STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
	:	
A PETITION FOR A DECLARATORY	:	PETITION NO. ____
RULING ON THE NEED TO OBTAIN A	:	
SITING COUNCIL CERTIFICATE FOR THE	:	
PROPOSED MODIFICATION OF AN	:	
EXISTING WIRELESS	:	
TELECOMMUNICATIONS FACILITY AT	:	
36 HATCHETTS HILL ROAD, OLD LYME, CONNECTICUT	:	MARCH 18, 2022

PETITION FOR A DECLARATORY RULING:
INSTALLATION HAVING NO
SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT

I. Introduction

Pursuant to Sections 16-50j-38 and 16-50j-39 of the Regulations of Connecticut State Agencies ("R.C.S.A."), DISH Wireless, LLC ("DISH") hereby petitions the Connecticut Siting Council (the "Council") for a declaratory ruling ("Petition") that no Certificate of Environmental Compatibility and Public Need ("Certificate") is required under Section 16-50k(a) of the Connecticut General Statutes ("C.G.S.") for the modification of an existing wireless telecommunications facility at 36 Hatchetts Hill Road in Old Lyme, Connecticut (the "Existing Facility").

II. Existing Facility

The Existing Facility is located on an approximately 8.22-acre parcel that is the site of the offices and yard of Pasqualini Construction Inc.. The Facility consists of a 190-foot monopole and associated compound owned by Crown Castle, and currently includes the telecommunications equipment of several wireless carriers. **Attachment 1** contains the owner's authorization permitting DISH to file this Petition. The Facility was originally approved by the Town of Old Lyme on January 14, 1999 as documented in **Attachment 2**.

III. DISH Facility

DISH's proposed facility is illustrated on the plans submitted as **Attachment 3**. DISH proposes the shared use of the Existing Facility to provide FCC licensed services. DISH will install three (3) panel antennas and six (6) remote radiohead units (RRH) on a new platform mount installed at the centerline height of approximately 155' AGL.

DISH has confirmed that the Existing Facility is capable of supporting the addition of DISH's

antennas and tower mounted equipment, as documented in the tower Structural Analysis Report annexed hereto as **Attachment 4**, and once new mounts are installed as documented in the Mount Analysis Report annexed hereto as **Attachment 5**.

DISH's 5' x 7' lease area is located to the North of the tower and adjacent to two existing equipment shelters. In order to fully enclose its ground equipment, DISH will install a 5'- 8" x 9'- 6" fence extension. Within its lease area, DISH will install a 5' x 7' steel platform for its ground equipment, supported by four (4) 12" x 12" footpads at grade.

IV. The Proposed Modification Will Not Have A Substantial Adverse Environmental Effect

1. Physical Environmental Effects

The attachment of DISH's antennas to the existing monopole, and the installation of radio and electrical equipment within the expanded compound will not involve a significant alteration to the physical and environmental characteristics of the Property. No native trees will need to be removed and no on-site or off-site wetlands or watercourses will be impacted by the proposed facility expansion.

2. Visual Effects

Given the height of the existing tower, 190' AGL, which has existing antennas at multiple levels, DISH's proposed antenna installation at a centerline height of approximately 155' AGL would have a minimal visual impact. The proposed compound expansion will impact a small portion of the existing fenced perimeter and will also have a minimal visual impact.

3. FCC Compliance

Radio frequency ("RF") emissions resulting from AT&T's shared use of the Existing Facility will be well below the standards adopted by the Federal Communications Commission ("FCC"). Included in **Attachment 6** is a Radio Frequency Emissions Analysis Report prepared by EBI Consulting. This report confirms that the modified facility will operate well within the RF emission standards established by the FCC.

V. Notice to the City, Property Owner and Abutting Landowners

On March 18, 2022, a copy of this Petition was sent to Timothy C Griswold, First Selectman and Dan Bourret, Land Use Coordinator for the Town of Old Lyme. A notice of DISH's intent to file this Petition was also sent to the owners of land that may be considered to abut the Property. Included in **Attachment 7** is a sample abutter's letter and the list of those abutting landowners who were sent notice.

VI. Conclusion

Based on the information provided above, the Petitioners respectfully requests that the Council issue a determination in the form of a declaratory ruling that the installation of a temporary tower at the Property will not have a substantial adverse environmental effect and does not require the issuance of a Certificate of Environmental Compatibility and Public Need pursuant to § 16-50k of the General Statutes.

Respectfully submitted,

Denise Sabo
Northeast Site Solutions
Agent for AT&T
(860) 209-4690
denise@northeastsitesolutions.com

Attachments

Cc: Timothy C Griswold, First Selectman
Old Lyme Memorial Town Hall
52 Lyme Street
Old Lyme, CT 06371

Dan Bourret, Land Use Coordinator
Old Lyme Memorial Town Hall
52 Lyme Street
Old Lyme, CT 06371

Hatchetts Hill LLC (property owner)
38 Hatchetts Hill Road
Old Lyme, CT 06371

Crown Castle – Tower Owner

ATTACHMENT 1

4545 E River Rd, Suite 320
West Henrietta, NY 14586

Phone: (585) 445-5896
Fax: (724) 416-4461
www.crowncastle.com

Crown Castle Letter of Authorization

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

Re: Tower Share Application
Crown Castle telecommunications site at:
38 HATCHETTS HILL ROAD, OLD LYME, CT 06371

T-MOBILE USA TOWER LLC ("Crown Castle") hereby authorizes DISH Wireless LLC, including their Agent, to act as our Agent in the processing of all zoning applications, building permits and approvals through the CT - CONNECTICUT SITING COUNCIL for the existing wireless communications site described below:

Crown Site ID/Name:	**823529/CT038/EastLyme/ I-95/ X72**
Customer Site ID:	**BOBOS00034A/CT-CCI-T-823529**
Site Address:	**38 Hatchetts Hill Road, Old Lyme, CT 06371**

Crown Castle

By: _____ Date: 11/23/2021

Richard Zajac
Site Acquisition Specialist

36 HATCHETTS HILL RD

Location	36 HATCHETTS HILL RD	**Mblu**	19/ / 22/ /
Acct#	00080000	**Owner**	HATCHETTS HILL LLC
Assessment	$767,600	**Appraisal**	$1,096,500
PID	890	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2019	$449,300	$647,200	$1,096,500

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2019	$314,600	$453,000	$767,600

Owner of Record

Owner	HATCHETTS HILL LLC	**Sale Price**	$0
Co-Owner		**Certificate**	
Address	38 HATCHETTS HILL RD OLD LYME, CT 06371	**Book & Page**	0220/0677
		Sale Date	08/02/1994

Ownership History

Ownership History				
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Sale Date**
HATCHETTS HILL LLC	$0		0220/0677	08/02/1994

Building Information

Building 1 : Section 1

Building Photo

Year Built: 1994
Living Area: 12,060
Replacement Cost: $653,756
Building Percent Good: 64
Replacement Cost Less Depreciation: $418,400

Building Attributes	
Field	**Description**
Style:	Garage
Model	Ind/Comm
Grade	Above Ave
Stories:	2
Occupancy	2.00
Exterior Wall 1	Concr/Cinder
Exterior Wall 2	Vinyl Siding
Roof Structure	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Wall 1	Minim/Masonry
Interior Wall 2	Drywall/Sheet
Interior Floor 1	Concr-Finished
Interior Floor 2	Carpet
Heating Fuel	Oil
Heating Type	Radiant
AC Type	None
Struct Class	
Bldg Use	IND WHSES
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	316I
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	16.00
% Comn Wall	0.00

Building Photo

(http://images.vgsi.com/photos/OldLymeCTPhotos/\00\00\55\40.jpg)

Building Layout

(http://images.vgsi.com/photos/OldLymeCTPhotos//Sketches/890_890.jpg)

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	8,580	8,580
AOF	Office, (Average)	3,480	3,480
		12,060	12,060

Extra Features

Extra Features				Legend
Code	**Description**	**Size**	**Value**	**Bldg #**
GEN	GENERATOR	1.00 UNITS	$0	1

Land

Land Use

Use Code	4010
Description	IND WHSES
Zone	LI80
Neighborhood	IND
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	8.20
Frontage	0
Depth	0
Assessed Value	$453,000
Appraised Value	$647,200

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
PAV2	PAVING-CONC			1296.00 S.F.	$2,700	1
PAV1	PAVING-ASPHALT			8600.00 S.F.	$10,800	1
PLT1	PLTRY HSE 1 ST			192.00 S.F.	$1,000	1
SHP1	WORK SHOP AVE			140.00 S.F.	$2,500	1
SHP1	WORK SHOP AVE			280.00 S.F.	$4,900	1
TNK3	GT-10,000			12000.00 GALS	$9,000	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$449,300	$647,200	$1,096,500
2019	$388,400	$539,300	$927,700
2018	$388,400	$539,300	$927,700

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$314,600	$453,000	$767,600
2019	$271,800	$377,500	$649,300

2018	$271,800	$377,500	$649,300

October 2020

This map (data) is for planning purposes only. It is not intended to be used for description, conveyance, authoritative definition of any legal boundary, or property title. This is not a survey product. The Town of Old Lyme and its mapping contractors assume no legal responsibility for the information contained herein.

AppGeo

Parcel Line
Right of Way
Paper Street
Rail Road
Rivers/Streams
Tie Line
Mapgrid
Easement
Leader
Railroad
Abandoned Railroad
Edge of Paved Area
Edge of Unpaved Area
Edge of Trail
Bridge
Tunnel/Portal
Edge of Drive
Buildings
Structures
Pools
Rivers/Streams
Lakes/Ponds
Swamps

Town of Old Lyme

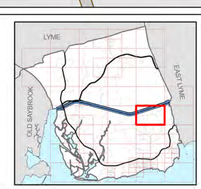
C O N N E C T I C U T

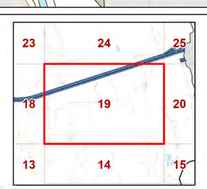
Tax Assessor Map

N W E S

0 200 400 Feet

1 inch = 200 feet





Tax Map Number

19

ATTACHMENT 2

TOWN OF OLD LYME, CONNECTICUT

ZONING COMMISSION
52 Lyme Street
P.O. Box 160
Old Lyme, CT 06371
Tel (860) 434-9174
Fax (860) 434-5636

CERTIFICATE OF DECISION

SPECIAL EXCEPTION

Application of: Omnipoint Communication, Inc. at 36 Hatchetts Hill Road, Old Lyme, CT., Map #19, Lot #22 in a LI-80 zone.

Request for a Special Exception Approval/Site Development Plan Approval for a proposed telecommunications tower. The Public Hearing was held on November 12, 1998.

Commission Members Present and Voting: Jeff Flower, Alan Bayreuther, Connie Kastelowitz, Robert McCarthy and Steven Ross.

Decision on January 14, 1999.

In this application the Commission members voted unanimously to approve the Site Development Plan/Special Exception as shown on the plan dated September 10, 1998 revised through December 9, 1998 with the following conditions:

1. Paragraph 13 be amended in accordance with Attorney Mattern's letter of January 13, 1999.

The Planning Commission concluded that this proposal, as approved, will not adversely affect the public health, safety, welfare or property values of the Town of Old Lyme.

This Certificate of Decision must be recorded in the land records of the Town of Old Lyme, Connecticut. The Town Clerk shall index the same in the grantor's index under the name of the record owner's, and the record owner shall pay the fees for such recording.

Dated at Old Lyme, Connecticut this 28th day of January 1999.

_____, Chairman
Old Lyme Planning Commission

Received for Record 2/19/99 at 1 : 15 m P
Recorded by Eileen K. Coffee A.T.C.
Town Clerk

ATTACHMENT 3

ATTACHMENT 4

DISH Wireless L.L.C. SITE ID:

BOBOS00034A

DISH Wireless L.L.C. SITE ADDRESS:

38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

CONNECTICUT CODE OF COMPLIANCE

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

CODE TYPE	CODE
BUILDING	2018 CT STATE BUILDING CODE/2015 IBC W/ CT AMENDMENTS
MECHANICAL	2018 CT STATE BUILDING CODE/2015 IMC W/ CT AMENDMENTS
ELECTRICAL	2018 CT STATE BUILDING CODE/2017 NEC W/ CT AMENDMENTS

SHEET INDEX

SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

TOWER SCOPE OF WORK:
- INSTALL (3) PROPOSED PANEL ANTENNAS (1 PER SECTOR)
- INSTALL (1) PROPOSED ANTENNA PLATFORM MOUNT
- INSTALL PROPOSED JUMPERS
- INSTALL (6) PROPOSED RRUs (2 PER SECTOR)
- INSTALL (1) PROPOSED OVER VOLTAGE PROTECTION DEVICE (OVP)
- INSTALL (1) PROPOSED HYBRID CABLE

GROUND SCOPE OF WORK:
- PROPOSED 15'-2" L.F. OF CHAIN-LINK COMPOUND EXPANSION FENCE
- INSTALL (1) PROPOSED METAL PLATFORM
- INSTALL (1) PROPOSED ICE BRIDGE
- INSTALL (1) PROPOSED PPC CABINET
- INSTALL (1) PROPOSED EQUIPMENT CABINET
- INSTALL (1) PROPOSED POWER CONDUIT
- INSTALL (1) PROPOSED TELCO CONDUIT
- INSTALL (1) PROPOSED TELCO-FIBER BOX
- INSTALL (1) PROPOSED GPS UNIT
- INSTALL (1) PROPOSED FIBER NID (IF REQUIRED)
- DISH Wireless, L.L.C. TO UTILIZE ABANDONED METROPCS METER SOCKET

SITE PHOTO

UNDERGROUND SERVICE ALERT CBYD 811
UTILITY NOTIFICATION CENTER OF CONNECTICUT
(800) 922-4455
WWW.CBYD.COM
CALL 2 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

SITE INFORMATION

PROPERTY OWNER:	GLOBAL SIGNAL ACQUISITIONS IV, LLC
ADDRESS:	PO BOX 277455 ATLANTA, GA
TOWER TYPE:	MONOPOLE
CROWN CASTLE SITE ID:	823529
CROWN CASTLE APP NUMBER:	553314
COUNTY:	NEW LONDON
LATITUDE (NAD 83):	41° 19' 3.26" N 41.317572°
LONGITUDE (NAD 83):	72° 16' 11.87" W -72.269964°
ZONING JURISDICTION:	CONNECTICUT SITING COUNCIL
ZONING DISTRICT:	LI-80
PARCEL NUMBER:	OLYM-080000-000000
OCCUPANCY GROUP:	U
CONSTRUCTION TYPE:	II-B
POWER COMPANY:	NORTHEAST UTILITIES
TELEPHONE COMPANY:	AT&T

PROJECT DIRECTORY

APPLICANT:	DISH WIRELESS, LLC. 5701 SOUTH SANTA FE DRIVE LITTLETON, CO 80120
TOWER OWNER:	CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317 (877) 486-9377
SITE DESIGNER:	KIMLEY-HORN & ASSOCIATES 3875 EMBASSY PKWY, SUITE 280 AKRON, OH 44333 (216) 505-7771 COA #: PEC.0000738
SITE ACQUISITION:	COURTNEY PRESTON (620) 717-2155
CONSTRUCTION MANAGER:	CHAD WILCOX CHAD.WILCOX@DISH.COM
RF ENGINEER:	ARVIN SEBASTIAN ARVIN.SEBASTIAN@DISH.COM

01/13/22
Exp. 01/31/22

DIRECTIONS

DIRECTIONS FROM TWEED NEW HAVEN AIRPORT:

x GET ON I-95 N IN EAST HAVEN FROM DODGE AVE AND THOMPSON AVE (2.2 MI)
x FOLLOW I-95 N TO 4 MILE RIVER RD IN NEW LONDON COUNTY. TAKE EXIT 71 FROM I-95 N (32.9 MI)
x TAKE HATCHETTS HILL RD TO YOUR DESTINATION (0.8 MI)

VICINITY MAP

NO SCALE

dish wireless.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

Kimley»Horn
COA #: PEC.0000738
421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601

STATE OF CONNECTICUT
BRIAN J. BREWER
29510
LICENSED PROFESSIONAL ENGINEER

DRAWN BY:	CHECKED BY:	APPROVED BY:
SEW	MCK	---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
A	10/26/2021	ISSUED FOR REVIEW
0	11/04/2021	ISSUED FOR CONSTRUCTION
1	01/12/2022	REVISED PER CLIENT

A&E PROJECT NUMBER

KHCLE-17450

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

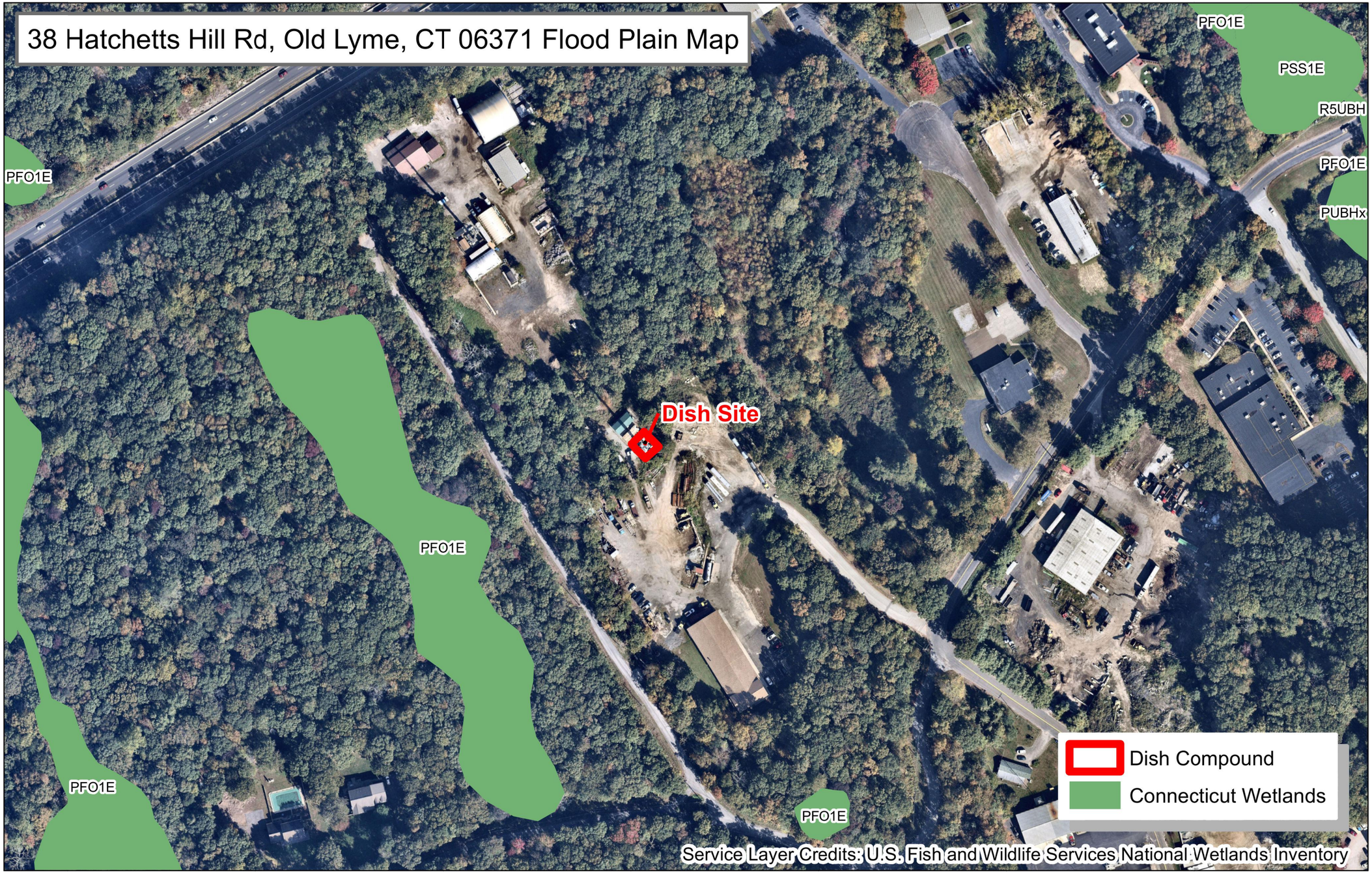
SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

38 Hatchetts Hill Rd, Old Lyme, CT 06371 Flood Plain Map



WETLAND MAP | NO SCALE | 1

DISH Wireless L.L.C. TEMPLATE VERSION 45 – 10/08/2021

dish wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

Kimley»Horn

COA #: PEC.0000738
421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601

01/13/22
Exp. 01/31/22

STATE OF CONNECTICUT
BRIAN J. BREWER
29510
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY:	CHECKED BY:	APPROVED BY:
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BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

WETLAND MAP

SHEET NUMBER

A-1.0

01/13/22
Exp. 01/31/22

PARCEL SITE PLAN

128' 64' 0 128' 256'
1/128"=1'-0"

1

dish wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

Kimley»Horn

COA #: PEC.0000738
421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601

STATE OF CONNECTICUT
BRIAN L. BREWER
29510
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY:	CHECKED BY:	APPROVED BY:
SEW	MCK	---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

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KHCLE-17450

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

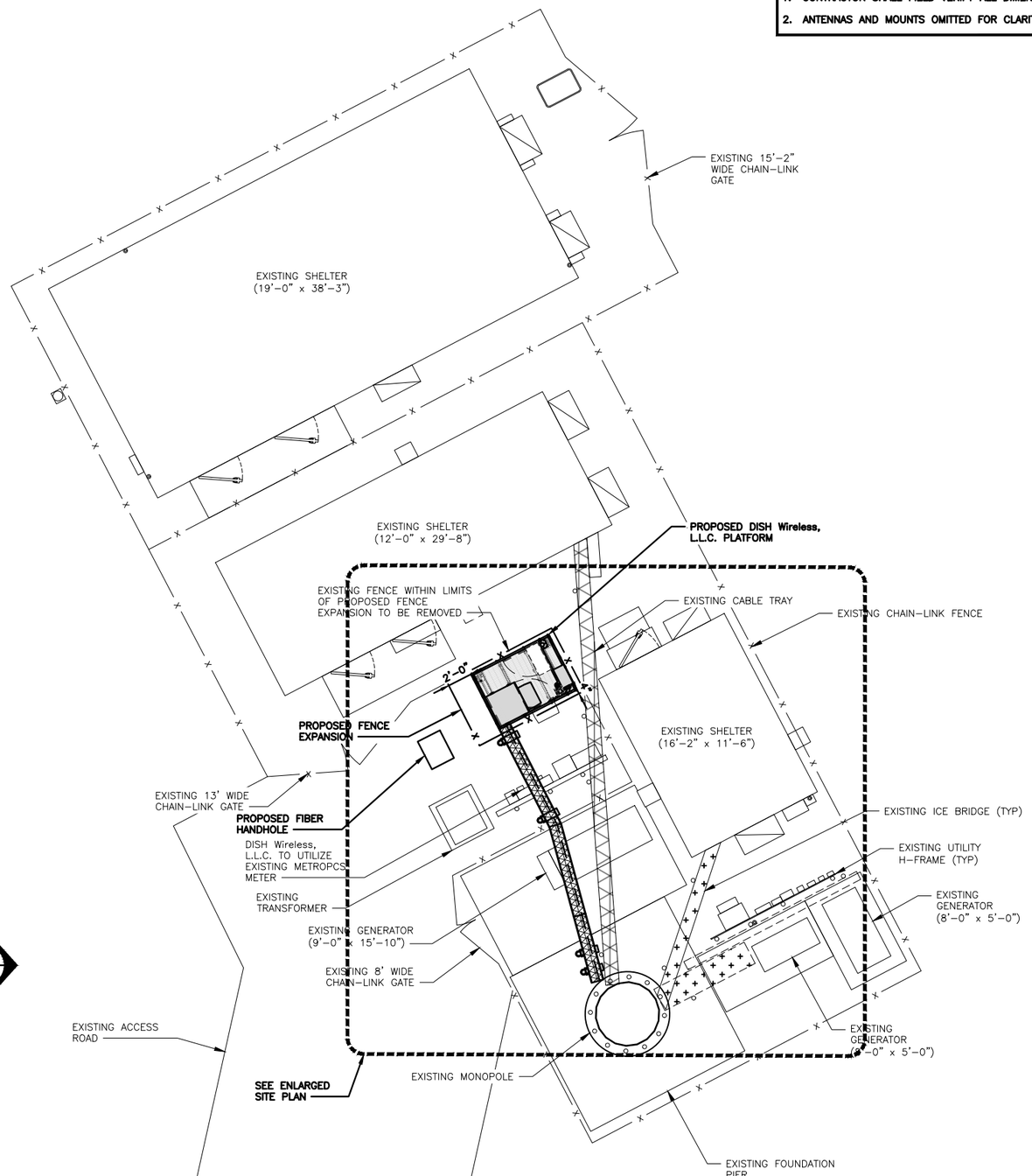
PARCEL
SITE PLAN

SHEET NUMBER

A-1.1

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.



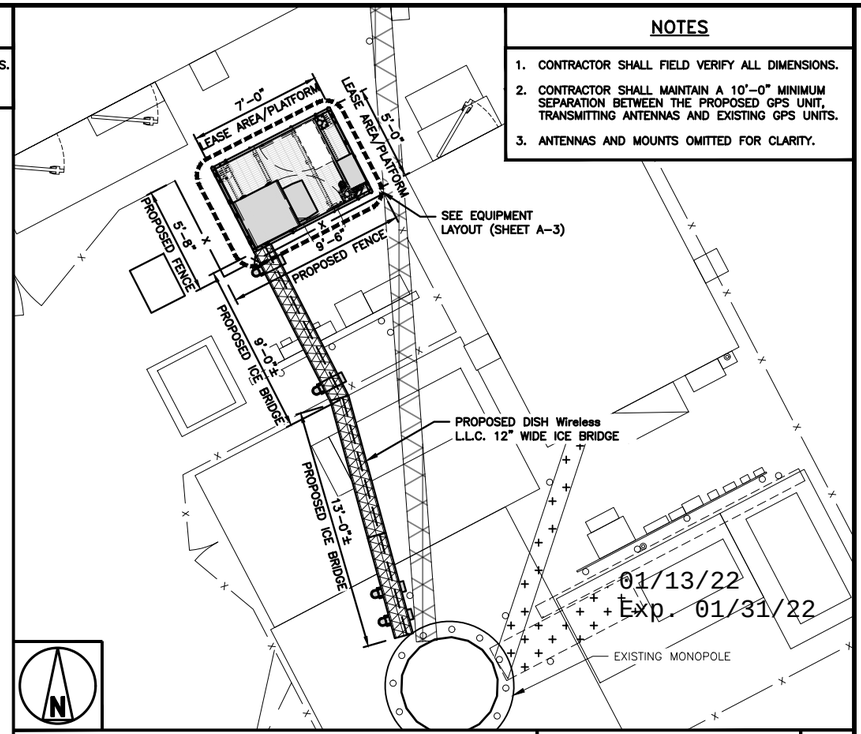
OVERALL SITE PLAN

6' 4' 2' 0 5' 10'
3/16"=1'-0"

1

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. CONTRACTOR SHALL MAINTAIN A 10'-0" MINIMUM SEPARATION BETWEEN THE PROPOSED GPS UNIT, TRANSMITTING ANTENNAS AND EXISTING GPS UNITS.
3. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.



ENLARGED SITE PLAN

4' 2' 0 4' 8'
1/4"=1'-0"

2

OVERALL UTILITY ROUTE PLAN

NO SCALE

3

dish wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

Kimley»Horn

COA #: PEC.0000738
421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601

STATE OF CONNECTICUT
BRIAN J. BREWER
29510
LICENSED PROFESSIONAL ENGINEER

01/13/22
Exp. 01/31/22

DRAWN BY:	CHECKED BY:	APPROVED BY:
SEW	MCK	---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

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A&E PROJECT NUMBER

KHCLE-17450

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

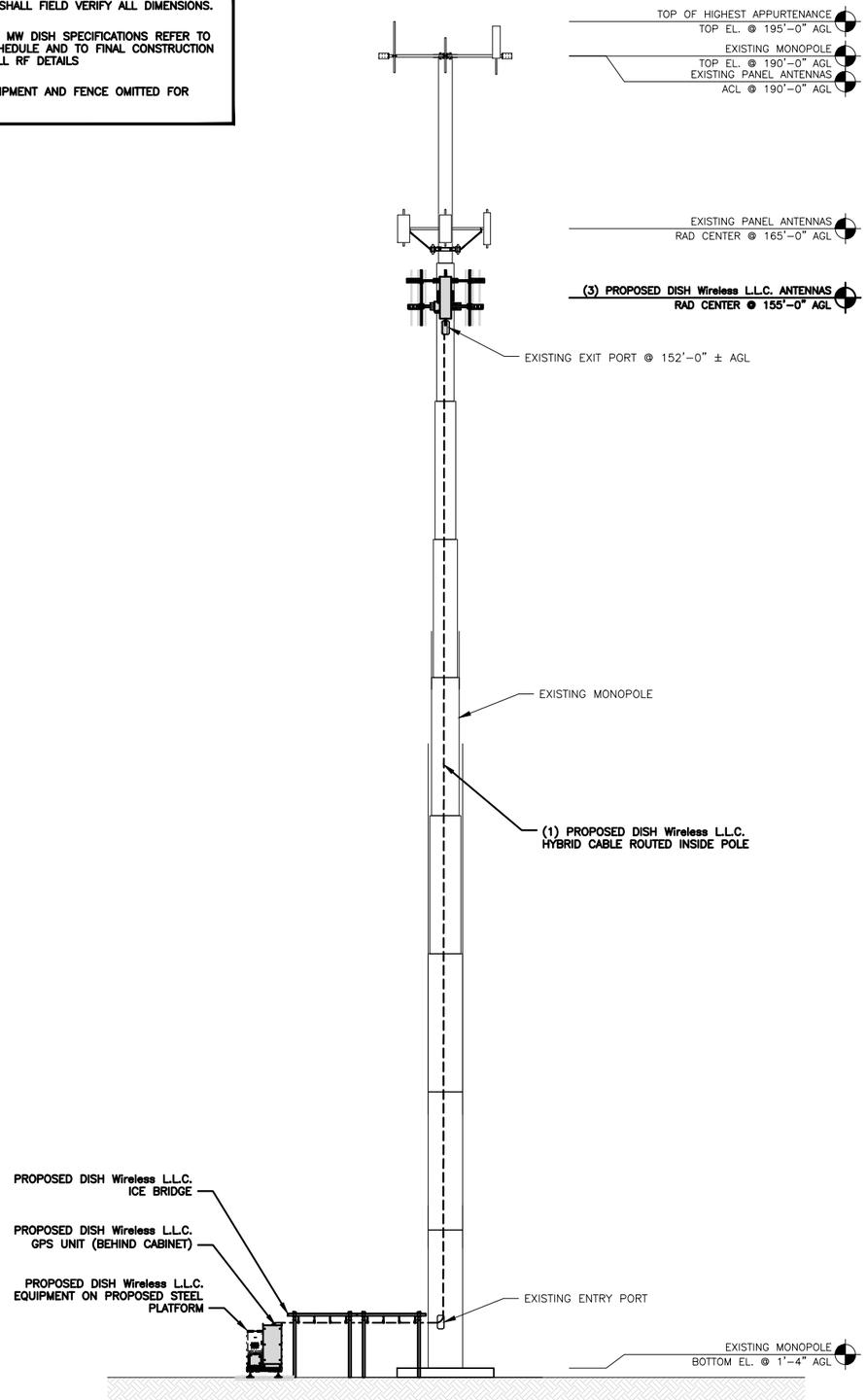
OVERALL AND ENLARGED SITE PLAN

SHEET NUMBER

A-1.2

NOTES

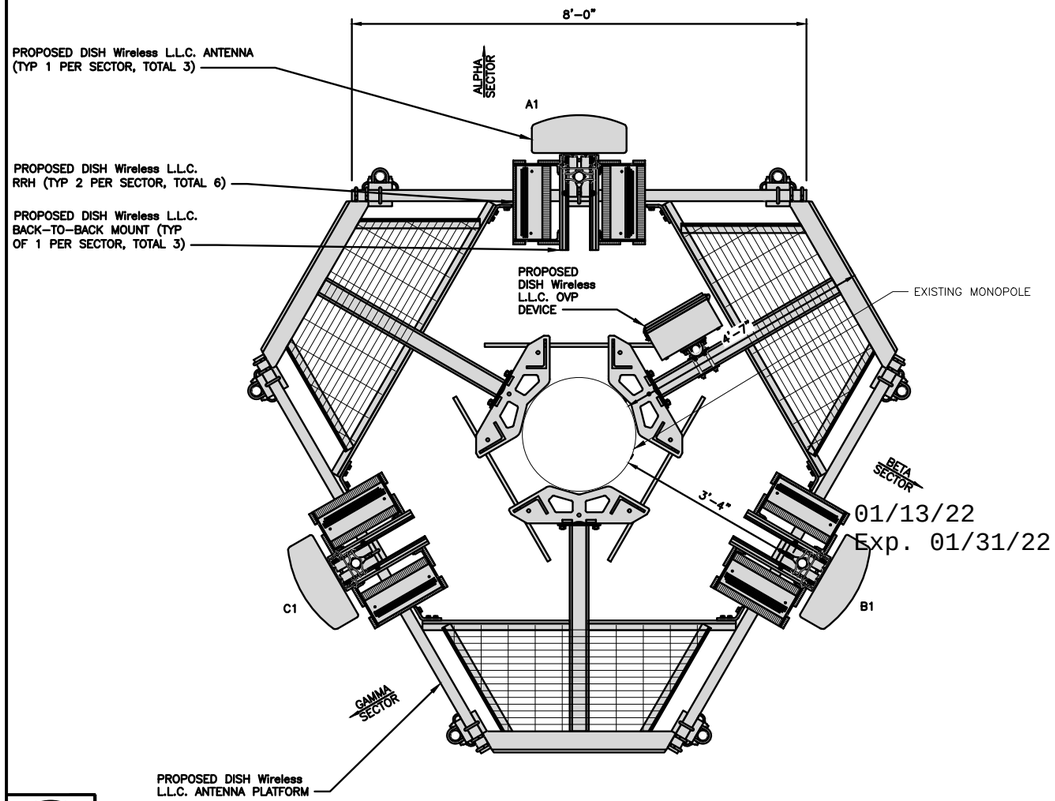
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ANTENNA AND MW DISH SPECIFICATIONS REFER TO ANTENNA SCHEDULE AND TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS
3. EXISTING EQUIPMENT AND FENCE OMITTED FOR CLARITY.



PROPOSED WEST ELEVATION

6' 4' 2' 0 5' 10'
3/16"=1'-0"

1



ANTENNA LAYOUT

12" 6" 0 1' 2' 3'
3/4"=1'-0"

2

SECTOR	POSITION	ANTENNA						TRANSMISSION CABLE
		EXISTING OR PROPOSED	MANUFACTURER – MODEL NUMBER	TECHNOLOGY	SIZE (HxW)	AZIMUTH	RAD CENTER	FEED LINE TYPE AND LENGTH
ALPHA	A1	PROPOSED	JMA – MX08FRO665-21	5G	72.0" x 20.0"	0°	155'-0"	(1) HIGH-CAPACITY HYBRID CABLE (200'-0" LONG)
BETA	B1	PROPOSED	JMA – MX08FRO665-21	5G	72.0" x 20.0"	120°	155'-0"	
GAMMA	C1	PROPOSED	JMA – MX08FRO665-21	5G	72.0" x 20.0"	240°	155'-0"	

SECTOR	POSITION	RRH	
		MANUFACTURER – MODEL NUMBER	TECHNOLOGY
ALPHA	A1	FUJITSU – TA08025-B604	5G
	A1	FUJITSU – TA08025-B605	5G
BETA	B1	FUJITSU – TA08025-B604	5G
	B1	FUJITSU – TA08025-B605	5G
GAMMA	C1	FUJITSU – TA08025-B604	5G
	C1	FUJITSU – TA08025-B605	5G

NOTES

1. CONTRACTOR TO REFER TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS.
2. ANTENNA AND RRH MODELS MAY CHANGE DUE TO EQUIPMENT AVAILABILITY. ALL EQUIPMENT CHANGES MUST BE APPROVED AND REMAIN IN COMPLIANCE WITH THE PROPOSED DESIGN AND STRUCTURAL ANALYSES.

ANTENNA SCHEDULE

NO SCALE

3

dish wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

Kimley»Horn

COA #: PEC.0000738
421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601

STATE OF CONNECTICUT
BRIAN J. BREWER
29510
LICENSED PROFESSIONAL ENGINEER

01/13/22
Exp. 01/31/22

DRAWN BY:	CHECKED BY:	APPROVED BY:
SEW	MCK	---

RFDS REV #: ---

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A&E PROJECT NUMBER

KHCLE-17450

DISH Wireless L.L.C.
PROJECT INFORMATION

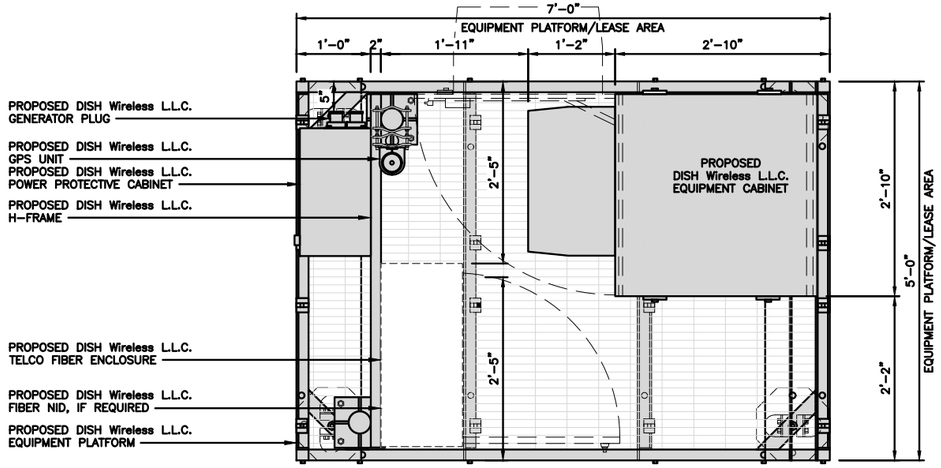
BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

ELEVATION, ANTENNA LAYOUT AND SCHEDULE

SHEET NUMBER

A-2



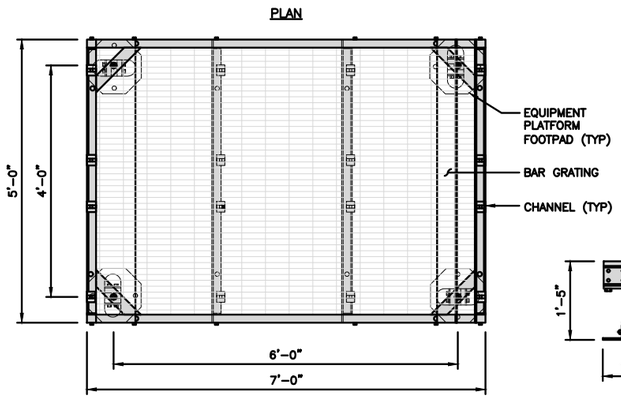
PLATFORM EQUIPMENT PLAN

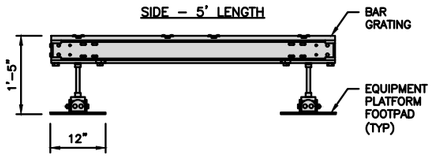
12" 9" 6" 3" 0 1' 2'
1"=1'-0"

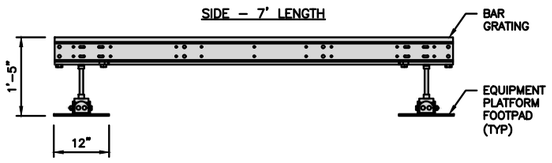
1

COMMSCOPE MTC4045LP 5X7 PLATFORM	
DIMENSIONS (HxWxD)	16"x84"x60"
TOTAL WEIGHT	423 LBS

NOTE:
1. GC TO PROVIDE EXTENDED THREAD FOR PLATFORM IF REQUIRED HEIGHT EXCEEDS 17"
2. PLATFORM TO BE LEVEL WITHIN 1"

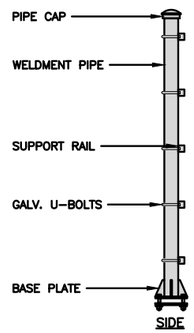


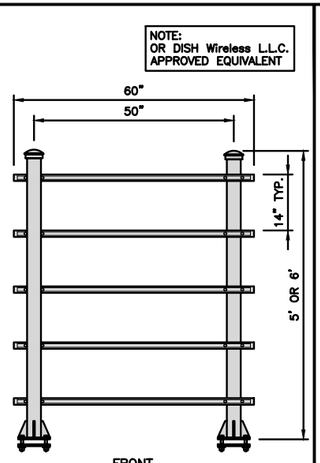




PLATFORM DETAIL | NO SCALE | 2

COMMSCOPE MTC4045HFLD H-FRAME	
UNISTRUT/SUPPORT RAILS QTY	5
WEIGHT	59.74 lbs



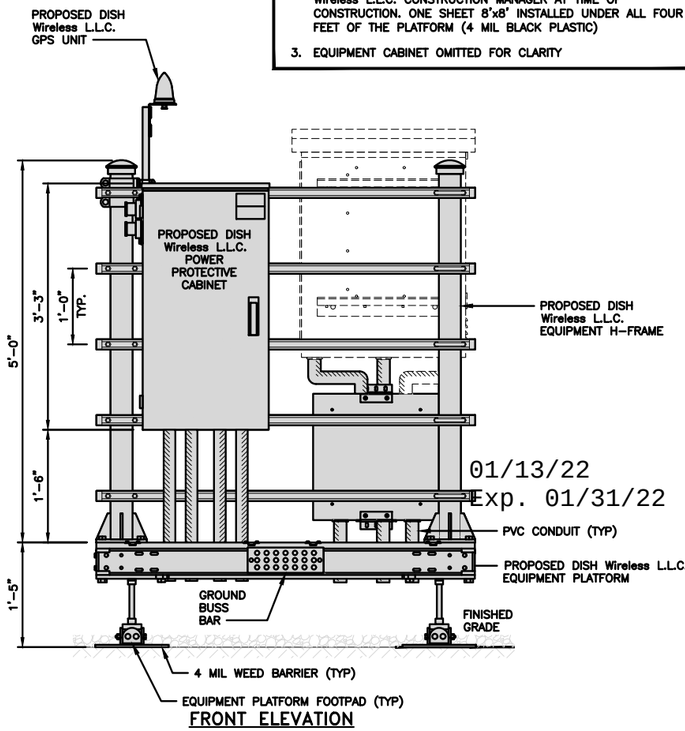


H-FRAME DETAIL | NO SCALE | 3

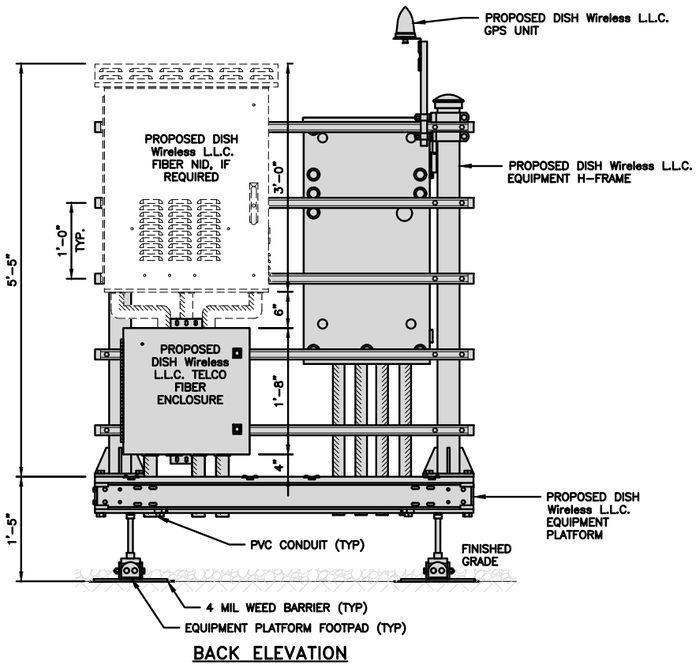
NOT USED | NO SCALE | 4

NOTES

1. CONTRACTOR TO BURY PLATFORM FEET WITH A MINIMUM OF 2" OF FILL PER EXISTING SITE SURFACE
2. WEED BARRIER FABRIC TO BE ADDED AT DISCRETION OF DISH Wireless L.L.C. CONSTRUCTION MANAGER AT TIME OF CONSTRUCTION. ONE SHEET 8'x8' INSTALLED UNDER ALL FOUR FEET OF THE PLATFORM (4 MIL BLACK PLASTIC)
3. EQUIPMENT CABINET OMITTED FOR CLARITY



FRONT ELEVATION



BACK ELEVATION

H-FRAME EQUIPMENT ELEVATION

12" 9" 6" 3" 0 1' 2'
1"=1'-0"

5

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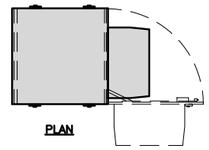
KHCLE-17450

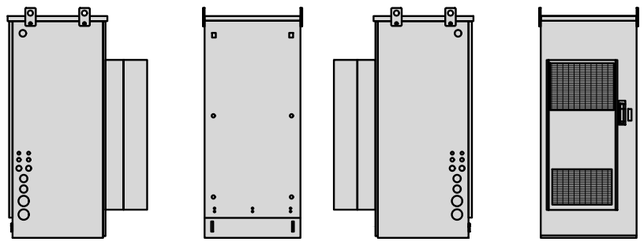
DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE
EQUIPMENT PLATFORM AND H-FRAME DETAILS

SHEET NUMBER
A-3

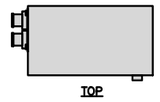
CHARLES INDUSTRY HEX CUBE–PM639155N4	
DIMENSIONS (HxWxD):	74"x32"x32"
POWER PLANT:	–48VDC ABB/600W
TOTAL WEIGHT (EMPTY)	408 LBS

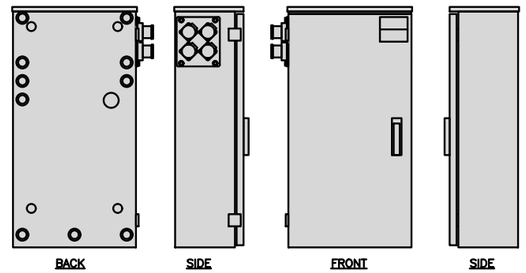




CABINET DETAIL | NO SCALE | 1

RAYCAP PPC RDIAC–2465–P–240–MTS	
ENCLOSURE DIMENSIONS (HxWxD):	39"x22.855"x12.593
WEIGHT:	80 lbs
OPERATING AC VOLTAGE	240/120 1 PHASE 3W+G

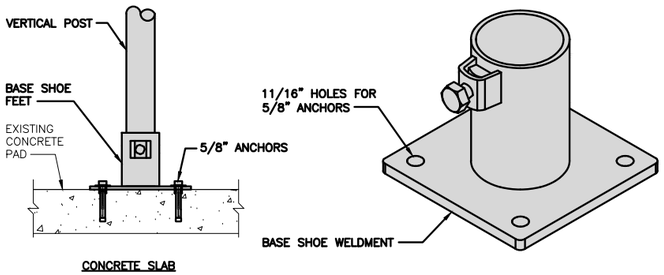




POWER PROTECTION CABINET (PPC) DETAIL | NO SCALE | 2

NOT USED | NO SCALE | 3

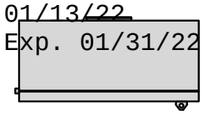
SITEPRO1 BSF35 BASE SHOE FEET	
DIMENSIONS (HxWxL)	8"x8"x1/2"
WEIGHT	15.0 LBS
POST SIZE:	2–7/8" OR 3–1/2"

