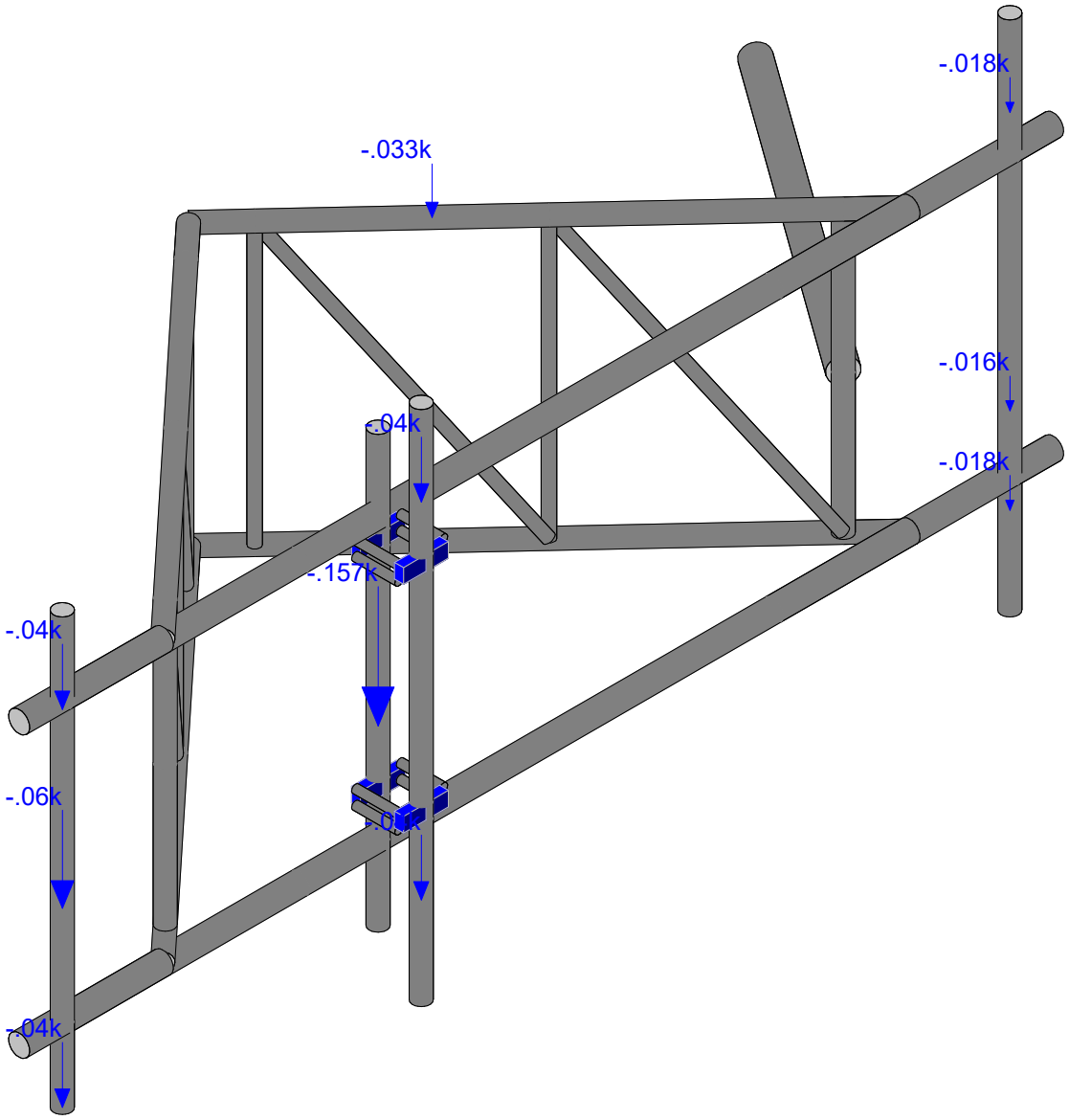




Envelope Only Solution

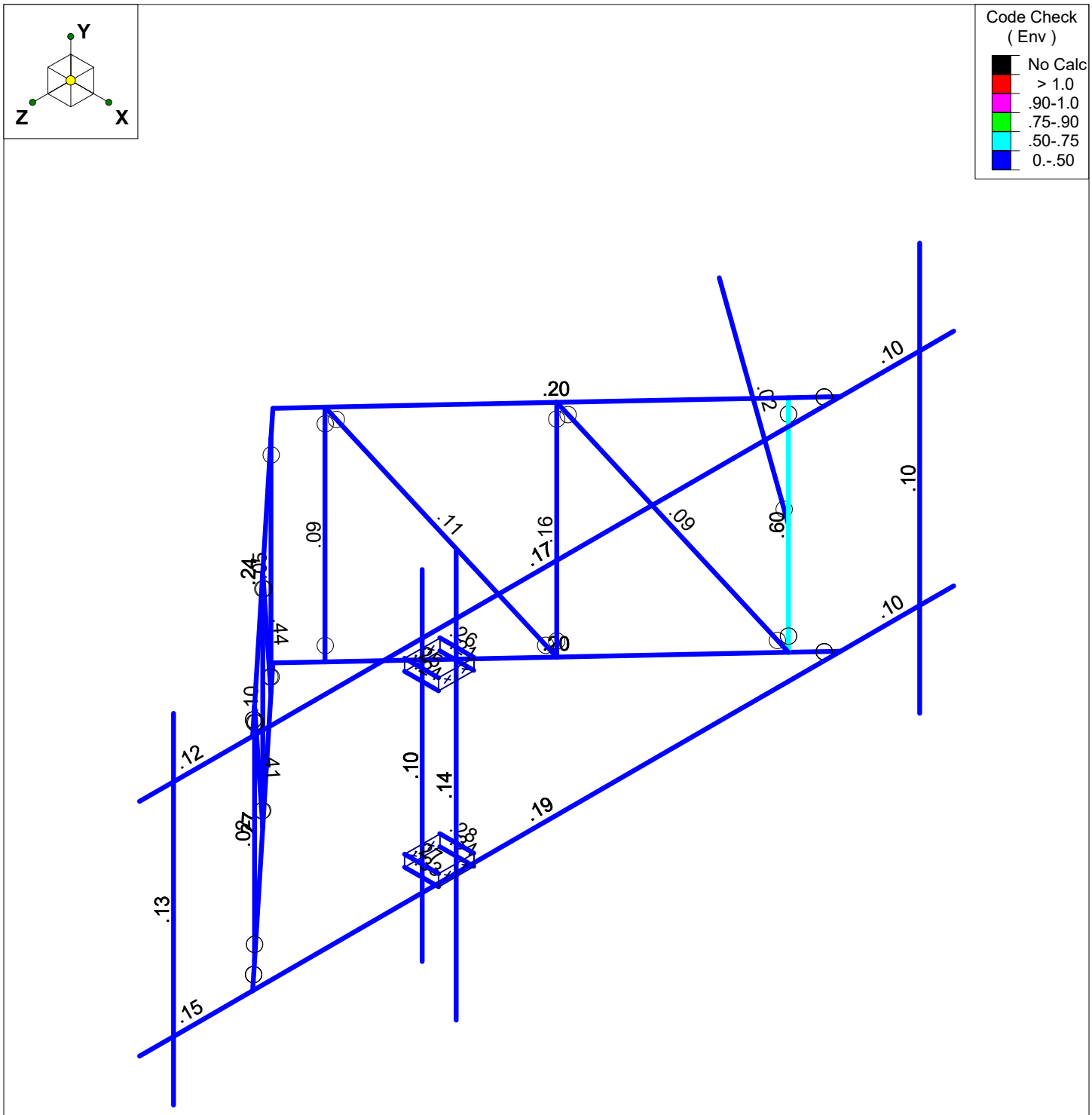
Tower Engineering Profes...	CCI BU No. 876345 - Alpha Sector	SK - 1
NPD		Sept 10, 2019 at 8:26 AM
155517.296090		Mount Rev H.r3d





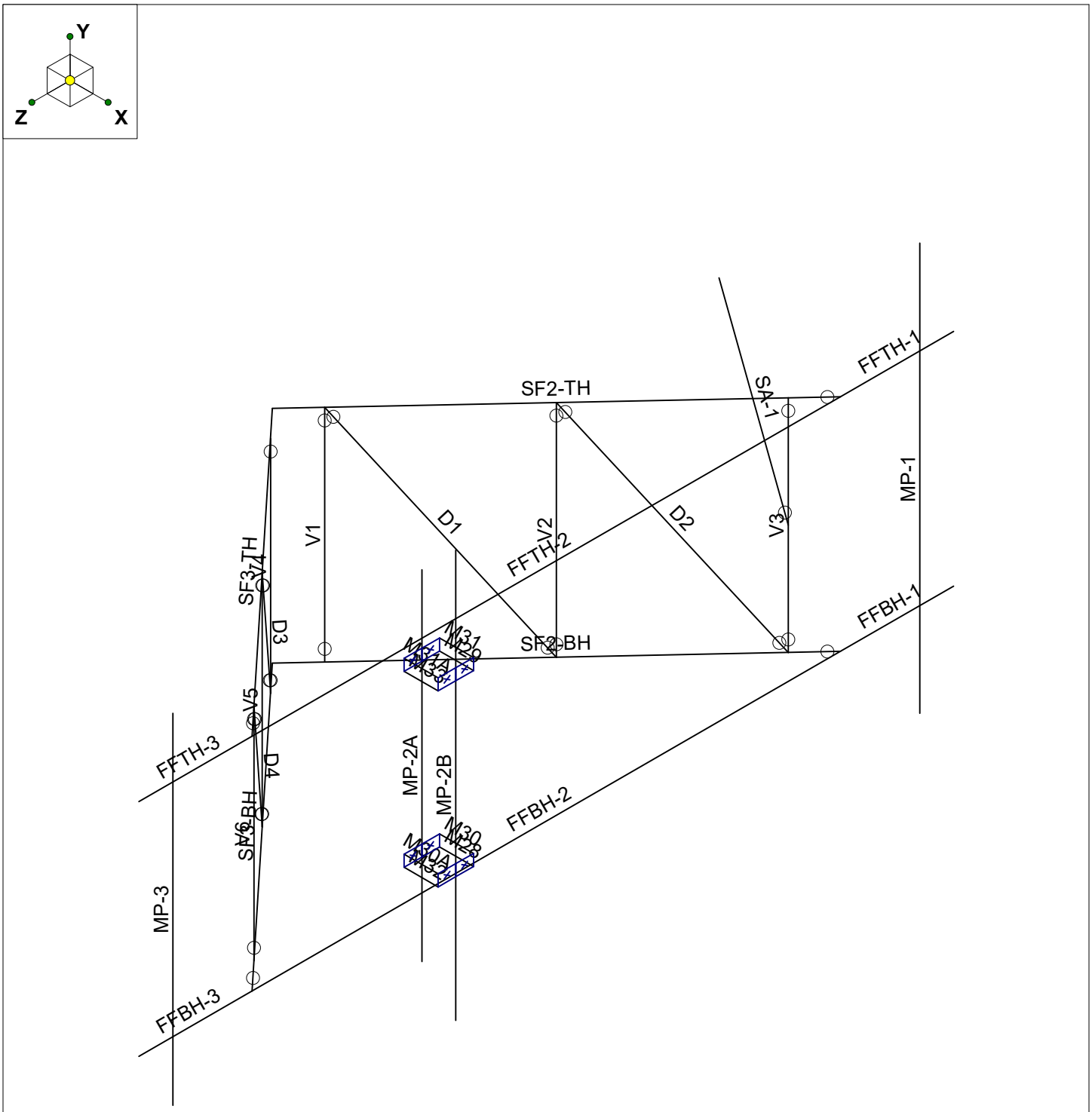
Loads: BLC 1, Dead
Envelope Only Solution

Tower Engineering Profes...	CCI BU No. 876345 - Alpha Sector	SK - 2
NPD		Sept 10, 2019 at 8:26 AM
155517.296090		Mount Rev H.r3d



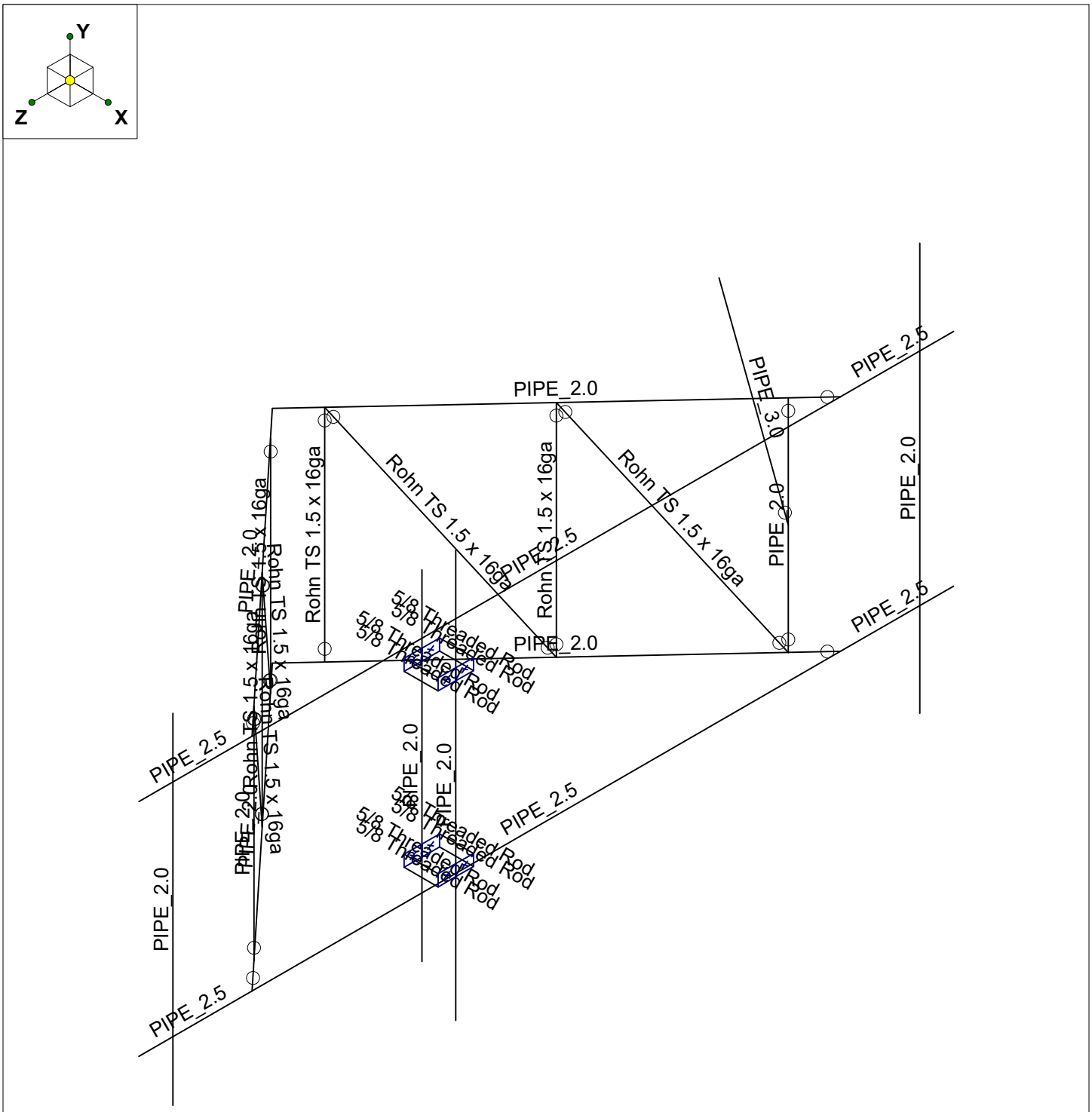
Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Tower Engineering Profes...	CCI BU No. 876345 - Alpha Sector	SK - 3
NPD		Sept 10, 2019 at 8:42 AM
155517.296090		Mount Rev H.r3d



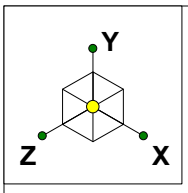
Envelope Only Solution

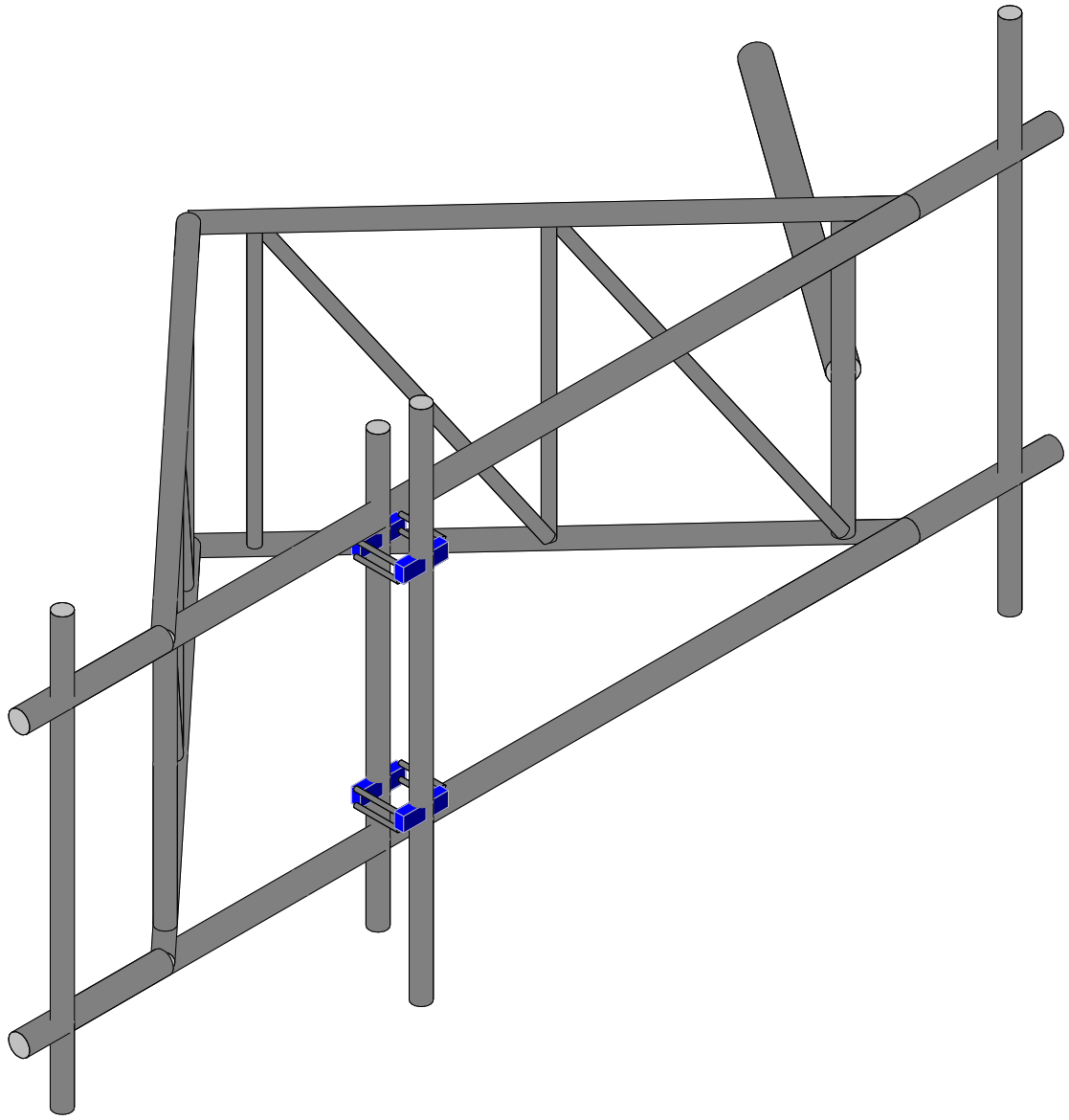
Tower Engineering Profes...	CCI BU No. 876345 - Alpha Sector	SK - 4
NPD		Sept 10, 2019 at 8:27 AM
155517.296090		Mount Rev H.r3d



Envelope Only Solution

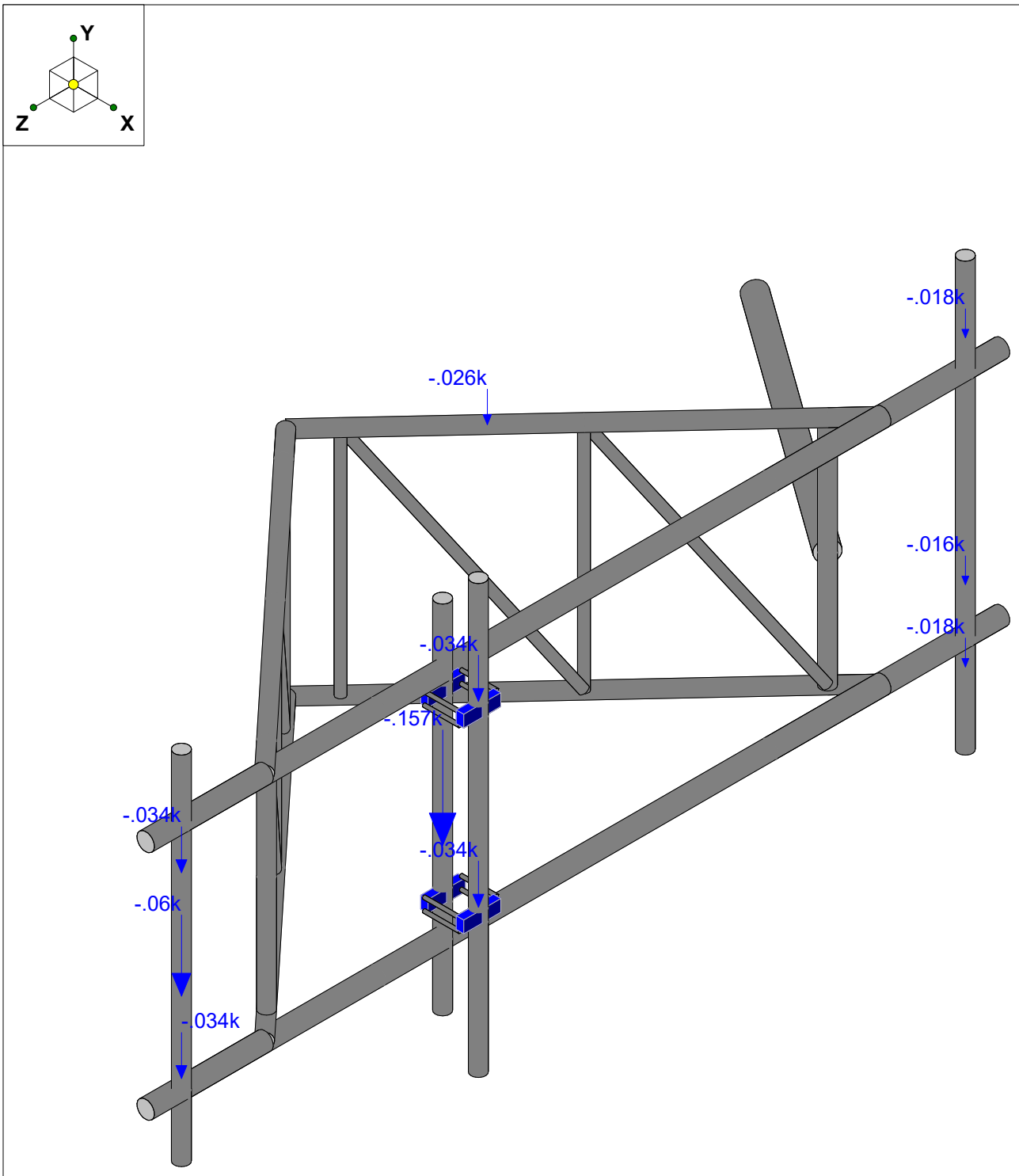
Tower Engineering Profes...	CCI BU No. 876345 - Alpha Sector	SK - 5
NPD		Sept 10, 2019 at 8:43 AM
155517.296090		Mount Rev H.r3d





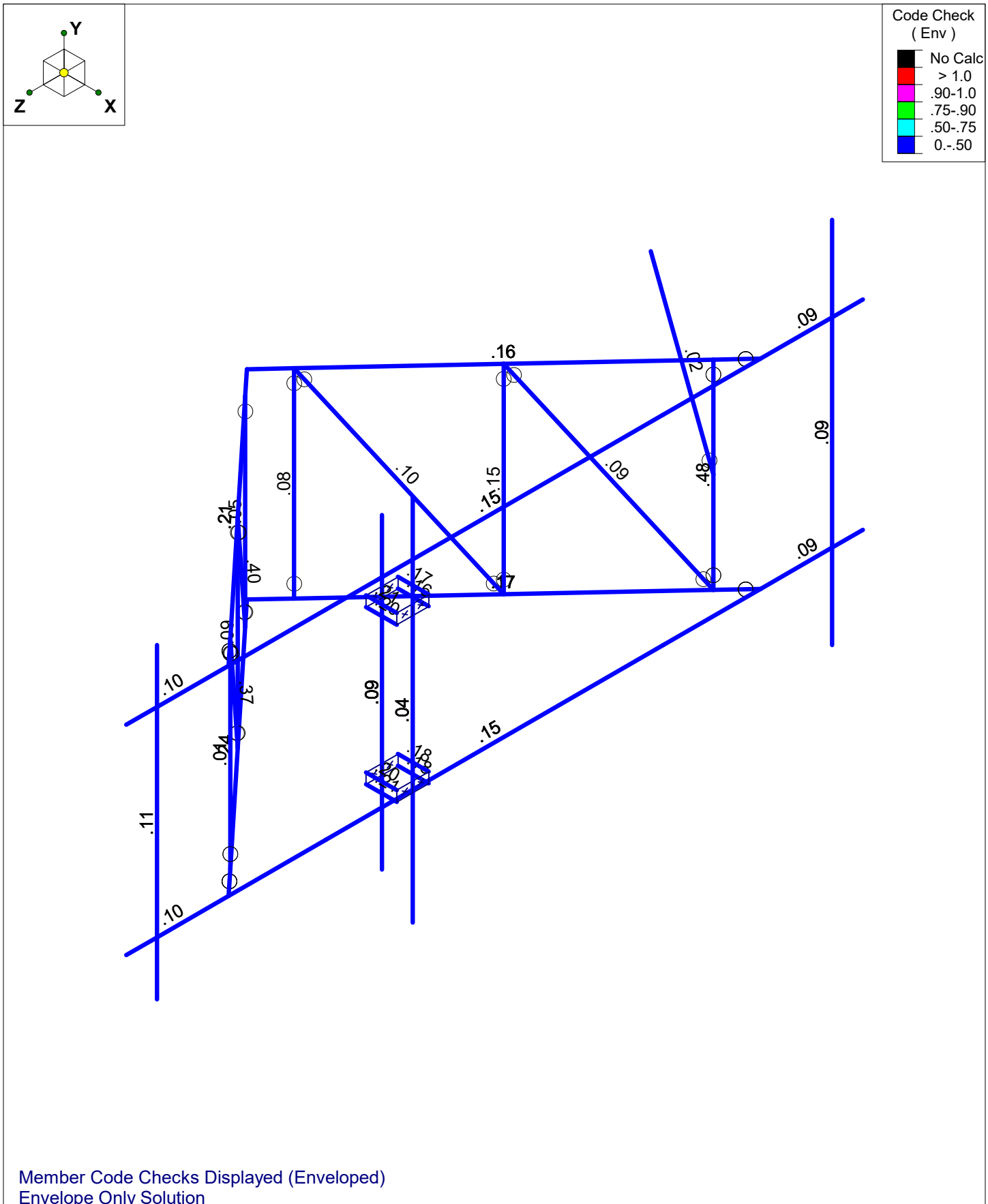
Envelope Only Solution

Tower Engineering Profes...	CCI BU No. 876345	SK - 6
NPD		Sept 10, 2019 at 8:50 AM
155517.296090		Mount Rev H.r3d



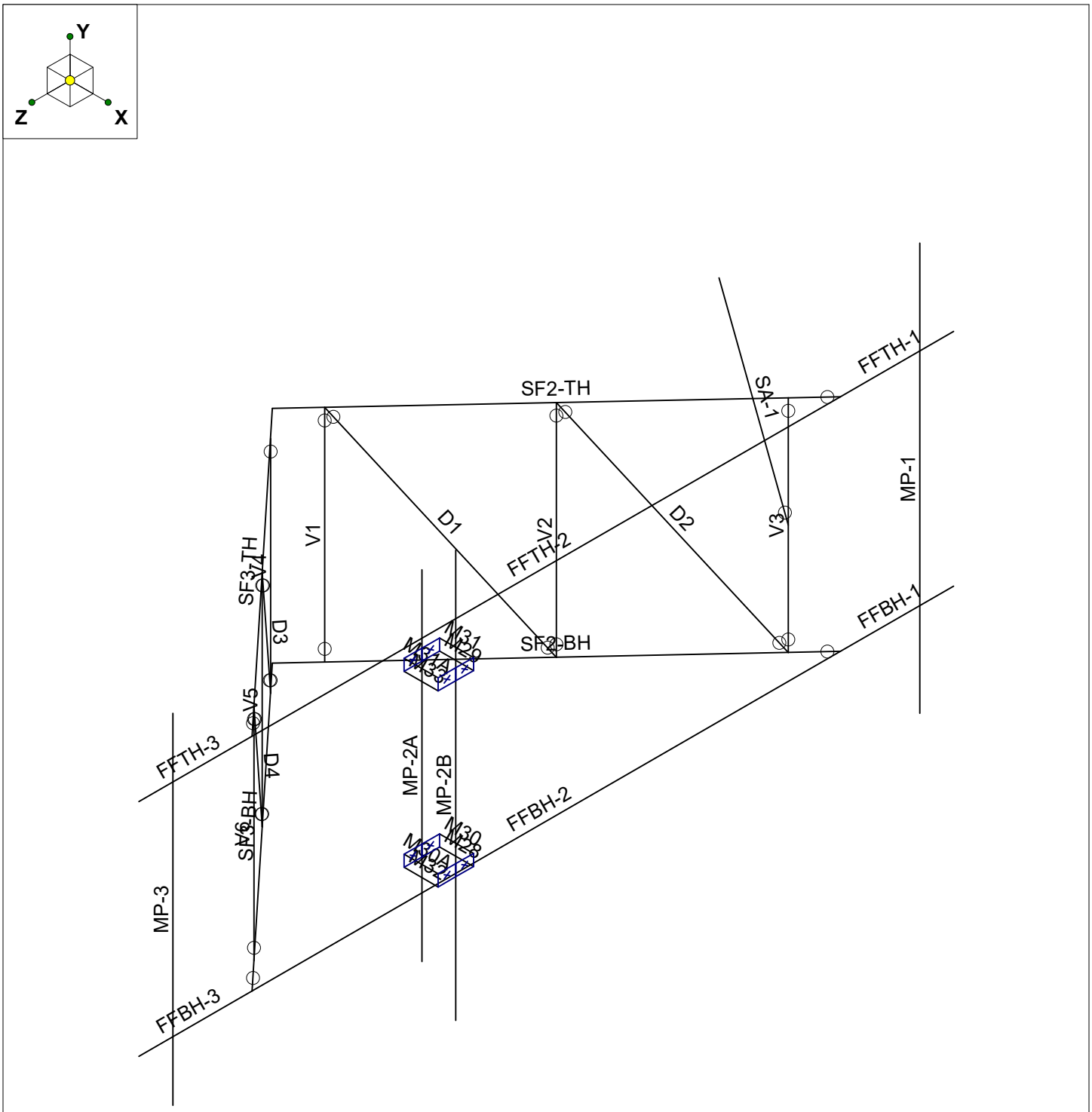
Loads: BLC 1, Dead
Envelope Only Solution

Tower Engineering Profes...	CCI BU No. 876345	SK - 7
NPD		Sept 10, 2019 at 8:50 AM
155517.296090		Mount Rev H.r3d



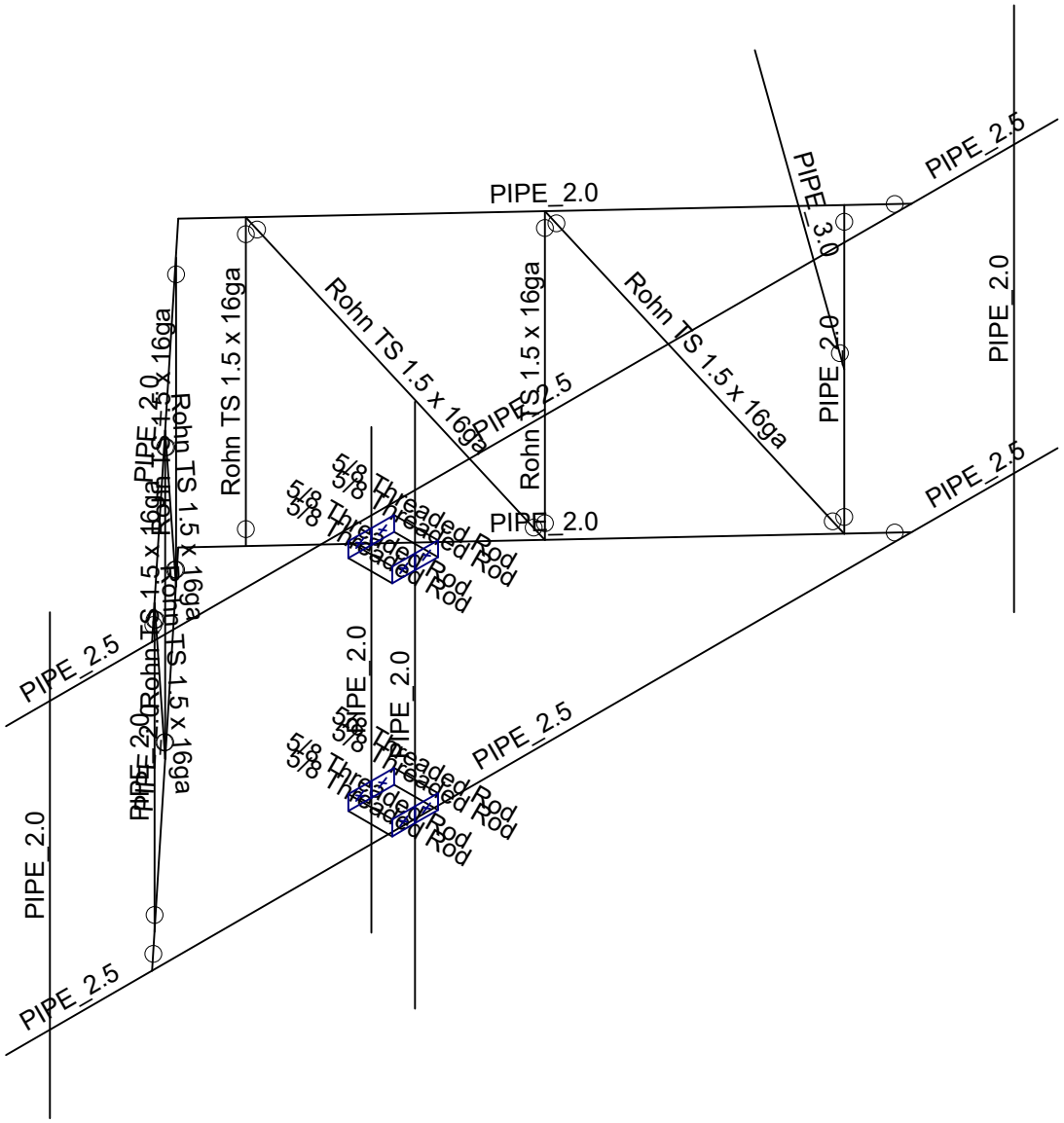
Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Tower Engineering Profes...	CCI BU No. 876345	SK - 8
NPD		Sept 10, 2019 at 8:50 AM
155517.296090		Mount Rev H.r3d



Envelope Only Solution

Tower Engineering Profes...	CCI BU No. 876345	SK - 9
NPD		Sept 10, 2019 at 8:50 AM
155517.296090		Mount Rev H.r3d



Envelope Only Solution

Tower Engineering Profes...	CCI BU No. 876345	SK - 10
NPD		Sept 10, 2019 at 8:50 AM
155517.296090		Mount Rev H.r3d

APPENDIX B

SOFTWARE INPUT CALCULATIONS

TOWER ENGINEERING PROFESSIONALS

CCI BU No. 876345

TEP No.	155517.296090	
Analysis By:	NPD	9/10/2019
Checked By:	WHW	9/10/2019

Code Revisions:	TIA-222-H	IBC 2015
Tower Type:	3 Sided Self-Support	

Wind Inputs:

Ult. Wind Velocity:	130.0	mph
Live Load Velocity:	30.0	mph
Ice Wind Velocity:	50.0	mph
Base Ice Thickness:	1.50	inches
Mount Centerline:	140.0	ft
Antenna Centerline:	141.0	ft
Exposure Category:	C	
Topo Category:	1	
Risk Category:	II	
Ground Elevation:	1068	ft

Wind Calculations:

K_{zt}:	1.000	Section 2.6.6
K_d:	0.950	
$K_{z\text{-}Mount}$:	1.359	Section 2.6.5.2
$K_{z\text{-}Antenna}$:	1.361	Section 2.6.5.2
K_{iz}:	1.156	Section 2.6.10
Ice Thickness:	1.474	inches - Section 2.6.10
$K_{es\text{-}wind}$:	0.95	Annex S (Table S-1)
$K_{es\text{-}ice}$:	0.85	Annex S (Table S-1)

Without Ice - (psf)		With Ice - (psf)	
$(q_zG_h)_{Mount}$:	51.03	**$(q_zG_h)_{Mount}$:**	7.95
$(q_zG_h)_{Antenna}$:	51.11	**$(q_zG_h)_{Antenna}$:**	7.96

TOWER ENGINEERING PROFESSIONALS

CCI BU No. 876345

TEP No. 155517.296090

Analysis By: NPD 9/10/2019

Checked By: WHW 9/10/2019

Alpha Sector

Antenna Loads are Calculated in Accordance with TIA-222-H

Azimuth is the absolute angle measured clockwise from RISA-3D global X-axis.

										Distance from start node of the member		
MFR	Model	Height (in)	Width (in)	Depth (in)	Wt. (lbs)	Azimuth°	Qty	Shape	Member Label	Location #1 (ft,%)	Location #2 (ft,%)	Location #3 (ft,%)
POWERWAVE TECHNOLOGIES	7770	55.00	11.00	5.00	35.00	10.00	1	Flat	MP-1	1.00	5.00	
POWERWAVE TECHNOLOGIES	TT19-08BP111-001	9.90	6.70	5.40	16.00	10.00	1	Flat	MP-1	4.00		
CCI ANTENNAS	DMP65R-BU6D	71.20	20.70	7.70	79.40	10.00	1	Flat	MP-2B	1.00	5.00	
Ericsson	RADIO 4449	28.00	15.00	10.00	85.00	10.00	1	Flat	MP-2A	3.00		
Ericsson	RRUS 8843 B2/B66A	14.90	13.20	10.90	72.00	10.00	1	Flat	MP-2A	3.00		
CCI ANTENNAS	DMP65R-BU6D	71.20	20.70	7.70	79.40	10.00	1	Flat	MP-3	1.00	5.00	
Ericsson	RRUS 4478 B14	16.50	13.40	7.70	59.90	10.00	1	Flat	MP-3	3.00		
Raycap	DC6-48-60-18-8F	31.25	11.00	11.00	32.80	0.00	1	Round	SF2-TH	2.00		

TOWER ENGINEERING PROFESSIONALS

CCI BU No. 876345

TEP No. 155517.296090

Analysis By: NPD 9/10/2019

Checked By: WHW 9/10/2019

Beta/Gamma Sector

Antenna Loads are Calculated in Accordance with TIA-222-H

Azimuth is the absolute angle measured clockwise from RISA-3D global X-axis.

