NORTHEAST SITE SOLUTIONS
Turnkey Wireless Development

Northeast Site Solutions
Denise Sabo
4 Angela's Way, Burlington CT 06013
203-435-3640
denise@northeastsitesolutions.com

June 25, 2021

Members of the Siting Council
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Exempt Modification Application
83 Reeds Gap Road, North Branford CT 06472
Latitude: 41.403428
Longitude: -72.744261
Site#: 806386_ Crown_VZW

Dear Ms. Bachman:

Verizon Wireless is requesting to file an exempt modification for an existing tower located at 83 Reeds Gap Road, North Branford CT 06472. Verizon Wireless currently maintains twelve (12) antennas at the 90-foot level of the existing 92-foot tower. The property is owned by David Tamulevich, and tower is owned by Crown Castle. Verizon now intends to add three (3) antenna. The new antennas would be installed at the 90-foot level of the tower. This modification includes B2, B5 hardware that is both 4G (LTE), and **5G** capable.

Verizon Planned Modifications:
Remove: NONE

Remove and Replace: NONE

Install New:
(3) Sub6 MT6407-77A Antenna

Existing to Remain:
(4) DB844G65ZAXY Antenna
(6) JAHH-65B-R3B Antenna
(2) LPA-80063 Antenna
(3) Samsung B2/B66A -BRO49 – RFV01U-D1A RRU
(3) Samsung B5/B13 -BRO4C – RFV01U-D2A RRU
(3) Diplexers
(2) Raycap OBV Box
(12) Coax Lines
(2) 1-5/8" Hybrid

NORTHEAST SITE SOLUTIONS

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The facility was approved by the CT Siting Council on November 22, 1995. Please see attached

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies§ 16- SOj-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.SA. § 16-SOj-73, a copy of this letter is being sent to The Honorable Michael J. Doody, Mayor for the Town of North Branford, Tom Hogarty, Zoning Enforcement Officer, Crown Castle as the tower owner, and property owner.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

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

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

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The existing structure and its foundation can support the proposed loading.

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

Sincerely,

Denise Sabo
Mobile: 203-435-3640
Fax: 413-521-0558
Office: 4 Angela's Way, Burlington CT 06013
Email: denise@northeastsitesolutions.com

NORTHEAST SITE SOLUTIONS
Turnkey Wireless Development

Attachments
cc: The Honorable Michael J. Doody (via email only to executivesecretary@townofnorthbranfordct.com
Town of North Branford – Mayor
909 Foxon Road, North Branford CT 06471

Tom Hogarty, Zoning Enforcement Officer (via email only to zeo@townofnorthbranfordct.com
Town of North Branford – Zoning Enforcement Officer
909 Foxon Road, North Branford CT 06471

David Tamilevich – Property Owner
83 Reeds Gap Road, Northford CT 06472

Crown Castle, Tower Owner (via email to Sarah.Snell@crowncastle.com)

Exhibit A

Original Facility Approval

EXMOD\BANM\BOLTON

Bell Atlantic NYNEX Mobile

Bell Atlantic NYNEX Mobile
20 Alexander Drive
P.O. Box 5029
Wallingford, CT 06492
203-269-8858

Jennifer Young Gaudet
Manager - Regulatory

ORIGINAL

November 22, 1995

RECEIVED
NOV 22 1995
CONNECTICUT
SITING COUNCIL

HAND DELIVERED

Mr. Joel M. Rinebold
Executive Director
Connecticut Siting Council
136 Main Street, Suite 401
New Britain, Connecticut 06051

Re: Bell Atlantic NYNEX Mobile - Antenna Upgrades

Dear Mr. Rinebold:

Bell Atlantic NYNEX Mobile ("BANM" or the "Company") is undertaking a system performance improvement plan which involves upgrading the antenna configurations at most of its cell sites. This letter, together with attached Schedule 1 which provides site-by-site detail, serves as BANM's notice of intent, pursuant to R.C.S.A. § 16-50j-73, of construction which constitutes exempt modifications pursuant to R.C.S.A. § 16-50j-72(b).

In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter is being sent to the chief elected officials of the municipalities in which the affected cell sites are located. Those individuals are listed on Schedule 2, appended hereto. A sample of the letter sent to those officials is also enclosed.

The changes include some conversions from omnidirectional to sectorized configurations, some changes in antenna model and some additions of directional antennas. As detailed below and on Schedule 1 appended hereto, the changes meet the criteria for exempt modifications.

First, the height of BANM's installations will not be increased at any of the sites; the changes may result in a decrease in height. On most Company-owned monopoles, the dual platform configuration formerly used will be modified by adding a rail assembly to each platform and removing the vertical mounting pipes between them. The panel antennas will be mounted on the top rail assembly. These antennas will replace the top-mounted omnidirectional antennas as well as the transmit/receive antennas which have been mounted between the platforms. These changes will reduce the overall height of the structures (including appurtenances). Similar changes made to lattice towers, while not utilizing a platform mount, will also result

Approved 12/6/95

in reduced overall height at sites where top-mounted omnidirectional antennas have been used.

Second, the planned changes will not extend the site boundaries. The antenna upgrade does not involve other changes to the sites.

Third, the planned changes will not increase the noise levels at the existing facilities by six decibels or more. The change in antenna model and any additional antennas will not result in any change in noise levels.

Fourth, operation of the new antennas will not increase the total radio frequency electromagnetic radiation power density at any of the sites to a level at or above the ANSI standard. Included in Schedule 1 are the results of updated power density calculations for BANM's installations. In general, the changes will result in a decrease in power density predictions since sectorization restricts RF channel transmissions to less than a full 360° pattern and reduces effective radiated power to approximately one third of omnidirectional values. It should be noted, however, that the percentage of the ANSI standard may reflect a higher number than that shown in previous filings for sites which predated the 1992 revision to the ANSI standard. Because the effect, if any, of the change in antenna configuration is to decrease the overall power density, no updated calculations have been performed for other uses at shared sites.

Based on the foregoing and the enclosed, the Company respectfully submits that the proposed changes to the antenna configurations at the sites listed on Schedule 1 constitute exempt modifications under R.C.S.A. Section 16-50j-72(b).

Respectfully yours,

Jennifer Young Gaudet

Jennifer Young Gaudet
Manager - Regulatory

Enclosures

cc: Municipal officials listed on Schedule 2

SITE NAME	ADDRESS	TOWN	CSC REF	RAD CTR	# OF ANTS	TYPE/MODEL of ANTENNAS	POWER DENSITY	% OF STANDARD
BOLTON	130 VERNON RD	BOLTON	EXMOD	120	3	ALP-9212	0.0474	8.13
					3	ALP-6014		
BRANFORD	1801 NORTH MAIN ST	BRANFORD	DN 122	107	15	ALP-9212	0.0596	10.22
BRISTOL	32 VALLEY ST	BRISTOL	EXMOD	88	9	ALP-9212	0.0882	15.13
BRUCE GOLF COURSE	1323 KING ST	GREENWICH	EXMOD	98/103	6	ALP-9212	0.0711	12.19
CLINTON	48 COW HILL RD	CLINTON	DN 148	206	12	ALP-9212	0.0161	2.76
DANBURY	24 HOSPITAL AVE	DANBURY	DN 79	204	12	ALP-9212	0.0164	2.81
DARIEN	LEDGE RD	DARIEN	DN 155	100	14	ALP-9212	0.0682	11.7
DURHAM	101R OLD BLUE HILLS RD	DURHAM	DN 161	100	12	ALP-9212	0.0682	11.7
EAST BRIDGEPORT	939 BARNUM AVE	BRIDGEPORT	EXMOD	152	12	ALP-9212	0.0296	5.08
EAST FAIRFIELD	40 BLACKROCK TPKE	FAIRFIELD	PET 304	120	12	ALP-9212	0.0474	8.13
EAST GRANBY	NEWGATE RD	EAST GRANBY	EXMOD	80	8	ALP-9212	0.1067	18.3
					4	ALP-9209		
EAST LYME	93 ROXBURY RD	EAST LYME	DN 116	158	10	ALP-9212	0.0274	4.7
EAST NORWALK	FILBERT ST	NORWALK	PET 305	120	15	ALP-9212	0.0474	8.13
ENFIELD	OLIVER RD	ENFIELD	DN 139	150	13	ALP-9212	0.0303	5.2
FAIRFIELD	281 WOODHOUSE RD	FAIRFIELD	DN 86	160	15	ALP-9212	0.0267	4.58
FARMINGTON	RATTLESNAKE MTN	FARMINGTON	EXMOD	239	8	ALP-9212	0.012	2.06
GLASTONBURY	BIRCH MOUNTAIN RD	GLASTONBURY	DN 58	155	9	ALP-9212	0.0284	4.87
GREENWICH	5 PERRYRIDGE RD	GREENWICH	DN 73	106	12	CTY-10510	0.0608	10.43
GROTON	68 GROTON LONG POINT RD	GROTON	EXMOD	100	12	ALP-9212	0.0682	11.7
GUILFORD	131 MANOR RD	GUILFORD	DN 56	150	12	ALP-9212	0.0303	5.2
HADDAM	TURKEY HILL RD	HADDAM	DN 58	180	12	ALP-9212	0.0211	3.62
HAMDEN	1055 WINTERGREEN AVE	HAMDEN	DN 56A	173	12	ALP-9212	0.0228	3.91
HARTFORD	1 STATE ST	HARTFORD	DN 58	296	9	ALP-9212	0.0078	1.34
HARTFORD N.W.	439-455 HOMESTEAD AVE	HARTFORD	DN 126	140	12	ALP-9212	0.0348	5.98
KILLINGWORTH	TOWER HILL RD (RT 80)	KILLINGWORTH	DN 69	160	12	ALP-9212	0.0267	4.58
MERIDEN	WEST PEAK	MERIDEN	DN 93	78	8	ALP-9209	0.1122	19.25
MIDDLETOWN	213 COURT ST	MIDDLETOWN	DN 126	180	9	ALP-9212	0.0211	3.62
MILFORD	423 ORONOQUE RD	MILFORD	DN 56	100	9	ALP-9212	0.0682	11.7
NAUGATUCK	45 PEACH ORCHARD RD	NAUGATUCK	DN 56B	195	12	ALP-9212	0.018	3.09
NEW BRITAIN	155 MYRTLE ST	NEW BRITAIN	PET 283	93	12	ALP-9212	0.079	13.55
NEW HAVEN	54 MEADOW ST	NEW HAVEN	DN 140	146	15	ALP-9212	0.032	5.49
NEW HAVEN EAST	153 FORBES AVE	NEW HAVEN	PET 329	72	12	CTY-10510	0.1317	22.59
NEW LONDON	59 WESTWOOD AVE	NEW LONDON	EXMOD	80	2	DB-809	0.1067	18.3
NEWTOWN	WASHINGTON AVE (RT 34)	NEWTOWN	DN 89	182	9	ALP-9212	0.0206	3.54
NORTH BRANFORD	83 REEDS GAP RD	NORTH BRANFORD	DN 56	87	15	ALP-9212	0.0902	15.47
NORTH BRIDGEPORT	1330 CHOPSEY HILL RD	BRIDGEPORT	EXMOD	132	12	ALP-9212	0.0392	6.12

SITE NAME	ADDRESS	TOWN	CSC REF	RAD CTR	# OF ANTS	TYPE/MODEL of ANTENNAS	POWER DENSITY	% OF STANDARD
NORTH HAVEN	117 WASHINGTON AVE	NORTH HAVEN	DN 117	122	15	ALP-9212	0.0459	7.87
NORTH NORWALK	WEST ROCKS RD	NORWALK	PET 284	83	15	ALP-9212	0.0991	17
NORWALK	50 ROCKLAND RD	NORWALK	DN 73	171	12	ALP-9212	0.0234	4.01
OLD SAYBROOK EAST	2 CLARK ST	OLD SAYBROOK	PET 327	90	9	ALP-9212	0.0843	14.46
PORTLAND	OLD MARLBOROUGH TPKE	PORTLAND	DN 58	160	10	ALP-9212	0.0267	4.58
REDDING	80 LONETOWN RD	REDDING	PET 311	95	2	PD-10009	0.0757	12.98
RIDGEFIELD	76 EAST RIDGE AVE	RIDGEFIELD	DN 113	140	9	ALP-9212	0.0348	5.97
RIVERSIDE	1111 EAST PUTNAM AVE	GREENWICH	DN 120	47	12	ALP-9212	0.3091	53.02
ROCKY HILL	FRANCE ST	ROCKY HILL	DN 58	140	12	ALP-9212	0.0348	5.97
SOMERS	126 PIONEER HTS RD	SOMERS	DN 58	155	12	ALP-9212	0.0284	4.87
SOUTHBURY	KETTLETOWN RD	SOUTHBURY	DN 88	230	12	ALP-9212	0.0129	2.21
STAMFORD	300 TRESSER BLVD	STAMFORD	DN 73	206	10	ALP-9209	0.0161	2.76
					5	ALP-11008		
TALCOTT	TALCOTT MOUNTAIN	BLOOMFIELD	DN 107	55	3	ALP-6008	0.2657	38.72
	SCIENCE CENTER				3	ALP-11008		
TRUMBULL	BOOTH HILL RD/ VIDEO LN	TRUMBULL	DN 77	230	15	ALP-9212	0.0129	2.21
VERNON	SOUTH ST	VERNON	DN 58A	120	12	ALP-9212	0.0474	8.13
WEST HARTFORD	570 NEW PARK AVE	WEST HARTFORD	DN 131	150	14	ALP-9212	0.0303	5.2
WEST HAVEN	24 ROCKDALE RD	WEST HAVEN	DN 56	169	12	ALP-9212	0.0239	4.1
WETHERSFIELD	100 GREAT MEADOW RD	WETHERSFIELD	DN 139	115	12	ALP-9212	0.0516	8.86
WILLIMANTIC	349 MOUNTAIN RD	WILLIMANTIC	EXMOD	193	4	PD-10017	0.0183	3.14
WILLINGTON	56 COS GROVE RD	WILLINGTON	DN 58	138	10	ALP-11011	0.0359	6.15
WILTON	128 OLD MATHER RD	WILTON	DN 94	178	12	ALP-9212	0.0216	3.7
WINDSOR	482 PIGEON HILL RD	WINDSOR	DN 58	155	15	ALP-9212	0.0284	4.87
WINDSOR SOUTH	599 MATIANUCK AVE	WINDSOR	DN 137	100	10	ALP-9212	0.0682	11.7
WOLCOTT	347 EAST ST	WOLCOTT	DN 56	167	12	ALP-9212	0.0245	4.2
WOODSTOCK	WEST QUASSETT RD	WOODSTOCK	EXMOD	134	2	PD-1110R	0.038	6.52

Exhibit B

Property Card

83 REEDS GAP RD

Location	83 REEDS GAP RD	**Mblu**	70/B 6/ / /
Acct#	002385	**Owner**	TAMULEVICH DAVID
Assessment	$269,400	**Appraisal**	$384,800
PID	4398	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2015	$186,100	$198,700	$384,800
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2015	$130,300	$139,100	$269,400

Owner of Record

Owner	TAMULEVICH DAVID	**Sale Price**	$120,000
Co-Owner		**Certificate**	
Address	83 REEDS GAP RD NORTHFORD, CT 06472-1122	**Book & Page**	465/1113
		Sale Date	01/02/2014
		Instrument	08

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
TAMULEVICH DAVID	$120,000		465/1113	08	01/02/2014
LISKA MARY TRUSTEE	$0		451/ 511		06/14/2012
LISKA MARY	$0		212/ 677		09/20/1991

Building Information

Building 1 : Section 1

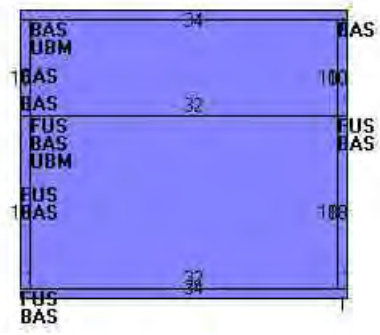
Year Built:	1983
Living Area:	1,666
Replacement Cost:	$140,202
Building Percent Good:	86
Replacement Cost Less Depreciation:	$120,600

Building Attributes	
Field	**Description**
Style	Colonial
Model	Residential
Grade:	Average
Stories:	2 Stories
Occupancy	1
Exterior Wall 1	Cedar or Redwd
Exterior Wall 2	
Roof Structure:	Salt Box
Roof Cover	Asphalt Shingl
Interior Wall 1	Drywall/Sheet
Interior Wall 2	Knotty Pine Pa
Interior Flr 1	Pine/Soft Wood
Interior Flr 2	Carpet
Heat Fuel	Electric
Heat Type:	Geothermal
AC Type:	Heat Pump
Total Bedrooms:	2 Bedrooms
Total Bthrms:	2
Total Half Baths:	0
Total Xtra Fixtrs:	
Total Rooms:	4 Rooms
Bath Style:	Average
Kitchen Style:	Average

Building Photo

(http://images.vgsi.com/photos/NorthBranfordCTPhotos//\00\00\

Building Layout



(http://images.vgsi.com/photos/NorthBranfordCTPhotos//Sketche

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	1,020	1,020
FUS	Full Upper Story	646	646
UBM	Basement, Unfinished	896	0
		2,562	1,666

Extra Features

Extra Features				Legend
Code	**Description**	**Size**	**Value**	**Bldg #**
FPL1	FIREPLACE 1STY	1 UNITS	$3,400	1
FPO	EXTRA FPL OPEN	1 UNITS	$1,300	1

Land

Land Use

Land Line Valuation

Use Code	1010	**Size (Acres)**	4.69
Description	SINGLE FAM MDL-01	**Frontage**	0
Zone	R80	**Depth**	0
Neighborhood		**Assessed Value**	$139,100
Alt Land Appr	No	**Appraised Value**	$198,700
Category			

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
BRN3	BARN 1 STY W/LOFT			1200 S.F.	$29,300	1
ELCB	ELECTRONIC COMM BLDG			200 S.F.	$31,500	1

Valuation History

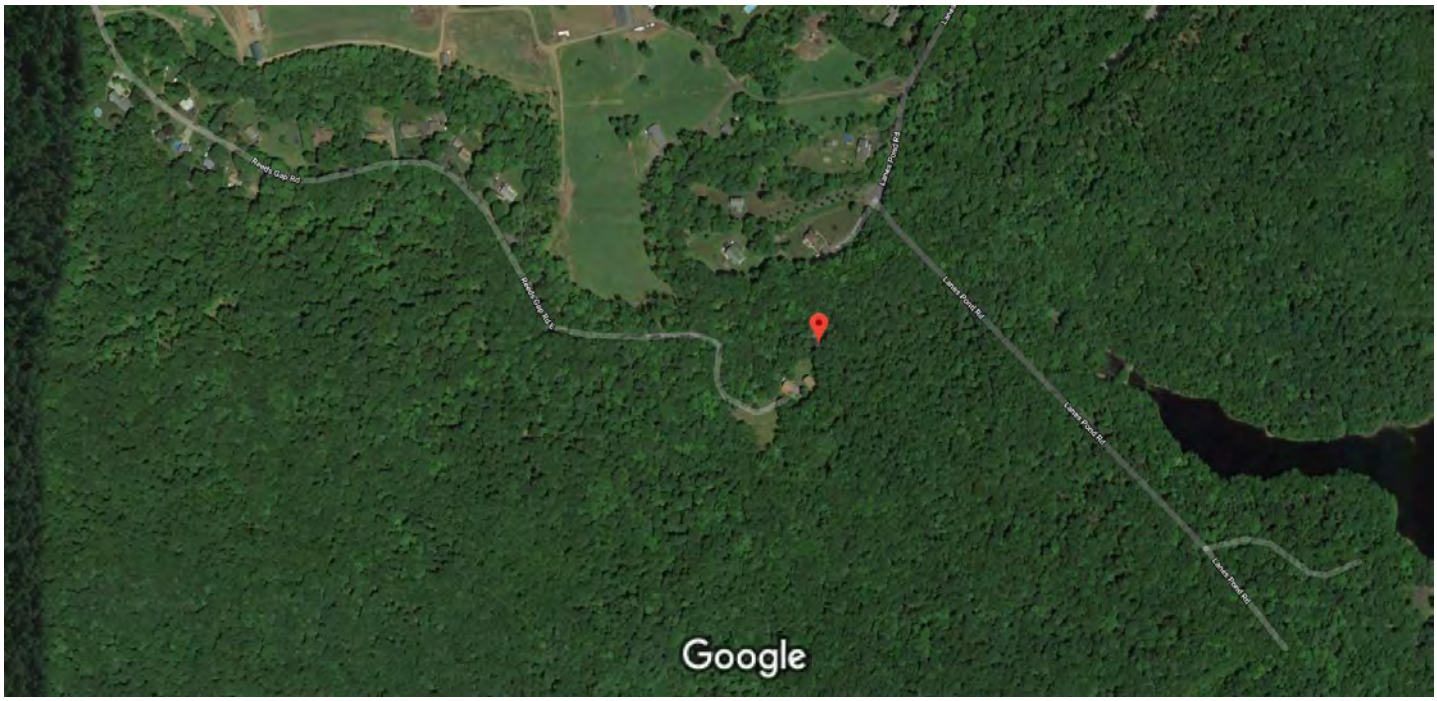
Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$186,100	$198,700	$384,800
2017	$186,100	$198,700	$384,800
2016	$186,100	$198,700	$384,800

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$130,300	$139,100	$269,400
2017	$130,300	$139,100	$269,400
2016	$130,300	$139,100	$269,400

Google Maps

41°24'12.5"N 72°44'38.9"W

Crown Castle - tower location



Imagery ©2020 Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2020 200 ft

41°24'12.5"N 72°44'38.9"W

41.403464, -72.744139

Directions | Save | Nearby | Send to your phone | Share

Northford, CT 06472

C734+98 Northford, Connecticut

Exhibit C

Construction Drawings

verizon

VERIZON SITE NUMBER: 468991
VERIZON SITE NAME: NHV 106 943628
SITE TYPE: SELF-SUPPORT TOWER
TOWER HEIGHT: 92'-0"

BUSINESS UNIT #: 806386
SITE ADDRESS: 83 REEDS GAP ROAD NORTH BRANFORD, CT 06472
COUNTY: NEW HAVEN
JURISDICTION: CONNECTICUT SITING COUNCIL

VERIZON 5G L-SUB6 - CARRIER ADD

SITE INFORMATION

CROWN CASTLE USA INC. SITE NAME:	NHV 106 943628
SITE ADDRESS:	83 REEDS GAP ROAD NORTH BRANFORD, CT 06472
COUNTY:	NEW HAVEN
MAP/PARCEL #:	4398
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41.403464°
LONGITUDE:	-72.744139°
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	626
CURRENT ZONING:	R80
JURISDICTION:	CONNECTICUT SITING COUNCIL
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	TAMULEVICH DAVID 83 REEDS GAP RD NORTHFORD, CT 06472-1122
TOWER OWNER:	CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	VERIZON WIRELESS 180 WASHINGTON VALLEY ROAD BEDMINSTER, NJ 07921
ELECTRIC PROVIDER:	NOT PROVIDED
TELCO PROVIDER:	NOT PROVIDED

PROJECT TEAM

A&E FIRM:	B+T GROUP 1717 S BOULDER AVE, SUITE 300 TULSA, OK 74119 RICHARD MCCLURE (918) 587-4630
CROWN CASTLE USA INC. DISTRICT CONTACTS:	3 CORPORATE PARK DRIVE, SUITE 101 CLIFTON PARK, NY 12065
VERIZON CONTACT:	TIMOTHY PARKS TIMOTHY.PARKS@VERIZONWIRELESS.COM

DRAWING INDEX

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

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

APPROVALS

SIGNATURE	DATE

CONTRACTOR PMI REQUIREMENTS

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

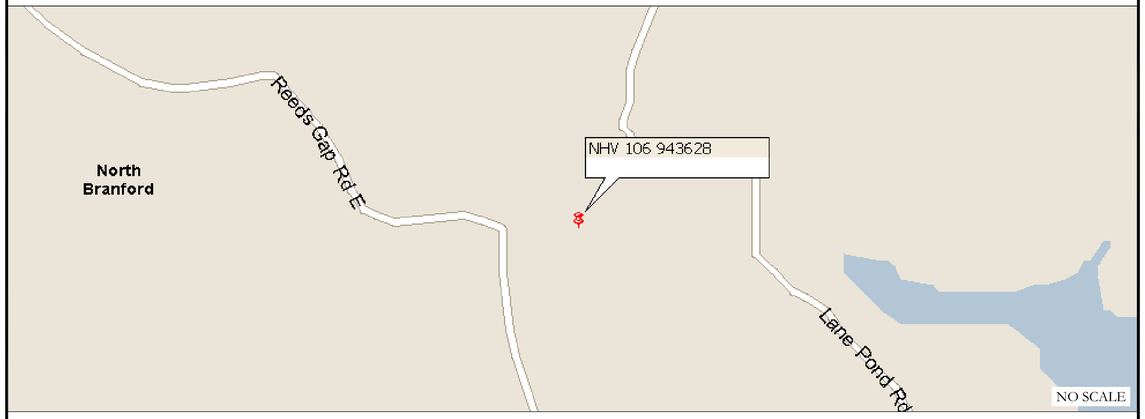
*** PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT

MOUNT MODIFICATION REQUIRED	N

VzW APPROVED SMART KIT VENDORS

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

LOCATION MAP



DRIVING DIRECTIONS FROM DISTRICT OFFICE:
MASS PIKE WEST TO RT 84 SOUTH(WEST) TO RT 91 SOUTH TO EXIT 14 (NORTHFORD RD.) FOLLOW NORTHFORD RD SOUTH TO A LEFT ONTO RT 17 NORTH (2.5 MILES). TAKE A RIGHT ONTO REEDS GAP RD. EAST (1 MILE). PAVEMENT TURNS INTO DIRT/STONE. AT TEE INTERSECTION OF GRAVEL/DIRT ROAD TURN LEFT. STAY TO LEFT ON DIRT ROAD AT FORK (SAND BARREL IS LOCATED). SITE A FEW HUNDRED FEET.

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: DATED:	BY OTHERS
MOUNT ANALYSIS: DATED:	MASUR CONSULTING CONNECTICUT 3/30/21
RFDS REVISION: DATED:	N/A 3/17/21
ORDER ID: REVISION:	552625 0

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

PROJECT DESCRIPTION

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

TOWER SCOPE OF WORK:
- INSTALL (3) ANTENNAS

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

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

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

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

VERIZON SITE NUMBER:
468991

BU #: **806386**
NHV 106 943628

83 REEDS GAP ROAD
NORTH BRANFORD, CT 06472

EXISTING 92'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	4/15/21	LHT	CONSTRUCTION	MTJ

STATE OF CONNECTICUT
No. 23924
LICENSED
PROFESSIONAL ENGINEER
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B&T ENGINEERING, INC.
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CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

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

GENERAL NOTES:

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

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

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

GREENFIELD GROUNDING NOTES:

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

ELECTRICAL INSTALLATION NOTES:

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

CONDUCTOR COLOR CODE

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

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

APWA UNIFORM COLOR CODE:

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

ABBREVIATIONS:

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

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www.btgrp.com

VERIZON SITE NUMBER:
468991

BU #: **806386**
NHV 106 943628

83 REEDS GAP ROAD
NORTH BRANFORD, CT 06472

EXISTING 92'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	4/15/21	LHT	CONSTRUCTION	MTJ

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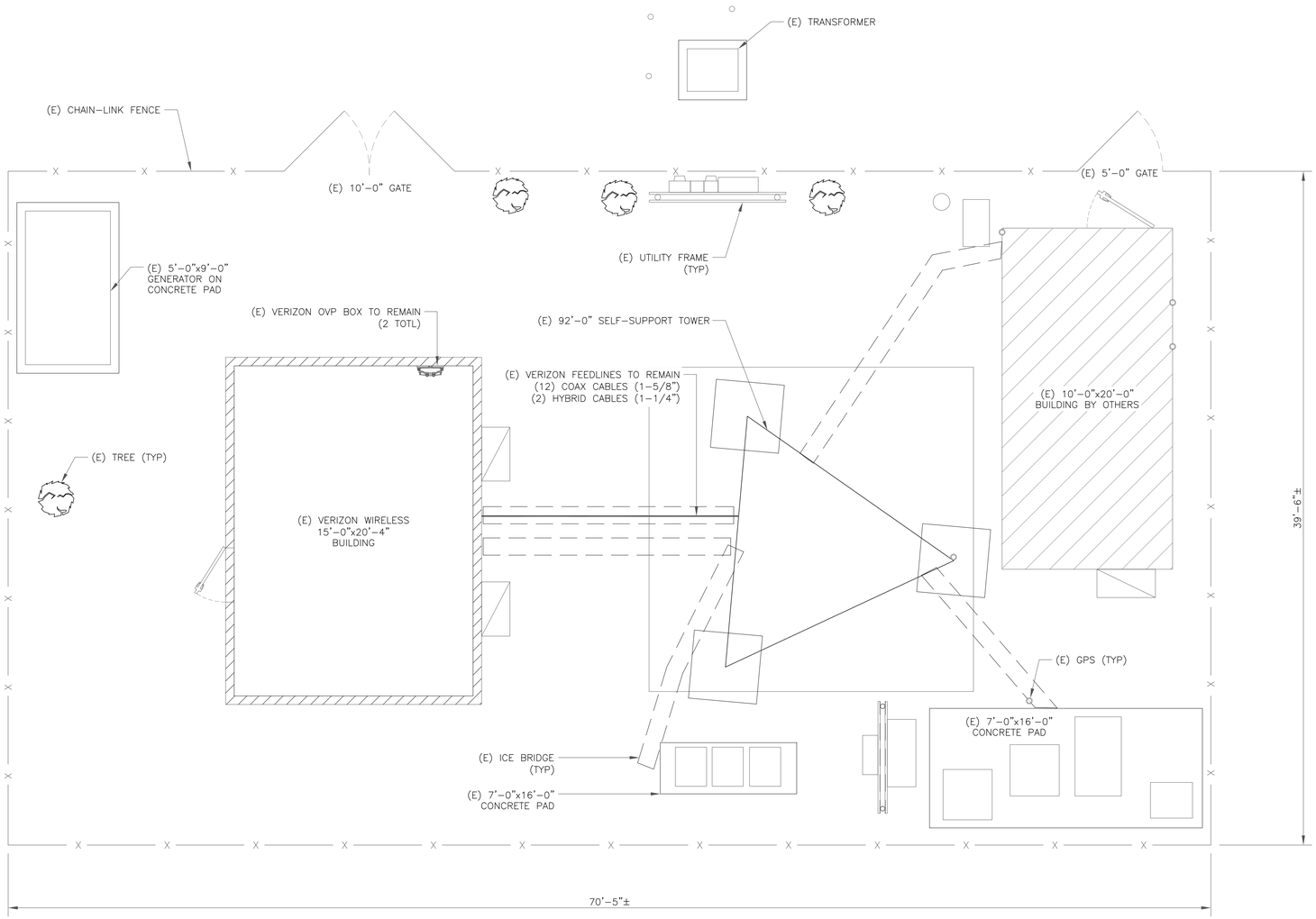
PEC.0001564
Expires 2/10/22

SHEET NUMBER: T-2

REVISION: 0



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

N

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LICENSED PROFESSIONAL ENGINEER
4/15/21

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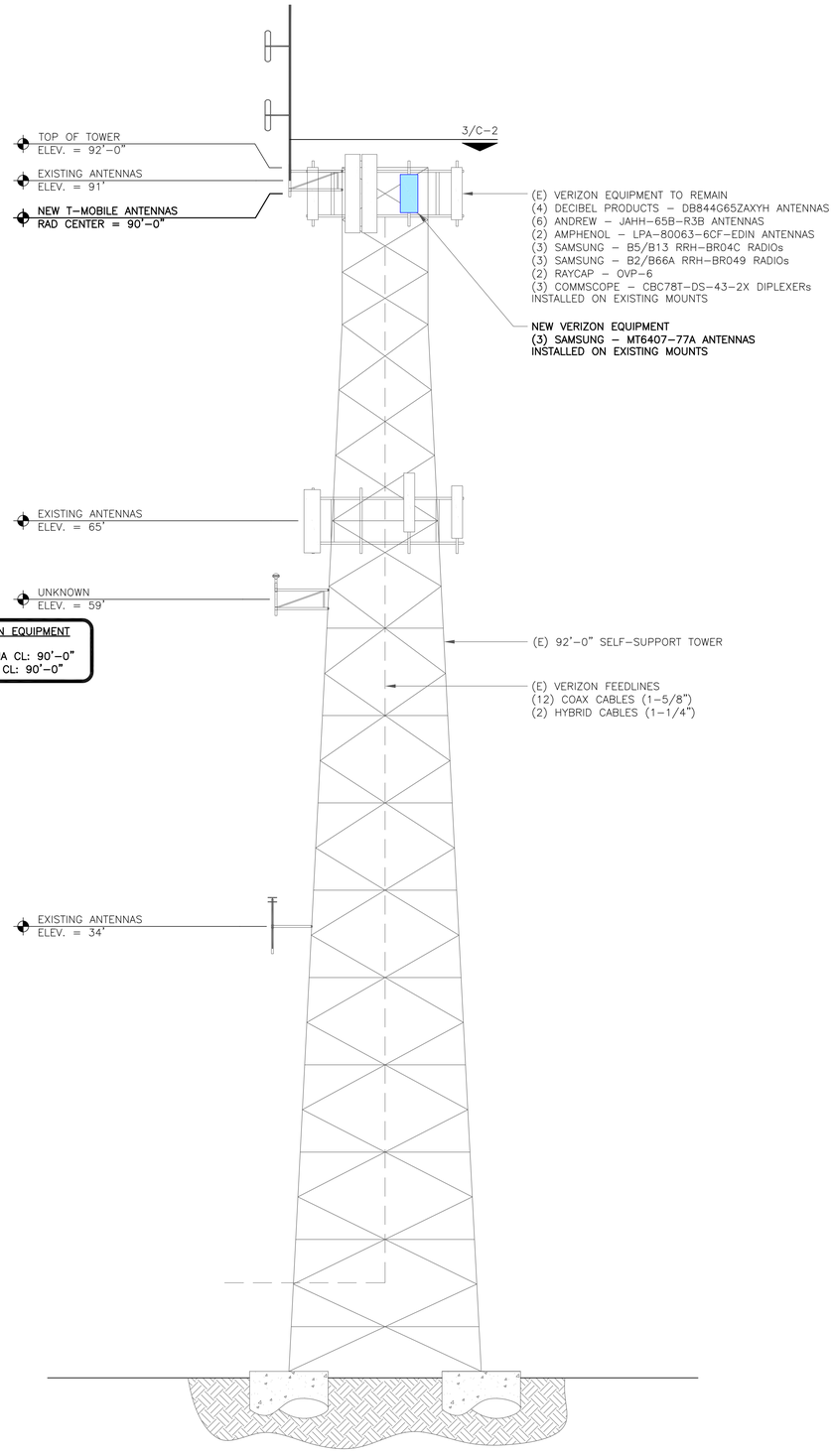
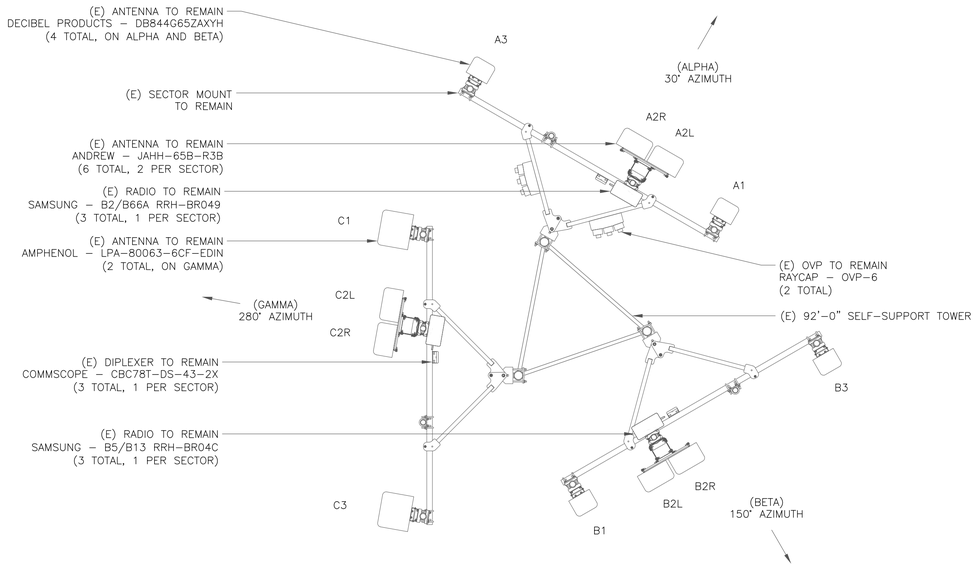
SHEET NUMBER: C-1

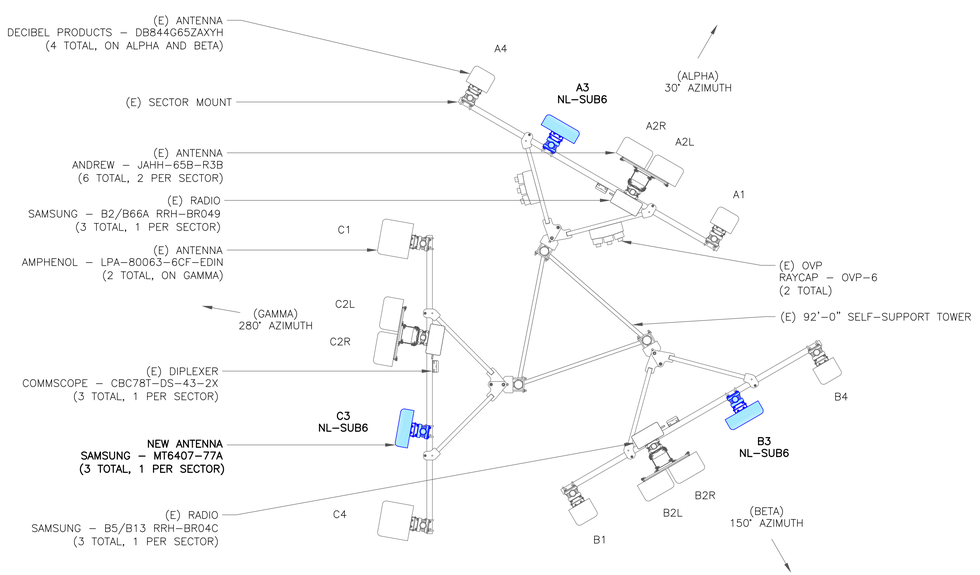
REVISION: 0



1 TOWER ELEVATION
SCALE: NOT TO SCALE



2 EXISTING ANTENNA PLAN
SCALE: NOT TO SCALE



3 NEW ANTENNA PLAN
SCALE: NOT TO SCALE

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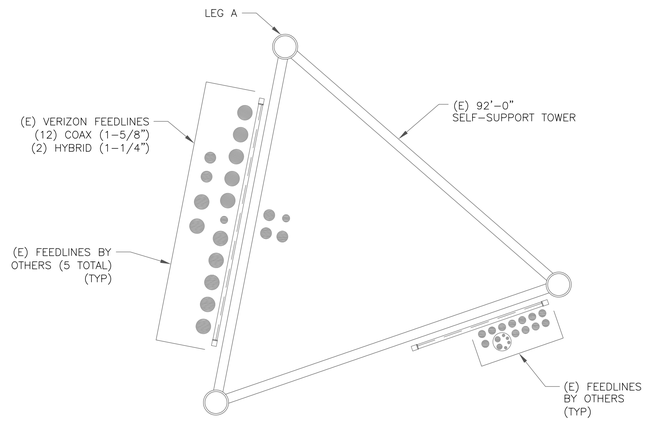
ANTENNA/RRH SCHEDULE

SECTOR	STATUS	ANTENNA MANUFACTURER	ANTENNA MODEL	ANTENNA CENTERLINE	AZIMUTH	MECHANICAL DOWNTILTS	ELECTRICAL DOWNTILTS	TOWER EQUIPMENT MANUFACTURER	TOWER EQUIPMENT QTY/MODEL
A1	EXISTING	DECIBEL PRODUCTS	DB844G65ZAXYH	90'-0"	30°	0°	0°	–	–
A2L A2R	EXISTING	ANDREW	JAHH-65B-R3B	90'-0"	30°	0°	2°/4°/2°/2°	RAYCAP SAMSUNG SAMSUNG	OVP-6 B5/B13 RRH-BR04C B2/B66A RRH-BR049
A3	**NEW**	**SAMSUNG**	**MT6407-77A**	**90'-0"**	**30°**	**0°**	**6°**	**–**	**–**
A4	EXISTING	DECIBEL PRODUCTS	DB844G65ZAXYH	90'-0"	30°	0°	0°	–	–
B1	EXISTING	DECIBEL PRODUCTS	DB844G65ZAXYH	90'-0"	150°	0°	0°	–	–
B2L B2R	EXISTING	ANDREW	JAHH-65B-R3B	90'-0"	150°	0°	2°/4°/2°/2°	SAMSUNG SAMSUNG	B5/B13 RRH-BR04C B2/B66A RRH-BR049
B3	**NEW**	**SAMSUNG**	**MT6407-77A**	**90'-0"**	**150°**	**0°**	**6°**	**–**	**–**
B4	EXISTING	DECIBEL PRODUCTS	DB844G65ZAXYH	90'-0"	150°	0°	0°	–	–
C1	EXISTING	AMPHENOL	LPA-80063-6CF-EDIN	90'-0"	280°	2°	6°	–	–
C2L C2R	EXISTING	ANDREW	JAHH-65B-R3B	90'-0"	280°	0°	5°/8°/2°/2°	SAMSUNG SAMSUNG	B5/B13 RRH-BR04C B2/B66A RRH-BR049
C3	**NEW**	**SAMSUNG**	**MT6407-77A**	**90'-0"**	**280°**	**0°**	**6°**	**–**	**–**
C4	EXISTING	AMPHENOL	LPA-80063-6CF-EDIN	90'-0"	280°	2°	6°	–	–

1 VERIZON TOWER EQUIPMENT SCHEDULE
SCALE: NOT TO SCALE

CABLE SCHEDULE

STATUS	CABLE TYPE	SIZE	LENGTH	QTY
EXISTING	COAX	1-5/8"	140'-0"±	12
EXISTING	HYBRID	1-1/4"	140'-0"±	2
TOTAL CABLE QTY:				14



2 BASE LEVEL DETAIL
SCALE: NOT TO SCALE

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BU #: **806386**
NHV 106 943628

83 REEDS GAP ROAD
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SELF-SUPPORT TOWER

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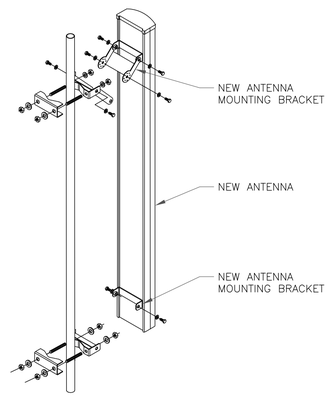
1 NOT USED
SCALE: NOT TO SCALE

2 NOT USED
SCALE: NOT TO SCALE

3 NOT USED
SCALE: NOT TO SCALE

INSTALLER NOTES:

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



4 ANTENNA MOUNTING DETAIL
SCALE: NOT TO SCALE

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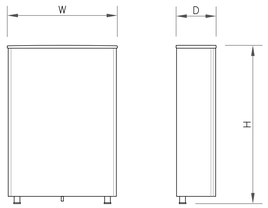

ANTENNA SPECS	
MANUFACTURER	SAMSUNG
MODEL #	MT6407-77A
WIDTH	16.06"
DEPTH	5.51"
HEIGHT	35.06"
WEIGHT	81.57 LBS

1 ANTENNA SPECS
SCALE: NOT TO SCALE

2 NOT USED
SCALE: NOT TO SCALE

3 NOT USED
SCALE: NOT TO SCALE

4 NOT USED
SCALE: NOT TO SCALE

5 NOT USED
SCALE: NOT TO SCALE

6 NOT USED
SCALE: NOT TO SCALE

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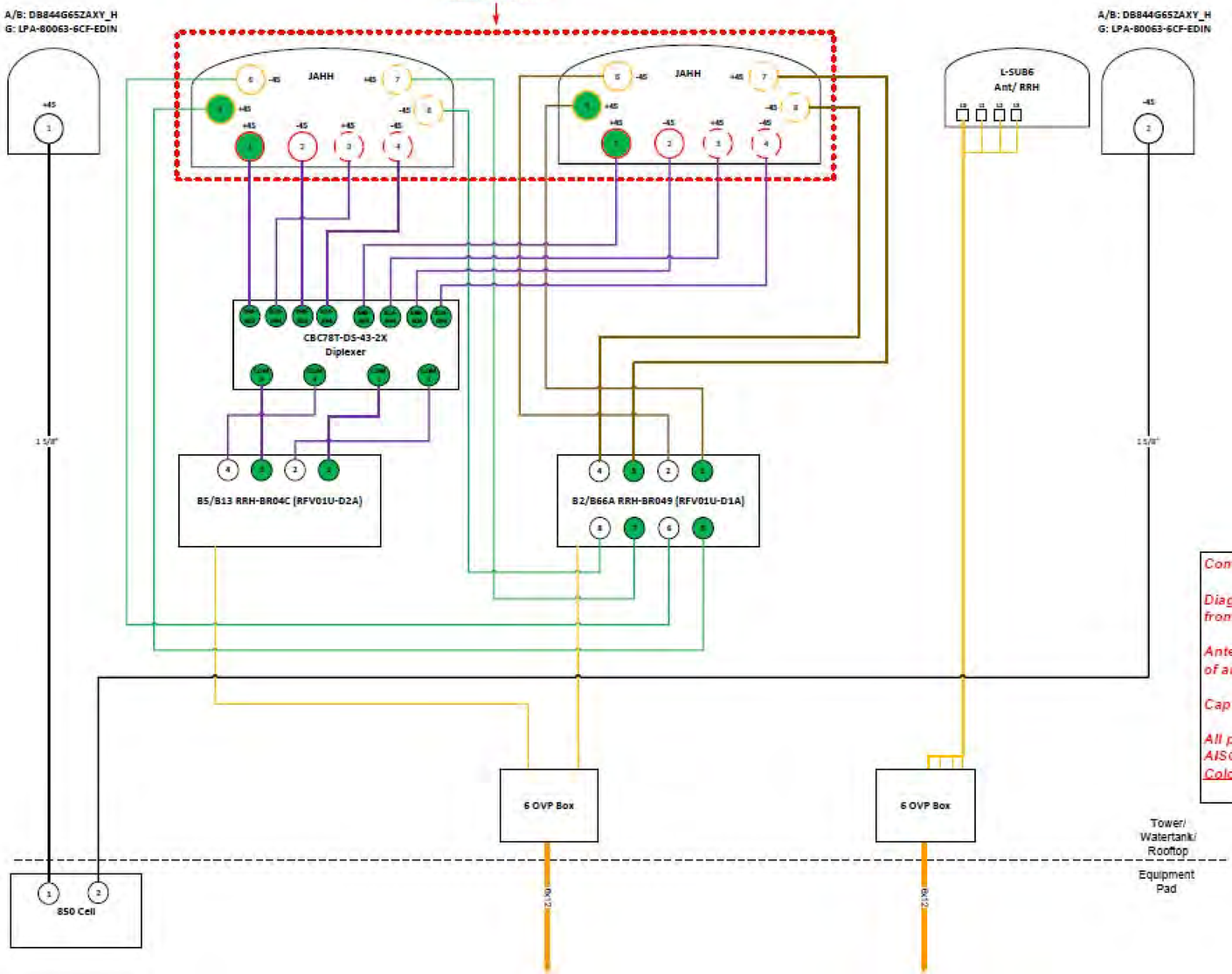
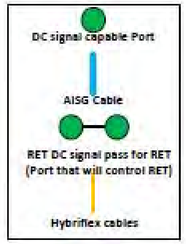
BSAMNT-3BS-2-2



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

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



Comments:

Diagram shows antenna port configuration as viewed from below antennas.