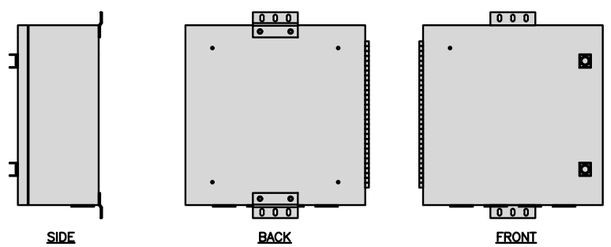


ICE BRIDGE PIPE MOUNT DETAIL | NO SCALE | 4

NOT USED | NO SCALE | 5

CHARLES CFIT–PF2020DSH1 FIBER TELCO ENCLOSURE	
ENCLOSURE DIMS (HxWxD)	20"x20"x9"
ENCLOSURE WEIGHT	20 lbs
MOUNTING	WALL
COMPLIANCE	TYPE 4

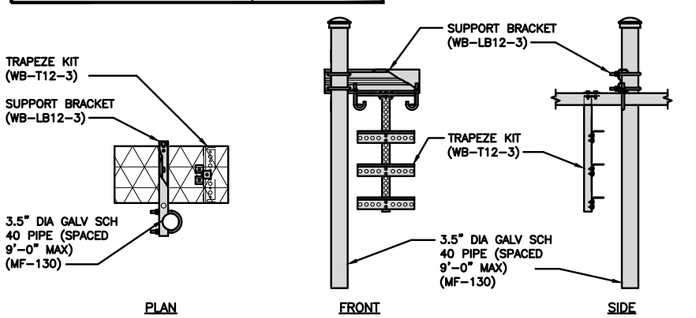




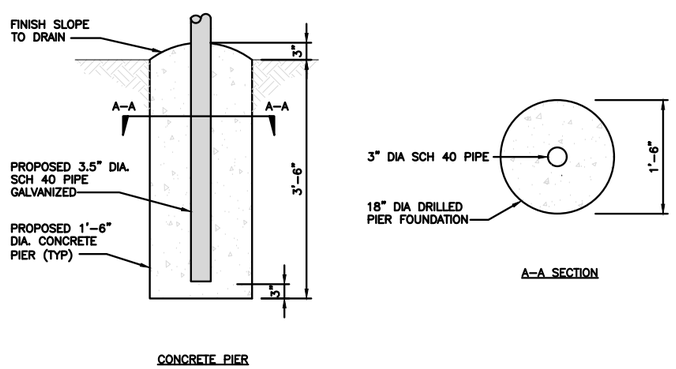
FIBER TELCO ENCLOSURE DETAIL | NO SCALE | 6

COMMSCOPE WB–K110–B WAVEGUIDE BRIDGE KIT	
DIMENSIONS (HxL)	160"x10'
WEIGHT/ VOLUME	325.0 LBS
CABLE RUN (QTY)	12

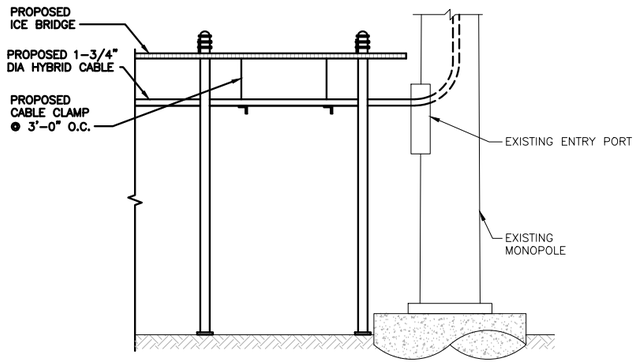
INCLUDED PRODUCTS:	
	WB–T12–3 TRAPEZE KIT, 3 RUNGS
	WB–LB12–3 SUPPORT BRACKET
	MF–130 DIRECT BURIAL PIPE COLUMN, 13'–4"



ICE BRIDGE DETAIL | NO SCALE | 7



TYPICAL ICE BRIDGE CONCRETE PIER DETAIL | NO SCALE | 8



HYBRID CABLE RUN | NO SCALE | 9

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LITTLETON, CO 80120

Kimley»Horn

COA #: PEC.0000738
421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601

01/13/22
Exp. 01/31/22

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SEW	MCK	---

RFDS REV #: ---

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KHCLE–17450

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

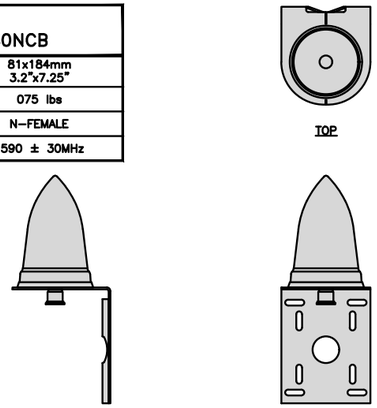
SHEET TITLE

EQUIPMENT DETAILS

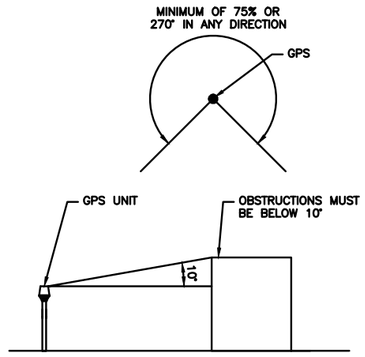
SHEET NUMBER

A-4

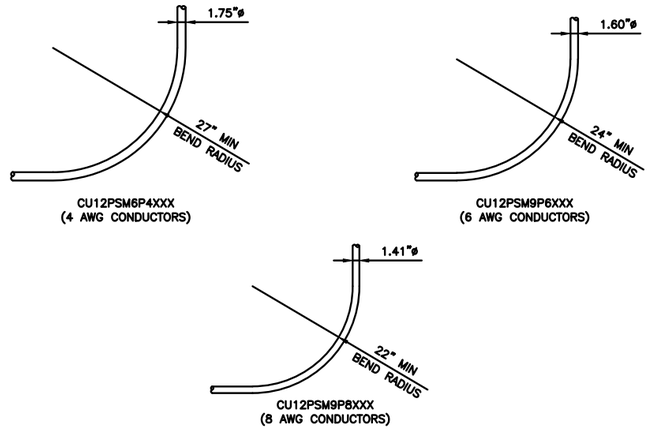
PCTEL GPSGL-TMG-SPI-40NCB	
DIMENSIONS (DIAxH) MM/INCH	81x184mm 3.2"x7.25"
WEIGHT W/ACCESSORIES	075 lbs
CONNECTOR	N-FEMALE
FREQUENCY RANGE	1590 ± 30MHz



GPS DETAIL | NO SCALE | 1



GPS MINIMUM SKY VIEW REQUIREMENTS | NO SCALE | 2



CABLES UNLIMITED HYBRID CABLE
MINIMUM BEND RADIUSES | NO SCALE | 3

01/13/22
Exp. 01/31/22

NOT USED | NO SCALE | 4

NOT USED | NO SCALE | 5

NOT USED | NO SCALE | 6

NOT USED | NO SCALE | 7

NOT USED | NO SCALE | 8

NOT USED | NO SCALE | 9

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5701 SOUTH SANTA FE DRIVE
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Kimley»Horn

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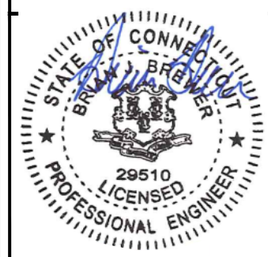

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PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

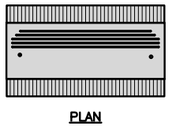
SHEET TITLE

EQUIPMENT DETAILS

SHEET NUMBER

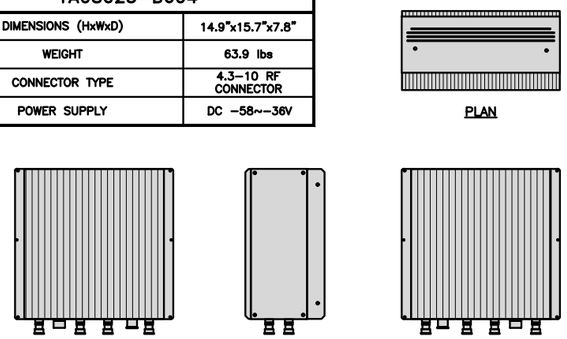
A-5

FUJITSU TRIPLE BAND TA08025-B605	
DIMENSIONS (HxWxD)	14.9"x15.7"x9"
WEIGHT	74.95 lbs
CONNECTOR TYPE	4.3-10 RF CONNECTOR
POWER SUPPLY	DC -58~-36V



RRH DETAIL | NO SCALE | 1

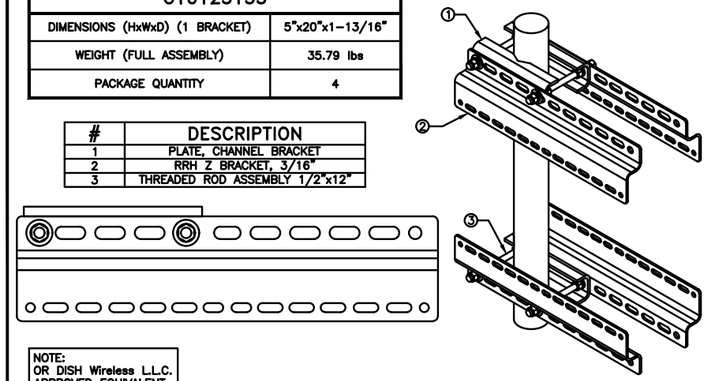
FUJITSU DUAL BAND TA08025-B604	
DIMENSIONS (HxWxD)	14.9"x15.7"x7.8"
WEIGHT	63.9 lbs
CONNECTOR TYPE	4.3-10 RF CONNECTOR
POWER SUPPLY	DC -58~-36V



RRH DETAIL | NO SCALE | 2

SABRE DOUBLE Z-BRACKET C10123155	
DIMENSIONS (HxWxD) (1 BRACKET)	5"x20"x1-13/16"
WEIGHT (FULL ASSEMBLY)	35.79 lbs
PACKAGE QUANTITY	4

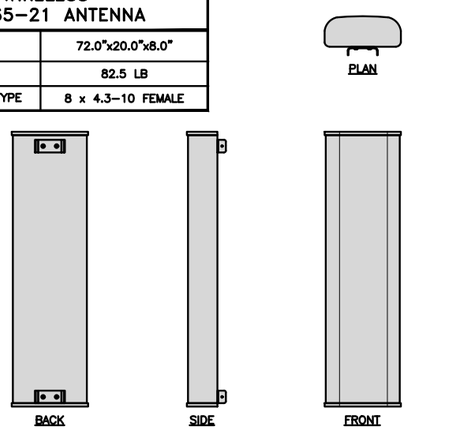
#	DESCRIPTION
1	PLATE, CHANNEL BRACKET
2	RRH Z BRACKET, 3/16"
3	THREADED ROD ASSEMBLY 1/2"x12"



NOTE:
OR DISH Wireless L.L.C.
APPROVED EQUIVALENT

RRH MOUNT DETAIL | NO SCALE | 3

JMA WIRELESS MX08FRO665-21 ANTENNA	
DIMENSIONS (HxWxD)	72.0"x20.0"x8.0"
TOTAL WEIGHT	82.5 LB
RF PORTS, CONNECTOR TYPE	8 x 4.3-10 FEMALE



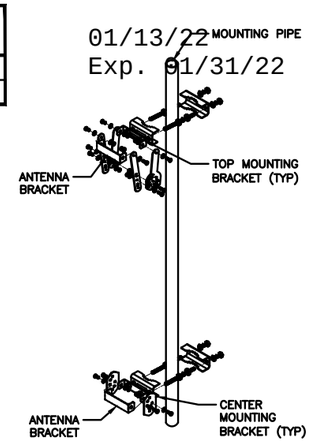
ANTENNA DETAIL | NO SCALE | 4

NOT USED | NO SCALE | 5

JMA ANTENNA MOUNTING BRACKET #91900318	
TOTAL WEIGHT (WITH BRACKETS)	18 lbs (8.18 Kg)
POLE DIAMETER RANGE	2.5 TO 4.5 INCHES

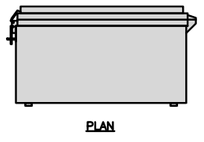
NOTE:
KIT #91900318: TOP AND BOTTOM BRACKETS FOR 4-,6-, AND 8-FOOT ANTENNAS

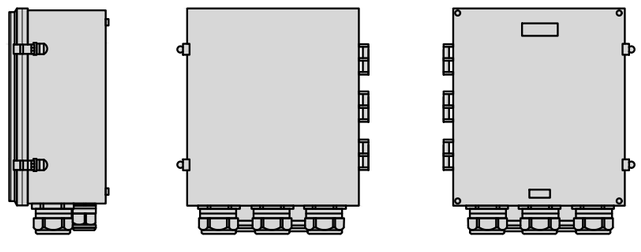
ANTENNA BRACKET NOT PART OF KIT



ANTENNA BRACKET DETAIL | NO SCALE | 6

RAYCAP RDIDC-9181-PF-48 DC SURGE PROTECTION (OVP)	
DIMENSIONS (HxWxD)	18.98"x14.39"x8.15"
WEIGHT	21.82 LBS

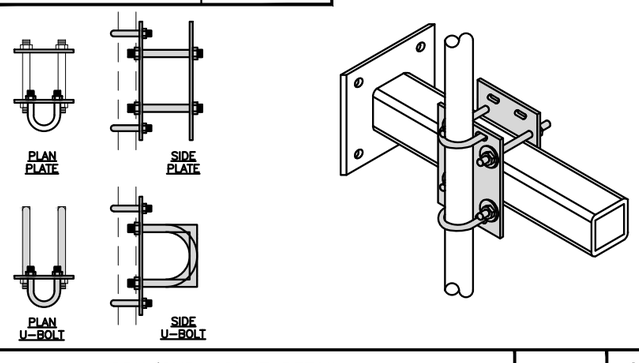




SURGE SUPPRESSION DETAIL (OVP) | NO SCALE | 7

COMMSCOPE XP-2040 CROSSOVER PLATE	
DIMENSIONS (HxW)	10"x12"
WEIGHT	11 lbs

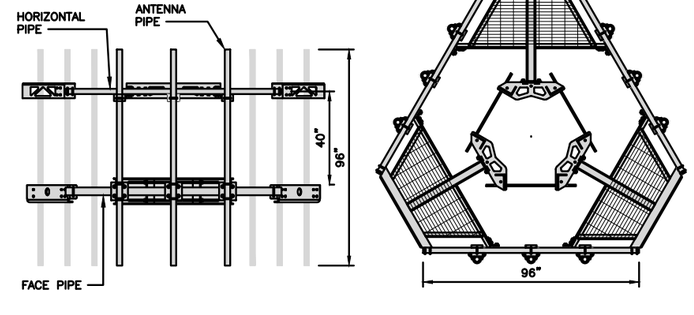
NOTE:
OR DISH Wireless L.L.C.
APPROVED EQUIVALENT



RRH/OVP MOUNT DETAIL | NO SCALE | 8

COMMSCOPE MC-PK8-DSH	
FACE WIDTH	96"
WEIGHT	1373.08 lbs
NOTE: 15" TO 38" O.D.	

NOTE:
OR DISH Wireless L.L.C.
APPROVED EQUIVALENT



ANTENNA PLATFORM DETAIL | NO SCALE | 9

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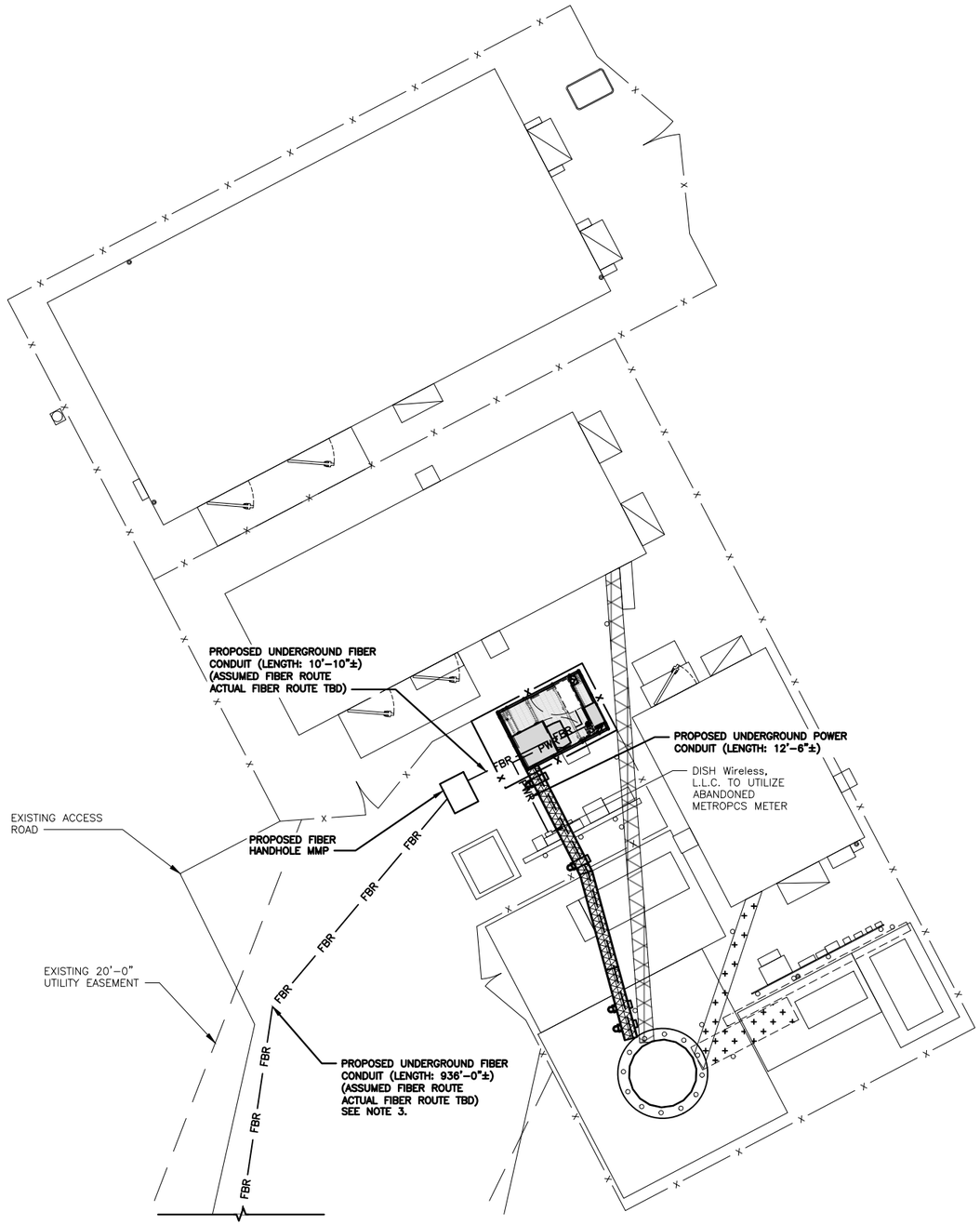
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
A-6

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED UNDERGROUND UTILITY CONDUIT ROUTE.
2. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.
3. DUE TO UTILITY EASEMENT RIGHTS SPECIFIED IN THE GROUND LEASE, CUSTOMER MAY INSTALL EQUIPMENT WITHIN SPECIFIED UTILITY EASEMENT AREA. "PWR" AND "FBR" PATH DEPICTED ON A–1 AND E–1 REPRESENT PLANNED ROUTING BASED ON BEST AVAILABLE INFORMATION INCLUDING BUT NOT LIMITED TO A SURVEY, EXHIBITS, METES AND BOUNDS OF THE UTILITY EASEMENT, FIELD VERIFICATION, PRIOR PROJECT DOCUMENTATION AND OTHER REAL PROPETY RIGHTS DOCUMENTS. WHEN INSTALLING THE UTILITIES PLEASE LOCATE AND FOLLOW EXISTING PATH. IF EXISTING PATH IS MATERIALLY INCONSISTENT WITH "PWR" AND "FBR" PATH DEPICTED ON A–1 AND E–1 AND SAID VARIANCE IS NOT NOTED ON CDs, PLEASE NOTIFY TOWER OWNER AS FURTHER COORDINATION MAY BE NEEDED.



UTILITY ROUTE PLAN

6' 4' 2' 0 5' 10'
3/16"=1'–0"

1

DC POWER WIRING SHALL BE COLOR CODED AT EACH END FOR IDENTIFYING +24V AND –48V CONDUCTORS. RED MARKINGS SHALL IDENTIFY +24V AND BLUE MARKINGS SHALL IDENTIFY –48V.

1. CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTOR'S FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
2. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL STATE AND LOCAL CODES, LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC STANDARDS.
3. LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO CONSTRUCTION.
4. CONDUIT ROUGH–IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. VERIFY WITH THE MECHANICAL EQUIPMENT CONTRACTOR AND COMPLY AS REQUIRED.
5. CONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETE SYSTEM.
6. CONTRACTOR SHALL PROVIDE PULL BOXES AND JUNCTION BOXES AS REQUIRED BY THE NEC ARTICLE 314.
7. CONTRACTOR SHALL PROVIDE ALL STRAIN RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
8. ALL DISCONNECTS AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM.
9. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC 250. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, AND EQUIPMENT CABINETS.
10. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
11. PANEL SCHEDULE LOADING AND CIRCUIT ARRANGEMENTS REFLECT POST–CONSTRUCTION EQUIPMENT.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR AS–BUILT PANEL SCHEDULE AND SITE DRAWINGS.
13. ALL TRENCHES IN COMPOUND TO BE HAND DUG

01/13/22
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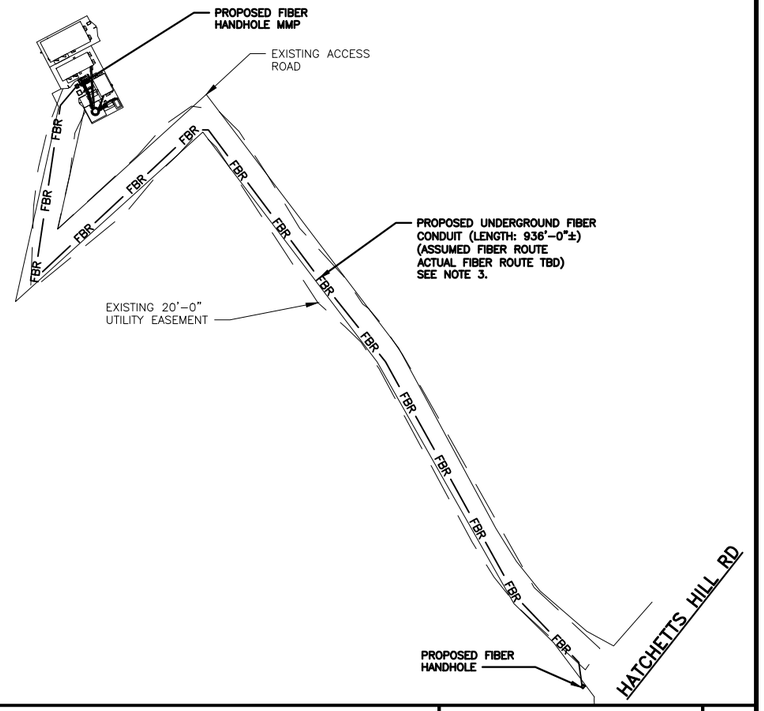
ELECTRICAL NOTES

NO SCALE

2



OVERALL UTILITY ROUTE PLAN

NO SCALE

3

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Kimley»Horn

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RALEIGH, NC 27601

STATE OF CONNECTICUT
BRIAN J. BREWER
29510
LICENSED PROFESSIONAL ENGINEER

DRAWN BY:	CHECKED BY:	APPROVED BY:
SEW	MCK	---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

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A&E PROJECT NUMBER

KHCLE–17450

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

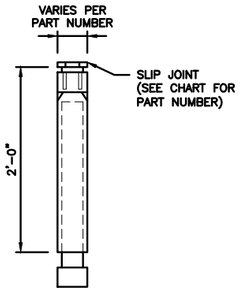
ELECTRICAL/FIBER ROUTE PLAN AND NOTES

SHEET NUMBER

E-1

CARLON EXPANSION FITTINGS

COUPLING END PART#	MALE TERMINAL ADAPTER END PART#	SIZE	STD CTN QTY.	TRAVEL LENGTH
E945D	E945DX	1/2"	20	4"
E945E	E945EX	3/4"	15	4"
E945F	E945FX	1"	10	4"
E945G	E945GX	1 1/4"	5	4"
E945H	E945HX	1 1/2"	5	4"
E945J	E945JX	2"	15	8"
E945K	E945KX	2 1/2"	10	8"
E945L	E945LX	3"	10	8"
E945M	E945MX	3 1/2"	5	8"
E945N	E945NX	4"	5	8"
E945P	E945PX	5"	1	8"
E945R	E945RX	6"	1	8"

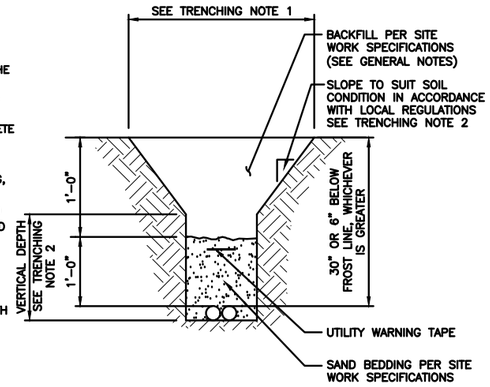


NOTE:
CONTRACTOR TO INSTALL EXPANSION FITTING SLIP JOINT AT METER CENTER CONDUIT TERMINATION, AS PER LOCAL UTILITY POLICY, ORDINANCE AND/OR SPECIFIED REQUIREMENT.

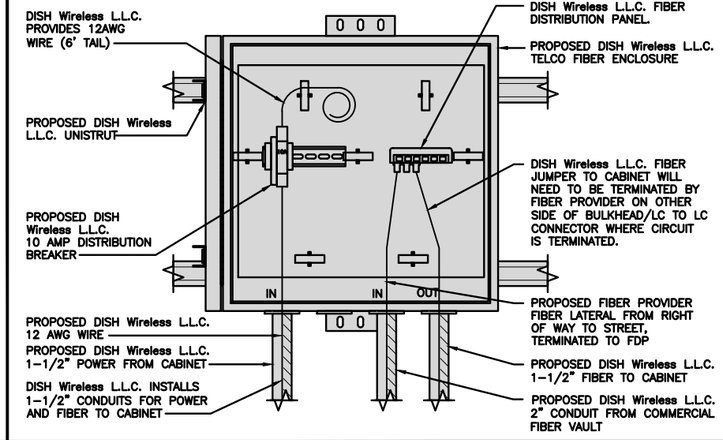
EXPANSION JOINT DETAIL | NO SCALE | 1

TRENCHING NOTES

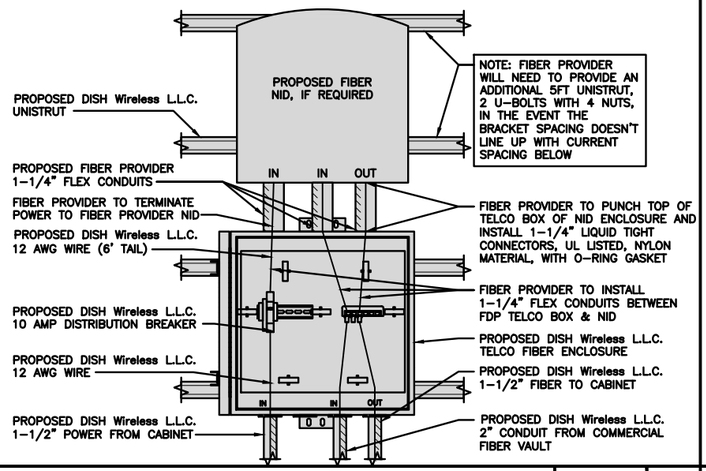
1. CONTRACTOR SHALL RESTORE THE TRENCH TO ITS ORIGINAL CONDITIONS BY EITHER SEEDING OR SODDING GRASS AREAS, OR REPLACING ASPHALT OR CONCRETE AREAS TO ITS ORIGINAL CROSS SECTION.
2. TRENCHING SAFETY; INCLUDING, BUT NOT LIMITED TO SOIL CLASSIFICATION, SLOPING, AND SHORING, SHALL BE GOVERNED BY THE CURRENT OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS.
3. ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC) OR AS REQUIRED BY THE LOCAL JURISDICTION, WHICHEVER IS THE MOST STRINGENT.



TYPICAL UNDERGROUND TRENCH DETAIL | NO SCALE | 2



DARK TELCO BOX – INTERIOR WIRING LAYOUT | NO SCALE | 3



LIT TELCO BOX – INTERIOR WIRING LAYOUT (OPTIONAL) | NO SCALE | 4

NOT USED | NO SCALE | 5

NOT USED | NO SCALE | 6

NOT USED | NO SCALE | 7

NOT USED | NO SCALE | 8

NOT USED | NO SCALE | 9

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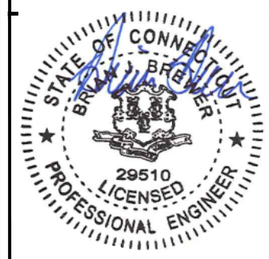

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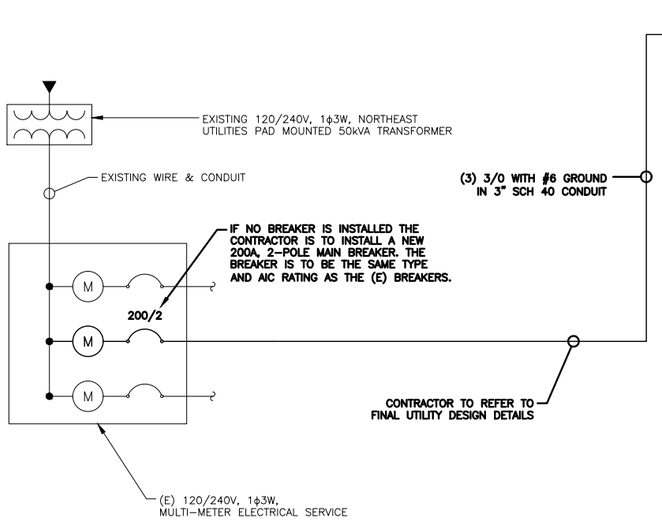
KHCLE-17450

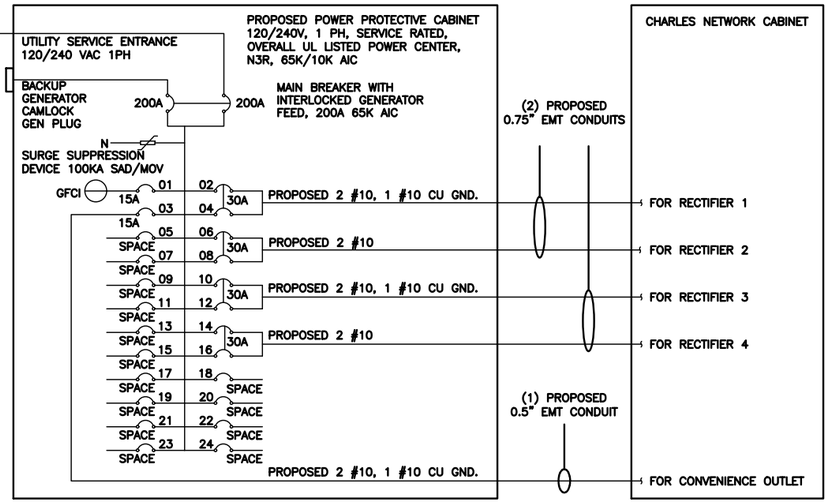
DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE
ELECTRICAL DETAILS

SHEET NUMBER
E-2





NOTE:
BRANCH CIRCUIT WIRING SUPPLYING RECTIFIERS ARE TO BE RATED UL1015, 105°C, 600V, AND PVC INSULATED, IN THE SIZES SHOWN IN THE ONE-LINE DIAGRAM. CONTRACTOR MAY SUBSTITUTE UL1015 WIRE FOR THWN-2 FOR CONVENIENCE OUTLET BRANCH CIRCUIT.

BREAKERS REQUIRED:
(4) 30A, 2P BREAKER - SQUARE D P/N:QO230
(1) 15A, 1P BREAKER - SQUARE D P/N:QO115

NOTES

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED SHORT CIRCUIT CALCULATIONS AND THE AIC RATINGS FOR EACH DEVICE IS ADEQUATE TO PROTECT THE EQUIPMENT AND THE ELECTRICAL SYSTEM.

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED VOLTAGE DROP CALCULATIONS AND ALL BRANCH CIRCUIT AND FEEDERS COMPLY WITH THE NEC (LISTED ON T-1) ARTICLE 210.19(A)(1) FPN NO. 4.

THE (2) CONDUITS WITH (4) CURRENT CARRYING CONDUCTORS EACH, SHALL APPLY THE ADJUSTMENT FACTOR OF 80% PER 2014/17 NEC TABLE 310.15(B)(3)(a) OR 2020 NEC TABLE 310.15(C)(1) FOR UL1015 WIRE.

#12 FOR 15A-20A/1P BREAKER: 0.8 x 30A = 24.0A
#10 FOR 25A-30A/2P BREAKER: 0.8 x 40A = 32.0A
#8 FOR 35A-40A/2P BREAKER: 0.8 x 55A = 44.0A
#6 FOR 45A-60A/2P BREAKER: 0.8 x 75A = 60.0A

CONDUIT SIZING: AT 40% FILL PER NEC CHAPTER 9, TABLE 4, ARTICLE 358.
0.5" CONDUIT - 0.122 SQ. IN AREA
0.75" CONDUIT - 0.213 SQ. IN AREA
2.0" CONDUIT - 1.316 SQ. IN AREA
3.0" CONDUIT - 2.907 SQ. IN AREA

CABINET CONVENIENCE OUTLET CONDUCTORS (1 CONDUIT): USING THWN-2, CU.

#10 - 0.0211 SQ. IN X 2 = 0.0422 SQ. IN
#10 - 0.0211 SQ. IN X 1 = 0.0211 SQ. IN <GROUND
TOTAL = 0.0633 SQ. IN

0.5" EMT CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (3) WIRES, INCLUDING GROUND WIRE, AS INDICATED ABOVE.

RECTIFIER CONDUCTORS (2 CONDUITS): USING UL1015, CU.

#10 - 0.0266 SQ. IN X 4 = 0.1064 SQ. IN
#10 - 0.0082 SQ. IN X 1 = 0.0082 SQ. IN <BARE GROUND
TOTAL = 0.1146 SQ. IN

0.75" EMT CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (5) WIRES, INCLUDING GROUND WIRE, AS INDICATED ABOVE.

PPC FEED CONDUCTORS (1 CONDUIT): USING THWN, CU.

3/0 - 0.2679 SQ. IN X 3 = 0.8037 SQ. IN
#6 - 0.0507 SQ. IN X 1 = 0.0507 SQ. IN <GROUND
TOTAL = 0.8544 SQ. IN

3.0" SCH 40 PVC CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (4) WIRES, INCLUDING GROUND WIRE, AS INDICATED ABOVE.

PPC ONE-LINE DIAGRAM — NO SCALE — 1

PROPOSED CHARLES PANEL SCHEDULE

LOAD SERVED	VOLT AMPS (WATTS) L1	VOLT AMPS (WATTS) L2	TRIP	CKT #	PHASE	CKT #	TRIP	VOLT AMPS (WATTS) L1	VOLT AMPS (WATTS) L2	LOAD SERVED
PPC GFCI OUTLET	180		15A	1	A	2	30A	2880		ABB/GE INFINITY RECTIFIER 1
CHARLES GFCI OUTLET		180	15A	3	B	4			2880	
-SPACE-				5	A	6	30A	2880		ABB/GE INFINITY RECTIFIER 2
-SPACE-				7	B	8			2880	
-SPACE-				9	A	10	30A	2880		ABB/GE INFINITY RECTIFIER 3
-SPACE-				11	B	12			2880	
-SPACE-				13	A	14	30A	2880		ABB/GE INFINITY RECTIFIER 4
-SPACE-				15	B	16			2880	
-SPACE-				17	A	18				-SPACE-
-SPACE-				19	B	20				-SPACE-
-SPACE-				21	A	22				-SPACE-
-SPACE-				23	B	24				-SPACE-
VOLTAGE AMPS	180	180						11520	11520	
200A MCB, 1ϕ, 24 SPACE, 120/240V			L1		L2					
MB RATING: 65,000 AIC			11700		11700		VOLTAGE AMPS			
			98		98		AMPS			
			98				MAX AMPS			
			123				MAX 125%			

PANEL SCHEDULE — NO SCALE — 2

NOT USED — NO SCALE — 3

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STATE OF CONNECTICUT BRIAN K. BREWER 29510 LICENSED PROFESSIONAL ENGINEER
01/13/22
Exp. 01/31/22

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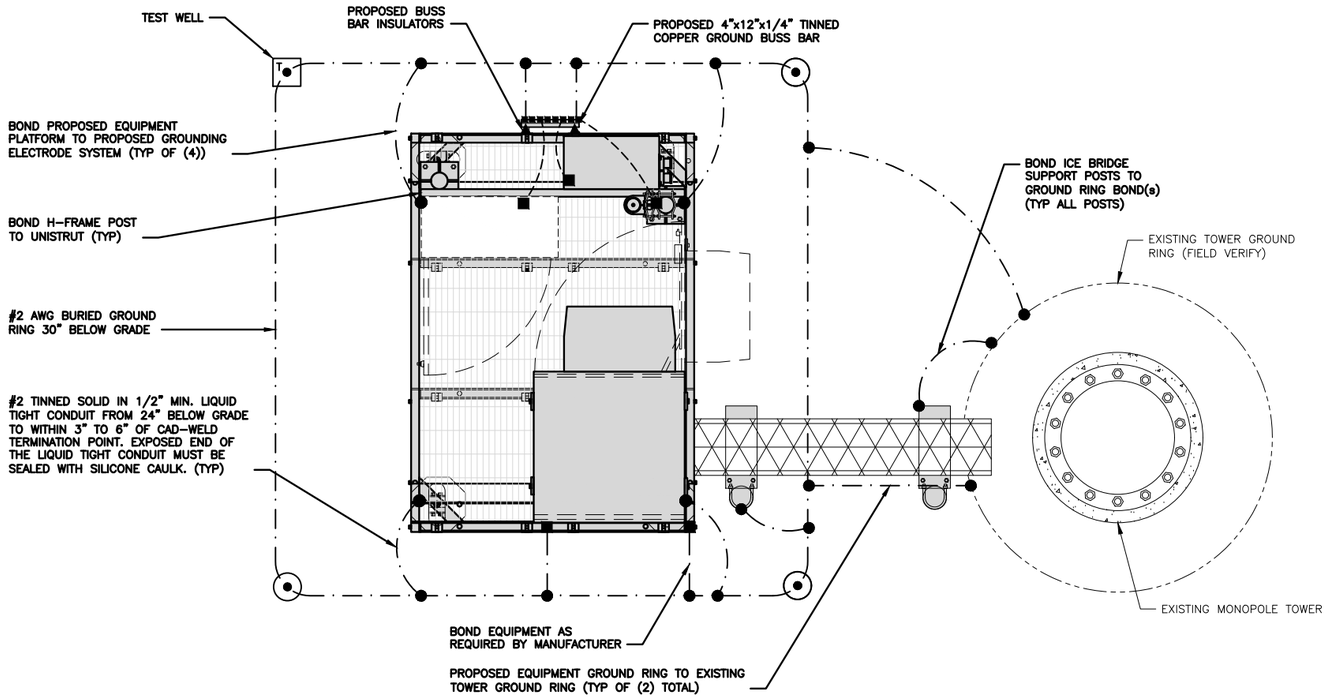
KHCLE-17450

DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE
ELECTRICAL ONE-LINE, FAULT CALCS & PANEL SCHEDULE

SHEET NUMBER
E-3

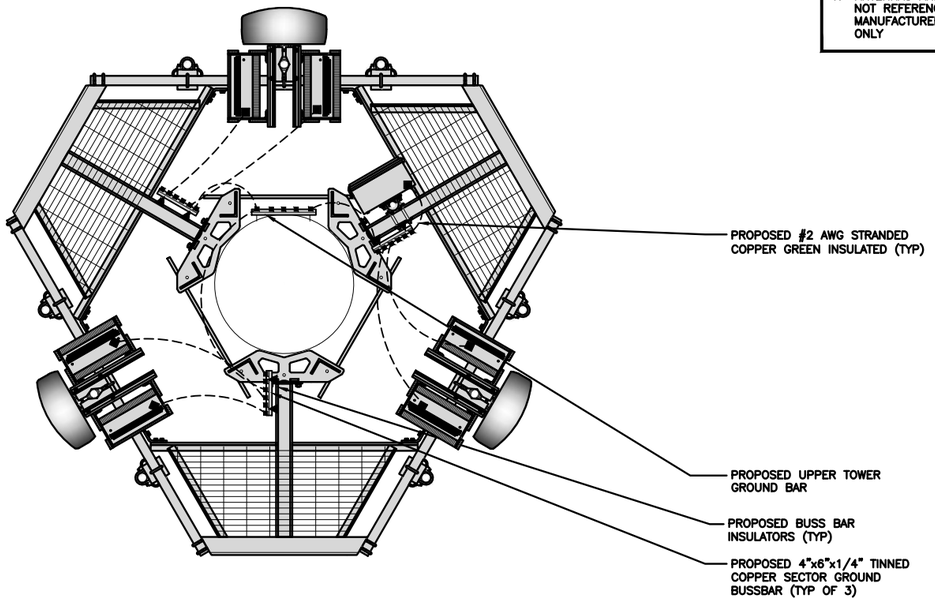


TYPICAL EQUIPMENT GROUNDING PLAN

NO SCALE | 1

NOTES

1. ANTENNAS AND OVP SHOWN ARE GENERIC AND NOT REFERENCING TO A SPECIFIC MANUFACTURER. THIS LAYOUT IS FOR REFERENCE ONLY



TYPICAL ANTENNA GROUNDING PLAN

NO SCALE | 2

- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION
- GROUND BUS BAR
- GROUND ROD
- TEST GROUND ROD WITH INSPECTION SLEEVE
- #6 AWG STRANDED & INSULATED
- #2 AWG SOLID COPPER TINNED
- BUSS BAR INSULATOR

GROUNDING LEGEND

1. GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.
2. CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH NEC SECTION 250 AND DISH Wireless L.L.C. GROUNDING AND BONDING REQUIREMENTS AND MANUFACTURER'S SPECIFICATIONS.
3. ALL GROUND CONDUCTORS SHALL BE COPPER; NO ALUMINUM CONDUCTORS SHALL BE USED.

GROUNDING KEY NOTES

(A) EXTERIOR GROUND RING: #2 AWG SOLID COPPER, BURIED AT A DEPTH OF AT LEAST 30 INCHES BELOW GRADE, OR 6 INCHES BELOW THE FROST LINE AND APPROXIMATELY 24 INCHES FROM THE EXTERIOR WALL OR FOOTING.

(B) TOWER GROUND RING: THE GROUND RING SYSTEM SHALL BE INSTALLED AROUND AN ANTENNA TOWER'S LEGS, AND/OR GUY ANCHORS. WHERE SEPARATE SYSTEMS HAVE BEEN PROVIDED FOR THE TOWER AND THE BUILDING, AT LEAST TWO BONDS SHALL BE MADE BETWEEN THE TOWER RING GROUND SYSTEM AND THE BUILDING RING GROUND SYSTEM USING MINIMUM #2 AWG SOLID COPPER CONDUCTORS.

(C) INTERIOR GROUND RING: #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR EXTENDED AROUND THE PERIMETER OF THE EQUIPMENT AREA. ALL NON-TELECOMMUNICATIONS RELATED METALLIC OBJECTS FOUND WITHIN A SITE SHALL BE GROUNDED TO THE INTERIOR GROUND RING WITH #6 AWG STRANDED GREEN INSULATED CONDUCTOR.

(D) BOND TO INTERIOR GROUND RING: #2 AWG SOLID TINNED COPPER WIRE PRIMARY BONDS SHALL BE PROVIDED AT LEAST AT FOUR POINTS ON THE INTERIOR GROUND RING, LOCATED AT THE CORNERS OF THE BUILDING.

(E) GROUND ROD: UL LISTED COPPER CLAD STEEL. MINIMUM 1/2" DIAMETER BY EIGHT FEET LONG. GROUND RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES. GROUND RODS SHALL BE DRIVEN TO THE DEPTH OF GROUND RING CONDUCTOR.

(F) CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 AWG UNLESS NOTED OTHERWISE STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUCTORS.

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

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

(I) TELCO GROUND BAR: BOND TO BOTH CELL REFERENCE GROUND BAR OR EXTERIOR GROUND RING.

(J) FRAME BONDING: THE BONDING POINT FOR TELECOM EQUIPMENT FRAMES SHALL BE THE GROUND BUS THAT IS NOT ISOLATED FROM THE EQUIPMENTS METAL FRAMEWORK.

(K) INTERIOR UNIT BONDS: METAL FRAMES, CABINETS AND INDIVIDUAL METALLIC UNITS LOCATED WITH THE AREA OF THE INTERIOR GROUND RING REQUIRE A #6 AWG STRANDED GREEN INSULATED COPPER BOND TO THE INTERIOR GROUND RING.

(L) FENCE AND GATE GROUNDING: METAL FENCES WITHIN 7 FEET OF THE EXTERIOR GROUND RING OR OBJECTS BONDED TO THE EXTERIOR GROUND RING SHALL BE BONDED TO THE GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTOR AT AN INTERVAL NOT EXCEEDING 25 FEET. BONDS SHALL BE MADE AT EACH GATE POST AND ACROSS GATE OPENINGS.

(M) EXTERIOR UNIT BONDS: METALLIC OBJECTS, EXTERNAL TO OR MOUNTED TO THE BUILDING, SHALL BE BONDED TO THE EXTERIOR GROUND RING. USING #2 TINNED SOLID COPPER WIRE

(N) ICE BRIDGE SUPPORTS: EACH ICE BRIDGE LEG SHALL BE BONDED TO THE GROUND RING WITH #2 AWG BARE TINNED COPPER CONDUCTOR. PROVIDE EXOTHERMIC WELDS AT BOTH THE ICE BRIDGE LEG AND BURIED GROUND RING.

(O) DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICE CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH A MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR

(P) TOWER TOP COLLECTOR BUSS BAR IS TO BE MECHANICALLY BONDED TO PROPOSED ANTENNA MOUNT COLLAR.

REFER TO DISH Wireless L.L.C. GROUNDING NOTES.

