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

August 29, 2023

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

RE: **Notice of Exempt Modification for Verizon**
Crown #806353_Crown_VZW
128 Mather Street, Wilton, CT 06897
Latitude: 41° 14′ 18.34″/ Longitude: -73° 25′ 26.44″

Dear Ms. Bachman:

Verizon Wireless is requesting to file an exempt modification for an existing tower located at 128 Mather Street, Wilton, CT 06897. The property is owned by the Town of Wilton and the tower is owned by Crown Castle. Verizon now intends to add three (3) interference mitigation filters to be installed at the 164-foot level of the tower of the 180-foot monopole. This modification may include B2, B5, B17, B14, B29, B30, B66 & n77 hardware that is 4G(LTE) and/or 5GNR capable through remote software configuration and either or both services may be turned on or off at various times.

Panned Modification:

Tower:

Installed New:
(3) Kaelus BSF0020F3V1-1 Twin Bandstop 900MHZ Interference Mitigation Filters

The facility was approved by the Connecticut Siting Council on May 3, 1988 via a Decision and Order. Please see attached.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.SA. § 16-SOj-73, a copy of this letter is being sent to First Selectwoman Lynne Vanderslice and Planning Director Michael Wrinn for the municipality and property owner. Crown Castle is the tower owner. The proposed modifications will not result in an increase in the height of the existing tower.

1. The proposed modifications will not require the extension of the site boundary.
2. The proposed modification will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
3. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communication Commission safety standard.

4. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
5. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, Verizon respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Please send approval/rejection letter to Attn: Domenica Tatasciore.

Sincerely,

Domenica Tatasciore
Site Acquisition Specialist
1800 W. Park Drive
Westborough, MA 01581
(508) 621-9161/ Domenica.Tatasciore@crowncastle.com

Attachments
cc:

First Selectwoman Lynne Vanderslice
Town of Wilton
238 Danbury Road
Wilton, CT 06897
203-563-0100

Planning Director Michael Wrinn
Town of Wilton
238 Danbury Road
Wilton, CT 06897
203-563-0185

Crown Castle, Tower Owner

From: TrackingUpdates@fedex.com
To: Tatasciore, Domenica
Subject: FedEx Shipment 773126467991: Your package has been delivered
Date: Tuesday, August 29, 2023 10:09:26 AM

Hi. Your package was delivered Tue, 08/29/2023 at 10:01am.

Delivered to 238 DANBURY RD, WILTON, CT 06897
Received by J.RODCHESTER

OBTAIN PROOF OF DELIVERY

TRACKING NUMBER	773126467991
FROM	Crown Castle 1800 West Park Drive

	Suite 200 WESTBOROUGH, MA, US, 01581
TO	Town of Wilton First Selectwoman Lynne Vanderslice 238 Danbury Road WILTON, CT, US, 06897
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Mon 8/28/2023 06:04 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	WILTON, CT, US, 06897
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Priority Overnight

From: TrackingUpdates@fedex.com
To: Tatasciore, Domenica
Subject: FedEx Shipment 773126482145: Your package has been delivered
Date: Tuesday, August 29, 2023 10:11:04 AM

Hi. Your package was delivered Tue, 08/29/2023 at 10:04am.

Delivered to 238 DANBURY RD, WILTON, CT 06897
Received by S.ROBERTSON

OBTAIN PROOF OF DELIVERY

TRACKING NUMBER	773126482145
FROM	Crown Castle 1800 West Park Drive

	Suite 200 WESTBOROUGH, MA, US, 01581
TO	Town of Wilton Planning Director Michael Wrinn 238 Danbury Road WILTON, CT, US, 06897
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Mon 8/28/2023 06:04 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	WILTON, CT, US, 06897
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Priority Overnight

Wondering when a package will arrive?

Enter your tracking number to see your estimated delivery time within a 4-hour window.

TRACK A PACKAGE

DOCKET NO. 94 - AN APPLICATION OF METRO MOBILE CTS OF FAIRFIELD COUNTY, INC., FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR CELLULAR TELEPHONE ANTENNAS AND ASSOCIATED EQUIPMENT IN THE TOWN OF WILTON, CONNECTICUT.	: Connecticut : Siting : Council May 3, 1988

DECISION AND ORDER

Pursuant to the foregoing opinion, the Connecticut Siting Council finds that the effects associated with the construction and operation of a cellular monopole structure at the alternative Mather Street site, including effects on the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forests and parks, air and water purity and fish and wildlife, are not significant either alone or cumulatively with other effects, are not in conflict with the policies of the state concerning such effects, and are not sufficient reason to deny the application, and therefore, directs that a Certificate of Environmental Compatibility and Public Need, as provided by Section 16-50k of the General Statutes of Connecticut (CGS) be issued to Metro Mobile CTS of Fairfield County, Inc. (Metro Mobile) for the construction, operation, and maintenance of a cellular telephone tower site and associated equipment at the "Wilton-D/AA" site on Mather Street in Wilton, Connecticut.

The proposed "D-Wilton" site on Richdale Drive and alternative "D/A Wilton" site on Quail Ridge Road are hereby denied.

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

1. The tower shall be constructed as a monopole or lattice tower, as determined by the Council in approving the development and management plan, and be no taller than necessary to provide the proposed service, and in no event shall exceed a total height of 193 feet, including antennas and associated equipment.

2. The facility shall be constructed in accordance with all applicable federal, state, and municipal laws and regulations.

3. Unless necessary to comply with condition number two, above, no lights shall be installed on this tower.

4. The Certificate Holder shall prepare a development and management (d&m) plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of State Agencies. The d&m plan shall provide monopole and lattice tower foundation design specifications and plans for permanent evergreen screening around the outside perimeter of the eight-foot chain link fence which will surround the site.

5. The Certificate Holder shall provide the Council with the results of additional subsurface reconnaissance at the proposed site prior to the commencement of any construction at this site.

6. The Certificate Holder or its successor shall notify the Council if and when directional antennas or any equipment other than that listed in this application are added to this facility.

7. The Certificate Holder or its successor shall permit public or private entities to share space on the tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

8. If this facility does not provide, or permanently ceases to provide, cellular service following the completion of construction, this Decision and Order shall be void, and the tower and all associated equipment in this application shall be dismantled and removed or reapplication for any new use shall be made to the Council before any such new use is made.

9. The Certificate Holder shall comply with any future radio frequency (RF) standards promulated by state or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facility granted in this Decision and Order shall be brought into compliance with such standards.

10. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the issuance of this Decision and Order, or within three years of the completion of any appeal taken in this Decision and Order.

Pursuant to Section 16-50p, we hereby direct that a copy of the Decision and Order be served on each person listed below. A notice of issuance shall be published in the Norwalk Hour and the Wilton Bulletin.

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

The parties or intervenors to this proceeding are:

Metro Mobile CTS of Fairfield County, Inc. (Party)
50 Rockland Road
South Norwalk, CT 06854
Attn: Michael Riley

Howard L. Slater, Esq. (Its Attorney)
Jennifer Young Gaudet, Esq.
Byrne, Slater, Sandler, Shulman & Rouse, P.C.
330 Main Street
Hartford, CT 06103

Fleischman and Walsh, P.C. (Representative)
1725 N. Street, N.W.
Washington, D.C. 20036
Attn: Richard Rubin, Esq.

PEACE, Inc. (Party)

Ann Caggiano (Representative)
President
PEACE, Inc.
33 Honey Hill Trail
Wilton, CT 06897

Town of Wilton (Party)

Edward C. Desmond (Representative)
First Selectman
Town of Wilton
Town Hall
238 Danbury Road
Wilton, CT 06897

Joseph C. Lee, Esq. (Its Attorney)
Alice A. Bruno, Esq.
Tyler Cooper & Alcorn
205 Church Street
P.O. Box 1936
New Haven, CT 06509

Margaret Doheny (Party)
21 Richdale Drive
Wilton, CT 06897

SNET Cellular, Inc. (Intervenor)

Donald R. Chapman, Vice President (Representative)
Operations
SNET Cellular, Inc.
555 Long Wharf Drive
New Haven, CT 06511

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

Ogden Bigelow (Intervenor)
25 Hidden Lake Road
Wilton, CT 06897

John Jordon (Party)
32 Mayapple Road
Wilton, CT 06897

Veronica Tella (Party)
41 Honey Hill Trail
Wilton, CT 06897

Betsy Mitchell (Party)
125 Catalpa Road
Wilton, CT 06897
(SERVICE WAIVED)

1390E

CERTIFICATION

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case in Docket 94 or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut the 3rd day of May, 1988.

Council Members	Vote Cast
Gloria Dibble Pond Chairperson	Yes
Commissioner Peter Boucher Designee: Roland Miller	Yes
Commissioner Leslie Carothers Designee: Brian Emerick	Yes
Mortimer A. Gelston	Yes
James G. Horsfall	Yes
William H. Smith	Yes
Colin C. Tait	Absent

1395E-2

Town of Wilton, CT

Property Listing Report

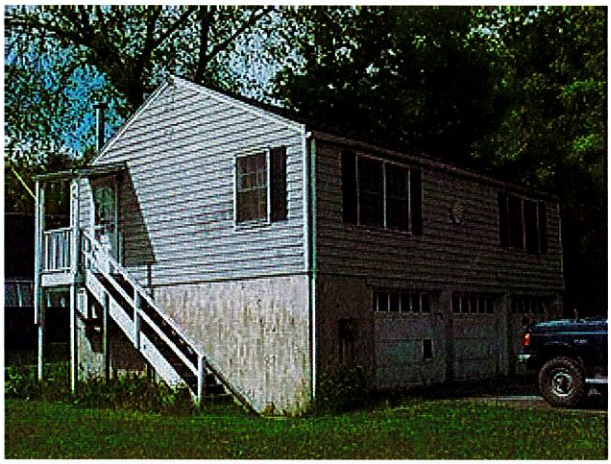
Map Block Lot	57-24	Building #	1	PID	2939	Account	006518

Property Information

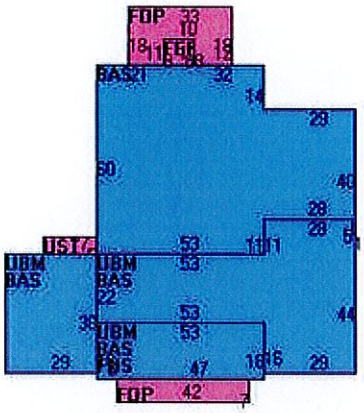
Property Location	238 DANBURY RD
Owner	WILTON TOWN OF
Co-Owner	na
Mailing Address	238 DANBURY RD WILTON CT 06897
Land Use	21 Ex Com MDL-94
Land Class	E
Zoning Code	R-2
Census Tract	3

Neighborhood	6000
Acreage	11.17
Utilities	Public Water,Public Sewer
Lot Setting/Desc	UNKNOWN Rolling
Book / Page	0343/0239
Additional Info	

Photo



Sketch



Primary Construction Details

Year Built	1930
Building Desc.	Ex Com MDL-94
Building Style	City/Town Hall
Building Grade	
Stories	3
Occupancy	1.00
Exterior Walls	Brick
Exterior Walls 2	NA
Roof Style	Flat
Roof Cover	Rolled Compos
Interior Walls	Drywall
Interior Walls 2	Plastered
Interior Floors 1	Terrazzo Monol
Interior Floors 2	Carpet

Heating Fuel	Oil
Heating Type	Hot Water
AC %	03
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Commercial
Building Condition	VG
Sprinkler %	NA
Heat / AC	Heat A/C Split
Frame Type	Masonary
Baths / Plumbing	Average
Ceiling / Wall	Sus Ceil and W
Rooms / Prtns	Average
Wall Height	10
First Floor Use	NA
Foundation	NA

Report Created On 8/22/2023

Town of Wilton, CT

Property Listing Report | Map Block Lot 57-24 | Building # 1 | PID 2939 | Account 006518

Valuation Summary

(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	0	0
Extras	0	0
Improvements	0	0
Outbuildings	0	0
Land	0	0
Total	12621900	8835330

Outbuilding and Extra Features

Type	Description
Vault Avg.	136.00 S.F.
Vault Avg.	832.00 S.F.
Paving Asphaul	120000.00 S.F.
Lights 1	6.00 UNITS
Lights (2)	1.00 UNITS
Air-Cond.	1922.00 S.F.
Air-Cond.	4289.00 S.F.
Air-Cond.	1944.00 S.F.
Gas Pump	2.00 UNITS

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	8838	8838
Enclosed Porch	80	0
Open Porch	808	0
Upper Story, Finished	954	954
Basement, Unfinished	4638	0
Utility, Storage, Unfinished	85	0
Total Area	15403	9792

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
SHOFF, LOUISE E	0177/0266	06/26/1972	0
WILTON TOWN OF	0343/0239	03/26/1980	300000

Report Created On 8/22/2023

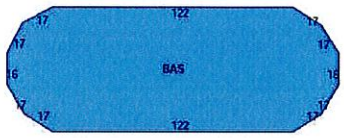
Town of Wilton, CT

Property Listing Report

Map Block Lot	57-24	Building #	2	PID	2939	Account	

Photo

Sketch



Primary Construction Details

Year Built	1989
Building Desc.	Commercial
Building Style	Warehouse
Building Grade	
Stories	1
Occupancy	0.00
Exterior Walls	Concr/Cinder
Exterior Walls 2	NA
Roof Style	Irregular
Roof Cover	Asphalt Shngl.
Interior Walls	Minim/Masonry
Interior Walls 2	NA
Interior Floors 1	Dirt/None
Interior Floors 2	NA

Heating Fuel	None
Heating Type	None
AC %	01
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Ex Com MDL-96
Building Condition	A
Sprinkler %	NA
Heat / AC	None
Frame Type	Wood Frame
Baths / Plumbing	None
Ceiling / Wall	Ceiling Only
Rooms / Prtns	Average
Wall Height	30
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	9770	9770

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	9770	9770

Report Created On 8/22/2023

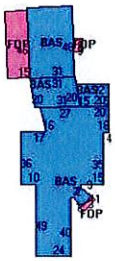
Town of Wilton, CT

Property Listing Report

Map Block Lot	57-24	Building #	3	PID	2939	Account	

Photo

Sketch



Primary Construction Details

Year Built	1960
Building Desc.	Commercial
Building Style	City/Town Hall
Building Grade	
Stories	1
Occupancy	2.00
Exterior Walls	Stucco/Masonry
Exterior Walls 2	NA
Roof Style	Gable/Hip
Roof Cover	Asphalt Shngl.
Interior Walls	Drywall
Interior Walls 2	NA
Interior Floors 1	Carpet
Interior Floors 2	NA

Heating Fuel	Oil
Heating Type	Hot Water
AC %	03
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Ex Com MDL-94
Building Condition	A
Sprinkler %	NA
Heat / AC	Heat A/C Split
Frame Type	Masonary
Baths / Plumbing	Average
Ceiling / Wall	Ceil and Wall
Rooms / Prtns	Average
Wall Height	10
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	6507	6507
Open Porch	777	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	7284	6507

Report Created On 8/22/2023

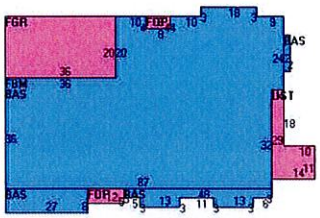
Town of Wilton, CT

Property Listing Report

Map Block Lot	57-24	Building #	4	PID	2939	Account	

Photo

Sketch



Primary Construction Details

Year Built	1974
Building Desc.	Commercial
Building Style	Police Station
Building Grade	
Stories	1
Occupancy	1.00
Exterior Walls	Brick
Exterior Walls 2	NA
Roof Style	Flat
Roof Cover	Rolled Compos
Interior Walls	Drywall
Interior Walls 2	NA
Interior Floors 1	Vinyl
Interior Floors 2	Carpet

Heating Fuel	Oil
Heating Type	Hot Water
AC %	03
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Ex Com MDL-96
Building Condition	G
Sprinkler %	NA
Heat / AC	Heat A/C Split
Frame Type	Masonary
Baths / Plumbing	Average
Ceiling / Wall	Sus Ceil and W
Rooms / Prtns	Average
Wall Height	14
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	4732	4732
Basement, Finished	4270	4057
Garage	720	0
Open Porch	92	0
Utility, Storage, Unfinished	226	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	10040	8789

Report Created On 8/22/2023

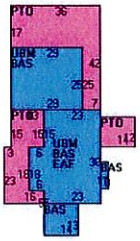
Town of Wilton, CT

Property Listing Report

Map Block Lot	57-24	Building #	5	PID	2939	Account	

Photo

Sketch



Primary Construction Details

Year Built	1933
Building Desc.	Commercial
Building Style	Res Style Comm
Building Grade	
Stories	1.25
Occupancy	1.00
Exterior Walls	Vinyl Siding
Exterior Walls 2	NA
Roof Style	Gable/Hip
Roof Cover	Asphalt Shngl.
Interior Walls	Drywall
Interior Walls 2	Plastered
Interior Floors 1	Carpet
Interior Floors 2	NA

Heating Fuel	Oil
Heating Type	Forced Air
AC %	06
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Ex Com MDL-94
Building Condition	G
Sprinkler %	NA
Heat / AC	Heat A/C Split
Frame Type	Wood Frame
Baths / Plumbing	Average
Ceiling / Wall	Ceil and Wall
Rooms / Prtns	Average
Wall Height	10
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	1922	1922
Attic, Expansion, Finished	982	491
Patio	1410	0
Basement, Unfinished	1707	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	6021	2413

Report Created On 8/22/2023

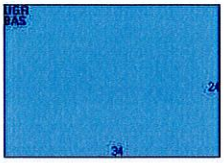
Town of Wilton, CT

Property Listing Report

Map Block Lot	57-24	Building #	6	PID	2939	Account	

Photo

Sketch



Primary Construction Details

Year Built	1950
Building Desc.	Residential
Building Style	Ranch
Building Grade	Below Average
Stories	1
Occupancy	1
Exterior Walls	Clapboard
Exterior Walls 2	NA
Roof Style	Gable/Hip
Roof Cover	Asphalt Shngl.
Interior Walls	Drywall
Interior Walls 2	NA
Interior Floors 1	Vinyl
Interior Floors 2	Carpet

Heating Fuel	Oil
Heating Type	Forced Air
AC %	01
Bedrooms	2 Bedrooms
Full Bathrooms	1
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	5
Bath Style	Average
Kitchen Style	Average
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Ex Com MDL-01
Building Condition	A
Sprinkler %	NA
Heat / AC	NA
Frame Type	NA
Baths / Plumbing	NA
Ceiling / Wall	NA
Rooms / Prtns	NA
Wall Height	NA
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	816	816
Garage, Under	816	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	1632	816

Report Created On 8/22/2023

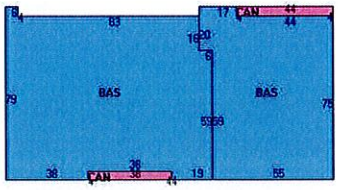
Town of Wilton, CT

Property Listing Report

Map Block Lot	57-24	Building #	7	PID	2939	Account	

Photo

Sketch



Primary Construction Details

Year Built	1982
Building Desc.	Commercial
Building Style	Fire Station
Building Grade	
Stories	1
Occupancy	1.00
Exterior Walls	Brick
Exterior Walls 2	NA
Roof Style	Gable/Hip
Roof Cover	Asphalt Shngl.
Interior Walls	Drywall
Interior Walls 2	Minim/Masonry
Interior Floors 1	Carpet
Interior Floors 2	Concrete

Heating Fuel	Oil
Heating Type	Hot Water
AC %	06
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Ex Com MDL-96
Building Condition	G
Sprinkler %	NA
Heat / AC	Heat A/C Split
Frame Type	Masonary
Baths / Plumbing	Average
Ceiling / Wall	Ceil and Wall
Rooms / Prtns	Average
Wall Height	16
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	11190	11190
Canopy	328	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	11518	11190

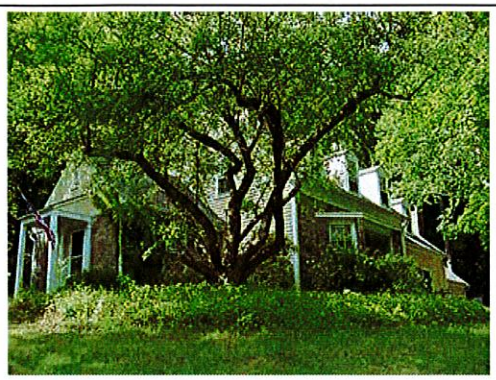
Report Created On 8/22/2023

Town of Wilton, CT

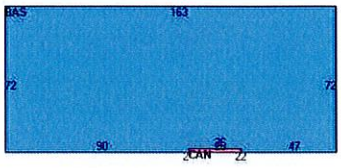
Property Listing Report

Map Block Lot	57-24	Building #	8	PID	2939	Account	

Photo



Sketch



Primary Construction Details

Year Built	1982
Building Desc.	Commercial
Building Style	Garage Office
Building Grade	
Stories	1
Occupancy	1.00
Exterior Walls	Brick
Exterior Walls 2	NA
Roof Style	Gable/Hip
Roof Cover	Asphalt Shngl.
Interior Walls	Minim/Masonry
Interior Walls 2	Drywall
Interior Floors 1	Concrete
Interior Floors 2	Vinyl

Heating Fuel	Oil
Heating Type	Forced Air
AC %	06
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Ex Com MDL-96
Building Condition	A
Sprinkler %	NA
Heat / AC	Heat A/C Split
Frame Type	Masonary
Baths / Plumbing	Average
Ceiling / Wall	Ceiling Only
Rooms / Prtns	Average
Wall Height	14
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	11684	11684
Canopy	52	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	11736	11684

Report Created On 8/22/2023

Town of Wilton, CT

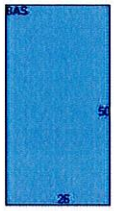
Property Listing Report

Map Block Lot	57-24	Building #	9	PID	2939	Account	

Photo

No Photo Available

Sketch



Primary Construction Details

Year Built	2006
Building Desc.	Commercial
Building Style	Commercial
Building Grade	
Stories	1
Occupancy	1.00
Exterior Walls	Pre-finsh Metl
Exterior Walls 2	NA
Roof Style	Gable/Hip
Roof Cover	Metal/Tin
Interior Walls	Minim/Masonry
Interior Walls 2	NA
Interior Floors 1	Concrete
Interior Floors 2	NA

Heating Fuel	None
Heating Type	None
AC %	01
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Ex Com MDL-96
Building Condition	A
Sprinkler %	NA
Heat / AC	None
Frame Type	Steel
Baths / Plumbing	None
Ceiling / Wall	Ceil and Wall
Rooms / Prtns	LIght
Wall Height	16
First Floor Use	NA
Foundation	NA

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	1300	1300

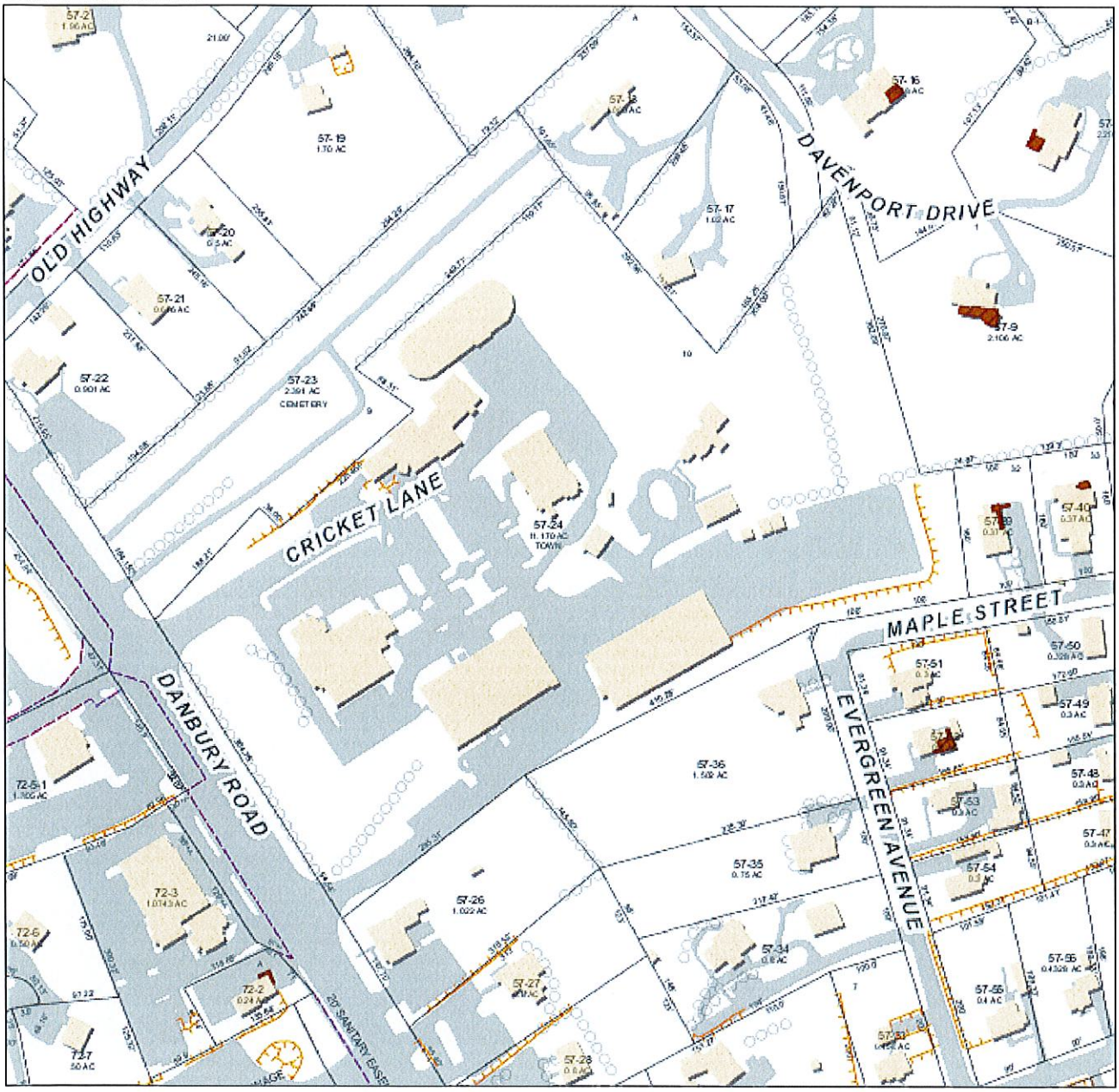
Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	1300	1300

Report Created On 8/22/2023

Town of Wilton

Geographic Information System (GIS)

Date Printed: 8/22/2023



MAP DISCLAIMER - NOTICE OF LIABILITY

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

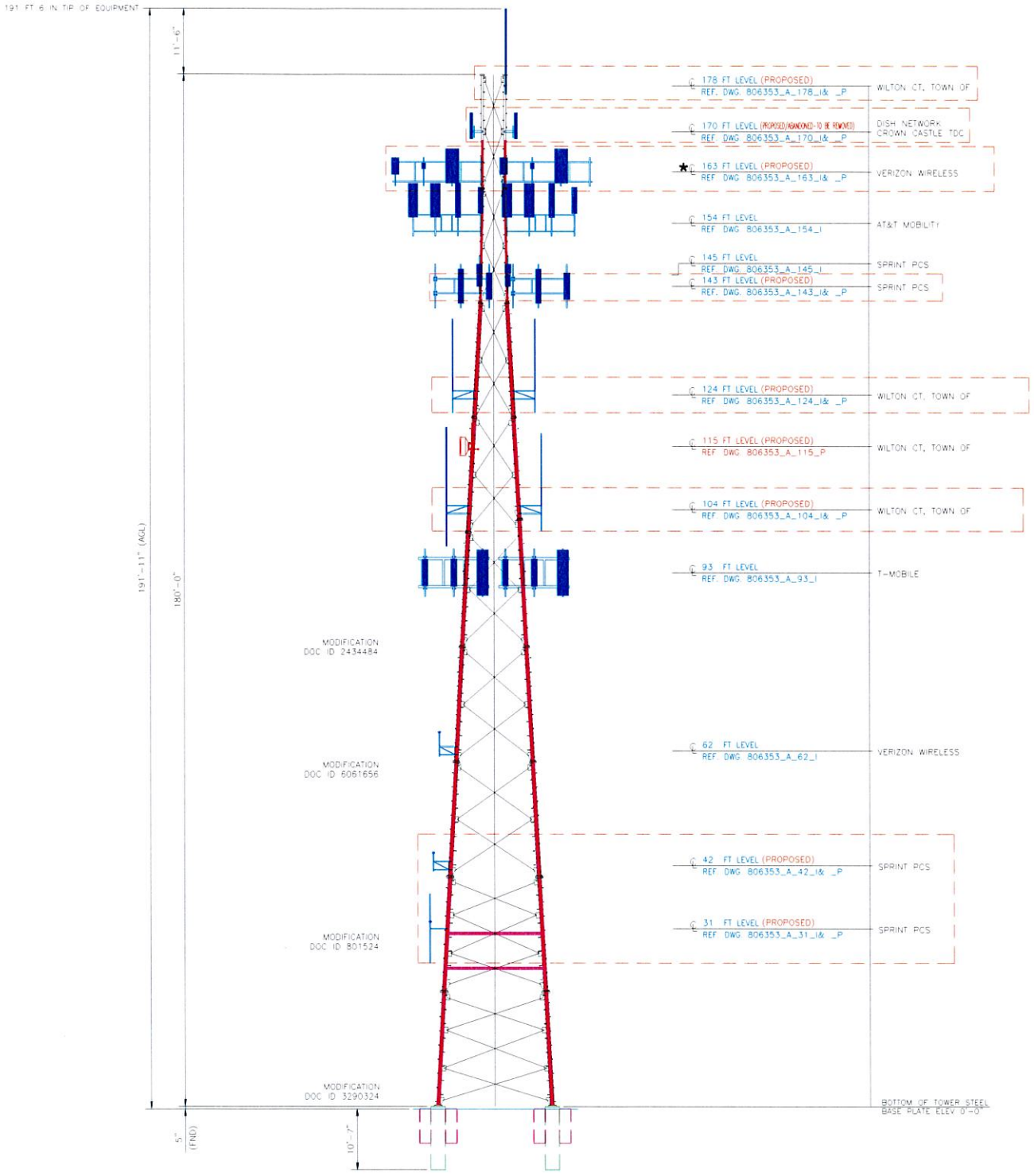
Zoning Effective: July 28, 2017

Planimetrics Updated: 2014

Approximate Scale: 1 inch = 200 feet

0 200 Feet

N W E S


191' 6" IN TIP OF EQUIPMENT
11'-6"
191'-11" (AGL)
180'-0"
5" (FND)
10'-7"
178' FT LEVEL (PROPOSED)
REF. DWG. 806353_A_178_I&_P
WILTON, CT, TOWN OF
170' FT LEVEL (PROPOSED/ABANDONED-TO BE REMOVED)
REF. DWG. 806353_A_170_I&_P
DISH NETWORK
CROWN CASTLE TDC
163' FT LEVEL (PROPOSED)
REF. DWG. 806353_A_163_I&_P
VERIZON WIRELESS
154' FT LEVEL
REF. DWG. 806353_A_154_I
AT&T MOBILITY
145' FT LEVEL
REF. DWG. 806353_A_145_I
SPRINT PCS
143' FT LEVEL (PROPOSED)
REF. DWG. 806353_A_143_I&_P
SPRINT PCS
124' FT LEVEL (PROPOSED)
REF. DWG. 806353_A_124_I&_P
WILTON, CT, TOWN OF
115' FT LEVEL (PROPOSED)
REF. DWG. 806353_A_115_P
WILTON, CT, TOWN OF
104' FT LEVEL (PROPOSED)
REF. DWG. 806353_A_104_I&_P
WILTON, CT, TOWN OF
93' FT LEVEL
REF. DWG. 806353_A_93_I
T-MOBILE
MODIFICATION
DOC ID 2434484
MODIFICATION
DOC ID 6061656
62' FT LEVEL
REF. DWG. 806353_A_62_I
VERIZON WIRELESS
42' FT LEVEL (PROPOSED)
REF. DWG. 806353_A_42_I&_P
SPRINT PCS
31' FT LEVEL (PROPOSED)
REF. DWG. 806353_A_31_I&_P
SPRINT PCS
MODIFICATION
DOC ID 801524
MODIFICATION
DOC ID 3290324
BOTTOM OF TOWER STEEL
BASE PLATE ELEV. 0'-0"

BSF0020F3V1-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

The BSF0020 is ideal for co-located 700, 850 and 900 networks. Utilising a 2.6MHz guardband the BSF0020 provides rejection of the 900 UL band while passing 700/850 UL and DL bands. Capable of being used in an outdoor environment the BSF0020 contains two identical bandstop filters, suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay and rejection.

FEATURES

- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available

TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	

ELECTRICAL	
Impedance	50Ohms
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm

DC / AISG	
Passband	0 - 13MHz
Insertion loss	0.3dB maximum
Return loss	15dB minimum
Input voltage range	± 33V
DC current rating	2A continuous, 4A peak
Compliance	3GPP TS 25.461

ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-20ºC to +60ºC | -4°F to +140°F
Ingress protection	IP67
Altitude	2600m | 8530ft
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.
MTBF	>1,000,000 hours
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE

MECHANICAL	
Dimensions H x D x W	269 x 277 x 80mm | 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)
Weight	8.0 kg | 17.6 lbs (no bracket)
Finish	Powder coated, light grey (RAL7035)
Connectors	RF: 4.3-10 (F) x 4
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.

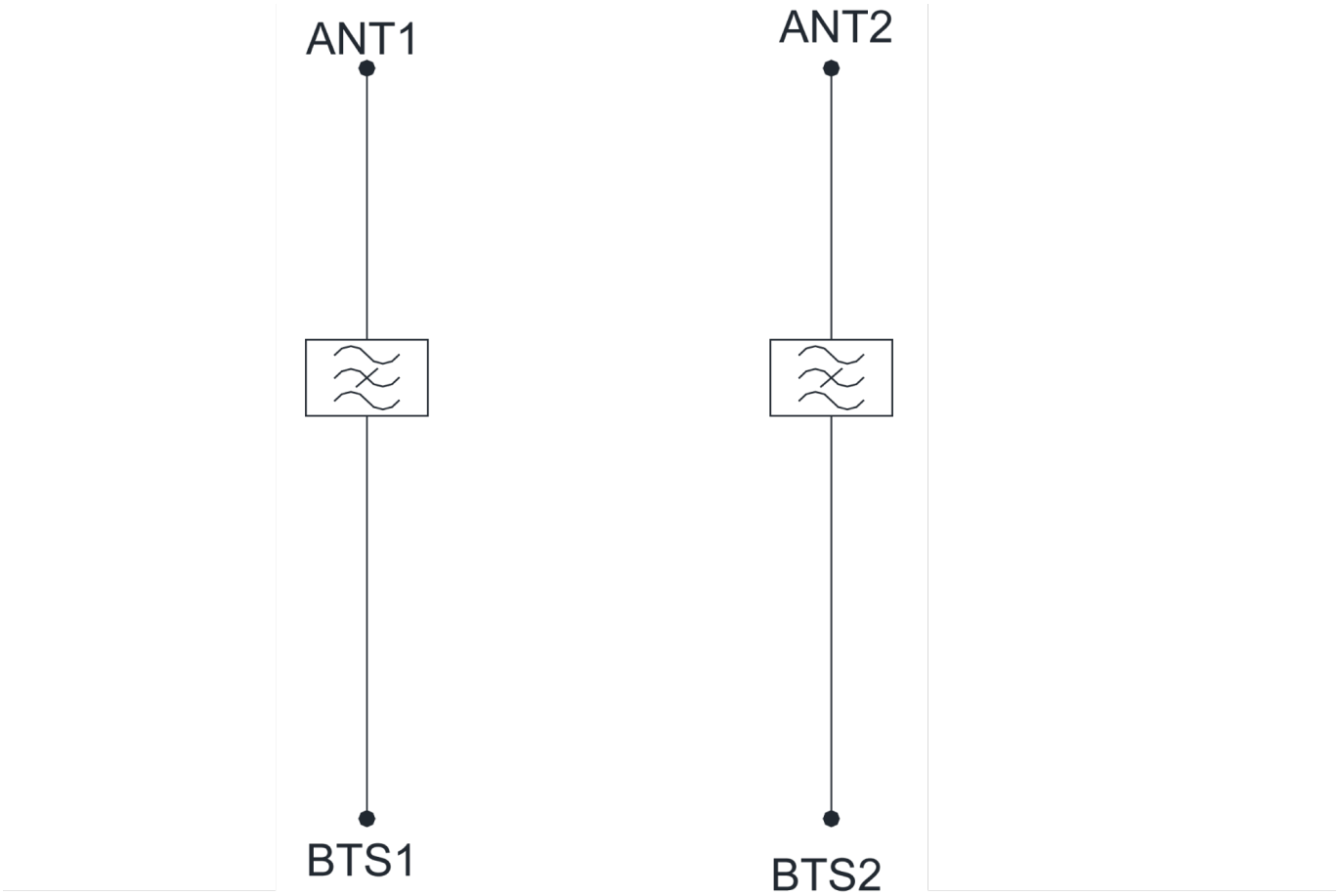
Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
BSF0020F3V1	TWIN, 2 in / 2 out	DC/AISG PASS NO BRACKET	4.3-10 (F)
BSF0020F3V1-1	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)
BSF0020F3V1-2	QUAD, 4 in / 4 out	DC/AISG PASS	4.3-10 (F)

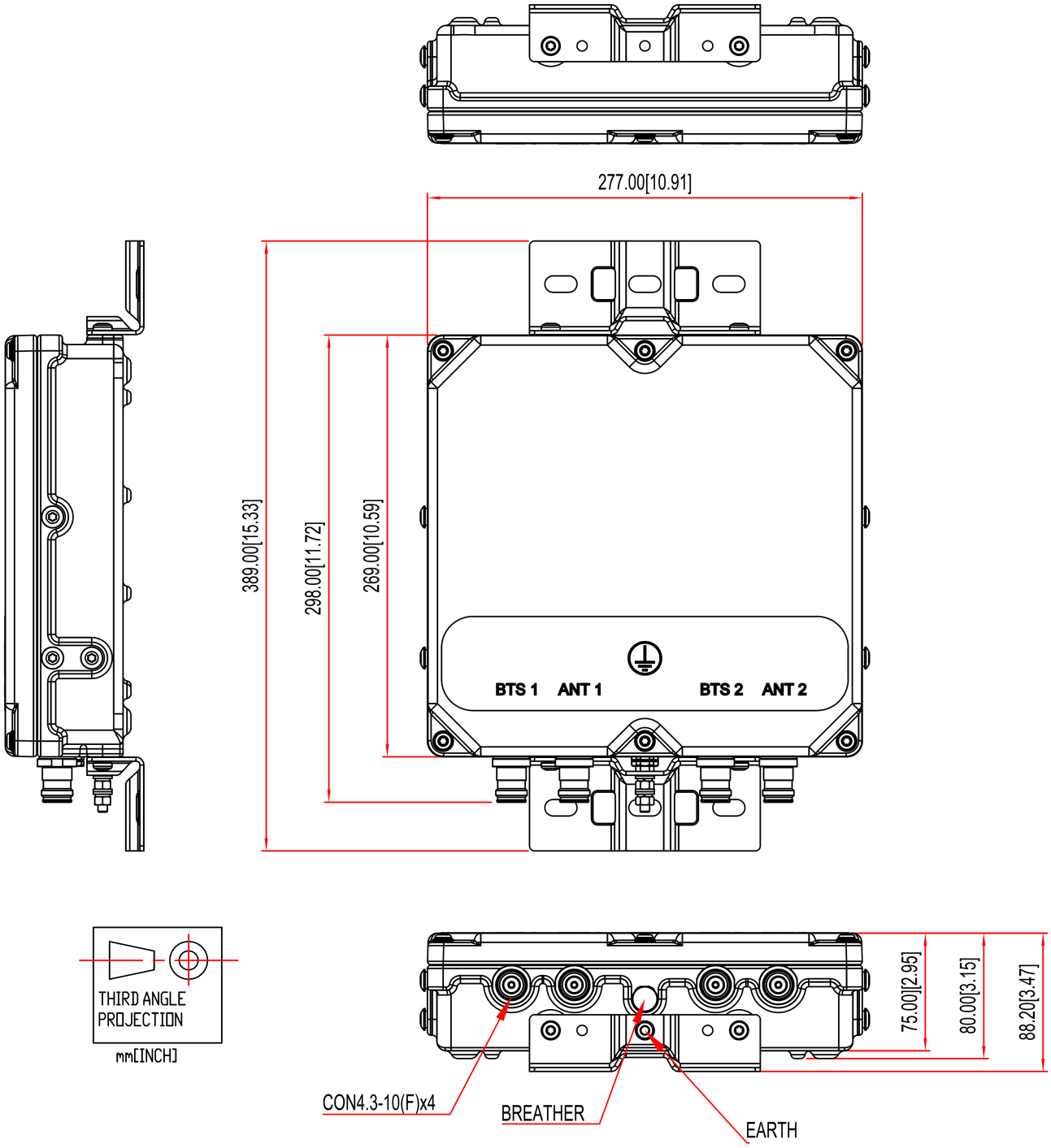
Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

ELECTRICAL BLOCK DIAGRAM



Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

MECHANICAL BLOCK DIAGRAM



Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

Colliers Engineering & Design CT, PC
1055 Washington Boulevard
Stamford, CT 06901
860.395.0055
peter.albano@collierseng.com

Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis

SMART Tool Project #: 10206435
Colliers Engineering & Design Project #: 23777086 (Rev. 1)

July 10, 2023

Site Information	*Site ID:*	*5000383039-VZW / WILTON CT*
	Site Name:	*WILTON CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*128 Mather Rd.* *Wilton, Connecticut 06897* *Fairfield County*
	Latitude:	*41.238426°*
	Longitude:	*-73.424011°*
Structure Information	*Tower Type:*	*180-Ft Self Support*
	Mount Type:	*17.42-Ft Sector Frame*
	FUZE ID #	**17123706**

Analysis Results

Sector Frame: **60.4% Pass***

***Antennas and equipment to be installed in compliance with PMI Requirements of this mount analysis.**

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com

For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

Report Prepared By: Frank Centone

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: 325157, Dated February 10, 2021* *Filter Add Scope Provided*
Mount Mapping Report	*Hudson Design Group LLC, Site ID: 467241* *Dated March 23, 2021*
Previous Post Modification Inspection	*Colliers Engineering & Design Project #: 21777141* *Dated April 10, 2023*
Filter Add Scope	*Provided by Verizon Wireless*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	120 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.985
Seismic Parameters:	S_S:	0.236 g
	S_1:	0.057 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Load, Lv:	250 lbs.
	Maintenance 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
162.00	164.00	3	Samsung	MT6407-77A	Retained
		6	Commscope	JAHH-65B-R3B	
		3	Samsung	XXDWMM-12.5-65-8T CBRS	
		1	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		3	Commscope	CBC78T-DS-43	
		1	Raycap	RRFDC-3315-PF-48	
		6	KAelus	BSF0020F3V1-1	Added

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

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design 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 Colliers Engineering & Design 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 in accordance with the NSTD-446 Standard, 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. Colliers Engineering & Design is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

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

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Colliers Engineering & Design.