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

Cap and weatherproof unused antenna ports.

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

1 PLUMBING DIAGRAM
SCALE: NOT TO SCALE

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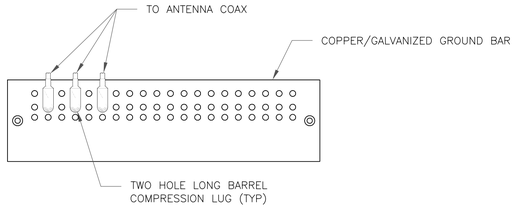
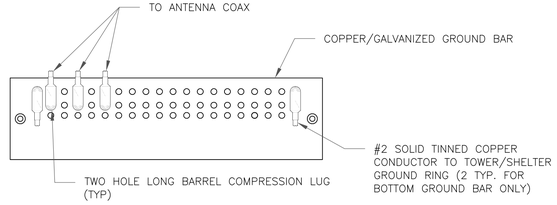


NOTES:

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

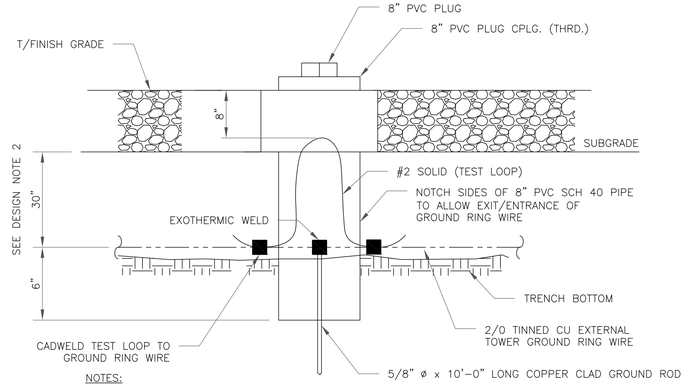
1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

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

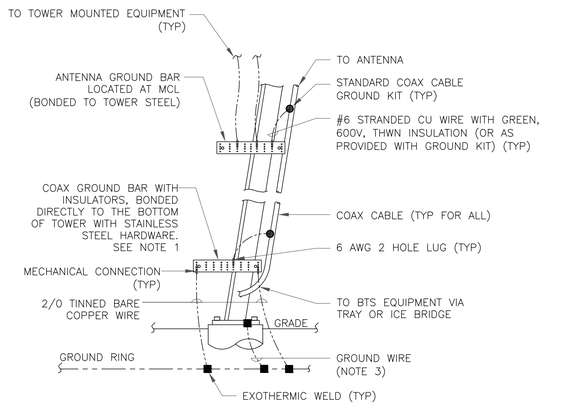
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

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

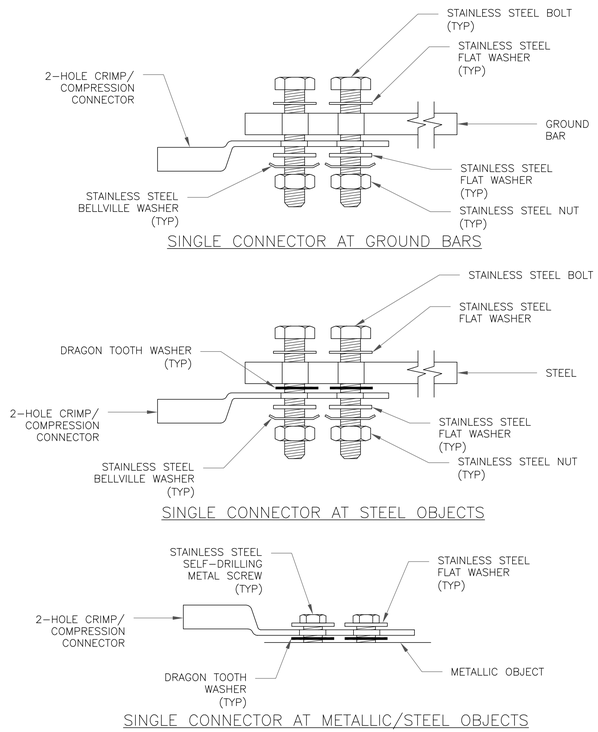
3 INSPECTION WELL DETAIL
SCALE: NOT TO SCALE



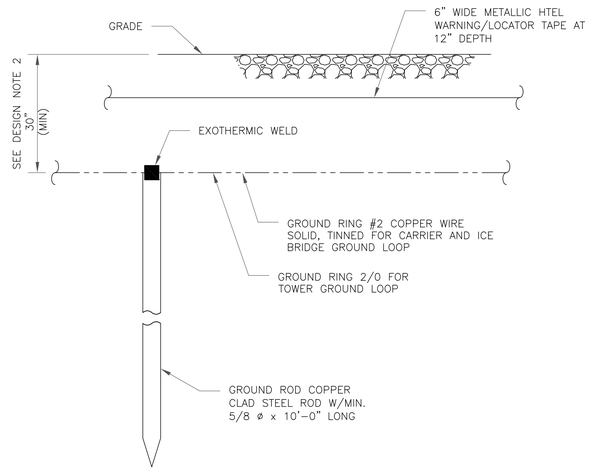
NOTES:

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

4 TYPICAL ANTENNA CABLE GROUNDING
SCALE: NOT TO SCALE



5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

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

6 GROUND ROD DETAIL
SCALE: NOT TO SCALE

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NHV 106 943628

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EXISTING 92'-0"
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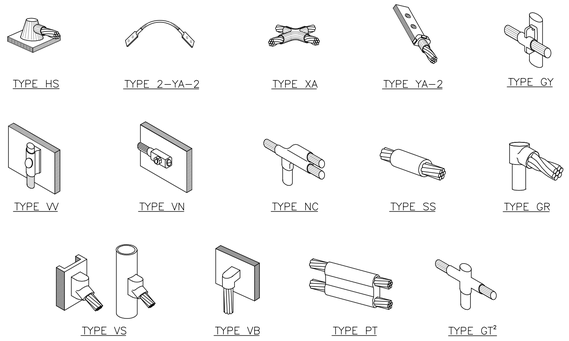
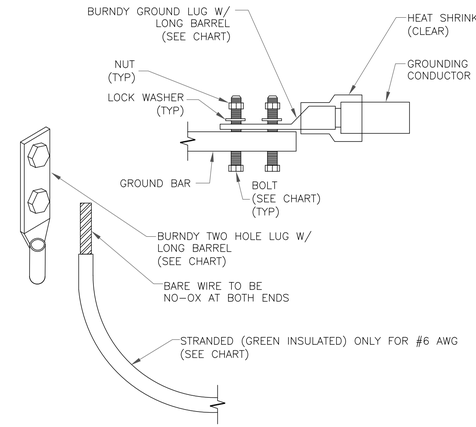


NOTE:

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

1 CADWELD GROUNDING CONNECTIONS
SCALE: NOT TO SCALE

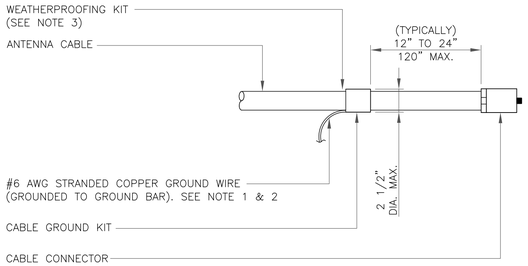
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



NOTES:

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

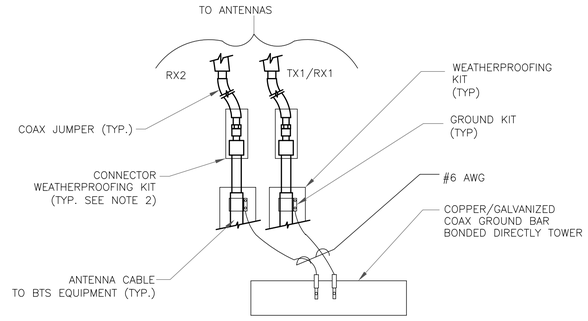
2 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



NOTES:

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

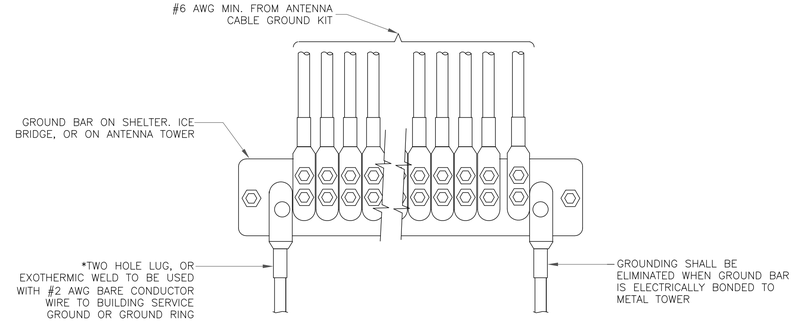
3 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



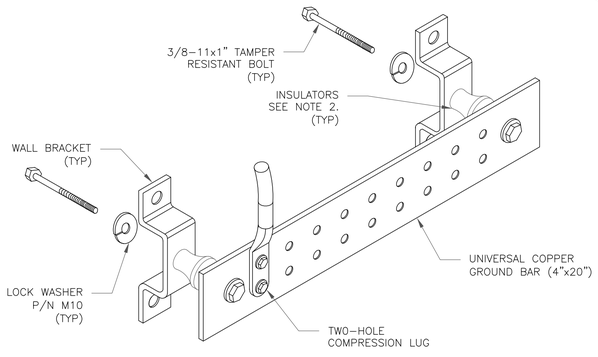
NOTES:

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

4 GROUND CABLE CONNECTION
SCALE: NOT TO SCALE



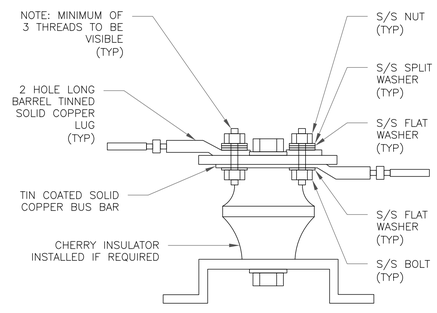
5 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



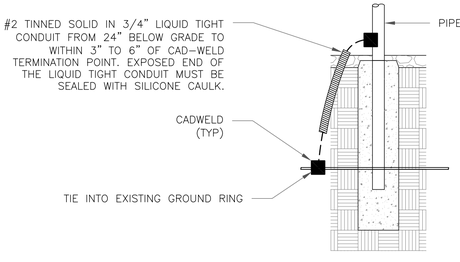
NOTES:

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

6 GROUND BAR DETAIL
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE



8 TRANSITIONING GROUND DETAIL
SCALE: NOT TO SCALE

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

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

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

VERIZON SITE NUMBER:
468991

BU #: **806386**
NHV 106 943628

83 REEDS GAP ROAD
NORTH BRANFORD, CT 06472

EXISTING 92'-0"
SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	4/15/21	LHT	CONSTRUCTION	MTJ

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

SHEET NUMBER: G-2
REVISION: 0

Exhibit D

Structural Analysis Report

Date: **April 27, 2021**

MORRISON HERSHFIELD

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

Subject:	**Structural Analysis Report**	
Carrier Designation:	***Verizon Wireless* Co-Locate**	
	Site Number:	468991
	Site Name:	NHV 106 943628
Crown Castle Designation:	**BU Number:**	806386
	Site Name:	NHV 106 943628
	JDE Job Number:	644614
	Work Order Number:	1950510
	Order Number:	552665 Rev. 0
Engineering Firm Designation:	**Morrison Hershfield Project Number:** CN8-036 / 2101398	
Site Data:	**83 Reeds Gap Road, North Branford, New Haven County, CT 06472** **Latitude *41° 24' 12.47"*, Longitude *-72° 44' 38.9"*** **92 Foot - Rohn Self Support Tower**	

Morrison Hershfield is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above-mentioned tower.

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

LC5: Proposed Equipment Configuration **Sufficient Capacity - 78.1%**

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

Respectfully submitted by:

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

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 92 ft self support tower designed by Rohn.

The tower was modified multiple times in the past to accommodate additional loading. All the modifications have been considered in this analysis per their respective post modification inspection reports.

2) ANALYSIS CRITERIA

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

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
89.0	90.0	2	antel	LPA-80063/6CF w/ Mount Pipe	12 2	1-5/8 1-1/4
		4	decibel	DB844G65ZAXY w/ Mount Pipe		
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe		
		6	commscope	JAHH-65B-R3B		
		3	commscope	CBC78T-DS-43-2X		
		3	samsung telecommunications	RFV01U-D1A		
		3	samsung telecommunications	RFV01U-D2A		
		2	rfs/celwave	DB-T1-6Z-8AB-0Z		
		3	-	Dual Mount Bracket [#BSAMNT-SBS-2-2]		
	89.0	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)
91.0	97.0	1	sinclair	SD210D-SF2P4SNM	3	7/8
	94.0	1	sinclair	SD310-HF2P4SNM		
	91.0	2	-	Side Arm Mount [SO 304-1]		
65.0	67.0	3	cci antennas	HPA65R-BU6A w/ Mount Pipe	12 2 2 2 1	7/8 3/4 3/8 7/16 2.25C
	66.0	3	kathrein	80010965 w/ Mount Pipe		
		3	powerwave technologies	7770.00 w/ Mount Pipe		
		3	kathrein	782 10253		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
65.0	66.0	3	ericsson	RRUS 4449 B5/B12	-	-
		3	ericsson	RRUS 8843 B2/B66A		
		2	raycap	DC6-48-60-18-8F		
	65.0	6	powerwave technologies	LGP21401		
		1	-	Sector Mount [SM 502-3]		
59.0	60.0	1	gps	GPS_A	1	1/2
	59.0	1	tower mounts	Side Arm Mount [SO 305-1]		
34.0	35.0	1	spectracom	8225	1	1/2

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	1069632	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	4063555	CCISITES
4-TOWER MANUFACTURER DRAWINGS	962042	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	1093271	CCISITES
4-POST-MODIFICATION INSPECTION	1285457	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	962041	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	3841012	CCISITES
4-POST-MODIFICATION INSPECTION	4061638	CCISITES

3.1) Analysis Method

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

3.2) Assumptions

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

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T1	92 - 80	Leg	ROHN 2 STD	3	-9.38	38.68	24.3	Pass
T2	80 - 75	Leg	ROHN 2.5 STD	27	-13.22	59.99	22.0	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T3	75 - 70	Leg	ROHN 2.5 STD	36	-18.12	59.99	30.2	Pass
T4	70 - 65	Leg	ROHN 2.5 STD	45	-22.05	59.99	36.8	Pass
T5	65 - 60	Leg	ROHN 2.5 STD	53	-29.15	59.99	48.6	Pass
T6	60 - 40	Leg	ROHN 2.5 X-STR	65	-53.48	91.95	58.2	Pass
T7	40 - 20	Leg	ROHN 3 X-STR	95	-77.94	129.46	60.2	Pass
T8	20 - 13.3333	Leg	ROHN 3.5 X-STR	125	-85.81	161.66	53.1	Pass
T9	13.3333 - 6.66667	Leg	ROHN 3.5 X-STR	137	-93.88	161.69	58.1	Pass
T10	6.66667 - 0	Leg	ROHN 3.5 X-STR	149	-101.55	161.71	62.8	Pass
T1	92 - 80	Diagonal	L1 1/2x1 1/2x1/8	17	-2.37	5.03	47.2 68.0 (b)	Pass
T2	80 - 75	Diagonal	L1 3/4x1 3/4x1/8	32	-2.53	6.21	40.7 57.3 (b)	Pass
T3	75 - 70	Diagonal	L2x2x1/4	42	-2.35	16.10	14.6 34.4 (b)	Pass
T4	70 - 65	Diagonal	L1 3/4x1 3/4x1/8	50	-2.54	5.14	49.5 58.1 (b)	Pass
T5	65 - 60	Diagonal	L2x2x1/4	59	-3.49	13.37	26.1 47.3 (b)	Pass
T6	60 - 40	Diagonal	L2x2x1/4	68	-4.11	8.11	50.7 54.9 (b)	Pass
T7	40 - 20	Diagonal	L2 1/2x2 1/2x3/16	98	-4.47	9.64	46.4 69.2 (b)	Pass
T8	20 - 13.3333	Diagonal	L2 1/2x2 1/2x3/16	128	-4.71	8.90	52.9 70.8 (b)	Pass
T9	13.3333 - 6.66667	Diagonal	L2 1/2x2 1/2x3/8	141	-4.74	15.29	31.0 62.4 (b)	Pass
T10	6.66667 - 0	Diagonal	L2 1/2x2 1/2x3/8	152	-5.15	14.09	36.5 64.8 (b)	Pass
T6	60 - 40	Secondary Horizontal	L2 1/2x2 1/2x1/4	73	-0.93	24.82	3.7 12.9 (b)	Pass
T7	40 - 20	Secondary Horizontal	L2x2x1/4	103	-1.35	8.74	15.5 19.7 (b)	Pass
T8	20 - 13.3333	Secondary Horizontal	L2x2x1/4	133	-1.49	7.86	18.9 21.7 (b)	Pass
T9	13.3333 - 6.66667	Secondary Horizontal	L2x2x1/4	145	-1.63	7.05	23.1 23.7 (b)	Pass
T10	6.66667 - 0	Secondary Horizontal	L2x2x1/4	157	-1.76	6.36	27.7	Pass
T1	92 - 80	Top Girt	L2x2x1/8	4	-0.35	4.27	8.2 8.6 (b)	Pass
T5	65 - 60	Top Girt	L2 1/2x2 1/2x3/16	55	-0.51	7.96	6.4 8.2 (b)	Pass
							Summary	
						Leg (T10)	62.8	Pass
						Diagonal (T8)	70.8	Pass
						Secondary Horizontal (T10)	27.7	Pass
						Top Girt (T1)	8.6	Pass
						Bolt Checks	67.4	Pass
						Rating =	70.8	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	51.5	Pass
1	Base Foundation (Structure)	0	14.0	Pass
1	Base Foundation (Soil Interaction)	0	78.1	Pass

Structure Rating (max from all components) =	78.1%*

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

4.1) Recommendations

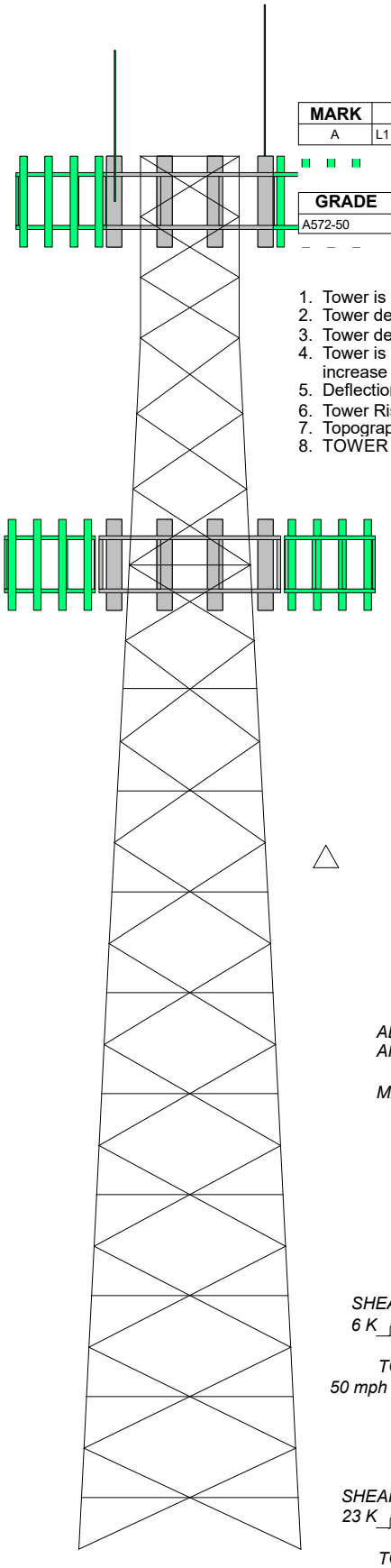
The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

APPENDIX A

TNXTOWER OUTPUT

Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
Legs	ROHN 2 STD		ROHN 2.5 STD			ROHN 2.5 X-STR	ROHN 3 X-STR		ROHN 3.5 X-STR	
Leg Grade						A572-50				
Diagonals	L1 1/2x1 1/2x1/8		L2x2x1/4			L2x2x1/4	L2 1/2x2 1/2x3/16		L2 1/2x2 1/2x3/8	
Diagonal Grade						A36				
Top Girts	L2x2x1/8		N.A.		B		N.A.			
Sec. Horizontals	N.A.					L2 1/2x2 1/2x1/4		L2x2x1/4		
Face Width (ft)	6.52083	6.5625	7.0625	7.5625	8.0625	8.5625	10.6042	12.6354	13.3229	14.0104
# Panels @ (ft)	3 @ 4		4 @ 5				9 @ 6.66667			
Weight (K)	0.3	0.2	0.3	0.2	0.3	1.5	1.7	0.6	0.9	0.9

92.0 ft
80.0 ft
75.0 ft
70.0 ft
65.0 ft
60.0 ft
40.0 ft
20.0 ft
13.3 ft
6.7 ft
0.0 ft



SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	L1 3/4x1 3/4x1/8	B	L2 1/2x2 1/2x3/16

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 New Haven County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 125 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 70.8%

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 106 K
SHEAR: 14 K

UPLIFT: -90 K
SHEAR: 12 K

AXIAL 54 K
SHEAR 6 K *MOMENT 348 kip-ft*

TORQUE 2 kip-ft
50 mph WIND - 1.5000 in ICE

AXIAL 21 K
SHEAR 23 K *MOMENT 1257 kip-ft*

TORQUE 7 kip-ft
REACTIONS - 125 mph WIND

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

Job: CN8-036 / 2101398			
Project: 806386 / NHV 106 943628			
Client: Crown Castle USA	Drawn by: RA	App'd:	
Code: TIA-222-H	Date: 04/27/21	Scale: NTS	
Path:		Dwg No. E-1	

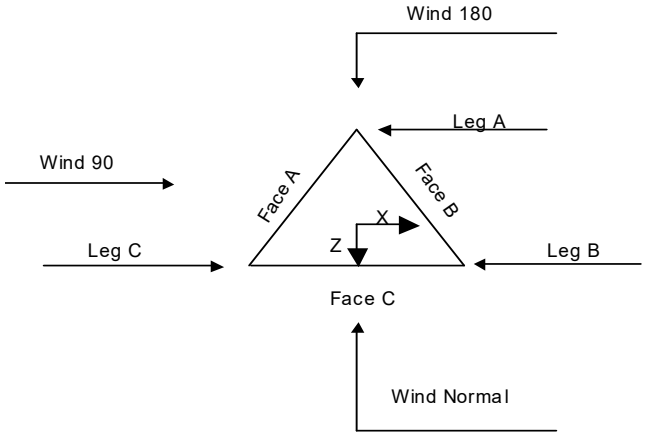
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 92.00 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.
The face width of the tower is 6.52 ft at the top and 14.70 ft at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower is located in New Haven County, Connecticut.
Tower base elevation above sea level: 583.00 ft.
Basic wind speed of 125 mph.
Risk Category II.
Exposure Category C.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0.00 ft.
Nominal ice thickness of 1.5000 in.
Ice thickness is considered to increase with height.
Ice density of 56 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in tower member design is 1.
Tower analysis based on target reliabilities in accordance with Annex S.
Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
Maximum demand-capacity ratio is: 1.05.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

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



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	92.00-80.00			6.52	1	12.00
T2	80.00-75.00			6.56	1	5.00
T3	75.00-70.00			7.06	1	5.00
T4	70.00-65.00			7.56	1	5.00
T5	65.00-60.00			8.06	1	5.00
T6	60.00-40.00			8.56	1	20.00
T7	40.00-20.00			10.60	1	20.00
T8	20.00-13.33			12.64	1	6.67
T9	13.33-6.67			13.32	1	6.67
T10	6.67-0.00			14.01	1	6.67

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	92.00-80.00	4.00	X Brace	No	No	0.0000	0.0000
T2	80.00-75.00	5.00	X Brace	No	No	0.0000	0.0000
T3	75.00-70.00	5.00	X Brace	No	No	0.0000	0.0000
T4	70.00-65.00	5.00	X Brace	No	No	0.0000	0.0000
T5	65.00-60.00	5.00	X Brace	No	No	0.0000	0.0000
T6	60.00-40.00	6.67	X Brace	No	Yes	0.0000	0.0000
T7	40.00-20.00	6.67	X Brace	No	Yes	0.0000	0.0000
T8	20.00-13.33	6.67	X Brace	No	Yes	0.0000	0.0000
T9	13.33-6.67	6.67	X Brace	No	Yes	0.0000	0.0000
T10	6.67-0.00	6.67	X Brace	No	Yes	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 92.00-80.00	Pipe	ROHN 2 STD	A572-50 (50 ksi)	Equal Angle	L1 1/2x1 1/2x1/8	A36 (36 ksi)
T2 80.00-75.00	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x1/8	A36 (36 ksi)
T3 75.00-70.00	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T4 70.00-65.00	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x1/8	A36 (36 ksi)
T5 65.00-60.00	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T6 60.00-40.00	Pipe	ROHN 2.5 X-STR	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T7 40.00-20.00	Pipe	ROHN 3 X-STR	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T8 20.00-13.33	Pipe	ROHN 3.5 X-STR	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T9 13.33-6.67	Pipe	ROHN 3.5 X-STR	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/8	A36 (36 ksi)
T10 6.67-0.00	Pipe	ROHN 3.5 X-STR	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/8	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 92.00-80.00	Equal Angle	L2x2x1/8	A36 (36 ksi)	Pipe		A36 (36 ksi)
T5 65.00-60.00	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)	Pipe		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T6 60.00-40.00	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T7 40.00-20.00	Equal Angle	L2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T8 20.00-13.33	Equal Angle	L2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T9 13.33-6.67	Equal Angle	L2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T10 6.67-0.00	Equal Angle	L2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1 92.00-80.00	0.00	0.1793	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T2 80.00-75.00	0.00	0.1793	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T3 75.00-70.00	0.00	0.1793	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T4 70.00-65.00	0.00	0.1793	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T5 65.00-60.00	0.00	0.1793	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T6 60.00-40.00	0.00	0.1793	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T7 40.00-20.00	0.00	0.1793	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T8 20.00-13.33	0.00	0.1793	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T9 13.33-6.67	0.00	0.1793	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T10 6.67-0.00	0.00	0.1793	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000

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 92.00-80.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T2 80.00-75.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T3 75.00-70.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T4 70.00-65.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T5 65.00-60.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T6 60.00-40.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	0.5	1
T7 40.00-20.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	0.5	1
T8 20.00-13.33	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	0.5	1
T9 13.33-6.67	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	0.5	1
T10 6.67-0.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	0.5	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		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 92.00-80.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T2 80.00-75.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 75.00-70.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 70.00-65.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 65.00-60.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6 60.00-40.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T7 40.00-20.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T8 20.00-13.33	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T9 13.33-6.67	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T10 6.67-0.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 92.00-80.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T2 80.00-75.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 75.00-70.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 70.00-65.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 65.00-60.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6 60.00-40.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T7 40.00-20.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T8 20.00-13.33	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T9 13.33-6.67	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T10 6.67-0.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 92.00-80.00	Flange	0.6250 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	0
T2 80.00-75.00	Flange	0.6250 A325X	0	0.5000 A325X	1	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	0
T3 75.00-70.00	Flange	0.6250 A325X	0	0.5000 A325X	1	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	0
T4 70.00-65.00	Flange	0.6250 A325X	0	0.5000 A325X	1	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	0
T5 65.00-60.00	Flange	0.6250 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	0

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.
T6 60.00-40.00	Flange	0.7500 A325X	4	0.5000 A325N	1	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	1
T7 40.00-20.00	Flange	0.8750 A325X	4	0.5000 A325X	1	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325X	1
T8 20.00-13.33	Flange	0.8750 A449	0	0.5000 A325X	1	0.5000 A325N	0	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325X	1
T9 13.33-6.67	Flange	0.8750 A449	0	0.5000 A325X	1	0.6250 A325N	0	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325X	1
T10 6.67-0.00	Flange	0.8750 A449	0	0.5000 A325X	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325X	1

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 plf
Feedline Ladder (Af)	A	No	No	Af (CaAa)	92.00 - 0.00	1.5000	0.1	1	1	3.0000	3.0000		8.40
Feedline Ladder (Af)	A	No	No	Af (CaAa)	92.00 - 0.00	-2.0000	0.1	1	1	3.0000	3.0000		8.40
Feedline Ladder (Af) ***	C	No	No	Af (CaAa)	65.00 - 0.00	0.0000	-0.35	1	1	3.0000	3.0000		8.40
LDF5-50A(7/8)	A	No	No	Ar (CaAa)	91.00 - 0.00	-2.0000	0.1	2	2	0.5000 1.0900	1.0900		0.33
LCF78-50A(7/8) ***	A	No	No	Ar (CaAa)	91.00 - 0.00	-2.0000	0.1	1	1	0.5000 1.0900	1.0900		0.34
LDF7-50A(1-5/8)	A	No	No	Ar (CaAa)	89.00 - 0.00	0.0000	0	12	12	0.5000 1.9800	1.9800		0.82
HB114-1-0813U4-M5F(1-1/4) ***	A	No	No	Ar (CaAa)	89.00 - 0.00	0.0000	-0.1	2	2	0.5000 1.5400	1.5400		1.20
AVA5-50(7/8)	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.4	12	8	0.5000 1.1020	1.1020		0.30
FB-L98B-002-75000(3/8)	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.3	1	1	0.3937	0.0000		0.06
FB-L98B-034-XXX(3/8)	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.3	1	1	0.3937	0.0000		0.06
WR-VG122ST-BRDA(7/16)	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.3	2	2	0.4600	0.0000		0.14
WR-VG86ST-BRD(3/4)	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.3	2	2	0.5000 0.7950	0.0000		0.58
2.25" Flexible Conduit ***	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.3	1	1	2.2500	2.2500		0.34
LDF4-50A(1/2) ***	A	No	No	Ar (CaAa)	59.00 - 0.00	0.0000	0	1	1	0.5000 0.6250	0.6250		0.15
LDF4-50A(1/2) ***	A	No	No	Ar (CaAa)	34.00 - 0.00	0.0000	0	1	1	0.5000 0.6250	0.6250		0.15

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	92.00-80.00	A	0.000	0.000	39.753	0.000	0.32
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
T2	80.00-75.00	A	0.000	0.000	20.055	0.000	0.15
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
T3	75.00-70.00	A	0.000	0.000	20.055	0.000	0.15
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
T4	70.00-65.00	A	0.000	0.000	20.055	0.000	0.15
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
T5	65.00-60.00	A	0.000	0.000	20.055	0.000	0.15
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	10.237	0.000	0.07
T6	60.00-40.00	A	0.000	0.000	81.407	0.000	0.60
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	40.948	0.000	0.28
T7	40.00-20.00	A	0.000	0.000	82.345	0.000	0.61
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	40.948	0.000	0.28
T8	20.00-13.33	A	0.000	0.000	27.573	0.000	0.20
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	13.649	0.000	0.09
T9	13.33-6.67	A	0.000	0.000	27.573	0.000	0.20
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	13.649	0.000	0.09
T10	6.67-0.00	A	0.000	0.000	27.573	0.000	0.20
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	13.649	0.000	0.09

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	92.00-80.00	A	1.403	0.000	0.000	77.439	0.000	1.13
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
T2	80.00-75.00	A	1.389	0.000	0.000	38.937	0.000	0.55
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
T3	75.00-70.00	A	1.379	0.000	0.000	38.864	0.000	0.55
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
T4	70.00-65.00	A	1.370	0.000	0.000	38.787	0.000	0.54
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
T5	65.00-60.00	A	1.359	0.000	0.000	38.704	0.000	0.54
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	24.431	0.000	0.32
T6	60.00-40.00	A	1.329	0.000	0.000	160.106	0.000	2.19
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	96.625	0.000	1.26
T7	40.00-20.00	A	1.263	0.000	0.000	162.492	0.000	2.15
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	94.203	0.000	1.20
T8	20.00-13.33	A	1.191	0.000	0.000	53.844	0.000	0.69
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	30.523	0.000	0.38
T9	13.33-6.67	A	1.132	0.000	0.000	53.063	0.000	0.66
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	29.800	0.000	0.37

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
T10	6.67-0.00	A	1.014	0.000	0.000	51.515	0.000	0.61
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	28.367	0.000	0.34

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	92.00-80.00	-6.4951	-6.4651	-6.7268	-6.5120
T2	80.00-75.00	-7.7945	-7.2870	-8.1237	-7.4211
T3	75.00-70.00	-7.7949	-7.4225	-8.3396	-7.6965
T4	70.00-65.00	-8.5240	-8.0582	-8.9052	-8.2023
T5	65.00-60.00	1.6569	-3.1965	3.2511	-0.6548
T6	60.00-40.00	1.7665	-3.8451	3.1720	-1.1245
T7	40.00-20.00	1.7266	-4.2298	2.9940	-1.6399
T8	20.00-13.33	1.7536	-4.4931	2.9959	-1.9825
T9	13.33-6.67	1.8038	-4.6341	3.0952	-2.1635
T10	6.67-0.00	1.8515	-4.7690	3.1989	-2.4721

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	1	Feedline Ladder (Af)	80.00 - 92.00	0.6000	0.6000
T1	2	Feedline Ladder (Af)	80.00 - 92.00	0.6000	0.6000
T1	5	LDF5-50A(7/8)	80.00 - 91.00	0.6000	0.6000
T1	6	LCF78-50A(7/8)	80.00 - 91.00	0.6000	0.6000
T1	8	LDF7-50A(1-5/8)	80.00 - 89.00	0.6000	0.6000
T1	9	HB114-1-0813U4-M5F(1-1/4)	80.00 - 89.00	0.6000	0.6000
T2	1	Feedline Ladder (Af)	75.00 - 80.00	0.6000	0.6000
T2	2	Feedline Ladder (Af)	75.00 - 80.00	0.6000	0.6000
T2	5	LDF5-50A(7/8)	75.00 - 80.00	0.6000	0.6000
T2	6	LCF78-50A(7/8)	75.00 - 80.00	0.6000	0.6000
T2	8	LDF7-50A(1-5/8)	75.00 - 80.00	0.6000	0.6000
T2	9	HB114-1-0813U4-M5F(1-1/4)	75.00 - 80.00	0.6000	0.6000
T3	1	Feedline Ladder (Af)	70.00 - 75.00	0.6000	0.6000
T3	2	Feedline Ladder (Af)	70.00 - 75.00	0.6000	0.6000
T3	5	LDF5-50A(7/8)	70.00 - 75.00	0.6000	0.6000
T3	6	LCF78-50A(7/8)	70.00 - 75.00	0.6000	0.6000
T3	8	LDF7-50A(1-5/8)	70.00 - 75.00	0.6000	0.6000
T3	9	HB114-1-0813U4-M5F(1-1/4)	70.00 - 75.00	0.6000	0.6000
T4	1	Feedline Ladder (Af)	65.00 - 70.00	0.6000	0.6000
T4	2	Feedline Ladder (Af)	65.00 - 70.00	0.6000	0.6000
T4	5	LDF5-50A(7/8)	65.00 - 70.00	0.6000	0.6000
T4	6	LCF78-50A(7/8)	65.00 - 70.00	0.6000	0.6000
T4	8	LDF7-50A(1-5/8)	65.00 - 70.00	0.6000	0.6000
T4	9	HB114-1-0813U4-M5F(1-1/4)	65.00 - 70.00	0.6000	0.6000
T5	1	Feedline Ladder (Af)	60.00 - 65.00	0.6000	0.6000
T5	2	Feedline Ladder (Af)	60.00 - 65.00	0.6000	0.6000
T5	3	Feedline Ladder (Af)	60.00 - 65.00	0.6000	0.6000
T5	5	LDF5-50A(7/8)	60.00 - 65.00	0.6000	0.6000
T5	6	LCF78-50A(7/8)	60.00 - 65.00	0.6000	0.6000
T5	8	LDF7-50A(1-5/8)	60.00 - 65.00	0.6000	0.6000
T5	9	HB114-1-0813U4-M5F(1-1/4)	60.00 - 65.00	0.6000	0.6000
T5	11	AVA5-50(7/8)	60.00 - 65.00	0.6000	0.6000
T5	12	FB-L98B-002-75000(3/8)	60.00 - 65.00	0.6000	0.6000
T5	13	FB-L98B-034-XXX(3/8)	60.00 - 65.00	0.6000	0.6000
T5	14	WR-VG122ST-BRDA(7/16)	60.00 - 65.00	0.6000	0.6000
T5	15	WR-VG86ST-BRD(3/4)	60.00 - 65.00	0.6000	0.6000
T5	16	2.25" Flexible Conduit	60.00 - 65.00	0.6000	0.6000
T6	1	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T6	2	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T6	3	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T6	5	LDF5-50A(7/8)	40.00 - 60.00	0.6000	0.6000
T6	6	LCF78-50A(7/8)	40.00 - 60.00	0.6000	0.6000
T6	8	LDF7-50A(1-5/8)	40.00 - 60.00	0.6000	0.6000
T6	9	HB114-1-0813U4-M5F(1-1/4)	40.00 - 60.00	0.6000	0.6000
T6	11	AVA5-50(7/8)	40.00 - 60.00	0.6000	0.6000
T6	12	FB-L98B-002-75000(3/8)	40.00 - 60.00	0.6000	0.6000
T6	13	FB-L98B-034-XXX(3/8)	40.00 - 60.00	0.6000	0.6000
T6	14	WR-VG122ST-BRDA(7/16)	40.00 - 60.00	0.6000	0.6000
T6	15	WR-VG86ST-BRD(3/4)	40.00 - 60.00	0.6000	0.6000
T6	16	2.25" Flexible Conduit	40.00 - 60.00	0.6000	0.6000
T6	18	LDF4-50A(1/2)	40.00 - 59.00	0.6000	0.6000
T7	1	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T7	2	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T7	3	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T7	5	LDF5-50A(7/8)	20.00 - 40.00	0.6000	0.6000
T7	6	LCF78-50A(7/8)	20.00 - 40.00	0.6000	0.6000
T7	8	LDF7-50A(1-5/8)	20.00 - 40.00	0.6000	0.6000
T7	9	HB114-1-0813U4-M5F(1-1/4)	20.00 - 40.00	0.6000	0.6000
T7	11	AVA5-50(7/8)	20.00 - 40.00	0.6000	0.6000
T7	12	FB-L98B-002-75000(3/8)	20.00 - 40.00	0.6000	0.6000
T7	13	FB-L98B-034-XXX(3/8)	20.00 - 40.00	0.6000	0.6000
T7	14	WR-VG122ST-BRDA(7/16)	20.00 - 40.00	0.6000	0.6000
T7	15	WR-VG86ST-BRD(3/4)	20.00 - 40.00	0.6000	0.6000
T7	16	2.25" Flexible Conduit	20.00 - 40.00	0.6000	0.6000
T7	18	LDF4-50A(1/2)	20.00 - 40.00	0.6000	0.6000
T7	20	LDF4-50A(1/2)	20.00 - 34.00	0.6000	0.6000
T8	1	Feedline Ladder (Af)	13.33 - 20.00	0.6000	0.6000
T8	2	Feedline Ladder (Af)	13.33 - 20.00	0.6000	0.6000
T8	3	Feedline Ladder (Af)	13.33 - 20.00	0.6000	0.6000
T8	5	LDF5-50A(7/8)	13.33 - 20.00	0.6000	0.6000
T8	6	LCF78-50A(7/8)	13.33 - 20.00	0.6000	0.6000
T8	8	LDF7-50A(1-5/8)	13.33 - 20.00	0.6000	0.6000
T8	9	HB114-1-0813U4-M5F(1-1/4)	13.33 - 20.00	0.6000	0.6000
T8	11	AVA5-50(7/8)	13.33 - 20.00	0.6000	0.6000
T8	12	FB-L98B-002-75000(3/8)	13.33 - 20.00	0.6000	0.6000
T8	13	FB-L98B-034-XXX(3/8)	13.33 - 20.00	0.6000	0.6000
T8	14	WR-VG122ST-BRDA(7/16)	13.33 - 20.00	0.6000	0.6000
T8	15	WR-VG86ST-BRD(3/4)	13.33 - 20.00	0.6000	0.6000
T8	16	2.25" Flexible Conduit	13.33 - 20.00	0.6000	0.6000
T8	18	LDF4-50A(1/2)	13.33 - 20.00	0.6000	0.6000
T8	20	LDF4-50A(1/2)	13.33 - 20.00	0.6000	0.6000
T9	1	Feedline Ladder (Af)	6.67 - 13.33	0.6000	0.6000
T9	2	Feedline Ladder (Af)	6.67 - 13.33	0.6000	0.6000
T9	3	Feedline Ladder (Af)	6.67 - 13.33	0.6000	0.6000
T9	5	LDF5-50A(7/8)	6.67 - 13.33	0.6000	0.6000
T9	6	LCF78-50A(7/8)	6.67 - 13.33	0.6000	0.6000
T9	8	LDF7-50A(1-5/8)	6.67 - 13.33	0.6000	0.6000
T9	9	HB114-1-0813U4-M5F(1-1/4)	6.67 - 13.33	0.6000	0.6000
T9	11	AVA5-50(7/8)	6.67 - 13.33	0.6000	0.6000
T9	12	FB-L98B-002-75000(3/8)	6.67 - 13.33	0.6000	0.6000
T9	13	FB-L98B-034-XXX(3/8)	6.67 - 13.33	0.6000	0.6000
T9	14	WR-VG122ST-BRDA(7/16)	6.67 - 13.33	0.6000	0.6000
T9	15	WR-VG86ST-BRD(3/4)	6.67 - 13.33	0.6000	0.6000
T9	16	2.25" Flexible Conduit	6.67 - 13.33	0.6000	0.6000
T9	18	LDF4-50A(1/2)	6.67 - 13.33	0.6000	0.6000
T9	20	LDF4-50A(1/2)	6.67 - 13.33	0.6000	0.6000
T10	1	Feedline Ladder (Af)	0.00 - 6.67	0.6000	0.6000
T10	2	Feedline Ladder (Af)	0.00 - 6.67	0.6000	0.6000
T10	3	Feedline Ladder (Af)	0.00 - 6.67	0.6000	0.6000
T10	5	LDF5-50A(7/8)	0.00 - 6.67	0.6000	0.6000
T10	6	LCF78-50A(7/8)	0.00 - 6.67	0.6000	0.6000
T10	8	LDF7-50A(1-5/8)	0.00 - 6.67	0.6000	0.6000
T10	9	HB114-1-0813U4-M5F(1-1/4)	0.00 - 6.67	0.6000	0.6000
T10	11	AVA5-50(7/8)	0.00 - 6.67	0.6000	0.6000
T10	12	FB-L98B-002-75000(3/8)	0.00 - 6.67	0.6000	0.6000
T10	13	FB-L98B-034-XXX(3/8)	0.00 - 6.67	0.6000	0.6000
T10	14	WR-VG122ST-BRDA(7/16)	0.00 - 6.67	0.6000	0.6000
T10	15	WR-VG86ST-BRD(3/4)	0.00 - 6.67	0.6000	0.6000
T10	16	2.25" Flexible Conduit	0.00 - 6.67	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T10	18	LDF4-50A(1/2)	0.00 - 6.67	0.6000	0.6000
T10	20	LDF4-50A(1/2)	0.00 - 6.67	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
****RA****									
SD210D-SF2P4SNM	B	From Leg	2.00 0.00 6.00	0.0000	91.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.24 6.47 8.68 13.00	4.24 6.47 8.68 13.00	0.04 0.10 0.18 0.42
SD310-HF2P4SNM	C	From Leg	2.00 0.00 3.00	0.0000	91.00	No Ice 1/2" Ice 1" Ice 2" Ice	10.74 15.26 15.95 17.36	10.74 15.26 15.95 17.36	0.02 0.18 0.35 0.71
Side Arm Mount [SO 304-1]	B	From Leg	1.00 0.00 0.00	0.0000	91.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.31 0.50 0.73 1.29	0.88 1.26 1.67 2.58	0.02 0.03 0.05 0.09
Side Arm Mount [SO 304-1]	C	From Leg	1.00 0.00 0.00	0.0000	91.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.31 0.50 0.73 1.29	0.88 1.26 1.67 2.58	0.02 0.03 0.05 0.09
***									
(2) JAHH-65B-R3B	A	From Leg	4.00 0.00 1.00	49.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.29 5.75 6.22 7.20	3.05 3.48 3.93 4.84	0.06 0.12 0.19 0.33
(2) JAHH-65B-R3B	B	From Leg	4.00 0.00 1.00	49.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.29 5.75 6.22 7.20	3.05 3.48 3.93 4.84	0.06 0.12 0.19 0.33
(2) JAHH-65B-R3B	C	From Leg	4.00 0.00 1.00	59.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.29 5.75 6.22 7.20	3.05 3.48 3.93 4.84	0.06 0.12 0.19 0.33
(2) DB844G65ZAXY w/ Mount Pipe	A	From Leg	4.00 0.00 1.00	49.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.23 4.71 5.21 6.26	4.51 5.00 5.50 6.57	0.03 0.08 0.13 0.25
(2) DB844G65ZAXY w/ Mount Pipe	B	From Leg	4.00 0.00 1.00	49.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.23 4.71 5.21 6.26	4.51 5.00 5.50 6.57	0.03 0.08 0.13 0.25
(2) LPA-80063/6CF w/ Mount Pipe	C	From Leg	4.00 0.00 1.00	59.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	9.83 10.40 10.93 12.03	10.22 11.38 12.27 14.09	0.05 0.14 0.25 0.48
CBC78T-DS-43-2X	A	From Leg	4.00 0.00 1.00	0.0000	89.00	No Ice 1/2" Ice	0.37 0.45 0.53	0.51 0.60 0.70	0.02 0.03 0.04