GROUNDING KEY NOTES

NO SCALE | 3

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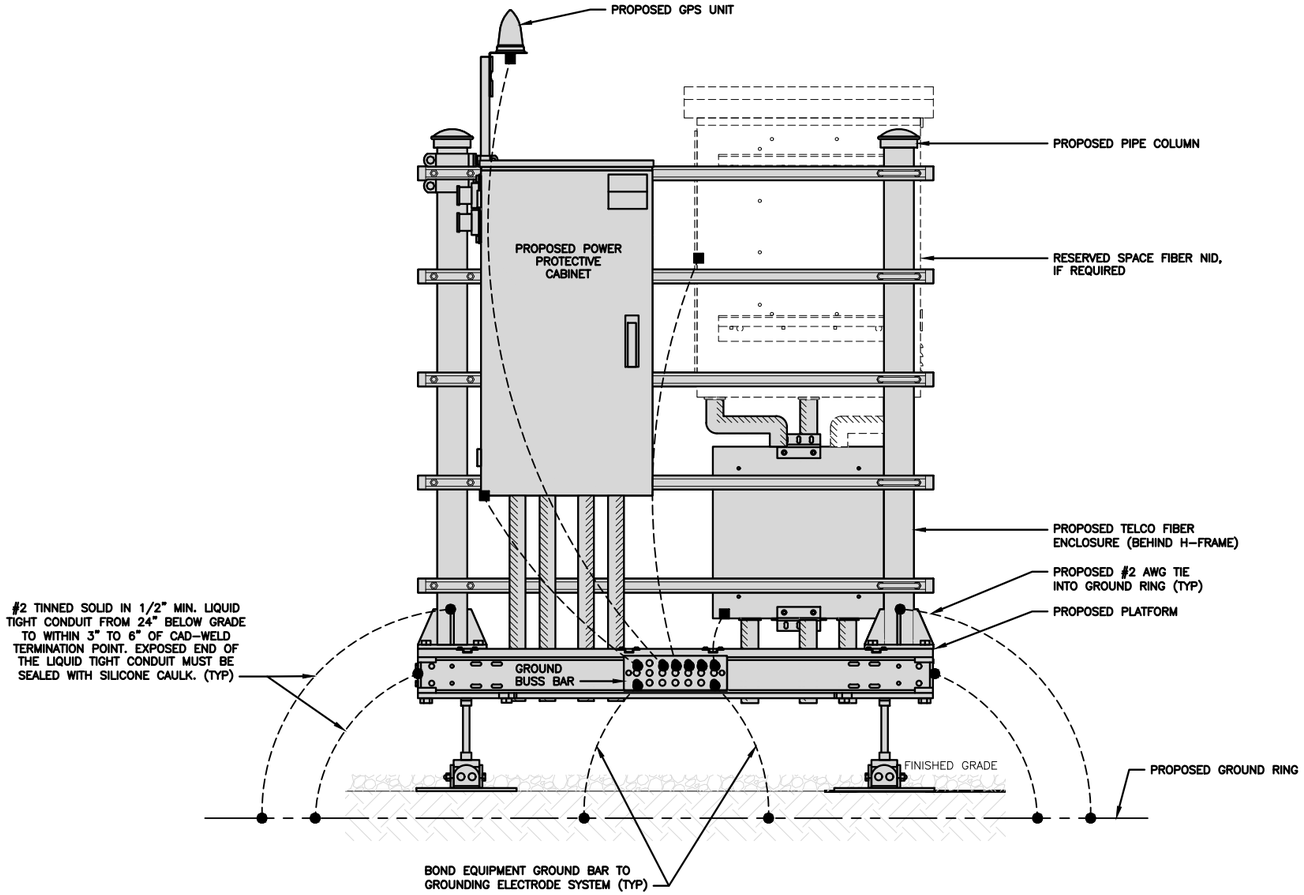
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE
GROUNDING PLANS AND NOTES

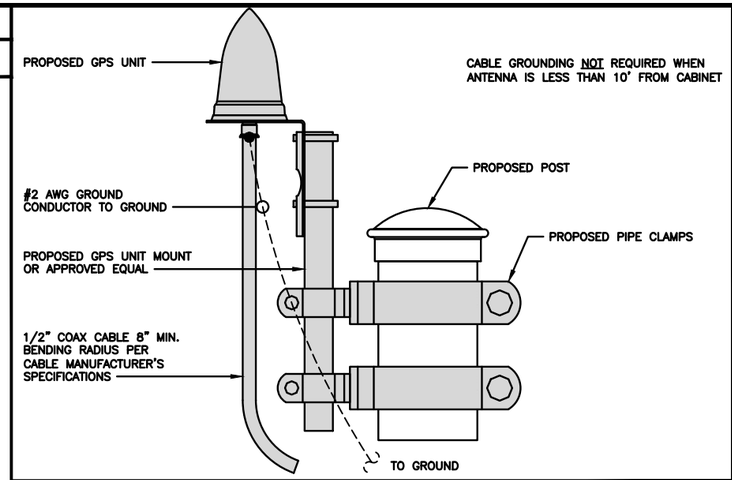
SHEET NUMBER
G-1

NOTES

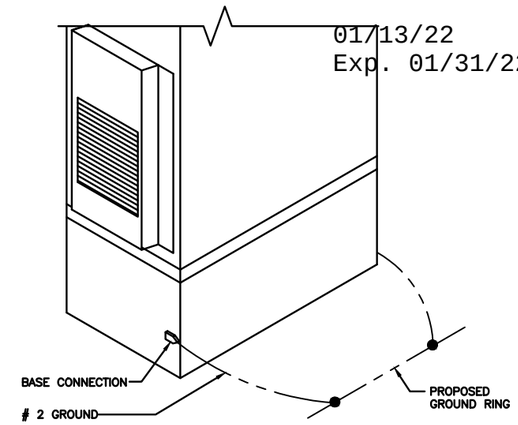
EQUIPMENT CABINET OMITTED FOR CLARITY



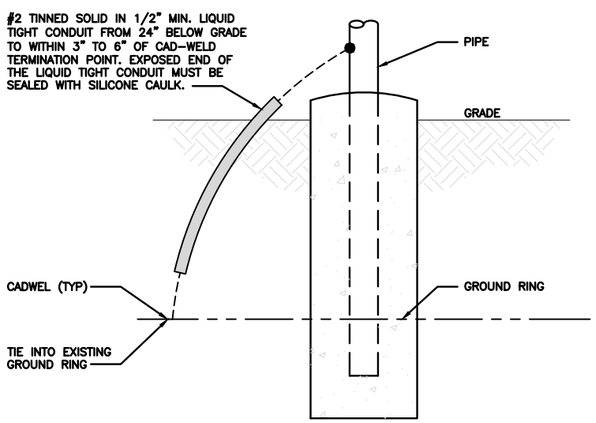
H-FRAME GROUNDING DETAIL | NO SCALE | 1



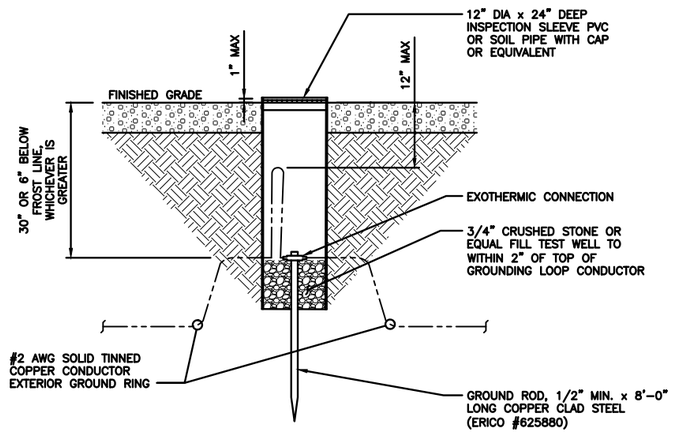
TYPICAL GPS UNIT GROUNDING | NO SCALE | 2



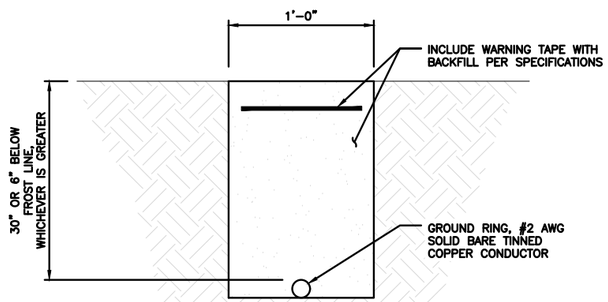
OUTDOOR CABINET GROUNDING | NO SCALE | 3



TRANSITIONING GROUND DETAIL | NO SCALE | 4



TYPICAL TEST GROUND ROD WITH INSPECTION SLEEVE | NO SCALE | 5



TYPICAL GROUND RING TRENCH | NO SCALE | 6

DISH Wireless L.L.C. TEMPLATE VERSION 45 – 10/08/2021

dish wireless.

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LITTLETON, CO 80120

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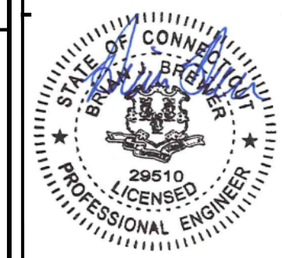

01/13/22
Exp. 01/31/22

DRAWN BY:	CHECKED BY:	APPROVED BY:
SEW	MCK	---

RFDS REV #: ---

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A&E PROJECT NUMBER

KHCLE-17450

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

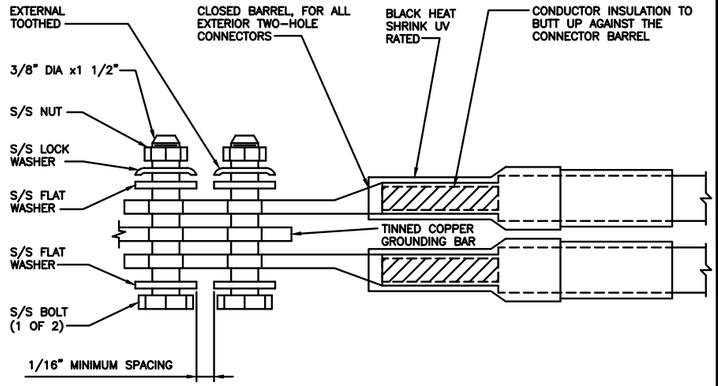
GROUNDING DETAILS

SHEET NUMBER

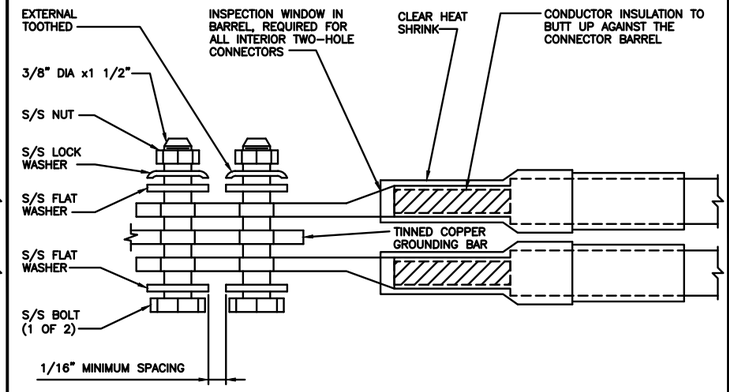
G-2

1. EXOTHERMIC WELD (2) TWO, #2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUND BAR, ROUTE CONDUCTORS TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. ALL EXTERIOR GROUNDING HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
3. FOR GROUND BOND TO STEEL ONLY: COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
4. DO NOT INSTALL CABLE GROUNDING KIT AT A BEND AND ALWAYS DIRECT GROUND CONDUCTOR DOWN TO GROUNDING BUS.
5. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUND BAR AND BOLTED ON THE BACK SIDE.
6. ALL GROUNDING PARTS AND EQUIPMENT TO BE SUPPLIED AND INSTALLED BY CONTRACTOR.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUND BAR AS REQUIRED.
8. ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).

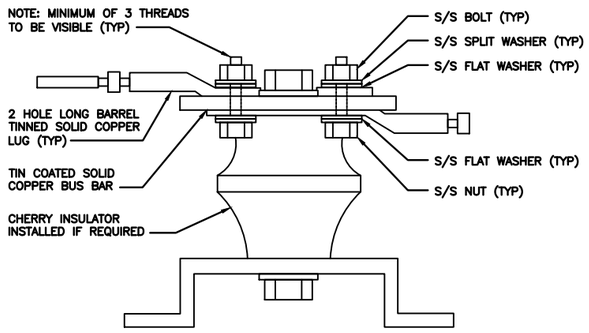
TYPICAL GROUNDING NOTES | NO SCALE | 1



TYPICAL EXTERIOR TWO HOLE LUG | NO SCALE | 2



TYPICAL INTERIOR TWO HOLE LUG | NO SCALE | 3



LUG DETAIL | NO SCALE | 4

NOT USED | NO SCALE | 5

NOT USED | NO SCALE | 6

NOT USED | NO SCALE | 7

NOT USED | NO SCALE | 8

NOT USED | NO SCALE | 9

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STATE OF CONNECTICUT
BRIAN J. BREWER
29510
LICENSED
PROFESSIONAL ENGINEER

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DISH Wireless L.L.C.
PROJECT INFORMATION

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38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER

G-3

HYBRID/DISCREET CABLES — 3/4" TAPE WIDTHS WITH 3/4" SPACING

LOW–BAND RRH
(600 MHz N71 BASEBAND) +
(850 MHz N26 BAND) +
(700 MHz N29 BAND) – OPTIONAL PER MARKET

ADD FREQUENCY COLOR TO SECTOR BAND
(CBRS WILL USE YELLOW BAND)

	ALPHA RRH				BETA RRH				GAMMA RRH			
	PORT 1 + SLANT	PORT 2 – SLANT	PORT 3 + SLANT	PORT 4 – SLANT	PORT 1 + SLANT	PORT 2 – SLANT	PORT 3 + SLANT	PORT 4 – SLANT	PORT 1 + SLANT	PORT 2 – SLANT	PORT 3 + SLANT	PORT 4 – SLANT
	RED	RED	RED	RED	BLUE	BLUE	BLUE	BLUE	GREEN	GREEN	GREEN	GREEN
	ORANGE	ORANGE	RED	RED	ORANGE	ORANGE	BLUE	BLUE	ORANGE	ORANGE	GREEN	GREEN
		WHITE (–) PORT	ORANGE	ORANGE		WHITE (–) PORT	ORANGE	ORANGE		WHITE (–) PORT	ORANGE	ORANGE
				WHITE (–) PORT				WHITE (–) PORT				WHITE (–) PORT

MID–BAND RRH
(AWS BANDS N66+N70)

ADD FREQUENCY COLOR TO SECTOR BAND
(CBRS WILL USE YELLOW BANDS)

	RED	RED	RED	RED	BLUE	BLUE	BLUE	BLUE	GREEN	GREEN	GREEN	GREEN
	PURPLE	PURPLE	RED	RED	PURPLE	PURPLE	BLUE	BLUE	PURPLE	PURPLE	GREEN	GREEN
		WHITE (–) PORT	PURPLE	PURPLE		WHITE (–) PORT	PURPLE	PURPLE		WHITE (–) PORT	PURPLE	PURPLE
				WHITE (–) PORT				WHITE (–) PORT				WHITE (–) PORT

HYBRID/DISCREET CABLES

INCLUDE SECTOR BANDS BEING SUPPORTED ALONG WITH FREQUENCY BANDS.

EXAMPLE 1 – HYBRID, OR DISCREET, SUPPORTS ALL SECTORS, BOTH LOW–BANDS AND MID–BANDS.

EXAMPLE 2 – HYBRID, OR DISCREET, SUPPORTS CBRS ONLY, ALL SECTORS.

EXAMPLE 3 – MAIN COAX WITH GROUND MOUNTED RRHs.

EXAMPLE 1	EXAMPLE 2	EXAMPLE 3 COAX#1 (ALPHA)	CANISTER COAX #2 (ALPHA)
RED	RED	RED	RED
BLUE	BLUE		RED
GREEN	GREEN		
ORANGE	YELLOW		
PURPLE			

FIBER JUMPERS TO RRHs

LOW–BAND HHR FIBER CABLES HAVE SECTOR STRIPE ONLY.

LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH
RED	RED	BLUE	BLUE	GREEN	GREEN
ORANGE	PURPLE	ORANGE	PURPLE	ORANGE	PURPLE

POWER CABLES TO RRHs

LOW–BAND RRH POWER CABLES HAVE SECTOR STRIPE ONLY

LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH
RED	RED	BLUE	BLUE	GREEN	GREEN
ORANGE	PURPLE	ORANGE	PURPLE	ORANGE	PURPLE

RET MOTORS AT ANTENNAS

RET CONTROL IS HANDLED BY THE MID–BAND RRH WHEN ONE SET OF RET PORTS EXIST ON ANTENNA.

SEPARATE RET CABLES ARE USED WHEN ANTENNA PORTS PROVIDE INPUTS FOR BOTH LOW AND MID BANDS.

ANTENNA 1 MID BAND IN	ANTENNA 1 LOW BAND IN	ANTENNA 1 MID BAND IN	ANTENNA 1 LOW BAND IN	ANTENNA 1 MID BAND IN	ANTENNA 1 LOW BAND IN
RED	RED	BLUE	BLUE	GREEN	GREEN
PURPLE	ORANGE	PURPLE	ORANGE	PURPLE	ORANGE

MICROWAVE RADIO LINKS

LINKS WILL HAVE A 1.5–2 INCH WHITE WRAP WITH THE AZIMUTH COLOR OVERLAPPING IN THE MIDDLE.
ADD ADDITIONAL SECTOR COLOR BANDS FOR EACH ADDITIONAL MW RADIO.

MICROWAVE CABLES WILL REQUIRE P–TOUCH LABELS INSIDE THE CABINET TO IDENTIFY THE LOCAL AND REMOTE SITE ID's.

FORWARD AZIMUTH OF 0–120 DEGREES PRIMARY	FORWARD AZIMUTH OF 0–120 DEGREES SECONDARY	FORWARD AZIMUTH OF 120–240 DEGREES PRIMARY	FORWARD AZIMUTH OF 120–240 DEGREES SECONDARY	FORWARD AZIMUTH OF 240–359 DEGREES PRIMARY	FORWARD AZIMUTH OF 240–359 DEGREES SECONDARY
WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
RED	RED	BLUE	BLUE	GREEN	GREEN
WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
	RED		BLUE		GREEN
	WHITE		WHITE		WHITE

LOW BANDS (N71+N26) OPTIONAL – (N29): ORANGE

AWS (N66+N70+H–BLOCK): PURPLE

CBRS TECH (3 GHz): YELLOW

NEGATIVE SLANT PORT ON ANT/RRH: WHITE

ALPHA SECTOR: RED

BETA SECTOR: BLUE

GAMMA SECTOR: GREEN

COLOR IDENTIFIER		2

01/13/22
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NOT USED		3

RF CABLE COLOR CODES		1

NOT USED		4

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DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE
RF
CABLE COLOR CODES

SHEET NUMBER
RF-1

LEGEND

EXOTHERMIC CONNECTION

MECHANICAL CONNECTION

BUSS BAR INSULATOR

CHEMICAL ELECTROLYTIC GROUNDING SYSTEM

TEST CHEMICAL ELECTROLYTIC GROUNDING SYSTEM — T

EXOTHERMIC WITH INSPECTION SLEEVE

GROUNDING BAR

GROUND ROD

TEST GROUND ROD WITH INSPECTION SLEEVE — T

SINGLE POLE SWITCH — $

DUPLEX RECEPTACLE

DUPLEX GFCI RECEPTACLE — GFCI

FLUORESCENT LIGHTING FIXTURE (2) TWO LAMPS 48–T8 — F

SMOKE DETECTION (DC) — SD

EMERGENCY LIGHTING (DC)

SECURITY LIGHT W/PHOTOCELL LITHONIA ALXW LED–1–25A400/51K–SR4–120–PE–DDBTXD

CHAIN LINK FENCE — X X X X

WOOD/WROUGHT IRON FENCE

WALL STRUCTURE

LEASE AREA

PROPERTY LINE (PL)

SETBACKS

ICE BRIDGE

CABLE TRAY

WATER LINE — W W W W W

UNDERGROUND POWER — UGP UGP UGP UGP UGP

UNDERGROUND TELCO — UGT UGT UGT UGT UGT

OVERHEAD POWER — OHP OHP OHP OHP

OVERHEAD TELCO — OHT OHT OHT OHT

UNDERGROUND TELCO/POWER — UGT/P UGT/P UGT/P UGT/P

ABOVE GROUND POWER — AGP AGP AGP AGP AGP

ABOVE GROUND TELCO — AGT AGT AGT AGT AGT

ABOVE GROUND TELCO/POWER — AGT/P AGT/P AGT/P AGT/P

WORKPOINT — W.P.

SECTION REFERENCE — XX / X–X

DETAIL REFERENCE — XX / X–X

ABBREVIATIONS

AB	ANCHOR BOLT
ABV	ABOVE
AC	ALTERNATING CURRENT
ADDL	ADDITIONAL
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AGL	ABOVE GROUND LEVEL
AIC	AMPERAGE INTERRUPTION CAPACITY
ALUM	ALUMINUM
ALT	ALTERNATE
ANT	ANTENNA
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BATT	BATTERY
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BTC	BARE TINNED COPPER CONDUCTOR
BOF	BOTTOM OF FOOTING
CAB	CABINET
CANT	CANTILEVERED
CHG	CHARGING
CLG	CEILING
CLR	CLEAR
COL	COLUMN
COMM	COMMON
CONC	CONCRETE
CONSTR	CONSTRUCTION
DBL	DOUBLE
DC	DIRECT CURRENT
DEPT	DEPARTMENT
DF	DOUGLAS FIR
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DWG	DRAWING
DWL	DOWEL
EA	EACH
EC	ELECTRICAL CONDUCTOR
EL.	ELEVATION
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ENG	ENGINEER
EQ	EQUAL
EXP	EXPANSION
EXT	EXTERIOR
EW	EACH WAY
FAB	FABRICATION
FF	FINISH FLOOR
FG	FINISH GRADE
FIF	FACILITY INTERFACE FRAME
FIN	FINISH(ED)
FLR	FLOOR
FDN	FOUNDATION
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FOW	FACE OF WALL
FS	FINISH SURFACE
FT	FOOT
FTG	FOOTING
GA	GAUGE
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GLB	GLUE LAMINATED BEAM
GLV	GALVANIZED
GPS	GLOBAL POSITIONING SYSTEM
GND	GROUND
GSM	GLOBAL SYSTEM FOR MOBILE
HDG	HOT DIPPED GALVANIZED
HDR	HEADER
HGR	HANGER
HVAC	HEAT/VENTILATION/AIR CONDITIONING
HT	HEIGHT
IGR	INTERIOR GROUND RING
IN	INCH
INT	INTERIOR
LB(S)	POUND(S)
LF	LINEAR FEET
LTE	LONG TERM EVOLUTION
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
MTS	MANUAL TRANSFER SWITCH
MW	MICROWAVE
NEC	NATIONAL ELECTRIC CODE
NM	NEWTON METERS
NO.	NUMBER
#	NUMBER
NTS	NOT TO SCALE
OC	ON–CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OPNG	OPENING
P/C	PRECAST CONCRETE
PCS	PERSONAL COMMUNICATION SERVICES
PCU	PRIMARY CONTROL UNIT
PRC	PRIMARY RADIO CABINET
PP	POLARIZING PRESERVING
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PWR	POWER CABINET
QTY	QUANTITY
RAD	RADIUS
RECT	RECTIFIER
REF	REFERENCE
REINF	REINFORCEMENT
REQ'D	REQUIRED
RET	REMOTE ELECTRIC TILT
RF	RADIO FREQUENCY
RMC	RIGID METALLIC CONDUIT
RRH	REMOTE RADIO HEAD
RRU	REMOTE RADIO UNIT
RWY	RACEWAY
SCH	SCHEDULE
SHT	SHEET
SIAD	SMART INTEGRATED ACCESS DEVICE
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
TEMP	TEMPORARY
THK	THICKNESS
TMA	TOWER MOUNTED AMPLIFIER
TN	TOE NAIL
TOA	TOP OF ANTENNA
TOC	TOP OF CURB
TOF	TOP OF FOUNDATION
TOP	TOP OF PLATE (PARAPET)
TOS	TOP OF STEEL
TOW	TOP OF WALL
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
UPS	UNITERRUPTIBLE POWER SYSTEM (DC POWER PLANT)
VIF	VERIFIED IN FIELD
W	WIDE
W/	WITH
WD	WOOD
WP	WEATHERPROOF
WT	WEIGHT

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DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

LEGEND AND ABBREVIATIONS

SHEET NUMBER

GN-1

SITE ACTIVITY REQUIREMENTS:

1. NOTICE TO PROCEED – NO WORK SHALL COMMENCE PRIOR TO CONTRACTOR RECEIVING A WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE DISH Wireless L.L.C. AND TOWER OWNER NOC & THE DISH Wireless L.L.C. AND TOWER OWNER CONSTRUCTION MANAGER.

2. "LOOK UP" – DISH Wireless L.L.C. AND TOWER OWNER SAFETY CLIMB REQUIREMENT:

THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR DISH Wireless L.L.C. AND DISH Wireless L.L.C. AND TOWER OWNER POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.

3. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.

4. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND DISH Wireless L.L.C. AND TOWER OWNER STANDARDS, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA–322 (LATEST EDITION).

5. ALL SITE WORK TO COMPLY WITH DISH Wireless L.L.C. AND TOWER OWNER INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON DISH Wireless L.L.C. AND TOWER OWNER TOWER SITE AND LATEST VERSION OF ANSI/TIA–1019–A–2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."

6. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY DISH Wireless L.L.C. AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.

7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES INCLUDING PRIVATE LOCATES SERVICES PRIOR TO THE START OF CONSTRUCTION.

10. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.

11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND DISH PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.

12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF DISH Wireless L.L.C. AND TOWER OWNER, AND/OR LOCAL UTILITIES.

14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.

15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.

16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.

17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.

18. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.

20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS AND RADIOS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

22. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

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

CONTRACTOR:GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION

CARRIER:DISH Wireless L.L.C.

TOWER OWNER:TOWER OWNER

2. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.

3. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.

4. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.

5. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.

6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CARRIER POC AND TOWER OWNER.

7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

10. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.

11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION, BEFORE SUBMITTING BIDS, TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.

12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF DISH Wireless L.L.C. AND TOWER OWNER

13. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

dish wireless.

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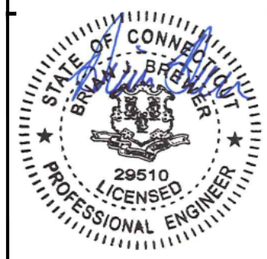

01/13/22
Exp. 01/31/22

DRAWN BY:	CHECKED BY:	APPROVED BY:
SEW	MCK	---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
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0	11/04/2021	ISSUED FOR CONSTRUCTION
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A&E PROJECT NUMBER

KHCLE–17450

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-2

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.

2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.

3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°f AT TIME OF PLACEMENT.

4. CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER-TO-CEMENT RATIO (W/C) OF 0.45.

5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:

#4 BARS AND SMALLER 40 ksi

#5 BARS AND LARGER 60 ksi

6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
- CONCRETE EXPOSED TO EARTH OR WEATHER:
- #6 BARS AND LARGER 2"
- #5 BARS AND SMALLER 1-1/2"
- CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
- SLAB AND WALLS 3/4"
- BEAMS AND COLUMNS 1-1/2"

7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.

2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.

3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.

4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.

4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.

4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.

5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.

6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).

7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.

8. TIE WRAPS ARE NOT ALLOWED.

9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.

10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.

11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.

12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.

13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).

14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

16. ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.

18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.

20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.

21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).

22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).

23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER-ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.

24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3 (OR BETTER) FOR EXTERIOR LOCATIONS.

25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.

26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.

27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR DISH Wireless L.L.C. AND TOWER OWNER BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.

29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "DISH Wireless L.L.C.".

30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

dish wireless.

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Kimley»Horn

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STATE OF CONNECTICUT
BRIAN L. BREWER
29510
LICENSED PROFESSIONAL ENGINEER

01/13/22
EXP. 01/31/22

DRAWN BY:	CHECKED BY:	APPROVED BY:
SEW	MCK	---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

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A	10/26/2021	ISSUED FOR REVIEW
0	11/04/2021	ISSUED FOR CONSTRUCTION
1	01/12/2022	REVISED PER CLIENT

A&E PROJECT NUMBER

KHCLE-17450

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-3

GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.

2. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.

3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.

4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.

6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.

7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.

8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.

9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.

10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.

11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.

13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.

14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.

15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.

17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.

18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.

19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).

21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). DO NOT ATTACH GROUNDING TO FIRE SPRINKLER SYSTEM PIPES.

01/13/22
Exp. 01/31/22

dish wireless.

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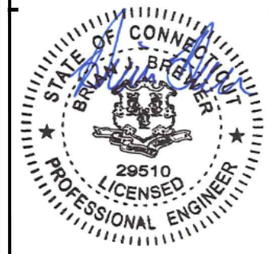

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PROJECT INFORMATION

BOBOS00034A
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-4

Date: **October 05, 2021**

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

Subject:	**Structural Analysis Report**	
Carrier Designation:	***DISH Network* Co-Locate**	
	Site Number:	BOBOS00034A
	Site Name:	CT-CCI-T-823529
Crown Castle Designation:	**BU Number:**	823529
	Site Name:	CT038/EastLyme/ I-95/ X72
	JDE Job Number:	645123
	Work Order Number:	1962458
	Order Number:	553314 Rev. 0
Engineering Firm Designation:	**Crown Castle Project Number:**	1962458
Site Data:	**38 Hatchetts Hill Road, Old Lyme, New London County, CT** **Latitude *41° 19' 3.26"*, Longitude *-72° 16' 11.87"*** **190 Foot - Monopole 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:

LC5: Proposed Equipment Configuration **Sufficient Capacity**

This analysis utilizes an ultimate 3-second gust wind speed of 126 mph as required by the 2018 Connecticut State Building Code & 2015 International Building Code. Applicable Standard references and design criteria are listed in Section 2 - "Analysis Criteria".

Structural analysis prepared by: Didi Rossmiller

Respectfully submitted by:

Digitally signed by Maham Barimani
Date: 2021.10.06 15:55:37 -04'00'

STATE OF CONNECTICUT
MAHAM BARIMANI
30501
LICENSED
PROFESSIONAL ENGINEER

Maham Barimani, P.E.
Senior Project Engineer

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 190 ft Monopole tower designed by PIROD MANUFACTURES INC. The tower has been modified per reinforcement drawings prepared by TEP. Reinforcement consist of shaft reinforcing and bolted flange jumps at 5 different elevations.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	126 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	1.5 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
155.0	155.0	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		
		1	tower mounts	Commscope MC-PK8-DSH		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
190.0	192.0	3	ericsson	AIR 32 B2A B66AA_T-MOBILE w/ Mount Pipe	6	1-3/8
		3	ericsson	AIR6449 B41_T-MOBILE w/ Mount Pipe		
		3	ericsson	RADIO 4449 B71 B85A_T-MOBILE		
		3	ericsson	RRUS 4415 B25		
		3	rfs celwave	APXVAALL24_43-U-NA20_TMO w/ Mount Pipe		
	190.0	1	tower mounts	Platform Mount [LP 405-1_HR-1]		
165.0	165.0	3	andrew	SBNHH-1D65A w/ Mount Pipe	2 4 6 2	3/4 3/8 1-1/4 conduit
		6	cci antennas	OPA65R-BU4D w/ Mount Pipe		
		3	ericsson	RRUS 4449 B5/B12		
		3	ericsson	RRUS 4478 B14		
		3	ericsson	RRUS 8843 B2/B66A		
		3	powerwave technologies	TT19-08BP111-001		
		1	raycap	DC6-48-60-18-8F		
		1	raycap	DC9-48-60-24-8C-EV		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
		1	tower mounts	Platform Mount [LP 712-1_KCKR]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	3500965	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	3505479	CCISITES
4-TOWER MANUFACTURER DRAWINGS	3500968	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	3771952	CCISITES
4-POST-MODIFICATION INSPECTION	3826084	CCISITES

3.1) Analysis Method

tnxTower (version 8.1.1.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard.

tnxTower was used to determine the loads on the modified structure. Additional calculations were performed to determine the stresses in the pole and in the reinforcing elements. These calculations are included in Appendix C.

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.
3) Base and flange plate design methodology of the manufacturer has been reviewed and found to be an acceptable means of designing to resist the full capacity of the bolts and shaft.

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
L1	190 - 160	Pole	P24x0.375	1	-11.94	1104.67	28.5	Pass
L2	160 - 140	Pole	30" x 0.375"	2	-18.37	1376.61	46.8	Pass
L3	140 - 120	Pole	36" x 0.375"	3	-22.39	1564.60	56.2	Pass
L4	120 - 100	Pole	42" x 0.375"	4	-28.49	1752.31	61.1	Pass
L5	100 - 80	Pole	P48x0.375	5	-34.66	1939.86	63.7	Pass
L6	80 - 60	Pole	P54x3/8	6	-41.56	2127.30	65.1	Pass
L7	60 - 40	Pole	P60x3/8	7	-49.05	2314.65	65.9	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L8	40 - 20	Pole	P60x1/2	8	-57.72	3281.97	58.1	Pass
L9	20 - 0	Pole	P60x5/8	9	-68.05	4346.11	53.6	Pass
							Summary	
						Pole (L7)	65.9	Pass
						Rating =	65.9	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Flange Bolts	160	26.7	Pass
1,2	Flange Plate	160	28.5	Pass
1	Flange Bolts	140	46.4	Pass
1,2	Flange Plate	140	46.8	Pass
1	Flange Bolts	120	57.6	Pass
1,2	Flange Plate	120	57.6	Pass
1	Flange Bolts	100	63.5	Pass
1,2	Flange Plate	100	63.5	Pass
1	Flange Bolts	80	66.9	Pass
1,2	Flange Plate	80	66.9	Pass
1	Flange Bolts	60	35.9	Pass
1,2	Flange Plate	60	65.1	Pass
1	Flange Bolts	40	53.0	Pass
1,2	Flange Plate	40	65.9	Pass
1	Flange Bolts	20	48.6	Pass
1,2	Flange Plate	20	58.1	Pass
1	Anchor Rods	0	47.5	Pass
1,2	Base Plate	0	53.6	Pass
1	Base Foundation (Structure)	0	32.8	Pass
1	Base Foundation (Soil Interaction)	0	69.3	Pass

Structure Rating (max from all components) =	69.3%

Notes:
1) See additional documentation in “Appendix C – Additional Calculations” for calculations supporting the % capacity consumed.
2) Base/Flange plates are assumed to have the same capacity as their respective splice bolts or shaft.

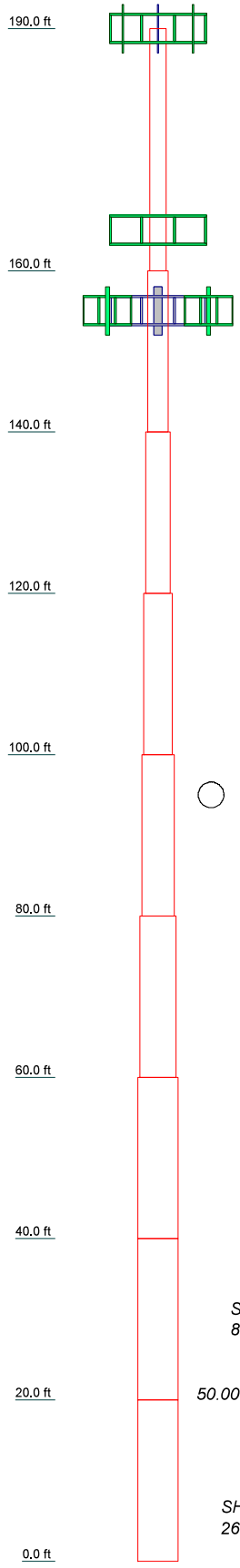
4.1) Recommendations

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	Size	Length (ft)	Grade	Weight (K)
1	P24x0.375	30.0000	A53-B-42	2.8
2	30" x 0.375"	20.0000		2.4
3	36" x 0.375"	20.0000		2.9
4	42" x 0.375"	20.0000		3.3
5	P48x0.375	20.0000		3.8
6	P54x3/8	20.0000		4.3
7	P60x3/8	20.0000		4.8
8	P60x1/2	20.0000		6.4
9	P60x5/8	20.0000		7.9
				38.6



ALL REACTIONS ARE FACTORED

AXIAL 99 K

SHEAR 8 K

MOMENT 1056 kip-ft

TORQUE 0 kip-ft

50.00 mph WIND - 1.5000 in ICE

AXIAL 68 K

SHEAR 26 K

MOMENT 3384 kip-ft

TORQUE 0 kip-ft

REACTIONS - 126.00 mph WIND

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A53-B-42	42 ksi	63 ksi			

TOWER DESIGN NOTES

1. Tower is located in New London County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 126.00 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50.00 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60.00 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.0000 ft
8. TIA-222-H Annex S
9. TOWER RATING: 65.9%

CROWN CASTLE
The Pathway to Possible

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

Job: BU 823529			
Client: CCI	Drawn by: DRossmiller	App'd:	
Code: TIA-222-H	Date: 10/05/21	Scale: NTS	
Path: C:\Users\drossmiller\OneDrive - Crown Castle USA Inc\Desktop\temporary\823529WO 1962458 - SA\Prod\823529_RPA.eri		Dwg No. E-1	

Tower Input Data

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

- Tower is located in New London County, Connecticut.
- Tower base elevation above sea level: 168.0000 ft.
- Basic wind speed of 126.00 mph.
- Risk Category II.
- Exposure Category B.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.0000 ft.
- Nominal ice thickness of 1.5000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56.00 pcf.
- A wind speed of 50.00 mph is used in combination with ice.
- Temperature drop of 50.00 °F.
- Deflections calculated using a wind speed of 60.00 mph.
- TIA-222-H Annex S.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in pole design is 1.
- Tower analysis based on target reliabilities in accordance with Annex S.
- Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
- Maximum demand-capacity ratio is: 1.05.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

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

Pole Section Geometry

Section	Elevation ft	Section Length ft	Pole Size	Pole Grade	Socket Length ft
L1	190.0000-160.0000	30.0000	P24x0.375	A53-B-42 (42 ksi)	
L2	160.0000-140.0000	20.0000	30" x 0.375"	A53-B-42 (42 ksi)	
L3	140.0000-120.0000	20.0000	36" x 0.375"	A53-B-42 (42 ksi)	
L4	120.0000-100.0000	20.0000	42" x 0.375"	A53-B-42 (42 ksi)	
L5	100.0000-80.0000	20.0000	P48x0.375	A53-B-42 (42 ksi)	
L6	80.0000-60.0000	20.0000	P54x3/8	A53-B-42 (42 ksi)	
L7	60.0000-40.0000	20.0000	P60x3/8	A53-B-42 (42 ksi)	
L8	40.0000-20.0000	20.0000	P60x1/2	A53-B-42 (42 ksi)	
L9	20.0000-0.0000	20.0000	P60x5/8	A53-B-42 (42 ksi)	

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
L1 190.0000-160.0000				1	1	1			
L2 160.0000-140.0000				1	1	1			
L3 140.0000-120.0000				1	1	1			
L4 120.0000-100.0000				1	1	1			
L5 100.0000-80.0000				1	1	1			
L6 80.0000-60.0000				1	1	1			
L7 60.0000-40.0000				1	1	1			
L8 40.0000-20.0000				1	1	1			
L9 20.0000-0.0000				1	1	1			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
3/4" ladder rung (12" long 12" oc) *** **********	C	No	Surface Ar (CaAa)	190.0000 - 10.0000	1	1	-0.167 -0.167	0.7500		1.50
CCI-045100 (L)	A	No	Surface Af (CaAa)	23.5000 - 17.2500	1	1	-0.250 -0.250	4.5000	11.0000	15.31
CCI-045100 (L)	B	No	Surface Af (CaAa)	23.5000 - 17.2500	1	1	-0.250 -0.250	4.5000	11.0000	15.31
CCI-045100 (L)	C	No	Surface Af (CaAa)	23.5000 - 17.2500	1	1	-0.250 -0.250	4.5000	11.0000	15.31
CCI-045100 (L)	A	No	Surface Af (CaAa)	90.5000 - 36.7500	1	1	-0.250 -0.250	4.5000	11.0000	15.31

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
CCI-045100 (L)	B	No	Surface Af (CaAa)	90.5000 - 36.7500	1	1	-0.250 -0.250	4.5000	11.0000	15.31
CCI-045100 (L)	C	No	Surface Af (CaAa)	90.5000 - 36.7500	1	1	-0.250 -0.250	4.5000	11.0000	15.31
FP 4 x 4.5	A	No	Surface Af (CaAa)	106.7500 - 98.2500	1	1	-0.250 -0.250	4.0000	17.0000	61.25
FP 4 x 4.5	B	No	Surface Af (CaAa)	106.7500 - 98.2500	1	1	-0.250 -0.250	4.0000	17.0000	61.25
FP 4 x 4.5	C	No	Surface Af (CaAa)	106.7500 - 98.2500	1	1	-0.250 -0.250	4.0000	17.0000	61.25
***										

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
CU12PSM6P4XXX (1-3/4)	C	No	No	Inside Pole	155.0000 - 0.0000	1	No Ice	0.0000	2.72
							1/2" Ice	0.0000	2.72
							1" Ice	0.0000	2.72
							2" Ice	0.0000	2.72
********** **********									
HCS 6X12 6AWG(1-3/8)	C	No	No	Inside Pole	190.0000 - 0.0000	6	No Ice	0.0000	1.70
							1/2" Ice	0.0000	1.70
							1" Ice	0.0000	1.70
							2" Ice	0.0000	1.70
*** **********									
FB-L98B-034-XXX(3/8)	C	No	No	Inside Pole	165.0000 - 0.0000	2	No Ice	0.0000	0.06
							1/2" Ice	0.0000	0.06
							1" Ice	0.0000	0.06
							2" Ice	0.0000	0.06
WR-VG86ST-BRD(3/4)	C	No	No	Inside Pole	165.0000 - 0.0000	4	No Ice	0.0000	0.58
							1/2" Ice	0.0000	0.58
							1" Ice	0.0000	0.58
							2" Ice	0.0000	0.58
LDF6-50A(1-1/4)	C	No	No	Inside Pole	165.0000 - 0.0000	6	No Ice	0.0000	0.60
							1/2" Ice	0.0000	0.60
							1" Ice	0.0000	0.60
							2" Ice	0.0000	0.60
2" (Nominal) Conduit	C	No	No	Inside Pole	165.0000 - 0.0000	2	No Ice	0.0000	0.72
							1/2" Ice	0.0000	0.72
							1" Ice	0.0000	0.72
							2" Ice	0.0000	0.72
***									

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
L1	190.0000-160.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	2.250	0.000	0.39
L2	160.0000-140.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	1.500	0.000	0.42

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
L3	140.0000-120.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	1.500	0.000	0.44
L4	120.0000-100.0000	A	0.000	0.000	3.896	0.000	0.41
		B	0.000	0.000	3.896	0.000	0.41
		C	0.000	0.000	5.396	0.000	0.85
L5	100.0000-80.0000	A	0.000	0.000	8.885	0.000	0.27
		B	0.000	0.000	8.885	0.000	0.27
		C	0.000	0.000	10.385	0.000	0.71
L6	80.0000-60.0000	A	0.000	0.000	15.000	0.000	0.31
		B	0.000	0.000	15.000	0.000	0.31
		C	0.000	0.000	16.500	0.000	0.74
L7	60.0000-40.0000	A	0.000	0.000	15.000	0.000	0.31
		B	0.000	0.000	15.000	0.000	0.31
		C	0.000	0.000	16.500	0.000	0.74
L8	40.0000-20.0000	A	0.000	0.000	4.681	0.000	0.10
		B	0.000	0.000	4.681	0.000	0.10
		C	0.000	0.000	6.181	0.000	0.54
L9	20.0000-0.0000	A	0.000	0.000	1.762	0.000	0.04
		B	0.000	0.000	1.762	0.000	0.04
		C	0.000	0.000	2.512	0.000	0.47

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
L1	190.0000-160.0000	A	1.506	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	11.289	0.000	0.51
L2	160.0000-140.0000	A	1.483	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	7.434	0.000	0.51
L3	140.0000-120.0000	A	1.462	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	7.349	0.000	0.52
L4	120.0000-100.0000	A	1.438	0.000	0.000	5.073	0.000	0.50
		B		0.000	0.000	5.073	0.000	0.50
		C		0.000	0.000	12.326	0.000	1.01
L5	100.0000-80.0000	A	1.410	0.000	0.000	12.145	0.000	0.38
		B		0.000	0.000	12.145	0.000	0.38
		C		0.000	0.000	19.283	0.000	0.90
L6	80.0000-60.0000	A	1.375	0.000	0.000	20.498	0.000	0.48
		B		0.000	0.000	20.498	0.000	0.48
		C		0.000	0.000	27.497	0.000	0.99
L7	60.0000-40.0000	A	1.329	0.000	0.000	20.316	0.000	0.47
		B		0.000	0.000	20.316	0.000	0.47
		C		0.000	0.000	27.133	0.000	0.98
L8	40.0000-20.0000	A	1.263	0.000	0.000	5.975	0.000	0.16
		B		0.000	0.000	5.975	0.000	0.16
		C		0.000	0.000	12.527	0.000	0.66
L9	20.0000-0.0000	A	1.132	0.000	0.000	2.097	0.000	0.06
		B		0.000	0.000	2.097	0.000	0.06
		C		0.000	0.000	5.110	0.000	0.51

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
L1	190.0000-160.0000	0.2490	0.6840	0.5176	1.4218

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
L2	160.0000-140.0000	0.2505	0.6880	0.5329	1.4638
L3	140.0000-120.0000	0.2514	0.6907	0.5422	1.4894
L4	120.0000-100.0000	0.1987	0.5459	0.4725	1.2980
L5	100.0000-80.0000	0.1642	0.4511	0.4099	1.1259
L6	80.0000-60.0000	0.1398	0.3839	0.3601	0.9892
L7	60.0000-40.0000	0.1464	0.4020	0.3668	1.0076
L8	40.0000-20.0000	0.2063	0.5668	0.4553	1.2506
L9	20.0000-0.0000	0.1180	0.3242	0.2339	0.6426

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

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L1	1	3/4" ladder rung (12" long 12" oc)	160.00 - 190.00	1.0000	1.0000
L2	1	3/4" ladder rung (12" long 12" oc)	140.00 - 160.00	1.0000	1.0000
L3	1	3/4" ladder rung (12" long 12" oc)	120.00 - 140.00	1.0000	1.0000
L4	1	3/4" ladder rung (12" long 12" oc)	100.00 - 120.00	1.0000	1.0000
L4	21	FP 4 x 4.5	100.00 - 106.75	1.0000	1.0000
L4	22	FP 4 x 4.5	100.00 - 106.75	1.0000	1.0000
L4	23	FP 4 x 4.5	100.00 - 106.75	1.0000	1.0000
L5	1	3/4" ladder rung (12" long 12" oc)	80.00 - 100.00	1.0000	1.0000
L5	18	CCI-045100 (L)	80.00 - 90.50	1.0000	1.0000
L5	19	CCI-045100 (L)	80.00 - 90.50	1.0000	1.0000
L5	20	CCI-045100 (L)	80.00 - 90.50	1.0000	1.0000
L5	21	FP 4 x 4.5	98.25 - 100.00	1.0000	1.0000
L5	22	FP 4 x 4.5	98.25 - 100.00	1.0000	1.0000
L5	23	FP 4 x 4.5	98.25 - 100.00	1.0000	1.0000
L6	1	3/4" ladder rung (12" long 12" oc)	60.00 - 80.00	1.0000	1.0000
L6	18	CCI-045100 (L)	60.00 - 80.00	1.0000	1.0000
L6	19	CCI-045100 (L)	60.00 - 80.00	1.0000	1.0000
L6	20	CCI-045100 (L)	60.00 - 80.00	1.0000	1.0000
L7	1	3/4" ladder rung (12" long 12" oc)	40.00 - 60.00	1.0000	1.0000
L7	18	CCI-045100 (L)	40.00 - 60.00	1.0000	1.0000
L7	19	CCI-045100 (L)	40.00 - 60.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L7	20	CCI-045100 (L)	40.00 - 60.00	1.0000	1.0000
L8	1	3/4" ladder rung (12" long 12" oc)	20.00 - 40.00	1.0000	1.0000
L8	15	CCI-045100 (L)	20.00 - 23.50	1.0000	1.0000
L8	16	CCI-045100 (L)	20.00 - 23.50	1.0000	1.0000
L8	17	CCI-045100 (L)	20.00 - 23.50	1.0000	1.0000
L8	18	CCI-045100 (L)	36.75 - 40.00	1.0000	1.0000
L8	19	CCI-045100 (L)	36.75 - 40.00	1.0000	1.0000
L8	20	CCI-045100 (L)	36.75 - 40.00	1.0000	1.0000
L9	1	3/4" ladder rung (12" long 12" oc)	10.00 - 20.00	1.0000	1.0000
L9	15	CCI-045100 (L)	17.25 - 20.00	1.0000	1.0000
L9	16	CCI-045100 (L)	17.25 - 20.00	1.0000	1.0000
L9	17	CCI-045100 (L)	17.25 - 20.00	1.0000	1.0000