										Distance from start node of the member		
MFR	Model	Height (in)	Width (in)	Depth (in)	Wt. (lbs)	Azimuth°	Qty	Shape	Member Label	Location #1 (ft,%)	Location #2 (ft,%)	Location #3 (ft,%)
POWERWAVE TECHNOLOGIES	7770	55.00	11.00	5.00	35.00	10.00	1	Flat	MP-1	1.00	5.00	
POWERWAVE TECHNOLOGIES	TT19-08BP111-001	9.90	6.70	5.40	16.00	10.00	1	Flat	MP-1	4.00		
CCI ANTENNAS	DMP65R-BU4D	48.00	20.70	7.70	67.90	10.00	1	Flat	MP-2B	1.50	4.00	
Ericsson	RADIO 4449	28.00	15.00	10.00	85.00	10.00	1	Flat	MP-2A	3.00		
Ericsson	RRUS 8843 B2/B66A	14.90	13.20	10.90	72.00	10.00	1	Flat	MP-2A	3.00		
CCI ANTENNAS	DMP65R-BU4D	48.00	20.70	7.70	67.90	10.00	1	Flat	MP-3	1.50	4.00	
Ericsson	RRUS 4478 B14	16.50	13.40	7.70	59.90	10.00	1	Flat	MP-3	3.00		
Raycap	DC6-48-60-0-8C-EV	31.40	10.24	18.28	26.20	0.00	1	Round	SF2-TH	2.00		

TOWER ENGINEERING PROFESSIONALS

CCI BU No. 876345

TEP No.	155517.296090	
Analysis By:	NPD	9/10/2019
Checked By:	WHW	9/10/2019

Member Forces are Calculated in Accordance with TIA-222-H

Member Name	Wind Proj. (in)	Length (in)	Shape	θ (°)	Perimeter (in)
FFBH-1	2.875	144.00	Round	90.00	9.03
FFBH-2	2.875	144.00	Round	90.00	9.03
FFBH-3	2.875	144.00	Round	90.00	9.03
FFTH-1	2.875	144.00	Round	90.00	9.03
FFTH-2	2.875	144.00	Round	90.00	9.03
FFTH-3	2.875	144.00	Round	90.00	9.03
MP-1	2.375	72.00	Round		7.46
MP-3	2.375	60.00	Round		7.46
SA-1	3.500	54.23	Round	-35.82	11.00
SF2-BH	2.375	71.05	Round	47.04	7.46
SF2-TH	2.375	71.05	Round	47.04	7.46
SF3-BH	2.375	71.05	Round	-47.04	7.46
SF3-TH	2.375	71.05	Round	-47.04	7.46
D1	1.500	48.60	Round		4.71
D2	1.500	48.60	Round		4.71
D3	1.500	48.60	Round		4.71
D4	1.500	48.60	Round		4.71
V1	1.500	39.00	Round		4.71
V2	1.500	39.00	Round		4.71
V4	1.500	39.00	Round		4.71
V5	1.500	39.00	Round		4.71
V3	2.375	39.00	Round		7.46
V6	2.375	39.00	Round		7.46
MP-2B	2.375	72.00	Round		7.46
MP-2A	2.375	60.00	Round		7.46
M30	0.625	14.00	Round	0.00	1.96
M31	0.625	14.00	Round	0.00	1.96
M28	0.625	14.00	Round	0.00	1.96
M29	0.625	14.00	Round	0.00	1.96
M30A	0.625	14.00	Round	0.00	1.96
M31A	0.625	14.00	Round	0.00	1.96
M32	0.625	14.00	Round	0.00	1.96
M33	0.625	14.00	Round	0.00	1.96

APPENDIX C

SOFTWARE ANALYSIS OUTPUT

(Global) Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	24
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 15th(360-16): LRFD
Adjust Stiffness?	No
RISAConnection Code	None
Cold Formed Steel Code	None
Wood Code	None
Wood Temperature	< 100F
Concrete Code	None
Masonry Code	None
Aluminum Code	None - Building
Stainless Steel Code	None

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	Yes
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

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(Global) Model Settings, Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	1
Cd X	1
Rho Z	1
Rho X	1

Hot Rolled Steel Properties

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

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horiz	PIPE 2.5	None	None	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
2	Mount Pipe 1	PIPE 2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
3	Support Arm	PIPE 2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
4	Support Bracing 1	Rohn TS 1.5 x 16ga	None	None	A53 GR.42	Typical	.263	.068	.068	.137
5	Support Bracing 2	PIPE 2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
6	Stabilizer	PIPE 3.0	None	None	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
7	MP Cxn	5/8 Threaded Rod	None	None	A36 Gr.36	Typical	.226	.004	.004	.008

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	CF1A	8CU1.25X057	Beam	None	A653 SS Gr...	Typical	.581	.057	4.41	.00063

Material Takeoff

	Material	Size	Pieces	Length[ft]	Weight[K]
1	Hot Rolled Steel				
2	A36 Gr.36	5/8 Threaded Rod	8	4	0
3	A53 GR.42	Rohn TS 1.5 x 16ga	8	29.2	0
4	A53 Gr.B	PIPE 2.0	10	52.2	.2
5	A53 Gr.B	PIPE 2.5	6	24	.1
6	A53 Gr.B	PIPE 3.0	1	4.5	0
7	Total HR Steel		33	113.9	.4
8					
9	Plate Elements	Thickness (in)		Volume (yds^3)	
10	gen_Steel	1.3	8	0	0
11	Total Plates		8	0	0

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	SF2-01	Reaction	Reaction	Reaction			
2	SF2-02	Reaction	Reaction	Reaction			
3	N46	Reaction	Reaction	Reaction			

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	FFBH-1	FF3	SF2-4			Face Horiz	None	None	A53 Gr.B	Typical
2	FFBH-2	SF2-4	SF3-4			Face Horiz	None	None	A53 Gr.B	Typical
3	FFBH-3	SF3-4	FF4			Face Horiz	None	None	A53 Gr.B	Typical
4	FFTH-1	FF1	SF2-3			Face Horiz	None	None	A53 Gr.B	Typical
5	FFTH-2	SF2-3	SF3-3			Face Horiz	None	None	A53 Gr.B	Typical
6	FFTH-3	SF3-3	FF2			Face Horiz	None	None	A53 Gr.B	Typical
7	MP-1	N31	N33			Mount Pipe 1	None	None	A53 Gr.B	Typical
8	MP-3	N35	N37			Mount Pipe 1	None	None	A53 Gr.B	Typical
9	SA-1	N47A	N46			Stabilizer	None	None	A53 Gr.B	Typical
10	SF2-BH	SF2-02	SF2-4			Support Arm	None	None	A53 Gr.B	Typical
11	SF2-TH	SF2-01	SF2-3			Support Arm	None	None	A53 Gr.B	Typical
12	SF3-BH	SF2-02	SF3-4			Support Arm	None	None	A53 Gr.B	Typical
13	SF3-TH	SF2-01	SF3-3			Support Arm	None	None	A53 Gr.B	Typical
14	D1	N33A	N36A			Support Bracing 1	None	None	A53 GR.42	Typical
15	D2	N35A	N38A			Support Bracing 1	None	None	A53 GR.42	Typical
16	D3	N44A	N45A			Support Bracing 1	None	None	A53 GR.42	Typical
17	D4	N46A	N47			Support Bracing 1	None	None	A53 GR.42	Typical
18	V1	N33A	N34A			Support Bracing 1	None	None	A53 GR.42	Typical
19	V2	N35A	N36A			Support Bracing 1	None	None	A53 GR.42	Typical
20	V4	N43A	N44A			Support Bracing 1	None	None	A53 GR.42	Typical
21	V5	N45A	N46A			Support Bracing 1	None	None	A53 GR.42	Typical
22	V3	N37A	N38A			Support Bracing 2	None	None	A53 Gr.B	Typical
23	V6	N47	N48			Support Bracing 2	None	None	A53 Gr.B	Typical
24	MP-2B	N54	N55			Mount Pipe 1	None	None	A53 Gr.B	Typical
25	MP-2A	N52	N53			Mount Pipe 1	None	None	A53 Gr.B	Typical
26	M30	N56	N57			MP Cxn	None	None	A36 Gr.36	Typical
27	M31	N58	N59			MP Cxn	None	None	A36 Gr.36	Typical
28	M28	N48B	N49			MP Cxn	None	None	A36 Gr.36	Typical
29	M29	N50	N51			MP Cxn	None	None	A36 Gr.36	Typical
30	M30A	N52A	N53A			MP Cxn	None	None	A36 Gr.36	Typical
31	M31A	N54A	N55A			MP Cxn	None	None	A36 Gr.36	Typical
32	M32	N56A	N57A			MP Cxn	None	None	A36 Gr.36	Typical
33	M33	N58A	N59A			MP Cxn	None	None	A36 Gr.36	Typical

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio O...	Analysis ...	Inactive	Seismi...
1	FFBH-1						Yes	** NA **			None
2	FFBH-2						Yes	** NA **			None
3	FFBH-3						Yes	** NA **			None
4	FFTH-1						Yes	** NA **			None
5	FFTH-2						Yes	** NA **			None
6	FFTH-3						Yes	** NA **			None
7	MP-1						Yes	** NA **			None
8	MP-3						Yes	** NA **			None
9	SA-1	BenPIN					Yes	** NA **			None
10	SF2-BH		BenPIN				Yes	** NA **			None
11	SF2-TH		BenPIN				Yes	** NA **			None
12	SF3-BH		BenPIN				Yes	** NA **			None
13	SF3-TH		BenPIN				Yes	** NA **			None
14	D1	BenPIN	BenPIN				Yes	** NA **			None
15	D2	BenPIN	BenPIN				Yes	** NA **			None
16	D3	BenPIN	BenPIN				Yes	** NA **			None
17	D4	BenPIN	BenPIN				Yes	** NA **			None
18	V1	BenPIN	BenPIN				Yes	** NA **			None
19	V2	BenPIN	BenPIN				Yes	** NA **			None
20	V4	BenPIN	BenPIN				Yes	** NA **			None
21	V5	BenPIN	BenPIN				Yes	** NA **			None
22	V3	BenPIN	BenPIN				Yes	** NA **			None
23	V6	BenPIN	BenPIN				Yes	** NA **			None
24	MP-2B						Yes	** NA **			None
25	MP-2A						Yes	** NA **			None
26	M30						Yes	** NA **			None
27	M31						Yes	** NA **			None
28	M28						Yes	** NA **			None
29	M29						Yes	** NA **			None
30	M30A						Yes	** NA **			None
31	M31A						Yes	** NA **			None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torq...	Kyy	Kzz	Cb	Functi...
1	FFBH-1	Face Horiz	1.666						2.1	2.1		Lateral
2	FFBH-2	Face Horiz	8.667						1	1		Lateral
3	FFBH-3	Face Horiz	1.666						2.1	2.1		Lateral
4	FFTH-1	Face Horiz	1.666						2.1	2.1		Lateral
5	FFTH-2	Face Horiz	8.667						1	1		Lateral
6	FFTH-3	Face Horiz	1.666						2.1	2.1		Lateral
7	MP-1	Mount Pipe 1	6	Segment	Segment				2.1	2.1		Lateral
8	MP-3	Mount Pipe 1	5	Segment	Segment				2.1	2.1		Lateral
9	SA-1	Stabilizer	4.519						1	1		Lateral
10	SF2-BH	Support Arm	5.921		2.417				1	1		Lateral
11	SF2-TH	Support Arm	5.921		2.417				1	1		Lateral
12	SF3-BH	Support Arm	5.921		2.417				1	1		Lateral
13	SF3-TH	Support Arm	5.921		2.417				1	1		Lateral
14	D1	Support Br...	4.05						1	1		Lateral
15	D2	Support Br...	4.05						1	1		Lateral
16	D3	Support Br...	4.05						1	1		Lateral
17	D4	Support Br...	4.05						1	1		Lateral
18	V1	Support Br...	3.25						1	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torq...	Kyy	Kzz	Cb	Functi...
19	V2	Support Br...	3.25						1	1		Lateral
20	V4	Support Br...	3.25						1	1		Lateral
21	V5	Support Br...	3.25						1	1		Lateral
22	V3	Support Br...	3.25						1	1		Lateral
23	V6	Support Br...	3.25						1	1		Lateral
24	MP-2B	Mount Pipe 1	6	Segment	Segment				2.1	2.1		Lateral
25	MP-2A	Mount Pipe 1	5	Segment	Segment				2.1	2.1		Lateral
26	M30	MP Cxn	.5						1	1		Lateral
27	M31	MP Cxn	.5						1	1		Lateral
28	M28	MP Cxn	.5						1	1		Lateral
29	M29	MP Cxn	.5						1	1		Lateral
30	M30A	MP Cxn	.5						1	1		Lateral
31	M31A	MP Cxn	.5						1	1		Lateral
32	M32	MP Cxn	.5						1	1		Lateral
33	M33	MP Cxn	.5						1	1		Lateral

Cold Formed Steel Design Parameters

Label	Shape	Lengt...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp b...	Kyy	Kzz	Cm-yy	Cm-zz	Cb	R	y sway	z sway
No Data to Print ...														

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(M...	Surface(Plate/...
1	Dead	None		-1			11			
2	0 Wind - No Ice	None					11	33		
3	30 Wind - No Ice	None					22	66		
4	45 Wind - No Ice	None					22	66		
5	60 Wind - No Ice	None					22	66		
6	90 Wind - No Ice	None					11	33		
7	120 Wind - No Ice	None					22	66		
8	135 Wind - No Ice	None					22	66		
9	150 Wind - No Ice	None					22	66		
10	180 Wind - No Ice	None					11	33		
11	210 Wind - No Ice	None					22	66		
12	225 Wind - No Ice	None					22	66		
13	240 Wind - No Ice	None					22	66		
14	270 Wind - No Ice	None					11	33		
15	300 Wind - No Ice	None					22	66		
16	315 Wind - No Ice	None					22	66		
17	330 Wind - No Ice	None					22	66		
18	Ice Weight	None					11	33		
19	0 Wind - Ice	None					11	33		
20	30 Wind - Ice	None					22	66		
21	45 Wind - Ice	None					22	66		
22	60 Wind - Ice	None					22	66		
23	90 Wind - Ice	None					11	33		
24	120 Wind - Ice	None					22	66		
25	135 Wind - Ice	None					22	66		
26	150 Wind - Ice	None					22	66		
27	180 Wind - Ice	None					11	33		
28	210 Wind - Ice	None					22	66		
29	225 Wind - Ice	None					22	66		
30	240 Wind - Ice	None					22	66		
31	270 Wind - Ice	None					11	33		
32	300 Wind - Ice	None					22	66		

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(M...	Surface(Plate/...
33	315 Wind - Ice	None					22	66		
34	330 Wind - Ice	None					22	66		
35	Lm	None				1				
36	Lv	None				1				
37	Seismic Load X	ELX	-1				11			
38	Seismic Load Z	ELZ			-1		11			

Load Combinations

	Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4D	Yes	Y		1	1.4																				
2	0.9D+1.0 0-Wind	Yes	Y		1	.9	2	1																		
3	0.9D+1.0 30-Wind	Yes	Y		1	.9	3	1																		
4	0.9D+1.0 45-Wind	Yes	Y		1	.9	4	1																		
5	0.9D+1.0 60-Wind	Yes	Y		1	.9	5	1																		
6	0.9D+1.0 90-Wind	Yes	Y		1	.9	6	1																		
7	0.9D+1.0 120-Wind	Yes	Y		1	.9	7	1																		
8	0.9D+1.0 135-Wind	Yes	Y		1	.9	8	1																		
9	0.9D+1.0 150-Wind	Yes	Y		1	.9	9	1																		
10	0.9D+1.0 180-Wind	Yes	Y		1	.9	10	1																		
11	0.9D+1.0 210-Wind	Yes	Y		1	.9	11	1																		
12	0.9D+1.0 225-Wind	Yes	Y		1	.9	12	1																		
13	0.9D+1.0 240-Wind	Yes	Y		1	.9	13	1																		
14	0.9D+1.0 270-Wind	Yes	Y		1	.9	14	1																		
15	0.9D+1.0 300-Wind	Yes	Y		1	.9	15	1																		
16	0.9D+1.0 315-Wind	Yes	Y		1	.9	16	1																		
17	0.9D+1.0 330-Wind	Yes	Y		1	.9	17	1																		
18	1.2D+1.0 0-Wind	Yes	Y		1	1.2	2	1																		
19	1.2D+1.0 30-Wind	Yes	Y		1	1.2	3	1																		
20	1.2D+1.0 45-Wind	Yes	Y		1	1.2	4	1																		
21	1.2D+1.0 60-Wind	Yes	Y		1	1.2	5	1																		
22	1.2D+1.0 90-Wind	Yes	Y		1	1.2	6	1																		
23	1.2D+1.0 120-Wind	Yes	Y		1	1.2	7	1																		
24	1.2D+1.0 135-Wind	Yes	Y		1	1.2	8	1																		
25	1.2D+1.0 150-Wind	Yes	Y		1	1.2	9	1																		
26	1.2D+1.0 180-Wind	Yes	Y		1	1.2	10	1																		
27	1.2D+1.0 210-Wind	Yes	Y		1	1.2	11	1																		
28	1.2D+1.0 225-Wind	Yes	Y		1	1.2	12	1																		
29	1.2D+1.0 240-Wind	Yes	Y		1	1.2	13	1																		
30	1.2D+1.0 270-Wind	Yes	Y		1	1.2	14	1																		
31	1.2D+1.0 300-Wind	Yes	Y		1	1.2	15	1																		
32	1.2D+1.0 315-Wind	Yes	Y		1	1.2	16	1																		
33	1.2D+1.0 330-Wind	Yes	Y		1	1.2	17	1																		
34	1.2D+1.0Di+1.0 0-Wind Ice	Yes	Y		1	1.2	18	1	19	1																
35	1.2D+1.0Di+1.0 30-Wind Ice	Yes	Y		1	1.2	18	1	20	1																
36	1.2D+1.0Di+1.0 45-Wind Ice	Yes	Y		1	1.2	18	1	21	1																
37	1.2D+1.0Di+1.0 60-Wind Ice	Yes	Y		1	1.2	18	1	22	1																
38	1.2D+1.0Di+1.0 90-Wind Ice	Yes	Y		1	1.2	18	1	23	1																
39	1.2D+1.0Di+1.0 120-Wind Ice	Yes	Y		1	1.2	18	1	24	1																
40	1.2D+1.0Di+1.0 135-Wind Ice	Yes	Y		1	1.2	18	1	25	1																
41	1.2D+1.0Di+1.0 150-Wind Ice	Yes	Y		1	1.2	18	1	26	1																
42	1.2D+1.0Di+1.0 180-Wind Ice	Yes	Y		1	1.2	18	1	27	1																
43	1.2D+1.0Di+1.0 210-Wind Ice	Yes	Y		1	1.2	18	1	28	1																
44	1.2D+1.0Di+1.0 225-Wind Ice	Yes	Y		1	1.2	18	1	29	1																
45	1.2D+1.0Di+1.0 240-Wind Ice	Yes	Y		1	1.2	18	1	30	1																
46	1.2D+1.0Di+1.0 270-Wind Ice	Yes	Y		1	1.2	18	1	31	1																

Load Combinations (Continued)

	Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
47	1.2D+1.0Di+1.0 300-Wind Ice	Yes	Y		1	1.2	18	1	32	1																		
48	1.2D+1.0Di+1.0 315-Wind Ice	Yes	Y		1	1.2	18	1	33	1																		
49	1.2D+1.0Di+1.0 330-Wind Ice	Yes	Y		1	1.2	18	1	34	1																		
50	1.2D+1.5Lv	Yes	Y		36	1.5	1	1.2																				
51	1.2D+1.5Lm+1.0 0-Wind	Yes	Y		1	1.2	2	.053	35	1.5																		
52	1.2D+1.5Lm+1.0 30-Wind	Yes	Y		1	1.2	3	.053	35	1.5																		
53	1.2D+1.5Lm+1.0 45-Wind	Yes	Y		1	1.2	4	.053	35	1.5																		
54	1.2D+1.5Lm+1.0 60-Wind	Yes	Y		1	1.2	5	.053	35	1.5																		
55	1.2D+1.5Lm+1.0 90-Wind	Yes	Y		1	1.2	6	.053	35	1.5																		
56	1.2D+1.5Lm+1.0 120-Wind	Yes	Y		1	1.2	7	.053	35	1.5																		
57	1.2D+1.5Lm+1.0 135-Wind	Yes	Y		1	1.2	8	.053	35	1.5																		
58	1.2D+1.5Lm+1.0 150-Wind	Yes	Y		1	1.2	9	.053	35	1.5																		
59	1.2D+1.5Lm+1.0 180-Wind	Yes	Y		1	1.2	10	.053	35	1.5																		
60	1.2D+1.5Lm+1.0 210-Wind	Yes	Y		1	1.2	11	.053	35	1.5																		
61	1.2D+1.5Lm+1.0 225-Wind	Yes	Y		1	1.2	12	.053	35	1.5																		
62	1.2D+1.5Lm+1.0 240-Wind	Yes	Y		1	1.2	13	.053	35	1.5																		
63	1.2D+1.5Lm+1.0 270-Wind	Yes	Y		1	1.2	14	.053	35	1.5																		
64	1.2D+1.5Lm+1.0 300-Wind	Yes	Y		1	1.2	15	.053	35	1.5																		
65	1.2D+1.5Lm+1.0 315-Wind	Yes	Y		1	1.2	16	.053	35	1.5																		
66	1.2D+1.5Lm+1.0 330-Wind	Yes	Y		1	1.2	17	.053	35	1.5																		
67	(1.2+0.2Sds)D+1.0 0 Seismic	Yes	Y		1	1.2	E...	.03	0																			
68	(1.2+0.2Sds)D+1.0 30 Seismic	Yes	Y		1	1.2	E...	.026	E...	.015																		
69	(1.2+0.2Sds)D+1.0 45 Seismic	Yes	Y		1	1.2	E...	.021	E...	.021																		
70	(1.2+0.2Sds)D+1.0 60 Seismic	Yes	Y		1	1.2	E...	.015	E...	.026																		
71	(1.2+0.2Sds)D+1.0 90 Seismic	Yes	Y		1	1.2	0		E...	.03																		
72	(1.2+0.2Sds)D+1.0 120 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	.026																		
73	(1.2+0.2Sds)D+1.0 135 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	.021																		
74	(1.2+0.2Sds)D+1.0 150 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	.015																		
75	(1.2+0.2Sds)D+1.0 180 Seismic	Yes	Y		1	1.2	E...	-.03	0																			
76	(1.2+0.2Sds)D+1.0 210 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	-.0...																		
77	(1.2+0.2Sds)D+1.0 225 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	-.0...																		
78	(1.2+0.2Sds)D+1.0 240 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	-.0...																		
79	(1.2+0.2Sds)D+1.0 270 Seismic	Yes	Y		1	1.2	0		E...	-.03																		
80	(1.2+0.2Sds)D+1.0 300 Seismic	Yes	Y		1	1.2	E...	.015	E...	-.0...																		
81	(1.2+0.2Sds)D+1.0 315 Seismic	Yes	Y		1	1.2	E...	.021	E...	-.0...																		
82	(1.2+0.2Sds)D+1.0 330 Seismic	Yes	Y		1	1.2	E...	.026	E...	-.0...																		
83	(0.9-0.2Sds)*DL+1.0 0 Seismic	Yes	Y		1	.9	E...	.03	0																			
84	(0.9-0.2Sds)*DL+1.0 30 Seismic	Yes	Y		1	.9	E...	.026	E...	.015																		
85	(0.9-0.2Sds)*DL+1.0 Seismic	Yes	Y		1	.9	E...	.021	E...	.021																		
86	(0.9-0.2Sds)*DL+1.0 60 Seismic	Yes	Y		1	.9	E...	.015	E...	.026																		
87	(0.9-0.2Sds)*DL+1.0 90 Seismic	Yes	Y		1	.9	0		E...	.03																		
88	(0.9-0.2Sds)*DL+1.0 120 Seismic	Yes	Y		1	.9	E...	-.0...	E...	.026																		
89	(0.9-0.2Sds)*DL+1.0 135 Seismic	Yes	Y		1	.9	E...	-.0...	E...	.021																		
90	(0.9-0.2Sds)*DL+1.0 150 Seismic	Yes	Y		1	.9	E...	-.0...	E...	.015																		
91	(0.9-0.2Sds)*DL+1.0 180 Seismic	Yes	Y		1	.9	E...	-.03	0																			
92	(0.9-0.2Sds)*DL+1.0 210 Seismic	Yes	Y		1	.9	E...	-.0...	E...	-.0...																		
93	(0.9-0.2Sds)*DL+1.0 225 Seismic	Yes	Y		1	.9	E...	-.0...	E...	-.0...																		
94	(0.9-0.2Sds)*DL+1.0 240 Seismic	Yes	Y		1	.9	E...	-.0...	E...	-.0...																		
95	(0.9-0.2Sds)*DL+1.0 270 Seismic	Yes	Y		1	.9	0		E...	-.03																		
96	(0.9-0.2Sds)*DL+1.0 300 Seismic	Yes	Y		1	.9	E...	.015	E...	-.0...																		
97	(0.9-0.2Sds)*DL+1.0 315 Seismic	Yes	Y		1	.9	E...	.021	E...	-.0...																		
98	(0.9-0.2Sds)*DL+1.0 330 Seismic	Yes	Y		1	.9	E...	.026	E...	-.0...																		

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Joint Loads and Enforced Displacements (BLC 35 : Lm)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/ft, k*s^2*ft)]
1	N30	L	Y	-.5

Joint Loads and Enforced Displacements (BLC 36 : Lv)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/ft, k*s^2*ft)]
1	FF4	L	Y	-.25

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.018	1
2	MP-1	Y	-.016	4
3	MP-2B	Y	-.04	1
4	MP-2A	Y	-.085	3
5	MP-2A	Y	-.072	3
6	MP-3	Y	-.04	1
7	MP-3	Y	-.06	3
8	SF2-TH	Y	-.033	2
9	MP-1	Y	-.018	5
10	MP-2B	Y	-.04	5
11	MP-3	Y	-.04	5

Member Point Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.125	1
2	MP-1	X	-.025	4
3	MP-2B	X	-.287	1
4	MP-2A	X	-.159	3
5	MP-2A	X	-.075	3
6	MP-3	X	-.287	1
7	MP-3	X	-.084	3
8	SF2-TH	X	-.056	2
9	MP-1	X	-.125	5
10	MP-2B	X	-.287	5
11	MP-3	X	-.287	5

Member Point Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.104	1
2	MP-1	X	-.022	4
3	MP-2B	X	-.237	1
4	MP-2A	X	-.134	3
5	MP-2A	X	-.064	3
6	MP-3	X	-.237	1
7	MP-3	X	-.07	3
8	SF2-TH	X	-.048	2
9	MP-1	X	-.104	5
10	MP-2B	X	-.237	5
11	MP-3	X	-.237	5
12	MP-1	Z	-.06	1
13	MP-1	Z	-.012	4
14	MP-2B	Z	-.137	1
15	MP-2A	Z	-.077	3
16	MP-2A	Z	-.037	3
17	MP-3	Z	-.137	1

Member Point Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
18	MP-3	Z	-.04	3
19	SF2-TH	Z	-.028	2
20	MP-1	Z	-.06	5
21	MP-2B	Z	-.137	5
22	MP-3	Z	-.137	5

Member Point Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.076	1
2	MP-1	X	-.017	4
3	MP-2B	X	-.169	1
4	MP-2A	X	-.102	3
5	MP-2A	X	-.05	3
6	MP-3	X	-.169	1
7	MP-3	X	-.052	3
8	SF2-TH	X	-.039	2
9	MP-1	X	-.076	5
10	MP-2B	X	-.169	5
11	MP-3	X	-.169	5
12	MP-1	Z	-.076	1
13	MP-1	Z	-.017	4
14	MP-2B	Z	-.169	1
15	MP-2A	Z	-.102	3
16	MP-2A	Z	-.05	3
17	MP-3	Z	-.169	1
18	MP-3	Z	-.052	3
19	SF2-TH	Z	-.039	2
20	MP-1	Z	-.076	5
21	MP-2B	Z	-.169	5
22	MP-3	Z	-.169	5

Member Point Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.046	1
2	MP-1	X	-.011	4
3	MP-2B	X	-.098	1
4	MP-2A	X	-.065	3
5	MP-2A	X	-.034	3
6	MP-3	X	-.098	1
7	MP-3	X	-.032	3
8	SF2-TH	X	-.028	2
9	MP-1	X	-.046	5
10	MP-2B	X	-.098	5
11	MP-3	X	-.098	5
12	MP-1	Z	-.08	1
13	MP-1	Z	-.02	4
14	MP-2B	Z	-.17	1
15	MP-2A	Z	-.113	3
16	MP-2A	Z	-.059	3
17	MP-3	Z	-.17	1
18	MP-3	Z	-.055	3
19	SF2-TH	Z	-.048	2
20	MP-1	Z	-.08	5
21	MP-2B	Z	-.17	5
22	MP-3	Z	-.17	5

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Member Point Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.069	1
2	MP-1	Z	-.021	4
3	MP-2B	Z	-.134	1
4	MP-2A	Z	-.11	3
5	MP-2A	Z	-.063	3
6	MP-3	Z	-.134	1
7	MP-3	Z	-.05	3
8	SF2-TH	Z	-.056	2
9	MP-1	Z	-.069	5
10	MP-2B	Z	-.134	5
11	MP-3	Z	-.134	5

Member Point Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.037	1
2	MP-1	X	.011	4
3	MP-2B	X	.074	1
4	MP-2A	X	.057	3
5	MP-2A	X	.032	3
6	MP-3	X	.074	1
7	MP-3	X	.026	3
8	SF2-TH	X	.028	2
9	MP-1	X	.037	5
10	MP-2B	X	.074	5
11	MP-3	X	.074	5
12	MP-1	Z	-.064	1
13	MP-1	Z	-.018	4
14	MP-2B	Z	-.128	1
15	MP-2A	Z	-.099	3
16	MP-2A	Z	-.055	3
17	MP-3	Z	-.128	1
18	MP-3	Z	-.046	3
19	SF2-TH	Z	-.048	2
20	MP-1	Z	-.064	5
21	MP-2B	Z	-.128	5
22	MP-3	Z	-.128	5

Member Point Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.061	1
2	MP-1	X	.016	4
3	MP-2B	X	.129	1
4	MP-2A	X	.089	3
5	MP-2A	X	.047	3
6	MP-3	X	.129	1
7	MP-3	X	.043	3
8	SF2-TH	X	.039	2
9	MP-1	X	.061	5
10	MP-2B	X	.129	5
11	MP-3	X	.129	5
12	MP-1	Z	-.061	1
13	MP-1	Z	-.016	4
14	MP-2B	Z	-.129	1
15	MP-2A	Z	-.089	3
16	MP-2A	Z	-.047	3
17	MP-3	Z	-.129	1

Member Point Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
18	MP-3	Z	-.043	3
19	SF2-TH	Z	-.039	2
20	MP-1	Z	-.061	5
21	MP-2B	Z	-.129	5
22	MP-3	Z	-.129	5

Member Point Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.088	1
2	MP-1	X	.02	4
3	MP-2B	X	.195	1
4	MP-2A	X	.121	3
5	MP-2A	X	.061	3
6	MP-3	X	.195	1
7	MP-3	X	.06	3
8	SF2-TH	X	.048	2
9	MP-1	X	.088	5
10	MP-2B	X	.195	5
11	MP-3	X	.195	5
12	MP-1	Z	-.051	1
13	MP-1	Z	-.012	4
14	MP-2B	Z	-.112	1
15	MP-2A	Z	-.07	3
16	MP-2A	Z	-.035	3
17	MP-3	Z	-.112	1
18	MP-3	Z	-.035	3
19	SF2-TH	Z	-.028	2
20	MP-1	Z	-.051	5
21	MP-2B	Z	-.112	5
22	MP-3	Z	-.112	5

Member Point Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.125	1
2	MP-1	X	.025	4
3	MP-2B	X	.287	1
4	MP-2A	X	.159	3
5	MP-2A	X	.075	3
6	MP-3	X	.287	1
7	MP-3	X	.084	3
8	SF2-TH	X	.056	2
9	MP-1	X	.125	5
10	MP-2B	X	.287	5
11	MP-3	X	.287	5

Member Point Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.104	1
2	MP-1	X	.022	4
3	MP-2B	X	.237	1
4	MP-2A	X	.134	3
5	MP-2A	X	.064	3
6	MP-3	X	.237	1
7	MP-3	X	.07	3
8	SF2-TH	X	.048	2

Company : Tower Engineering Professionals, Inc.
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Member Point Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
9	MP-1	X	.104	5
10	MP-2B	X	.237	5
11	MP-3	X	.237	5
12	MP-1	Z	.06	1
13	MP-1	Z	.012	4
14	MP-2B	Z	.137	1
15	MP-2A	Z	.077	3
16	MP-2A	Z	.037	3
17	MP-3	Z	.137	1
18	MP-3	Z	.04	3
19	SF2-TH	Z	.028	2
20	MP-1	Z	.06	5
21	MP-2B	Z	.137	5
22	MP-3	Z	.137	5

Member Point Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.076	1
2	MP-1	X	.017	4
3	MP-2B	X	.169	1
4	MP-2A	X	.102	3
5	MP-2A	X	.05	3
6	MP-3	X	.169	1
7	MP-3	X	.052	3
8	SF2-TH	X	.039	2
9	MP-1	X	.076	5
10	MP-2B	X	.169	5
11	MP-3	X	.169	5
12	MP-1	Z	.076	1
13	MP-1	Z	.017	4
14	MP-2B	Z	.169	1
15	MP-2A	Z	.102	3
16	MP-2A	Z	.05	3
17	MP-3	Z	.169	1
18	MP-3	Z	.052	3
19	SF2-TH	Z	.039	2
20	MP-1	Z	.076	5
21	MP-2B	Z	.169	5
22	MP-3	Z	.169	5

Member Point Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.046	1
2	MP-1	X	.011	4
3	MP-2B	X	.098	1
4	MP-2A	X	.065	3
5	MP-2A	X	.034	3
6	MP-3	X	.098	1
7	MP-3	X	.032	3
8	SF2-TH	X	.028	2
9	MP-1	X	.046	5
10	MP-2B	X	.098	5
11	MP-3	X	.098	5
12	MP-1	Z	.08	1
13	MP-1	Z	.02	4
14	MP-2B	Z	.17	1

Member Point Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP-2A	Z	.113	3
16	MP-2A	Z	.059	3
17	MP-3	Z	.17	1
18	MP-3	Z	.055	3
19	SF2-TH	Z	.048	2
20	MP-1	Z	.08	5
21	MP-2B	Z	.17	5
22	MP-3	Z	.17	5

Member Point Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.069	1
2	MP-1	Z	.021	4
3	MP-2B	Z	.134	1
4	MP-2A	Z	.11	3
5	MP-2A	Z	.063	3
6	MP-3	Z	.134	1
7	MP-3	Z	.05	3
8	SF2-TH	Z	.056	2
9	MP-1	Z	.069	5
10	MP-2B	Z	.134	5
11	MP-3	Z	.134	5

Member Point Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.037	1
2	MP-1	X	-.011	4
3	MP-2B	X	-.074	1
4	MP-2A	X	-.057	3
5	MP-2A	X	-.032	3
6	MP-3	X	-.074	1
7	MP-3	X	-.026	3
8	SF2-TH	X	-.028	2
9	MP-1	X	-.037	5
10	MP-2B	X	-.074	5
11	MP-3	X	-.074	5
12	MP-1	Z	.064	1
13	MP-1	Z	.018	4
14	MP-2B	Z	.128	1
15	MP-2A	Z	.099	3
16	MP-2A	Z	.055	3
17	MP-3	Z	.128	1
18	MP-3	Z	.046	3
19	SF2-TH	Z	.048	2
20	MP-1	Z	.064	5
21	MP-2B	Z	.128	5
22	MP-3	Z	.128	5

Member Point Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.061	1
2	MP-1	X	-.016	4
3	MP-2B	X	-.129	1
4	MP-2A	X	-.089	3
5	MP-2A	X	-.047	3

Company : Tower Engineering Professionals, Inc.
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8:43 AM
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Member Point Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
6	MP-3	X	-.129	1
7	MP-3	X	-.043	3
8	SF2-TH	X	-.039	2
9	MP-1	X	-.061	5
10	MP-2B	X	-.129	5
11	MP-3	X	-.129	5
12	MP-1	Z	.061	1
13	MP-1	Z	.016	4
14	MP-2B	Z	.129	1
15	MP-2A	Z	.089	3
16	MP-2A	Z	.047	3
17	MP-3	Z	.129	1
18	MP-3	Z	.043	3
19	SF2-TH	Z	.039	2
20	MP-1	Z	.061	5
21	MP-2B	Z	.129	5
22	MP-3	Z	.129	5

Member Point Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.088	1
2	MP-1	X	-.02	4
3	MP-2B	X	-.195	1
4	MP-2A	X	-.121	3
5	MP-2A	X	-.061	3
6	MP-3	X	-.195	1
7	MP-3	X	-.06	3
8	SF2-TH	X	-.048	2
9	MP-1	X	-.088	5
10	MP-2B	X	-.195	5
11	MP-3	X	-.195	5
12	MP-1	Z	.051	1
13	MP-1	Z	.012	4
14	MP-2B	Z	.112	1
15	MP-2A	Z	.07	3
16	MP-2A	Z	.035	3
17	MP-3	Z	.112	1
18	MP-3	Z	.035	3
19	SF2-TH	Z	.028	2
20	MP-1	Z	.051	5
21	MP-2B	Z	.112	5
22	MP-3	Z	.112	5

Member Point Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.055	1
2	MP-1	Y	-.022	4
3	MP-2B	Y	-.119	1
4	MP-2A	Y	-.097	3
5	MP-2A	Y	-.06	3
6	MP-3	Y	-.119	1
7	MP-3	Y	-.055	3
8	SF2-TH	Y	-.064	2
9	MP-1	Y	-.055	5
10	MP-2B	Y	-.119	5
11	MP-3	Y	-.119	5

Member Point Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.026	1
2	MP-1	X	-.007	4
3	MP-2B	X	-.054	1
4	MP-2A	X	-.033	3
5	MP-2A	X	-.017	3
6	MP-3	X	-.054	1
7	MP-3	X	-.019	3
8	SF2-TH	X	-.012	2
9	MP-1	X	-.026	5
10	MP-2B	X	-.054	5
11	MP-3	X	-.054	5

Member Point Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.021	1
2	MP-1	X	-.006	4
3	MP-2B	X	-.044	1
4	MP-2A	X	-.028	3
5	MP-2A	X	-.015	3
6	MP-3	X	-.044	1
7	MP-3	X	-.016	3
8	SF2-TH	X	-.01	2
9	MP-1	X	-.021	5
10	MP-2B	X	-.044	5
11	MP-3	X	-.044	5
12	MP-1	Z	-.012	1
13	MP-1	Z	-.004	4
14	MP-2B	Z	-.025	1
15	MP-2A	Z	-.016	3
16	MP-2A	Z	-.008	3
17	MP-3	Z	-.025	1
18	MP-3	Z	-.009	3
19	SF2-TH	Z	-.006	2
20	MP-1	Z	-.012	5
21	MP-2B	Z	-.025	5
22	MP-3	Z	-.025	5

Member Point Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.016	1
2	MP-1	X	-.005	4
3	MP-2B	X	-.032	1
4	MP-2A	X	-.021	3
5	MP-2A	X	-.012	3
6	MP-3	X	-.032	1
7	MP-3	X	-.012	3
8	SF2-TH	X	-.008	2
9	MP-1	X	-.016	5
10	MP-2B	X	-.032	5
11	MP-3	X	-.032	5
12	MP-1	Z	-.016	1
13	MP-1	Z	-.005	4
14	MP-2B	Z	-.032	1
15	MP-2A	Z	-.021	3
16	MP-2A	Z	-.012	3
17	MP-3	Z	-.032	1

Company : Tower Engineering Professionals, Inc.
Designer : NPD
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Sept 10, 2019
8:43 AM
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Member Point Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
18	MP-3	Z	-.012	3
19	SF2-TH	Z	-.008	2
20	MP-1	Z	-.016	5
21	MP-2B	Z	-.032	5
22	MP-3	Z	-.032	5

Member Point Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.01	1
2	MP-1	X	-.003	4
3	MP-2B	X	-.019	1
4	MP-2A	X	-.014	3
5	MP-2A	X	-.008	3
6	MP-3	X	-.019	1
7	MP-3	X	-.008	3
8	SF2-TH	X	-.006	2
9	MP-1	X	-.01	5
10	MP-2B	X	-.019	5
11	MP-3	X	-.019	5
12	MP-1	Z	-.017	1
13	MP-1	Z	-.006	4
14	MP-2B	Z	-.033	1
15	MP-2A	Z	-.024	3
16	MP-2A	Z	-.014	3
17	MP-3	Z	-.033	1
18	MP-3	Z	-.013	3
19	SF2-TH	Z	-.01	2
20	MP-1	Z	-.017	5
21	MP-2B	Z	-.033	5
22	MP-3	Z	-.033	5

Member Point Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.016	1
2	MP-1	Z	-.006	4
3	MP-2B	Z	-.027	1
4	MP-2A	Z	-.024	3
5	MP-2A	Z	-.015	3
6	MP-3	Z	-.027	1
7	MP-3	Z	-.012	3
8	SF2-TH	Z	-.012	2
9	MP-1	Z	-.016	5
10	MP-2B	Z	-.027	5
11	MP-3	Z	-.027	5

Member Point Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.009	1
2	MP-1	X	.003	4
3	MP-2B	X	.015	1
4	MP-2A	X	.012	3
5	MP-2A	X	.008	3
6	MP-3	X	.015	1
7	MP-3	X	.007	3
8	SF2-TH	X	.006	2

Member Point Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
9	MP-1	X	.009	5
10	MP-2B	X	.015	5
11	MP-3	X	.015	5
12	MP-1	Z	-.015	1
13	MP-1	Z	-.006	4
14	MP-2B	Z	-.026	1
15	MP-2A	Z	-.022	3
16	MP-2A	Z	-.013	3
17	MP-3	Z	-.026	1
18	MP-3	Z	-.011	3
19	SF2-TH	Z	-.01	2
20	MP-1	Z	-.015	5
21	MP-2B	Z	-.026	5
22	MP-3	Z	-.026	5

Member Point Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.014	1
2	MP-1	X	.005	4
3	MP-2B	X	.025	1
4	MP-2A	X	.019	3
5	MP-2A	X	.011	3
6	MP-3	X	.025	1
7	MP-3	X	.01	3
8	SF2-TH	X	.008	2
9	MP-1	X	.014	5
10	MP-2B	X	.025	5
11	MP-3	X	.025	5
12	MP-1	Z	-.014	1
13	MP-1	Z	-.005	4
14	MP-2B	Z	-.025	1
15	MP-2A	Z	-.019	3
16	MP-2A	Z	-.011	3
17	MP-3	Z	-.025	1
18	MP-3	Z	-.01	3
19	SF2-TH	Z	-.008	2
20	MP-1	Z	-.014	5
21	MP-2B	Z	-.025	5
22	MP-3	Z	-.025	5

Member Point Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.019	1
2	MP-1	X	.006	4
3	MP-2B	X	.037	1
4	MP-2A	X	.025	3
5	MP-2A	X	.014	3
6	MP-3	X	.037	1
7	MP-3	X	.014	3
8	SF2-TH	X	.01	2
9	MP-1	X	.019	5
10	MP-2B	X	.037	5
11	MP-3	X	.037	5
12	MP-1	Z	-.011	1
13	MP-1	Z	-.003	4
14	MP-2B	Z	-.021	1

Company : Tower Engineering Professionals, Inc.
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Member Point Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP-2A	Z	-.015	3
16	MP-2A	Z	-.008	3
17	MP-3	Z	-.021	1
18	MP-3	Z	-.008	3
19	SF2-TH	Z	-.006	2
20	MP-1	Z	-.011	5
21	MP-2B	Z	-.021	5
22	MP-3	Z	-.021	5

Member Point Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.026	1
2	MP-1	X	.007	4
3	MP-2B	X	.054	1
4	MP-2A	X	.033	3
5	MP-2A	X	.017	3
6	MP-3	X	.054	1
7	MP-3	X	.019	3
8	SF2-TH	X	.012	2
9	MP-1	X	.026	5
10	MP-2B	X	.054	5
11	MP-3	X	.054	5

Member Point Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.021	1
2	MP-1	X	.006	4
3	MP-2B	X	.044	1
4	MP-2A	X	.028	3
5	MP-2A	X	.015	3
6	MP-3	X	.044	1
7	MP-3	X	.016	3
8	SF2-TH	X	.01	2
9	MP-1	X	.021	5
10	MP-2B	X	.044	5
11	MP-3	X	.044	5
12	MP-1	Z	.012	1
13	MP-1	Z	.004	4
14	MP-2B	Z	.025	1
15	MP-2A	Z	.016	3
16	MP-2A	Z	.008	3
17	MP-3	Z	.025	1
18	MP-3	Z	.009	3
19	SF2-TH	Z	.006	2
20	MP-1	Z	.012	5
21	MP-2B	Z	.025	5
22	MP-3	Z	.025	5

Member Point Loads (BLC 29 : 225 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.016	1
2	MP-1	X	.005	4
3	MP-2B	X	.032	1
4	MP-2A	X	.021	3
5	MP-2A	X	.012	3

Member Point Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
6	MP-3	X	.032	1
7	MP-3	X	.012	3
8	SF2-TH	X	.008	2
9	MP-1	X	.016	5
10	MP-2B	X	.032	5
11	MP-3	X	.032	5
12	MP-1	Z	.016	1
13	MP-1	Z	.005	4
14	MP-2B	Z	.032	1
15	MP-2A	Z	.021	3
16	MP-2A	Z	.012	3
17	MP-3	Z	.032	1
18	MP-3	Z	.012	3
19	SF2-TH	Z	.008	2
20	MP-1	Z	.016	5
21	MP-2B	Z	.032	5
22	MP-3	Z	.032	5

Member Point Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.01	1
2	MP-1	X	.003	4
3	MP-2B	X	.019	1
4	MP-2A	X	.014	3
5	MP-2A	X	.008	3
6	MP-3	X	.019	1
7	MP-3	X	.008	3
8	SF2-TH	X	.006	2
9	MP-1	X	.01	5
10	MP-2B	X	.019	5
11	MP-3	X	.019	5
12	MP-1	Z	.017	1
13	MP-1	Z	.006	4
14	MP-2B	Z	.033	1
15	MP-2A	Z	.024	3
16	MP-2A	Z	.014	3
17	MP-3	Z	.033	1
18	MP-3	Z	.013	3
19	SF2-TH	Z	.01	2
20	MP-1	Z	.017	5
21	MP-2B	Z	.033	5
22	MP-3	Z	.033	5

Member Point Loads (BLC 31 : 270 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.016	1
2	MP-1	Z	.006	4
3	MP-2B	Z	.027	1
4	MP-2A	Z	.024	3
5	MP-2A	Z	.015	3
6	MP-3	Z	.027	1
7	MP-3	Z	.012	3
8	SF2-TH	Z	.012	2
9	MP-1	Z	.016	5
10	MP-2B	Z	.027	5
11	MP-3	Z	.027	5

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Member Point Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.009	1
2	MP-1	X	-.003	4
3	MP-2B	X	-.015	1
4	MP-2A	X	-.012	3
5	MP-2A	X	-.008	3
6	MP-3	X	-.015	1
7	MP-3	X	-.007	3
8	SF2-TH	X	-.006	2
9	MP-1	X	-.009	5
10	MP-2B	X	-.015	5
11	MP-3	X	-.015	5
12	MP-1	Z	.015	1
13	MP-1	Z	.006	4
14	MP-2B	Z	.026	1
15	MP-2A	Z	.022	3
16	MP-2A	Z	.013	3
17	MP-3	Z	.026	1
18	MP-3	Z	.011	3
19	SF2-TH	Z	.01	2
20	MP-1	Z	.015	5
21	MP-2B	Z	.026	5
22	MP-3	Z	.026	5

Member Point Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.014	1
2	MP-1	X	-.005	4
3	MP-2B	X	-.025	1
4	MP-2A	X	-.019	3
5	MP-2A	X	-.011	3
6	MP-3	X	-.025	1
7	MP-3	X	-.01	3
8	SF2-TH	X	-.008	2
9	MP-1	X	-.014	5
10	MP-2B	X	-.025	5
11	MP-3	X	-.025	5
12	MP-1	Z	.014	1
13	MP-1	Z	.005	4
14	MP-2B	Z	.025	1
15	MP-2A	Z	.019	3
16	MP-2A	Z	.011	3
17	MP-3	Z	.025	1
18	MP-3	Z	.01	3
19	SF2-TH	Z	.008	2
20	MP-1	Z	.014	5
21	MP-2B	Z	.025	5
22	MP-3	Z	.025	5

Member Point Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.019	1
2	MP-1	X	-.006	4
3	MP-2B	X	-.037	1
4	MP-2A	X	-.025	3
5	MP-2A	X	-.014	3
6	MP-3	X	-.037	1

Member Point Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
7	MP-3	X	-.014	3
8	SF2-TH	X	-.01	2
9	MP-1	X	-.019	5
10	MP-2B	X	-.037	5
11	MP-3	X	-.037	5
12	MP-1	Z	.011	1
13	MP-1	Z	.003	4
14	MP-2B	Z	.021	1
15	MP-2A	Z	.015	3
16	MP-2A	Z	.008	3
17	MP-3	Z	.021	1
18	MP-3	Z	.008	3
19	SF2-TH	Z	.006	2
20	MP-1	Z	.011	5
21	MP-2B	Z	.021	5
22	MP-3	Z	.021	5

Member Point Loads (BLC 37 : Seismic Load X)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.018	1
2	MP-1	X	-.016	4
3	MP-2B	X	-.04	1
4	MP-2A	X	-.085	3
5	MP-2A	X	-.072	3
6	MP-3	X	-.04	1
7	MP-3	X	-.06	3
8	SF2-TH	X	-.033	2
9	MP-1	X	-.018	5
10	MP-2B	X	-.04	5
11	MP-3	X	-.04	5

Member Point Loads (BLC 38 : Seismic Load Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.018	1
2	MP-1	Z	-.016	4
3	MP-2B	Z	-.04	1
4	MP-2A	Z	-.085	3
5	MP-2A	Z	-.072	3
6	MP-3	Z	-.04	1
7	MP-3	Z	-.06	3
8	SF2-TH	Z	-.033	2
9	MP-1	Z	-.018	5
10	MP-2B	Z	-.04	5
11	MP-3	Z	-.04	5

Member Distributed Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.012	-.012	0	%100
2	FFBH-2	X	-.012	-.012	0	%100
3	FFBH-3	X	-.012	-.012	0	%100
4	FFTH-1	X	-.012	-.012	0	%100
5	FFTH-2	X	-.012	-.012	0	%100
6	FFTH-3	X	-.012	-.012	0	%100
7	MP-1	X	-.011	-.011	0	%100