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
						1" Ice	0.72	0.93	0.06
						2" Ice			
CBC78T-DS-43-2X	B	From Leg	4.00	0.0000	89.00	No Ice	0.37	0.51	0.02
			0.00			1/2"	0.45	0.60	0.03
			1.00			Ice	0.53	0.70	0.04
						1" Ice	0.72	0.93	0.06
						2" Ice			
(2) DB-T1-6Z-8AB-0Z	A	From Leg	4.00	0.0000	89.00	No Ice	4.80	2.00	0.04
			0.00			1/2"	5.07	2.19	0.08
			1.00			Ice	5.35	2.39	0.12
						1" Ice	5.93	2.81	0.21
						2" Ice			
CBC78T-DS-43-2X	C	From Leg	4.00	0.0000	89.00	No Ice	0.37	0.51	0.02
			0.00			1/2"	0.45	0.60	0.03
			1.00			Ice	0.53	0.70	0.04
						1" Ice	0.72	0.93	0.06
						2" Ice			
RFV01U-D1A	A	From Leg	4.00	0.0000	89.00	No Ice	1.88	1.25	0.08
			0.00			1/2"	2.05	1.39	0.10
			1.00			Ice	2.22	1.54	0.12
						1" Ice	2.60	1.86	0.18
						2" Ice			
RFV01U-D1A	B	From Leg	4.00	0.0000	89.00	No Ice	1.88	1.25	0.08
			0.00			1/2"	2.05	1.39	0.10
			1.00			Ice	2.22	1.54	0.12
						1" Ice	2.60	1.86	0.18
						2" Ice			
RFV01U-D1A	C	From Leg	4.00	0.0000	89.00	No Ice	1.88	1.25	0.08
			0.00			1/2"	2.05	1.39	0.10
			1.00			Ice	2.22	1.54	0.12
						1" Ice	2.60	1.86	0.18
						2" Ice			
RFV01U-D2A	A	From Leg	4.00	0.0000	89.00	No Ice	1.88	1.01	0.07
			0.00			1/2"	2.05	1.14	0.09
			1.00			Ice	2.22	1.28	0.11
						1" Ice	2.60	1.59	0.15
						2" Ice			
RFV01U-D2A	B	From Leg	4.00	0.0000	89.00	No Ice	1.88	1.01	0.07
			0.00			1/2"	2.05	1.14	0.09
			1.00			Ice	2.22	1.28	0.11
						1" Ice	2.60	1.59	0.15
						2" Ice			
RFV01U-D2A	C	From Leg	4.00	0.0000	89.00	No Ice	1.88	1.01	0.07
			0.00			1/2"	2.05	1.14	0.09
			1.00			Ice	2.22	1.28	0.11
						1" Ice	2.60	1.59	0.15
						2" Ice			
Sector Mount [SM 502-3]	C	None		0.0000	89.00	No Ice	29.82	29.82	1.67
						1/2"	42.21	42.21	2.27
						Ice	54.43	54.43	3.05
						1" Ice	78.49	78.49	5.18
						2" Ice			
(3) 4' x 2" Pipe Mount	A	From Leg	4.00	0.0000	89.00	No Ice	0.79	0.79	0.03
			0.00			1/2"	1.03	1.03	0.04
			0.00			Ice	1.28	1.28	0.04
						1" Ice	1.81	1.81	0.07
						2" Ice			
(3) 4' x 2" Pipe Mount	B	From Leg	4.00	0.0000	89.00	No Ice	0.79	0.79	0.03
			0.00			1/2"	1.03	1.03	0.04
			0.00			Ice	1.28	1.28	0.04
						1" Ice	1.81	1.81	0.07
						2" Ice			
(3) 4' x 2" Pipe Mount	C	From Leg	4.00	0.0000	89.00	No Ice	0.79	0.79	0.03
			0.00			1/2"	1.03	1.03	0.04
			0.00			Ice	1.28	1.28	0.04

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
						1" Ice	1.81	1.81	0.07
						2" Ice			
Dual Mount Bracket [#BSAMNT-SBS-2-2]	A	From Leg	4.00 0.00 1.00	0.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.73 3.40 4.40	1.90 2.73 3.40 4.40	0.03 0.04 0.06 0.12
Dual Mount Bracket [#BSAMNT-SBS-2-2]	B	From Leg	4.00 0.00 1.00	0.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.73 3.40 4.40	1.90 2.73 3.40 4.40	0.03 0.04 0.06 0.12
Dual Mount Bracket [#BSAMNT-SBS-2-2]	C	From Leg	4.00 0.00 1.00	0.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.73 3.40 4.40	1.90 2.73 3.40 4.40	0.03 0.04 0.06 0.12
***									
MT6407-77A w/ Mount Pipe	A	From Leg	4.00 0.00 1.00	0.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.91 5.26 5.61 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
MT6407-77A w/ Mount Pipe	B	From Leg	4.00 0.00 1.00	0.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.91 5.26 5.61 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
MT6407-77A w/ Mount Pipe	C	From Leg	4.00 0.00 1.00	0.0000	89.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.91 5.26 5.61 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
***									
7770.00 w/ Mount Pipe	A	From Leg	4.00 0.00 1.00	29.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.75 6.18 6.61 7.49	4.25 5.01 5.71 7.16	0.06 0.10 0.16 0.29
7770.00 w/ Mount Pipe	B	From Leg	4.00 0.00 1.00	29.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.75 6.18 6.61 7.49	4.25 5.01 5.71 7.16	0.06 0.10 0.16 0.29
7770.00 w/ Mount Pipe	C	From Leg	4.00 0.00 1.00	49.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.75 6.18 6.61 7.49	4.25 5.01 5.71 7.16	0.06 0.10 0.16 0.29
HPA65R-BU6A w/ Mount Pipe	A	From Leg	4.00 0.00 2.00	69.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.83 6.40 6.99 8.19	5.00 5.56 6.13 7.32	0.08 0.14 0.22 0.40
HPA65R-BU6A w/ Mount Pipe	B	From Leg	4.00 0.00 2.00	69.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.83 6.40 6.99 8.19	5.00 5.56 6.13 7.32	0.08 0.14 0.22 0.40
HPA65R-BU6A w/ Mount Pipe	C	From Leg	4.00 0.00 2.00	69.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.83 6.40 6.99 8.19	5.00 5.56 6.13 7.32	0.08 0.14 0.22 0.40
80010965 w/ Mount Pipe	A	From Leg	4.00	69.0000	65.00	No Ice	12.26	5.79	0.14

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			1/2"	13.03	6.47	0.23
			1.00			Ice	13.80	7.17	0.33
						1" Ice	15.41	8.60	0.57
						2" Ice			
80010965 w/ Mount Pipe	B	From Leg	4.00	69.0000	65.00	No Ice	12.26	5.79	0.14
			0.00			1/2"	13.03	6.47	0.23
			1.00			Ice	13.80	7.17	0.33
						1" Ice	15.41	8.60	0.57
						2" Ice			
80010965 w/ Mount Pipe	C	From Leg	4.00	69.0000	65.00	No Ice	12.26	5.79	0.14
			0.00			1/2"	13.03	6.47	0.23
			1.00			Ice	13.80	7.17	0.33
						1" Ice	15.41	8.60	0.57
						2" Ice			
(2) LGP21401	A	From Leg	4.00	0.0000	65.00	No Ice	1.10	0.21	0.01
			0.00			1/2"	1.24	0.27	0.02
			0.00			Ice	1.38	0.35	0.03
						1" Ice	1.69	0.52	0.05
						2" Ice			
(2) LGP21401	B	From Leg	4.00	0.0000	65.00	No Ice	1.10	0.21	0.01
			0.00			1/2"	1.24	0.27	0.02
			0.00			Ice	1.38	0.35	0.03
						1" Ice	1.69	0.52	0.05
						2" Ice			
(2) LGP21401	C	From Leg	4.00	0.0000	65.00	No Ice	1.10	0.21	0.01
			0.00			1/2"	1.24	0.27	0.02
			0.00			Ice	1.38	0.35	0.03
						1" Ice	1.69	0.52	0.05
						2" Ice			
782 10253	A	From Leg	4.00	0.0000	65.00	No Ice	0.11	0.06	0.00
			0.00			1/2"	0.15	0.10	0.00
			1.00			Ice	0.20	0.14	0.01
						1" Ice	0.33	0.25	0.01
						2" Ice			
782 10253	B	From Leg	4.00	0.0000	65.00	No Ice	0.11	0.06	0.00
			0.00			1/2"	0.15	0.10	0.00
			1.00			Ice	0.20	0.14	0.01
						1" Ice	0.33	0.25	0.01
						2" Ice			
782 10253	C	From Leg	4.00	0.0000	65.00	No Ice	0.11	0.06	0.00
			0.00			1/2"	0.15	0.10	0.00
			1.00			Ice	0.20	0.14	0.01
						1" Ice	0.33	0.25	0.01
						2" Ice			
RRUS 8843 B2/B66A	A	From Leg	4.00	0.0000	65.00	No Ice	1.64	1.35	0.07
			0.00			1/2"	1.80	1.50	0.09
			1.00			Ice	1.97	1.65	0.11
						1" Ice	2.32	1.99	0.16
						2" Ice			
RRUS 8843 B2/B66A	B	From Leg	4.00	0.0000	65.00	No Ice	1.64	1.35	0.07
			0.00			1/2"	1.80	1.50	0.09
			1.00			Ice	1.97	1.65	0.11
						1" Ice	2.32	1.99	0.16
						2" Ice			
RRUS 8843 B2/B66A	C	From Leg	4.00	0.0000	65.00	No Ice	1.64	1.35	0.07
			0.00			1/2"	1.80	1.50	0.09
			1.00			Ice	1.97	1.65	0.11
						1" Ice	2.32	1.99	0.16
						2" Ice			
RRUS 4449 B5/B12	A	From Leg	4.00	0.0000	65.00	No Ice	1.97	1.41	0.07
			0.00			1/2"	2.14	1.56	0.09
			1.00			Ice	2.33	1.73	0.11
						1" Ice	2.72	2.07	0.16
						2" Ice			
RRUS 4449 B5/B12	B	From Leg	4.00	0.0000	65.00	No Ice	1.97	1.41	0.07

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			1/2"	2.14	1.56	0.09
			1.00			Ice	2.33	1.73	0.11
						1" Ice	2.72	2.07	0.16
						2" Ice			
RRUS 4449 B5/B12	C	From Leg	4.00	0.0000	65.00	No Ice	1.97	1.41	0.07
			0.00			1/2"	2.14	1.56	0.09
			1.00			Ice	2.33	1.73	0.11
						1" Ice	2.72	2.07	0.16
						2" Ice			
DC6-48-60-18-8F	A	From Leg	4.00	0.0000	65.00	No Ice	0.92	0.92	0.02
			0.00			1/2"	1.46	1.46	0.04
			1.00			Ice	1.64	1.64	0.06
						1" Ice	2.04	2.04	0.11
						2" Ice			
DC6-48-60-18-8F	B	From Leg	4.00	0.0000	65.00	No Ice	0.92	0.92	0.02
			0.00			1/2"	1.46	1.46	0.04
			1.00			Ice	1.64	1.64	0.06
						1" Ice	2.04	2.04	0.11
						2" Ice			
Sector Mount [SM 502-3]	C	None		0.0000	65.00	No Ice	29.82	29.82	1.67
						1/2"	42.21	42.21	2.27
						Ice	54.43	54.43	3.05
						1" Ice	78.49	78.49	5.18
						2" Ice			
***									
GPS_A	C	From Leg	3.00	0.0000	59.00	No Ice	0.26	0.26	0.00
			0.00			1/2"	0.32	0.32	0.00
			1.00			Ice	0.39	0.39	0.01
						1" Ice	0.56	0.56	0.02
						2" Ice			
Side Arm Mount [SO 305-1]	C	From Leg	1.50	0.0000	59.00	No Ice	0.53	1.52	0.03
			0.00			1/2"	0.78	2.07	0.04
			0.00			Ice	1.06	2.66	0.06
						1" Ice	1.73	3.91	0.13
						2" Ice			
***									
8225	B	From Leg	2.00	0.0000	34.00	No Ice	0.89	0.89	0.00
			0.00			1/2"	1.06	1.06	0.01
			1.00			Ice	1.23	1.23	0.02
						1" Ice	1.59	1.59	0.05
						2" Ice			
***									

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice

Comb. No.	Description
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	92 - 80	Leg	Max Tension	23	6.35	-0.09	0.01
			Max. Compression	2	-9.38	0.10	0.02
			Max. Mx	2	-2.47	-0.64	0.09
			Max. My	24	-1.50	-0.01	-0.80
			Max. Vy	2	-1.17	0.52	0.09
			Max. Vx	12	1.34	0.01	-0.53
		Diagonal	Max Tension	14	2.37	0.00	0.00
			Max. Compression	2	-2.37	0.00	0.00
			Max. Mx	36	0.27	0.01	0.00
			Max. My	2	-2.37	-0.00	0.00
			Max. Vy	36	-0.02	0.01	0.00
			Max. Vx	2	-0.00	-0.00	0.00
		Top Girt	Max Tension	14	0.35	0.00	0.00
			Max. Compression	2	-0.35	0.00	0.00
			Max. Mx	37	0.08	-0.05	0.00
			Max. My	38	-0.01	0.00	0.00
			Max. Vy	37	-0.03	0.00	0.00
			Max. Vx	38	-0.00	0.00	0.00
T2	80 - 75	Leg	Max Tension	23	10.10	-0.05	0.00
			Max. Compression	2	-13.22	0.05	0.02
			Max. Mx	2	-13.14	0.10	0.02
			Max. My	24	-1.61	-0.00	0.10
			Max. Vy	10	0.04	0.10	-0.01
			Max. Vx	20	0.06	-0.00	-0.10
		Diagonal	Max Tension	15	2.37	0.00	0.00
			Max. Compression	2	-2.53	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	36	0.18	0.02	0.00
			Max. My	2	-2.53	-0.00	0.00
			Max. Vy	37	0.02	0.02	0.00
			Max. Vx	33	0.00	0.00	0.00
T3	75 - 70	Leg	Max Tension	23	14.61	-0.01	-0.01
			Max. Compression	2	-18.12	-0.00	0.00
			Max. Mx	10	-17.92	0.06	-0.00
			Max. My	24	-1.78	-0.00	0.10
			Max. Vy	10	0.04	0.06	-0.00
			Max. Vx	12	-0.05	-0.00	-0.10
		Diagonal	Max Tension	2	2.47	0.00	0.00
			Max. Compression	15	-2.35	0.00	0.00
			Max. Mx	35	0.58	0.03	-0.00
			Max. My	38	-0.27	0.02	0.00
			Max. Vy	37	0.03	0.02	-0.00
			Max. Vx	38	-0.00	0.00	0.00
T4	70 - 65	Leg	Max Tension	23	18.53	-0.10	0.01
			Max. Compression	2	-22.05	0.12	0.02
			Max. Mx	10	-22.02	0.13	-0.01
			Max. My	20	-2.22	-0.01	-0.05
			Max. Vy	10	-0.05	0.13	-0.01
			Max. Vx	20	-0.05	-0.01	-0.05
		Diagonal	Max Tension	15	2.40	0.00	0.00
			Max. Compression	2	-2.54	0.00	0.00
			Max. Mx	35	0.40	0.02	0.00
			Max. My	38	0.43	0.02	0.00
			Max. Vy	36	0.02	0.02	-0.00
			Max. Vx	33	0.00	0.00	0.00
T5	65 - 60	Leg	Max Tension	23	23.04	-0.10	0.01
			Max. Compression	10	-29.15	-0.06	-0.00
			Max. Mx	10	-29.14	0.13	-0.01
			Max. My	24	-3.21	-0.03	0.15
			Max. Vy	10	0.08	0.13	-0.01
			Max. Vx	4	0.07	-0.02	-0.15
		Diagonal	Max Tension	8	3.39	0.00	0.00
			Max. Compression	8	-3.49	0.00	0.00
			Max. Mx	36	0.64	0.03	-0.00
			Max. My	14	-3.19	0.00	-0.01
			Max. Vy	37	0.03	0.03	0.00
			Max. Vx	14	0.00	0.00	0.00
		Top Girt	Max Tension	31	0.27	0.00	0.00
			Max. Compression	6	-0.19	0.00	0.00
			Max. Mx	35	0.24	-0.10	0.00
			Max. My	38	0.20	0.00	0.00
			Max. Vy	35	0.05	0.00	0.00
			Max. Vx	38	-0.00	0.00	0.00
T6	60 - 40	Leg	Max Tension	23	44.94	0.14	-0.00
			Max. Compression	10	-53.48	-0.23	0.00
			Max. Mx	10	-53.46	0.33	-0.00
			Max. My	24	-3.77	-0.04	0.21
			Max. Vy	10	-0.19	0.33	-0.00
			Max. Vx	20	-0.11	-0.04	-0.21
		Diagonal	Max Tension	9	3.94	0.02	-0.00
			Max. Compression	10	-4.11	0.00	0.00
			Max. Mx	35	1.11	0.04	0.00
			Max. My	2	-3.92	-0.00	0.01
			Max. Vy	37	0.03	0.04	0.00
			Max. Vx	38	-0.00	0.00	0.00
		Secondary Horizontal	Max Tension	20	0.23	0.02	-0.00
			Max. Compression	25	-0.23	0.01	0.01
			Max. Mx	38	-0.00	0.04	0.01
			Max. My	36	0.01	0.03	0.01
			Max. Vy	38	-0.04	0.04	0.01
			Max. Vx	38	-0.00	0.00	0.00
T7	40 - 20	Leg	Max Tension	23	66.46	0.24	-0.00
			Max. Compression	10	-77.94	-0.42	0.00
			Max. Mx	10	-77.91	0.56	-0.00
			Max. My	24	-5.04	-0.07	0.39

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	10	0.30	0.56	-0.00
			Max. Vx	24	-0.17	-0.07	0.39
		Diagonal	Max Tension	9	4.29	0.03	0.00
			Max. Compression	10	-4.47	0.00	0.00
			Max. Mx	31	0.86	0.08	0.01
			Max. My	31	-1.75	0.07	-0.01
			Max. Vy	37	0.05	0.08	0.01
			Max. Vx	37	0.00	0.00	0.00
		Secondary Horizontal	Max Tension	24	0.38	0.02	-0.00
			Max. Compression	25	-0.37	0.02	0.00
			Max. Mx	30	0.01	0.06	0.01
			Max. My	36	-0.06	0.06	0.01
			Max. Vy	30	0.04	0.06	0.01
			Max. Vx	38	-0.00	0.00	0.00
T8	20 - 13.3333	Leg	Max Tension	23	73.32	0.28	-0.00
			Max. Compression	10	-85.81	-0.21	-0.01
			Max. Mx	35	-36.35	-0.77	0.00
			Max. My	24	-5.24	-0.07	0.39
			Max. Vy	31	0.34	0.41	0.00
			Max. Vx	24	0.16	-0.07	0.39
		Diagonal	Max Tension	13	4.39	0.03	-0.00
			Max. Compression	10	-4.71	0.00	0.00
			Max. Mx	31	1.57	0.05	0.01
			Max. My	38	1.60	0.05	0.01
			Max. Vy	37	0.04	0.05	0.01
			Max. Vx	38	-0.00	0.00	0.00
		Secondary Horizontal	Max Tension	24	0.37	0.02	0.00
			Max. Compression	25	-0.35	0.01	0.00
			Max. Mx	38	0.23	0.04	0.01
			Max. My	36	0.07	0.04	0.01
			Max. Vy	38	-0.04	0.04	0.01
			Max. Vx	38	-0.00	0.00	0.00
T9	13.3333 - 6.66667	Leg	Max Tension	23	80.18	0.15	0.01
			Max. Compression	10	-93.88	-0.59	0.00
			Max. Mx	35	-38.06	-0.77	0.00
			Max. My	24	-5.78	-0.09	0.67
			Max. Vy	10	0.40	0.73	0.00
			Max. Vx	24	-0.26	-0.09	0.67
		Diagonal	Max Tension	13	4.48	0.06	-0.00
			Max. Compression	12	-4.74	0.00	0.00
			Max. Mx	38	0.62	0.13	0.01
			Max. My	37	-2.06	0.12	0.01
			Max. Vy	37	0.06	0.13	0.01
			Max. Vx	37	0.00	0.00	0.00
		Secondary Horizontal	Max Tension	22	0.49	0.00	0.00
			Max. Compression	25	-0.47	0.02	0.00
			Max. Mx	38	-0.08	0.07	0.01
			Max. My	37	-0.05	0.07	0.01
			Max. Vy	38	-0.04	0.07	0.01
			Max. Vx	37	0.00	0.00	0.00
T10	6.66667 - 0	Leg	Max Tension	23	86.53	0.39	-0.00
			Max. Compression	10	-101.55	0.00	0.00
			Max. Mx	37	8.33	0.68	0.00
			Max. My	24	-6.16	-0.09	0.67
			Max. Vy	10	-0.40	0.67	-0.00
			Max. Vx	24	0.24	-0.09	0.67
		Diagonal	Max Tension	13	4.65	0.06	-0.01
			Max. Compression	10	-5.15	0.00	0.00
			Max. Mx	24	2.25	0.09	-0.01
			Max. My	38	2.22	0.05	0.01
			Max. Vy	38	0.05	0.05	0.01
			Max. Vx	38	-0.00	0.00	0.00
		Secondary Horizontal	Max Tension	24	0.38	0.03	0.00
			Max. Compression	25	-0.37	0.02	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	37	-0.00	0.04	0.00
			Max. My	24	-0.36	0.02	0.00
			Max. Vy	37	-0.04	0.04	0.00
			Max. Vx	38	-0.00	0.00	0.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	98.11	10.94	-6.46
	Max. H_x	18	98.11	10.94	-6.46
	Max. H_z	7	-81.56	-9.40	5.56
	Min. Vert	7	-81.56	-9.40	5.56
	Min. H_x	7	-81.56	-9.40	5.56
	Min. H_z	18	98.11	10.94	-6.46
Leg B	Max. Vert	10	105.70	-12.10	-6.83
	Max. H_x	23	-89.92	10.58	5.95
	Max. H_z	25	-79.86	9.15	6.02
	Min. Vert	23	-89.92	10.58	5.95
	Min. H_x	10	105.70	-12.10	-6.83
	Min. H_z	10	105.70	-12.10	-6.83
Leg A	Max. Vert	2	101.30	-0.14	13.18
	Max. H_x	21	5.55	1.92	0.45
	Max. H_z	2	101.30	-0.14	13.18
	Min. Vert	15	-84.54	0.13	-11.41
	Min. H_x	8	6.95	-1.93	0.56
	Min. H_z	15	-84.54	0.13	-11.41

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	17.30	-0.00	-0.00	-2.39	2.73	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	20.76	-0.03	-21.57	-1201.33	5.75	-3.54
0.9 Dead+1.0 Wind 0 deg - No Ice	15.57	-0.03	-21.57	-1199.61	4.93	-3.53
1.2 Dead+1.0 Wind 30 deg - No Ice	20.76	9.40	-16.51	-942.65	-528.20	2.02
0.9 Dead+1.0 Wind 30 deg - No Ice	15.57	9.40	-16.51	-941.13	-528.58	2.03
1.2 Dead+1.0 Wind 60 deg - No Ice	20.76	16.80	-9.79	-562.17	-951.12	-3.01
0.9 Dead+1.0 Wind 60 deg - No Ice	15.57	16.80	-9.79	-560.97	-951.15	-3.01
1.2 Dead+1.0 Wind 90 deg - No Ice	20.76	21.49	0.03	-0.43	-1201.40	-3.70
0.9 Dead+1.0 Wind 90 deg - No Ice	15.57	21.49	0.03	0.29	-1201.22	-3.70
1.2 Dead+1.0 Wind 120 deg - No Ice	20.76	19.71	11.51	636.23	-1084.49	3.47
0.9 Dead+1.0 Wind 120 deg - No Ice	15.57	19.71	11.51	636.43	-1084.41	3.47
1.2 Dead+1.0 Wind 150 deg - No Ice	20.76	11.21	19.58	1084.54	-616.28	7.44
0.9 Dead+1.0 Wind 150 deg - No Ice	15.57	11.21	19.58	1084.37	-616.59	7.44
1.2 Dead+1.0 Wind 180 deg - No Ice	20.76	0.03	20.29	1142.37	0.84	3.54

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
0.9 Dead+1.0 Wind 180 deg - No Ice	15.57	0.03	20.29	1142.14	0.02	3.53
1.2 Dead+1.0 Wind 210 deg - No Ice	20.76	-9.40	16.51	936.87	534.78	-2.02
0.9 Dead+1.0 Wind 210 deg - No Ice	15.57	-9.40	16.51	936.81	533.51	-2.03
1.2 Dead+1.0 Wind 240 deg - No Ice	20.76	-17.91	10.43	582.97	1003.76	3.01
0.9 Dead+1.0 Wind 240 deg - No Ice	15.57	-17.91	10.43	583.21	1002.11	3.01
1.2 Dead+1.0 Wind 270 deg - No Ice	20.76	-21.49	-0.03	-5.34	1207.97	3.70
0.9 Dead+1.0 Wind 270 deg - No Ice	15.57	-21.49	-0.03	-4.62	1206.14	3.70
1.2 Dead+1.0 Wind 300 deg - No Ice	20.76	-18.60	-10.87	-615.40	1045.01	-3.46
0.9 Dead+1.0 Wind 300 deg - No Ice	15.57	-18.60	-10.87	-614.16	1043.32	-3.47
1.2 Dead+1.0 Wind 330 deg - No Ice	20.76	-11.21	-19.58	-1090.30	622.88	-7.44
0.9 Dead+1.0 Wind 330 deg - No Ice	15.57	-11.21	-19.58	-1088.68	621.54	-7.44
1.2 Dead+1.0 Ice+1.0 Temp	53.60	0.00	0.00	-2.85	10.85	-0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	53.60	-0.00	-5.70	-322.32	10.88	-0.34
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	53.60	2.62	-4.58	-263.69	-137.66	0.56
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	53.60	4.61	-2.69	-156.36	-251.50	-0.17
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	53.60	5.78	0.00	-2.82	-314.47	-0.46
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	53.60	5.37	3.12	171.03	-286.71	0.86
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	53.60	2.97	5.18	287.13	-154.52	1.55
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	53.60	0.00	5.53	309.60	10.83	0.34
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	53.60	-2.62	4.58	257.99	159.37	-0.56
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	53.60	-4.76	2.77	154.18	279.29	0.17
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	53.60	-5.78	-0.00	-2.88	336.18	0.46
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	53.60	-5.22	-3.04	-173.22	302.35	-0.86
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	53.60	-2.97	-5.18	-292.82	176.23	-1.55
Dead+Wind 0 deg - Service	17.30	-0.01	-5.23	-293.03	3.33	-0.85
Dead+Wind 30 deg - Service	17.30	2.28	-4.01	-230.31	-126.16	0.50
Dead+Wind 60 deg - Service	17.30	4.08	-2.37	-138.04	-228.72	-0.73
Dead+Wind 90 deg - Service	17.30	5.21	0.01	-1.81	-289.41	-0.90
Dead+Wind 120 deg - Service	17.30	4.78	2.79	152.58	-261.05	0.83
Dead+Wind 150 deg - Service	17.30	2.72	4.75	261.30	-147.51	1.80
Dead+Wind 180 deg - Service	17.30	0.01	4.92	275.33	2.14	0.85
Dead+Wind 210 deg - Service	17.30	-2.28	4.01	225.50	131.63	-0.50
Dead+Wind 240 deg - Service	17.30	-4.34	2.53	139.67	245.36	0.73
Dead+Wind 270 deg - Service	17.30	-5.21	-0.01	-3.00	294.88	0.90
Dead+Wind 300 deg - Service	17.30	-4.51	-2.64	-150.94	255.36	-0.83
Dead+Wind 330 deg - Service	17.30	-2.72	-4.75	-266.10	152.99	-1.80

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	0.00	-17.30	0.00	0.00	17.30	0.00	0.000%
2	-0.03	-20.76	-21.57	0.03	20.76	21.57	0.005%
3	-0.03	-15.57	-21.57	0.03	15.57	21.57	0.004%
4	9.40	-20.76	-16.52	-9.40	20.76	16.51	0.005%
5	9.40	-15.57	-16.52	-9.40	15.57	16.51	0.005%
6	16.80	-20.76	-9.79	-16.80	20.76	9.79	0.006%
7	16.80	-15.57	-9.79	-16.80	15.57	9.79	0.005%
8	21.49	-20.76	0.03	-21.49	20.76	-0.03	0.005%
9	21.49	-15.57	0.03	-21.49	15.57	-0.03	0.005%
10	19.71	-20.76	11.51	-19.71	20.76	-11.51	0.005%
11	19.71	-15.57	11.51	-19.71	15.57	-11.51	0.004%
12	11.21	-20.76	19.58	-11.21	20.76	-19.58	0.005%
13	11.21	-15.57	19.58	-11.21	15.57	-19.58	0.005%
14	0.03	-20.76	20.29	-0.03	20.76	-20.29	0.006%
15	0.03	-15.57	20.29	-0.03	15.57	-20.29	0.005%
16	-9.40	-20.76	16.52	9.40	20.76	-16.51	0.005%
17	-9.40	-15.57	16.52	9.40	15.57	-16.51	0.005%
18	-17.91	-20.76	10.43	17.91	20.76	-10.43	0.005%
19	-17.91	-15.57	10.43	17.91	15.57	-10.43	0.004%
20	-21.49	-20.76	-0.03	21.49	20.76	0.03	0.006%
21	-21.49	-15.57	-0.03	21.49	15.57	0.03	0.005%
22	-18.60	-20.76	-10.87	18.60	20.76	10.87	0.006%
23	-18.60	-15.57	-10.87	18.60	15.57	10.87	0.005%
24	-11.21	-20.76	-19.58	11.21	20.76	19.58	0.006%
25	-11.21	-15.57	-19.58	11.21	15.57	19.58	0.005%
26	0.00	-53.60	0.00	-0.00	53.60	-0.00	0.000%
27	-0.00	-53.60	-5.70	0.00	53.60	5.70	0.002%
28	2.62	-53.60	-4.58	-2.62	53.60	4.58	0.002%
29	4.61	-53.60	-2.69	-4.61	53.60	2.69	0.002%
30	5.78	-53.60	0.00	-5.78	53.60	-0.00	0.002%
31	5.37	-53.60	3.12	-5.37	53.60	-3.12	0.002%
32	2.97	-53.60	5.19	-2.97	53.60	-5.18	0.002%
33	0.00	-53.60	5.53	-0.00	53.60	-5.53	0.002%
34	-2.62	-53.60	4.58	2.62	53.60	-4.58	0.002%
35	-4.76	-53.60	2.77	4.76	53.60	-2.77	0.002%
36	-5.78	-53.60	-0.00	5.78	53.60	0.00	0.002%
37	-5.22	-53.60	-3.04	5.22	53.60	3.04	0.002%
38	-2.97	-53.60	-5.19	2.97	53.60	5.18	0.002%
39	-0.01	-17.30	-5.23	0.01	17.30	5.23	0.002%
40	2.28	-17.30	-4.01	-2.28	17.30	4.01	0.002%
41	4.08	-17.30	-2.38	-4.08	17.30	2.37	0.002%
42	5.21	-17.30	0.01	-5.21	17.30	-0.01	0.002%
43	4.78	-17.30	2.79	-4.78	17.30	-2.79	0.002%
44	2.72	-17.30	4.75	-2.72	17.30	-4.75	0.002%
45	0.01	-17.30	4.92	-0.01	17.30	-4.92	0.002%
46	-2.28	-17.30	4.01	2.28	17.30	-4.01	0.002%
47	-4.35	-17.30	2.53	4.34	17.30	-2.53	0.002%
48	-5.21	-17.30	-0.01	5.21	17.30	0.01	0.002%
49	-4.51	-17.30	-2.64	4.51	17.30	2.64	0.002%
50	-2.72	-17.30	-4.75	2.72	17.30	4.75	0.002%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	4	0.00000001	0.00025023
3	Yes	4	0.00000001	0.00018449
4	Yes	4	0.00000001	0.00026030
5	Yes	4	0.00000001	0.00019464
6	Yes	4	0.00000001	0.00026841
7	Yes	4	0.00000001	0.00020278
8	Yes	4	0.00000001	0.00025915

9	Yes	4	0.00000001	0.00019366
10	Yes	4	0.00000001	0.00024884
11	Yes	4	0.00000001	0.00018337
12	Yes	4	0.00000001	0.00025822
13	Yes	4	0.00000001	0.00019277
14	Yes	4	0.00000001	0.00026823
15	Yes	4	0.00000001	0.00020267
16	Yes	4	0.00000001	0.00026070
17	Yes	4	0.00000001	0.00019511
18	Yes	4	0.00000001	0.00025068
19	Yes	4	0.00000001	0.00018495
20	Yes	4	0.00000001	0.00025954
21	Yes	4	0.00000001	0.00019392
22	Yes	4	0.00000001	0.00026809
23	Yes	4	0.00000001	0.00020247
24	Yes	4	0.00000001	0.00025810
25	Yes	4	0.00000001	0.00019248
26	Yes	4	0.00000001	0.00004176
27	Yes	4	0.00000001	0.00047958
28	Yes	4	0.00000001	0.00045538
29	Yes	4	0.00000001	0.00044923
30	Yes	4	0.00000001	0.00045726
31	Yes	4	0.00000001	0.00046953
32	Yes	4	0.00000001	0.00047033
33	Yes	4	0.00000001	0.00046698
34	Yes	4	0.00000001	0.00046784
35	Yes	4	0.00000001	0.00048373
36	Yes	4	0.00000001	0.00049936
37	Yes	4	0.00000001	0.00050837
38	Yes	4	0.00000001	0.00049939
39	Yes	4	0.00000001	0.00020122
40	Yes	4	0.00000001	0.00020103
41	Yes	4	0.00000001	0.00020304
42	Yes	4	0.00000001	0.00020204
43	Yes	4	0.00000001	0.00020006
44	Yes	4	0.00000001	0.00020228
45	Yes	4	0.00000001	0.00020326
46	Yes	4	0.00000001	0.00020053
47	Yes	4	0.00000001	0.00020026
48	Yes	4	0.00000001	0.00020353
49	Yes	4	0.00000001	0.00020580
50	Yes	4	0.00000001	0.00020405

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	92 - 80	1.379	50	0.1197	0.0221
T2	80 - 75	1.071	50	0.1138	0.0155
T3	75 - 70	0.947	50	0.1098	0.0126
T4	70 - 65	0.833	50	0.1042	0.0113
T5	65 - 60	0.722	50	0.0980	0.0088
T6	60 - 40	0.618	50	0.0902	0.0078
T7	40 - 20	0.285	50	0.0588	0.0043
T8	20 - 13.3333	0.077	50	0.0285	0.0016
T9	13.3333 - 6.66667	0.036	50	0.0195	0.0008
T10	6.66667 - 0	0.010	43	0.0098	0.0004

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
91.00	SD210D-SF2P4SNM	50	1.353	0.1193	0.0216	258595
89.00	(2) JAHH-65B-R3B	50	1.301	0.1185	0.0206	258595
65.00	7770.00 w/ Mount Pipe	50	0.722	0.0980	0.0088	42440
59.00	GPS_A	50	0.598	0.0886	0.0077	35480
34.00	8225	50	0.209	0.0494	0.0034	38580

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	92 - 80	5.613	24	0.4843	0.0916
T2	80 - 75	4.365	24	0.4613	0.0640
T3	75 - 70	3.865	24	0.4453	0.0521
T4	70 - 65	3.400	24	0.4232	0.0470
T5	65 - 60	2.948	24	0.3983	0.0367
T6	60 - 40	2.525	24	0.3672	0.0323
T7	40 - 20	1.167	10	0.2399	0.0179
T8	20 - 13.3333	0.319	10	0.1166	0.0065
T9	13.3333 - 6.66667	0.150	10	0.0796	0.0032
T10	6.66667 - 0	0.041	11	0.0402	0.0016

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
91.00	SD210D-SF2P4SNM	24	5.509	0.4828	0.0895	68334
89.00	(2) JAHH-65B-R3B	24	5.299	0.4796	0.0852	68334
65.00	7770.00 w/ Mount Pipe	24	2.948	0.3983	0.0367	10496
59.00	GPS_A	24	2.444	0.3607	0.0318	8810
34.00	8225	10	0.859	0.2016	0.0141	9470

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	92	Leg	A325X	0.6250	4	1.59	20.34	0.078	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	2.37	3.48	0.680	1.05	Member Block Shear
		Top Girt	A325X	0.5000	1	0.35	4.13	0.086	1.05	Member Bearing
T2	80	Diagonal	A325X	0.5000	1	2.37	4.13	0.573	1.05	Member Bearing
T3	75	Diagonal	A325X	0.5000	1	2.47	7.18	0.344	1.05	Gusset Bearing
T4	70	Diagonal	A325X	0.5000	1	2.40	4.13	0.581	1.05	Member Bearing
T5	65	Leg	A325X	0.6250	4	5.76	20.34	0.283	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	3.39	7.18	0.473	1.05	Gusset Bearing
		Top Girt	A325X	0.5000	1	0.51	6.20	0.082	1.05	Member Bearing
T6	60	Leg	A325X	0.7500	4	11.22	30.10	0.373	1.05	Bolt Tension
		Diagonal	A325N	0.5000	1	3.94	7.18	0.549	1.05	Gusset Bearing

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
		Secondary Horizontal	A325N	0.5000	1	0.93	7.18	0.129	1.05	Gusset Bearing
T7	40	Leg	A325X	0.8750	4	16.60	41.56	0.399	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	4.29	6.20	0.692	1.05	Member Bearing
		Secondary Horizontal	A325X	0.6250	1	1.35	6.86	0.197	1.05	Gusset Bearing
T8	20	Diagonal	A325X	0.5000	1	4.39	6.20	0.708	1.05	Member Bearing
		Secondary Horizontal	A325X	0.6250	1	1.49	6.86	0.217	1.05	Gusset Bearing
T9	13.3333	Diagonal	A325X	0.5000	1	4.48	7.18	0.624	1.05	Gusset Bearing
		Secondary Horizontal	A325X	0.6250	1	1.63	6.86	0.237	1.05	Gusset Bearing
T10	6.66667	Diagonal	A325X	0.5000	1	4.65	7.18	0.648	1.05	Gusset Bearing
		Secondary Horizontal	A325X	0.6250	1	1.76	6.86	0.257	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	92 - 80	ROHN 2 STD	12.00	4.00	61.0 K=1.00	1.0745	-9.38	36.84	0.255 [1]
T2	80 - 75	ROHN 2.5 STD	5.01	5.01	63.4 K=1.00	1.7040	-13.22	57.14	0.231 [1]
T3	75 - 70	ROHN 2.5 STD	5.01	5.01	63.4 K=1.00	1.7040	-18.12	57.14	0.317 [1]
T4	70 - 65	ROHN 2.5 STD	5.01	5.01	63.4 K=1.00	1.7040	-22.05	57.14	0.386 [1]
T5	65 - 60	ROHN 2.5 STD	5.01	5.01	63.4 K=1.00	1.7040	-29.15	57.14	0.510 [1]
T6	60 - 40	ROHN 2.5 X-STR	20.03	3.45	44.8 K=1.00	2.2535	-53.48	87.57	0.611 [1]
T7	40 - 20	ROHN 3 X-STR	20.03	3.43	36.2 K=1.00	3.0159	-77.94	123.30	0.632 [1]
T8	20 - 13.3333	ROHN 3.5 X-STR	6.68	3.43	31.5 K=1.00	3.6784	-85.81	153.96	0.557 [1]
T9	13.3333 - 6.66667	ROHN 3.5 X-STR	6.68	3.42	31.4 K=1.00	3.6784	-93.88	153.99	0.610 [1]
T10	6.66667 - 0	ROHN 3.5 X-STR	6.68	3.42	31.4 K=1.00	3.6784	-101.55	154.01	0.659 [1]

[1] P_u / ϕP_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	92 - 80	L1 1/2x1 1/2x1/8	7.67	3.62	146.6 K=1.00	0.3594	-2.37	4.79	0.496 [1]
T2	80 - 75	L1 3/4x1 3/4x1/8	8.45	4.13	142.8 K=1.00	0.4219	-2.53	5.92	0.427 [1]
T3	75 - 70	L2x2x1/4	8.86	4.31	132.3	0.9380	-2.35	15.34	0.153 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T4	70 - 65	L1 3/4x1 3/4x1/8	9.28	4.54	157.1 K=1.00	0.4219	-2.54	4.89	0.519 [1]
T5	65 - 60	L2x2x1/4	9.70	4.73	145.2 K=1.00	0.9380	-3.49	12.73	0.274 [1]
T6	60 - 40	L2x2x1/4	12.24	6.08	186.5 K=1.00	0.9380	-4.11	7.72	0.532 [1]
T7	40 - 20	L2 1/2x2 1/2x3/16	13.99	6.92	167.7 K=1.00	0.9020	-4.47	9.18	0.487 [1]
T8	20 - 13.3333	L2 1/2x2 1/2x3/16	14.59	7.20	174.5 K=1.00	0.9020	-4.71	8.48	0.555 [1]
T9	13.3333 - 6.66667	L2 1/2x2 1/2x3/8	15.21	7.48	184.4 K=1.00	1.7300	-4.74	14.56	0.326 [1]
T10	6.66667 - 0	L2 1/2x2 1/2x3/8	15.83	7.79	192.1 K=1.00	1.7300	-5.15	13.42	0.383 [1]