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	60.4 %	Pass
Antenna Pipe	59.0 %	Pass
Connection Beam	19.0 %	Pass
Connection Pipe	17.8 %	Pass
Standoff Diagonal	6.8 %	Pass
Standoff Connection	26.5 %	Pass
Standoff Horizontal	32.7 %	Pass
Tie Back	22.7 %	Pass
Mount Connection	47.0 %	Pass

Structure Rating – ***(Controlling Utilization of all Components)***	**60.4%**

Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	30.6	21.8	38.0	29.3
0.5	41.7	28.7	52.2	39.2
1	52.6	35.1	66.2	48.8

Notes:
- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 1 sector(s).
- Ka factors included in (EPA)a calculations

Requirements:

The existing mounts are **SUFFICIENT** for the final loading configuration shown in attachment 2 and do not require modifications. Additional requirements are noted below.

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

Attachments:

1. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Photos
4. Mount Mapping Report (for reference only)
5. Analysis Calculations

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Passing Mount Analysis

Passing Mount Analysis requires a PMI due to a modification in loading.

Electronic pdf version of this can be downloaded at https://pmi.vzwsmart.com.

For additional questions and support, please reach out to pmisupport@colliersengineering.com

---

MDG #: 5000383039 SMART Project #: 10206435 Fuze Project ID: 17123706

Purpose – to provide SMART Tool structural vendor 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:

- If installation will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide "as built mount drawings" showing contractor's name, contact information, preparer's signature, and date. Any deviations from the drawings (Proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo should be time and date stamped
- Photos should be high resolution.
- 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. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: ***https://pmi.vzwsmart.com***

Photo Requirements:

- *Photos taken at ground level*
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation.
  - Photos of the mount after installation; if the mounts are at different rad elevations, pictures must be provided for all elevations that equipment was installed.
- *Photos taken at Mount Elevation*
  - Photos showing the safety climb wire rope above and below the mount prior to installation.
  - Photos showing the climbing facility and safety climb if present.

- Photos showing each individual sector after installation. Each entire sector shall be in one photo to show the interconnection of members.
    - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.

Antenna & equipment placement and Geometry Confirmation:

- The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below.

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

☐ The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

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

Issue:

Response:

Special Instruction Confirmation:

☐ The contractor has read and acknowledges the above special instructions.

☐ All hardware listed in the Special Instructions above (if applicable) has been properly installed, and the existing hardware was inspected.

☐ The material utilized was as specified in the SMART Tool engineering vendor Special Instructions above (if applicable) and included in the material certification folder is a packing list or invoice for these materials.

OR

☐ The material utilized was approved by a SMART Tool engineering vendor as an “equivalent” and this approval is included as part of the contractor submission.

Comments:

Contractor certifies that the climbing facility / safety climb was not damaged prior to starting work:

☐ Yes ☐ No

Contractor certifies no new damage created during the current installation:

☐ Yes ☐ No

Contractor to certify the condition of the safety climb and verify no damage when leaving the site:

☐ Safety Climb in Good Condition ☐ Safety Climb Damaged

Certifying Individual:

Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

Structure: 5000383039-VZW - WILTON CT

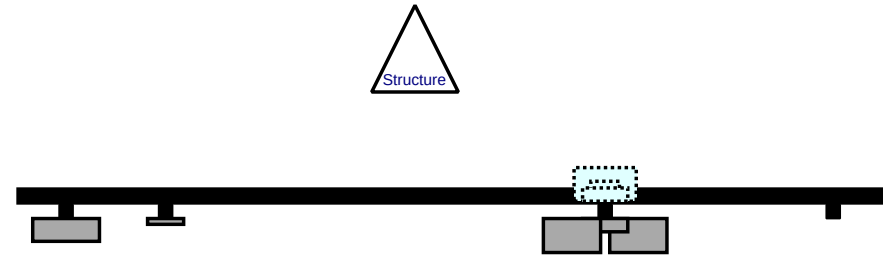
Sector: **A** 7/10/2023

Structure Type: Self Support 10206435

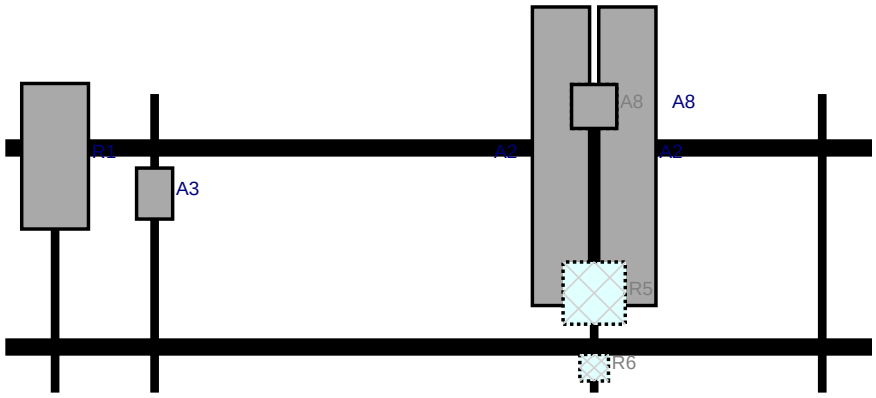
Mount Elev: 162.00 Page: 1

Colliers Engineering & Design

Plan View



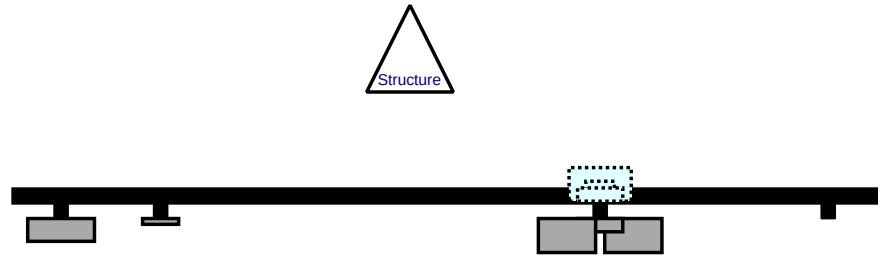
Front View - Looking at Structure



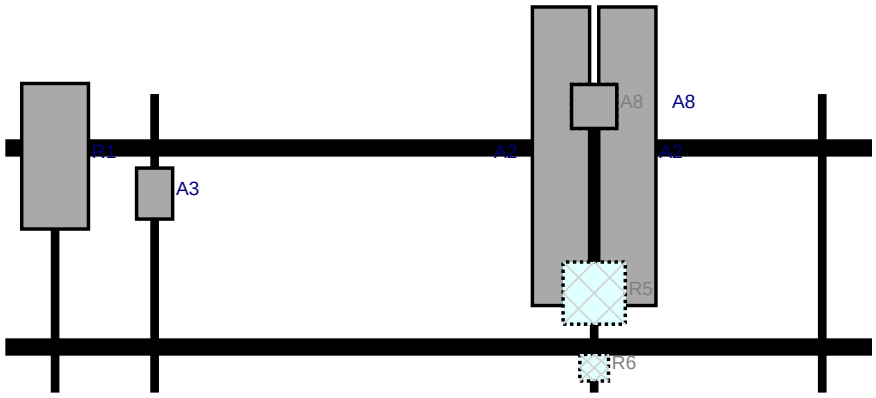
4 3 2 1

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	JAHH-65B-R3B	72	13.8	142	2	a	Front	15	-8	Retained	04/03/2023
A2	JAHH-65B-R3B	72	13.8	142	2	b	Front	15	8	Retained	04/03/2023
R5	B5/B13 RRH-BR04C	15	15	142	2	a	Behind	48	0	Retained	04/03/2023
R6	CBC78T-DS-43	6.4	6.9	142	2	a	Behind	66	0	Retained	04/03/2023
A8	BSF0020F3V1-1	10.6	10.9	142	2	a	Behind	3	0	Added	
A8	BSF0020F3V1-1	10.6	10.9	142	2	b	Front	3	0	Added	
A3	XXDWMM-12.5-65-8T CBRS Port1 3550 8DT	12.3	8.7	36	3	a	Front	24	0	Retained	04/03/2023
R1	MT6407-77A	35.1	16.1	12	4	a	Front	15	0	Retained	04/03/2023
M32	B2/B66A RRH-BR049	15	15		Member					Retained	04/03/2023
OVP	RRFDC-3315-PF-48	19.1	15.7		Member					Retained	04/03/2023

Plan View



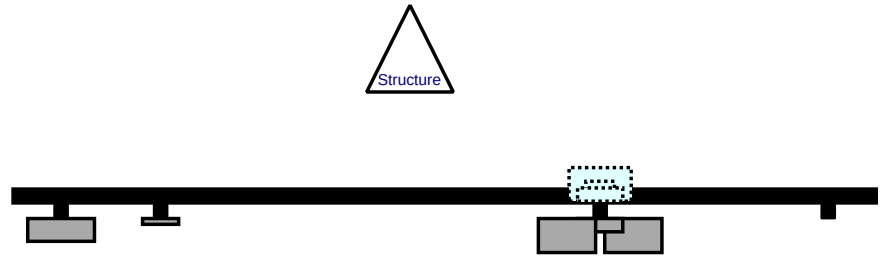
Front View - Looking at Structure



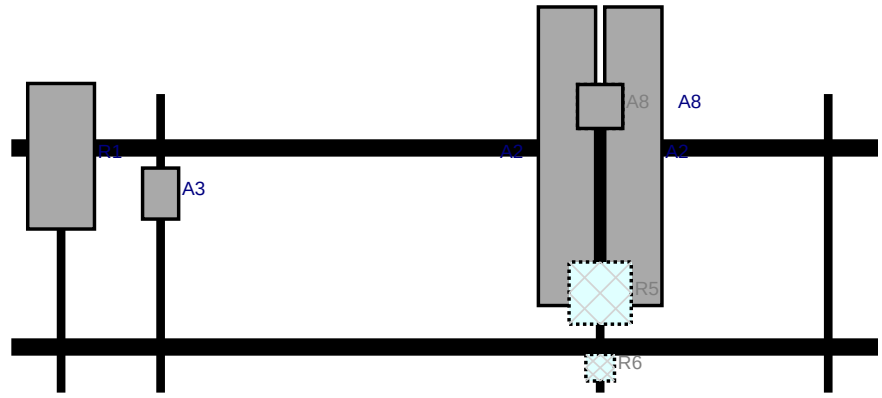
4 3 2 1

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	JAHH-65B-R3B	72	13.8	142	2	a	Front	15	-8	Retained	04/03/2023
A2	JAHH-65B-R3B	72	13.8	142	2	b	Front	15	8	Retained	04/03/2023
R5	B5/B13 RRH-BR04C	15	15	142	2	a	Behind	48	0	Retained	04/03/2023
R6	CBC78T-DS-43	6.4	6.9	142	2	a	Behind	66	0	Retained	04/03/2023
A8	BSF0020F3V1-1	10.6	10.9	142	2	a	Behind	3	0	Added	
A8	BSF0020F3V1-1	10.6	10.9	142	2	b	Front	3	0	Added	
A3	XXDWMM-12.5-65-8T CBRS Port1 3550 8DT	12.3	8.7	36	3	a	Front	24	0	Retained	04/03/2023
R1	MT6407-77A	35.1	16.1	12	4	a	Front	15	0	Retained	04/03/2023

Plan View

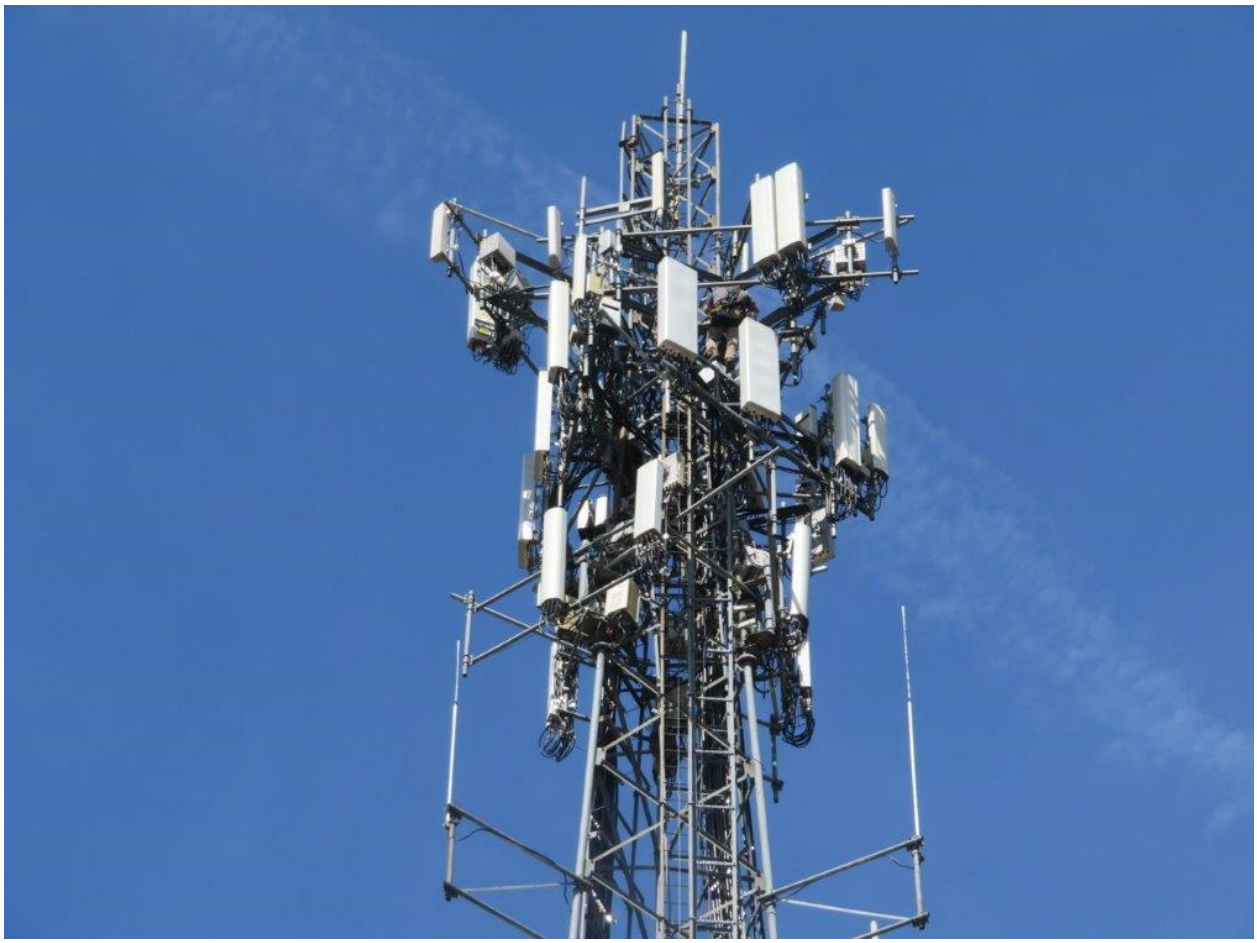


Front View - Looking at Structure



4 3 2 1

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	JAHH-65B-R3B	72	13.8	142	2	a	Front	15	-8	Retained	04/03/2023
A2	JAHH-65B-R3B	72	13.8	142	2	b	Front	15	8	Retained	04/03/2023
R5	B5/B13 RRH-BR04C	15	15	142	2	a	Behind	48	0	Retained	04/03/2023
R6	CBC78T-DS-43	6.4	6.9	142	2	a	Behind	66	0	Retained	04/03/2023
A8	BSF0020F3V1-1	10.6	10.9	142	2	a	Behind	3	0	Added	
A8	BSF0020F3V1-1	10.6	10.9	142	2	b	Front	3	0	Added	
A3	XXDWMM-12.5-65-8T CBRS Port1 3550 8DT	12.3	8.7	36	3	a	Front	24	0	Retained	04/03/2023
R1	MT6407-77A	35.1	16.1	12	4	a	Front	15	0	Retained	04/03/2023

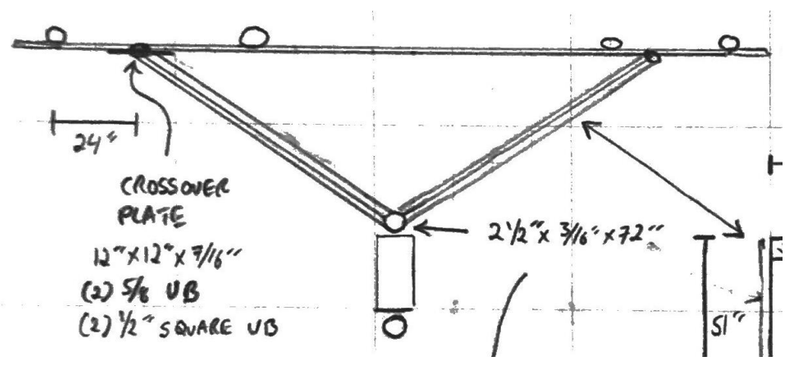


V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	CROWN CASTLE	**Mapping Date:**	3/23/2021
Site Name:	WILTON CT	**Tower Type:**	Self Support
Site Number or ID:	467241	**Tower Height (Ft.):**	180
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	**Mount Elevation (Ft.):**	162



Mount Pipe Configuration and Geometries [Unit = Inches]

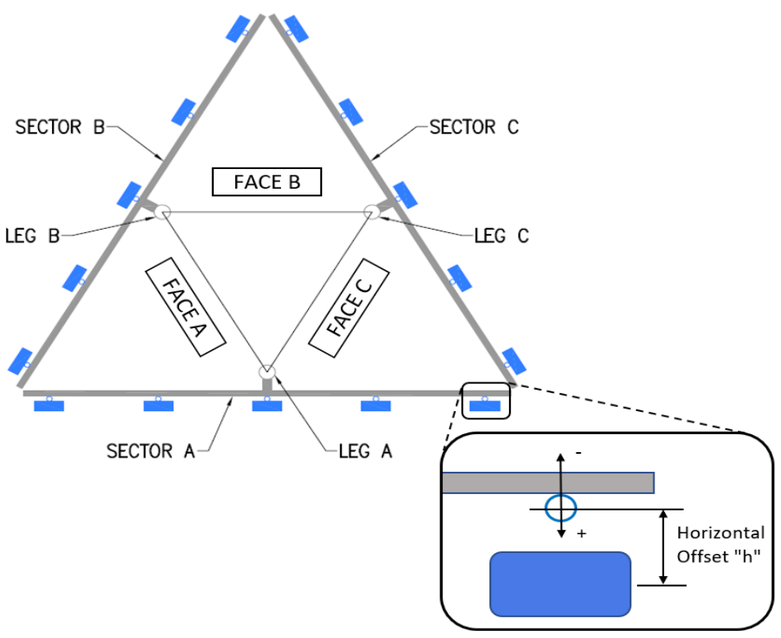
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2" STD. PIPE X 72" LONG	61.00	12.00	C1	2" STD. PIPE X 72" LONG	61.00	12.00
A2	3-1/2"Ø X 3/8" THK. X 96" LONG	73.00	67.00	C2	3-1/2"Ø X 3/8" THK. X 96" LONG	73.00	67.00
A3	2" STD. PIPE X 72" LONG	60.00	173.00	C3	2" STD. PIPE X 72" LONG	60.00	173.00
A4	2" STD. PIPE X 72" LONG	61.00	197.00	C4	2" STD. PIPE X 72" LONG	61.00	197.00
A5				C5			
A6				C6			
B1	2" STD. PIPE X 72" LONG	61.00	12.00	D1			
B2	3-1/2"Ø X 3/8" THK. X 96" LONG	73.00	67.00	D2			
B3	2" STD. PIPE X 72" LONG	60.00	173.00	D3			
B4	2" STD. PIPE X 72" LONG	61.00	197.00	D4			
B5				D5			
B6				D6			

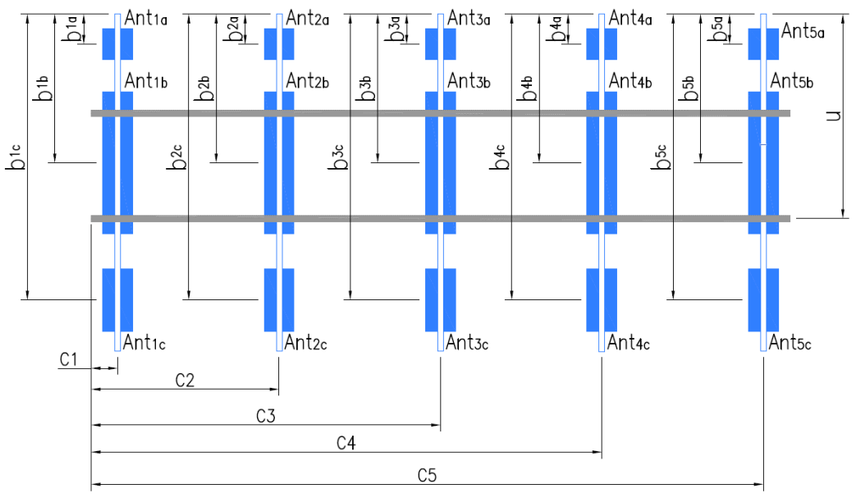
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	51.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	40
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	20

Please enter additional infomation or comments below.

MAST 6 INFO WILL BE LOCATED IN STANDOFF COLUMNS

Tower Face Width at Mount Elev. (ft.):	3.791	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	2.5



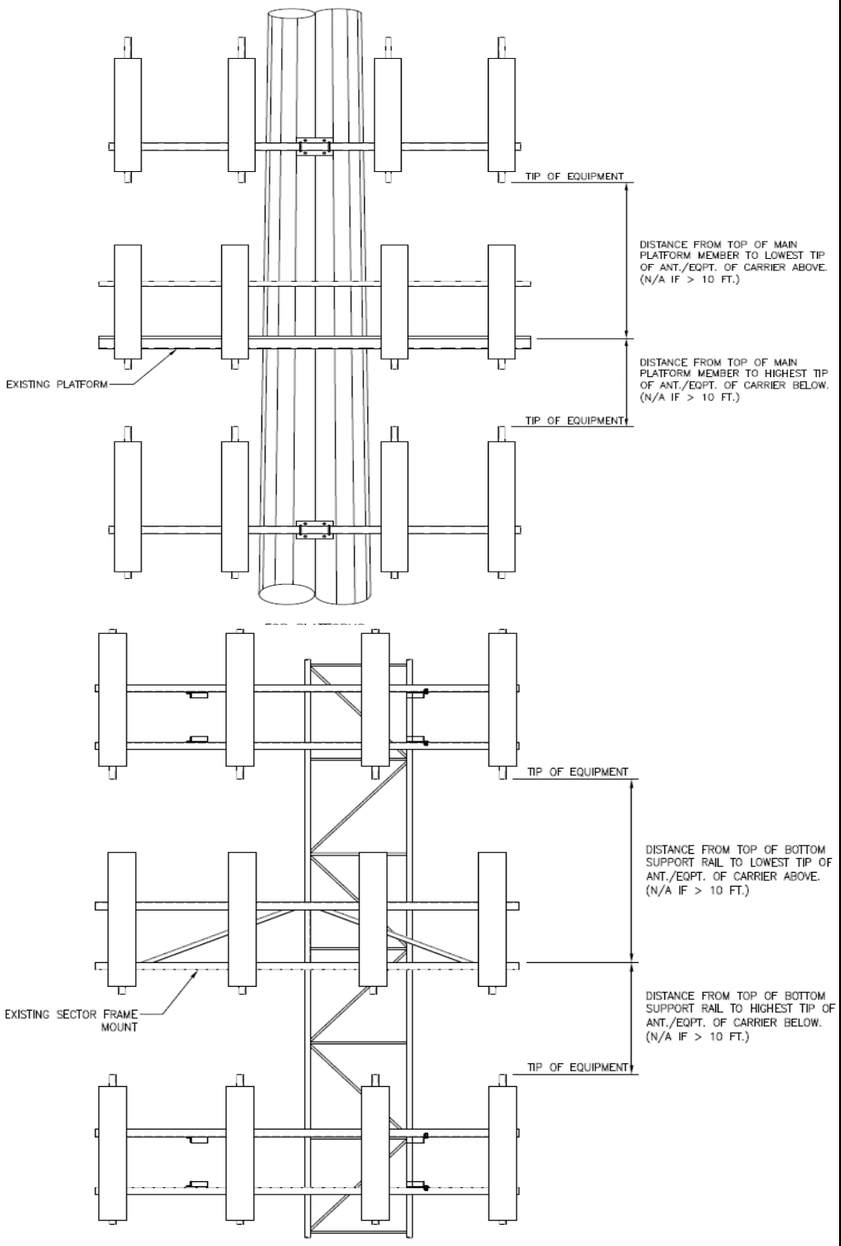


Antenna Layout (Looking Out From Tower)

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}										
Ant_{1b}	UNKNOWN ANTENNA	6.00	8.00	48.00		160.667	26.00	9.50	330.00	53
Ant_{1c}										
Ant_{2a}	RFV0U1-D2A	16.00	10.00	16.00		160.667	38.00	-9.50		53,92
Ant_{2b}	(2) JAHH-65B-R3B	14.00	8.50	73.00		160.833	36.00	14.00	0.00	53,100
Ant_{2c}	CBC78T-DS-43-DC	7.00	10.00	7.00		157.083	81.00	-9.00		98,99
Ant_{3a}										
Ant_{3b}	RT4401-48A	8.50	8.00	15.00		160.583	26.00	9.50	0.00	95,96
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	UNKNOWN ANTENNA	6.00	8.00	48.00		160.667	26.00	9.50	330.00	57
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	RFV0U1-D1A	16.00	12.00	16.00			31.00	-9.00		53,80
Ant on Standoff										
Ant on Tower	(2) RRFDC-3315-PF-48	15.00	10.00	28.00						107-110
Ant on Tower										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	330.00	Deg	Leg A:	23.00	Deg
Sector B:	80.00	Deg	Leg B:	143.00	Deg
Sector C:	200.00	Deg	Leg C:	263.00	Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	203.00	Deg	Outside Face C
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.



Sector B										
Ant_{1a}										
Ant_{1b}	UNKNOWN ANTENNA	6.00	8.00	48.00		160.667	26.00	9.50	80.00	58
Ant_{1c}										
Ant_{2a}	RFV0U1-D2A	16.00	10.00	16.00		160.667	38.00	-9.50		58,92
Ant_{2b}	(2) JAHH-65B-R3B	14.00	8.50	73.00		160.833	36.00	14.00	130.00	58,100
Ant_{2c}	CBC78T-DS-43-DC	7.00	10.00	7.00		157.083	81.00	-9.00		98,99
Ant_{3a}										
Ant_{3b}	RT4401-48A	8.50	8.00	15.00		160.583	26.00	9.50	130.00	59,95,96
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	UNKNOWN ANTENNA	6.00	8.00	48.00		160.667	26.00	9.50	80.00	59
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	RFV0U1-D1A	16.00	12.00	16.00			31.00	-9.00		58,80
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}										
Ant_{1b}	UNKNOWN ANTENNA	6.00	8.00	48.00		160.667	26.00	9.50	215.00	60
Ant_{1c}										
Ant_{2a}	RFV0U1-D2A	16.00	10.00	16.00		160.667	38.00	-9.50		60,92
Ant_{2b}	(2) JAHH-65B-R3B	14.00	8.50	73.00		160.833	36.00	14.00	230.00	60,100
Ant_{2c}	CBC78T-DS-43-DC	7.00	10.00	7.00		157.083	81.00	-9.00		98,99
Ant_{3a}										
Ant_{3b}	RT4401-48A	8.50	8.00	15.00		160.583	26.00	9.50	230.00	95,96
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	UNKNOWN ANTENNA	6.00	8.00	48.00		160.667	26.00	9.50	215.00	63
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	RFV0U1-D1A	16.00	12.00	16.00			31.00	-9.00		60,80
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 #

1		
2	(6) 1-5/8"Ø COAX, (6) 1-1/4"Ø COAX, (2) 1-1/4"Ø HYBRID	164-166
3		
4		
5		
6		
7		
8		

Mapping Notes
1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.)
2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness.
3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab.
4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type.
5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required.
6. Please measure and report the size and length of all existing antenna mounting pipes.
7. Please measure and report the antenna information for all sectors.
8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.

Standard Conditions
1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

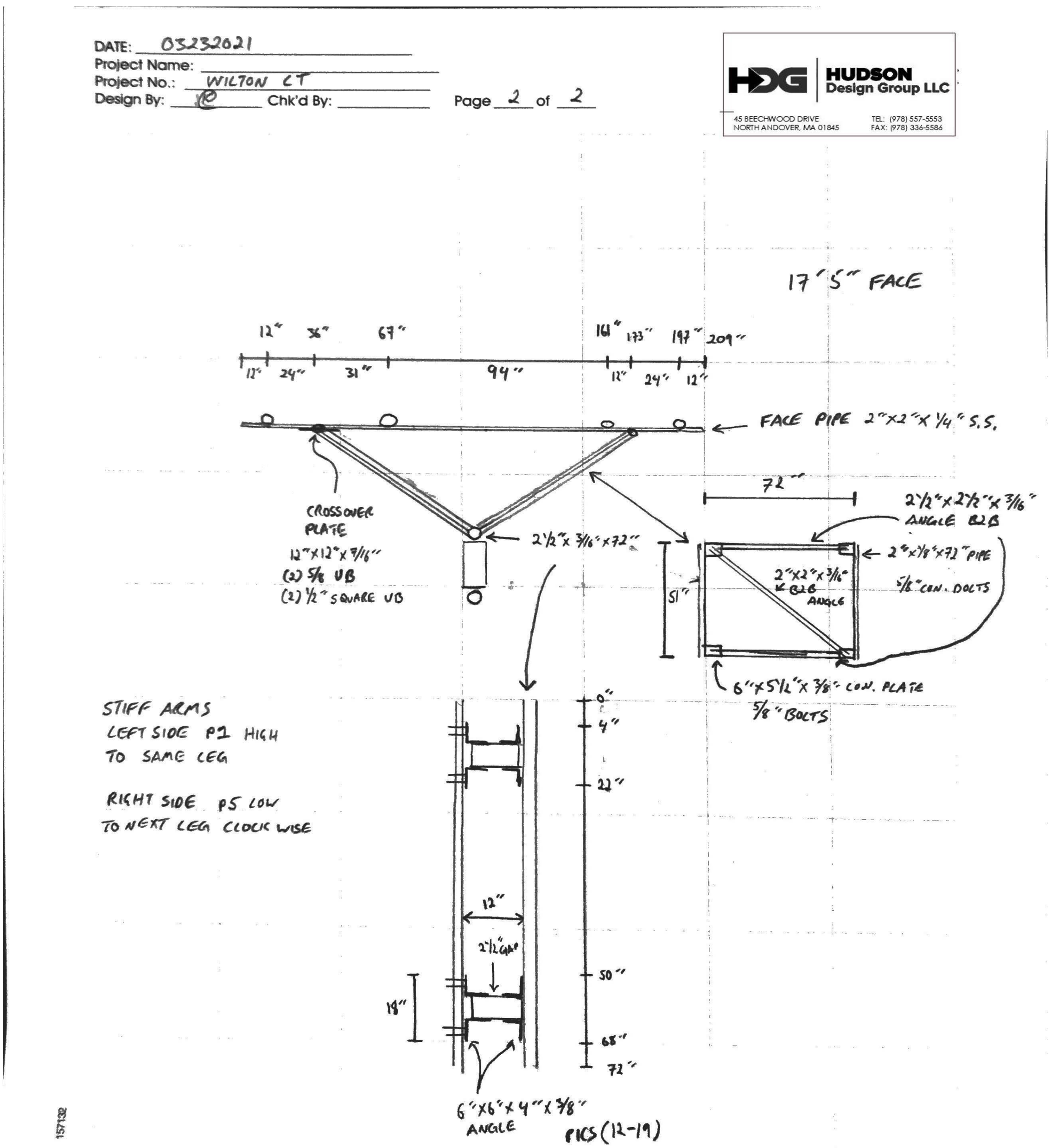
FCC #

Tower Owner:	CROWN CASTLE	**Mapping Date:**	3/23/2021
Site Name:	WILTON CT	**Tower Type:**	Self Support
Site Number or ID:	467241	**Tower Height (Ft.):**	180
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	**Mount Elevation (Ft.):**	162

Please Insert Sketches of the Antenna Mount

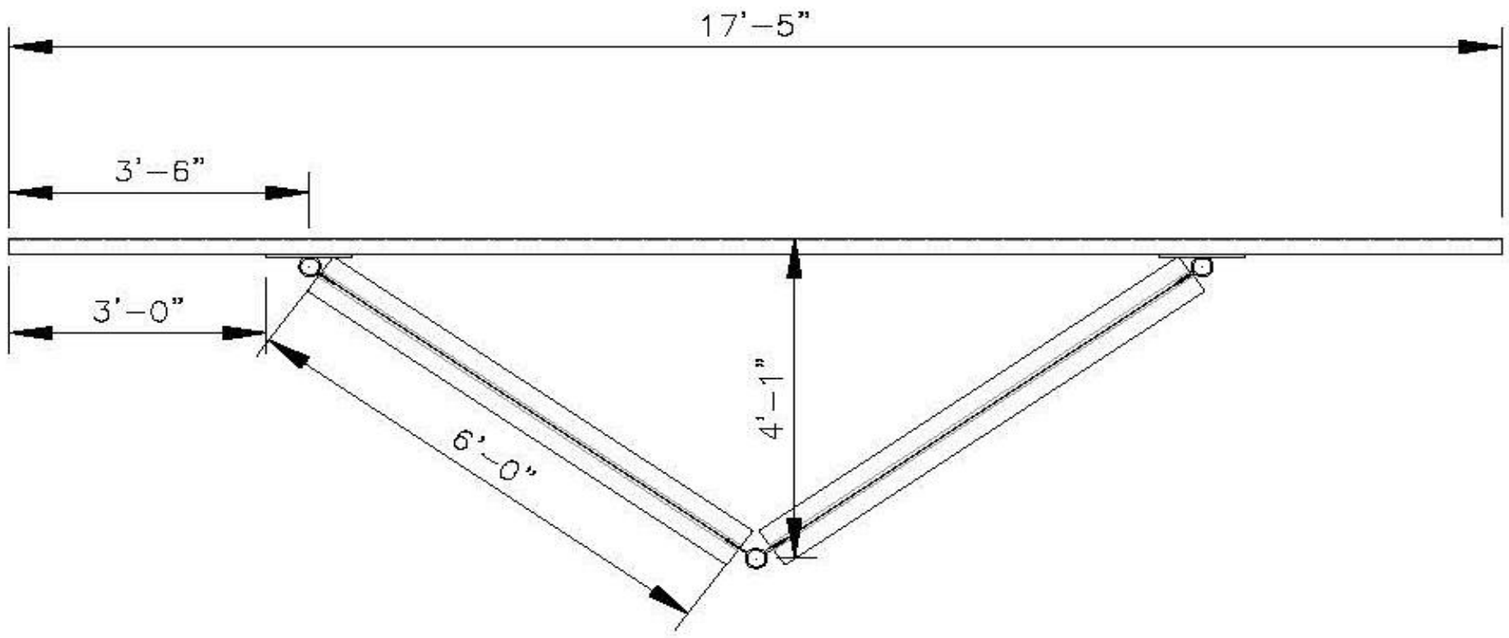
DATE: 03232021
Project Name: _____
Project No.: WILTON CT
Design By: _____ Chk'd By: _____ Page 2 of 2

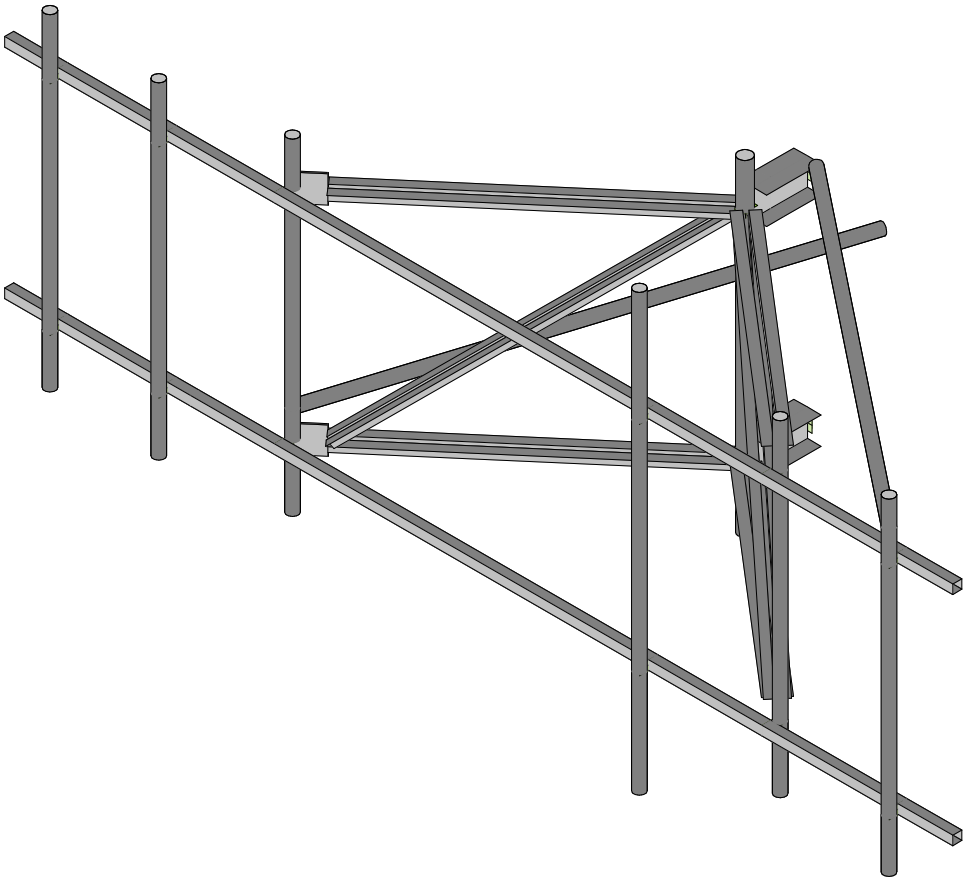
HUDSON Design Group LLC
45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845
TEL: (978) 557-5553 FAX: (978) 336-5586



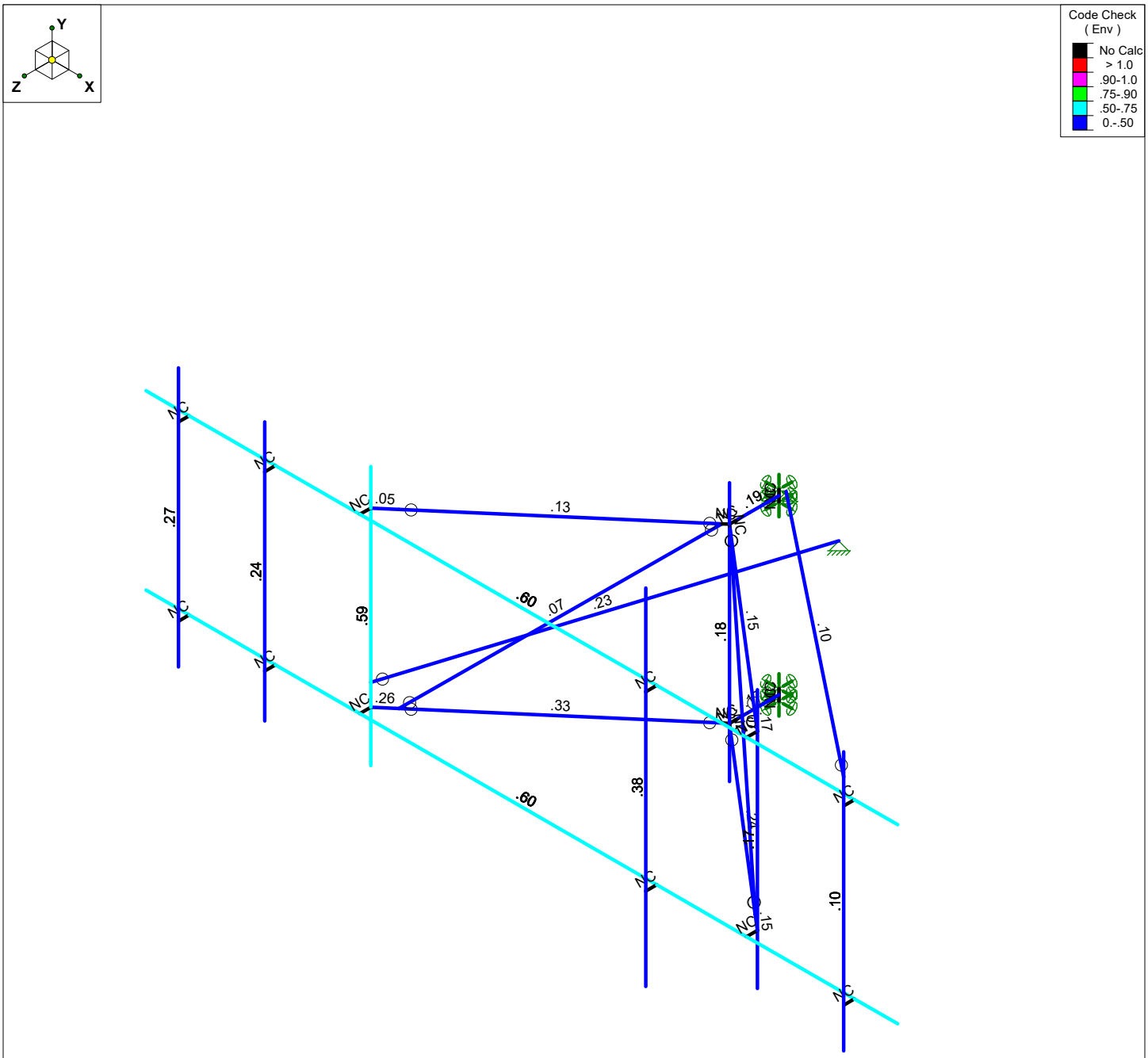
157132

Please Insert Sketches of the Antenna Mount, cont'd



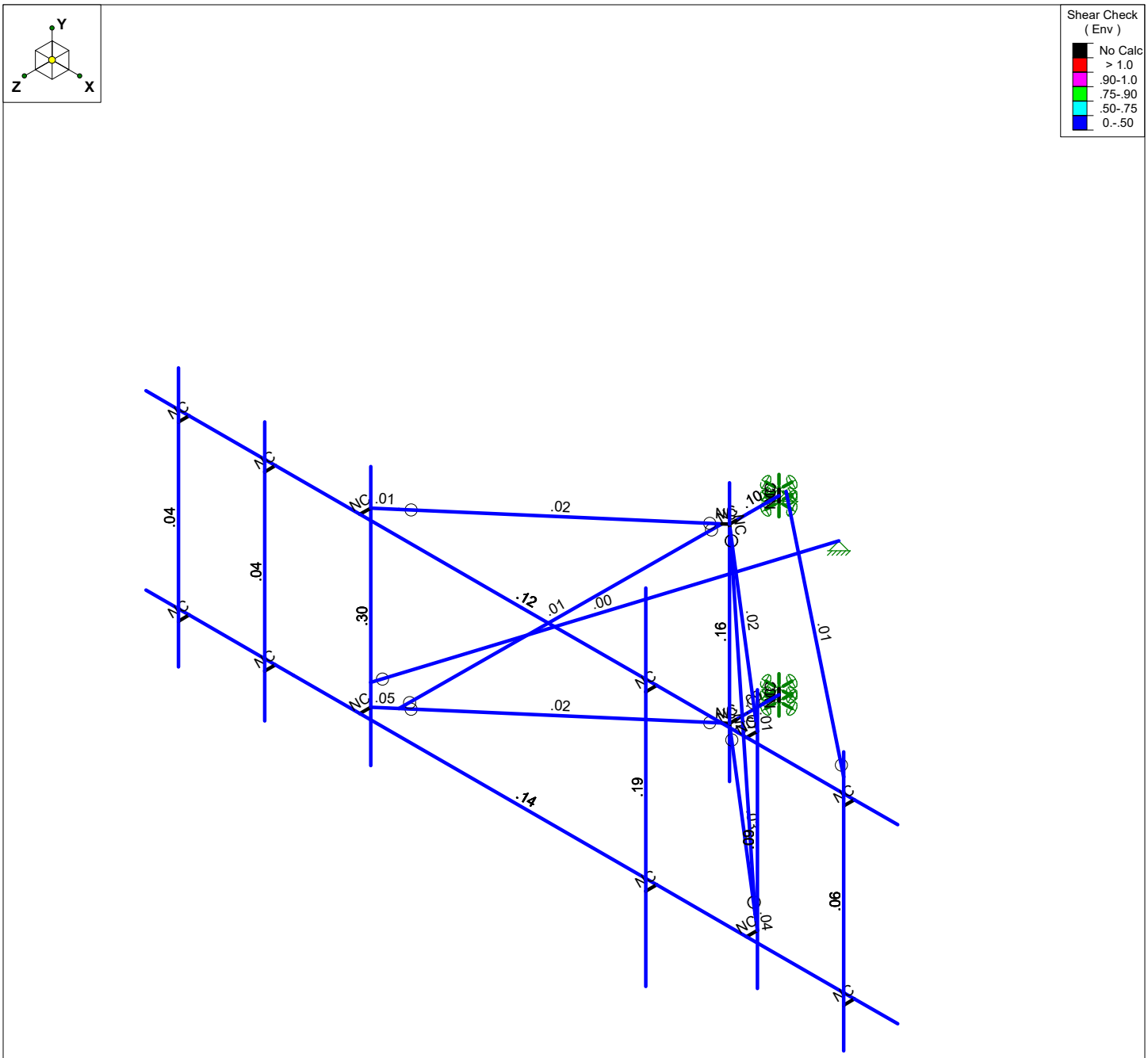


Colliers Engineering & De...		SK - 1
EK		June 29, 2023 at 3:46 PM
		5000383039-VZW_MT_LOT_A_H....