Member Distributed Loads (BLC 2 : 0 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
8	MP-3	X	-.011	-.011	0	%100
9	SA-1	X	-.005	-.005	0	%100
10	SF2-BH	X	-.008	-.008	0	%100
11	SF2-TH	X	-.008	-.008	0	%100
12	SF3-BH	X	-.008	-.008	0	%100
13	SF3-TH	X	-.008	-.008	0	%100
14	D1	X	-.007	-.007	0	%100
15	D2	X	-.007	-.007	0	%100
16	D3	X	-.007	-.007	0	%100
17	D4	X	-.007	-.007	0	%100
18	V1	X	-.007	-.007	0	%100
19	V2	X	-.007	-.007	0	%100
20	V4	X	-.007	-.007	0	%100
21	V5	X	-.007	-.007	0	%100
22	V3	X	-.009	-.009	0	%100
23	V6	X	-.009	-.009	0	%100
24	MP-2B	X	-.011	-.011	0	%100
25	MP-2A	X	-.011	-.011	0	%100
26	M30	X	0	0	0	%100
27	M31	X	0	0	0	%100
28	M28	X	0	0	0	%100
29	M29	X	0	0	0	%100
30	M30A	X	0	0	0	%100
31	M31A	X	0	0	0	%100
32	M32	X	0	0	0	%100
33	M33	X	0	0	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.009	-.009	0	%100
2	FFBH-2	X	-.009	-.009	0	%100
3	FFBH-3	X	-.009	-.009	0	%100
4	FFTH-1	X	-.009	-.009	0	%100
5	FFTH-2	X	-.009	-.009	0	%100
6	FFTH-3	X	-.009	-.009	0	%100
7	MP-1	X	-.009	-.009	0	%100
8	MP-3	X	-.009	-.009	0	%100
9	SA-1	X	-.000676	-.000676	0	%100
10	SF2-BH	X	-.009	-.009	0	%100
11	SF2-TH	X	-.009	-.009	0	%100
12	SF3-BH	X	-.003	-.003	0	%100
13	SF3-TH	X	-.003	-.003	0	%100
14	D1	X	-.006	-.006	0	%100
15	D2	X	-.006	-.006	0	%100
16	D3	X	-.006	-.006	0	%100
17	D4	X	-.006	-.006	0	%100
18	V1	X	-.006	-.006	0	%100
19	V2	X	-.006	-.006	0	%100
20	V4	X	-.006	-.006	0	%100
21	V5	X	-.006	-.006	0	%100
22	V3	X	-.008	-.008	0	%100
23	V6	X	-.008	-.008	0	%100
24	MP-2B	X	-.009	-.009	0	%100
25	MP-2A	X	-.009	-.009	0	%100
26	M30	X	-.000725	-.000725	0	%100
27	M31	X	-.000725	-.000725	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
28	M28	X	-.000725	-.000725	0	%100
29	M29	X	-.000725	-.000725	0	%100
30	M30A	X	-.000725	-.000725	0	%100
31	M31A	X	-.000725	-.000725	0	%100
32	M32	X	-.000725	-.000725	0	%100
33	M33	X	-.000725	-.000725	0	%100
34	FFBH-1	Z	-.005	-.005	0	%100
35	FFBH-2	Z	-.005	-.005	0	%100
36	FFBH-3	Z	-.005	-.005	0	%100
37	FFTH-1	Z	-.005	-.005	0	%100
38	FFTH-2	Z	-.005	-.005	0	%100
39	FFTH-3	Z	-.005	-.005	0	%100
40	MP-1	Z	-.005	-.005	0	%100
41	MP-3	Z	-.005	-.005	0	%100
42	SA-1	Z	-.000434	-.000434	0	%100
43	SF2-BH	Z	-.005	-.005	0	%100
44	SF2-TH	Z	-.005	-.005	0	%100
45	SF3-BH	Z	-.001	-.001	0	%100
46	SF3-TH	Z	-.001	-.001	0	%100
47	D1	Z	-.003	-.003	0	%100
48	D2	Z	-.003	-.003	0	%100
49	D3	Z	-.003	-.003	0	%100
50	D4	Z	-.003	-.003	0	%100
51	V1	Z	-.003	-.003	0	%100
52	V2	Z	-.003	-.003	0	%100
53	V4	Z	-.003	-.003	0	%100
54	V5	Z	-.003	-.003	0	%100
55	V3	Z	-.005	-.005	0	%100
56	V6	Z	-.005	-.005	0	%100
57	MP-2B	Z	-.005	-.005	0	%100
58	MP-2A	Z	-.005	-.005	0	%100
59	M30	Z	-.000683	-.000683	0	%100
60	M31	Z	-.000683	-.000683	0	%100
61	M28	Z	-.000683	-.000683	0	%100
62	M29	Z	-.000683	-.000683	0	%100
63	M30A	Z	-.000683	-.000683	0	%100
64	M31A	Z	-.000683	-.000683	0	%100
65	M32	Z	-.000683	-.000683	0	%100
66	M33	Z	-.000683	-.000683	0	%100

Member Distributed Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.006	-.006	0	%100
2	FFBH-2	X	-.006	-.006	0	%100
3	FFBH-3	X	-.006	-.006	0	%100
4	FFTH-1	X	-.006	-.006	0	%100
5	FFTH-2	X	-.006	-.006	0	%100
6	FFTH-3	X	-.006	-.006	0	%100
7	MP-1	X	-.008	-.008	0	%100
8	MP-3	X	-.008	-.008	0	%100
9	SA-1	X	-.000869	-.000869	0	%100
10	SF2-BH	X	-.007	-.007	0	%100
11	SF2-TH	X	-.007	-.007	0	%100
12	SF3-BH	X	-.000259	-.000259	0	%100
13	SF3-TH	X	-.000259	-.000259	0	%100
14	D1	X	-.005	-.005	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
Checked By: WHW

Member Distributed Loads (BLC 4 : 45 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
15	D2	X	-.005	-.005	0	%100
16	D3	X	-.005	-.005	0	%100
17	D4	X	-.005	-.005	0	%100
18	V1	X	-.005	-.005	0	%100
19	V2	X	-.005	-.005	0	%100
20	V4	X	-.005	-.005	0	%100
21	V5	X	-.005	-.005	0	%100
22	V3	X	-.006	-.006	0	%100
23	V6	X	-.006	-.006	0	%100
24	MP-2B	X	-.008	-.008	0	%100
25	MP-2A	X	-.008	-.008	0	%100
26	M30	X	-.000837	-.000837	0	%100
27	M31	X	-.000837	-.000837	0	%100
28	M28	X	-.000837	-.000837	0	%100
29	M29	X	-.000837	-.000837	0	%100
30	M30A	X	-.000837	-.000837	0	%100
31	M31A	X	-.000837	-.000837	0	%100
32	M32	X	-.000837	-.000837	0	%100
33	M33	X	-.000837	-.000837	0	%100
34	FFBH-1	Z	-.006	-.006	0	%100
35	FFBH-2	Z	-.006	-.006	0	%100
36	FFBH-3	Z	-.006	-.006	0	%100
37	FFTH-1	Z	-.006	-.006	0	%100
38	FFTH-2	Z	-.006	-.006	0	%100
39	FFTH-3	Z	-.006	-.006	0	%100
40	MP-1	Z	-.008	-.008	0	%100
41	MP-3	Z	-.008	-.008	0	%100
42	SA-1	Z	-.000966	-.000966	0	%100
43	SF2-BH	Z	-.007	-.007	0	%100
44	SF2-TH	Z	-.007	-.007	0	%100
45	SF3-BH	Z	-.000252	-.000252	0	%100
46	SF3-TH	Z	-.000252	-.000252	0	%100
47	D1	Z	-.005	-.005	0	%100
48	D2	Z	-.005	-.005	0	%100
49	D3	Z	-.005	-.005	0	%100
50	D4	Z	-.005	-.005	0	%100
51	V1	Z	-.005	-.005	0	%100
52	V2	Z	-.005	-.005	0	%100
53	V4	Z	-.005	-.005	0	%100
54	V5	Z	-.005	-.005	0	%100
55	V3	Z	-.006	-.006	0	%100
56	V6	Z	-.006	-.006	0	%100
57	MP-2B	Z	-.008	-.008	0	%100
58	MP-2A	Z	-.008	-.008	0	%100
59	M30	Z	-.001	-.001	0	%100
60	M31	Z	-.001	-.001	0	%100
61	M28	Z	-.001	-.001	0	%100
62	M29	Z	-.001	-.001	0	%100
63	M30A	Z	-.001	-.001	0	%100
64	M31A	Z	-.001	-.001	0	%100
65	M32	Z	-.001	-.001	0	%100
66	M33	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.003	-.003	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
2	FFBH-2	X	-.003	-.003	0	%100
3	FFBH-3	X	-.003	-.003	0	%100
4	FFTH-1	X	-.003	-.003	0	%100
5	FFTH-2	X	-.003	-.003	0	%100
6	FFTH-3	X	-.003	-.003	0	%100
7	MP-1	X	-.005	-.005	0	%100
8	MP-3	X	-.005	-.005	0	%100
9	SA-1	X	-.002	-.002	0	%100
10	SF2-BH	X	-.005	-.005	0	%100
11	SF2-TH	X	-.005	-.005	0	%100
12	SF3-BH	X	-.001	-.001	0	%100
13	SF3-TH	X	-.001	-.001	0	%100
14	D1	X	-.003	-.003	0	%100
15	D2	X	-.003	-.003	0	%100
16	D3	X	-.003	-.003	0	%100
17	D4	X	-.003	-.003	0	%100
18	V1	X	-.003	-.003	0	%100
19	V2	X	-.003	-.003	0	%100
20	V4	X	-.003	-.003	0	%100
21	V5	X	-.003	-.003	0	%100
22	V3	X	-.005	-.005	0	%100
23	V6	X	-.005	-.005	0	%100
24	MP-2B	X	-.005	-.005	0	%100
25	MP-2A	X	-.005	-.005	0	%100
26	M30	X	-.000725	-.000725	0	%100
27	M31	X	-.000725	-.000725	0	%100
28	M28	X	-.000725	-.000725	0	%100
29	M29	X	-.000725	-.000725	0	%100
30	M30A	X	-.000725	-.000725	0	%100
31	M31A	X	-.000725	-.000725	0	%100
32	M32	X	-.000725	-.000725	0	%100
33	M33	X	-.000725	-.000725	0	%100
34	FFBH-1	Z	-.005	-.005	0	%100
35	FFBH-2	Z	-.005	-.005	0	%100
36	FFBH-3	Z	-.005	-.005	0	%100
37	FFTH-1	Z	-.005	-.005	0	%100
38	FFTH-2	Z	-.005	-.005	0	%100
39	FFTH-3	Z	-.005	-.005	0	%100
40	MP-1	Z	-.009	-.009	0	%100
41	MP-3	Z	-.009	-.009	0	%100
42	SA-1	Z	-.003	-.003	0	%100
43	SF2-BH	Z	-.008	-.008	0	%100
44	SF2-TH	Z	-.008	-.008	0	%100
45	SF3-BH	Z	-.002	-.002	0	%100
46	SF3-TH	Z	-.002	-.002	0	%100
47	D1	Z	-.006	-.006	0	%100
48	D2	Z	-.006	-.006	0	%100
49	D3	Z	-.006	-.006	0	%100
50	D4	Z	-.006	-.006	0	%100
51	V1	Z	-.006	-.006	0	%100
52	V2	Z	-.006	-.006	0	%100
53	V4	Z	-.006	-.006	0	%100
54	V5	Z	-.006	-.006	0	%100
55	V3	Z	-.008	-.008	0	%100
56	V6	Z	-.008	-.008	0	%100
57	MP-2B	Z	-.009	-.009	0	%100
58	MP-2A	Z	-.009	-.009	0	%100

Company : Tower Engineering Professionals, Inc.
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Sept 10, 2019
8:43 AM
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Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
59	M30	Z	-.002	-.002	0	%100
60	M31	Z	-.002	-.002	0	%100
61	M28	Z	-.002	-.002	0	%100
62	M29	Z	-.002	-.002	0	%100
63	M30A	Z	-.002	-.002	0	%100
64	M31A	Z	-.002	-.002	0	%100
65	M32	Z	-.002	-.002	0	%100
66	M33	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	Z	0	0	0	%100
2	FFBH-2	Z	0	0	0	%100
3	FFBH-3	Z	0	0	0	%100
4	FFTH-1	Z	0	0	0	%100
5	FFTH-2	Z	0	0	0	%100
6	FFTH-3	Z	0	0	0	%100
7	MP-1	Z	-.011	-.011	0	%100
8	MP-3	Z	-.011	-.011	0	%100
9	SA-1	Z	-.007	-.007	0	%100
10	SF2-BH	Z	-.007	-.007	0	%100
11	SF2-TH	Z	-.007	-.007	0	%100
12	SF3-BH	Z	-.007	-.007	0	%100
13	SF3-TH	Z	-.007	-.007	0	%100
14	D1	Z	-.007	-.007	0	%100
15	D2	Z	-.007	-.007	0	%100
16	D3	Z	-.007	-.007	0	%100
17	D4	Z	-.007	-.007	0	%100
18	V1	Z	-.007	-.007	0	%100
19	V2	Z	-.007	-.007	0	%100
20	V4	Z	-.007	-.007	0	%100
21	V5	Z	-.007	-.007	0	%100
22	V3	Z	-.009	-.009	0	%100
23	V6	Z	-.009	-.009	0	%100
24	MP-2B	Z	-.011	-.011	0	%100
25	MP-2A	Z	-.011	-.011	0	%100
26	M30	Z	-.003	-.003	0	%100
27	M31	Z	-.003	-.003	0	%100
28	M28	Z	-.003	-.003	0	%100
29	M29	Z	-.003	-.003	0	%100
30	M30A	Z	-.003	-.003	0	%100
31	M31A	Z	-.003	-.003	0	%100
32	M32	Z	-.003	-.003	0	%100
33	M33	Z	-.003	-.003	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.003	.003	0	%100
2	FFBH-2	X	.003	.003	0	%100
3	FFBH-3	X	.003	.003	0	%100
4	FFTH-1	X	.003	.003	0	%100
5	FFTH-2	X	.003	.003	0	%100
6	FFTH-3	X	.003	.003	0	%100
7	MP-1	X	.005	.005	0	%100
8	MP-3	X	.005	.005	0	%100
9	SA-1	X	.004	.004	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
10	SF2-BH	X	.001	.001	0	%100
11	SF2-TH	X	.001	.001	0	%100
12	SF3-BH	X	.005	.005	0	%100
13	SF3-TH	X	.005	.005	0	%100
14	D1	X	.003	.003	0	%100
15	D2	X	.003	.003	0	%100
16	D3	X	.003	.003	0	%100
17	D4	X	.003	.003	0	%100
18	V1	X	.003	.003	0	%100
19	V2	X	.003	.003	0	%100
20	V4	X	.003	.003	0	%100
21	V5	X	.003	.003	0	%100
22	V3	X	.005	.005	0	%100
23	V6	X	.005	.005	0	%100
24	MP-2B	X	.005	.005	0	%100
25	MP-2A	X	.005	.005	0	%100
26	M30	X	.000725	.000725	0	%100
27	M31	X	.000725	.000725	0	%100
28	M28	X	.000725	.000725	0	%100
29	M29	X	.000725	.000725	0	%100
30	M30A	X	.000725	.000725	0	%100
31	M31A	X	.000725	.000725	0	%100
32	M32	X	.000725	.000725	0	%100
33	M33	X	.000725	.000725	0	%100
34	FFBH-1	Z	-.005	-.005	0	%100
35	FFBH-2	Z	-.005	-.005	0	%100
36	FFBH-3	Z	-.005	-.005	0	%100
37	FFTH-1	Z	-.005	-.005	0	%100
38	FFTH-2	Z	-.005	-.005	0	%100
39	FFTH-3	Z	-.005	-.005	0	%100
40	MP-1	Z	-.009	-.009	0	%100
41	MP-3	Z	-.009	-.009	0	%100
42	SA-1	Z	-.007	-.007	0	%100
43	SF2-BH	Z	-.002	-.002	0	%100
44	SF2-TH	Z	-.002	-.002	0	%100
45	SF3-BH	Z	-.008	-.008	0	%100
46	SF3-TH	Z	-.008	-.008	0	%100
47	D1	Z	-.006	-.006	0	%100
48	D2	Z	-.006	-.006	0	%100
49	D3	Z	-.006	-.006	0	%100
50	D4	Z	-.006	-.006	0	%100
51	V1	Z	-.006	-.006	0	%100
52	V2	Z	-.006	-.006	0	%100
53	V4	Z	-.006	-.006	0	%100
54	V5	Z	-.006	-.006	0	%100
55	V3	Z	-.008	-.008	0	%100
56	V6	Z	-.008	-.008	0	%100
57	MP-2B	Z	-.009	-.009	0	%100
58	MP-2A	Z	-.009	-.009	0	%100
59	M30	Z	-.002	-.002	0	%100
60	M31	Z	-.002	-.002	0	%100
61	M28	Z	-.002	-.002	0	%100
62	M29	Z	-.002	-.002	0	%100
63	M30A	Z	-.002	-.002	0	%100
64	M31A	Z	-.002	-.002	0	%100
65	M32	Z	-.002	-.002	0	%100
66	M33	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.006	.006	0	%100
2	FFBH-2	X	.006	.006	0	%100
3	FFBH-3	X	.006	.006	0	%100
4	FFTH-1	X	.006	.006	0	%100
5	FFTH-2	X	.006	.006	0	%100
6	FFTH-3	X	.006	.006	0	%100
7	MP-1	X	.008	.008	0	%100
8	MP-3	X	.008	.008	0	%100
9	SA-1	X	.005	.005	0	%100
10	SF2-BH	X	.000259	.000259	0	%100
11	SF2-TH	X	.000259	.000259	0	%100
12	SF3-BH	X	.007	.007	0	%100
13	SF3-TH	X	.007	.007	0	%100
14	D1	X	.005	.005	0	%100
15	D2	X	.005	.005	0	%100
16	D3	X	.005	.005	0	%100
17	D4	X	.005	.005	0	%100
18	V1	X	.005	.005	0	%100
19	V2	X	.005	.005	0	%100
20	V4	X	.005	.005	0	%100
21	V5	X	.005	.005	0	%100
22	V3	X	.006	.006	0	%100
23	V6	X	.006	.006	0	%100
24	MP-2B	X	.008	.008	0	%100
25	MP-2A	X	.008	.008	0	%100
26	M30	X	.000837	.000837	0	%100
27	M31	X	.000837	.000837	0	%100
28	M28	X	.000837	.000837	0	%100
29	M29	X	.000837	.000837	0	%100
30	M30A	X	.000837	.000837	0	%100
31	M31A	X	.000837	.000837	0	%100
32	M32	X	.000837	.000837	0	%100
33	M33	X	.000837	.000837	0	%100
34	FFBH-1	Z	-.006	-.006	0	%100
35	FFBH-2	Z	-.006	-.006	0	%100
36	FFBH-3	Z	-.006	-.006	0	%100
37	FFTH-1	Z	-.006	-.006	0	%100
38	FFTH-2	Z	-.006	-.006	0	%100
39	FFTH-3	Z	-.006	-.006	0	%100
40	MP-1	Z	-.008	-.008	0	%100
41	MP-3	Z	-.008	-.008	0	%100
42	SA-1	Z	-.006	-.006	0	%100
43	SF2-BH	Z	-.000252	-.000252	0	%100
44	SF2-TH	Z	-.000252	-.000252	0	%100
45	SF3-BH	Z	-.007	-.007	0	%100
46	SF3-TH	Z	-.007	-.007	0	%100
47	D1	Z	-.005	-.005	0	%100
48	D2	Z	-.005	-.005	0	%100
49	D3	Z	-.005	-.005	0	%100
50	D4	Z	-.005	-.005	0	%100
51	V1	Z	-.005	-.005	0	%100
52	V2	Z	-.005	-.005	0	%100
53	V4	Z	-.005	-.005	0	%100
54	V5	Z	-.005	-.005	0	%100
55	V3	Z	-.006	-.006	0	%100
56	V6	Z	-.006	-.006	0	%100
57	MP-2B	Z	-.008	-.008	0	%100

Member Distributed Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
58	MP-2A	Z	-.008	-.008	0	%100
59	M30	Z	-.001	-.001	0	%100
60	M31	Z	-.001	-.001	0	%100
61	M28	Z	-.001	-.001	0	%100
62	M29	Z	-.001	-.001	0	%100
63	M30A	Z	-.001	-.001	0	%100
64	M31A	Z	-.001	-.001	0	%100
65	M32	Z	-.001	-.001	0	%100
66	M33	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.009	.009	0	%100
2	FFBH-2	X	.009	.009	0	%100
3	FFBH-3	X	.009	.009	0	%100
4	FFTH-1	X	.009	.009	0	%100
5	FFTH-2	X	.009	.009	0	%100
6	FFTH-3	X	.009	.009	0	%100
7	MP-1	X	.009	.009	0	%100
8	MP-3	X	.009	.009	0	%100
9	SA-1	X	.006	.006	0	%100
10	SF2-BH	X	.003	.003	0	%100
11	SF2-TH	X	.003	.003	0	%100
12	SF3-BH	X	.009	.009	0	%100
13	SF3-TH	X	.009	.009	0	%100
14	D1	X	.006	.006	0	%100
15	D2	X	.006	.006	0	%100
16	D3	X	.006	.006	0	%100
17	D4	X	.006	.006	0	%100
18	V1	X	.006	.006	0	%100
19	V2	X	.006	.006	0	%100
20	V4	X	.006	.006	0	%100
21	V5	X	.006	.006	0	%100
22	V3	X	.008	.008	0	%100
23	V6	X	.008	.008	0	%100
24	MP-2B	X	.009	.009	0	%100
25	MP-2A	X	.009	.009	0	%100
26	M30	X	.000725	.000725	0	%100
27	M31	X	.000725	.000725	0	%100
28	M28	X	.000725	.000725	0	%100
29	M29	X	.000725	.000725	0	%100
30	M30A	X	.000725	.000725	0	%100
31	M31A	X	.000725	.000725	0	%100
32	M32	X	.000725	.000725	0	%100
33	M33	X	.000725	.000725	0	%100
34	FFBH-1	Z	-.005	-.005	0	%100
35	FFBH-2	Z	-.005	-.005	0	%100
36	FFBH-3	Z	-.005	-.005	0	%100
37	FFTH-1	Z	-.005	-.005	0	%100
38	FFTH-2	Z	-.005	-.005	0	%100
39	FFTH-3	Z	-.005	-.005	0	%100
40	MP-1	Z	-.005	-.005	0	%100
41	MP-3	Z	-.005	-.005	0	%100
42	SA-1	Z	-.004	-.004	0	%100
43	SF2-BH	Z	-.001	-.001	0	%100
44	SF2-TH	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
45	SF3-BH	Z	-.005	-.005	0	%100
46	SF3-TH	Z	-.005	-.005	0	%100
47	D1	Z	-.003	-.003	0	%100
48	D2	Z	-.003	-.003	0	%100
49	D3	Z	-.003	-.003	0	%100
50	D4	Z	-.003	-.003	0	%100
51	V1	Z	-.003	-.003	0	%100
52	V2	Z	-.003	-.003	0	%100
53	V4	Z	-.003	-.003	0	%100
54	V5	Z	-.003	-.003	0	%100
55	V3	Z	-.005	-.005	0	%100
56	V6	Z	-.005	-.005	0	%100
57	MP-2B	Z	-.005	-.005	0	%100
58	MP-2A	Z	-.005	-.005	0	%100
59	M30	Z	-.000683	-.000683	0	%100
60	M31	Z	-.000683	-.000683	0	%100
61	M28	Z	-.000683	-.000683	0	%100
62	M29	Z	-.000683	-.000683	0	%100
63	M30A	Z	-.000683	-.000683	0	%100
64	M31A	Z	-.000683	-.000683	0	%100
65	M32	Z	-.000683	-.000683	0	%100
66	M33	Z	-.000683	-.000683	0	%100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.012	.012	0	%100
2	FFBH-2	X	.012	.012	0	%100
3	FFBH-3	X	.012	.012	0	%100
4	FFTH-1	X	.012	.012	0	%100
5	FFTH-2	X	.012	.012	0	%100
6	FFTH-3	X	.012	.012	0	%100
7	MP-1	X	.011	.011	0	%100
8	MP-3	X	.011	.011	0	%100
9	SA-1	X	.005	.005	0	%100
10	SF2-BH	X	.008	.008	0	%100
11	SF2-TH	X	.008	.008	0	%100
12	SF3-BH	X	.008	.008	0	%100
13	SF3-TH	X	.008	.008	0	%100
14	D1	X	.007	.007	0	%100
15	D2	X	.007	.007	0	%100
16	D3	X	.007	.007	0	%100
17	D4	X	.007	.007	0	%100
18	V1	X	.007	.007	0	%100
19	V2	X	.007	.007	0	%100
20	V4	X	.007	.007	0	%100
21	V5	X	.007	.007	0	%100
22	V3	X	.009	.009	0	%100
23	V6	X	.009	.009	0	%100
24	MP-2B	X	.011	.011	0	%100
25	MP-2A	X	.011	.011	0	%100
26	M30	X	0	0	0	%100
27	M31	X	0	0	0	%100
28	M28	X	0	0	0	%100
29	M29	X	0	0	0	%100
30	M30A	X	0	0	0	%100
31	M31A	X	0	0	0	%100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
32	M32	X	0	0	0	%100
33	M33	X	0	0	0	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.009	.009	0	%100
2	FFBH-2	X	.009	.009	0	%100
3	FFBH-3	X	.009	.009	0	%100
4	FFTH-1	X	.009	.009	0	%100
5	FFTH-2	X	.009	.009	0	%100
6	FFTH-3	X	.009	.009	0	%100
7	MP-1	X	.009	.009	0	%100
8	MP-3	X	.009	.009	0	%100
9	SA-1	X	.000676	.000676	0	%100
10	SF2-BH	X	.009	.009	0	%100
11	SF2-TH	X	.009	.009	0	%100
12	SF3-BH	X	.003	.003	0	%100
13	SF3-TH	X	.003	.003	0	%100
14	D1	X	.006	.006	0	%100
15	D2	X	.006	.006	0	%100
16	D3	X	.006	.006	0	%100
17	D4	X	.006	.006	0	%100
18	V1	X	.006	.006	0	%100
19	V2	X	.006	.006	0	%100
20	V4	X	.006	.006	0	%100
21	V5	X	.006	.006	0	%100
22	V3	X	.008	.008	0	%100
23	V6	X	.008	.008	0	%100
24	MP-2B	X	.009	.009	0	%100
25	MP-2A	X	.009	.009	0	%100
26	M30	X	.000725	.000725	0	%100
27	M31	X	.000725	.000725	0	%100
28	M28	X	.000725	.000725	0	%100
29	M29	X	.000725	.000725	0	%100
30	M30A	X	.000725	.000725	0	%100
31	M31A	X	.000725	.000725	0	%100
32	M32	X	.000725	.000725	0	%100
33	M33	X	.000725	.000725	0	%100
34	FFBH-1	Z	.005	.005	0	%100
35	FFBH-2	Z	.005	.005	0	%100
36	FFBH-3	Z	.005	.005	0	%100
37	FFTH-1	Z	.005	.005	0	%100
38	FFTH-2	Z	.005	.005	0	%100
39	FFTH-3	Z	.005	.005	0	%100
40	MP-1	Z	.005	.005	0	%100
41	MP-3	Z	.005	.005	0	%100
42	SA-1	Z	.000434	.000434	0	%100
43	SF2-BH	Z	.005	.005	0	%100
44	SF2-TH	Z	.005	.005	0	%100
45	SF3-BH	Z	.001	.001	0	%100
46	SF3-TH	Z	.001	.001	0	%100
47	D1	Z	.003	.003	0	%100
48	D2	Z	.003	.003	0	%100
49	D3	Z	.003	.003	0	%100
50	D4	Z	.003	.003	0	%100
51	V1	Z	.003	.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
Checked By: WHW

Member Distributed Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
52	V2	Z	.003	.003	0	%100
53	V4	Z	.003	.003	0	%100
54	V5	Z	.003	.003	0	%100
55	V3	Z	.005	.005	0	%100
56	V6	Z	.005	.005	0	%100
57	MP-2B	Z	.005	.005	0	%100
58	MP-2A	Z	.005	.005	0	%100
59	M30	Z	.000683	.000683	0	%100
60	M31	Z	.000683	.000683	0	%100
61	M28	Z	.000683	.000683	0	%100
62	M29	Z	.000683	.000683	0	%100
63	M30A	Z	.000683	.000683	0	%100
64	M31A	Z	.000683	.000683	0	%100
65	M32	Z	.000683	.000683	0	%100
66	M33	Z	.000683	.000683	0	%100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.006	.006	0	%100
2	FFBH-2	X	.006	.006	0	%100
3	FFBH-3	X	.006	.006	0	%100
4	FFTH-1	X	.006	.006	0	%100
5	FFTH-2	X	.006	.006	0	%100
6	FFTH-3	X	.006	.006	0	%100
7	MP-1	X	.008	.008	0	%100
8	MP-3	X	.008	.008	0	%100
9	SA-1	X	.000869	.000869	0	%100
10	SF2-BH	X	.007	.007	0	%100
11	SF2-TH	X	.007	.007	0	%100
12	SF3-BH	X	.000259	.000259	0	%100
13	SF3-TH	X	.000259	.000259	0	%100
14	D1	X	.005	.005	0	%100
15	D2	X	.005	.005	0	%100
16	D3	X	.005	.005	0	%100
17	D4	X	.005	.005	0	%100
18	V1	X	.005	.005	0	%100
19	V2	X	.005	.005	0	%100
20	V4	X	.005	.005	0	%100
21	V5	X	.005	.005	0	%100
22	V3	X	.006	.006	0	%100
23	V6	X	.006	.006	0	%100
24	MP-2B	X	.008	.008	0	%100
25	MP-2A	X	.008	.008	0	%100
26	M30	X	.000837	.000837	0	%100
27	M31	X	.000837	.000837	0	%100
28	M28	X	.000837	.000837	0	%100
29	M29	X	.000837	.000837	0	%100
30	M30A	X	.000837	.000837	0	%100
31	M31A	X	.000837	.000837	0	%100
32	M32	X	.000837	.000837	0	%100
33	M33	X	.000837	.000837	0	%100
34	FFBH-1	Z	.006	.006	0	%100
35	FFBH-2	Z	.006	.006	0	%100
36	FFBH-3	Z	.006	.006	0	%100
37	FFTH-1	Z	.006	.006	0	%100
38	FFTH-2	Z	.006	.006	0	%100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
39	FFTH-3	Z	.006	.006	0	%100
40	MP-1	Z	.008	.008	0	%100
41	MP-3	Z	.008	.008	0	%100
42	SA-1	Z	.000966	.000966	0	%100
43	SF2-BH	Z	.007	.007	0	%100
44	SF2-TH	Z	.007	.007	0	%100
45	SF3-BH	Z	.000252	.000252	0	%100
46	SF3-TH	Z	.000252	.000252	0	%100
47	D1	Z	.005	.005	0	%100
48	D2	Z	.005	.005	0	%100
49	D3	Z	.005	.005	0	%100
50	D4	Z	.005	.005	0	%100
51	V1	Z	.005	.005	0	%100
52	V2	Z	.005	.005	0	%100
53	V4	Z	.005	.005	0	%100
54	V5	Z	.005	.005	0	%100
55	V3	Z	.006	.006	0	%100
56	V6	Z	.006	.006	0	%100
57	MP-2B	Z	.008	.008	0	%100
58	MP-2A	Z	.008	.008	0	%100
59	M30	Z	.001	.001	0	%100
60	M31	Z	.001	.001	0	%100
61	M28	Z	.001	.001	0	%100
62	M29	Z	.001	.001	0	%100
63	M30A	Z	.001	.001	0	%100
64	M31A	Z	.001	.001	0	%100
65	M32	Z	.001	.001	0	%100
66	M33	Z	.001	.001	0	%100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.003	.003	0	%100
2	FFBH-2	X	.003	.003	0	%100
3	FFBH-3	X	.003	.003	0	%100
4	FFTH-1	X	.003	.003	0	%100
5	FFTH-2	X	.003	.003	0	%100
6	FFTH-3	X	.003	.003	0	%100
7	MP-1	X	.005	.005	0	%100
8	MP-3	X	.005	.005	0	%100
9	SA-1	X	.002	.002	0	%100
10	SF2-BH	X	.005	.005	0	%100
11	SF2-TH	X	.005	.005	0	%100
12	SF3-BH	X	.001	.001	0	%100
13	SF3-TH	X	.001	.001	0	%100
14	D1	X	.003	.003	0	%100
15	D2	X	.003	.003	0	%100
16	D3	X	.003	.003	0	%100
17	D4	X	.003	.003	0	%100
18	V1	X	.003	.003	0	%100
19	V2	X	.003	.003	0	%100
20	V4	X	.003	.003	0	%100
21	V5	X	.003	.003	0	%100
22	V3	X	.005	.005	0	%100
23	V6	X	.005	.005	0	%100
24	MP-2B	X	.005	.005	0	%100
25	MP-2A	X	.005	.005	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Member Distributed Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
26	M30	X	.000725	.000725	0	%100
27	M31	X	.000725	.000725	0	%100
28	M28	X	.000725	.000725	0	%100
29	M29	X	.000725	.000725	0	%100
30	M30A	X	.000725	.000725	0	%100
31	M31A	X	.000725	.000725	0	%100
32	M32	X	.000725	.000725	0	%100
33	M33	X	.000725	.000725	0	%100
34	FFBH-1	Z	.005	.005	0	%100
35	FFBH-2	Z	.005	.005	0	%100
36	FFBH-3	Z	.005	.005	0	%100
37	FFTH-1	Z	.005	.005	0	%100
38	FFTH-2	Z	.005	.005	0	%100
39	FFTH-3	Z	.005	.005	0	%100
40	MP-1	Z	.009	.009	0	%100
41	MP-3	Z	.009	.009	0	%100
42	SA-1	Z	.003	.003	0	%100
43	SF2-BH	Z	.008	.008	0	%100
44	SF2-TH	Z	.008	.008	0	%100
45	SF3-BH	Z	.002	.002	0	%100
46	SF3-TH	Z	.002	.002	0	%100
47	D1	Z	.006	.006	0	%100
48	D2	Z	.006	.006	0	%100
49	D3	Z	.006	.006	0	%100
50	D4	Z	.006	.006	0	%100
51	V1	Z	.006	.006	0	%100
52	V2	Z	.006	.006	0	%100
53	V4	Z	.006	.006	0	%100
54	V5	Z	.006	.006	0	%100
55	V3	Z	.008	.008	0	%100
56	V6	Z	.008	.008	0	%100
57	MP-2B	Z	.009	.009	0	%100
58	MP-2A	Z	.009	.009	0	%100
59	M30	Z	.002	.002	0	%100
60	M31	Z	.002	.002	0	%100
61	M28	Z	.002	.002	0	%100
62	M29	Z	.002	.002	0	%100
63	M30A	Z	.002	.002	0	%100
64	M31A	Z	.002	.002	0	%100
65	M32	Z	.002	.002	0	%100
66	M33	Z	.002	.002	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	Z	0	0	0	%100
2	FFBH-2	Z	0	0	0	%100
3	FFBH-3	Z	0	0	0	%100
4	FFTH-1	Z	0	0	0	%100
5	FFTH-2	Z	0	0	0	%100
6	FFTH-3	Z	0	0	0	%100
7	MP-1	Z	.011	.011	0	%100
8	MP-3	Z	.011	.011	0	%100
9	SA-1	Z	.007	.007	0	%100
10	SF2-BH	Z	.007	.007	0	%100
11	SF2-TH	Z	.007	.007	0	%100
12	SF3-BH	Z	.007	.007	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
13	SF3-TH	Z	.007	.007	0	%100
14	D1	Z	.007	.007	0	%100
15	D2	Z	.007	.007	0	%100
16	D3	Z	.007	.007	0	%100
17	D4	Z	.007	.007	0	%100
18	V1	Z	.007	.007	0	%100
19	V2	Z	.007	.007	0	%100
20	V4	Z	.007	.007	0	%100
21	V5	Z	.007	.007	0	%100
22	V3	Z	.009	.009	0	%100
23	V6	Z	.009	.009	0	%100
24	MP-2B	Z	.011	.011	0	%100
25	MP-2A	Z	.011	.011	0	%100
26	M30	Z	.003	.003	0	%100
27	M31	Z	.003	.003	0	%100
28	M28	Z	.003	.003	0	%100
29	M29	Z	.003	.003	0	%100
30	M30A	Z	.003	.003	0	%100
31	M31A	Z	.003	.003	0	%100
32	M32	Z	.003	.003	0	%100
33	M33	Z	.003	.003	0	%100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.003	-.003	0	%100
2	FFBH-2	X	-.003	-.003	0	%100
3	FFBH-3	X	-.003	-.003	0	%100
4	FFTH-1	X	-.003	-.003	0	%100
5	FFTH-2	X	-.003	-.003	0	%100
6	FFTH-3	X	-.003	-.003	0	%100
7	MP-1	X	-.005	-.005	0	%100
8	MP-3	X	-.005	-.005	0	%100
9	SA-1	X	-.004	-.004	0	%100
10	SF2-BH	X	-.001	-.001	0	%100
11	SF2-TH	X	-.001	-.001	0	%100
12	SF3-BH	X	-.005	-.005	0	%100
13	SF3-TH	X	-.005	-.005	0	%100
14	D1	X	-.003	-.003	0	%100
15	D2	X	-.003	-.003	0	%100
16	D3	X	-.003	-.003	0	%100
17	D4	X	-.003	-.003	0	%100
18	V1	X	-.003	-.003	0	%100
19	V2	X	-.003	-.003	0	%100
20	V4	X	-.003	-.003	0	%100
21	V5	X	-.003	-.003	0	%100
22	V3	X	-.005	-.005	0	%100
23	V6	X	-.005	-.005	0	%100
24	MP-2B	X	-.005	-.005	0	%100
25	MP-2A	X	-.005	-.005	0	%100
26	M30	X	-.000725	-.000725	0	%100
27	M31	X	-.000725	-.000725	0	%100
28	M28	X	-.000725	-.000725	0	%100
29	M29	X	-.000725	-.000725	0	%100
30	M30A	X	-.000725	-.000725	0	%100
31	M31A	X	-.000725	-.000725	0	%100
32	M32	X	-.000725	-.000725	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Member Distributed Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
33	M33	X	-.000725	-.000725	0	%100
34	FFBH-1	Z	.005	.005	0	%100
35	FFBH-2	Z	.005	.005	0	%100
36	FFBH-3	Z	.005	.005	0	%100
37	FFTH-1	Z	.005	.005	0	%100
38	FFTH-2	Z	.005	.005	0	%100
39	FFTH-3	Z	.005	.005	0	%100
40	MP-1	Z	.009	.009	0	%100
41	MP-3	Z	.009	.009	0	%100
42	SA-1	Z	.007	.007	0	%100
43	SF2-BH	Z	.002	.002	0	%100
44	SF2-TH	Z	.002	.002	0	%100
45	SF3-BH	Z	.008	.008	0	%100
46	SF3-TH	Z	.008	.008	0	%100
47	D1	Z	.006	.006	0	%100
48	D2	Z	.006	.006	0	%100
49	D3	Z	.006	.006	0	%100
50	D4	Z	.006	.006	0	%100
51	V1	Z	.006	.006	0	%100
52	V2	Z	.006	.006	0	%100
53	V4	Z	.006	.006	0	%100
54	V5	Z	.006	.006	0	%100
55	V3	Z	.008	.008	0	%100
56	V6	Z	.008	.008	0	%100
57	MP-2B	Z	.009	.009	0	%100
58	MP-2A	Z	.009	.009	0	%100
59	M30	Z	.002	.002	0	%100
60	M31	Z	.002	.002	0	%100
61	M28	Z	.002	.002	0	%100
62	M29	Z	.002	.002	0	%100
63	M30A	Z	.002	.002	0	%100
64	M31A	Z	.002	.002	0	%100
65	M32	Z	.002	.002	0	%100
66	M33	Z	.002	.002	0	%100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.006	-.006	0	%100
2	FFBH-2	X	-.006	-.006	0	%100
3	FFBH-3	X	-.006	-.006	0	%100
4	FFTH-1	X	-.006	-.006	0	%100
5	FFTH-2	X	-.006	-.006	0	%100
6	FFTH-3	X	-.006	-.006	0	%100
7	MP-1	X	-.008	-.008	0	%100
8	MP-3	X	-.008	-.008	0	%100
9	SA-1	X	-.005	-.005	0	%100
10	SF2-BH	X	-.000259	-.000259	0	%100
11	SF2-TH	X	-.000259	-.000259	0	%100
12	SF3-BH	X	-.007	-.007	0	%100
13	SF3-TH	X	-.007	-.007	0	%100
14	D1	X	-.005	-.005	0	%100
15	D2	X	-.005	-.005	0	%100
16	D3	X	-.005	-.005	0	%100
17	D4	X	-.005	-.005	0	%100
18	V1	X	-.005	-.005	0	%100
19	V2	X	-.005	-.005	0	%100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
20	V4	X	-.005	-.005	0	%100
21	V5	X	-.005	-.005	0	%100
22	V3	X	-.006	-.006	0	%100
23	V6	X	-.006	-.006	0	%100
24	MP-2B	X	-.008	-.008	0	%100
25	MP-2A	X	-.008	-.008	0	%100
26	M30	X	-.000837	-.000837	0	%100
27	M31	X	-.000837	-.000837	0	%100
28	M28	X	-.000837	-.000837	0	%100
29	M29	X	-.000837	-.000837	0	%100
30	M30A	X	-.000837	-.000837	0	%100
31	M31A	X	-.000837	-.000837	0	%100
32	M32	X	-.000837	-.000837	0	%100
33	M33	X	-.000837	-.000837	0	%100
34	FFBH-1	Z	.006	.006	0	%100
35	FFBH-2	Z	.006	.006	0	%100
36	FFBH-3	Z	.006	.006	0	%100
37	FFTH-1	Z	.006	.006	0	%100
38	FFTH-2	Z	.006	.006	0	%100
39	FFTH-3	Z	.006	.006	0	%100
40	MP-1	Z	.008	.008	0	%100
41	MP-3	Z	.008	.008	0	%100
42	SA-1	Z	.006	.006	0	%100
43	SF2-BH	Z	.000252	.000252	0	%100
44	SF2-TH	Z	.000252	.000252	0	%100
45	SF3-BH	Z	.007	.007	0	%100
46	SF3-TH	Z	.007	.007	0	%100
47	D1	Z	.005	.005	0	%100
48	D2	Z	.005	.005	0	%100
49	D3	Z	.005	.005	0	%100
50	D4	Z	.005	.005	0	%100
51	V1	Z	.005	.005	0	%100
52	V2	Z	.005	.005	0	%100
53	V4	Z	.005	.005	0	%100
54	V5	Z	.005	.005	0	%100
55	V3	Z	.006	.006	0	%100
56	V6	Z	.006	.006	0	%100
57	MP-2B	Z	.008	.008	0	%100
58	MP-2A	Z	.008	.008	0	%100
59	M30	Z	.001	.001	0	%100
60	M31	Z	.001	.001	0	%100
61	M28	Z	.001	.001	0	%100
62	M29	Z	.001	.001	0	%100
63	M30A	Z	.001	.001	0	%100
64	M31A	Z	.001	.001	0	%100
65	M32	Z	.001	.001	0	%100
66	M33	Z	.001	.001	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.009	-.009	0	%100
2	FFBH-2	X	-.009	-.009	0	%100
3	FFBH-3	X	-.009	-.009	0	%100
4	FFTH-1	X	-.009	-.009	0	%100
5	FFTH-2	X	-.009	-.009	0	%100
6	FFTH-3	X	-.009	-.009	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
7	MP-1	X	-.009	-.009	0	%100
8	MP-3	X	-.009	-.009	0	%100
9	SA-1	X	-.006	-.006	0	%100
10	SF2-BH	X	-.003	-.003	0	%100
11	SF2-TH	X	-.003	-.003	0	%100
12	SF3-BH	X	-.009	-.009	0	%100
13	SF3-TH	X	-.009	-.009	0	%100
14	D1	X	-.006	-.006	0	%100
15	D2	X	-.006	-.006	0	%100
16	D3	X	-.006	-.006	0	%100
17	D4	X	-.006	-.006	0	%100
18	V1	X	-.006	-.006	0	%100
19	V2	X	-.006	-.006	0	%100
20	V4	X	-.006	-.006	0	%100
21	V5	X	-.006	-.006	0	%100
22	V3	X	-.008	-.008	0	%100
23	V6	X	-.008	-.008	0	%100
24	MP-2B	X	-.009	-.009	0	%100
25	MP-2A	X	-.009	-.009	0	%100
26	M30	X	-.000725	-.000725	0	%100
27	M31	X	-.000725	-.000725	0	%100
28	M28	X	-.000725	-.000725	0	%100
29	M29	X	-.000725	-.000725	0	%100
30	M30A	X	-.000725	-.000725	0	%100
31	M31A	X	-.000725	-.000725	0	%100
32	M32	X	-.000725	-.000725	0	%100
33	M33	X	-.000725	-.000725	0	%100
34	FFBH-1	Z	.005	.005	0	%100
35	FFBH-2	Z	.005	.005	0	%100
36	FFBH-3	Z	.005	.005	0	%100
37	FFTH-1	Z	.005	.005	0	%100
38	FFTH-2	Z	.005	.005	0	%100
39	FFTH-3	Z	.005	.005	0	%100
40	MP-1	Z	.005	.005	0	%100
41	MP-3	Z	.005	.005	0	%100
42	SA-1	Z	.004	.004	0	%100
43	SF2-BH	Z	.001	.001	0	%100
44	SF2-TH	Z	.001	.001	0	%100
45	SF3-BH	Z	.005	.005	0	%100
46	SF3-TH	Z	.005	.005	0	%100
47	D1	Z	.003	.003	0	%100
48	D2	Z	.003	.003	0	%100
49	D3	Z	.003	.003	0	%100
50	D4	Z	.003	.003	0	%100
51	V1	Z	.003	.003	0	%100
52	V2	Z	.003	.003	0	%100
53	V4	Z	.003	.003	0	%100
54	V5	Z	.003	.003	0	%100
55	V3	Z	.005	.005	0	%100
56	V6	Z	.005	.005	0	%100
57	MP-2B	Z	.005	.005	0	%100
58	MP-2A	Z	.005	.005	0	%100
59	M30	Z	.000683	.000683	0	%100
60	M31	Z	.000683	.000683	0	%100
61	M28	Z	.000683	.000683	0	%100
62	M29	Z	.000683	.000683	0	%100
63	M30A	Z	.000683	.000683	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
64	M31A	Z	.000683	.000683	0	%100
65	M32	Z	.000683	.000683	0	%100
66	M33	Z	.000683	.000683	0	%100