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T6	60 - 40	L2 1/2x2 1/2x1/4	10.25	4.86	119.4 K=1.01	1.1900	-0.93	23.64	0.039 [1]
T7	40 - 20	L2x2x1/4	12.29	5.85	179.6 K=1.00	0.9380	-1.35	8.32	0.162 [1]
T8	20 - 13.3333	L2x2x1/4	12.97	6.17	189.4 K=1.00	0.9380	-1.49	7.48	0.199 [1]
T9	13.3333 - 6.66667	L2x2x1/4	13.66	6.52	200.0 K=1.00	0.9380	-1.63	6.71	0.243 [1]
T10	6.66667 - 0	L2x2x1/4	14.35	6.86	210.6 K=1.00	0.9380	-1.76	6.06	0.291 [1]

[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	92 - 80	L2x2x1/8	6.52	6.11	184.6 K=1.00	0.4844	-0.35	4.07	0.086 [1]
T5	65 - 60	L2 1/2x2 1/2x3/16	8.06	7.61	184.6 K=1.00	0.9020	-0.51	7.58	0.067 [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	92 - 80	ROHN 2 STD	12.00	4.00	61.0	1.0745	6.35	48.35	0.131 [1]

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T2	80 - 75	ROHN 2.5 STD	5.01	5.01	63.4	1.7040	10.10	76.68	0.132 [1]
T3	75 - 70	ROHN 2.5 STD	5.01	5.01	63.4	1.7040	14.61	76.68	0.191 [1]
T4	70 - 65	ROHN 2.5 STD	5.01	5.01	63.4	1.7040	18.53	76.68	0.242 [1]
T5	65 - 60	ROHN 2.5 STD	5.01	5.01	63.4	1.7040	23.05	76.68	0.301 [1]
T6	60 - 40	ROHN 2.5 X-STR	20.03	3.23	41.9	2.2535	44.94	101.41	0.443 [1]
T7	40 - 20	ROHN 3 X-STR	20.03	3.25	34.3	3.0159	66.46	135.72	0.490 [1]
T8	20 - 13.3333	ROHN 3.5 X-STR	6.68	3.25	29.9	3.6784	73.32	165.53	0.443 [1]
T9	13.3333 - 6.66667	ROHN 3.5 X-STR	6.68	3.26	29.9	3.6784	80.18	165.53	0.484 [1]
T10	6.66667 - 0	ROHN 3.5 X-STR	6.68	3.26	29.9	3.6784	86.53	165.53	0.523 [1]

[1] P_u / ϕP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	92 - 80	L1 1/2x1 1/2x1/8	7.67	3.62	96.0	0.2109	2.37	9.18	0.258 [1]
T2	80 - 75	L1 3/4x1 3/4x1/8	8.45	4.13	93.1	0.2578	2.37	11.21	0.211 [1]
T3	75 - 70	L2x2x1/4	8.86	4.31	87.4	0.5863	2.47	25.50	0.097 [1]
T4	70 - 65	L1 3/4x1 3/4x1/8	9.28	4.54	102.1	0.2578	2.40	11.21	0.214 [1]
T5	65 - 60	L2x2x1/4	9.70	4.73	95.7	0.5863	3.39	25.50	0.133 [1]
T6	60 - 40	L2x2x1/4	12.24	6.08	121.8	0.5863	3.94	25.50	0.154 [1]
T7	40 - 20	L2 1/2x2 1/2x3/16	13.99	6.92	108.3	0.5886	4.29	25.60	0.168 [1]
T8	20 - 13.3333	L2 1/2x2 1/2x3/16	14.59	7.20	112.6	0.5886	4.39	25.60	0.171 [1]
T9	13.3333 - 6.66667	L2 1/2x2 1/2x3/8	15.21	7.48	121.3	1.1217	4.48	48.79	0.092 [1]
T10	6.66667 - 0	L2 1/2x2 1/2x3/8	15.83	7.79	126.2	1.1217	4.65	48.79	0.095 [1]

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Tension)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T6	60 - 40	L2 1/2x2 1/2x1/4	9.57	4.52	145.6	0.7753	0.93	33.73	0.028 [1]
T7	40 - 20	L2x2x1/4	12.29	5.85	236.4	0.5629	1.35	24.49	0.055 [1]
T8	20 - 13.3333	L2x2x1/4	12.97	6.17	249.0	0.5629	1.49	24.49	0.061 [1]
T9	13.3333 - 6.66667	L2x2x1/4	13.66	6.52	262.6	0.5629	1.63	24.49	0.066 [1]
T10	6.66667 - 0	L2x2x1/4	14.35	6.86	276.1	0.5629	1.76	24.49	0.072 [1]

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	92 - 80	L2x2x1/8	6.52	6.11	121.2	0.3047	0.35	13.25	0.027 [1]
T5	65 - 60	L2 1/2x2 1/2x3/16	8.06	7.61	120.7	0.5886	0.51	25.60	0.020 [1]

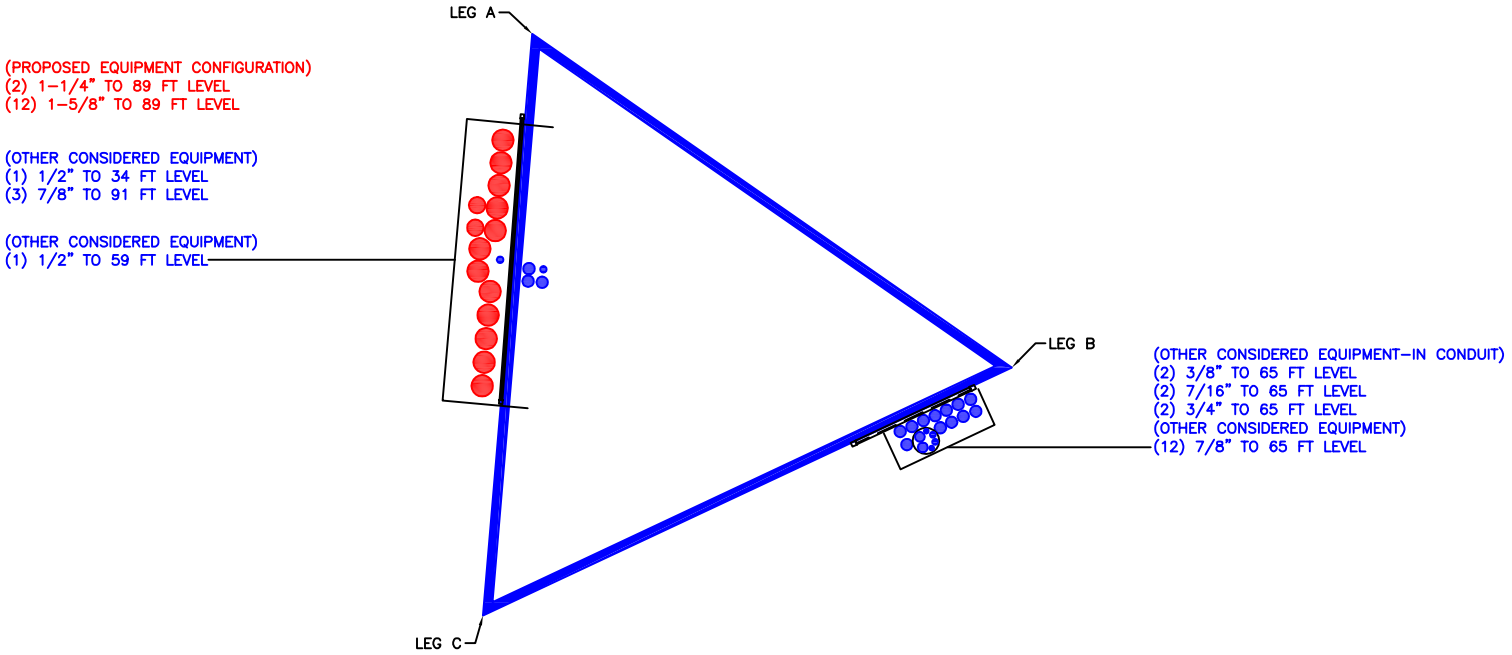
[1] P_u / ϕP_n controls

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	92 - 80	Leg	ROHN 2 STD	3	-9.38	38.68	24.3	Pass
T2	80 - 75	Leg	ROHN 2.5 STD	27	-13.22	59.99	22.0	Pass
T3	75 - 70	Leg	ROHN 2.5 STD	36	-18.12	59.99	30.2	Pass
T4	70 - 65	Leg	ROHN 2.5 STD	45	-22.05	59.99	36.8	Pass
T5	65 - 60	Leg	ROHN 2.5 STD	53	-29.15	59.99	48.6	Pass
T6	60 - 40	Leg	ROHN 2.5 X-STR	65	-53.48	91.95	58.2	Pass
T7	40 - 20	Leg	ROHN 3 X-STR	95	-77.94	129.46	60.2	Pass
T8	20 - 13.3333	Leg	ROHN 3.5 X-STR	125	-85.81	161.66	53.1	Pass
T9	13.3333 - 6.66667	Leg	ROHN 3.5 X-STR	137	-93.88	161.69	58.1	Pass
T10	6.66667 - 0	Leg	ROHN 3.5 X-STR	149	-101.55	161.71	62.8	Pass
T1	92 - 80	Diagonal	L1 1/2x1 1/2x1/8	17	-2.37	5.03	47.2 68.0 (b)	Pass
T2	80 - 75	Diagonal	L1 3/4x1 3/4x1/8	32	-2.53	6.21	40.7 57.3 (b)	Pass
T3	75 - 70	Diagonal	L2x2x1/4	42	-2.35	16.10	14.6 34.4 (b)	Pass
T4	70 - 65	Diagonal	L1 3/4x1 3/4x1/8	50	-2.54	5.14	49.5 58.1 (b)	Pass
T5	65 - 60	Diagonal	L2x2x1/4	59	-3.49	13.37	26.1 47.3 (b)	Pass
T6	60 - 40	Diagonal	L2x2x1/4	68	-4.11	8.11	50.7 54.9 (b)	Pass
T7	40 - 20	Diagonal	L2 1/2x2 1/2x3/16	98	-4.47	9.64	46.4 69.2 (b)	Pass
T8	20 - 13.3333	Diagonal	L2 1/2x2 1/2x3/16	128	-4.71	8.90	52.9 70.8 (b)	Pass
T9	13.3333 - 6.66667	Diagonal	L2 1/2x2 1/2x3/8	141	-4.74	15.29	31.0 62.4 (b)	Pass
T10	6.66667 - 0	Diagonal	L2 1/2x2 1/2x3/8	152	-5.15	14.09	36.5 64.8 (b)	Pass
T6	60 - 40	Secondary Horizontal	L2 1/2x2 1/2x1/4	73	-0.93	24.82	3.7 12.9 (b)	Pass
T7	40 - 20	Secondary Horizontal	L2x2x1/4	103	-1.35	8.74	15.5 19.7 (b)	Pass
T8	20 - 13.3333	Secondary Horizontal	L2x2x1/4	133	-1.49	7.86	18.9 21.7 (b)	Pass
T9	13.3333 - 6.66667	Secondary Horizontal	L2x2x1/4	145	-1.63	7.05	23.1 23.7 (b)	Pass
T10	6.66667 - 0	Secondary Horizontal	L2x2x1/4	157	-1.76	6.36	27.7	Pass
T1	92 - 80	Top Girt	L2x2x1/8	4	-0.35	4.27	8.2 8.6 (b)	Pass
T5	65 - 60	Top Girt	L2 1/2x2 1/2x3/16	55	-0.51	7.96	6.4 8.2 (b)	Pass
							Summary	
						Leg (T10)	62.8	Pass
						Diagonal (T8)	70.8	Pass
						Secondary Horizontal (T10)	27.7	Pass
						Top Girt (T1)	8.6	Pass
						Bolt Checks	67.4	Pass
						RATING =	**70.8**	**Pass**

APPENDIX B

BASE LEVEL DRAWING



BUSINESS UNIT: 806386 TOWER ID: C_BASELEVEL

APPENDIX C

ADDITIONAL CALCULATIONS

Self Support Anchor Rod Capacity

Site Info	
BU #	806386
Site Name	NHV 106 943628
Order #	552665 Rev. 0

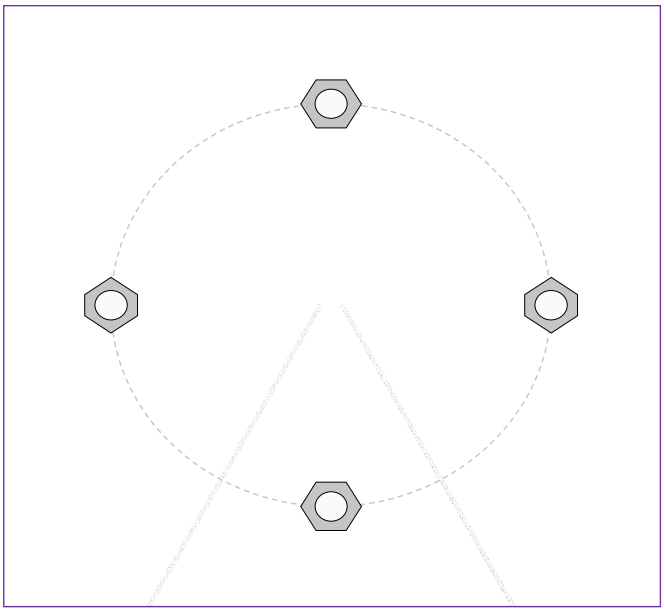
Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	Yes
l_{ar} (in)	0.125

Applied Loads		
	Comp.	Uplift
Axial Force (kips)	105.70	89.92
Shear Force (kips)	13.89	12.14

**TIA-222-H Section 15.5 Applied*

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

**Anchor Rod Eccentricity Applied*



Connection Properties

Anchor Rod Data

(4) 7/8" ø bolts (A449 N; Fy=92 ksi, Fu=120 ksi)

l_{ar} (in): 0.125

Analysis Results

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

Pu_t = 22.48	ϕPn_t = 41.58	**Stress Rating**
Vu = 3.04	ϕVn = 27.06	**51.5%**
Mu = n/a	ϕMn = n/a	**Pass**

SST Unit Base Foundation

BU # :	806386
Site Name:	NHV 106 943628
App. Number:	552665 Rev. 0
TIA-222 Revision:	H

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

Superstructure Analysis Reactions		
Global Moment, **M**:	1257.34	ft-kips
Global Axial, **P**:	20.76	kips
Global Shear, **V**:	22.82	kips
Leg Compression, $\mathbf{P_{comp}}$:	105.7	kips
Leg Comp. Shear, $\mathbf{V_{u\_comp}}$:	13.89	kips
Leg Uplift, $\mathbf{P_{uplift}}$:	89.92	kips
Leg Uplift. Shear, $\mathbf{V_{u\_uplift}}$:	12.14	kips
Tower Height, **H**:	92	ft
Base Face Width, **BW**:	14.7	ft
BP Dist. Above Fdn, $\mathbf{bp_{dist}}$:	1	in
Anchor Bolt Circle, **BC**:	7.0625	in

Foundation Analysis Checks	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	41.88	22.82	**51.9%**	**Pass**
Bearing Pressure (ksf)	22.65	3.58	**15.8%**	**Pass**
*Overturning (kip*ft)*	1714.68	1339.11	**78.1%**	**Pass**
*Pad Flexure (kip*ft)*	2862.74	420.15	**14.0%**	**Pass**
Pad Shear - 1-way (kips)	702.45	69.13	**9.4%**	**Pass**
Pad Shear - Comp 2-way (ksi)	0.164	0.020	**11.4%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	1276.52	0.00	**0.0%**	**Pass**
Pad Shear - Tension 2-way (ksi)	0.164	0.017	**9.7%**	**Pass**
*Flexural 2-way (Tension) (kip*ft)*	1276.52	0.00	**0.0%**	**Pass**

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

Soil Rating*:	**78.1%**
Structural Rating*:	**14.0%**

Pad Properties		
Depth, **D**:	2.00	ft
Pad Width, $\mathbf{W_1}$:	19.00	ft
Pad Thickness, **T**:	3.50	ft
Pad Rebar Size (Bottom dir. 2), $\mathbf{Sp_2}$:	8	
Pad Rebar Quantity (Bottom dir. 2), $\mathbf{mp_2}$:	22	
Pad Clear Cover, $\mathbf{cc_{pad}}$:	3	in

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

Soil Properties		
Total Soil Unit Weight, γ:	100	pcf
Ultimate Net Bearing, Qnet:	30.000	ksf
Cohesion, **Cu**:		ksf
Friction Angle, φ:		degrees
SPT Blow Count, $\mathbf{N_{blows}}$:		
Base Friction, μ:	0.3	
Neglected Depth, **N**:	3.3	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, **gw**:	N/A	ft

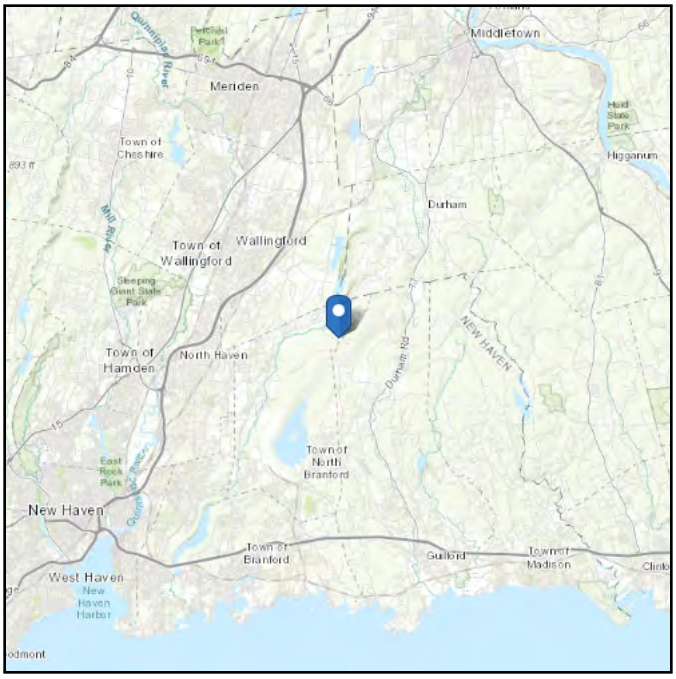
<-- Toggle between Gross and Net

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Elevation: 583.14 ft (NAVD 88)
Latitude: 41.403464
Longitude: -72.744139



Wind

Results:

Wind Speed:	126 Vmph	Ultimate windspeed of 125 mph is used per New Heaven County exception
10-year MRI	78 Vmph	
25-year MRI	87 Vmph	
50-year MRI	94 Vmph	
100-year MRI	103 Vmph	

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

Date Accessed: Tue Apr 27 2021

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

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

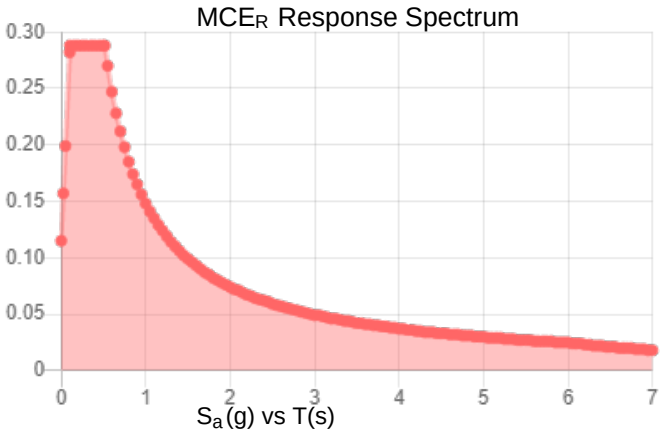
Seismic

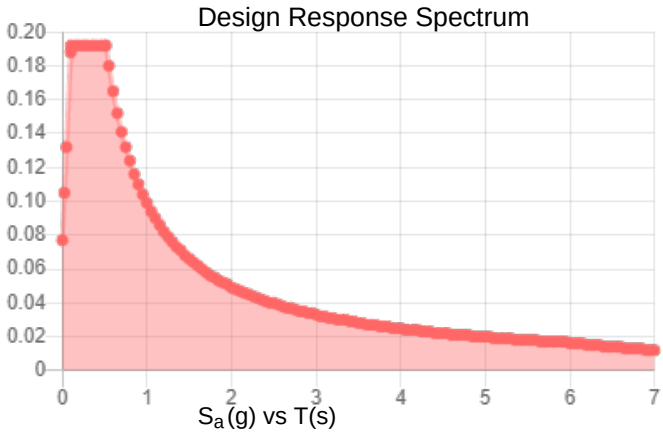
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.18	S_{DS} :	0.192
S_1 :	0.062	S_{D1} :	0.099
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.092
S_{MS} :	0.288	PGA_M :	0.147
S_{M1} :	0.148	F_{PGA} :	1.6
		I_e :	1

Seismic Design Category B





Data Accessed: Tue Apr 27 2021

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

Ice

Results:

Ice Thickness:	0.75 in.
Concurrent Temperature:	15 F
Gust Speed:	50 mph
Data Source:	Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8
Date Accessed:	Tue Apr 27 2021

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

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

Exhibit E

Mount Analysis

Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
(856) 797-0412
peter.albano@colliersengineering.com

Antenna Mount Analysis Report and PMI Requirements

Mount Analysis

SMART Tool Project #: 10037942
Maser Consulting Connecticut Project #: 21777074A

March 30, 2021

Site Information	*Site ID:*	*468991-VZW / N BRANFORD CT*
	Site Name:	*N BRANFORD CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*83 Reeds Gap Rd* *North Branford, Connecticut 06471* *New Haven County*
	Latitude:	*41.403428°*
	Longitude:	*-72.744261°*
Structure Information	*Tower Type:*	*94-Ft Self Support*
	Mount Type:	*12.67-Ft Sector Frame*

FUZE ID # 16272007

Analysis Results

Sector Frame: **35.6% Pass**

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

Report Prepared By: Zachary Telljohann

Executive Summary:

The objective of this report is to determine the capacity of the antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS Site ID: 324528, dated March 17, 2021*
Mount Mapping Report	*Level-Up Towers, Site ID: 467144, dated February 20, 2021*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	120 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	C
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.979
Seismic Parameters:	S_S:	0.208
	S_1:	0.055
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
89.00	90.00	3	Samsung	MT6407-77A	Added
		4	Andrew	DB844G65ZAXY	Retained
		2	Amphenol Antel	LPA-80063-6CF-EDIN	
		6	Commscope	JAHH-65B-R3B	
		3	Commscope	CBC78T-DS-43	
		2	Raycap	RxxDC-3315-PF-48	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	

Standard Conditions:

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

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

   Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

   The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

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

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

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

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

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

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

Analysis Results:

Component	Utilization %	Pass/Fail
Antenna Pipe	*30.8%*	*Pass*
Standoff Vertical	*5.8%*	*Pass*
Tieback	*5.1%*	*Pass*
Standoff Diagonal	*6.6%*	*Pass*
Standoff Plate	*35.6%*	*Pass*
Standoff Horizontal	*28.9%*	*Pass*
Horizontal mount pipe	*30.8%*	*Pass*
Connection Check	*11.9%*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**35.6%**

Recommendation:

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

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

Attachments:

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


02/20/2021 12:08

V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	SBA	**Mapping Date:**	2/20/2021
Site Name:	N BRANFORD CT	**Tower Type:**	Self Support
Site Number or ID:	467144	**Tower Height (Ft.):**	94
Mapping Contractor:	Level-Up Towers	**Mount Elevation (Ft.):**	90

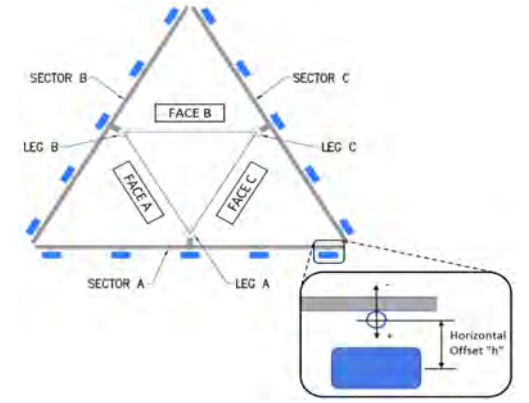
Mount Pipe Configuration and Geometries [Unit = Inches]

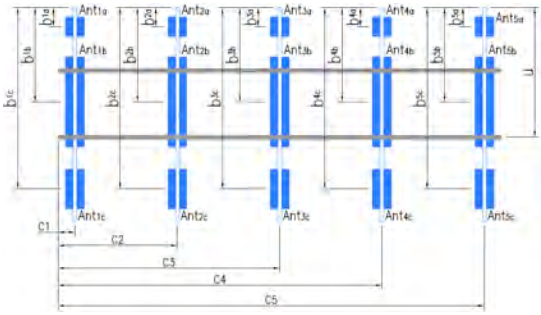
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	P2.88x0.21", 96" Long	29.00	4.00	C1	P2.88x0.21", 96" Long	29.00	4.00
A2	P2.88x0.21", 96" Long	29.00	52.00	C2	P2.88x0.21", 96" Long	29.00	52.00
A3	P2.88x0.21", 96" Long	29.00	100.00	C3	P2.88x0.21", 96" Long	29.00	100.00
A4	P2.88x0.21", 96" Long	29.00	148.00	C4	P2.88x0.21", 96" Long	29.00	148.00
A5				C5			
A6				C6			
B1	P2.88x0.21", 96" Long	29.00	4.00	D1			
B2	P2.88x0.21", 96" Long	29.00	52.00	D2			
B3	P2.88x0.21", 96" Long	29.00	100.00	D3			
B4	P2.88x0.21", 96" Long	29.00	148.00	D4			
B5				D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	20.25
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	

Please enter additional infomation or comments below.

Tower Face Width at Mount Elev. (ft.):	7.5	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	2.42



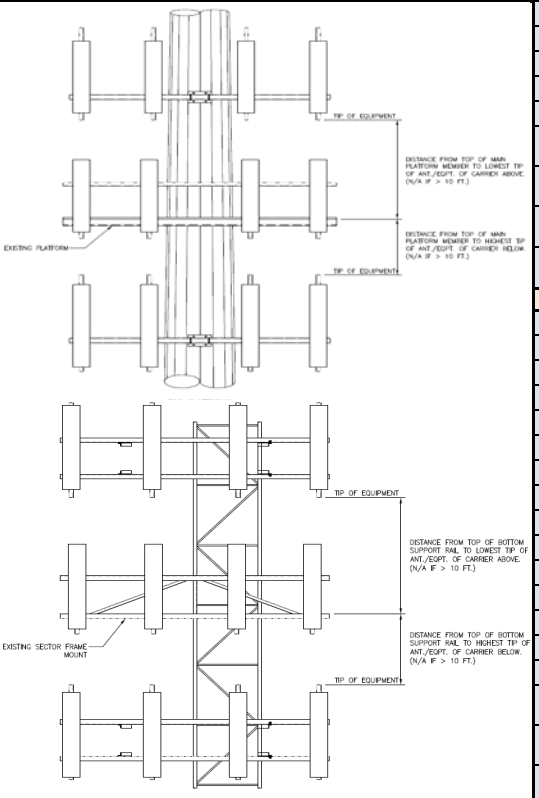


Antenna Layout (Looking Out From Tower)

Ants. Items	Enter antenna model. If not labeled, enter "Unknown". Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Mounting Locations [Units are inches and degrees] Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photos of antennas Photo Numbers
Sector A										
Ant_{1a}	No Label	10.00	8.00	41.00		87.7292	36.00	7.00	30.00	98
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	Samsung RFV01U-D2A	15.00	8.00	15.00		86.8958	46.00	-8.00	30.00	106
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	Commscope JAHH-65	14.00	8.00	72.00		88.1458	31.00	12.00	30.00	101
Ant_{3b}	Commscope JAHH-65	14.00	8.00	72.00		88.1458	31.00	12.00	30.00	101
Ant_{3c}	Samsung RFV01U-D2A	15.00	8.00	15.00		86.8958	46.00	-8.00	30.00	102
Ant_{4a}	No Label	10.00	8.00	41.00		87.7292	36.00	7.00	30.00	108
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Mount Azimuth (Degree) for Each Sector			Tower Leg Azimuth (Degree) for Each Sector		
Sector A:	30.00	Deg	Leg A:		Deg
Sector B:	150.00	Deg	Leg B:		Deg
Sector C:	270.00	Deg	Leg C:		Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information		
Location:	A Deg	Sector A
Climbing Facility	Corrosion Type:	Good condition.
	Access:	Climbing path was unobstructed.
	Condition:	Good condition.



Sector B										
Ant_{1a}	No Label	10.00	8.00	41.00		87.7292	36.00	7.00	150.00	110
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	Samsung RFV01U-D2A	15.00	8.00	15.00		86.8958	46.00	-8.00	150.00	59
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	Commscope JAHH-65	14.00	8.00	72.00		88.1458	31.00	12.00	150.00	63
Ant_{3b}	Commscope JAHH-65	14.00	8.00	72.00		88.1458	31.00	12.00	150.00	63
Ant_{3c}	Samsung RFV01U-D2A	15.00	8.00	15.00		86.8958	46.00	-8.00	150.00	111
Ant_{4a}	No Label	10.00	8.00	41.00		87.7292	36.00	7.00	150.00	112
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}	Amphenol LPA-80063	14.00	12.00	71.00		87.8125	35.00	16.00	270.00	114
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	Samsung RFV01U-D2A	15.00	8.00	15.00		86.8958	46.00	-8.00	270.00	86
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	Commscope JAHH-65	14.00	8.00	72.00		88.1458	31.00	12.00	270.00	89
Ant_{3b}	Commscope JAHH-65	14.00	8.00	72.00		88.1458	31.00	12.00	270.00	89
Ant_{3c}	Samsung RFV01U-D2A	15.00	8.00	15.00		86.8958	46.00	-8.00	270.00	87
Ant_{4a}	Amphenol LPA-80063	14.00	12.00	71.00		87.8125	35.00	16.00	270.00	117
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #

V3.0 Updated on 8-31-2020

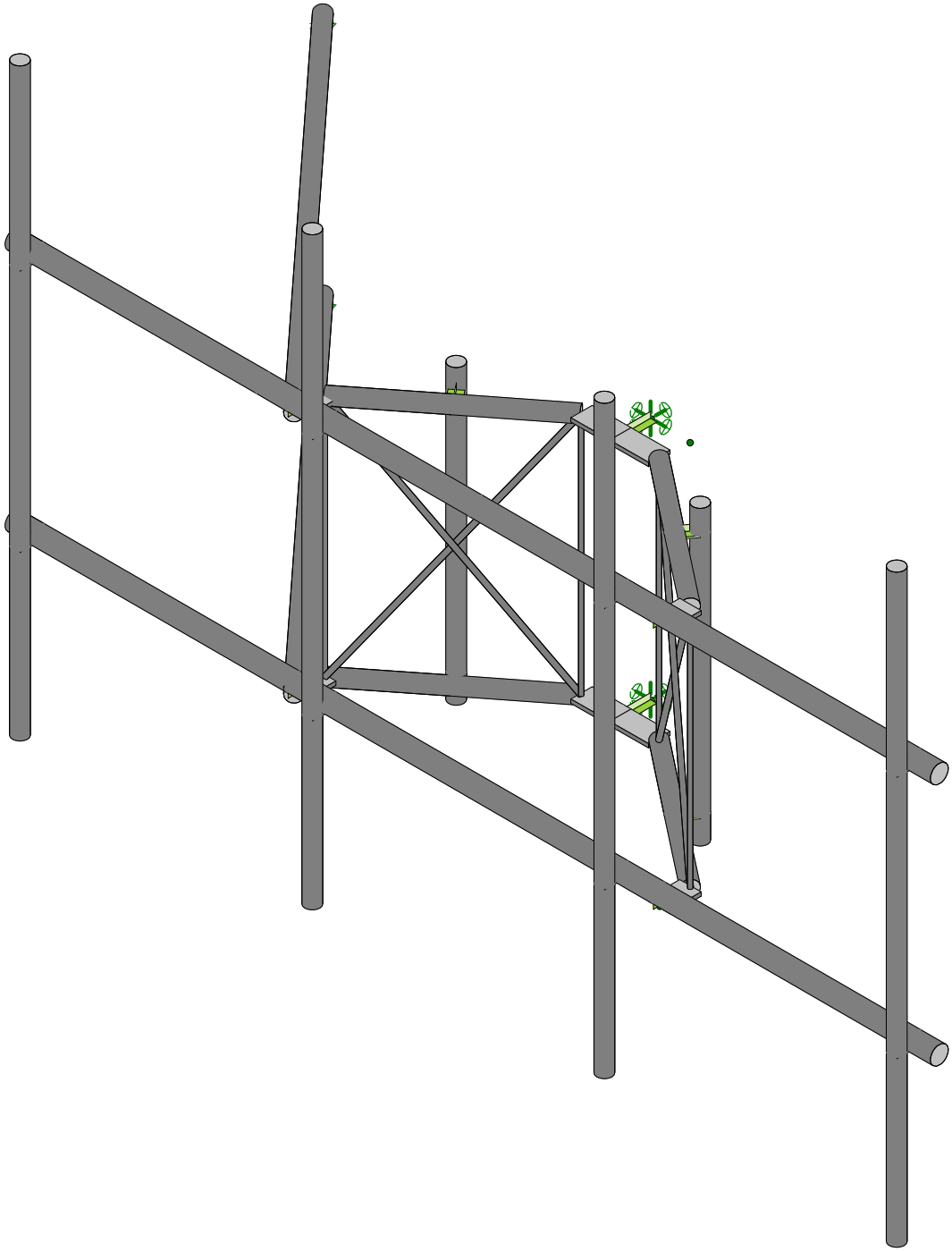
Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	SBA	**Mapping Date:**	2/20/2021
Site Name:	N BRANFORD CT	**Tower Type:**	Self Support
Site Number or ID:	467144	**Tower Height (Ft.):**	94
Mapping Contractor:	Level-Up Towers	**Mount Elevation (Ft.):**	90

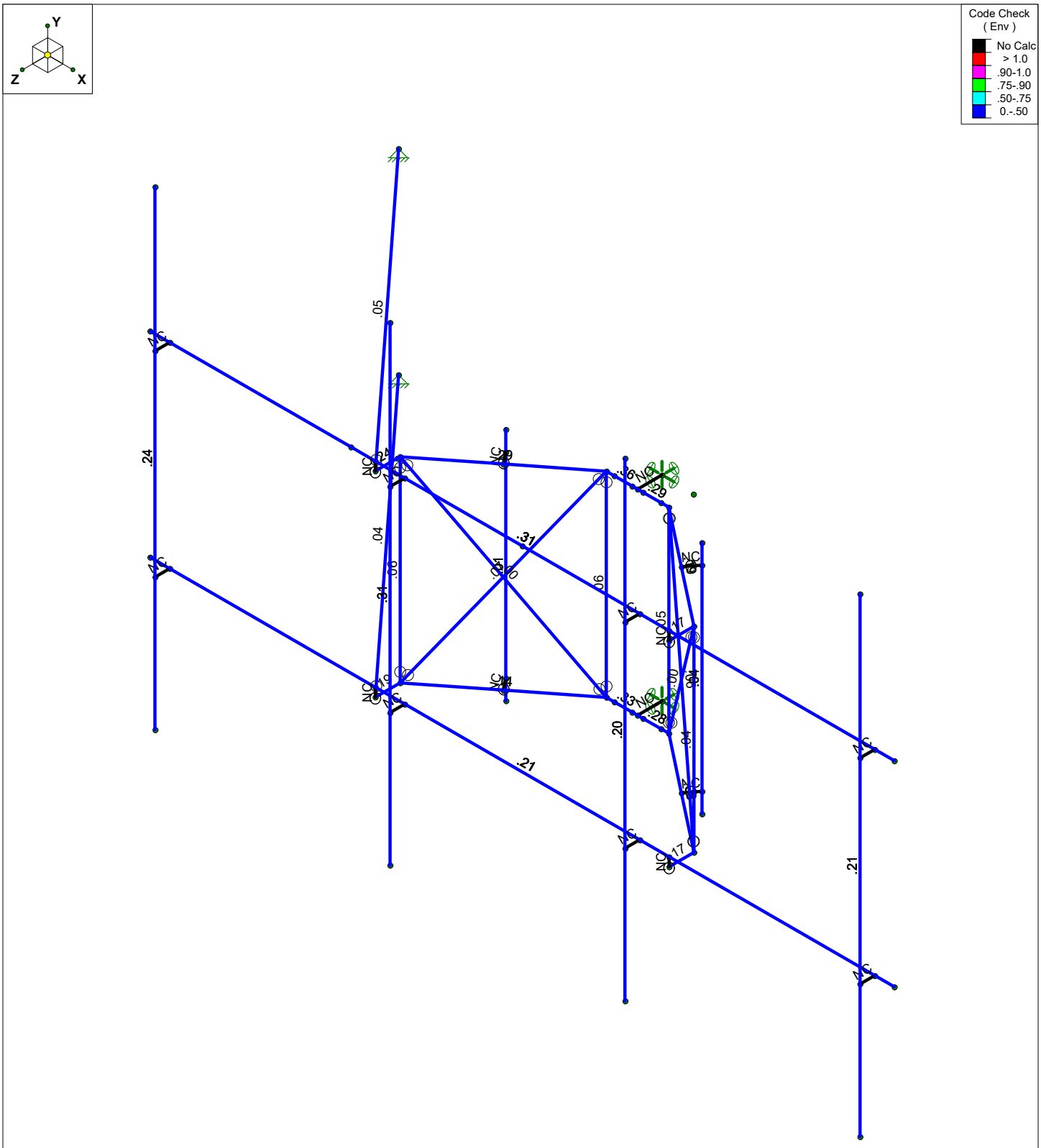
Please Insert Sketches of the Antenna Mount

Please Insert Sketches of the Antenna Mount, cont'd



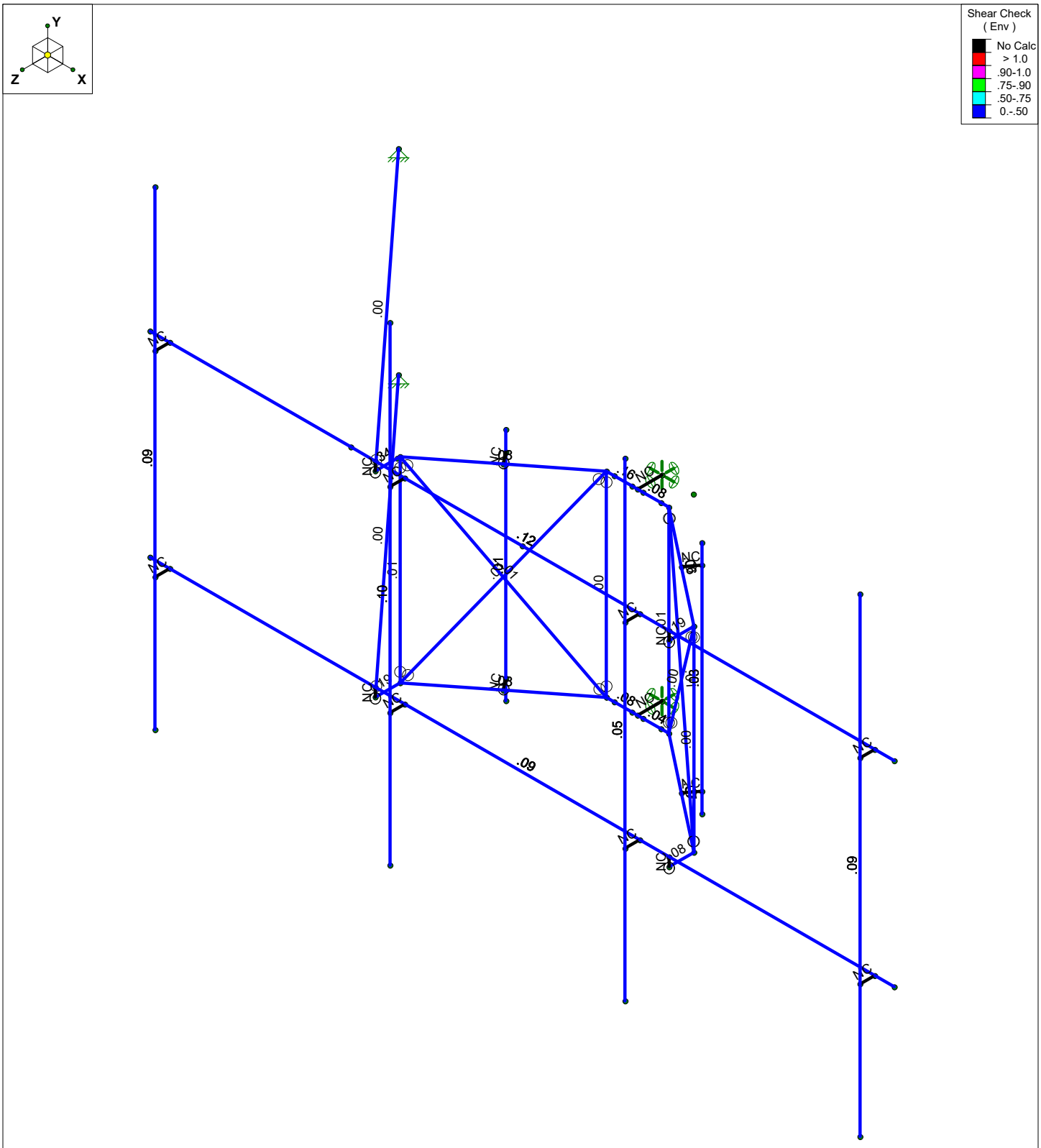
Envelope Only Solution

		SK - 1
		Mar 30, 2021 at 4:17 PM
		468991-VZW_MT_LOT_C_H.r3d



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 2
		Mar 30, 2021 at 4:18 PM
		468991-VZW_MT_LOT_C_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 3
		Mar 30, 2021 at 4:18 PM
		468991-VZW_MT_LOT_C_H.r3d

Basic Load Cases

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

Basic Load Cases (Continued)

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

Load Combinations

	Description	Sol...	PD...	SR...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...
1	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										

Load Combinations (Continued)

	Description	Sol..	PD..	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..
29	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																
52	Seismic Mass		Y		1	1	39	1																
53	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX		SY	1	SZ	-1										
54	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	-.866										
55	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	-.5										
56	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	1	SY	1	SZ											
57	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	.5										
58	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	.866										
59	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX		SY	1	SZ	1										
60	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	.866										
61	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	.5										
62	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	-1	SY	1	SZ											
63	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	-.5										
64	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	-.866										