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Colliers Engineering & De...		SK - 2
EK		June 29, 2023 at 3:46 PM
		5000383039-VZW_MT_LOT_A_H....



Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Colliers Engineering & De...		SK - 3
EK		June 29, 2023 at 3:46 PM
		5000383039-VZW_MT_LOT_A_H....

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
57	Structure Wi (120 Deg)	None						46		
58	Structure Wi (150 Deg)	None						46		
59	Structure Wi (180 Deg)	None						46		
60	Structure Wi (210 Deg)	None						46		
61	Structure Wi (240 Deg)	None						46		
62	Structure Wi (270 Deg)	None						46		
63	Structure Wi (300 Deg)	None						46		
64	Structure Wi (330 Deg)	None						46		
65	Structure Wm (0 Deg)	None						46		
66	Structure Wm (30 Deg)	None						46		
67	Structure Wm (60 Deg)	None						46		
68	Structure Wm (90 Deg)	None						46		
69	Structure Wm (120 Deg)	None						46		
70	Structure Wm (150 Deg)	None						46		
71	Structure Wm (180 Deg)	None						46		
72	Structure Wm (210 Deg)	None						46		
73	Structure Wm (240 Deg)	None						46		
74	Structure Wm (270 Deg)	None						46		
75	Structure Wm (300 Deg)	None						46		
76	Structure Wm (330 Deg)	None						46		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					36			
82	Antenna Eh (0 Deg)	None					24			
83	Antenna Eh (90 Deg)	None					24			
84	Structure Ev	ELY		-.05						
85	Structure Eh (0 Deg)	ELZ			-.126					
86	Structure Eh (90 Deg)	ELX	.126							

Load Combinations

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

Load Combinations (Continued)

	Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	BLC	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
23	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + 1...	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	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	1	83		E...	1	E...					
53	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5	E...	.866	E...	.5				
54	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866	E...	.5	E...	.866				
55	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	1	E...		E...	1				
56	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866	E...	-.5	E...	.866				
57	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.8...	83	.5	E...	-.8...	E...	.5				
58	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-1	83		E...	-1	E...					
59	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.8...	83	-.5	E...	-.8...	E...	-.5				
60	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.8...	E...	-.5	E...	-.8...				
61	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	-1	E...		E...	-1				
62	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.8...	E...	.5	E...	-.8...				
63	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5	E...	.866	E...	-.5				
64	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	1	83		E...	1	E...					
65	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5	E...	.866	E...	.5				
66	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866	E...	.5	E...	.866				
67	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	1	E...		E...	1				
68	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866	E...	-.5	E...	.866				
69	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.8...	83	.5	E...	-.8...	E...	.5				
70	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-1	83		E...	-1	E...					
71	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.8...	83	-.5	E...	-.8...	E...	-.5				
72	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.8...	E...	-.5	E...	-.8...				
73	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1	E...		E...	-1				
74	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.8...	E...	.5	E...	-.8...				
75	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5	E...	.866	E...	-.5				

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-9.4375	0	4.083333	0	
2	N2	7.979167	0	4.083333	0	
3	N3	-9.4375	-4	4.083333	0	
4	N4	7.979167	-4	4.083333	0	
5	N5	-8.4375	0	4.083333	0	
6	N6	-8.4375	-4	4.083333	0	
7	N7	-6.4375	0	4.083333	0	
8	N8	-6.4375	-4	4.083333	0	
9	N9	2.395833	0	4.083333	0	
10	N10	2.395833	-4	4.083333	0	
11	N11	6.979167	0	4.083333	0	
12	N12	6.979167	-4	4.083333	0	
13	N13	-8.4375	0	4.333333	0	
14	N14	-8.4375	-4	4.333333	0	
15	N15	-6.4375	0	4.333333	0	
16	N16	-6.4375	-4	4.333333	0	
17	N17	2.395833	0	4.333333	0	
18	N18	2.395833	-4	4.333333	0	
19	N19	6.979167	0	4.333333	0	
20	N20	6.979167	-4	4.333333	0	
21	N21	-8.4375	1.083333	4.333333	0	
22	N22	-6.4375	1	4.333333	0	
23	N23	2.395833	2.083333	4.333333	0	
24	N24	6.979167	1.083333	4.333333	0	
25	N25	-8.4375	-4.916667	4.333333	0	
26	N26	-6.4375	-5	4.333333	0	
27	N27	2.395833	-5.916667	4.333333	0	
28	N28	6.979167	-4.916667	4.333333	0	
29	N30	-6.020833	-4	4.083333	0	
30	N31	4.479167	0	3.833333	0	
31	N32	4.479167	-4	4.083333	0	
32	N39	4.479167	0	4.083333	0	
33	N41	4.479167	-4	3.833333	0	
34	N48	4.479167	0.833333	3.833333	0	
35	N50	4.479167	-5.166667	3.833333	0	
36	N83	4.479167	-1.833333	3.916667	0	
37	N65	0	0	0	0	
38	N66	0	0	-0.145833	0	
39	N67	0	0	-1.145833	0	
40	N68	0	.125	-1.145833	0	
41	N69	0	-.125	-1.145833	0	
42	N71	0	-4	0	0	
43	N72	0	-4	-0.145833	0	
44	N73	0	-4	-1.145833	0	
45	N74A	0	-3.875	-1.145833	0	
46	N75	0	-4.125	-1.145833	0	
47	N79	0	0.833333	0	0	
48	N80	0	-5.166667	0	0	
49	N60	-0.729167	0	4.083333	0	
50	N57	0	0	-0.458333	0	
51	N61	4.128004	0	3.532803	0	
52	N62	4.128004	-4	3.532803	0	
53	N57A	-4.479167	0	3.833333	0	
54	N58A	-4.479167	-4	4.083333	0	
55	N59A	-4.479167	0	4.083333	0	
56	N60B	-4.479167	-4	3.833333	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N61A	-4.479167	0.833333	3.833333	0	
58	N62A	-4.479167	-5.166667	3.833333	0	
59	N67A	-4.128004	0	3.532803	0	
60	N68A	-4.128004	-4	3.532803	0	
61	N69A	1.895833	0	-4.429513	0	
62	N71B	6.979167	0.583333	4.333333	0	
63	N68B	0	0	-1.3125	0	
64	N69B	-4.479167	-3.5	3.833333	0	
65	N70	3.791667	0	-1.145833	0	
66	N74	-1.895833	0	-4.429513	0	
67	N76	-3.791667	0	-1.145833	0	
68	N73A	-1.895833	-3.5	-4.429513	0	
69	N76B	-0.094969	0	0.081276	0	
70	N77A	-0.094969	-4	0.081276	0	
71	N78	0.094969	-4	0.081276	0	
72	N79A	0.094969	0	0.081276	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Standoff Connection	PL3/8x6	Beam	Single Angle	A36 Gr.36	Typical	2.25	.026	6.75	.101
3	Standoff Horizontal	LL2.5x2.5x3x0	Beam	Double Angl...	A36 Gr.36	Typical	1.8	1.91	1.07	.023
4	Standoff Vertical	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
5	Standoff Diagonal	LL2x2x3x3	Beam	Double Angl...	A36 Gr.36	Typical	1.44	1.35	.542	.018
6	Face Horizontal	HSS2X2X4	Beam	HSS Pipe	A500 Gr. B 46	Typical	1.51	.747	.747	1.31
7	Tie Back	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
8	Connection Pipe	PIPE_2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
9	Connection Beam	W6X15	Beam	Pipe	A36 Gr.36	Typical	4.43	9.32	29.1	.101
10	Connection Plate	PL3/8x6	Beam	Single Angle	A36 Gr.36	Typical	2.25	.026	6.75	.101

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N1	N2			Face Horizontal	Beam	HSS Pipe	A500 Gr. ...	Typical
2	M2	N3	N4			Face Horizontal	Beam	HSS Pipe	A500 Gr. ...	Typical
3	M3	N5	N13			RIGID	None	None	RIGID	Typical
4	M4	N7	N15			RIGID	None	None	RIGID	Typical
5	M5	N9	N17			RIGID	None	None	RIGID	Typical
6	M6	N11	N19			RIGID	None	None	RIGID	Typical
7	M7	N12	N20			RIGID	None	None	RIGID	Typical
8	M8	N10	N18			RIGID	None	None	RIGID	Typical
9	M9	N8	N16			RIGID	None	None	RIGID	Typical
10	M10	N6	N14			RIGID	None	None	RIGID	Typical
11	MP4A	N21	N25			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
12	MP3A	N22	N26			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
13	MP2A	N23	N27			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
14	MP1A	N24	N28			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
15	M22	N39	N31			RIGID	None	None	RIGID	Typical
16	M30	N32	N41			RIGID	None	None	RIGID	Typical
17	M32	N48	N50			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
18	M37	N65	N66			RIGID	None	None	RIGID	Typical
19	M38	N66	N67			Connection Beam	Beam	Pipe	A36 Gr.36	Typical
20	M39A	N67	N68			RIGID	None	None	RIGID	Typical
21	M40	N67	N69			RIGID	None	None	RIGID	Typical
22	M42	N71	N72			RIGID	None	None	RIGID	Typical
23	M43	N72	N73			Connection Beam	Beam	Pipe	A36 Gr.36	Typical
24	M44	N73	N74A			RIGID	None	None	RIGID	Typical
25	M45	N73	N75			RIGID	None	None	RIGID	Typical
26	OVP	N79	N80			Connection Pipe	Beam	Pipe	A53 Gr. B	Typical
27	M40B	N79A	N62			Standoff Diagonal	Beam	Double Angle ...	A36 Gr.36	Typical
28	M39B	N61	N31			Standoff Connection	Beam	Single Angle	A36 Gr.36	Typical
29	M40C	N79A	N61			Standoff Horizontal	Beam	Double Angle ...	A36 Gr.36	Typical
30	M42B	N62	N41			Standoff Connection	Beam	Single Angle	A36 Gr.36	Typical
31	M43B	N78	N62			Standoff Horizontal	Beam	Double Angle ...	A36 Gr.36	Typical
32	M35	N59A	N57A			RIGID	None	None	RIGID	Typical
33	M36	N58A	N60B			RIGID	None	None	RIGID	Typical
34	M37A	N61A	N62A			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
35	M40A	N67A	N57A			Standoff Connection	Beam	Single Angle	A36 Gr.36	Typical
36	M43A	N68A	N60B			Standoff Connection	Beam	Single Angle	A36 Gr.36	Typical
37	M45A	N71B	N68B			Tie Back	Beam	Pipe	A53 Gr. B	Typical
38	M45B	N69B	N73A			Tie Back	Beam	Pipe	A53 Gr. B	Typical
39	M41	N76B	N68A			Standoff Diagonal	Beam	Double Angle ...	A36 Gr.36	Typical
40	M43C	N76B	N67A			Standoff Horizontal	Beam	Double Angle ...	A36 Gr.36	Typical
41	M45C	N77A	N68A			Standoff Horizontal	Beam	Double Angle ...	A36 Gr.36	Typical
42	M42A	N71	N78			RIGID	None	None	RIGID	Typical
43	M43D	N71	N77A			RIGID	None	None	RIGID	Typical
44	M44A	N65	N79A			RIGID	None	None	RIGID	Typical
45	M45D	N65	N76B			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...	A...		Inactive	Seismic ...
1	M1						Yes	Default				None
2	M2						Yes					None
3	M3						Yes	** NA **				None
4	M4						Yes	** NA **				None
5	M5						Yes	** NA **				None
6	M6						Yes	** NA **				None
7	M7						Yes	** NA **				None
8	M8						Yes	** NA **				None
9	M9						Yes	** NA **				None
10	M10						Yes	** NA **				None
11	MP4A						Yes	** NA **				None
12	MP3A						Yes	** NA **				None
13	MP2A						Yes	** NA **				None
14	MP1A						Yes	** NA **				None
15	M22						Yes	** NA **				None
16	M30						Yes	** NA **				None
17	M32						Yes	** NA **				None
18	M37						Yes	** NA **				None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...	A...	Inactive	Seismic ...
19	M38						Yes	Default			None
20	M39A						Yes	** NA **			None
21	M40						Yes	** NA **			None
22	M42						Yes	** NA **			None
23	M43						Yes				None
24	M44						Yes	** NA **			None
25	M45						Yes	** NA **			None
26	OVP						Yes				None
27	M40B	BenPIN	BenPIN				Yes	Default			None
28	M39B						Yes				None
29	M40C	OOOOOX	OOOOOX				Yes				None
30	M42B						Yes				None
31	M43B	OOOOOX	OOOOOX				Yes				None
32	M35						Yes	** NA **			None
33	M36						Yes	** NA **			None
34	M37A						Yes	** NA **			None
35	M40A						Yes				None
36	M43A						Yes				None
37	M45A	OOOOXO					Yes	Default			None
38	M45B	OOOOXO					Yes	Default			None
39	M41	BenPIN	BenPIN				Yes	Default			None
40	M43C	OOOOOX	OOOOOX				Yes				None
41	M45C	OOOOOX	OOOOOX				Yes				None
42	M42A						Yes	** NA **			None
43	M43D						Yes	** NA **			None
44	M44A						Yes	** NA **			None
45	M45D						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-43.55	.5
2	MP4A	My	-.022	.5
3	MP4A	Mz	-.013	.5
4	MP4A	Y	-43.55	2
5	MP4A	My	-.022	2
6	MP4A	Mz	-.013	2
7	MP2A	Y	-31.65	.5
8	MP2A	My	-.005	.5
9	MP2A	Mz	-.028	.5
10	MP2A	Y	-31.65	2
11	MP2A	My	-.005	2
12	MP2A	Mz	-.028	2
13	MP2A	Y	-31.65	.5
14	MP2A	My	-.027	.5
15	MP2A	Mz	.009	.5
16	MP2A	Y	-31.65	2
17	MP2A	My	-.027	2
18	MP2A	Mz	.009	2
19	MP3A	Y	-18.7	2
20	MP3A	My	-.009	2
21	MP3A	Mz	-.005	2
22	M32	Y	-84.4	4
23	M32	My	0	4
24	M32	Mz	0	4
25	MP2A	Y	-70.3	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
26	MP2A	My	-.041	4
27	MP2A	Mz	0	4
28	MP2A	Y	-10.4	5.5
29	MP2A	My	-.006	5.5
30	MP2A	Mz	0	5.5
31	OVP	Y	-26.9	3.5
32	OVP	My	0	3.5
33	OVP	Mz	0	3.5
34	MP2A	Y	-17.6	1.5
35	MP2A	My	.013	1.5
36	MP2A	Mz	.007	1.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-36.299	.5
2	MP4A	My	-.018	.5
3	MP4A	Mz	-.011	.5
4	MP4A	Y	-36.299	2
5	MP4A	My	-.018	2
6	MP4A	Mz	-.011	2
7	MP2A	Y	-71.269	.5
8	MP2A	My	-.012	.5
9	MP2A	Mz	-.062	.5
10	MP2A	Y	-71.269	2
11	MP2A	My	-.012	2
12	MP2A	Mz	-.062	2
13	MP2A	Y	-71.269	.5
14	MP2A	My	-.06	.5
15	MP2A	Mz	.02	.5
16	MP2A	Y	-71.269	2
17	MP2A	My	-.06	2
18	MP2A	Mz	.02	2
19	MP3A	Y	-21.477	2
20	MP3A	My	-.011	2
21	MP3A	Mz	-.006	2
22	M32	Y	-45.777	4
23	M32	My	0	4
24	M32	Mz	0	4
25	MP2A	Y	-41.174	4
26	MP2A	My	-.024	4
27	MP2A	Mz	0	4
28	MP2A	Y	-10.976	5.5
29	MP2A	My	-.006	5.5
30	MP2A	Mz	0	5.5
31	OVP	Y	-56.357	3.5
32	OVP	My	0	3.5
33	OVP	Mz	0	3.5
34	MP2A	Y	-17.711	1.5
35	MP2A	My	.013	1.5
36	MP2A	Mz	.007	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	-57.892	.5
3	MP4A	Mx	.017	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP4A	X	0	2
5	MP4A	Z	-57.892	2
6	MP4A	Mx	.017	2
7	MP2A	X	0	.5
8	MP2A	Z	-147.108	.5
9	MP2A	Mx	.128	.5
10	MP2A	X	0	2
11	MP2A	Z	-147.108	2
12	MP2A	Mx	.128	2
13	MP2A	X	0	.5
14	MP2A	Z	-147.108	.5
15	MP2A	Mx	-.042	.5
16	MP2A	X	0	2
17	MP2A	Z	-147.108	2
18	MP2A	Mx	-.042	2
19	MP3A	X	0	2
20	MP3A	Z	-22.079	2
21	MP3A	Mx	.006	2
22	M32	X	0	4
23	M32	Z	-39.958	4
24	M32	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	-54.757	4
27	MP2A	Mx	0	4
28	MP2A	X	0	5.5
29	MP2A	Z	-13.071	5.5
30	MP2A	Mx	0	5.5
31	OVP	X	0	3.5
32	OVP	Z	-62.884	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	0	1.5
35	MP2A	Z	-28.007	1.5
36	MP2A	Mx	-.012	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	34.621	.5
2	MP4A	Z	-59.965	.5
3	MP4A	Mx	0	.5
4	MP4A	X	34.621	2
5	MP4A	Z	-59.965	2
6	MP4A	Mx	0	2
7	MP2A	X	80.457	.5
8	MP2A	Z	-139.356	.5
9	MP2A	Mx	.107	.5
10	MP2A	X	80.457	2
11	MP2A	Z	-139.356	2
12	MP2A	Mx	.107	2
13	MP2A	X	80.457	.5
14	MP2A	Z	-139.356	.5
15	MP2A	Mx	-.107	.5
16	MP2A	X	80.457	2
17	MP2A	Z	-139.356	2
18	MP2A	Mx	-.107	2
19	MP3A	X	12.718	2
20	MP3A	Z	-22.028	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
21	MP3A	Mx	0	2
22	M32	X	24.415	4
23	M32	Z	-42.288	4
24	M32	Mx	0	4
25	MP2A	X	24.287	4
26	MP2A	Z	-42.067	4
27	MP2A	Mx	-.014	4
28	MP2A	X	6.032	5.5
29	MP2A	Z	-10.448	5.5
30	MP2A	Mx	-.004	5.5
31	OVP	X	39.065	3.5
32	OVP	Z	-67.663	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	16.957	1.5
35	MP2A	Z	-29.37	1.5
36	MP2A	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	50.136	.5
2	MP4A	Z	-28.946	.5
3	MP4A	Mx	-.017	.5
4	MP4A	X	50.136	2
5	MP4A	Z	-28.946	2
6	MP4A	Mx	-.017	2
7	MP2A	X	127.399	.5
8	MP2A	Z	-73.554	.5
9	MP2A	Mx	.042	.5
10	MP2A	X	127.399	2
11	MP2A	Z	-73.554	2
12	MP2A	Mx	.042	2
13	MP2A	X	127.399	.5
14	MP2A	Z	-73.554	.5
15	MP2A	Mx	-.128	.5
16	MP2A	X	127.399	2
17	MP2A	Z	-73.554	2
18	MP2A	Mx	-.128	2
19	MP3A	X	19.121	2
20	MP3A	Z	-11.04	2
21	MP3A	Mx	-.006	2
22	M32	X	47.302	4
23	M32	Z	-27.31	4
24	M32	Mx	0	4
25	MP2A	X	31.359	4
26	MP2A	Z	-18.105	4
27	MP2A	Mx	-.018	4
28	MP2A	X	8.704	5.5
29	MP2A	Z	-5.025	5.5
30	MP2A	Mx	-.005	5.5
31	OVP	X	76.282	3.5
32	OVP	Z	-44.041	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	24.255	1.5
35	MP2A	Z	-14.004	1.5
36	MP2A	Mx	.012	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	35.195	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	-.018	.5
4	MP4A	X	35.195	2
5	MP4A	Z	0	2
6	MP4A	Mx	-.018	2
7	MP2A	X	119.494	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	-.021	.5
10	MP2A	X	119.494	2
11	MP2A	Z	0	2
12	MP2A	Mx	-.021	2
13	MP2A	X	119.494	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	-.1	.5
16	MP2A	X	119.494	2
17	MP2A	Z	0	2
18	MP2A	Mx	-.1	2
19	MP3A	X	15.367	2
20	MP3A	Z	0	2
21	MP3A	Mx	-.008	2
22	M32	X	51.539	4
23	M32	Z	0	4
24	M32	Mx	0	4
25	MP2A	X	30.028	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.018	4
28	MP2A	X	9.044	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	-.005	5.5
31	OVP	X	82.787	3.5
32	OVP	Z	0	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	16.193	1.5
35	MP2A	Z	0	1.5
36	MP2A	Mx	.012	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	20.651	.5
2	MP4A	Z	11.923	.5
3	MP4A	Mx	-.014	.5
4	MP4A	X	20.651	2
5	MP4A	Z	11.923	2
6	MP4A	Mx	-.014	2
7	MP2A	X	91.528	.5
8	MP2A	Z	52.843	.5
9	MP2A	Mx	-.062	.5
10	MP2A	X	91.528	2
11	MP2A	Z	52.843	2
12	MP2A	Mx	-.062	2
13	MP2A	X	91.528	.5
14	MP2A	Z	52.843	.5
15	MP2A	Mx	-.062	.5
16	MP2A	X	91.528	2
17	MP2A	Z	52.843	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP2A	Mx	-.062	2
19	MP3A	X	10.402	2
20	MP3A	Z	6.006	2
21	MP3A	Mx	-.007	2
22	M32	X	36.951	4
23	M32	Z	21.334	4
24	M32	Mx	0	4
25	MP2A	X	31.359	4
26	MP2A	Z	18.105	4
27	MP2A	Mx	-.018	4
28	MP2A	X	8.704	5.5
29	MP2A	Z	5.025	5.5
30	MP2A	Mx	-.005	5.5
31	OVP	X	58.492	3.5
32	OVP	Z	33.77	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	8.908	1.5
35	MP2A	Z	5.143	1.5
36	MP2A	Mx	.009	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	17.597	.5
2	MP4A	Z	30.479	.5
3	MP4A	Mx	-.018	.5
4	MP4A	X	17.597	2
5	MP4A	Z	30.479	2
6	MP4A	Mx	-.018	2
7	MP2A	X	59.747	.5
8	MP2A	Z	103.485	.5
9	MP2A	Mx	-.1	.5
10	MP2A	X	59.747	2
11	MP2A	Z	103.485	2
12	MP2A	Mx	-.1	2
13	MP2A	X	59.747	.5
14	MP2A	Z	103.485	.5
15	MP2A	Mx	-.021	.5
16	MP2A	X	59.747	2
17	MP2A	Z	103.485	2
18	MP2A	Mx	-.021	2
19	MP3A	X	7.684	2
20	MP3A	Z	13.308	2
21	MP3A	Mx	-.008	2
22	M32	X	18.439	4
23	M32	Z	31.936	4
24	M32	Mx	0	4
25	MP2A	X	24.287	4
26	MP2A	Z	42.067	4
27	MP2A	Mx	-.014	4
28	MP2A	X	6.032	5.5
29	MP2A	Z	10.448	5.5
30	MP2A	Mx	-.004	5.5
31	OVP	X	28.794	3.5
32	OVP	Z	49.873	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	8.097	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP2A	Z	14.024	1.5
36	MP2A	Mx	.012	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	57.892	.5
3	MP4A	Mx	-.017	.5
4	MP4A	X	0	2
5	MP4A	Z	57.892	2
6	MP4A	Mx	-.017	2
7	MP2A	X	0	.5
8	MP2A	Z	147.108	.5
9	MP2A	Mx	-.128	.5
10	MP2A	X	0	2
11	MP2A	Z	147.108	2
12	MP2A	Mx	-.128	2
13	MP2A	X	0	.5
14	MP2A	Z	147.108	.5
15	MP2A	Mx	.042	.5
16	MP2A	X	0	2
17	MP2A	Z	147.108	2
18	MP2A	Mx	.042	2
19	MP3A	X	0	2
20	MP3A	Z	22.079	2
21	MP3A	Mx	-.006	2
22	M32	X	0	4
23	M32	Z	39.958	4
24	M32	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	54.757	4
27	MP2A	Mx	0	4
28	MP2A	X	0	5.5
29	MP2A	Z	13.071	5.5
30	MP2A	Mx	0	5.5
31	OVP	X	0	3.5
32	OVP	Z	62.884	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	0	1.5
35	MP2A	Z	28.007	1.5
36	MP2A	Mx	.012	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-34.621	.5
2	MP4A	Z	59.965	.5
3	MP4A	Mx	0	.5
4	MP4A	X	-34.621	2
5	MP4A	Z	59.965	2
6	MP4A	Mx	0	2
7	MP2A	X	-80.457	.5
8	MP2A	Z	139.356	.5
9	MP2A	Mx	-.107	.5
10	MP2A	X	-80.457	2
11	MP2A	Z	139.356	2
12	MP2A	Mx	-.107	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	X	-80.457	.5
14	MP2A	Z	139.356	.5
15	MP2A	Mx	.107	.5
16	MP2A	X	-80.457	2
17	MP2A	Z	139.356	2
18	MP2A	Mx	.107	2
19	MP3A	X	-12.718	2
20	MP3A	Z	22.028	2
21	MP3A	Mx	0	2
22	M32	X	-24.415	4
23	M32	Z	42.288	4
24	M32	Mx	0	4
25	MP2A	X	-24.287	4
26	MP2A	Z	42.067	4
27	MP2A	Mx	.014	4
28	MP2A	X	-6.032	5.5
29	MP2A	Z	10.448	5.5
30	MP2A	Mx	.004	5.5
31	OVP	X	-39.065	3.5
32	OVP	Z	67.663	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-16.957	1.5
35	MP2A	Z	29.37	1.5
36	MP2A	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-50.136	.5
2	MP4A	Z	28.946	.5
3	MP4A	Mx	.017	.5
4	MP4A	X	-50.136	2
5	MP4A	Z	28.946	2
6	MP4A	Mx	.017	2
7	MP2A	X	-127.399	.5
8	MP2A	Z	73.554	.5
9	MP2A	Mx	-.042	.5
10	MP2A	X	-127.399	2
11	MP2A	Z	73.554	2
12	MP2A	Mx	-.042	2
13	MP2A	X	-127.399	.5
14	MP2A	Z	73.554	.5
15	MP2A	Mx	.128	.5
16	MP2A	X	-127.399	2
17	MP2A	Z	73.554	2
18	MP2A	Mx	.128	2
19	MP3A	X	-19.121	2
20	MP3A	Z	11.04	2
21	MP3A	Mx	.006	2
22	M32	X	-47.302	4
23	M32	Z	27.31	4
24	M32	Mx	0	4
25	MP2A	X	-31.359	4
26	MP2A	Z	18.105	4
27	MP2A	Mx	.018	4
28	MP2A	X	-8.704	5.5
29	MP2A	Z	5.025	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	MP2A	Mx	.005	5.5
31	OVP	X	-76.282	3.5
32	OVP	Z	44.041	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-24.255	1.5
35	MP2A	Z	14.004	1.5
36	MP2A	Mx	-.012	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-35.195	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	.018	.5
4	MP4A	X	-35.195	2
5	MP4A	Z	0	2
6	MP4A	Mx	.018	2
7	MP2A	X	-119.494	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	.021	.5
10	MP2A	X	-119.494	2
11	MP2A	Z	0	2
12	MP2A	Mx	.021	2
13	MP2A	X	-119.494	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	.1	.5
16	MP2A	X	-119.494	2
17	MP2A	Z	0	2
18	MP2A	Mx	.1	2
19	MP3A	X	-15.367	2
20	MP3A	Z	0	2
21	MP3A	Mx	.008	2
22	M32	X	-51.539	4
23	M32	Z	0	4
24	M32	Mx	0	4
25	MP2A	X	-30.028	4
26	MP2A	Z	0	4
27	MP2A	Mx	.018	4
28	MP2A	X	-9.044	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	.005	5.5
31	OVP	X	-82.787	3.5
32	OVP	Z	0	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-16.193	1.5
35	MP2A	Z	0	1.5
36	MP2A	Mx	-.012	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-20.651	.5
2	MP4A	Z	-11.923	.5
3	MP4A	Mx	.014	.5
4	MP4A	X	-20.651	2
5	MP4A	Z	-11.923	2
6	MP4A	Mx	.014	2
7	MP2A	X	-91.528	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP2A	Z	-52.843	.5
9	MP2A	Mx	.062	.5
10	MP2A	X	-91.528	2
11	MP2A	Z	-52.843	2
12	MP2A	Mx	.062	2
13	MP2A	X	-91.528	.5
14	MP2A	Z	-52.843	.5
15	MP2A	Mx	.062	.5
16	MP2A	X	-91.528	2
17	MP2A	Z	-52.843	2
18	MP2A	Mx	.062	2
19	MP3A	X	-10.402	2
20	MP3A	Z	-6.006	2
21	MP3A	Mx	.007	2
22	M32	X	-36.951	4
23	M32	Z	-21.334	4
24	M32	Mx	0	4
25	MP2A	X	-31.359	4
26	MP2A	Z	-18.105	4
27	MP2A	Mx	.018	4
28	MP2A	X	-8.704	5.5
29	MP2A	Z	-5.025	5.5
30	MP2A	Mx	.005	5.5
31	OVP	X	-58.492	3.5
32	OVP	Z	-33.77	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-8.908	1.5
35	MP2A	Z	-5.143	1.5
36	MP2A	Mx	-.009	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-17.597	.5
2	MP4A	Z	-30.479	.5
3	MP4A	Mx	.018	.5
4	MP4A	X	-17.597	2
5	MP4A	Z	-30.479	2
6	MP4A	Mx	.018	2
7	MP2A	X	-59.747	.5
8	MP2A	Z	-103.485	.5
9	MP2A	Mx	.1	.5
10	MP2A	X	-59.747	2
11	MP2A	Z	-103.485	2
12	MP2A	Mx	.1	2
13	MP2A	X	-59.747	.5
14	MP2A	Z	-103.485	.5
15	MP2A	Mx	.021	.5
16	MP2A	X	-59.747	2
17	MP2A	Z	-103.485	2
18	MP2A	Mx	.021	2
19	MP3A	X	-7.684	2
20	MP3A	Z	-13.308	2
21	MP3A	Mx	.008	2
22	M32	X	-18.439	4
23	M32	Z	-31.936	4
24	M32	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	-24.287	4
26	MP2A	Z	-42.067	4
27	MP2A	Mx	.014	4
28	MP2A	X	-6.032	5.5
29	MP2A	Z	-10.448	5.5
30	MP2A	Mx	.004	5.5
31	OVP	X	-28.794	3.5
32	OVP	Z	-49.873	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-8.097	1.5
35	MP2A	Z	-14.024	1.5
36	MP2A	Mx	-.012	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	-13.977	.5
3	MP4A	Mx	.004	.5
4	MP4A	X	0	2
5	MP4A	Z	-13.977	2
6	MP4A	Mx	.004	2
7	MP2A	X	0	.5
8	MP2A	Z	-28.228	.5
9	MP2A	Mx	.025	.5
10	MP2A	X	0	2
11	MP2A	Z	-28.228	2
12	MP2A	Mx	.025	2
13	MP2A	X	0	.5
14	MP2A	Z	-28.228	.5
15	MP2A	Mx	-.008	.5
16	MP2A	X	0	2
17	MP2A	Z	-28.228	2
18	MP2A	Mx	-.008	2
19	MP3A	X	0	2
20	MP3A	Z	-7.495	2
21	MP3A	Mx	.002	2
22	M32	X	0	4
23	M32	Z	-10.328	4
24	M32	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	-13.764	4
27	MP2A	Mx	0	4
28	MP2A	X	0	5.5
29	MP2A	Z	-3.352	5.5
30	MP2A	Mx	0	5.5
31	OVP	X	0	3.5
32	OVP	Z	-13.2	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	0	1.5
35	MP2A	Z	-6.397	1.5
36	MP2A	Mx	-.003	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	8.158	.5
2	MP4A	Z	-14.13	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
3	MP4A	Mx	0	.5
4	MP4A	X	8.158	2
5	MP4A	Z	-14.13	2
6	MP4A	Mx	0	2
7	MP2A	X	15.331	.5
8	MP2A	Z	-26.554	.5
9	MP2A	Mx	.02	.5
10	MP2A	X	15.331	2
11	MP2A	Z	-26.554	2
12	MP2A	Mx	.02	2
13	MP2A	X	15.331	.5
14	MP2A	Z	-26.554	.5
15	MP2A	Mx	-.02	.5
16	MP2A	X	15.331	2
17	MP2A	Z	-26.554	2
18	MP2A	Mx	-.02	2
19	MP3A	X	4.205	2
20	MP3A	Z	-7.283	2
21	MP3A	Mx	0	2
22	M32	X	6.194	4
23	M32	Z	-10.728	4
24	M32	Mx	0	4
25	MP2A	X	6.16	4
26	MP2A	Z	-10.67	4
27	MP2A	Mx	-.004	4
28	MP2A	X	1.572	5.5
29	MP2A	Z	-2.723	5.5
30	MP2A	Mx	-.000917	5.5
31	OVP	X	8.017	3.5
32	OVP	Z	-13.885	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	3.787	1.5
35	MP2A	Z	-6.56	1.5
36	MP2A	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	12.104	.5
2	MP4A	Z	-6.988	.5
3	MP4A	Mx	-.004	.5
4	MP4A	X	12.104	2
5	MP4A	Z	-6.988	2
6	MP4A	Mx	-.004	2
7	MP2A	X	24.446	.5
8	MP2A	Z	-14.114	.5
9	MP2A	Mx	.008	.5
10	MP2A	X	24.446	2
11	MP2A	Z	-14.114	2
12	MP2A	Mx	.008	2
13	MP2A	X	24.446	.5
14	MP2A	Z	-14.114	.5
15	MP2A	Mx	-.025	.5
16	MP2A	X	24.446	2
17	MP2A	Z	-14.114	2
18	MP2A	Mx	-.025	2
19	MP3A	X	6.491	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP3A	Z	-3.748	2
21	MP3A	Mx	-.002	2
22	M32	X	11.892	4
23	M32	Z	-6.866	4
24	M32	Mx	0	4
25	MP2A	X	8.17	4
26	MP2A	Z	-4.717	4
27	MP2A	Mx	-.005	4
28	MP2A	X	2.362	5.5
29	MP2A	Z	-1.363	5.5
30	MP2A	Mx	-.001	5.5
31	OVP	X	15.487	3.5
32	OVP	Z	-8.941	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	5.54	1.5
35	MP2A	Z	-3.198	1.5
36	MP2A	Mx	.003	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	9.299	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	-.005	.5
4	MP4A	X	9.299	2
5	MP4A	Z	0	2
6	MP4A	Mx	-.005	2
7	MP2A	X	23.362	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	-.004	.5
10	MP2A	X	23.362	2
11	MP2A	Z	0	2
12	MP2A	Mx	-.004	2
13	MP2A	X	23.362	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	-.02	.5
16	MP2A	X	23.362	2
17	MP2A	Z	0	2
18	MP2A	Mx	-.02	2
19	MP3A	X	5.667	2
20	MP3A	Z	0	2
21	MP3A	Mx	-.003	2
22	M32	X	13.017	4
23	M32	Z	0	4
24	M32	Mx	0	4
25	MP2A	X	7.991	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.005	4
28	MP2A	X	2.518	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	-.001	5.5
31	OVP	X	16.899	3.5
32	OVP	Z	0	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	4.042	1.5
35	MP2A	Z	0	1.5
36	MP2A	Mx	.003	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	6.028	.5
2	MP4A	Z	3.48	.5
3	MP4A	Mx	-.004	.5
4	MP4A	X	6.028	2
5	MP4A	Z	3.48	2
6	MP4A	Mx	-.004	2
7	MP2A	X	18.125	.5
8	MP2A	Z	10.464	.5
9	MP2A	Mx	-.012	.5
10	MP2A	X	18.125	2
11	MP2A	Z	10.464	2
12	MP2A	Mx	-.012	2
13	MP2A	X	18.125	.5
14	MP2A	Z	10.464	.5
15	MP2A	Mx	-.012	.5
16	MP2A	X	18.125	2
17	MP2A	Z	10.464	2
18	MP2A	Mx	-.012	2
19	MP3A	X	4.116	2
20	MP3A	Z	2.377	2
21	MP3A	Mx	-.003	2
22	M32	X	9.489	4
23	M32	Z	5.478	4
24	M32	Mx	0	4
25	MP2A	X	8.17	4
26	MP2A	Z	4.717	4
27	MP2A	Mx	-.005	4
28	MP2A	X	2.362	5.5
29	MP2A	Z	1.363	5.5
30	MP2A	Mx	-.001	5.5
31	OVP	X	12.181	3.5
32	OVP	Z	7.033	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	2.48	1.5
35	MP2A	Z	1.432	1.5
36	MP2A	Mx	.002	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	4.649	.5
2	MP4A	Z	8.053	.5
3	MP4A	Mx	-.005	.5
4	MP4A	X	4.649	2
5	MP4A	Z	8.053	2
6	MP4A	Mx	-.005	2
7	MP2A	X	11.681	.5
8	MP2A	Z	20.232	.5
9	MP2A	Mx	-.02	.5
10	MP2A	X	11.681	2
11	MP2A	Z	20.232	2
12	MP2A	Mx	-.02	2
13	MP2A	X	11.681	.5
14	MP2A	Z	20.232	.5
15	MP2A	Mx	-.004	.5
16	MP2A	X	11.681	2
17	MP2A	Z	20.232	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP2A	Mx	-.004	2
19	MP3A	X	2.834	2
20	MP3A	Z	4.908	2
21	MP3A	Mx	-.003	2
22	M32	X	4.806	4
23	M32	Z	8.325	4
24	M32	Mx	0	4
25	MP2A	X	6.16	4
26	MP2A	Z	10.67	4
27	MP2A	Mx	-.004	4
28	MP2A	X	1.572	5.5
29	MP2A	Z	2.723	5.5
30	MP2A	Mx	-.000917	5.5
31	OVP	X	6.108	3.5
32	OVP	Z	10.58	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	2.021	1.5
35	MP2A	Z	3.5	1.5
36	MP2A	Mx	.003	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	13.977	.5
3	MP4A	Mx	-.004	.5
4	MP4A	X	0	2
5	MP4A	Z	13.977	2
6	MP4A	Mx	-.004	2
7	MP2A	X	0	.5
8	MP2A	Z	28.228	.5
9	MP2A	Mx	-.025	.5
10	MP2A	X	0	2
11	MP2A	Z	28.228	2
12	MP2A	Mx	-.025	2
13	MP2A	X	0	.5
14	MP2A	Z	28.228	.5
15	MP2A	Mx	.008	.5
16	MP2A	X	0	2
17	MP2A	Z	28.228	2
18	MP2A	Mx	.008	2
19	MP3A	X	0	2
20	MP3A	Z	7.495	2
21	MP3A	Mx	-.002	2
22	M32	X	0	4
23	M32	Z	10.328	4
24	M32	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	13.764	4
27	MP2A	Mx	0	4
28	MP2A	X	0	5.5
29	MP2A	Z	3.352	5.5
30	MP2A	Mx	0	5.5
31	OVP	X	0	3.5
32	OVP	Z	13.2	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP2A	Z	6.397	1.5
36	MP2A	Mx	.003	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-8.158	.5
2	MP4A	Z	14.13	.5
3	MP4A	Mx	0	.5
4	MP4A	X	-8.158	2
5	MP4A	Z	14.13	2
6	MP4A	Mx	0	2
7	MP2A	X	-15.331	.5
8	MP2A	Z	26.554	.5
9	MP2A	Mx	-.02	.5
10	MP2A	X	-15.331	2
11	MP2A	Z	26.554	2
12	MP2A	Mx	-.02	2
13	MP2A	X	-15.331	.5
14	MP2A	Z	26.554	.5
15	MP2A	Mx	.02	.5
16	MP2A	X	-15.331	2
17	MP2A	Z	26.554	2
18	MP2A	Mx	.02	2
19	MP3A	X	-4.205	2
20	MP3A	Z	7.283	2
21	MP3A	Mx	0	2
22	M32	X	-6.194	4
23	M32	Z	10.728	4
24	M32	Mx	0	4
25	MP2A	X	-6.16	4
26	MP2A	Z	10.67	4
27	MP2A	Mx	.004	4
28	MP2A	X	-1.572	5.5
29	MP2A	Z	2.723	5.5
30	MP2A	Mx	.000917	5.5
31	OVP	X	-8.017	3.5
32	OVP	Z	13.885	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-3.787	1.5
35	MP2A	Z	6.56	1.5
36	MP2A	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-12.104	.5
2	MP4A	Z	6.988	.5
3	MP4A	Mx	.004	.5
4	MP4A	X	-12.104	2
5	MP4A	Z	6.988	2
6	MP4A	Mx	.004	2
7	MP2A	X	-24.446	.5
8	MP2A	Z	14.114	.5
9	MP2A	Mx	-.008	.5
10	MP2A	X	-24.446	2
11	MP2A	Z	14.114	2
12	MP2A	Mx	-.008	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	X	-24.446	.5
14	MP2A	Z	14.114	.5
15	MP2A	Mx	.025	.5
16	MP2A	X	-24.446	2
17	MP2A	Z	14.114	2
18	MP2A	Mx	.025	2
19	MP3A	X	-6.491	2
20	MP3A	Z	3.748	2
21	MP3A	Mx	.002	2
22	M32	X	-11.892	4
23	M32	Z	6.866	4
24	M32	Mx	0	4
25	MP2A	X	-8.17	4
26	MP2A	Z	4.717	4
27	MP2A	Mx	.005	4
28	MP2A	X	-2.362	5.5
29	MP2A	Z	1.363	5.5
30	MP2A	Mx	.001	5.5
31	OVP	X	-15.487	3.5
32	OVP	Z	8.941	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-5.54	1.5
35	MP2A	Z	3.198	1.5
36	MP2A	Mx	-.003	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-9.299	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	.005	.5
4	MP4A	X	-9.299	2
5	MP4A	Z	0	2
6	MP4A	Mx	.005	2
7	MP2A	X	-23.362	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	.004	.5
10	MP2A	X	-23.362	2
11	MP2A	Z	0	2
12	MP2A	Mx	.004	2
13	MP2A	X	-23.362	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	.02	.5
16	MP2A	X	-23.362	2
17	MP2A	Z	0	2
18	MP2A	Mx	.02	2
19	MP3A	X	-5.667	2
20	MP3A	Z	0	2
21	MP3A	Mx	.003	2
22	M32	X	-13.017	4
23	M32	Z	0	4
24	M32	Mx	0	4
25	MP2A	X	-7.991	4
26	MP2A	Z	0	4
27	MP2A	Mx	.005	4
28	MP2A	X	-2.518	5.5
29	MP2A	Z	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	MP2A	Mx	.001	5.5
31	OVP	X	-16.899	3.5
32	OVP	Z	0	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-4.042	1.5
35	MP2A	Z	0	1.5
36	MP2A	Mx	-.003	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-6.028	.5
2	MP4A	Z	-3.48	.5
3	MP4A	Mx	.004	.5
4	MP4A	X	-6.028	2
5	MP4A	Z	-3.48	2
6	MP4A	Mx	.004	2
7	MP2A	X	-18.125	.5
8	MP2A	Z	-10.464	.5
9	MP2A	Mx	.012	.5
10	MP2A	X	-18.125	2
11	MP2A	Z	-10.464	2
12	MP2A	Mx	.012	2
13	MP2A	X	-18.125	.5
14	MP2A	Z	-10.464	.5
15	MP2A	Mx	.012	.5
16	MP2A	X	-18.125	2
17	MP2A	Z	-10.464	2
18	MP2A	Mx	.012	2
19	MP3A	X	-4.116	2
20	MP3A	Z	-2.377	2
21	MP3A	Mx	.003	2
22	M32	X	-9.489	4
23	M32	Z	-5.478	4
24	M32	Mx	0	4
25	MP2A	X	-8.17	4
26	MP2A	Z	-4.717	4
27	MP2A	Mx	.005	4
28	MP2A	X	-2.362	5.5
29	MP2A	Z	-1.363	5.5
30	MP2A	Mx	.001	5.5
31	OVP	X	-12.181	3.5
32	OVP	Z	-7.033	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-2.48	1.5
35	MP2A	Z	-1.432	1.5
36	MP2A	Mx	-.002	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-4.649	.5
2	MP4A	Z	-8.053	.5
3	MP4A	Mx	.005	.5
4	MP4A	X	-4.649	2
5	MP4A	Z	-8.053	2
6	MP4A	Mx	.005	2
7	MP2A	X	-11.681	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP2A	Z	-20.232	.5
9	MP2A	Mx	.02	.5
10	MP2A	X	-11.681	2
11	MP2A	Z	-20.232	2
12	MP2A	Mx	.02	2
13	MP2A	X	-11.681	.5
14	MP2A	Z	-20.232	.5
15	MP2A	Mx	.004	.5
16	MP2A	X	-11.681	2
17	MP2A	Z	-20.232	2
18	MP2A	Mx	.004	2
19	MP3A	X	-2.834	2
20	MP3A	Z	-4.908	2
21	MP3A	Mx	.003	2
22	M32	X	-4.806	4
23	M32	Z	-8.325	4
24	M32	Mx	0	4
25	MP2A	X	-6.16	4
26	MP2A	Z	-10.67	4
27	MP2A	Mx	.004	4
28	MP2A	X	-1.572	5.5
29	MP2A	Z	-2.723	5.5
30	MP2A	Mx	.000917	5.5
31	OVP	X	-6.108	3.5
32	OVP	Z	-10.58	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-2.021	1.5
35	MP2A	Z	-3.5	1.5
36	MP2A	Mx	-.003	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	-3.618	.5
3	MP4A	Mx	.001	.5
4	MP4A	X	0	2
5	MP4A	Z	-3.618	2
6	MP4A	Mx	.001	2
7	MP2A	X	0	.5
8	MP2A	Z	-9.194	.5
9	MP2A	Mx	.008	.5
10	MP2A	X	0	2
11	MP2A	Z	-9.194	2
12	MP2A	Mx	.008	2
13	MP2A	X	0	.5
14	MP2A	Z	-9.194	.5
15	MP2A	Mx	-.003	.5
16	MP2A	X	0	2
17	MP2A	Z	-9.194	2
18	MP2A	Mx	-.003	2
19	MP3A	X	0	2
20	MP3A	Z	-1.38	2
21	MP3A	Mx	.000402	2
22	M32	X	0	4
23	M32	Z	-2.497	4
24	M32	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	0	4
26	MP2A	Z	-3.422	4
27	MP2A	Mx	0	4
28	MP2A	X	0	5.5
29	MP2A	Z	-.817	5.5
30	MP2A	Mx	0	5.5
31	OVP	X	0	3.5
32	OVP	Z	-3.93	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	0	1.5
35	MP2A	Z	-1.75	1.5
36	MP2A	Mx	-.000729	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	2.164	.5
2	MP4A	Z	-3.748	.5
3	MP4A	Mx	0	.5
4	MP4A	X	2.164	2
5	MP4A	Z	-3.748	2
6	MP4A	Mx	0	2
7	MP2A	X	5.029	.5
8	MP2A	Z	-8.71	.5
9	MP2A	Mx	.007	.5
10	MP2A	X	5.029	2
11	MP2A	Z	-8.71	2
12	MP2A	Mx	.007	2
13	MP2A	X	5.029	.5
14	MP2A	Z	-8.71	.5
15	MP2A	Mx	-.007	.5
16	MP2A	X	5.029	2
17	MP2A	Z	-8.71	2
18	MP2A	Mx	-.007	2
19	MP3A	X	.795	2
20	MP3A	Z	-1.377	2
21	MP3A	Mx	0	2
22	M32	X	1.526	4
23	M32	Z	-2.643	4
24	M32	Mx	0	4
25	MP2A	X	1.518	4
26	MP2A	Z	-2.629	4
27	MP2A	Mx	-.000886	4
28	MP2A	X	.377	5.5
29	MP2A	Z	-.653	5.5
30	MP2A	Mx	-.00022	5.5
31	OVP	X	2.442	3.5
32	OVP	Z	-4.229	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	1.06	1.5
35	MP2A	Z	-1.836	1.5
36	MP2A	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	3.134	.5
2	MP4A	Z	-1.809	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
3	MP4A	Mx	-.001	.5
4	MP4A	X	3.134	2
5	MP4A	Z	-1.809	2
6	MP4A	Mx	-.001	2
7	MP2A	X	7.962	.5
8	MP2A	Z	-4.597	.5
9	MP2A	Mx	.003	.5
10	MP2A	X	7.962	2
11	MP2A	Z	-4.597	2
12	MP2A	Mx	.003	2
13	MP2A	X	7.962	.5
14	MP2A	Z	-4.597	.5
15	MP2A	Mx	-.008	.5
16	MP2A	X	7.962	2
17	MP2A	Z	-4.597	2
18	MP2A	Mx	-.008	2
19	MP3A	X	1.195	2
20	MP3A	Z	-.69	2
21	MP3A	Mx	-.000402	2
22	M32	X	2.956	4
23	M32	Z	-1.707	4
24	M32	Mx	0	4
25	MP2A	X	1.96	4
26	MP2A	Z	-1.132	4
27	MP2A	Mx	-.001	4
28	MP2A	X	.544	5.5
29	MP2A	Z	-.314	5.5
30	MP2A	Mx	-.000317	5.5
31	OVP	X	4.768	3.5
32	OVP	Z	-2.753	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	1.516	1.5
35	MP2A	Z	-.875	1.5
36	MP2A	Mx	.000729	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	2.2	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	-.001	.5
4	MP4A	X	2.2	2
5	MP4A	Z	0	2
6	MP4A	Mx	-.001	2
7	MP2A	X	7.468	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	-.001	.5
10	MP2A	X	7.468	2
11	MP2A	Z	0	2
12	MP2A	Mx	-.001	2
13	MP2A	X	7.468	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	-.006	.5
16	MP2A	X	7.468	2
17	MP2A	Z	0	2
18	MP2A	Mx	-.006	2
19	MP3A	X	.96	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP3A	Z	0	2
21	MP3A	Mx	-.000485	2
22	M32	X	3.221	4
23	M32	Z	0	4
24	M32	Mx	0	4
25	MP2A	X	1.877	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.001	4
28	MP2A	X	.565	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	-.00033	5.5
31	OVP	X	5.174	3.5
32	OVP	Z	0	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	1.012	1.5
35	MP2A	Z	0	1.5
36	MP2A	Mx	.00073	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	1.291	.5
2	MP4A	Z	.745	.5
3	MP4A	Mx	-.000869	.5
4	MP4A	X	1.291	2
5	MP4A	Z	.745	2
6	MP4A	Mx	-.000869	2
7	MP2A	X	5.72	.5
8	MP2A	Z	3.303	.5
9	MP2A	Mx	-.004	.5
10	MP2A	X	5.72	2
11	MP2A	Z	3.303	2
12	MP2A	Mx	-.004	2
13	MP2A	X	5.72	.5
14	MP2A	Z	3.303	.5
15	MP2A	Mx	-.004	.5
16	MP2A	X	5.72	2
17	MP2A	Z	3.303	2
18	MP2A	Mx	-.004	2
19	MP3A	X	.65	2
20	MP3A	Z	.375	2
21	MP3A	Mx	-.000438	2
22	M32	X	2.309	4
23	M32	Z	1.333	4
24	M32	Mx	0	4
25	MP2A	X	1.96	4
26	MP2A	Z	1.132	4
27	MP2A	Mx	-.001	4
28	MP2A	X	.544	5.5
29	MP2A	Z	.314	5.5
30	MP2A	Mx	-.000317	5.5
31	OVP	X	3.656	3.5
32	OVP	Z	2.111	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	.557	1.5
35	MP2A	Z	.321	1.5
36	MP2A	Mx	.000536	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	1.1	.5
2	MP4A	Z	1.905	.5
3	MP4A	Mx	-.001	.5
4	MP4A	X	1.1	2
5	MP4A	Z	1.905	2
6	MP4A	Mx	-.001	2
7	MP2A	X	3.734	.5
8	MP2A	Z	6.468	.5
9	MP2A	Mx	-.006	.5
10	MP2A	X	3.734	2
11	MP2A	Z	6.468	2
12	MP2A	Mx	-.006	2
13	MP2A	X	3.734	.5
14	MP2A	Z	6.468	.5
15	MP2A	Mx	-.001	.5
16	MP2A	X	3.734	2
17	MP2A	Z	6.468	2
18	MP2A	Mx	-.001	2
19	MP3A	X	.48	2
20	MP3A	Z	.832	2
21	MP3A	Mx	-.000485	2
22	M32	X	1.152	4
23	M32	Z	1.996	4
24	M32	Mx	0	4
25	MP2A	X	1.518	4
26	MP2A	Z	2.629	4
27	MP2A	Mx	-.000886	4
28	MP2A	X	.377	5.5
29	MP2A	Z	.653	5.5
30	MP2A	Mx	-.00022	5.5
31	OVP	X	1.8	3.5
32	OVP	Z	3.117	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	.506	1.5
35	MP2A	Z	.876	1.5
36	MP2A	Mx	.00073	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	3.618	.5
3	MP4A	Mx	-.001	.5
4	MP4A	X	0	2
5	MP4A	Z	3.618	2
6	MP4A	Mx	-.001	2
7	MP2A	X	0	.5
8	MP2A	Z	9.194	.5
9	MP2A	Mx	-.008	.5
10	MP2A	X	0	2
11	MP2A	Z	9.194	2
12	MP2A	Mx	-.008	2
13	MP2A	X	0	.5
14	MP2A	Z	9.194	.5
15	MP2A	Mx	.003	.5
16	MP2A	X	0	2
17	MP2A	Z	9.194	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP2A	Mx	.003	2
19	MP3A	X	0	2
20	MP3A	Z	1.38	2
21	MP3A	Mx	-.000402	2
22	M32	X	0	4
23	M32	Z	2.497	4
24	M32	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	3.422	4
27	MP2A	Mx	0	4
28	MP2A	X	0	5.5
29	MP2A	Z	.817	5.5
30	MP2A	Mx	0	5.5
31	OVP	X	0	3.5
32	OVP	Z	3.93	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	0	1.5
35	MP2A	Z	1.75	1.5
36	MP2A	Mx	.000729	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-2.164	.5
2	MP4A	Z	3.748	.5
3	MP4A	Mx	0	.5
4	MP4A	X	-2.164	2
5	MP4A	Z	3.748	2
6	MP4A	Mx	0	2
7	MP2A	X	-5.029	.5
8	MP2A	Z	8.71	.5
9	MP2A	Mx	-.007	.5
10	MP2A	X	-5.029	2
11	MP2A	Z	8.71	2
12	MP2A	Mx	-.007	2
13	MP2A	X	-5.029	.5
14	MP2A	Z	8.71	.5
15	MP2A	Mx	.007	.5
16	MP2A	X	-5.029	2
17	MP2A	Z	8.71	2
18	MP2A	Mx	.007	2
19	MP3A	X	-.795	2
20	MP3A	Z	1.377	2
21	MP3A	Mx	0	2
22	M32	X	-1.526	4
23	M32	Z	2.643	4
24	M32	Mx	0	4
25	MP2A	X	-1.518	4
26	MP2A	Z	2.629	4
27	MP2A	Mx	.000886	4
28	MP2A	X	-.377	5.5
29	MP2A	Z	.653	5.5
30	MP2A	Mx	.00022	5.5
31	OVP	X	-2.442	3.5
32	OVP	Z	4.229	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-1.06	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP2A	Z	1.836	1.5
36	MP2A	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-3.134	.5
2	MP4A	Z	1.809	.5
3	MP4A	Mx	.001	.5
4	MP4A	X	-3.134	2
5	MP4A	Z	1.809	2
6	MP4A	Mx	.001	2
7	MP2A	X	-7.962	.5
8	MP2A	Z	4.597	.5
9	MP2A	Mx	-.003	.5
10	MP2A	X	-7.962	2
11	MP2A	Z	4.597	2
12	MP2A	Mx	-.003	2
13	MP2A	X	-7.962	.5
14	MP2A	Z	4.597	.5
15	MP2A	Mx	.008	.5
16	MP2A	X	-7.962	2
17	MP2A	Z	4.597	2
18	MP2A	Mx	.008	2
19	MP3A	X	-1.195	2
20	MP3A	Z	.69	2
21	MP3A	Mx	.000402	2
22	M32	X	-2.956	4
23	M32	Z	1.707	4
24	M32	Mx	0	4
25	MP2A	X	-1.96	4
26	MP2A	Z	1.132	4
27	MP2A	Mx	.001	4
28	MP2A	X	-.544	5.5
29	MP2A	Z	.314	5.5
30	MP2A	Mx	.000317	5.5
31	OVP	X	-4.768	3.5
32	OVP	Z	2.753	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-1.516	1.5
35	MP2A	Z	.875	1.5
36	MP2A	Mx	-.000729	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-2.2	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	.001	.5
4	MP4A	X	-2.2	2
5	MP4A	Z	0	2
6	MP4A	Mx	.001	2
7	MP2A	X	-7.468	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	.001	.5
10	MP2A	X	-7.468	2
11	MP2A	Z	0	2
12	MP2A	Mx	.001	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	X	-7.468	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	.006	.5
16	MP2A	X	-7.468	2
17	MP2A	Z	0	2
18	MP2A	Mx	.006	2
19	MP3A	X	-.96	2
20	MP3A	Z	0	2
21	MP3A	Mx	.000485	2
22	M32	X	-3.221	4
23	M32	Z	0	4
24	M32	Mx	0	4
25	MP2A	X	-1.877	4
26	MP2A	Z	0	4
27	MP2A	Mx	.001	4
28	MP2A	X	-.565	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	.00033	5.5
31	OVP	X	-5.174	3.5
32	OVP	Z	0	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-1.012	1.5
35	MP2A	Z	0	1.5
36	MP2A	Mx	-.00073	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-1.291	.5
2	MP4A	Z	-.745	.5
3	MP4A	Mx	.000869	.5
4	MP4A	X	-1.291	2
5	MP4A	Z	-.745	2
6	MP4A	Mx	.000869	2
7	MP2A	X	-5.72	.5
8	MP2A	Z	-3.303	.5
9	MP2A	Mx	.004	.5
10	MP2A	X	-5.72	2
11	MP2A	Z	-3.303	2
12	MP2A	Mx	.004	2
13	MP2A	X	-5.72	.5
14	MP2A	Z	-3.303	.5
15	MP2A	Mx	.004	.5
16	MP2A	X	-5.72	2
17	MP2A	Z	-3.303	2
18	MP2A	Mx	.004	2
19	MP3A	X	-.65	2
20	MP3A	Z	-.375	2
21	MP3A	Mx	.000438	2
22	M32	X	-2.309	4
23	M32	Z	-1.333	4
24	M32	Mx	0	4
25	MP2A	X	-1.96	4
26	MP2A	Z	-1.132	4
27	MP2A	Mx	.001	4
28	MP2A	X	-.544	5.5
29	MP2A	Z	-.314	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	MP2A	Mx	.000317	5.5
31	OVP	X	-3.656	3.5
32	OVP	Z	-2.111	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-.557	1.5
35	MP2A	Z	-.321	1.5
36	MP2A	Mx	-.000536	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-1.1	.5
2	MP4A	Z	-1.905	.5
3	MP4A	Mx	.001	.5
4	MP4A	X	-1.1	2
5	MP4A	Z	-1.905	2
6	MP4A	Mx	.001	2
7	MP2A	X	-3.734	.5
8	MP2A	Z	-6.468	.5
9	MP2A	Mx	.006	.5
10	MP2A	X	-3.734	2
11	MP2A	Z	-6.468	2
12	MP2A	Mx	.006	2
13	MP2A	X	-3.734	.5
14	MP2A	Z	-6.468	.5
15	MP2A	Mx	.001	.5
16	MP2A	X	-3.734	2
17	MP2A	Z	-6.468	2
18	MP2A	Mx	.001	2
19	MP3A	X	-.48	2
20	MP3A	Z	-.832	2
21	MP3A	Mx	.000485	2
22	M32	X	-1.152	4
23	M32	Z	-1.996	4
24	M32	Mx	0	4
25	MP2A	X	-1.518	4
26	MP2A	Z	-2.629	4
27	MP2A	Mx	.000886	4
28	MP2A	X	-.377	5.5
29	MP2A	Z	-.653	5.5
30	MP2A	Mx	.00022	5.5
31	OVP	X	-1.8	3.5
32	OVP	Z	-3.117	3.5
33	OVP	Mx	0	3.5
34	MP2A	X	-.506	1.5
35	MP2A	Z	-.876	1.5
36	MP2A	Mx	-.00073	1.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M2	Y	-500	%17