Effective Width of Flat Linear Attachments / Feed Lines

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L4	21	FP 4 x 4.5	100.00 - 106.75	Manual	1.0000
L4	22	FP 4 x 4.5	100.00 - 106.75	Manual	1.0000
L4	23	FP 4 x 4.5	100.00 - 106.75	Manual	1.0000
L5	18	CCI-045100 (L)	80.00 - 90.50	Manual	1.0000
L5	19	CCI-045100 (L)	80.00 - 90.50	Manual	1.0000
L5	20	CCI-045100 (L)	80.00 - 90.50	Manual	1.0000
L5	21	FP 4 x 4.5	98.25 - 100.00	Manual	1.0000
L5	22	FP 4 x 4.5	98.25 - 100.00	Manual	1.0000
L5	23	FP 4 x 4.5	98.25 - 100.00	Manual	1.0000
L6	18	CCI-045100 (L)	60.00 - 80.00	Manual	1.0000
L6	19	CCI-045100 (L)	60.00 - 80.00	Manual	1.0000
L6	20	CCI-045100 (L)	60.00 - 80.00	Manual	1.0000
L7	18	CCI-045100 (L)	40.00 - 60.00	Manual	1.0000
L7	19	CCI-045100 (L)	40.00 - 60.00	Manual	1.0000
L7	20	CCI-045100 (L)	40.00 - 60.00	Manual	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L8	15	CCI-045100 (L)	20.00 - 23.50	Manual	1.0000
L8	16	CCI-045100 (L)	20.00 - 23.50	Manual	1.0000
L8	17	CCI-045100 (L)	20.00 - 23.50	Manual	1.0000
L8	18	CCI-045100 (L)	36.75 - 40.00	Manual	1.0000
L8	19	CCI-045100 (L)	36.75 - 40.00	Manual	1.0000
L8	20	CCI-045100 (L)	36.75 - 40.00	Manual	1.0000
L9	15	CCI-045100 (L)	17.25 - 20.00	Manual	1.0000
L9	16	CCI-045100 (L)	17.25 - 20.00	Manual	1.0000
L9	17	CCI-045100 (L)	17.25 - 20.00	Manual	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft
*** 190 ***					
AIR 32 B2A B66AA_T-MOBILE w/ Mount Pipe	A	From Leg	4.0000 0.00 2.00	0.0000	190.0000
AIR 32 B2A B66AA_T-MOBILE w/ Mount Pipe	B	From Leg	4.0000 0.00 2.00	0.0000	190.0000
AIR 32 B2A B66AA_T-MOBILE w/ Mount Pipe	C	From Leg	4.0000 0.00 2.00	0.0000	190.0000
AIR6449 B41_T-MOBILE w/ Mount Pipe	A	From Leg	4.0000 0.00 2.00	0.0000	190.0000
AIR6449 B41_T-MOBILE w/ Mount Pipe	B	From Leg	4.0000 0.00 2.00	0.0000	190.0000
AIR6449 B41_T-MOBILE w/ Mount Pipe	C	From Leg	4.0000 0.00 2.00	0.0000	190.0000
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	A	From Leg	4.0000 0.00 2.00	0.0000	190.0000
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	B	From Leg	4.0000 0.00 2.00	0.0000	190.0000
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	C	From Leg	4.0000 0.00 2.00	0.0000	190.0000
RADIO 4449 B71 B85A_T-MOBILE	A	From Leg	4.0000 0.00 2.00	0.0000	190.0000
RADIO 4449 B71 B85A_T-MOBILE	B	From Leg	4.0000 0.00 2.00	0.0000	190.0000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
RADIO 4449 B71 B85A_T-MOBILE	C	From Leg	4.0000 0.00 2.00	0.0000	190.0000
RRUS 4415 B25	A	From Leg	4.0000 0.00 2.00	0.0000	190.0000
RRUS 4415 B25	B	From Leg	4.0000 0.00 2.00	0.0000	190.0000
RRUS 4415 B25	C	From Leg	4.0000 0.00 2.00	0.0000	190.0000
6' x 2" Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.0000	190.0000
6' x 2" Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.0000	190.0000
6' x 2" Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.0000	190.0000
Platform Mount [LP 405-1_HR-1] *** 165 ***	C	None		0.0000	190.0000
SBNHH-1D65A w/ Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.0000	165.0000
SBNHH-1D65A w/ Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.0000	165.0000
SBNHH-1D65A w/ Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.0000	165.0000
(2) OPA65R-BU4D w/ Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.0000	165.0000
(2) OPA65R-BU4D w/ Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.0000	165.0000
(2) OPA65R-BU4D w/ Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.0000	165.0000
RRUS 4449 B5/B12	A	From Leg	4.0000 0.00 0.00	0.0000	165.0000
RRUS 4449 B5/B12	B	From Leg	4.0000 0.00 0.00	0.0000	165.0000
RRUS 4449 B5/B12	C	From Leg	4.0000 0.00 0.00	0.0000	165.0000
RRUS 4478 B14	A	From Leg	4.0000 0.00 0.00	0.0000	165.0000
RRUS 4478 B14	B	From Leg	4.0000 0.00 0.00	0.0000	165.0000
RRUS 4478 B14	C	From Leg	4.0000 0.00 0.00	0.0000	165.0000
RRUS 8843 B2/B66A	A	From Leg	4.0000 0.00 0.00	0.0000	165.0000
RRUS 8843 B2/B66A	B	From Leg	4.0000 0.00 0.00	0.0000	165.0000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
RRUS 8843 B2/B66A	C	From Leg	4.0000 0.00 0.00	0.0000	165.0000
TT19-08BP111-001	A	From Leg	4.0000 0.00 0.00	0.0000	165.0000
TT19-08BP111-001	B	From Leg	4.0000 0.00 0.00	0.0000	165.0000
TT19-08BP111-001	C	From Leg	4.0000 0.00 0.00	0.0000	165.0000
DC6-48-60-18-8F	A	From Leg	4.0000 0.00 0.00	0.0000	165.0000
DC9-48-60-24-8C-EV	B	From Leg	4.0000 0.00 0.00	0.0000	165.0000
6' x 2" Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.0000	165.0000
6' x 2" Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.0000	165.0000
6' x 2" Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.0000	165.0000
Platform Mount [LP 712-1_KCKR]	C	None		0.0000	165.0000
Miscellaneous [NA 507-1]	C	None		0.0000	165.0000
*** 155 ***					
MX08FRO665-21 w/ Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.0000	155.0000
MX08FRO665-21 w/ Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.0000	155.0000
MX08FRO665-21 w/ Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.0000	155.0000
TA08025-B604	A	From Leg	4.0000 0.00 0.00	0.0000	155.0000
TA08025-B604	B	From Leg	4.0000 0.00 0.00	0.0000	155.0000
TA08025-B604	C	From Leg	4.0000 0.00 0.00	0.0000	155.0000
TA08025-B605	A	From Leg	4.0000 0.00 0.00	0.0000	155.0000
TA08025-B605	B	From Leg	4.0000 0.00 0.00	0.0000	155.0000
TA08025-B605	C	From Leg	4.0000 0.00 0.00	0.0000	155.0000
RDIDC-9181-PF-48	A	From Leg	4.0000 0.00 0.00	0.0000	155.0000
(2) 8' x 2" Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.0000	155.0000
(2) 8' x 2" Mount Pipe	B	From Leg	4.0000 0.00	0.0000	155.0000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
(2) 8' x 2" Mount Pipe	C	From Leg	0.00 4.0000 0.00 0.00	0.0000	155.0000
Commscope MC-PK8-DSH ***	C	None		0.0000	155.0000

Tower Pressures - No Ice

G_H = 1.100

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg % 	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1 190.0000-160.0000	175.0000	1.16	42.28	60.000	A	0.000	60.000	60.000	100.00	0.000	0.000
					B	0.000	60.000		100.00	0.000	0.000
					C	0.000	60.000		100.00	2.250	0.000
L2 160.0000-140.0000	150.0000	1.11	40.45	50.000	A	0.000	50.000	50.000	100.00	0.000	0.000
					B	0.000	50.000		100.00	0.000	0.000
					C	0.000	50.000		100.00	1.500	0.000
L3 140.0000-120.0000	130.0000	1.065	38.83	60.000	A	0.000	60.000	60.000	100.00	0.000	0.000
					B	0.000	60.000		100.00	0.000	0.000
					C	0.000	60.000		100.00	1.500	0.000
L4 120.0000-100.0000	110.0000	1.016	37.02	70.000	A	0.000	70.000	70.000	100.00	3.896	0.000
					B	0.000	70.000		100.00	3.896	0.000
					C	0.000	70.000		100.00	5.396	0.000
L5 100.0000-80.0000	90.0000	0.959	34.96	80.000	A	0.000	80.000	80.000	100.00	8.885	0.000
					B	0.000	80.000		100.00	8.885	0.000
					C	0.000	80.000		100.00	10.385	0.000
L6 80.0000-60.0000	70.0000	0.892	32.54	90.000	A	0.000	90.000	90.000	100.00	15.000	0.000
					B	0.000	90.000		100.00	15.000	0.000
					C	0.000	90.000		100.00	16.500	0.000
L7 60.0000-40.0000	50.0000	0.811	29.56	100.000	A	0.000	100.000	100.000	100.00	15.000	0.000
					B	0.000	100.000		100.00	15.000	0.000
					C	0.000	100.000		100.00	16.500	0.000
L8 40.0000-20.0000	30.0000	0.701	25.54	100.000	A	0.000	100.000	100.000	100.00	4.681	0.000
					B	0.000	100.000		100.00	4.681	0.000
					C	0.000	100.000		100.00	6.181	0.000
L9 20.0000-0.0000	10.0000	0.7	25.52	100.000	A	0.000	100.000	100.000	100.00	1.762	0.000
					B	0.000	100.000		100.00	1.762	0.000
					C	0.000	100.000		100.00	2.512	0.000

Tower Pressure - With Ice

G_H = 1.100

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg % 	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1 190.0000-160.0000	175.0000	1.16	6.66	1.5065	67.532	A	0.000	67.532	67.532	100.00	0.000	0.000
						B	0.000	67.532		100.00	0.000	0.000
						C	0.000	67.532		100.00	11.289	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L2 160.0000-140.0000	150.0000	1.11	6.37	1.4834	54.945	A	0.000	54.945	54.945	100.00	0.000	0.000
						B	0.000	54.945		100.00	0.000	0.000
						C	0.000	54.945		100.00	7.434	0.000
L3 140.0000-120.0000	130.0000	1.065	6.12	1.4624	64.875	A	0.000	64.875	64.875	100.00	0.000	0.000
						B	0.000	64.875		100.00	0.000	0.000
						C	0.000	64.875		100.00	7.349	0.000
L4 120.0000-100.0000	110.0000	1.016	5.83	1.4381	74.794	A	0.000	74.794	74.794	100.00	5.073	0.000
						B	0.000	74.794		100.00	5.073	0.000
						C	0.000	74.794		100.00	12.326	0.000
L5 100.0000-80.0000	90.0000	0.959	5.51	1.4096	84.699	A	0.000	84.699	84.699	100.00	12.145	0.000
						B	0.000	84.699		100.00	12.145	0.000
						C	0.000	84.699		100.00	19.283	0.000
L6 80.0000-60.0000	70.0000	0.892	5.12	1.3746	94.582	A	0.000	94.582	94.582	100.00	20.498	0.000
						B	0.000	94.582		100.00	20.498	0.000
						C	0.000	94.582		100.00	27.497	0.000
L7 60.0000-40.0000	50.0000	0.811	4.65	1.3291	104.430	A	0.000	104.430	104.430	100.00	20.316	0.000
						B	0.000	104.430		100.00	20.316	0.000
						C	0.000	104.430		100.00	27.133	0.000
L8 40.0000-20.0000	30.0000	0.701	4.02	1.2629	104.210	A	0.000	104.210	104.210	100.00	5.975	0.000
						B	0.000	104.210		100.00	5.975	0.000
						C	0.000	104.210		100.00	12.527	0.000
L9 20.0000-0.0000	10.0000	0.7	4.02	1.1315	103.772	A	0.000	103.772	103.772	100.00	2.097	0.000
						B	0.000	103.772		100.00	2.097	0.000
						C	0.000	103.772		100.00	5.110	0.000

Tower Pressure - Service

G_H = 1.100

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1 190.0000-160.0000	175.0000	1.16	9.03	60.000	A	0.000	60.000	60.000	100.00	0.000	0.000
					B	0.000	60.000		100.00	0.000	0.000
					C	0.000	60.000		100.00	2.250	0.000
L2 160.0000-140.0000	150.0000	1.11	8.64	50.000	A	0.000	50.000	50.000	100.00	0.000	0.000
					B	0.000	50.000		100.00	0.000	0.000
					C	0.000	50.000		100.00	1.500	0.000
L3 140.0000-120.0000	130.0000	1.065	8.29	60.000	A	0.000	60.000	60.000	100.00	0.000	0.000
					B	0.000	60.000		100.00	0.000	0.000
					C	0.000	60.000		100.00	1.500	0.000
L4 120.0000-100.0000	110.0000	1.016	7.91	70.000	A	0.000	70.000	70.000	100.00	3.896	0.000
					B	0.000	70.000		100.00	3.896	0.000
					C	0.000	70.000		100.00	5.396	0.000
L5 100.0000-80.0000	90.0000	0.959	7.47	80.000	A	0.000	80.000	80.000	100.00	8.885	0.000
					B	0.000	80.000		100.00	8.885	0.000
					C	0.000	80.000		100.00	10.385	0.000
L6 80.0000-60.0000	70.0000	0.892	6.95	90.000	A	0.000	90.000	90.000	100.00	15.000	0.000
					B	0.000	90.000		100.00	15.000	0.000
					C	0.000	90.000		100.00	16.500	0.000
L7 60.0000-40.0000	50.0000	0.811	6.31	100.000	A	0.000	100.000	100.000	100.00	15.000	0.000
					B	0.000	100.000		100.00	15.000	0.000
					C	0.000	100.000		100.00	16.500	0.000
L8 40.0000-20.0000	30.0000	0.701	5.45	100.000	A	0.000	100.000	100.000	100.00	4.681	0.000
					B	0.000	100.000		100.00	4.681	0.000
					C	0.000	100.000		100.00	6.181	0.000
L9 20.0000-0.0000	10.0000	0.7	5.45	100.000	A	0.000	100.000	100.000	100.00	1.762	0.000
					B	0.000	100.000		100.00	1.762	0.000
					C	0.000	100.000		100.00	2.512	0.000

Load Combinations

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

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	190 - 160	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-24.86	-0.45	0.06
			Max. Mx	8	-11.94	-178.95	-0.03
			Max. My	14	-11.94	-0.15	-178.84
			Max. Vy	8	10.49	-178.95	-0.03
			Max. Vx	14	10.49	-0.15	-178.84
			Max. Torque	13			0.21
L2	160 - 140	Pole	Max Tension	1	0.00	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	26	-35.41	-0.45	0.40
			Max. Mx	8	-18.38	-450.38	0.04
			Max. My	2	-18.37	-0.16	450.88
			Max. Vy	8	15.05	-450.38	0.04
			Max. Vx	14	15.09	-0.16	-450.77
			Max. Torque	10			0.41
L3	140 - 120	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-40.78	-0.45	0.22
			Max. Mx	8	-22.39	-766.94	-0.01
			Max. My	14	-22.39	-0.16	-768.15
			Max. Vy	8	16.59	-766.94	-0.01
			Max. Vx	14	16.63	-0.16	-768.15
			Max. Torque	10			0.41
L4	120 - 100	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-48.65	-0.45	0.02
			Max. Mx	8	-28.49	-1116.15	-0.08
			Max. My	14	-28.49	-0.16	-1118.19
			Max. Vy	8	18.32	-1116.15	-0.08
			Max. Vx	14	18.36	-0.16	-1118.19
			Max. Torque	10			0.41
L5	100 - 80	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-56.85	-0.45	-0.20
			Max. Mx	8	-34.66	-1500.28	-0.15
			Max. My	14	-34.66	-0.17	-1503.16
			Max. Vy	8	20.09	-1500.28	-0.15
			Max. Vx	14	20.13	-0.17	-1503.16
			Max. Torque	10			0.41
L6	80 - 60	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-66.09	-0.45	-0.45
			Max. Mx	8	-41.56	-1920.16	-0.23
			Max. My	14	-41.56	-0.17	-1923.89
			Max. Vy	8	21.90	-1920.16	-0.23
			Max. Vx	14	21.93	-0.17	-1923.89
			Max. Torque	10			0.41
L7	60 - 40	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-76.01	-0.45	-0.71
			Max. Mx	8	-49.05	-2375.63	-0.33
			Max. My	14	-49.05	-0.17	-2380.21
			Max. Vy	8	23.65	-2375.63	-0.33
			Max. Vx	14	23.69	-0.17	-2380.21
			Max. Torque	10			0.41
L8	40 - 20	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-86.65	-0.45	-0.96
			Max. Mx	8	-57.72	-2862.96	-0.42
			Max. My	14	-57.72	-0.17	-2868.38
			Max. Vy	8	25.08	-2862.96	-0.42
			Max. Vx	14	25.12	-0.17	-2868.38
			Max. Torque	10			0.41
L9	20 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-98.60	-0.45	-1.07
			Max. Mx	8	-68.05	-3377.96	-0.47
			Max. My	14	-68.05	-0.17	-3384.17
			Max. Vy	20	-26.41	3377.62	-0.47
			Max. Vx	14	26.45	-0.17	-3384.17
			Max. Torque	10			0.41

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	98.60	-0.00	-0.00
	Max. H_x	21	51.04	26.40	0.00
	Max. H_z	3	51.04	-0.00	26.44
	Max. M_x	2	3383.24	-0.00	26.44

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
	Max. M_z	8	3377.96	-26.40	0.00
	Max. Torsion	10	0.41	-22.87	-13.22
	Min. Vert	15	51.04	-0.00	-26.44
	Min. H_x	9	51.04	-26.40	0.00
	Min. H_z	15	51.04	-0.00	-26.44
	Min. M_x	14	-3384.17	-0.00	-26.44
	Min. M_z	20	-3377.62	26.40	0.00
	Min. Torsion	22	-0.41	22.87	13.22

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	56.71	0.00	0.00	0.37	-0.13	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	68.05	0.00	-26.44	-3383.24	-0.17	0.18
0.9 Dead+1.0 Wind 0 deg - No Ice	51.04	0.00	-26.44	-3347.26	-0.12	0.18
1.2 Dead+1.0 Wind 30 deg - No Ice	68.05	13.20	-22.90	-2930.62	-1689.47	-0.03
0.9 Dead+1.0 Wind 30 deg - No Ice	51.04	13.20	-22.90	-2899.23	-1671.27	-0.03
1.2 Dead+1.0 Wind 60 deg - No Ice	68.05	22.87	-13.22	-1691.80	-2926.13	-0.23
0.9 Dead+1.0 Wind 60 deg - No Ice	51.04	22.87	-13.22	-1673.73	-2894.63	-0.23
1.2 Dead+1.0 Wind 90 deg - No Ice	68.05	26.40	-0.00	0.47	-3377.96	-0.37
0.9 Dead+1.0 Wind 90 deg - No Ice	51.04	26.40	-0.00	0.35	-3341.88	-0.36
1.2 Dead+1.0 Wind 120 deg - No Ice	68.05	22.87	13.22	1692.73	-2926.12	-0.41
0.9 Dead+1.0 Wind 120 deg - No Ice	51.04	22.87	13.22	1674.42	-2894.63	-0.40
1.2 Dead+1.0 Wind 150 deg - No Ice	68.05	13.20	22.90	2931.55	-1689.47	-0.34
0.9 Dead+1.0 Wind 150 deg - No Ice	51.04	13.20	22.90	2899.92	-1671.26	-0.34
1.2 Dead+1.0 Wind 180 deg - No Ice	68.05	0.00	26.44	3384.17	-0.17	-0.18
0.9 Dead+1.0 Wind 180 deg - No Ice	51.04	0.00	26.44	3347.95	-0.12	-0.18
1.2 Dead+1.0 Wind 210 deg - No Ice	68.05	-13.20	22.90	2931.55	1689.13	0.03
0.9 Dead+1.0 Wind 210 deg - No Ice	51.04	-13.20	22.90	2899.92	1671.02	0.03
1.2 Dead+1.0 Wind 240 deg - No Ice	68.05	-22.87	13.22	1692.73	2925.79	0.23
0.9 Dead+1.0 Wind 240 deg - No Ice	51.04	-22.87	13.22	1674.42	2894.38	0.23
1.2 Dead+1.0 Wind 270 deg - No Ice	68.05	-26.40	-0.00	0.47	3377.62	0.37
0.9 Dead+1.0 Wind 270 deg - No Ice	51.04	-26.40	-0.00	0.35	3341.63	0.36
1.2 Dead+1.0 Wind 300 deg - No Ice	68.05	-22.87	-13.22	-1691.80	2925.79	0.41
0.9 Dead+1.0 Wind 300 deg - No Ice	51.04	-22.87	-13.22	-1673.72	2894.38	0.40
1.2 Dead+1.0 Wind 330 deg - No Ice	68.05	-13.20	-22.90	-2930.62	1689.13	0.34
0.9 Dead+1.0 Wind 330 deg - No Ice	51.04	-13.20	-22.90	-2899.23	1671.02	0.34
1.2 Dead+1.0 Ice+1.0 Temp	98.60	0.00	0.00	1.07	-0.45	0.00

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
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	98.60	-0.00	-8.25	-1053.47	-0.53	0.05
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	98.60	4.12	-7.14	-912.18	-527.28	-0.00
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	98.60	7.14	-4.12	-526.18	-912.89	-0.06
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	98.60	8.24	-0.00	1.11	-1054.04	-0.10
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	98.60	7.14	4.12	528.40	-912.89	-0.11
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	98.60	4.12	7.14	914.40	-527.28	-0.09
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	98.60	-0.00	8.25	1055.68	-0.53	-0.05
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	98.60	-4.12	7.14	914.40	526.23	0.00
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	98.60	-7.14	4.12	528.40	911.84	0.06
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	98.60	-8.24	-0.00	1.11	1052.98	0.10
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	98.60	-7.14	-4.12	-526.18	911.84	0.11
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	98.60	-4.12	-7.14	-912.18	526.23	0.09
Dead+Wind 0 deg - Service	56.71	-0.00	-5.65	-717.99	-0.14	0.05
Dead+Wind 30 deg - Service	56.71	2.82	-4.89	-621.74	-358.70	-0.00
Dead+Wind 60 deg - Service	56.71	4.89	-2.82	-358.80	-621.18	-0.05
Dead+Wind 90 deg - Service	56.71	5.64	-0.00	0.38	-717.26	-0.08
Dead+Wind 120 deg - Service	56.71	4.89	2.82	359.57	-621.18	-0.09
Dead+Wind 150 deg - Service	56.71	2.82	4.89	622.51	-358.70	-0.08
Dead+Wind 180 deg - Service	56.71	-0.00	5.65	718.76	-0.14	-0.05
Dead+Wind 210 deg - Service	56.71	-2.82	4.89	622.51	358.42	0.00
Dead+Wind 240 deg - Service	56.71	-4.89	2.82	359.57	620.90	0.05
Dead+Wind 270 deg - Service	56.71	-5.64	-0.00	0.38	716.98	0.08
Dead+Wind 300 deg - Service	56.71	-4.89	-2.82	-358.80	620.90	0.09
Dead+Wind 330 deg - Service	56.71	-2.82	-4.89	-621.74	358.42	0.08

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	0.00	-56.71	0.00	-0.00	56.71	-0.00	0.000%
2	0.00	-68.05	-26.44	-0.00	68.05	26.44	0.008%
3	0.00	-51.04	-26.44	-0.00	51.04	26.44	0.007%
4	13.20	-68.05	-22.90	-13.20	68.05	22.90	0.000%
5	13.20	-51.04	-22.90	-13.20	51.04	22.90	0.000%
6	22.87	-68.05	-13.22	-22.87	68.05	13.22	0.000%
7	22.87	-51.04	-13.22	-22.87	51.04	13.22	0.000%
8	26.41	-68.05	0.00	-26.40	68.05	0.00	0.008%
9	26.41	-51.04	0.00	-26.40	51.04	0.00	0.007%
10	22.87	-68.05	13.22	-22.87	68.05	-13.22	0.000%
11	22.87	-51.04	13.22	-22.87	51.04	-13.22	0.000%
12	13.20	-68.05	22.90	-13.20	68.05	-22.90	0.000%
13	13.20	-51.04	22.90	-13.20	51.04	-22.90	0.000%
14	0.00	-68.05	26.44	-0.00	68.05	-26.44	0.008%
15	0.00	-51.04	26.44	-0.00	51.04	-26.44	0.007%
16	-13.20	-68.05	22.90	13.20	68.05	-22.90	0.000%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
17	-13.20	-51.04	22.90	13.20	51.04	-22.90	0.000%
18	-22.87	-68.05	13.22	22.87	68.05	-13.22	0.000%
19	-22.87	-51.04	13.22	22.87	51.04	-13.22	0.000%
20	-26.41	-68.05	0.00	26.40	68.05	0.00	0.008%
21	-26.41	-51.04	0.00	26.40	51.04	0.00	0.007%
22	-22.87	-68.05	-13.22	22.87	68.05	13.22	0.000%
23	-22.87	-51.04	-13.22	22.87	51.04	13.22	0.000%
24	-13.20	-68.05	-22.90	13.20	68.05	22.90	0.000%
25	-13.20	-51.04	-22.90	13.20	51.04	22.90	0.000%
26	0.00	-98.60	0.00	-0.00	98.60	-0.00	0.000%
27	0.00	-98.60	-8.25	0.00	98.60	8.25	0.000%
28	4.12	-98.60	-7.14	-4.12	98.60	7.14	0.000%
29	7.14	-98.60	-4.12	-7.14	98.60	4.12	0.000%
30	8.24	-98.60	0.00	-8.24	98.60	0.00	0.000%
31	7.14	-98.60	4.12	-7.14	98.60	-4.12	0.000%
32	4.12	-98.60	7.14	-4.12	98.60	-7.14	0.000%
33	0.00	-98.60	8.25	0.00	98.60	-8.25	0.000%
34	-4.12	-98.60	7.14	4.12	98.60	-7.14	0.000%
35	-7.14	-98.60	4.12	7.14	98.60	-4.12	0.000%
36	-8.24	-98.60	0.00	8.24	98.60	0.00	0.000%
37	-7.14	-98.60	-4.12	7.14	98.60	4.12	0.000%
38	-4.12	-98.60	-7.14	4.12	98.60	7.14	0.000%
39	0.00	-56.71	-5.65	0.00	56.71	5.65	0.002%
40	2.82	-56.71	-4.89	-2.82	56.71	4.89	0.002%
41	4.89	-56.71	-2.83	-4.89	56.71	2.82	0.002%
42	5.64	-56.71	0.00	-5.64	56.71	0.00	0.002%
43	4.89	-56.71	2.83	-4.89	56.71	-2.82	0.002%
44	2.82	-56.71	4.89	-2.82	56.71	-4.89	0.002%
45	0.00	-56.71	5.65	0.00	56.71	-5.65	0.002%
46	-2.82	-56.71	4.89	2.82	56.71	-4.89	0.002%
47	-4.89	-56.71	2.83	4.89	56.71	-2.82	0.002%
48	-5.64	-56.71	0.00	5.64	56.71	0.00	0.002%
49	-4.89	-56.71	-2.83	4.89	56.71	2.82	0.002%
50	-2.82	-56.71	-4.89	2.82	56.71	4.89	0.002%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00000001
2	Yes	16	0.00012172	0.00004327
3	Yes	16	0.00008320	0.00004642
4	Yes	21	0.00000001	0.00009373
5	Yes	20	0.00000001	0.00014491
6	Yes	21	0.00000001	0.00009424
7	Yes	20	0.00000001	0.00014573
8	Yes	16	0.00012173	0.00005435
9	Yes	16	0.00008321	0.00005454
10	Yes	21	0.00000001	0.00009288
11	Yes	20	0.00000001	0.00014353
12	Yes	21	0.00000001	0.00009460
13	Yes	20	0.00000001	0.00014628
14	Yes	16	0.00012172	0.00004328
15	Yes	16	0.00008320	0.00004643
16	Yes	21	0.00000001	0.00009384
17	Yes	20	0.00000001	0.00014509
18	Yes	21	0.00000001	0.00009322
19	Yes	20	0.00000001	0.00014410
20	Yes	16	0.00012173	0.00005434
21	Yes	16	0.00008321	0.00005453
22	Yes	21	0.00000001	0.00009460
23	Yes	20	0.00000001	0.00014634
24	Yes	21	0.00000001	0.00009300
25	Yes	20	0.00000001	0.00014374
26	Yes	6	0.00000001	0.00000001
27	Yes	19	0.00000001	0.00011544
28	Yes	19	0.00000001	0.00012747
29	Yes	19	0.00000001	0.00012748
30	Yes	19	0.00000001	0.00011550
31	Yes	19	0.00000001	0.00012746
32	Yes	19	0.00000001	0.00012761
33	Yes	19	0.00000001	0.00011552
34	Yes	19	0.00000001	0.00012732
35	Yes	19	0.00000001	0.00012720
36	Yes	19	0.00000001	0.00011522
37	Yes	19	0.00000001	0.00012722
38	Yes	19	0.00000001	0.00012718
39	Yes	16	0.00000001	0.00001032
40	Yes	16	0.00000001	0.00002109
41	Yes	16	0.00000001	0.00002174
42	Yes	16	0.00000001	0.00001043
43	Yes	16	0.00000001	0.00001995
44	Yes	16	0.00000001	0.00002228
45	Yes	16	0.00000001	0.00001033
46	Yes	16	0.00000001	0.00002111
47	Yes	16	0.00000001	0.00002046
48	Yes	16	0.00000001	0.00001042
49	Yes	16	0.00000001	0.00002236
50	Yes	16	0.00000001	0.00002005

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	190 - 160	16.494	45	0.8073	0.0005
L2	160 - 140	11.570	45	0.7351	0.0004
L3	140 - 120	8.661	45	0.6390	0.0003
L4	120 - 100	6.195	45	0.5293	0.0002
L5	100 - 80	4.187	45	0.4228	0.0001
L6	80 - 60	2.613	45	0.3238	0.0001
L7	60 - 40	1.439	45	0.2330	0.0001
L8	40 - 20	0.631	45	0.1500	0.0000
L9	20 - 0	0.158	45	0.0735	0.0000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
190.0000	AIR 32 B2A B66AA_T-MOBILE w/ Mount Pipe	45	16.494	0.8073	0.0005	80342
165.0000	SBNHH-1D65A w/ Mount Pipe	45	12.356	0.7525	0.0005	16068
155.0000	MX08FRO665-21 w/ Mount Pipe	45	10.805	0.7145	0.0004	12532

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	190 - 160	77.836	14	3.8144	0.0021
L2	160 - 140	54.588	14	3.4728	0.0019
L3	140 - 120	40.858	14	3.0174	0.0013
L4	120 - 100	29.216	14	2.4987	0.0008
L5	100 - 80	19.741	14	1.9949	0.0005
L6	80 - 60	12.318	14	1.5271	0.0004
L7	60 - 40	6.783	14	1.0985	0.0002
L8	40 - 20	2.973	14	0.7067	0.0001
L9	20 - 0	0.745	14	0.3460	0.0001

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
190.0000	AIR 32 B2A B66AA_T-MOBILE w/ Mount Pipe	14	77.836	3.8144	0.0021	17124
165.0000	SBNHH-1D65A w/ Mount Pipe	14	58.301	3.5551	0.0021	3422
155.0000	MX08FRO665-21 w/ Mount Pipe	14	50.979	3.3748	0.0018	2668

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L1	190 - 160 (1)	P24x0.375	30.0000	0.0000	0.0	27.8325	-11.94	1052.07	0.011
L2	160 - 140 (2)	30" x 0.375"	20.0000	0.0000	0.0	34.9011	-18.37	1311.06	0.014
L3	140 - 120 (3)	36" x 0.375"	20.0000	0.0000	0.0	41.9697	-22.39	1490.10	0.015
L4	120 - 100 (4)	42" x 0.375"	20.0000	0.0000	0.0	49.0383	-28.49	1668.87	0.017
L5	100 - 80 (5)	P48x0.375	20.0000	0.0000	0.0	56.1069	-34.66	1847.49	0.019

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L6	80 - 60 (6)	P54x3/8	20.0000	0.0000	0.0	63.1755	-41.56	2026.00	0.021
L7	60 - 40 (7)	P60x3/8	20.0000	0.0000	0.0	70.2440	-49.05	2204.43	0.022
L8	40 - 20 (8)	P60x1/2	20.0000	0.0000	0.0	93.4624	-57.72	3125.69	0.018
L9	20 - 0 (9)	P60x5/8	20.0000	0.0000	0.0	116.5830	-68.05	4139.15	0.016

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	190 - 160 (1)	P24x0.375	178.98	623.72	0.287	0.00	623.72	0.000
L2	160 - 140 (2)	30" x 0.375"	450.89	947.86	0.476	0.00	947.86	0.000
L3	140 - 120 (3)	36" x 0.375"	768.15	1338.81	0.574	0.00	1338.81	0.000
L4	120 - 100 (4)	42" x 0.375"	1118.19	1796.56	0.622	0.00	1796.56	0.000
L5	100 - 80 (5)	P48x0.375	1503.16	2321.11	0.648	0.00	2321.11	0.000
L6	80 - 60 (6)	P54x3/8	1923.89	2912.46	0.661	0.00	2912.46	0.000
L7	60 - 40 (7)	P60x3/8	2380.21	3570.61	0.667	0.00	3570.61	0.000
L8	40 - 20 (8)	P60x1/2	2868.38	4860.41	0.590	0.00	4860.41	0.000
L9	20 - 0 (9)	P60x5/8	3384.17	6198.18	0.546	0.00	6198.18	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	190 - 160 (1)	P24x0.375	10.49	315.62	0.033	0.19	655.57	0.000
L2	160 - 140 (2)	30" x 0.375"	15.09	395.78	0.038	0.03	994.73	0.000
L3	140 - 120 (3)	36" x 0.375"	16.63	454.19	0.037	0.18	1094.28	0.000
L4	120 - 100 (4)	42" x 0.375"	18.36	421.13	0.044	0.18	1185.51	0.000
L5	100 - 80 (5)	P48x0.375	20.13	394.81	0.051	0.18	1270.83	0.000
L6	80 - 60 (6)	P54x3/8	21.93	406.96	0.054	0.18	1474.98	0.000
L7	60 - 40 (7)	P60x3/8	23.69	418.12	0.057	0.18	1684.97	0.000
L8	40 - 20 (8)	P60x1/2	25.12	797.08	0.032	0.18	3205.39	0.000
L9	20 - 0 (9)	P60x5/8	26.45	1314.11	0.020	0.18	5273.53	0.000

Pole Interaction Design Data

Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	190 - 160 (1)	0.011	0.287	0.000	0.033	0.000	0.299	1.050	4.8.2
L2	160 - 140 (2)	0.014	0.476	0.000	0.038	0.000	0.491	1.050	4.8.2
L3	140 - 120 (3)	0.015	0.574	0.000	0.037	0.000	0.590	1.050	4.8.2
L4	120 - 100 (4)	0.017	0.622	0.000	0.044	0.000	0.641	1.050	4.8.2
L5	100 - 80 (5)	0.019	0.648	0.000	0.051	0.000	0.669	1.050	4.8.2
L6	80 - 60 (6)	0.021	0.661	0.000	0.054	0.000	0.684	1.050	4.8.2
L7	60 - 40 (7)	0.022	0.667	0.000	0.057	0.000	0.692	1.050	4.8.2
L8	40 - 20 (8)	0.018	0.590	0.000	0.032	0.000	0.610	1.050	4.8.2
L9	20 - 0 (9)	0.016	0.546	0.000	0.020	0.000	0.563	1.050	4.8.2

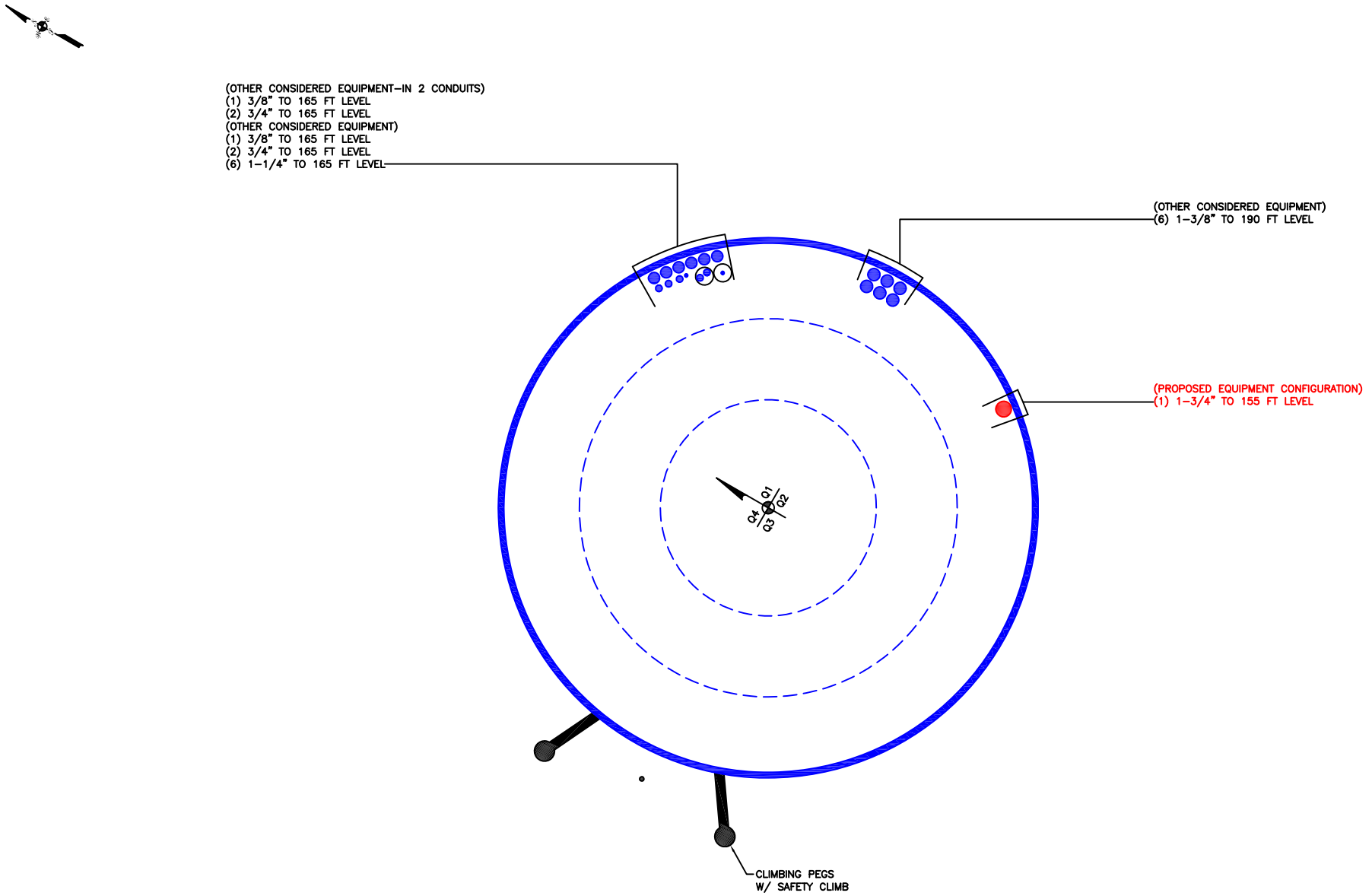
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	190 - 160	Pole	P24x0.375	1	-11.94	1104.67	28.5	Pass
L2	160 - 140	Pole	30" x 0.375"	2	-18.37	1376.61	46.8	Pass
L3	140 - 120	Pole	36" x 0.375"	3	-22.39	1564.60	56.2	Pass
L4	120 - 100	Pole	42" x 0.375"	4	-28.49	1752.31	61.1	Pass
L5	100 - 80	Pole	P48x0.375	5	-34.66	1939.86	63.7	Pass
L6	80 - 60	Pole	P54x3/8	6	-41.56	2127.30	65.1	Pass
L7	60 - 40	Pole	P60x3/8	7	-49.05	2314.65	65.9	Pass
L8	40 - 20	Pole	P60x1/2	8	-57.72	3281.97	58.1	Pass
L9	20 - 0	Pole	P60x5/8	9	-68.05	4346.11	53.6	Pass
							Summary	
						Pole (L7)	65.9	Pass
						RATING =	**65.9**	**Pass**

***NOTE: Above stress ratios for reinforced sections are approximate. More exact calculations are presented in Appendix C.**

APPENDIX B

BASE LEVEL DRAWING


(OTHER CONSIDERED EQUIPMENT–IN 2 CONDUITS)
(1) 3/8" TO 165 FT LEVEL
(2) 3/4" TO 165 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(1) 3/8" TO 165 FT LEVEL
(2) 3/4" TO 165 FT LEVEL
(6) 1–1/4" TO 165 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(6) 1–3/8" TO 190 FT LEVEL
(PROPOSED EQUIPMENT CONFIGURATION)
(1) 1–3/4" TO 155 FT LEVEL
Q1
Q2
Q3
Q4
CLIMBING PEGS
W/ SAFETY CLIMB

APPENDIX C

ADDITIONAL CALCULATIONS

Monopole Flange Plate Connection

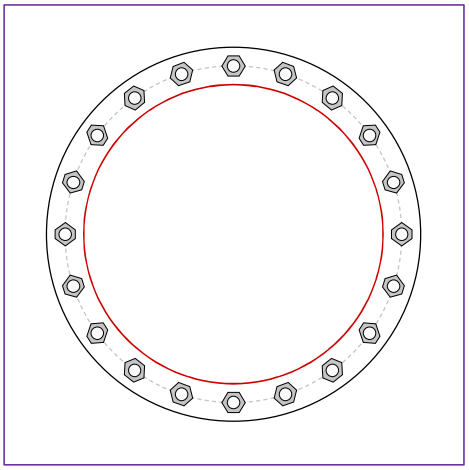
Elevation = 160 ft.

BU #	823529
Site Name	038/EastLyme/ I-95/ X
Order #	
TIA-222 Revision	H

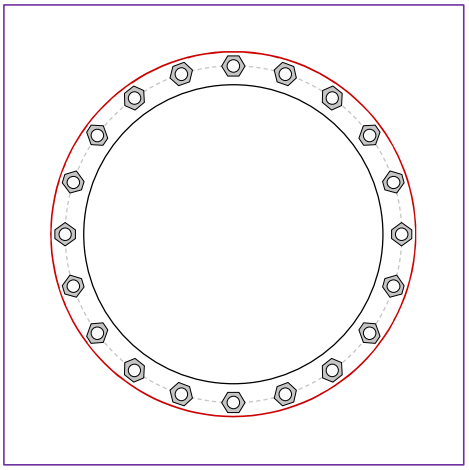
Applied Loads	
Moment (kip-ft)	178.98
Axial Force (kips)	11.94
Shear Force (kips)	10.49

**TIA-222-H Section 15.5 Applied*

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(20) 1" ø bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 27" BC

Top Plate Data

30" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Plate Data

24" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

N/A

Bottom Stiffener Data

N/A

Top Pole Data

24" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Pole Data

30" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	15.30	
Allowable (kips)	54.53	
Stress Rating:	**26.7%**	**Pass**

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Monopole Flange Plate Connection

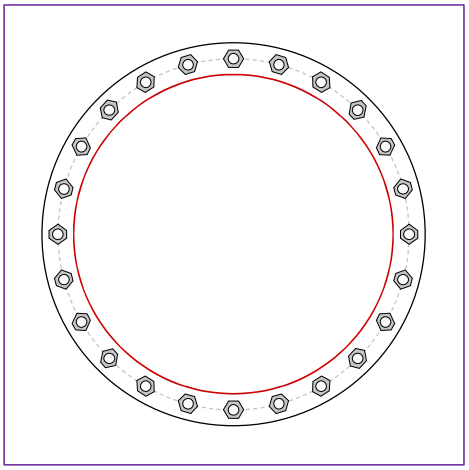
Elevation = 140 ft.

BU #	823529
Site Name	038/EastLyme/ I-95/ X
Order #	
TIA-222 Revision	H

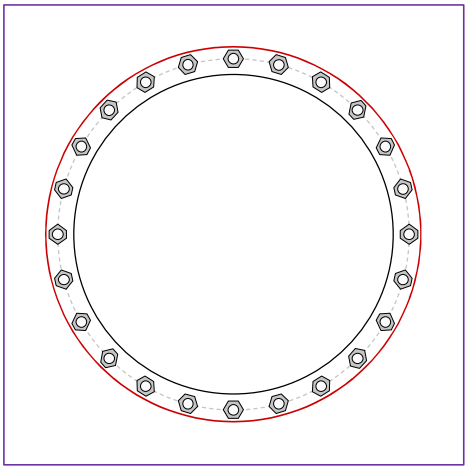
Applied Loads	
Moment (kip-ft)	450.89
Axial Force (kips)	18.37
Shear Force (kips)	15.09

**TIA-222-H Section 15.5 Applied*

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(24) 1" ø bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 33" BC

Top Plate Data

36" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Plate Data

30" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

N/A

Bottom Stiffener Data

N/A

Top Pole Data

30" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Pole Data

36" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	26.55	
Allowable (kips)	54.53	
Stress Rating:	**46.4%**	**Pass**

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Monopole Flange Plate Connection

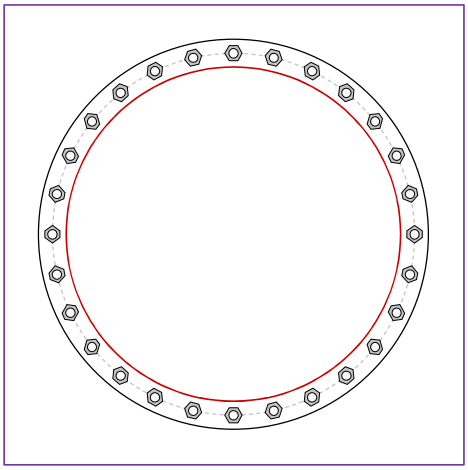
Elevation = 120 ft.

BU #	823529
Site Name	038/EastLyme/ I-95/ X
Order #	
TIA-222 Revision	H

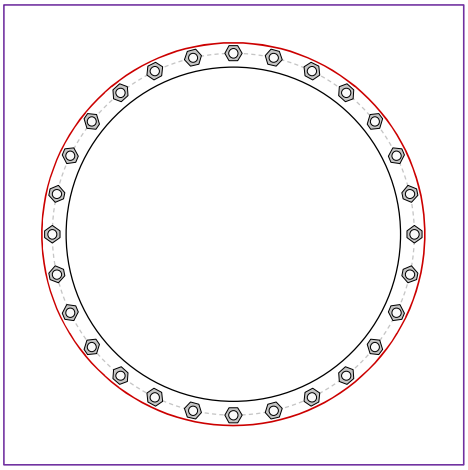
Applied Loads	
Moment (kip-ft)	768.15
Axial Force (kips)	22.39
Shear Force (kips)	16.63

**TIA-222-H Section 15.5 Applied*

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(28) 1" ø bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 39" BC

Top Plate Data

42" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Plate Data

36" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

N/A

Bottom Stiffener Data

N/A

Top Pole Data

36" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Pole Data

42" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	32.96	
Allowable (kips)	54.53	
Stress Rating:	**57.6%**	**Pass**

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Monopole Flange Plate Connection

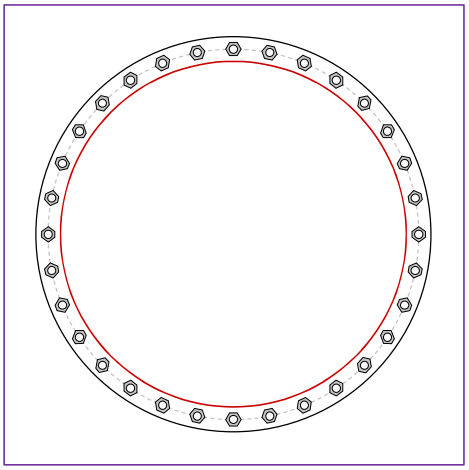
Elevation = 100 ft.