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	3.5	0.145833	8.083333	0	
2	N2	-9.166667	0.145833	8.083333	0	
3	N3	3.5	3.479167	8.083333	0	
4	N4	-9.166667	3.479167	8.083333	0	
5	N21	-5.333333	0	8.083333	0	
6	N22	-5.333333	3.333333	8.083333	0	
7	N23	-0.333333	0	8.083333	0	
8	N24	-0.333333	3.333333	8.083333	0	
9	N25	-5.333333	0	7.661458	0	
10	N26	-5.333333	3.333333	7.661458	0	
11	N27	-0.333333	0	7.661458	0	
12	N28	-0.333333	3.333333	7.661458	0	
13	N29	-2.833333	0	6.119792	0	
14	N30	-2.833333	3.333333	6.119792	0	
15	N31	-3.364583	0	6.119792	0	
16	N32	-3.364583	3.333333	6.119792	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
17	N33	-2.302083	0	6.119792	0	
18	N34	-2.302083	3.333333	6.119792	0	
19	N35	-2.833333	0	5.703125	0	
20	N36	-2.833333	3.333333	5.703125	0	
21	N37	-5.75	3.479167	8.083333	0	
22	N58	-5.333333	3.333333	7.708333	0	
23	N76	-2.927083	0	6.119792	0	
24	N77	-3.229167	0	6.119792	0	
25	N78	-2.739583	0	6.119792	0	
26	N79	-2.4375	0	6.119792	0	
27	N80	-2.927083	3.333333	6.119792	0	
28	N81	-3.229167	3.333333	6.119792	0	
29	N82	-2.739583	3.333333	6.119792	0	
30	N83	-2.4375	3.333333	6.119792	0	
31	N58A	-2.833333	3.479167	8.083333	0	
32	N59	-5.333333	0.145833	8.083333	0	
33	N60	-5.333333	3.479167	8.083333	0	
34	N61	-0.333333	0.145833	8.083333	0	
35	N62	-0.333333	3.479167	8.083333	0	
36	N39	-8.833333	0.145833	8.083333	0	
37	N40	-8.833333	3.479167	8.083333	0	
38	N41	3.166667	0.145833	8.083333	0	
39	N42	3.166667	3.479167	8.083333	0	
40	N43	-0.833333	0.145833	8.083333	0	
41	N44	-0.833333	3.479167	8.083333	0	
42	N45	-4.833333	0.145833	8.083333	0	
43	N46	-4.833333	3.479167	8.083333	0	
44	N47	-8.833333	0.145833	8.333333	0	
45	N48	-8.833333	3.479167	8.333333	0	
46	N49	3.166667	0.145833	8.333333	0	
47	N50	3.166667	3.479167	8.333333	0	
48	N51	-0.833333	0.145833	8.333333	0	
49	N52	-0.833333	3.479167	8.333333	0	
50	N53	-4.833333	0.145833	8.333333	0	
51	N54	-4.833333	3.479167	8.333333	0	
52	N55	-8.833333	5.895833	8.333333	0	
53	N56	3.166667	5.895833	8.333333	0	
54	N57	-0.833333	5.895833	8.333333	0	
55	N58B	-4.833333	5.895833	8.333333	0	
56	N59A	-8.833333	-2.104167	8.333333	0	
57	N60A	3.166667	-2.104167	8.333333	0	
58	N61A	-0.833333	-2.104167	8.333333	0	
59	N62A	-4.833333	-2.104167	8.333333	0	
60	N63	-4.348958	3.333333	6.890625	0	
61	N64	-4.348958	0	6.890625	0	
62	N65	-1.317708	0	6.890625	0	
63	N66	-1.317708	3.333333	6.890625	0	
64	N67	-4.502058	3.333333	6.692983	0	
65	N68	-4.502058	0	6.692983	0	
66	N69	-1.164608	0	6.692983	0	
67	N70	-1.164608	3.333333	6.692983	0	
68	N71	-4.502058	3.666667	6.692983	0	
69	N72	-1.164608	3.666667	6.692983	0	
70	N73	-4.502058	-0.333333	6.692983	0	
71	N74	-1.164608	-0.333333	6.692983	0	
72	CP	-5.618746	0	2.383599	0	
73	N79A	-9.886247	0	3.136075	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
74	N80A	-9.886247	3.333333	3.136075	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Column	Wide Flange	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Horizontal mount pipe	PIPE_2.5	Beam	Pipe	Q235	Typical	1.61	1.45	1.45	2.89
3	Standoff Horizontal	PIPE_2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
4	Standoff Diagonal	SR_0.75	Beam	BAR	Q235	Typical	.442	.016	.016	.031
5	Tieback	PIPE_2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
6	Standoff Vertical	SR_0.625	Column	Wide Flange	Q235	Typical	.307	.007	.007	.015
7	Standoff Plate	PL5/8X3.5	Beam	BAR	Q235	Typical	2.188	.071	2.233	.253

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N1			Horizontal mou...	Beam	Pipe	Q235	Typical
2	M2	N4	N3			Horizontal mou...	Beam	Pipe	Q235	Typical
3	M13	N22	N26		90	Standoff Plate	Beam	BAR	Q235	Typical
4	M14	N21	N25		90	Standoff Plate	Beam	BAR	Q235	Typical
5	M15	N23	N27		90	Standoff Plate	Beam	BAR	Q235	Typical
6	M16	N24	N28		90	Standoff Plate	Beam	BAR	Q235	Typical
7	M17	N26	N32			Standoff Horiz...	Beam	Pipe	Q235	Typical
8	M18	N25	N31			Standoff Horiz...	Beam	Pipe	Q235	Typical
9	M19	N27	N33			Standoff Horiz...	Beam	Pipe	Q235	Typical
10	M20	N28	N34			Standoff Horiz...	Beam	Pipe	Q235	Typical
11	M21	N32	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
12	M22	N34	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
13	M23	N31	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
14	M24	N33	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
15	M25	N31	N26			Standoff Diago...	Beam	BAR	Q235	Typical
16	M26	N32	N25			Standoff Diago...	Beam	BAR	Q235	Typical
17	M27	N33	N28			Standoff Diago...	Beam	BAR	Q235	Typical
18	M28	N27	N34			Standoff Diago...	Beam	BAR	Q235	Typical
19	M29	N29	N35			RIGID	None	None	RIGID	Typical
20	M30	N30	N36			RIGID	None	None	RIGID	Typical
21	M31	N22	N80A			Tieback	Beam	Pipe	Q235	Typical
22	M32	N21	N79A			Tieback	Beam	Pipe	Q235	Typical
23	M44	N25	N26			Standoff Vertical	Column	Wide Flange	Q235	Typical
24	M45	N31	N32			Standoff Vertical	Column	Wide Flange	Q235	Typical
25	M46	N33	N34			Standoff Vertical	Column	Wide Flange	Q235	Typical
26	M47	N27	N28			Standoff Vertical	Column	Wide Flange	Q235	Typical
27	M47B	N22	N60			RIGID	None	None	RIGID	Typical
28	M48A	N21	N59			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
29	M49A	N24	N62			RIGID	None	None	RIGID	Typical
30	M50A	N23	N61			RIGID	None	None	RIGID	Typical
31	M51A	N30	N36			RIGID	None	None	RIGID	Typical
32	M52A	N29	N35			RIGID	None	None	RIGID	Typical
33	M33	N41	N49			RIGID	None	None	RIGID	Typical
34	M34	N43	N51			RIGID	None	None	RIGID	Typical
35	M35	N45	N53			RIGID	None	None	RIGID	Typical
36	M36	N39	N47			RIGID	None	None	RIGID	Typical
37	M37	N40	N48			RIGID	None	None	RIGID	Typical
38	M38	N46	N54			RIGID	None	None	RIGID	Typical
39	M39	N44	N52			RIGID	None	None	RIGID	Typical
40	M40	N42	N50			RIGID	None	None	RIGID	Typical
41	MP1A	N56	N60A			Antenna Pipe	Column	Wide Flange	A53 Gr. B	Typical
42	MP2A	N57	N61A			Antenna Pipe	Column	Wide Flange	A53 Gr. B	Typical
43	MP3A	N58B	N62A			Antenna Pipe	Column	Wide Flange	A53 Gr. B	Typical
44	MP4A	N55	N59A			Antenna Pipe	Column	Wide Flange	A53 Gr. B	Typical
45	M45A	N64	N68			RIGID	None	None	RIGID	Typical
46	M46A	N63	N67			RIGID	None	None	RIGID	Typical
47	M47A	N70	N66			RIGID	None	None	RIGID	Typical
48	M48	N69	N65			RIGID	None	None	RIGID	Typical
49	M49	N71	N73			Antenna Pipe	Column	Wide Flange	A53 Gr. B	Typical
50	M50	N72	N74			Antenna Pipe	Column	Wide Flange	A53 Gr. B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes				None
3	M13						Yes	Default			None
4	M14						Yes	Default			None
5	M15						Yes				None
6	M16						Yes				None
7	M17						Yes	Default			None
8	M18						Yes				None
9	M19						Yes				None
10	M20						Yes	Default			None
11	M21						Yes	Default			None
12	M22						Yes				None
13	M23						Yes				None
14	M24						Yes				None
15	M25	BenPIN	BenPIN			Euler Buc...	Yes	Default			None
16	M26	BenPIN	BenPIN			Euler Buc...	Yes	Default			None
17	M27	BenPIN	BenPIN			Euler Buc...	Yes				None
18	M28	BenPIN	BenPIN			Euler Buc...	Yes				None
19	M29						Yes	** NA **		Inactive	None
20	M30						Yes	** NA **		Inactive	None
21	M31	BenPIN					Yes	Default			None
22	M32	BenPIN					Yes	Default			None
23	M44	BenPIN	BenPIN				Yes	** NA **			None
24	M45	BenPIN	BenPIN				Yes	** NA **			None
25	M46	BenPIN	BenPIN				Yes	** NA **			None
26	M47	BenPIN	BenPIN				Yes	** NA **			None
27	M47B		OOOXOO				Yes	** NA **			None
28	M48A		OOOXOO				Yes	** NA **			None
29	M49A		OOOXOO				Yes	** NA **			None
30	M50A		OOOXOO				Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
31	M51A						Yes	** NA **			None
32	M52A						Yes	** NA **			None
33	M33						Yes	** NA **			None
34	M34						Yes	** NA **			None
35	M35						Yes	** NA **			None
36	M36						Yes	** NA **			None
37	M37						Yes	** NA **			None
38	M38						Yes	** NA **			None
39	M39						Yes	** NA **			None
40	M40						Yes	** NA **			None
41	MP1A						Yes	** NA **			None
42	MP2A						Yes	** NA **			None
43	MP3A						Yes	** NA **			None
44	MP4A						Yes	** NA **			None
45	M45A		OOOXOO				Yes	** NA **			None
46	M46A		OOOXOO				Yes	** NA **			None
47	M47A	OOOXOX					Yes	** NA **			None
48	M48	OOOXOX					Yes	** NA **			None
49	M49						Yes	** NA **			None
50	M50						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-43.55	2
2	MP2A	My	-.022	2
3	MP2A	Mz	0	2
4	MP2A	Y	-43.55	4
5	MP2A	My	-.022	4
6	MP2A	Mz	0	4
7	MP1A	Y	-13.5	.5
8	MP1A	My	-.007	.5
9	MP1A	Mz	0	.5
10	MP1A	Y	-13.5	5
11	MP1A	My	-.007	5
12	MP1A	Mz	0	5
13	MP4A	Y	-13.5	.5
14	MP4A	My	-.007	.5
15	MP4A	Mz	0	.5
16	MP4A	Y	-13.5	5
17	MP4A	My	-.007	5
18	MP4A	Mz	0	5
19	MP3A	Y	-31.65	1.5
20	MP3A	My	-.016	1.5
21	MP3A	Mz	-.016	1.5
22	MP3A	Y	-31.65	5
23	MP3A	My	-.016	5
24	MP3A	Mz	-.016	5
25	MP3A	Y	-31.65	1.5
26	MP3A	My	-.016	1.5
27	MP3A	Mz	.016	1.5
28	MP3A	Y	-31.65	5
29	MP3A	My	-.016	5
30	MP3A	Mz	.016	5
31	M49	Y	-10.4	2
32	M49	My	0	2

Member Point Loads (BLC 1 : Antenna D) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	M49	Mz	0	2
34	M50	Y	-32	1
35	M50	My	0	1
36	M50	Mz	0	1
37	MP3A	Y	-84.4	4
38	MP3A	My	.042	4
39	MP3A	Mz	0	4
40	MP2A	Y	-70.3	4
41	MP2A	My	.035	4
42	MP2A	Mz	0	4

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-33.913	2
2	MP2A	My	-.017	2
3	MP2A	Mz	0	2
4	MP2A	Y	-33.913	4
5	MP2A	My	-.017	4
6	MP2A	Mz	0	4
7	MP1A	Y	-85.397	.5
8	MP1A	My	-.043	.5
9	MP1A	Mz	0	.5
10	MP1A	Y	-85.397	5
11	MP1A	My	-.043	5
12	MP1A	Mz	0	5
13	MP4A	Y	-85.397	.5
14	MP4A	My	-.043	.5
15	MP4A	Mz	0	.5
16	MP4A	Y	-85.397	5
17	MP4A	My	-.043	5
18	MP4A	Mz	0	5
19	MP3A	Y	-66.664	1.5
20	MP3A	My	-.033	1.5
21	MP3A	Mz	-.033	1.5
22	MP3A	Y	-66.664	5
23	MP3A	My	-.033	5
24	MP3A	Mz	-.033	5
25	MP3A	Y	-66.664	1.5
26	MP3A	My	-.033	1.5
27	MP3A	Mz	.033	1.5
28	MP3A	Y	-66.664	5
29	MP3A	My	-.033	5
30	MP3A	Mz	.033	5
31	M49	Y	-10.16	2
32	M49	My	0	2
33	M49	Mz	0	2
34	M50	Y	-60.643	1
35	M50	My	0	1
36	M50	Mz	0	1
37	MP3A	Y	-42.726	4
38	MP3A	My	.021	4
39	MP3A	Mz	0	4
40	MP2A	Y	-38.41	4
41	MP2A	My	.019	4
42	MP2A	Mz	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	-89.567	2
3	MP2A	Mx	0	2
4	MP2A	X	0	4
5	MP2A	Z	-89.567	4
6	MP2A	Mx	0	4
7	MP1A	X	0	.5
8	MP1A	Z	-185.994	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	5
11	MP1A	Z	-185.994	5
12	MP1A	Mx	0	5
13	MP4A	X	0	.5
14	MP4A	Z	-185.994	.5
15	MP4A	Mx	0	.5
16	MP4A	X	0	5
17	MP4A	Z	-185.994	5
18	MP4A	Mx	0	5
19	MP3A	X	0	1.5
20	MP3A	Z	-173.607	1.5
21	MP3A	Mx	.087	1.5
22	MP3A	X	0	5
23	MP3A	Z	-173.607	5
24	MP3A	Mx	.087	5
25	MP3A	X	0	1.5
26	MP3A	Z	-173.607	1.5
27	MP3A	Mx	-.087	1.5
28	MP3A	X	0	5
29	MP3A	Z	-173.607	5
30	MP3A	Mx	-.087	5
31	M49	X	0	2
32	M49	Z	-9.888	2
33	M49	Mx	0	2
34	M50	X	0	1
35	M50	Z	-76.433	1
36	M50	Mx	0	1
37	MP3A	X	0	4
38	MP3A	Z	-71.272	4
39	MP3A	Mx	0	4
40	MP2A	X	0	4
41	MP2A	Z	-71.272	4
42	MP2A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	37.971	2
2	MP2A	Z	-65.767	2
3	MP2A	Mx	-.019	2
4	MP2A	X	37.971	4
5	MP2A	Z	-65.767	4
6	MP2A	Mx	-.019	4
7	MP1A	X	90.242	.5
8	MP1A	Z	-156.303	.5
9	MP1A	Mx	-.045	.5
10	MP1A	X	90.242	5
11	MP1A	Z	-156.303	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP1A	Mx	-.045	5
13	MP4A	X	90.242	.5
14	MP4A	Z	-156.303	.5
15	MP4A	Mx	-.045	.5
16	MP4A	X	90.242	5
17	MP4A	Z	-156.303	5
18	MP4A	Mx	-.045	5
19	MP3A	X	79.355	1.5
20	MP3A	Z	-137.448	1.5
21	MP3A	Mx	.029	1.5
22	MP3A	X	79.355	5
23	MP3A	Z	-137.448	5
24	MP3A	Mx	.029	5
25	MP3A	X	79.355	1.5
26	MP3A	Z	-137.448	1.5
27	MP3A	Mx	-.108	1.5
28	MP3A	X	79.355	5
29	MP3A	Z	-137.448	5
30	MP3A	Mx	-.108	5
31	M49	X	5.776	2
32	M49	Z	-10.005	2
33	M49	Mx	0	2
34	M50	X	45.777	1
35	M50	Z	-79.288	1
36	M50	Mx	0	1
37	MP3A	X	32.682	4
38	MP3A	Z	-56.607	4
39	MP3A	Mx	.016	4
40	MP2A	X	31.551	4
41	MP2A	Z	-54.648	4
42	MP2A	Mx	.016	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	42.167	2
2	MP2A	Z	-24.345	2
3	MP2A	Mx	-.021	2
4	MP2A	X	42.167	4
5	MP2A	Z	-24.345	4
6	MP2A	Mx	-.021	4
7	MP1A	X	146.758	.5
8	MP1A	Z	-84.731	.5
9	MP1A	Mx	-.073	.5
10	MP1A	X	146.758	5
11	MP1A	Z	-84.731	5
12	MP1A	Mx	-.073	5
13	MP4A	X	146.758	.5
14	MP4A	Z	-84.731	.5
15	MP4A	Mx	-.073	.5
16	MP4A	X	146.758	5
17	MP4A	Z	-84.731	5
18	MP4A	Mx	-.073	5
19	MP3A	X	111.647	1.5
20	MP3A	Z	-64.459	1.5
21	MP3A	Mx	-.024	1.5
22	MP3A	X	111.647	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP3A	Z	-64.459	5
24	MP3A	Mx	-.024	5
25	MP3A	X	111.647	1.5
26	MP3A	Z	-64.459	1.5
27	MP3A	Mx	-.088	1.5
28	MP3A	X	111.647	5
29	MP3A	Z	-64.459	5
30	MP3A	Mx	-.088	5
31	M49	X	11.773	2
32	M49	Z	-6.797	2
33	M49	Mx	0	2
34	M50	X	95.352	1
35	M50	Z	-55.052	1
36	M50	Mx	0	1
37	MP3A	X	46.375	4
38	MP3A	Z	-26.775	4
39	MP3A	Mx	.023	4
40	MP2A	X	40.496	4
41	MP2A	Z	-23.38	4
42	MP2A	Mx	.02	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	35.065	2
2	MP2A	Z	0	2
3	MP2A	Mx	-.018	2
4	MP2A	X	35.065	4
5	MP2A	Z	0	4
6	MP2A	Mx	-.018	4
7	MP1A	X	163.951	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	-.082	.5
10	MP1A	X	163.951	5
11	MP1A	Z	0	5
12	MP1A	Mx	-.082	5
13	MP4A	X	163.951	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	-.082	.5
16	MP4A	X	163.951	5
17	MP4A	Z	0	5
18	MP4A	Mx	-.082	5
19	MP3A	X	114.023	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	-.057	1.5
22	MP3A	X	114.023	5
23	MP3A	Z	0	5
24	MP3A	Mx	-.057	5
25	MP3A	X	114.023	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	-.057	1.5
28	MP3A	X	114.023	5
29	MP3A	Z	0	5
30	MP3A	Mx	-.057	5
31	M49	X	13.971	2
32	M49	Z	0	2
33	M49	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	M50	X	113.531	1
35	M50	Z	0	1
36	M50	Mx	0	1
37	MP3A	X	47.642	4
38	MP3A	Z	0	4
39	MP3A	Mx	.024	4
40	MP2A	X	38.59	4
41	MP2A	Z	0	4
42	MP2A	Mx	.019	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	42.167	2
2	MP2A	Z	24.345	2
3	MP2A	Mx	-.021	2
4	MP2A	X	42.167	4
5	MP2A	Z	24.345	4
6	MP2A	Mx	-.021	4
7	MP1A	X	146.758	.5
8	MP1A	Z	84.731	.5
9	MP1A	Mx	-.073	.5
10	MP1A	X	146.758	5
11	MP1A	Z	84.731	5
12	MP1A	Mx	-.073	5
13	MP4A	X	146.758	.5
14	MP4A	Z	84.731	.5
15	MP4A	Mx	-.073	.5
16	MP4A	X	146.758	5
17	MP4A	Z	84.731	5
18	MP4A	Mx	-.073	5
19	MP3A	X	111.647	1.5
20	MP3A	Z	64.459	1.5
21	MP3A	Mx	-.088	1.5
22	MP3A	X	111.647	5
23	MP3A	Z	64.459	5
24	MP3A	Mx	-.088	5
25	MP3A	X	111.647	1.5
26	MP3A	Z	64.459	1.5
27	MP3A	Mx	-.024	1.5
28	MP3A	X	111.647	5
29	MP3A	Z	64.459	5
30	MP3A	Mx	-.024	5
31	M49	X	10.658	2
32	M49	Z	6.153	2
33	M49	Mx	0	2
34	M50	X	85.225	1
35	M50	Z	49.205	1
36	M50	Mx	0	1
37	MP3A	X	46.375	4
38	MP3A	Z	26.775	4
39	MP3A	Mx	.023	4
40	MP2A	X	40.496	4
41	MP2A	Z	23.38	4
42	MP2A	Mx	.02	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	37.971	2
2	MP2A	Z	65.767	2
3	MP2A	Mx	-.019	2
4	MP2A	X	37.971	4
5	MP2A	Z	65.767	4
6	MP2A	Mx	-.019	4
7	MP1A	X	90.242	.5
8	MP1A	Z	156.303	.5
9	MP1A	Mx	-.045	.5
10	MP1A	X	90.242	5
11	MP1A	Z	156.303	5
12	MP1A	Mx	-.045	5
13	MP4A	X	90.242	.5
14	MP4A	Z	156.303	.5
15	MP4A	Mx	-.045	.5
16	MP4A	X	90.242	5
17	MP4A	Z	156.303	5
18	MP4A	Mx	-.045	5
19	MP3A	X	79.355	1.5
20	MP3A	Z	137.448	1.5
21	MP3A	Mx	-.108	1.5
22	MP3A	X	79.355	5
23	MP3A	Z	137.448	5
24	MP3A	Mx	-.108	5
25	MP3A	X	79.355	1.5
26	MP3A	Z	137.448	1.5
27	MP3A	Mx	.029	1.5
28	MP3A	X	79.355	5
29	MP3A	Z	137.448	5
30	MP3A	Mx	.029	5
31	M49	X	5.133	2
32	M49	Z	8.89	2
33	M49	Mx	0	2
34	M50	X	39.93	1
35	M50	Z	69.161	1
36	M50	Mx	0	1
37	MP3A	X	32.682	4
38	MP3A	Z	56.607	4
39	MP3A	Mx	.016	4
40	MP2A	X	31.551	4
41	MP2A	Z	54.648	4
42	MP2A	Mx	.016	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	89.567	2
3	MP2A	Mx	0	2
4	MP2A	X	0	4
5	MP2A	Z	89.567	4
6	MP2A	Mx	0	4
7	MP1A	X	0	.5
8	MP1A	Z	185.994	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	5
11	MP1A	Z	185.994	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP1A	Mx	0	5
13	MP4A	X	0	.5
14	MP4A	Z	185.994	.5
15	MP4A	Mx	0	.5
16	MP4A	X	0	5
17	MP4A	Z	185.994	5
18	MP4A	Mx	0	5
19	MP3A	X	0	1.5
20	MP3A	Z	173.607	1.5
21	MP3A	Mx	-.087	1.5
22	MP3A	X	0	5
23	MP3A	Z	173.607	5
24	MP3A	Mx	-.087	5
25	MP3A	X	0	1.5
26	MP3A	Z	173.607	1.5
27	MP3A	Mx	.087	1.5
28	MP3A	X	0	5
29	MP3A	Z	173.607	5
30	MP3A	Mx	.087	5
31	M49	X	0	2
32	M49	Z	9.888	2
33	M49	Mx	0	2
34	M50	X	0	1
35	M50	Z	76.433	1
36	M50	Mx	0	1
37	MP3A	X	0	4
38	MP3A	Z	71.272	4
39	MP3A	Mx	0	4
40	MP2A	X	0	4
41	MP2A	Z	71.272	4
42	MP2A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-37.971	2
2	MP2A	Z	65.767	2
3	MP2A	Mx	.019	2
4	MP2A	X	-37.971	4
5	MP2A	Z	65.767	4
6	MP2A	Mx	.019	4
7	MP1A	X	-90.242	.5
8	MP1A	Z	156.303	.5
9	MP1A	Mx	.045	.5
10	MP1A	X	-90.242	5
11	MP1A	Z	156.303	5
12	MP1A	Mx	.045	5
13	MP4A	X	-90.242	.5
14	MP4A	Z	156.303	.5
15	MP4A	Mx	.045	.5
16	MP4A	X	-90.242	5
17	MP4A	Z	156.303	5
18	MP4A	Mx	.045	5
19	MP3A	X	-79.355	1.5
20	MP3A	Z	137.448	1.5
21	MP3A	Mx	-.029	1.5
22	MP3A	X	-79.355	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP3A	Z	137.448	5
24	MP3A	Mx	-.029	5
25	MP3A	X	-79.355	1.5
26	MP3A	Z	137.448	1.5
27	MP3A	Mx	.108	1.5
28	MP3A	X	-79.355	5
29	MP3A	Z	137.448	5
30	MP3A	Mx	.108	5
31	M49	X	-5.776	2
32	M49	Z	10.005	2
33	M49	Mx	0	2
34	M50	X	-45.777	1
35	M50	Z	79.288	1
36	M50	Mx	0	1
37	MP3A	X	-32.682	4
38	MP3A	Z	56.607	4
39	MP3A	Mx	-.016	4
40	MP2A	X	-31.551	4
41	MP2A	Z	54.648	4
42	MP2A	Mx	-.016	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-42.167	2
2	MP2A	Z	24.345	2
3	MP2A	Mx	.021	2
4	MP2A	X	-42.167	4
5	MP2A	Z	24.345	4
6	MP2A	Mx	.021	4
7	MP1A	X	-146.758	.5
8	MP1A	Z	84.731	.5
9	MP1A	Mx	.073	.5
10	MP1A	X	-146.758	5
11	MP1A	Z	84.731	5
12	MP1A	Mx	.073	5
13	MP4A	X	-146.758	.5
14	MP4A	Z	84.731	.5
15	MP4A	Mx	.073	.5
16	MP4A	X	-146.758	5
17	MP4A	Z	84.731	5
18	MP4A	Mx	.073	5
19	MP3A	X	-111.647	1.5
20	MP3A	Z	64.459	1.5
21	MP3A	Mx	.024	1.5
22	MP3A	X	-111.647	5
23	MP3A	Z	64.459	5
24	MP3A	Mx	.024	5
25	MP3A	X	-111.647	1.5
26	MP3A	Z	64.459	1.5
27	MP3A	Mx	.088	1.5
28	MP3A	X	-111.647	5
29	MP3A	Z	64.459	5
30	MP3A	Mx	.088	5
31	M49	X	-11.773	2
32	M49	Z	6.797	2
33	M49	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	M50	X	-95.352	1
35	M50	Z	55.052	1
36	M50	Mx	0	1
37	MP3A	X	-46.375	4
38	MP3A	Z	26.775	4
39	MP3A	Mx	-.023	4
40	MP2A	X	-40.496	4
41	MP2A	Z	23.38	4
42	MP2A	Mx	-.02	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-35.065	2
2	MP2A	Z	0	2
3	MP2A	Mx	.018	2
4	MP2A	X	-35.065	4
5	MP2A	Z	0	4
6	MP2A	Mx	.018	4
7	MP1A	X	-163.951	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	.082	.5
10	MP1A	X	-163.951	5
11	MP1A	Z	0	5
12	MP1A	Mx	.082	5
13	MP4A	X	-163.951	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	.082	.5
16	MP4A	X	-163.951	5
17	MP4A	Z	0	5
18	MP4A	Mx	.082	5
19	MP3A	X	-114.023	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	.057	1.5
22	MP3A	X	-114.023	5
23	MP3A	Z	0	5
24	MP3A	Mx	.057	5
25	MP3A	X	-114.023	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	.057	1.5
28	MP3A	X	-114.023	5
29	MP3A	Z	0	5
30	MP3A	Mx	.057	5
31	M49	X	-13.971	2
32	M49	Z	0	2
33	M49	Mx	0	2
34	M50	X	-113.531	1
35	M50	Z	0	1
36	M50	Mx	0	1
37	MP3A	X	-47.642	4
38	MP3A	Z	0	4
39	MP3A	Mx	-.024	4
40	MP2A	X	-38.59	4
41	MP2A	Z	0	4
42	MP2A	Mx	-.019	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-42.167	2
2	MP2A	Z	-24.345	2
3	MP2A	Mx	.021	2
4	MP2A	X	-42.167	4
5	MP2A	Z	-24.345	4
6	MP2A	Mx	.021	4
7	MP1A	X	-146.758	.5
8	MP1A	Z	-84.731	.5
9	MP1A	Mx	.073	.5
10	MP1A	X	-146.758	5
11	MP1A	Z	-84.731	5
12	MP1A	Mx	.073	5
13	MP4A	X	-146.758	.5
14	MP4A	Z	-84.731	.5
15	MP4A	Mx	.073	.5
16	MP4A	X	-146.758	5
17	MP4A	Z	-84.731	5
18	MP4A	Mx	.073	5
19	MP3A	X	-111.647	1.5
20	MP3A	Z	-64.459	1.5
21	MP3A	Mx	.088	1.5
22	MP3A	X	-111.647	5
23	MP3A	Z	-64.459	5
24	MP3A	Mx	.088	5
25	MP3A	X	-111.647	1.5
26	MP3A	Z	-64.459	1.5
27	MP3A	Mx	.024	1.5
28	MP3A	X	-111.647	5
29	MP3A	Z	-64.459	5
30	MP3A	Mx	.024	5
31	M49	X	-10.658	2
32	M49	Z	-6.153	2
33	M49	Mx	0	2
34	M50	X	-85.225	1
35	M50	Z	-49.205	1
36	M50	Mx	0	1
37	MP3A	X	-46.375	4
38	MP3A	Z	-26.775	4
39	MP3A	Mx	-.023	4
40	MP2A	X	-40.496	4
41	MP2A	Z	-23.38	4
42	MP2A	Mx	-.02	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-37.971	2
2	MP2A	Z	-65.767	2
3	MP2A	Mx	.019	2
4	MP2A	X	-37.971	4
5	MP2A	Z	-65.767	4
6	MP2A	Mx	.019	4
7	MP1A	X	-90.242	.5
8	MP1A	Z	-156.303	.5
9	MP1A	Mx	.045	.5
10	MP1A	X	-90.242	5
11	MP1A	Z	-156.303	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP1A	Mx	.045	5
13	MP4A	X	-90.242	.5
14	MP4A	Z	-156.303	.5
15	MP4A	Mx	.045	.5
16	MP4A	X	-90.242	5
17	MP4A	Z	-156.303	5
18	MP4A	Mx	.045	5
19	MP3A	X	-79.355	1.5
20	MP3A	Z	-137.448	1.5
21	MP3A	Mx	.108	1.5
22	MP3A	X	-79.355	5
23	MP3A	Z	-137.448	5
24	MP3A	Mx	.108	5
25	MP3A	X	-79.355	1.5
26	MP3A	Z	-137.448	1.5
27	MP3A	Mx	-.029	1.5
28	MP3A	X	-79.355	5
29	MP3A	Z	-137.448	5
30	MP3A	Mx	-.029	5
31	M49	X	-5.133	2
32	M49	Z	-8.89	2
33	M49	Mx	0	2
34	M50	X	-39.93	1
35	M50	Z	-69.161	1
36	M50	Mx	0	1
37	MP3A	X	-32.682	4
38	MP3A	Z	-56.607	4
39	MP3A	Mx	-.016	4
40	MP2A	X	-31.551	4
41	MP2A	Z	-54.648	4
42	MP2A	Mx	-.016	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	-17.477	2