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M2	Y	-500	%68

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M2	Y	-250	%50

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-2.193	.5
2	MP4A	My	-.001	.5
3	MP4A	Mz	-.00064	.5
4	MP4A	Y	-2.193	2
5	MP4A	My	-.001	2
6	MP4A	Mz	-.00064	2
7	MP2A	Y	-1.593	.5
8	MP2A	My	-.000274	.5
9	MP2A	Mz	-.001	.5
10	MP2A	Y	-1.593	2
11	MP2A	My	-.000274	2
12	MP2A	Mz	-.001	2
13	MP2A	Y	-1.593	.5
14	MP2A	My	-.001	.5
15	MP2A	Mz	.000455	.5
16	MP2A	Y	-1.593	2
17	MP2A	My	-.001	2
18	MP2A	Mz	.000455	2
19	MP3A	Y	-.941	2
20	MP3A	My	-.000476	2
21	MP3A	Mz	-.000275	2
22	M32	Y	-4.249	4
23	M32	My	0	4
24	M32	Mz	0	4
25	MP2A	Y	-3.539	4
26	MP2A	My	-.002	4
27	MP2A	Mz	0	4
28	MP2A	Y	-.524	5.5
29	MP2A	My	-.000305	5.5
30	MP2A	Mz	0	5.5
31	OVP	Y	-1.354	3.5
32	OVP	My	0	3.5
33	OVP	Mz	0	3.5
34	MP2A	Y	-.886	1.5
35	MP2A	My	.000639	1.5
36	MP2A	Mz	.000369	1.5

Member Point Loads (BLC 82 : Antenna Eh (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Z	-5.481	.5
2	MP4A	Mx	.002	.5
3	MP4A	Z	-5.481	2
4	MP4A	Mx	.002	2
5	MP2A	Z	-3.984	.5
6	MP2A	Mx	.003	.5
7	MP2A	Z	-3.984	2
8	MP2A	Mx	.003	2

Member Point Loads (BLC 82 : Antenna Eh (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2A	Z	-3.984	.5
10	MP2A	Mx	-.001	.5
11	MP2A	Z	-3.984	2
12	MP2A	Mx	-.001	2
13	MP3A	Z	-2.354	2
14	MP3A	Mx	.000686	2
15	M32	Z	-10.623	4
16	M32	Mx	0	4
17	MP2A	Z	-8.848	4
18	MP2A	Mx	0	4
19	MP2A	Z	-1.309	5.5
20	MP2A	Mx	0	5.5
21	OVP	Z	-3.386	3.5
22	OVP	Mx	0	3.5
23	MP2A	Z	-2.215	1.5
24	MP2A	Mx	-.000923	1.5

Member Point Loads (BLC 83 : Antenna Eh (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	5.481	.5
2	MP4A	Mx	-.003	.5
3	MP4A	X	5.481	2
4	MP4A	Mx	-.003	2
5	MP2A	X	3.984	.5
6	MP2A	Mx	-.000685	.5
7	MP2A	X	3.984	2
8	MP2A	Mx	-.000685	2
9	MP2A	X	3.984	.5
10	MP2A	Mx	-.003	.5
11	MP2A	X	3.984	2
12	MP2A	Mx	-.003	2
13	MP3A	X	2.354	2
14	MP3A	Mx	-.001	2
15	M32	X	10.623	4
16	M32	Mx	0	4
17	MP2A	X	8.848	4
18	MP2A	Mx	-.005	4
19	MP2A	X	1.309	5.5
20	MP2A	Mx	-.000764	5.5
21	OVP	X	3.386	3.5
22	OVP	Mx	0	3.5
23	MP2A	X	2.215	1.5
24	MP2A	Mx	.002	1.5

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	-5.74	-5.74	0	%100
2	M2	Y	-5.74	-5.74	0	%100
3	MP4A	Y	-5.09	-5.09	0	%100
4	MP3A	Y	-5.09	-5.09	0	%100
5	MP2A	Y	-5.09	-5.09	0	%100
6	MP1A	Y	-5.09	-5.09	0	%100
7	M32	Y	-5.09	-5.09	0	%100
8	M38	Y	-13.853	-13.853	0	%100
9	M43	Y	-13.853	-13.853	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	OVP	Y	-5.807	-5.807	0	%100
11	M40B	Y	-7.958	-7.958	0	%100
12	M39B	Y	-10.306	-10.306	0	%100
13	M40C	Y	-8.855	-8.855	0	%100
14	M42B	Y	-10.306	-10.306	0	%100
15	M43B	Y	-8.855	-8.855	0	%100
16	M37A	Y	-5.09	-5.09	0	%100
17	M40A	Y	-10.306	-10.306	0	%100
18	M43A	Y	-10.306	-10.306	0	%100
19	M45A	Y	-5.09	-5.09	0	%100
20	M45B	Y	-5.09	-5.09	0	%100
21	M41	Y	-7.958	-7.958	0	%100
22	M43C	Y	-8.855	-8.855	0	%100
23	M45C	Y	-8.855	-8.855	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	-7.36	-7.36	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-7.36	-7.36	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-8.39	-8.39	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	-8.39	-8.39	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-8.39	-8.39	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	-8.39	-8.39	0	%100
13	M32	X	0	0	0	%100
14	M32	Z	-8.39	-8.39	0	%100
15	M38	X	0	0	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	0	0	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	0	0	0	%100
20	OVP	Z	-10.157	-10.157	0	%100
21	M40B	X	0	0	0	%100
22	M40B	Z	-10.296	-10.296	0	%100
23	M39B	X	0	0	0	%100
24	M39B	Z	-12.235	-12.235	0	%100
25	M40C	X	0	0	0	%100
26	M40C	Z	-8.497	-8.497	0	%100
27	M42B	X	0	0	0	%100
28	M42B	Z	-12.235	-12.235	0	%100
29	M43B	X	0	0	0	%100
30	M43B	Z	-8.497	-8.497	0	%100
31	M37A	X	0	0	0	%100
32	M37A	Z	-8.39	-8.39	0	%100
33	M40A	X	0	0	0	%100
34	M40A	Z	-12.235	-12.235	0	%100
35	M43A	X	0	0	0	%100
36	M43A	Z	-12.235	-12.235	0	%100
37	M45A	X	0	0	0	%100
38	M45A	Z	-5.085	-5.085	0	%100
39	M45B	X	0	0	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,%]
40	M45B	Z	-.747	-.747	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	-10.296	-10.296	0	%100
43	M43C	X	0	0	0	%100
44	M43C	Z	-8.497	-8.497	0	%100
45	M45C	X	0	0	0	%100
46	M45C	Z	-8.497	-8.497	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	2.76	2.76	0	%100
2	M1	Z	-4.78	-4.78	0	%100
3	M2	X	2.76	2.76	0	%100
4	M2	Z	-4.78	-4.78	0	%100
5	MP4A	X	4.195	4.195	0	%100
6	MP4A	Z	-7.266	-7.266	0	%100
7	MP3A	X	4.195	4.195	0	%100
8	MP3A	Z	-7.266	-7.266	0	%100
9	MP2A	X	4.195	4.195	0	%100
10	MP2A	Z	-7.266	-7.266	0	%100
11	MP1A	X	4.195	4.195	0	%100
12	MP1A	Z	-7.266	-7.266	0	%100
13	M32	X	4.195	4.195	0	%100
14	M32	Z	-7.266	-7.266	0	%100
15	M38	X	2.65	2.65	0	%100
16	M38	Z	-4.589	-4.589	0	%100
17	M43	X	2.65	2.65	0	%100
18	M43	Z	-4.589	-4.589	0	%100
19	OVP	X	5.078	5.078	0	%100
20	OVP	Z	-8.796	-8.796	0	%100
21	M40B	X	5.829	5.829	0	%100
22	M40B	Z	-10.096	-10.096	0	%100
23	M39B	X	10.242	10.242	0	%100
24	M39B	Z	-17.74	-17.74	0	%100
25	M40C	X	7.113	7.113	0	%100
26	M40C	Z	-12.32	-12.32	0	%100
27	M42B	X	10.242	10.242	0	%100
28	M42B	Z	-17.74	-17.74	0	%100
29	M43B	X	7.113	7.113	0	%100
30	M43B	Z	-12.32	-12.32	0	%100
31	M37A	X	4.195	4.195	0	%100
32	M37A	Z	-7.266	-7.266	0	%100
33	M40A	X	1.174	1.174	0	%100
34	M40A	Z	-2.034	-2.034	0	%100
35	M43A	X	1.174	1.174	0	%100
36	M43A	Z	-2.034	-2.034	0	%100
37	M45A	X	4.094	4.094	0	%100
38	M45A	Z	-7.09	-7.09	0	%100
39	M45B	X	.201	.201	0	%100
40	M45B	Z	-.348	-.348	0	%100
41	M41	X	4.332	4.332	0	%100
42	M41	Z	-7.504	-7.504	0	%100
43	M43C	X	.815	.815	0	%100
44	M43C	Z	-1.412	-1.412	0	%100
45	M45C	X	.815	.815	0	%100
46	M45C	Z	-1.412	-1.412	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	1.593	1.593	0	%100
2	M1	Z	-.92	-.92	0	%100
3	M2	X	1.593	1.593	0	%100
4	M2	Z	-.92	-.92	0	%100
5	MP4A	X	7.266	7.266	0	%100
6	MP4A	Z	-4.195	-4.195	0	%100
7	MP3A	X	7.266	7.266	0	%100
8	MP3A	Z	-4.195	-4.195	0	%100
9	MP2A	X	7.266	7.266	0	%100
10	MP2A	Z	-4.195	-4.195	0	%100
11	MP1A	X	7.266	7.266	0	%100
12	MP1A	Z	-4.195	-4.195	0	%100
13	M32	X	7.266	7.266	0	%100
14	M32	Z	-4.195	-4.195	0	%100
15	M38	X	13.767	13.767	0	%100
16	M38	Z	-7.949	-7.949	0	%100
17	M43	X	13.767	13.767	0	%100
18	M43	Z	-7.949	-7.949	0	%100
19	OVP	X	8.796	8.796	0	%100
20	OVP	Z	-5.078	-5.078	0	%100
21	M40B	X	9.862	9.862	0	%100
22	M40B	Z	-5.694	-5.694	0	%100
23	M39B	X	16.323	16.323	0	%100
24	M39B	Z	-9.424	-9.424	0	%100
25	M40C	X	11.335	11.335	0	%100
26	M40C	Z	-6.544	-6.544	0	%100
27	M42B	X	16.323	16.323	0	%100
28	M42B	Z	-9.424	-9.424	0	%100
29	M43B	X	11.335	11.335	0	%100
30	M43B	Z	-6.544	-6.544	0	%100
31	M37A	X	7.266	7.266	0	%100
32	M37A	Z	-4.195	-4.195	0	%100
33	M40A	X	.616	.616	0	%100
34	M40A	Z	-.356	-.356	0	%100
35	M43A	X	.616	.616	0	%100
36	M43A	Z	-.356	-.356	0	%100
37	M45A	X	6.334	6.334	0	%100
38	M45A	Z	-3.657	-3.657	0	%100
39	M45B	X	3.334	3.334	0	%100
40	M45B	Z	-1.925	-1.925	0	%100
41	M41	X	7.27	7.27	0	%100
42	M41	Z	-4.197	-4.197	0	%100
43	M43C	X	.428	.428	0	%100
44	M43C	Z	-.247	-.247	0	%100
45	M45C	X	.428	.428	0	%100
46	M45C	Z	-.247	-.247	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	MP4A	X	8.39	8.39	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	8.39	8.39	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,%]
8	MP3A	Z	0	0	0	%100
9	MP2A	X	8.39	8.39	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	8.39	8.39	0	%100
12	MP1A	Z	0	0	0	%100
13	M32	X	8.39	8.39	0	%100
14	M32	Z	0	0	0	%100
15	M38	X	21.196	21.196	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	21.196	21.196	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	10.157	10.157	0	%100
20	OVP	Z	0	0	0	%100
21	M40B	X	9.756	9.756	0	%100
22	M40B	Z	0	0	0	%100
23	M39B	X	8.961	8.961	0	%100
24	M39B	Z	0	0	0	%100
25	M40C	X	6.223	6.223	0	%100
26	M40C	Z	0	0	0	%100
27	M42B	X	8.961	8.961	0	%100
28	M42B	Z	0	0	0	%100
29	M43B	X	6.223	6.223	0	%100
30	M43B	Z	0	0	0	%100
31	M37A	X	8.39	8.39	0	%100
32	M37A	Z	0	0	0	%100
33	M40A	X	8.961	8.961	0	%100
34	M40A	Z	0	0	0	%100
35	M43A	X	8.961	8.961	0	%100
36	M43A	Z	0	0	0	%100
37	M45A	X	3.34	3.34	0	%100
38	M45A	Z	0	0	0	%100
39	M45B	X	7.643	7.643	0	%100
40	M45B	Z	0	0	0	%100
41	M41	X	9.756	9.756	0	%100
42	M41	Z	0	0	0	%100
43	M43C	X	6.223	6.223	0	%100
44	M43C	Z	0	0	0	%100
45	M45C	X	6.223	6.223	0	%100
46	M45C	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	1.593	1.593	0	%100
2	M1	Z	.92	.92	0	%100
3	M2	X	1.593	1.593	0	%100
4	M2	Z	.92	.92	0	%100
5	MP4A	X	7.266	7.266	0	%100
6	MP4A	Z	4.195	4.195	0	%100
7	MP3A	X	7.266	7.266	0	%100
8	MP3A	Z	4.195	4.195	0	%100
9	MP2A	X	7.266	7.266	0	%100
10	MP2A	Z	4.195	4.195	0	%100
11	MP1A	X	7.266	7.266	0	%100
12	MP1A	Z	4.195	4.195	0	%100
13	M32	X	7.266	7.266	0	%100
14	M32	Z	4.195	4.195	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,%]
15	M38	X	13.767	13.767	0	%100
16	M38	Z	7.949	7.949	0	%100
17	M43	X	13.767	13.767	0	%100
18	M43	Z	7.949	7.949	0	%100
19	OVP	X	8.796	8.796	0	%100
20	OVP	Z	5.078	5.078	0	%100
21	M40B	X	7.27	7.27	0	%100
22	M40B	Z	4.197	4.197	0	%100
23	M39B	X	.616	.616	0	%100
24	M39B	Z	.356	.356	0	%100
25	M40C	X	.428	.428	0	%100
26	M40C	Z	.247	.247	0	%100
27	M42B	X	.616	.616	0	%100
28	M42B	Z	.356	.356	0	%100
29	M43B	X	.428	.428	0	%100
30	M43B	Z	.247	.247	0	%100
31	M37A	X	7.266	7.266	0	%100
32	M37A	Z	4.195	4.195	0	%100
33	M40A	X	16.323	16.323	0	%100
34	M40A	Z	9.424	9.424	0	%100
35	M43A	X	16.323	16.323	0	%100
36	M43A	Z	9.424	9.424	0	%100
37	M45A	X	.207	.207	0	%100
38	M45A	Z	.119	.119	0	%100
39	M45B	X	6.918	6.918	0	%100
40	M45B	Z	3.994	3.994	0	%100
41	M41	X	9.862	9.862	0	%100
42	M41	Z	5.694	5.694	0	%100
43	M43C	X	11.335	11.335	0	%100
44	M43C	Z	6.544	6.544	0	%100
45	M45C	X	11.335	11.335	0	%100
46	M45C	Z	6.544	6.544	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	2.76	2.76	0	%100
2	M1	Z	4.78	4.78	0	%100
3	M2	X	2.76	2.76	0	%100
4	M2	Z	4.78	4.78	0	%100
5	MP4A	X	4.195	4.195	0	%100
6	MP4A	Z	7.266	7.266	0	%100
7	MP3A	X	4.195	4.195	0	%100
8	MP3A	Z	7.266	7.266	0	%100
9	MP2A	X	4.195	4.195	0	%100
10	MP2A	Z	7.266	7.266	0	%100
11	MP1A	X	4.195	4.195	0	%100
12	MP1A	Z	7.266	7.266	0	%100
13	M32	X	4.195	4.195	0	%100
14	M32	Z	7.266	7.266	0	%100
15	M38	X	2.65	2.65	0	%100
16	M38	Z	4.589	4.589	0	%100
17	M43	X	2.65	2.65	0	%100
18	M43	Z	4.589	4.589	0	%100
19	OVP	X	5.078	5.078	0	%100
20	OVP	Z	8.796	8.796	0	%100
21	M40B	X	4.332	4.332	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,%]
22	M40B	Z	7.504	7.504	0	%100
23	M39B	X	1.174	1.174	0	%100
24	M39B	Z	2.034	2.034	0	%100
25	M40C	X	.815	.815	0	%100
26	M40C	Z	1.412	1.412	0	%100
27	M42B	X	1.174	1.174	0	%100
28	M42B	Z	2.034	2.034	0	%100
29	M43B	X	.815	.815	0	%100
30	M43B	Z	1.412	1.412	0	%100
31	M37A	X	4.195	4.195	0	%100
32	M37A	Z	7.266	7.266	0	%100
33	M40A	X	10.242	10.242	0	%100
34	M40A	Z	17.74	17.74	0	%100
35	M43A	X	10.242	10.242	0	%100
36	M43A	Z	17.74	17.74	0	%100
37	M45A	X	.556	.556	0	%100
38	M45A	Z	.962	.962	0	%100
39	M45B	X	2.27	2.27	0	%100
40	M45B	Z	3.932	3.932	0	%100
41	M41	X	5.829	5.829	0	%100
42	M41	Z	10.096	10.096	0	%100
43	M43C	X	7.113	7.113	0	%100
44	M43C	Z	12.32	12.32	0	%100
45	M45C	X	7.113	7.113	0	%100
46	M45C	Z	12.32	12.32	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	7.36	7.36	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	7.36	7.36	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	8.39	8.39	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	8.39	8.39	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	8.39	8.39	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	8.39	8.39	0	%100
13	M32	X	0	0	0	%100
14	M32	Z	8.39	8.39	0	%100
15	M38	X	0	0	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	0	0	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	0	0	0	%100
20	OVP	Z	10.157	10.157	0	%100
21	M40B	X	0	0	0	%100
22	M40B	Z	10.296	10.296	0	%100
23	M39B	X	0	0	0	%100
24	M39B	Z	12.235	12.235	0	%100
25	M40C	X	0	0	0	%100
26	M40C	Z	8.497	8.497	0	%100
27	M42B	X	0	0	0	%100
28	M42B	Z	12.235	12.235	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,%]
29	M43B	X	0	0	0	%100
30	M43B	Z	8.497	8.497	0	%100
31	M37A	X	0	0	0	%100
32	M37A	Z	8.39	8.39	0	%100
33	M40A	X	0	0	0	%100
34	M40A	Z	12.235	12.235	0	%100
35	M43A	X	0	0	0	%100
36	M43A	Z	12.235	12.235	0	%100
37	M45A	X	0	0	0	%100
38	M45A	Z	5.085	5.085	0	%100
39	M45B	X	0	0	0	%100
40	M45B	Z	.747	.747	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	10.296	10.296	0	%100
43	M43C	X	0	0	0	%100
44	M43C	Z	8.497	8.497	0	%100
45	M45C	X	0	0	0	%100
46	M45C	Z	8.497	8.497	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	-2.76	-2.76	0	%100
2	M1	Z	4.78	4.78	0	%100
3	M2	X	-2.76	-2.76	0	%100
4	M2	Z	4.78	4.78	0	%100
5	MP4A	X	-4.195	-4.195	0	%100
6	MP4A	Z	7.266	7.266	0	%100
7	MP3A	X	-4.195	-4.195	0	%100
8	MP3A	Z	7.266	7.266	0	%100
9	MP2A	X	-4.195	-4.195	0	%100
10	MP2A	Z	7.266	7.266	0	%100
11	MP1A	X	-4.195	-4.195	0	%100
12	MP1A	Z	7.266	7.266	0	%100
13	M32	X	-4.195	-4.195	0	%100
14	M32	Z	7.266	7.266	0	%100
15	M38	X	-2.65	-2.65	0	%100
16	M38	Z	4.589	4.589	0	%100
17	M43	X	-2.65	-2.65	0	%100
18	M43	Z	4.589	4.589	0	%100
19	OVP	X	-5.078	-5.078	0	%100
20	OVP	Z	8.796	8.796	0	%100
21	M40B	X	-5.829	-5.829	0	%100
22	M40B	Z	10.096	10.096	0	%100
23	M39B	X	-10.242	-10.242	0	%100
24	M39B	Z	17.74	17.74	0	%100
25	M40C	X	-7.113	-7.113	0	%100
26	M40C	Z	12.32	12.32	0	%100
27	M42B	X	-10.242	-10.242	0	%100
28	M42B	Z	17.74	17.74	0	%100
29	M43B	X	-7.113	-7.113	0	%100
30	M43B	Z	12.32	12.32	0	%100
31	M37A	X	-4.195	-4.195	0	%100
32	M37A	Z	7.266	7.266	0	%100
33	M40A	X	-1.174	-1.174	0	%100
34	M40A	Z	2.034	2.034	0	%100
35	M43A	X	-1.174	-1.174	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,%]
36	M43A	Z	2.034	2.034	0	%100
37	M45A	X	-4.094	-4.094	0	%100
38	M45A	Z	7.09	7.09	0	%100
39	M45B	X	-.201	-.201	0	%100
40	M45B	Z	.348	.348	0	%100
41	M41	X	-4.332	-4.332	0	%100
42	M41	Z	7.504	7.504	0	%100
43	M43C	X	-.815	-.815	0	%100
44	M43C	Z	1.412	1.412	0	%100
45	M45C	X	-.815	-.815	0	%100
46	M45C	Z	1.412	1.412	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	-1.593	-1.593	0	%100
2	M1	Z	.92	.92	0	%100
3	M2	X	-1.593	-1.593	0	%100
4	M2	Z	.92	.92	0	%100
5	MP4A	X	-7.266	-7.266	0	%100
6	MP4A	Z	4.195	4.195	0	%100
7	MP3A	X	-7.266	-7.266	0	%100
8	MP3A	Z	4.195	4.195	0	%100
9	MP2A	X	-7.266	-7.266	0	%100
10	MP2A	Z	4.195	4.195	0	%100
11	MP1A	X	-7.266	-7.266	0	%100
12	MP1A	Z	4.195	4.195	0	%100
13	M32	X	-7.266	-7.266	0	%100
14	M32	Z	4.195	4.195	0	%100
15	M38	X	-13.767	-13.767	0	%100
16	M38	Z	7.949	7.949	0	%100
17	M43	X	-13.767	-13.767	0	%100
18	M43	Z	7.949	7.949	0	%100
19	OVP	X	-8.796	-8.796	0	%100
20	OVP	Z	5.078	5.078	0	%100
21	M40B	X	-9.862	-9.862	0	%100
22	M40B	Z	5.694	5.694	0	%100
23	M39B	X	-16.323	-16.323	0	%100
24	M39B	Z	9.424	9.424	0	%100
25	M40C	X	-11.335	-11.335	0	%100
26	M40C	Z	6.544	6.544	0	%100
27	M42B	X	-16.323	-16.323	0	%100
28	M42B	Z	9.424	9.424	0	%100
29	M43B	X	-11.335	-11.335	0	%100
30	M43B	Z	6.544	6.544	0	%100
31	M37A	X	-7.266	-7.266	0	%100
32	M37A	Z	4.195	4.195	0	%100
33	M40A	X	-.616	-.616	0	%100
34	M40A	Z	.356	.356	0	%100
35	M43A	X	-.616	-.616	0	%100
36	M43A	Z	.356	.356	0	%100
37	M45A	X	-6.334	-6.334	0	%100
38	M45A	Z	3.657	3.657	0	%100
39	M45B	X	-3.334	-3.334	0	%100
40	M45B	Z	1.925	1.925	0	%100
41	M41	X	-7.27	-7.27	0	%100
42	M41	Z	4.197	4.197	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,%]
43	M43C	X	-.428	-.428	0	%100
44	M43C	Z	.247	.247	0	%100
45	M45C	X	-.428	-.428	0	%100
46	M45C	Z	.247	.247	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	MP4A	X	-8.39	-8.39	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	-8.39	-8.39	0	%100
8	MP3A	Z	0	0	0	%100
9	MP2A	X	-8.39	-8.39	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	-8.39	-8.39	0	%100
12	MP1A	Z	0	0	0	%100
13	M32	X	-8.39	-8.39	0	%100
14	M32	Z	0	0	0	%100
15	M38	X	-21.196	-21.196	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	-21.196	-21.196	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	-10.157	-10.157	0	%100
20	OVP	Z	0	0	0	%100
21	M40B	X	-9.756	-9.756	0	%100
22	M40B	Z	0	0	0	%100
23	M39B	X	-8.961	-8.961	0	%100
24	M39B	Z	0	0	0	%100
25	M40C	X	-6.223	-6.223	0	%100
26	M40C	Z	0	0	0	%100
27	M42B	X	-8.961	-8.961	0	%100
28	M42B	Z	0	0	0	%100
29	M43B	X	-6.223	-6.223	0	%100
30	M43B	Z	0	0	0	%100
31	M37A	X	-8.39	-8.39	0	%100
32	M37A	Z	0	0	0	%100
33	M40A	X	-8.961	-8.961	0	%100
34	M40A	Z	0	0	0	%100
35	M43A	X	-8.961	-8.961	0	%100
36	M43A	Z	0	0	0	%100
37	M45A	X	-3.34	-3.34	0	%100
38	M45A	Z	0	0	0	%100
39	M45B	X	-7.643	-7.643	0	%100
40	M45B	Z	0	0	0	%100
41	M41	X	-9.756	-9.756	0	%100
42	M41	Z	0	0	0	%100
43	M43C	X	-6.223	-6.223	0	%100
44	M43C	Z	0	0	0	%100
45	M45C	X	-6.223	-6.223	0	%100
46	M45C	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,%]