BU #	823529
Site Name	038/EastLyme/ I-95/ X
Order #	
TIA-222 Revision	H

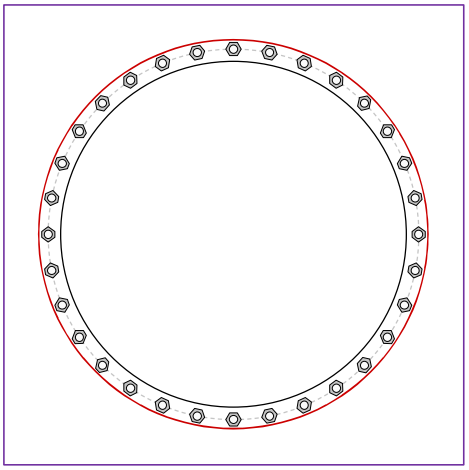
Applied Loads	
Moment (kip-ft)	1118.19
Axial Force (kips)	28.49
Shear Force (kips)	18.36

**TIA-222-H Section 15.5 Applied*

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(32) 1" ø bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 45" BC

Top Plate Data

48" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Plate Data

42" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

N/A

Bottom Stiffener Data

N/A

Top Pole Data

42" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Pole Data

48" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	36.38	
Allowable (kips)	54.53	
Stress Rating:	**63.5%**	**Pass**

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Monopole Flange Plate Connection

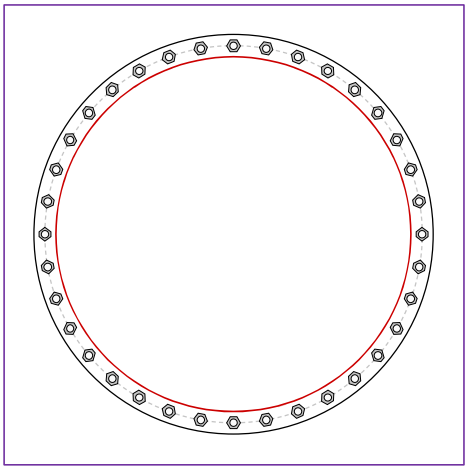
Elevation = 80 ft.

BU #	823529
Site Name	038/EastLyme/ I-95/ X
Order #	
TIA-222 Revision	H

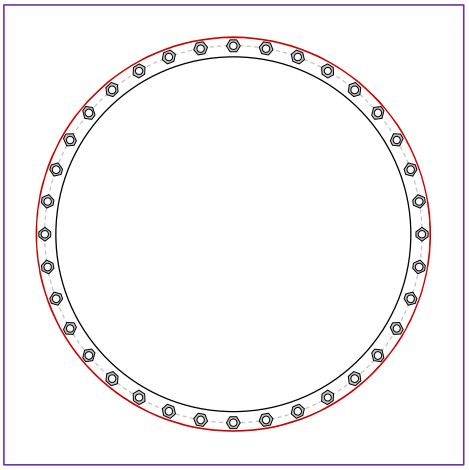
Applied Loads	
Moment (kip-ft)	1503.16
Axial Force (kips)	34.66
Shear Force (kips)	20.13

**TIA-222-H Section 15.5 Applied*

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(36) 1" ø bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 51" BC

Top Plate Data

54" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Plate Data

48" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

N/A

Bottom Stiffener Data

N/A

Top Pole Data

48" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Pole Data

54" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	38.33	
Allowable (kips)	54.53	
Stress Rating:	**66.9%**	**Pass**

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Monopole Flange Plate Connection

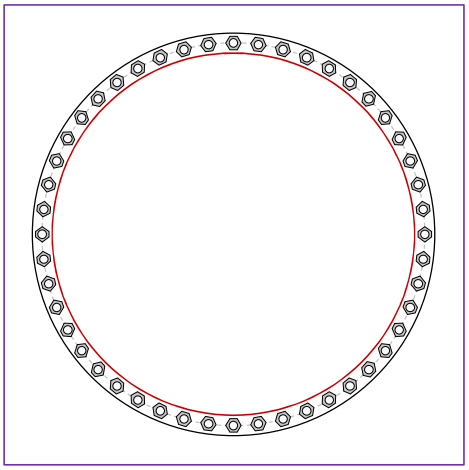
Elevation = 60 ft.

BU #	823529
Site Name	038/EastLyme/ I-95/ X
Order #	
TIA-222 Revision	H

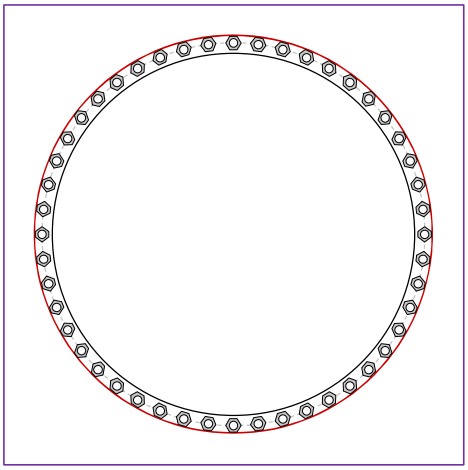
Applied Loads	
Moment (kip-ft)	1923.89
Axial Force (kips)	41.56
Shear Force (kips)	21.93

**TIA-222-H Section 15.5 Applied*

Top Plate - External



Bottom Plate - Internal



Connection Properties

Bolt Data

(48) 1-1/4" ø bolts (A325 N; Fy=81 ksi, Fu=120 ksi) on 57" BC

Top Plate Data

60" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Plate Data

54" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

N/A

Bottom Stiffener Data

N/A

Top Pole Data

54" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Pole Data

60" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	32.88	
Allowable (kips)	87.21	
Stress Rating:	**35.9%**	**Pass**

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Monopole Flange Plate Connection

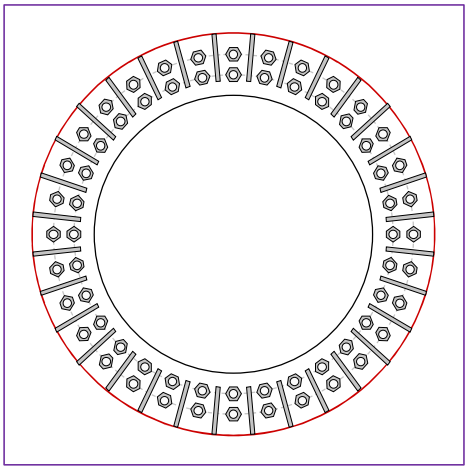
Elevation = 40 ft.

BU #	823529
Site Name	038/EastLyme/ I-95/ X
Order #	
TIA-222 Revision	H

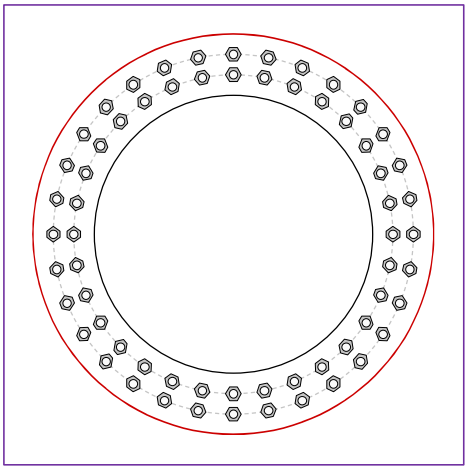
Applied Loads	
Moment (kip-ft)	2380.21
Axial Force (kips)	49.05
Shear Force (kips)	23.69

**TIA-222-H Section 15.5 Applied*

Top Plate - Internal



Bottom Plate - Internal



Connection Properties

Bolt Data

GROUP 1: (32) 1-1/4" ø bolts (A325 N; Fy=81 ksi, Fu=120 ksi) on 47" BC
GROUP 2: (32) 1-1/4" ø bolts (A325 N; Fy=81 ksi, Fu=120 ksi) on 53" BC

Top Plate Data

41" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Plate Data

41" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

(32) 10"H x 7"W x 0.625"T, Notch: 0.5"
plate: Fy= 36 ksi ; weld: Fy= 70 ksi
horiz. weld: 0.375" fillet
vert. weld: 0.375" fillet

Bottom Stiffener Data

N/A

Top Pole Data

60" x 0.375" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Pole Data

60" x 0.5" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	48.49	
Allowable (kips)	87.21	
Stress Rating:	**53.0%**	Pass

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Top Stiffener Capacity

Horizontal Weld:	**Pirod OK**
Vertical Weld:	**Pirod OK**
Plate Flexure+Shear:	**Pirod OK**
Plate Tension+Shear:	**Pirod OK**
Plate Compression:	**Pirod OK**

Bottom Stiffener Capacity

Horizontal Weld:	**N/A**
Vertical Weld:	**N/A**
Plate Flexure+Shear:	**N/A**
Plate Tension+Shear:	**N/A**
Plate Compression:	**N/A**

Top Pole Capacity

Punching Shear:	**Pirod OK**

Bottom Pole Capacity

Punching Shear:	**N/A**

CCIplate

Elevation (ft)	40	*(Flange)*

Bolt Group	Resist Axial	Resist Shear	Induce Plate Bending
1	Yes	Yes	Yes
2	Yes	Yes	Yes

Custom Bolt Connection

Bolt	Bolt Group ID	Location (deg.)	Diameter (in)	Material	Bolt Circle (in)	Eta Factor, η:	I_w (in):	Thread Type	Area Override, in^2	Tension Only
1	1	0	1,25	A325	47	0,5	0	N-Included		No
2	1	11,25	1,25	A325	47	0,5	0	N-Included		No
3	1	22,5	1,25	A325	47	0,5	0	N-Included		No
4	1	33,75	1,25	A325	47	0,5	0	N-Included		No
5	1	45	1,25	A325	47	0,5	0	N-Included		No
6	1	56,25	1,25	A325	47	0,5	0	N-Included		No
7	1	67,5	1,25	A325	47	0,5	0	N-Included		No
8	1	78,75	1,25	A325	47	0,5	0	N-Included		No
9	1	90	1,25	A325	47	0,5	0	N-Included		No
10	1	101,25	1,25	A325	47	0,5	0	N-Included		No
11	1	112,5	1,25	A325	47	0,5	0	N-Included		No
12	1	123,75	1,25	A325	47	0,5	0	N-Included		No
13	1	135	1,25	A325	47	0,5	0	N-Included		No
14	1	146,25	1,25	A325	47	0,5	0	N-Included		No
15	1	157,5	1,25	A325	47	0,5	0	N-Included		No
16	1	168,75	1,25	A325	47	0,5	0	N-Included		No
17	1	180	1,25	A325	47	0,5	0	N-Included		No
18	1	191,25	1,25	A325	47	0,5	0	N-Included		No
19	1	202,5	1,25	A325	47	0,5	0	N-Included		No
20	1	213,75	1,25	A325	47	0,5	0	N-Included		No
21	1	225	1,25	A325	47	0,5	0	N-Included		No
22	1	236,25	1,25	A325	47	0,5	0	N-Included		No
23	1	247,5	1,25	A325	47	0,5	0	N-Included		No
24	1	258,75	1,25	A325	47	0,5	0	N-Included		No
25	1	270	1,25	A325	47	0,5	0	N-Included		No
26	1	281,25	1,25	A325	47	0,5	0	N-Included		No
27	1	292,5	1,25	A325	47	0,5	0	N-Included		No
28	1	303,75	1,25	A325	47	0,5	0	N-Included		No
29	1	315	1,25	A325	47	0,5	0	N-Included		No
30	1	326,25	1,25	A325	47	0,5	0	N-Included		No
31	1	337,5	1,25	A325	47	0,5	0	N-Included		No
32	1	348,75	1,25	A325	47	0,5	0	N-Included		No
33	2	0	1,25	A325	53	0,5	0	N-Included		No
34	2	11,25	1,25	A325	53	0,5	0	N-Included		No
35	2	22,5	1,25	A325	53	0,5	0	N-Included		No
36	2	33,75	1,25	A325	53	0,5	0	N-Included		No
37	2	45	1,25	A325	53	0,5	0	N-Included		No
38	2	56,25	1,25	A325	53	0,5	0	N-Included		No
39	2	67,5	1,25	A325	53	0,5	0	N-Included		No
40	2	78,75	1,25	A325	53	0,5	0	N-Included		No
41	2	90	1,25	A325	53	0,5	0	N-Included		No
42	2	101,25	1,25	A325	53	0,5	0	N-Included		No
43	2	112,5	1,25	A325	53	0,5	0	N-Included		No
44	2	123,75	1,25	A325	53	0,5	0	N-Included		No
45	2	135	1,25	A325	53	0,5	0	N-Included		No
46	2	146,25	1,25	A325	53	0,5	0	N-Included		No
47	2	157,5	1,25	A325	53	0,5	0	N-Included		No
48	2	168,75	1,25	A325	53	0,5	0	N-Included		No
49	2	180	1,25	A325	53	0,5	0	N-Included		No
50	2	191,25	1,25	A325	53	0,5	0	N-Included		No
51	2	202,5	1,25	A325	53	0,5	0	N-Included		No
52	2	213,75	1,25	A325	53	0,5	0	N-Included		No
53	2	225	1,25	A325	53	0,5	0	N-Included		No
54	2	236,25	1,25	A325	53	0,5	0	N-Included		No
55	2	247,5	1,25	A325	53	0,5	0	N-Included		No
56	2	258,75	1,25	A325	53	0,5	0	N-Included		No
57	2	270	1,25	A325	53	0,5	0	N-Included		No
58	2	281,25	1,25	A325	53	0,5	0	N-Included		No
59	2	292,5	1,25	A325	53	0,5	0	N-Included		No
60	2	303,75	1,25	A325	53	0,5	0	N-Included		No
61	2	315	1,25	A325	53	0,5	0	N-Included		No
62	2	326,25	1,25	A325	53	0,5	0	N-Included		No
63	2	337,5	1,25	A325	53	0,5	0	N-Included		No
64	2	348,75	1,25	A325	53	0,5	0	N-Included		No

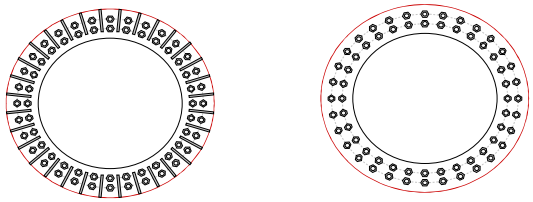
Custom Stiffener Connection - Top Plate

Stiffener	Stiffener Group ID	Location (deg.)	Width (in)	Height (in)	Thickness (in)	H. Notch (in)	V. Notch (in)	Grade (ksi)	Weld Type	Groove Depth (in)	Groove Angle (deg.)	H. Fillet Weld Size (in)	V. Fillet Weld Size (in)	Weld Strength (ksi)
1	1	5,625	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
2	1	16,875	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
3	1	28,125	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
4	1	39,375	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
5	1	50,625	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
6	1	61,875	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
7	1	73,125	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
8	1	84,375	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
9	1	95,625	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
10	1	106,875	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
11	1	118,125	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
12	1	129,375	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
13	1	140,625	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
14	1	151,875	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
15	1	163,125	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
16	1	174,375	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
17	1	185,625	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
18	1	196,875	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
19	1	208,125	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
20	1	219,375	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
21	1	230,625	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
22	1	241,875	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
23	1	253,125	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
24	1	264,375	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
25	1	275,625	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
26	1	286,875	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
27	1	298,125	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
28	1	309,375	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
29	1	320,625	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
30	1	331,875	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
31	1	343,125	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70
32	1	354,375	7	10	0,625	0,5	0,5	36	Fillet			0,375	0,375	70

Custom Stiffener Connection - Bottom Plate

Stiffener	Stiffener Group ID	Location (deg.)	Width (in)	Height (in)	Thickness (in)	H. Notch (in)	V. Notch (in)	Grade (ksi)	Weld Type	Groove Depth (in)	Groove Angle (deg.)	H. Fillet Weld Size (in)	V. Fillet Weld Size (in)	Weld Strength (ksi)

Plot Graphic



Monopole Flange Plate Connection

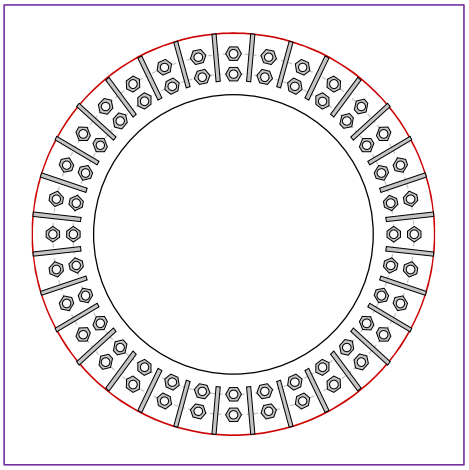
Elevation = 20 ft.

BU #	823529
Site Name	038/EastLyme/ I-95/ X
Order #	
TIA-222 Revision	H

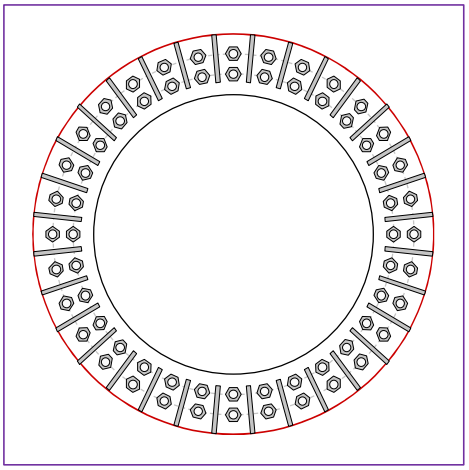
Applied Loads	
Moment (kip-ft)	2868.38
Axial Force (kips)	57.72
Shear Force (kips)	25.12

**TIA-222-H Section 15.5 Applied*

Top Plate - Internal



Bottom Plate - Internal



Connection Properties

Bolt Data

GROUP 1: (32) 1-1/4" ø bolts (A325 N; Fy=81 ksi, Fu=120 ksi) on 53" BC
GROUP 2: (32) 1-1/4" ø bolts (A325 N; Fy=81 ksi, Fu=120 ksi) on 47" BC

Top Plate Data

41" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Plate Data

41" ID x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

(32) 10"H x 7"W x 0.625"T, Notch: 0.5"
plate: Fy= 36 ksi ; weld: Fy= 80 ksi
horiz. weld: 0.375" fillet
vert. weld: 0.375" fillet

Bottom Stiffener Data

(32) 10"H x 7"W x 0.625"T, Notch: 0.5"
plate: Fy= 36 ksi ; weld: Fy= 80 ksi
horiz. weld: 0.375" fillet
vert. weld: 0.375" fillet

Top Pole Data

60" x 0.5" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Bottom Pole Data

60" x 0.625" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	44.53	
Allowable (kips)	87.21	
Stress Rating:	**48.6%**	Pass

Top Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Bottom Plate Capacity

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**
Tension Side Stress Rating:	**Pirod OK**

Top Stiffener Capacity

Horizontal Weld:	**Pirod OK**
Vertical Weld:	**Pirod OK**
Plate Flexure+Shear:	**Pirod OK**
Plate Tension+Shear:	**Pirod OK**
Plate Compression:	**Pirod OK**

Bottom Stiffener Capacity

Horizontal Weld:	**Pirod OK**
Vertical Weld:	**Pirod OK**
Plate Flexure+Shear:	**Pirod OK**
Plate Tension+Shear:	**Pirod OK**
Plate Compression:	**Pirod OK**

Top Pole Capacity

Punching Shear:	**Pirod OK**

Bottom Pole Capacity

Punching Shear:	**Pirod OK**

CCIplate

Elevation (ft)	20	(Flange)

Bolt Group	Resist Axial	Resist Shear	Induce Plate Bending
1	Yes	Yes	Yes
2	Yes	Yes	Yes

Custom Bolt Connection

Bolt	Bolt Group ID	Location (deg_A)	Diameter (in)	Material	Bolt Circle (in)	Eta Factor, η	I_x (in):	Thread Type	Area Override, in^2	Tension Only
1	1	0	1.25	A325	53	0.5	0	N-Included		No
2	1	11.25	1.25	A325	53	0.5	0	N-Included		No
3	1	22.5	1.25	A325	53	0.5	0	N-Included		No
4	1	33.75	1.25	A325	53	0.5	0	N-Included		No
5	1	45	1.25	A325	53	0.5	0	N-Included		No
6	1	56.25	1.25	A325	53	0.5	0	N-Included		No
7	1	67.5	1.25	A325	53	0.5	0	N-Included		No
8	1	78.75	1.25	A325	53	0.5	0	N-Included		No
9	1	90	1.25	A325	53	0.5	0	N-Included		No
10	1	101.25	1.25	A325	53	0.5	0	N-Included		No
11	1	112.5	1.25	A325	53	0.5	0	N-Included		No
12	1	123.75	1.25	A325	53	0.5	0	N-Included		No
13	1	135	1.25	A325	53	0.5	0	N-Included		No
14	1	146.25	1.25	A325	53	0.5	0	N-Included		No
15	1	157.5	1.25	A325	53	0.5	0	N-Included		No
16	1	168.75	1.25	A325	53	0.5	0	N-Included		No
17	1	180	1.25	A325	53	0.5	0	N-Included		No
18	1	191.25	1.25	A325	53	0.5	0	N-Included		No
19	1	202.5	1.25	A325	53	0.5	0	N-Included		No
20	1	213.75	1.25	A325	53	0.5	0	N-Included		No
21	1	225	1.25	A325	53	0.5	0	N-Included		No
22	1	236.25	1.25	A325	53	0.5	0	N-Included		No
23	1	247.5	1.25	A325	53	0.5	0	N-Included		No
24	1	258.75	1.25	A325	53	0.5	0	N-Included		No
25	1	270	1.25	A325	53	0.5	0	N-Included		No
26	1	281.25	1.25	A325	53	0.5	0	N-Included		No
27	1	292.5	1.25	A325	53	0.5	0	N-Included		No
28	1	303.75	1.25	A325	53	0.5	0	N-Included		No
29	1	315	1.25	A325	53	0.5	0	N-Included		No
30	1	326.25	1.25	A325	53	0.5	0	N-Included		No
31	1	337.5	1.25	A325	53	0.5	0	N-Included		No
32	1	348.75	1.25	A325	53	0.5	0	N-Included		No
33	2	0	1.25	A325	47	0.5	0	N-Included		No
34	2	11.25	1.25	A325	47	0.5	0	N-Included		No
35	2	22.5	1.25	A325	47	0.5	0	N-Included		No
36	2	33.75	1.25	A325	47	0.5	0	N-Included		No
37	2	45	1.25	A325	47	0.5	0	N-Included		No
38	2	56.25	1.25	A325	47	0.5	0	N-Included		No
39	2	67.5	1.25	A325	47	0.5	0	N-Included		No
40	2	78.75	1.25	A325	47	0.5	0	N-Included		No
41	2	90	1.25	A325	47	0.5	0	N-Included		No
42	2	101.25	1.25	A325	47	0.5	0	N-Included		No
43	2	112.5	1.25	A325	47	0.5	0	N-Included		No
44	2	123.75	1.25	A325	47	0.5	0	N-Included		No
45	2	135	1.25	A325	47	0.5	0	N-Included		No
46	2	146.25	1.25	A325	47	0.5	0	N-Included		No
47	2	157.5	1.25	A325	47	0.5	0	N-Included		No
48	2	168.75	1.25	A325	47	0.5	0	N-Included		No
49	2	180	1.25	A325	47	0.5	0	N-Included		No
50	2	191.25	1.25	A325	47	0.5	0	N-Included		No
51	2	202.5	1.25	A325	47	0.5	0	N-Included		No
52	2	213.75	1.25	A325	47	0.5	0	N-Included		No
53	2	225	1.25	A325	47	0.5	0	N-Included		No
54	2	236.25	1.25	A325	47	0.5	0	N-Included		No
55	2	247.5	1.25	A325	47	0.5	0	N-Included		No
56	2	258.75	1.25	A325	47	0.5	0	N-Included		No
57	2	270	1.25	A325	47	0.5	0	N-Included		No
58	2	281.25	1.25	A325	47	0.5	0	N-Included		No
59	2	292.5	1.25	A325	47	0.5	0	N-Included		No
60	2	303.75	1.25	A325	47	0.5	0	N-Included		No
61	2	315	1.25	A325	47	0.5	0	N-Included		No
62	2	326.25	1.25	A325	47	0.5	0	N-Included		No
63	2	337.5	1.25	A325	47	0.5	0	N-Included		No
64	2	348.75	1.25	A325	47	0.5	0	N-Included		No

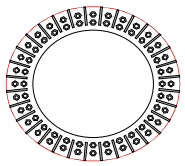
Custom Stiffener Connection - Top Plate

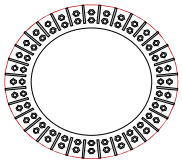
Stiffener	Stiffener Group ID	Location (deg_A)	Width (in)	Height (in)	Thickness (in)	H, Notch (in)	V, Notch (in)	Grade (ksi)	Weld Type	Groove Depth (in)	Groove Angle (deg_A)	H, Fillet Weld Size (in)	V, Fillet Weld Size (in)	Weld Strength (ksi)
1	1	5.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
2	1	16.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
3	1	28.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
4	1	39.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
5	1	50.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
6	1	61.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
7	1	73.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
8	1	84.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
9	1	95.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
10	1	106.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
11	1	118.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
12	1	129.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
13	1	140.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
14	1	151.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
15	1	163.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
16	1	174.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
17	1	185.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
18	1	196.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
19	1	208.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
20	1	219.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
21	1	230.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
22	1	241.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
23	1	253.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
24	1	264.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
25	1	275.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
26	1	286.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
27	1	298.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
28	1	309.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
29	1	320.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
30	1	331.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
31	1	343.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
32	1	354.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80

Custom Stiffener Connection - Bottom Plate

Stiffener	Stiffener Group ID	Location (deg_A)	Width (in)	Height (in)	Thickness (in)	H, Notch (in)	V, Notch (in)	Grade (ksi)	Weld Type	Groove Depth (in)	Groove Angle (deg_A)	H, Fillet Weld Size (in)	V, Fillet Weld Size (in)	Weld Strength (ksi)
1	1	5.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
2	1	16.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
3	1	28.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
4	1	39.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
5	1	50.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
6	1	61.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
7	1	73.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
8	1	84.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
9	1	95.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
10	1	106.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
11	1	118.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
12	1	129.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
13	1	140.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
14	1	151.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
15	1	163.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
16	1	174.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
17	1	185.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
18	1	196.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
19	1	208.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
20	1	219.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
21	1	230.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
22	1	241.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
23	1	253.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
24	1	264.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
25	1	275.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
26	1	286.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
27	1	298.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
28	1	309.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
29	1	320.625	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
30	1	331.875	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
31	1	343.125	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80
32	1	354.375	7	10	0.625	0.5	0.5	36	Fillet			0.375	0.375	80

Plot Graphic





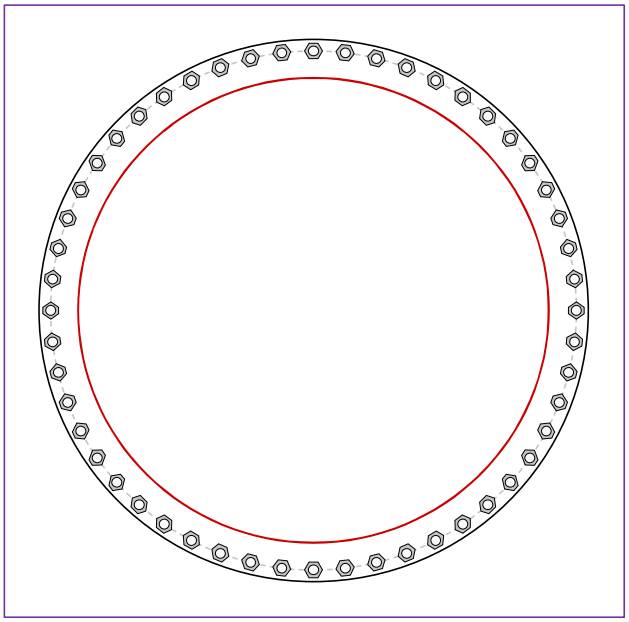
Monopole Base Plate Connection

Site Info	
BU #	823529
Site Name	038/EastLyme/ I-95/ X
Order #	

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
l_{ar} (in)	1.75

Applied Loads	
Moment (kip-ft)	3384.17
Axial Force (kips)	68.05
Shear Force (kips)	26.45

**TIA-222-H Section 15.5 Applied*



Connection Properties

Anchor Rod Data

(52) 1-1/4" ø bolts (F1554-105 N; Fy=105 ksi, Fu=125 ksi) on 67" BC

Base Plate Data

70" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Stiffener Data

N/A

Pole Data

60" x 0.625" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

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

Pu_t = 45.31	ϕPn_t = 90.84	**Stress Rating**
Vu = 0.51	ϕVn = 57.52	**47.5%**
Mu = 0.58	ϕMn = 30.76	**Pass**

Base Plate Summary

Max Stress (ksi):	-
Allowable Stress (ksi):	-
Stress Rating:	**Pirod OK**

Pier and Pad Foundation

BU # :	823529
Site Name:	1890285
App. Number:	

TIA-222 Revision:	H
Tower Type:	Monopole

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

Superstructure Analysis Reactions		
Compression, P_{comp}:	68.05	kips
Base Shear, Vu_comp:	26.44	kips
Moment, M_u:	3384.17	ft-kips
Tower Height, **H**:	190	ft
BP Dist. Above Fdn, bp_{dist}:	3	in
Bolt Circle / Bearing Plate Width, **BC**:	67	in

Foundation Analysis Checks	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	67.62	26.44	**37.2%**	**Pass**
Bearing Pressure (ksf)	30.31	17.85	**58.9%**	**Pass**
*Overturning (kip*ft)*	5033.45	3489.93	**69.3%**	**Pass**
*Pad Flexure (kip*ft)*	2664.57	759.46	**27.1%**	**Pass**
Pad Shear - 1-way (kips)	559.01	192.48	**32.8%**	**Pass**
Pad Shear - 2-way (Comp) (ksi)	0.164	0.000	**0.0%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	4234.65	0.00	**0.0%**	**Pass**

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

Structural Rating*:	**32.8%**
Soil Rating*:	**69.3%**

Pad Properties		
Depth, **D**:	2.75	ft
Pad Width, W_1:	14	ft
Pad Thickness, **T**:	3.75	ft
Pad Rebar Size (Bottom dir. 2), Sp_2:	8	
Pad Rebar Quantity (Bottom dir. 2), mp_2:	19	
Pad Clear Cover, cc_{pad}:	3	in

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

Soil Properties		
Total Soil Unit Weight, γ:	150	pcf
Ultimate Net Bearing, Qnet:	40.000	ksf
Cohesion, **Cu**:	15.000	ksf
Friction Angle, φ:	0	degrees
SPT Blow Count, N_{blows}:		
Base Friction, μ:	0.6	
Neglected Depth, **N**:	3.30	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, **gw**:	N/A	ft

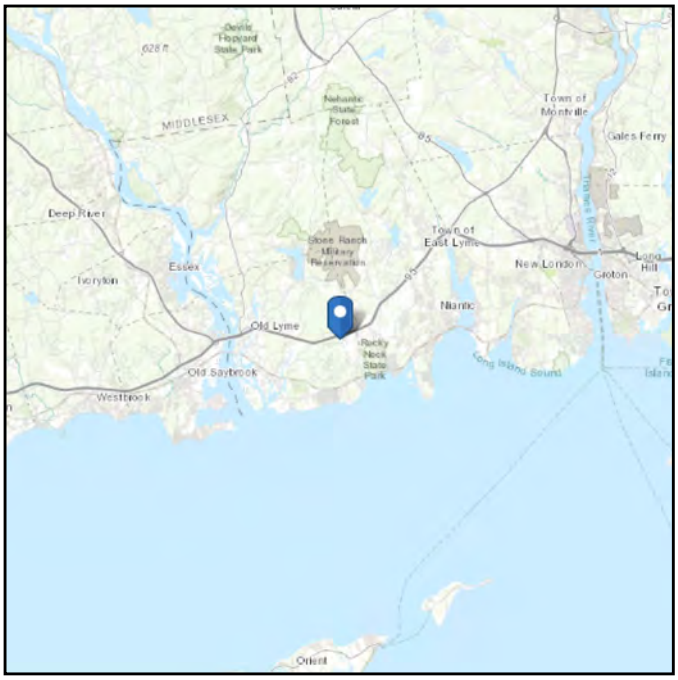
<--Toggle between Gross and Net

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Elevation: 168.4 ft (NAVD 88)
Latitude: 41.317572
Longitude: -72.269964



Wind

Results:

Wind Speed:	126 Vmph
10-year MRI	76 Vmph
25-year MRI	86 Vmph
50-year MRI	97 Vmph
100-year MRI	103 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:	Tue Oct 05 2021

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

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

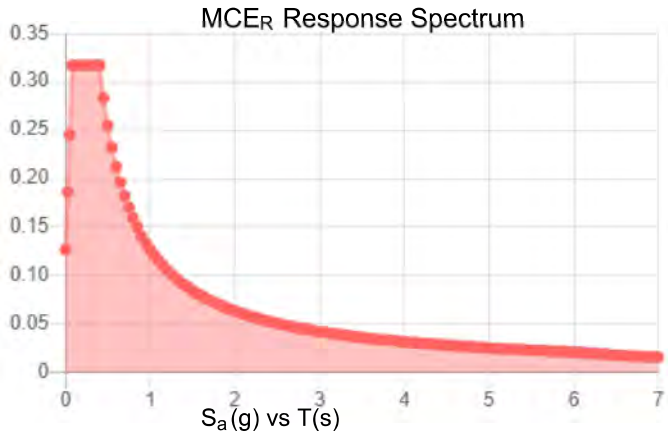
Seismic

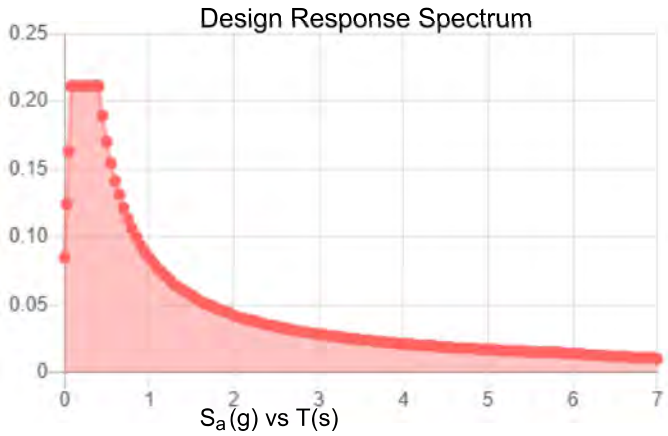
Site Soil Class: D - Default (see Section 11.4.3)

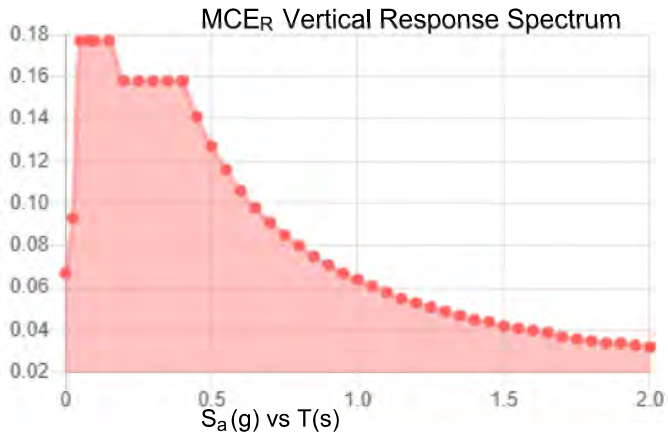
Results:

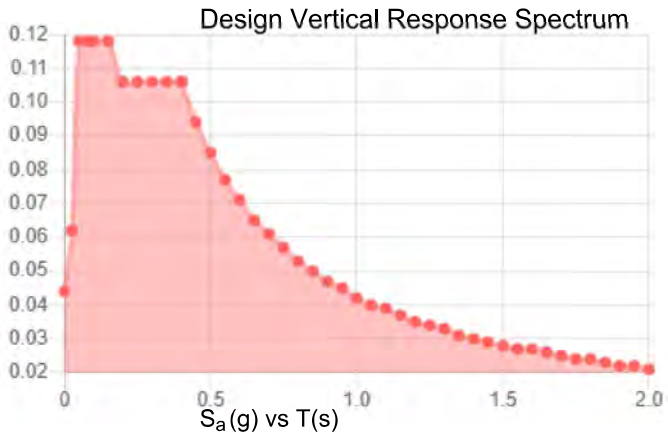
S_S :	0.198	S_{D1} :	0.085
S_1 :	0.053	T_L :	6
F_a :	1.6	PGA :	0.11
F_v :	2.4	PGA_M :	0.174
S_{MS} :	0.317	F_{PGA} :	1.58
S_{M1} :	0.127	I_e :	1
S_{DS} :	0.211	C_v :	0.7

Seismic Design Category B









Data Accessed: Tue Oct 05 2021

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

Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	15 F
Gust Speed:	50 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Tue Oct 05 2021

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

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

ATTACHMENT 5

Date: **November 3, 2021**

Rob Kulbacki
Crown Castle
2000 Corporate Drive,
Canonsburg, PA 15317
724-416-2116

POD Group
1033 E Turkeyfoot Lake Rd. Suite 206
Akron, OH 44312
(330) 961.7432
mhoudeshell@podgrp.com

Subject:	**Mount Analysis Report**	
Carrier Designation:	**DISH Network**	
	Carrier Site Number:	**BOBOS00034A**
	Carrier Site Name:	**CT-CCI-T-823529**
Crown Castle Designation:	**Crown Castle BU Number:**	**823529**
	Crown Castle Site Name:	**CT038/EastLyme/ I-95/ X72**
	Crown Castle JDE Job Number:	**645123**
	Crown Castle Order Number:	**553314 Rev. 2**
Engineering Firm Designation:	**POD Report Designation:**	**21-113671**
Site Data:	**38 Hatchetts Hill Road, Old Lyme, New Loundon County, CT 06371** **Latitude 41°19'3.26" Longitude -72°16'11.87"**	
Structure Information:	**Tower Height & Type:**	**190 ft Monopole**
	Mount Elevation:	**155 ft**
	Mount Type:	**8' Platform with Support Rail**

Dear Rob Kulbacki,

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

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

8' Platform with Support Rail (Multiple Sector) **Sufficient**

This analysis utilizes an ultimate 3-second gust wind speed of 133 mph as required by the 2015 International Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Mount structural analysis prepared by: Bradley Linerode

Respectfully submitted by:

Jason Cheronis

Digitally signed by Jason Cheronis
Date: 2021.11.03 09:03:18 -04'00'

STATE OF CONNECTICUT
JASON CHERONIS
PEN.0032793
LICENSED PROFESSIONAL ENGINEER

Jason Cheronis, PE
Connecticut PE#: 0032793

TABLE OF CONTENTS

1) INTRODUCTION

This mount is a proposed 8' Platform with Support Rail designed by Commscope (P/N: MC-PK8). This mount is to be installed at the 155 ft elevation on the 190 ft Monopole.

2) ANALYSIS CRITERIA

Building Code: 2015 IBC
TIA-222 Revision: TIA-222-H
Risk Category: II
Ultimate Wind Speed: 133 mph
Exposure Category: B
Topographic Factor at Base: 1.000
Topographic Factor at Mount: 1.000
Ice Thickness: 1 in
Wind Speed with Ice: 50 mph
Seismic S_s: 0.163
Seismic S_1: 0.058
Live Loading Wind Speed: 30 mph
Man Live Load at Mid/End-Points: 250 lb
Man Live Load at Mount Pipes: 500 lb

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details	Note
155	155	3	JMA WIRELESS	MX08FRO665-21	8' Platform with Support Rail	-
		3	FUJITSU	TA08025-B604		
		3	FUJITSU	TA08025-B605		
		1	RAYCAP	RDIDC-9181-PF-48		

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Crown Application	-	Crown Castle App #: 553314 Rev. 2 Dated: 4/26/2021	Crown Castle
Structural Analysis	-	Crown Castle Report #: 1962458 Dated: 10/05/2021	Crown Castle
Proposed Base Levels Drawings	-	Crown Castle Sheet #: A1-155 Dated: 4/27/2021	Crown Castle
Mount Specification Sheets	-	Commscope Part #: MC-PK8-DSH Dated: 3/17/2021	Commscope

3.1) Analysis Method

RISA-3D (Version 17.0.2), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases. Selected output from the analysis are included in the Appendices.

A tool internally developed, using Microsoft Excel, by POD Group, was used to calculate wind loading on all appurtenances, dishes, and mount members for various load cases. Selected output from the calculations is included in Appendix B.

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

3.2) Assumptions

1) The antenna mounting system was properly fabricated, installed, and maintained in good condition in accordance with its original design, TIA Standards, and/or manufacturer's specifications. This is not a condition assessment of the mount, structure, or foundation.
2) The configuration of antennas, mounts, and other appurtenances are as specified in Table 1 and the referenced drawings.
3) All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
4) The weight of the mount was increased 10% in the analysis to account for connections, coax, and jumpers.
5) The purpose of this report is to assess the feasibility of adding appurtenances usually accompanied by transmission lines to the structure. POD Group does not analyze the fabrication of the mount or structure (including welding).
6) The analysis will be required to be revised if the existing conditions in the field differ from those shown in the above-referenced documents or assumed in this analysis. No allowance was made for any damaged, missing, or rusted members.
7) Steel grades have been assumed as follows, unless noted otherwise:
    a. Angle — ASTM A529 (GR 50)
    b. Channel, Plate — ASTM A36 (GR 36)
    c. HSS (Rectangular) — ASTM 500 (GR B-46)
    d. Pipe — ASTM A500 (GR C-60)
    e. Connection Bolts — ASTM A325

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and POD Group should be allowed to review any new information to determine its effect on the structural integrity of the mount.

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity (8' Platform with Support Rail)

Notes	Component	Critical Member	Centerline (ft)	% Capacity	Pass / Fail
1	Face	FACE	120	5.9	Pass
	Rail	RAIL		13.3	Pass
	Standoff	SO		23.6	Pass
	Corner	CR		16.3	Pass
	Plate	PLATE		15.8	Pass
	Mount Pipe	MP		14.2	Pass
	Rail Connection	RAIL CON		10.4	Pass
	Grating Support	GRAT SUP		5.0	Pass
	Standoff Flange Plate Bolts	-	-	2.6	Pass
	Standoff Flange Plate	-	-	24.6	Pass

Structure Rating (max from all components) =	**24.6%**

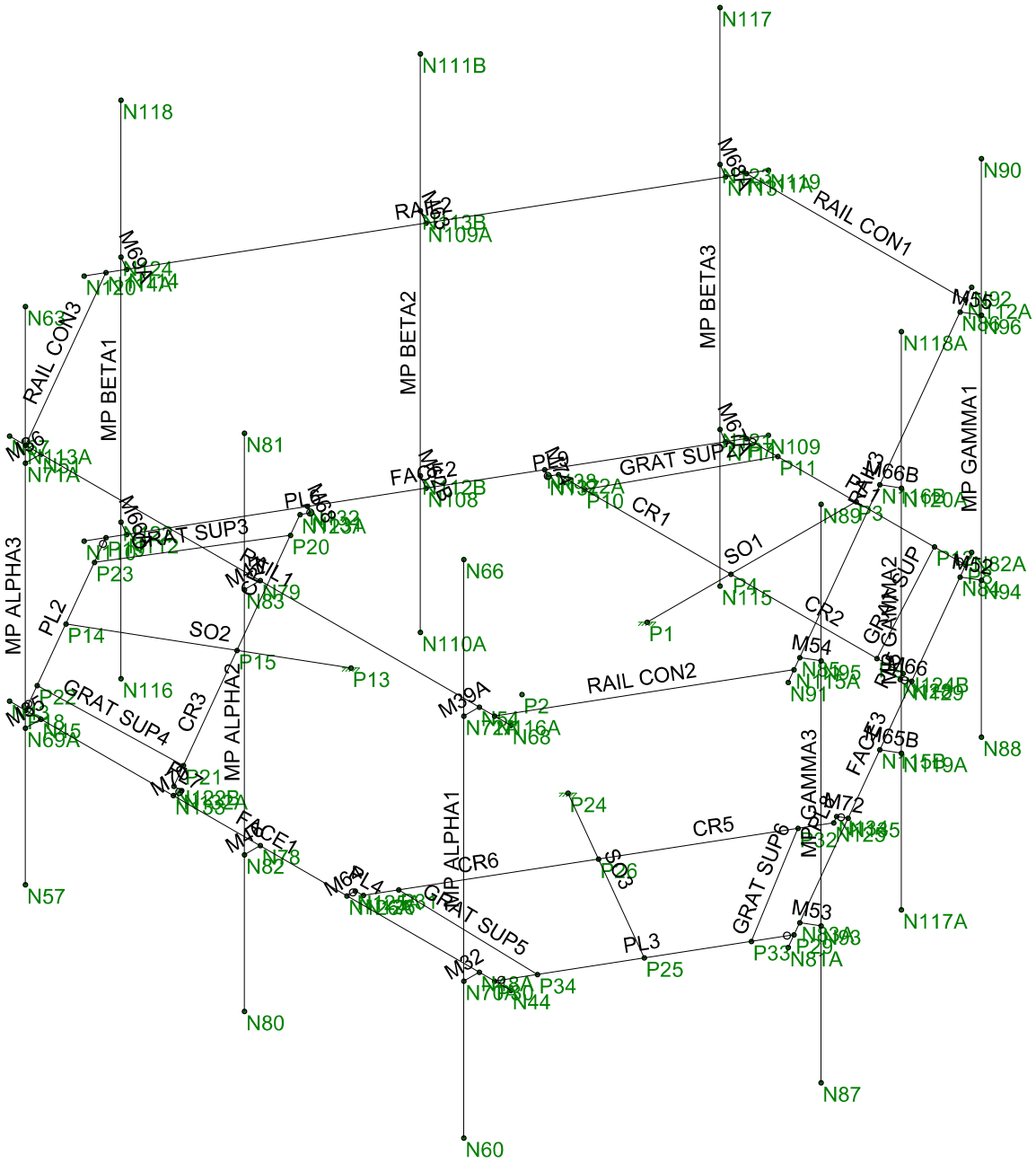
Notes:
1) See additional documentation in "Appendix C – Software Analysis Output" and "Appendix D – Additional Calculations" for calculations supporting the % capacity

4.1) Recommendations

The proposed mount Commscope MC-PK8-DSH installed per manufacturer specifications has sufficient capacity to carry the proposed loading configuration.