3	MP2A	Mx	0	2
4	MP2A	X	0	4
5	MP2A	Z	-17.477	4
6	MP2A	Mx	0	4
7	MP1A	X	0	.5
8	MP1A	Z	-34.999	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	5
11	MP1A	Z	-34.999	5
12	MP1A	Mx	0	5
13	MP4A	X	0	.5
14	MP4A	Z	-34.999	.5
15	MP4A	Mx	0	.5
16	MP4A	X	0	5
17	MP4A	Z	-34.999	5
18	MP4A	Mx	0	5
19	MP3A	X	0	1.5
20	MP3A	Z	-32.899	1.5
21	MP3A	Mx	.016	1.5
22	MP3A	X	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP3A	Z	-32.899	5
24	MP3A	Mx	.016	5
25	MP3A	X	0	1.5
26	MP3A	Z	-32.899	1.5
27	MP3A	Mx	-.016	1.5
28	MP3A	X	0	5
29	MP3A	Z	-32.899	5
30	MP3A	Mx	-.016	5
31	M49	X	0	2
32	M49	Z	-2.673	2
33	M49	Mx	0	2
34	M50	X	0	1
35	M50	Z	-15.804	1
36	M50	Mx	0	1
37	MP3A	X	0	4
38	MP3A	Z	-14.695	4
39	MP3A	Mx	0	4
40	MP2A	X	0	4
41	MP2A	Z	-14.695	4
42	MP2A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.481	2
2	MP2A	Z	-12.958	2
3	MP2A	Mx	-.004	2
4	MP2A	X	7.481	4
5	MP2A	Z	-12.958	4
6	MP2A	Mx	-.004	4
7	MP1A	X	17.018	.5
8	MP1A	Z	-29.476	.5
9	MP1A	Mx	-.009	.5
10	MP1A	X	17.018	5
11	MP1A	Z	-29.476	5
12	MP1A	Mx	-.009	5
13	MP4A	X	17.018	.5
14	MP4A	Z	-29.476	.5
15	MP4A	Mx	-.009	.5
16	MP4A	X	17.018	5
17	MP4A	Z	-29.476	5
18	MP4A	Mx	-.009	5
19	MP3A	X	15.138	1.5
20	MP3A	Z	-26.22	1.5
21	MP3A	Mx	.006	1.5
22	MP3A	X	15.138	5
23	MP3A	Z	-26.22	5
24	MP3A	Mx	.006	5
25	MP3A	X	15.138	1.5
26	MP3A	Z	-26.22	1.5
27	MP3A	Mx	-.021	1.5
28	MP3A	X	15.138	5
29	MP3A	Z	-26.22	5
30	MP3A	Mx	-.021	5
31	M49	X	1.507	2
32	M49	Z	-2.61	2
33	M49	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	M50	X	9.287	1
35	M50	Z	-16.085	1
36	M50	Mx	0	1
37	MP3A	X	6.786	4
38	MP3A	Z	-11.754	4
39	MP3A	Mx	.003	4
40	MP2A	X	6.573	4
41	MP2A	Z	-11.384	4
42	MP2A	Mx	.003	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	8.602	2
2	MP2A	Z	-4.966	2
3	MP2A	Mx	-.004	2
4	MP2A	X	8.602	4
5	MP2A	Z	-4.966	4
6	MP2A	Mx	-.004	4
7	MP1A	X	27.809	.5
8	MP1A	Z	-16.056	.5
9	MP1A	Mx	-.014	.5
10	MP1A	X	27.809	5
11	MP1A	Z	-16.056	5
12	MP1A	Mx	-.014	5
13	MP4A	X	27.809	.5
14	MP4A	Z	-16.056	.5
15	MP4A	Mx	-.014	.5
16	MP4A	X	27.809	5
17	MP4A	Z	-16.056	5
18	MP4A	Mx	-.014	5
19	MP3A	X	21.676	1.5
20	MP3A	Z	-12.515	1.5
21	MP3A	Mx	-.005	1.5
22	MP3A	X	21.676	5
23	MP3A	Z	-12.515	5
24	MP3A	Mx	-.005	5
25	MP3A	X	21.676	1.5
26	MP3A	Z	-12.515	1.5
27	MP3A	Mx	-.017	1.5
28	MP3A	X	21.676	5
29	MP3A	Z	-12.515	5
30	MP3A	Mx	-.017	5
31	M49	X	2.973	2
32	M49	Z	-1.716	2
33	M49	Mx	0	2
34	M50	X	19.028	1
35	M50	Z	-10.986	1
36	M50	Mx	0	1
37	MP3A	X	9.809	4
38	MP3A	Z	-5.663	4
39	MP3A	Mx	.005	4
40	MP2A	X	8.701	4
41	MP2A	Z	-5.023	4
42	MP2A	Mx	.004	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.417	2
2	MP2A	Z	0	2
3	MP2A	Mx	-.004	2
4	MP2A	X	7.417	4
5	MP2A	Z	0	4
6	MP2A	Mx	-.004	4
7	MP1A	X	31.149	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	-.016	.5
10	MP1A	X	31.149	5
11	MP1A	Z	0	5
12	MP1A	Mx	-.016	5
13	MP4A	X	31.149	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	-.016	.5
16	MP4A	X	31.149	5
17	MP4A	Z	0	5
18	MP4A	Mx	-.016	5
19	MP3A	X	22.407	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	-.011	1.5
22	MP3A	X	22.407	5
23	MP3A	Z	0	5
24	MP3A	Mx	-.011	5
25	MP3A	X	22.407	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	-.011	1.5
28	MP3A	X	22.407	5
29	MP3A	Z	0	5
30	MP3A	Mx	-.011	5
31	M49	X	3.51	2
32	M49	Z	0	2
33	M49	Mx	0	2
34	M50	X	22.6	1
35	M50	Z	0	1
36	M50	Mx	0	1
37	MP3A	X	10.204	4
38	MP3A	Z	0	4
39	MP3A	Mx	.005	4
40	MP2A	X	8.498	4
41	MP2A	Z	0	4
42	MP2A	Mx	.004	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	8.602	2
2	MP2A	Z	4.966	2
3	MP2A	Mx	-.004	2
4	MP2A	X	8.602	4
5	MP2A	Z	4.966	4
6	MP2A	Mx	-.004	4
7	MP1A	X	27.809	.5
8	MP1A	Z	16.056	.5
9	MP1A	Mx	-.014	.5
10	MP1A	X	27.809	5
11	MP1A	Z	16.056	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP1A	Mx	-.014	5
13	MP4A	X	27.809	.5
14	MP4A	Z	16.056	.5
15	MP4A	Mx	-.014	.5
16	MP4A	X	27.809	5
17	MP4A	Z	16.056	5
18	MP4A	Mx	-.014	5
19	MP3A	X	21.676	1.5
20	MP3A	Z	12.515	1.5
21	MP3A	Mx	-.017	1.5
22	MP3A	X	21.676	5
23	MP3A	Z	12.515	5
24	MP3A	Mx	-.017	5
25	MP3A	X	21.676	1.5
26	MP3A	Z	12.515	1.5
27	MP3A	Mx	-.005	1.5
28	MP3A	X	21.676	5
29	MP3A	Z	12.515	5
30	MP3A	Mx	-.005	5
31	M49	X	2.744	2
32	M49	Z	1.584	2
33	M49	Mx	0	2
34	M50	X	17.173	1
35	M50	Z	9.915	1
36	M50	Mx	0	1
37	MP3A	X	9.809	4
38	MP3A	Z	5.663	4
39	MP3A	Mx	.005	4
40	MP2A	X	8.701	4
41	MP2A	Z	5.023	4
42	MP2A	Mx	.004	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.481	2
2	MP2A	Z	12.958	2
3	MP2A	Mx	-.004	2
4	MP2A	X	7.481	4
5	MP2A	Z	12.958	4
6	MP2A	Mx	-.004	4
7	MP1A	X	17.018	.5
8	MP1A	Z	29.476	.5
9	MP1A	Mx	-.009	.5
10	MP1A	X	17.018	5
11	MP1A	Z	29.476	5
12	MP1A	Mx	-.009	5
13	MP4A	X	17.018	.5
14	MP4A	Z	29.476	.5
15	MP4A	Mx	-.009	.5
16	MP4A	X	17.018	5
17	MP4A	Z	29.476	5
18	MP4A	Mx	-.009	5
19	MP3A	X	15.138	1.5
20	MP3A	Z	26.22	1.5
21	MP3A	Mx	-.021	1.5
22	MP3A	X	15.138	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP3A	Z	26.22	5
24	MP3A	Mx	-.021	5
25	MP3A	X	15.138	1.5
26	MP3A	Z	26.22	1.5
27	MP3A	Mx	.006	1.5
28	MP3A	X	15.138	5
29	MP3A	Z	26.22	5
30	MP3A	Mx	.006	5
31	M49	X	1.375	2
32	M49	Z	2.382	2
33	M49	Mx	0	2
34	M50	X	8.216	1
35	M50	Z	14.23	1
36	M50	Mx	0	1
37	MP3A	X	6.786	4
38	MP3A	Z	11.754	4
39	MP3A	Mx	.003	4
40	MP2A	X	6.573	4
41	MP2A	Z	11.384	4
42	MP2A	Mx	.003	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	17.477	2
3	MP2A	Mx	0	2
4	MP2A	X	0	4
5	MP2A	Z	17.477	4
6	MP2A	Mx	0	4
7	MP1A	X	0	.5
8	MP1A	Z	34.999	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	5
11	MP1A	Z	34.999	5
12	MP1A	Mx	0	5
13	MP4A	X	0	.5
14	MP4A	Z	34.999	.5
15	MP4A	Mx	0	.5
16	MP4A	X	0	5
17	MP4A	Z	34.999	5
18	MP4A	Mx	0	5
19	MP3A	X	0	1.5
20	MP3A	Z	32.899	1.5
21	MP3A	Mx	-.016	1.5
22	MP3A	X	0	5
23	MP3A	Z	32.899	5
24	MP3A	Mx	-.016	5
25	MP3A	X	0	1.5
26	MP3A	Z	32.899	1.5
27	MP3A	Mx	.016	1.5
28	MP3A	X	0	5
29	MP3A	Z	32.899	5
30	MP3A	Mx	.016	5
31	M49	X	0	2
32	M49	Z	2.673	2
33	M49	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	M50	X	0	1
35	M50	Z	15.804	1
36	M50	Mx	0	1
37	MP3A	X	0	4
38	MP3A	Z	14.695	4
39	MP3A	Mx	0	4
40	MP2A	X	0	4
41	MP2A	Z	14.695	4
42	MP2A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.481	2
2	MP2A	Z	12.958	2
3	MP2A	Mx	.004	2
4	MP2A	X	-7.481	4
5	MP2A	Z	12.958	4
6	MP2A	Mx	.004	4
7	MP1A	X	-17.018	.5
8	MP1A	Z	29.476	.5
9	MP1A	Mx	.009	.5
10	MP1A	X	-17.018	5
11	MP1A	Z	29.476	5
12	MP1A	Mx	.009	5
13	MP4A	X	-17.018	.5
14	MP4A	Z	29.476	.5
15	MP4A	Mx	.009	.5
16	MP4A	X	-17.018	5
17	MP4A	Z	29.476	5
18	MP4A	Mx	.009	5
19	MP3A	X	-15.138	1.5
20	MP3A	Z	26.22	1.5
21	MP3A	Mx	-.006	1.5
22	MP3A	X	-15.138	5
23	MP3A	Z	26.22	5
24	MP3A	Mx	-.006	5
25	MP3A	X	-15.138	1.5
26	MP3A	Z	26.22	1.5
27	MP3A	Mx	.021	1.5
28	MP3A	X	-15.138	5
29	MP3A	Z	26.22	5
30	MP3A	Mx	.021	5
31	M49	X	-1.507	2
32	M49	Z	2.61	2
33	M49	Mx	0	2
34	M50	X	-9.287	1
35	M50	Z	16.085	1
36	M50	Mx	0	1
37	MP3A	X	-6.786	4
38	MP3A	Z	11.754	4
39	MP3A	Mx	-.003	4
40	MP2A	X	-6.573	4
41	MP2A	Z	11.384	4
42	MP2A	Mx	-.003	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-8.602	2
2	MP2A	Z	4.966	2
3	MP2A	Mx	.004	2
4	MP2A	X	-8.602	4
5	MP2A	Z	4.966	4
6	MP2A	Mx	.004	4
7	MP1A	X	-27.809	.5
8	MP1A	Z	16.056	.5
9	MP1A	Mx	.014	.5
10	MP1A	X	-27.809	5
11	MP1A	Z	16.056	5
12	MP1A	Mx	.014	5
13	MP4A	X	-27.809	.5
14	MP4A	Z	16.056	.5
15	MP4A	Mx	.014	.5
16	MP4A	X	-27.809	5
17	MP4A	Z	16.056	5
18	MP4A	Mx	.014	5
19	MP3A	X	-21.676	1.5
20	MP3A	Z	12.515	1.5
21	MP3A	Mx	.005	1.5
22	MP3A	X	-21.676	5
23	MP3A	Z	12.515	5
24	MP3A	Mx	.005	5
25	MP3A	X	-21.676	1.5
26	MP3A	Z	12.515	1.5
27	MP3A	Mx	.017	1.5
28	MP3A	X	-21.676	5
29	MP3A	Z	12.515	5
30	MP3A	Mx	.017	5
31	M49	X	-2.973	2
32	M49	Z	1.716	2
33	M49	Mx	0	2
34	M50	X	-19.028	1
35	M50	Z	10.986	1
36	M50	Mx	0	1
37	MP3A	X	-9.809	4
38	MP3A	Z	5.663	4
39	MP3A	Mx	-.005	4
40	MP2A	X	-8.701	4
41	MP2A	Z	5.023	4
42	MP2A	Mx	-.004	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.417	2
2	MP2A	Z	0	2
3	MP2A	Mx	.004	2
4	MP2A	X	-7.417	4
5	MP2A	Z	0	4
6	MP2A	Mx	.004	4
7	MP1A	X	-31.149	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	.016	.5
10	MP1A	X	-31.149	5
11	MP1A	Z	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP1A	Mx	.016	5
13	MP4A	X	-31.149	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	.016	.5
16	MP4A	X	-31.149	5
17	MP4A	Z	0	5
18	MP4A	Mx	.016	5
19	MP3A	X	-22.407	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	.011	1.5
22	MP3A	X	-22.407	5
23	MP3A	Z	0	5
24	MP3A	Mx	.011	5
25	MP3A	X	-22.407	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	.011	1.5
28	MP3A	X	-22.407	5
29	MP3A	Z	0	5
30	MP3A	Mx	.011	5
31	M49	X	-3.51	2
32	M49	Z	0	2
33	M49	Mx	0	2
34	M50	X	-22.6	1
35	M50	Z	0	1
36	M50	Mx	0	1
37	MP3A	X	-10.204	4
38	MP3A	Z	0	4
39	MP3A	Mx	-.005	4
40	MP2A	X	-8.498	4
41	MP2A	Z	0	4
42	MP2A	Mx	-.004	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-8.602	2
2	MP2A	Z	-4.966	2
3	MP2A	Mx	.004	2
4	MP2A	X	-8.602	4
5	MP2A	Z	-4.966	4
6	MP2A	Mx	.004	4
7	MP1A	X	-27.809	.5
8	MP1A	Z	-16.056	.5
9	MP1A	Mx	.014	.5
10	MP1A	X	-27.809	5
11	MP1A	Z	-16.056	5
12	MP1A	Mx	.014	5
13	MP4A	X	-27.809	.5
14	MP4A	Z	-16.056	.5
15	MP4A	Mx	.014	.5
16	MP4A	X	-27.809	5
17	MP4A	Z	-16.056	5
18	MP4A	Mx	.014	5
19	MP3A	X	-21.676	1.5
20	MP3A	Z	-12.515	1.5
21	MP3A	Mx	.017	1.5
22	MP3A	X	-21.676	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP3A	Z	-12.515	5
24	MP3A	Mx	.017	5
25	MP3A	X	-21.676	1.5
26	MP3A	Z	-12.515	1.5
27	MP3A	Mx	.005	1.5
28	MP3A	X	-21.676	5
29	MP3A	Z	-12.515	5
30	MP3A	Mx	.005	5
31	M49	X	-2.744	2
32	M49	Z	-1.584	2
33	M49	Mx	0	2
34	M50	X	-17.173	1
35	M50	Z	-9.915	1
36	M50	Mx	0	1
37	MP3A	X	-9.809	4
38	MP3A	Z	-5.663	4
39	MP3A	Mx	-.005	4
40	MP2A	X	-8.701	4
41	MP2A	Z	-5.023	4
42	MP2A	Mx	-.004	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.481	2
2	MP2A	Z	-12.958	2
3	MP2A	Mx	.004	2
4	MP2A	X	-7.481	4
5	MP2A	Z	-12.958	4
6	MP2A	Mx	.004	4
7	MP1A	X	-17.018	.5
8	MP1A	Z	-29.476	.5
9	MP1A	Mx	.009	.5
10	MP1A	X	-17.018	5
11	MP1A	Z	-29.476	5
12	MP1A	Mx	.009	5
13	MP4A	X	-17.018	.5
14	MP4A	Z	-29.476	.5
15	MP4A	Mx	.009	.5
16	MP4A	X	-17.018	5
17	MP4A	Z	-29.476	5
18	MP4A	Mx	.009	5
19	MP3A	X	-15.138	1.5
20	MP3A	Z	-26.22	1.5
21	MP3A	Mx	.021	1.5
22	MP3A	X	-15.138	5
23	MP3A	Z	-26.22	5
24	MP3A	Mx	.021	5
25	MP3A	X	-15.138	1.5
26	MP3A	Z	-26.22	1.5
27	MP3A	Mx	-.006	1.5
28	MP3A	X	-15.138	5
29	MP3A	Z	-26.22	5
30	MP3A	Mx	-.006	5
31	M49	X	-1.375	2
32	M49	Z	-2.382	2
33	M49	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	M50	X	-8.216	1
35	M50	Z	-14.23	1
36	M50	Mx	0	1
37	MP3A	X	-6.786	4
38	MP3A	Z	-11.754	4
39	MP3A	Mx	-.003	4
40	MP2A	X	-6.573	4
41	MP2A	Z	-11.384	4
42	MP2A	Mx	-.003	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	-5.598	2
3	MP2A	Mx	0	2
4	MP2A	X	0	4
5	MP2A	Z	-5.598	4
6	MP2A	Mx	0	4
7	MP1A	X	0	.5
8	MP1A	Z	-11.625	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	5
11	MP1A	Z	-11.625	5
12	MP1A	Mx	0	5
13	MP4A	X	0	.5
14	MP4A	Z	-11.625	.5
15	MP4A	Mx	0	.5
16	MP4A	X	0	5
17	MP4A	Z	-11.625	5
18	MP4A	Mx	0	5
19	MP3A	X	0	1.5
20	MP3A	Z	-10.85	1.5
21	MP3A	Mx	.005	1.5
22	MP3A	X	0	5
23	MP3A	Z	-10.85	5
24	MP3A	Mx	.005	5
25	MP3A	X	0	1.5
26	MP3A	Z	-10.85	1.5
27	MP3A	Mx	-.005	1.5
28	MP3A	X	0	5
29	MP3A	Z	-10.85	5
30	MP3A	Mx	-.005	5
31	M49	X	0	2
32	M49	Z	-.618	2
33	M49	Mx	0	2
34	M50	X	0	1
35	M50	Z	-4.777	1
36	M50	Mx	0	1
37	MP3A	X	0	4
38	MP3A	Z	-4.455	4
39	MP3A	Mx	0	4
40	MP2A	X	0	4
41	MP2A	Z	-4.455	4
42	MP2A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.373	2
2	MP2A	Z	-4.11	2
3	MP2A	Mx	-.001	2
4	MP2A	X	2.373	4
5	MP2A	Z	-4.11	4
6	MP2A	Mx	-.001	4
7	MP1A	X	5.64	.5
8	MP1A	Z	-9.769	.5
9	MP1A	Mx	-.003	.5
10	MP1A	X	5.64	5
11	MP1A	Z	-9.769	5
12	MP1A	Mx	-.003	5
13	MP4A	X	5.64	.5
14	MP4A	Z	-9.769	.5
15	MP4A	Mx	-.003	.5
16	MP4A	X	5.64	5
17	MP4A	Z	-9.769	5
18	MP4A	Mx	-.003	5
19	MP3A	X	4.96	1.5
20	MP3A	Z	-8.59	1.5
21	MP3A	Mx	.002	1.5
22	MP3A	X	4.96	5
23	MP3A	Z	-8.59	5
24	MP3A	Mx	.002	5
25	MP3A	X	4.96	1.5
26	MP3A	Z	-8.59	1.5
27	MP3A	Mx	-.007	1.5
28	MP3A	X	4.96	5
29	MP3A	Z	-8.59	5
30	MP3A	Mx	-.007	5
31	M49	X	.361	2
32	M49	Z	-.625	2
33	M49	Mx	0	2
34	M50	X	2.861	1
35	M50	Z	-4.956	1
36	M50	Mx	0	1
37	MP3A	X	2.043	4
38	MP3A	Z	-3.538	4
39	MP3A	Mx	.001	4
40	MP2A	X	1.972	4
41	MP2A	Z	-3.415	4
42	MP2A	Mx	.000986	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.635	2
2	MP2A	Z	-1.522	2
3	MP2A	Mx	-.001	2
4	MP2A	X	2.635	4
5	MP2A	Z	-1.522	4
6	MP2A	Mx	-.001	4
7	MP1A	X	9.172	.5
8	MP1A	Z	-5.296	.5
9	MP1A	Mx	-.005	.5
10	MP1A	X	9.172	5
11	MP1A	Z	-5.296	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP1A	Mx	-.005	5
13	MP4A	X	9.172	.5
14	MP4A	Z	-5.296	.5
15	MP4A	Mx	-.005	.5
16	MP4A	X	9.172	5
17	MP4A	Z	-5.296	5
18	MP4A	Mx	-.005	5
19	MP3A	X	6.978	1.5
20	MP3A	Z	-4.029	1.5
21	MP3A	Mx	-.001	1.5
22	MP3A	X	6.978	5
23	MP3A	Z	-4.029	5
24	MP3A	Mx	-.001	5
25	MP3A	X	6.978	1.5
26	MP3A	Z	-4.029	1.5
27	MP3A	Mx	-.006	1.5
28	MP3A	X	6.978	5
29	MP3A	Z	-4.029	5
30	MP3A	Mx	-.006	5
31	M49	X	.736	2
32	M49	Z	-.425	2
33	M49	Mx	0	2
34	M50	X	5.96	1
35	M50	Z	-3.441	1
36	M50	Mx	0	1
37	MP3A	X	2.898	4
38	MP3A	Z	-1.673	4
39	MP3A	Mx	.001	4
40	MP2A	X	2.531	4
41	MP2A	Z	-1.461	4
42	MP2A	Mx	.001	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.192	2
2	MP2A	Z	0	2
3	MP2A	Mx	-.001	2
4	MP2A	X	2.192	4
5	MP2A	Z	0	4
6	MP2A	Mx	-.001	4
7	MP1A	X	10.247	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	-.005	.5
10	MP1A	X	10.247	5
11	MP1A	Z	0	5
12	MP1A	Mx	-.005	5
13	MP4A	X	10.247	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	-.005	.5
16	MP4A	X	10.247	5
17	MP4A	Z	0	5
18	MP4A	Mx	-.005	5
19	MP3A	X	7.126	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	-.004	1.5
22	MP3A	X	7.126	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP3A	Z	0	5
24	MP3A	Mx	-.004	5
25	MP3A	X	7.126	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	-.004	1.5
28	MP3A	X	7.126	5
29	MP3A	Z	0	5
30	MP3A	Mx	-.004	5
31	M49	X	.873	2
32	M49	Z	0	2
33	M49	Mx	0	2
34	M50	X	7.096	1
35	M50	Z	0	1
36	M50	Mx	0	1
37	MP3A	X	2.978	4
38	MP3A	Z	0	4
39	MP3A	Mx	.001	4
40	MP2A	X	2.412	4
41	MP2A	Z	0	4
42	MP2A	Mx	.001	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.635	2
2	MP2A	Z	1.522	2
3	MP2A	Mx	-.001	2
4	MP2A	X	2.635	4
5	MP2A	Z	1.522	4
6	MP2A	Mx	-.001	4
7	MP1A	X	9.172	.5
8	MP1A	Z	5.296	.5
9	MP1A	Mx	-.005	.5
10	MP1A	X	9.172	5
11	MP1A	Z	5.296	5
12	MP1A	Mx	-.005	5
13	MP4A	X	9.172	.5
14	MP4A	Z	5.296	.5
15	MP4A	Mx	-.005	.5
16	MP4A	X	9.172	5
17	MP4A	Z	5.296	5
18	MP4A	Mx	-.005	5
19	MP3A	X	6.978	1.5
20	MP3A	Z	4.029	1.5
21	MP3A	Mx	-.006	1.5
22	MP3A	X	6.978	5
23	MP3A	Z	4.029	5
24	MP3A	Mx	-.006	5
25	MP3A	X	6.978	1.5
26	MP3A	Z	4.029	1.5
27	MP3A	Mx	-.001	1.5
28	MP3A	X	6.978	5
29	MP3A	Z	4.029	5
30	MP3A	Mx	-.001	5
31	M49	X	.666	2
32	M49	Z	.385	2
33	M49	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	M50	X	5.327	1
35	M50	Z	3.075	1
36	M50	Mx	0	1
37	MP3A	X	2.898	4
38	MP3A	Z	1.673	4
39	MP3A	Mx	.001	4
40	MP2A	X	2.531	4
41	MP2A	Z	1.461	4
42	MP2A	Mx	.001	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.373	2
2	MP2A	Z	4.11	2
3	MP2A	Mx	-.001	2
4	MP2A	X	2.373	4
5	MP2A	Z	4.11	4
6	MP2A	Mx	-.001	4
7	MP1A	X	5.64	.5
8	MP1A	Z	9.769	.5
9	MP1A	Mx	-.003	.5
10	MP1A	X	5.64	5
11	MP1A	Z	9.769	5
12	MP1A	Mx	-.003	5
13	MP4A	X	5.64	.5
14	MP4A	Z	9.769	.5
15	MP4A	Mx	-.003	.5
16	MP4A	X	5.64	5
17	MP4A	Z	9.769	5
18	MP4A	Mx	-.003	5
19	MP3A	X	4.96	1.5
20	MP3A	Z	8.59	1.5
21	MP3A	Mx	-.007	1.5
22	MP3A	X	4.96	5
23	MP3A	Z	8.59	5
24	MP3A	Mx	-.007	5
25	MP3A	X	4.96	1.5
26	MP3A	Z	8.59	1.5
27	MP3A	Mx	.002	1.5
28	MP3A	X	4.96	5
29	MP3A	Z	8.59	5
30	MP3A	Mx	.002	5
31	M49	X	.321	2
32	M49	Z	.556	2
33	M49	Mx	0	2
34	M50	X	2.496	1
35	M50	Z	4.323	1
36	M50	Mx	0	1
37	MP3A	X	2.043	4
38	MP3A	Z	3.538	4
39	MP3A	Mx	.001	4
40	MP2A	X	1.972	4
41	MP2A	Z	3.415	4
42	MP2A	Mx	.000986	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	5.598	2
3	MP2A	Mx	0	2
4	MP2A	X	0	4
5	MP2A	Z	5.598	4
6	MP2A	Mx	0	4
7	MP1A	X	0	.5
8	MP1A	Z	11.625	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	5
11	MP1A	Z	11.625	5
12	MP1A	Mx	0	5
13	MP4A	X	0	.5
14	MP4A	Z	11.625	.5
15	MP4A	Mx	0	.5
16	MP4A	X	0	5
17	MP4A	Z	11.625	5
18	MP4A	Mx	0	5
19	MP3A	X	0	1.5
20	MP3A	Z	10.85	1.5
21	MP3A	Mx	-.005	1.5
22	MP3A	X	0	5
23	MP3A	Z	10.85	5
24	MP3A	Mx	-.005	5
25	MP3A	X	0	1.5
26	MP3A	Z	10.85	1.5
27	MP3A	Mx	.005	1.5
28	MP3A	X	0	5
29	MP3A	Z	10.85	5
30	MP3A	Mx	.005	5
31	M49	X	0	2
32	M49	Z	.618	2
33	M49	Mx	0	2
34	M50	X	0	1
35	M50	Z	4.777	1
36	M50	Mx	0	1
37	MP3A	X	0	4
38	MP3A	Z	4.455	4
39	MP3A	Mx	0	4
40	MP2A	X	0	4
41	MP2A	Z	4.455	4
42	MP2A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-2.373	2
2	MP2A	Z	4.11	2
3	MP2A	Mx	.001	2
4	MP2A	X	-2.373	4
5	MP2A	Z	4.11	4
6	MP2A	Mx	.001	4
7	MP1A	X	-5.64	.5
8	MP1A	Z	9.769	.5
9	MP1A	Mx	.003	.5
10	MP1A	X	-5.64	5
11	MP1A	Z	9.769	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP1A	Mx	.003	5
13	MP4A	X	-5.64	.5
14	MP4A	Z	9.769	.5
15	MP4A	Mx	.003	.5
16	MP4A	X	-5.64	5
17	MP4A	Z	9.769	5
18	MP4A	Mx	.003	5
19	MP3A	X	-4.96	1.5
20	MP3A	Z	8.59	1.5
21	MP3A	Mx	-.002	1.5
22	MP3A	X	-4.96	5
23	MP3A	Z	8.59	5
24	MP3A	Mx	-.002	5
25	MP3A	X	-4.96	1.5
26	MP3A	Z	8.59	1.5
27	MP3A	Mx	.007	1.5
28	MP3A	X	-4.96	5
29	MP3A	Z	8.59	5
30	MP3A	Mx	.007	5
31	M49	X	-.361	2
32	M49	Z	.625	2
33	M49	Mx	0	2
34	M50	X	-2.861	1
35	M50	Z	4.956	1
36	M50	Mx	0	1
37	MP3A	X	-2.043	4
38	MP3A	Z	3.538	4
39	MP3A	Mx	-.001	4
40	MP2A	X	-1.972	4
41	MP2A	Z	3.415	4
42	MP2A	Mx	-.000986	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-2.635	2
2	MP2A	Z	1.522	2
3	MP2A	Mx	.001	2
4	MP2A	X	-2.635	4
5	MP2A	Z	1.522	4
6	MP2A	Mx	.001	4
7	MP1A	X	-9.172	.5
8	MP1A	Z	5.296	.5
9	MP1A	Mx	.005	.5
10	MP1A	X	-9.172	5
11	MP1A	Z	5.296	5
12	MP1A	Mx	.005	5
13	MP4A	X	-9.172	.5
14	MP4A	Z	5.296	.5
15	MP4A	Mx	.005	.5
16	MP4A	X	-9.172	5
17	MP4A	Z	5.296	5
18	MP4A	Mx	.005	5
19	MP3A	X	-6.978	1.5
20	MP3A	Z	4.029	1.5
21	MP3A	Mx	.001	1.5
22	MP3A	X	-6.978	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP3A	Z	4.029	5
24	MP3A	Mx	.001	5
25	MP3A	X	-6.978	1.5
26	MP3A	Z	4.029	1.5
27	MP3A	Mx	.006	1.5
28	MP3A	X	-6.978	5
29	MP3A	Z	4.029	5
30	MP3A	Mx	.006	5
31	M49	X	-.736	2
32	M49	Z	.425	2
33	M49	Mx	0	2
34	M50	X	-5.96	1
35	M50	Z	3.441	1
36	M50	Mx	0	1
37	MP3A	X	-2.898	4
38	MP3A	Z	1.673	4
39	MP3A	Mx	-.001	4
40	MP2A	X	-2.531	4
41	MP2A	Z	1.461	4
42	MP2A	Mx	-.001	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-2.192	2
2	MP2A	Z	0	2
3	MP2A	Mx	.001	2
4	MP2A	X	-2.192	4
5	MP2A	Z	0	4
6	MP2A	Mx	.001	4
7	MP1A	X	-10.247	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	.005	.5
10	MP1A	X	-10.247	5
11	MP1A	Z	0	5
12	MP1A	Mx	.005	5
13	MP4A	X	-10.247	.5
14	MP4A	Z	0	.5
15	MP4A	Mx	.005	.5
16	MP4A	X	-10.247	5
17	MP4A	Z	0	5
18	MP4A	Mx	.005	5
19	MP3A	X	-7.126	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	.004	1.5
22	MP3A	X	-7.126	5
23	MP3A	Z	0	5
24	MP3A	Mx	.004	5
25	MP3A	X	-7.126	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	.004	1.5
28	MP3A	X	-7.126	5
29	MP3A	Z	0	5
30	MP3A	Mx	.004	5
31	M49	X	-.873	2
32	M49	Z	0	2
33	M49	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	M50	X	-7.096	1
35	M50	Z	0	1
36	M50	Mx	0	1
37	MP3A	X	-2.978	4
38	MP3A	Z	0	4
39	MP3A	Mx	-.001	4
40	MP2A	X	-2.412	4
41	MP2A	Z	0	4
42	MP2A	Mx	-.001	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-2.635	2
2	MP2A	Z	-1.522	2
3	MP2A	Mx	.001	2
4	MP2A	X	-2.635	4
5	MP2A	Z	-1.522	4
6	MP2A	Mx	.001	4
7	MP1A	X	-9.172	.5
8	MP1A	Z	-5.296	.5
9	MP1A	Mx	.005	.5
10	MP1A	X	-9.172	5
11	MP1A	Z	-5.296	5
12	MP1A	Mx	.005	5
13	MP4A	X	-9.172	.5
14	MP4A	Z	-5.296	.5
15	MP4A	Mx	.005	.5
16	MP4A	X	-9.172	5
17	MP4A	Z	-5.296	5
18	MP4A	Mx	.005	5
19	MP3A	X	-6.978	1.5
20	MP3A	Z	-4.029	1.5
21	MP3A	Mx	.006	1.5
22	MP3A	X	-6.978	5
23	MP3A	Z	-4.029	5
24	MP3A	Mx	.006	5
25	MP3A	X	-6.978	1.5
26	MP3A	Z	-4.029	1.5
27	MP3A	Mx	.001	1.5
28	MP3A	X	-6.978	5
29	MP3A	Z	-4.029	5
30	MP3A	Mx	.001	5
31	M49	X	-.666	2
32	M49	Z	-.385	2
33	M49	Mx	0	2
34	M50	X	-5.327	1
35	M50	Z	-3.075	1
36	M50	Mx	0	1
37	MP3A	X	-2.898	4
38	MP3A	Z	-1.673	4
39	MP3A	Mx	-.001	4
40	MP2A	X	-2.531	4
41	MP2A	Z	-1.461	4
42	MP2A	Mx	-.001	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-2.373	2
2	MP2A	Z	-4.11	2
3	MP2A	Mx	.001	2
4	MP2A	X	-2.373	4
5	MP2A	Z	-4.11	4
6	MP2A	Mx	.001	4
7	MP1A	X	-5.64	.5
8	MP1A	Z	-9.769	.5
9	MP1A	Mx	.003	.5
10	MP1A	X	-5.64	5
11	MP1A	Z	-9.769	5
12	MP1A	Mx	.003	5
13	MP4A	X	-5.64	.5
14	MP4A	Z	-9.769	.5
15	MP4A	Mx	.003	.5
16	MP4A	X	-5.64	5
17	MP4A	Z	-9.769	5
18	MP4A	Mx	.003	5
19	MP3A	X	-4.96	1.5
20	MP3A	Z	-8.59	1.5
21	MP3A	Mx	.007	1.5
22	MP3A	X	-4.96	5
23	MP3A	Z	-8.59	5
24	MP3A	Mx	.007	5
25	MP3A	X	-4.96	1.5
26	MP3A	Z	-8.59	1.5
27	MP3A	Mx	-.002	1.5
28	MP3A	X	-4.96	5
29	MP3A	Z	-8.59	5
30	MP3A	Mx	-.002	5
31	M49	X	-.321	2
32	M49	Z	-.556	2
33	M49	Mx	0	2
34	M50	X	-2.496	1
35	M50	Z	-4.323	1
36	M50	Mx	0	1
37	MP3A	X	-2.043	4
38	MP3A	Z	-3.538	4
39	MP3A	Mx	-.001	4
40	MP2A	X	-1.972	4
41	MP2A	Z	-3.415	4
42	MP2A	Mx	-.000986	4