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,%]
1	M1	X	-1.593	-1.593	0	%100
2	M1	Z	-.92	-.92	0	%100
3	M2	X	-1.593	-1.593	0	%100
4	M2	Z	-.92	-.92	0	%100
5	MP4A	X	-7.266	-7.266	0	%100
6	MP4A	Z	-4.195	-4.195	0	%100
7	MP3A	X	-7.266	-7.266	0	%100
8	MP3A	Z	-4.195	-4.195	0	%100
9	MP2A	X	-7.266	-7.266	0	%100
10	MP2A	Z	-4.195	-4.195	0	%100
11	MP1A	X	-7.266	-7.266	0	%100
12	MP1A	Z	-4.195	-4.195	0	%100
13	M32	X	-7.266	-7.266	0	%100
14	M32	Z	-4.195	-4.195	0	%100
15	M38	X	-13.767	-13.767	0	%100
16	M38	Z	-7.949	-7.949	0	%100
17	M43	X	-13.767	-13.767	0	%100
18	M43	Z	-7.949	-7.949	0	%100
19	OVP	X	-8.796	-8.796	0	%100
20	OVP	Z	-5.078	-5.078	0	%100
21	M40B	X	-7.27	-7.27	0	%100
22	M40B	Z	-4.197	-4.197	0	%100
23	M39B	X	-.616	-.616	0	%100
24	M39B	Z	-.356	-.356	0	%100
25	M40C	X	-.428	-.428	0	%100
26	M40C	Z	-.247	-.247	0	%100
27	M42B	X	-.616	-.616	0	%100
28	M42B	Z	-.356	-.356	0	%100
29	M43B	X	-.428	-.428	0	%100
30	M43B	Z	-.247	-.247	0	%100
31	M37A	X	-7.266	-7.266	0	%100
32	M37A	Z	-4.195	-4.195	0	%100
33	M40A	X	-16.323	-16.323	0	%100
34	M40A	Z	-9.424	-9.424	0	%100
35	M43A	X	-16.323	-16.323	0	%100
36	M43A	Z	-9.424	-9.424	0	%100
37	M45A	X	-.207	-.207	0	%100
38	M45A	Z	-.119	-.119	0	%100
39	M45B	X	-6.918	-6.918	0	%100
40	M45B	Z	-3.994	-3.994	0	%100
41	M41	X	-9.862	-9.862	0	%100
42	M41	Z	-5.694	-5.694	0	%100
43	M43C	X	-11.335	-11.335	0	%100
44	M43C	Z	-6.544	-6.544	0	%100
45	M45C	X	-11.335	-11.335	0	%100
46	M45C	Z	-6.544	-6.544	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	-2.76	-2.76	0	%100
2	M1	Z	-4.78	-4.78	0	%100
3	M2	X	-2.76	-2.76	0	%100
4	M2	Z	-4.78	-4.78	0	%100
5	MP4A	X	-4.195	-4.195	0	%100
6	MP4A	Z	-7.266	-7.266	0	%100
7	MP3A	X	-4.195	-4.195	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,%]
8	MP3A	Z	-7.266	-7.266	0	%100
9	MP2A	X	-4.195	-4.195	0	%100
10	MP2A	Z	-7.266	-7.266	0	%100
11	MP1A	X	-4.195	-4.195	0	%100
12	MP1A	Z	-7.266	-7.266	0	%100
13	M32	X	-4.195	-4.195	0	%100
14	M32	Z	-7.266	-7.266	0	%100
15	M38	X	-2.65	-2.65	0	%100
16	M38	Z	-4.589	-4.589	0	%100
17	M43	X	-2.65	-2.65	0	%100
18	M43	Z	-4.589	-4.589	0	%100
19	OVP	X	-5.078	-5.078	0	%100
20	OVP	Z	-8.796	-8.796	0	%100
21	M40B	X	-4.332	-4.332	0	%100
22	M40B	Z	-7.504	-7.504	0	%100
23	M39B	X	-1.174	-1.174	0	%100
24	M39B	Z	-2.034	-2.034	0	%100
25	M40C	X	-.815	-.815	0	%100
26	M40C	Z	-1.412	-1.412	0	%100
27	M42B	X	-1.174	-1.174	0	%100
28	M42B	Z	-2.034	-2.034	0	%100
29	M43B	X	-.815	-.815	0	%100
30	M43B	Z	-1.412	-1.412	0	%100
31	M37A	X	-4.195	-4.195	0	%100
32	M37A	Z	-7.266	-7.266	0	%100
33	M40A	X	-10.242	-10.242	0	%100
34	M40A	Z	-17.74	-17.74	0	%100
35	M43A	X	-10.242	-10.242	0	%100
36	M43A	Z	-17.74	-17.74	0	%100
37	M45A	X	-.556	-.556	0	%100
38	M45A	Z	-.962	-.962	0	%100
39	M45B	X	-2.27	-2.27	0	%100
40	M45B	Z	-3.932	-3.932	0	%100
41	M41	X	-5.829	-5.829	0	%100
42	M41	Z	-10.096	-10.096	0	%100
43	M43C	X	-7.113	-7.113	0	%100
44	M43C	Z	-12.32	-12.32	0	%100
45	M45C	X	-7.113	-7.113	0	%100
46	M45C	Z	-12.32	-12.32	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	-2.718	-2.718	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-2.718	-2.718	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-2.897	-2.897	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	-2.897	-2.897	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-2.897	-2.897	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	-2.897	-2.897	0	%100
13	M32	X	0	0	0	%100
14	M32	Z	-2.897	-2.897	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,%]
15	M38	X	0	0	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	0	0	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	0	0	0	%100
20	OVP	Z	-3.203	-3.203	0	%100
21	M40B	X	0	0	0	%100
22	M40B	Z	-2.839	-2.839	0	%100
23	M39B	X	0	0	0	%100
24	M39B	Z	-2.609	-2.609	0	%100
25	M40C	X	0	0	0	%100
26	M40C	Z	-2.306	-2.306	0	%100
27	M42B	X	0	0	0	%100
28	M42B	Z	-2.609	-2.609	0	%100
29	M43B	X	0	0	0	%100
30	M43B	Z	-2.306	-2.306	0	%100
31	M37A	X	0	0	0	%100
32	M37A	Z	-2.897	-2.897	0	%100
33	M40A	X	0	0	0	%100
34	M40A	Z	-2.609	-2.609	0	%100
35	M43A	X	0	0	0	%100
36	M43A	Z	-2.609	-2.609	0	%100
37	M45A	X	0	0	0	%100
38	M45A	Z	-1.756	-1.756	0	%100
39	M45B	X	0	0	0	%100
40	M45B	Z	-.258	-.258	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	-2.839	-2.839	0	%100
43	M43C	X	0	0	0	%100
44	M43C	Z	-2.306	-2.306	0	%100
45	M45C	X	0	0	0	%100
46	M45C	Z	-2.306	-2.306	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	1.019	1.019	0	%100
2	M1	Z	-1.765	-1.765	0	%100
3	M2	X	1.019	1.019	0	%100
4	M2	Z	-1.765	-1.765	0	%100
5	MP4A	X	1.448	1.448	0	%100
6	MP4A	Z	-2.509	-2.509	0	%100
7	MP3A	X	1.448	1.448	0	%100
8	MP3A	Z	-2.509	-2.509	0	%100
9	MP2A	X	1.448	1.448	0	%100
10	MP2A	Z	-2.509	-2.509	0	%100
11	MP1A	X	1.448	1.448	0	%100
12	MP1A	Z	-2.509	-2.509	0	%100
13	M32	X	1.448	1.448	0	%100
14	M32	Z	-2.509	-2.509	0	%100
15	M38	X	.574	.574	0	%100
16	M38	Z	-.994	-.994	0	%100
17	M43	X	.574	.574	0	%100
18	M43	Z	-.994	-.994	0	%100
19	OVP	X	1.602	1.602	0	%100
20	OVP	Z	-2.774	-2.774	0	%100
21	M40B	X	1.717	1.717	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,%]
22	M40B	Z	-2.973	-2.973	0	%100
23	M39B	X	2.184	2.184	0	%100
24	M39B	Z	-3.783	-3.783	0	%100
25	M40C	X	1.931	1.931	0	%100
26	M40C	Z	-3.344	-3.344	0	%100
27	M42B	X	2.184	2.184	0	%100
28	M42B	Z	-3.783	-3.783	0	%100
29	M43B	X	1.931	1.931	0	%100
30	M43B	Z	-3.344	-3.344	0	%100
31	M37A	X	1.448	1.448	0	%100
32	M37A	Z	-2.509	-2.509	0	%100
33	M40A	X	.25	.25	0	%100
34	M40A	Z	-.434	-.434	0	%100
35	M43A	X	.25	.25	0	%100
36	M43A	Z	-.434	-.434	0	%100
37	M45A	X	1.413	1.413	0	%100
38	M45A	Z	-2.448	-2.448	0	%100
39	M45B	X	.069	.069	0	%100
40	M45B	Z	-.12	-.12	0	%100
41	M41	X	1.064	1.064	0	%100
42	M41	Z	-1.842	-1.842	0	%100
43	M43C	X	.221	.221	0	%100
44	M43C	Z	-.383	-.383	0	%100
45	M45C	X	.221	.221	0	%100
46	M45C	Z	-.383	-.383	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	.588	.588	0	%100
2	M1	Z	-.34	-.34	0	%100
3	M2	X	.588	.588	0	%100
4	M2	Z	-.34	-.34	0	%100
5	MP4A	X	2.509	2.509	0	%100
6	MP4A	Z	-1.448	-1.448	0	%100
7	MP3A	X	2.509	2.509	0	%100
8	MP3A	Z	-1.448	-1.448	0	%100
9	MP2A	X	2.509	2.509	0	%100
10	MP2A	Z	-1.448	-1.448	0	%100
11	MP1A	X	2.509	2.509	0	%100
12	MP1A	Z	-1.448	-1.448	0	%100
13	M32	X	2.509	2.509	0	%100
14	M32	Z	-1.448	-1.448	0	%100
15	M38	X	2.981	2.981	0	%100
16	M38	Z	-1.721	-1.721	0	%100
17	M43	X	2.981	2.981	0	%100
18	M43	Z	-1.721	-1.721	0	%100
19	OVP	X	2.774	2.774	0	%100
20	OVP	Z	-1.602	-1.602	0	%100
21	M40B	X	2.871	2.871	0	%100
22	M40B	Z	-1.658	-1.658	0	%100
23	M39B	X	3.481	3.481	0	%100
24	M39B	Z	-2.01	-2.01	0	%100
25	M40C	X	3.077	3.077	0	%100
26	M40C	Z	-1.776	-1.776	0	%100
27	M42B	X	3.481	3.481	0	%100
28	M42B	Z	-2.01	-2.01	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,%]
29	M43B	X	3.077	3.077	0	%100
30	M43B	Z	-1.776	-1.776	0	%100
31	M37A	X	2.509	2.509	0	%100
32	M37A	Z	-1.448	-1.448	0	%100
33	M40A	X	.131	.131	0	%100
34	M40A	Z	-.076	-.076	0	%100
35	M43A	X	.131	.131	0	%100
36	M43A	Z	-.076	-.076	0	%100
37	M45A	X	2.187	2.187	0	%100
38	M45A	Z	-1.263	-1.263	0	%100
39	M45B	X	1.151	1.151	0	%100
40	M45B	Z	-.665	-.665	0	%100
41	M41	X	1.74	1.74	0	%100
42	M41	Z	-1.005	-1.005	0	%100
43	M43C	X	.116	.116	0	%100
44	M43C	Z	-.067	-.067	0	%100
45	M45C	X	.116	.116	0	%100
46	M45C	Z	-.067	-.067	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	MP4A	X	2.897	2.897	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	2.897	2.897	0	%100
8	MP3A	Z	0	0	0	%100
9	MP2A	X	2.897	2.897	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	2.897	2.897	0	%100
12	MP1A	Z	0	0	0	%100
13	M32	X	2.897	2.897	0	%100
14	M32	Z	0	0	0	%100
15	M38	X	4.59	4.59	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	4.59	4.59	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	3.203	3.203	0	%100
20	OVP	Z	0	0	0	%100
21	M40B	X	2.604	2.604	0	%100
22	M40B	Z	0	0	0	%100
23	M39B	X	1.911	1.911	0	%100
24	M39B	Z	0	0	0	%100
25	M40C	X	1.689	1.689	0	%100
26	M40C	Z	0	0	0	%100
27	M42B	X	1.911	1.911	0	%100
28	M42B	Z	0	0	0	%100
29	M43B	X	1.689	1.689	0	%100
30	M43B	Z	0	0	0	%100
31	M37A	X	2.897	2.897	0	%100
32	M37A	Z	0	0	0	%100
33	M40A	X	1.911	1.911	0	%100
34	M40A	Z	0	0	0	%100
35	M43A	X	1.911	1.911	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,%]
36	M43A	Z	0	0	0	%100
37	M45A	X	1.153	1.153	0	%100
38	M45A	Z	0	0	0	%100
39	M45B	X	2.639	2.639	0	%100
40	M45B	Z	0	0	0	%100
41	M41	X	2.604	2.604	0	%100
42	M41	Z	0	0	0	%100
43	M43C	X	1.689	1.689	0	%100
44	M43C	Z	0	0	0	%100
45	M45C	X	1.689	1.689	0	%100
46	M45C	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	.588	.588	0	%100
2	M1	Z	.34	.34	0	%100
3	M2	X	.588	.588	0	%100
4	M2	Z	.34	.34	0	%100
5	MP4A	X	2.509	2.509	0	%100
6	MP4A	Z	1.448	1.448	0	%100
7	MP3A	X	2.509	2.509	0	%100
8	MP3A	Z	1.448	1.448	0	%100
9	MP2A	X	2.509	2.509	0	%100
10	MP2A	Z	1.448	1.448	0	%100
11	MP1A	X	2.509	2.509	0	%100
12	MP1A	Z	1.448	1.448	0	%100
13	M32	X	2.509	2.509	0	%100
14	M32	Z	1.448	1.448	0	%100
15	M38	X	2.981	2.981	0	%100
16	M38	Z	1.721	1.721	0	%100
17	M43	X	2.981	2.981	0	%100
18	M43	Z	1.721	1.721	0	%100
19	OVP	X	2.774	2.774	0	%100
20	OVP	Z	1.602	1.602	0	%100
21	M40B	X	1.74	1.74	0	%100
22	M40B	Z	1.005	1.005	0	%100
23	M39B	X	.131	.131	0	%100
24	M39B	Z	.076	.076	0	%100
25	M40C	X	.116	.116	0	%100
26	M40C	Z	.067	.067	0	%100
27	M42B	X	.131	.131	0	%100
28	M42B	Z	.076	.076	0	%100
29	M43B	X	.116	.116	0	%100
30	M43B	Z	.067	.067	0	%100
31	M37A	X	2.509	2.509	0	%100
32	M37A	Z	1.448	1.448	0	%100
33	M40A	X	3.481	3.481	0	%100
34	M40A	Z	2.01	2.01	0	%100
35	M43A	X	3.481	3.481	0	%100
36	M43A	Z	2.01	2.01	0	%100
37	M45A	X	.071	.071	0	%100
38	M45A	Z	.041	.041	0	%100
39	M45B	X	2.388	2.388	0	%100
40	M45B	Z	1.379	1.379	0	%100
41	M41	X	2.871	2.871	0	%100
42	M41	Z	1.658	1.658	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,%]
43	M43C	X	3.077	3.077	0	%100
44	M43C	Z	1.776	1.776	0	%100
45	M45C	X	3.077	3.077	0	%100
46	M45C	Z	1.776	1.776	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	1.019	1.019	0	%100
2	M1	Z	1.765	1.765	0	%100
3	M2	X	1.019	1.019	0	%100
4	M2	Z	1.765	1.765	0	%100
5	MP4A	X	1.448	1.448	0	%100
6	MP4A	Z	2.509	2.509	0	%100
7	MP3A	X	1.448	1.448	0	%100
8	MP3A	Z	2.509	2.509	0	%100
9	MP2A	X	1.448	1.448	0	%100
10	MP2A	Z	2.509	2.509	0	%100
11	MP1A	X	1.448	1.448	0	%100
12	MP1A	Z	2.509	2.509	0	%100
13	M32	X	1.448	1.448	0	%100
14	M32	Z	2.509	2.509	0	%100
15	M38	X	.574	.574	0	%100
16	M38	Z	.994	.994	0	%100
17	M43	X	.574	.574	0	%100
18	M43	Z	.994	.994	0	%100
19	OVP	X	1.602	1.602	0	%100
20	OVP	Z	2.774	2.774	0	%100
21	M40B	X	1.064	1.064	0	%100
22	M40B	Z	1.842	1.842	0	%100
23	M39B	X	.25	.25	0	%100
24	M39B	Z	.434	.434	0	%100
25	M40C	X	.221	.221	0	%100
26	M40C	Z	.383	.383	0	%100
27	M42B	X	.25	.25	0	%100
28	M42B	Z	.434	.434	0	%100
29	M43B	X	.221	.221	0	%100
30	M43B	Z	.383	.383	0	%100
31	M37A	X	1.448	1.448	0	%100
32	M37A	Z	2.509	2.509	0	%100
33	M40A	X	2.184	2.184	0	%100
34	M40A	Z	3.783	3.783	0	%100
35	M43A	X	2.184	2.184	0	%100
36	M43A	Z	3.783	3.783	0	%100
37	M45A	X	.192	.192	0	%100
38	M45A	Z	.332	.332	0	%100
39	M45B	X	.784	.784	0	%100
40	M45B	Z	1.358	1.358	0	%100
41	M41	X	1.717	1.717	0	%100
42	M41	Z	2.973	2.973	0	%100
43	M43C	X	1.931	1.931	0	%100
44	M43C	Z	3.344	3.344	0	%100
45	M45C	X	1.931	1.931	0	%100
46	M45C	Z	3.344	3.344	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,%]

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,%]
1	M1	X	0	0	0	%100
2	M1	Z	2.718	2.718	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	2.718	2.718	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	2.897	2.897	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	2.897	2.897	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	2.897	2.897	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	2.897	2.897	0	%100
13	M32	X	0	0	0	%100
14	M32	Z	2.897	2.897	0	%100
15	M38	X	0	0	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	0	0	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	0	0	0	%100
20	OVP	Z	3.203	3.203	0	%100
21	M40B	X	0	0	0	%100
22	M40B	Z	2.839	2.839	0	%100
23	M39B	X	0	0	0	%100
24	M39B	Z	2.609	2.609	0	%100
25	M40C	X	0	0	0	%100
26	M40C	Z	2.306	2.306	0	%100
27	M42B	X	0	0	0	%100
28	M42B	Z	2.609	2.609	0	%100
29	M43B	X	0	0	0	%100
30	M43B	Z	2.306	2.306	0	%100
31	M37A	X	0	0	0	%100
32	M37A	Z	2.897	2.897	0	%100
33	M40A	X	0	0	0	%100
34	M40A	Z	2.609	2.609	0	%100
35	M43A	X	0	0	0	%100
36	M43A	Z	2.609	2.609	0	%100
37	M45A	X	0	0	0	%100
38	M45A	Z	1.756	1.756	0	%100
39	M45B	X	0	0	0	%100
40	M45B	Z	.258	.258	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	2.839	2.839	0	%100
43	M43C	X	0	0	0	%100
44	M43C	Z	2.306	2.306	0	%100
45	M45C	X	0	0	0	%100
46	M45C	Z	2.306	2.306	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	-1.019	-1.019	0	%100
2	M1	Z	1.765	1.765	0	%100
3	M2	X	-1.019	-1.019	0	%100
4	M2	Z	1.765	1.765	0	%100
5	MP4A	X	-1.448	-1.448	0	%100
6	MP4A	Z	2.509	2.509	0	%100
7	MP3A	X	-1.448	-1.448	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,%]
8	MP3A	Z	2.509	2.509	0	%100
9	MP2A	X	-1.448	-1.448	0	%100
10	MP2A	Z	2.509	2.509	0	%100
11	MP1A	X	-1.448	-1.448	0	%100
12	MP1A	Z	2.509	2.509	0	%100
13	M32	X	-1.448	-1.448	0	%100
14	M32	Z	2.509	2.509	0	%100
15	M38	X	-.574	-.574	0	%100
16	M38	Z	.994	.994	0	%100
17	M43	X	-.574	-.574	0	%100
18	M43	Z	.994	.994	0	%100
19	OVP	X	-1.602	-1.602	0	%100
20	OVP	Z	2.774	2.774	0	%100
21	M40B	X	-1.717	-1.717	0	%100
22	M40B	Z	2.973	2.973	0	%100
23	M39B	X	-2.184	-2.184	0	%100
24	M39B	Z	3.783	3.783	0	%100
25	M40C	X	-1.931	-1.931	0	%100
26	M40C	Z	3.344	3.344	0	%100
27	M42B	X	-2.184	-2.184	0	%100
28	M42B	Z	3.783	3.783	0	%100
29	M43B	X	-1.931	-1.931	0	%100
30	M43B	Z	3.344	3.344	0	%100
31	M37A	X	-1.448	-1.448	0	%100
32	M37A	Z	2.509	2.509	0	%100
33	M40A	X	-.25	-.25	0	%100
34	M40A	Z	.434	.434	0	%100
35	M43A	X	-.25	-.25	0	%100
36	M43A	Z	.434	.434	0	%100
37	M45A	X	-1.413	-1.413	0	%100
38	M45A	Z	2.448	2.448	0	%100
39	M45B	X	-.069	-.069	0	%100
40	M45B	Z	.12	.12	0	%100
41	M41	X	-1.064	-1.064	0	%100
42	M41	Z	1.842	1.842	0	%100
43	M43C	X	-.221	-.221	0	%100
44	M43C	Z	.383	.383	0	%100
45	M45C	X	-.221	-.221	0	%100
46	M45C	Z	.383	.383	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	-.588	-.588	0	%100
2	M1	Z	.34	.34	0	%100
3	M2	X	-.588	-.588	0	%100
4	M2	Z	.34	.34	0	%100
5	MP4A	X	-2.509	-2.509	0	%100
6	MP4A	Z	1.448	1.448	0	%100
7	MP3A	X	-2.509	-2.509	0	%100
8	MP3A	Z	1.448	1.448	0	%100
9	MP2A	X	-2.509	-2.509	0	%100
10	MP2A	Z	1.448	1.448	0	%100
11	MP1A	X	-2.509	-2.509	0	%100
12	MP1A	Z	1.448	1.448	0	%100
13	M32	X	-2.509	-2.509	0	%100
14	M32	Z	1.448	1.448	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,%]
15	M38	X	-2.981	-2.981	0	%100
16	M38	Z	1.721	1.721	0	%100
17	M43	X	-2.981	-2.981	0	%100
18	M43	Z	1.721	1.721	0	%100
19	OVP	X	-2.774	-2.774	0	%100
20	OVP	Z	1.602	1.602	0	%100
21	M40B	X	-2.871	-2.871	0	%100
22	M40B	Z	1.658	1.658	0	%100
23	M39B	X	-3.481	-3.481	0	%100
24	M39B	Z	2.01	2.01	0	%100
25	M40C	X	-3.077	-3.077	0	%100
26	M40C	Z	1.776	1.776	0	%100
27	M42B	X	-3.481	-3.481	0	%100
28	M42B	Z	2.01	2.01	0	%100
29	M43B	X	-3.077	-3.077	0	%100
30	M43B	Z	1.776	1.776	0	%100
31	M37A	X	-2.509	-2.509	0	%100
32	M37A	Z	1.448	1.448	0	%100
33	M40A	X	-.131	-.131	0	%100
34	M40A	Z	.076	.076	0	%100
35	M43A	X	-.131	-.131	0	%100
36	M43A	Z	.076	.076	0	%100
37	M45A	X	-2.187	-2.187	0	%100
38	M45A	Z	1.263	1.263	0	%100
39	M45B	X	-1.151	-1.151	0	%100
40	M45B	Z	.665	.665	0	%100
41	M41	X	-1.74	-1.74	0	%100
42	M41	Z	1.005	1.005	0	%100
43	M43C	X	-.116	-.116	0	%100
44	M43C	Z	.067	.067	0	%100
45	M45C	X	-.116	-.116	0	%100
46	M45C	Z	.067	.067	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	MP4A	X	-2.897	-2.897	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	-2.897	-2.897	0	%100
8	MP3A	Z	0	0	0	%100
9	MP2A	X	-2.897	-2.897	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	-2.897	-2.897	0	%100
12	MP1A	Z	0	0	0	%100
13	M32	X	-2.897	-2.897	0	%100
14	M32	Z	0	0	0	%100
15	M38	X	-4.59	-4.59	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	-4.59	-4.59	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	-3.203	-3.203	0	%100
20	OVP	Z	0	0	0	%100
21	M40B	X	-2.604	-2.604	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,%]
22	M40B	Z	0	0	0	%100
23	M39B	X	-1.911	-1.911	0	%100
24	M39B	Z	0	0	0	%100
25	M40C	X	-1.689	-1.689	0	%100
26	M40C	Z	0	0	0	%100
27	M42B	X	-1.911	-1.911	0	%100
28	M42B	Z	0	0	0	%100
29	M43B	X	-1.689	-1.689	0	%100
30	M43B	Z	0	0	0	%100
31	M37A	X	-2.897	-2.897	0	%100
32	M37A	Z	0	0	0	%100
33	M40A	X	-1.911	-1.911	0	%100
34	M40A	Z	0	0	0	%100
35	M43A	X	-1.911	-1.911	0	%100
36	M43A	Z	0	0	0	%100
37	M45A	X	-1.153	-1.153	0	%100
38	M45A	Z	0	0	0	%100
39	M45B	X	-2.639	-2.639	0	%100
40	M45B	Z	0	0	0	%100
41	M41	X	-2.604	-2.604	0	%100
42	M41	Z	0	0	0	%100
43	M43C	X	-1.689	-1.689	0	%100
44	M43C	Z	0	0	0	%100
45	M45C	X	-1.689	-1.689	0	%100
46	M45C	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	-.588	-.588	0	%100
2	M1	Z	-.34	-.34	0	%100
3	M2	X	-.588	-.588	0	%100
4	M2	Z	-.34	-.34	0	%100
5	MP4A	X	-2.509	-2.509	0	%100
6	MP4A	Z	-1.448	-1.448	0	%100
7	MP3A	X	-2.509	-2.509	0	%100
8	MP3A	Z	-1.448	-1.448	0	%100
9	MP2A	X	-2.509	-2.509	0	%100
10	MP2A	Z	-1.448	-1.448	0	%100
11	MP1A	X	-2.509	-2.509	0	%100
12	MP1A	Z	-1.448	-1.448	0	%100
13	M32	X	-2.509	-2.509	0	%100
14	M32	Z	-1.448	-1.448	0	%100
15	M38	X	-2.981	-2.981	0	%100
16	M38	Z	-1.721	-1.721	0	%100
17	M43	X	-2.981	-2.981	0	%100
18	M43	Z	-1.721	-1.721	0	%100
19	OVP	X	-2.774	-2.774	0	%100
20	OVP	Z	-1.602	-1.602	0	%100
21	M40B	X	-1.74	-1.74	0	%100
22	M40B	Z	-1.005	-1.005	0	%100
23	M39B	X	-.131	-.131	0	%100
24	M39B	Z	-.076	-.076	0	%100
25	M40C	X	-.116	-.116	0	%100
26	M40C	Z	-.067	-.067	0	%100
27	M42B	X	-.131	-.131	0	%100
28	M42B	Z	-.076	-.076	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,%]
29	M43B	X	-.116	-.116	0	%100
30	M43B	Z	-.067	-.067	0	%100
31	M37A	X	-2.509	-2.509	0	%100
32	M37A	Z	-1.448	-1.448	0	%100
33	M40A	X	-3.481	-3.481	0	%100
34	M40A	Z	-2.01	-2.01	0	%100
35	M43A	X	-3.481	-3.481	0	%100
36	M43A	Z	-2.01	-2.01	0	%100
37	M45A	X	-.071	-.071	0	%100
38	M45A	Z	-.041	-.041	0	%100
39	M45B	X	-2.388	-2.388	0	%100
40	M45B	Z	-1.379	-1.379	0	%100
41	M41	X	-2.871	-2.871	0	%100
42	M41	Z	-1.658	-1.658	0	%100
43	M43C	X	-3.077	-3.077	0	%100
44	M43C	Z	-1.776	-1.776	0	%100
45	M45C	X	-3.077	-3.077	0	%100
46	M45C	Z	-1.776	-1.776	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	-1.019	-1.019	0	%100
2	M1	Z	-1.765	-1.765	0	%100
3	M2	X	-1.019	-1.019	0	%100
4	M2	Z	-1.765	-1.765	0	%100
5	MP4A	X	-1.448	-1.448	0	%100
6	MP4A	Z	-2.509	-2.509	0	%100
7	MP3A	X	-1.448	-1.448	0	%100
8	MP3A	Z	-2.509	-2.509	0	%100
9	MP2A	X	-1.448	-1.448	0	%100
10	MP2A	Z	-2.509	-2.509	0	%100
11	MP1A	X	-1.448	-1.448	0	%100
12	MP1A	Z	-2.509	-2.509	0	%100
13	M32	X	-1.448	-1.448	0	%100
14	M32	Z	-2.509	-2.509	0	%100
15	M38	X	-.574	-.574	0	%100
16	M38	Z	-.994	-.994	0	%100
17	M43	X	-.574	-.574	0	%100
18	M43	Z	-.994	-.994	0	%100
19	OVP	X	-1.602	-1.602	0	%100
20	OVP	Z	-2.774	-2.774	0	%100
21	M40B	X	-1.064	-1.064	0	%100
22	M40B	Z	-1.842	-1.842	0	%100
23	M39B	X	-.25	-.25	0	%100
24	M39B	Z	-.434	-.434	0	%100
25	M40C	X	-.221	-.221	0	%100
26	M40C	Z	-.383	-.383	0	%100
27	M42B	X	-.25	-.25	0	%100
28	M42B	Z	-.434	-.434	0	%100
29	M43B	X	-.221	-.221	0	%100
30	M43B	Z	-.383	-.383	0	%100
31	M37A	X	-1.448	-1.448	0	%100
32	M37A	Z	-2.509	-2.509	0	%100
33	M40A	X	-2.184	-2.184	0	%100
34	M40A	Z	-3.783	-3.783	0	%100
35	M43A	X	-2.184	-2.184	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,%]
36	M43A	Z	-3.783	-3.783	0	%100
37	M45A	X	-.192	-.192	0	%100
38	M45A	Z	-.332	-.332	0	%100
39	M45B	X	-.784	-.784	0	%100
40	M45B	Z	-1.358	-1.358	0	%100
41	M41	X	-1.717	-1.717	0	%100
42	M41	Z	-2.973	-2.973	0	%100
43	M43C	X	-1.931	-1.931	0	%100
44	M43C	Z	-3.344	-3.344	0	%100
45	M45C	X	-1.931	-1.931	0	%100
46	M45C	Z	-3.344	-3.344	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	-.46	-.46	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.46	-.46	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-.524	-.524	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	-.524	-.524	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-.524	-.524	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	-.524	-.524	0	%100
13	M32	X	0	0	0	%100
14	M32	Z	-.524	-.524	0	%100
15	M38	X	0	0	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	0	0	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	0	0	0	%100
20	OVP	Z	-.635	-.635	0	%100
21	M40B	X	0	0	0	%100
22	M40B	Z	-.644	-.644	0	%100
23	M39B	X	0	0	0	%100
24	M39B	Z	-.765	-.765	0	%100
25	M40C	X	0	0	0	%100
26	M40C	Z	-.531	-.531	0	%100
27	M42B	X	0	0	0	%100
28	M42B	Z	-.765	-.765	0	%100
29	M43B	X	0	0	0	%100
30	M43B	Z	-.531	-.531	0	%100
31	M37A	X	0	0	0	%100
32	M37A	Z	-.524	-.524	0	%100
33	M40A	X	0	0	0	%100
34	M40A	Z	-.765	-.765	0	%100
35	M43A	X	0	0	0	%100
36	M43A	Z	-.765	-.765	0	%100
37	M45A	X	0	0	0	%100
38	M45A	Z	-.318	-.318	0	%100
39	M45B	X	0	0	0	%100
40	M45B	Z	-.047	-.047	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	-.644	-.644	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,%]
43	M43C	X	0	0	0	%100
44	M43C	Z	-.531	-.531	0	%100
45	M45C	X	0	0	0	%100
46	M45C	Z	-.531	-.531	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	.172	.172	0	%100
2	M1	Z	-.299	-.299	0	%100
3	M2	X	.172	.172	0	%100
4	M2	Z	-.299	-.299	0	%100
5	MP4A	X	.262	.262	0	%100
6	MP4A	Z	-.454	-.454	0	%100
7	MP3A	X	.262	.262	0	%100
8	MP3A	Z	-.454	-.454	0	%100
9	MP2A	X	.262	.262	0	%100
10	MP2A	Z	-.454	-.454	0	%100
11	MP1A	X	.262	.262	0	%100
12	MP1A	Z	-.454	-.454	0	%100
13	M32	X	.262	.262	0	%100
14	M32	Z	-.454	-.454	0	%100
15	M38	X	.166	.166	0	%100
16	M38	Z	-.287	-.287	0	%100
17	M43	X	.166	.166	0	%100
18	M43	Z	-.287	-.287	0	%100
19	OVP	X	.317	.317	0	%100
20	OVP	Z	-.55	-.55	0	%100
21	M40B	X	.364	.364	0	%100
22	M40B	Z	-.631	-.631	0	%100
23	M39B	X	.64	.64	0	%100
24	M39B	Z	-1.109	-1.109	0	%100
25	M40C	X	.445	.445	0	%100
26	M40C	Z	-.77	-.77	0	%100
27	M42B	X	.64	.64	0	%100
28	M42B	Z	-1.109	-1.109	0	%100
29	M43B	X	.445	.445	0	%100
30	M43B	Z	-.77	-.77	0	%100
31	M37A	X	.262	.262	0	%100
32	M37A	Z	-.454	-.454	0	%100
33	M40A	X	.073	.073	0	%100
34	M40A	Z	-.127	-.127	0	%100
35	M43A	X	.073	.073	0	%100
36	M43A	Z	-.127	-.127	0	%100
37	M45A	X	.256	.256	0	%100
38	M45A	Z	-.443	-.443	0	%100
39	M45B	X	.013	.013	0	%100
40	M45B	Z	-.022	-.022	0	%100
41	M41	X	.271	.271	0	%100
42	M41	Z	-.469	-.469	0	%100
43	M43C	X	.051	.051	0	%100
44	M43C	Z	-.088	-.088	0	%100
45	M45C	X	.051	.051	0	%100
46	M45C	Z	-.088	-.088	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,%]