Member Distributed Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	Y	-.008	-.008	0	%100
2	FFBH-2	Y	-.008	-.008	0	%100
3	FFBH-3	Y	-.008	-.008	0	%100
4	FFTH-1	Y	-.008	-.008	0	%100
5	FFTH-2	Y	-.008	-.008	0	%100
6	FFTH-3	Y	-.008	-.008	0	%100
7	MP-1	Y	-.007	-.007	0	%100
8	MP-3	Y	-.007	-.007	0	%100
9	SA-1	Y	-.009	-.009	0	%100
10	SF2-BH	Y	-.007	-.007	0	%100
11	SF2-TH	Y	-.007	-.007	0	%100
12	SF3-BH	Y	-.007	-.007	0	%100
13	SF3-TH	Y	-.007	-.007	0	%100
14	D1	Y	-.006	-.006	0	%100
15	D2	Y	-.006	-.006	0	%100
16	D3	Y	-.006	-.006	0	%100
17	D4	Y	-.006	-.006	0	%100
18	V1	Y	-.006	-.006	0	%100
19	V2	Y	-.006	-.006	0	%100
20	V4	Y	-.006	-.006	0	%100
21	V5	Y	-.006	-.006	0	%100
22	V3	Y	-.007	-.007	0	%100
23	V6	Y	-.007	-.007	0	%100
24	MP-2B	Y	-.007	-.007	0	%100
25	MP-2A	Y	-.007	-.007	0	%100
26	M30	Y	-.005	-.005	0	%100
27	M31	Y	-.005	-.005	0	%100
28	M28	Y	-.005	-.005	0	%100
29	M29	Y	-.005	-.005	0	%100
30	M30A	Y	-.005	-.005	0	%100
31	M31A	Y	-.005	-.005	0	%100
32	M32	Y	-.005	-.005	0	%100
33	M33	Y	-.005	-.005	0	%100

Member Distributed Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.004	-.004	0	%100
2	FFBH-2	X	-.004	-.004	0	%100
3	FFBH-3	X	-.004	-.004	0	%100
4	FFTH-1	X	-.004	-.004	0	%100
5	FFTH-2	X	-.004	-.004	0	%100
6	FFTH-3	X	-.004	-.004	0	%100
7	MP-1	X	-.003	-.003	0	%100
8	MP-3	X	-.003	-.003	0	%100
9	SA-1	X	-.003	-.003	0	%100
10	SF2-BH	X	-.003	-.003	0	%100
11	SF2-TH	X	-.003	-.003	0	%100
12	SF3-BH	X	-.003	-.003	0	%100
13	SF3-TH	X	-.003	-.003	0	%100
14	D1	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 19 : 0 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
15	D2	X	-.002	-.002	0	%100
16	D3	X	-.002	-.002	0	%100
17	D4	X	-.002	-.002	0	%100
18	V1	X	-.002	-.002	0	%100
19	V2	X	-.002	-.002	0	%100
20	V4	X	-.002	-.002	0	%100
21	V5	X	-.002	-.002	0	%100
22	V3	X	-.003	-.003	0	%100
23	V6	X	-.003	-.003	0	%100
24	MP-2B	X	-.003	-.003	0	%100
25	MP-2A	X	-.003	-.003	0	%100
26	M30	X	-.002	-.002	0	%100
27	M31	X	-.002	-.002	0	%100
28	M28	X	-.002	-.002	0	%100
29	M29	X	-.002	-.002	0	%100
30	M30A	X	-.002	-.002	0	%100
31	M31A	X	-.002	-.002	0	%100
32	M32	X	-.002	-.002	0	%100
33	M33	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.003	-.003	0	%100
2	FFBH-2	X	-.003	-.003	0	%100
3	FFBH-3	X	-.003	-.003	0	%100
4	FFTH-1	X	-.003	-.003	0	%100
5	FFTH-2	X	-.003	-.003	0	%100
6	FFTH-3	X	-.003	-.003	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-3	X	-.002	-.002	0	%100
9	SA-1	X	-.000272	-.000272	0	%100
10	SF2-BH	X	-.002	-.002	0	%100
11	SF2-TH	X	-.002	-.002	0	%100
12	SF3-BH	X	-.000733	-.000733	0	%100
13	SF3-TH	X	-.000733	-.000733	0	%100
14	D1	X	-.002	-.002	0	%100
15	D2	X	-.002	-.002	0	%100
16	D3	X	-.002	-.002	0	%100
17	D4	X	-.002	-.002	0	%100
18	V1	X	-.002	-.002	0	%100
19	V2	X	-.002	-.002	0	%100
20	V4	X	-.002	-.002	0	%100
21	V5	X	-.002	-.002	0	%100
22	V3	X	-.002	-.002	0	%100
23	V6	X	-.002	-.002	0	%100
24	MP-2B	X	-.002	-.002	0	%100
25	MP-2A	X	-.002	-.002	0	%100
26	M30	X	-.000781	-.000781	0	%100
27	M31	X	-.000781	-.000781	0	%100
28	M28	X	-.000781	-.000781	0	%100
29	M29	X	-.000781	-.000781	0	%100
30	M30A	X	-.000781	-.000781	0	%100
31	M31A	X	-.000781	-.000781	0	%100
32	M32	X	-.000781	-.000781	0	%100
33	M33	X	-.000781	-.000781	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.002	-.002	0	%100
41	MP-3	Z	-.002	-.002	0	%100
42	SA-1	Z	-.000166	-.000166	0	%100
43	SF2-BH	Z	-.001	-.001	0	%100
44	SF2-TH	Z	-.001	-.001	0	%100
45	SF3-BH	Z	-.000416	-.000416	0	%100
46	SF3-TH	Z	-.000416	-.000416	0	%100
47	D1	Z	-.001	-.001	0	%100
48	D2	Z	-.001	-.001	0	%100
49	D3	Z	-.001	-.001	0	%100
50	D4	Z	-.001	-.001	0	%100
51	V1	Z	-.001	-.001	0	%100
52	V2	Z	-.001	-.001	0	%100
53	V4	Z	-.001	-.001	0	%100
54	V5	Z	-.001	-.001	0	%100
55	V3	Z	-.001	-.001	0	%100
56	V6	Z	-.001	-.001	0	%100
57	MP-2B	Z	-.002	-.002	0	%100
58	MP-2A	Z	-.002	-.002	0	%100
59	M30	Z	-.000483	-.000483	0	%100
60	M31	Z	-.000483	-.000483	0	%100
61	M28	Z	-.000483	-.000483	0	%100
62	M29	Z	-.000483	-.000483	0	%100
63	M30A	Z	-.000483	-.000483	0	%100
64	M31A	Z	-.000483	-.000483	0	%100
65	M32	Z	-.000483	-.000483	0	%100
66	M33	Z	-.000483	-.000483	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.002	-.002	0	%100
2	FFBH-2	X	-.002	-.002	0	%100
3	FFBH-3	X	-.002	-.002	0	%100
4	FFTH-1	X	-.002	-.002	0	%100
5	FFTH-2	X	-.002	-.002	0	%100
6	FFTH-3	X	-.002	-.002	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-3	X	-.002	-.002	0	%100
9	SA-1	X	-.000349	-.000349	0	%100
10	SF2-BH	X	-.002	-.002	0	%100
11	SF2-TH	X	-.002	-.002	0	%100
12	SF3-BH	X	-7.3e-5	-7.3e-5	0	%100
13	SF3-TH	X	-7.3e-5	-7.3e-5	0	%100
14	D1	X	-.002	-.002	0	%100
15	D2	X	-.002	-.002	0	%100
16	D3	X	-.002	-.002	0	%100
17	D4	X	-.002	-.002	0	%100
18	V1	X	-.002	-.002	0	%100
19	V2	X	-.002	-.002	0	%100
20	V4	X	-.002	-.002	0	%100
21	V5	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
22	V3	X	-.002	-.002	0	%100
23	V6	X	-.002	-.002	0	%100
24	MP-2B	X	-.002	-.002	0	%100
25	MP-2A	X	-.002	-.002	0	%100
26	M30	X	-.000902	-.000902	0	%100
27	M31	X	-.000902	-.000902	0	%100
28	M28	X	-.000902	-.000902	0	%100
29	M29	X	-.000902	-.000902	0	%100
30	M30A	X	-.000902	-.000902	0	%100
31	M31A	X	-.000902	-.000902	0	%100
32	M32	X	-.000902	-.000902	0	%100
33	M33	X	-.000902	-.000902	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.002	-.002	0	%100
41	MP-3	Z	-.002	-.002	0	%100
42	SA-1	Z	-.000368	-.000368	0	%100
43	SF2-BH	Z	-.002	-.002	0	%100
44	SF2-TH	Z	-.002	-.002	0	%100
45	SF3-BH	Z	-7.2e-5	-7.2e-5	0	%100
46	SF3-TH	Z	-7.2e-5	-7.2e-5	0	%100
47	D1	Z	-.002	-.002	0	%100
48	D2	Z	-.002	-.002	0	%100
49	D3	Z	-.002	-.002	0	%100
50	D4	Z	-.002	-.002	0	%100
51	V1	Z	-.002	-.002	0	%100
52	V2	Z	-.002	-.002	0	%100
53	V4	Z	-.002	-.002	0	%100
54	V5	Z	-.002	-.002	0	%100
55	V3	Z	-.002	-.002	0	%100
56	V6	Z	-.002	-.002	0	%100
57	MP-2B	Z	-.002	-.002	0	%100
58	MP-2A	Z	-.002	-.002	0	%100
59	M30	Z	-.000966	-.000966	0	%100
60	M31	Z	-.000966	-.000966	0	%100
61	M28	Z	-.000966	-.000966	0	%100
62	M29	Z	-.000966	-.000966	0	%100
63	M30A	Z	-.000966	-.000966	0	%100
64	M31A	Z	-.000966	-.000966	0	%100
65	M32	Z	-.000966	-.000966	0	%100
66	M33	Z	-.000966	-.000966	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.001	-.001	0	%100
2	FFBH-2	X	-.001	-.001	0	%100
3	FFBH-3	X	-.001	-.001	0	%100
4	FFTH-1	X	-.001	-.001	0	%100
5	FFTH-2	X	-.001	-.001	0	%100
6	FFTH-3	X	-.001	-.001	0	%100
7	MP-1	X	-.001	-.001	0	%100
8	MP-3	X	-.001	-.001	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
9	SA-1	X	-.000634	-.000634	0	%100
10	SF2-BH	X	-.001	-.001	0	%100
11	SF2-TH	X	-.001	-.001	0	%100
12	SF3-BH	X	-.000324	-.000324	0	%100
13	SF3-TH	X	-.000324	-.000324	0	%100
14	D1	X	-.001	-.001	0	%100
15	D2	X	-.001	-.001	0	%100
16	D3	X	-.001	-.001	0	%100
17	D4	X	-.001	-.001	0	%100
18	V1	X	-.001	-.001	0	%100
19	V2	X	-.001	-.001	0	%100
20	V4	X	-.001	-.001	0	%100
21	V5	X	-.001	-.001	0	%100
22	V3	X	-.001	-.001	0	%100
23	V6	X	-.001	-.001	0	%100
24	MP-2B	X	-.001	-.001	0	%100
25	MP-2A	X	-.001	-.001	0	%100
26	M30	X	-.000781	-.000781	0	%100
27	M31	X	-.000781	-.000781	0	%100
28	M28	X	-.000781	-.000781	0	%100
29	M29	X	-.000781	-.000781	0	%100
30	M30A	X	-.000781	-.000781	0	%100
31	M31A	X	-.000781	-.000781	0	%100
32	M32	X	-.000781	-.000781	0	%100
33	M33	X	-.000781	-.000781	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.003	-.003	0	%100
41	MP-3	Z	-.003	-.003	0	%100
42	SA-1	Z	-.001	-.001	0	%100
43	SF2-BH	Z	-.002	-.002	0	%100
44	SF2-TH	Z	-.002	-.002	0	%100
45	SF3-BH	Z	-.000551	-.000551	0	%100
46	SF3-TH	Z	-.000551	-.000551	0	%100
47	D1	Z	-.002	-.002	0	%100
48	D2	Z	-.002	-.002	0	%100
49	D3	Z	-.002	-.002	0	%100
50	D4	Z	-.002	-.002	0	%100
51	V1	Z	-.002	-.002	0	%100
52	V2	Z	-.002	-.002	0	%100
53	V4	Z	-.002	-.002	0	%100
54	V5	Z	-.002	-.002	0	%100
55	V3	Z	-.002	-.002	0	%100
56	V6	Z	-.002	-.002	0	%100
57	MP-2B	Z	-.003	-.003	0	%100
58	MP-2A	Z	-.003	-.003	0	%100
59	M30	Z	-.001	-.001	0	%100
60	M31	Z	-.001	-.001	0	%100
61	M28	Z	-.001	-.001	0	%100
62	M29	Z	-.001	-.001	0	%100
63	M30A	Z	-.001	-.001	0	%100
64	M31A	Z	-.001	-.001	0	%100
65	M32	Z	-.001	-.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
Checked By: WHW

Member Distributed Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
66	M33	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	Z	0	0	0	%100
2	FFBH-2	Z	0	0	0	%100
3	FFBH-3	Z	0	0	0	%100
4	FFTH-1	Z	0	0	0	%100
5	FFTH-2	Z	0	0	0	%100
6	FFTH-3	Z	0	0	0	%100
7	MP-1	Z	-.003	-.003	0	%100
8	MP-3	Z	-.003	-.003	0	%100
9	SA-1	Z	-.003	-.003	0	%100
10	SF2-BH	Z	-.002	-.002	0	%100
11	SF2-TH	Z	-.002	-.002	0	%100
12	SF3-BH	Z	-.002	-.002	0	%100
13	SF3-TH	Z	-.002	-.002	0	%100
14	D1	Z	-.003	-.003	0	%100
15	D2	Z	-.003	-.003	0	%100
16	D3	Z	-.003	-.003	0	%100
17	D4	Z	-.003	-.003	0	%100
18	V1	Z	-.002	-.002	0	%100
19	V2	Z	-.002	-.002	0	%100
20	V4	Z	-.002	-.002	0	%100
21	V5	Z	-.002	-.002	0	%100
22	V3	Z	-.003	-.003	0	%100
23	V6	Z	-.003	-.003	0	%100
24	MP-2B	Z	-.003	-.003	0	%100
25	MP-2A	Z	-.003	-.003	0	%100
26	M30	Z	-.002	-.002	0	%100
27	M31	Z	-.002	-.002	0	%100
28	M28	Z	-.002	-.002	0	%100
29	M29	Z	-.002	-.002	0	%100
30	M30A	Z	-.002	-.002	0	%100
31	M31A	Z	-.002	-.002	0	%100
32	M32	Z	-.002	-.002	0	%100
33	M33	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.001	.001	0	%100
2	FFBH-2	X	.001	.001	0	%100
3	FFBH-3	X	.001	.001	0	%100
4	FFTH-1	X	.001	.001	0	%100
5	FFTH-2	X	.001	.001	0	%100
6	FFTH-3	X	.001	.001	0	%100
7	MP-1	X	.001	.001	0	%100
8	MP-3	X	.001	.001	0	%100
9	SA-1	X	.002	.002	0	%100
10	SF2-BH	X	.000324	.000324	0	%100
11	SF2-TH	X	.000324	.000324	0	%100
12	SF3-BH	X	.001	.001	0	%100
13	SF3-TH	X	.001	.001	0	%100
14	D1	X	.001	.001	0	%100
15	D2	X	.001	.001	0	%100
16	D3	X	.001	.001	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
17	D4	X	.001	.001	0	%100
18	V1	X	.001	.001	0	%100
19	V2	X	.001	.001	0	%100
20	V4	X	.001	.001	0	%100
21	V5	X	.001	.001	0	%100
22	V3	X	.001	.001	0	%100
23	V6	X	.001	.001	0	%100
24	MP-2B	X	.001	.001	0	%100
25	MP-2A	X	.001	.001	0	%100
26	M30	X	.000781	.000781	0	%100
27	M31	X	.000781	.000781	0	%100
28	M28	X	.000781	.000781	0	%100
29	M29	X	.000781	.000781	0	%100
30	M30A	X	.000781	.000781	0	%100
31	M31A	X	.000781	.000781	0	%100
32	M32	X	.000781	.000781	0	%100
33	M33	X	.000781	.000781	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.003	-.003	0	%100
41	MP-3	Z	-.003	-.003	0	%100
42	SA-1	Z	-.003	-.003	0	%100
43	SF2-BH	Z	-.000551	-.000551	0	%100
44	SF2-TH	Z	-.000551	-.000551	0	%100
45	SF3-BH	Z	-.002	-.002	0	%100
46	SF3-TH	Z	-.002	-.002	0	%100
47	D1	Z	-.002	-.002	0	%100
48	D2	Z	-.002	-.002	0	%100
49	D3	Z	-.002	-.002	0	%100
50	D4	Z	-.002	-.002	0	%100
51	V1	Z	-.002	-.002	0	%100
52	V2	Z	-.002	-.002	0	%100
53	V4	Z	-.002	-.002	0	%100
54	V5	Z	-.002	-.002	0	%100
55	V3	Z	-.002	-.002	0	%100
56	V6	Z	-.002	-.002	0	%100
57	MP-2B	Z	-.003	-.003	0	%100
58	MP-2A	Z	-.003	-.003	0	%100
59	M30	Z	-.001	-.001	0	%100
60	M31	Z	-.001	-.001	0	%100
61	M28	Z	-.001	-.001	0	%100
62	M29	Z	-.001	-.001	0	%100
63	M30A	Z	-.001	-.001	0	%100
64	M31A	Z	-.001	-.001	0	%100
65	M32	Z	-.001	-.001	0	%100
66	M33	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.002	.002	0	%100
2	FFBH-2	X	.002	.002	0	%100
3	FFBH-3	X	.002	.002	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
4	FFTH-1	X	.002	.002	0	%100
5	FFTH-2	X	.002	.002	0	%100
6	FFTH-3	X	.002	.002	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-3	X	.002	.002	0	%100
9	SA-1	X	.002	.002	0	%100
10	SF2-BH	X	7.3e-5	7.3e-5	0	%100
11	SF2-TH	X	7.3e-5	7.3e-5	0	%100
12	SF3-BH	X	.002	.002	0	%100
13	SF3-TH	X	.002	.002	0	%100
14	D1	X	.002	.002	0	%100
15	D2	X	.002	.002	0	%100
16	D3	X	.002	.002	0	%100
17	D4	X	.002	.002	0	%100
18	V1	X	.002	.002	0	%100
19	V2	X	.002	.002	0	%100
20	V4	X	.002	.002	0	%100
21	V5	X	.002	.002	0	%100
22	V3	X	.002	.002	0	%100
23	V6	X	.002	.002	0	%100
24	MP-2B	X	.002	.002	0	%100
25	MP-2A	X	.002	.002	0	%100
26	M30	X	.000902	.000902	0	%100
27	M31	X	.000902	.000902	0	%100
28	M28	X	.000902	.000902	0	%100
29	M29	X	.000902	.000902	0	%100
30	M30A	X	.000902	.000902	0	%100
31	M31A	X	.000902	.000902	0	%100
32	M32	X	.000902	.000902	0	%100
33	M33	X	.000902	.000902	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.002	-.002	0	%100
41	MP-3	Z	-.002	-.002	0	%100
42	SA-1	Z	-.002	-.002	0	%100
43	SF2-BH	Z	-7.2e-5	-7.2e-5	0	%100
44	SF2-TH	Z	-7.2e-5	-7.2e-5	0	%100
45	SF3-BH	Z	-.002	-.002	0	%100
46	SF3-TH	Z	-.002	-.002	0	%100
47	D1	Z	-.002	-.002	0	%100
48	D2	Z	-.002	-.002	0	%100
49	D3	Z	-.002	-.002	0	%100
50	D4	Z	-.002	-.002	0	%100
51	V1	Z	-.002	-.002	0	%100
52	V2	Z	-.002	-.002	0	%100
53	V4	Z	-.002	-.002	0	%100
54	V5	Z	-.002	-.002	0	%100
55	V3	Z	-.002	-.002	0	%100
56	V6	Z	-.002	-.002	0	%100
57	MP-2B	Z	-.002	-.002	0	%100
58	MP-2A	Z	-.002	-.002	0	%100
59	M30	Z	-.000966	-.000966	0	%100
60	M31	Z	-.000966	-.000966	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
61	M28	Z	-.000966	-.000966	0	%100
62	M29	Z	-.000966	-.000966	0	%100
63	M30A	Z	-.000966	-.000966	0	%100
64	M31A	Z	-.000966	-.000966	0	%100
65	M32	Z	-.000966	-.000966	0	%100
66	M33	Z	-.000966	-.000966	0	%100

Member Distributed Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.003	.003	0	%100
2	FFBH-2	X	.003	.003	0	%100
3	FFBH-3	X	.003	.003	0	%100
4	FFTH-1	X	.003	.003	0	%100
5	FFTH-2	X	.003	.003	0	%100
6	FFTH-3	X	.003	.003	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-3	X	.002	.002	0	%100
9	SA-1	X	.002	.002	0	%100
10	SF2-BH	X	.000733	.000733	0	%100
11	SF2-TH	X	.000733	.000733	0	%100
12	SF3-BH	X	.002	.002	0	%100
13	SF3-TH	X	.002	.002	0	%100
14	D1	X	.002	.002	0	%100
15	D2	X	.002	.002	0	%100
16	D3	X	.002	.002	0	%100
17	D4	X	.002	.002	0	%100
18	V1	X	.002	.002	0	%100
19	V2	X	.002	.002	0	%100
20	V4	X	.002	.002	0	%100
21	V5	X	.002	.002	0	%100
22	V3	X	.002	.002	0	%100
23	V6	X	.002	.002	0	%100
24	MP-2B	X	.002	.002	0	%100
25	MP-2A	X	.002	.002	0	%100
26	M30	X	.000781	.000781	0	%100
27	M31	X	.000781	.000781	0	%100
28	M28	X	.000781	.000781	0	%100
29	M29	X	.000781	.000781	0	%100
30	M30A	X	.000781	.000781	0	%100
31	M31A	X	.000781	.000781	0	%100
32	M32	X	.000781	.000781	0	%100
33	M33	X	.000781	.000781	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.002	-.002	0	%100
41	MP-3	Z	-.002	-.002	0	%100
42	SA-1	Z	-.001	-.001	0	%100
43	SF2-BH	Z	-.000416	-.000416	0	%100
44	SF2-TH	Z	-.000416	-.000416	0	%100
45	SF3-BH	Z	-.001	-.001	0	%100
46	SF3-TH	Z	-.001	-.001	0	%100
47	D1	Z	-.001	-.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Member Distributed Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
48	D2	Z	-.001	-.001	0	%100
49	D3	Z	-.001	-.001	0	%100
50	D4	Z	-.001	-.001	0	%100
51	V1	Z	-.001	-.001	0	%100
52	V2	Z	-.001	-.001	0	%100
53	V4	Z	-.001	-.001	0	%100
54	V5	Z	-.001	-.001	0	%100
55	V3	Z	-.001	-.001	0	%100
56	V6	Z	-.001	-.001	0	%100
57	MP-2B	Z	-.002	-.002	0	%100
58	MP-2A	Z	-.002	-.002	0	%100
59	M30	Z	-.000483	-.000483	0	%100
60	M31	Z	-.000483	-.000483	0	%100
61	M28	Z	-.000483	-.000483	0	%100
62	M29	Z	-.000483	-.000483	0	%100
63	M30A	Z	-.000483	-.000483	0	%100
64	M31A	Z	-.000483	-.000483	0	%100
65	M32	Z	-.000483	-.000483	0	%100
66	M33	Z	-.000483	-.000483	0	%100

Member Distributed Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.004	.004	0	%100
2	FFBH-2	X	.004	.004	0	%100
3	FFBH-3	X	.004	.004	0	%100
4	FFTH-1	X	.004	.004	0	%100
5	FFTH-2	X	.004	.004	0	%100
6	FFTH-3	X	.004	.004	0	%100
7	MP-1	X	.003	.003	0	%100
8	MP-3	X	.003	.003	0	%100
9	SA-1	X	.003	.003	0	%100
10	SF2-BH	X	.003	.003	0	%100
11	SF2-TH	X	.003	.003	0	%100
12	SF3-BH	X	.003	.003	0	%100
13	SF3-TH	X	.003	.003	0	%100
14	D1	X	.002	.002	0	%100
15	D2	X	.002	.002	0	%100
16	D3	X	.002	.002	0	%100
17	D4	X	.002	.002	0	%100
18	V1	X	.002	.002	0	%100
19	V2	X	.002	.002	0	%100
20	V4	X	.002	.002	0	%100
21	V5	X	.002	.002	0	%100
22	V3	X	.003	.003	0	%100
23	V6	X	.003	.003	0	%100
24	MP-2B	X	.003	.003	0	%100
25	MP-2A	X	.003	.003	0	%100
26	M30	X	.002	.002	0	%100
27	M31	X	.002	.002	0	%100
28	M28	X	.002	.002	0	%100
29	M29	X	.002	.002	0	%100
30	M30A	X	.002	.002	0	%100
31	M31A	X	.002	.002	0	%100
32	M32	X	.002	.002	0	%100
33	M33	X	.002	.002	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.003	.003	0	%100
2	FFBH-2	X	.003	.003	0	%100
3	FFBH-3	X	.003	.003	0	%100
4	FFTH-1	X	.003	.003	0	%100
5	FFTH-2	X	.003	.003	0	%100
6	FFTH-3	X	.003	.003	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-3	X	.002	.002	0	%100
9	SA-1	X	.000272	.000272	0	%100
10	SF2-BH	X	.002	.002	0	%100
11	SF2-TH	X	.002	.002	0	%100
12	SF3-BH	X	.000733	.000733	0	%100
13	SF3-TH	X	.000733	.000733	0	%100
14	D1	X	.002	.002	0	%100
15	D2	X	.002	.002	0	%100
16	D3	X	.002	.002	0	%100
17	D4	X	.002	.002	0	%100
18	V1	X	.002	.002	0	%100
19	V2	X	.002	.002	0	%100
20	V4	X	.002	.002	0	%100
21	V5	X	.002	.002	0	%100
22	V3	X	.002	.002	0	%100
23	V6	X	.002	.002	0	%100
24	MP-2B	X	.002	.002	0	%100
25	MP-2A	X	.002	.002	0	%100
26	M30	X	.000781	.000781	0	%100
27	M31	X	.000781	.000781	0	%100
28	M28	X	.000781	.000781	0	%100
29	M29	X	.000781	.000781	0	%100
30	M30A	X	.000781	.000781	0	%100
31	M31A	X	.000781	.000781	0	%100
32	M32	X	.000781	.000781	0	%100
33	M33	X	.000781	.000781	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.002	.002	0	%100
41	MP-3	Z	.002	.002	0	%100
42	SA-1	Z	.000166	.000166	0	%100
43	SF2-BH	Z	.001	.001	0	%100
44	SF2-TH	Z	.001	.001	0	%100
45	SF3-BH	Z	.000416	.000416	0	%100
46	SF3-TH	Z	.000416	.000416	0	%100
47	D1	Z	.001	.001	0	%100
48	D2	Z	.001	.001	0	%100
49	D3	Z	.001	.001	0	%100
50	D4	Z	.001	.001	0	%100
51	V1	Z	.001	.001	0	%100
52	V2	Z	.001	.001	0	%100
53	V4	Z	.001	.001	0	%100
54	V5	Z	.001	.001	0	%100
55	V3	Z	.001	.001	0	%100
56	V6	Z	.001	.001	0	%100
57	MP-2B	Z	.002	.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Member Distributed Loads (BLC 28 : 210 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
58	MP-2A	Z	.002	.002	0	%100
59	M30	Z	.000483	.000483	0	%100
60	M31	Z	.000483	.000483	0	%100
61	M28	Z	.000483	.000483	0	%100
62	M29	Z	.000483	.000483	0	%100
63	M30A	Z	.000483	.000483	0	%100
64	M31A	Z	.000483	.000483	0	%100
65	M32	Z	.000483	.000483	0	%100
66	M33	Z	.000483	.000483	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.002	.002	0	%100
2	FFBH-2	X	.002	.002	0	%100
3	FFBH-3	X	.002	.002	0	%100
4	FFTH-1	X	.002	.002	0	%100
5	FFTH-2	X	.002	.002	0	%100
6	FFTH-3	X	.002	.002	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-3	X	.002	.002	0	%100
9	SA-1	X	.000349	.000349	0	%100
10	SF2-BH	X	.002	.002	0	%100
11	SF2-TH	X	.002	.002	0	%100
12	SF3-BH	X	7.3e-5	7.3e-5	0	%100
13	SF3-TH	X	7.3e-5	7.3e-5	0	%100
14	D1	X	.002	.002	0	%100
15	D2	X	.002	.002	0	%100
16	D3	X	.002	.002	0	%100
17	D4	X	.002	.002	0	%100
18	V1	X	.002	.002	0	%100
19	V2	X	.002	.002	0	%100
20	V4	X	.002	.002	0	%100
21	V5	X	.002	.002	0	%100
22	V3	X	.002	.002	0	%100
23	V6	X	.002	.002	0	%100
24	MP-2B	X	.002	.002	0	%100
25	MP-2A	X	.002	.002	0	%100
26	M30	X	.000902	.000902	0	%100
27	M31	X	.000902	.000902	0	%100
28	M28	X	.000902	.000902	0	%100
29	M29	X	.000902	.000902	0	%100
30	M30A	X	.000902	.000902	0	%100
31	M31A	X	.000902	.000902	0	%100
32	M32	X	.000902	.000902	0	%100
33	M33	X	.000902	.000902	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.002	.002	0	%100
41	MP-3	Z	.002	.002	0	%100
42	SA-1	Z	.000368	.000368	0	%100
43	SF2-BH	Z	.002	.002	0	%100
44	SF2-TH	Z	.002	.002	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
45	SF3-BH	Z	7.2e-5	7.2e-5	0	%100
46	SF3-TH	Z	7.2e-5	7.2e-5	0	%100
47	D1	Z	.002	.002	0	%100
48	D2	Z	.002	.002	0	%100
49	D3	Z	.002	.002	0	%100
50	D4	Z	.002	.002	0	%100
51	V1	Z	.002	.002	0	%100
52	V2	Z	.002	.002	0	%100
53	V4	Z	.002	.002	0	%100
54	V5	Z	.002	.002	0	%100
55	V3	Z	.002	.002	0	%100
56	V6	Z	.002	.002	0	%100
57	MP-2B	Z	.002	.002	0	%100
58	MP-2A	Z	.002	.002	0	%100
59	M30	Z	.000966	.000966	0	%100
60	M31	Z	.000966	.000966	0	%100
61	M28	Z	.000966	.000966	0	%100
62	M29	Z	.000966	.000966	0	%100
63	M30A	Z	.000966	.000966	0	%100
64	M31A	Z	.000966	.000966	0	%100
65	M32	Z	.000966	.000966	0	%100
66	M33	Z	.000966	.000966	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.001	.001	0	%100
2	FFBH-2	X	.001	.001	0	%100
3	FFBH-3	X	.001	.001	0	%100
4	FFTH-1	X	.001	.001	0	%100
5	FFTH-2	X	.001	.001	0	%100
6	FFTH-3	X	.001	.001	0	%100
7	MP-1	X	.001	.001	0	%100
8	MP-3	X	.001	.001	0	%100
9	SA-1	X	.000634	.000634	0	%100
10	SF2-BH	X	.001	.001	0	%100
11	SF2-TH	X	.001	.001	0	%100
12	SF3-BH	X	.000324	.000324	0	%100
13	SF3-TH	X	.000324	.000324	0	%100
14	D1	X	.001	.001	0	%100
15	D2	X	.001	.001	0	%100
16	D3	X	.001	.001	0	%100
17	D4	X	.001	.001	0	%100
18	V1	X	.001	.001	0	%100
19	V2	X	.001	.001	0	%100
20	V4	X	.001	.001	0	%100
21	V5	X	.001	.001	0	%100
22	V3	X	.001	.001	0	%100
23	V6	X	.001	.001	0	%100
24	MP-2B	X	.001	.001	0	%100
25	MP-2A	X	.001	.001	0	%100
26	M30	X	.000781	.000781	0	%100
27	M31	X	.000781	.000781	0	%100
28	M28	X	.000781	.000781	0	%100
29	M29	X	.000781	.000781	0	%100
30	M30A	X	.000781	.000781	0	%100
31	M31A	X	.000781	.000781	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
32	M32	X	.000781	.000781	0	%100
33	M33	X	.000781	.000781	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.003	.003	0	%100
41	MP-3	Z	.003	.003	0	%100
42	SA-1	Z	.001	.001	0	%100
43	SF2-BH	Z	.002	.002	0	%100
44	SF2-TH	Z	.002	.002	0	%100
45	SF3-BH	Z	.000551	.000551	0	%100
46	SF3-TH	Z	.000551	.000551	0	%100
47	D1	Z	.002	.002	0	%100
48	D2	Z	.002	.002	0	%100
49	D3	Z	.002	.002	0	%100
50	D4	Z	.002	.002	0	%100
51	V1	Z	.002	.002	0	%100
52	V2	Z	.002	.002	0	%100
53	V4	Z	.002	.002	0	%100
54	V5	Z	.002	.002	0	%100
55	V3	Z	.002	.002	0	%100
56	V6	Z	.002	.002	0	%100
57	MP-2B	Z	.003	.003	0	%100
58	MP-2A	Z	.003	.003	0	%100
59	M30	Z	.001	.001	0	%100
60	M31	Z	.001	.001	0	%100
61	M28	Z	.001	.001	0	%100
62	M29	Z	.001	.001	0	%100
63	M30A	Z	.001	.001	0	%100
64	M31A	Z	.001	.001	0	%100
65	M32	Z	.001	.001	0	%100
66	M33	Z	.001	.001	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	Z	0	0	0	%100
2	FFBH-2	Z	0	0	0	%100
3	FFBH-3	Z	0	0	0	%100
4	FFTH-1	Z	0	0	0	%100
5	FFTH-2	Z	0	0	0	%100
6	FFTH-3	Z	0	0	0	%100
7	MP-1	Z	.003	.003	0	%100
8	MP-3	Z	.003	.003	0	%100
9	SA-1	Z	.003	.003	0	%100
10	SF2-BH	Z	.002	.002	0	%100
11	SF2-TH	Z	.002	.002	0	%100
12	SF3-BH	Z	.002	.002	0	%100
13	SF3-TH	Z	.002	.002	0	%100
14	D1	Z	.003	.003	0	%100
15	D2	Z	.003	.003	0	%100
16	D3	Z	.003	.003	0	%100
17	D4	Z	.003	.003	0	%100
18	V1	Z	.002	.002	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
19	V2	Z	.002	.002	0	%100
20	V4	Z	.002	.002	0	%100
21	V5	Z	.002	.002	0	%100
22	V3	Z	.003	.003	0	%100
23	V6	Z	.003	.003	0	%100
24	MP-2B	Z	.003	.003	0	%100
25	MP-2A	Z	.003	.003	0	%100
26	M30	Z	.002	.002	0	%100
27	M31	Z	.002	.002	0	%100
28	M28	Z	.002	.002	0	%100
29	M29	Z	.002	.002	0	%100
30	M30A	Z	.002	.002	0	%100
31	M31A	Z	.002	.002	0	%100
32	M32	Z	.002	.002	0	%100
33	M33	Z	.002	.002	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.001	-.001	0	%100
2	FFBH-2	X	-.001	-.001	0	%100
3	FFBH-3	X	-.001	-.001	0	%100
4	FFTH-1	X	-.001	-.001	0	%100
5	FFTH-2	X	-.001	-.001	0	%100
6	FFTH-3	X	-.001	-.001	0	%100
7	MP-1	X	-.001	-.001	0	%100
8	MP-3	X	-.001	-.001	0	%100
9	SA-1	X	-.002	-.002	0	%100
10	SF2-BH	X	-.000324	-.000324	0	%100
11	SF2-TH	X	-.000324	-.000324	0	%100
12	SF3-BH	X	-.001	-.001	0	%100
13	SF3-TH	X	-.001	-.001	0	%100
14	D1	X	-.001	-.001	0	%100
15	D2	X	-.001	-.001	0	%100
16	D3	X	-.001	-.001	0	%100
17	D4	X	-.001	-.001	0	%100
18	V1	X	-.001	-.001	0	%100
19	V2	X	-.001	-.001	0	%100
20	V4	X	-.001	-.001	0	%100
21	V5	X	-.001	-.001	0	%100
22	V3	X	-.001	-.001	0	%100
23	V6	X	-.001	-.001	0	%100
24	MP-2B	X	-.001	-.001	0	%100
25	MP-2A	X	-.001	-.001	0	%100
26	M30	X	-.000781	-.000781	0	%100
27	M31	X	-.000781	-.000781	0	%100
28	M28	X	-.000781	-.000781	0	%100
29	M29	X	-.000781	-.000781	0	%100
30	M30A	X	-.000781	-.000781	0	%100
31	M31A	X	-.000781	-.000781	0	%100
32	M32	X	-.000781	-.000781	0	%100
33	M33	X	-.000781	-.000781	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Member Distributed Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.003	.003	0	%100
41	MP-3	Z	.003	.003	0	%100
42	SA-1	Z	.003	.003	0	%100
43	SF2-BH	Z	.000551	.000551	0	%100
44	SF2-TH	Z	.000551	.000551	0	%100
45	SF3-BH	Z	.002	.002	0	%100
46	SF3-TH	Z	.002	.002	0	%100
47	D1	Z	.002	.002	0	%100
48	D2	Z	.002	.002	0	%100
49	D3	Z	.002	.002	0	%100
50	D4	Z	.002	.002	0	%100
51	V1	Z	.002	.002	0	%100
52	V2	Z	.002	.002	0	%100
53	V4	Z	.002	.002	0	%100
54	V5	Z	.002	.002	0	%100
55	V3	Z	.002	.002	0	%100
56	V6	Z	.002	.002	0	%100
57	MP-2B	Z	.003	.003	0	%100
58	MP-2A	Z	.003	.003	0	%100
59	M30	Z	.001	.001	0	%100
60	M31	Z	.001	.001	0	%100
61	M28	Z	.001	.001	0	%100
62	M29	Z	.001	.001	0	%100
63	M30A	Z	.001	.001	0	%100
64	M31A	Z	.001	.001	0	%100
65	M32	Z	.001	.001	0	%100
66	M33	Z	.001	.001	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.002	-.002	0	%100
2	FFBH-2	X	-.002	-.002	0	%100
3	FFBH-3	X	-.002	-.002	0	%100
4	FFTH-1	X	-.002	-.002	0	%100
5	FFTH-2	X	-.002	-.002	0	%100
6	FFTH-3	X	-.002	-.002	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-3	X	-.002	-.002	0	%100
9	SA-1	X	-.002	-.002	0	%100
10	SF2-BH	X	-7.3e-5	-7.3e-5	0	%100
11	SF2-TH	X	-7.3e-5	-7.3e-5	0	%100
12	SF3-BH	X	-.002	-.002	0	%100
13	SF3-TH	X	-.002	-.002	0	%100
14	D1	X	-.002	-.002	0	%100
15	D2	X	-.002	-.002	0	%100
16	D3	X	-.002	-.002	0	%100
17	D4	X	-.002	-.002	0	%100
18	V1	X	-.002	-.002	0	%100
19	V2	X	-.002	-.002	0	%100
20	V4	X	-.002	-.002	0	%100
21	V5	X	-.002	-.002	0	%100
22	V3	X	-.002	-.002	0	%100
23	V6	X	-.002	-.002	0	%100
24	MP-2B	X	-.002	-.002	0	%100
25	MP-2A	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
26	M30	X	-.000902	-.000902	0	%100
27	M31	X	-.000902	-.000902	0	%100
28	M28	X	-.000902	-.000902	0	%100
29	M29	X	-.000902	-.000902	0	%100
30	M30A	X	-.000902	-.000902	0	%100
31	M31A	X	-.000902	-.000902	0	%100
32	M32	X	-.000902	-.000902	0	%100
33	M33	X	-.000902	-.000902	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.002	.002	0	%100
41	MP-3	Z	.002	.002	0	%100
42	SA-1	Z	.002	.002	0	%100
43	SF2-BH	Z	7.2e-5	7.2e-5	0	%100
44	SF2-TH	Z	7.2e-5	7.2e-5	0	%100
45	SF3-BH	Z	.002	.002	0	%100
46	SF3-TH	Z	.002	.002	0	%100
47	D1	Z	.002	.002	0	%100
48	D2	Z	.002	.002	0	%100
49	D3	Z	.002	.002	0	%100
50	D4	Z	.002	.002	0	%100
51	V1	Z	.002	.002	0	%100
52	V2	Z	.002	.002	0	%100
53	V4	Z	.002	.002	0	%100
54	V5	Z	.002	.002	0	%100
55	V3	Z	.002	.002	0	%100
56	V6	Z	.002	.002	0	%100
57	MP-2B	Z	.002	.002	0	%100
58	MP-2A	Z	.002	.002	0	%100
59	M30	Z	.000966	.000966	0	%100
60	M31	Z	.000966	.000966	0	%100
61	M28	Z	.000966	.000966	0	%100
62	M29	Z	.000966	.000966	0	%100
63	M30A	Z	.000966	.000966	0	%100
64	M31A	Z	.000966	.000966	0	%100
65	M32	Z	.000966	.000966	0	%100
66	M33	Z	.000966	.000966	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.003	-.003	0	%100
2	FFBH-2	X	-.003	-.003	0	%100
3	FFBH-3	X	-.003	-.003	0	%100
4	FFTH-1	X	-.003	-.003	0	%100
5	FFTH-2	X	-.003	-.003	0	%100
6	FFTH-3	X	-.003	-.003	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-3	X	-.002	-.002	0	%100
9	SA-1	X	-.002	-.002	0	%100
10	SF2-BH	X	-.000733	-.000733	0	%100
11	SF2-TH	X	-.000733	-.000733	0	%100
12	SF3-BH	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
13	SF3-TH	X	-.002	-.002	0	%100
14	D1	X	-.002	-.002	0	%100
15	D2	X	-.002	-.002	0	%100
16	D3	X	-.002	-.002	0	%100
17	D4	X	-.002	-.002	0	%100
18	V1	X	-.002	-.002	0	%100
19	V2	X	-.002	-.002	0	%100
20	V4	X	-.002	-.002	0	%100
21	V5	X	-.002	-.002	0	%100
22	V3	X	-.002	-.002	0	%100
23	V6	X	-.002	-.002	0	%100
24	MP-2B	X	-.002	-.002	0	%100
25	MP-2A	X	-.002	-.002	0	%100
26	M30	X	-.000781	-.000781	0	%100
27	M31	X	-.000781	-.000781	0	%100
28	M28	X	-.000781	-.000781	0	%100
29	M29	X	-.000781	-.000781	0	%100
30	M30A	X	-.000781	-.000781	0	%100
31	M31A	X	-.000781	-.000781	0	%100
32	M32	X	-.000781	-.000781	0	%100
33	M33	X	-.000781	-.000781	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.002	.002	0	%100
41	MP-3	Z	.002	.002	0	%100
42	SA-1	Z	.001	.001	0	%100
43	SF2-BH	Z	.000416	.000416	0	%100
44	SF2-TH	Z	.000416	.000416	0	%100
45	SF3-BH	Z	.001	.001	0	%100
46	SF3-TH	Z	.001	.001	0	%100
47	D1	Z	.001	.001	0	%100
48	D2	Z	.001	.001	0	%100
49	D3	Z	.001	.001	0	%100
50	D4	Z	.001	.001	0	%100
51	V1	Z	.001	.001	0	%100
52	V2	Z	.001	.001	0	%100
53	V4	Z	.001	.001	0	%100
54	V5	Z	.001	.001	0	%100
55	V3	Z	.001	.001	0	%100
56	V6	Z	.001	.001	0	%100
57	MP-2B	Z	.002	.002	0	%100
58	MP-2A	Z	.002	.002	0	%100
59	M30	Z	.000483	.000483	0	%100
60	M31	Z	.000483	.000483	0	%100
61	M28	Z	.000483	.000483	0	%100
62	M29	Z	.000483	.000483	0	%100
63	M30A	Z	.000483	.000483	0	%100
64	M31A	Z	.000483	.000483	0	%100
65	M32	Z	.000483	.000483	0	%100
66	M33	Z	.000483	.000483	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	SF2-01	max	.685	2	1.305	39	.289	5	0	98	0	98	0	98
2		min	-3.324	42	.36	10	-1.626	62	0	1	0	1	0	1
3	SF2-02	max	3.373	34	1.357	47	1.634	54	0	98	0	98	0	98
4		min	-.92	10	.382	2	-.425	13	0	1	0	1	0	1
5	N46	max	1.092	24	.041	48	.81	24	0	98	0	98	0	98
6		min	-1.094	16	.014	7	-.812	16	0	1	0	1	0	1
7	Totals:	max	2.777	18	2.701	49	1.832	21						
8		min	-2.777	10	.766	2	-1.832	13						

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

	Member	Shape	Code Check	Lo...	LC	S...	L...	LC	phi*P...	phi*P...	phi*Mn ...	phi*M...	Cb	Eqn
1	V3	PIP...	.599	1....	32	.0...	0	32	28.308	32.13	1.872	1.872	1.314	H1-1b
2	D3	Roh...	.437	1....	43	.0...	4...	25	5.672	9.941	.381	.381	1.136	H1-1a
3	D4	Roh...	.408	1....	43	.0...	4...	31	5.672	9.941	.381	.381	1.136	H1-1a
4	M28	5/8 ...	.341	.5	28	.0...	0	29	6.606	7.338	.066	.066	2.253	H1-1b
5	M32	5/8 ...	.335	0	20	.0...	0	21	6.606	7.338	.066	.066	2.258	H1-1b
6	M30	5/8 ...	.277	.5	28	.0...	0	29	6.606	7.338	.066	.066	2.253	H1-1b
7	M30A	5/8 ...	.271	0	21	.0...	0	21	6.606	7.338	.066	.066	2.264	H1-1b
8	SF3-BH	PIP...	.267	.4...	34	.1...	0	41	21.104	32.13	1.872	1.872	2.066	H1-1b
9	M31	5/8 ...	.258	.5	20	.0...	0	21	6.606	7.338	.066	.066	2.252	H1-1b
10	M31A	5/8 ...	.248	0	29	.0...	0	45	6.606	7.338	.066	.066	2.269	H1-1b
11	M33	5/8 ...	.245	0	45	.0...	0	45	6.606	7.338	.066	.066	2.285	H1-1b
12	SF3-TH	PIP...	.235	.5...	42	.0...	0	41	21.104	32.13	1.872	1.872	1.959	H1-1b
13	M29	5/8 ...	.213	.5	20	.0...	0	21	6.606	7.338	.066	.066	2.256	H1-1b
14	SF2-TH	PIP...	.205	5....	33	.0...	0	34	21.104	32.13	1.872	1.872	1.911	H1-1b
15	SF2-BH	PIP...	.204	5....	33	.0...	0	49	21.104	32.13	1.872	1.872	2.086	H1-1b
16	FFBH-2	PIP...	.187	6....	18	.0...	8...	18	27.426	50.715	3.596	3.596	1.693	H1-1b
17	FFTH-2	PIP...	.173	6....	26	.0...	8...	26	27.426	50.715	3.596	3.596	1.849	H1-1b
18	V2	Roh...	.156	3....	34	.0...	3...	33	6.927	9.941	.381	.381	1.136	H1-1b*
19	FFBH-3	PIP...	.147	0	26	.0...	0	26	45.879	50.715	3.596	3.596	1.795	H1-1b
20	MP-2B	PIP...	.135	4....	26	.0...	1.5	27	26.899	32.13	1.872	1.872	1.716	H1-1b
21	MP-3	PIP...	.131	4....	26	.0...	....	26	30.855	32.13	1.872	1.872	3	H1-1b
22	FFTH-3	PIP...	.116	0	26	.0...	0	58	45.879	50.715	3.596	3.596	1.775	H1-1b
23	D1	Roh...	.106	2....	47	.0...	0	26	5.672	9.941	.381	.381	1.136	H1-1b
24	MP-1	PIP...	.101	1....	46	.0...	1...	18	18.381	32.13	1.872	1.872	1.559	H1-1b
25	FFBH-1	PIP...	.101	1....	34	.0...	1...	49	45.879	50.715	3.596	3.596	1.666	H1-1b
26	V5	Roh...	.099	1....	38	.0...	3...	33	6.927	9.941	.381	.381	1	H1-1b
27	MP-2A	PIP...	.098	4....	27	.1...	....	21	31.775	32.13	1.872	1.872	1.465	H1-1b
28	FFTH-1	PIP...	.098	1....	45	.0...	1...	49	45.879	50.715	3.596	3.596	1.683	H1-1b
29	D2	Roh...	.088	2....	47	.0...	4...	25	5.672	9.941	.381	.381	1.136	H1-1b
30	V1	Roh...	.087	3....	49	.0...	3...	18	6.927	9.941	.381	.381	1.136	H1-1b*
31	V4	Roh...	.053	1....	38	.0...	3...	18	6.927	9.941	.381	.381	1	H1-1b
32	SA-1	PIP...	.023	0	24	.0...	4...	47	58.453	65.205	5.749	5.749	1.136	H1-1b*
33	V6	PIP...	.016	1....	46	.0...	0	33	28.308	32.13	1.872	1.872	1.316	H1-1b

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345 - Alpha Sector

Sept 10, 2019
8:43 AM
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Envelope None Cold Formed Steel Code Checks

Me...	Shape	Code Check	Lo...	LC	Sh...	Lo...	.....	Pn[k]	Tn[k]	Mny...	Mnzz[...	Cb	Cmyy	Cmzz	Eqn
No Data to Print ...															