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%66

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%34

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	%50

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-5.369	-5.369	0	%100
2	M2	Y	-5.369	-5.369	0	%100
3	M13	Y	-6.287	-6.287	0	%100
4	M14	Y	-6.287	-6.287	0	%100
5	M15	Y	-6.287	-6.287	0	%100
6	M16	Y	-6.287	-6.287	0	%100
7	M17	Y	-4.694	-4.694	0	%100
8	M18	Y	-4.694	-4.694	0	%100
9	M19	Y	-4.694	-4.694	0	%100
10	M20	Y	-4.694	-4.694	0	%100
11	M21	Y	-6.287	-6.287	0	%100
12	M22	Y	-6.287	-6.287	0	%100
13	M23	Y	-6.287	-6.287	0	%100
14	M24	Y	-6.287	-6.287	0	%100
15	M25	Y	-2.502	-2.502	0	%100
16	M26	Y	-2.502	-2.502	0	%100
17	M27	Y	-2.502	-2.502	0	%100
18	M28	Y	-2.502	-2.502	0	%100
19	M31	Y	-4.694	-4.694	0	%100
20	M32	Y	-4.694	-4.694	0	%100
21	M44	Y	-2.333	-2.333	0	%100
22	M45	Y	-2.333	-2.333	0	%100
23	M46	Y	-2.333	-2.333	0	%100
24	M47	Y	-2.333	-2.333	0	%100
25	MP1A	Y	-4.694	-4.694	0	%100
26	MP2A	Y	-4.694	-4.694	0	%100
27	MP3A	Y	-4.694	-4.694	0	%100
28	MP4A	Y	-4.694	-4.694	0	%100
29	M49	Y	-4.694	-4.694	0	%100
30	M50	Y	-4.694	-4.694	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-10.958	-10.958	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-10.958	-10.958	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-4.326	-4.326	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-4.326	-4.326	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-4.326	-4.326	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	M20	X	0	0	0	%100
20	M20	Z	-4.326	-4.326	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-2.382	-2.382	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-2.382	-2.382	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-2.382	-2.382	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-2.382	-2.382	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-2.467	-2.467	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-2.467	-2.467	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-2.467	-2.467	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-2.467	-2.467	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-4.151	-4.151	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	-4.151	-4.151	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	-2.382	-2.382	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	-2.382	-2.382	0	%100
45	M46	X	0	0	0	%100
46	M46	Z	-2.382	-2.382	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	-2.382	-2.382	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	-9.052	-9.052	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	-9.052	-9.052	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	-9.052	-9.052	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	-9.052	-9.052	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	-8.249	-8.249	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	-8.249	-8.249	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.109	4.109	0	%100
2	M1	Z	-7.117	-7.117	0	%100
3	M2	X	4.109	4.109	0	%100
4	M2	Z	-7.117	-7.117	0	%100
5	M13	X	.298	.298	0	%100
6	M13	Z	-.516	-.516	0	%100
7	M14	X	.298	.298	0	%100
8	M14	Z	-.516	-.516	0	%100
9	M15	X	.298	.298	0	%100
10	M15	Z	-.516	-.516	0	%100
11	M16	X	.298	.298	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
12	M16	Z	-.516	-.516	0	%100
13	M17	X	.487	.487	0	%100
14	M17	Z	-.844	-.844	0	%100
15	M18	X	.487	.487	0	%100
16	M18	Z	-.844	-.844	0	%100
17	M19	X	3.421	3.421	0	%100
18	M19	Z	-5.925	-5.925	0	%100
19	M20	X	3.421	3.421	0	%100
20	M20	Z	-5.925	-5.925	0	%100
21	M21	X	.893	.893	0	%100
22	M21	Z	-1.547	-1.547	0	%100
23	M22	X	.893	.893	0	%100
24	M22	Z	-1.547	-1.547	0	%100
25	M23	X	.893	.893	0	%100
26	M23	Z	-1.547	-1.547	0	%100
27	M24	X	.893	.893	0	%100
28	M24	Z	-1.547	-1.547	0	%100
29	M25	X	.986	.986	0	%100
30	M25	Z	-1.709	-1.709	0	%100
31	M26	X	.986	.986	0	%100
32	M26	Z	-1.709	-1.709	0	%100
33	M27	X	1.419	1.419	0	%100
34	M27	Z	-2.458	-2.458	0	%100
35	M28	X	1.419	1.419	0	%100
36	M28	Z	-2.458	-2.458	0	%100
37	M31	X	4.122	4.122	0	%100
38	M31	Z	-7.14	-7.14	0	%100
39	M32	X	4.122	4.122	0	%100
40	M32	Z	-7.14	-7.14	0	%100
41	M44	X	1.191	1.191	0	%100
42	M44	Z	-2.063	-2.063	0	%100
43	M45	X	1.191	1.191	0	%100
44	M45	Z	-2.063	-2.063	0	%100
45	M46	X	1.191	1.191	0	%100
46	M46	Z	-2.063	-2.063	0	%100
47	M47	X	1.191	1.191	0	%100
48	M47	Z	-2.063	-2.063	0	%100
49	MP1A	X	4.526	4.526	0	%100
50	MP1A	Z	-7.839	-7.839	0	%100
51	MP2A	X	4.526	4.526	0	%100
52	MP2A	Z	-7.839	-7.839	0	%100
53	MP3A	X	4.526	4.526	0	%100
54	MP3A	Z	-7.839	-7.839	0	%100
55	MP4A	X	4.526	4.526	0	%100
56	MP4A	Z	-7.839	-7.839	0	%100
57	M49	X	4.125	4.125	0	%100
58	M49	Z	-7.144	-7.144	0	%100
59	M50	X	4.125	4.125	0	%100
60	M50	Z	-7.144	-7.144	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.372	2.372	0	%100
2	M1	Z	-1.37	-1.37	0	%100
3	M2	X	2.372	2.372	0	%100
4	M2	Z	-1.37	-1.37	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	M13	X	1.547	1.547	0	%100
6	M13	Z	-.893	-.893	0	%100
7	M14	X	1.547	1.547	0	%100
8	M14	Z	-.893	-.893	0	%100
9	M15	X	1.547	1.547	0	%100
10	M15	Z	-.893	-.893	0	%100
11	M16	X	1.547	1.547	0	%100
12	M16	Z	-.893	-.893	0	%100
13	M17	X	.119	.119	0	%100
14	M17	Z	-.069	-.069	0	%100
15	M18	X	.119	.119	0	%100
16	M18	Z	-.069	-.069	0	%100
17	M19	X	5.201	5.201	0	%100
18	M19	Z	-3.003	-3.003	0	%100
19	M20	X	5.201	5.201	0	%100
20	M20	Z	-3.003	-3.003	0	%100
21	M21	X	.516	.516	0	%100
22	M21	Z	-.298	-.298	0	%100
23	M22	X	.516	.516	0	%100
24	M22	Z	-.298	-.298	0	%100
25	M23	X	.516	.516	0	%100
26	M23	Z	-.298	-.298	0	%100
27	M24	X	.516	.516	0	%100
28	M24	Z	-.298	-.298	0	%100
29	M25	X	1.602	1.602	0	%100
30	M25	Z	-.925	-.925	0	%100
31	M26	X	1.602	1.602	0	%100
32	M26	Z	-.925	-.925	0	%100
33	M27	X	2.351	2.351	0	%100
34	M27	Z	-1.357	-1.357	0	%100
35	M28	X	2.351	2.351	0	%100
36	M28	Z	-1.357	-1.357	0	%100
37	M31	X	7.465	7.465	0	%100
38	M31	Z	-4.31	-4.31	0	%100
39	M32	X	7.465	7.465	0	%100
40	M32	Z	-4.31	-4.31	0	%100
41	M44	X	2.063	2.063	0	%100
42	M44	Z	-1.191	-1.191	0	%100
43	M45	X	2.063	2.063	0	%100
44	M45	Z	-1.191	-1.191	0	%100
45	M46	X	2.063	2.063	0	%100
46	M46	Z	-1.191	-1.191	0	%100
47	M47	X	2.063	2.063	0	%100
48	M47	Z	-1.191	-1.191	0	%100
49	MP1A	X	7.839	7.839	0	%100
50	MP1A	Z	-4.526	-4.526	0	%100
51	MP2A	X	7.839	7.839	0	%100
52	MP2A	Z	-4.526	-4.526	0	%100
53	MP3A	X	7.839	7.839	0	%100
54	MP3A	Z	-4.526	-4.526	0	%100
55	MP4A	X	7.839	7.839	0	%100
56	MP4A	Z	-4.526	-4.526	0	%100
57	M49	X	7.144	7.144	0	%100
58	M49	Z	-4.125	-4.125	0	%100
59	M50	X	7.144	7.144	0	%100
60	M50	Z	-4.125	-4.125	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	2.382	2.382	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	2.382	2.382	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	2.382	2.382	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	2.382	2.382	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	2.653	2.653	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	2.653	2.653	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	2.653	2.653	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	2.653	2.653	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	2.22	2.22	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	2.22	2.22	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	2.22	2.22	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	2.22	2.22	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	4.901	4.901	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	4.901	4.901	0	%100
40	M32	Z	0	0	0	%100
41	M44	X	2.382	2.382	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	2.382	2.382	0	%100
44	M45	Z	0	0	0	%100
45	M46	X	2.382	2.382	0	%100
46	M46	Z	0	0	0	%100
47	M47	X	2.382	2.382	0	%100
48	M47	Z	0	0	0	%100
49	MP1A	X	9.052	9.052	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	9.052	9.052	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	9.052	9.052	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	9.052	9.052	0	%100
56	MP4A	Z	0	0	0	%100
57	M49	X	8.249	8.249	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	M49	Z	0	0	0	%100
59	M50	X	8.249	8.249	0	%100
60	M50	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.372	2.372	0	%100
2	M1	Z	1.37	1.37	0	%100
3	M2	X	2.372	2.372	0	%100
4	M2	Z	1.37	1.37	0	%100
5	M13	X	1.547	1.547	0	%100
6	M13	Z	.893	.893	0	%100
7	M14	X	1.547	1.547	0	%100
8	M14	Z	.893	.893	0	%100
9	M15	X	1.547	1.547	0	%100
10	M15	Z	.893	.893	0	%100
11	M16	X	1.547	1.547	0	%100
12	M16	Z	.893	.893	0	%100
13	M17	X	5.201	5.201	0	%100
14	M17	Z	3.003	3.003	0	%100
15	M18	X	5.201	5.201	0	%100
16	M18	Z	3.003	3.003	0	%100
17	M19	X	.119	.119	0	%100
18	M19	Z	.069	.069	0	%100
19	M20	X	.119	.119	0	%100
20	M20	Z	.069	.069	0	%100
21	M21	X	.516	.516	0	%100
22	M21	Z	.298	.298	0	%100
23	M22	X	.516	.516	0	%100
24	M22	Z	.298	.298	0	%100
25	M23	X	.516	.516	0	%100
26	M23	Z	.298	.298	0	%100
27	M24	X	.516	.516	0	%100
28	M24	Z	.298	.298	0	%100
29	M25	X	2.351	2.351	0	%100
30	M25	Z	1.357	1.357	0	%100
31	M26	X	2.351	2.351	0	%100
32	M26	Z	1.357	1.357	0	%100
33	M27	X	1.602	1.602	0	%100
34	M27	Z	.925	.925	0	%100
35	M28	X	1.602	1.602	0	%100
36	M28	Z	.925	.925	0	%100
37	M31	X	.699	.699	0	%100
38	M31	Z	.404	.404	0	%100
39	M32	X	.699	.699	0	%100
40	M32	Z	.404	.404	0	%100
41	M44	X	2.063	2.063	0	%100
42	M44	Z	1.191	1.191	0	%100
43	M45	X	2.063	2.063	0	%100
44	M45	Z	1.191	1.191	0	%100
45	M46	X	2.063	2.063	0	%100
46	M46	Z	1.191	1.191	0	%100
47	M47	X	2.063	2.063	0	%100
48	M47	Z	1.191	1.191	0	%100
49	MP1A	X	7.839	7.839	0	%100
50	MP1A	Z	4.526	4.526	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
51	MP2A	X	7.839	7.839	0	%100
52	MP2A	Z	4.526	4.526	0	%100
53	MP3A	X	7.839	7.839	0	%100
54	MP3A	Z	4.526	4.526	0	%100
55	MP4A	X	7.839	7.839	0	%100
56	MP4A	Z	4.526	4.526	0	%100
57	M49	X	7.144	7.144	0	%100
58	M49	Z	4.125	4.125	0	%100
59	M50	X	7.144	7.144	0	%100
60	M50	Z	4.125	4.125	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.109	4.109	0	%100
2	M1	Z	7.117	7.117	0	%100
3	M2	X	4.109	4.109	0	%100
4	M2	Z	7.117	7.117	0	%100
5	M13	X	.298	.298	0	%100
6	M13	Z	.516	.516	0	%100
7	M14	X	.298	.298	0	%100
8	M14	Z	.516	.516	0	%100
9	M15	X	.298	.298	0	%100
10	M15	Z	.516	.516	0	%100
11	M16	X	.298	.298	0	%100
12	M16	Z	.516	.516	0	%100
13	M17	X	3.421	3.421	0	%100
14	M17	Z	5.925	5.925	0	%100
15	M18	X	3.421	3.421	0	%100
16	M18	Z	5.925	5.925	0	%100
17	M19	X	.487	.487	0	%100
18	M19	Z	.844	.844	0	%100
19	M20	X	.487	.487	0	%100
20	M20	Z	.844	.844	0	%100
21	M21	X	.893	.893	0	%100
22	M21	Z	1.547	1.547	0	%100
23	M22	X	.893	.893	0	%100
24	M22	Z	1.547	1.547	0	%100
25	M23	X	.893	.893	0	%100
26	M23	Z	1.547	1.547	0	%100
27	M24	X	.893	.893	0	%100
28	M24	Z	1.547	1.547	0	%100
29	M25	X	1.419	1.419	0	%100
30	M25	Z	2.458	2.458	0	%100
31	M26	X	1.419	1.419	0	%100
32	M26	Z	2.458	2.458	0	%100
33	M27	X	.986	.986	0	%100
34	M27	Z	1.709	1.709	0	%100
35	M28	X	.986	.986	0	%100
36	M28	Z	1.709	1.709	0	%100
37	M31	X	.216	.216	0	%100
38	M31	Z	.374	.374	0	%100
39	M32	X	.216	.216	0	%100
40	M32	Z	.374	.374	0	%100
41	M44	X	1.191	1.191	0	%100
42	M44	Z	2.063	2.063	0	%100
43	M45	X	1.191	1.191	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
44	M45	Z	2.063	2.063	0	%100
45	M46	X	1.191	1.191	0	%100
46	M46	Z	2.063	2.063	0	%100
47	M47	X	1.191	1.191	0	%100
48	M47	Z	2.063	2.063	0	%100
49	MP1A	X	4.526	4.526	0	%100
50	MP1A	Z	7.839	7.839	0	%100
51	MP2A	X	4.526	4.526	0	%100
52	MP2A	Z	7.839	7.839	0	%100
53	MP3A	X	4.526	4.526	0	%100
54	MP3A	Z	7.839	7.839	0	%100
55	MP4A	X	4.526	4.526	0	%100
56	MP4A	Z	7.839	7.839	0	%100
57	M49	X	4.125	4.125	0	%100
58	M49	Z	7.144	7.144	0	%100
59	M50	X	4.125	4.125	0	%100
60	M50	Z	7.144	7.144	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	10.958	10.958	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	10.958	10.958	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	4.326	4.326	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	4.326	4.326	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	4.326	4.326	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	4.326	4.326	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	2.382	2.382	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	2.382	2.382	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	2.382	2.382	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	2.382	2.382	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	2.467	2.467	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	2.467	2.467	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	2.467	2.467	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	2.467	2.467	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	M31	X	0	0	0	%100
38	M31	Z	4.151	4.151	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	4.151	4.151	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	2.382	2.382	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	2.382	2.382	0	%100
45	M46	X	0	0	0	%100
46	M46	Z	2.382	2.382	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	2.382	2.382	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	9.052	9.052	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	9.052	9.052	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	9.052	9.052	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	9.052	9.052	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	8.249	8.249	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	8.249	8.249	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.109	-4.109	0	%100
2	M1	Z	7.117	7.117	0	%100
3	M2	X	-4.109	-4.109	0	%100
4	M2	Z	7.117	7.117	0	%100
5	M13	X	-.298	-.298	0	%100
6	M13	Z	.516	.516	0	%100
7	M14	X	-.298	-.298	0	%100
8	M14	Z	.516	.516	0	%100
9	M15	X	-.298	-.298	0	%100
10	M15	Z	.516	.516	0	%100
11	M16	X	-.298	-.298	0	%100
12	M16	Z	.516	.516	0	%100
13	M17	X	-.487	-.487	0	%100
14	M17	Z	.844	.844	0	%100
15	M18	X	-.487	-.487	0	%100
16	M18	Z	.844	.844	0	%100
17	M19	X	-3.421	-3.421	0	%100
18	M19	Z	5.925	5.925	0	%100
19	M20	X	-3.421	-3.421	0	%100
20	M20	Z	5.925	5.925	0	%100
21	M21	X	-.893	-.893	0	%100
22	M21	Z	1.547	1.547	0	%100
23	M22	X	-.893	-.893	0	%100
24	M22	Z	1.547	1.547	0	%100
25	M23	X	-.893	-.893	0	%100
26	M23	Z	1.547	1.547	0	%100
27	M24	X	-.893	-.893	0	%100
28	M24	Z	1.547	1.547	0	%100
29	M25	X	-.986	-.986	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
30	M25	Z	1.709	1.709	0	%100
31	M26	X	-.986	-.986	0	%100
32	M26	Z	1.709	1.709	0	%100
33	M27	X	-1.419	-1.419	0	%100
34	M27	Z	2.458	2.458	0	%100
35	M28	X	-1.419	-1.419	0	%100
36	M28	Z	2.458	2.458	0	%100
37	M31	X	-4.122	-4.122	0	%100
38	M31	Z	7.14	7.14	0	%100
39	M32	X	-4.122	-4.122	0	%100
40	M32	Z	7.14	7.14	0	%100
41	M44	X	-1.191	-1.191	0	%100
42	M44	Z	2.063	2.063	0	%100
43	M45	X	-1.191	-1.191	0	%100
44	M45	Z	2.063	2.063	0	%100
45	M46	X	-1.191	-1.191	0	%100
46	M46	Z	2.063	2.063	0	%100
47	M47	X	-1.191	-1.191	0	%100
48	M47	Z	2.063	2.063	0	%100
49	MP1A	X	-4.526	-4.526	0	%100
50	MP1A	Z	7.839	7.839	0	%100
51	MP2A	X	-4.526	-4.526	0	%100
52	MP2A	Z	7.839	7.839	0	%100
53	MP3A	X	-4.526	-4.526	0	%100
54	MP3A	Z	7.839	7.839	0	%100
55	MP4A	X	-4.526	-4.526	0	%100
56	MP4A	Z	7.839	7.839	0	%100
57	M49	X	-4.125	-4.125	0	%100
58	M49	Z	7.144	7.144	0	%100
59	M50	X	-4.125	-4.125	0	%100
60	M50	Z	7.144	7.144	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.372	-2.372	0	%100
2	M1	Z	1.37	1.37	0	%100
3	M2	X	-2.372	-2.372	0	%100
4	M2	Z	1.37	1.37	0	%100
5	M13	X	-1.547	-1.547	0	%100
6	M13	Z	.893	.893	0	%100
7	M14	X	-1.547	-1.547	0	%100
8	M14	Z	.893	.893	0	%100
9	M15	X	-1.547	-1.547	0	%100
10	M15	Z	.893	.893	0	%100
11	M16	X	-1.547	-1.547	0	%100
12	M16	Z	.893	.893	0	%100
13	M17	X	-.119	-.119	0	%100
14	M17	Z	.069	.069	0	%100
15	M18	X	-.119	-.119	0	%100
16	M18	Z	.069	.069	0	%100
17	M19	X	-5.201	-5.201	0	%100
18	M19	Z	3.003	3.003	0	%100
19	M20	X	-5.201	-5.201	0	%100
20	M20	Z	3.003	3.003	0	%100
21	M21	X	-.516	-.516	0	%100
22	M21	Z	.298	.298	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M22	X	-.516	-.516	0	%100
24	M22	Z	.298	.298	0	%100
25	M23	X	-.516	-.516	0	%100
26	M23	Z	.298	.298	0	%100
27	M24	X	-.516	-.516	0	%100
28	M24	Z	.298	.298	0	%100
29	M25	X	-1.602	-1.602	0	%100
30	M25	Z	.925	.925	0	%100
31	M26	X	-1.602	-1.602	0	%100
32	M26	Z	.925	.925	0	%100
33	M27	X	-2.351	-2.351	0	%100
34	M27	Z	1.357	1.357	0	%100
35	M28	X	-2.351	-2.351	0	%100
36	M28	Z	1.357	1.357	0	%100
37	M31	X	-7.465	-7.465	0	%100
38	M31	Z	4.31	4.31	0	%100
39	M32	X	-7.465	-7.465	0	%100
40	M32	Z	4.31	4.31	0	%100
41	M44	X	-2.063	-2.063	0	%100
42	M44	Z	1.191	1.191	0	%100
43	M45	X	-2.063	-2.063	0	%100
44	M45	Z	1.191	1.191	0	%100
45	M46	X	-2.063	-2.063	0	%100
46	M46	Z	1.191	1.191	0	%100
47	M47	X	-2.063	-2.063	0	%100
48	M47	Z	1.191	1.191	0	%100
49	MP1A	X	-7.839	-7.839	0	%100
50	MP1A	Z	4.526	4.526	0	%100
51	MP2A	X	-7.839	-7.839	0	%100
52	MP2A	Z	4.526	4.526	0	%100
53	MP3A	X	-7.839	-7.839	0	%100
54	MP3A	Z	4.526	4.526	0	%100
55	MP4A	X	-7.839	-7.839	0	%100
56	MP4A	Z	4.526	4.526	0	%100
57	M49	X	-7.144	-7.144	0	%100
58	M49	Z	4.125	4.125	0	%100
59	M50	X	-7.144	-7.144	0	%100
60	M50	Z	4.125	4.125	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-2.382	-2.382	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-2.382	-2.382	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-2.382	-2.382	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-2.382	-2.382	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-2.653	-2.653	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-2.653	-2.653	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M18	Z	0	0	0	%100
17	M19	X	-2.653	-2.653	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-2.653	-2.653	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-2.22	-2.22	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-2.22	-2.22	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-2.22	-2.22	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-2.22	-2.22	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	-4.901	-4.901	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	-4.901	-4.901	0	%100
40	M32	Z	0	0	0	%100
41	M44	X	-2.382	-2.382	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	-2.382	-2.382	0	%100
44	M45	Z	0	0	0	%100
45	M46	X	-2.382	-2.382	0	%100
46	M46	Z	0	0	0	%100
47	M47	X	-2.382	-2.382	0	%100
48	M47	Z	0	0	0	%100
49	MP1A	X	-9.052	-9.052	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	-9.052	-9.052	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	-9.052	-9.052	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	-9.052	-9.052	0	%100
56	MP4A	Z	0	0	0	%100
57	M49	X	-8.249	-8.249	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	-8.249	-8.249	0	%100
60	M50	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.372	-2.372	0	%100
2	M1	Z	-1.37	-1.37	0	%100
3	M2	X	-2.372	-2.372	0	%100
4	M2	Z	-1.37	-1.37	0	%100
5	M13	X	-1.547	-1.547	0	%100
6	M13	Z	-.893	-.893	0	%100
7	M14	X	-1.547	-1.547	0	%100
8	M14	Z	-.893	-.893	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
9	M15	X	-1.547	-1.547	0	%100
10	M15	Z	-.893	-.893	0	%100
11	M16	X	-1.547	-1.547	0	%100
12	M16	Z	-.893	-.893	0	%100
13	M17	X	-5.201	-5.201	0	%100
14	M17	Z	-3.003	-3.003	0	%100
15	M18	X	-5.201	-5.201	0	%100
16	M18	Z	-3.003	-3.003	0	%100
17	M19	X	-.119	-.119	0	%100
18	M19	Z	-.069	-.069	0	%100
19	M20	X	-.119	-.119	0	%100
20	M20	Z	-.069	-.069	0	%100
21	M21	X	-.516	-.516	0	%100
22	M21	Z	-.298	-.298	0	%100
23	M22	X	-.516	-.516	0	%100
24	M22	Z	-.298	-.298	0	%100
25	M23	X	-.516	-.516	0	%100
26	M23	Z	-.298	-.298	0	%100
27	M24	X	-.516	-.516	0	%100
28	M24	Z	-.298	-.298	0	%100
29	M25	X	-2.351	-2.351	0	%100
30	M25	Z	-1.357	-1.357	0	%100
31	M26	X	-2.351	-2.351	0	%100
32	M26	Z	-1.357	-1.357	0	%100
33	M27	X	-1.602	-1.602	0	%100
34	M27	Z	-.925	-.925	0	%100
35	M28	X	-1.602	-1.602	0	%100
36	M28	Z	-.925	-.925	0	%100
37	M31	X	-.699	-.699	0	%100
38	M31	Z	-.404	-.404	0	%100
39	M32	X	-.699	-.699	0	%100
40	M32	Z	-.404	-.404	0	%100
41	M44	X	-2.063	-2.063	0	%100
42	M44	Z	-1.191	-1.191	0	%100
43	M45	X	-2.063	-2.063	0	%100
44	M45	Z	-1.191	-1.191	0	%100
45	M46	X	-2.063	-2.063	0	%100
46	M46	Z	-1.191	-1.191	0	%100
47	M47	X	-2.063	-2.063	0	%100
48	M47	Z	-1.191	-1.191	0	%100
49	MP1A	X	-7.839	-7.839	0	%100
50	MP1A	Z	-4.526	-4.526	0	%100
51	MP2A	X	-7.839	-7.839	0	%100
52	MP2A	Z	-4.526	-4.526	0	%100
53	MP3A	X	-7.839	-7.839	0	%100
54	MP3A	Z	-4.526	-4.526	0	%100
55	MP4A	X	-7.839	-7.839	0	%100
56	MP4A	Z	-4.526	-4.526	0	%100
57	M49	X	-7.144	-7.144	0	%100
58	M49	Z	-4.125	-4.125	0	%100
59	M50	X	-7.144	-7.144	0	%100
60	M50	Z	-4.125	-4.125	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.109	-4.109	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
2	M1	Z	-7.117	-7.117	0	%100
3	M2	X	-4.109	-4.109	0	%100
4	M2	Z	-7.117	-7.117	0	%100
5	M13	X	-.298	-.298	0	%100
6	M13	Z	-.516	-.516	0	%100
7	M14	X	-.298	-.298	0	%100
8	M14	Z	-.516	-.516	0	%100
9	M15	X	-.298	-.298	0	%100
10	M15	Z	-.516	-.516	0	%100
11	M16	X	-.298	-.298	0	%100
12	M16	Z	-.516	-.516	0	%100
13	M17	X	-3.421	-3.421	0	%100
14	M17	Z	-5.925	-5.925	0	%100
15	M18	X	-3.421	-3.421	0	%100
16	M18	Z	-5.925	-5.925	0	%100
17	M19	X	-.487	-.487	0	%100
18	M19	Z	-.844	-.844	0	%100
19	M20	X	-.487	-.487	0	%100
20	M20	Z	-.844	-.844	0	%100
21	M21	X	-.893	-.893	0	%100
22	M21	Z	-1.547	-1.547	0	%100
23	M22	X	-.893	-.893	0	%100
24	M22	Z	-1.547	-1.547	0	%100
25	M23	X	-.893	-.893	0	%100
26	M23	Z	-1.547	-1.547	0	%100
27	M24	X	-.893	-.893	0	%100
28	M24	Z	-1.547	-1.547	0	%100
29	M25	X	-1.419	-1.419	0	%100
30	M25	Z	-2.458	-2.458	0	%100
31	M26	X	-1.419	-1.419	0	%100
32	M26	Z	-2.458	-2.458	0	%100
33	M27	X	-.986	-.986	0	%100
34	M27	Z	-1.709	-1.709	0	%100
35	M28	X	-.986	-.986	0	%100
36	M28	Z	-1.709	-1.709	0	%100
37	M31	X	-.216	-.216	0	%100
38	M31	Z	-.374	-.374	0	%100
39	M32	X	-.216	-.216	0	%100
40	M32	Z	-.374	-.374	0	%100
41	M44	X	-1.191	-1.191	0	%100
42	M44	Z	-2.063	-2.063	0	%100
43	M45	X	-1.191	-1.191	0	%100
44	M45	Z	-2.063	-2.063	0	%100
45	M46	X	-1.191	-1.191	0	%100
46	M46	Z	-2.063	-2.063	0	%100
47	M47	X	-1.191	-1.191	0	%100
48	M47	Z	-2.063	-2.063	0	%100
49	MP1A	X	-4.526	-4.526	0	%100
50	MP1A	Z	-7.839	-7.839	0	%100
51	MP2A	X	-4.526	-4.526	0	%100
52	MP2A	Z	-7.839	-7.839	0	%100
53	MP3A	X	-4.526	-4.526	0	%100
54	MP3A	Z	-7.839	-7.839	0	%100
55	MP4A	X	-4.526	-4.526	0	%100
56	MP4A	Z	-7.839	-7.839	0	%100
57	M49	X	-4.125	-4.125	0	%100
58	M49	Z	-7.144	-7.144	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
59	M50	X	-4.125	-4.125	0	%100
60	M50	Z	-7.144	-7.144	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-3.364	-3.364	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-3.364	-3.364	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-1.466	-1.466	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-1.466	-1.466	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-1.466	-1.466	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-1.466	-1.466	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-1.277	-1.277	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-1.277	-1.277	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-1.277	-1.277	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-1.277	-1.277	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-1.635	-1.635	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-1.635	-1.635	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-1.635	-1.635	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-1.635	-1.635	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-1.391	-1.391	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	-1.391	-1.391	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	-1.689	-1.689	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	-1.689	-1.689	0	%100
45	M46	X	0	0	0	%100
46	M46	Z	-1.689	-1.689	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	-1.689	-1.689	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	-3.033	-3.033	0	%100
51	MP2A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
52	MP2A	Z	-3.033	-3.033	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	-3.033	-3.033	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	-3.033	-3.033	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	-2.805	-2.805	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	-2.805	-2.805	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.261	1.261	0	%100
2	M1	Z	-2.185	-2.185	0	%100
3	M2	X	1.261	1.261	0	%100
4	M2	Z	-2.185	-2.185	0	%100
5	M13	X	.158	.158	0	%100
6	M13	Z	-.274	-.274	0	%100
7	M14	X	.158	.158	0	%100
8	M14	Z	-.274	-.274	0	%100
9	M15	X	.158	.158	0	%100
10	M15	Z	-.274	-.274	0	%100
11	M16	X	.158	.158	0	%100
12	M16	Z	-.274	-.274	0	%100
13	M17	X	.165	.165	0	%100
14	M17	Z	-.286	-.286	0	%100
15	M18	X	.165	.165	0	%100
16	M18	Z	-.286	-.286	0	%100
17	M19	X	1.159	1.159	0	%100
18	M19	Z	-2.007	-2.007	0	%100
19	M20	X	1.159	1.159	0	%100
20	M20	Z	-2.007	-2.007	0	%100
21	M21	X	.479	.479	0	%100
22	M21	Z	-.829	-.829	0	%100
23	M22	X	.479	.479	0	%100
24	M22	Z	-.829	-.829	0	%100
25	M23	X	.479	.479	0	%100
26	M23	Z	-.829	-.829	0	%100
27	M24	X	.479	.479	0	%100
28	M24	Z	-.829	-.829	0	%100
29	M25	X	.654	.654	0	%100
30	M25	Z	-1.132	-1.132	0	%100
31	M26	X	.654	.654	0	%100
32	M26	Z	-1.132	-1.132	0	%100
33	M27	X	.94	.94	0	%100
34	M27	Z	-1.628	-1.628	0	%100
35	M28	X	.94	.94	0	%100
36	M28	Z	-1.628	-1.628	0	%100
37	M31	X	1.381	1.381	0	%100
38	M31	Z	-2.392	-2.392	0	%100
39	M32	X	1.381	1.381	0	%100
40	M32	Z	-2.392	-2.392	0	%100
41	M44	X	.844	.844	0	%100
42	M44	Z	-1.462	-1.462	0	%100
43	M45	X	.844	.844	0	%100
44	M45	Z	-1.462	-1.462	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	M46	X	.844	.844	0	%100
46	M46	Z	-1.462	-1.462	0	%100
47	M47	X	.844	.844	0	%100
48	M47	Z	-1.462	-1.462	0	%100
49	MP1A	X	1.516	1.516	0	%100
50	MP1A	Z	-2.627	-2.627	0	%100
51	MP2A	X	1.516	1.516	0	%100
52	MP2A	Z	-2.627	-2.627	0	%100
53	MP3A	X	1.516	1.516	0	%100
54	MP3A	Z	-2.627	-2.627	0	%100
55	MP4A	X	1.516	1.516	0	%100
56	MP4A	Z	-2.627	-2.627	0	%100
57	M49	X	1.403	1.403	0	%100
58	M49	Z	-2.429	-2.429	0	%100
59	M50	X	1.403	1.403	0	%100
60	M50	Z	-2.429	-2.429	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.728	.728	0	%100
2	M1	Z	-.42	-.42	0	%100
3	M2	X	.728	.728	0	%100
4	M2	Z	-.42	-.42	0	%100
5	M13	X	.822	.822	0	%100
6	M13	Z	-.475	-.475	0	%100
7	M14	X	.822	.822	0	%100
8	M14	Z	-.475	-.475	0	%100
9	M15	X	.822	.822	0	%100
10	M15	Z	-.475	-.475	0	%100
11	M16	X	.822	.822	0	%100
12	M16	Z	-.475	-.475	0	%100
13	M17	X	.04	.04	0	%100
14	M17	Z	-.023	-.023	0	%100
15	M18	X	.04	.04	0	%100
16	M18	Z	-.023	-.023	0	%100
17	M19	X	1.762	1.762	0	%100
18	M19	Z	-1.017	-1.017	0	%100
19	M20	X	1.762	1.762	0	%100
20	M20	Z	-1.017	-1.017	0	%100
21	M21	X	.276	.276	0	%100
22	M21	Z	-.16	-.16	0	%100
23	M22	X	.276	.276	0	%100
24	M22	Z	-.16	-.16	0	%100
25	M23	X	.276	.276	0	%100
26	M23	Z	-.16	-.16	0	%100
27	M24	X	.276	.276	0	%100
28	M24	Z	-.16	-.16	0	%100
29	M25	X	1.061	1.061	0	%100
30	M25	Z	-.613	-.613	0	%100
31	M26	X	1.061	1.061	0	%100
32	M26	Z	-.613	-.613	0	%100
33	M27	X	1.558	1.558	0	%100
34	M27	Z	-.899	-.899	0	%100
35	M28	X	1.558	1.558	0	%100
36	M28	Z	-.899	-.899	0	%100
37	M31	X	2.501	2.501	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
38	M31	Z	-1.444	-1.444	0	%100
39	M32	X	2.501	2.501	0	%100
40	M32	Z	-1.444	-1.444	0	%100
41	M44	X	1.462	1.462	0	%100
42	M44	Z	-.844	-.844	0	%100
43	M45	X	1.462	1.462	0	%100
44	M45	Z	-.844	-.844	0	%100
45	M46	X	1.462	1.462	0	%100
46	M46	Z	-.844	-.844	0	%100
47	M47	X	1.462	1.462	0	%100
48	M47	Z	-.844	-.844	0	%100
49	MP1A	X	2.627	2.627	0	%100
50	MP1A	Z	-1.516	-1.516	0	%100
51	MP2A	X	2.627	2.627	0	%100
52	MP2A	Z	-1.516	-1.516	0	%100
53	MP3A	X	2.627	2.627	0	%100
54	MP3A	Z	-1.516	-1.516	0	%100
55	MP4A	X	2.627	2.627	0	%100
56	MP4A	Z	-1.516	-1.516	0	%100
57	M49	X	2.429	2.429	0	%100
58	M49	Z	-1.403	-1.403	0	%100
59	M50	X	2.429	2.429	0	%100
60	M50	Z	-1.403	-1.403	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	1.266	1.266	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	1.266	1.266	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	1.266	1.266	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	1.266	1.266	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	.899	.899	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	.899	.899	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	.899	.899	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	.899	.899	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	1.471	1.471	0	%100
30	M25	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
31	M26	X	1.471	1.471	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	1.471	1.471	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	1.471	1.471	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	1.642	1.642	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	1.642	1.642	0	%100
40	M32	Z	0	0	0	%100
41	M44	X	1.689	1.689	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	1.689	1.689	0	%100
44	M45	Z	0	0	0	%100
45	M46	X	1.689	1.689	0	%100
46	M46	Z	0	0	0	%100
47	M47	X	1.689	1.689	0	%100
48	M47	Z	0	0	0	%100
49	MP1A	X	3.033	3.033	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	3.033	3.033	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	3.033	3.033	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	3.033	3.033	0	%100
56	MP4A	Z	0	0	0	%100
57	M49	X	2.805	2.805	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	2.805	2.805	0	%100
60	M50	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.728	.728	0	%100
2	M1	Z	.42	.42	0	%100
3	M2	X	.728	.728	0	%100
4	M2	Z	.42	.42	0	%100
5	M13	X	.822	.822	0	%100
6	M13	Z	.475	.475	0	%100
7	M14	X	.822	.822	0	%100
8	M14	Z	.475	.475	0	%100
9	M15	X	.822	.822	0	%100
10	M15	Z	.475	.475	0	%100
11	M16	X	.822	.822	0	%100
12	M16	Z	.475	.475	0	%100
13	M17	X	1.762	1.762	0	%100
14	M17	Z	1.017	1.017	0	%100
15	M18	X	1.762	1.762	0	%100
16	M18	Z	1.017	1.017	0	%100
17	M19	X	.04	.04	0	%100
18	M19	Z	.023	.023	0	%100
19	M20	X	.04	.04	0	%100
20	M20	Z	.023	.023	0	%100
21	M21	X	.276	.276	0	%100
22	M21	Z	.16	.16	0	%100
23	M22	X	.276	.276	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
24	M22	Z	.16	.16	0	%100
25	M23	X	.276	.276	0	%100
26	M23	Z	.16	.16	0	%100
27	M24	X	.276	.276	0	%100
28	M24	Z	.16	.16	0	%100
29	M25	X	1.558	1.558	0	%100
30	M25	Z	.899	.899	0	%100
31	M26	X	1.558	1.558	0	%100
32	M26	Z	.899	.899	0	%100
33	M27	X	1.061	1.061	0	%100
34	M27	Z	.613	.613	0	%100
35	M28	X	1.061	1.061	0	%100
36	M28	Z	.613	.613	0	%100
37	M31	X	.234	.234	0	%100
38	M31	Z	.135	.135	0	%100
39	M32	X	.234	.234	0	%100
40	M32	Z	.135	.135	0	%100
41	M44	X	1.462	1.462	0	%100
42	M44	Z	.844	.844	0	%100
43	M45	X	1.462	1.462	0	%100
44	M45	Z	.844	.844	0	%100
45	M46	X	1.462	1.462	0	%100
46	M46	Z	.844	.844	0	%100
47	M47	X	1.462	1.462	0	%100
48	M47	Z	.844	.844	0	%100
49	MP1A	X	2.627	2.627	0	%100
50	MP1A	Z	1.516	1.516	0	%100
51	MP2A	X	2.627	2.627	0	%100
52	MP2A	Z	1.516	1.516	0	%100
53	MP3A	X	2.627	2.627	0	%100
54	MP3A	Z	1.516	1.516	0	%100
55	MP4A	X	2.627	2.627	0	%100
56	MP4A	Z	1.516	1.516	0	%100
57	M49	X	2.429	2.429	0	%100
58	M49	Z	1.403	1.403	0	%100
59	M50	X	2.429	2.429	0	%100
60	M50	Z	1.403	1.403	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.261	1.261	0	%100
2	M1	Z	2.185	2.185	0	%100
3	M2	X	1.261	1.261	0	%100
4	M2	Z	2.185	2.185	0	%100
5	M13	X	.158	.158	0	%100
6	M13	Z	.274	.274	0	%100
7	M14	X	.158	.158	0	%100
8	M14	Z	.274	.274	0	%100
9	M15	X	.158	.158	0	%100
10	M15	Z	.274	.274	0	%100
11	M16	X	.158	.158	0	%100
12	M16	Z	.274	.274	0	%100
13	M17	X	1.159	1.159	0	%100
14	M17	Z	2.007	2.007	0	%100
15	M18	X	1.159	1.159	0	%100
16	M18	Z	2.007	2.007	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
17	M19	X	.165	.165	0	%100
18	M19	Z	.286	.286	0	%100
19	M20	X	.165	.165	0	%100
20	M20	Z	.286	.286	0	%100
21	M21	X	.479	.479	0	%100
22	M21	Z	.829	.829	0	%100
23	M22	X	.479	.479	0	%100
24	M22	Z	.829	.829	0	%100
25	M23	X	.479	.479	0	%100
26	M23	Z	.829	.829	0	%100
27	M24	X	.479	.479	0	%100
28	M24	Z	.829	.829	0	%100
29	M25	X	.94	.94	0	%100
30	M25	Z	1.628	1.628	0	%100
31	M26	X	.94	.94	0	%100
32	M26	Z	1.628	1.628	0	%100
33	M27	X	.654	.654	0	%100
34	M27	Z	1.132	1.132	0	%100
35	M28	X	.654	.654	0	%100
36	M28	Z	1.132	1.132	0	%100
37	M31	X	.072	.072	0	%100
38	M31	Z	.125	.125	0	%100
39	M32	X	.072	.072	0	%100
40	M32	Z	.125	.125	0	%100
41	M44	X	.844	.844	0	%100
42	M44	Z	1.462	1.462	0	%100
43	M45	X	.844	.844	0	%100
44	M45	Z	1.462	1.462	0	%100
45	M46	X	.844	.844	0	%100
46	M46	Z	1.462	1.462	0	%100
47	M47	X	.844	.844	0	%100
48	M47	Z	1.462	1.462	0	%100
49	MP1A	X	1.516	1.516	0	%100
50	MP1A	Z	2.627	2.627	0	%100
51	MP2A	X	1.516	1.516	0	%100
52	MP2A	Z	2.627	2.627	0	%100
53	MP3A	X	1.516	1.516	0	%100
54	MP3A	Z	2.627	2.627	0	%100
55	MP4A	X	1.516	1.516	0	%100
56	MP4A	Z	2.627	2.627	0	%100
57	M49	X	1.403	1.403	0	%100
58	M49	Z	2.429	2.429	0	%100
59	M50	X	1.403	1.403	0	%100
60	M50	Z	2.429	2.429	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	3.364	3.364	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	3.364	3.364	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	1.466	1.466	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	1.466	1.466	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	1.466	1.466	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	1.466	1.466	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	1.277	1.277	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	1.277	1.277	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	1.277	1.277	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	1.277	1.277	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	1.635	1.635	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	1.635	1.635	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	1.635	1.635	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	1.635	1.635	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	1.391	1.391	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	1.391	1.391	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	1.689	1.689	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	1.689	1.689	0	%100
45	M46	X	0	0	0	%100
46	M46	Z	1.689	1.689	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	1.689	1.689	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	3.033	3.033	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	3.033	3.033	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	3.033	3.033	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	3.033	3.033	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	2.805	2.805	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	2.805	2.805	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.261	-1.261	0	%100
2	M1	Z	2.185	2.185	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
3	M2	X	-1.261	-1.261	0	%100
4	M2	Z	2.185	2.185	0	%100
5	M13	X	-.158	-.158	0	%100
6	M13	Z	.274	.274	0	%100
7	M14	X	-.158	-.158	0	%100
8	M14	Z	.274	.274	0	%100
9	M15	X	-.158	-.158	0	%100
10	M15	Z	.274	.274	0	%100
11	M16	X	-.158	-.158	0	%100
12	M16	Z	.274	.274	0	%100
13	M17	X	-.165	-.165	0	%100
14	M17	Z	.286	.286	0	%100
15	M18	X	-.165	-.165	0	%100
16	M18	Z	.286	.286	0	%100
17	M19	X	-1.159	-1.159	0	%100
18	M19	Z	2.007	2.007	0	%100
19	M20	X	-1.159	-1.159	0	%100
20	M20	Z	2.007	2.007	0	%100
21	M21	X	-.479	-.479	0	%100
22	M21	Z	.829	.829	0	%100
23	M22	X	-.479	-.479	0	%100
24	M22	Z	.829	.829	0	%100
25	M23	X	-.479	-.479	0	%100
26	M23	Z	.829	.829	0	%100
27	M24	X	-.479	-.479	0	%100
28	M24	Z	.829	.829	0	%100
29	M25	X	-.654	-.654	0	%100
30	M25	Z	1.132	1.132	0	%100
31	M26	X	-.654	-.654	0	%100
32	M26	Z	1.132	1.132	0	%100
33	M27	X	-.94	-.94	0	%100
34	M27	Z	1.628	1.628	0	%100
35	M28	X	-.94	-.94	0	%100
36	M28	Z	1.628	1.628	0	%100
37	M31	X	-1.381	-1.381	0	%100
38	M31	Z	2.392	2.392	0	%100
39	M32	X	-1.381	-1.381	0	%100
40	M32	Z	2.392	2.392	0	%100
41	M44	X	-.844	-.844	0	%100
42	M44	Z	1.462	1.462	0	%100
43	M45	X	-.844	-.844	0	%100
44	M45	Z	1.462	1.462	0	%100
45	M46	X	-.844	-.844	0	%100
46	M46	Z	1.462	1.462	0	%100
47	M47	X	-.844	-.844	0	%100
48	M47	Z	1.462	1.462	0	%100
49	MP1A	X	-1.516	-1.516	0	%100
50	MP1A	Z	2.627	2.627	0	%100
51	MP2A	X	-1.516	-1.516	0	%100
52	MP2A	Z	2.627	2.627	0	%100
53	MP3A	X	-1.516	-1.516	0	%100
54	MP3A	Z	2.627	2.627	0	%100
55	MP4A	X	-1.516	-1.516	0	%100
56	MP4A	Z	2.627	2.627	0	%100
57	M49	X	-1.403	-1.403	0	%100
58	M49	Z	2.429	2.429	0	%100
59	M50	X	-1.403	-1.403	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
60	M50	Z	2.429	2.429	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.728	-.728	0	%100
2	M1	Z	.42	.42	0	%100
3	M2	X	-.728	-.728	0	%100
4	M2	Z	.42	.42	0	%100
5	M13	X	-.822	-.822	0	%100
6	M13	Z	.475	.475	0	%100
7	M14	X	-.822	-.822	0	%100
8	M14	Z	.475	.475	0	%100
9	M15	X	-.822	-.822	0	%100
10	M15	Z	.475	.475	0	%100
11	M16	X	-.822	-.822	0	%100
12	M16	Z	.475	.475	0	%100
13	M17	X	-.04	-.04	0	%100
14	M17	Z	.023	.023	0	%100
15	M18	X	-.04	-.04	0	%100
16	M18	Z	.023	.023	0	%100
17	M19	X	-1.762	-1.762	0	%100
18	M19	Z	1.017	1.017	0	%100
19	M20	X	-1.762	-1.762	0	%100
20	M20	Z	1.017	1.017	0	%100
21	M21	X	-.276	-.276	0	%100
22	M21	Z	.16	.16	0	%100
23	M22	X	-.276	-.276	0	%100
24	M22	Z	.16	.16	0	%100
25	M23	X	-.276	-.276	0	%100
26	M23	Z	.16	.16	0	%100
27	M24	X	-.276	-.276	0	%100
28	M24	Z	.16	.16	0	%100
29	M25	X	-1.061	-1.061	0	%100
30	M25	Z	.613	.613	0	%100
31	M26	X	-1.061	-1.061	0	%100
32	M26	Z	.613	.613	0	%100
33	M27	X	-1.558	-1.558	0	%100
34	M27	Z	.899	.899	0	%100
35	M28	X	-1.558	-1.558	0	%100
36	M28	Z	.899	.899	0	%100
37	M31	X	-2.501	-2.501	0	%100
38	M31	Z	1.444	1.444	0	%100
39	M32	X	-2.501	-2.501	0	%100
40	M32	Z	1.444	1.444	0	%100
41	M44	X	-1.462	-1.462	0	%100
42	M44	Z	.844	.844	0	%100
43	M45	X	-1.462	-1.462	0	%100
44	M45	Z	.844	.844	0	%100
45	M46	X	-1.462	-1.462	0	%100
46	M46	Z	.844	.844	0	%100
47	M47	X	-1.462	-1.462	0	%100
48	M47	Z	.844	.844	0	%100
49	MP1A	X	-2.627	-2.627	0	%100
50	MP1A	Z	1.516	1.516	0	%100
51	MP2A	X	-2.627	-2.627	0	%100
52	MP2A	Z	1.516	1.516	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	MP3A	X	-2.627	-2.627	0	%100
54	MP3A	Z	1.516	1.516	0	%100
55	MP4A	X	-2.627	-2.627	0	%100
56	MP4A	Z	1.516	1.516	0	%100
57	M49	X	-2.429	-2.429	0	%100
58	M49	Z	1.403	1.403	0	%100
59	M50	X	-2.429	-2.429	0	%100
60	M50	Z	1.403	1.403	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-1.266	-1.266	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-1.266	-1.266	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-1.266	-1.266	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-1.266	-1.266	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-.899	-.899	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-.899	-.899	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-.899	-.899	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-.899	-.899	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-1.471	-1.471	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-1.471	-1.471	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-1.471	-1.471	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-1.471	-1.471	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	-1.642	-1.642	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	-1.642	-1.642	0	%100
40	M32	Z	0	0	0	%100
41	M44	X	-1.689	-1.689	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	-1.689	-1.689	0	%100
44	M45	Z	0	0	0	%100
45	M46	X	-1.689	-1.689	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
46	M46	Z	0	0	0	%100
47	M47	X	-1.689	-1.689	0	%100
48	M47	Z	0	0	0	%100
49	MP1A	X	-3.033	-3.033	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	-3.033	-3.033	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	-3.033	-3.033	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	-3.033	-3.033	0	%100
56	MP4A	Z	0	0	0	%100
57	M49	X	-2.805	-2.805	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	-2.805	-2.805	0	%100
60	M50	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.728	-.728	0	%100
2	M1	Z	-.42	-.42	0	%100
3	M2	X	-.728	-.728	0	%100
4	M2	Z	-.42	-.42	0	%100
5	M13	X	-.822	-.822	0	%100
6	M13	Z	-.475	-.475	0	%100
7	M14	X	-.822	-.822	0	%100
8	M14	Z	-.475	-.475	0	%100
9	M15	X	-.822	-.822	0	%100
10	M15	Z	-.475	-.475	0	%100
11	M16	X	-.822	-.822	0	%100
12	M16	Z	-.475	-.475	0	%100
13	M17	X	-1.762	-1.762	0	%100
14	M17	Z	-1.017	-1.017	0	%100
15	M18	X	-1.762	-1.762	0	%100
16	M18	Z	-1.017	-1.017	0	%100
17	M19	X	-.04	-.04	0	%100
18	M19	Z	-.023	-.023	0	%100
19	M20	X	-.04	-.04	0	%100
20	M20	Z	-.023	-.023	0	%100
21	M21	X	-.276	-.276	0	%100
22	M21	Z	-.16	-.16	0	%100
23	M22	X	-.276	-.276	0	%100
24	M22	Z	-.16	-.16	0	%100
25	M23	X	-.276	-.276	0	%100
26	M23	Z	-.16	-.16	0	%100
27	M24	X	-.276	-.276	0	%100
28	M24	Z	-.16	-.16	0	%100
29	M25	X	-1.558	-1.558	0	%100
30	M25	Z	-.899	-.899	0	%100
31	M26	X	-1.558	-1.558	0	%100
32	M26	Z	-.899	-.899	0	%100
33	M27	X	-1.061	-1.061	0	%100
34	M27	Z	-.613	-.613	0	%100
35	M28	X	-1.061	-1.061	0	%100
36	M28	Z	-.613	-.613	0	%100
37	M31	X	-.234	-.234	0	%100
38	M31	Z	-.135	-.135	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
39	M32	X	-.234	-.234	0	%100
40	M32	Z	-.135	-.135	0	%100
41	M44	X	-1.462	-1.462	0	%100
42	M44	Z	-.844	-.844	0	%100
43	M45	X	-1.462	-1.462	0	%100
44	M45	Z	-.844	-.844	0	%100
45	M46	X	-1.462	-1.462	0	%100
46	M46	Z	-.844	-.844	0	%100
47	M47	X	-1.462	-1.462	0	%100
48	M47	Z	-.844	-.844	0	%100
49	MP1A	X	-2.627	-2.627	0	%100
50	MP1A	Z	-1.516	-1.516	0	%100
51	MP2A	X	-2.627	-2.627	0	%100
52	MP2A	Z	-1.516	-1.516	0	%100
53	MP3A	X	-2.627	-2.627	0	%100
54	MP3A	Z	-1.516	-1.516	0	%100
55	MP4A	X	-2.627	-2.627	0	%100
56	MP4A	Z	-1.516	-1.516	0	%100
57	M49	X	-2.429	-2.429	0	%100
58	M49	Z	-1.403	-1.403	0	%100
59	M50	X	-2.429	-2.429	0	%100
60	M50	Z	-1.403	-1.403	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.261	-1.261	0	%100
2	M1	Z	-2.185	-2.185	0	%100
3	M2	X	-1.261	-1.261	0	%100
4	M2	Z	-2.185	-2.185	0	%100
5	M13	X	-.158	-.158	0	%100
6	M13	Z	-.274	-.274	0	%100
7	M14	X	-.158	-.158	0	%100
8	M14	Z	-.274	-.274	0	%100
9	M15	X	-.158	-.158	0	%100
10	M15	Z	-.274	-.274	0	%100
11	M16	X	-.158	-.158	0	%100
12	M16	Z	-.274	-.274	0	%100
13	M17	X	-1.159	-1.159	0	%100
14	M17	Z	-2.007	-2.007	0	%100
15	M18	X	-1.159	-1.159	0	%100
16	M18	Z	-2.007	-2.007	0	%100
17	M19	X	-.165	-.165	0	%100
18	M19	Z	-.286	-.286	0	%100
19	M20	X	-.165	-.165	0	%100
20	M20	Z	-.286	-.286	0	%100
21	M21	X	-.479	-.479	0	%100
22	M21	Z	-.829	-.829	0	%100
23	M22	X	-.479	-.479	0	%100
24	M22	Z	-.829	-.829	0	%100
25	M23	X	-.479	-.479	0	%100
26	M23	Z	-.829	-.829	0	%100
27	M24	X	-.479	-.479	0	%100
28	M24	Z	-.829	-.829	0	%100
29	M25	X	-.94	-.94	0	%100
30	M25	Z	-1.628	-1.628	0	%100
31	M26	X	-.94	-.94	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	M26	Z	-1.628	-1.628	0	%100
33	M27	X	-.654	-.654	0	%100
34	M27	Z	-1.132	-1.132	0	%100
35	M28	X	-.654	-.654	0	%100
36	M28	Z	-1.132	-1.132	0	%100
37	M31	X	-.072	-.072	0	%100
38	M31	Z	-.125	-.125	0	%100
39	M32	X	-.072	-.072	0	%100
40	M32	Z	-.125	-.125	0	%100
41	M44	X	-.844	-.844	0	%100
42	M44	Z	-1.462	-1.462	0	%100
43	M45	X	-.844	-.844	0	%100
44	M45	Z	-1.462	-1.462	0	%100
45	M46	X	-.844	-.844	0	%100
46	M46	Z	-1.462	-1.462	0	%100
47	M47	X	-.844	-.844	0	%100
48	M47	Z	-1.462	-1.462	0	%100
49	MP1A	X	-1.516	-1.516	0	%100
50	MP1A	Z	-2.627	-2.627	0	%100
51	MP2A	X	-1.516	-1.516	0	%100
52	MP2A	Z	-2.627	-2.627	0	%100
53	MP3A	X	-1.516	-1.516	0	%100
54	MP3A	Z	-2.627	-2.627	0	%100
55	MP4A	X	-1.516	-1.516	0	%100
56	MP4A	Z	-2.627	-2.627	0	%100
57	M49	X	-1.403	-1.403	0	%100
58	M49	Z	-2.429	-2.429	0	%100
59	M50	X	-1.403	-1.403	0	%100
60	M50	Z	-2.429	-2.429	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.685	-.685	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.685	-.685	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-.27	-.27	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-.27	-.27	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-.27	-.27	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-.27	-.27	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-.149	-.149	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-.149	-.149	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
25	M23	X	0	0	0	%100
26	M23	Z	-.149	-.149	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-.149	-.149	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-.154	-.154	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-.154	-.154	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-.154	-.154	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-.154	-.154	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-.259	-.259	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	-.259	-.259	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	-.149	-.149	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	-.149	-.149	0	%100
45	M46	X	0	0	0	%100
46	M46	Z	-.149	-.149	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	-.149	-.149	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	-.566	-.566	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	-.566	-.566	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	-.566	-.566	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	-.566	-.566	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	-.516	-.516	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	-.516	-.516	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.257	.257	0	%100
2	M1	Z	-.445	-.445	0	%100
3	M2	X	.257	.257	0	%100
4	M2	Z	-.445	-.445	0	%100
5	M13	X	.019	.019	0	%100
6	M13	Z	-.032	-.032	0	%100
7	M14	X	.019	.019	0	%100
8	M14	Z	-.032	-.032	0	%100
9	M15	X	.019	.019	0	%100
10	M15	Z	-.032	-.032	0	%100
11	M16	X	.019	.019	0	%100
12	M16	Z	-.032	-.032	0	%100
13	M17	X	.03	.03	0	%100
14	M17	Z	-.053	-.053	0	%100
15	M18	X	.03	.03	0	%100
16	M18	Z	-.053	-.053	0	%100
17	M19	X	.214	.214	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
18	M19	Z	-.37	-.37	0	%100
19	M20	X	.214	.214	0	%100
20	M20	Z	-.37	-.37	0	%100
21	M21	X	.056	.056	0	%100
22	M21	Z	-.097	-.097	0	%100
23	M22	X	.056	.056	0	%100
24	M22	Z	-.097	-.097	0	%100
25	M23	X	.056	.056	0	%100
26	M23	Z	-.097	-.097	0	%100
27	M24	X	.056	.056	0	%100
28	M24	Z	-.097	-.097	0	%100
29	M25	X	.062	.062	0	%100
30	M25	Z	-.107	-.107	0	%100
31	M26	X	.062	.062	0	%100
32	M26	Z	-.107	-.107	0	%100
33	M27	X	.089	.089	0	%100
34	M27	Z	-.154	-.154	0	%100
35	M28	X	.089	.089	0	%100
36	M28	Z	-.154	-.154	0	%100
37	M31	X	.258	.258	0	%100
38	M31	Z	-.446	-.446	0	%100
39	M32	X	.258	.258	0	%100
40	M32	Z	-.446	-.446	0	%100
41	M44	X	.074	.074	0	%100
42	M44	Z	-.129	-.129	0	%100
43	M45	X	.074	.074	0	%100
44	M45	Z	-.129	-.129	0	%100
45	M46	X	.074	.074	0	%100
46	M46	Z	-.129	-.129	0	%100
47	M47	X	.074	.074	0	%100
48	M47	Z	-.129	-.129	0	%100
49	MP1A	X	.283	.283	0	%100
50	MP1A	Z	-.49	-.49	0	%100
51	MP2A	X	.283	.283	0	%100
52	MP2A	Z	-.49	-.49	0	%100
53	MP3A	X	.283	.283	0	%100
54	MP3A	Z	-.49	-.49	0	%100
55	MP4A	X	.283	.283	0	%100
56	MP4A	Z	-.49	-.49	0	%100
57	M49	X	.258	.258	0	%100
58	M49	Z	-.446	-.446	0	%100
59	M50	X	.258	.258	0	%100
60	M50	Z	-.446	-.446	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.148	.148	0	%100
2	M1	Z	-.086	-.086	0	%100
3	M2	X	.148	.148	0	%100
4	M2	Z	-.086	-.086	0	%100
5	M13	X	.097	.097	0	%100
6	M13	Z	-.056	-.056	0	%100
7	M14	X	.097	.097	0	%100
8	M14	Z	-.056	-.056	0	%100
9	M15	X	.097	.097	0	%100
10	M15	Z	-.056	-.056	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	M16	X	.097	.097	0	%100
12	M16	Z	-.056	-.056	0	%100
13	M17	X	.007	.007	0	%100
14	M17	Z	-.004	-.004	0	%100
15	M18	X	.007	.007	0	%100
16	M18	Z	-.004	-.004	0	%100
17	M19	X	.325	.325	0	%100
18	M19	Z	-.188	-.188	0	%100
19	M20	X	.325	.325	0	%100
20	M20	Z	-.188	-.188	0	%100
21	M21	X	.032	.032	0	%100
22	M21	Z	-.019	-.019	0	%100
23	M22	X	.032	.032	0	%100
24	M22	Z	-.019	-.019	0	%100
25	M23	X	.032	.032	0	%100
26	M23	Z	-.019	-.019	0	%100
27	M24	X	.032	.032	0	%100
28	M24	Z	-.019	-.019	0	%100
29	M25	X	.1	.1	0	%100
30	M25	Z	-.058	-.058	0	%100
31	M26	X	.1	.1	0	%100
32	M26	Z	-.058	-.058	0	%100
33	M27	X	.147	.147	0	%100
34	M27	Z	-.085	-.085	0	%100
35	M28	X	.147	.147	0	%100
36	M28	Z	-.085	-.085	0	%100
37	M31	X	.467	.467	0	%100
38	M31	Z	-.269	-.269	0	%100
39	M32	X	.467	.467	0	%100
40	M32	Z	-.269	-.269	0	%100
41	M44	X	.129	.129	0	%100
42	M44	Z	-.074	-.074	0	%100
43	M45	X	.129	.129	0	%100
44	M45	Z	-.074	-.074	0	%100
45	M46	X	.129	.129	0	%100
46	M46	Z	-.074	-.074	0	%100
47	M47	X	.129	.129	0	%100
48	M47	Z	-.074	-.074	0	%100
49	MP1A	X	.49	.49	0	%100
50	MP1A	Z	-.283	-.283	0	%100
51	MP2A	X	.49	.49	0	%100
52	MP2A	Z	-.283	-.283	0	%100
53	MP3A	X	.49	.49	0	%100
54	MP3A	Z	-.283	-.283	0	%100
55	MP4A	X	.49	.49	0	%100
56	MP4A	Z	-.283	-.283	0	%100
57	M49	X	.446	.446	0	%100
58	M49	Z	-.258	-.258	0	%100
59	M50	X	.446	.446	0	%100
60	M50	Z	-.258	-.258	0	%100