APPENDIX A

Wire Frame and Rendered Models



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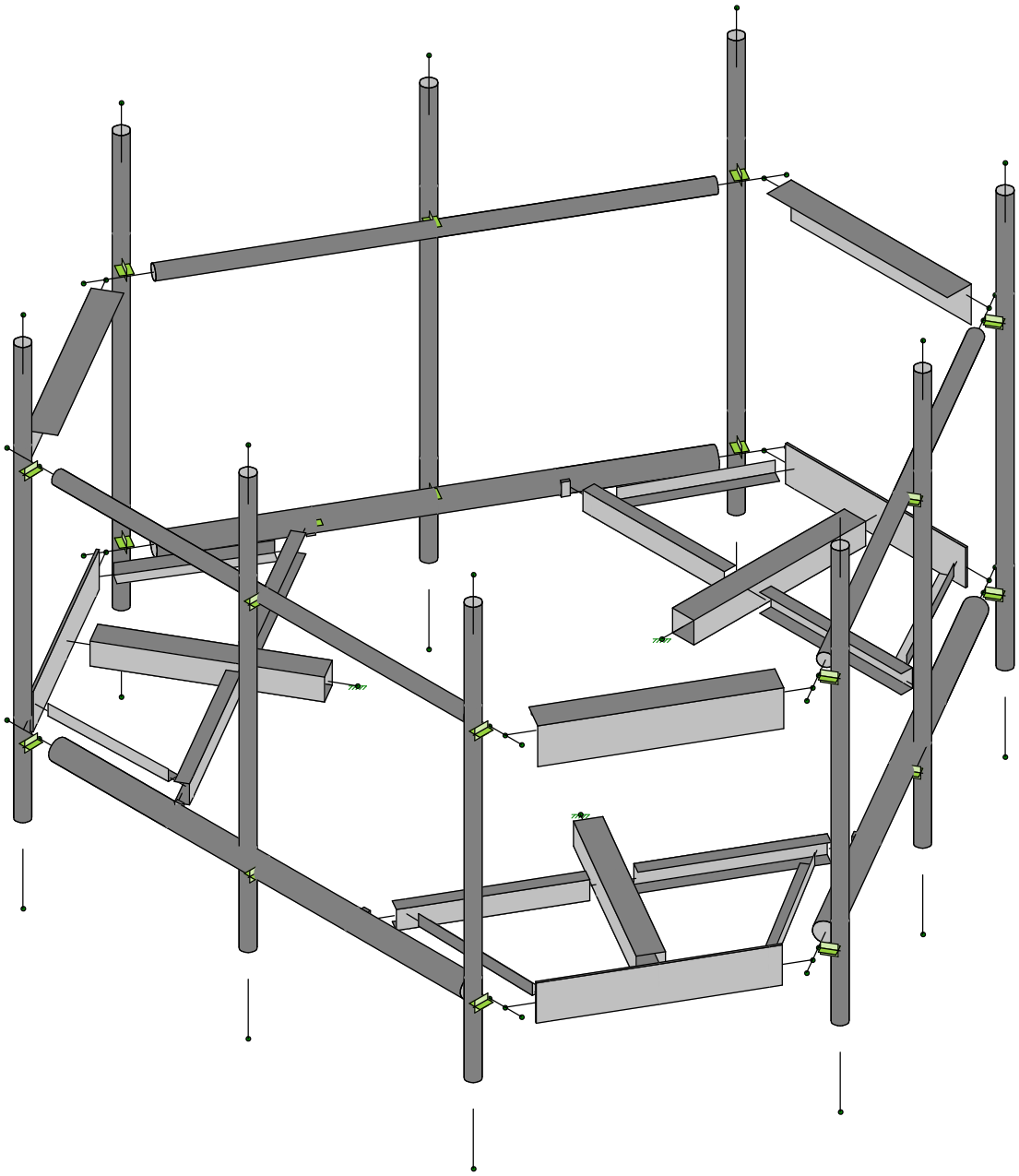

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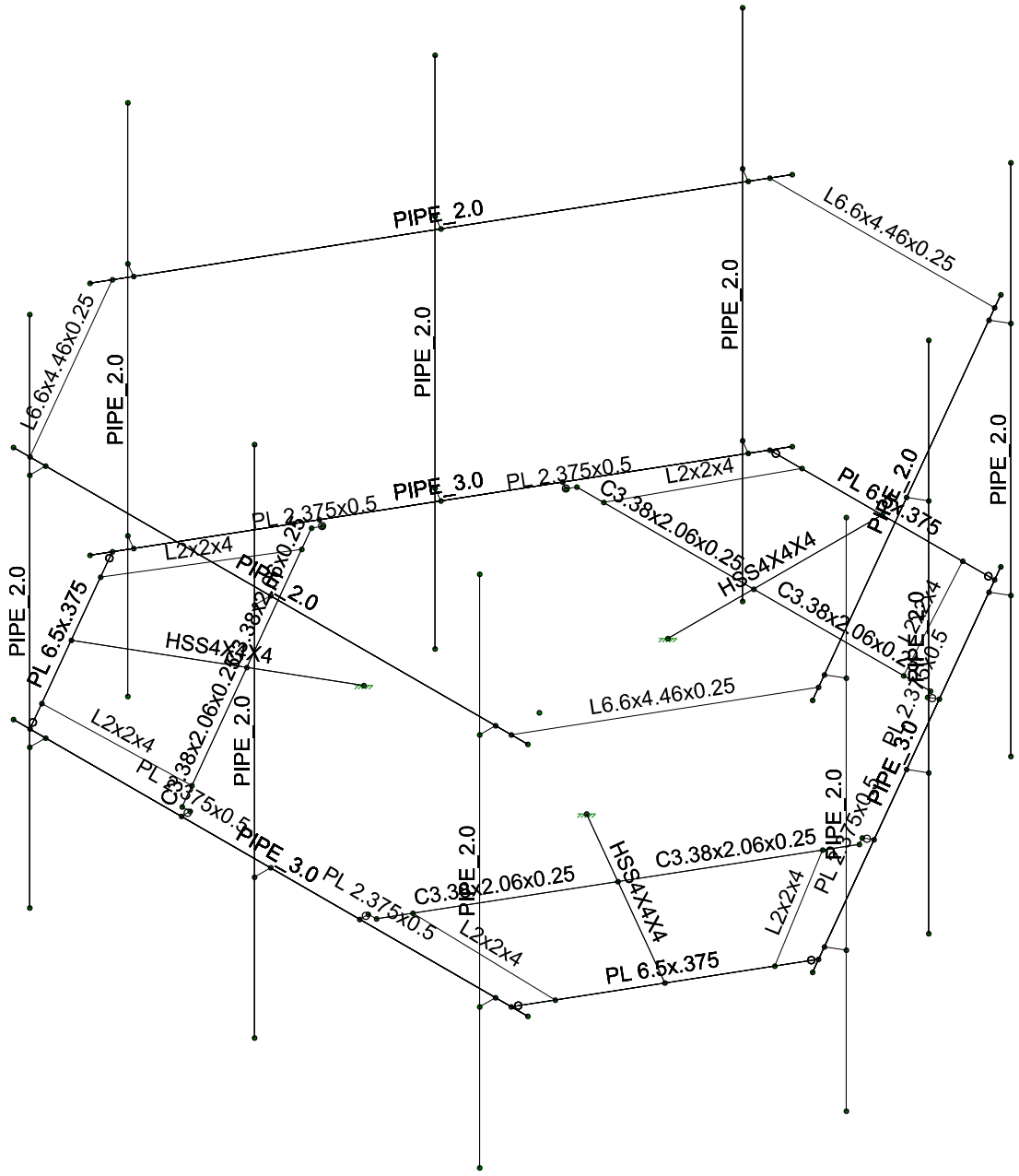

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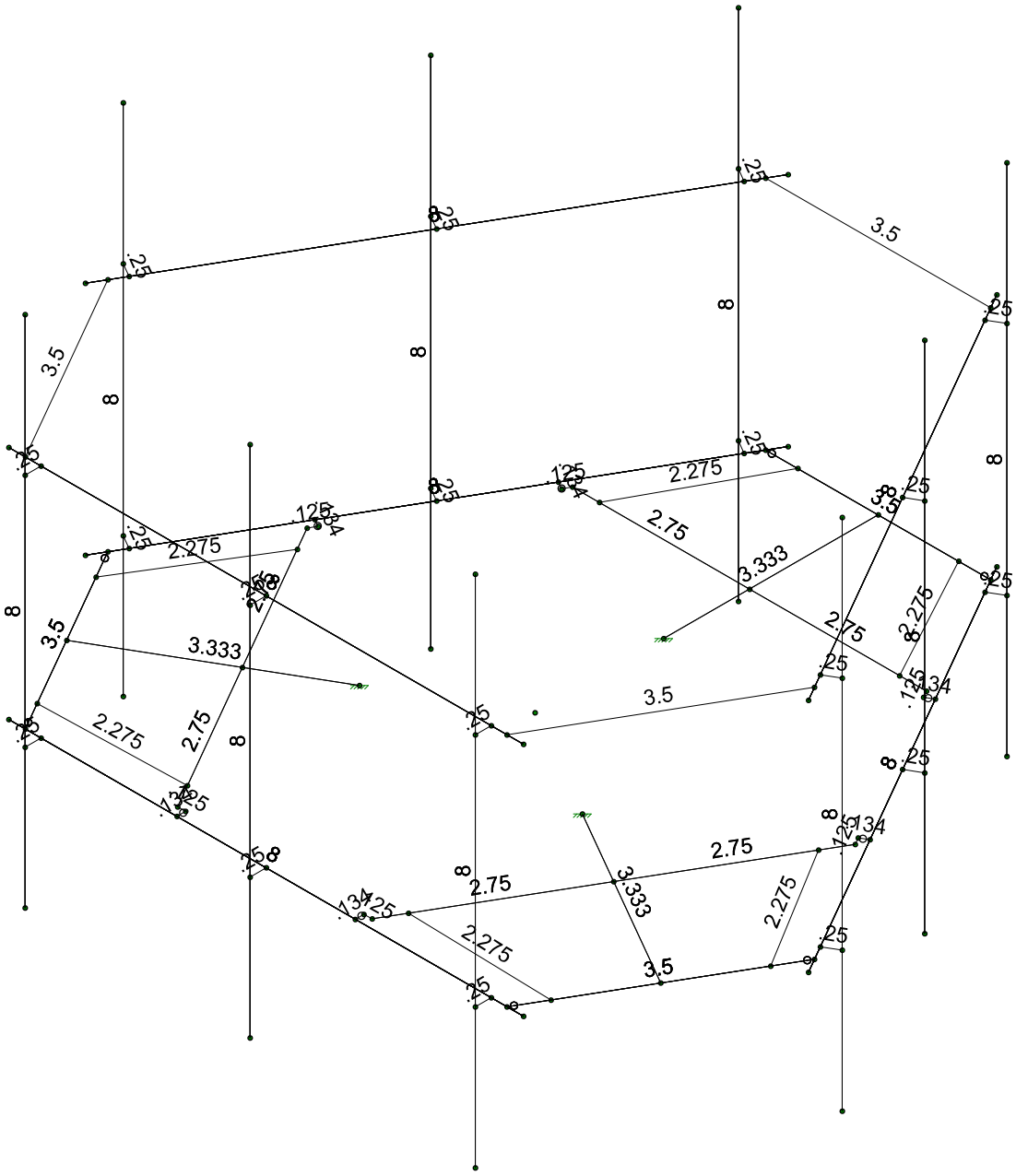

Member Length (ft) Displayed

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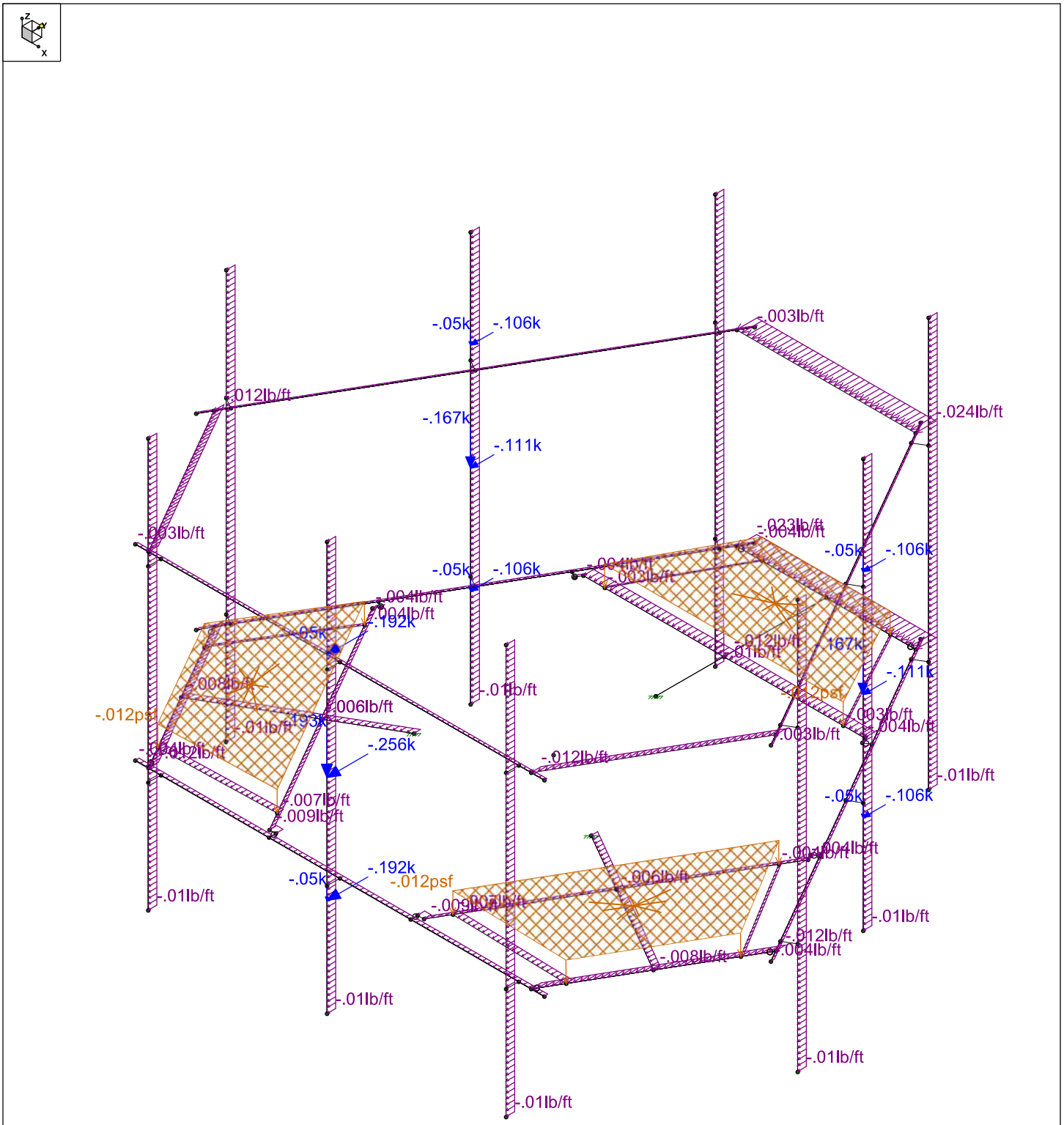

Loads: LC 2, 1.2D + 1.0W(0)

POD	828540	SK - 5
BL		Nov 2, 2021 at 6:04 PM
21-113668		(PL86) 823529.r3d

APPENDIX B

Software Input Calculations

POD Job #	**21-113671**
Site Number	**823529**
Site Name	**CT038/Easylyme/ I-95/ X72**

General Site Information

Mount Type	SFP	Risk Category	II	I (seismic)	1			Use CFD	Yes
V (Wind Speed)	133	I(ice)	1	Sms	0.261				
Zs	175			Sm1	0.139				width (ft) height (ft)
ti	1	Ss	0.163	Sds	0.174			Front Outer Dimensions	8 3.667
Vi	50	S1	0.058	Sd1	0.093				
Kzt	1	Soil Site Class	D	Seismic Design Category					
Exposure	B	Fa	1.600	B					
zg	1200	Fv	2.400	Seismic Analysis Not Required					
α	7			R	2	TIA-222-H 16.7			
Kmin	0.7	Tower Type	Monopole	As	1	TIA-222-H 16.7			
G_H	1	Tower Height	160	Cs, Min	0.03	TIA-222-H 2.7.7.1.1			
Ke	0.99			Cs	0.086933333	TIA-222-H 2.7.7.1.1			
K_D	0.95								
K_A	0.9								

Appurtenance Information

Model	Shielded	% Shielded	Centerline	Centerline on MP	Spacing (in)	Azimuth	Sector	Quantity		MP #
MX08FRO665-21			155	4	50		A/B/C	1	2	
TA08025-B604			155	4			A/B/C	1	2	
TA08025-B605			155	4			A/B/C	1	2	
RDIDC-9181-PF-48			155	4			A	1	2	

Mount Information

Elevation (ft)	155	Grating Thickness (in)	1
K_z	1.12	Grating Ice Weight (k/ft^2)	0.014
Kiz	1.17		
tiz	1.17		

	Length (ft)	Width (in)	Centerline
Mount Pipes	8	2.375	155

Round Members

Member	Length (ft)	Width (in)	Frame Member	# of Members
face on	8	3.4	Yes	2
face off	8	3.4	No	1
rail on	8	2.375	Yes	2
rail off	8	2.375	No	1

Flat Members

Member	Length (ft)	Width (in)	Shape	A	B	C	D	Frame Member	# of Members
SO	3.33	4	Square HSS	4	0.25	4		No	3
Grat	2.275	2	Angle	2	0.25			No	6
PI1	3.5	6.5	Channel		6.5		0.375	No	3
CR	2.75	3.38	Channel	2.06	3.38	0.25	0.25	No	6
Rail Con	3.5	6.6	Angle	4.46	0.25			No	3
PI2	0.125	2.375	Channel		2.375		0.5	No	6

Version 3.54

Appurtenance Wind Calculations

									Wind Force (Kips)				
Model	Height	Width	Depth	Weight (lbs)	Kz	qz (lb/ft$_2$)	$(EPA)_N$ (ft^2)	$(EPA)_T$(ft^2)	Front	Side	Alpha	Beta	Gamma
MX08FRO665-21	72.0	20.0	8.0	82.5	1.12	47.88	8.01	3.21	0.384	0.154	0.326	0.326	0.154
TA08025-B604	15.0	15.8	7.9	63.9	1.12	47.88	1.77	0.88	0.085	0.042	0.074	0.074	0.042
TA08025-B605	15.0	15.8	9.1	75.0	1.12	47.88	1.77	1.02	0.085	0.049	0.076	0.076	0.049
RDIDC-9181-PF-48	16.6	14.6	8.5	21.9	1.12	47.88	1.81	1.05	0.087	0.050	0.078	0.078	0.050

Appurtenance Ice Calculations

										Wind Force (Kips)				
Model	tiz (in)	Height	Width	Depth	Weight (lbs)	Kiz	qz (lb/ft$_2$)	$(EPA)_N$ (ft^2)	$(EPA)_T$(ft^2)	Front	Side	Alpha	Beta	Gamma
MX08FRO665-21	1.17	74.33	22.33	10.33	182.71	1.17	6.77	8.31	3.85	0.056	0.026	0.049	0.049	0.026
TA08025-B604	1.17	17.29	18.08	10.20	43.34	1.17	6.77	1.37	0.77	0.009	0.005	0.008	0.008	0.005
TA08025-B605	1.17	17.29	18.08	11.39	46.31	1.17	6.77	1.37	0.86	0.009	0.006	0.008	0.008	0.006
RDIDC-9181-PF-48	1.17	18.90	16.90	10.79	45.60	1.17	6.77	1.40	0.90	0.009	0.006	0.009	0.009	0.006

Round Members

	Wind Calculations							Ice Calculations							
Member	q_z (lb/ft^2)	Ar	C	Rr	Cf	EPA (ft^2)	Load (k/ft)	Width (in)	Weight (k/ft)	q_z (lb/ft^2)	Arice	Rrice	Cf	EPA (ft^2)	Load (k/ft)
face on	47.88	4.53	38.87	0.59	1.20	1.44	0.009	5.73	0.01	6.77	7.65	0.65	1.20	2.70	0.002
face off	47.88	2.27	38.87	0.59	1.20	1.44	0.004	5.73	0.01	6.77	3.82	0.65	1.20	2.70	0.001
rail on	47.88	3.17	27.15	0.59	1.20	1.01	0.006	4.71	0.01	6.77	6.28	0.65	1.20	2.22	0.002
rail off	47.88	1.58	27.15	0.59	1.20	1.01	0.003	4.71	0.01	6.77	3.14	0.65	1.20	2.22	0.001

Flat Members

	Wind Calculations					Ice Calculations							
Member	q_z (lb/ft^2)	Af	Cf	EPA	Load (k/ft)	Width (in)	Weight (k/ft)	q_z (lb/ft^2)	Arice	Rrice	Cf	EPA	Load (k/ft)
SO	47.88	3.33	1.25	1.25	0.009	6.33	0.01	6.77	5.27	0.65	1.25	1.29	0.001
Grat	47.88	2.28	2.00	0.68	0.007	4.33	0.01	6.77	4.93	0.65	2.00	0.97	0.001
PI1	47.88	5.69	2.00	3.41	0.023	8.83	0.01	6.77	7.73	0.65	2.00	3.04	0.003
CR	47.88	4.65	2.00	1.39	0.012	5.71	0.01	6.77	7.86	0.65	2.00	1.54	0.002
Rail Con	47.88	5.78	2.00	3.47	0.024	8.93	0.01	6.77	7.82	0.65	2.00	3.07	0.003
PI2	47.88	0.15	2.00	0.04	0.009	4.71	0.00	6.77	0.29	0.65	2.00	0.06	0.002

Appurtenance Seismic Calculations

Model	Weight	Sds	p	Cs	As	Ev	Eh
MX08FRO665-21	82.5	0.174	1.000	0.087	1.000	0.003	0.007
TA08025-B604	63.9	0.174	1.000	0.087	1.000	0.002	0.006
TA08025-B605	75.0	0.174	1.000	0.087	1.000	0.003	0.007
RDIDC-9181-PF-48	21.9	0.174	1.000	0.087	1.000	0.001	0.002

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APPENDIX C

Software Analysis Output

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp b...	L-tor...	Kyy	Kzz	Cb	Func...
1	SO1	HSS4X4X4	3.333			Lbyy						Lateral
2	GRAT SUP	L2x2x4	2.275			Lbyy						Lateral
3	GRAT SUP2	L2x2x4	2.275			Lbyy						Lateral
4	PL1	PL 6.5x.375	3.5			Lbyy						Lateral
5	SO2	HSS4X4X4	3.333			Lbyy						Lateral
6	GRAT SUP3	L2x2x4	2.275			Lbyy						Lateral
7	GRAT SUP4	L2x2x4	2.275			Lbyy						Lateral
8	PL2	PL 6.5x.375	3.5			Lbyy						Lateral
9	SO3	HSS4X4X4	3.333			Lbyy						Lateral
10	GRAT SUP5	L2x2x4	2.275			Lbyy						Lateral
11	GRAT SUP6	L2x2x4	2.275			Lbyy						Lateral
12	PL3	PL 6.5x.375	3.5			Lbyy						Lateral
13	FACE1	PIPE_3.0	8			Lbyy						Lateral
14	MP ALPHA1	PIPE_2.0	8			Lbyy						Lateral
15	MP ALPHA3	PIPE_2.0	8			Lbyy						Lateral
16	RAIL1	PIPE_2.0	8			Lbyy						Lateral
17	RAIL CON3	L6.6x4.46x0.25	3.5			Lbyy						Lateral
18	RAIL CON1	L6.6x4.46x0.25	3.5			Lbyy						Lateral
19	RAIL CON2	L6.6x4.46x0.25	3.5			Lbyy						Lateral
20	CR1	C3.38x2.06x0.25	2.75			Lbyy						Lateral
21	CR2	C3.38x2.06x0.25	2.75			Lbyy						Lateral
22	CR3	C3.38x2.06x0.25	2.75			Lbyy						Lateral
23	CR4	C3.38x2.06x0.25	2.75			Lbyy						Lateral
24	CR5	C3.38x2.06x0.25	2.75			Lbyy						Lateral
25	CR6	C3.38x2.06x0.25	2.75			Lbyy						Lateral
26	PL4	PL 2.375x0.5	.125									Lateral
27	PL5	PL 2.375x0.5	.125									Lateral
28	PL6	PL 2.375x0.5	.125									Lateral
29	PL7	PL 2.375x0.5	.125									Lateral
30	PL8	PL 2.375x0.5	.125									Lateral
31	PL9	PL 2.375x0.5	.125									Lateral
32	MP ALPHA2	PIPE_2.0	8			Lbyy						Lateral
33	FACE3	PIPE_3.0	8			Lbyy						Lateral
34	MP GAMMA1	PIPE_2.0	8			Lbyy						Lateral
35	MP GAMMA3	PIPE_2.0	8			Lbyy						Lateral
36	RAIL3	PIPE_2.0	8			Lbyy						Lateral
37	FACE2	PIPE_3.0	8			Lbyy						Lateral
38	MP BETA1	PIPE_2.0	8			Lbyy						Lateral
39	MP BETA3	PIPE_2.0	8			Lbyy						Lateral
40	RAIL2	PIPE_2.0	8			Lbyy						Lateral
41	MP BETA2	PIPE_2.0	8			Lbyy						Lateral
42	MP GAMMA2	PIPE_2.0	8			Lbyy						Lateral

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	SO1						Yes				None
2	GRAT SUP						Yes				None
3	GRAT SUP2						Yes				None
4	PL1	BenPIN	BenPIN				Yes	Default			None
5	SO2						Yes				None
6	GRAT SUP3						Yes				None
7	GRAT SUP4						Yes				None
8	PL2	BenPIN	BenPIN				Yes	Default			None
9	SO3						Yes	Default			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
10	GRAT SUP5						Yes				None
11	GRAT SUP6						Yes				None
12	PL3	BenPIN	BenPIN				Yes	Default			None
13	FACE1						Yes				None
14	MP ALPHA1						Yes		+y+3		None
15	MP ALPHA3						Yes		+y+3		None
16	RAIL1						Yes				None
17	RAIL CON3						Yes				None
18	RAIL CON1						Yes				None
19	RAIL CON2						Yes	Default			None
20	M32						Yes	** NA **			None
21	M35						Yes	** NA **			None
22	M36						Yes	** NA **			None
23	M39A						Yes	** NA **			None
24	CR1						Yes	Default			None
25	CR2						Yes	Default			None
26	CR3						Yes	Default			None
27	CR4						Yes	Default			None
28	CR5						Yes	Default			None
29	CR6						Yes	Default			None
30	M64	BenPIN					Yes	** NA **			None
31	PL4						Yes				None
32	M66	BenPIN					Yes	** NA **			None
33	PL5						Yes				None
34	M68	BenPIN					Yes	** NA **			None
35	PL6						Yes				None
36	M70	BenPIN					Yes	** NA **			None
37	PL7						Yes				None
38	M72	BenPIN					Yes	** NA **			None
39	PL8						Yes				None
40	M74	BenPIN					Yes	** NA **			None
41	PL9						Yes				None
42	MP ALPHA2						Yes		+y+3		None
43	M46						Yes	** NA **			None
44	M47						Yes	** NA **			None
45	FACE3						Yes				None
46	MP GAMM...						Yes		+y+3		None
47	MP GAMM...						Yes		+y+3		None
48	RAIL3						Yes				None
49	M52						Yes	** NA **			None
50	M53						Yes	** NA **			None
51	M54						Yes	** NA **			None
52	M55						Yes	** NA **			None
53	FACE2						Yes				None
54	MP BETA1						Yes		+y+3		None
55	MP BETA3						Yes		+y+3		None
56	RAIL2						Yes				None
57	M66A						Yes	** NA **			None
58	M67A						Yes	** NA **			None
59	M68A						Yes	** NA **			None
60	M69A						Yes	** NA **			None
61	MP BETA2						Yes		+y+3		None
62	M62B						Yes	** NA **			None
63	M63						Yes	** NA **			None
64	MP GAMM...						Yes		+y+3		None
65	M65B						Yes	** NA **			None
66	M66B						Yes	** NA **			None

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Sh...	Type	Design List	Material	Design R...
1	SO1	P3	P1		270	HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical
2	GRAT SUP	P9	P12		180	L2x2x4	Beam	Single Angle	A529 Gr. 50	Typical
3	GRAT SUP2	P10	P11		90	L2x2x4	Beam	Single Angle	A529 Gr. 50	Typical
4	PL1	P7	P8		90	PL 6.5x.375	Beam	RECT	A36 Gr.36	Typical
5	SO2	P14	P13		90	HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical
6	GRAT SUP3	P20	P23		180	L2x2x4	Beam	Single Angle	A529 Gr. 50	Typical
7	GRAT SUP4	P21	P22		270	L2x2x4	Beam	Single Angle	A529 Gr. 50	Typical
8	PL2	P18	P19		270	PL 6.5x.375	Beam	RECT	A36 Gr.36	Typical
9	SO3	P25	P24		270	HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical
10	GRAT SUP5	P31	P34		360	L2x2x4	Beam	Single Angle	A529 Gr. 50	Typical
11	GRAT SUP6	P32	P33		90	L2x2x4	Beam	Single Angle	A529 Gr. 50	Typical
12	PL3	P29	P30		270	PL 6.5x.375	Beam	RECT	A36 Gr.36	Typical
13	FACE1	N43	N44		90	PIPE_3.0	Beam	Pipe	A500 GR.C	Typical
14	MP ALPHA1	N60	N66		180	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
15	MP ALPHA3	N57	N63		180	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
16	RAIL1	N67	N68		90	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
17	RAIL CON3	N114A	N113A		270	L6.6x4.46x...	Beam	Single Angle	A36 Gr.36	Typical
18	RAIL CON1	N112A	N111A		90	L6.6x4.46x...	Beam	Single Angle	A36 Gr.36	Typical
19	RAIL CON2	N116A	N115A		270	L6.6x4.46x...	Beam	Single Angle	A36 Gr.36	Typical
20	M32	N48A	N70A		270	RIGID	None	None	RIGID	Typical
21	M35	N45	N69A		270	RIGID	None	None	RIGID	Typical
22	M36	N51	N71A		270	RIGID	None	None	RIGID	Typical
23	M39A	N54	N72A		270	RIGID	None	None	RIGID	Typical
24	CR1	P4	N122A		270	C3.38x2.06...	Beam	Channel	A36 Gr.36	Typical
25	CR2	P4	N124B		90	C3.38x2.06...	Beam	Channel	A36 Gr.36	Typical
26	CR3	P15	N122B		90	C3.38x2.06...	Beam	Channel	A36 Gr.36	Typical
27	CR4	P15	N123A		270	C3.38x2.06...	Beam	Channel	A36 Gr.36	Typical
28	CR5	P26	N125		90	C3.38x2.06...	Beam	Channel	A36 Gr.36	Typical
29	CR6	P26	N126		270	C3.38x2.06...	Beam	Channel	A36 Gr.36	Typical
30	M64	N126A	N125A		90	RIGID	None	None	RIGID	Typical
31	PL4	N126	N125A		270	PL 2.375x0.5	Beam	RECT	A36 Gr.36	Typical
32	M66	N129	N128		270	RIGID	None	None	RIGID	Typical
33	PL5	N124B	N128		90	PL 2.375x0.5	Beam	RECT	A36 Gr.36	Typical
34	M68	N132	N131		90	RIGID	None	None	RIGID	Typical
35	PL6	N123A	N131		90	PL 2.375x0.5	Beam	RECT	A36 Gr.36	Typical
36	M70	N133	N132A		90	RIGID	None	None	RIGID	Typical
37	PL7	N122B	N132A		90	PL 2.375x0.5	Beam	RECT	A36 Gr.36	Typical
38	M72	N135	N134		270	RIGID	None	None	RIGID	Typical
39	PL8	N125	N134		270	PL 2.375x0.5	Beam	RECT	A36 Gr.36	Typical
40	M74	N138	N137		90	RIGID	None	None	RIGID	Typical
41	PL9	N122A	N137		270	PL 2.375x0.5	Beam	RECT	A36 Gr.36	Typical
42	MP ALPHA2	N80	N81		180	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
43	M46	N78	N82		270	RIGID	None	None	RIGID	Typical
44	M47	N79	N83		270	RIGID	None	None	RIGID	Typical
45	FACE3	N81A	N82A		270	PIPE_3.0	Beam	Pipe	A500 GR.C	Typical
46	MP GAMMA1	N88	N90		180	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
47	MP GAMMA3	N87	N89		180	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
48	RAIL3	N91	N92		270	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
49	M52	N84	N94		90	RIGID	None	None	RIGID	Typical
50	M53	N83A	N93		90	RIGID	None	None	RIGID	Typical
51	M54	N85	N95		90	RIGID	None	None	RIGID	Typical
52	M55	N86	N96		90	RIGID	None	None	RIGID	Typical
53	FACE2	N109	N110		270	PIPE_3.0	Beam	Pipe	A500 GR.C	Typical
54	MP BETA1	N116	N118		180	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
55	MP BETA3	N115	N117		180	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
56	RAIL2	N119	N120		270	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Sh...	Type	Design List	Material	Design R...
57	M66A	N112	N122		270	RIGID	None	None	RIGID	Typical
58	M67A	N111	N121		270	RIGID	None	None	RIGID	Typical
59	M68A	N113	N123		270	RIGID	None	None	RIGID	Typical
60	M69A	N114	N124		270	RIGID	None	None	RIGID	Typical
61	MP BETA2	N110A	N111B		60	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
62	M62B	N108	N112B		270	RIGID	None	None	RIGID	Typical
63	M63	N109A	N113B		270	RIGID	None	None	RIGID	Typical
64	MP GAMMA2	N117A	N118A		300	PIPE_2.0	Beam	Pipe	A500 GR.C	Typical
65	M65B	N115B	N119A		90	RIGID	None	None	RIGID	Typical
66	M66B	N116B	N120A		90	RIGID	None	None	RIGID	Typical

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (\1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3
8	A913 Gr.65	29000	11154	.3	.65	.49	65	1.1	80	1.1
9	A500 GR.C	29000	11154	.3	.65	.49	46	1.6	60	1.2
10	A529 Gr. 50	29000	11154	.3	.65	.49	50	1.1	65	1.1
11	A1011-33Ksi	29000	11154	.3	.65	.49	33	1.5	58	1.2
12	A1011 36 Ksi	29000	11154	.3	.65	.49	36	1.5	58	1.2
13	A1018 50 Ksi	29000	11154	.3	.65	.49	50	1.5	65	1.2

Member Point Loads (BLC 1 : Live Load)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	FACE1	Z	-.5	0

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.192	6.083
2	MP ALPHA2	Y	-.192	1.917
3	MP BETA2	Y	-.106	6.083
4	MP BETA2	Y	-.106	1.917
5	MP GAMMA2	Y	-.106	6.083
6	MP GAMMA2	Y	-.106	1.917
7	MP ALPHA2	Y	-.085	4
8	MP BETA2	Y	-.053	4
9	MP GAMMA2	Y	-.053	4
10	MP ALPHA2	Y	-.085	4
11	MP BETA2	Y	-.058	4
12	MP GAMMA2	Y	-.058	4
13	MP ALPHA2	Y	-.087	4

Member Point Loads (BLC 3 : Dead Load)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.041	6.083
2	MP ALPHA2	Z	-.041	1.917
3	MP BETA2	Z	-.041	6.083
4	MP BETA2	Z	-.041	1.917

Member Point Loads (BLC 3 : Dead Load) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP GAMMA2	Z	-.041	6.083
6	MP GAMMA2	Z	-.041	1.917
7	MP ALPHA2	Z	-.064	4
8	MP BETA2	Z	-.064	4
9	MP GAMMA2	Z	-.064	4
10	MP ALPHA2	Z	-.075	4
11	MP BETA2	Z	-.075	4
12	MP GAMMA2	Z	-.075	4
13	MP ALPHA2	Z	-.022	4

Member Point Loads (BLC 4 : Wind Load (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.141	6.083
2	MP ALPHA2	Y	-.141	1.917
3	MP ALPHA2	X	-.082	6.083
4	MP ALPHA2	X	-.082	1.917
5	MP BETA2	Y	-.067	6.083
6	MP BETA2	Y	-.067	1.917
7	MP BETA2	X	-.038	6.083
8	MP BETA2	X	-.038	1.917
9	MP GAMMA2	Y	-.141	6.083
10	MP GAMMA2	Y	-.141	1.917
11	MP GAMMA2	X	-.082	6.083
12	MP GAMMA2	X	-.082	1.917
13	MP ALPHA2	Y	-.064	4
14	MP ALPHA2	X	-.037	4
15	MP BETA2	Y	-.037	4
16	MP BETA2	X	-.021	4
17	MP GAMMA2	Y	-.064	4
18	MP GAMMA2	X	-.037	4
19	MP ALPHA2	Y	-.065	4
20	MP ALPHA2	X	-.038	4
21	MP BETA2	Y	-.042	4
22	MP BETA2	X	-.024	4
23	MP GAMMA2	Y	-.065	4
24	MP GAMMA2	X	-.038	4
25	MP ALPHA2	Y	-.067	4
26	MP ALPHA2	X	-.039	4

Member Point Loads (BLC 5 : Wind Load (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.053	6.083
2	MP ALPHA2	Y	-.053	1.917
3	MP ALPHA2	X	-.091	6.083
4	MP ALPHA2	X	-.091	1.917
5	MP BETA2	Y	-.053	6.083
6	MP BETA2	Y	-.053	1.917
7	MP BETA2	X	-.091	6.083
8	MP BETA2	X	-.091	1.917
9	MP GAMMA2	Y	-.096	6.083
10	MP GAMMA2	Y	-.096	1.917
11	MP GAMMA2	X	-.166	6.083
12	MP GAMMA2	X	-.166	1.917
13	MP ALPHA2	Y	-.026	4
14	MP ALPHA2	X	-.046	4
15	MP BETA2	Y	-.026	4

Member Point Loads (BLC 5 : Wind Load (60)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
16	MP BETA2	X	-.046	4
17	MP GAMMA2	Y	-.042	4
18	MP GAMMA2	X	-.073	4
19	MP ALPHA2	Y	-.029	4
20	MP ALPHA2	X	-.05	4
21	MP BETA2	Y	-.029	4
22	MP BETA2	X	-.05	4
23	MP GAMMA2	Y	-.042	4
24	MP GAMMA2	X	-.073	4
25	MP ALPHA2	Y	-.03	4
26	MP ALPHA2	X	-.051	4

Member Point Loads (BLC 6 : Wind Load (90))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.077	6.083
2	MP ALPHA2	X	-.077	1.917
3	MP BETA2	X	-.163	6.083
4	MP BETA2	X	-.163	1.917
5	MP GAMMA2	X	-.163	6.083
6	MP GAMMA2	X	-.163	1.917
7	MP ALPHA2	X	-.042	4
8	MP BETA2	X	-.074	4
9	MP GAMMA2	X	-.074	4
10	MP ALPHA2	X	-.049	4
11	MP BETA2	X	-.076	4
12	MP GAMMA2	X	-.076	4
13	MP ALPHA2	X	-.05	4

Member Point Loads (BLC 7 : Wind Load (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.053	6.083
2	MP ALPHA2	Y	.053	1.917
3	MP ALPHA2	X	-.091	6.083
4	MP ALPHA2	X	-.091	1.917
5	MP BETA2	Y	.096	6.083
6	MP BETA2	Y	.096	1.917
7	MP BETA2	X	-.166	6.083
8	MP BETA2	X	-.166	1.917
9	MP GAMMA2	Y	.053	6.083
10	MP GAMMA2	Y	.053	1.917
11	MP GAMMA2	X	-.091	6.083
12	MP GAMMA2	X	-.091	1.917
13	MP ALPHA2	Y	.026	4
14	MP ALPHA2	X	-.046	4
15	MP BETA2	Y	.042	4
16	MP BETA2	X	-.073	4
17	MP GAMMA2	Y	.026	4
18	MP GAMMA2	X	-.046	4
19	MP ALPHA2	Y	.029	4
20	MP ALPHA2	X	-.05	4
21	MP BETA2	Y	.042	4
22	MP BETA2	X	-.073	4
23	MP GAMMA2	Y	.029	4
24	MP GAMMA2	X	-.05	4
25	MP ALPHA2	Y	.03	4
26	MP ALPHA2	X	-.051	4

Member Point Loads (BLC 8 : Wind Load (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.141	6.083
2	MP ALPHA2	Y	.141	1.917
3	MP ALPHA2	X	-.082	6.083
4	MP ALPHA2	X	-.082	1.917
5	MP BETA2	Y	.141	6.083
6	MP BETA2	Y	.141	1.917
7	MP BETA2	X	-.082	6.083
8	MP BETA2	X	-.082	1.917
9	MP GAMMA2	Y	.067	6.083
10	MP GAMMA2	Y	.067	1.917
11	MP GAMMA2	X	-.038	6.083
12	MP GAMMA2	X	-.038	1.917
13	MP ALPHA2	Y	.064	4
14	MP ALPHA2	X	-.037	4
15	MP BETA2	Y	.064	4
16	MP BETA2	X	-.037	4
17	MP GAMMA2	Y	.037	4
18	MP GAMMA2	X	-.021	4
19	MP ALPHA2	Y	.065	4
20	MP ALPHA2	X	-.038	4
21	MP BETA2	Y	.065	4
22	MP BETA2	X	-.038	4
23	MP GAMMA2	Y	.042	4
24	MP GAMMA2	X	-.024	4
25	MP ALPHA2	Y	.067	4
26	MP ALPHA2	X	-.039	4

Member Point Loads (BLC 9 : Wind Load (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.192	6.083
2	MP ALPHA2	Y	.192	1.917
3	MP BETA2	Y	.106	6.083
4	MP BETA2	Y	.106	1.917
5	MP GAMMA2	Y	.106	6.083
6	MP GAMMA2	Y	.106	1.917
7	MP ALPHA2	Y	.085	4
8	MP BETA2	Y	.053	4
9	MP GAMMA2	Y	.053	4
10	MP ALPHA2	Y	.085	4
11	MP BETA2	Y	.058	4
12	MP GAMMA2	Y	.058	4
13	MP ALPHA2	Y	.087	4

Member Point Loads (BLC 10 : Wind Load (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.141	6.083
2	MP ALPHA2	Y	.141	1.917
3	MP ALPHA2	X	.082	6.083
4	MP ALPHA2	X	.082	1.917
5	MP BETA2	Y	.067	6.083
6	MP BETA2	Y	.067	1.917
7	MP BETA2	X	.038	6.083
8	MP BETA2	X	.038	1.917
9	MP GAMMA2	Y	.141	6.083
10	MP GAMMA2	Y	.141	1.917
11	MP GAMMA2	X	.082	6.083

Member Point Loads (BLC 10 : Wind Load (210)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
12	MP GAMMA2	X	.082	1.917
13	MP ALPHA2	Y	.064	4
14	MP ALPHA2	X	.037	4
15	MP BETA2	Y	.037	4
16	MP BETA2	X	.021	4
17	MP GAMMA2	Y	.064	4
18	MP GAMMA2	X	.037	4
19	MP ALPHA2	Y	.065	4
20	MP ALPHA2	X	.038	4
21	MP BETA2	Y	.042	4
22	MP BETA2	X	.024	4
23	MP GAMMA2	Y	.065	4
24	MP GAMMA2	X	.038	4
25	MP ALPHA2	Y	.067	4
26	MP ALPHA2	X	.039	4

Member Point Loads (BLC 11 : Wind Load (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.053	6.083
2	MP ALPHA2	Y	.053	1.917
3	MP ALPHA2	X	.091	6.083
4	MP ALPHA2	X	.091	1.917
5	MP BETA2	Y	.053	6.083
6	MP BETA2	Y	.053	1.917
7	MP BETA2	X	.091	6.083
8	MP BETA2	X	.091	1.917
9	MP GAMMA2	Y	.096	6.083
10	MP GAMMA2	Y	.096	1.917
11	MP GAMMA2	X	.166	6.083
12	MP GAMMA2	X	.166	1.917
13	MP ALPHA2	Y	.026	4
14	MP ALPHA2	X	.046	4
15	MP BETA2	Y	.026	4
16	MP BETA2	X	.046	4
17	MP GAMMA2	Y	.042	4
18	MP GAMMA2	X	.073	4
19	MP ALPHA2	Y	.029	4
20	MP ALPHA2	X	.05	4
21	MP BETA2	Y	.029	4
22	MP BETA2	X	.05	4
23	MP GAMMA2	Y	.042	4
24	MP GAMMA2	X	.073	4
25	MP ALPHA2	Y	.03	4
26	MP ALPHA2	X	.051	4

Member Point Loads (BLC 12 : Wind Load (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.077	6.083
2	MP ALPHA2	X	.077	1.917
3	MP BETA2	X	.163	6.083
4	MP BETA2	X	.163	1.917
5	MP GAMMA2	X	.163	6.083
6	MP GAMMA2	X	.163	1.917
7	MP ALPHA2	X	.042	4
8	MP BETA2	X	.074	4
9	MP GAMMA2	X	.074	4

Member Point Loads (BLC 12 : Wind Load (270)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
10	MP ALPHA2	X	.049	4
11	MP BETA2	X	.076	4
12	MP GAMMA2	X	.076	4
13	MP ALPHA2	X	.05	4

Member Point Loads (BLC 13 : Wind Load (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.053	6.083
2	MP ALPHA2	Y	-.053	1.917
3	MP ALPHA2	X	.091	6.083
4	MP ALPHA2	X	.091	1.917
5	MP BETA2	Y	-.096	6.083
6	MP BETA2	Y	-.096	1.917
7	MP BETA2	X	.166	6.083
8	MP BETA2	X	.166	1.917
9	MP GAMMA2	Y	-.053	6.083
10	MP GAMMA2	Y	-.053	1.917
11	MP GAMMA2	X	.091	6.083
12	MP GAMMA2	X	.091	1.917
13	MP ALPHA2	Y	-.026	4
14	MP ALPHA2	X	.046	4
15	MP BETA2	Y	-.042	4
16	MP BETA2	X	.073	4
17	MP GAMMA2	Y	-.026	4
18	MP GAMMA2	X	.046	4
19	MP ALPHA2	Y	-.029	4
20	MP ALPHA2	X	.05	4
21	MP BETA2	Y	-.042	4
22	MP BETA2	X	.073	4
23	MP GAMMA2	Y	-.029	4
24	MP GAMMA2	X	.05	4
25	MP ALPHA2	Y	-.03	4
26	MP ALPHA2	X	.051	4

Member Point Loads (BLC 14 : Wind Load (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.141	6.083
2	MP ALPHA2	Y	-.141	1.917
3	MP ALPHA2	X	.082	6.083
4	MP ALPHA2	X	.082	1.917
5	MP BETA2	Y	-.141	6.083
6	MP BETA2	Y	-.141	1.917
7	MP BETA2	X	.082	6.083
8	MP BETA2	X	.082	1.917
9	MP GAMMA2	Y	-.067	6.083
10	MP GAMMA2	Y	-.067	1.917
11	MP GAMMA2	X	.038	6.083
12	MP GAMMA2	X	.038	1.917
13	MP ALPHA2	Y	-.064	4
14	MP ALPHA2	X	.037	4
15	MP BETA2	Y	-.064	4
16	MP BETA2	X	.037	4
17	MP GAMMA2	Y	-.037	4
18	MP GAMMA2	X	.021	4
19	MP ALPHA2	Y	-.065	4
20	MP ALPHA2	X	.038	4

Member Point Loads (BLC 14 : Wind Load (330)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
21	MP BETA2	Y	-.065	4
22	MP BETA2	X	.038	4
23	MP GAMMA2	Y	-.042	4
24	MP GAMMA2	X	.024	4
25	MP ALPHA2	Y	-.067	4
26	MP ALPHA2	X	.039	4

Member Point Loads (BLC 15 : Maintanence (0))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.01	6.083
2	MP ALPHA2	Y	-.01	1.917
3	MP BETA2	Y	-.005	6.083
4	MP BETA2	Y	-.005	1.917
5	MP GAMMA2	Y	-.005	6.083
6	MP GAMMA2	Y	-.005	1.917
7	MP ALPHA2	Y	-.004	4
8	MP BETA2	Y	-.003	4
9	MP GAMMA2	Y	-.003	4
10	MP ALPHA2	Y	-.004	4
11	MP BETA2	Y	-.003	4
12	MP GAMMA2	Y	-.003	4
13	MP ALPHA2	Y	-.004	4

Member Point Loads (BLC 16 : Maintanence (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.007	6.083
2	MP ALPHA2	Y	-.007	1.917
3	MP ALPHA2	X	-.004	6.083
4	MP ALPHA2	X	-.004	1.917
5	MP BETA2	Y	-.003	6.083
6	MP BETA2	Y	-.003	1.917
7	MP BETA2	X	-.002	6.083
8	MP BETA2	X	-.002	1.917
9	MP GAMMA2	Y	-.007	6.083
10	MP GAMMA2	Y	-.007	1.917
11	MP GAMMA2	X	-.004	6.083
12	MP GAMMA2	X	-.004	1.917
13	MP ALPHA2	Y	-.003	4
14	MP ALPHA2	X	-.002	4
15	MP BETA2	Y	-.002	4
16	MP BETA2	X	-.001	4
17	MP GAMMA2	Y	-.003	4
18	MP GAMMA2	X	-.002	4
19	MP ALPHA2	Y	-.003	4
20	MP ALPHA2	X	-.002	4
21	MP BETA2	Y	-.002	4
22	MP BETA2	X	-.001	4
23	MP GAMMA2	Y	-.003	4
24	MP GAMMA2	X	-.002	4
25	MP ALPHA2	Y	-.003	4
26	MP ALPHA2	X	-.002	4