(Global) Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	24
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 15th(360-16): LRFD
Adjust Stiffness?	No
RISAConnection Code	None
Cold Formed Steel Code	None
Wood Code	None
Wood Temperature	< 100F
Concrete Code	None
Masonry Code	None
Aluminum Code	None - Building
Stainless Steel Code	None

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	Yes
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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(Global) Model Settings, Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	1
Cd X	1
Rho Z	1
Rho X	1

Hot Rolled Steel Properties

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

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horiz	PIPE 2.5	None	None	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
2	Mount Pipe 1	PIPE 2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
3	Support Arm	PIPE 2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
4	Support Bracing 1	Rohn TS 1.5 x 16ga	None	None	A53 GR.42	Typical	.263	.068	.068	.137
5	Support Bracing 2	PIPE 2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
6	Stabilizer	PIPE 3.0	None	None	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
7	MP Cxn	5/8 Threaded Rod	None	None	A36 Gr.36	Typical	.226	.004	.004	.008

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	CF1A	8CU1.25X057	Beam	None	A653 SS Gr..	Typical	.581	.057	4.41	.00063

Material Takeoff

	Material	Size	Pieces	Length[ft]	Weight[K]
1	Hot Rolled Steel				
2	A36 Gr.36	5/8 Threaded Rod	8	4	0
3	A53 GR.42	Rohn TS 1.5 x 16ga	8	29.2	0
4	A53 Gr.B	PIPE 2.0	10	52.2	.2
5	A53 Gr.B	PIPE 2.5	6	24	.1
6	A53 Gr.B	PIPE 3.0	1	4.5	0
7	Total HR Steel		33	113.9	.4
8					
9	Plate Elements	Thickness (in)		Volume (yds^3)	
10	gen_Steel	1.3	8	0	0
11	Total Plates		8	0	0

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	SF2-01	Reaction	Reaction	Reaction			
2	SF2-02	Reaction	Reaction	Reaction			
3	N46	Reaction	Reaction	Reaction			

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	FFBH-1	FF3	SF2-4			Face Horiz	None	None	A53 Gr.B	Typical
2	FFBH-2	SF2-4	SF3-4			Face Horiz	None	None	A53 Gr.B	Typical
3	FFBH-3	SF3-4	FF4			Face Horiz	None	None	A53 Gr.B	Typical
4	FFTH-1	FF1	SF2-3			Face Horiz	None	None	A53 Gr.B	Typical
5	FFTH-2	SF2-3	SF3-3			Face Horiz	None	None	A53 Gr.B	Typical
6	FFTH-3	SF3-3	FF2			Face Horiz	None	None	A53 Gr.B	Typical
7	MP-1	N31	N33			Mount Pipe 1	None	None	A53 Gr.B	Typical
8	MP-3	N35	N37			Mount Pipe 1	None	None	A53 Gr.B	Typical
9	SA-1	N47A	N46			Stabilizer	None	None	A53 Gr.B	Typical
10	SF2-BH	SF2-02	SF2-4			Support Arm	None	None	A53 Gr.B	Typical
11	SF2-TH	SF2-01	SF2-3			Support Arm	None	None	A53 Gr.B	Typical
12	SF3-BH	SF2-02	SF3-4			Support Arm	None	None	A53 Gr.B	Typical
13	SF3-TH	SF2-01	SF3-3			Support Arm	None	None	A53 Gr.B	Typical
14	D1	N33A	N36A			Support Bracing 1	None	None	A53 GR.42	Typical
15	D2	N35A	N38A			Support Bracing 1	None	None	A53 GR.42	Typical
16	D3	N44A	N45A			Support Bracing 1	None	None	A53 GR.42	Typical
17	D4	N46A	N47			Support Bracing 1	None	None	A53 GR.42	Typical
18	V1	N33A	N34A			Support Bracing 1	None	None	A53 GR.42	Typical
19	V2	N35A	N36A			Support Bracing 1	None	None	A53 GR.42	Typical
20	V4	N43A	N44A			Support Bracing 1	None	None	A53 GR.42	Typical
21	V5	N45A	N46A			Support Bracing 1	None	None	A53 GR.42	Typical
22	V3	N37A	N38A			Support Bracing 2	None	None	A53 Gr.B	Typical
23	V6	N47	N48			Support Bracing 2	None	None	A53 Gr.B	Typical
24	MP-2B	N54	N55			Mount Pipe 1	None	None	A53 Gr.B	Typical
25	MP-2A	N52	N53			Mount Pipe 1	None	None	A53 Gr.B	Typical
26	M30	N56	N57			MP Cxn	None	None	A36 Gr.36	Typical
27	M31	N58	N59			MP Cxn	None	None	A36 Gr.36	Typical
28	M28	N48B	N49			MP Cxn	None	None	A36 Gr.36	Typical
29	M29	N50	N51			MP Cxn	None	None	A36 Gr.36	Typical
30	M30A	N52A	N53A			MP Cxn	None	None	A36 Gr.36	Typical
31	M31A	N54A	N55A			MP Cxn	None	None	A36 Gr.36	Typical
32	M32	N56A	N57A			MP Cxn	None	None	A36 Gr.36	Typical
33	M33	N58A	N59A			MP Cxn	None	None	A36 Gr.36	Typical

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio O...	Analysis ...	Inactive	Seismi...
1	FFBH-1						Yes	** NA **			None
2	FFBH-2						Yes	** NA **			None
3	FFBH-3						Yes	** NA **			None
4	FFTH-1						Yes	** NA **			None
5	FFTH-2						Yes	** NA **			None
6	FFTH-3						Yes	** NA **			None
7	MP-1						Yes	** NA **			None
8	MP-3						Yes	** NA **			None
9	SA-1	BenPIN					Yes	** NA **			None
10	SF2-BH		BenPIN				Yes	** NA **			None
11	SF2-TH		BenPIN				Yes	** NA **			None
12	SF3-BH		BenPIN				Yes	** NA **			None
13	SF3-TH		BenPIN				Yes	** NA **			None
14	D1	BenPIN	BenPIN				Yes	** NA **			None
15	D2	BenPIN	BenPIN				Yes	** NA **			None
16	D3	BenPIN	BenPIN				Yes	** NA **			None
17	D4	BenPIN	BenPIN				Yes	** NA **			None
18	V1	BenPIN	BenPIN				Yes	** NA **			None
19	V2	BenPIN	BenPIN				Yes	** NA **			None
20	V4	BenPIN	BenPIN				Yes	** NA **			None
21	V5	BenPIN	BenPIN				Yes	** NA **			None
22	V3	BenPIN	BenPIN				Yes	** NA **			None
23	V6	BenPIN	BenPIN				Yes	** NA **			None
24	MP-2B						Yes	** NA **			None
25	MP-2A						Yes	** NA **			None
26	M30						Yes	** NA **			None
27	M31						Yes	** NA **			None
28	M28						Yes	** NA **			None
29	M29						Yes	** NA **			None
30	M30A						Yes	** NA **			None
31	M31A						Yes	** NA **			None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torq...	Kyy	Kzz	Cb	Functi...
1	FFBH-1	Face Horiz	1.666						2.1	2.1		Lateral
2	FFBH-2	Face Horiz	8.667						1	1		Lateral
3	FFBH-3	Face Horiz	1.666						2.1	2.1		Lateral
4	FFTH-1	Face Horiz	1.666						2.1	2.1		Lateral
5	FFTH-2	Face Horiz	8.667						1	1		Lateral
6	FFTH-3	Face Horiz	1.666						2.1	2.1		Lateral
7	MP-1	Mount Pipe 1	6	Segment	Segment				2.1	2.1		Lateral
8	MP-3	Mount Pipe 1	5	Segment	Segment				2.1	2.1		Lateral
9	SA-1	Stabilizer	4.519						1	1		Lateral
10	SF2-BH	Support Arm	5.921		2.417				1	1		Lateral
11	SF2-TH	Support Arm	5.921		2.417				1	1		Lateral
12	SF3-BH	Support Arm	5.921		2.417				1	1		Lateral
13	SF3-TH	Support Arm	5.921		2.417				1	1		Lateral
14	D1	Support Br...	4.05						1	1		Lateral
15	D2	Support Br...	4.05						1	1		Lateral
16	D3	Support Br...	4.05						1	1		Lateral
17	D4	Support Br...	4.05						1	1		Lateral
18	V1	Support Br...	3.25						1	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torq...	Kyy	Kzz	Cb	Functi...
19	V2	Support Br...	3.25						1	1		Lateral
20	V4	Support Br...	3.25						1	1		Lateral
21	V5	Support Br...	3.25						1	1		Lateral
22	V3	Support Br...	3.25						1	1		Lateral
23	V6	Support Br...	3.25						1	1		Lateral
24	MP-2B	Mount Pipe 1	6	Segment	Segment				2.1	2.1		Lateral
25	MP-2A	Mount Pipe 1	5	Segment	Segment				2.1	2.1		Lateral
26	M30	MP Cxn	.5						1	1		Lateral
27	M31	MP Cxn	.5						1	1		Lateral
28	M28	MP Cxn	.5						1	1		Lateral
29	M29	MP Cxn	.5						1	1		Lateral
30	M30A	MP Cxn	.5						1	1		Lateral
31	M31A	MP Cxn	.5						1	1		Lateral
32	M32	MP Cxn	.5						1	1		Lateral
33	M33	MP Cxn	.5						1	1		Lateral

Cold Formed Steel Design Parameters

Label	Shape	Lengt...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp b...	Kyy	Kzz	Cm-yy	Cm-zz	Cb	R	y sway	z sway
No Data to Print ...														

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(M...	Surface(Plate/...
1	Dead	None		-1			11			
2	0 Wind - No Ice	None					11	33		
3	30 Wind - No Ice	None					22	66		
4	45 Wind - No Ice	None					22	66		
5	60 Wind - No Ice	None					22	66		
6	90 Wind - No Ice	None					11	33		
7	120 Wind - No Ice	None					22	66		
8	135 Wind - No Ice	None					22	66		
9	150 Wind - No Ice	None					22	66		
10	180 Wind - No Ice	None					11	33		
11	210 Wind - No Ice	None					22	66		
12	225 Wind - No Ice	None					22	66		
13	240 Wind - No Ice	None					22	66		
14	270 Wind - No Ice	None					11	33		
15	300 Wind - No Ice	None					22	66		
16	315 Wind - No Ice	None					22	66		
17	330 Wind - No Ice	None					22	66		
18	Ice Weight	None					11	33		
19	0 Wind - Ice	None					11	33		
20	30 Wind - Ice	None					22	66		
21	45 Wind - Ice	None					22	66		
22	60 Wind - Ice	None					22	66		
23	90 Wind - Ice	None					11	33		
24	120 Wind - Ice	None					22	66		
25	135 Wind - Ice	None					22	66		
26	150 Wind - Ice	None					22	66		
27	180 Wind - Ice	None					11	33		
28	210 Wind - Ice	None					22	66		
29	225 Wind - Ice	None					22	66		
30	240 Wind - Ice	None					22	66		
31	270 Wind - Ice	None					11	33		
32	300 Wind - Ice	None					22	66		

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Sept 10, 2019
8:52 AM
Checked By: WHW

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(M...	Surface(Plate/...
33	315 Wind - Ice	None					22	66		
34	330 Wind - Ice	None					22	66		
35	Lm	None				1				
36	Lv	None				1				
37	Seismic Load X	ELX	-1				11			
38	Seismic Load Z	ELZ			-1		11			

Load Combinations

	Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4D	Yes	Y		1	1.4																				
2	0.9D+1.0 0-Wind	Yes	Y		1	.9	2	1																		
3	0.9D+1.0 30-Wind	Yes	Y		1	.9	3	1																		
4	0.9D+1.0 45-Wind	Yes	Y		1	.9	4	1																		
5	0.9D+1.0 60-Wind	Yes	Y		1	.9	5	1																		
6	0.9D+1.0 90-Wind	Yes	Y		1	.9	6	1																		
7	0.9D+1.0 120-Wind	Yes	Y		1	.9	7	1																		
8	0.9D+1.0 135-Wind	Yes	Y		1	.9	8	1																		
9	0.9D+1.0 150-Wind	Yes	Y		1	.9	9	1																		
10	0.9D+1.0 180-Wind	Yes	Y		1	.9	10	1																		
11	0.9D+1.0 210-Wind	Yes	Y		1	.9	11	1																		
12	0.9D+1.0 225-Wind	Yes	Y		1	.9	12	1																		
13	0.9D+1.0 240-Wind	Yes	Y		1	.9	13	1																		
14	0.9D+1.0 270-Wind	Yes	Y		1	.9	14	1																		
15	0.9D+1.0 300-Wind	Yes	Y		1	.9	15	1																		
16	0.9D+1.0 315-Wind	Yes	Y		1	.9	16	1																		
17	0.9D+1.0 330-Wind	Yes	Y		1	.9	17	1																		
18	1.2D+1.0 0-Wind	Yes	Y		1	1.2	2	1																		
19	1.2D+1.0 30-Wind	Yes	Y		1	1.2	3	1																		
20	1.2D+1.0 45-Wind	Yes	Y		1	1.2	4	1																		
21	1.2D+1.0 60-Wind	Yes	Y		1	1.2	5	1																		
22	1.2D+1.0 90-Wind	Yes	Y		1	1.2	6	1																		
23	1.2D+1.0 120-Wind	Yes	Y		1	1.2	7	1																		
24	1.2D+1.0 135-Wind	Yes	Y		1	1.2	8	1																		
25	1.2D+1.0 150-Wind	Yes	Y		1	1.2	9	1																		
26	1.2D+1.0 180-Wind	Yes	Y		1	1.2	10	1																		
27	1.2D+1.0 210-Wind	Yes	Y		1	1.2	11	1																		
28	1.2D+1.0 225-Wind	Yes	Y		1	1.2	12	1																		
29	1.2D+1.0 240-Wind	Yes	Y		1	1.2	13	1																		
30	1.2D+1.0 270-Wind	Yes	Y		1	1.2	14	1																		
31	1.2D+1.0 300-Wind	Yes	Y		1	1.2	15	1																		
32	1.2D+1.0 315-Wind	Yes	Y		1	1.2	16	1																		
33	1.2D+1.0 330-Wind	Yes	Y		1	1.2	17	1																		
34	1.2D+1.0Di+1.0 0-Wind Ice	Yes	Y		1	1.2	18	1	19	1																
35	1.2D+1.0Di+1.0 30-Wind Ice	Yes	Y		1	1.2	18	1	20	1																
36	1.2D+1.0Di+1.0 45-Wind Ice	Yes	Y		1	1.2	18	1	21	1																
37	1.2D+1.0Di+1.0 60-Wind Ice	Yes	Y		1	1.2	18	1	22	1																
38	1.2D+1.0Di+1.0 90-Wind Ice	Yes	Y		1	1.2	18	1	23	1																
39	1.2D+1.0Di+1.0 120-Wind Ice	Yes	Y		1	1.2	18	1	24	1																
40	1.2D+1.0Di+1.0 135-Wind Ice	Yes	Y		1	1.2	18	1	25	1																
41	1.2D+1.0Di+1.0 150-Wind Ice	Yes	Y		1	1.2	18	1	26	1																
42	1.2D+1.0Di+1.0 180-Wind Ice	Yes	Y		1	1.2	18	1	27	1																
43	1.2D+1.0Di+1.0 210-Wind Ice	Yes	Y		1	1.2	18	1	28	1																
44	1.2D+1.0Di+1.0 225-Wind Ice	Yes	Y		1	1.2	18	1	29	1																
45	1.2D+1.0Di+1.0 240-Wind Ice	Yes	Y		1	1.2	18	1	30	1																
46	1.2D+1.0Di+1.0 270-Wind Ice	Yes	Y		1	1.2	18	1	31	1																

Load Combinations (Continued)

	Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
47	1.2D+1.0Di+1.0 300-Wind Ice	Yes	Y		1	1.2	18	1	32	1																		
48	1.2D+1.0Di+1.0 315-Wind Ice	Yes	Y		1	1.2	18	1	33	1																		
49	1.2D+1.0Di+1.0 330-Wind Ice	Yes	Y		1	1.2	18	1	34	1																		
50	1.2D+1.5Lv	Yes	Y		36	1.5	1	1.2																				
51	1.2D+1.5Lm+1.0 0-Wind	Yes	Y		1	1.2	2	.053	35	1.5																		
52	1.2D+1.5Lm+1.0 30-Wind	Yes	Y		1	1.2	3	.053	35	1.5																		
53	1.2D+1.5Lm+1.0 45-Wind	Yes	Y		1	1.2	4	.053	35	1.5																		
54	1.2D+1.5Lm+1.0 60-Wind	Yes	Y		1	1.2	5	.053	35	1.5																		
55	1.2D+1.5Lm+1.0 90-Wind	Yes	Y		1	1.2	6	.053	35	1.5																		
56	1.2D+1.5Lm+1.0 120-Wind	Yes	Y		1	1.2	7	.053	35	1.5																		
57	1.2D+1.5Lm+1.0 135-Wind	Yes	Y		1	1.2	8	.053	35	1.5																		
58	1.2D+1.5Lm+1.0 150-Wind	Yes	Y		1	1.2	9	.053	35	1.5																		
59	1.2D+1.5Lm+1.0 180-Wind	Yes	Y		1	1.2	10	.053	35	1.5																		
60	1.2D+1.5Lm+1.0 210-Wind	Yes	Y		1	1.2	11	.053	35	1.5																		
61	1.2D+1.5Lm+1.0 225-Wind	Yes	Y		1	1.2	12	.053	35	1.5																		
62	1.2D+1.5Lm+1.0 240-Wind	Yes	Y		1	1.2	13	.053	35	1.5																		
63	1.2D+1.5Lm+1.0 270-Wind	Yes	Y		1	1.2	14	.053	35	1.5																		
64	1.2D+1.5Lm+1.0 300-Wind	Yes	Y		1	1.2	15	.053	35	1.5																		
65	1.2D+1.5Lm+1.0 315-Wind	Yes	Y		1	1.2	16	.053	35	1.5																		
66	1.2D+1.5Lm+1.0 330-Wind	Yes	Y		1	1.2	17	.053	35	1.5																		
67	(1.2+0.2Sds)D+1.0 0 Seismic	Yes	Y		1	1.2	E...	.03	0																			
68	(1.2+0.2Sds)D+1.0 30 Seismic	Yes	Y		1	1.2	E...	.026	E...	.015																		
69	(1.2+0.2Sds)D+1.0 45 Seismic	Yes	Y		1	1.2	E...	.021	E...	.021																		
70	(1.2+0.2Sds)D+1.0 60 Seismic	Yes	Y		1	1.2	E...	.015	E...	.026																		
71	(1.2+0.2Sds)D+1.0 90 Seismic	Yes	Y		1	1.2	0		E...	.03																		
72	(1.2+0.2Sds)D+1.0 120 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	.026																		
73	(1.2+0.2Sds)D+1.0 135 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	.021																		
74	(1.2+0.2Sds)D+1.0 150 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	.015																		
75	(1.2+0.2Sds)D+1.0 180 Seismic	Yes	Y		1	1.2	E...	-.03	0																			
76	(1.2+0.2Sds)D+1.0 210 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	-.0...																		
77	(1.2+0.2Sds)D+1.0 225 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	-.0...																		
78	(1.2+0.2Sds)D+1.0 240 Seismic	Yes	Y		1	1.2	E...	-.0...	E...	-.0...																		
79	(1.2+0.2Sds)D+1.0 270 Seismic	Yes	Y		1	1.2	0		E...	-.03																		
80	(1.2+0.2Sds)D+1.0 300 Seismic	Yes	Y		1	1.2	E...	.015	E...	-.0...																		
81	(1.2+0.2Sds)D+1.0 315 Seismic	Yes	Y		1	1.2	E...	.021	E...	-.0...																		
82	(1.2+0.2Sds)D+1.0 330 Seismic	Yes	Y		1	1.2	E...	.026	E...	-.0...																		
83	(0.9-0.2Sds)*DL+1.0 0 Seismic	Yes	Y		1	.9	E...	.03	0																			
84	(0.9-0.2Sds)*DL+1.0 30 Seismic	Yes	Y		1	.9	E...	.026	E...	.015																		
85	(0.9-0.2Sds)*DL+1.0 Seismic	Yes	Y		1	.9	E...	.021	E...	.021																		
86	(0.9-0.2Sds)*DL+1.0 60 Seismic	Yes	Y		1	.9	E...	.015	E...	.026																		
87	(0.9-0.2Sds)*DL+1.0 90 Seismic	Yes	Y		1	.9	0		E...	.03																		
88	(0.9-0.2Sds)*DL+1.0 120 Seismic	Yes	Y		1	.9	E...	-.0...	E...	.026																		
89	(0.9-0.2Sds)*DL+1.0 135 Seismic	Yes	Y		1	.9	E...	-.0...	E...	.021																		
90	(0.9-0.2Sds)*DL+1.0 150 Seismic	Yes	Y		1	.9	E...	-.0...	E...	.015																		
91	(0.9-0.2Sds)*DL+1.0 180 Seismic	Yes	Y		1	.9	E...	-.03	0																			
92	(0.9-0.2Sds)*DL+1.0 210 Seismic	Yes	Y		1	.9	E...	-.0...	E...	-.0...																		
93	(0.9-0.2Sds)*DL+1.0 225 Seismic	Yes	Y		1	.9	E...	-.0...	E...	-.0...																		
94	(0.9-0.2Sds)*DL+1.0 240 Seismic	Yes	Y		1	.9	E...	-.0...	E...	-.0...																		
95	(0.9-0.2Sds)*DL+1.0 270 Seismic	Yes	Y		1	.9	0		E...	-.03																		
96	(0.9-0.2Sds)*DL+1.0 300 Seismic	Yes	Y		1	.9	E...	.015	E...	-.0...																		
97	(0.9-0.2Sds)*DL+1.0 315 Seismic	Yes	Y		1	.9	E...	.021	E...	-.0...																		
98	(0.9-0.2Sds)*DL+1.0 330 Seismic	Yes	Y		1	.9	E...	.026	E...	-.0...																		

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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Joint Loads and Enforced Displacements (BLC 35 : Lm)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/ft, k*s^2*ft)]
1	N30	L	Y	-.5

Joint Loads and Enforced Displacements (BLC 36 : Lv)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/ft, k*s^2*ft)]
1	FF4	L	Y	-.25

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.018	1
2	MP-1	Y	-.016	4
3	MP-2B	Y	-.034	1.5
4	MP-2A	Y	-.085	3
5	MP-2A	Y	-.072	3
6	MP-3	Y	-.034	1.5
7	MP-3	Y	-.06	3
8	SF2-TH	Y	-.026	2
9	MP-1	Y	-.018	5
10	MP-2B	Y	-.034	4
11	MP-3	Y	-.034	4

Member Point Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.125	1
2	MP-1	X	-.025	4
3	MP-2B	X	-.187	1.5
4	MP-2A	X	-.159	3
5	MP-2A	X	-.075	3
6	MP-3	X	-.187	1.5
7	MP-3	X	-.084	3
8	SF2-TH	X	-.053	2
9	MP-1	X	-.125	5
10	MP-2B	X	-.187	4
11	MP-3	X	-.187	4

Member Point Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.104	1
2	MP-1	X	-.022	4
3	MP-2B	X	-.154	1.5
4	MP-2A	X	-.134	3
5	MP-2A	X	-.064	3
6	MP-3	X	-.154	1.5
7	MP-3	X	-.07	3
8	SF2-TH	X	-.054	2
9	MP-1	X	-.104	5
10	MP-2B	X	-.154	4
11	MP-3	X	-.154	4
12	MP-1	Z	-.06	1
13	MP-1	Z	-.012	4
14	MP-2B	Z	-.089	1.5
15	MP-2A	Z	-.077	3
16	MP-2A	Z	-.037	3
17	MP-3	Z	-.089	1.5

Member Point Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
18	MP-3	Z	-.04	3
19	SF2-TH	Z	-.031	2
20	MP-1	Z	-.06	5
21	MP-2B	Z	-.089	4
22	MP-3	Z	-.089	4

Member Point Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.076	1
2	MP-1	X	-.017	4
3	MP-2B	X	-.109	1.5
4	MP-2A	X	-.102	3
5	MP-2A	X	-.05	3
6	MP-3	X	-.109	1.5
7	MP-3	X	-.052	3
8	SF2-TH	X	-.051	2
9	MP-1	X	-.076	5
10	MP-2B	X	-.109	4
11	MP-3	X	-.109	4
12	MP-1	Z	-.076	1
13	MP-1	Z	-.017	4
14	MP-2B	Z	-.109	1.5
15	MP-2A	Z	-.102	3
16	MP-2A	Z	-.05	3
17	MP-3	Z	-.109	1.5
18	MP-3	Z	-.052	3
19	SF2-TH	Z	-.051	2
20	MP-1	Z	-.076	5
21	MP-2B	Z	-.109	4
22	MP-3	Z	-.109	4

Member Point Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.046	1
2	MP-1	X	-.011	4
3	MP-2B	X	-.063	1.5
4	MP-2A	X	-.065	3
5	MP-2A	X	-.034	3
6	MP-3	X	-.063	1.5
7	MP-3	X	-.032	3
8	SF2-TH	X	-.041	2
9	MP-1	X	-.046	5
10	MP-2B	X	-.063	4
11	MP-3	X	-.063	4
12	MP-1	Z	-.08	1
13	MP-1	Z	-.02	4
14	MP-2B	Z	-.109	1.5
15	MP-2A	Z	-.113	3
16	MP-2A	Z	-.059	3
17	MP-3	Z	-.109	1.5
18	MP-3	Z	-.055	3
19	SF2-TH	Z	-.071	2
20	MP-1	Z	-.08	5
21	MP-2B	Z	-.109	4
22	MP-3	Z	-.109	4

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Sept 10, 2019
8:52 AM
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Member Point Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.069	1
2	MP-1	Z	-.021	4
3	MP-2B	Z	-.084	1.5
4	MP-2A	Z	-.11	3
5	MP-2A	Z	-.063	3
6	MP-3	Z	-.084	1.5
7	MP-3	Z	-.05	3
8	SF2-TH	Z	-.092	2
9	MP-1	Z	-.069	5
10	MP-2B	Z	-.084	4
11	MP-3	Z	-.084	4

Member Point Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.037	1
2	MP-1	X	.011	4
3	MP-2B	X	.047	1.5
4	MP-2A	X	.057	3
5	MP-2A	X	.032	3
6	MP-3	X	.047	1.5
7	MP-3	X	.026	3
8	SF2-TH	X	.041	2
9	MP-1	X	.037	5
10	MP-2B	X	.047	4
11	MP-3	X	.047	4
12	MP-1	Z	-.064	1
13	MP-1	Z	-.018	4
14	MP-2B	Z	-.081	1.5
15	MP-2A	Z	-.099	3
16	MP-2A	Z	-.055	3
17	MP-3	Z	-.081	1.5
18	MP-3	Z	-.046	3
19	SF2-TH	Z	-.071	2
20	MP-1	Z	-.064	5
21	MP-2B	Z	-.081	4
22	MP-3	Z	-.081	4

Member Point Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.061	1
2	MP-1	X	.016	4
3	MP-2B	X	.083	1.5
4	MP-2A	X	.089	3
5	MP-2A	X	.047	3
6	MP-3	X	.083	1.5
7	MP-3	X	.043	3
8	SF2-TH	X	.051	2
9	MP-1	X	.061	5
10	MP-2B	X	.083	4
11	MP-3	X	.083	4
12	MP-1	Z	-.061	1
13	MP-1	Z	-.016	4
14	MP-2B	Z	-.083	1.5
15	MP-2A	Z	-.089	3
16	MP-2A	Z	-.047	3
17	MP-3	Z	-.083	1.5

Member Point Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
18	MP-3	Z	-.043	3
19	SF2-TH	Z	-.051	2
20	MP-1	Z	-.061	5
21	MP-2B	Z	-.083	4
22	MP-3	Z	-.083	4

Member Point Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.088	1
2	MP-1	X	.02	4
3	MP-2B	X	.126	1.5
4	MP-2A	X	.121	3
5	MP-2A	X	.061	3
6	MP-3	X	.126	1.5
7	MP-3	X	.06	3
8	SF2-TH	X	.054	2
9	MP-1	X	.088	5
10	MP-2B	X	.126	4
11	MP-3	X	.126	4
12	MP-1	Z	-.051	1
13	MP-1	Z	-.012	4
14	MP-2B	Z	-.073	1.5
15	MP-2A	Z	-.07	3
16	MP-2A	Z	-.035	3
17	MP-3	Z	-.073	1.5
18	MP-3	Z	-.035	3
19	SF2-TH	Z	-.031	2
20	MP-1	Z	-.051	5
21	MP-2B	Z	-.073	4
22	MP-3	Z	-.073	4

Member Point Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.125	1
2	MP-1	X	.025	4
3	MP-2B	X	.187	1.5
4	MP-2A	X	.159	3
5	MP-2A	X	.075	3
6	MP-3	X	.187	1.5
7	MP-3	X	.084	3
8	SF2-TH	X	.053	2
9	MP-1	X	.125	5
10	MP-2B	X	.187	4
11	MP-3	X	.187	4

Member Point Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.104	1
2	MP-1	X	.022	4
3	MP-2B	X	.154	1.5
4	MP-2A	X	.134	3
5	MP-2A	X	.064	3
6	MP-3	X	.154	1.5
7	MP-3	X	.07	3
8	SF2-TH	X	.054	2

Company : Tower Engineering Professionals, Inc.
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Sept 10, 2019
8:52 AM
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Member Point Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
9	MP-1	X	.104	5
10	MP-2B	X	.154	4
11	MP-3	X	.154	4
12	MP-1	Z	.06	1
13	MP-1	Z	.012	4
14	MP-2B	Z	.089	1.5
15	MP-2A	Z	.077	3
16	MP-2A	Z	.037	3
17	MP-3	Z	.089	1.5
18	MP-3	Z	.04	3
19	SF2-TH	Z	.031	2
20	MP-1	Z	.06	5
21	MP-2B	Z	.089	4
22	MP-3	Z	.089	4

Member Point Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.076	1
2	MP-1	X	.017	4
3	MP-2B	X	.109	1.5
4	MP-2A	X	.102	3
5	MP-2A	X	.05	3
6	MP-3	X	.109	1.5
7	MP-3	X	.052	3
8	SF2-TH	X	.051	2
9	MP-1	X	.076	5
10	MP-2B	X	.109	4
11	MP-3	X	.109	4
12	MP-1	Z	.076	1
13	MP-1	Z	.017	4
14	MP-2B	Z	.109	1.5
15	MP-2A	Z	.102	3
16	MP-2A	Z	.05	3
17	MP-3	Z	.109	1.5
18	MP-3	Z	.052	3
19	SF2-TH	Z	.051	2
20	MP-1	Z	.076	5
21	MP-2B	Z	.109	4
22	MP-3	Z	.109	4

Member Point Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.046	1
2	MP-1	X	.011	4
3	MP-2B	X	.063	1.5
4	MP-2A	X	.065	3
5	MP-2A	X	.034	3
6	MP-3	X	.063	1.5
7	MP-3	X	.032	3
8	SF2-TH	X	.041	2
9	MP-1	X	.046	5
10	MP-2B	X	.063	4
11	MP-3	X	.063	4
12	MP-1	Z	.08	1
13	MP-1	Z	.02	4
14	MP-2B	Z	.109	1.5

Member Point Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP-2A	Z	.113	3
16	MP-2A	Z	.059	3
17	MP-3	Z	.109	1.5
18	MP-3	Z	.055	3
19	SF2-TH	Z	.071	2
20	MP-1	Z	.08	5
21	MP-2B	Z	.109	4
22	MP-3	Z	.109	4

Member Point Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.069	1
2	MP-1	Z	.021	4
3	MP-2B	Z	.084	1.5
4	MP-2A	Z	.11	3
5	MP-2A	Z	.063	3
6	MP-3	Z	.084	1.5
7	MP-3	Z	.05	3
8	SF2-TH	Z	.092	2
9	MP-1	Z	.069	5
10	MP-2B	Z	.084	4
11	MP-3	Z	.084	4

Member Point Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.037	1
2	MP-1	X	-.011	4
3	MP-2B	X	-.047	1.5
4	MP-2A	X	-.057	3
5	MP-2A	X	-.032	3
6	MP-3	X	-.047	1.5
7	MP-3	X	-.026	3
8	SF2-TH	X	-.041	2
9	MP-1	X	-.037	5
10	MP-2B	X	-.047	4
11	MP-3	X	-.047	4
12	MP-1	Z	.064	1
13	MP-1	Z	.018	4
14	MP-2B	Z	.081	1.5
15	MP-2A	Z	.099	3
16	MP-2A	Z	.055	3
17	MP-3	Z	.081	1.5
18	MP-3	Z	.046	3
19	SF2-TH	Z	.071	2
20	MP-1	Z	.064	5
21	MP-2B	Z	.081	4
22	MP-3	Z	.081	4

Member Point Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.061	1
2	MP-1	X	-.016	4
3	MP-2B	X	-.083	1.5
4	MP-2A	X	-.089	3
5	MP-2A	X	-.047	3

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Sept 10, 2019
8:52 AM
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Member Point Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
6	MP-3	X	-.083	1.5
7	MP-3	X	-.043	3
8	SF2-TH	X	-.051	2
9	MP-1	X	-.061	5
10	MP-2B	X	-.083	4
11	MP-3	X	-.083	4
12	MP-1	Z	.061	1
13	MP-1	Z	.016	4
14	MP-2B	Z	.083	1.5
15	MP-2A	Z	.089	3
16	MP-2A	Z	.047	3
17	MP-3	Z	.083	1.5
18	MP-3	Z	.043	3
19	SF2-TH	Z	.051	2
20	MP-1	Z	.061	5
21	MP-2B	Z	.083	4
22	MP-3	Z	.083	4

Member Point Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.088	1
2	MP-1	X	-.02	4
3	MP-2B	X	-.126	1.5
4	MP-2A	X	-.121	3
5	MP-2A	X	-.061	3
6	MP-3	X	-.126	1.5
7	MP-3	X	-.06	3
8	SF2-TH	X	-.054	2
9	MP-1	X	-.088	5
10	MP-2B	X	-.126	4
11	MP-3	X	-.126	4
12	MP-1	Z	.051	1
13	MP-1	Z	.012	4
14	MP-2B	Z	.073	1.5
15	MP-2A	Z	.07	3
16	MP-2A	Z	.035	3
17	MP-3	Z	.073	1.5
18	MP-3	Z	.035	3
19	SF2-TH	Z	.031	2
20	MP-1	Z	.051	5
21	MP-2B	Z	.073	4
22	MP-3	Z	.073	4

Member Point Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.055	1
2	MP-1	Y	-.022	4
3	MP-2B	Y	-.084	1.5
4	MP-2A	Y	-.097	3
5	MP-2A	Y	-.06	3
6	MP-3	Y	-.084	1.5
7	MP-3	Y	-.055	3
8	SF2-TH	Y	-.06	2
9	MP-1	Y	-.055	5
10	MP-2B	Y	-.084	4
11	MP-3	Y	-.084	4

Member Point Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.026	1
2	MP-1	X	-.007	4
3	MP-2B	X	-.036	1.5
4	MP-2A	X	-.033	3
5	MP-2A	X	-.017	3
6	MP-3	X	-.036	1.5
7	MP-3	X	-.019	3
8	SF2-TH	X	-.011	2
9	MP-1	X	-.026	5
10	MP-2B	X	-.036	4
11	MP-3	X	-.036	4

Member Point Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.021	1
2	MP-1	X	-.006	4
3	MP-2B	X	-.029	1.5
4	MP-2A	X	-.028	3
5	MP-2A	X	-.015	3
6	MP-3	X	-.029	1.5
7	MP-3	X	-.016	3
8	SF2-TH	X	-.011	2
9	MP-1	X	-.021	5
10	MP-2B	X	-.029	4
11	MP-3	X	-.029	4
12	MP-1	Z	-.012	1
13	MP-1	Z	-.004	4
14	MP-2B	Z	-.017	1.5
15	MP-2A	Z	-.016	3
16	MP-2A	Z	-.008	3
17	MP-3	Z	-.017	1.5
18	MP-3	Z	-.009	3
19	SF2-TH	Z	-.007	2
20	MP-1	Z	-.012	5
21	MP-2B	Z	-.017	4
22	MP-3	Z	-.017	4

Member Point Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.016	1
2	MP-1	X	-.005	4
3	MP-2B	X	-.021	1.5
4	MP-2A	X	-.021	3
5	MP-2A	X	-.012	3
6	MP-3	X	-.021	1.5
7	MP-3	X	-.012	3
8	SF2-TH	X	-.01	2
9	MP-1	X	-.016	5
10	MP-2B	X	-.021	4
11	MP-3	X	-.021	4
12	MP-1	Z	-.016	1
13	MP-1	Z	-.005	4
14	MP-2B	Z	-.021	1.5
15	MP-2A	Z	-.021	3
16	MP-2A	Z	-.012	3
17	MP-3	Z	-.021	1.5

Member Point Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
18	MP-3	Z	-.012	3
19	SF2-TH	Z	-.01	2
20	MP-1	Z	-.016	5
21	MP-2B	Z	-.021	4
22	MP-3	Z	-.021	4

Member Point Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.01	1
2	MP-1	X	-.003	4
3	MP-2B	X	-.013	1.5
4	MP-2A	X	-.014	3
5	MP-2A	X	-.008	3
6	MP-3	X	-.013	1.5
7	MP-3	X	-.008	3
8	SF2-TH	X	-.008	2
9	MP-1	X	-.01	5
10	MP-2B	X	-.013	4
11	MP-3	X	-.013	4
12	MP-1	Z	-.017	1
13	MP-1	Z	-.006	4
14	MP-2B	Z	-.022	1.5
15	MP-2A	Z	-.024	3
16	MP-2A	Z	-.014	3
17	MP-3	Z	-.022	1.5
18	MP-3	Z	-.013	3
19	SF2-TH	Z	-.014	2
20	MP-1	Z	-.017	5
21	MP-2B	Z	-.022	4
22	MP-3	Z	-.022	4

Member Point Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.016	1
2	MP-1	Z	-.006	4
3	MP-2B	Z	-.018	1.5
4	MP-2A	Z	-.024	3
5	MP-2A	Z	-.015	3
6	MP-3	Z	-.018	1.5
7	MP-3	Z	-.012	3
8	SF2-TH	Z	-.018	2
9	MP-1	Z	-.016	5
10	MP-2B	Z	-.018	4
11	MP-3	Z	-.018	4

Member Point Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.009	1
2	MP-1	X	.003	4
3	MP-2B	X	.01	1.5
4	MP-2A	X	.012	3
5	MP-2A	X	.008	3
6	MP-3	X	.01	1.5
7	MP-3	X	.007	3
8	SF2-TH	X	.008	2

Member Point Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
9	MP-1	X	.009	5
10	MP-2B	X	.01	4
11	MP-3	X	.01	4
12	MP-1	Z	-.015	1
13	MP-1	Z	-.006	4
14	MP-2B	Z	-.017	1.5
15	MP-2A	Z	-.022	3
16	MP-2A	Z	-.013	3
17	MP-3	Z	-.017	1.5
18	MP-3	Z	-.011	3
19	SF2-TH	Z	-.014	2
20	MP-1	Z	-.015	5
21	MP-2B	Z	-.017	4
22	MP-3	Z	-.017	4

Member Point Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.014	1
2	MP-1	X	.005	4
3	MP-2B	X	.017	1.5
4	MP-2A	X	.019	3
5	MP-2A	X	.011	3
6	MP-3	X	.017	1.5
7	MP-3	X	.01	3
8	SF2-TH	X	.01	2
9	MP-1	X	.014	5
10	MP-2B	X	.017	4
11	MP-3	X	.017	4
12	MP-1	Z	-.014	1
13	MP-1	Z	-.005	4
14	MP-2B	Z	-.017	1.5
15	MP-2A	Z	-.019	3
16	MP-2A	Z	-.011	3
17	MP-3	Z	-.017	1.5
18	MP-3	Z	-.01	3
19	SF2-TH	Z	-.01	2
20	MP-1	Z	-.014	5
21	MP-2B	Z	-.017	4
22	MP-3	Z	-.017	4

Member Point Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.019	1
2	MP-1	X	.006	4
3	MP-2B	X	.025	1.5
4	MP-2A	X	.025	3
5	MP-2A	X	.014	3
6	MP-3	X	.025	1.5
7	MP-3	X	.014	3
8	SF2-TH	X	.011	2
9	MP-1	X	.019	5
10	MP-2B	X	.025	4
11	MP-3	X	.025	4
12	MP-1	Z	-.011	1
13	MP-1	Z	-.003	4
14	MP-2B	Z	-.014	1.5

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Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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Member Point Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP-2A	Z	-.015	3
16	MP-2A	Z	-.008	3
17	MP-3	Z	-.014	1.5
18	MP-3	Z	-.008	3
19	SF2-TH	Z	-.007	2
20	MP-1	Z	-.011	5
21	MP-2B	Z	-.014	4
22	MP-3	Z	-.014	4

Member Point Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.026	1
2	MP-1	X	.007	4
3	MP-2B	X	.036	1.5
4	MP-2A	X	.033	3
5	MP-2A	X	.017	3
6	MP-3	X	.036	1.5
7	MP-3	X	.019	3
8	SF2-TH	X	.011	2
9	MP-1	X	.026	5
10	MP-2B	X	.036	4
11	MP-3	X	.036	4