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

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

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	0	0	0	%100
5	M13	X	.149	.149	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	.149	.149	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	.149	.149	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	.149	.149	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	.166	.166	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	.166	.166	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	.166	.166	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	.166	.166	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	.139	.139	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	.139	.139	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	.139	.139	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	.139	.139	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	.306	.306	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	.306	.306	0	%100
40	M32	Z	0	0	0	%100
41	M44	X	.149	.149	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	.149	.149	0	%100
44	M45	Z	0	0	0	%100
45	M46	X	.149	.149	0	%100
46	M46	Z	0	0	0	%100
47	M47	X	.149	.149	0	%100
48	M47	Z	0	0	0	%100
49	MP1A	X	.566	.566	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	.566	.566	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	.566	.566	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	.566	.566	0	%100
56	MP4A	Z	0	0	0	%100
57	M49	X	.516	.516	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	.516	.516	0	%100
60	M50	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.148	.148	0	%100
2	M1	Z	.086	.086	0	%100
3	M2	X	.148	.148	0	%100
4	M2	Z	.086	.086	0	%100
5	M13	X	.097	.097	0	%100
6	M13	Z	.056	.056	0	%100
7	M14	X	.097	.097	0	%100
8	M14	Z	.056	.056	0	%100
9	M15	X	.097	.097	0	%100
10	M15	Z	.056	.056	0	%100
11	M16	X	.097	.097	0	%100
12	M16	Z	.056	.056	0	%100
13	M17	X	.325	.325	0	%100
14	M17	Z	.188	.188	0	%100
15	M18	X	.325	.325	0	%100
16	M18	Z	.188	.188	0	%100
17	M19	X	.007	.007	0	%100
18	M19	Z	.004	.004	0	%100
19	M20	X	.007	.007	0	%100
20	M20	Z	.004	.004	0	%100
21	M21	X	.032	.032	0	%100
22	M21	Z	.019	.019	0	%100
23	M22	X	.032	.032	0	%100
24	M22	Z	.019	.019	0	%100
25	M23	X	.032	.032	0	%100
26	M23	Z	.019	.019	0	%100
27	M24	X	.032	.032	0	%100
28	M24	Z	.019	.019	0	%100
29	M25	X	.147	.147	0	%100
30	M25	Z	.085	.085	0	%100
31	M26	X	.147	.147	0	%100
32	M26	Z	.085	.085	0	%100
33	M27	X	.1	.1	0	%100
34	M27	Z	.058	.058	0	%100
35	M28	X	.1	.1	0	%100
36	M28	Z	.058	.058	0	%100
37	M31	X	.044	.044	0	%100
38	M31	Z	.025	.025	0	%100
39	M32	X	.044	.044	0	%100
40	M32	Z	.025	.025	0	%100
41	M44	X	.129	.129	0	%100
42	M44	Z	.074	.074	0	%100
43	M45	X	.129	.129	0	%100
44	M45	Z	.074	.074	0	%100
45	M46	X	.129	.129	0	%100
46	M46	Z	.074	.074	0	%100
47	M47	X	.129	.129	0	%100
48	M47	Z	.074	.074	0	%100
49	MP1A	X	.49	.49	0	%100
50	MP1A	Z	.283	.283	0	%100
51	MP2A	X	.49	.49	0	%100
52	MP2A	Z	.283	.283	0	%100
53	MP3A	X	.49	.49	0	%100
54	MP3A	Z	.283	.283	0	%100
55	MP4A	X	.49	.49	0	%100
56	MP4A	Z	.283	.283	0	%100
57	M49	X	.446	.446	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	M49	Z	.258	.258	0	%100
59	M50	X	.446	.446	0	%100
60	M50	Z	.258	.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.257	.257	0	%100
2	M1	Z	.445	.445	0	%100
3	M2	X	.257	.257	0	%100
4	M2	Z	.445	.445	0	%100
5	M13	X	.019	.019	0	%100
6	M13	Z	.032	.032	0	%100
7	M14	X	.019	.019	0	%100
8	M14	Z	.032	.032	0	%100
9	M15	X	.019	.019	0	%100
10	M15	Z	.032	.032	0	%100
11	M16	X	.019	.019	0	%100
12	M16	Z	.032	.032	0	%100
13	M17	X	.214	.214	0	%100
14	M17	Z	.37	.37	0	%100
15	M18	X	.214	.214	0	%100
16	M18	Z	.37	.37	0	%100
17	M19	X	.03	.03	0	%100
18	M19	Z	.053	.053	0	%100
19	M20	X	.03	.03	0	%100
20	M20	Z	.053	.053	0	%100
21	M21	X	.056	.056	0	%100
22	M21	Z	.097	.097	0	%100
23	M22	X	.056	.056	0	%100
24	M22	Z	.097	.097	0	%100
25	M23	X	.056	.056	0	%100
26	M23	Z	.097	.097	0	%100
27	M24	X	.056	.056	0	%100
28	M24	Z	.097	.097	0	%100
29	M25	X	.089	.089	0	%100
30	M25	Z	.154	.154	0	%100
31	M26	X	.089	.089	0	%100
32	M26	Z	.154	.154	0	%100
33	M27	X	.062	.062	0	%100
34	M27	Z	.107	.107	0	%100
35	M28	X	.062	.062	0	%100
36	M28	Z	.107	.107	0	%100
37	M31	X	.014	.014	0	%100
38	M31	Z	.023	.023	0	%100
39	M32	X	.014	.014	0	%100
40	M32	Z	.023	.023	0	%100
41	M44	X	.074	.074	0	%100
42	M44	Z	.129	.129	0	%100
43	M45	X	.074	.074	0	%100
44	M45	Z	.129	.129	0	%100
45	M46	X	.074	.074	0	%100
46	M46	Z	.129	.129	0	%100
47	M47	X	.074	.074	0	%100
48	M47	Z	.129	.129	0	%100
49	MP1A	X	.283	.283	0	%100
50	MP1A	Z	.49	.49	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
51	MP2A	X	.283	.283	0	%100
52	MP2A	Z	.49	.49	0	%100
53	MP3A	X	.283	.283	0	%100
54	MP3A	Z	.49	.49	0	%100
55	MP4A	X	.283	.283	0	%100
56	MP4A	Z	.49	.49	0	%100
57	M49	X	.258	.258	0	%100
58	M49	Z	.446	.446	0	%100
59	M50	X	.258	.258	0	%100
60	M50	Z	.446	.446	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.685	.685	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.685	.685	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	.27	.27	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	.27	.27	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	.27	.27	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	.27	.27	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	.149	.149	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	.149	.149	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	.149	.149	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	.149	.149	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	.154	.154	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	.154	.154	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	.154	.154	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	.154	.154	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	.259	.259	0	%100
39	M32	X	0	0	0	%100
40	M32	Z	.259	.259	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	.149	.149	0	%100
43	M45	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
44	M45	Z	.149	.149	0	%100
45	M46	X	0	0	0	%100
46	M46	Z	.149	.149	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	.149	.149	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	.566	.566	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	.566	.566	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	.566	.566	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	.566	.566	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	.516	.516	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	.516	.516	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.257	-.257	0	%100
2	M1	Z	.445	.445	0	%100
3	M2	X	-.257	-.257	0	%100
4	M2	Z	.445	.445	0	%100
5	M13	X	-.019	-.019	0	%100
6	M13	Z	.032	.032	0	%100
7	M14	X	-.019	-.019	0	%100
8	M14	Z	.032	.032	0	%100
9	M15	X	-.019	-.019	0	%100
10	M15	Z	.032	.032	0	%100
11	M16	X	-.019	-.019	0	%100
12	M16	Z	.032	.032	0	%100
13	M17	X	-.03	-.03	0	%100
14	M17	Z	.053	.053	0	%100
15	M18	X	-.03	-.03	0	%100
16	M18	Z	.053	.053	0	%100
17	M19	X	-.214	-.214	0	%100
18	M19	Z	.37	.37	0	%100
19	M20	X	-.214	-.214	0	%100
20	M20	Z	.37	.37	0	%100
21	M21	X	-.056	-.056	0	%100
22	M21	Z	.097	.097	0	%100
23	M22	X	-.056	-.056	0	%100
24	M22	Z	.097	.097	0	%100
25	M23	X	-.056	-.056	0	%100
26	M23	Z	.097	.097	0	%100
27	M24	X	-.056	-.056	0	%100
28	M24	Z	.097	.097	0	%100
29	M25	X	-.062	-.062	0	%100
30	M25	Z	.107	.107	0	%100
31	M26	X	-.062	-.062	0	%100
32	M26	Z	.107	.107	0	%100
33	M27	X	-.089	-.089	0	%100
34	M27	Z	.154	.154	0	%100
35	M28	X	-.089	-.089	0	%100
36	M28	Z	.154	.154	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	M31	X	-.258	-.258	0	%100
38	M31	Z	.446	.446	0	%100
39	M32	X	-.258	-.258	0	%100
40	M32	Z	.446	.446	0	%100
41	M44	X	-.074	-.074	0	%100
42	M44	Z	.129	.129	0	%100
43	M45	X	-.074	-.074	0	%100
44	M45	Z	.129	.129	0	%100
45	M46	X	-.074	-.074	0	%100
46	M46	Z	.129	.129	0	%100
47	M47	X	-.074	-.074	0	%100
48	M47	Z	.129	.129	0	%100
49	MP1A	X	-.283	-.283	0	%100
50	MP1A	Z	.49	.49	0	%100
51	MP2A	X	-.283	-.283	0	%100
52	MP2A	Z	.49	.49	0	%100
53	MP3A	X	-.283	-.283	0	%100
54	MP3A	Z	.49	.49	0	%100
55	MP4A	X	-.283	-.283	0	%100
56	MP4A	Z	.49	.49	0	%100
57	M49	X	-.258	-.258	0	%100
58	M49	Z	.446	.446	0	%100
59	M50	X	-.258	-.258	0	%100
60	M50	Z	.446	.446	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.148	-.148	0	%100
2	M1	Z	.086	.086	0	%100
3	M2	X	-.148	-.148	0	%100
4	M2	Z	.086	.086	0	%100
5	M13	X	-.097	-.097	0	%100
6	M13	Z	.056	.056	0	%100
7	M14	X	-.097	-.097	0	%100
8	M14	Z	.056	.056	0	%100
9	M15	X	-.097	-.097	0	%100
10	M15	Z	.056	.056	0	%100
11	M16	X	-.097	-.097	0	%100
12	M16	Z	.056	.056	0	%100
13	M17	X	-.007	-.007	0	%100
14	M17	Z	.004	.004	0	%100
15	M18	X	-.007	-.007	0	%100
16	M18	Z	.004	.004	0	%100
17	M19	X	-.325	-.325	0	%100
18	M19	Z	.188	.188	0	%100
19	M20	X	-.325	-.325	0	%100
20	M20	Z	.188	.188	0	%100
21	M21	X	-.032	-.032	0	%100
22	M21	Z	.019	.019	0	%100
23	M22	X	-.032	-.032	0	%100
24	M22	Z	.019	.019	0	%100
25	M23	X	-.032	-.032	0	%100
26	M23	Z	.019	.019	0	%100
27	M24	X	-.032	-.032	0	%100
28	M24	Z	.019	.019	0	%100
29	M25	X	-.1	-.1	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
30	M25	Z	.058	.058	0	%100
31	M26	X	-.1	-.1	0	%100
32	M26	Z	.058	.058	0	%100
33	M27	X	-.147	-.147	0	%100
34	M27	Z	.085	.085	0	%100
35	M28	X	-.147	-.147	0	%100
36	M28	Z	.085	.085	0	%100
37	M31	X	-.467	-.467	0	%100
38	M31	Z	.269	.269	0	%100
39	M32	X	-.467	-.467	0	%100
40	M32	Z	.269	.269	0	%100
41	M44	X	-.129	-.129	0	%100
42	M44	Z	.074	.074	0	%100
43	M45	X	-.129	-.129	0	%100
44	M45	Z	.074	.074	0	%100
45	M46	X	-.129	-.129	0	%100
46	M46	Z	.074	.074	0	%100
47	M47	X	-.129	-.129	0	%100
48	M47	Z	.074	.074	0	%100
49	MP1A	X	-.49	-.49	0	%100
50	MP1A	Z	.283	.283	0	%100
51	MP2A	X	-.49	-.49	0	%100
52	MP2A	Z	.283	.283	0	%100
53	MP3A	X	-.49	-.49	0	%100
54	MP3A	Z	.283	.283	0	%100
55	MP4A	X	-.49	-.49	0	%100
56	MP4A	Z	.283	.283	0	%100
57	M49	X	-.446	-.446	0	%100
58	M49	Z	.258	.258	0	%100
59	M50	X	-.446	-.446	0	%100
60	M50	Z	.258	.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-.149	-.149	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-.149	-.149	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-.149	-.149	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-.149	-.149	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-.166	-.166	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-.166	-.166	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-.166	-.166	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-.166	-.166	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-.139	-.139	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-.139	-.139	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-.139	-.139	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-.139	-.139	0	%100
36	M28	Z	0	0	0	%100
37	M31	X	-.306	-.306	0	%100
38	M31	Z	0	0	0	%100
39	M32	X	-.306	-.306	0	%100
40	M32	Z	0	0	0	%100
41	M44	X	-.149	-.149	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	-.149	-.149	0	%100
44	M45	Z	0	0	0	%100
45	M46	X	-.149	-.149	0	%100
46	M46	Z	0	0	0	%100
47	M47	X	-.149	-.149	0	%100
48	M47	Z	0	0	0	%100
49	MP1A	X	-.566	-.566	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	-.566	-.566	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	-.566	-.566	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	-.566	-.566	0	%100
56	MP4A	Z	0	0	0	%100
57	M49	X	-.516	-.516	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	-.516	-.516	0	%100
60	M50	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.148	-.148	0	%100
2	M1	Z	-.086	-.086	0	%100
3	M2	X	-.148	-.148	0	%100
4	M2	Z	-.086	-.086	0	%100
5	M13	X	-.097	-.097	0	%100
6	M13	Z	-.056	-.056	0	%100
7	M14	X	-.097	-.097	0	%100
8	M14	Z	-.056	-.056	0	%100
9	M15	X	-.097	-.097	0	%100
10	M15	Z	-.056	-.056	0	%100
11	M16	X	-.097	-.097	0	%100
12	M16	Z	-.056	-.056	0	%100
13	M17	X	-.325	-.325	0	%100
14	M17	Z	-.188	-.188	0	%100
15	M18	X	-.325	-.325	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M18	Z	-.188	-.188	0	%100
17	M19	X	-.007	-.007	0	%100
18	M19	Z	-.004	-.004	0	%100
19	M20	X	-.007	-.007	0	%100
20	M20	Z	-.004	-.004	0	%100
21	M21	X	-.032	-.032	0	%100
22	M21	Z	-.019	-.019	0	%100
23	M22	X	-.032	-.032	0	%100
24	M22	Z	-.019	-.019	0	%100
25	M23	X	-.032	-.032	0	%100
26	M23	Z	-.019	-.019	0	%100
27	M24	X	-.032	-.032	0	%100
28	M24	Z	-.019	-.019	0	%100
29	M25	X	-.147	-.147	0	%100
30	M25	Z	-.085	-.085	0	%100
31	M26	X	-.147	-.147	0	%100
32	M26	Z	-.085	-.085	0	%100
33	M27	X	-.1	-.1	0	%100
34	M27	Z	-.058	-.058	0	%100
35	M28	X	-.1	-.1	0	%100
36	M28	Z	-.058	-.058	0	%100
37	M31	X	-.044	-.044	0	%100
38	M31	Z	-.025	-.025	0	%100
39	M32	X	-.044	-.044	0	%100
40	M32	Z	-.025	-.025	0	%100
41	M44	X	-.129	-.129	0	%100
42	M44	Z	-.074	-.074	0	%100
43	M45	X	-.129	-.129	0	%100
44	M45	Z	-.074	-.074	0	%100
45	M46	X	-.129	-.129	0	%100
46	M46	Z	-.074	-.074	0	%100
47	M47	X	-.129	-.129	0	%100
48	M47	Z	-.074	-.074	0	%100
49	MP1A	X	-.49	-.49	0	%100
50	MP1A	Z	-.283	-.283	0	%100
51	MP2A	X	-.49	-.49	0	%100
52	MP2A	Z	-.283	-.283	0	%100
53	MP3A	X	-.49	-.49	0	%100
54	MP3A	Z	-.283	-.283	0	%100
55	MP4A	X	-.49	-.49	0	%100
56	MP4A	Z	-.283	-.283	0	%100
57	M49	X	-.446	-.446	0	%100
58	M49	Z	-.258	-.258	0	%100
59	M50	X	-.446	-.446	0	%100
60	M50	Z	-.258	-.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.257	-.257	0	%100
2	M1	Z	-.445	-.445	0	%100
3	M2	X	-.257	-.257	0	%100
4	M2	Z	-.445	-.445	0	%100
5	M13	X	-.019	-.019	0	%100
6	M13	Z	-.032	-.032	0	%100
7	M14	X	-.019	-.019	0	%100
8	M14	Z	-.032	-.032	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
9	M15	X	-.019	-.019	0	%100
10	M15	Z	-.032	-.032	0	%100
11	M16	X	-.019	-.019	0	%100
12	M16	Z	-.032	-.032	0	%100
13	M17	X	-.214	-.214	0	%100
14	M17	Z	-.37	-.37	0	%100
15	M18	X	-.214	-.214	0	%100
16	M18	Z	-.37	-.37	0	%100
17	M19	X	-.03	-.03	0	%100
18	M19	Z	-.053	-.053	0	%100
19	M20	X	-.03	-.03	0	%100
20	M20	Z	-.053	-.053	0	%100
21	M21	X	-.056	-.056	0	%100
22	M21	Z	-.097	-.097	0	%100
23	M22	X	-.056	-.056	0	%100
24	M22	Z	-.097	-.097	0	%100
25	M23	X	-.056	-.056	0	%100
26	M23	Z	-.097	-.097	0	%100
27	M24	X	-.056	-.056	0	%100
28	M24	Z	-.097	-.097	0	%100
29	M25	X	-.089	-.089	0	%100
30	M25	Z	-.154	-.154	0	%100
31	M26	X	-.089	-.089	0	%100
32	M26	Z	-.154	-.154	0	%100
33	M27	X	-.062	-.062	0	%100
34	M27	Z	-.107	-.107	0	%100
35	M28	X	-.062	-.062	0	%100
36	M28	Z	-.107	-.107	0	%100
37	M31	X	-.014	-.014	0	%100
38	M31	Z	-.023	-.023	0	%100
39	M32	X	-.014	-.014	0	%100
40	M32	Z	-.023	-.023	0	%100
41	M44	X	-.074	-.074	0	%100
42	M44	Z	-.129	-.129	0	%100
43	M45	X	-.074	-.074	0	%100
44	M45	Z	-.129	-.129	0	%100
45	M46	X	-.074	-.074	0	%100
46	M46	Z	-.129	-.129	0	%100
47	M47	X	-.074	-.074	0	%100
48	M47	Z	-.129	-.129	0	%100
49	MP1A	X	-.283	-.283	0	%100
50	MP1A	Z	-.49	-.49	0	%100
51	MP2A	X	-.283	-.283	0	%100
52	MP2A	Z	-.49	-.49	0	%100
53	MP3A	X	-.283	-.283	0	%100
54	MP3A	Z	-.49	-.49	0	%100
55	MP4A	X	-.283	-.283	0	%100
56	MP4A	Z	-.49	-.49	0	%100
57	M49	X	-.258	-.258	0	%100
58	M49	Z	-.446	-.446	0	%100
59	M50	X	-.258	-.258	0	%100
60	M50	Z	-.446	-.446	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N35	max	351.657	33	1202.46	20	1594.394	14	-.175	11	0	51	.084	28
2		min	-612.351	49	504.662	2	-154.477	8	-.52	17	0	1	-.105	49
3	N36	max	876.376	9	1173.003	14	1359.717	2	-.125	9	0	51	.082	27
4		min	-763.494	3	493.263	8	-2535.055	8	-.493	14	0	1	-.103	45
5	N79A	max	389.022	10	29.802	16	404.834	10	0	51	0	51	0	51
6		min	-357.389	4	13.881	9	-370.398	4	0	1	0	1	0	1
7	N80A	max	645.833	11	29.899	17	700.646	11	0	51	0	51	0	51
8		min	-680.574	5	13.841	9	-738.3	5	0	1	0	1	0	1
9	Totals:	max	1916.644	10	2428.037	21	2656.623	1						
10		min	-1916.644	4	1069.407	3	-2656.623	7						

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
1	M1	PIPE_2.5	.209	8.313	7	.087	3.958		43	14178.1...	50715	3.596	3.596	1...	H1-1b
2	M2	PIPE_2.5	.308	3.826	7	.121	3.958		7	14178.1...	50715	3.596	3.596	2...	H1-1b
3	M13	PL5/8X3.5	.241	.422	8	.343	.422	y	9	66184.77	68906.25	.897	5.024	1...	H1-1b
4	M14	PL5/8X3.5	.188	0	41	.186	.422	y	3	66184.77	68906.25	.897	5.024	1...	H1-1b
5	M15	PL5/8X3.5	.170	0	28	.080	0	y	2	66184.77	68906.25	.897	5.024	1...	H1-1b
6	M16	PL5/8X3.5	.172	.422	7	.188	0	y	7	66184.77	68906.25	.897	5.024	1...	H1-1b
7	M17	PIPE_2.0	.289	0	8	.081	1.25		3	31128.25	32130	1.872	1.872	2...	H1-1b
8	M18	PIPE_2.0	.135	0	2	.078	0		17	31128.25	32130	1.872	1.872	1...	H1-1b
9	M19	PIPE_2.0	.078	0	2	.069	0		29	31128.25	32130	1.872	1.872	1...	H1-1b
10	M20	PIPE_2.0	.194	0	7	.059	0		13	31128.25	32130	1.872	1.872	2...	H1-1b
11	M21	PL5/8X3.5	.356	.531	20	.157	.531	y	9	67591.76	68906.25	.897	5.024	1...	H1-1b
12	M22	PL5/8X3.5	.289	.531	19	.079	.531	y	7	67591.76	68906.25	.897	5.024	1...	H1-1b
13	M23	PL5/8X3.5	.329	.531	13	.084	0	y	5	67591.76	68906.25	.897	5.024	1...	H1-1b
14	M24	PL5/8X3.5	.283	.531	14	.036	0	y	28	67591.76	68906.25	.897	5.024	1...	H1-1b
15	M25	SR_0.75	.000	0	51	.008	0		19	2863.936	13916.2...	.174	.174	1...	H1-1a
16	M26	SR_0.75	.066	0	20	.010	4.167		14	2863.936	13916.2...	.174	.174	1...	H1-1b*
17	M27	SR_0.75	.000	0	51	.004	0		18	2863.936	13916.2...	.174	.174	1...	H1-1a
18	M28	SR_0.75	.058	4.167	30	.007	4.167		14	2863.936	13916.2...	.174	.174	1...	H1-1b*
19	M31	PIPE_2.0	.051	6.723	11	.003	6.723		9	18686.4...	32130	1.872	1.872	1...	H1-1b*
20	M32	PIPE_2.0	.042	3.362	9	.003	6.723		9	18686.4...	32130	1.872	1.872	1...	H1-1b
21	M44	SR_0.625	.058	1.667	12	.007	0		8	2017.074	9670.5	.094	.094	1...	H1-1b
22	M45	SR_0.625	.057	1.667	8	.003	0		23	2017.074	9670.5	.094	.094	1...	H1-1b
23	M46	SR_0.625	.050	1.667	7	.006	0		7	2017.074	9670.5	.094	.094	1	H1-1b
24	M47	SR_0.625	.042	1.667	11	.004	0		5	2017.074	9670.5	.094	.094	1...	H1-1b
25	MP1A	PIPE_2.0	.213	2.417	7	.086	5.75		8	14916.0...	32130	1.872	1.872	4...	H1-1b
26	MP2A	PIPE_2.0	.204	2.417	7	.049	2.417		7	14916.0...	32130	1.872	1.872	3...	H1-1b
27	MP3A	PIPE_2.0	.308	2.417	7	.096	2.417		9	14916.0...	32130	1.872	1.872	3...	H1-1b
28	MP4A	PIPE_2.0	.237	5.75	49	.092	5.75		6	14916.0...	32130	1.872	1.872	4...	H1-1b
29	M49	PIPE_2.0	.012	2	9	.011	3.667		8	26521.4...	32130	1.872	1.872	1...	H1-1b
30	M50	PIPE_2.0	.036	1.042	4	.030	.333		8	26521.4...	32130	1.872	1.872	1...	H1-1b

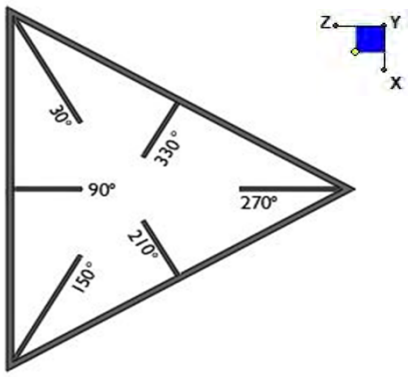
Client:	Verizon Wireless	Date:	3/30/2021
Site Name:	N Branford CT		
Project No.	21777074A		
Title:	Mount Analysis	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

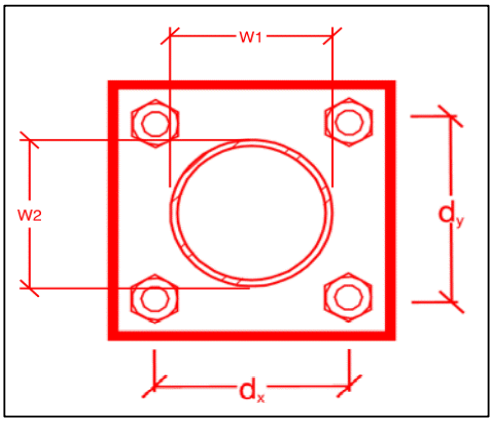
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N36	90
N35	90



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	9.5
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	3.5
Bolt Type:	A307
Bolt Diameter (in):	0.625
Required Tensile Strength (kips):	4.8
Required Shear Strength (kips):	2.6
Tensile Strength / bolt (kips):	10.0
Shear Strength / bolt (kips):	6.0
Tensile Capacity Overall:	**11.9%***
Shear Capacity Overall:	**10.9%**



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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Passing Mount Analysis

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

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

Base Requirements:

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

Photo Requirements:

- *Base and "During Installation Photos"*
  - Base pictures include
    - Photo of Gate Signs showing the tower owner, site name, and number
    - Photo of carrier shelter showing the carrier site name and number if available
    - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
  - "During Installation Photos if provided - must be placed only in this folder
- *Photos taken at ground level*
  - Overall tower structure before and after installation of the equipment modifications
  - Photos of the appropriate mount before and after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed
- *Photos taken at Mount Elevation*
  - Photos showing each individual sector before and also after installation of equipment.

- These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
- Photos showing the safety climb wire rope above and below the mount prior to modification.
- Photos showing the climbing facility and safety climb if present.

Antenna & equipment placement and Geometry Confirmation:

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

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

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

Certifying Individual: Company _____

Name _____

Signature _____

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

Issue:

Response:

Schedule A – Photo & Document File Structure

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

Structure: 468991-VZW - N BRANFORD CT

Sector: **A**

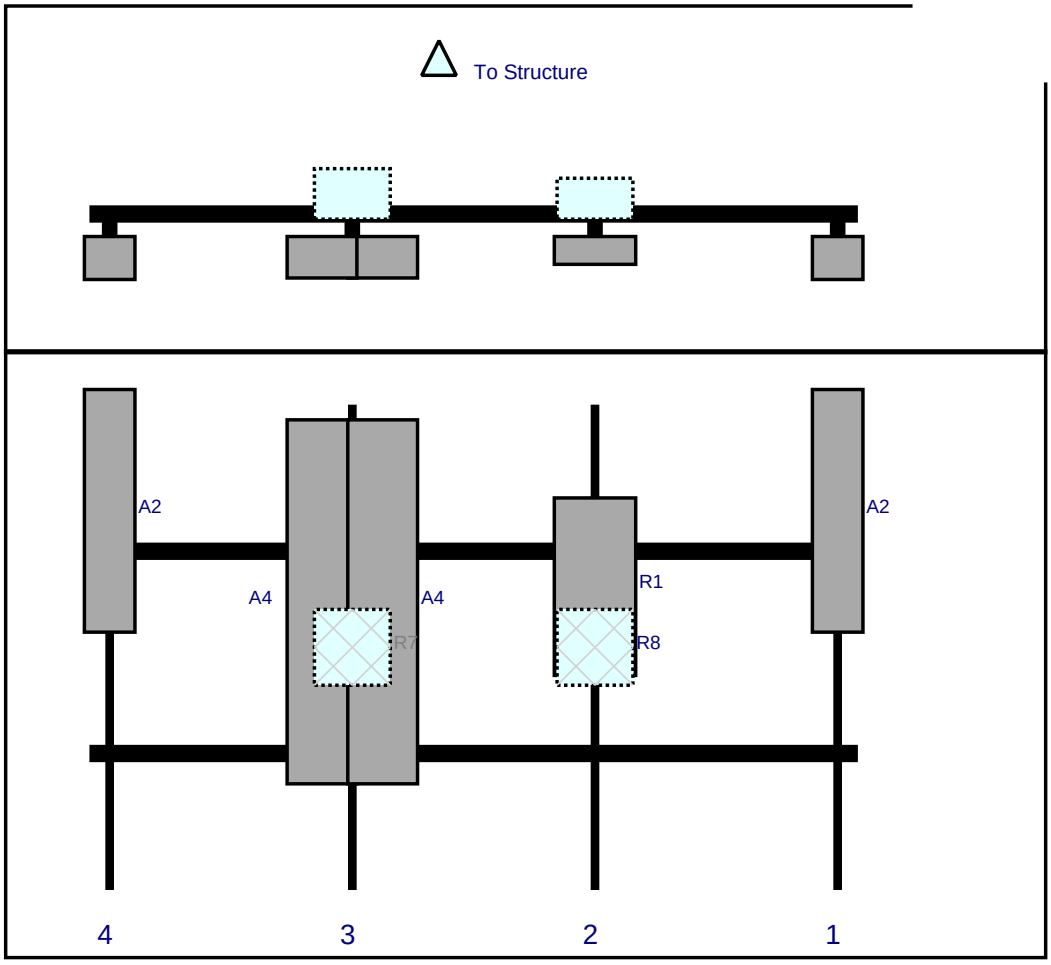
Structure Type: Self Support

Mount Elev: 89.00

MASER CONSULTING — CONNECTICUT —

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A2	DB844G65ZAXY	48	10	148	1	a	Front	21	0	Retained	02/20/2021
R1	MT6407-77A	35.1	16.1	100	2	a	Front	36	0	Added	
R8	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	100	2	a	Behind	48	0	Retained	02/20/2021
A4	JAHH-65B-R3B	72	13.8	52	3	a	Front	39	-6	Retained	02/20/2021
A4	JAHH-65B-R3B	72	13.8	52	3	b	Front	39	6	Retained	02/20/2021
R7	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	52	3	a	Behind	48	0	Retained	02/20/2021
A2	DB844G65ZAXY	48	10	4	4	a	Front	21	0	Retained	02/20/2021

Structure: 468991-VZW - N BRANFORD CT

Sector: **B**

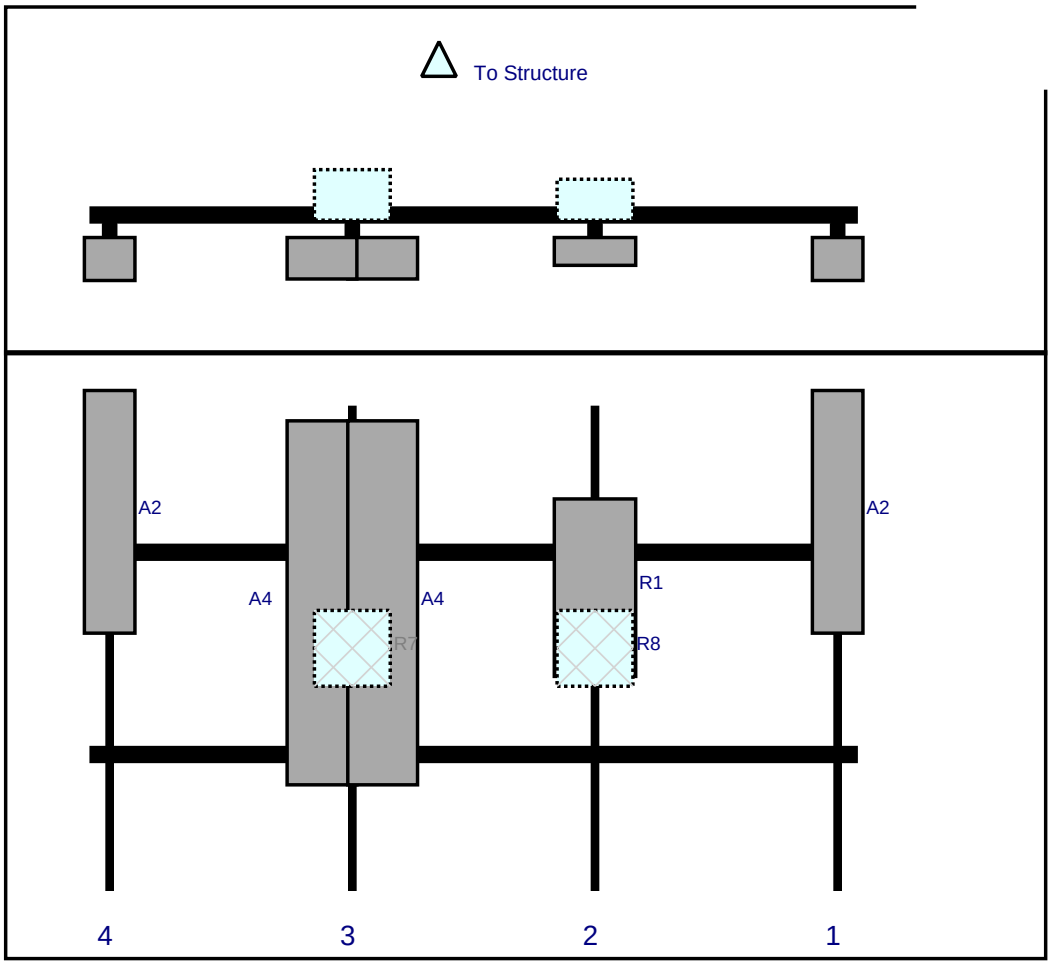
Structure Type: Self Support

Mount Elev: 89.00

MASER CONSULTING — CONNECTICUT —

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A2	DB844G65ZAXY	48	10	148	1	a	Front	21	0	Retained	02/20/2021
R1	MT6407-77A	35.1	16.1	100	2	a	Front	36	0	Added	
R8	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	100	2	a	Behind	48	0	Retained	02/20/2021
A2	DB844G65ZAXY	48	10	4	4	a	Front	21	0	Retained	02/20/2021
A4	JAHH-65B-R3B	72	13.8	52	3	a	Front	39	-6	Retained	02/20/2021
A4	JAHH-65B-R3B	72	13.8	52	3	b	Front	39	6	Retained	02/20/2021
R7	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	52	3	a	Behind	48	0	Retained	02/20/2021

Structure: 468991-VZW - N BRANFORD CT

Sector: **C**

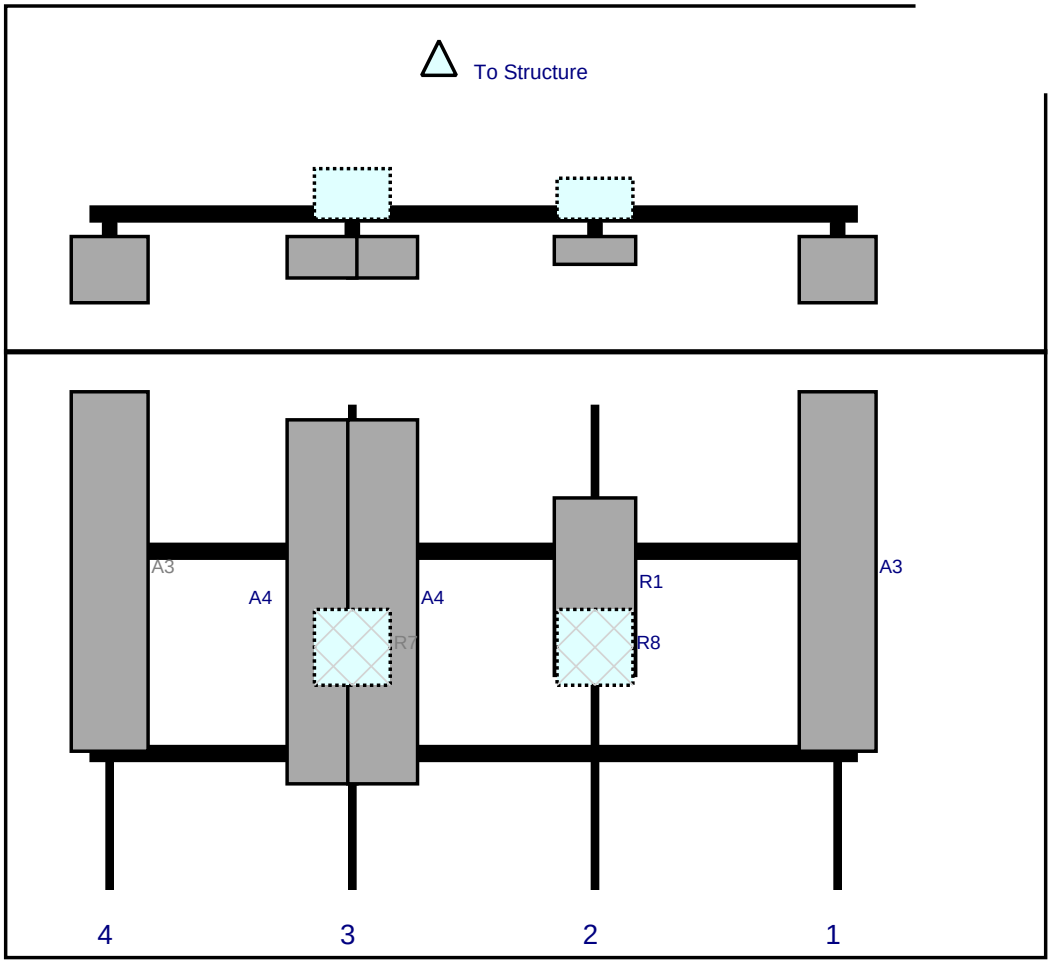
Structure Type: Self Support

Mount Elev: 89.00

MASER CONSULTING — CONNECTICUT —

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A3	LPA-80063-6CF-EDIN-X	71.1	15.2	148	1	a	Front	33	0	Retained	02/20/2021
R1	MT6407-77A	35.1	16.1	100	2	a	Front	36	0	Added	
R8	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	100	2	a	Behind	48	0	Retained	02/20/2021
A4	JAHH-65B-R3B	72	13.8	52	3	a	Front	39	-6	Retained	02/20/2021
A4	JAHH-65B-R3B	72	13.8	52	3	b	Front	39	6	Retained	02/20/2021
R7	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	52	3	a	Behind	48	0	Retained	02/20/2021
A3	LPA-80063-6CF-EDIN-X	71.1	15.2	4	4	a	Front	33	0	Retained	02/20/2021

Maser Consulting Connecticut

Subject	TIA-222-H Usage
Site Information	Site ID: 468991 Site Name: N Branford CT Carrier Name: Verizon Wireless Address: 83 Reeds Gap Rd North Branford, Connecticut 06471 New Haven County Latitude: 41.403428° Longitude: -72.744261°
Structure Information	Tower Type: Self-Support Mount Type: Sector Frame

To Whom It May Concern,

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

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

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

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

Sincerely,

Taqi Khawaja, PE
Technical Manager

Exhibit F

Power Density/RF Emissions Report

Site Name: ***NORTH BRANFORD CT***
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)
VZW 700	751	4	628	2511	90	0.0111
VZW CDMA	877.26	2	497	993	90	0.0044
VZW Cellular	874	4	725	2902	90	0.0129
VZW PCS	1975	4	1525	6100	90	0.0271
VZW AWS	2120	4	1493	5973	90	0.0265
VZW CBAND	3730.08	4	6531	26125	90	0.1160

Total Percentage of Maximum Permissible Exposure

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

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

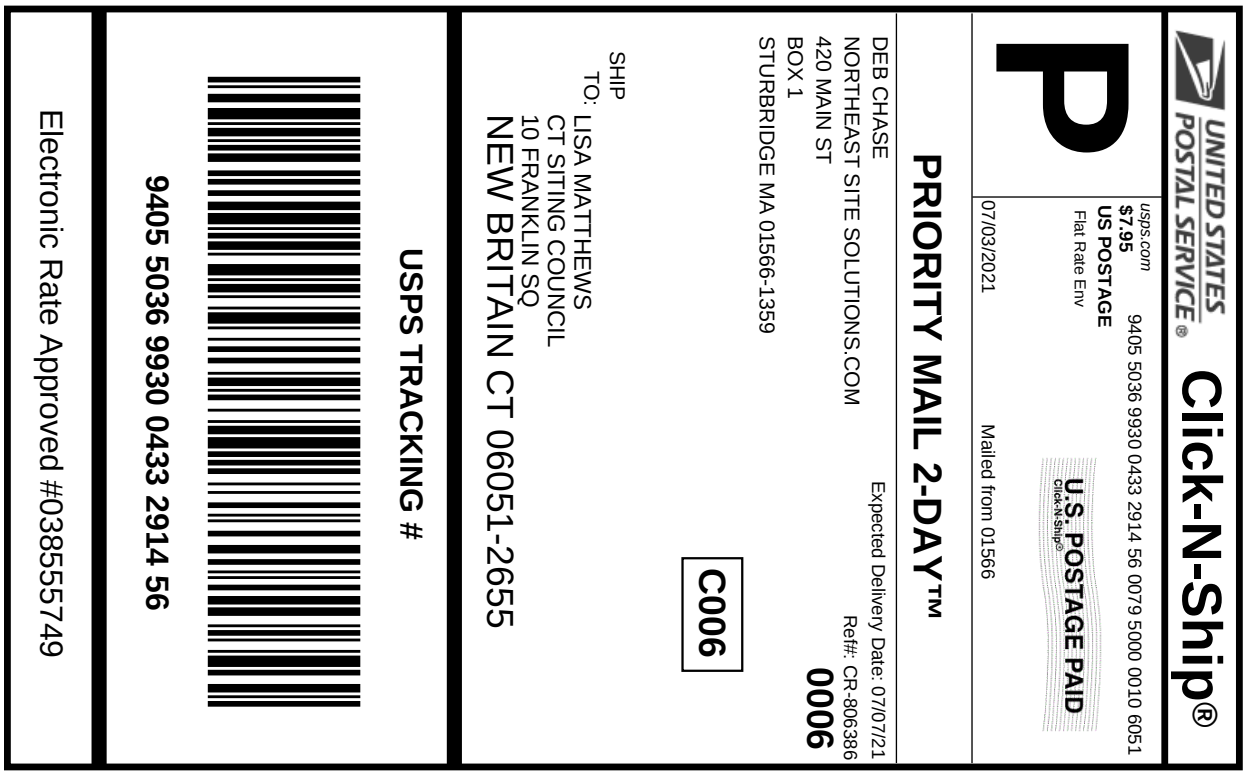
Absolute worst case maximum values used.

Maximum Permissible Exposure*	Fraction of MPE
(mW/cm^2)	(%)
0.5007	2.23%
0.5848	0.75%
0.5827	2.21%
1.0000	2.71%
1.0000	2.65%
1.0000	11.60%
	22.15%

/IEEE C95.1-199
il's November 10, 2015 Memorandum for Exempt Modification filing

Exhibit G

Recipient Mailings



Cut on dotted line.

Instructions

1. **Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.**
2. **Place your label so it does not wrap around the edge of the package.**
3. **Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.**
4. **To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.**
5. **Mail your package on the "Ship Date" you selected when creating this label.**

Click-N-Ship® Label Record

USPS TRACKING # :
9405 5036 9930 0433 2914 56

Trans. #:	537461676
Print Date:	07/01/2021
Ship Date:	07/03/2021
Expected Delivery Date:	07/07/2021

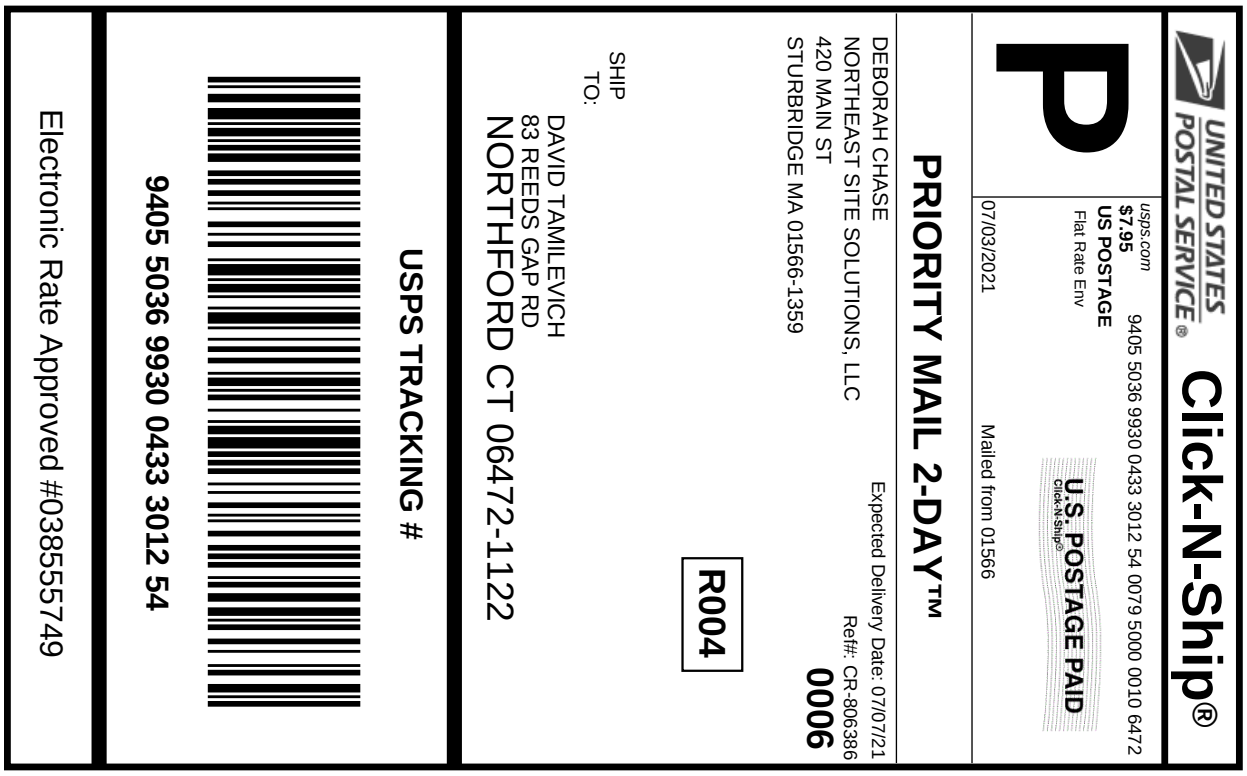
Priority Mail® Postage:	**$7.95**
Total:	**$7.95**

From: DEB CHASE Ref#: CR-806386
NORTHEAST SITE SOLUTIONS.COM
420 MAIN ST
BOX 1
STURBRIDGE MA 01566-1359

To: LISA MATTHEWS
CT SITING COUNCIL
10 FRANKLIN SQ
NEW BRITAIN CT 06051-2655

* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.

Thank you for shipping with the United States Postal Service!
Check the status of your shipment on the USPS Tracking® page at usps.com



Cut on dotted line.

Instructions

1. **Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.**
2. **Place your label so it does not wrap around the edge of the package.**
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4. **To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.**
5. **Mail your package on the "Ship Date" you selected when creating this label.**

Click-N-Ship® Label Record

USPS TRACKING # :
9405 5036 9930 0433 3012 54

Trans. #:	537462990
Print Date:	07/01/2021
Ship Date:	07/03/2021
Expected Delivery Date:	07/07/2021

Priority Mail® Postage:	**$7.95**
Total:	**$7.95**

From: DEBORAH CHASE Ref#: CR-806386
NORTHEAST SITE SOLUTIONS, LLC
420 MAIN ST
STURBRIDGE MA 01566-1359

To: DAVID TAMILEVICH
83 REEDS GAP RD
NORTHFORD CT 06472-1122

* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.

Thank you for shipping with the United States Postal Service!
Check the status of your shipment on the USPS Tracking® page at usps.com

Deborah Chase

From: Deborah Chase
Sent: Thursday, July 1, 2021 7:00 PM
To: 'zeo@townofnorthbranfordct.com'
Cc: 'townmanager@townofnorthbranfordct.com'
Subject: RE: 83 Reeds Gap Road, North Branford CT 06472 VERIZON WIRELESS EM APPLICATION (806386-CROWN)
Attachments: 83 REEDS GAP ROAD NORTH BRANFORD CT 06472 VERIZON WIRELESS EM APPLICATION (806386-Crown) - Copy.pdf

---

From: Deborah Chase <deborah@northeastsitesolutions.com>
Sent: Thursday, July 1, 2021 6:58 PM
To: 'zeo@townofnorthbranfordct.com' <zeo@townofnorthbranfordct.com>
Cc: 'townmanager@townofnorthbranfordct.com' <townmanager@townofnorthbranfordct.com>
Subject: RE: 83 Reeds Gap Road, North Branford CT 06472 VERIZON WIRELESS EM APPLICATION (806386-CROWN)

File was too big so I have sent it via WeTransfer.
Please let me know if you have issued with downloading.
Thank you

From: Deborah Chase <deborah@northeastsitesolutions.com>
Sent: Thursday, July 1, 2021 6:53 PM
To: 'zeo@townofnorthbranfordct.com' <zeo@townofnorthbranfordct.com>
Cc: 'townmanager@townofnorthbranfordct.com' <townmanager@townofnorthbranfordct.com>
Subject: 83 Reeds Gap Road, North Branford CT 06472 VERIZON WIRELESS EM APPLICATION (806386-CROWN)

Good afternoon-

Attached please find Verizon Wireless' exempt modification application that is being submitted to the Connecticut Siting Council today, July 1, 2021.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable.

If you could kindly confirm receipt.

Thank you

Deborah Chase
Senior Project Coordinator & Analyst
Mobile: 860-490-8839

Save a tree. Refuse.Reduce. Reuse. Recycle.