Member Point Loads (BLC 17 : Maintanence (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.003	6.083

Member Point Loads (BLC 17 : Maintanence (60)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
2	MP ALPHA2	Y	-.003	1.917
3	MP ALPHA2	X	-.005	6.083
4	MP ALPHA2	X	-.005	1.917
5	MP BETA2	Y	-.003	6.083
6	MP BETA2	Y	-.003	1.917
7	MP BETA2	X	-.005	6.083
8	MP BETA2	X	-.005	1.917
9	MP GAMMA2	Y	-.005	6.083
10	MP GAMMA2	Y	-.005	1.917
11	MP GAMMA2	X	-.008	6.083
12	MP GAMMA2	X	-.008	1.917
13	MP ALPHA2	Y	-.001	4
14	MP ALPHA2	X	-.002	4
15	MP BETA2	Y	-.001	4
16	MP BETA2	X	-.002	4
17	MP GAMMA2	Y	-.002	4
18	MP GAMMA2	X	-.004	4
19	MP ALPHA2	Y	-.001	4
20	MP ALPHA2	X	-.003	4
21	MP BETA2	Y	-.001	4
22	MP BETA2	X	-.003	4
23	MP GAMMA2	Y	-.002	4
24	MP GAMMA2	X	-.004	4
25	MP ALPHA2	Y	-.002	4
26	MP ALPHA2	X	-.003	4

Member Point Loads (BLC 18 : Maintanence (90))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.004	6.083
2	MP ALPHA2	X	-.004	1.917
3	MP BETA2	X	-.008	6.083
4	MP BETA2	X	-.008	1.917
5	MP GAMMA2	X	-.008	6.083
6	MP GAMMA2	X	-.008	1.917
7	MP ALPHA2	X	-.002	4
8	MP BETA2	X	-.004	4
9	MP GAMMA2	X	-.004	4
10	MP ALPHA2	X	-.002	4
11	MP BETA2	X	-.004	4
12	MP GAMMA2	X	-.004	4
13	MP ALPHA2	X	-.003	4

Member Point Loads (BLC 19 : Maintanence (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.003	6.083
2	MP ALPHA2	Y	.003	1.917
3	MP ALPHA2	X	-.005	6.083
4	MP ALPHA2	X	-.005	1.917
5	MP BETA2	Y	.005	6.083
6	MP BETA2	Y	.005	1.917
7	MP BETA2	X	-.008	6.083
8	MP BETA2	X	-.008	1.917
9	MP GAMMA2	Y	.003	6.083
10	MP GAMMA2	Y	.003	1.917
11	MP GAMMA2	X	-.005	6.083
12	MP GAMMA2	X	-.005	1.917

Member Point Loads (BLC 19 : Maintanence (120)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
13	MP ALPHA2	Y	.001	4
14	MP ALPHA2	X	-.002	4
15	MP BETA2	Y	.002	4
16	MP BETA2	X	-.004	4
17	MP GAMMA2	Y	.001	4
18	MP GAMMA2	X	-.002	4
19	MP ALPHA2	Y	.001	4
20	MP ALPHA2	X	-.003	4
21	MP BETA2	Y	.002	4
22	MP BETA2	X	-.004	4
23	MP GAMMA2	Y	.001	4
24	MP GAMMA2	X	-.003	4
25	MP ALPHA2	Y	.002	4
26	MP ALPHA2	X	-.003	4

Member Point Loads (BLC 20 : Maintanence (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.007	6.083
2	MP ALPHA2	Y	.007	1.917
3	MP ALPHA2	X	-.004	6.083
4	MP ALPHA2	X	-.004	1.917
5	MP BETA2	Y	.007	6.083
6	MP BETA2	Y	.007	1.917
7	MP BETA2	X	-.004	6.083
8	MP BETA2	X	-.004	1.917
9	MP GAMMA2	Y	.003	6.083
10	MP GAMMA2	Y	.003	1.917
11	MP GAMMA2	X	-.002	6.083
12	MP GAMMA2	X	-.002	1.917
13	MP ALPHA2	Y	.003	4
14	MP ALPHA2	X	-.002	4
15	MP BETA2	Y	.003	4
16	MP BETA2	X	-.002	4
17	MP GAMMA2	Y	.002	4
18	MP GAMMA2	X	-.001	4
19	MP ALPHA2	Y	.003	4
20	MP ALPHA2	X	-.002	4
21	MP BETA2	Y	.003	4
22	MP BETA2	X	-.002	4
23	MP GAMMA2	Y	.002	4
24	MP GAMMA2	X	-.001	4
25	MP ALPHA2	Y	.003	4
26	MP ALPHA2	X	-.002	4

Member Point Loads (BLC 21 : Maintanence (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.01	6.083
2	MP ALPHA2	Y	.01	1.917
3	MP BETA2	Y	.005	6.083
4	MP BETA2	Y	.005	1.917
5	MP GAMMA2	Y	.005	6.083
6	MP GAMMA2	Y	.005	1.917
7	MP ALPHA2	Y	.004	4
8	MP BETA2	Y	.003	4
9	MP GAMMA2	Y	.003	4
10	MP ALPHA2	Y	.004	4

Member Point Loads (BLC 21 : Maintanence (180)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
11	MP BETA2	Y	.003	4
12	MP GAMMA2	Y	.003	4
13	MP ALPHA2	Y	.004	4

Member Point Loads (BLC 22 : Maintanence (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.007	6.083
2	MP ALPHA2	Y	.007	1.917
3	MP ALPHA2	X	.004	6.083
4	MP ALPHA2	X	.004	1.917
5	MP BETA2	Y	.003	6.083
6	MP BETA2	Y	.003	1.917
7	MP BETA2	X	.002	6.083
8	MP BETA2	X	.002	1.917
9	MP GAMMA2	Y	.007	6.083
10	MP GAMMA2	Y	.007	1.917
11	MP GAMMA2	X	.004	6.083
12	MP GAMMA2	X	.004	1.917
13	MP ALPHA2	Y	.003	4
14	MP ALPHA2	X	.002	4
15	MP BETA2	Y	.002	4
16	MP BETA2	X	.001	4
17	MP GAMMA2	Y	.003	4
18	MP GAMMA2	X	.002	4
19	MP ALPHA2	Y	.003	4
20	MP ALPHA2	X	.002	4
21	MP BETA2	Y	.002	4
22	MP BETA2	X	.001	4
23	MP GAMMA2	Y	.003	4
24	MP GAMMA2	X	.002	4
25	MP ALPHA2	Y	.003	4
26	MP ALPHA2	X	.002	4

Member Point Loads (BLC 23 : Maintanence (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.003	6.083
2	MP ALPHA2	Y	.003	1.917
3	MP ALPHA2	X	.005	6.083
4	MP ALPHA2	X	.005	1.917
5	MP BETA2	Y	.003	6.083
6	MP BETA2	Y	.003	1.917
7	MP BETA2	X	.005	6.083
8	MP BETA2	X	.005	1.917
9	MP GAMMA2	Y	.005	6.083
10	MP GAMMA2	Y	.005	1.917
11	MP GAMMA2	X	.008	6.083
12	MP GAMMA2	X	.008	1.917
13	MP ALPHA2	Y	.001	4
14	MP ALPHA2	X	.002	4
15	MP BETA2	Y	.001	4
16	MP BETA2	X	.002	4
17	MP GAMMA2	Y	.002	4
18	MP GAMMA2	X	.004	4
19	MP ALPHA2	Y	.001	4
20	MP ALPHA2	X	.003	4
21	MP BETA2	Y	.001	4

Member Point Loads (BLC 23 : Maintanence (240)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
22	MP BETA2	X	.003	4
23	MP GAMMA2	Y	.002	4
24	MP GAMMA2	X	.004	4
25	MP ALPHA2	Y	.002	4
26	MP ALPHA2	X	.003	4

Member Point Loads (BLC 24 : Maintanence (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.004	6.083
2	MP ALPHA2	X	.004	1.917
3	MP BETA2	X	.008	6.083
4	MP BETA2	X	.008	1.917
5	MP GAMMA2	X	.008	6.083
6	MP GAMMA2	X	.008	1.917
7	MP ALPHA2	X	.002	4
8	MP BETA2	X	.004	4
9	MP GAMMA2	X	.004	4
10	MP ALPHA2	X	.002	4
11	MP BETA2	X	.004	4
12	MP GAMMA2	X	.004	4
13	MP ALPHA2	X	.003	4

Member Point Loads (BLC 25 : Maintanence (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.003	6.083
2	MP ALPHA2	Y	-.003	1.917
3	MP ALPHA2	X	.005	6.083
4	MP ALPHA2	X	.005	1.917
5	MP BETA2	Y	-.005	6.083
6	MP BETA2	Y	-.005	1.917
7	MP BETA2	X	.008	6.083
8	MP BETA2	X	.008	1.917
9	MP GAMMA2	Y	-.003	6.083
10	MP GAMMA2	Y	-.003	1.917
11	MP GAMMA2	X	.005	6.083
12	MP GAMMA2	X	.005	1.917
13	MP ALPHA2	Y	-.001	4
14	MP ALPHA2	X	.002	4
15	MP BETA2	Y	-.002	4
16	MP BETA2	X	.004	4
17	MP GAMMA2	Y	-.001	4
18	MP GAMMA2	X	.002	4
19	MP ALPHA2	Y	-.001	4
20	MP ALPHA2	X	.003	4
21	MP BETA2	Y	-.002	4
22	MP BETA2	X	.004	4
23	MP GAMMA2	Y	-.001	4
24	MP GAMMA2	X	.003	4
25	MP ALPHA2	Y	-.002	4
26	MP ALPHA2	X	.003	4

Member Point Loads (BLC 26 : Maintanence (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.007	6.083
2	MP ALPHA2	Y	-.007	1.917

Member Point Loads (BLC 26 : Maintanence (330)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
3	MP ALPHA2	X	.004	6.083
4	MP ALPHA2	X	.004	1.917
5	MP BETA2	Y	-.007	6.083
6	MP BETA2	Y	-.007	1.917
7	MP BETA2	X	.004	6.083
8	MP BETA2	X	.004	1.917
9	MP GAMMA2	Y	-.003	6.083
10	MP GAMMA2	Y	-.003	1.917
11	MP GAMMA2	X	.002	6.083
12	MP GAMMA2	X	.002	1.917
13	MP ALPHA2	Y	-.003	4
14	MP ALPHA2	X	.002	4
15	MP BETA2	Y	-.003	4
16	MP BETA2	X	.002	4
17	MP GAMMA2	Y	-.002	4
18	MP GAMMA2	X	.001	4
19	MP ALPHA2	Y	-.003	4
20	MP ALPHA2	X	.002	4
21	MP BETA2	Y	-.003	4
22	MP BETA2	X	.002	4
23	MP GAMMA2	Y	-.002	4
24	MP GAMMA2	X	.001	4
25	MP ALPHA2	Y	-.003	4
26	MP ALPHA2	X	.002	4

Member Point Loads (BLC 27 : Ice Dead Load)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.091	6.083
2	MP ALPHA2	Z	-.091	1.917
3	MP BETA2	Z	-.091	6.083
4	MP BETA2	Z	-.091	1.917
5	MP GAMMA2	Z	-.091	6.083
6	MP GAMMA2	Z	-.091	1.917
7	MP ALPHA2	Z	-.043	4
8	MP BETA2	Z	-.043	4
9	MP GAMMA2	Z	-.043	4
10	MP ALPHA2	Z	-.046	4
11	MP BETA2	Z	-.046	4
12	MP GAMMA2	Z	-.046	4
13	MP ALPHA2	Z	-.046	4

Member Point Loads (BLC 28 : Ice Wind Load (0))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.028	6.083
2	MP ALPHA2	Y	-.028	1.917
3	MP BETA2	Y	-.017	6.083
4	MP BETA2	Y	-.017	1.917
5	MP GAMMA2	Y	-.017	6.083
6	MP GAMMA2	Y	-.017	1.917
7	MP ALPHA2	Y	-.009	4
8	MP BETA2	Y	-.006	4
9	MP GAMMA2	Y	-.006	4
10	MP ALPHA2	Y	-.009	4
11	MP BETA2	Y	-.007	4
12	MP GAMMA2	Y	-.007	4
13	MP ALPHA2	Y	-.009	4

Member Point Loads (BLC 29 : Ice Wind Load (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.021	6.083
2	MP ALPHA2	Y	-.021	1.917
3	MP ALPHA2	X	-.012	6.083
4	MP ALPHA2	X	-.012	1.917
5	MP BETA2	Y	-.011	6.083
6	MP BETA2	Y	-.011	1.917
7	MP BETA2	X	-.007	6.083
8	MP BETA2	X	-.007	1.917
9	MP GAMMA2	Y	-.021	6.083
10	MP GAMMA2	Y	-.021	1.917
11	MP GAMMA2	X	-.012	6.083
12	MP GAMMA2	X	-.012	1.917
13	MP ALPHA2	Y	-.007	4
14	MP ALPHA2	X	-.004	4
15	MP BETA2	Y	-.005	4
16	MP BETA2	X	-.003	4
17	MP GAMMA2	Y	-.007	4
18	MP GAMMA2	X	-.004	4
19	MP ALPHA2	Y	-.007	4
20	MP ALPHA2	X	-.004	4
21	MP BETA2	Y	-.005	4
22	MP BETA2	X	-.003	4
23	MP GAMMA2	Y	-.007	4
24	MP GAMMA2	X	-.004	4
25	MP ALPHA2	Y	-.007	4
26	MP ALPHA2	X	-.004	4

Member Point Loads (BLC 30 : Ice Wind Load (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.008	6.083
2	MP ALPHA2	Y	-.008	1.917
3	MP ALPHA2	X	-.015	6.083
4	MP ALPHA2	X	-.015	1.917
5	MP BETA2	Y	-.008	6.083
6	MP BETA2	Y	-.008	1.917
7	MP BETA2	X	-.015	6.083
8	MP BETA2	X	-.015	1.917
9	MP GAMMA2	Y	-.014	6.083
10	MP GAMMA2	Y	-.014	1.917
11	MP GAMMA2	X	-.024	6.083
12	MP GAMMA2	X	-.024	1.917
13	MP ALPHA2	Y	-.003	4
14	MP ALPHA2	X	-.005	4
15	MP BETA2	Y	-.003	4
16	MP BETA2	X	-.005	4
17	MP GAMMA2	Y	-.005	4
18	MP GAMMA2	X	-.008	4
19	MP ALPHA2	Y	-.003	4
20	MP ALPHA2	X	-.006	4
21	MP BETA2	Y	-.003	4
22	MP BETA2	X	-.006	4
23	MP GAMMA2	Y	-.005	4
24	MP GAMMA2	X	-.008	4
25	MP ALPHA2	Y	-.003	4
26	MP ALPHA2	X	-.006	4

Member Point Loads (BLC 31 : Ice Wind Load (90))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.013	6.083
2	MP ALPHA2	X	-.013	1.917
3	MP BETA2	X	-.024	6.083
4	MP BETA2	X	-.024	1.917
5	MP GAMMA2	X	-.024	6.083
6	MP GAMMA2	X	-.024	1.917
7	MP ALPHA2	X	-.005	4
8	MP BETA2	X	-.008	4
9	MP GAMMA2	X	-.008	4
10	MP ALPHA2	X	-.006	4
11	MP BETA2	X	-.008	4
12	MP GAMMA2	X	-.008	4
13	MP ALPHA2	X	-.006	4

Member Point Loads (BLC 32 : Ice Wind Load (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.008	6.083
2	MP ALPHA2	Y	.008	1.917
3	MP ALPHA2	X	-.015	6.083
4	MP ALPHA2	X	-.015	1.917
5	MP BETA2	Y	.014	6.083
6	MP BETA2	Y	.014	1.917
7	MP BETA2	X	-.024	6.083
8	MP BETA2	X	-.024	1.917
9	MP GAMMA2	Y	.008	6.083
10	MP GAMMA2	Y	.008	1.917
11	MP GAMMA2	X	-.015	6.083
12	MP GAMMA2	X	-.015	1.917
13	MP ALPHA2	Y	.003	4
14	MP ALPHA2	X	-.005	4
15	MP BETA2	Y	.005	4
16	MP BETA2	X	-.008	4
17	MP GAMMA2	Y	.003	4
18	MP GAMMA2	X	-.005	4
19	MP ALPHA2	Y	.003	4
20	MP ALPHA2	X	-.006	4
21	MP BETA2	Y	.005	4
22	MP BETA2	X	-.008	4
23	MP GAMMA2	Y	.003	4
24	MP GAMMA2	X	-.006	4
25	MP ALPHA2	Y	.003	4
26	MP ALPHA2	X	-.006	4

Member Point Loads (BLC 33 : Ice Wind Load (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.021	6.083
2	MP ALPHA2	Y	.021	1.917
3	MP ALPHA2	X	-.012	6.083
4	MP ALPHA2	X	-.012	1.917
5	MP BETA2	Y	.021	6.083
6	MP BETA2	Y	.021	1.917
7	MP BETA2	X	-.012	6.083
8	MP BETA2	X	-.012	1.917
9	MP GAMMA2	Y	.011	6.083
10	MP GAMMA2	Y	.011	1.917
11	MP GAMMA2	X	-.007	6.083

Member Point Loads (BLC 33 : Ice Wind Load (150)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
12	MP GAMMA2	X	-.007	1.917
13	MP ALPHA2	Y	.007	4
14	MP ALPHA2	X	-.004	4
15	MP BETA2	Y	.007	4
16	MP BETA2	X	-.004	4
17	MP GAMMA2	Y	.005	4
18	MP GAMMA2	X	-.003	4
19	MP ALPHA2	Y	.007	4
20	MP ALPHA2	X	-.004	4
21	MP BETA2	Y	.007	4
22	MP BETA2	X	-.004	4
23	MP GAMMA2	Y	.005	4
24	MP GAMMA2	X	-.003	4
25	MP ALPHA2	Y	.007	4
26	MP ALPHA2	X	-.004	4

Member Point Loads (BLC 34 : Ice Wind Load (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.028	6.083
2	MP ALPHA2	Y	.028	1.917
3	MP BETA2	Y	.017	6.083
4	MP BETA2	Y	.017	1.917
5	MP GAMMA2	Y	.017	6.083
6	MP GAMMA2	Y	.017	1.917
7	MP ALPHA2	Y	.009	4
8	MP BETA2	Y	.006	4
9	MP GAMMA2	Y	.006	4
10	MP ALPHA2	Y	.009	4
11	MP BETA2	Y	.007	4
12	MP GAMMA2	Y	.007	4
13	MP ALPHA2	Y	.009	4

Member Point Loads (BLC 35 : Ice Wind Load (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.021	6.083
2	MP ALPHA2	Y	.021	1.917
3	MP ALPHA2	X	.012	6.083
4	MP ALPHA2	X	.012	1.917
5	MP BETA2	Y	.011	6.083
6	MP BETA2	Y	.011	1.917
7	MP BETA2	X	.007	6.083
8	MP BETA2	X	.007	1.917
9	MP GAMMA2	Y	.021	6.083
10	MP GAMMA2	Y	.021	1.917
11	MP GAMMA2	X	.012	6.083
12	MP GAMMA2	X	.012	1.917
13	MP ALPHA2	Y	.007	4
14	MP ALPHA2	X	.004	4
15	MP BETA2	Y	.005	4
16	MP BETA2	X	.003	4
17	MP GAMMA2	Y	.007	4
18	MP GAMMA2	X	.004	4
19	MP ALPHA2	Y	.007	4
20	MP ALPHA2	X	.004	4
21	MP BETA2	Y	.005	4
22	MP BETA2	X	.003	4

Member Point Loads (BLC 35 : Ice Wind Load (210)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
23	MP GAMMA2	Y	.007	4
24	MP GAMMA2	X	.004	4
25	MP ALPHA2	Y	.007	4
26	MP ALPHA2	X	.004	4

Member Point Loads (BLC 36 : Ice Wind Load (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.008	6.083
2	MP ALPHA2	Y	.008	1.917
3	MP ALPHA2	X	.015	6.083
4	MP ALPHA2	X	.015	1.917
5	MP BETA2	Y	.008	6.083
6	MP BETA2	Y	.008	1.917
7	MP BETA2	X	.015	6.083
8	MP BETA2	X	.015	1.917
9	MP GAMMA2	Y	.014	6.083
10	MP GAMMA2	Y	.014	1.917
11	MP GAMMA2	X	.024	6.083
12	MP GAMMA2	X	.024	1.917
13	MP ALPHA2	Y	.003	4
14	MP ALPHA2	X	.005	4
15	MP BETA2	Y	.003	4
16	MP BETA2	X	.005	4
17	MP GAMMA2	Y	.005	4
18	MP GAMMA2	X	.008	4
19	MP ALPHA2	Y	.003	4
20	MP ALPHA2	X	.006	4
21	MP BETA2	Y	.003	4
22	MP BETA2	X	.006	4
23	MP GAMMA2	Y	.005	4
24	MP GAMMA2	X	.008	4
25	MP ALPHA2	Y	.003	4
26	MP ALPHA2	X	.006	4

Member Point Loads (BLC 37 : Ice Wind Load (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.013	6.083
2	MP ALPHA2	X	.013	1.917
3	MP BETA2	X	.024	6.083
4	MP BETA2	X	.024	1.917
5	MP GAMMA2	X	.024	6.083
6	MP GAMMA2	X	.024	1.917
7	MP ALPHA2	X	.005	4
8	MP BETA2	X	.008	4
9	MP GAMMA2	X	.008	4
10	MP ALPHA2	X	.006	4
11	MP BETA2	X	.008	4
12	MP GAMMA2	X	.008	4
13	MP ALPHA2	X	.006	4

Member Point Loads (BLC 38 : Ice Wind Load (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.008	6.083
2	MP ALPHA2	Y	-.008	1.917
3	MP ALPHA2	X	.015	6.083

Member Point Loads (BLC 38 : Ice Wind Load (300)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
4	MP ALPHA2	X	.015	1.917
5	MP BETA2	Y	-.014	6.083
6	MP BETA2	Y	-.014	1.917
7	MP BETA2	X	.024	6.083
8	MP BETA2	X	.024	1.917
9	MP GAMMA2	Y	-.008	6.083
10	MP GAMMA2	Y	-.008	1.917
11	MP GAMMA2	X	.015	6.083
12	MP GAMMA2	X	.015	1.917
13	MP ALPHA2	Y	-.003	4
14	MP ALPHA2	X	.005	4
15	MP BETA2	Y	-.005	4
16	MP BETA2	X	.008	4
17	MP GAMMA2	Y	-.003	4
18	MP GAMMA2	X	.005	4
19	MP ALPHA2	Y	-.003	4
20	MP ALPHA2	X	.006	4
21	MP BETA2	Y	-.005	4
22	MP BETA2	X	.008	4
23	MP GAMMA2	Y	-.003	4
24	MP GAMMA2	X	.006	4
25	MP ALPHA2	Y	-.003	4
26	MP ALPHA2	X	.006	4

Member Point Loads (BLC 39 : Ice Wind Load (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.021	6.083
2	MP ALPHA2	Y	-.021	1.917
3	MP ALPHA2	X	.012	6.083
4	MP ALPHA2	X	.012	1.917
5	MP BETA2	Y	-.021	6.083
6	MP BETA2	Y	-.021	1.917
7	MP BETA2	X	.012	6.083
8	MP BETA2	X	.012	1.917
9	MP GAMMA2	Y	-.011	6.083
10	MP GAMMA2	Y	-.011	1.917
11	MP GAMMA2	X	.007	6.083
12	MP GAMMA2	X	.007	1.917
13	MP ALPHA2	Y	-.007	4
14	MP ALPHA2	X	.004	4
15	MP BETA2	Y	-.007	4
16	MP BETA2	X	.004	4
17	MP GAMMA2	Y	-.005	4
18	MP GAMMA2	X	.003	4
19	MP ALPHA2	Y	-.007	4
20	MP ALPHA2	X	.004	4
21	MP BETA2	Y	-.007	4
22	MP BETA2	X	.004	4
23	MP GAMMA2	Y	-.005	4
24	MP GAMMA2	X	.003	4
25	MP ALPHA2	Y	-.007	4
26	MP ALPHA2	X	.004	4

Member Point Loads (BLC 40 : Earthquake (x-direction))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.004	6.083

Member Point Loads (BLC 40 : Earthquake (x-direction)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
2	MP ALPHA2	X	-.004	1.917
3	MP BETA2	X	-.004	6.083
4	MP BETA2	X	-.004	1.917
5	MP GAMMA2	X	-.004	6.083
6	MP GAMMA2	X	-.004	1.917
7	MP ALPHA2	X	-.006	4
8	MP BETA2	X	-.006	4
9	MP GAMMA2	X	-.006	4
10	MP ALPHA2	X	-.007	4
11	MP BETA2	X	-.007	4
12	MP GAMMA2	X	-.007	4
13	MP ALPHA2	X	-.002	4

Member Point Loads (BLC 41 : Earthquake (y-direction))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.004	6.083
2	MP ALPHA2	Y	-.004	1.917
3	MP BETA2	Y	-.004	6.083
4	MP BETA2	Y	-.004	1.917
5	MP GAMMA2	Y	-.004	6.083
6	MP GAMMA2	Y	-.004	1.917
7	MP ALPHA2	Y	-.006	4
8	MP BETA2	Y	-.006	4
9	MP GAMMA2	Y	-.006	4
10	MP ALPHA2	Y	-.007	4
11	MP BETA2	Y	-.007	4
12	MP GAMMA2	Y	-.007	4
13	MP ALPHA2	Y	-.002	4

Member Point Loads (BLC 42 : Earthquake (z-direction))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.001	6.083
2	MP ALPHA2	Z	-.001	1.917
3	MP BETA2	Z	-.001	6.083
4	MP BETA2	Z	-.001	1.917
5	MP GAMMA2	Z	-.001	6.083
6	MP GAMMA2	Z	-.001	1.917
7	MP ALPHA2	Z	-.002	4
8	MP BETA2	Z	-.002	4
9	MP GAMMA2	Z	-.002	4
10	MP ALPHA2	Z	-.003	4
11	MP BETA2	Z	-.003	4
12	MP GAMMA2	Z	-.003	4
13	MP ALPHA2	Z	-.00076	4

Member Distributed Loads (BLC 2 : Wind Load (0))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.009	-.009	0	0
2	GRAT SUP	PY	-.007	-.007	0	0
3	GRAT SUP2	PY	-.007	-.007	0	0
4	PL1	PY	-.023	-.023	0	0
5	SO2	PY	-.009	-.009	0	0
6	GRAT SUP3	PY	-.007	-.007	0	0
7	GRAT SUP4	PY	-.007	-.007	0	0

Member Distributed Loads (BLC 2 : Wind Load (0)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
8	PL2	PY	-.023	-.023	0	0
9	SO3	PY	-.009	-.009	0	0
10	GRAT SUP5	PY	-.007	-.007	0	0
11	GRAT SUP6	PY	-.007	-.007	0	0
12	PL3	PY	-.023	-.023	0	0
13	FACE1	PY	-.004	-.004	0	0
14	MP ALPHA1	PY	-.01	-.01	0	0
15	MP ALPHA3	PY	-.01	-.01	0	0
16	RAIL1	PY	-.003	-.003	0	0
17	RAIL CON3	PY	-.024	-.024	0	0
18	RAIL CON1	PY	-.024	-.024	0	0
19	RAIL CON2	PY	-.024	-.024	0	0
20	CR1	PY	-.012	-.012	0	0
21	CR2	PY	-.012	-.012	0	0
22	CR3	PY	-.012	-.012	0	0
23	CR4	PY	-.012	-.012	0	0
24	CR5	PY	-.012	-.012	0	0
25	CR6	PY	-.012	-.012	0	0
26	PL4	PY	-.009	-.009	0	0
27	PL5	PY	-.009	-.009	0	0
28	PL6	PY	-.009	-.009	0	0
29	PL7	PY	-.009	-.009	0	0
30	PL8	PY	-.009	-.009	0	0
31	PL9	PY	-.009	-.009	0	0
32	MP ALPHA2	PY	-.01	-.01	0	0
33	FACE3	PY	-.009	-.009	0	0
34	MP GAMMA1	PY	-.01	-.01	0	0
35	MP GAMMA3	PY	-.01	-.01	0	0
36	RAIL3	PY	-.006	-.006	0	0
37	FACE2	PY	-.009	-.009	0	0
38	MP BETA1	PY	-.01	-.01	0	0
39	MP BETA3	PY	-.01	-.01	0	0
40	RAIL2	PY	-.006	-.006	0	0
41	MP BETA2	PY	-.01	-.01	0	0
42	MP GAMMA2	PY	-.01	-.01	0	0

Member Distributed Loads (BLC 4 : Wind Load (30))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.008	-.008	0	0
2	GRAT SUP	PY	-.006	-.006	0	0
3	GRAT SUP2	PY	-.006	-.006	0	0
4	PL1	PY	-.02	-.02	0	0
5	SO2	PY	-.008	-.008	0	0
6	GRAT SUP3	PY	-.006	-.006	0	0
7	GRAT SUP4	PY	-.006	-.006	0	0
8	PL2	PY	-.02	-.02	0	0
9	SO3	PY	-.008	-.008	0	0
10	GRAT SUP5	PY	-.006	-.006	0	0
11	GRAT SUP6	PY	-.006	-.006	0	0
12	PL3	PY	-.02	-.02	0	0
13	FACE1	PY	-.004	-.004	0	0
14	MP ALPHA1	PY	-.009	-.009	0	0
15	MP ALPHA3	PY	-.009	-.009	0	0
16	RAIL1	PY	-.003	-.003	0	0
17	RAIL CON3	PY	-.021	-.021	0	0
18	RAIL CON1	PY	-.021	-.021	0	0

Member Distributed Loads (BLC 4 : Wind Load (30)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	RAIL CON2	PY	-.021	-.021	0	0
20	CR1	PY	-.011	-.011	0	0
21	CR2	PY	-.011	-.011	0	0
22	CR3	PY	-.011	-.011	0	0
23	CR4	PY	-.011	-.011	0	0
24	CR5	PY	-.011	-.011	0	0
25	CR6	PY	-.011	-.011	0	0
26	PL4	PY	-.007	-.007	0	0
27	PL5	PY	-.007	-.007	0	0
28	PL6	PY	-.007	-.007	0	0
29	PL7	PY	-.007	-.007	0	0
30	PL8	PY	-.007	-.007	0	0
31	PL9	PY	-.007	-.007	0	0
32	MP ALPHA2	PY	-.009	-.009	0	0
33	FACE3	PY	-.007	-.007	0	0
34	MP GAMMA1	PY	-.009	-.009	0	0
35	MP GAMMA3	PY	-.009	-.009	0	0
36	RAIL3	PY	-.005	-.005	0	0
37	FACE2	PY	-.007	-.007	0	0
38	MP BETA1	PY	-.009	-.009	0	0
39	MP BETA3	PY	-.009	-.009	0	0
40	RAIL2	PY	-.005	-.005	0	0
41	MP BETA2	PY	-.009	-.009	0	0
42	MP GAMMA2	PY	-.009	-.009	0	0
43	SO1	PX	-.004	-.004	0	0
44	GRAT SUP	PX	-.004	-.004	0	0
45	GRAT SUP2	PX	-.004	-.004	0	0
46	PL1	PX	-.012	-.012	0	0
47	SO2	PX	-.004	-.004	0	0
48	GRAT SUP3	PX	-.004	-.004	0	0
49	GRAT SUP4	PX	-.004	-.004	0	0
50	PL2	PX	-.012	-.012	0	0
51	SO3	PX	-.004	-.004	0	0
52	GRAT SUP5	PX	-.004	-.004	0	0
53	GRAT SUP6	PX	-.004	-.004	0	0
54	PL3	PX	-.012	-.012	0	0
55	FACE1	PX	-.002	-.002	0	0
56	MP ALPHA1	PX	-.005	-.005	0	0
57	MP ALPHA3	PX	-.005	-.005	0	0
58	RAIL1	PX	-.002	-.002	0	0
59	RAIL CON3	PX	-.012	-.012	0	0
60	RAIL CON1	PX	-.012	-.012	0	0
61	RAIL CON2	PX	-.012	-.012	0	0
62	CR1	PX	-.006	-.006	0	0
63	CR2	PX	-.006	-.006	0	0
64	CR3	PX	-.006	-.006	0	0
65	CR4	PX	-.006	-.006	0	0
66	CR5	PX	-.006	-.006	0	0
67	CR6	PX	-.006	-.006	0	0
68	PL4	PX	-.004	-.004	0	0
69	PL5	PX	-.004	-.004	0	0
70	PL6	PX	-.004	-.004	0	0
71	PL7	PX	-.004	-.004	0	0
72	PL8	PX	-.004	-.004	0	0
73	PL9	PX	-.004	-.004	0	0
74	MP ALPHA2	PX	-.005	-.005	0	0
75	FACE3	PX	-.004	-.004	0	0

Member Distributed Loads (BLC 4 : Wind Load (30)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
76	MP GAMMA1	PX	-.005	-.005	0	0
77	MP GAMMA3	PX	-.005	-.005	0	0
78	RAIL3	PX	-.003	-.003	0	0
79	FACE2	PX	-.004	-.004	0	0
80	MP BETA1	PX	-.005	-.005	0	0
81	MP BETA3	PX	-.005	-.005	0	0
82	RAIL2	PX	-.003	-.003	0	0
83	MP BETA2	PX	-.005	-.005	0	0
84	MP GAMMA2	PX	-.005	-.005	0	0

Member Distributed Loads (BLC 5 : Wind Load (60))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.004	-.004	0	0
2	GRAT SUP	PY	-.004	-.004	0	0
3	GRAT SUP2	PY	-.004	-.004	0	0
4	PL1	PY	-.012	-.012	0	0
5	SO2	PY	-.004	-.004	0	0
6	GRAT SUP3	PY	-.004	-.004	0	0
7	GRAT SUP4	PY	-.004	-.004	0	0
8	PL2	PY	-.012	-.012	0	0
9	SO3	PY	-.004	-.004	0	0
10	GRAT SUP5	PY	-.004	-.004	0	0
11	GRAT SUP6	PY	-.004	-.004	0	0
12	PL3	PY	-.012	-.012	0	0
13	FACE1	PY	-.002	-.002	0	0
14	MP ALPHA1	PY	-.005	-.005	0	0
15	MP ALPHA3	PY	-.005	-.005	0	0
16	RAIL1	PY	-.002	-.002	0	0
17	RAIL CON3	PY	-.012	-.012	0	0
18	RAIL CON1	PY	-.012	-.012	0	0
19	RAIL CON2	PY	-.012	-.012	0	0
20	CR1	PY	-.006	-.006	0	0
21	CR2	PY	-.006	-.006	0	0
22	CR3	PY	-.006	-.006	0	0
23	CR4	PY	-.006	-.006	0	0
24	CR5	PY	-.006	-.006	0	0
25	CR6	PY	-.006	-.006	0	0
26	PL4	PY	-.004	-.004	0	0
27	PL5	PY	-.004	-.004	0	0
28	PL6	PY	-.004	-.004	0	0
29	PL7	PY	-.004	-.004	0	0
30	PL8	PY	-.004	-.004	0	0
31	PL9	PY	-.004	-.004	0	0
32	MP ALPHA2	PY	-.005	-.005	0	0
33	FACE3	PY	-.004	-.004	0	0
34	MP GAMMA1	PY	-.005	-.005	0	0
35	MP GAMMA3	PY	-.005	-.005	0	0
36	RAIL3	PY	-.003	-.003	0	0
37	FACE2	PY	-.004	-.004	0	0
38	MP BETA1	PY	-.005	-.005	0	0
39	MP BETA3	PY	-.005	-.005	0	0
40	RAIL2	PY	-.003	-.003	0	0
41	MP BETA2	PY	-.005	-.005	0	0
42	MP GAMMA2	PY	-.005	-.005	0	0
43	SO1	PX	-.008	-.008	0	0
44	GRAT SUP	PX	-.006	-.006	0	0

Member Distributed Loads (BLC 5 : Wind Load (60)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	GRAT SUP2	PX	-.006	-.006	0	0
46	PL1	PX	-.02	-.02	0	0
47	SO2	PX	-.008	-.008	0	0
48	GRAT SUP3	PX	-.006	-.006	0	0
49	GRAT SUP4	PX	-.006	-.006	0	0
50	PL2	PX	-.02	-.02	0	0
51	SO3	PX	-.008	-.008	0	0
52	GRAT SUP5	PX	-.006	-.006	0	0
53	GRAT SUP6	PX	-.006	-.006	0	0
54	PL3	PX	-.02	-.02	0	0
55	FACE1	PX	-.004	-.004	0	0
56	MP ALPHA1	PX	-.009	-.009	0	0
57	MP ALPHA3	PX	-.009	-.009	0	0
58	RAIL1	PX	-.003	-.003	0	0
59	RAIL CON3	PX	-.021	-.021	0	0
60	RAIL CON1	PX	-.021	-.021	0	0
61	RAIL CON2	PX	-.021	-.021	0	0
62	CR1	PX	-.011	-.011	0	0
63	CR2	PX	-.011	-.011	0	0
64	CR3	PX	-.011	-.011	0	0
65	CR4	PX	-.011	-.011	0	0
66	CR5	PX	-.011	-.011	0	0
67	CR6	PX	-.011	-.011	0	0
68	PL4	PX	-.007	-.007	0	0
69	PL5	PX	-.007	-.007	0	0
70	PL6	PX	-.007	-.007	0	0
71	PL7	PX	-.007	-.007	0	0
72	PL8	PX	-.007	-.007	0	0
73	PL9	PX	-.007	-.007	0	0
74	MP ALPHA2	PX	-.009	-.009	0	0
75	FACE3	PX	-.007	-.007	0	0
76	MP GAMMA1	PX	-.009	-.009	0	0
77	MP GAMMA3	PX	-.009	-.009	0	0
78	RAIL3	PX	-.005	-.005	0	0
79	FACE2	PX	-.007	-.007	0	0
80	MP BETA1	PX	-.009	-.009	0	0
81	MP BETA3	PX	-.009	-.009	0	0
82	RAIL2	PX	-.005	-.005	0	0
83	MP BETA2	PX	-.009	-.009	0	0
84	MP GAMMA2	PX	-.009	-.009	0	0

Member Distributed Loads (BLC 6 : Wind Load (90))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PX	-.009	-.009	0	0
2	GRAT SUP	PX	-.007	-.007	0	0
3	GRAT SUP2	PX	-.007	-.007	0	0
4	PL1	PX	-.023	-.023	0	0
5	SO2	PX	-.009	-.009	0	0
6	GRAT SUP3	PX	-.007	-.007	0	0
7	GRAT SUP4	PX	-.007	-.007	0	0
8	PL2	PX	-.023	-.023	0	0
9	SO3	PX	-.009	-.009	0	0
10	GRAT SUP5	PX	-.007	-.007	0	0
11	GRAT SUP6	PX	-.007	-.007	0	0
12	PL3	PX	-.023	-.023	0	0
13	FACE2	PX	-.004	-.004	0	0

Member Distributed Loads (BLC 6 : Wind Load (90)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
14	MP ALPHA1	PX	-.01	-.01	0	0
15	MP ALPHA3	PX	-.01	-.01	0	0
16	RAIL2	PX	-.003	-.003	0	0
17	RAIL CON3	PX	-.024	-.024	0	0
18	RAIL CON1	PX	-.024	-.024	0	0
19	RAIL CON2	PX	-.024	-.024	0	0
20	CR1	PX	-.012	-.012	0	0
21	CR2	PX	-.012	-.012	0	0
22	CR3	PX	-.012	-.012	0	0
23	CR4	PX	-.012	-.012	0	0
24	CR5	PX	-.012	-.012	0	0
25	CR6	PX	-.012	-.012	0	0
26	PL4	PX	-.009	-.009	0	0
27	PL5	PX	-.009	-.009	0	0
28	PL6	PX	-.009	-.009	0	0
29	PL7	PX	-.009	-.009	0	0
30	PL8	PX	-.009	-.009	0	0
31	PL9	PX	-.009	-.009	0	0
32	MP ALPHA2	PX	-.01	-.01	0	0
33	FACE3	PX	-.009	-.009	0	0
34	MP GAMMA1	PX	-.01	-.01	0	0
35	MP GAMMA3	PX	-.01	-.01	0	0
36	RAIL3	PX	-.006	-.006	0	0
37	FACE1	PX	-.009	-.009	0	0
38	MP BETA1	PX	-.01	-.01	0	0
39	MP BETA3	PX	-.01	-.01	0	0
40	RAIL1	PX	-.006	-.006	0	0
41	MP BETA2	PX	-.01	-.01	0	0
42	MP GAMMA2	PX	-.01	-.01	0	0

Member Distributed Loads (BLC 7 : Wind Load (120))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.004	.004	0	0
2	GRAT SUP	PY	.004	.004	0	0
3	GRAT SUP2	PY	.004	.004	0	0
4	PL1	PY	.012	.012	0	0
5	SO2	PY	.004	.004	0	0
6	GRAT SUP3	PY	.004	.004	0	0
7	GRAT SUP4	PY	.004	.004	0	0
8	PL2	PY	.012	.012	0	0
9	SO3	PY	.004	.004	0	0
10	GRAT SUP5	PY	.004	.004	0	0
11	GRAT SUP6	PY	.004	.004	0	0
12	PL3	PY	.012	.012	0	0
13	FACE2	PY	.002	.002	0	0
14	MP ALPHA1	PY	.005	.005	0	0
15	MP ALPHA3	PY	.005	.005	0	0
16	RAIL2	PY	.002	.002	0	0
17	RAIL CON3	PY	.012	.012	0	0
18	RAIL CON1	PY	.012	.012	0	0
19	RAIL CON2	PY	.012	.012	0	0
20	CR1	PY	.006	.006	0	0
21	CR2	PY	.006	.006	0	0
22	CR3	PY	.006	.006	0	0
23	CR4	PY	.006	.006	0	0
24	CR5	PY	.006	.006	0	0

Member Distributed Loads (BLC 7 : Wind Load (120)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
25	CR6	PY	.006	.006	0	0
26	PL4	PY	.004	.004	0	0
27	PL5	PY	.004	.004	0	0
28	PL6	PY	.004	.004	0	0
29	PL7	PY	.004	.004	0	0
30	PL8	PY	.004	.004	0	0
31	PL9	PY	.004	.004	0	0
32	MP ALPHA2	PY	.005	.005	0	0
33	FACE3	PY	.004	.004	0	0
34	MP GAMMA1	PY	.005	.005	0	0
35	MP GAMMA3	PY	.005	.005	0	0
36	RAIL3	PY	.003	.003	0	0
37	FACE1	PY	.004	.004	0	0
38	MP BETA1	PY	.005	.005	0	0
39	MP BETA3	PY	.005	.005	0	0
40	RAIL1	PY	.003	.003	0	0
41	MP BETA2	PY	.005	.005	0	0
42	MP GAMMA2	PY	.005	.005	0	0
43	SO1	PX	-.008	-.008	0	0
44	GRAT SUP	PX	-.006	-.006	0	0
45	GRAT SUP2	PX	-.006	-.006	0	0
46	PL1	PX	-.02	-.02	0	0
47	SO2	PX	-.008	-.008	0	0
48	GRAT SUP3	PX	-.006	-.006	0	0
49	GRAT SUP4	PX	-.006	-.006	0	0
50	PL2	PX	-.02	-.02	0	0
51	SO3	PX	-.008	-.008	0	0
52	GRAT SUP5	PX	-.006	-.006	0	0
53	GRAT SUP6	PX	-.006	-.006	0	0
54	PL3	PX	-.02	-.02	0	0
55	FACE2	PX	-.004	-.004	0	0
56	MP ALPHA1	PX	-.009	-.009	0	0
57	MP ALPHA3	PX	-.009	-.009	0	0
58	RAIL2	PX	-.003	-.003	0	0
59	RAIL CON3	PX	-.021	-.021	0	0
60	RAIL CON1	PX	-.021	-.021	0	0
61	RAIL CON2	PX	-.021	-.021	0	0
62	CR1	PX	-.011	-.011	0	0
63	CR2	PX	-.011	-.011	0	0
64	CR3	PX	-.011	-.011	0	0
65	CR4	PX	-.011	-.011	0	0
66	CR5	PX	-.011	-.011	0	0
67	CR6	PX	-.011	-.011	0	0
68	PL4	PX	-.007	-.007	0	0
69	PL5	PX	-.007	-.007	0	0
70	PL6	PX	-.007	-.007	0	0
71	PL7	PX	-.007	-.007	0	0
72	PL8	PX	-.007	-.007	0	0
73	PL9	PX	-.007	-.007	0	0
74	MP ALPHA2	PX	-.009	-.009	0	0
75	FACE3	PX	-.007	-.007	0	0
76	MP GAMMA1	PX	-.009	-.009	0	0
77	MP GAMMA3	PX	-.009	-.009	0	0
78	RAIL3	PX	-.005	-.005	0	0
79	FACE1	PX	-.007	-.007	0	0
80	MP BETA1	PX	-.009	-.009	0	0
81	MP BETA3	PX	-.009	-.009	0	0

Member Distributed Loads (BLC 7 : Wind Load (120)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
82	RAIL1	PX	-.005	-.005	0	0
83	MP BETA2	PX	-.009	-.009	0	0
84	MP GAMMA2	PX	-.009	-.009	0	0

Member Distributed Loads (BLC 8 : Wind Load (150))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.008	.008	0	0
2	GRAT SUP	PY	.006	.006	0	0
3	GRAT SUP2	PY	.006	.006	0	0
4	PL1	PY	.02	.02	0	0
5	SO2	PY	.008	.008	0	0
6	GRAT SUP3	PY	.006	.006	0	0
7	GRAT SUP4	PY	.006	.006	0	0
8	PL2	PY	.02	.02	0	0
9	SO3	PY	.008	.008	0	0
10	GRAT SUP5	PY	.006	.006	0	0
11	GRAT SUP6	PY	.006	.006	0	0
12	PL3	PY	.02	.02	0	0
13	FACE2	PY	.004	.004	0	0
14	MP ALPHA1	PY	.009	.009	0	0
15	MP ALPHA3	PY	.009	.009	0	0
16	RAIL2	PY	.003	.003	0	0
17	RAIL CON3	PY	.021	.021	0	0
18	RAIL CON1	PY	.021	.021	0	0
19	RAIL CON2	PY	.021	.021	0	0
20	CR1	PY	.011	.011	0	0
21	CR2	PY	.011	.011	0	0
22	CR3	PY	.011	.011	0	0
23	CR4	PY	.011	.011	0	0
24	CR5	PY	.011	.011	0	0
25	CR6	PY	.011	.011	0	0
26	PL4	PY	.007	.007	0	0
27	PL5	PY	.007	.007	0	0
28	PL6	PY	.007	.007	0	0
29	PL7	PY	.007	.007	0	0
30	PL8	PY	.007	.007	0	0
31	PL9	PY	.007	.007	0	0
32	MP ALPHA2	PY	.009	.009	0	0
33	FACE3	PY	.007	.007	0	0
34	MP GAMMA1	PY	.009	.009	0	0
35	MP GAMMA3	PY	.009	.009	0	0
36	RAIL3	PY	.005	.005	0	0
37	FACE1	PY	.007	.007	0	0
38	MP BETA1	PY	.009	.009	0	0
39	MP BETA3	PY	.009	.009	0	0
40	RAIL1	PY	.005	.005	0	0
41	MP BETA2	PY	.009	.009	0	0
42	MP GAMMA2	PY	.009	.009	0	0
43	SO1	PX	-.004	-.004	0	0
44	GRAT SUP	PX	-.004	-.004	0	0
45	GRAT SUP2	PX	-.004	-.004	0	0
46	PL1	PX	-.012	-.012	0	0
47	SO2	PX	-.004	-.004	0	0
48	GRAT SUP3	PX	-.004	-.004	0	0
49	GRAT SUP4	PX	-.004	-.004	0	0
50	PL2	PX	-.012	-.012	0	0