Member Point Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.021	1
2	MP-1	X	.006	4
3	MP-2B	X	.029	1.5
4	MP-2A	X	.028	3
5	MP-2A	X	.015	3
6	MP-3	X	.029	1.5
7	MP-3	X	.016	3
8	SF2-TH	X	.011	2
9	MP-1	X	.021	5
10	MP-2B	X	.029	4
11	MP-3	X	.029	4
12	MP-1	Z	.012	1
13	MP-1	Z	.004	4
14	MP-2B	Z	.017	1.5
15	MP-2A	Z	.016	3
16	MP-2A	Z	.008	3
17	MP-3	Z	.017	1.5
18	MP-3	Z	.009	3
19	SF2-TH	Z	.007	2
20	MP-1	Z	.012	5
21	MP-2B	Z	.017	4
22	MP-3	Z	.017	4

Member Point Loads (BLC 29 : 225 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.016	1
2	MP-1	X	.005	4
3	MP-2B	X	.021	1.5
4	MP-2A	X	.021	3
5	MP-2A	X	.012	3

Member Point Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
6	MP-3	X	.021	1.5
7	MP-3	X	.012	3
8	SF2-TH	X	.01	2
9	MP-1	X	.016	5
10	MP-2B	X	.021	4
11	MP-3	X	.021	4
12	MP-1	Z	.016	1
13	MP-1	Z	.005	4
14	MP-2B	Z	.021	1.5
15	MP-2A	Z	.021	3
16	MP-2A	Z	.012	3
17	MP-3	Z	.021	1.5
18	MP-3	Z	.012	3
19	SF2-TH	Z	.01	2
20	MP-1	Z	.016	5
21	MP-2B	Z	.021	4
22	MP-3	Z	.021	4

Member Point Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.01	1
2	MP-1	X	.003	4
3	MP-2B	X	.013	1.5
4	MP-2A	X	.014	3
5	MP-2A	X	.008	3
6	MP-3	X	.013	1.5
7	MP-3	X	.008	3
8	SF2-TH	X	.008	2
9	MP-1	X	.01	5
10	MP-2B	X	.013	4
11	MP-3	X	.013	4
12	MP-1	Z	.017	1
13	MP-1	Z	.006	4
14	MP-2B	Z	.022	1.5
15	MP-2A	Z	.024	3
16	MP-2A	Z	.014	3
17	MP-3	Z	.022	1.5
18	MP-3	Z	.013	3
19	SF2-TH	Z	.014	2
20	MP-1	Z	.017	5
21	MP-2B	Z	.022	4
22	MP-3	Z	.022	4

Member Point Loads (BLC 31 : 270 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.016	1
2	MP-1	Z	.006	4
3	MP-2B	Z	.018	1.5
4	MP-2A	Z	.024	3
5	MP-2A	Z	.015	3
6	MP-3	Z	.018	1.5
7	MP-3	Z	.012	3
8	SF2-TH	Z	.018	2
9	MP-1	Z	.016	5
10	MP-2B	Z	.018	4
11	MP-3	Z	.018	4

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

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Member Point Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.009	1
2	MP-1	X	-.003	4
3	MP-2B	X	-.01	1.5
4	MP-2A	X	-.012	3
5	MP-2A	X	-.008	3
6	MP-3	X	-.01	1.5
7	MP-3	X	-.007	3
8	SF2-TH	X	-.008	2
9	MP-1	X	-.009	5
10	MP-2B	X	-.01	4
11	MP-3	X	-.01	4
12	MP-1	Z	.015	1
13	MP-1	Z	.006	4
14	MP-2B	Z	.017	1.5
15	MP-2A	Z	.022	3
16	MP-2A	Z	.013	3
17	MP-3	Z	.017	1.5
18	MP-3	Z	.011	3
19	SF2-TH	Z	.014	2
20	MP-1	Z	.015	5
21	MP-2B	Z	.017	4
22	MP-3	Z	.017	4

Member Point Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.014	1
2	MP-1	X	-.005	4
3	MP-2B	X	-.017	1.5
4	MP-2A	X	-.019	3
5	MP-2A	X	-.011	3
6	MP-3	X	-.017	1.5
7	MP-3	X	-.01	3
8	SF2-TH	X	-.01	2
9	MP-1	X	-.014	5
10	MP-2B	X	-.017	4
11	MP-3	X	-.017	4
12	MP-1	Z	.014	1
13	MP-1	Z	.005	4
14	MP-2B	Z	.017	1.5
15	MP-2A	Z	.019	3
16	MP-2A	Z	.011	3
17	MP-3	Z	.017	1.5
18	MP-3	Z	.01	3
19	SF2-TH	Z	.01	2
20	MP-1	Z	.014	5
21	MP-2B	Z	.017	4
22	MP-3	Z	.017	4

Member Point Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.019	1
2	MP-1	X	-.006	4
3	MP-2B	X	-.025	1.5
4	MP-2A	X	-.025	3
5	MP-2A	X	-.014	3
6	MP-3	X	-.025	1.5

Member Point Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
7	MP-3	X	-.014	3
8	SF2-TH	X	-.011	2
9	MP-1	X	-.019	5
10	MP-2B	X	-.025	4
11	MP-3	X	-.025	4
12	MP-1	Z	.011	1
13	MP-1	Z	.003	4
14	MP-2B	Z	.014	1.5
15	MP-2A	Z	.015	3
16	MP-2A	Z	.008	3
17	MP-3	Z	.014	1.5
18	MP-3	Z	.008	3
19	SF2-TH	Z	.007	2
20	MP-1	Z	.011	5
21	MP-2B	Z	.014	4
22	MP-3	Z	.014	4

Member Point Loads (BLC 37 : Seismic Load X)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.018	1
2	MP-1	X	-.016	4
3	MP-2B	X	-.034	1.5
4	MP-2A	X	-.085	3
5	MP-2A	X	-.072	3
6	MP-3	X	-.034	1.5
7	MP-3	X	-.06	3
8	SF2-TH	X	-.026	2
9	MP-1	X	-.018	5
10	MP-2B	X	-.034	4
11	MP-3	X	-.034	4

Member Point Loads (BLC 38 : Seismic Load Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.018	1
2	MP-1	Z	-.016	4
3	MP-2B	Z	-.034	1.5
4	MP-2A	Z	-.085	3
5	MP-2A	Z	-.072	3
6	MP-3	Z	-.034	1.5
7	MP-3	Z	-.06	3
8	SF2-TH	Z	-.026	2
9	MP-1	Z	-.018	5
10	MP-2B	Z	-.034	4
11	MP-3	Z	-.034	4

Member Distributed Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.012	-.012	0	%100
2	FFBH-2	X	-.012	-.012	0	%100
3	FFBH-3	X	-.012	-.012	0	%100
4	FFTH-1	X	-.012	-.012	0	%100
5	FFTH-2	X	-.012	-.012	0	%100
6	FFTH-3	X	-.012	-.012	0	%100
7	MP-1	X	-.011	-.011	0	%100

Member Distributed Loads (BLC 2 : 0 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
8	MP-3	X	-.011	-.011	0	%100
9	SA-1	X	-.005	-.005	0	%100
10	SF2-BH	X	-.008	-.008	0	%100
11	SF2-TH	X	-.008	-.008	0	%100
12	SF3-BH	X	-.008	-.008	0	%100
13	SF3-TH	X	-.008	-.008	0	%100
14	D1	X	-.007	-.007	0	%100
15	D2	X	-.007	-.007	0	%100
16	D3	X	-.007	-.007	0	%100
17	D4	X	-.007	-.007	0	%100
18	V1	X	-.007	-.007	0	%100
19	V2	X	-.007	-.007	0	%100
20	V4	X	-.007	-.007	0	%100
21	V5	X	-.007	-.007	0	%100
22	V3	X	-.009	-.009	0	%100
23	V6	X	-.009	-.009	0	%100
24	MP-2B	X	-.011	-.011	0	%100
25	MP-2A	X	-.011	-.011	0	%100
26	M30	X	0	0	0	%100
27	M31	X	0	0	0	%100
28	M28	X	0	0	0	%100
29	M29	X	0	0	0	%100
30	M30A	X	0	0	0	%100
31	M31A	X	0	0	0	%100
32	M32	X	0	0	0	%100
33	M33	X	0	0	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.009	-.009	0	%100
2	FFBH-2	X	-.009	-.009	0	%100
3	FFBH-3	X	-.009	-.009	0	%100
4	FFTH-1	X	-.009	-.009	0	%100
5	FFTH-2	X	-.009	-.009	0	%100
6	FFTH-3	X	-.009	-.009	0	%100
7	MP-1	X	-.009	-.009	0	%100
8	MP-3	X	-.009	-.009	0	%100
9	SA-1	X	-.000676	-.000676	0	%100
10	SF2-BH	X	-.009	-.009	0	%100
11	SF2-TH	X	-.009	-.009	0	%100
12	SF3-BH	X	-.003	-.003	0	%100
13	SF3-TH	X	-.003	-.003	0	%100
14	D1	X	-.006	-.006	0	%100
15	D2	X	-.006	-.006	0	%100
16	D3	X	-.006	-.006	0	%100
17	D4	X	-.006	-.006	0	%100
18	V1	X	-.006	-.006	0	%100
19	V2	X	-.006	-.006	0	%100
20	V4	X	-.006	-.006	0	%100
21	V5	X	-.006	-.006	0	%100
22	V3	X	-.008	-.008	0	%100
23	V6	X	-.008	-.008	0	%100
24	MP-2B	X	-.009	-.009	0	%100
25	MP-2A	X	-.009	-.009	0	%100
26	M30	X	-.000725	-.000725	0	%100
27	M31	X	-.000725	-.000725	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
28	M28	X	-.000725	-.000725	0	%100
29	M29	X	-.000725	-.000725	0	%100
30	M30A	X	-.000725	-.000725	0	%100
31	M31A	X	-.000725	-.000725	0	%100
32	M32	X	-.000725	-.000725	0	%100
33	M33	X	-.000725	-.000725	0	%100
34	FFBH-1	Z	-.005	-.005	0	%100
35	FFBH-2	Z	-.005	-.005	0	%100
36	FFBH-3	Z	-.005	-.005	0	%100
37	FFTH-1	Z	-.005	-.005	0	%100
38	FFTH-2	Z	-.005	-.005	0	%100
39	FFTH-3	Z	-.005	-.005	0	%100
40	MP-1	Z	-.005	-.005	0	%100
41	MP-3	Z	-.005	-.005	0	%100
42	SA-1	Z	-.000434	-.000434	0	%100
43	SF2-BH	Z	-.005	-.005	0	%100
44	SF2-TH	Z	-.005	-.005	0	%100
45	SF3-BH	Z	-.001	-.001	0	%100
46	SF3-TH	Z	-.001	-.001	0	%100
47	D1	Z	-.003	-.003	0	%100
48	D2	Z	-.003	-.003	0	%100
49	D3	Z	-.003	-.003	0	%100
50	D4	Z	-.003	-.003	0	%100
51	V1	Z	-.003	-.003	0	%100
52	V2	Z	-.003	-.003	0	%100
53	V4	Z	-.003	-.003	0	%100
54	V5	Z	-.003	-.003	0	%100
55	V3	Z	-.005	-.005	0	%100
56	V6	Z	-.005	-.005	0	%100
57	MP-2B	Z	-.005	-.005	0	%100
58	MP-2A	Z	-.005	-.005	0	%100
59	M30	Z	-.000683	-.000683	0	%100
60	M31	Z	-.000683	-.000683	0	%100
61	M28	Z	-.000683	-.000683	0	%100
62	M29	Z	-.000683	-.000683	0	%100
63	M30A	Z	-.000683	-.000683	0	%100
64	M31A	Z	-.000683	-.000683	0	%100
65	M32	Z	-.000683	-.000683	0	%100
66	M33	Z	-.000683	-.000683	0	%100

Member Distributed Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.006	-.006	0	%100
2	FFBH-2	X	-.006	-.006	0	%100
3	FFBH-3	X	-.006	-.006	0	%100
4	FFTH-1	X	-.006	-.006	0	%100
5	FFTH-2	X	-.006	-.006	0	%100
6	FFTH-3	X	-.006	-.006	0	%100
7	MP-1	X	-.008	-.008	0	%100
8	MP-3	X	-.008	-.008	0	%100
9	SA-1	X	-.000869	-.000869	0	%100
10	SF2-BH	X	-.007	-.007	0	%100
11	SF2-TH	X	-.007	-.007	0	%100
12	SF3-BH	X	-.000259	-.000259	0	%100
13	SF3-TH	X	-.000259	-.000259	0	%100
14	D1	X	-.005	-.005	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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Member Distributed Loads (BLC 4 : 45 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
15	D2	X	-.005	-.005	0	%100
16	D3	X	-.005	-.005	0	%100
17	D4	X	-.005	-.005	0	%100
18	V1	X	-.005	-.005	0	%100
19	V2	X	-.005	-.005	0	%100
20	V4	X	-.005	-.005	0	%100
21	V5	X	-.005	-.005	0	%100
22	V3	X	-.006	-.006	0	%100
23	V6	X	-.006	-.006	0	%100
24	MP-2B	X	-.008	-.008	0	%100
25	MP-2A	X	-.008	-.008	0	%100
26	M30	X	-.000837	-.000837	0	%100
27	M31	X	-.000837	-.000837	0	%100
28	M28	X	-.000837	-.000837	0	%100
29	M29	X	-.000837	-.000837	0	%100
30	M30A	X	-.000837	-.000837	0	%100
31	M31A	X	-.000837	-.000837	0	%100
32	M32	X	-.000837	-.000837	0	%100
33	M33	X	-.000837	-.000837	0	%100
34	FFBH-1	Z	-.006	-.006	0	%100
35	FFBH-2	Z	-.006	-.006	0	%100
36	FFBH-3	Z	-.006	-.006	0	%100
37	FFTH-1	Z	-.006	-.006	0	%100
38	FFTH-2	Z	-.006	-.006	0	%100
39	FFTH-3	Z	-.006	-.006	0	%100
40	MP-1	Z	-.008	-.008	0	%100
41	MP-3	Z	-.008	-.008	0	%100
42	SA-1	Z	-.000966	-.000966	0	%100
43	SF2-BH	Z	-.007	-.007	0	%100
44	SF2-TH	Z	-.007	-.007	0	%100
45	SF3-BH	Z	-.000252	-.000252	0	%100
46	SF3-TH	Z	-.000252	-.000252	0	%100
47	D1	Z	-.005	-.005	0	%100
48	D2	Z	-.005	-.005	0	%100
49	D3	Z	-.005	-.005	0	%100
50	D4	Z	-.005	-.005	0	%100
51	V1	Z	-.005	-.005	0	%100
52	V2	Z	-.005	-.005	0	%100
53	V4	Z	-.005	-.005	0	%100
54	V5	Z	-.005	-.005	0	%100
55	V3	Z	-.006	-.006	0	%100
56	V6	Z	-.006	-.006	0	%100
57	MP-2B	Z	-.008	-.008	0	%100
58	MP-2A	Z	-.008	-.008	0	%100
59	M30	Z	-.001	-.001	0	%100
60	M31	Z	-.001	-.001	0	%100
61	M28	Z	-.001	-.001	0	%100
62	M29	Z	-.001	-.001	0	%100
63	M30A	Z	-.001	-.001	0	%100
64	M31A	Z	-.001	-.001	0	%100
65	M32	Z	-.001	-.001	0	%100
66	M33	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.003	-.003	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
2	FFBH-2	X	-.003	-.003	0	%100
3	FFBH-3	X	-.003	-.003	0	%100
4	FFTH-1	X	-.003	-.003	0	%100
5	FFTH-2	X	-.003	-.003	0	%100
6	FFTH-3	X	-.003	-.003	0	%100
7	MP-1	X	-.005	-.005	0	%100
8	MP-3	X	-.005	-.005	0	%100
9	SA-1	X	-.002	-.002	0	%100
10	SF2-BH	X	-.005	-.005	0	%100
11	SF2-TH	X	-.005	-.005	0	%100
12	SF3-BH	X	-.001	-.001	0	%100
13	SF3-TH	X	-.001	-.001	0	%100
14	D1	X	-.003	-.003	0	%100
15	D2	X	-.003	-.003	0	%100
16	D3	X	-.003	-.003	0	%100
17	D4	X	-.003	-.003	0	%100
18	V1	X	-.003	-.003	0	%100
19	V2	X	-.003	-.003	0	%100
20	V4	X	-.003	-.003	0	%100
21	V5	X	-.003	-.003	0	%100
22	V3	X	-.005	-.005	0	%100
23	V6	X	-.005	-.005	0	%100
24	MP-2B	X	-.005	-.005	0	%100
25	MP-2A	X	-.005	-.005	0	%100
26	M30	X	-.000725	-.000725	0	%100
27	M31	X	-.000725	-.000725	0	%100
28	M28	X	-.000725	-.000725	0	%100
29	M29	X	-.000725	-.000725	0	%100
30	M30A	X	-.000725	-.000725	0	%100
31	M31A	X	-.000725	-.000725	0	%100
32	M32	X	-.000725	-.000725	0	%100
33	M33	X	-.000725	-.000725	0	%100
34	FFBH-1	Z	-.005	-.005	0	%100
35	FFBH-2	Z	-.005	-.005	0	%100
36	FFBH-3	Z	-.005	-.005	0	%100
37	FFTH-1	Z	-.005	-.005	0	%100
38	FFTH-2	Z	-.005	-.005	0	%100
39	FFTH-3	Z	-.005	-.005	0	%100
40	MP-1	Z	-.009	-.009	0	%100
41	MP-3	Z	-.009	-.009	0	%100
42	SA-1	Z	-.003	-.003	0	%100
43	SF2-BH	Z	-.008	-.008	0	%100
44	SF2-TH	Z	-.008	-.008	0	%100
45	SF3-BH	Z	-.002	-.002	0	%100
46	SF3-TH	Z	-.002	-.002	0	%100
47	D1	Z	-.006	-.006	0	%100
48	D2	Z	-.006	-.006	0	%100
49	D3	Z	-.006	-.006	0	%100
50	D4	Z	-.006	-.006	0	%100
51	V1	Z	-.006	-.006	0	%100
52	V2	Z	-.006	-.006	0	%100
53	V4	Z	-.006	-.006	0	%100
54	V5	Z	-.006	-.006	0	%100
55	V3	Z	-.008	-.008	0	%100
56	V6	Z	-.008	-.008	0	%100
57	MP-2B	Z	-.009	-.009	0	%100
58	MP-2A	Z	-.009	-.009	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
59	M30	Z	-.002	-.002	0	%100
60	M31	Z	-.002	-.002	0	%100
61	M28	Z	-.002	-.002	0	%100
62	M29	Z	-.002	-.002	0	%100
63	M30A	Z	-.002	-.002	0	%100
64	M31A	Z	-.002	-.002	0	%100
65	M32	Z	-.002	-.002	0	%100
66	M33	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	Z	0	0	0	%100
2	FFBH-2	Z	0	0	0	%100
3	FFBH-3	Z	0	0	0	%100
4	FFTH-1	Z	0	0	0	%100
5	FFTH-2	Z	0	0	0	%100
6	FFTH-3	Z	0	0	0	%100
7	MP-1	Z	-.011	-.011	0	%100
8	MP-3	Z	-.011	-.011	0	%100
9	SA-1	Z	-.007	-.007	0	%100
10	SF2-BH	Z	-.007	-.007	0	%100
11	SF2-TH	Z	-.007	-.007	0	%100
12	SF3-BH	Z	-.007	-.007	0	%100
13	SF3-TH	Z	-.007	-.007	0	%100
14	D1	Z	-.007	-.007	0	%100
15	D2	Z	-.007	-.007	0	%100
16	D3	Z	-.007	-.007	0	%100
17	D4	Z	-.007	-.007	0	%100
18	V1	Z	-.007	-.007	0	%100
19	V2	Z	-.007	-.007	0	%100
20	V4	Z	-.007	-.007	0	%100
21	V5	Z	-.007	-.007	0	%100
22	V3	Z	-.009	-.009	0	%100
23	V6	Z	-.009	-.009	0	%100
24	MP-2B	Z	-.011	-.011	0	%100
25	MP-2A	Z	-.011	-.011	0	%100
26	M30	Z	-.003	-.003	0	%100
27	M31	Z	-.003	-.003	0	%100
28	M28	Z	-.003	-.003	0	%100
29	M29	Z	-.003	-.003	0	%100
30	M30A	Z	-.003	-.003	0	%100
31	M31A	Z	-.003	-.003	0	%100
32	M32	Z	-.003	-.003	0	%100
33	M33	Z	-.003	-.003	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.003	.003	0	%100
2	FFBH-2	X	.003	.003	0	%100
3	FFBH-3	X	.003	.003	0	%100
4	FFTH-1	X	.003	.003	0	%100
5	FFTH-2	X	.003	.003	0	%100
6	FFTH-3	X	.003	.003	0	%100
7	MP-1	X	.005	.005	0	%100
8	MP-3	X	.005	.005	0	%100
9	SA-1	X	.004	.004	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
10	SF2-BH	X	.001	.001	0	%100
11	SF2-TH	X	.001	.001	0	%100
12	SF3-BH	X	.005	.005	0	%100
13	SF3-TH	X	.005	.005	0	%100
14	D1	X	.003	.003	0	%100
15	D2	X	.003	.003	0	%100
16	D3	X	.003	.003	0	%100
17	D4	X	.003	.003	0	%100
18	V1	X	.003	.003	0	%100
19	V2	X	.003	.003	0	%100
20	V4	X	.003	.003	0	%100
21	V5	X	.003	.003	0	%100
22	V3	X	.005	.005	0	%100
23	V6	X	.005	.005	0	%100
24	MP-2B	X	.005	.005	0	%100
25	MP-2A	X	.005	.005	0	%100
26	M30	X	.000725	.000725	0	%100
27	M31	X	.000725	.000725	0	%100
28	M28	X	.000725	.000725	0	%100
29	M29	X	.000725	.000725	0	%100
30	M30A	X	.000725	.000725	0	%100
31	M31A	X	.000725	.000725	0	%100
32	M32	X	.000725	.000725	0	%100
33	M33	X	.000725	.000725	0	%100
34	FFBH-1	Z	-.005	-.005	0	%100
35	FFBH-2	Z	-.005	-.005	0	%100
36	FFBH-3	Z	-.005	-.005	0	%100
37	FFTH-1	Z	-.005	-.005	0	%100
38	FFTH-2	Z	-.005	-.005	0	%100
39	FFTH-3	Z	-.005	-.005	0	%100
40	MP-1	Z	-.009	-.009	0	%100
41	MP-3	Z	-.009	-.009	0	%100
42	SA-1	Z	-.007	-.007	0	%100
43	SF2-BH	Z	-.002	-.002	0	%100
44	SF2-TH	Z	-.002	-.002	0	%100
45	SF3-BH	Z	-.008	-.008	0	%100
46	SF3-TH	Z	-.008	-.008	0	%100
47	D1	Z	-.006	-.006	0	%100
48	D2	Z	-.006	-.006	0	%100
49	D3	Z	-.006	-.006	0	%100
50	D4	Z	-.006	-.006	0	%100
51	V1	Z	-.006	-.006	0	%100
52	V2	Z	-.006	-.006	0	%100
53	V4	Z	-.006	-.006	0	%100
54	V5	Z	-.006	-.006	0	%100
55	V3	Z	-.008	-.008	0	%100
56	V6	Z	-.008	-.008	0	%100
57	MP-2B	Z	-.009	-.009	0	%100
58	MP-2A	Z	-.009	-.009	0	%100
59	M30	Z	-.002	-.002	0	%100
60	M31	Z	-.002	-.002	0	%100
61	M28	Z	-.002	-.002	0	%100
62	M29	Z	-.002	-.002	0	%100
63	M30A	Z	-.002	-.002	0	%100
64	M31A	Z	-.002	-.002	0	%100
65	M32	Z	-.002	-.002	0	%100
66	M33	Z	-.002	-.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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Member Distributed Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.006	.006	0	%100
2	FFBH-2	X	.006	.006	0	%100
3	FFBH-3	X	.006	.006	0	%100
4	FFTH-1	X	.006	.006	0	%100
5	FFTH-2	X	.006	.006	0	%100
6	FFTH-3	X	.006	.006	0	%100
7	MP-1	X	.008	.008	0	%100
8	MP-3	X	.008	.008	0	%100
9	SA-1	X	.005	.005	0	%100
10	SF2-BH	X	.000259	.000259	0	%100
11	SF2-TH	X	.000259	.000259	0	%100
12	SF3-BH	X	.007	.007	0	%100
13	SF3-TH	X	.007	.007	0	%100
14	D1	X	.005	.005	0	%100
15	D2	X	.005	.005	0	%100
16	D3	X	.005	.005	0	%100
17	D4	X	.005	.005	0	%100
18	V1	X	.005	.005	0	%100
19	V2	X	.005	.005	0	%100
20	V4	X	.005	.005	0	%100
21	V5	X	.005	.005	0	%100
22	V3	X	.006	.006	0	%100
23	V6	X	.006	.006	0	%100
24	MP-2B	X	.008	.008	0	%100
25	MP-2A	X	.008	.008	0	%100
26	M30	X	.000837	.000837	0	%100
27	M31	X	.000837	.000837	0	%100
28	M28	X	.000837	.000837	0	%100
29	M29	X	.000837	.000837	0	%100
30	M30A	X	.000837	.000837	0	%100
31	M31A	X	.000837	.000837	0	%100
32	M32	X	.000837	.000837	0	%100
33	M33	X	.000837	.000837	0	%100
34	FFBH-1	Z	-.006	-.006	0	%100
35	FFBH-2	Z	-.006	-.006	0	%100
36	FFBH-3	Z	-.006	-.006	0	%100
37	FFTH-1	Z	-.006	-.006	0	%100
38	FFTH-2	Z	-.006	-.006	0	%100
39	FFTH-3	Z	-.006	-.006	0	%100
40	MP-1	Z	-.008	-.008	0	%100
41	MP-3	Z	-.008	-.008	0	%100
42	SA-1	Z	-.006	-.006	0	%100
43	SF2-BH	Z	-.000252	-.000252	0	%100
44	SF2-TH	Z	-.000252	-.000252	0	%100
45	SF3-BH	Z	-.007	-.007	0	%100
46	SF3-TH	Z	-.007	-.007	0	%100
47	D1	Z	-.005	-.005	0	%100
48	D2	Z	-.005	-.005	0	%100
49	D3	Z	-.005	-.005	0	%100
50	D4	Z	-.005	-.005	0	%100
51	V1	Z	-.005	-.005	0	%100
52	V2	Z	-.005	-.005	0	%100
53	V4	Z	-.005	-.005	0	%100
54	V5	Z	-.005	-.005	0	%100
55	V3	Z	-.006	-.006	0	%100
56	V6	Z	-.006	-.006	0	%100
57	MP-2B	Z	-.008	-.008	0	%100

Member Distributed Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
58	MP-2A	Z	-.008	-.008	0	%100
59	M30	Z	-.001	-.001	0	%100
60	M31	Z	-.001	-.001	0	%100
61	M28	Z	-.001	-.001	0	%100
62	M29	Z	-.001	-.001	0	%100
63	M30A	Z	-.001	-.001	0	%100
64	M31A	Z	-.001	-.001	0	%100
65	M32	Z	-.001	-.001	0	%100
66	M33	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.009	.009	0	%100
2	FFBH-2	X	.009	.009	0	%100
3	FFBH-3	X	.009	.009	0	%100
4	FFTH-1	X	.009	.009	0	%100
5	FFTH-2	X	.009	.009	0	%100
6	FFTH-3	X	.009	.009	0	%100
7	MP-1	X	.009	.009	0	%100
8	MP-3	X	.009	.009	0	%100
9	SA-1	X	.006	.006	0	%100
10	SF2-BH	X	.003	.003	0	%100
11	SF2-TH	X	.003	.003	0	%100
12	SF3-BH	X	.009	.009	0	%100
13	SF3-TH	X	.009	.009	0	%100
14	D1	X	.006	.006	0	%100
15	D2	X	.006	.006	0	%100
16	D3	X	.006	.006	0	%100
17	D4	X	.006	.006	0	%100
18	V1	X	.006	.006	0	%100
19	V2	X	.006	.006	0	%100
20	V4	X	.006	.006	0	%100
21	V5	X	.006	.006	0	%100
22	V3	X	.008	.008	0	%100
23	V6	X	.008	.008	0	%100
24	MP-2B	X	.009	.009	0	%100
25	MP-2A	X	.009	.009	0	%100
26	M30	X	.000725	.000725	0	%100
27	M31	X	.000725	.000725	0	%100
28	M28	X	.000725	.000725	0	%100
29	M29	X	.000725	.000725	0	%100
30	M30A	X	.000725	.000725	0	%100
31	M31A	X	.000725	.000725	0	%100
32	M32	X	.000725	.000725	0	%100
33	M33	X	.000725	.000725	0	%100
34	FFBH-1	Z	-.005	-.005	0	%100
35	FFBH-2	Z	-.005	-.005	0	%100
36	FFBH-3	Z	-.005	-.005	0	%100
37	FFTH-1	Z	-.005	-.005	0	%100
38	FFTH-2	Z	-.005	-.005	0	%100
39	FFTH-3	Z	-.005	-.005	0	%100
40	MP-1	Z	-.005	-.005	0	%100
41	MP-3	Z	-.005	-.005	0	%100
42	SA-1	Z	-.004	-.004	0	%100
43	SF2-BH	Z	-.001	-.001	0	%100
44	SF2-TH	Z	-.001	-.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
Checked By: WHW

Member Distributed Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
45	SF3-BH	Z	-.005	-.005	0	%100
46	SF3-TH	Z	-.005	-.005	0	%100
47	D1	Z	-.003	-.003	0	%100
48	D2	Z	-.003	-.003	0	%100
49	D3	Z	-.003	-.003	0	%100
50	D4	Z	-.003	-.003	0	%100
51	V1	Z	-.003	-.003	0	%100
52	V2	Z	-.003	-.003	0	%100
53	V4	Z	-.003	-.003	0	%100
54	V5	Z	-.003	-.003	0	%100
55	V3	Z	-.005	-.005	0	%100
56	V6	Z	-.005	-.005	0	%100
57	MP-2B	Z	-.005	-.005	0	%100
58	MP-2A	Z	-.005	-.005	0	%100
59	M30	Z	-.000683	-.000683	0	%100
60	M31	Z	-.000683	-.000683	0	%100
61	M28	Z	-.000683	-.000683	0	%100
62	M29	Z	-.000683	-.000683	0	%100
63	M30A	Z	-.000683	-.000683	0	%100
64	M31A	Z	-.000683	-.000683	0	%100
65	M32	Z	-.000683	-.000683	0	%100
66	M33	Z	-.000683	-.000683	0	%100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.012	.012	0	%100
2	FFBH-2	X	.012	.012	0	%100
3	FFBH-3	X	.012	.012	0	%100
4	FFTH-1	X	.012	.012	0	%100
5	FFTH-2	X	.012	.012	0	%100
6	FFTH-3	X	.012	.012	0	%100
7	MP-1	X	.011	.011	0	%100
8	MP-3	X	.011	.011	0	%100
9	SA-1	X	.005	.005	0	%100
10	SF2-BH	X	.008	.008	0	%100
11	SF2-TH	X	.008	.008	0	%100
12	SF3-BH	X	.008	.008	0	%100
13	SF3-TH	X	.008	.008	0	%100
14	D1	X	.007	.007	0	%100
15	D2	X	.007	.007	0	%100
16	D3	X	.007	.007	0	%100
17	D4	X	.007	.007	0	%100
18	V1	X	.007	.007	0	%100
19	V2	X	.007	.007	0	%100
20	V4	X	.007	.007	0	%100
21	V5	X	.007	.007	0	%100
22	V3	X	.009	.009	0	%100
23	V6	X	.009	.009	0	%100
24	MP-2B	X	.011	.011	0	%100
25	MP-2A	X	.011	.011	0	%100
26	M30	X	0	0	0	%100
27	M31	X	0	0	0	%100
28	M28	X	0	0	0	%100
29	M29	X	0	0	0	%100
30	M30A	X	0	0	0	%100
31	M31A	X	0	0	0	%100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
32	M32	X	0	0	0	%100
33	M33	X	0	0	0	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.009	.009	0	%100
2	FFBH-2	X	.009	.009	0	%100
3	FFBH-3	X	.009	.009	0	%100
4	FFTH-1	X	.009	.009	0	%100
5	FFTH-2	X	.009	.009	0	%100
6	FFTH-3	X	.009	.009	0	%100
7	MP-1	X	.009	.009	0	%100
8	MP-3	X	.009	.009	0	%100
9	SA-1	X	.000676	.000676	0	%100
10	SF2-BH	X	.009	.009	0	%100
11	SF2-TH	X	.009	.009	0	%100
12	SF3-BH	X	.003	.003	0	%100
13	SF3-TH	X	.003	.003	0	%100
14	D1	X	.006	.006	0	%100
15	D2	X	.006	.006	0	%100
16	D3	X	.006	.006	0	%100
17	D4	X	.006	.006	0	%100
18	V1	X	.006	.006	0	%100
19	V2	X	.006	.006	0	%100
20	V4	X	.006	.006	0	%100
21	V5	X	.006	.006	0	%100
22	V3	X	.008	.008	0	%100
23	V6	X	.008	.008	0	%100
24	MP-2B	X	.009	.009	0	%100
25	MP-2A	X	.009	.009	0	%100
26	M30	X	.000725	.000725	0	%100
27	M31	X	.000725	.000725	0	%100
28	M28	X	.000725	.000725	0	%100
29	M29	X	.000725	.000725	0	%100
30	M30A	X	.000725	.000725	0	%100
31	M31A	X	.000725	.000725	0	%100
32	M32	X	.000725	.000725	0	%100
33	M33	X	.000725	.000725	0	%100
34	FFBH-1	Z	.005	.005	0	%100
35	FFBH-2	Z	.005	.005	0	%100
36	FFBH-3	Z	.005	.005	0	%100
37	FFTH-1	Z	.005	.005	0	%100
38	FFTH-2	Z	.005	.005	0	%100
39	FFTH-3	Z	.005	.005	0	%100
40	MP-1	Z	.005	.005	0	%100
41	MP-3	Z	.005	.005	0	%100
42	SA-1	Z	.000434	.000434	0	%100
43	SF2-BH	Z	.005	.005	0	%100
44	SF2-TH	Z	.005	.005	0	%100
45	SF3-BH	Z	.001	.001	0	%100
46	SF3-TH	Z	.001	.001	0	%100
47	D1	Z	.003	.003	0	%100
48	D2	Z	.003	.003	0	%100
49	D3	Z	.003	.003	0	%100
50	D4	Z	.003	.003	0	%100
51	V1	Z	.003	.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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Member Distributed Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
52	V2	Z	.003	.003	0	%100
53	V4	Z	.003	.003	0	%100
54	V5	Z	.003	.003	0	%100
55	V3	Z	.005	.005	0	%100
56	V6	Z	.005	.005	0	%100
57	MP-2B	Z	.005	.005	0	%100
58	MP-2A	Z	.005	.005	0	%100
59	M30	Z	.000683	.000683	0	%100
60	M31	Z	.000683	.000683	0	%100
61	M28	Z	.000683	.000683	0	%100
62	M29	Z	.000683	.000683	0	%100
63	M30A	Z	.000683	.000683	0	%100
64	M31A	Z	.000683	.000683	0	%100
65	M32	Z	.000683	.000683	0	%100
66	M33	Z	.000683	.000683	0	%100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.006	.006	0	%100
2	FFBH-2	X	.006	.006	0	%100
3	FFBH-3	X	.006	.006	0	%100
4	FFTH-1	X	.006	.006	0	%100
5	FFTH-2	X	.006	.006	0	%100
6	FFTH-3	X	.006	.006	0	%100
7	MP-1	X	.008	.008	0	%100
8	MP-3	X	.008	.008	0	%100
9	SA-1	X	.000869	.000869	0	%100
10	SF2-BH	X	.007	.007	0	%100
11	SF2-TH	X	.007	.007	0	%100
12	SF3-BH	X	.000259	.000259	0	%100
13	SF3-TH	X	.000259	.000259	0	%100
14	D1	X	.005	.005	0	%100
15	D2	X	.005	.005	0	%100
16	D3	X	.005	.005	0	%100
17	D4	X	.005	.005	0	%100
18	V1	X	.005	.005	0	%100
19	V2	X	.005	.005	0	%100
20	V4	X	.005	.005	0	%100
21	V5	X	.005	.005	0	%100
22	V3	X	.006	.006	0	%100
23	V6	X	.006	.006	0	%100
24	MP-2B	X	.008	.008	0	%100
25	MP-2A	X	.008	.008	0	%100
26	M30	X	.000837	.000837	0	%100
27	M31	X	.000837	.000837	0	%100
28	M28	X	.000837	.000837	0	%100
29	M29	X	.000837	.000837	0	%100
30	M30A	X	.000837	.000837	0	%100
31	M31A	X	.000837	.000837	0	%100
32	M32	X	.000837	.000837	0	%100
33	M33	X	.000837	.000837	0	%100
34	FFBH-1	Z	.006	.006	0	%100
35	FFBH-2	Z	.006	.006	0	%100
36	FFBH-3	Z	.006	.006	0	%100
37	FFTH-1	Z	.006	.006	0	%100
38	FFTH-2	Z	.006	.006	0	%100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
39	FFTH-3	Z	.006	.006	0	%100
40	MP-1	Z	.008	.008	0	%100
41	MP-3	Z	.008	.008	0	%100
42	SA-1	Z	.000966	.000966	0	%100
43	SF2-BH	Z	.007	.007	0	%100
44	SF2-TH	Z	.007	.007	0	%100
45	SF3-BH	Z	.000252	.000252	0	%100
46	SF3-TH	Z	.000252	.000252	0	%100
47	D1	Z	.005	.005	0	%100
48	D2	Z	.005	.005	0	%100
49	D3	Z	.005	.005	0	%100
50	D4	Z	.005	.005	0	%100
51	V1	Z	.005	.005	0	%100
52	V2	Z	.005	.005	0	%100
53	V4	Z	.005	.005	0	%100
54	V5	Z	.005	.005	0	%100
55	V3	Z	.006	.006	0	%100
56	V6	Z	.006	.006	0	%100
57	MP-2B	Z	.008	.008	0	%100
58	MP-2A	Z	.008	.008	0	%100
59	M30	Z	.001	.001	0	%100
60	M31	Z	.001	.001	0	%100
61	M28	Z	.001	.001	0	%100
62	M29	Z	.001	.001	0	%100
63	M30A	Z	.001	.001	0	%100
64	M31A	Z	.001	.001	0	%100
65	M32	Z	.001	.001	0	%100
66	M33	Z	.001	.001	0	%100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.003	.003	0	%100
2	FFBH-2	X	.003	.003	0	%100
3	FFBH-3	X	.003	.003	0	%100
4	FFTH-1	X	.003	.003	0	%100
5	FFTH-2	X	.003	.003	0	%100
6	FFTH-3	X	.003	.003	0	%100
7	MP-1	X	.005	.005	0	%100
8	MP-3	X	.005	.005	0	%100
9	SA-1	X	.002	.002	0	%100
10	SF2-BH	X	.005	.005	0	%100
11	SF2-TH	X	.005	.005	0	%100
12	SF3-BH	X	.001	.001	0	%100
13	SF3-TH	X	.001	.001	0	%100
14	D1	X	.003	.003	0	%100
15	D2	X	.003	.003	0	%100
16	D3	X	.003	.003	0	%100
17	D4	X	.003	.003	0	%100
18	V1	X	.003	.003	0	%100
19	V2	X	.003	.003	0	%100
20	V4	X	.003	.003	0	%100
21	V5	X	.003	.003	0	%100
22	V3	X	.005	.005	0	%100
23	V6	X	.005	.005	0	%100
24	MP-2B	X	.005	.005	0	%100
25	MP-2A	X	.005	.005	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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Member Distributed Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
26	M30	X	.000725	.000725	0	%100
27	M31	X	.000725	.000725	0	%100
28	M28	X	.000725	.000725	0	%100
29	M29	X	.000725	.000725	0	%100
30	M30A	X	.000725	.000725	0	%100
31	M31A	X	.000725	.000725	0	%100
32	M32	X	.000725	.000725	0	%100
33	M33	X	.000725	.000725	0	%100
34	FFBH-1	Z	.005	.005	0	%100
35	FFBH-2	Z	.005	.005	0	%100
36	FFBH-3	Z	.005	.005	0	%100
37	FFTH-1	Z	.005	.005	0	%100
38	FFTH-2	Z	.005	.005	0	%100
39	FFTH-3	Z	.005	.005	0	%100
40	MP-1	Z	.009	.009	0	%100
41	MP-3	Z	.009	.009	0	%100
42	SA-1	Z	.003	.003	0	%100
43	SF2-BH	Z	.008	.008	0	%100
44	SF2-TH	Z	.008	.008	0	%100
45	SF3-BH	Z	.002	.002	0	%100
46	SF3-TH	Z	.002	.002	0	%100
47	D1	Z	.006	.006	0	%100
48	D2	Z	.006	.006	0	%100
49	D3	Z	.006	.006	0	%100
50	D4	Z	.006	.006	0	%100
51	V1	Z	.006	.006	0	%100
52	V2	Z	.006	.006	0	%100
53	V4	Z	.006	.006	0	%100
54	V5	Z	.006	.006	0	%100
55	V3	Z	.008	.008	0	%100
56	V6	Z	.008	.008	0	%100
57	MP-2B	Z	.009	.009	0	%100
58	MP-2A	Z	.009	.009	0	%100
59	M30	Z	.002	.002	0	%100
60	M31	Z	.002	.002	0	%100
61	M28	Z	.002	.002	0	%100
62	M29	Z	.002	.002	0	%100
63	M30A	Z	.002	.002	0	%100
64	M31A	Z	.002	.002	0	%100
65	M32	Z	.002	.002	0	%100
66	M33	Z	.002	.002	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	Z	0	0	0	%100
2	FFBH-2	Z	0	0	0	%100
3	FFBH-3	Z	0	0	0	%100
4	FFTH-1	Z	0	0	0	%100
5	FFTH-2	Z	0	0	0	%100
6	FFTH-3	Z	0	0	0	%100
7	MP-1	Z	.011	.011	0	%100
8	MP-3	Z	.011	.011	0	%100
9	SA-1	Z	.007	.007	0	%100
10	SF2-BH	Z	.007	.007	0	%100
11	SF2-TH	Z	.007	.007	0	%100
12	SF3-BH	Z	.007	.007	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
13	SF3-TH	Z	.007	.007	0	%100
14	D1	Z	.007	.007	0	%100
15	D2	Z	.007	.007	0	%100
16	D3	Z	.007	.007	0	%100
17	D4	Z	.007	.007	0	%100
18	V1	Z	.007	.007	0	%100
19	V2	Z	.007	.007	0	%100
20	V4	Z	.007	.007	0	%100
21	V5	Z	.007	.007	0	%100
22	V3	Z	.009	.009	0	%100
23	V6	Z	.009	.009	0	%100
24	MP-2B	Z	.011	.011	0	%100
25	MP-2A	Z	.011	.011	0	%100
26	M30	Z	.003	.003	0	%100
27	M31	Z	.003	.003	0	%100
28	M28	Z	.003	.003	0	%100
29	M29	Z	.003	.003	0	%100
30	M30A	Z	.003	.003	0	%100
31	M31A	Z	.003	.003	0	%100
32	M32	Z	.003	.003	0	%100
33	M33	Z	.003	.003	0	%100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.003	-.003	0	%100
2	FFBH-2	X	-.003	-.003	0	%100
3	FFBH-3	X	-.003	-.003	0	%100
4	FFTH-1	X	-.003	-.003	0	%100
5	FFTH-2	X	-.003	-.003	0	%100
6	FFTH-3	X	-.003	-.003	0	%100
7	MP-1	X	-.005	-.005	0	%100
8	MP-3	X	-.005	-.005	0	%100
9	SA-1	X	-.004	-.004	0	%100
10	SF2-BH	X	-.001	-.001	0	%100
11	SF2-TH	X	-.001	-.001	0	%100
12	SF3-BH	X	-.005	-.005	0	%100
13	SF3-TH	X	-.005	-.005	0	%100
14	D1	X	-.003	-.003	0	%100
15	D2	X	-.003	-.003	0	%100
16	D3	X	-.003	-.003	0	%100
17	D4	X	-.003	-.003	0	%100
18	V1	X	-.003	-.003	0	%100
19	V2	X	-.003	-.003	0	%100
20	V4	X	-.003	-.003	0	%100
21	V5	X	-.003	-.003	0	%100
22	V3	X	-.005	-.005	0	%100
23	V6	X	-.005	-.005	0	%100
24	MP-2B	X	-.005	-.005	0	%100
25	MP-2A	X	-.005	-.005	0	%100
26	M30	X	-.000725	-.000725	0	%100
27	M31	X	-.000725	-.000725	0	%100
28	M28	X	-.000725	-.000725	0	%100
29	M29	X	-.000725	-.000725	0	%100
30	M30A	X	-.000725	-.000725	0	%100
31	M31A	X	-.000725	-.000725	0	%100
32	M32	X	-.000725	-.000725	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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Member Distributed Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
33	M33	X	-.000725	-.000725	0	%100
34	FFBH-1	Z	.005	.005	0	%100
35	FFBH-2	Z	.005	.005	0	%100
36	FFBH-3	Z	.005	.005	0	%100
37	FFTH-1	Z	.005	.005	0	%100
38	FFTH-2	Z	.005	.005	0	%100
39	FFTH-3	Z	.005	.005	0	%100
40	MP-1	Z	.009	.009	0	%100
41	MP-3	Z	.009	.009	0	%100
42	SA-1	Z	.007	.007	0	%100
43	SF2-BH	Z	.002	.002	0	%100
44	SF2-TH	Z	.002	.002	0	%100
45	SF3-BH	Z	.008	.008	0	%100
46	SF3-TH	Z	.008	.008	0	%100
47	D1	Z	.006	.006	0	%100
48	D2	Z	.006	.006	0	%100
49	D3	Z	.006	.006	0	%100
50	D4	Z	.006	.006	0	%100
51	V1	Z	.006	.006	0	%100
52	V2	Z	.006	.006	0	%100
53	V4	Z	.006	.006	0	%100
54	V5	Z	.006	.006	0	%100
55	V3	Z	.008	.008	0	%100
56	V6	Z	.008	.008	0	%100
57	MP-2B	Z	.009	.009	0	%100
58	MP-2A	Z	.009	.009	0	%100
59	M30	Z	.002	.002	0	%100
60	M31	Z	.002	.002	0	%100
61	M28	Z	.002	.002	0	%100
62	M29	Z	.002	.002	0	%100
63	M30A	Z	.002	.002	0	%100
64	M31A	Z	.002	.002	0	%100
65	M32	Z	.002	.002	0	%100
66	M33	Z	.002	.002	0	%100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.006	-.006	0	%100
2	FFBH-2	X	-.006	-.006	0	%100
3	FFBH-3	X	-.006	-.006	0	%100
4	FFTH-1	X	-.006	-.006	0	%100
5	FFTH-2	X	-.006	-.006	0	%100
6	FFTH-3	X	-.006	-.006	0	%100
7	MP-1	X	-.008	-.008	0	%100
8	MP-3	X	-.008	-.008	0	%100
9	SA-1	X	-.005	-.005	0	%100
10	SF2-BH	X	-.000259	-.000259	0	%100
11	SF2-TH	X	-.000259	-.000259	0	%100
12	SF3-BH	X	-.007	-.007	0	%100
13	SF3-TH	X	-.007	-.007	0	%100
14	D1	X	-.005	-.005	0	%100
15	D2	X	-.005	-.005	0	%100
16	D3	X	-.005	-.005	0	%100
17	D4	X	-.005	-.005	0	%100
18	V1	X	-.005	-.005	0	%100
19	V2	X	-.005	-.005	0	%100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
20	V4	X	-.005	-.005	0	%100
21	V5	X	-.005	-.005	0	%100
22	V3	X	-.006	-.006	0	%100
23	V6	X	-.006	-.006	0	%100
24	MP-2B	X	-.008	-.008	0	%100
25	MP-2A	X	-.008	-.008	0	%100
26	M30	X	-.000837	-.000837	0	%100
27	M31	X	-.000837	-.000837	0	%100
28	M28	X	-.000837	-.000837	0	%100
29	M29	X	-.000837	-.000837	0	%100
30	M30A	X	-.000837	-.000837	0	%100
31	M31A	X	-.000837	-.000837	0	%100
32	M32	X	-.000837	-.000837	0	%100
33	M33	X	-.000837	-.000837	0	%100
34	FFBH-1	Z	.006	.006	0	%100
35	FFBH-2	Z	.006	.006	0	%100
36	FFBH-3	Z	.006	.006	0	%100
37	FFTH-1	Z	.006	.006	0	%100
38	FFTH-2	Z	.006	.006	0	%100
39	FFTH-3	Z	.006	.006	0	%100
40	MP-1	Z	.008	.008	0	%100
41	MP-3	Z	.008	.008	0	%100
42	SA-1	Z	.006	.006	0	%100
43	SF2-BH	Z	.000252	.000252	0	%100
44	SF2-TH	Z	.000252	.000252	0	%100
45	SF3-BH	Z	.007	.007	0	%100
46	SF3-TH	Z	.007	.007	0	%100
47	D1	Z	.005	.005	0	%100
48	D2	Z	.005	.005	0	%100
49	D3	Z	.005	.005	0	%100
50	D4	Z	.005	.005	0	%100
51	V1	Z	.005	.005	0	%100
52	V2	Z	.005	.005	0	%100
53	V4	Z	.005	.005	0	%100
54	V5	Z	.005	.005	0	%100
55	V3	Z	.006	.006	0	%100
56	V6	Z	.006	.006	0	%100
57	MP-2B	Z	.008	.008	0	%100
58	MP-2A	Z	.008	.008	0	%100
59	M30	Z	.001	.001	0	%100
60	M31	Z	.001	.001	0	%100
61	M28	Z	.001	.001	0	%100
62	M29	Z	.001	.001	0	%100
63	M30A	Z	.001	.001	0	%100
64	M31A	Z	.001	.001	0	%100
65	M32	Z	.001	.001	0	%100
66	M33	Z	.001	.001	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.009	-.009	0	%100
2	FFBH-2	X	-.009	-.009	0	%100
3	FFBH-3	X	-.009	-.009	0	%100
4	FFTH-1	X	-.009	-.009	0	%100
5	FFTH-2	X	-.009	-.009	0	%100
6	FFTH-3	X	-.009	-.009	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
7	MP-1	X	-.009	-.009	0	%100
8	MP-3	X	-.009	-.009	0	%100
9	SA-1	X	-.006	-.006	0	%100
10	SF2-BH	X	-.003	-.003	0	%100
11	SF2-TH	X	-.003	-.003	0	%100
12	SF3-BH	X	-.009	-.009	0	%100
13	SF3-TH	X	-.009	-.009	0	%100
14	D1	X	-.006	-.006	0	%100
15	D2	X	-.006	-.006	0	%100
16	D3	X	-.006	-.006	0	%100
17	D4	X	-.006	-.006	0	%100
18	V1	X	-.006	-.006	0	%100
19	V2	X	-.006	-.006	0	%100
20	V4	X	-.006	-.006	0	%100
21	V5	X	-.006	-.006	0	%100
22	V3	X	-.008	-.008	0	%100
23	V6	X	-.008	-.008	0	%100
24	MP-2B	X	-.009	-.009	0	%100
25	MP-2A	X	-.009	-.009	0	%100
26	M30	X	-.000725	-.000725	0	%100
27	M31	X	-.000725	-.000725	0	%100
28	M28	X	-.000725	-.000725	0	%100
29	M29	X	-.000725	-.000725	0	%100
30	M30A	X	-.000725	-.000725	0	%100
31	M31A	X	-.000725	-.000725	0	%100
32	M32	X	-.000725	-.000725	0	%100
33	M33	X	-.000725	-.000725	0	%100
34	FFBH-1	Z	.005	.005	0	%100
35	FFBH-2	Z	.005	.005	0	%100
36	FFBH-3	Z	.005	.005	0	%100
37	FFTH-1	Z	.005	.005	0	%100
38	FFTH-2	Z	.005	.005	0	%100
39	FFTH-3	Z	.005	.005	0	%100
40	MP-1	Z	.005	.005	0	%100
41	MP-3	Z	.005	.005	0	%100
42	SA-1	Z	.004	.004	0	%100
43	SF2-BH	Z	.001	.001	0	%100
44	SF2-TH	Z	.001	.001	0	%100
45	SF3-BH	Z	.005	.005	0	%100
46	SF3-TH	Z	.005	.005	0	%100
47	D1	Z	.003	.003	0	%100
48	D2	Z	.003	.003	0	%100
49	D3	Z	.003	.003	0	%100
50	D4	Z	.003	.003	0	%100
51	V1	Z	.003	.003	0	%100
52	V2	Z	.003	.003	0	%100
53	V4	Z	.003	.003	0	%100
54	V5	Z	.003	.003	0	%100
55	V3	Z	.005	.005	0	%100
56	V6	Z	.005	.005	0	%100
57	MP-2B	Z	.005	.005	0	%100
58	MP-2A	Z	.005	.005	0	%100
59	M30	Z	.000683	.000683	0	%100
60	M31	Z	.000683	.000683	0	%100
61	M28	Z	.000683	.000683	0	%100
62	M29	Z	.000683	.000683	0	%100
63	M30A	Z	.000683	.000683	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
64	M31A	Z	.000683	.000683	0	%100
65	M32	Z	.000683	.000683	0	%100
66	M33	Z	.000683	.000683	0	%100