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,%]
1	M1	X	.1	.1	0	%100
2	M1	Z	-.057	-.057	0	%100
3	M2	X	.1	.1	0	%100
4	M2	Z	-.057	-.057	0	%100
5	MP4A	X	.454	.454	0	%100
6	MP4A	Z	-.262	-.262	0	%100
7	MP3A	X	.454	.454	0	%100
8	MP3A	Z	-.262	-.262	0	%100
9	MP2A	X	.454	.454	0	%100
10	MP2A	Z	-.262	-.262	0	%100
11	MP1A	X	.454	.454	0	%100
12	MP1A	Z	-.262	-.262	0	%100
13	M32	X	.454	.454	0	%100
14	M32	Z	-.262	-.262	0	%100
15	M38	X	.86	.86	0	%100
16	M38	Z	-.497	-.497	0	%100
17	M43	X	.86	.86	0	%100
18	M43	Z	-.497	-.497	0	%100
19	OVP	X	.55	.55	0	%100
20	OVP	Z	-.317	-.317	0	%100
21	M40B	X	.616	.616	0	%100
22	M40B	Z	-.356	-.356	0	%100
23	M39B	X	1.02	1.02	0	%100
24	M39B	Z	-.589	-.589	0	%100
25	M40C	X	.708	.708	0	%100
26	M40C	Z	-.409	-.409	0	%100
27	M42B	X	1.02	1.02	0	%100
28	M42B	Z	-.589	-.589	0	%100
29	M43B	X	.708	.708	0	%100
30	M43B	Z	-.409	-.409	0	%100
31	M37A	X	.454	.454	0	%100
32	M37A	Z	-.262	-.262	0	%100
33	M40A	X	.039	.039	0	%100
34	M40A	Z	-.022	-.022	0	%100
35	M43A	X	.039	.039	0	%100
36	M43A	Z	-.022	-.022	0	%100
37	M45A	X	.396	.396	0	%100
38	M45A	Z	-.229	-.229	0	%100
39	M45B	X	.208	.208	0	%100
40	M45B	Z	-.12	-.12	0	%100
41	M41	X	.454	.454	0	%100
42	M41	Z	-.262	-.262	0	%100
43	M43C	X	.027	.027	0	%100
44	M43C	Z	-.015	-.015	0	%100
45	M45C	X	.027	.027	0	%100
46	M45C	Z	-.015	-.015	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
4	M2	Z	0	0	0	%100
5	MP4A	X	.524	.524	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	.524	.524	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,%]
8	MP3A	Z	0	0	0	%100
9	MP2A	X	.524	.524	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	.524	.524	0	%100
12	MP1A	Z	0	0	0	%100
13	M32	X	.524	.524	0	%100
14	M32	Z	0	0	0	%100
15	M38	X	1.325	1.325	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	1.325	1.325	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	.635	.635	0	%100
20	OVP	Z	0	0	0	%100
21	M40B	X	.61	.61	0	%100
22	M40B	Z	0	0	0	%100
23	M39B	X	.56	.56	0	%100
24	M39B	Z	0	0	0	%100
25	M40C	X	.389	.389	0	%100
26	M40C	Z	0	0	0	%100
27	M42B	X	.56	.56	0	%100
28	M42B	Z	0	0	0	%100
29	M43B	X	.389	.389	0	%100
30	M43B	Z	0	0	0	%100
31	M37A	X	.524	.524	0	%100
32	M37A	Z	0	0	0	%100
33	M40A	X	.56	.56	0	%100
34	M40A	Z	0	0	0	%100
35	M43A	X	.56	.56	0	%100
36	M43A	Z	0	0	0	%100
37	M45A	X	.209	.209	0	%100
38	M45A	Z	0	0	0	%100
39	M45B	X	.478	.478	0	%100
40	M45B	Z	0	0	0	%100
41	M41	X	.61	.61	0	%100
42	M41	Z	0	0	0	%100
43	M43C	X	.389	.389	0	%100
44	M43C	Z	0	0	0	%100
45	M45C	X	.389	.389	0	%100
46	M45C	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	.1	.1	0	%100
2	M1	Z	.057	.057	0	%100
3	M2	X	.1	.1	0	%100
4	M2	Z	.057	.057	0	%100
5	MP4A	X	.454	.454	0	%100
6	MP4A	Z	.262	.262	0	%100
7	MP3A	X	.454	.454	0	%100
8	MP3A	Z	.262	.262	0	%100
9	MP2A	X	.454	.454	0	%100
10	MP2A	Z	.262	.262	0	%100
11	MP1A	X	.454	.454	0	%100
12	MP1A	Z	.262	.262	0	%100
13	M32	X	.454	.454	0	%100
14	M32	Z	.262	.262	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,%]
15	M38	X	.86	.86	0	%100
16	M38	Z	.497	.497	0	%100
17	M43	X	.86	.86	0	%100
18	M43	Z	.497	.497	0	%100
19	OVP	X	.55	.55	0	%100
20	OVP	Z	.317	.317	0	%100
21	M40B	X	.454	.454	0	%100
22	M40B	Z	.262	.262	0	%100
23	M39B	X	.039	.039	0	%100
24	M39B	Z	.022	.022	0	%100
25	M40C	X	.027	.027	0	%100
26	M40C	Z	.015	.015	0	%100
27	M42B	X	.039	.039	0	%100
28	M42B	Z	.022	.022	0	%100
29	M43B	X	.027	.027	0	%100
30	M43B	Z	.015	.015	0	%100
31	M37A	X	.454	.454	0	%100
32	M37A	Z	.262	.262	0	%100
33	M40A	X	1.02	1.02	0	%100
34	M40A	Z	.589	.589	0	%100
35	M43A	X	1.02	1.02	0	%100
36	M43A	Z	.589	.589	0	%100
37	M45A	X	.013	.013	0	%100
38	M45A	Z	.007	.007	0	%100
39	M45B	X	.432	.432	0	%100
40	M45B	Z	.25	.25	0	%100
41	M41	X	.616	.616	0	%100
42	M41	Z	.356	.356	0	%100
43	M43C	X	.708	.708	0	%100
44	M43C	Z	.409	.409	0	%100
45	M45C	X	.708	.708	0	%100
46	M45C	Z	.409	.409	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	.172	.172	0	%100
2	M1	Z	.299	.299	0	%100
3	M2	X	.172	.172	0	%100
4	M2	Z	.299	.299	0	%100
5	MP4A	X	.262	.262	0	%100
6	MP4A	Z	.454	.454	0	%100
7	MP3A	X	.262	.262	0	%100
8	MP3A	Z	.454	.454	0	%100
9	MP2A	X	.262	.262	0	%100
10	MP2A	Z	.454	.454	0	%100
11	MP1A	X	.262	.262	0	%100
12	MP1A	Z	.454	.454	0	%100
13	M32	X	.262	.262	0	%100
14	M32	Z	.454	.454	0	%100
15	M38	X	.166	.166	0	%100
16	M38	Z	.287	.287	0	%100
17	M43	X	.166	.166	0	%100
18	M43	Z	.287	.287	0	%100
19	OVP	X	.317	.317	0	%100
20	OVP	Z	.55	.55	0	%100
21	M40B	X	.271	.271	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,%]
22	M40B	Z	.469	.469	0	%100
23	M39B	X	.073	.073	0	%100
24	M39B	Z	.127	.127	0	%100
25	M40C	X	.051	.051	0	%100
26	M40C	Z	.088	.088	0	%100
27	M42B	X	.073	.073	0	%100
28	M42B	Z	.127	.127	0	%100
29	M43B	X	.051	.051	0	%100
30	M43B	Z	.088	.088	0	%100
31	M37A	X	.262	.262	0	%100
32	M37A	Z	.454	.454	0	%100
33	M40A	X	.64	.64	0	%100
34	M40A	Z	1.109	1.109	0	%100
35	M43A	X	.64	.64	0	%100
36	M43A	Z	1.109	1.109	0	%100
37	M45A	X	.035	.035	0	%100
38	M45A	Z	.06	.06	0	%100
39	M45B	X	.142	.142	0	%100
40	M45B	Z	.246	.246	0	%100
41	M41	X	.364	.364	0	%100
42	M41	Z	.631	.631	0	%100
43	M43C	X	.445	.445	0	%100
44	M43C	Z	.77	.77	0	%100
45	M45C	X	.445	.445	0	%100
46	M45C	Z	.77	.77	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	.46	.46	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.46	.46	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	.524	.524	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	.524	.524	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	.524	.524	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	.524	.524	0	%100
13	M32	X	0	0	0	%100
14	M32	Z	.524	.524	0	%100
15	M38	X	0	0	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	0	0	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	0	0	0	%100
20	OVP	Z	.635	.635	0	%100
21	M40B	X	0	0	0	%100
22	M40B	Z	.644	.644	0	%100
23	M39B	X	0	0	0	%100
24	M39B	Z	.765	.765	0	%100
25	M40C	X	0	0	0	%100
26	M40C	Z	.531	.531	0	%100
27	M42B	X	0	0	0	%100
28	M42B	Z	.765	.765	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,%]
29	M43B	X	0	0	0	%100
30	M43B	Z	.531	.531	0	%100
31	M37A	X	0	0	0	%100
32	M37A	Z	.524	.524	0	%100
33	M40A	X	0	0	0	%100
34	M40A	Z	.765	.765	0	%100
35	M43A	X	0	0	0	%100
36	M43A	Z	.765	.765	0	%100
37	M45A	X	0	0	0	%100
38	M45A	Z	.318	.318	0	%100
39	M45B	X	0	0	0	%100
40	M45B	Z	.047	.047	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	.644	.644	0	%100
43	M43C	X	0	0	0	%100
44	M43C	Z	.531	.531	0	%100
45	M45C	X	0	0	0	%100
46	M45C	Z	.531	.531	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	-.172	-.172	0	%100
2	M1	Z	.299	.299	0	%100
3	M2	X	-.172	-.172	0	%100
4	M2	Z	.299	.299	0	%100
5	MP4A	X	-.262	-.262	0	%100
6	MP4A	Z	.454	.454	0	%100
7	MP3A	X	-.262	-.262	0	%100
8	MP3A	Z	.454	.454	0	%100
9	MP2A	X	-.262	-.262	0	%100
10	MP2A	Z	.454	.454	0	%100
11	MP1A	X	-.262	-.262	0	%100
12	MP1A	Z	.454	.454	0	%100
13	M32	X	-.262	-.262	0	%100
14	M32	Z	.454	.454	0	%100
15	M38	X	-.166	-.166	0	%100
16	M38	Z	.287	.287	0	%100
17	M43	X	-.166	-.166	0	%100
18	M43	Z	.287	.287	0	%100
19	OVP	X	-.317	-.317	0	%100
20	OVP	Z	.55	.55	0	%100
21	M40B	X	-.364	-.364	0	%100
22	M40B	Z	.631	.631	0	%100
23	M39B	X	-.64	-.64	0	%100
24	M39B	Z	1.109	1.109	0	%100
25	M40C	X	-.445	-.445	0	%100
26	M40C	Z	.77	.77	0	%100
27	M42B	X	-.64	-.64	0	%100
28	M42B	Z	1.109	1.109	0	%100
29	M43B	X	-.445	-.445	0	%100
30	M43B	Z	.77	.77	0	%100
31	M37A	X	-.262	-.262	0	%100
32	M37A	Z	.454	.454	0	%100
33	M40A	X	-.073	-.073	0	%100
34	M40A	Z	.127	.127	0	%100
35	M43A	X	-.073	-.073	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,%]
36	M43A	Z	.127	.127	0	%100
37	M45A	X	-.256	-.256	0	%100
38	M45A	Z	.443	.443	0	%100
39	M45B	X	-.013	-.013	0	%100
40	M45B	Z	.022	.022	0	%100
41	M41	X	-.271	-.271	0	%100
42	M41	Z	.469	.469	0	%100
43	M43C	X	-.051	-.051	0	%100
44	M43C	Z	.088	.088	0	%100
45	M45C	X	-.051	-.051	0	%100
46	M45C	Z	.088	.088	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	-.1	-.1	0	%100
2	M1	Z	.057	.057	0	%100
3	M2	X	-.1	-.1	0	%100
4	M2	Z	.057	.057	0	%100
5	MP4A	X	-.454	-.454	0	%100
6	MP4A	Z	.262	.262	0	%100
7	MP3A	X	-.454	-.454	0	%100
8	MP3A	Z	.262	.262	0	%100
9	MP2A	X	-.454	-.454	0	%100
10	MP2A	Z	.262	.262	0	%100
11	MP1A	X	-.454	-.454	0	%100
12	MP1A	Z	.262	.262	0	%100
13	M32	X	-.454	-.454	0	%100
14	M32	Z	.262	.262	0	%100
15	M38	X	-.86	-.86	0	%100
16	M38	Z	.497	.497	0	%100
17	M43	X	-.86	-.86	0	%100
18	M43	Z	.497	.497	0	%100
19	OVP	X	-.55	-.55	0	%100
20	OVP	Z	.317	.317	0	%100
21	M40B	X	-.616	-.616	0	%100
22	M40B	Z	.356	.356	0	%100
23	M39B	X	-1.02	-1.02	0	%100
24	M39B	Z	.589	.589	0	%100
25	M40C	X	-.708	-.708	0	%100
26	M40C	Z	.409	.409	0	%100
27	M42B	X	-1.02	-1.02	0	%100
28	M42B	Z	.589	.589	0	%100
29	M43B	X	-.708	-.708	0	%100
30	M43B	Z	.409	.409	0	%100
31	M37A	X	-.454	-.454	0	%100
32	M37A	Z	.262	.262	0	%100
33	M40A	X	-.039	-.039	0	%100
34	M40A	Z	.022	.022	0	%100
35	M43A	X	-.039	-.039	0	%100
36	M43A	Z	.022	.022	0	%100
37	M45A	X	-.396	-.396	0	%100
38	M45A	Z	.229	.229	0	%100
39	M45B	X	-.208	-.208	0	%100
40	M45B	Z	.12	.12	0	%100
41	M41	X	-.454	-.454	0	%100
42	M41	Z	.262	.262	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,%]
43	M43C	X	-.027	-.027	0	%100
44	M43C	Z	.015	.015	0	%100
45	M45C	X	-.027	-.027	0	%100
46	M45C	Z	.015	.015	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	MP4A	X	-.524	-.524	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	-.524	-.524	0	%100
8	MP3A	Z	0	0	0	%100
9	MP2A	X	-.524	-.524	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	-.524	-.524	0	%100
12	MP1A	Z	0	0	0	%100
13	M32	X	-.524	-.524	0	%100
14	M32	Z	0	0	0	%100
15	M38	X	-1.325	-1.325	0	%100
16	M38	Z	0	0	0	%100
17	M43	X	-1.325	-1.325	0	%100
18	M43	Z	0	0	0	%100
19	OVP	X	-.635	-.635	0	%100
20	OVP	Z	0	0	0	%100
21	M40B	X	-.61	-.61	0	%100
22	M40B	Z	0	0	0	%100
23	M39B	X	-.56	-.56	0	%100
24	M39B	Z	0	0	0	%100
25	M40C	X	-.389	-.389	0	%100
26	M40C	Z	0	0	0	%100
27	M42B	X	-.56	-.56	0	%100
28	M42B	Z	0	0	0	%100
29	M43B	X	-.389	-.389	0	%100
30	M43B	Z	0	0	0	%100
31	M37A	X	-.524	-.524	0	%100
32	M37A	Z	0	0	0	%100
33	M40A	X	-.56	-.56	0	%100
34	M40A	Z	0	0	0	%100
35	M43A	X	-.56	-.56	0	%100
36	M43A	Z	0	0	0	%100
37	M45A	X	-.209	-.209	0	%100
38	M45A	Z	0	0	0	%100
39	M45B	X	-.478	-.478	0	%100
40	M45B	Z	0	0	0	%100
41	M41	X	-.61	-.61	0	%100
42	M41	Z	0	0	0	%100
43	M43C	X	-.389	-.389	0	%100
44	M43C	Z	0	0	0	%100
45	M45C	X	-.389	-.389	0	%100
46	M45C	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,%]

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,%]
1	M1	X	-.1	-.1	0	%100
2	M1	Z	-.057	-.057	0	%100
3	M2	X	-.1	-.1	0	%100
4	M2	Z	-.057	-.057	0	%100
5	MP4A	X	-.454	-.454	0	%100
6	MP4A	Z	-.262	-.262	0	%100
7	MP3A	X	-.454	-.454	0	%100
8	MP3A	Z	-.262	-.262	0	%100
9	MP2A	X	-.454	-.454	0	%100
10	MP2A	Z	-.262	-.262	0	%100
11	MP1A	X	-.454	-.454	0	%100
12	MP1A	Z	-.262	-.262	0	%100
13	M32	X	-.454	-.454	0	%100
14	M32	Z	-.262	-.262	0	%100
15	M38	X	-.86	-.86	0	%100
16	M38	Z	-.497	-.497	0	%100
17	M43	X	-.86	-.86	0	%100
18	M43	Z	-.497	-.497	0	%100
19	OVP	X	-.55	-.55	0	%100
20	OVP	Z	-.317	-.317	0	%100
21	M40B	X	-.454	-.454	0	%100
22	M40B	Z	-.262	-.262	0	%100
23	M39B	X	-.039	-.039	0	%100
24	M39B	Z	-.022	-.022	0	%100
25	M40C	X	-.027	-.027	0	%100
26	M40C	Z	-.015	-.015	0	%100
27	M42B	X	-.039	-.039	0	%100
28	M42B	Z	-.022	-.022	0	%100
29	M43B	X	-.027	-.027	0	%100
30	M43B	Z	-.015	-.015	0	%100
31	M37A	X	-.454	-.454	0	%100
32	M37A	Z	-.262	-.262	0	%100
33	M40A	X	-1.02	-1.02	0	%100
34	M40A	Z	-.589	-.589	0	%100
35	M43A	X	-1.02	-1.02	0	%100
36	M43A	Z	-.589	-.589	0	%100
37	M45A	X	-.013	-.013	0	%100
38	M45A	Z	-.007	-.007	0	%100
39	M45B	X	-.432	-.432	0	%100
40	M45B	Z	-.25	-.25	0	%100
41	M41	X	-.616	-.616	0	%100
42	M41	Z	-.356	-.356	0	%100
43	M43C	X	-.708	-.708	0	%100
44	M43C	Z	-.409	-.409	0	%100
45	M45C	X	-.708	-.708	0	%100
46	M45C	Z	-.409	-.409	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	-.172	-.172	0	%100
2	M1	Z	-.299	-.299	0	%100
3	M2	X	-.172	-.172	0	%100
4	M2	Z	-.299	-.299	0	%100
5	MP4A	X	-.262	-.262	0	%100
6	MP4A	Z	-.454	-.454	0	%100
7	MP3A	X	-.262	-.262	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,%]
8	MP3A	Z	-.454	-.454	0	%100
9	MP2A	X	-.262	-.262	0	%100
10	MP2A	Z	-.454	-.454	0	%100
11	MP1A	X	-.262	-.262	0	%100
12	MP1A	Z	-.454	-.454	0	%100
13	M32	X	-.262	-.262	0	%100
14	M32	Z	-.454	-.454	0	%100
15	M38	X	-.166	-.166	0	%100
16	M38	Z	-.287	-.287	0	%100
17	M43	X	-.166	-.166	0	%100
18	M43	Z	-.287	-.287	0	%100
19	OVP	X	-.317	-.317	0	%100
20	OVP	Z	-.55	-.55	0	%100
21	M40B	X	-.271	-.271	0	%100
22	M40B	Z	-.469	-.469	0	%100
23	M39B	X	-.073	-.073	0	%100
24	M39B	Z	-.127	-.127	0	%100
25	M40C	X	-.051	-.051	0	%100
26	M40C	Z	-.088	-.088	0	%100
27	M42B	X	-.073	-.073	0	%100
28	M42B	Z	-.127	-.127	0	%100
29	M43B	X	-.051	-.051	0	%100
30	M43B	Z	-.088	-.088	0	%100
31	M37A	X	-.262	-.262	0	%100
32	M37A	Z	-.454	-.454	0	%100
33	M40A	X	-.64	-.64	0	%100
34	M40A	Z	-1.109	-1.109	0	%100
35	M43A	X	-.64	-.64	0	%100
36	M43A	Z	-1.109	-1.109	0	%100
37	M45A	X	-.035	-.035	0	%100
38	M45A	Z	-.06	-.06	0	%100
39	M45B	X	-.142	-.142	0	%100
40	M45B	Z	-.246	-.246	0	%100
41	M41	X	-.364	-.364	0	%100
42	M41	Z	-.631	-.631	0	%100
43	M43C	X	-.445	-.445	0	%100
44	M43C	Z	-.77	-.77	0	%100
45	M45C	X	-.445	-.445	0	%100
46	M45C	Z	-.77	-.77	0	%100

Member Area Loads

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

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

	Member	Shape	Code Check	L...	LC	Shear C...	Loc...	...	...	phi*P...	phi*P...	phi*M...	phi*M...	...	Eqn
1	M1	HSS2X2...	.596	1...	8	.120	5.08	y	9	3863....	62514	3.326	3.326	...	H1-1a
2	M2	HSS2X2...	.604	5...	9	.144	3.0...	y	9	3863....	62514	3.326	3.326	...	H1-1a
3	MP4A	PIPE_2.0	.266	5...	49	.041	1.1...		8	20866...	32130	1.872	1.872	...	H1-1b
4	MP3A	PIPE_2.0	.237	1	27	.041	1		8	20866...	32130	1.872	1.872	...	H1-1b
5	MP2A	PIPE_2.0	.381	2...	8	.191	2.0...		10	14916...	32130	1.872	1.872	...	H1-1b
6	MP1A	PIPE_2.0	.105	1...	2	.062	5.0...		9	20866...	32130	1.872	1.872	...	H1-1b
7	M32	PIPE_2.0	.171	4...	39	.088	4.8...		10	20866...	32130	1.872	1.872	...	H1-1b
8	M38	W6X15	.190	1	33	.100	.427	z	33	14301...	143532	12.535	28.71	...	H1-1b

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

	Member	Shape	Code Check	L...	LC	Shear C...	Loc...	...	...	phi*P...	phi*P...	phi*M...	phi*M...	...	Eqn
9	M43	W6X15	.174	0	9	.089	.427	z	33	14301...	143532	12.535	28.71	...	H1-1b
10	OVP	PIPE_2.5	.178	4....	33	.162	4.8...		33	37773...	50715	3.596	3.596	...	H1-1b
11	M40B	LL2x2x3...	.068	3....	14	.007	6.6...	y	21	19163...	46656	2.666	1.598	...	H1-1b
12	M39B	PL3/8x6	.167	.4...	7	.011	.462	y	9	63490...	72900	.57	9.113	...	H1-1b
13	M40C	LL2.5x2....	.150	0	6	.022	5.3...	z	9	40714...	58320	3.3	2.528	...	H1-1b
14	M42B	PL3/8x6	.152	.4...	3	.045	0	y	39	63490...	72900	.57	9.113	...	H1-1b
15	M43B	LL2.5x2....	.242	0	3	.029	5.3...	z	9	40714...	58320	3.3	2.528	...	H1-1b
16	M37A	PIPE_2.0	.590	4....	9	.297	4.8...		9	20866...	32130	1.872	1.872	...	H1-1b
17	M40A	PL3/8x6	.053	.4...	4	.011	.462	y	9	63490...	72900	.57	9.113	...	H1-1b
18	M43A	PL3/8x6	.265	.4...	9	.053	0	y	33	63490...	72900	.57	9.113	...	H1-1b
19	M45A	PIPE_2.0	.096	0	8	.006	0		20	12155...	32130	1.872	1.872	...	H1-1b
20	M45B	PIPE_2.0	.227	4....	9	.005	0		23	13081...	32130	1.872	1.872	...	H1-1a
21	M41	LL2x2x3...	.066	3....	24	.008	6.6...	y	3	19163...	46656	2.666	1.598	...	H1-1b
22	M43C	LL2.5x2....	.132	0	3	.023	5.3...	z	9	40714...	58320	3.3	2.528	...	H1-1b
23	M45C	LL2.5x2....	.327	0	3	.017	5.3...	z	9	40714...	58320	3.3	2.528	...	H1-1b

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	N68	max	1402.332	33	763.061	20	-848.984	2	-.181	71	0	75	.076	3
2		min	-800.361	3	259.23	64	-3839.855	20	-.556	14	0	1	-.204	33
3	N69	max	103.477	2	763.061	20	1586.168	2	-.231	65	0	75	.125	3
4		min	-488.61	32	259.23	64	-307.961	8	-.698	20	0	1	-.262	33
5	N74A	max	1271.299	9	563.703	13	1038.057	3	-.153	9	0	75	.061	3
6		min	-1046.254	3	190.115	70	-1496.801	9	-.495	15	0	1	-.23	33
7	N75	max	205.012	47	563.703	13	3091.853	15	-.078	3	0	75	.141	3
8		min	-1278.494	29	190.115	70	93.919	9	-.354	21	0	1	-.198	9
9	N68B	max	386.115	8	36.836	20	271.168	8	0	75	0	75	0	75
10		min	-364.296	2	-2.619	2	-244.236	2	0	1	0	1	0	1
11	N73A	max	809.18	3	37.434	17	2614.47	9	0	75	0	75	0	75
12		min	-812.459	9	10.274	11	-2646.798	3	0	1	0	1	0	1
13	Totals:	max	1568.959	9	2713.573	22	1953.21	1						
14		min	-1568.98	3	923.155	69	-1953.239	7						

VzW SMART Tool© Vendor

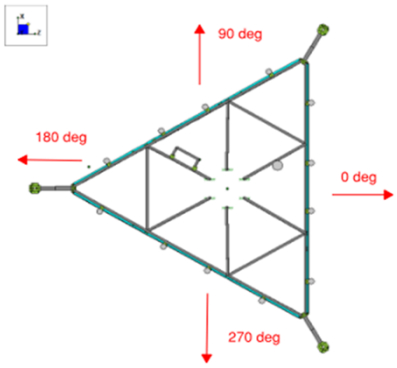
Client:	Verizon Wireless	Date:	7/5/2023
Site Name:	Wilton CT		
MDG #:	5000383039		
Fuze ID #:	17123706	Page:	1

Version 1.01

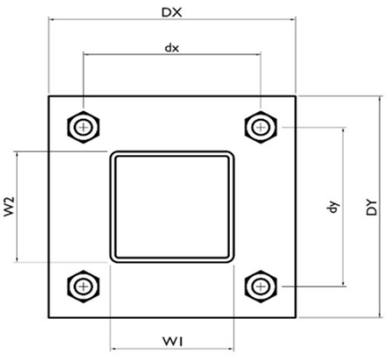
I. Mount-to-Tower Connection Check

Custom Orientation Required	Yes

Nodes (labeled per Risa)	Orientation (per graphic of typical platform)
N74A	0
N75	0
N68	0
N69	0



Tower Connection Bolt Checks	Yes
Bolt Orientation	Parallel
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	2.5
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	4
Bolt Type:	A307
Bolt Diameter (in):	0.375
Required Tensile Strength / bolt (kips):	1.8
Required Shear Strength / bolt (kips):	0.3
Tensile Capacity / bolt (kips):	3.7
Shear Capacity / bolt (kips):	2.2
Bolt Overall Utilization:	**47.0%**
Tower Connection Baseplate Checks	No



Date: **August 03, 2023**

Crown Castle
2000 Corporate Drive
Canonsburg, PA 15317
(724) 416-2000

Subject:	**Structural Analysis Report**	
Carrier Designation:	***Verizon Wireless* Co-Locate**	
	Site Number:	5000383039
	Site Name:	WILTON CT
Crown Castle Designation:	**BU Number:**	806353
	Site Name:	BRG 124 943066
	JDE Job Number:	751324
	Work Order Number:	2246054
	Order Number:	654635 Rev. 0
Engineering Firm Designation:	**Crown Castle Project Number:**	2246054
Site Data:	**128 MATHER STREET, WILTON, FAIRFIELD County, CT**	
	Latitude *41° 14' 18.7"*, Longitude *-73° 25' 26.9"*	
	180 Foot - Self Support Tower	

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

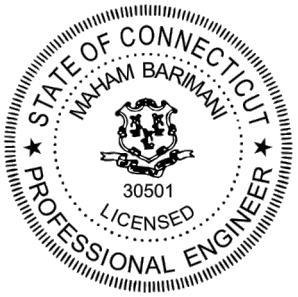
The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC7: Proposed Equipment Configuration **Sufficient Capacity – 86.9%**

This analysis utilizes an ultimate 3-second gust wind speed of 116 mph as required by the 2022 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - "Analysis Criteria".

Structural analysis prepared by: Jared Koski, EI

Respectfully submitted by:



Maham Barimani, P.E.
Senior Project Engineer

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 180 ft Self Support tower designed by FWT Inc. The tower has been modified multiple times to accommodate additional loading.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	116 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	1 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)
163.0	164.0	6	commscope	JAHH-65B-R3B w/ Mount Pipe	2	1-5/8
		3	kaelus	BSF0020F3V1		
		2	raycap	RRFDC-3315-PF-48		
		3	samsung telecommunications	CBRS w/ Mount Pipe		
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe		
		3	samsung telecommunications	RFV01U-D1A		
		3	samsung telecommunications	RFV01U-D2A		
	163.0	1	tower mounts	Sector Mount [SM 702-3](16')		
	160.0	3	commscope	CBC78T-DS-43-2X		
62.0	65.0	1	gps	GPS_A	1	1/2
	62.0	1	tower mounts	Side Arm Mount [SO 305-1]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
178.0	184.0	1	rfs celwave	PD10017	2	7/8
170.0	174.0	3	fujitsu	TA08025-B604	1	1-3/4
		3	fujitsu	TA08025-B605		
		3	jma wireless	MX08FRO665-21 w/ Mount Pipe		
		1	raycap	RDIDC-9181-PF-48		
	170.0	1	tower mounts	Commscope MTC3975083 (3)		
154.0	158.0	3	cci antennas	DMP65R-BU6D w/ Mount Pipe	2	3/8
		3	cci antennas	OPA65R-BU6D w/ Mount Pipe	6	5/8
		3	ericsson	RRUS 32 B2	12	1-5/8

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
		3	ericsson	RRUS 32 B30		
		3	ericsson	RRUS 4449 B5/B12		
		3	ericsson	RRUS 4478 B14		
		3	kaelus	DBC0061F1V51-2		
		3	powerwave technologies	7770.00 w/ Mount Pipe		
		6	powerwave technologies	LGP21401		
		3	quintel technology	QS66512-2 w/ Mount Pipe		
		3	raycap	DC6-48-60-18-8F		
	154.0	1	tower mounts	Sector Mount [SM 1303-3]		
145.0	146.0	3	alcatel lucent	800 EXTERNAL NOTCH FILTER	-	-
		3	alcatel lucent	800MHZ 2X50W RRH		
		3	alcatel lucent	PCS 1900MHZ 4X45W-65MHZ		
143.0	143.0	3	commscope	VV-65B-R1_TMO w/ Mount Pipe	3	1-5/8
		3	ericsson	AIR 6419 B41_TMO w/ Mount Pipe		
		3	ericsson	RADIO 4460 B2/B25 B66_TMO		
		3	ericsson	Radio 4480_TMOV2		
		3	rfs celwave	APXVAALL24_43-U-NA20_TMO w/ Mount Pipe		
		3	tower mounts	Site Pro1 VFA12-HD Mount		
124.0	131.0	3	dbspectra	DS7C09P36UxD w/ Mount Pipe	1 3	1/2 1-5/8
	124.0	1	tower mounts	Side Arm Mount [SO 308-3]		
		1	tx rx systems	440 SERUES TTA SYSTEM		
115.0	115.0	1	commscope	VHLP3-11W	1	EW90
		1	tower mounts	Pipe Mount [PM 601-1]		
104.0	111.0	1	rfs celwave	1142-2C	1 1	1/2 7/8
	108.0	1	rfs celwave	220-3BN		
	104.0	2	tower mounts	Side Arm Mount [SO 303-1]		
93.0	93.0	3	ericsson	AIR 32 B2a/B66Aa	4	1-5/8
		3	ericsson	ERICSSON AIR 21 B2A B4P w/ Mount Pipe		
		3	ericsson	KRY 112 144/1		
		3	ericsson	RADIO 4449 B12/B71		
		3	rfs celwave	APXVAARR24_43-U-NA20		
		1	tower mounts	Sector Mount [SM 404-3]		
42.0	44.0	1	gps	GPS_A	1	1/2
	42.0	1	tower mounts	Side Arm Mount [SO 305-1]		
31.0	32.0	1	gps	GPS_A	1	1/2
	31.0	1	tower mounts	Side Arm Mount [SO 701-1]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	262283	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	262285	CCISITES
4-TOWER MANUFACTURER DRAWINGS	217757	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	801524	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	2434484	CCISITES
4-POST-MODIFICATION INSPECTION	2575710	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	6061656	CCISITES
4-POST-MODIFICATION INSPECTION	6515894	CCISITES

3.1) Analysis Method

tnxTower (version 8.1.4.0), 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. Crown Castle 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	180 - 168	Leg	P2x0.154	2	-3.660	29.380	12.5	Pass
T2	168 - 160	Leg	P2x0.154 (GR)	26	-12.688	40.351	31.4	Pass
T3	160 - 140	Leg	P3x0.216 (GR)	41	-51.055	91.364	55.9	Pass
T4	140 - 120	Leg	P3.5x.318 (GR)	68	-86.377	128.240	67.4	Pass
T5	120 - 100	Leg	P4x.337 (GR)	88	-118.129	165.049	71.6	Pass
T6	100 - 80	Leg	P5x0.375 (GR)	109	123.947	202.133	61.3	Pass
T7	80 - 60	Leg	P6x0.432	130	-176.638	238.435	74.1	Pass
T8	60 - 40	Leg	P6x0.432	145	-205.107	238.435	86.0	Pass
T9	40 - 20	Leg	P6x0.432	160	-231.932	266.933	86.9	Pass
T10	20 - 0	Leg	P8x.5	181	-259.410	386.074	67.2	Pass
T1	180 - 168	Diagonal	L2x1 1/2x3/16	9	-0.827	15.935	5.2	Pass
T2	168 - 160	Diagonal	L2x1 1/2x3/16	30	-2.474	15.935	15.5	Pass
T3	160 - 140	Diagonal	L2x1 1/2x3/16	43	-4.165	10.157	41.0	Pass
T4	140 - 120	Diagonal	L2x2x3/16	70	-4.656	9.511	49.0	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T5	120 - 100	Diagonal	L2 1/2x2x3/16	91	-4.877	9.472	51.5	Pass
T6	100 - 80	Diagonal	L2 1/2x2 1/2x3/16	112	-5.630	10.923	51.5	Pass
T7	80 - 60	Diagonal	L3x3x3/16	133	-6.657	11.950	55.7	Pass
T8	60 - 40	Diagonal	L3 1/2x3x1/4	148	-7.051	15.837	44.5	Pass
T9	40 - 20	Diagonal	L3 1/2x3x1/4	163	-8.119	13.218	61.4	Pass
T10	20 - 0	Diagonal	L3 1/2x3 /12x1/4	184	-8.336	14.432	57.8	Pass
T9	40 - 20	Secondary Horizontal	L3 1/2x3 1/2x1/4	171	-4.022	15.131	26.6	Pass
T1	180 - 168	Top Girt	L2x1 1/2x3/16	6	-0.122	10.904	1.1	Pass
							Summary	
						Leg (T9)	86.9	Pass
						Diagonal (T9)	61.4	Pass
						Secondary Horizontal (T9)	26.6	Pass
						Top Girt (T1)	1.1	Pass
						Bolt Checks	84.4	Pass
						Rating =	86.9	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	57.1	Pass
1	Base Foundation (Structure)	0	87.3	Pass
1	Base Foundation (Soil Interaction)	0	88.1	Pass

Structure Rating (max from all components) =	**88.1%**

Notes:
1) See additional documentation in “Appendix C – Additional Calculations” for calculations supporting the % capacity consumed.

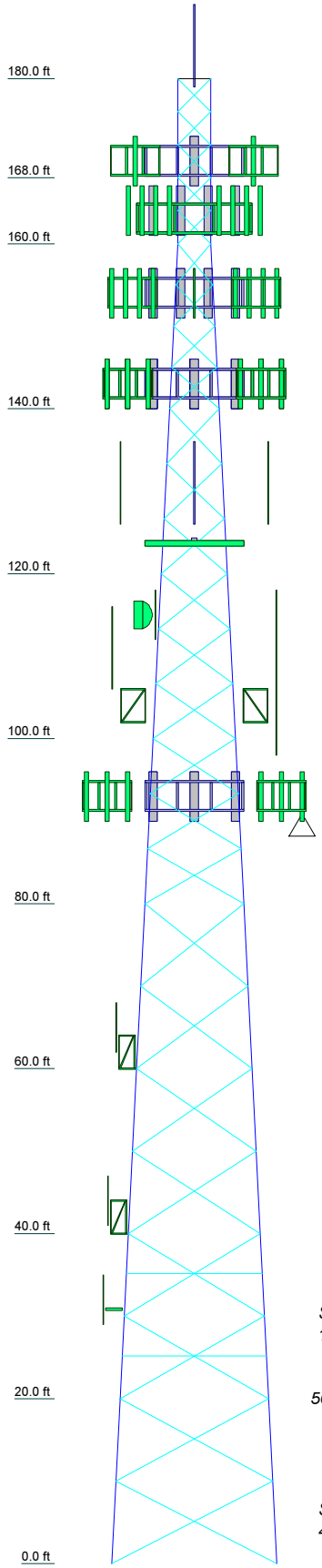
4.1) Recommendations

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	Legs	Leg Grade	Diagonals	Diagonal Grade	Top Girts	Sec. Horizontals	Face Width (ft)	# Panels @ (ft)	Weight (K)
T1	P2x0.154		L2x1 1/2x3/16		L2x1 1/2x3/16		4	5 @ 4	0.4
T2	A								0.3
T3	P3x0.216 (GR)							4 @ 5	1.4
T4	P3.5x.318 (GR)		L2x2x3/16				6		1.9
T5	P4x.337 (GR)		L2 1/2x2x3/16			N.A.	8	9 @ 6.66667	2.4
T6	P5x0.375 (GR)	A53-B-35	L2 1/2x2 1/2x3/16	A36	N.A.		10		3.4
T7			L3x3x3/16				12		2.7
T8	P6x0.432		L3 1/2x3x1/4				14		3.2
T9						L3 1/2x3 1/2x1/4	16	8 @ 10	3.9
T10	P8x.5		L3 1/2x3 /12x1/4			N.A.	18		4.5
							20		24.1



SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	P2x0.154 (GR)		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A53-B-35	35 ksi	60 ksi	A36	36 ksi	58 ksi

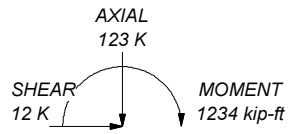
TOWER DESIGN NOTES

1. Tower is located in Fairfield County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 116 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.000 ft
8. Grouted pipe f'c is 7.000 ksi
9. TOWER RATING: 86.9%

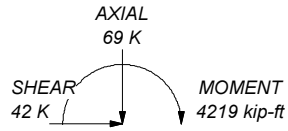
ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 266 K
SHEAR: 27 K

UPLIFT: -220 K
SHEAR: 23 K



TORQUE 7 kip-ft
50 mph WIND - 1.000 in ICE



TORQUE 27 kip-ft
REACTIONS - 116 mph WIND

CROWN CASTLE
The Pathway to Possible

Crown Castle
2000 Corporate Drive
Canonsburg, PA 15317
Phone: (724) 416-2000
FAX:

Job: *BU# 806353*			
Project:			
Client: Crown Castle	Drawn by: jkoski		App'd:
Code: TIA-222-H	Date: 08/03/23		Scale: NTS
Path: C:\Users\jkoski\Desktop\Work Area\806353\WO 2246054 - SA\Prod\806353.eri			Dwg No. E-1

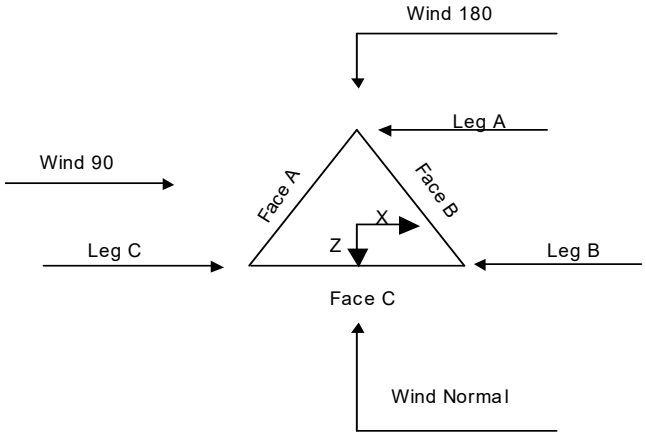
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 180.000 ft above the ground line.
The base of the tower is set at an elevation of 0.000 ft above the ground line.
The face width of the tower is 4.000 ft at the top and 20.000 ft at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

- Tower is located in Fairfield County, Connecticut.
- Tower base elevation above sea level: 427.000 ft.
- Basic wind speed of 116 mph.
- Risk Category II.
- Exposure Category B.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.000 ft.
- Nominal ice thickness of 1.000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56.000 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Temperature drop of 50.000 °F.
- Deflections calculated using a wind speed of 60 mph.
- Grouted pipe f'_c is 7.000 ksi.
- 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 Forces in Supporting Bracing Members
	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	180.000-168.000			4.000	1	12.000
T2	168.000-160.000			4.000	1	8.000
T3	160.000-140.000			4.000	1	20.000
T4	140.000-120.000			6.000	1	20.000
T5	120.000-100.000			8.000	1	20.000
T6	100.000-80.000			10.000	1	20.000
T7	80.000-60.000			12.000	1	20.000
T8	60.000-40.000			14.000	1	20.000
T9	40.000-20.000			16.000	1	20.000
T10	20.000-0.000			18.000	1	20.000

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	180.000-168.000	4.000	X Brace	No	No	0.000	0.000
T2	168.000-160.000	4.000	X Brace	No	No	0.000	0.000
T3	160.000-140.000	5.000	X Brace	No	No	0.000	0.000
T4	140.000-120.000	6.667	X Brace	No	No	0.000	0.000
T5	120.000-100.000	6.667	X Brace	No	No	0.000	0.000
T6	100.000-80.000	6.667	X Brace	No	No	0.000	0.000
T7	80.000-60.000	10.000	X Brace	No	No	0.000	0.000
T8	60.000-40.000	10.000	X Brace	No	No	0.000	0.000

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

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 180.000-168.000	Pipe	P2x0.154	A53-B-35 (35 ksi)	Single Angle	L2x1 1/2x3/16	A36 (36 ksi)
T2 168.000-160.000	Grouted Pipe	P2x0.154	A53-B-35 (35 ksi)	Single Angle	L2x1 1/2x3/16	A36 (36 ksi)
T3 160.000-140.000	Grouted Pipe	P3x0.216	A53-B-35 (35 ksi)	Single Angle	L2x1 1/2x3/16	A36 (36 ksi)
T4 140.000-120.000	Grouted Pipe	P3.5x.318	A53-B-35 (35 ksi)	Single Angle	L2x2x3/16	A36 (36 ksi)
T5 120.000-100.000	Grouted Pipe	P4x.337	A53-B-35 (35 ksi)	Single Angle	L2 1/2x2x3/16	A36 (36 ksi)
T6 100.000-80.000	Grouted Pipe	P5x0.375	A53-B-35 (35 ksi)	Single Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T7 80.000-60.000	Pipe	P6x0.432	A53-B-35 (35 ksi)	Single Angle	L3x3x3/16	A36 (36 ksi)
T8 60.000-40.000	Pipe	P6x0.432	A53-B-35 (35 ksi)	Single Angle	L3 1/2x3x1/4	A36 (36 ksi)
T9 40.000-20.000	Pipe	P6x0.432	A53-B-35 (35 ksi)	Single Angle	L3 1/2x3x1/4	A36 (36 ksi)
T10 20.000-0.000	Pipe	P8x.5	A53-B-35 (35 ksi)	Single Angle	L3 1/2x3 /12x1/4	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 180.000-168.000	Single Angle	L2x1 1/2x3/16	A36 (36 ksi)	Single Angle		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
T9 40.000-20.000	Single Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)	Single Angle		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 180.000-168.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T2 168.000-160.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt

Tower Elevation ft	Gusset Area (per face) ft²	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T3 160.000-140.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T4 140.000-120.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T5 120.000-100.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T6 100.000-80.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T7 80.000-60.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T8 60.000-40.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T9 40.000-20.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T10 20.000-0.000	0.000	0.375	A36 (36 ksi)	1.05	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1 180.000-168.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T2 168.000-160.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T3 160.000-140.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T4 140.000-120.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T5 120.000-100.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T6 100.000-80.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T7 80.000-60.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T8 60.000-40.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T9 40.000-20.000	Yes	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T10 20.000-0.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 0.5	1 1

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

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Net Width Deduct in	U	Diagonal Net Width Deduct in	U	Top Girt Net Width Deduct in	U	Bottom Girt Net Width Deduct in	U	Mid Girt Net Width Deduct in	U	Long Horizontal Net Width Deduct in	U	Short Horizontal Net Width Deduct in	U
T1 180.000-168.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T2 168.000-160.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Elevation ft	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
T3 160.000-140.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T4 140.000-120.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 120.000-100.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 100.000-80.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 80.000-60.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 60.000-40.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T9 40.000-20.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T10 20.000-0.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Elevation ft	Redundant Horizontal		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 180.000-168.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T2 168.000-160.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T3 160.000-140.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T4 140.000-120.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 120.000-100.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 100.000-80.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 80.000-60.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 60.000-40.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T9 40.000-20.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T10 20.000-0.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 180.000-168.000	Flange	0.625 A325N	0	0.625 A325N	1	0.625 A325N	1	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.000 A325N	0
T2 168.000-160.000	Flange	0.625 A325N	4	0.625 A325N	1	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.000 A325N	0
T3 160.000-140.000	Flange	0.625 A325N	4	0.625 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.000 A325N	0
T4 140.000-120.000	Flange	0.750 A325N	4	0.625 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.000 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.
T5 120.000-100.000	Flange	0.750 A325N	4	0.625 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.000 A325N	0
T6 100.000-80.000	Flange	0.875 A490N	4	0.625 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.000 A325N	0
T7 80.000-60.000	Flange	0.875 A325N	4	0.625 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.000 A325N	0
T8 60.000-40.000	Flange	1.000 A325N	4	0.625 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.000 A325N	0
T9 40.000-20.000	Flange	1.000 A325N	4	0.625 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.500 A325N	1
T10 20.000-0.000	Flange	1.500 A325N	0	0.625 A325N	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.000 A325N	0

Grouted Pipe Properties

Size	F_y ksi	A_s in^2	A_c in^2	Wt plf	E_c ksi	E_m ksi	F_{ym} ksi
P2x0.154 (GR)	35.000	1.075	3.356	10.647	4768.962	40914.218	53.581
P3x0.216 (GR)	35.000	2.228	7.393	22.984	4768.962	41656.327	54.738
P3.5x.318 (GR)	35.000	3.678	8.888	31.033	4768.962	38218.387	49.377
P4x.337 (GR)	35.000	4.407	11.497	38.949	4768.962	38951.934	50.521
P5x0.375 (GR)	35.000	6.111	18.190	58.691	4768.962	40355.493	52.710