Member Distributed Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	Y	-.008	-.008	0	%100
2	FFBH-2	Y	-.008	-.008	0	%100
3	FFBH-3	Y	-.008	-.008	0	%100
4	FFTH-1	Y	-.008	-.008	0	%100
5	FFTH-2	Y	-.008	-.008	0	%100
6	FFTH-3	Y	-.008	-.008	0	%100
7	MP-1	Y	-.007	-.007	0	%100
8	MP-3	Y	-.007	-.007	0	%100
9	SA-1	Y	-.009	-.009	0	%100
10	SF2-BH	Y	-.007	-.007	0	%100
11	SF2-TH	Y	-.007	-.007	0	%100
12	SF3-BH	Y	-.007	-.007	0	%100
13	SF3-TH	Y	-.007	-.007	0	%100
14	D1	Y	-.006	-.006	0	%100
15	D2	Y	-.006	-.006	0	%100
16	D3	Y	-.006	-.006	0	%100
17	D4	Y	-.006	-.006	0	%100
18	V1	Y	-.006	-.006	0	%100
19	V2	Y	-.006	-.006	0	%100
20	V4	Y	-.006	-.006	0	%100
21	V5	Y	-.006	-.006	0	%100
22	V3	Y	-.007	-.007	0	%100
23	V6	Y	-.007	-.007	0	%100
24	MP-2B	Y	-.007	-.007	0	%100
25	MP-2A	Y	-.007	-.007	0	%100
26	M30	Y	-.005	-.005	0	%100
27	M31	Y	-.005	-.005	0	%100
28	M28	Y	-.005	-.005	0	%100
29	M29	Y	-.005	-.005	0	%100
30	M30A	Y	-.005	-.005	0	%100
31	M31A	Y	-.005	-.005	0	%100
32	M32	Y	-.005	-.005	0	%100
33	M33	Y	-.005	-.005	0	%100

Member Distributed Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.004	-.004	0	%100
2	FFBH-2	X	-.004	-.004	0	%100
3	FFBH-3	X	-.004	-.004	0	%100
4	FFTH-1	X	-.004	-.004	0	%100
5	FFTH-2	X	-.004	-.004	0	%100
6	FFTH-3	X	-.004	-.004	0	%100
7	MP-1	X	-.003	-.003	0	%100
8	MP-3	X	-.003	-.003	0	%100
9	SA-1	X	-.003	-.003	0	%100
10	SF2-BH	X	-.003	-.003	0	%100
11	SF2-TH	X	-.003	-.003	0	%100
12	SF3-BH	X	-.003	-.003	0	%100
13	SF3-TH	X	-.003	-.003	0	%100
14	D1	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 19 : 0 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
15	D2	X	-.002	-.002	0	%100
16	D3	X	-.002	-.002	0	%100
17	D4	X	-.002	-.002	0	%100
18	V1	X	-.002	-.002	0	%100
19	V2	X	-.002	-.002	0	%100
20	V4	X	-.002	-.002	0	%100
21	V5	X	-.002	-.002	0	%100
22	V3	X	-.003	-.003	0	%100
23	V6	X	-.003	-.003	0	%100
24	MP-2B	X	-.003	-.003	0	%100
25	MP-2A	X	-.003	-.003	0	%100
26	M30	X	-.002	-.002	0	%100
27	M31	X	-.002	-.002	0	%100
28	M28	X	-.002	-.002	0	%100
29	M29	X	-.002	-.002	0	%100
30	M30A	X	-.002	-.002	0	%100
31	M31A	X	-.002	-.002	0	%100
32	M32	X	-.002	-.002	0	%100
33	M33	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.003	-.003	0	%100
2	FFBH-2	X	-.003	-.003	0	%100
3	FFBH-3	X	-.003	-.003	0	%100
4	FFTH-1	X	-.003	-.003	0	%100
5	FFTH-2	X	-.003	-.003	0	%100
6	FFTH-3	X	-.003	-.003	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-3	X	-.002	-.002	0	%100
9	SA-1	X	-.000272	-.000272	0	%100
10	SF2-BH	X	-.002	-.002	0	%100
11	SF2-TH	X	-.002	-.002	0	%100
12	SF3-BH	X	-.000733	-.000733	0	%100
13	SF3-TH	X	-.000733	-.000733	0	%100
14	D1	X	-.002	-.002	0	%100
15	D2	X	-.002	-.002	0	%100
16	D3	X	-.002	-.002	0	%100
17	D4	X	-.002	-.002	0	%100
18	V1	X	-.002	-.002	0	%100
19	V2	X	-.002	-.002	0	%100
20	V4	X	-.002	-.002	0	%100
21	V5	X	-.002	-.002	0	%100
22	V3	X	-.002	-.002	0	%100
23	V6	X	-.002	-.002	0	%100
24	MP-2B	X	-.002	-.002	0	%100
25	MP-2A	X	-.002	-.002	0	%100
26	M30	X	-.000781	-.000781	0	%100
27	M31	X	-.000781	-.000781	0	%100
28	M28	X	-.000781	-.000781	0	%100
29	M29	X	-.000781	-.000781	0	%100
30	M30A	X	-.000781	-.000781	0	%100
31	M31A	X	-.000781	-.000781	0	%100
32	M32	X	-.000781	-.000781	0	%100
33	M33	X	-.000781	-.000781	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.002	-.002	0	%100
41	MP-3	Z	-.002	-.002	0	%100
42	SA-1	Z	-.000166	-.000166	0	%100
43	SF2-BH	Z	-.001	-.001	0	%100
44	SF2-TH	Z	-.001	-.001	0	%100
45	SF3-BH	Z	-.000416	-.000416	0	%100
46	SF3-TH	Z	-.000416	-.000416	0	%100
47	D1	Z	-.001	-.001	0	%100
48	D2	Z	-.001	-.001	0	%100
49	D3	Z	-.001	-.001	0	%100
50	D4	Z	-.001	-.001	0	%100
51	V1	Z	-.001	-.001	0	%100
52	V2	Z	-.001	-.001	0	%100
53	V4	Z	-.001	-.001	0	%100
54	V5	Z	-.001	-.001	0	%100
55	V3	Z	-.001	-.001	0	%100
56	V6	Z	-.001	-.001	0	%100
57	MP-2B	Z	-.002	-.002	0	%100
58	MP-2A	Z	-.002	-.002	0	%100
59	M30	Z	-.000483	-.000483	0	%100
60	M31	Z	-.000483	-.000483	0	%100
61	M28	Z	-.000483	-.000483	0	%100
62	M29	Z	-.000483	-.000483	0	%100
63	M30A	Z	-.000483	-.000483	0	%100
64	M31A	Z	-.000483	-.000483	0	%100
65	M32	Z	-.000483	-.000483	0	%100
66	M33	Z	-.000483	-.000483	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.002	-.002	0	%100
2	FFBH-2	X	-.002	-.002	0	%100
3	FFBH-3	X	-.002	-.002	0	%100
4	FFTH-1	X	-.002	-.002	0	%100
5	FFTH-2	X	-.002	-.002	0	%100
6	FFTH-3	X	-.002	-.002	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-3	X	-.002	-.002	0	%100
9	SA-1	X	-.000349	-.000349	0	%100
10	SF2-BH	X	-.002	-.002	0	%100
11	SF2-TH	X	-.002	-.002	0	%100
12	SF3-BH	X	-7.3e-5	-7.3e-5	0	%100
13	SF3-TH	X	-7.3e-5	-7.3e-5	0	%100
14	D1	X	-.002	-.002	0	%100
15	D2	X	-.002	-.002	0	%100
16	D3	X	-.002	-.002	0	%100
17	D4	X	-.002	-.002	0	%100
18	V1	X	-.002	-.002	0	%100
19	V2	X	-.002	-.002	0	%100
20	V4	X	-.002	-.002	0	%100
21	V5	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
22	V3	X	-.002	-.002	0	%100
23	V6	X	-.002	-.002	0	%100
24	MP-2B	X	-.002	-.002	0	%100
25	MP-2A	X	-.002	-.002	0	%100
26	M30	X	-.000902	-.000902	0	%100
27	M31	X	-.000902	-.000902	0	%100
28	M28	X	-.000902	-.000902	0	%100
29	M29	X	-.000902	-.000902	0	%100
30	M30A	X	-.000902	-.000902	0	%100
31	M31A	X	-.000902	-.000902	0	%100
32	M32	X	-.000902	-.000902	0	%100
33	M33	X	-.000902	-.000902	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.002	-.002	0	%100
41	MP-3	Z	-.002	-.002	0	%100
42	SA-1	Z	-.000368	-.000368	0	%100
43	SF2-BH	Z	-.002	-.002	0	%100
44	SF2-TH	Z	-.002	-.002	0	%100
45	SF3-BH	Z	-7.2e-5	-7.2e-5	0	%100
46	SF3-TH	Z	-7.2e-5	-7.2e-5	0	%100
47	D1	Z	-.002	-.002	0	%100
48	D2	Z	-.002	-.002	0	%100
49	D3	Z	-.002	-.002	0	%100
50	D4	Z	-.002	-.002	0	%100
51	V1	Z	-.002	-.002	0	%100
52	V2	Z	-.002	-.002	0	%100
53	V4	Z	-.002	-.002	0	%100
54	V5	Z	-.002	-.002	0	%100
55	V3	Z	-.002	-.002	0	%100
56	V6	Z	-.002	-.002	0	%100
57	MP-2B	Z	-.002	-.002	0	%100
58	MP-2A	Z	-.002	-.002	0	%100
59	M30	Z	-.000966	-.000966	0	%100
60	M31	Z	-.000966	-.000966	0	%100
61	M28	Z	-.000966	-.000966	0	%100
62	M29	Z	-.000966	-.000966	0	%100
63	M30A	Z	-.000966	-.000966	0	%100
64	M31A	Z	-.000966	-.000966	0	%100
65	M32	Z	-.000966	-.000966	0	%100
66	M33	Z	-.000966	-.000966	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.001	-.001	0	%100
2	FFBH-2	X	-.001	-.001	0	%100
3	FFBH-3	X	-.001	-.001	0	%100
4	FFTH-1	X	-.001	-.001	0	%100
5	FFTH-2	X	-.001	-.001	0	%100
6	FFTH-3	X	-.001	-.001	0	%100
7	MP-1	X	-.001	-.001	0	%100
8	MP-3	X	-.001	-.001	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
9	SA-1	X	-.000634	-.000634	0	%100
10	SF2-BH	X	-.001	-.001	0	%100
11	SF2-TH	X	-.001	-.001	0	%100
12	SF3-BH	X	-.000324	-.000324	0	%100
13	SF3-TH	X	-.000324	-.000324	0	%100
14	D1	X	-.001	-.001	0	%100
15	D2	X	-.001	-.001	0	%100
16	D3	X	-.001	-.001	0	%100
17	D4	X	-.001	-.001	0	%100
18	V1	X	-.001	-.001	0	%100
19	V2	X	-.001	-.001	0	%100
20	V4	X	-.001	-.001	0	%100
21	V5	X	-.001	-.001	0	%100
22	V3	X	-.001	-.001	0	%100
23	V6	X	-.001	-.001	0	%100
24	MP-2B	X	-.001	-.001	0	%100
25	MP-2A	X	-.001	-.001	0	%100
26	M30	X	-.000781	-.000781	0	%100
27	M31	X	-.000781	-.000781	0	%100
28	M28	X	-.000781	-.000781	0	%100
29	M29	X	-.000781	-.000781	0	%100
30	M30A	X	-.000781	-.000781	0	%100
31	M31A	X	-.000781	-.000781	0	%100
32	M32	X	-.000781	-.000781	0	%100
33	M33	X	-.000781	-.000781	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.003	-.003	0	%100
41	MP-3	Z	-.003	-.003	0	%100
42	SA-1	Z	-.001	-.001	0	%100
43	SF2-BH	Z	-.002	-.002	0	%100
44	SF2-TH	Z	-.002	-.002	0	%100
45	SF3-BH	Z	-.000551	-.000551	0	%100
46	SF3-TH	Z	-.000551	-.000551	0	%100
47	D1	Z	-.002	-.002	0	%100
48	D2	Z	-.002	-.002	0	%100
49	D3	Z	-.002	-.002	0	%100
50	D4	Z	-.002	-.002	0	%100
51	V1	Z	-.002	-.002	0	%100
52	V2	Z	-.002	-.002	0	%100
53	V4	Z	-.002	-.002	0	%100
54	V5	Z	-.002	-.002	0	%100
55	V3	Z	-.002	-.002	0	%100
56	V6	Z	-.002	-.002	0	%100
57	MP-2B	Z	-.003	-.003	0	%100
58	MP-2A	Z	-.003	-.003	0	%100
59	M30	Z	-.001	-.001	0	%100
60	M31	Z	-.001	-.001	0	%100
61	M28	Z	-.001	-.001	0	%100
62	M29	Z	-.001	-.001	0	%100
63	M30A	Z	-.001	-.001	0	%100
64	M31A	Z	-.001	-.001	0	%100
65	M32	Z	-.001	-.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
Checked By: WHW

Member Distributed Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
66	M33	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	Z	0	0	0	%100
2	FFBH-2	Z	0	0	0	%100
3	FFBH-3	Z	0	0	0	%100
4	FFTH-1	Z	0	0	0	%100
5	FFTH-2	Z	0	0	0	%100
6	FFTH-3	Z	0	0	0	%100
7	MP-1	Z	-.003	-.003	0	%100
8	MP-3	Z	-.003	-.003	0	%100
9	SA-1	Z	-.003	-.003	0	%100
10	SF2-BH	Z	-.002	-.002	0	%100
11	SF2-TH	Z	-.002	-.002	0	%100
12	SF3-BH	Z	-.002	-.002	0	%100
13	SF3-TH	Z	-.002	-.002	0	%100
14	D1	Z	-.003	-.003	0	%100
15	D2	Z	-.003	-.003	0	%100
16	D3	Z	-.003	-.003	0	%100
17	D4	Z	-.003	-.003	0	%100
18	V1	Z	-.002	-.002	0	%100
19	V2	Z	-.002	-.002	0	%100
20	V4	Z	-.002	-.002	0	%100
21	V5	Z	-.002	-.002	0	%100
22	V3	Z	-.003	-.003	0	%100
23	V6	Z	-.003	-.003	0	%100
24	MP-2B	Z	-.003	-.003	0	%100
25	MP-2A	Z	-.003	-.003	0	%100
26	M30	Z	-.002	-.002	0	%100
27	M31	Z	-.002	-.002	0	%100
28	M28	Z	-.002	-.002	0	%100
29	M29	Z	-.002	-.002	0	%100
30	M30A	Z	-.002	-.002	0	%100
31	M31A	Z	-.002	-.002	0	%100
32	M32	Z	-.002	-.002	0	%100
33	M33	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.001	.001	0	%100
2	FFBH-2	X	.001	.001	0	%100
3	FFBH-3	X	.001	.001	0	%100
4	FFTH-1	X	.001	.001	0	%100
5	FFTH-2	X	.001	.001	0	%100
6	FFTH-3	X	.001	.001	0	%100
7	MP-1	X	.001	.001	0	%100
8	MP-3	X	.001	.001	0	%100
9	SA-1	X	.002	.002	0	%100
10	SF2-BH	X	.000324	.000324	0	%100
11	SF2-TH	X	.000324	.000324	0	%100
12	SF3-BH	X	.001	.001	0	%100
13	SF3-TH	X	.001	.001	0	%100
14	D1	X	.001	.001	0	%100
15	D2	X	.001	.001	0	%100
16	D3	X	.001	.001	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
17	D4	X	.001	.001	0	%100
18	V1	X	.001	.001	0	%100
19	V2	X	.001	.001	0	%100
20	V4	X	.001	.001	0	%100
21	V5	X	.001	.001	0	%100
22	V3	X	.001	.001	0	%100
23	V6	X	.001	.001	0	%100
24	MP-2B	X	.001	.001	0	%100
25	MP-2A	X	.001	.001	0	%100
26	M30	X	.000781	.000781	0	%100
27	M31	X	.000781	.000781	0	%100
28	M28	X	.000781	.000781	0	%100
29	M29	X	.000781	.000781	0	%100
30	M30A	X	.000781	.000781	0	%100
31	M31A	X	.000781	.000781	0	%100
32	M32	X	.000781	.000781	0	%100
33	M33	X	.000781	.000781	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.003	-.003	0	%100
41	MP-3	Z	-.003	-.003	0	%100
42	SA-1	Z	-.003	-.003	0	%100
43	SF2-BH	Z	-.000551	-.000551	0	%100
44	SF2-TH	Z	-.000551	-.000551	0	%100
45	SF3-BH	Z	-.002	-.002	0	%100
46	SF3-TH	Z	-.002	-.002	0	%100
47	D1	Z	-.002	-.002	0	%100
48	D2	Z	-.002	-.002	0	%100
49	D3	Z	-.002	-.002	0	%100
50	D4	Z	-.002	-.002	0	%100
51	V1	Z	-.002	-.002	0	%100
52	V2	Z	-.002	-.002	0	%100
53	V4	Z	-.002	-.002	0	%100
54	V5	Z	-.002	-.002	0	%100
55	V3	Z	-.002	-.002	0	%100
56	V6	Z	-.002	-.002	0	%100
57	MP-2B	Z	-.003	-.003	0	%100
58	MP-2A	Z	-.003	-.003	0	%100
59	M30	Z	-.001	-.001	0	%100
60	M31	Z	-.001	-.001	0	%100
61	M28	Z	-.001	-.001	0	%100
62	M29	Z	-.001	-.001	0	%100
63	M30A	Z	-.001	-.001	0	%100
64	M31A	Z	-.001	-.001	0	%100
65	M32	Z	-.001	-.001	0	%100
66	M33	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.002	.002	0	%100
2	FFBH-2	X	.002	.002	0	%100
3	FFBH-3	X	.002	.002	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
4	FFTH-1	X	.002	.002	0	%100
5	FFTH-2	X	.002	.002	0	%100
6	FFTH-3	X	.002	.002	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-3	X	.002	.002	0	%100
9	SA-1	X	.002	.002	0	%100
10	SF2-BH	X	7.3e-5	7.3e-5	0	%100
11	SF2-TH	X	7.3e-5	7.3e-5	0	%100
12	SF3-BH	X	.002	.002	0	%100
13	SF3-TH	X	.002	.002	0	%100
14	D1	X	.002	.002	0	%100
15	D2	X	.002	.002	0	%100
16	D3	X	.002	.002	0	%100
17	D4	X	.002	.002	0	%100
18	V1	X	.002	.002	0	%100
19	V2	X	.002	.002	0	%100
20	V4	X	.002	.002	0	%100
21	V5	X	.002	.002	0	%100
22	V3	X	.002	.002	0	%100
23	V6	X	.002	.002	0	%100
24	MP-2B	X	.002	.002	0	%100
25	MP-2A	X	.002	.002	0	%100
26	M30	X	.000902	.000902	0	%100
27	M31	X	.000902	.000902	0	%100
28	M28	X	.000902	.000902	0	%100
29	M29	X	.000902	.000902	0	%100
30	M30A	X	.000902	.000902	0	%100
31	M31A	X	.000902	.000902	0	%100
32	M32	X	.000902	.000902	0	%100
33	M33	X	.000902	.000902	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.002	-.002	0	%100
41	MP-3	Z	-.002	-.002	0	%100
42	SA-1	Z	-.002	-.002	0	%100
43	SF2-BH	Z	-7.2e-5	-7.2e-5	0	%100
44	SF2-TH	Z	-7.2e-5	-7.2e-5	0	%100
45	SF3-BH	Z	-.002	-.002	0	%100
46	SF3-TH	Z	-.002	-.002	0	%100
47	D1	Z	-.002	-.002	0	%100
48	D2	Z	-.002	-.002	0	%100
49	D3	Z	-.002	-.002	0	%100
50	D4	Z	-.002	-.002	0	%100
51	V1	Z	-.002	-.002	0	%100
52	V2	Z	-.002	-.002	0	%100
53	V4	Z	-.002	-.002	0	%100
54	V5	Z	-.002	-.002	0	%100
55	V3	Z	-.002	-.002	0	%100
56	V6	Z	-.002	-.002	0	%100
57	MP-2B	Z	-.002	-.002	0	%100
58	MP-2A	Z	-.002	-.002	0	%100
59	M30	Z	-.000966	-.000966	0	%100
60	M31	Z	-.000966	-.000966	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
61	M28	Z	-.000966	-.000966	0	%100
62	M29	Z	-.000966	-.000966	0	%100
63	M30A	Z	-.000966	-.000966	0	%100
64	M31A	Z	-.000966	-.000966	0	%100
65	M32	Z	-.000966	-.000966	0	%100
66	M33	Z	-.000966	-.000966	0	%100

Member Distributed Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.003	.003	0	%100
2	FFBH-2	X	.003	.003	0	%100
3	FFBH-3	X	.003	.003	0	%100
4	FFTH-1	X	.003	.003	0	%100
5	FFTH-2	X	.003	.003	0	%100
6	FFTH-3	X	.003	.003	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-3	X	.002	.002	0	%100
9	SA-1	X	.002	.002	0	%100
10	SF2-BH	X	.000733	.000733	0	%100
11	SF2-TH	X	.000733	.000733	0	%100
12	SF3-BH	X	.002	.002	0	%100
13	SF3-TH	X	.002	.002	0	%100
14	D1	X	.002	.002	0	%100
15	D2	X	.002	.002	0	%100
16	D3	X	.002	.002	0	%100
17	D4	X	.002	.002	0	%100
18	V1	X	.002	.002	0	%100
19	V2	X	.002	.002	0	%100
20	V4	X	.002	.002	0	%100
21	V5	X	.002	.002	0	%100
22	V3	X	.002	.002	0	%100
23	V6	X	.002	.002	0	%100
24	MP-2B	X	.002	.002	0	%100
25	MP-2A	X	.002	.002	0	%100
26	M30	X	.000781	.000781	0	%100
27	M31	X	.000781	.000781	0	%100
28	M28	X	.000781	.000781	0	%100
29	M29	X	.000781	.000781	0	%100
30	M30A	X	.000781	.000781	0	%100
31	M31A	X	.000781	.000781	0	%100
32	M32	X	.000781	.000781	0	%100
33	M33	X	.000781	.000781	0	%100
34	FFBH-1	Z	-.002	-.002	0	%100
35	FFBH-2	Z	-.002	-.002	0	%100
36	FFBH-3	Z	-.002	-.002	0	%100
37	FFTH-1	Z	-.002	-.002	0	%100
38	FFTH-2	Z	-.002	-.002	0	%100
39	FFTH-3	Z	-.002	-.002	0	%100
40	MP-1	Z	-.002	-.002	0	%100
41	MP-3	Z	-.002	-.002	0	%100
42	SA-1	Z	-.001	-.001	0	%100
43	SF2-BH	Z	-.000416	-.000416	0	%100
44	SF2-TH	Z	-.000416	-.000416	0	%100
45	SF3-BH	Z	-.001	-.001	0	%100
46	SF3-TH	Z	-.001	-.001	0	%100
47	D1	Z	-.001	-.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
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Member Distributed Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
48	D2	Z	-.001	-.001	0	%100
49	D3	Z	-.001	-.001	0	%100
50	D4	Z	-.001	-.001	0	%100
51	V1	Z	-.001	-.001	0	%100
52	V2	Z	-.001	-.001	0	%100
53	V4	Z	-.001	-.001	0	%100
54	V5	Z	-.001	-.001	0	%100
55	V3	Z	-.001	-.001	0	%100
56	V6	Z	-.001	-.001	0	%100
57	MP-2B	Z	-.002	-.002	0	%100
58	MP-2A	Z	-.002	-.002	0	%100
59	M30	Z	-.000483	-.000483	0	%100
60	M31	Z	-.000483	-.000483	0	%100
61	M28	Z	-.000483	-.000483	0	%100
62	M29	Z	-.000483	-.000483	0	%100
63	M30A	Z	-.000483	-.000483	0	%100
64	M31A	Z	-.000483	-.000483	0	%100
65	M32	Z	-.000483	-.000483	0	%100
66	M33	Z	-.000483	-.000483	0	%100

Member Distributed Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.004	.004	0	%100
2	FFBH-2	X	.004	.004	0	%100
3	FFBH-3	X	.004	.004	0	%100
4	FFTH-1	X	.004	.004	0	%100
5	FFTH-2	X	.004	.004	0	%100
6	FFTH-3	X	.004	.004	0	%100
7	MP-1	X	.003	.003	0	%100
8	MP-3	X	.003	.003	0	%100
9	SA-1	X	.003	.003	0	%100
10	SF2-BH	X	.003	.003	0	%100
11	SF2-TH	X	.003	.003	0	%100
12	SF3-BH	X	.003	.003	0	%100
13	SF3-TH	X	.003	.003	0	%100
14	D1	X	.002	.002	0	%100
15	D2	X	.002	.002	0	%100
16	D3	X	.002	.002	0	%100
17	D4	X	.002	.002	0	%100
18	V1	X	.002	.002	0	%100
19	V2	X	.002	.002	0	%100
20	V4	X	.002	.002	0	%100
21	V5	X	.002	.002	0	%100
22	V3	X	.003	.003	0	%100
23	V6	X	.003	.003	0	%100
24	MP-2B	X	.003	.003	0	%100
25	MP-2A	X	.003	.003	0	%100
26	M30	X	.002	.002	0	%100
27	M31	X	.002	.002	0	%100
28	M28	X	.002	.002	0	%100
29	M29	X	.002	.002	0	%100
30	M30A	X	.002	.002	0	%100
31	M31A	X	.002	.002	0	%100
32	M32	X	.002	.002	0	%100
33	M33	X	.002	.002	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.003	.003	0	%100
2	FFBH-2	X	.003	.003	0	%100
3	FFBH-3	X	.003	.003	0	%100
4	FFTH-1	X	.003	.003	0	%100
5	FFTH-2	X	.003	.003	0	%100
6	FFTH-3	X	.003	.003	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-3	X	.002	.002	0	%100
9	SA-1	X	.000272	.000272	0	%100
10	SF2-BH	X	.002	.002	0	%100
11	SF2-TH	X	.002	.002	0	%100
12	SF3-BH	X	.000733	.000733	0	%100
13	SF3-TH	X	.000733	.000733	0	%100
14	D1	X	.002	.002	0	%100
15	D2	X	.002	.002	0	%100
16	D3	X	.002	.002	0	%100
17	D4	X	.002	.002	0	%100
18	V1	X	.002	.002	0	%100
19	V2	X	.002	.002	0	%100
20	V4	X	.002	.002	0	%100
21	V5	X	.002	.002	0	%100
22	V3	X	.002	.002	0	%100
23	V6	X	.002	.002	0	%100
24	MP-2B	X	.002	.002	0	%100
25	MP-2A	X	.002	.002	0	%100
26	M30	X	.000781	.000781	0	%100
27	M31	X	.000781	.000781	0	%100
28	M28	X	.000781	.000781	0	%100
29	M29	X	.000781	.000781	0	%100
30	M30A	X	.000781	.000781	0	%100
31	M31A	X	.000781	.000781	0	%100
32	M32	X	.000781	.000781	0	%100
33	M33	X	.000781	.000781	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.002	.002	0	%100
41	MP-3	Z	.002	.002	0	%100
42	SA-1	Z	.000166	.000166	0	%100
43	SF2-BH	Z	.001	.001	0	%100
44	SF2-TH	Z	.001	.001	0	%100
45	SF3-BH	Z	.000416	.000416	0	%100
46	SF3-TH	Z	.000416	.000416	0	%100
47	D1	Z	.001	.001	0	%100
48	D2	Z	.001	.001	0	%100
49	D3	Z	.001	.001	0	%100
50	D4	Z	.001	.001	0	%100
51	V1	Z	.001	.001	0	%100
52	V2	Z	.001	.001	0	%100
53	V4	Z	.001	.001	0	%100
54	V5	Z	.001	.001	0	%100
55	V3	Z	.001	.001	0	%100
56	V6	Z	.001	.001	0	%100
57	MP-2B	Z	.002	.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
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Member Distributed Loads (BLC 28 : 210 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
58	MP-2A	Z	.002	.002	0	%100
59	M30	Z	.000483	.000483	0	%100
60	M31	Z	.000483	.000483	0	%100
61	M28	Z	.000483	.000483	0	%100
62	M29	Z	.000483	.000483	0	%100
63	M30A	Z	.000483	.000483	0	%100
64	M31A	Z	.000483	.000483	0	%100
65	M32	Z	.000483	.000483	0	%100
66	M33	Z	.000483	.000483	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.002	.002	0	%100
2	FFBH-2	X	.002	.002	0	%100
3	FFBH-3	X	.002	.002	0	%100
4	FFTH-1	X	.002	.002	0	%100
5	FFTH-2	X	.002	.002	0	%100
6	FFTH-3	X	.002	.002	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-3	X	.002	.002	0	%100
9	SA-1	X	.000349	.000349	0	%100
10	SF2-BH	X	.002	.002	0	%100
11	SF2-TH	X	.002	.002	0	%100
12	SF3-BH	X	7.3e-5	7.3e-5	0	%100
13	SF3-TH	X	7.3e-5	7.3e-5	0	%100
14	D1	X	.002	.002	0	%100
15	D2	X	.002	.002	0	%100
16	D3	X	.002	.002	0	%100
17	D4	X	.002	.002	0	%100
18	V1	X	.002	.002	0	%100
19	V2	X	.002	.002	0	%100
20	V4	X	.002	.002	0	%100
21	V5	X	.002	.002	0	%100
22	V3	X	.002	.002	0	%100
23	V6	X	.002	.002	0	%100
24	MP-2B	X	.002	.002	0	%100
25	MP-2A	X	.002	.002	0	%100
26	M30	X	.000902	.000902	0	%100
27	M31	X	.000902	.000902	0	%100
28	M28	X	.000902	.000902	0	%100
29	M29	X	.000902	.000902	0	%100
30	M30A	X	.000902	.000902	0	%100
31	M31A	X	.000902	.000902	0	%100
32	M32	X	.000902	.000902	0	%100
33	M33	X	.000902	.000902	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.002	.002	0	%100
41	MP-3	Z	.002	.002	0	%100
42	SA-1	Z	.000368	.000368	0	%100
43	SF2-BH	Z	.002	.002	0	%100
44	SF2-TH	Z	.002	.002	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
45	SF3-BH	Z	7.2e-5	7.2e-5	0	%100
46	SF3-TH	Z	7.2e-5	7.2e-5	0	%100
47	D1	Z	.002	.002	0	%100
48	D2	Z	.002	.002	0	%100
49	D3	Z	.002	.002	0	%100
50	D4	Z	.002	.002	0	%100
51	V1	Z	.002	.002	0	%100
52	V2	Z	.002	.002	0	%100
53	V4	Z	.002	.002	0	%100
54	V5	Z	.002	.002	0	%100
55	V3	Z	.002	.002	0	%100
56	V6	Z	.002	.002	0	%100
57	MP-2B	Z	.002	.002	0	%100
58	MP-2A	Z	.002	.002	0	%100
59	M30	Z	.000966	.000966	0	%100
60	M31	Z	.000966	.000966	0	%100
61	M28	Z	.000966	.000966	0	%100
62	M29	Z	.000966	.000966	0	%100
63	M30A	Z	.000966	.000966	0	%100
64	M31A	Z	.000966	.000966	0	%100
65	M32	Z	.000966	.000966	0	%100
66	M33	Z	.000966	.000966	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	.001	.001	0	%100
2	FFBH-2	X	.001	.001	0	%100
3	FFBH-3	X	.001	.001	0	%100
4	FFTH-1	X	.001	.001	0	%100
5	FFTH-2	X	.001	.001	0	%100
6	FFTH-3	X	.001	.001	0	%100
7	MP-1	X	.001	.001	0	%100
8	MP-3	X	.001	.001	0	%100
9	SA-1	X	.000634	.000634	0	%100
10	SF2-BH	X	.001	.001	0	%100
11	SF2-TH	X	.001	.001	0	%100
12	SF3-BH	X	.000324	.000324	0	%100
13	SF3-TH	X	.000324	.000324	0	%100
14	D1	X	.001	.001	0	%100
15	D2	X	.001	.001	0	%100
16	D3	X	.001	.001	0	%100
17	D4	X	.001	.001	0	%100
18	V1	X	.001	.001	0	%100
19	V2	X	.001	.001	0	%100
20	V4	X	.001	.001	0	%100
21	V5	X	.001	.001	0	%100
22	V3	X	.001	.001	0	%100
23	V6	X	.001	.001	0	%100
24	MP-2B	X	.001	.001	0	%100
25	MP-2A	X	.001	.001	0	%100
26	M30	X	.000781	.000781	0	%100
27	M31	X	.000781	.000781	0	%100
28	M28	X	.000781	.000781	0	%100
29	M29	X	.000781	.000781	0	%100
30	M30A	X	.000781	.000781	0	%100
31	M31A	X	.000781	.000781	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
32	M32	X	.000781	.000781	0	%100
33	M33	X	.000781	.000781	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.003	.003	0	%100
41	MP-3	Z	.003	.003	0	%100
42	SA-1	Z	.001	.001	0	%100
43	SF2-BH	Z	.002	.002	0	%100
44	SF2-TH	Z	.002	.002	0	%100
45	SF3-BH	Z	.000551	.000551	0	%100
46	SF3-TH	Z	.000551	.000551	0	%100
47	D1	Z	.002	.002	0	%100
48	D2	Z	.002	.002	0	%100
49	D3	Z	.002	.002	0	%100
50	D4	Z	.002	.002	0	%100
51	V1	Z	.002	.002	0	%100
52	V2	Z	.002	.002	0	%100
53	V4	Z	.002	.002	0	%100
54	V5	Z	.002	.002	0	%100
55	V3	Z	.002	.002	0	%100
56	V6	Z	.002	.002	0	%100
57	MP-2B	Z	.003	.003	0	%100
58	MP-2A	Z	.003	.003	0	%100
59	M30	Z	.001	.001	0	%100
60	M31	Z	.001	.001	0	%100
61	M28	Z	.001	.001	0	%100
62	M29	Z	.001	.001	0	%100
63	M30A	Z	.001	.001	0	%100
64	M31A	Z	.001	.001	0	%100
65	M32	Z	.001	.001	0	%100
66	M33	Z	.001	.001	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	Z	0	0	0	%100
2	FFBH-2	Z	0	0	0	%100
3	FFBH-3	Z	0	0	0	%100
4	FFTH-1	Z	0	0	0	%100
5	FFTH-2	Z	0	0	0	%100
6	FFTH-3	Z	0	0	0	%100
7	MP-1	Z	.003	.003	0	%100
8	MP-3	Z	.003	.003	0	%100
9	SA-1	Z	.003	.003	0	%100
10	SF2-BH	Z	.002	.002	0	%100
11	SF2-TH	Z	.002	.002	0	%100
12	SF3-BH	Z	.002	.002	0	%100
13	SF3-TH	Z	.002	.002	0	%100
14	D1	Z	.003	.003	0	%100
15	D2	Z	.003	.003	0	%100
16	D3	Z	.003	.003	0	%100
17	D4	Z	.003	.003	0	%100
18	V1	Z	.002	.002	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
19	V2	Z	.002	.002	0	%100
20	V4	Z	.002	.002	0	%100
21	V5	Z	.002	.002	0	%100
22	V3	Z	.003	.003	0	%100
23	V6	Z	.003	.003	0	%100
24	MP-2B	Z	.003	.003	0	%100
25	MP-2A	Z	.003	.003	0	%100
26	M30	Z	.002	.002	0	%100
27	M31	Z	.002	.002	0	%100
28	M28	Z	.002	.002	0	%100
29	M29	Z	.002	.002	0	%100
30	M30A	Z	.002	.002	0	%100
31	M31A	Z	.002	.002	0	%100
32	M32	Z	.002	.002	0	%100
33	M33	Z	.002	.002	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.001	-.001	0	%100
2	FFBH-2	X	-.001	-.001	0	%100
3	FFBH-3	X	-.001	-.001	0	%100
4	FFTH-1	X	-.001	-.001	0	%100
5	FFTH-2	X	-.001	-.001	0	%100
6	FFTH-3	X	-.001	-.001	0	%100
7	MP-1	X	-.001	-.001	0	%100
8	MP-3	X	-.001	-.001	0	%100
9	SA-1	X	-.002	-.002	0	%100
10	SF2-BH	X	-.000324	-.000324	0	%100
11	SF2-TH	X	-.000324	-.000324	0	%100
12	SF3-BH	X	-.001	-.001	0	%100
13	SF3-TH	X	-.001	-.001	0	%100
14	D1	X	-.001	-.001	0	%100
15	D2	X	-.001	-.001	0	%100
16	D3	X	-.001	-.001	0	%100
17	D4	X	-.001	-.001	0	%100
18	V1	X	-.001	-.001	0	%100
19	V2	X	-.001	-.001	0	%100
20	V4	X	-.001	-.001	0	%100
21	V5	X	-.001	-.001	0	%100
22	V3	X	-.001	-.001	0	%100
23	V6	X	-.001	-.001	0	%100
24	MP-2B	X	-.001	-.001	0	%100
25	MP-2A	X	-.001	-.001	0	%100
26	M30	X	-.000781	-.000781	0	%100
27	M31	X	-.000781	-.000781	0	%100
28	M28	X	-.000781	-.000781	0	%100
29	M29	X	-.000781	-.000781	0	%100
30	M30A	X	-.000781	-.000781	0	%100
31	M31A	X	-.000781	-.000781	0	%100
32	M32	X	-.000781	-.000781	0	%100
33	M33	X	-.000781	-.000781	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
Checked By: WHW