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
LDF4-50A(1/2")	C	No	No	Ar (CaAa)	31.000 - 0.000	-1.000	-0.32	1	1	0.850 0.750	0.630		0.150
Feedline Ladder (Af) *	C	No	No	Af (CaAa)	180.000 - 0.000	-1.000	-0.33	2	1	3.000	3.000		8.400
Climbing Ladder	C	No	No	Af (CaAa)	180.000 - 0.000	0.000	0.025	1	1	3.000	0.000		7.900
Safety Line 3/8 *	C	No	No	Ar (CaAa)	180.000 - 0.000	0.000	0.025	1	1	0.375	0.375		0.220
HCS 6X12 4AWG(1-5/8)	B	No	No	Ar (CaAa)	93.000 - 0.000	0.000	0.05	4	2	0.850 0.750	1.660		2.400
LDF6-50A(1-1/4)	B	No	No	Ar (CaAa)	93.000 - 0.000	0.000	0.15	6	6	0.850 0.750	1.550		0.600
Feedline Ladder (Af) *	B	No	No	Af (CaAa)	93.000 - 0.000	0.000	0.1	1	1	3.000	3.000		8.400
LCF158-50JA-A0(1-5/8)	B	No	No	Ar (CaAa)	154.000 - 0.000	0.000	0.3	12	6	0.850 0.750	1.980		0.800
WR-VG82ST-BRDA(5/8)	B	No	No	Ar (CaAa)	154.000 - 0.000	0.000	0.365	3	2	0.500	0.645		0.307
WR-VG82ST-BRDA(5/8)	B	No	No	Ar (CaAa)	154.000 - 0.000	5.500	0.3	5	5	1.500 1.000	0.645		0.307
Feedline Ladder (Af)	B	No	No	Af (CaAa)	154.000 - 0.000	0.000	0.32	1	1	3.000	3.000		8.400
2-1/4" Rigid Conduit *	B	No	No	Ar (CaAa)	155.000 - 0.000	0.000	0.385	1	1	0.850 0.750	2.250		3.000
LDF5-	B	No	No	Ar (CaAa)	104.000 -	0.000	0.345	1	1	0.850	1.090		0.330

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
50A(7/8) *					0.000					0.750			
CU12PSM6P4XXX(1-3/4)	A	No	No	Ar (CaAa)	170.000 - 0.000	0.000	-0.09	1	1	0.850 0.750	1.750		2.720
LDF4-50A(1/2)	A	No	No	Ar (CaAa)	62.000 - 0.000	0.000	-0.1	2	2	0.500	0.630		0.150
LDF4-50A(1/2)	A	No	No	Ar (CaAa)	104.000 - 62.000	0.000	-0.1	1	1	0.500	0.630		0.150
Feedline Ladder (Af) *	A	No	No	Af (CaAa)	124.000 - 0.000	0.000	0	1	1	3.000	3.000		8.400
HB158-1-08U8-S8J18(1-5/8)	A	No	No	Ar (CaAa)	163.000 - 0.000	0.000	0.1	2	2	0.850 0.750	1.980		1.300
T-Brackets (Af) *	A	No	No	Af (CaAa)	164.000 - 0.000	0.000	0.1	1	1	1.000	1.000		8.400
FSJ4-50B(1/2") *	A	No	No	Ar (CaAa)	42.000 - 0.000	0.000	0.03	1	1	0.850 0.750	0.520		0.140
HB158-21U6S24-xxM_TMO(1-5/8) *	A	No	No	Ar (CaAa)	143.000 - 0.000	0.000	0.14	3	2	0.850 0.750	1.996		2.500
LDF5-50A(7/8") *	A	No	No	Ar (CaAa)	178.000 - 0.000	5.500	0.1	2	2	0.850 0.750	1.090		0.330
(3/8") Ground Cables ***	A	No	No	Ar (CaAa)	162.000 - 0.000	0.000	-0.15	2	2	0.500	0.440		0.080
EC4-50(1/2)	A	No	No	Ar (CaAa)	124.000 - 0.000	2.000	-0.05	1	1	0.630	0.630		0.160
EC7-50A(1-5/8)	A	No	No	Ar (CaAa)	124.000 - 0.000	0.000	-0.1	3	3	1.970	1.970		0.680
EW90(ELLIPTICAL) ***	A	No	No	Ar (CaAa)	115.000 - 0.000	0.000	-0.3	1	1	1.280	1.280		0.320

Feed Line/Linear Appurtenances - Entered As Area

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

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	180.000-168.000	A	0.000	0.000	2.530	0.000	0.012
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	12.450	0.000	0.299
T2	168.000-160.000	A	0.000	0.000	5.175	0.000	0.069
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	8.300	0.000	0.199
T3	160.000-140.000	A	0.000	0.000	22.670	0.000	0.313
		B	0.000	0.000	50.863	0.000	0.331
		C	0.000	0.000	20.750	0.000	0.498

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T4	140.000-120.000	A	0.000	0.000	37.465	0.000	0.483
		B	0.000	0.000	72.340	0.000	0.469
		C	0.000	0.000	20.750	0.000	0.498
T5	120.000-100.000	A	0.000	0.000	58.101	0.000	0.658
		B	0.000	0.000	72.776	0.000	0.470
		C	0.000	0.000	20.750	0.000	0.498
T6	100.000-80.000	A	0.000	0.000	59.749	0.000	0.662
		B	0.000	0.000	101.742	0.000	0.757
		C	0.000	0.000	20.750	0.000	0.498
T7	80.000-60.000	A	0.000	0.000	59.875	0.000	0.662
		B	0.000	0.000	116.400	0.000	0.908
		C	0.000	0.000	20.750	0.000	0.498
T8	60.000-40.000	A	0.000	0.000	61.113	0.000	0.665
		B	0.000	0.000	116.400	0.000	0.908
		C	0.000	0.000	20.750	0.000	0.498
T9	40.000-20.000	A	0.000	0.000	62.049	0.000	0.668
		B	0.000	0.000	116.400	0.000	0.908
		C	0.000	0.000	21.443	0.000	0.500
T10	20.000-0.000	A	0.000	0.000	62.049	0.000	0.668
		B	0.000	0.000	116.400	0.000	0.908
		C	0.000	0.000	22.010	0.000	0.501

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	180.000-168.000	A	1.004	0.000	0.000	8.143	0.000	0.064
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	22.086	0.000	0.487
T2	168.000-160.000	A	0.998	0.000	0.000	14.355	0.000	0.169
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	14.686	0.000	0.324
T3	160.000-140.000	A	0.989	0.000	0.000	63.006	0.000	0.743
		B		0.000	0.000	79.352	0.000	1.113
		C		0.000	0.000	36.573	0.000	0.806
T4	140.000-120.000	A	0.975	0.000	0.000	91.365	0.000	1.138
		B		0.000	0.000	112.370	0.000	1.567
		C		0.000	0.000	36.348	0.000	0.800
T5	120.000-100.000	A	0.959	0.000	0.000	130.342	0.000	1.635
		B		0.000	0.000	113.129	0.000	1.563
		C		0.000	0.000	36.090	0.000	0.794
T6	100.000-80.000	A	0.940	0.000	0.000	134.803	0.000	1.657
		B		0.000	0.000	165.757	0.000	2.265
		C		0.000	0.000	35.785	0.000	0.786
T7	80.000-60.000	A	0.916	0.000	0.000	133.913	0.000	1.629
		B		0.000	0.000	190.696	0.000	2.594
		C		0.000	0.000	35.412	0.000	0.776
T8	60.000-40.000	A	0.886	0.000	0.000	137.717	0.000	1.614
		B		0.000	0.000	189.227	0.000	2.547
		C		0.000	0.000	34.927	0.000	0.764
T9	40.000-20.000	A	0.842	0.000	0.000	138.726	0.000	1.585
		B		0.000	0.000	187.090	0.000	2.480
		C		0.000	0.000	36.766	0.000	0.765
T10	20.000-0.000	A	0.754	0.000	0.000	132.543	0.000	1.474
		B		0.000	0.000	182.855	0.000	2.350
		C		0.000	0.000	37.097	0.000	0.742

Feed Line Center of Pressure

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
T1	180.000-168.000	0.798	2.979	0.484	2.876
T2	168.000-160.000	-0.480	2.003	-1.254	1.506
T3	160.000-140.000	5.173	2.512	4.123	1.985
T4	140.000-120.000	6.301	2.133	5.351	1.758
T5	120.000-100.000	3.843	1.756	2.513	1.321
T6	100.000-80.000	7.342	1.391	5.816	1.060
T7	80.000-60.000	9.794	1.256	8.125	0.937
T8	60.000-40.000	10.097	1.362	8.526	1.017
T9	40.000-20.000	9.565	1.410	8.337	1.127
T10	20.000-0.000	11.643	1.819	10.045	1.595

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	4	Feedline Ladder (Af)	168.00 - 180.00	0.6000	0.5970
T1	6	Climbing Ladder	168.00 - 180.00	0.6000	0.5970
T1	7	Safety Line 3/8	168.00 - 180.00	0.6000	0.5970
T1	23	CU12PSM6P4XXX(1-3/4)	168.00 - 170.00	0.6000	0.5970
T1	39	LDF5-50A(7/8")	168.00 - 178.00	0.6000	0.5970
T2	4	Feedline Ladder (Af)	160.00 - 168.00	0.6000	0.6000
T2	6	Climbing Ladder	160.00 - 168.00	0.6000	0.6000
T2	7	Safety Line 3/8	160.00 - 168.00	0.6000	0.6000
T2	23	CU12PSM6P4XXX(1-3/4)	160.00 - 168.00	0.6000	0.6000
T2	30	HB158-1-08U8-S8J18(1-5/8)	160.00 - 163.00	0.6000	0.6000
T2	31	T-Brackets (Af)	160.00 - 164.00	0.6000	0.6000
T2	39	LDF5-50A(7/8")	160.00 - 168.00	0.6000	0.6000
T2	41	(3/8") Ground Cables	160.00 - 162.00	0.6000	0.6000
T3	4	Feedline Ladder (Af)	140.00 - 160.00	0.6000	0.6000
T3	6	Climbing Ladder	140.00 - 160.00	0.6000	0.6000
T3	7	Safety Line 3/8	140.00 - 160.00	0.6000	0.6000
T3	13	LCF158-50JA-A0(1-5/8)	140.00 - 154.00	0.6000	0.6000
T3	14	WR-VG82ST-BRDA(5/8)	140.00 - 154.00	0.6000	0.6000
T3	16	WR-VG82ST-BRDA(5/8)	140.00 - 154.00	0.6000	0.6000
T3	18	Feedline Ladder (Af)	140.00 - 154.00	0.6000	0.6000
T3	19	2-1/4" Rigid Conduit	140.00 - 155.00	0.6000	0.6000
T3	23	CU12PSM6P4XXX(1-3/4)	140.00 - 160.00	0.6000	0.6000
T3	30	HB158-1-08U8-S8J18(1-5/8)	140.00 - 160.00	0.6000	0.6000
T3	31	T-Brackets (Af)	140.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T3	36	HB158-21U6S24-xxM_TMO(1-5/8)	160.00 140.00 - 143.00	0.6000	0.6000
T3	39	LDF5-50A(7/8")	140.00 - 160.00	0.6000	0.6000
T3	41	(3/8") Ground Cables	140.00 - 160.00	0.6000	0.6000
T4	4	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T4	6	Climbing Ladder	120.00 - 140.00	0.6000	0.6000
T4	7	Safety Line 3/8	120.00 - 140.00	0.6000	0.6000
T4	13	LCF158-50JA-A0(1-5/8)	120.00 - 140.00	0.6000	0.6000
T4	14	WR-VG82ST-BRDA(5/8)	120.00 - 140.00	0.6000	0.6000
T4	16	WR-VG82ST-BRDA(5/8)	120.00 - 140.00	0.6000	0.6000
T4	18	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T4	19	2-1/4" Rigid Conduit	120.00 - 140.00	0.6000	0.6000
T4	23	CU12PSM6P4XXX(1-3/4)	120.00 - 140.00	0.6000	0.6000
T4	27	Feedline Ladder (Af)	120.00 - 124.00	0.6000	0.6000
T4	30	HB158-1-08U8-S8J18(1-5/8)	120.00 - 140.00	0.6000	0.6000
T4	31	T-Brackets (Af)	120.00 - 140.00	0.6000	0.6000
T4	36	HB158-21U6S24-xxM_TMO(1-5/8)	120.00 - 140.00	0.6000	0.6000
T4	39	LDF5-50A(7/8")	120.00 - 140.00	0.6000	0.6000
T4	41	(3/8") Ground Cables	120.00 - 140.00	0.6000	0.6000
T4	43	EC4-50(1/2)	120.00 - 124.00	0.6000	0.6000
T4	44	EC7-50A(1-5/8)	120.00 - 124.00	0.6000	0.6000
T5	4	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	6	Climbing Ladder	100.00 - 120.00	0.6000	0.6000
T5	7	Safety Line 3/8	100.00 - 120.00	0.6000	0.6000
T5	13	LCF158-50JA-A0(1-5/8)	100.00 - 120.00	0.6000	0.6000
T5	14	WR-VG82ST-BRDA(5/8)	100.00 - 120.00	0.6000	0.6000
T5	16	WR-VG82ST-BRDA(5/8)	100.00 - 120.00	0.6000	0.6000
T5	18	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	19	2-1/4" Rigid Conduit	100.00 - 120.00	0.6000	0.6000
T5	21	LDF5-50A(7/8)	100.00 - 104.00	0.6000	0.6000
T5	23	CU12PSM6P4XXX(1-3/4)	100.00 - 120.00	0.6000	0.6000
T5	25	LDF4-50A(1/2)	100.00 - 104.00	0.6000	0.6000
T5	27	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	30	HB158-1-08U8-S8J18(1-5/8)	100.00 - 120.00	0.6000	0.6000
T5	31	T-Brackets (Af)	100.00 - 120.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T5	36	HB158-21U6S24-xxM_TMO(1-5/8)	100.00 - 120.00	0.6000	0.6000
T5	39	LDF5-50A(7/8")	100.00 - 120.00	0.6000	0.6000
T5	41	(3/8") Ground Cables	100.00 - 120.00	0.6000	0.6000
T5	43	EC4-50(1/2)	100.00 - 120.00	0.6000	0.6000
T5	44	EC7-50A(1-5/8)	100.00 - 120.00	0.6000	0.6000
T5	45	EW90(ELLIPTICAL)	100.00 - 115.00	0.6000	0.6000
T6	4	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	6	Climbing Ladder	80.00 - 100.00	0.6000	0.6000
T6	7	Safety Line 3/8	80.00 - 100.00	0.6000	0.6000
T6	9	HCS 6X12 4AWG(1-5/8)	80.00 - 93.00	0.6000	0.6000
T6	10	LDF6-50A(1-1/4)	80.00 - 93.00	0.6000	0.6000
T6	11	Feedline Ladder (Af)	80.00 - 93.00	0.6000	0.6000
T6	13	LCF158-50JA-A0(1-5/8)	80.00 - 100.00	0.6000	0.6000
T6	14	WR-VG82ST-BRDA(5/8)	80.00 - 100.00	0.6000	0.6000
T6	16	WR-VG82ST-BRDA(5/8)	80.00 - 100.00	0.6000	0.6000
T6	18	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	19	2-1/4" Rigid Conduit	80.00 - 100.00	0.6000	0.6000
T6	21	LDF5-50A(7/8)	80.00 - 100.00	0.6000	0.6000
T6	23	CU12PSM6P4XXX(1-3/4)	80.00 - 100.00	0.6000	0.6000
T6	25	LDF4-50A(1/2)	80.00 - 100.00	0.6000	0.6000
T6	27	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	30	HB158-1-08U8-S8J18(1-5/8)	80.00 - 100.00	0.6000	0.6000
T6	31	T-Brackets (Af)	80.00 - 100.00	0.6000	0.6000
T6	36	HB158-21U6S24-xxM_TMO(1-5/8)	80.00 - 100.00	0.6000	0.6000
T6	39	LDF5-50A(7/8")	80.00 - 100.00	0.6000	0.6000
T6	41	(3/8") Ground Cables	80.00 - 100.00	0.6000	0.6000
T6	43	EC4-50(1/2)	80.00 - 100.00	0.6000	0.6000
T6	44	EC7-50A(1-5/8)	80.00 - 100.00	0.6000	0.6000
T6	45	EW90(ELLIPTICAL)	80.00 - 100.00	0.6000	0.6000
T7	4	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	6	Climbing Ladder	60.00 - 80.00	0.6000	0.6000
T7	7	Safety Line 3/8	60.00 - 80.00	0.6000	0.6000
T7	9	HCS 6X12 4AWG(1-5/8)	60.00 - 80.00	0.6000	0.6000
T7	10	LDF6-50A(1-1/4)	60.00 - 80.00	0.6000	0.6000
T7	11	Feedline Ladder (Af)	60.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T7	13	LCF158-50JA-A0(1-5/8)	80.00 60.00 - 80.00	0.6000	0.6000
T7	14	WR-VG82ST-BRDA(5/8)	60.00 - 80.00	0.6000	0.6000
T7	16	WR-VG82ST-BRDA(5/8)	60.00 - 80.00	0.6000	0.6000
T7	18	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	19	2-1/4" Rigid Conduit	60.00 - 80.00	0.6000	0.6000
T7	21	LDF5-50A(7/8)	60.00 - 80.00	0.6000	0.6000
T7	23	CU12PSM6P4XXX(1-3/4)	60.00 - 80.00	0.6000	0.6000
T7	24	LDF4-50A(1/2)	60.00 - 62.00	0.6000	0.6000
T7	25	LDF4-50A(1/2)	62.00 - 80.00	0.6000	0.6000
T7	27	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	30	HB158-1-08U8-S8J18(1-5/8)	60.00 - 80.00	0.6000	0.6000
T7	31	T-Brackets (Af)	60.00 - 80.00	0.6000	0.6000
T7	36	HB158-21U6S24-xxM_TMO(1-5/8)	60.00 - 80.00	0.6000	0.6000
T7	39	LDF5-50A(7/8")	60.00 - 80.00	0.6000	0.6000
T7	41	(3/8") Ground Cables	60.00 - 80.00	0.6000	0.6000
T7	43	EC4-50(1/2)	60.00 - 80.00	0.6000	0.6000
T7	44	EC7-50A(1-5/8)	60.00 - 80.00	0.6000	0.6000
T7	45	EW90(ELLIPTICAL)	60.00 - 80.00	0.6000	0.6000
T8	4	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	6	Climbing Ladder	40.00 - 60.00	0.6000	0.6000
T8	7	Safety Line 3/8	40.00 - 60.00	0.6000	0.6000
T8	9	HCS 6X12 4AWG(1-5/8)	40.00 - 60.00	0.6000	0.6000
T8	10	LDF6-50A(1-1/4)	40.00 - 60.00	0.6000	0.6000
T8	11	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	13	LCF158-50JA-A0(1-5/8)	40.00 - 60.00	0.6000	0.6000
T8	14	WR-VG82ST-BRDA(5/8)	40.00 - 60.00	0.6000	0.6000
T8	16	WR-VG82ST-BRDA(5/8)	40.00 - 60.00	0.6000	0.6000
T8	18	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	19	2-1/4" Rigid Conduit	40.00 - 60.00	0.6000	0.6000
T8	21	LDF5-50A(7/8)	40.00 - 60.00	0.6000	0.6000
T8	23	CU12PSM6P4XXX(1-3/4)	40.00 - 60.00	0.6000	0.6000
T8	24	LDF4-50A(1/2)	40.00 - 60.00	0.6000	0.6000
T8	27	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	30	HB158-1-08U8-S8J18(1-5/8)	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
T8	31	T-Brackets (Af)	40.00 - 60.00	0.6000	0.6000
T8	33	FSJ4-50B(1/2")	40.00 - 42.00	0.6000	0.6000
T8	36	HB158-21U6S24-xxM_TMO(1-5/8)	40.00 - 60.00	0.6000	0.6000
T8	39	LDF5-50A(7/8")	40.00 - 60.00	0.6000	0.6000
T8	41	(3/8") Ground Cables	40.00 - 60.00	0.6000	0.6000
T8	43	EC4-50(1/2)	40.00 - 60.00	0.6000	0.6000
T8	44	EC7-50A(1-5/8)	40.00 - 60.00	0.6000	0.6000
T8	45	EW90(ELLIPTICAL)	40.00 - 60.00	0.6000	0.6000
T9	3	LDF4-50A(1/2")	20.00 - 31.00	0.6000	0.6000
T9	4	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	6	Climbing Ladder	20.00 - 40.00	0.6000	0.6000
T9	7	Safety Line 3/8	20.00 - 40.00	0.6000	0.6000
T9	9	HCS 6X12 4AWG(1-5/8)	20.00 - 40.00	0.6000	0.6000
T9	10	LDF6-50A(1-1/4)	20.00 - 40.00	0.6000	0.6000
T9	11	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	13	LCF158-50JA-A0(1-5/8)	20.00 - 40.00	0.6000	0.6000
T9	14	WR-VG82ST-BRDA(5/8)	20.00 - 40.00	0.6000	0.6000
T9	16	WR-VG82ST-BRDA(5/8)	20.00 - 40.00	0.6000	0.6000
T9	18	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	19	2-1/4" Rigid Conduit	20.00 - 40.00	0.6000	0.6000
T9	21	LDF5-50A(7/8)	20.00 - 40.00	0.6000	0.6000
T9	23	CU12PSM6P4XXX(1-3/4)	20.00 - 40.00	0.6000	0.6000
T9	24	LDF4-50A(1/2)	20.00 - 40.00	0.6000	0.6000
T9	27	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	30	HB158-1-08U8-S8J18(1-5/8)	20.00 - 40.00	0.6000	0.6000
T9	31	T-Brackets (Af)	20.00 - 40.00	0.6000	0.6000
T9	33	FSJ4-50B(1/2")	20.00 - 40.00	0.6000	0.6000
T9	36	HB158-21U6S24-xxM_TMO(1-5/8)	20.00 - 40.00	0.6000	0.6000
T9	39	LDF5-50A(7/8")	20.00 - 40.00	0.6000	0.6000
T9	41	(3/8") Ground Cables	20.00 - 40.00	0.6000	0.6000
T9	43	EC4-50(1/2)	20.00 - 40.00	0.6000	0.6000
T9	44	EC7-50A(1-5/8)	20.00 - 40.00	0.6000	0.6000
T9	45	EW90(ELLIPTICAL)	20.00 - 40.00	0.6000	0.6000
T10	3	LDF4-50A(1/2")	0.00 - 20.00	0.6000	0.6000
T10	4	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T10	6	Climbing Ladder	0.00 - 20.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T10	7	Safety Line 3/8	0.00 - 20.00	0.6000	0.6000
T10	9	HCS 6X12 4AWG(1-5/8)	0.00 - 20.00	0.6000	0.6000
T10	10	LDF6-50A(1-1/4)	0.00 - 20.00	0.6000	0.6000
T10	11	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T10	13	LCF158-50JA-A0(1-5/8)	0.00 - 20.00	0.6000	0.6000
T10	14	WR-VG82ST-BRDA(5/8)	0.00 - 20.00	0.6000	0.6000
T10	16	WR-VG82ST-BRDA(5/8)	0.00 - 20.00	0.6000	0.6000
T10	18	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T10	19	2-1/4" Rigid Conduit	0.00 - 20.00	0.6000	0.6000
T10	21	LDF5-50A(7/8)	0.00 - 20.00	0.6000	0.6000
T10	23	CU12PSM6P4XXX(1-3/4)	0.00 - 20.00	0.6000	0.6000
T10	24	LDF4-50A(1/2)	0.00 - 20.00	0.6000	0.6000
T10	27	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T10	30	HB158-1-08U8-S8J18(1-5/8)	0.00 - 20.00	0.6000	0.6000
T10	31	T-Brackets (Af)	0.00 - 20.00	0.6000	0.6000
T10	33	FSJ4-50B(1/2")	0.00 - 20.00	0.6000	0.6000
T10	36	HB158-21U6S24-xxM_TMO(1-5/8)	0.00 - 20.00	0.6000	0.6000
T10	39	LDF5-50A(7/8")	0.00 - 20.00	0.6000	0.6000
T10	41	(3/8") Ground Cables	0.00 - 20.00	0.6000	0.6000
T10	43	EC4-50(1/2)	0.00 - 20.00	0.6000	0.6000
T10	44	EC7-50A(1-5/8)	0.00 - 20.00	0.6000	0.6000
T10	45	EW90(ELLIPTICAL)	0.00 - 20.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
***					
PD10017	A	From Leg	0.500 0.000 6.000	0.000	178.000
*					
MX08FRO665-21 w/ Mount Pipe	A	From Leg	4.000 0.000 4.000	0.000	170.000
MX08FRO665-21 w/ Mount Pipe	B	From Leg	4.000 0.000 4.000	0.000	170.000
MX08FRO665-21 w/ Mount Pipe	C	From Leg	4.000 0.000 4.000	0.000	170.000
TA08025-B604	A	From Leg	4.000 0.000 4.000	0.000	170.000
TA08025-B604	B	From Leg	4.000 0.000 4.000	0.000	170.000
TA08025-B604	C	From Leg	4.000 0.000 4.000	0.000	170.000
TA08025-B605	A	From Leg	4.000 0.000 4.000	0.000	170.000
TA08025-B605	B	From Leg	4.000 0.000 4.000	0.000	170.000
TA08025-B605	C	From Leg	4.000 0.000 4.000	0.000	170.000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
RDIDC-9181-PF-48	A	From Leg	4.000 0.000 4.000	0.000	170.000
Commscope MTC3975083 (3)	C	None		0.000	170.000
(2) 10' x 2" Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	170.000
(2) 10' x 2" Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	170.000
(2) 10' x 2" Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	170.000
4' x 2" Pipe Mount	A	From Leg	2.000 0.000 0.000	0.000	170.000
* *					
(2) JAHH-65B-R3B w/ Mount Pipe	A	From Leg	4.000 0.000 1.000	0.000	163.000
(2) JAHH-65B-R3B w/ Mount Pipe	B	From Leg	4.000 0.000 1.000	0.000	163.000
(2) JAHH-65B-R3B w/ Mount Pipe	C	From Leg	4.000 0.000 1.000	0.000	163.000
CBRS w/ Mount Pipe	A	From Leg	4.000 0.000 1.000	0.000	163.000
CBRS w/ Mount Pipe	B	From Leg	4.000 0.000 1.000	0.000	163.000
CBRS w/ Mount Pipe	C	From Leg	4.000 0.000 1.000	0.000	163.000
MT6407-77A w/ Mount Pipe	A	From Leg	4.000 0.000 1.000	0.000	163.000
MT6407-77A w/ Mount Pipe	B	From Leg	4.000 0.000 1.000	0.000	163.000
MT6407-77A w/ Mount Pipe	C	From Leg	4.000 0.000 1.000	0.000	163.000
BSF0020F3V1	A	From Leg	4.000 0.000 1.000	0.000	163.000
BSF0020F3V1	B	From Leg	4.000 0.000 1.000	0.000	163.000
BSF0020F3V1	C	From Leg	4.000 0.000 1.000	0.000	163.000
CBC78T-DS-43-2X	A	From Leg	4.000 0.000 -3.000	0.000	163.000
CBC78T-DS-43-2X	B	From Leg	4.000 0.000 -3.000	0.000	163.000
CBC78T-DS-43-2X	C	From Leg	4.000 0.000 -3.000	0.000	163.000
(2) RRFDC-3315-PF-48	B	From Leg	4.000 0.000	0.000	163.000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
RFV01U-D1A	A	From Leg	1.000 4.000 0.000	0.000	163.000
RFV01U-D1A	B	From Leg	1.000 4.000 0.000	0.000	163.000
RFV01U-D1A	C	From Leg	1.000 4.000 0.000	0.000	163.000
RFV01U-D2A	A	From Leg	1.000 4.000 0.000	0.000	163.000
RFV01U-D2A	B	From Leg	1.000 4.000 0.000	0.000	163.000
RFV01U-D2A	C	From Leg	1.000 4.000 0.000	0.000	163.000
Sector Mount [SM 702-3](16')	C	None	1.000	0.000	163.000
Dual Antenna Mounting Bracket	A	From Leg	4.000 0.000 0.000	0.000	163.000
Dual Antenna Mounting Bracket	B	From Leg	4.000 0.000 0.000	0.000	163.000
Dual Antenna Mounting Bracket	C	From Leg	4.000 0.000 0.000	0.000	163.000
(2) 6' x 2" Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	163.000
(2) 6' x 2" Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	163.000
(2) 6' x 2" Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	163.000
* 7770.00 w/ Mount Pipe	A	From Leg	4.000 0.000 4.000	0.000	154.000
7770.00 w/ Mount Pipe	B	From Leg	4.000 0.000 4.000	0.000	154.000
7770.00 w/ Mount Pipe	C	From Leg	4.000 0.000 4.000	0.000	154.000
QS66512-2 w/ Mount Pipe	A	From Leg	4.000 0.000 4.000	0.000	154.000
QS66512-2 w/ Mount Pipe	B	From Leg	4.000 0.000 4.000	0.000	154.000
QS66512-2 w/ Mount Pipe	C	From Leg	4.000 0.000 4.000	0.000	154.000
OPA65R-BU6D w/ Mount Pipe	A	From Leg	4.000 0.000 4.000	0.000	154.000
OPA65R-BU6D w/ Mount Pipe	B	From Leg	4.000 0.000 4.000	0.000	154.000
OPA65R-BU6D w/ Mount Pipe	C	From Leg	4.000 0.000	0.000	154.000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
DMP65R-BU6D w/ Mount Pipe	A	From Leg	4.000 4.000 0.000	0.000	154.000
DMP65R-BU6D w/ Mount Pipe	B	From Leg	4.000 4.000 0.000	0.000	154.000
DMP65R-BU6D w/ Mount Pipe	C	From Leg	4.000 4.000 0.000	0.000	154.000
(2) LGP21401	A	From Leg	4.000 4.000 0.000	0.000	154.000
(2) LGP21401	B	From Leg	4.000 4.000 0.000	0.000	154.000
(2) LGP21401	C	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 32 B30	A	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 32 B30	B	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 32 B30	C	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 32 B2	A	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 32 B2	B	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 32 B2	C	From Leg	4.000 4.000 0.000	0.000	154.000
DBC0061F1V51-2	A	From Leg	4.000 4.000 0.000	0.000	154.000
DBC0061F1V51-2	B	From Leg	4.000 4.000 0.000	0.000	154.000
DBC0061F1V51-2	C	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 4478 B14	A	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 4478 B14	B	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 4478 B14	C	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 4449 B5/B12	A	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 4449 B5/B12	B	From Leg	4.000 4.000 0.000	0.000	154.000
RRUS 4449 B5/B12	C	From Leg	4.000 4.000 0.000	0.000	154.000
(3) DC6-48-60-18-8F	A	From Leg	4.000	0.000	154.000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
			0.000 4.000		
Sector Mount [SM 1303-3]	C	None		0.000	154.000
Pipe Mount [PM 601-3]	C	None		0.000	154.000
(2) 5' x 2" Pipe Mount	A	From Leg	4.000 0.000 0.000	0.000	154.000
(2) 5' x 2" Pipe Mount	B	From Leg	4.000 0.000 0.000	0.000	154.000
(2) 5' x 2" Pipe Mount	C	From Leg	4.000 0.000 0.000	0.000	154.000
12.5' x 2.375" Horizontal Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	154.000
12.5' x 2.375" Horizontal Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	154.000
12.5' x 2.375" Horizontal Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	154.000
* 800 EXTERNAL NOTCH FILTER	A	From Leg	1.000 0.000 1.000	0.000	145.000
800 EXTERNAL NOTCH FILTER	B	From Leg	1.000 0.000 1.000	0.000	145.000
800 EXTERNAL NOTCH FILTER	C	From Leg	1.000 0.000 1.000	0.000	145.000
PCS 1900MHZ 4X45W-65MHZ	A	From Leg	1.000 0.000 1.000	0.000	145.000
PCS 1900MHZ 4X45W-65MHZ	B	From Leg	1.000 0.000 1.000	0.000	145.000
PCS 1900MHZ 4X45W-65MHZ	C	From Leg	1.000 0.000 1.000	0.000	145.000
800MHZ 2X50W RRH	A	From Leg	1.000 0.000 1.000	0.000	145.000
800MHZ 2X50W RRH	B	From Leg	1.000 0.000 1.000	0.000	145.000
800MHZ 2X50W RRH	C	From Leg	1.000 0.000 1.000	0.000	145.000
* AIR 6419 B41_TMO w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	143.000
AIR 6419 B41_TMO w/ Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	143.000
AIR 6419 B41_TMO w/ Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	143.000
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	143.000
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	B	From Leg	4.000 0.000	0.000	143.000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	C	From Leg	0.000 4.000 0.000	0.000	143.000
VV-65B-R1_TMO w/ Mount Pipe	A	From Leg	0.000 4.000 0.000	0.000	143.000
VV-65B-R1_TMO w/ Mount Pipe	B	From Leg	0.000 4.000 0.000	0.000	143.000
VV-65B-R1_TMO w/ Mount Pipe	C	From Leg	0.000 4.000 0.000	0.000	143.000
RADIO 4460 B2/B25 B66_TMO	A	From Leg	0.000 4.000 0.000	0.000	143.000
RADIO 4460 B2/B25 B66_TMO	B	From Leg	0.000 4.000 0.000	0.000	143.000
RADIO 4460 B2/B25 B66_TMO	C	From Leg	0.000 4.000 0.000	0.000	143.000
Radio 4480_TMOV2	A	From Leg	0.000 4.000 0.000	0.000	143.000
Radio 4480_TMOV2	B	From Leg	0.000 4.000 0.000	0.000	143.000
Radio 4480_TMOV2	C	From Leg	0.000 4.000 0.000	0.000	143.000
Site Pro1 VFA12-HD Mount	A	From Leg	0.000 2.000 0.000	0.000	143.000
Site Pro1 VFA12-HD Mount	B	From Leg	0.000 2.000 0.000	0.000	143.000
Site Pro1 VFA12-HD Mount	C	From Leg	0.000 2.000 0.000	0.000	143.000
10' x 2" Mount Pipe	A	From Leg	0.000 4.000 0.000	0.000	143.000
10' x 2" Mount Pipe	B	From Leg	0.000 4.000 0.000	0.000	143.000
10' x 2" Mount Pipe	C	From Leg	0.000 4.000 0.000	0.000	143.000
6' x 2" Mount Pipe	A	From Leg	0.000 4.000 0.000	0.000	143.000
6' x 2" Mount Pipe	B	From Leg	0.000 4.000 0.000	0.000	143.000
6' x 2" Mount Pipe	C	From Leg	0.000 4.000 0.000	0.000	143.000
*			0.000		
DS7C09P36UxD w/ Mount Pipe	A	From Leg	6.000 0.000	0.000	124.000
DS7C09P36UxD w/ Mount Pipe	B	From Leg	7.000 6.000 0.000 7.000	0.000	124.000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
DS7C09P36UxD w/ Mount Pipe	C	From Leg	6.000 0.000 7.000	0.000	124.000
440 SERUES TTA SYSTEM	A	From Leg	6.000 0.000 0.000	0.000	124.000
Side Arm Mount [SO 308-3] **	C	None		0.000	124.000
Pipe Mount [PM 601-1]	C	From Leg	0.500 0.000 0.000	0.000	115.000
220-3BN *	B	From Leg	6.000 0.000 4.000	0.000	104.000
1142-2C	C	From Leg	6.000 0.000 7.000	0.000	104.000
Side Arm Mount [SO 303-1]	B	From Leg	3.000 0.000 0.000	0.000	104.000
Side Arm Mount [SO 303-1]	C	From Leg	3.000 0.000 0.000	0.000	104.000
APXVAARR24_43-U-NA20	A	From Leg	4.000 0.000 0.000	0.000	93.000
APXVAARR24_43-U-NA20	B	From Leg	4.000 0.000 0.000	0.000	93.000
APXVAARR24_43-U-NA20	C	From Leg	4.000 0.000 0.000	0.000	93.000
AIR 32 B2a/B66Aa	A	From Leg	4.000 0.000 0.000	0.000	93.000
AIR 32 B2a/B66Aa	B	From Leg	4.000 0.000 0.000	0.000	93.000
AIR 32 B2a/B66Aa	C	From Leg	4.000 0.000 0.000	0.000	93.000
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	93.000
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	93.000
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	93.000
KRY 112 144/1	A	From Leg	4.000 0.000 0.000	0.000	93.000
KRY 112 144/1	B	From Leg	4.000 0.000 0.000	0.000	93.000
KRY 112 144/1	C	From Leg	4.000 0.000 0.000	0.000	93.000
RADIO 4449 B12/B71	A	From Leg	4.000 0.000 0.000	0.000	93.000
RADIO 4449 B12/B71	B	From Leg	4.000	0.000	93.000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
			0.000 0.000		
RADIO 4449 B12/B71	C	From Leg	4.000 0.000 0.000	0.000	93.000
Sector Mount [SM 404-3]	C	None		0.000	93.000
*					
GPS_A	C	From Leg	3.000 0.000	0.000	62.000
			3.000		
Side Arm Mount [SO 305-1]	C	From Leg	1.500 0.000 0.000	0.000	62.000
*					
GPS_A	C	From Leg	3.000 0.000	0.000	42.000
			2.000		
Side Arm Mount [SO 305-1]	C	From Leg	1.500 0.000 0.000	0.000	42.000
*					
GPS_A	C	From Leg	3.000 0.000	0.000	31.000
			1.000		
Side Arm Mount [SO 701-1]	C	From Leg	1.500 0.000 0.000	0.000	31.000
*					
(2) 3'x8" Knife Plate	A	From Leg	0.000 0.000 0.000	0.000	20.000
(2) 3'x8" Knife Plate	B	From Leg	0.000 0.000 0.000	0.000	20.000
(2) 3'x8" Knife Plate	C	From Leg	0.000 0.000 0.000	0.000	20.000
(2) 3'x8" Knife Plate	A	From Leg	0.000 0.000 0.000	0.000	60.000
(2) 3'x8" Knife Plate	B	From Leg	0.000 0.000 0.000	0.000	60.000
(2) 3'x8" Knife Plate	C	From Leg	0.000 0.000 0.000	0.000	60.000
*					

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft
VHLP3-11W	C	Paraboloid w/Shroud (HP)	From Leg	1.000 0.000 0.000	-60.000		115.000	3.283
***								

Load Combinations

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

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	180 - 168	Leg	Max Tension	7	1.608	-0.093	0.068
			Max. Compression	10	-3.660	-0.105	-0.073
			Max. Mx	20	-1.097	-0.398	0.006
			Max. My	14	1.417	-0.002	0.389
			Max. Vy	20	-0.295	0.183	0.006
			Max. Vx	14	-0.299	-0.002	-0.197
		Diagonal	Max Tension	13	0.739	0.000	0.000
			Max. Compression	10	-0.827	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	28	0.054	0.010	-0.000
			Max. My	24	0.714	0.005	-0.002
			Max. Vy	28	-0.010	0.010	-0.000
			Max. Vx	24	-0.001	0.000	0.000
		Top Girt	Max Tension	2	0.158	0.000	0.000
			Max. Compression	23	-0.122	0.000	0.000
			Max. Mx	26	0.036	-0.014	0.000
			Max. Vy	26	0.014	0.000	0.000
T2	168 - 160	Leg	Max Tension	7	7.937	-0.234	0.107
			Max. Compression	10	-12.688	-0.223	-0.131
			Max. Mx	20	-10.798	-0.488	0.053
			Max. My	14	-7.547	0.044	0.519
			Max. Vy	20	0.734	0.250	0.023
			Max. Vx	2	0.734	0.032	0.216
		Diagonal	Max Tension	25	2.349	0.000	0.000
			Max. Compression	12	-2.474	0.000	0.000
			Max. Mx	8	2.259	0.018	-0.003
			Max. My	24	2.329	0.017	-0.003
			Max. Vy	30	-0.013	0.017	-0.001
			Max. Vx	24	-0.001	0.000	0.000
T3	160 - 140	Leg	Max Tension	7	38.917	-0.429	-0.015
			Max. Compression	10	-51.055	0.434	0.005
			Max. Mx	14	34.391	0.616	0.015
			Max. My	20	-4.841	-0.016	0.719
			Max. Vy	14	-0.988	-0.444	0.006
			Max. Vx	8	0.961	-0.034	0.243
		Diagonal	Max Tension	21	4.071	0.000	0.000
			Max. Compression	20	-4.165	0.000	0.000
			Max. Mx	10	2.969	0.025	0.002
			Max. My	24	-3.635	-0.006	-0.003
			Max. Vy	31	-0.015	0.018	0.001
			Max. Vx	24	0.001	0.000	0.000
T4	140 - 120	Leg	Max Tension	7	70.348	-0.383	-0.003
			Max. Compression	10	-86.377	0.356	-0.002
			Max. Mx	22	45.901	-0.530	-0.006
			Max. My	4	-7.578	-0.051	-0.562
			Max. Vy	22	-0.140	-0.339	-0.012
			Max. Vx	16	0.164	-0.017	0.350
		Diagonal	Max Tension	20	5.010	0.000	0.000
			Max. Compression	20	-5.043	0.000	0.000
			Max. Mx	10	3.575	0.027	0.002
			Max. My	28	-0.868	0.014	-0.003
			Max. Vy	29	0.020	0.022	0.003
			Max. Vx	28	0.001	0.000	0.000
T5	120 - 100	Leg	Max Tension	7	98.330	-0.339	-0.078
			Max. Compression	18	-118.129	0.446	0.090
			Max. Mx	2	-112.519	0.454	-0.037
			Max. My	16	-11.190	0.004	0.542
			Max. Vy	3	-0.108	0.454	-0.038
			Max. Vx	5	-0.187	-0.025	-0.478
		Diagonal	Max Tension	20	4.825	0.000	0.000
			Max. Compression	20	-4.877	0.000	0.000
			Max. Mx	18	3.640	0.042	0.003
			Max. My	34	1.087	0.035	0.005
			Max. Vy	31	-0.027	0.041	-0.004
			Max. Vx	34	-0.002	0.000	0.000
T6	100 - 80	Leg	Max Tension	7	123.947	-0.457	-0.015
			Max. Compression	18	-149.746	0.815	0.047
			Max. Mx	18	-149.746	0.815	0.047
			Max. My	16	-14.726	0.014	0.670
			Max. Vy	22	-0.571	-0.544	-0.022
			Max. Vx	16	0.514	-0.016	0.408
		Diagonal	Max Tension	20	5.668	0.000	0.000
			Max. Compression	20	-5.669	0.000	0.000
			Max. Mx	31	1.413	0.049	-0.006
			Max. My	29	-1.248	0.040	-0.007
			Max. Vy	29	0.034	0.048	-0.006
			Max. Vx	29	0.002	0.000	0.000
T7	80 - 60	Leg	Max Tension	7	147.251	-0.684	-0.040

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	18	-176.638	1.077	0.074
			Max. Mx	18	-176.638	1.077	0.074
			Max. My	4	-15.210	-0.093	-1.047
			Max. Vy	18	-0.122	1.077	0.074
			Max. Vx	4	0.152	-0.093	-1.047
		Diagonal	Max Tension	20	6.614	0.000	0.000
			Max. Compression	20	-6.657	0.000	0.000
			Max. Mx	31	1.596	0.085	0.011
			Max. My	34	1.753	0.082	0.012
			Max. Vy	29	0.047	0.083	0.010
			Max. Vx	34	-0.003	0.000	0.000
T8	60 - 40	Leg	Max Tension	7	171.263	-0.914	-0.038
			Max. Compression	18	-205.107	-0.131	0.031
			Max. Mx	18	-190.582	1.077	0.074
			Max. My	4	-17.437	-0.075	-0.948
			Max. Vy	22	-0.172	-0.915	-0.026
			Max. Vx	4	0.129	-0.075	-0.948
		Diagonal	Max Tension	20	6.987	0.000	0.000
			Max. Compression	20	-7.051	0.000	0.000
			Max. Mx	18	5.313	0.131	0.012
			Max. My	34	2.028	0.123	0.017
			Max. Vy	29	0.064	0.120	0.016
			Max. Vx	34	-0.004	0.000	0.000
T9	40 - 20	Leg	Max Tension	7	193.412	1.473	-0.021
			Max. Compression	18	-231.932	-0.409	0.031
			Max. Mx	18	-218.265	3.274	-0.011
			Max. My	8	-18.354	-0.434	1.895
			Max. Vy	18	-1.157	3.210	-0.013
			Max. Vx	4	0.467	-0.451	-1.847
		Diagonal	Max Tension	21	7.289	0.101	-0.002
			Max. Compression	18	-8.119	0.000	0.000
			Max. Mx	31	0.973	0.160	-0.012
			Max. My	18	-7.656	0.014	0.015
			Max. Vy	29	0.069	0.130	-0.011
			Max. Vx	28	-0.003	0.000	0.000
		Secondary Horizontal	Max Tension	8	1.227	0.058	0.004
			Max. Compression	9	-1.011	0.051	0.020
			Max. Mx	36	0.016	0.135	0.027
			Max. My	30	0.259	0.102	0.029
			Max. Vy	36	-0.072	0.135	0.027
			Max. Vx	30	-0.005	0.000	0.000
T10	20 - 0	Leg	Max Tension	7	215.171	-1.688	-0.033
			Max. Compression	18	-259.410	0.000	-0.000
			Max. Mx	35	-104.822	4.097	-0.020
			Max. My	8	-20.937	-0.152	2.367
			Max. Vy	31	-0.729	-3.078	0.000
			Max. Vx	4	-0.337	-0.153	-2.315
		Diagonal	Max Tension	20	7.773	0.000	0.000
			Max. Compression	18	-8.336	0.000	0.000
			Max. Mx	29	0.003	0.206	-0.021
			Max. My	28	3.710	0.123	-0.025
			Max. Vy	29	0.080	0.206	-0.021
			Max. Vx	28	0.004	0.000	0.000

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	266.199	23.616	-12.886
	Max. H_x	18	266.199	23.616	-12.886
	Max. H_z	7	-220.483	-20.223	10.988
	Min. Vert	7	-220.483	-20.223	10.988
	Min. H_x	7	-220.483	-20.223	10.988

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
	Min. H_z	18	266.199	23.616	-12.886
Leg B	Max. Vert	10	259.812	-22.227	-13.034
	Max. H_x	23	-209.195	18.790	11.036
	Max. H_z	23	-209.195	18.790	11.036
	Min. Vert	23	-209.195	18.790	11.036
	Min. H_x	10	259.812	-22.227	-13.034
	Min. H_z	10	259.812	-22.227	-13.034
Leg A	Max. Vert	2	249.477	0.467	24.835
	Max. H_x	20	22.468	2.418	1.678
	Max. H_z	2	249.477	0.467	24.835
	Min. Vert	15	-202.320	-0.423	-20.891
	Min. H_x	9	16.353	-2.361	1.209
	Min. H_z	15	-202.320	-0.423	-20.891

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	57.229	0.000	0.000	7.789	-23.340	0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	68.675	-0.044	-38.371	-3924.570	-23.442	15.074
0.9 Dead+1.0 Wind 0 deg - No Ice	51.506	-0.044	-38.371	-3926.907	-16.440	15.074
1.2 Dead+1.0 Wind 30 deg - No Ice	68.675	19.072	-33.346	-3413.455	-1985.161	26.245
0.9 Dead+1.0 Wind 30 deg - No Ice	51.506	19.072	-33.346	-3415.791	-1978.159	26.245
1.2 Dead+1.0 Wind 60 deg - No Ice	68.675	34.731	-20.236	-2056.433	-3571.414	21.544
0.9 Dead+1.0 Wind 60 deg - No Ice	51.506	34.731	-20.236	-2058.770	-3564.412	21.544
1.2 Dead+1.0 Wind 90 deg - No Ice	68.675	40.394	0.066	16.463	-4143.392	6.423
0.9 Dead+1.0 Wind 90 deg - No Ice	51.506	40.394	0.066	14.126	-4136.390	6.423
1.2 Dead+1.0 Wind 120 deg - No Ice	68.675	34.452	20.070	2060.808	-3548.591	-5.511
0.9 Dead+1.0 Wind 120 deg - No Ice	51.506	34.452	20.070	2058.472	-3541.589	-5.511
1.2 Dead+1.0 Wind 150 deg - No Ice	68.675	18.037	31.435	3287.911	-1909.210	-6.848
0.9 Dead+1.0 Wind 150 deg - No Ice	51.506	18.037	31.435	3285.575	-1902.209	-6.848
1.2 Dead+1.0 Wind 180 deg - No Ice	68.675	0.044	36.594	3803.998	-32.573	-15.330
0.9 Dead+1.0 Wind 180 deg - No Ice	51.506	0.044	36.594	3801.662	-25.571	-15.330
1.2 Dead+1.0 Wind 210 deg - No Ice	68.675	-19.060	33.295	3426.226	1927.780	-26.549
0.9 Dead+1.0 Wind 210 deg - No Ice	51.506	-19.060	33.295	3423.889	1934.782	-26.549
1.2 Dead+1.0 Wind 240 deg - No Ice	68.675	-36.241	21.052	2136.422	3632.675	-21.904
0.9 Dead+1.0 Wind 240 deg - No Ice	51.506	-36.241	21.052	2134.086	3639.677	-21.904
1.2 Dead+1.0 Wind 270 deg - No Ice	68.675	-40.394	-0.021	7.332	4087.377	-6.197
0.9 Dead+1.0 Wind 270 deg - No Ice	51.506	-40.394	-0.021	4.995	4094.379	-6.197
1.2 Dead+1.0 Wind 300 deg - No Ice	68.675	-32.942	-19.254	-1980.819	3375.300	5.385
0.9 Dead+1.0 Wind 300 deg - No Ice	51.506	-32.942	-19.254	-1983.156	3382.302	5.385
1.2 Dead+1.0 Wind 330 deg	68.675	-18.049	-31.486	-3275.140	1854.562	6.625

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
- No Ice 0.9 Dead+1.0 Wind 330 deg	51.506	-18.049	-31.486	-3277.477	1861.564	6.625
- No Ice 1.2 Dead+1.0 Ice+1.0 Temp	122.954	0.000	0.000	15.320	-67.157	0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	122.954	-0.011	-10.591	-1075.204	-66.161	3.448
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	122.954	5.407	-9.444	-951.238	-620.560	6.917
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	122.954	9.835	-5.723	-565.629	-1065.133	6.041
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	122.954	11.494	0.015	16.837	-1233.419	1.681
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	122.954	9.625	5.602	588.042	-1051.157	-0.939
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	122.954	5.182	9.026	951.298	-604.474	-1.156
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	122.954	0.011	10.290	1082.723	-68.153	-3.500
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	122.954	-5.404	9.433	980.669	485.967	-6.979
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	122.954	-10.091	5.859	606.129	950.163	-6.115
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	122.954	-11.494	-0.006	14.845	1099.105	-1.635
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	122.954	-9.370	-5.466	-547.542	897.499	0.913
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	122.954	-5.184	-9.037	-921.867	470.439	1.110
Dead+Wind 0 deg - Service	57.229	-0.012	-10.943	-1106.654	-22.054	4.245
Dead+Wind 30 deg - Service	57.229	5.439	-9.509	-961.833	-577.800	7.383
Dead+Wind 60 deg - Service	57.229	9.899	-5.767	-577.263	-1026.926	6.054
Dead+Wind 90 deg - Service	57.229	11.512	0.019	9.793	-1188.887	1.793
Dead+Wind 120 deg - Service	57.229	9.820	5.720	588.808	-1020.499	-1.566
Dead+Wind 150 deg - Service	57.229	5.148	8.971	936.791	-556.410	-1.937
Dead+Wind 180 deg - Service	57.229	0.012	10.442	1083.012	-24.625	-4.317
Dead+Wind 210 deg - Service	57.229	-5.436	9.495	975.743	530.736	-7.469
Dead+Wind 240 deg - Service	57.229	-10.324	5.997	610.102	1013.274	-6.155
Dead+Wind 270 deg - Service	57.229	-11.512	-0.006	7.221	1142.208	-1.729
Dead+Wind 300 deg - Service	57.229	-9.395	-5.490	-555.968	940.792	1.530
Dead+Wind 330 deg - Service	57.229	-5.151	-8.985	-922.881	510.116	1.874

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX	PY	PZ	PX	PY	PZ	% Error
	K	K	K	K	K	K	
1	0.000	-57.229	0.000	-0.000	57.229	0.000	0.000%
2	-0.044	-68.675	-38.371	0.044	68.675	38.371	0.000%
3	-0.044	-51.506	-38.371	0.044	51.506	38.371	0.000%
4	19.072	-68.675	-33.346	-19.072	68.675	33.346	0.000%
5	19.072	-51.506	-33.346	-19.072	51.506	33.346	0.000%
6	34.731	-68.675	-20.236	-34.731	68.675	20.236	0.000%
7	34.731	-51.506	-20.236	-34.731	51.506	20.236	0.000%
8	40.394	-68.675	0.066	-40.394	68.675	-0.066	0.000%
9	40.394	-51.506	0.066	-40.394	51.506	-0.066	0.000%
10	34.452	-68.675	20.070	-34.452	68.675	-20.070	0.000%
11	34.452	-51.506	20.070	-34.452	51.506	-20.070	0.000%
12	18.037	-68.675	31.435	-18.037	68.675	-31.435	0.000%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
13	18.037	-51.506	31.435	-18.037	51.506	-31.435	0.000%
14	0.044	-68.675	36.594	-0.044	68.675	-36.594	0.000%
15	0.044	-51.506	36.594	-0.044	51.506	-36.594	0.000%
16	-19.060	-68.675	33.295	19.060	68.675	-33.295	0.000%
17	-19.060	-51.506	33.295	19.060	51.506	-33.295	0.000%
18	-36.241	-68.675	21.052	36.241	68.675	-21.052	0.000%
19	-36.241	-51.506	21.052	36.241	51.506	-21.052	0.000%
20	-40.394	-68.675	-0.021	40.394	68.675	0.021	0.000%
21	-40.394	-51.506	-0.021	40.394	51.506	0.021	0.000%
22	-32.942	-68.675	-19.254	32.942	68.675	19.254	0.000%
23	-32.942	-51.506	-19.254	32.942	51.506	19.254	0.000%
24	-18.049	-68.675	-31.486	18.049	68.675	31.486	0.000%
25	-18.049	-51.506	-31.486	18.049	51.506	31.486	0.000%
26	0.000	-122.954	0.000	-0.000	122.954	-0.000	0.000%
27	-0.011	-122.954	-10.591	0.011	122.954	10.591	0.000%
28	5.407	-122.954	-9.444	-5.407	122.954	9.444	0.000%
29	9.835	-122.954	-5.723	-9.835	122.954	5.723	0.000%
30	11.494	-122.954	0.015	-11.494	122.954	-0.015	0.000%
31	9.625	-122.954	5.602	-9.625	122.954	-5.602	0.000%
32	5.182	-122.954	9.026	-5.182	122.954	-9.026	0.000%
33	0.011	-122.954	10.290	-0.011	122.954	-10.290	0.000%
34	-5.404	-122.954	9.433	5.404	122.954	-9.433	0.000%
35	-10.091	-122.954	5.859	10.091	122.954	-5.859	0.000%
36	-11.494	-122.954	-0.006	11.494	122.954	0.006	0.000%
37	-9.370	-122.954	-5.466	9.370	122.954	5.466	0.000%
38	-5.184	-122.954	-9.037	5.184	122.954	9.037	0.000%
39	-0.012	-57.229	-10.943	0.012	57.229	10.943	0.000%
40	5.439	-57.229	-9.509	-5.439	57.229	9.509	0.000%
41	9.899	-57.229	-5.767	-9.899	57.229	5.767	0.000%
42	11.512	-57.229	0.019	-11.512	57.229	-0.019	0.000%
43	9.820	-57.229	5.720	-9.820	57.229	-5.720	0.000%
44	5.148	-57.229	8.971	-5.148	57.229	-8.971	0.000%
45	0.012	-57.229	10.442	-0.012	57.229	-10.442	0.000%
46	-5.436	-57.229	9.495	5.436	57.229	-9.495	0.000%
47	-10.324	-57.229	5.997	10.324	57.229	-5.997	0.000%
48	-11.512	-57.229	-0.006	11.512	57.229	0.006	0.000%
49	-9.395	-57.229	-5.490	9.395	57.229	5.490	0.000%
50	-5.151	-57.229	-8.985	5.151	57.229	8.985	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	180 - 168	4.923	42	0.263	0.028
T2	168 - 160	4.263	42	0.260	0.028
T3	160 - 140	3.831	42	0.249	0.028
T4	140 - 120	2.836	42	0.209	0.024
T5	120 - 100	2.016	42	0.167	0.020
T6	100 - 80	1.370	42	0.128	0.016
T7	80 - 60	0.867	47	0.099	0.011
T8	60 - 40	0.482	47	0.072	0.008
T9	40 - 20	0.216	47	0.045	0.005
T10	20 - 0	0.061	47	0.018	0.002

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
178.000	PD10017	42	4.812	0.263	0.028	402340
170.000	MX08FRO665-21 w/ Mount Pipe	42	4.373	0.262	0.028	188266

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
163.000	(2) JAHH-65B-R3B w/ Mount Pipe	42	3.992	0.254	0.028	56099
154.000	7770.00 w/ Mount Pipe	42	3.517	0.238	0.027	34043
145.000	800 EXTERNAL NOTCH FILTER	42	3.070	0.219	0.025	27925
143.000	AIR 6419 B41_TMO w/ Mount Pipe	42	2.975	0.215	0.025	26883
124.000	DS7C09P36UxD w/ Mount Pipe	42	2.165	0.176	0.020	26211
115.000	VHLP3-11W	42	1.839	0.157	0.019	28090
104.000	220-3BN	42	1.487	0.135	0.017	32618
93.000	APXVAARR24_43-U-NA20	42	1.179	0.117	0.014	37008
62.000	GPS_A	47	0.515	0.075	0.008	39480
60.000	(2) 3'x8" Knife Plate	47	0.482	0.072	0.008	39414
42.000	GPS_A	47	0.238	0.048	0.005	43285
31.000	GPS_A	47	0.133	0.032	0.004	42992
20.000	(2) 3'x8" Knife Plate	47	0.061	0.018	0.002	43864

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	180 - 168	17.435	19	0.922	0.100
T2	168 - 160	15.118	19	0.912	0.101
T3	160 - 140	13.594	19	0.875	0.100
T4	140 - 120	10.081	19	0.737	0.086
T5	120 - 100	7.174	19	0.593	0.069
T6	100 - 80	4.881	19	0.453	0.056
T7	80 - 60	3.087	19	0.350	0.040
T8	60 - 40	1.716	19	0.256	0.027
T9	40 - 20	0.767	19	0.160	0.018
T10	20 - 0	0.216	19	0.063	0.009

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
178.000	PD10017	19	17.048	0.922	0.100	126756
170.000	MX08FRO665-21 w/ Mount Pipe	19	15.502	0.917	0.101	58905
163.000	(2) JAHH-65B-R3B w/ Mount Pipe	19	14.161	0.892	0.101	16720
154.000	7770.00 w/ Mount Pipe	19	12.488	0.837	0.098	9936
145.000	800 EXTERNAL NOTCH FILTER	19	10.909	0.774	0.090	8039
143.000	AIR 6419 B41_TMO w/ Mount Pipe	19	10.573	0.759	0.089	7721
124.000	DS7C09P36UxD w/ Mount Pipe	19	7.704	0.622	0.072	7487
115.000	VHLP3-11W	19	6.547	0.556	0.066	8002
104.000	220-3BN	19	5.296	0.479	0.059	9254
93.000	APXVAARR24_43-U-NA20	19	4.202	0.414	0.051	10468
62.000	GPS_A	19	1.834	0.266	0.028	11093
60.000	(2) 3'x8" Knife Plate	19	1.716	0.256	0.027	11075
42.000	GPS_A	19	0.844	0.170	0.019	12245
31.000	GPS_A	19	0.470	0.114	0.014	12154
20.000	(2) 3'x8" Knife Plate	19	0.216	0.063	0.009	12378

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	180	Diagonal	A325N	0.625	1	0.739	7.875	0.094	1.05	Member Block Shear
		Top Girt	A325N	0.625	1	0.158	7.875	0.020	1.05	Member Block Shear
T2	168	Leg	A325N	0.625	4	1.984	20.340	0.098	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	2.349	7.875	0.298	1.05	Member Block Shear
T3	160	Leg	A325N	0.625	4	9.718	20.340	0.478	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	4.071	7.875	0.517	1.05	Member Block Shear
T4	140	Leg	A325N	0.750	4	17.587	30.101	0.584	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	5.010	7.875	0.636	1.05	Member Block Shear
T5	120	Leg	A325N	0.750	4	24.583	30.101	0.817	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	4.825	9.914	0.487	1.05	Member Block Shear
T6	100	Leg	A490N	0.875	4	30.987	51.945	0.597	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	5.668	9.914	0.572	1.05	Member Block Shear
T7	80	Leg	A325N	0.875	4	36.813	41.556	0.886	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	6.614	10.934	0.605	1.05	Member Block Shear
T8	60	Leg	A325N	1.000	4	42.816	54.517	0.785	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	7.051	13.806	0.511	1.05	Bolt Shear
T9	40	Leg	A325N	1.000	4	48.303	54.517	0.886	1.05	Bolt Tension
		Diagonal	A325N	0.625	1	8.119	13.806	0.588	1.05	Bolt Shear
		Secondary Horizontal	A325N	0.500	1	4.022	8.836	0.455	1.05	Bolt Shear
T10	20	Diagonal	A325N	0.625	1	8.336	13.806	0.604	1.05	Bolt Shear

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	180 - 168	P2x0.154	12.000	4.000	61.0 K=1.00	1.075	-3.660	27.981	0.131 [1]
T2	168 - 160	P2x0.154 (GR)	8.000	4.000	61.0 K=1.00	1.075	-12.688	38.430	0.330 [1]
T3	160 - 140	P3x0.216 (GR)	20.033	5.008	51.7 K=1.00	2.228	-51.055	87.013	0.587 [1]
T4	140 - 120	P3.5x.318 (GR)	20.033	6.678	61.3 K=1.00	3.678	-86.377	122.133	0.707 [1]
T5	120 - 100	P4x.337 (GR)	20.033	6.678	54.3 K=1.00	4.407	-118.129	157.190	0.752 [1]
T6	100 - 80	P5x0.375 (GR)	20.033	6.678	43.6 K=1.00	6.111	-149.746	242.262	0.618 [1]
T7	80 - 60	P6x0.432	20.033	10.017	54.8 K=1.00	8.405	-176.638	227.081	0.778 [1]
T8	60 - 40	P6x0.432	20.033	10.017	54.8 K=1.00	8.405	-205.107	227.081	0.903 [1]
T9	40 - 20	P6x0.432	20.033	5.151	28.2 K=1.00	8.405	-231.932	254.222	0.912 [1]
T10	20 - 0	P8x.5	20.033	10.017	41.8 K=1.00	12.763	-259.410	367.690	0.706 [1]

[1] P_u / ϕP_n controls

Diagonal Design Data (Compression)

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	180 - 168	L2x1 1/2x3/16	5.657	2.543	101.1 K=1.07	0.621	-0.827	15.177	0.054 [1]
T2	168 - 160	L2x1 1/2x3/16	5.657	2.543	101.1 K=1.07	0.621	-2.474	15.177	0.163 [1]
T3	160 - 140	L2x1 1/2x3/16	7.621	3.637	135.6 K=1.00	0.621	-4.165	9.673	0.431 [1]
T4	140 - 120	L2x2x3/16	10.162	4.935	150.3 K=1.00	0.715	-4.656	9.058	0.514 [1]
T5	120 - 100	L2 1/2x2x3/16	11.744	5.701	160.2 K=1.00	0.809	-4.877	9.021	0.541 [1]
T6	100 - 80	L2 1/2x2 1/2x3/16	13.438	6.498	157.5 K=1.00	0.902	-5.630	10.402	0.541 [1]
T7	80 - 60	L3x3x3/16	16.803	8.223	165.6 K=1.00	1.090	-6.657	11.381	0.585 [1]
T8	60 - 40	L3 1/2x3x1/4	18.448	9.047	172.1 K=1.00	1.560	-7.051	15.083	0.467 [1]
T9	40 - 20	L3 1/2x3x1/4	20.158	9.903	188.3 K=1.00	1.560	-8.119	12.589	0.645 [1]
T10	20 - 0	L3 1/2x3 /12x1/4	21.916	10.835	187.5 K=1.00	1.688	-8.336	13.745	0.607 [1]

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Compression)

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	
T9	40 - 20	L3 1/2x3 1/2x1/4	17.486	16.642	183.2 K=1.00	1.690	-4.022	14.410	0.279 [1]

[1] P_u / ϕP_n controls

Top Girt Design Data (Compression)

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	180 - 168	L2x1 1/2x3/16	4.000	3.510	130.8 K=1.00	0.621	-0.122	10.385	0.012 [1]

[1] P_u / ϕP_n controls

Tension Checks

Leg 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	180 - 168	P2x0.154	12.000	4.000	61.0	1.075	1.608	33.848	0.048 [1]
T2	168 - 160	P2x0.154 (GR)	8.000	4.000	61.0	1.075	7.937	33.848	0.234 [1]
T3	160 - 140	P3x0.216 (GR)	20.033	5.008	51.7	2.228	38.872	70.197	0.554 [1]
T4	140 - 120	P3.5x.318 (GR)	20.033	6.678	61.3	3.678	70.348	115.870	0.607 [1]
T5	120 - 100	P4x.337 (GR)	20.033	6.678	54.3	4.407	98.330	138.834	0.708 [1]
T6	100 - 80	P5x0.375 (GR)	20.033	6.678	43.6	6.111	123.947	192.508	0.644 [1]
T7	80 - 60	P6x0.432	20.033	10.017	54.8	8.405	147.251	264.756	0.556 [1]
T8	60 - 40	P6x0.432	20.033	10.017	54.8	8.405	171.263	264.756	0.647 [1]
T9	40 - 20	P6x0.432	20.033	4.865	26.6	8.405	193.412	264.756	0.731 [1]
T10	20 - 0	P8x.5	20.033	10.017	41.8	12.763	215.171	402.026	0.535 [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	180 - 168	L2x1 1/2x3/16	5.657	2.543	73.4	0.360	0.739	15.675	0.047 [1]
T2	168 - 160	L2x1 1/2x3/16	5.657	2.543	73.4	0.360	2.349	15.675	0.150 [1]
T3	160 - 140	L2x1 1/2x3/16	7.621	3.637	103.3	0.360	4.071	15.675	0.260 [1]
T4	140 - 120	L2x2x3/16	9.197	4.474	89.9	0.431	5.010	18.739	0.267 [1]
T5	120 - 100	L2 1/2x2x3/16	11.744	5.701	117.0	0.501	4.825	21.806	0.221 [1]
T6	100 - 80	L2 1/2x2 1/2x3/16	13.438	6.498	102.5	0.571	5.668	24.840	0.228 [1]
T7	80 - 60	L3x3x3/16	16.803	8.223	107.0	0.712	6.614	30.973	0.214 [1]
T8	60 - 40	L3 1/2x3x1/4	18.448	9.047	120.8	1.029	6.987	44.778	0.156 [1]
T9	40 - 20	L3 1/2x3x1/4	20.158	9.903	132.1	1.029	7.289	44.778	0.163 [1]
T10	20 - 0	L3 1/2x3 /12x1/4	21.916	10.835	119.1	1.125	7.773	48.938	0.159 [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	
T9	40 - 20	L3 1/2x3 1/2x1/4	17.486	16.642	186.4	1.150	4.022	50.039	0.080 [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	180 - 168	L2x1 1/2x3/16	4.000	3.510	103.8	0.360	0.158	15.675	0.010 [1]

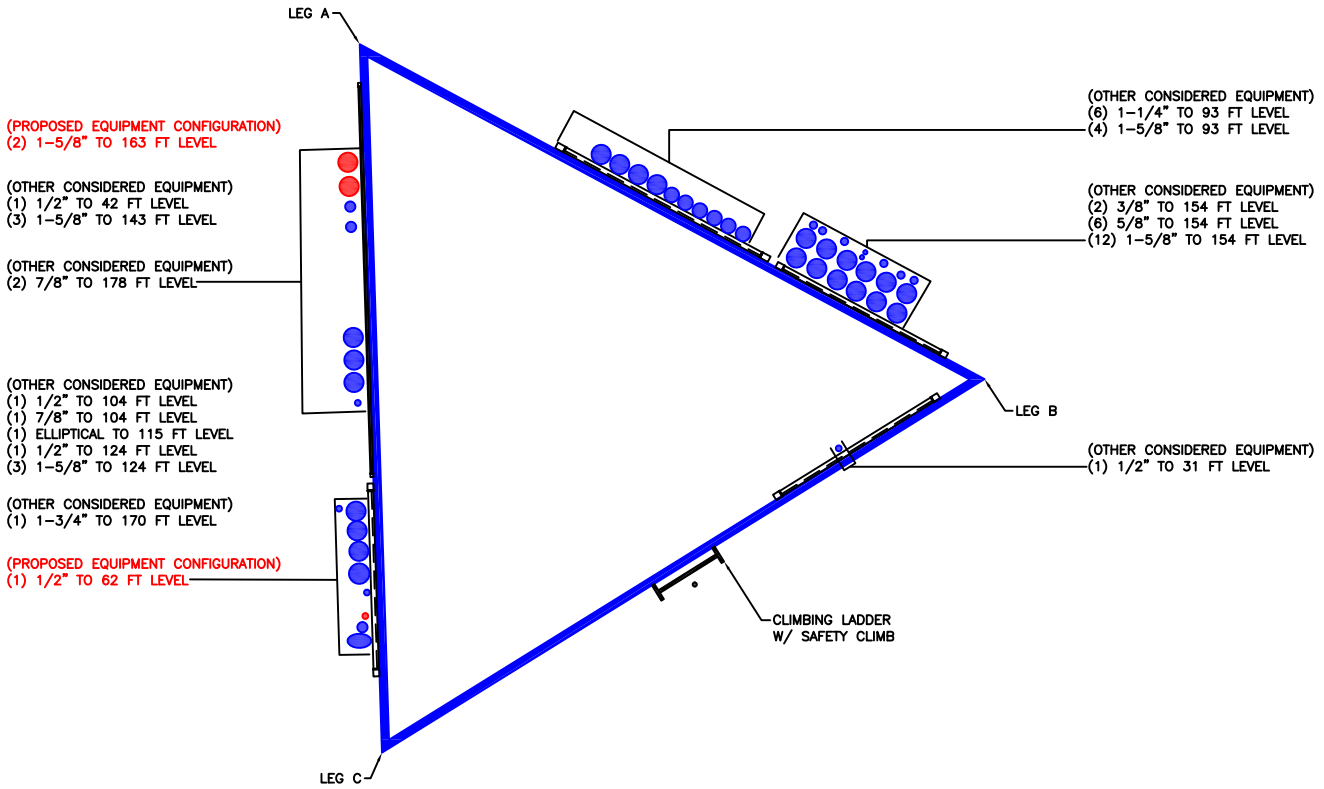
[1] P_u / ϕP_n controls

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	180 - 168	Leg	P2x0.154	2	-3.660	29.380	12.5	Pass
T2	168 - 160	Leg	P2x0.154 (GR)	26	-12.688	40.351	31.4	Pass
T3	160 - 140	Leg	P3x0.216 (GR)	41	-51.055	91.364	55.9	Pass
T4	140 - 120	Leg	P3.5x.318 (GR)	68	-86.377	128.240	67.4	Pass
T5	120 - 100	Leg	P4x.337 (GR)	88	-118.129	165.049	71.6	Pass
T6	100 - 80	Leg	P5x0.375 (GR)	109	123.947	202.133	61.3	Pass
T7	80 - 60	Leg	P6x0.432	130	-176.638	238.435	74.1	Pass
T8	60 - 40	Leg	P6x0.432	145	-205.107	238.435	86.0	Pass
T9	40 - 20	Leg	P6x0.432	160	-231.932	266.933	86.9	Pass
T10	20 - 0	Leg	P8x.5	181	-259.410	386.074	67.2	Pass
T1	180 - 168	Diagonal	L2x1 1/2x3/16	9	-0.827	15.935	5.2	Pass
T2	168 - 160	Diagonal	L2x1 1/2x3/16	30	-2.474	15.935	15.5	Pass
T3	160 - 140	Diagonal	L2x1 1/2x3/16	43	-4.165	10.157	41.0	Pass
T4	140 - 120	Diagonal	L2x2x3/16	70	-4.656	9.511	49.0	Pass
T5	120 - 100	Diagonal	L2 1/2x2x3/16	91	-4.877	9.472	51.5	Pass
T6	100 - 80	Diagonal	L2 1/2x2 1/2x3/16	112	-5.630	10.923	51.5	Pass
T7	80 - 60	Diagonal	L3x3x3/16	133	-6.657	11.950	55.7	Pass
T8	60 - 40	Diagonal	L3 1/2x3x1/4	148	-7.051	15.837	44.5	Pass
T9	40 - 20	Diagonal	L3 1/2x3x1/4	163	-8.119	13.218	61.4	Pass
T10	20 - 0	Diagonal	L3 1/2x3 /12x1/4	184	-8.336	14.432	57.8	Pass
T9	40 - 20	Secondary Horizontal	L3 1/2x3 1/2x1/4	171	-4.022	15.131	26.6	Pass
T1	180 - 168	Top Girt	L2x1 1/2x3/16	6	-0.122	10.904	1.1	Pass
						Summary		
						Leg (T9)	86.9	Pass
						Diagonal (T9)	61.4	Pass
						Secondary Horizontal (T9)	26.6	Pass
						Top Girt (T1)	1.1	Pass
						Bolt Checks	84.4	Pass
						RATING =	**86.9**	**Pass**

APPENDIX B

BASE LEVEL DRAWING


LEG A
(PROPOSED EQUIPMENT CONFIGURATION)
(2) 1-5/8" TO 163 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 42 FT LEVEL
(3) 1-5/8" TO 143 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(2) 7/8" TO 178 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 104 FT LEVEL
(1) 7/8" TO 104 FT LEVEL
(1) ELLIPTICAL TO 115 FT LEVEL
(1) 1/2" TO 124 FT LEVEL
(3) 1-5/8" TO 124 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(1) 1-3/4" TO 170 FT LEVEL
(PROPOSED EQUIPMENT CONFIGURATION)
(1) 1/2" TO 62 FT LEVEL
LEG C
(OTHER CONSIDERED EQUIPMENT)
(6) 1-1/4" TO 93 FT LEVEL
(4) 1-5/8" TO 93 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(2) 3/8" TO 154 FT LEVEL
(6) 5/8" TO 154 FT LEVEL
(12) 1-5/8" TO 154 FT LEVEL
LEG B
(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 31 FT LEVEL
CLIMBING LADDER
W/ SAFETY CLIMB

APPENDIX C

ADDITIONAL CALCULATIONS

Self Support Anchor Rod Capacity

Site Info	
BU #	806353
Site Name	BRG 124 943066
Order #	654635 Rev 0

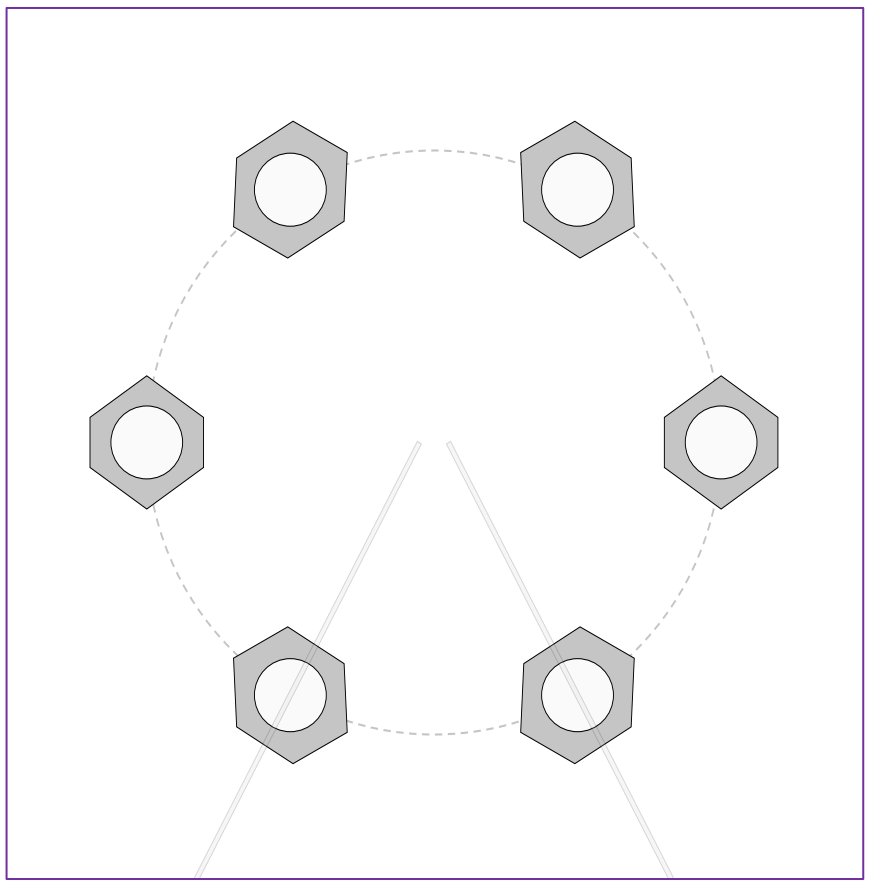
Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	Yes
l_{ar} (in)	2

Applied Loads		
	Comp.	Uplift
Axial Force (kips)	266.20	220.48
Shear Force (kips)	26.90	23.02

**TIA-222-H Section 15.5 Applied*

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

**Anchor Rod Eccentricity Applied*



Connection Properties

Anchor Rod Data

(6) 1-1/2" ø bolts (A36 N; Fy=36 ksi, Fu=58 ksi)

l_{ar} (in): 2

Analysis Results

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

Pu_t = 36.75	ϕPn_t = 61.34	**Stress Rating**
Vu = 3.84	ϕVn = 38.44	**57.1%**
Mu = n/a	ϕMn = n/a	**Pass**

Drilled Pier Foundation

BU # :	806353
Site Name:	BRG 124 943066
Order Number:	654635 Rev 0
TIA-222 Revison:	H
Tower Type:	Self Support

Check Limitation	
Apply TIA-222-H Section 15.5:	☑
N/A	☐
Additional Longitudinal Rebar	
Input Effective Depths (else Actual):	☐
Shear Design Options	
Check Shear along Depth of Pier:	☑
Utilize Shear-Friction Methodology:	☐
Override Critical Depth:	☐

Go to Soil Calculations

Applied Loads	Comp.	Uplift
Moment (kip-ft)	0	0
Axial Force (kips)	266.2	220.48
Shear Force (kips)	26.9	23.02

Material Properties			Rebar 2, Fy Override (ksi)	Rebar 3, Fy Override (ksi)
Concrete Strength, f'c:	3	ksi		
Rebar Strength, Fy:	60	ksi		
Tie Yield Strength, Fyt:	40	ksi		

Pier Design Data		
Depth	13.2	ft
Ext. Above Grade	0.3	ft
Pier Section 1		
From 0.3' above grade to 13.2' below grade		
Pier Diameter	2.5	ft
Rebar Quantity	14	
Rebar Size	8	
Clear Cover to Ties	4	in
Tie Size	4	
Tie Spacing	16	in

Rebar & Pier Options

Embedded Pole Inputs

Belled Pier Inputs

Analysis Results		
Soil Lateral Check	*Compression*	*Uplift*
$D_{v=0}$ (ft from TOC)	7.45	7.45
Soil Safety Factor	8.43	9.85
Max Moment (kip-ft)	173.52	148.49
Rating*	*15.0%*	*12.9%*
Soil Vertical Check	*Compression*	*Uplift*
Skin Friction (kips)	191.24	191.24
End Bearing (kips)	206.28	-
Weight of Concrete (kips)	11.93	8.95
Total Capacity (kips)	397.52	267.34
Axial (kips)	367.66	220.48
Rating*	*88.1%*	*78.5%*
Reinforced Concrete Flexure	*Compression*	*Uplift*
Critical Depth (ft from TOC)	7.46	7.07
Critical Moment (kip-ft)	173.52	147.33
Critical Moment Capacity	505.89	357.68
Rating*	*32.7%*	*39.2%*
Reinforced Concrete Shear	*Compression*	*Uplift*
Critical Depth (ft from TOC)	10.48	10.48
Critical Shear (kip)	57.38	49.11
Critical Shear Capacity	126.50	53.60
Rating*	*43.2%*	*87.3%*

Tie Spacing Requirements Not Met

Structural Foundation Rating*	**87.3%**
Soil Interaction Rating*	**88.1%**

*Rating per TIA-222-H Section 15.5

Soil Profile

Groundwater Depth	N/A	# of Layers	3

Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ_{soil} (pcf)	$\gamma_{concrete}$ (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	5	5	110	150	0	28	0.000	0.000	0.00	0.00			Cohesionless
2	5	6	1	110	150	0	30	0.000	0.000	0.77	0.77			Cohesionless
3	6	13.2	7.2	140	150	8	0	3.600	3.600	4.40	4.40	56.03		Cohesive

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Latitude: 41.238528
Longitude: -73.424139
Elevation: 0 ft (NAVD 88)

Wind

Results:

Wind Speed	116 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	97 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Wed Mar 01 2023

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

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

Seismic

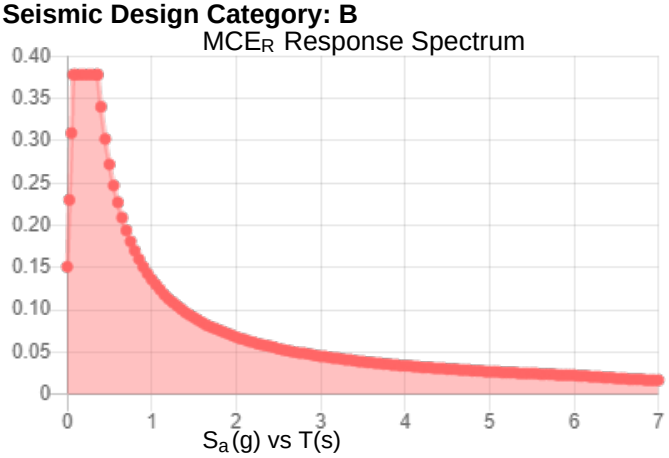
D - Default (see Section 11.4.3)

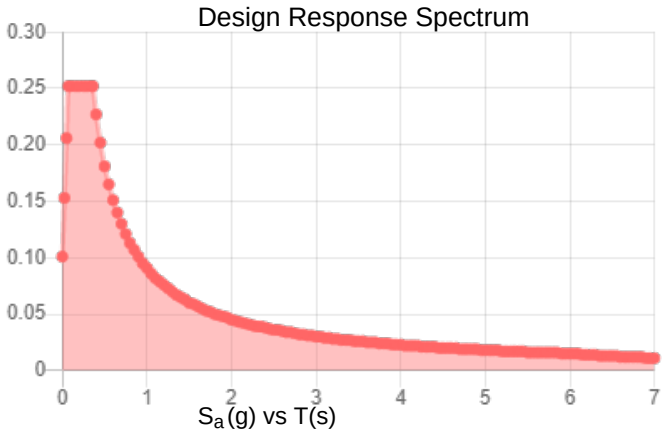
Site Soil Class:

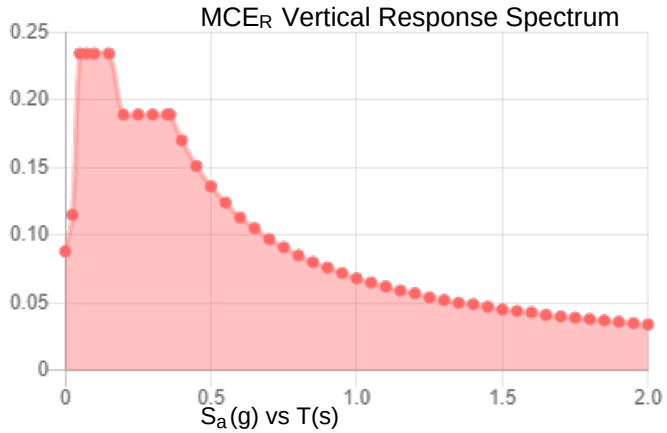
Results:

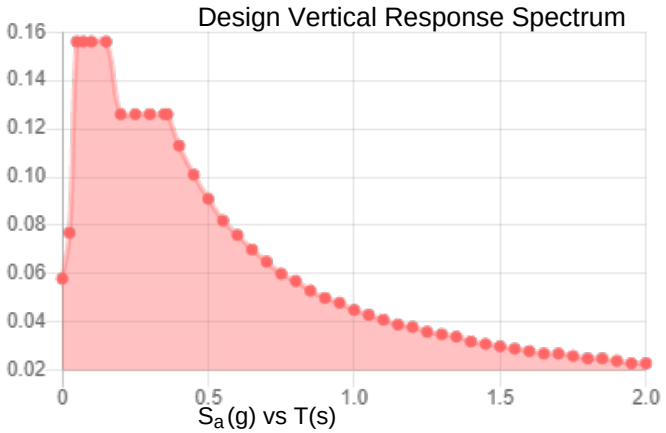
S_S :	0.236	S_{D1} :	0.091
S_1 :	0.057	T_L :	6
F_a :	1.6	PGA :	0.139
F_v :	2.4	PGA_M :	0.211
S_{MS} :	0.378	F_{PGA} :	1.523
S_{M1} :	0.136	I_e :	1
S_{DS} :	0.252	C_v :	0.773

Seismic Design Category: B









Data Accessed: **Wed Mar 01 2023**

Date Source:

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

Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	15 F
Gust Speed	50 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Wed Mar 01 2023

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

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.