Member Distributed Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.003	.003	0	%100
41	MP-3	Z	.003	.003	0	%100
42	SA-1	Z	.003	.003	0	%100
43	SF2-BH	Z	.000551	.000551	0	%100
44	SF2-TH	Z	.000551	.000551	0	%100
45	SF3-BH	Z	.002	.002	0	%100
46	SF3-TH	Z	.002	.002	0	%100
47	D1	Z	.002	.002	0	%100
48	D2	Z	.002	.002	0	%100
49	D3	Z	.002	.002	0	%100
50	D4	Z	.002	.002	0	%100
51	V1	Z	.002	.002	0	%100
52	V2	Z	.002	.002	0	%100
53	V4	Z	.002	.002	0	%100
54	V5	Z	.002	.002	0	%100
55	V3	Z	.002	.002	0	%100
56	V6	Z	.002	.002	0	%100
57	MP-2B	Z	.003	.003	0	%100
58	MP-2A	Z	.003	.003	0	%100
59	M30	Z	.001	.001	0	%100
60	M31	Z	.001	.001	0	%100
61	M28	Z	.001	.001	0	%100
62	M29	Z	.001	.001	0	%100
63	M30A	Z	.001	.001	0	%100
64	M31A	Z	.001	.001	0	%100
65	M32	Z	.001	.001	0	%100
66	M33	Z	.001	.001	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.002	-.002	0	%100
2	FFBH-2	X	-.002	-.002	0	%100
3	FFBH-3	X	-.002	-.002	0	%100
4	FFTH-1	X	-.002	-.002	0	%100
5	FFTH-2	X	-.002	-.002	0	%100
6	FFTH-3	X	-.002	-.002	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-3	X	-.002	-.002	0	%100
9	SA-1	X	-.002	-.002	0	%100
10	SF2-BH	X	-7.3e-5	-7.3e-5	0	%100
11	SF2-TH	X	-7.3e-5	-7.3e-5	0	%100
12	SF3-BH	X	-.002	-.002	0	%100
13	SF3-TH	X	-.002	-.002	0	%100
14	D1	X	-.002	-.002	0	%100
15	D2	X	-.002	-.002	0	%100
16	D3	X	-.002	-.002	0	%100
17	D4	X	-.002	-.002	0	%100
18	V1	X	-.002	-.002	0	%100
19	V2	X	-.002	-.002	0	%100
20	V4	X	-.002	-.002	0	%100
21	V5	X	-.002	-.002	0	%100
22	V3	X	-.002	-.002	0	%100
23	V6	X	-.002	-.002	0	%100
24	MP-2B	X	-.002	-.002	0	%100
25	MP-2A	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
26	M30	X	-.000902	-.000902	0	%100
27	M31	X	-.000902	-.000902	0	%100
28	M28	X	-.000902	-.000902	0	%100
29	M29	X	-.000902	-.000902	0	%100
30	M30A	X	-.000902	-.000902	0	%100
31	M31A	X	-.000902	-.000902	0	%100
32	M32	X	-.000902	-.000902	0	%100
33	M33	X	-.000902	-.000902	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.002	.002	0	%100
41	MP-3	Z	.002	.002	0	%100
42	SA-1	Z	.002	.002	0	%100
43	SF2-BH	Z	7.2e-5	7.2e-5	0	%100
44	SF2-TH	Z	7.2e-5	7.2e-5	0	%100
45	SF3-BH	Z	.002	.002	0	%100
46	SF3-TH	Z	.002	.002	0	%100
47	D1	Z	.002	.002	0	%100
48	D2	Z	.002	.002	0	%100
49	D3	Z	.002	.002	0	%100
50	D4	Z	.002	.002	0	%100
51	V1	Z	.002	.002	0	%100
52	V2	Z	.002	.002	0	%100
53	V4	Z	.002	.002	0	%100
54	V5	Z	.002	.002	0	%100
55	V3	Z	.002	.002	0	%100
56	V6	Z	.002	.002	0	%100
57	MP-2B	Z	.002	.002	0	%100
58	MP-2A	Z	.002	.002	0	%100
59	M30	Z	.000966	.000966	0	%100
60	M31	Z	.000966	.000966	0	%100
61	M28	Z	.000966	.000966	0	%100
62	M29	Z	.000966	.000966	0	%100
63	M30A	Z	.000966	.000966	0	%100
64	M31A	Z	.000966	.000966	0	%100
65	M32	Z	.000966	.000966	0	%100
66	M33	Z	.000966	.000966	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
1	FFBH-1	X	-.003	-.003	0	%100
2	FFBH-2	X	-.003	-.003	0	%100
3	FFBH-3	X	-.003	-.003	0	%100
4	FFTH-1	X	-.003	-.003	0	%100
5	FFTH-2	X	-.003	-.003	0	%100
6	FFTH-3	X	-.003	-.003	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-3	X	-.002	-.002	0	%100
9	SA-1	X	-.002	-.002	0	%100
10	SF2-BH	X	-.000733	-.000733	0	%100
11	SF2-TH	X	-.000733	-.000733	0	%100
12	SF3-BH	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Location[ft,...
13	SF3-TH	X	-.002	-.002	0	%100
14	D1	X	-.002	-.002	0	%100
15	D2	X	-.002	-.002	0	%100
16	D3	X	-.002	-.002	0	%100
17	D4	X	-.002	-.002	0	%100
18	V1	X	-.002	-.002	0	%100
19	V2	X	-.002	-.002	0	%100
20	V4	X	-.002	-.002	0	%100
21	V5	X	-.002	-.002	0	%100
22	V3	X	-.002	-.002	0	%100
23	V6	X	-.002	-.002	0	%100
24	MP-2B	X	-.002	-.002	0	%100
25	MP-2A	X	-.002	-.002	0	%100
26	M30	X	-.000781	-.000781	0	%100
27	M31	X	-.000781	-.000781	0	%100
28	M28	X	-.000781	-.000781	0	%100
29	M29	X	-.000781	-.000781	0	%100
30	M30A	X	-.000781	-.000781	0	%100
31	M31A	X	-.000781	-.000781	0	%100
32	M32	X	-.000781	-.000781	0	%100
33	M33	X	-.000781	-.000781	0	%100
34	FFBH-1	Z	.002	.002	0	%100
35	FFBH-2	Z	.002	.002	0	%100
36	FFBH-3	Z	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-2	Z	.002	.002	0	%100
39	FFTH-3	Z	.002	.002	0	%100
40	MP-1	Z	.002	.002	0	%100
41	MP-3	Z	.002	.002	0	%100
42	SA-1	Z	.001	.001	0	%100
43	SF2-BH	Z	.000416	.000416	0	%100
44	SF2-TH	Z	.000416	.000416	0	%100
45	SF3-BH	Z	.001	.001	0	%100
46	SF3-TH	Z	.001	.001	0	%100
47	D1	Z	.001	.001	0	%100
48	D2	Z	.001	.001	0	%100
49	D3	Z	.001	.001	0	%100
50	D4	Z	.001	.001	0	%100
51	V1	Z	.001	.001	0	%100
52	V2	Z	.001	.001	0	%100
53	V4	Z	.001	.001	0	%100
54	V5	Z	.001	.001	0	%100
55	V3	Z	.001	.001	0	%100
56	V6	Z	.001	.001	0	%100
57	MP-2B	Z	.002	.002	0	%100
58	MP-2A	Z	.002	.002	0	%100
59	M30	Z	.000483	.000483	0	%100
60	M31	Z	.000483	.000483	0	%100
61	M28	Z	.000483	.000483	0	%100
62	M29	Z	.000483	.000483	0	%100
63	M30A	Z	.000483	.000483	0	%100
64	M31A	Z	.000483	.000483	0	%100
65	M32	Z	.000483	.000483	0	%100
66	M33	Z	.000483	.000483	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	SF2-01	max	.488	2	1.225	42	.288	5	0	98	0	98	0	98
2		min	-3.061	42	.332	2	-1.598	62	0	1	0	1	0	1
3	SF2-02	max	3.077	34	1.268	34	1.598	54	0	98	0	98	0	98
4		min	-.55	10	.351	10	-.298	13	0	1	0	1	0	1
5	N46	max	.866	24	.041	47	.647	24	0	98	0	98	0	98
6		min	-.867	16	.014	5	-.649	16	0	1	0	1	0	1
7	Totals:	max	2.373	18	2.523	49	1.61	21						
8		min	-2.373	10	.739	2	-1.61	13						

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

	Member	Shape	Code Check	Lo...	LC	S...	L.....	LC	phi*P...	phi*P...	phi*Mn ...	phi*M...	Cb	Eqn
1	V3	PIP...	.477	1....	32	.0...	1...	31	28.308	32.13	1.872	1.872	1.313	H1-1b
2	D3	Roh...	.397	1....	44	.0...	0	26	5.672	9.941	.381	.381	1.136	H1-1a
3	D4	Roh...	.369	1....	61	.0...	0	30	5.672	9.941	.381	.381	1.136	H1-1a
4	SF3-BH	PIP...	.240	.4...	34	.0...	0	51	21.104	32.13	1.872	1.872	2.082	H1-1b
5	SF3-TH	PIP...	.211	.5...	42	.0...	0	59	21.104	32.13	1.872	1.872	1.944	H1-1b
6	M32	5/8 ...	.208	0	20	.0...	0	35	6.606	7.338	.066	.066	2.266	H1-1b
7	M31A	5/8 ...	.206	0	42	.0...	0	43	6.606	7.338	.066	.066	2.288	H1-1b
8	M33	5/8 ...	.204	0	42	.0...	0	42	6.606	7.338	.066	.066	2.288	H1-1b
9	M30A	5/8 ...	.200	0	35	.0...	0	35	6.606	7.338	.066	.066	2.287	H1-1b
10	M28	5/8 ...	.181	0	49	.0...	0	49	6.606	7.338	.066	.066	2.29	H1-1b
11	M30	5/8 ...	.179	0	49	.0...	0	49	6.606	7.338	.066	.066	2.289	H1-1b
12	SF2-BH	PIP...	.173	.5...	49	.0...	0	49	21.104	32.13	1.872	1.872	2.052	H1-1b
13	M31	5/8 ...	.173	.5	28	.0...	0	28	6.606	7.338	.066	.066	2.265	H1-1b
14	SF2-TH	PIP...	.164	5....	32	.0...	0	42	21.104	32.13	1.872	1.872	1.914	H1-1b
15	M29	5/8 ...	.160	0	41	.0...	0	41	6.606	7.338	.066	.066	2.293	H1-1b
16	FFTH-2	PIP...	.152	6....	26	.0...	8...	26	27.426	50.715	3.596	3.596	1.785	H1-1b
17	V2	Roh...	.152	3....	34	.0...	0	55	6.927	9.941	.381	.381	1.136	H1-1b*
18	FFBH-2	PIP...	.149	6....	18	.0...	8...	18	27.426	50.715	3.596	3.596	1.711	H1-1b
19	MP-3	PIP...	.113	.8...	62	.0...	4...	26	18.381	32.13	1.872	1.872	1.727	H1-1b
20	FFBH-3	PIP...	.104	0	18	.0...	0	54	45.879	50.715	3.596	3.596	1.938	H1-1b
21	D1	Roh...	.104	2....	47	.0...	4...	28	5.672	9.941	.381	.381	1.136	H1-1b
22	FFTH-3	PIP...	.101	0	41	.0...	0	59	45.879	50.715	3.596	3.596	1.896	H1-1b
23	FFBH-1	PIP...	.094	1....	34	.0...	1...	42	45.879	50.715	3.596	3.596	1.696	H1-1b
24	FFTH-1	PIP...	.093	1....	43	.0...	1...	34	45.879	50.715	3.596	3.596	1.71	H1-1b
25	MP-1	PIP...	.090	1....	46	.0...	1...	27	18.381	32.13	1.872	1.872	1.559	H1-1b
26	V5	Roh...	.089	1....	38	.0...	3...	30	6.927	9.941	.381	.381	1	H1-1b
27	MP-2A	PIP...	.088	4....	29	.0...	.....	28	31.775	32.13	1.872	1.872	1.811	H1-1b
28	D2	Roh...	.086	2....	47	.0...	0	24	5.672	9.941	.381	.381	1.136	H1-1b
29	V1	Roh...	.084	3....	34	.0...	3...	20	6.927	9.941	.381	.381	1.136	H1-1b*
30	V4	Roh...	.048	1....	38	.0...	3...	18	6.927	9.941	.381	.381	1	H1-1b
31	MP-2B	PIP...	.038	4	26	.0...	4	29	24.093	32.13	1.872	1.872	2.057	H1-1b
32	SA-1	PIP...	.019	0	24	.0...	4...	47	58.453	65.205	5.749	5.749	1.136	H1-1b*
33	V6	PIP...	.014	1....	46	.0...	0	30	28.308	32.13	1.872	1.872	1.316	H1-1b

Company : Tower Engineering Professionals, Inc.
Designer : NPD
Job Number : 155517.296090
Model Name : CCI BU No. 876345

Sept 10, 2019
8:52 AM
Checked By: WHW

Envelope None Cold Formed Steel Code Checks

Me...	Shape	Code Check	Lo...	LC	Sh...Lo.....	Pn[k]	Tn[k]	Mny...	Mnzz[...	Cb	Cmyy	Cmzz	Eqn
No Data to Print ...													

APPENDIX D

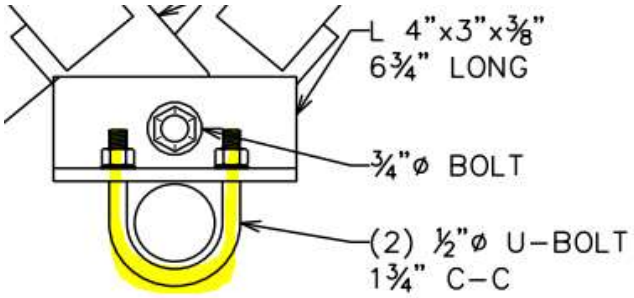
ADDITIONAL CALCULATIONS

Job Name: CCI BU No. 876345
TEP#155517.296090
Calc: NPD Check: WHW
Date: 9/10/2019

Moment Bolt Group - Tower Leg (Alpha Sector)

Bolt Size:	0.5	in
# Bolts:	4	
Plate Width:	6.75	in
Plate Height:	4	in
Bolt H Gap:	4.25	in
Bolt V Gap:	1.5	in
Plate T:	0.375	in
Tower Leg Ø:	3.5	in
Bolt Grade:	A36	
Fu_{bolt}	58	ksi
r:	2.2535	in
J:	20.31	in^4/in^2
$Bolt_{Area}$:	0.196	in^2
$Bolt_{Area, Net Tensile}$:	0.142	in^2
Pretension:	6	kips
Slotted Holes:	Long	

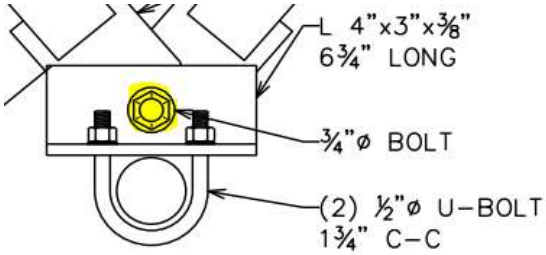
Code Checks Per ANSI/TIA-222-H:		
Bolt Capacity =	**13.5%**	**PASS**
Single Bolt Capacity=	**17.6%**	**PASS**



Single Bolt Check

Bolt Size:	0.75	in
Bolt F_u:	120	ksi
$Bolt_{A, Net Tensile}$:	0.334	in^2

Bolts: A325N



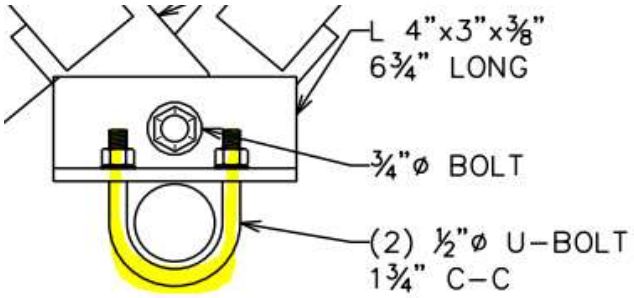
V_{max}=	3.494	kips
$ØR_{NV}$ =	19.880	kips
T_{max} =	1.363	kips
$ØR_{NT}$ =	30.060	kips

Job Name: CCI BU No. 876345
TEP#155517.296090
Calc: NPD Check: WHW
Date: 9/10/2019

Moment Bolt Group - Tower Leg (Beta/Gamma Sector)

Bolt Size:	0.5	in
# Bolts:	4	
Plate Width:	6.75	in
Plate Height:	4	in
Bolt H Gap:	4.25	in
Bolt V Gap:	1.5	in
Plate T:	0.375	in
Tower Leg Ø:	3.5	in
Bolt Grade:	A36	
Fu_{bolt}	58	ksi
r:	2.2535	in
J:	20.31	in^4/in^2
$Bolt_{Area}$:	0.196	in^2
$Bolt_{Area, Net Tensile}$:	0.142	in^2
Pretension:	6	kips
Slotted Holes:	Long	

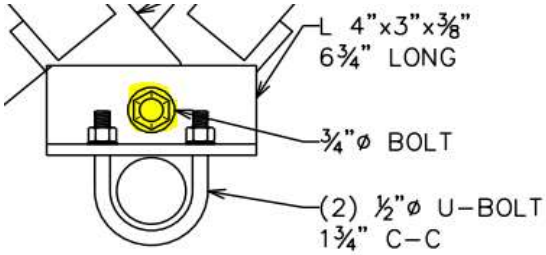
Code Checks Per ANSI/TIA-222-H:		
Bolt Capacity =	**12.4%**	**PASS**
Single Bolt Capacity=	**15.8%**	**PASS**



Single Bolt Check

Bolt Size:	0.75	in
Bolt F_u:	120	ksi
$Bolt_{A, Net Tensile}$:	0.334	in^2

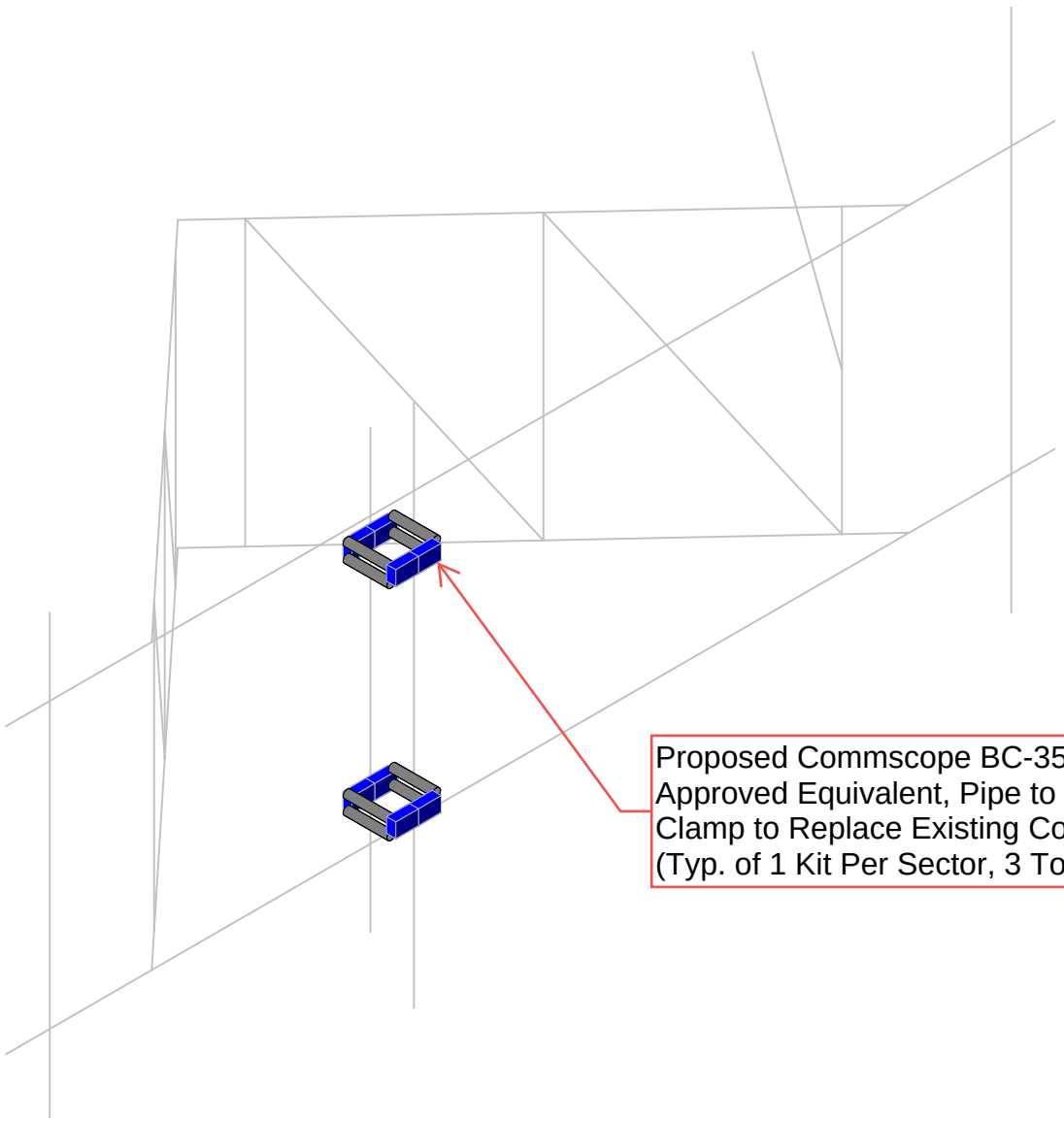
Bolts: A325N



V_{max}=	3.146	kips
$ØR_{NV}$ =	19.880	kips
T_{max} =	1.268	kips
$ØR_{NT}$ =	30.060	kips

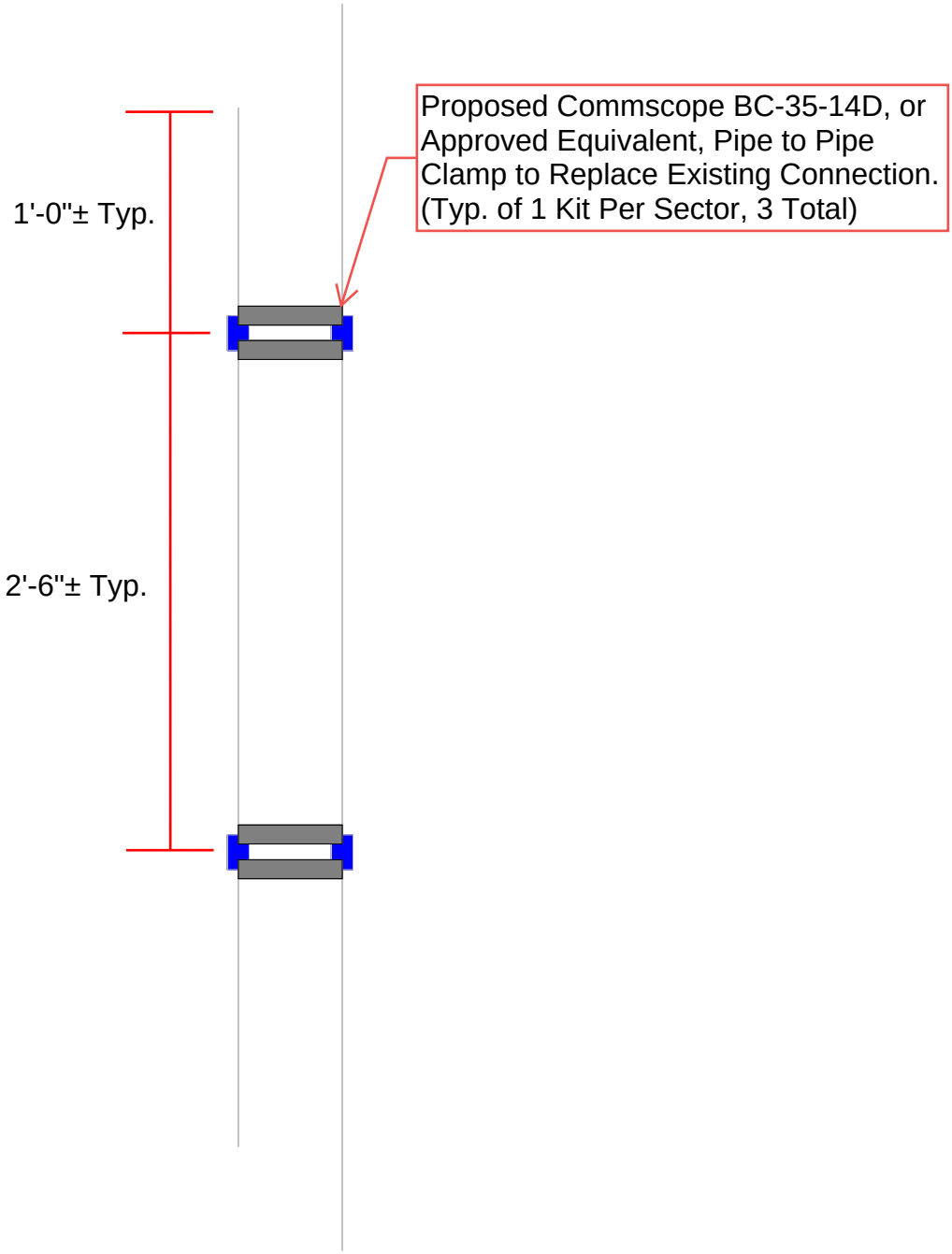
APPENDIX E

MOUNT MODIFICATION DESIGN DRAWINGS



Envelope Only Solution

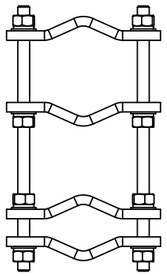
Tower Engineering Profes...	CCI BU No. 876345	SK - 11
NPD		Sept 10, 2019 at 8:34 AM
155517.296090		Mount Rev H.r3d

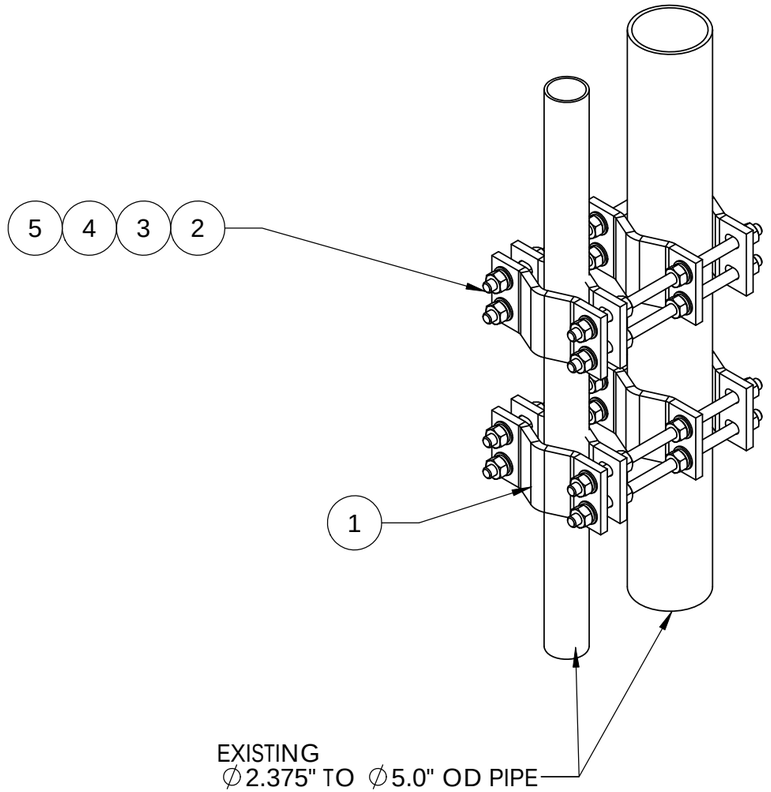


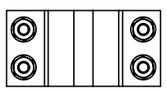
Tower Engineering Profes...	CCI BU No. 876345	SK - 12
NPD		Sept 10, 2019 at 8:36 AM
155517.296090		Mount Rev H.r3d

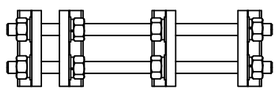
ITEM	PART NO.	DESCRIPTION	QTY.	WEIGHT
1	DC-P10D	Dual Half Clamp, 2-3/8" to 5"	8	4.42 LBS
2	MT-382-14	5/8" X 14" GALV THREADED ROD	8	1.21 LBS
3	GWF05A	5/8" GALV FLAT WASHER (A325)	32	0.03 LBS
4	GWL-05	5/8" GALV LOCK WASHER	32	0.03 LBS
5	GN05A	5/8" GALV HEX NUT (A194 2H)	32	0.12 LBS

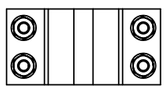
REVISIONS				
REV.	ZONE	DESCRIPTION	BY	DATE
A		INITIAL RELEASE	MSM	06/15/12

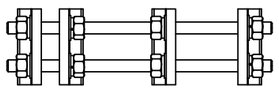












NOTES:
1. ALL METRIC DIMENSIONS ARE IN BRACKETS.

ALL DIMENSIONS ARE IN INCHES U.O.S.
TOLERANCES UNLESS OTHERWISE SPECIFIED:
.X = ± .12 ANGLES ±2°
.XX = ± .06 FRACTIONS ±1/32
.XXX= ± .03
REMOVE BURRS AND BREAK EDGES .005
DO NOT SCALE THIS PRINT

DRAWN BY: MSM	SHEET: 1 of 1	PART NUMBER: BC-35-14D	
CHECKED BY: TP	SCALE: NTS	DESCRIPTION: Pipe To Pipe Dual Clamp, 2–3/8" to 5"	
DATE: 06/15/12	MATERIAL: A36	DRAWING TYPE: ASSEMBLY DRAWING	
REVISION: A	FINISH: GALV A123	COMMSCOPE® Hickory, NC 28602 U.S.A.	
	WEIGHT: 50.42 LBS		

Exhibit F

Power Density/RF Emissions Report

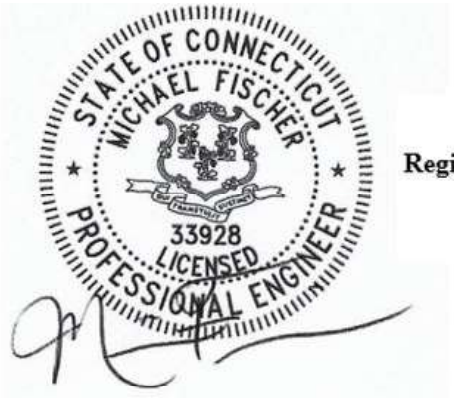
RF EMISSIONS COMPLIANCE REPORT

Crown Castle on behalf of AT&T Mobility, LLC

Crown Castle Site Name: SKY HILL
Crown Castle Site BU: 876345
AT&T Mobility, LLC Site FA #: 10035292
33 Janowski Road
Ashford, CT
10/4/2019

Report Status:

AT&T Mobility, LLC Is Compliant



Michael Fischer, P.E.
Registered Professional Engineer (Electrical)
Connecticut License Number 33928
Expires January 31, 2020

Signed 04 October 2019

Prepared By:

Site Safe, LLC

8618 Westwood Center Drive
Suite 315

Vienna, VA 22182

Voice: 703-276-1100
Fax: 703-276-1169

Engineering Statement in Re:
Electromagnetic Energy Analysis
Crown Castle
ASHFORD, CT

My signature on the cover of this document indicates:

That I am registered as a Professional Engineer in the jurisdiction indicated; and

That I have extensive professional experience in the wireless communications engineering industry; and

That I am an employee of Site Safe, LLC in Vienna, Virginia; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission ("the FCC" and "the FCC Rules") both in general and specifically as they apply to the FCC's Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields; and

That the technical information serving as the basis for this report was supplied by Crown Castle (see attached Site Summary and Carrier documents) and that AT&T Mobility, LLC's installation involves communications equipment, antennas and associated technical equipment at a location referred to as "SKY HILL" ("the site"); and

That AT&T Mobility, LLC proposes to operate at the site with transmit antennas listed in the carrier summary and with a maximum effective radiated power as specified by AT&T Mobility, LLC and shown on the worksheet and that worst-case 100% duty cycle has been assumed; and

That this analysis has been performed with the assumption that the ground immediately surrounding the tower is primarily flat or falling; and

That at this time, the FCC requires that certain licensees address specific levels of radio frequency energy to which workers or members of the public might possibly be exposed (at §1.1307(b) of the FCC Rules); and

That such consideration of possible exposure of humans to radio frequency energy must utilize the standards set by the FCC, which is the federal agency having jurisdiction over communications facilities; and

That the FCC rules define two tiers of permissible exposure guidelines: 1) "uncontrolled environments," which defines situations in which persons may not be aware of (the "general public"), or may not be able to control their exposure to a transmission facility; and 2) "controlled environments," which defines situations in which persons are aware of their potential for exposure (industry personnel); and

That this statement specifically addresses the uncontrolled environment (which is more conservative than the controlled environment) and the limit set forth in the FCC rules for licensees of AT&T Mobility, LLC's operating frequencies as shown on the attached antenna worksheet; and

That when applying the uncontrolled environment standards, the predicted Maximum Power Density at two meters above ground level from the proposed AT&T Mobility, LLC operation is

no more than 2.657% of the maximum permissible exposure limits in any accessible area on the ground; and

That it is understood per FCC Guidelines and OET 65 Appendix A, that regardless of the existent radio frequency environment, only those licensees whose contributions exceed 5% of the exposure limit pertinent to their operation(s) bear any responsibility for bringing any non-compliant area(s) into compliance; and

That when applying the uncontrolled environment standards, the cumulative predicted energy density from the proposed operation is no more than 6.318% of the maximum in any accessible area up to two meters above the ground per OET 65; and

That the calculations provided in this report are based on data provided by the client and antenna pattern data supplied by the antenna manufacturer, in accordance with FCC guidelines listed in OET 65. Horizontal and vertical antenna patterns are combined for modeling purposes to accurately reflect the energy two meters above ground level where on-axis energy refers to maximum energy two meters above the ground along the azimuth of the antenna and where area energy refers to the maximum energy anywhere two meters above the ground regardless of the antenna azimuth, accounting for cumulative energy from multiple antennas for the carrier(s) and frequency range(s) indicated; and

That the Occupational Safety and Health Administration has policies in place which address worker safety in and around communications sites, thus individual companies will be responsible for their employees' training regarding radio frequency safety; and

In summary, it is stated here that the proposed operation at the site will not result in exposure of the public to excessive levels of radio frequency energy as defined in the FCC Rules and Regulations, specifically 47 CFR 1.1307(b), and that AT&T Mobility, LLC's proposed operation is completely compliant.

Finally, it is stated that access to the tower should be restricted to communication industry professionals and approved contractor personnel trained in radio frequency safety and that this instant analysis addresses exposure levels at two meters above ground level and does not address exposure levels on the tower or in the immediate proximity of the antennas.

Crown Castle
SKY HILL
Site Summary

Carrier	Area Maximum Percentage MPE
AT&T Mobility, LLC	0.099 %
AT&T Mobility, LLC (Proposed)	0.553 %
AT&T Mobility, LLC (Proposed)	0.29 %
AT&T Mobility, LLC (Proposed)	0.251 %
AT&T Mobility, LLC (Proposed)	0.617 %
AT&T Mobility, LLC (Proposed)	0.587 %
AT&T Mobility, LLC (Proposed)	0.26 %
Sprint	0.17 %
Sprint	0.082 %
Sprint	0.082 %
Sprint	0.054 %
Sprint	0.054 %
T-Mobile	0.422 %
T-Mobile	0.266 %
T-Mobile	0.545 %
T-Mobile	0.27 %
Verizon Wireless	0.531 %
Verizon Wireless	0.488 %
Verizon Wireless	0.24 %
Verizon Wireless	0.457 %
Composite Site MPE:	6.318 %

AT&T Mobility, LLC
SKY HILL
Carrier Summary

Frequency:	850	MHz
Maximum Permissible Exposure (MPE):	566.67	µW/cm^2
Maximum power density at ground level:	0.56294	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.09934	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
Powerwave	7770	141	10	547	0.266043	0.046949	0.41073	0.072482
Powerwave	7770	141	140	547	0.266043	0.046949	0.41073	0.072482
Powerwave	7770	141	250	547	0.266043	0.046949	0.41073	0.072482

AT&T Mobility, LLC (Proposed)
SKY HILL
Carrier Summary

Frequency:	2100	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	5.53004	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.553	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
CCI Antennas	DMP65R-BU6D	141	10	4788	4.35089	0.435089	5.487594	0.548759
CCI Antennas	DMP65R-BU4D	141	140	4066	3.095373	0.309537	4.221126	0.422113
CCI Antennas	DMP65R-BU4D	141	250	4066	3.095373	0.309537	4.221126	0.422113

AT&T Mobility, LLC (Proposed)
SKY HILL
Carrier Summary

Frequency:	850	MHz
Maximum Permissible Exposure (MPE):	566.67	µW/cm^2
Maximum power density at ground level:	1.64117	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.28962	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
CCI Antennas	DMP65R-BU6D	141	10	2239	0.871758	0.15384	1.608424	0.283839
CCI Antennas	DMP65R-BU4D	141	140	1695	1.035313	0.182702	1.07986	0.190564
CCI Antennas	DMP65R-BU4D	141	250	1695	1.035313	0.182702	1.07986	0.190564

AT&T Mobility, LLC (Proposed)
SKY HILL
Carrier Summary

Frequency:	763	MHz
Maximum Permissible Exposure (MPE):	508.67	µW/cm^2
Maximum power density at ground level:	1.27645	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.25094	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
CCI Antennas	DMP65R-BU6D	141	10	2400	0.949109	0.186588	1.223904	0.24061
CCI Antennas	DMP65R-BU4D	141	140	1582	1.023783	0.201268	1.073581	0.211058
CCI Antennas	DMP65R-BU4D	141	250	1582	1.023783	0.201268	1.073581	0.211058

AT&T Mobility, LLC (Proposed)
SKY HILL
Carrier Summary

Frequency:	2300	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	6.1726	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.61726	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
CCI Antennas	DMP65R-BU6D	141	10	2606	5.876267	0.587627	6.157757	0.615776
CCI Antennas	DMP65R-BU4D	141	140	2917	2.193076	0.219308	2.813617	0.281362
CCI Antennas	DMP65R-BU4D	141	250	2917	2.193076	0.219308	2.813617	0.281362

AT&T Mobility, LLC (Proposed)
SKY HILL
Carrier Summary

Frequency:	1900	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	5.87208	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.58721	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
CCI Antennas	DMP65R-BU6D	141	10	4075	4.938501	0.49385	5.83114	0.583114
CCI Antennas	DMP65R-BU4D	141	140	3541	3.652302	0.36523	4.727618	0.472762
CCI Antennas	DMP65R-BU4D	141	250	3541	3.652302	0.36523	4.727618	0.472762

AT&T Mobility, LLC (Proposed)
SKY HILL
Carrier Summary

Frequency:	737	MHz
Maximum Permissible Exposure (MPE):	491.33	µW/cm^2
Maximum power density at ground level:	1.27645	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.25979	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
CCI Antennas	DMP65R-BU6D	141	10	2400	0.949109	0.19317	1.223904	0.249099
CCI Antennas	DMP65R-BU4D	141	140	1582	1.023783	0.208368	1.073581	0.218504
CCI Antennas	DMP65R-BU4D	141	250	1582	1.023783	0.208368	1.073581	0.218504

Sprint
SKY HILL
Carrier Summary

Frequency:	2500	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	1.70095	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.17009	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
RFS	APXVTM14-C-I20	192	0	6168	0.600486	0.060049	1.123264	0.112326
RFS	APXVTM14-C-I20	192	135	6168	0.600486	0.060049	1.123264	0.112326
RFS	APXVTM14-C-I20	192	240	6168	0.600486	0.060049	1.123264	0.112326

Sprint
SKY HILL
Carrier Summary

Frequency:	1990	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	0.82004	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.082	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
Commscope	NNVV-65B-R4	192	0	2781	0.618427	0.061843	0.790819	0.079082
Commscope	NNVV-65B-R4	192	135	2781	0.618427	0.061843	0.790819	0.079082
Commscope	NNVV-65B-R4	192	240	2781	0.618427	0.061843	0.790819	0.079082

Sprint
SKY HILL
Carrier Summary

Frequency:	1900	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	0.82004	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.082	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
Commscope	NNVV-65B-R4	192	0	2781	0.618427	0.061843	0.790819	0.079082
Commscope	NNVV-65B-R4	192	135	2781	0.618427	0.061843	0.790819	0.079082
Commscope	NNVV-65B-R4	192	240	2781	0.618427	0.061843	0.790819	0.079082

Sprint
SKY HILL
Carrier Summary

Frequency:	866	MHz
Maximum Permissible Exposure (MPE):	577.33	µW/cm^2
Maximum power density at ground level:	0.31148	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.05395	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
Commscope	NNVV-65B-R4	192	0	951	0.238811	0.041365	0.240885	0.041724
Commscope	NNVV-65B-R4	192	135	951	0.238811	0.041365	0.240885	0.041724
Commscope	NNVV-65B-R4	192	240	951	0.238811	0.041365	0.240885	0.041724

Sprint
SKY HILL
Carrier Summary

Frequency:	862	MHz
Maximum Permissible Exposure (MPE):	574.67	µW/cm^2
Maximum power density at ground level:	0.31148	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.0542	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
Commscope	NNVV-65B-R4	192	0	951	0.238811	0.041556	0.240885	0.041917
Commscope	NNVV-65B-R4	192	135	951	0.238811	0.041556	0.240885	0.041917
Commscope	NNVV-65B-R4	192	240	951	0.238811	0.041556	0.240885	0.041917

T-Mobile
SKY HILL
Carrier Summary

Frequency:	700	MHz
Maximum Permissible Exposure (MPE):	466.67	µW/cm^2
Maximum power density at ground level:	1.96963	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.42206	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
RFS	APXVAARR24_43-U-NA20	153	20	3484	0.938587	0.201126	0.998808	0.21403
RFS	APXVAARR24_43-U-NA20	153	160	3484	0.938587	0.201126	0.998808	0.21403
RFS	APXVAARR24_43-U-NA20	153	240	3484	0.938587	0.201126	0.998808	0.21403

T-Mobile
SKY HILL
Carrier Summary

Frequency:	600	MHz
Maximum Permissible Exposure (MPE):	400	µW/cm^2
Maximum power density at ground level:	1.0647	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.26618	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
RFS	APXVAARR24_43-U-NA20	153	20	2501	0.738434	0.184609	0.757176	0.189294
RFS	APXVAARR24_43-U-NA20	153	160	2501	0.738434	0.184609	0.757176	0.189294
RFS	APXVAARR24_43-U-NA20	153	240	2501	0.738434	0.184609	0.757176	0.189294

T-Mobile
SKY HILL
Carrier Summary

Frequency:	2100	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	5.44625	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.54463	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
RFS	APX16DWV-16DWVS-C-A20	153	20	6763	4.555445	0.455545	4.555445	0.455545
RFS	APX16DWV-16DWVS-C-A20	153	160	6763	4.555445	0.455545	4.555445	0.455545
RFS	APX16DWV-16DWVS-C-A20	153	240	6763	4.555445	0.455545	4.555445	0.455545

T-Mobile
SKY HILL
Carrier Summary

Frequency:	1900	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	2.70305	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.2703	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
RFS	APX16DWV-16DWVS-C-A20	153	20	6763	1.327513	0.132751	1.565447	0.156545
RFS	APX16DWV-16DWVS-C-A20	153	160	6763	1.327513	0.132751	1.565447	0.156545
RFS	APX16DWV-16DWVS-C-A20	153	240	6763	1.327513	0.132751	1.565447	0.156545

Verizon Wireless
SKY HILL
Carrier Summary

Frequency:	2100	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	5.31279	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.53128	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
Commscope	JAHH-65B-R3B	181	30	6828	1.504846	0.150485	2.654018	0.265402
Commscope	JAHH-65B-R3B	181	150	6828	1.504846	0.150485	2.654018	0.265402
Commscope	JAHH-65B-R3B	181	150	6828	1.504846	0.150485	2.654018	0.265402

Verizon Wireless
SKY HILL
Carrier Summary

Frequency:	1900	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	4.88189	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.48819	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
Commscope	JAHH-65B-R3B	181	30	5890	1.529239	0.152924	2.439028	0.243903
Commscope	JAHH-65B-R3B	181	150	5890	1.529239	0.152924	2.439028	0.243903
Commscope	JAHH-65B-R3B	181	150	5890	1.529239	0.152924	2.439028	0.243903

Verizon Wireless
SKY HILL
Carrier Summary

Frequency:	751	MHz
Maximum Permissible Exposure (MPE):	500.67	µW/cm^2
Maximum power density at ground level:	1.20212	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.2401	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
Commscope	JAHH-65B-R3B	181	30	1996	0.415034	0.082896	0.600253	0.119891
Commscope	JAHH-65B-R3B	181	150	1996	0.415034	0.082896	0.600253	0.119891
Commscope	JAHH-65B-R3B	181	150	1996	0.415034	0.082896	0.600253	0.119891

Verizon Wireless
SKY HILL
Carrier Summary

Frequency:	850	MHz
Maximum Permissible Exposure (MPE):	566.67	µW/cm^2
Maximum power density at ground level:	2.58963	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	0.45699	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
Antel	LPA-80080-4CF	181	30	1423	0.434791	0.076728	0.452009	0.079766
Commscope	JAHH-65B-R3B	181	30	3120	0.554009	0.097766	0.908106	0.160254
Antel	LPA-80080-4CF	181	150	1423	0.434791	0.076728	0.452009	0.079766
Commscope	JAHH-65B-R3B	181	150	3120	0.554009	0.097766	0.908106	0.160254
Antel	LPA-80080-4CF	181	150	1423	0.434791	0.076728	0.452009	0.079766
Commscope	JAHH-65B-R3B	181	150	3120	0.554009	0.097766	0.908106	0.160254