Member Distributed Loads (BLC 8 : Wind Load (150)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
51	SO3	PX	-.004	-.004	0	0
52	GRAT SUP5	PX	-.004	-.004	0	0
53	GRAT SUP6	PX	-.004	-.004	0	0
54	PL3	PX	-.012	-.012	0	0
55	FACE2	PX	-.002	-.002	0	0
56	MP ALPHA1	PX	-.005	-.005	0	0
57	MP ALPHA3	PX	-.005	-.005	0	0
58	RAIL2	PX	-.002	-.002	0	0
59	RAIL CON3	PX	-.012	-.012	0	0
60	RAIL CON1	PX	-.012	-.012	0	0
61	RAIL CON2	PX	-.012	-.012	0	0
62	CR1	PX	-.006	-.006	0	0
63	CR2	PX	-.006	-.006	0	0
64	CR3	PX	-.006	-.006	0	0
65	CR4	PX	-.006	-.006	0	0
66	CR5	PX	-.006	-.006	0	0
67	CR6	PX	-.006	-.006	0	0
68	PL4	PX	-.004	-.004	0	0
69	PL5	PX	-.004	-.004	0	0
70	PL6	PX	-.004	-.004	0	0
71	PL7	PX	-.004	-.004	0	0
72	PL8	PX	-.004	-.004	0	0
73	PL9	PX	-.004	-.004	0	0
74	MP ALPHA2	PX	-.005	-.005	0	0
75	FACE3	PX	-.004	-.004	0	0
76	MP GAMMA1	PX	-.005	-.005	0	0
77	MP GAMMA3	PX	-.005	-.005	0	0
78	RAIL3	PX	-.003	-.003	0	0
79	FACE1	PX	-.004	-.004	0	0
80	MP BETA1	PX	-.005	-.005	0	0
81	MP BETA3	PX	-.005	-.005	0	0
82	RAIL1	PX	-.003	-.003	0	0
83	MP BETA2	PX	-.005	-.005	0	0
84	MP GAMMA2	PX	-.005	-.005	0	0

Member Distributed Loads (BLC 9 : Wind Load (180))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.009	.009	0	0
2	GRAT SUP	PY	.007	.007	0	0
3	GRAT SUP2	PY	.007	.007	0	0
4	PL1	PY	.023	.023	0	0
5	SO2	PY	.009	.009	0	0
6	GRAT SUP3	PY	.007	.007	0	0
7	GRAT SUP4	PY	.007	.007	0	0
8	PL2	PY	.023	.023	0	0
9	SO3	PY	.009	.009	0	0
10	GRAT SUP5	PY	.007	.007	0	0
11	GRAT SUP6	PY	.007	.007	0	0
12	PL3	PY	.023	.023	0	0
13	FACE2	PY	.004	.004	0	0
14	MP ALPHA1	PY	.01	.01	0	0
15	MP ALPHA3	PY	.01	.01	0	0
16	RAIL2	PY	.003	.003	0	0
17	RAIL CON3	PY	.024	.024	0	0
18	RAIL CON1	PY	.024	.024	0	0
19	RAIL CON2	PY	.024	.024	0	0

Member Distributed Loads (BLC 9 : Wind Load (180)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
20	CR1	PY	.012	.012	0	0
21	CR2	PY	.012	.012	0	0
22	CR3	PY	.012	.012	0	0
23	CR4	PY	.012	.012	0	0
24	CR5	PY	.012	.012	0	0
25	CR6	PY	.012	.012	0	0
26	PL4	PY	.009	.009	0	0
27	PL5	PY	.009	.009	0	0
28	PL6	PY	.009	.009	0	0
29	PL7	PY	.009	.009	0	0
30	PL8	PY	.009	.009	0	0
31	PL9	PY	.009	.009	0	0
32	MP ALPHA2	PY	.01	.01	0	0
33	FACE3	PY	.009	.009	0	0
34	MP GAMMA1	PY	.01	.01	0	0
35	MP GAMMA3	PY	.01	.01	0	0
36	RAIL3	PY	.006	.006	0	0
37	FACE1	PY	.009	.009	0	0
38	MP BETA1	PY	.01	.01	0	0
39	MP BETA3	PY	.01	.01	0	0
40	RAIL1	PY	.006	.006	0	0
41	MP BETA2	PY	.01	.01	0	0
42	MP GAMMA2	PY	.01	.01	0	0

Member Distributed Loads (BLC 10 : Wind Load (210))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.008	.008	0	0
2	GRAT SUP	PY	.006	.006	0	0
3	GRAT SUP2	PY	.006	.006	0	0
4	PL1	PY	.02	.02	0	0
5	SO2	PY	.008	.008	0	0
6	GRAT SUP3	PY	.006	.006	0	0
7	GRAT SUP4	PY	.006	.006	0	0
8	PL2	PY	.02	.02	0	0
9	SO3	PY	.008	.008	0	0
10	GRAT SUP5	PY	.006	.006	0	0
11	GRAT SUP6	PY	.006	.006	0	0
12	PL3	PY	.02	.02	0	0
13	FACE3	PY	.004	.004	0	0
14	MP ALPHA1	PY	.009	.009	0	0
15	MP ALPHA3	PY	.009	.009	0	0
16	RAIL3	PY	.003	.003	0	0
17	RAIL CON3	PY	.021	.021	0	0
18	RAIL CON1	PY	.021	.021	0	0
19	RAIL CON2	PY	.021	.021	0	0
20	CR1	PY	.011	.011	0	0
21	CR2	PY	.011	.011	0	0
22	CR3	PY	.011	.011	0	0
23	CR4	PY	.011	.011	0	0
24	CR5	PY	.011	.011	0	0
25	CR6	PY	.011	.011	0	0
26	PL4	PY	.007	.007	0	0
27	PL5	PY	.007	.007	0	0
28	PL6	PY	.007	.007	0	0
29	PL7	PY	.007	.007	0	0
30	PL8	PY	.007	.007	0	0

Member Distributed Loads (BLC 10 : Wind Load (210)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
31	PL9	PY	.007	.007	0	0
32	MP ALPHA2	PY	.009	.009	0	0
33	FACE1	PY	.007	.007	0	0
34	MP GAMMA1	PY	.009	.009	0	0
35	MP GAMMA3	PY	.009	.009	0	0
36	RAIL1	PY	.005	.005	0	0
37	FACE2	PY	.007	.007	0	0
38	MP BETA1	PY	.009	.009	0	0
39	MP BETA3	PY	.009	.009	0	0
40	RAIL2	PY	.005	.005	0	0
41	MP BETA2	PY	.009	.009	0	0
42	MP GAMMA2	PY	.009	.009	0	0
43	SO1	PX	.004	.004	0	0
44	GRAT SUP	PX	.004	.004	0	0
45	GRAT SUP2	PX	.004	.004	0	0
46	PL1	PX	.012	.012	0	0
47	SO2	PX	.004	.004	0	0
48	GRAT SUP3	PX	.004	.004	0	0
49	GRAT SUP4	PX	.004	.004	0	0
50	PL2	PX	.012	.012	0	0
51	SO3	PX	.004	.004	0	0
52	GRAT SUP5	PX	.004	.004	0	0
53	GRAT SUP6	PX	.004	.004	0	0
54	PL3	PX	.012	.012	0	0
55	FACE3	PX	.002	.002	0	0
56	MP ALPHA1	PX	.005	.005	0	0
57	MP ALPHA3	PX	.005	.005	0	0
58	RAIL3	PX	.002	.002	0	0
59	RAIL CON3	PX	.012	.012	0	0
60	RAIL CON1	PX	.012	.012	0	0
61	RAIL CON2	PX	.012	.012	0	0
62	CR1	PX	.006	.006	0	0
63	CR2	PX	.006	.006	0	0
64	CR3	PX	.006	.006	0	0
65	CR4	PX	.006	.006	0	0
66	CR5	PX	.006	.006	0	0
67	CR6	PX	.006	.006	0	0
68	PL4	PX	.004	.004	0	0
69	PL5	PX	.004	.004	0	0
70	PL6	PX	.004	.004	0	0
71	PL7	PX	.004	.004	0	0
72	PL8	PX	.004	.004	0	0
73	PL9	PX	.004	.004	0	0
74	MP ALPHA2	PX	.005	.005	0	0
75	FACE1	PX	.004	.004	0	0
76	MP GAMMA1	PX	.005	.005	0	0
77	MP GAMMA3	PX	.005	.005	0	0
78	RAIL1	PX	.003	.003	0	0
79	FACE2	PX	.004	.004	0	0
80	MP BETA1	PX	.005	.005	0	0
81	MP BETA3	PX	.005	.005	0	0
82	RAIL2	PX	.003	.003	0	0
83	MP BETA2	PX	.005	.005	0	0
84	MP GAMMA2	PX	.005	.005	0	0

Member Distributed Loads (BLC 11 : Wind Load (240))

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

Member Distributed Loads (BLC 11 : Wind Load (240)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.004	.004	0	0
2	GRAT SUP	PY	.004	.004	0	0
3	GRAT SUP2	PY	.004	.004	0	0
4	PL1	PY	.012	.012	0	0
5	SO2	PY	.004	.004	0	0
6	GRAT SUP3	PY	.004	.004	0	0
7	GRAT SUP4	PY	.004	.004	0	0
8	PL2	PY	.012	.012	0	0
9	SO3	PY	.004	.004	0	0
10	GRAT SUP5	PY	.004	.004	0	0
11	GRAT SUP6	PY	.004	.004	0	0
12	PL3	PY	.012	.012	0	0
13	FACE3	PY	.002	.002	0	0
14	MP ALPHA1	PY	.005	.005	0	0
15	MP ALPHA3	PY	.005	.005	0	0
16	RAIL3	PY	.002	.002	0	0
17	RAIL CON3	PY	.012	.012	0	0
18	RAIL CON1	PY	.012	.012	0	0
19	RAIL CON2	PY	.012	.012	0	0
20	CR1	PY	.006	.006	0	0
21	CR2	PY	.006	.006	0	0
22	CR3	PY	.006	.006	0	0
23	CR4	PY	.006	.006	0	0
24	CR5	PY	.006	.006	0	0
25	CR6	PY	.006	.006	0	0
26	PL4	PY	.004	.004	0	0
27	PL5	PY	.004	.004	0	0
28	PL6	PY	.004	.004	0	0
29	PL7	PY	.004	.004	0	0
30	PL8	PY	.004	.004	0	0
31	PL9	PY	.004	.004	0	0
32	MP ALPHA2	PY	.005	.005	0	0
33	FACE1	PY	.004	.004	0	0
34	MP GAMMA1	PY	.005	.005	0	0
35	MP GAMMA3	PY	.005	.005	0	0
36	RAIL1	PY	.003	.003	0	0
37	FACE2	PY	.004	.004	0	0
38	MP BETA1	PY	.005	.005	0	0
39	MP BETA3	PY	.005	.005	0	0
40	RAIL2	PY	.003	.003	0	0
41	MP BETA2	PY	.005	.005	0	0
42	MP GAMMA2	PY	.005	.005	0	0
43	SO1	PX	.008	.008	0	0
44	GRAT SUP	PX	.006	.006	0	0
45	GRAT SUP2	PX	.006	.006	0	0
46	PL1	PX	.02	.02	0	0
47	SO2	PX	.008	.008	0	0
48	GRAT SUP3	PX	.006	.006	0	0
49	GRAT SUP4	PX	.006	.006	0	0
50	PL2	PX	.02	.02	0	0
51	SO3	PX	.008	.008	0	0
52	GRAT SUP5	PX	.006	.006	0	0
53	GRAT SUP6	PX	.006	.006	0	0
54	PL3	PX	.02	.02	0	0
55	FACE3	PX	.004	.004	0	0
56	MP ALPHA1	PX	.009	.009	0	0
57	MP ALPHA3	PX	.009	.009	0	0

Member Distributed Loads (BLC 11 : Wind Load (240)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	RAIL3	PX	.003	.003	0	0
59	RAIL CON3	PX	.021	.021	0	0
60	RAIL CON1	PX	.021	.021	0	0
61	RAIL CON2	PX	.021	.021	0	0
62	CR1	PX	.011	.011	0	0
63	CR2	PX	.011	.011	0	0
64	CR3	PX	.011	.011	0	0
65	CR4	PX	.011	.011	0	0
66	CR5	PX	.011	.011	0	0
67	CR6	PX	.011	.011	0	0
68	PL4	PX	.007	.007	0	0
69	PL5	PX	.007	.007	0	0
70	PL6	PX	.007	.007	0	0
71	PL7	PX	.007	.007	0	0
72	PL8	PX	.007	.007	0	0
73	PL9	PX	.007	.007	0	0
74	MP ALPHA2	PX	.009	.009	0	0
75	FACE1	PX	.007	.007	0	0
76	MP GAMMA1	PX	.009	.009	0	0
77	MP GAMMA3	PX	.009	.009	0	0
78	RAIL1	PX	.005	.005	0	0
79	FACE2	PX	.007	.007	0	0
80	MP BETA1	PX	.009	.009	0	0
81	MP BETA3	PX	.009	.009	0	0
82	RAIL2	PX	.005	.005	0	0
83	MP BETA2	PX	.009	.009	0	0
84	MP GAMMA2	PX	.009	.009	0	0

Member Distributed Loads (BLC 12 : Wind Load (270))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PX	.009	.009	0	0
2	GRAT SUP	PX	.007	.007	0	0
3	GRAT SUP2	PX	.007	.007	0	0
4	PL1	PX	.023	.023	0	0
5	SO2	PX	.009	.009	0	0
6	GRAT SUP3	PX	.007	.007	0	0
7	GRAT SUP4	PX	.007	.007	0	0
8	PL2	PX	.023	.023	0	0
9	SO3	PX	.009	.009	0	0
10	GRAT SUP5	PX	.007	.007	0	0
11	GRAT SUP6	PX	.007	.007	0	0
12	PL3	PX	.023	.023	0	0
13	FACE3	PX	.004	.004	0	0
14	MP ALPHA1	PX	.01	.01	0	0
15	MP ALPHA3	PX	.01	.01	0	0
16	RAIL3	PX	.003	.003	0	0
17	RAIL CON3	PX	.024	.024	0	0
18	RAIL CON1	PX	.024	.024	0	0
19	RAIL CON2	PX	.024	.024	0	0
20	CR1	PX	.012	.012	0	0
21	CR2	PX	.012	.012	0	0
22	CR3	PX	.012	.012	0	0
23	CR4	PX	.012	.012	0	0
24	CR5	PX	.012	.012	0	0
25	CR6	PX	.012	.012	0	0
26	PL4	PX	.009	.009	0	0

Member Distributed Loads (BLC 12 : Wind Load (270)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
27	PL5	PX	.009	.009	0	0
28	PL6	PX	.009	.009	0	0
29	PL7	PX	.009	.009	0	0
30	PL8	PX	.009	.009	0	0
31	PL9	PX	.009	.009	0	0
32	MP ALPHA2	PX	.01	.01	0	0
33	FACE1	PX	.009	.009	0	0
34	MP GAMMA1	PX	.01	.01	0	0
35	MP GAMMA3	PX	.01	.01	0	0
36	RAIL1	PX	.006	.006	0	0
37	FACE2	PX	.009	.009	0	0
38	MP BETA1	PX	.01	.01	0	0
39	MP BETA3	PX	.01	.01	0	0
40	RAIL2	PX	.006	.006	0	0
41	MP BETA2	PX	.01	.01	0	0
42	MP GAMMA2	PX	.01	.01	0	0

Member Distributed Loads (BLC 13 : Wind Load (300))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.004	-.004	0	0
2	GRAT SUP	PY	-.004	-.004	0	0
3	GRAT SUP2	PY	-.004	-.004	0	0
4	PL1	PY	-.012	-.012	0	0
5	SO2	PY	-.004	-.004	0	0
6	GRAT SUP3	PY	-.004	-.004	0	0
7	GRAT SUP4	PY	-.004	-.004	0	0
8	PL2	PY	-.012	-.012	0	0
9	SO3	PY	-.004	-.004	0	0
10	GRAT SUP5	PY	-.004	-.004	0	0
11	GRAT SUP6	PY	-.004	-.004	0	0
12	PL3	PY	-.012	-.012	0	0
13	FACE3	PY	-.002	-.002	0	0
14	MP ALPHA1	PY	-.005	-.005	0	0
15	MP ALPHA3	PY	-.005	-.005	0	0
16	RAIL3	PY	-.002	-.002	0	0
17	RAIL CON3	PY	-.012	-.012	0	0
18	RAIL CON1	PY	-.012	-.012	0	0
19	RAIL CON2	PY	-.012	-.012	0	0
20	CR1	PY	-.006	-.006	0	0
21	CR2	PY	-.006	-.006	0	0
22	CR3	PY	-.006	-.006	0	0
23	CR4	PY	-.006	-.006	0	0
24	CR5	PY	-.006	-.006	0	0
25	CR6	PY	-.006	-.006	0	0
26	PL4	PY	-.004	-.004	0	0
27	PL5	PY	-.004	-.004	0	0
28	PL6	PY	-.004	-.004	0	0
29	PL7	PY	-.004	-.004	0	0
30	PL8	PY	-.004	-.004	0	0
31	PL9	PY	-.004	-.004	0	0
32	MP ALPHA2	PY	-.005	-.005	0	0
33	FACE1	PY	-.004	-.004	0	0
34	MP GAMMA1	PY	-.005	-.005	0	0
35	MP GAMMA3	PY	-.005	-.005	0	0
36	RAIL1	PY	-.003	-.003	0	0
37	FACE2	PY	-.004	-.004	0	0

Member Distributed Loads (BLC 13 : Wind Load (300)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
38	MP BETA1	PY	-.005	-.005	0	0
39	MP BETA3	PY	-.005	-.005	0	0
40	RAIL2	PY	-.003	-.003	0	0
41	MP BETA2	PY	-.005	-.005	0	0
42	MP GAMMA2	PY	-.005	-.005	0	0
43	SO1	PX	.008	.008	0	0
44	GRAT SUP	PX	.006	.006	0	0
45	GRAT SUP2	PX	.006	.006	0	0
46	PL1	PX	.02	.02	0	0
47	SO2	PX	.008	.008	0	0
48	GRAT SUP3	PX	.006	.006	0	0
49	GRAT SUP4	PX	.006	.006	0	0
50	PL2	PX	.02	.02	0	0
51	SO3	PX	.008	.008	0	0
52	GRAT SUP5	PX	.006	.006	0	0
53	GRAT SUP6	PX	.006	.006	0	0
54	PL3	PX	.02	.02	0	0
55	FACE3	PX	.004	.004	0	0
56	MP ALPHA1	PX	.009	.009	0	0
57	MP ALPHA3	PX	.009	.009	0	0
58	RAIL3	PX	.003	.003	0	0
59	RAIL CON3	PX	.021	.021	0	0
60	RAIL CON1	PX	.021	.021	0	0
61	RAIL CON2	PX	.021	.021	0	0
62	CR1	PX	.011	.011	0	0
63	CR2	PX	.011	.011	0	0
64	CR3	PX	.011	.011	0	0
65	CR4	PX	.011	.011	0	0
66	CR5	PX	.011	.011	0	0
67	CR6	PX	.011	.011	0	0
68	PL4	PX	.007	.007	0	0
69	PL5	PX	.007	.007	0	0
70	PL6	PX	.007	.007	0	0
71	PL7	PX	.007	.007	0	0
72	PL8	PX	.007	.007	0	0
73	PL9	PX	.007	.007	0	0
74	MP ALPHA2	PX	.009	.009	0	0
75	FACE1	PX	.007	.007	0	0
76	MP GAMMA1	PX	.009	.009	0	0
77	MP GAMMA3	PX	.009	.009	0	0
78	RAIL1	PX	.005	.005	0	0
79	FACE2	PX	.007	.007	0	0
80	MP BETA1	PX	.009	.009	0	0
81	MP BETA3	PX	.009	.009	0	0
82	RAIL2	PX	.005	.005	0	0
83	MP BETA2	PX	.009	.009	0	0
84	MP GAMMA2	PX	.009	.009	0	0

Member Distributed Loads (BLC 14 : Wind Load (330))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.008	-.008	0	0
2	GRAT SUP	PY	-.006	-.006	0	0
3	GRAT SUP2	PY	-.006	-.006	0	0
4	PL1	PY	-.02	-.02	0	0
5	SO2	PY	-.008	-.008	0	0
6	GRAT SUP3	PY	-.006	-.006	0	0

Member Distributed Loads (BLC 14 : Wind Load (330)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
7	GRAT SUP4	PY	-.006	-.006	0	0
8	PL2	PY	-.02	-.02	0	0
9	SO3	PY	-.008	-.008	0	0
10	GRAT SUP5	PY	-.006	-.006	0	0
11	GRAT SUP6	PY	-.006	-.006	0	0
12	PL3	PY	-.02	-.02	0	0
13	FACE1	PY	-.004	-.004	0	0
14	MP ALPHA1	PY	-.009	-.009	0	0
15	MP ALPHA3	PY	-.009	-.009	0	0
16	RAIL1	PY	-.003	-.003	0	0
17	RAIL CON3	PY	-.021	-.021	0	0
18	RAIL CON1	PY	-.021	-.021	0	0
19	RAIL CON2	PY	-.021	-.021	0	0
20	CR1	PY	-.011	-.011	0	0
21	CR2	PY	-.011	-.011	0	0
22	CR3	PY	-.011	-.011	0	0
23	CR4	PY	-.011	-.011	0	0
24	CR5	PY	-.011	-.011	0	0
25	CR6	PY	-.011	-.011	0	0
26	PL4	PY	-.007	-.007	0	0
27	PL5	PY	-.007	-.007	0	0
28	PL6	PY	-.007	-.007	0	0
29	PL7	PY	-.007	-.007	0	0
30	PL8	PY	-.007	-.007	0	0
31	PL9	PY	-.007	-.007	0	0
32	MP ALPHA2	PY	-.009	-.009	0	0
33	FACE3	PY	-.007	-.007	0	0
34	MP GAMMA1	PY	-.009	-.009	0	0
35	MP GAMMA3	PY	-.009	-.009	0	0
36	RAIL3	PY	-.005	-.005	0	0
37	FACE2	PY	-.007	-.007	0	0
38	MP BETA1	PY	-.009	-.009	0	0
39	MP BETA3	PY	-.009	-.009	0	0
40	RAIL2	PY	-.005	-.005	0	0
41	MP BETA2	PY	-.009	-.009	0	0
42	MP GAMMA2	PY	-.009	-.009	0	0
43	SO1	PX	.004	.004	0	0
44	GRAT SUP	PX	.004	.004	0	0
45	GRAT SUP2	PX	.004	.004	0	0
46	PL1	PX	.012	.012	0	0
47	SO2	PX	.004	.004	0	0
48	GRAT SUP3	PX	.004	.004	0	0
49	GRAT SUP4	PX	.004	.004	0	0
50	PL2	PX	.012	.012	0	0
51	SO3	PX	.004	.004	0	0
52	GRAT SUP5	PX	.004	.004	0	0
53	GRAT SUP6	PX	.004	.004	0	0
54	PL3	PX	.012	.012	0	0
55	FACE1	PX	.002	.002	0	0
56	MP ALPHA1	PX	.005	.005	0	0
57	MP ALPHA3	PX	.005	.005	0	0
58	RAIL1	PX	.002	.002	0	0
59	RAIL CON3	PX	.012	.012	0	0
60	RAIL CON1	PX	.012	.012	0	0
61	RAIL CON2	PX	.012	.012	0	0
62	CR1	PX	.006	.006	0	0
63	CR2	PX	.006	.006	0	0

Member Distributed Loads (BLC 14 : Wind Load (330)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
64	CR3	PX	.006	.006	0	0
65	CR4	PX	.006	.006	0	0
66	CR5	PX	.006	.006	0	0
67	CR6	PX	.006	.006	0	0
68	PL4	PX	.004	.004	0	0
69	PL5	PX	.004	.004	0	0
70	PL6	PX	.004	.004	0	0
71	PL7	PX	.004	.004	0	0
72	PL8	PX	.004	.004	0	0
73	PL9	PX	.004	.004	0	0
74	MP ALPHA2	PX	.005	.005	0	0
75	FACE3	PX	.004	.004	0	0
76	MP GAMMA1	PX	.005	.005	0	0
77	MP GAMMA3	PX	.005	.005	0	0
78	RAIL3	PX	.003	.003	0	0
79	FACE2	PX	.004	.004	0	0
80	MP BETA1	PX	.005	.005	0	0
81	MP BETA3	PX	.005	.005	0	0
82	RAIL2	PX	.003	.003	0	0
83	MP BETA2	PX	.005	.005	0	0
84	MP GAMMA2	PX	.005	.005	0	0

Member Distributed Loads (BLC 15 : Maintanence (0))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.000457	-.000457	0	0
2	GRAT SUP	PY	-.000365	-.000365	0	0
3	GRAT SUP2	PY	-.000365	-.000365	0	0
4	PL1	PY	-.001	-.001	0	0
5	SO2	PY	-.000457	-.000457	0	0
6	GRAT SUP3	PY	-.000365	-.000365	0	0
7	GRAT SUP4	PY	-.000365	-.000365	0	0
8	PL2	PY	-.001	-.001	0	0
9	SO3	PY	-.000457	-.000457	0	0
10	GRAT SUP5	PY	-.000365	-.000365	0	0
11	GRAT SUP6	PY	-.000365	-.000365	0	0
12	PL3	PY	-.001	-.001	0	0
13	FACE1	PY	-.000219	-.000219	0	0
14	MP ALPHA1	PY	-.000521	-.000521	0	0
15	MP ALPHA3	PY	-.000521	-.000521	0	0
16	RAIL1	PY	-.000153	-.000153	0	0
17	RAIL CON3	PY	-.001	-.001	0	0
18	RAIL CON1	PY	-.001	-.001	0	0
19	RAIL CON2	PY	-.001	-.001	0	0
20	CR1	PY	-.000618	-.000618	0	0
21	CR2	PY	-.000618	-.000618	0	0
22	CR3	PY	-.000618	-.000618	0	0
23	CR4	PY	-.000618	-.000618	0	0
24	CR5	PY	-.000618	-.000618	0	0
25	CR6	PY	-.000618	-.000618	0	0
26	PL4	PY	-.000434	-.000434	0	0
27	PL5	PY	-.000434	-.000434	0	0
28	PL6	PY	-.000434	-.000434	0	0
29	PL7	PY	-.000434	-.000434	0	0
30	PL8	PY	-.000434	-.000434	0	0
31	PL9	PY	-.000434	-.000434	0	0
32	MP ALPHA2	PY	-.000521	-.000521	0	0

Member Distributed Loads (BLC 15 : Maintanence (0)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
33	FACE3	PY	-.000438	-.000438	0	0
34	MP GAMMA1	PY	-.000521	-.000521	0	0
35	MP GAMMA3	PY	-.000521	-.000521	0	0
36	RAIL3	PY	-.000306	-.000306	0	0
37	FACE2	PY	-.000438	-.000438	0	0
38	MP BETA1	PY	-.000521	-.000521	0	0
39	MP BETA3	PY	-.000521	-.000521	0	0
40	RAIL2	PY	-.000306	-.000306	0	0
41	MP BETA2	PY	-.000521	-.000521	0	0
42	MP GAMMA2	PY	-.000521	-.000521	0	0

Member Distributed Loads (BLC 16 : Maintanence (30))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.000396	-.000396	0	0
2	GRAT SUP	PY	-.000316	-.000316	0	0
3	GRAT SUP2	PY	-.000316	-.000316	0	0
4	PL1	PY	-.001	-.001	0	0
5	SO2	PY	-.000396	-.000396	0	0
6	GRAT SUP3	PY	-.000316	-.000316	0	0
7	GRAT SUP4	PY	-.000316	-.000316	0	0
8	PL2	PY	-.001	-.001	0	0
9	SO3	PY	-.000396	-.000396	0	0
10	GRAT SUP5	PY	-.000316	-.000316	0	0
11	GRAT SUP6	PY	-.000316	-.000316	0	0
12	PL3	PY	-.001	-.001	0	0
13	FACE1	PY	-.00019	-.00019	0	0
14	MP ALPHA1	PY	-.000451	-.000451	0	0
15	MP ALPHA3	PY	-.000451	-.000451	0	0
16	RAIL1	PY	-.000133	-.000133	0	0
17	RAIL CON3	PY	-.001	-.001	0	0
18	RAIL CON1	PY	-.001	-.001	0	0
19	RAIL CON2	PY	-.001	-.001	0	0
20	CR1	PY	-.000535	-.000535	0	0
21	CR2	PY	-.000535	-.000535	0	0
22	CR3	PY	-.000535	-.000535	0	0
23	CR4	PY	-.000535	-.000535	0	0
24	CR5	PY	-.000535	-.000535	0	0
25	CR6	PY	-.000535	-.000535	0	0
26	PL4	PY	-.000376	-.000376	0	0
27	PL5	PY	-.000376	-.000376	0	0
28	PL6	PY	-.000376	-.000376	0	0
29	PL7	PY	-.000376	-.000376	0	0
30	PL8	PY	-.000376	-.000376	0	0
31	PL9	PY	-.000376	-.000376	0	0
32	MP ALPHA2	PY	-.000451	-.000451	0	0
33	FACE3	PY	-.00038	-.00038	0	0
34	MP GAMMA1	PY	-.000451	-.000451	0	0
35	MP GAMMA3	PY	-.000451	-.000451	0	0
36	RAIL3	PY	-.000265	-.000265	0	0
37	FACE2	PY	-.00038	-.00038	0	0
38	MP BETA1	PY	-.000451	-.000451	0	0
39	MP BETA3	PY	-.000451	-.000451	0	0
40	RAIL2	PY	-.000265	-.000265	0	0
41	MP BETA2	PY	-.000451	-.000451	0	0
42	MP GAMMA2	PY	-.000451	-.000451	0	0
43	SO1	PX	-.000228	-.000228	0	0

Member Distributed Loads (BLC 16 : Maintanence (30)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
44	GRAT SUP	PX	-.000183	-.000183	0	0
45	GRAT SUP2	PX	-.000183	-.000183	0	0
46	PL1	PX	-.000594	-.000594	0	0
47	SO2	PX	-.000228	-.000228	0	0
48	GRAT SUP3	PX	-.000183	-.000183	0	0
49	GRAT SUP4	PX	-.000183	-.000183	0	0
50	PL2	PX	-.000594	-.000594	0	0
51	SO3	PX	-.000228	-.000228	0	0
52	GRAT SUP5	PX	-.000183	-.000183	0	0
53	GRAT SUP6	PX	-.000183	-.000183	0	0
54	PL3	PX	-.000594	-.000594	0	0
55	FACE1	PX	-.00011	-.00011	0	0
56	MP ALPHA1	PX	-.00026	-.00026	0	0
57	MP ALPHA3	PX	-.00026	-.00026	0	0
58	RAIL1	PX	-7.7e-5	-7.7e-5	0	0
59	RAIL CON3	PX	-.000603	-.000603	0	0
60	RAIL CON1	PX	-.000603	-.000603	0	0
61	RAIL CON2	PX	-.000603	-.000603	0	0
62	CR1	PX	-.000309	-.000309	0	0
63	CR2	PX	-.000309	-.000309	0	0
64	CR3	PX	-.000309	-.000309	0	0
65	CR4	PX	-.000309	-.000309	0	0
66	CR5	PX	-.000309	-.000309	0	0
67	CR6	PX	-.000309	-.000309	0	0
68	PL4	PX	-.000217	-.000217	0	0
69	PL5	PX	-.000217	-.000217	0	0
70	PL6	PX	-.000217	-.000217	0	0
71	PL7	PX	-.000217	-.000217	0	0
72	PL8	PX	-.000217	-.000217	0	0
73	PL9	PX	-.000217	-.000217	0	0
74	MP ALPHA2	PX	-.00026	-.00026	0	0
75	FACE3	PX	-.000219	-.000219	0	0
76	MP GAMMA1	PX	-.00026	-.00026	0	0
77	MP GAMMA3	PX	-.00026	-.00026	0	0
78	RAIL3	PX	-.000153	-.000153	0	0
79	FACE2	PX	-.000219	-.000219	0	0
80	MP BETA1	PX	-.00026	-.00026	0	0
81	MP BETA3	PX	-.00026	-.00026	0	0
82	RAIL2	PX	-.000153	-.000153	0	0
83	MP BETA2	PX	-.00026	-.00026	0	0
84	MP GAMMA2	PX	-.00026	-.00026	0	0

Member Distributed Loads (BLC 17 : Maintanence (60))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.000228	-.000228	0	0
2	GRAT SUP	PY	-.000183	-.000183	0	0
3	GRAT SUP2	PY	-.000183	-.000183	0	0
4	PL1	PY	-.000594	-.000594	0	0
5	SO2	PY	-.000228	-.000228	0	0
6	GRAT SUP3	PY	-.000183	-.000183	0	0
7	GRAT SUP4	PY	-.000183	-.000183	0	0
8	PL2	PY	-.000594	-.000594	0	0
9	SO3	PY	-.000228	-.000228	0	0
10	GRAT SUP5	PY	-.000183	-.000183	0	0
11	GRAT SUP6	PY	-.000183	-.000183	0	0
12	PL3	PY	-.000594	-.000594	0	0

Member Distributed Loads (BLC 17 : Maintanence (60)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	FACE1	PY	-.00011	-.00011	0	0
14	MP ALPHA1	PY	-.00026	-.00026	0	0
15	MP ALPHA3	PY	-.00026	-.00026	0	0
16	RAIL1	PY	-7.7e-5	-7.7e-5	0	0
17	RAIL CON3	PY	-.000603	-.000603	0	0
18	RAIL CON1	PY	-.000603	-.000603	0	0
19	RAIL CON2	PY	-.000603	-.000603	0	0
20	CR1	PY	-.000309	-.000309	0	0
21	CR2	PY	-.000309	-.000309	0	0
22	CR3	PY	-.000309	-.000309	0	0
23	CR4	PY	-.000309	-.000309	0	0
24	CR5	PY	-.000309	-.000309	0	0
25	CR6	PY	-.000309	-.000309	0	0
26	PL4	PY	-.000217	-.000217	0	0
27	PL5	PY	-.000217	-.000217	0	0
28	PL6	PY	-.000217	-.000217	0	0
29	PL7	PY	-.000217	-.000217	0	0
30	PL8	PY	-.000217	-.000217	0	0
31	PL9	PY	-.000217	-.000217	0	0
32	MP ALPHA2	PY	-.00026	-.00026	0	0
33	FACE3	PY	-.000219	-.000219	0	0
34	MP GAMMA1	PY	-.00026	-.00026	0	0
35	MP GAMMA3	PY	-.00026	-.00026	0	0
36	RAIL3	PY	-.000153	-.000153	0	0
37	FACE2	PY	-.000219	-.000219	0	0
38	MP BETA1	PY	-.00026	-.00026	0	0
39	MP BETA3	PY	-.00026	-.00026	0	0
40	RAIL2	PY	-.000153	-.000153	0	0
41	MP BETA2	PY	-.00026	-.00026	0	0
42	MP GAMMA2	PY	-.00026	-.00026	0	0
43	SO1	PX	-.000396	-.000396	0	0
44	GRAT SUP	PX	-.000316	-.000316	0	0
45	GRAT SUP2	PX	-.000316	-.000316	0	0
46	PL1	PX	-.001	-.001	0	0
47	SO2	PX	-.000396	-.000396	0	0
48	GRAT SUP3	PX	-.000316	-.000316	0	0
49	GRAT SUP4	PX	-.000316	-.000316	0	0
50	PL2	PX	-.001	-.001	0	0
51	SO3	PX	-.000396	-.000396	0	0
52	GRAT SUP5	PX	-.000316	-.000316	0	0
53	GRAT SUP6	PX	-.000316	-.000316	0	0
54	PL3	PX	-.001	-.001	0	0
55	FACE1	PX	-.00019	-.00019	0	0
56	MP ALPHA1	PX	-.000451	-.000451	0	0
57	MP ALPHA3	PX	-.000451	-.000451	0	0
58	RAIL1	PX	-.000133	-.000133	0	0
59	RAIL CON3	PX	-.001	-.001	0	0
60	RAIL CON1	PX	-.001	-.001	0	0
61	RAIL CON2	PX	-.001	-.001	0	0
62	CR1	PX	-.000535	-.000535	0	0
63	CR2	PX	-.000535	-.000535	0	0
64	CR3	PX	-.000535	-.000535	0	0
65	CR4	PX	-.000535	-.000535	0	0
66	CR5	PX	-.000535	-.000535	0	0
67	CR6	PX	-.000535	-.000535	0	0
68	PL4	PX	-.000376	-.000376	0	0
69	PL5	PX	-.000376	-.000376	0	0

Member Distributed Loads (BLC 17 : Maintanence (60)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
70	PL6	PX	-.000376	-.000376	0	0
71	PL7	PX	-.000376	-.000376	0	0
72	PL8	PX	-.000376	-.000376	0	0
73	PL9	PX	-.000376	-.000376	0	0
74	MP ALPHA2	PX	-.000451	-.000451	0	0
75	FACE3	PX	-.00038	-.00038	0	0
76	MP GAMMA1	PX	-.000451	-.000451	0	0
77	MP GAMMA3	PX	-.000451	-.000451	0	0
78	RAIL3	PX	-.000265	-.000265	0	0
79	FACE2	PX	-.00038	-.00038	0	0
80	MP BETA1	PX	-.000451	-.000451	0	0
81	MP BETA3	PX	-.000451	-.000451	0	0
82	RAIL2	PX	-.000265	-.000265	0	0
83	MP BETA2	PX	-.000451	-.000451	0	0
84	MP GAMMA2	PX	-.000451	-.000451	0	0

Member Distributed Loads (BLC 18 : Maintanence (90))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PX	-.000457	-.000457	0	0
2	GRAT SUP	PX	-.000365	-.000365	0	0
3	GRAT SUP2	PX	-.000365	-.000365	0	0
4	PL1	PX	-.001	-.001	0	0
5	SO2	PX	-.000457	-.000457	0	0
6	GRAT SUP3	PX	-.000365	-.000365	0	0
7	GRAT SUP4	PX	-.000365	-.000365	0	0
8	PL2	PX	-.001	-.001	0	0
9	SO3	PX	-.000457	-.000457	0	0
10	GRAT SUP5	PX	-.000365	-.000365	0	0
11	GRAT SUP6	PX	-.000365	-.000365	0	0
12	PL3	PX	-.001	-.001	0	0
13	FACE2	PX	-.000219	-.000219	0	0
14	MP ALPHA1	PX	-.000521	-.000521	0	0
15	MP ALPHA3	PX	-.000521	-.000521	0	0
16	RAIL2	PX	-.000153	-.000153	0	0
17	RAIL CON3	PX	-.001	-.001	0	0
18	RAIL CON1	PX	-.001	-.001	0	0
19	RAIL CON2	PX	-.001	-.001	0	0
20	CR1	PX	-.000618	-.000618	0	0
21	CR2	PX	-.000618	-.000618	0	0
22	CR3	PX	-.000618	-.000618	0	0
23	CR4	PX	-.000618	-.000618	0	0
24	CR5	PX	-.000618	-.000618	0	0
25	CR6	PX	-.000618	-.000618	0	0
26	PL4	PX	-.000434	-.000434	0	0
27	PL5	PX	-.000434	-.000434	0	0
28	PL6	PX	-.000434	-.000434	0	0
29	PL7	PX	-.000434	-.000434	0	0
30	PL8	PX	-.000434	-.000434	0	0
31	PL9	PX	-.000434	-.000434	0	0
32	MP ALPHA2	PX	-.000521	-.000521	0	0
33	FACE3	PX	-.000438	-.000438	0	0
34	MP GAMMA1	PX	-.000521	-.000521	0	0
35	MP GAMMA3	PX	-.000521	-.000521	0	0
36	RAIL3	PX	-.000306	-.000306	0	0
37	FACE1	PX	-.000438	-.000438	0	0
38	MP BETA1	PX	-.000521	-.000521	0	0

Member Distributed Loads (BLC 18 : Maintanence (90)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
39	MP BETA3	PX	-.000521	-.000521	0	0
40	RAIL1	PX	-.000306	-.000306	0	0
41	MP BETA2	PX	-.000521	-.000521	0	0
42	MP GAMMA2	PX	-.000521	-.000521	0	0

Member Distributed Loads (BLC 19 : Maintanence (120))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.000228	.000228	0	0
2	GRAT SUP	PY	.000183	.000183	0	0
3	GRAT SUP2	PY	.000183	.000183	0	0
4	PL1	PY	.000594	.000594	0	0
5	SO2	PY	.000228	.000228	0	0
6	GRAT SUP3	PY	.000183	.000183	0	0
7	GRAT SUP4	PY	.000183	.000183	0	0
8	PL2	PY	.000594	.000594	0	0
9	SO3	PY	.000228	.000228	0	0
10	GRAT SUP5	PY	.000183	.000183	0	0
11	GRAT SUP6	PY	.000183	.000183	0	0
12	PL3	PY	.000594	.000594	0	0
13	FACE2	PY	.00011	.00011	0	0
14	MP ALPHA1	PY	.00026	.00026	0	0
15	MP ALPHA3	PY	.00026	.00026	0	0
16	RAIL2	PY	7.7e-5	7.7e-5	0	0
17	RAIL CON3	PY	.000603	.000603	0	0
18	RAIL CON1	PY	.000603	.000603	0	0
19	RAIL CON2	PY	.000603	.000603	0	0
20	CR1	PY	.000309	.000309	0	0
21	CR2	PY	.000309	.000309	0	0
22	CR3	PY	.000309	.000309	0	0
23	CR4	PY	.000309	.000309	0	0
24	CR5	PY	.000309	.000309	0	0
25	CR6	PY	.000309	.000309	0	0
26	PL4	PY	.000217	.000217	0	0
27	PL5	PY	.000217	.000217	0	0
28	PL6	PY	.000217	.000217	0	0
29	PL7	PY	.000217	.000217	0	0
30	PL8	PY	.000217	.000217	0	0
31	PL9	PY	.000217	.000217	0	0
32	MP ALPHA2	PY	.00026	.00026	0	0
33	FACE3	PY	.000219	.000219	0	0
34	MP GAMMA1	PY	.00026	.00026	0	0
35	MP GAMMA3	PY	.00026	.00026	0	0
36	RAIL3	PY	.000153	.000153	0	0
37	FACE1	PY	.000219	.000219	0	0
38	MP BETA1	PY	.00026	.00026	0	0
39	MP BETA3	PY	.00026	.00026	0	0
40	RAIL1	PY	.000153	.000153	0	0
41	MP BETA2	PY	.00026	.00026	0	0
42	MP GAMMA2	PY	.00026	.00026	0	0
43	SO1	PX	-.000396	-.000396	0	0
44	GRAT SUP	PX	-.000316	-.000316	0	0
45	GRAT SUP2	PX	-.000316	-.000316	0	0
46	PL1	PX	-.001	-.001	0	0
47	SO2	PX	-.000396	-.000396	0	0
48	GRAT SUP3	PX	-.000316	-.000316	0	0
49	GRAT SUP4	PX	-.000316	-.000316	0	0

Member Distributed Loads (BLC 19 : Maintanence (120)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
50	PL2	PX	-.001	-.001	0	0
51	SO3	PX	-.000396	-.000396	0	0
52	GRAT SUP5	PX	-.000316	-.000316	0	0
53	GRAT SUP6	PX	-.000316	-.000316	0	0
54	PL3	PX	-.001	-.001	0	0
55	FACE2	PX	-.00019	-.00019	0	0
56	MP ALPHA1	PX	-.000451	-.000451	0	0
57	MP ALPHA3	PX	-.000451	-.000451	0	0
58	RAIL2	PX	-.000133	-.000133	0	0
59	RAIL CON3	PX	-.001	-.001	0	0
60	RAIL CON1	PX	-.001	-.001	0	0
61	RAIL CON2	PX	-.001	-.001	0	0
62	CR1	PX	-.000535	-.000535	0	0
63	CR2	PX	-.000535	-.000535	0	0
64	CR3	PX	-.000535	-.000535	0	0
65	CR4	PX	-.000535	-.000535	0	0
66	CR5	PX	-.000535	-.000535	0	0
67	CR6	PX	-.000535	-.000535	0	0
68	PL4	PX	-.000376	-.000376	0	0
69	PL5	PX	-.000376	-.000376	0	0
70	PL6	PX	-.000376	-.000376	0	0
71	PL7	PX	-.000376	-.000376	0	0
72	PL8	PX	-.000376	-.000376	0	0
73	PL9	PX	-.000376	-.000376	0	0
74	MP ALPHA2	PX	-.000451	-.000451	0	0
75	FACE3	PX	-.00038	-.00038	0	0
76	MP GAMMA1	PX	-.000451	-.000451	0	0
77	MP GAMMA3	PX	-.000451	-.000451	0	0
78	RAIL3	PX	-.000265	-.000265	0	0
79	FACE1	PX	-.00038	-.00038	0	0
80	MP BETA1	PX	-.000451	-.000451	0	0
81	MP BETA3	PX	-.000451	-.000451	0	0
82	RAIL1	PX	-.000265	-.000265	0	0
83	MP BETA2	PX	-.000451	-.000451	0	0
84	MP GAMMA2	PX	-.000451	-.000451	0	0

Member Distributed Loads (BLC 20 : Maintanence (150))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.000396	.000396	0	0
2	GRAT SUP	PY	.000316	.000316	0	0
3	GRAT SUP2	PY	.000316	.000316	0	0
4	PL1	PY	.001	.001	0	0
5	SO2	PY	.000396	.000396	0	0
6	GRAT SUP3	PY	.000316	.000316	0	0
7	GRAT SUP4	PY	.000316	.000316	0	0
8	PL2	PY	.001	.001	0	0
9	SO3	PY	.000396	.000396	0	0
10	GRAT SUP5	PY	.000316	.000316	0	0
11	GRAT SUP6	PY	.000316	.000316	0	0
12	PL3	PY	.001	.001	0	0
13	FACE2	PY	.00019	.00019	0	0
14	MP ALPHA1	PY	.000451	.000451	0	0
15	MP ALPHA3	PY	.000451	.000451	0	0
16	RAIL2	PY	.000133	.000133	0	0
17	RAIL CON3	PY	.001	.001	0	0
18	RAIL CON1	PY	.001	.001	0	0

Member Distributed Loads (BLC 20 : Maintanence (150)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	RAIL CON2	PY	.001	.001	0	0
20	CR1	PY	.000535	.000535	0	0
21	CR2	PY	.000535	.000535	0	0
22	CR3	PY	.000535	.000535	0	0
23	CR4	PY	.000535	.000535	0	0
24	CR5	PY	.000535	.000535	0	0
25	CR6	PY	.000535	.000535	0	0
26	PL4	PY	.000376	.000376	0	0
27	PL5	PY	.000376	.000376	0	0
28	PL6	PY	.000376	.000376	0	0
29	PL7	PY	.000376	.000376	0	0
30	PL8	PY	.000376	.000376	0	0
31	PL9	PY	.000376	.000376	0	0
32	MP ALPHA2	PY	.000451	.000451	0	0
33	FACE3	PY	.00038	.00038	0	0
34	MP GAMMA1	PY	.000451	.000451	0	0
35	MP GAMMA3	PY	.000451	.000451	0	0
36	RAIL3	PY	.000265	.000265	0	0
37	FACE1	PY	.00038	.00038	0	0
38	MP BETA1	PY	.000451	.000451	0	0
39	MP BETA3	PY	.000451	.000451	0	0
40	RAIL1	PY	.000265	.000265	0	0
41	MP BETA2	PY	.000451	.000451	0	0
42	MP GAMMA2	PY	.000451	.000451	0	0
43	SO1	PX	-.000228	-.000228	0	0
44	GRAT SUP	PX	-.000183	-.000183	0	0
45	GRAT SUP2	PX	-.000183	-.000183	0	0
46	PL1	PX	-.000594	-.000594	0	0
47	SO2	PX	-.000228	-.000228	0	0
48	GRAT SUP3	PX	-.000183	-.000183	0	0
49	GRAT SUP4	PX	-.000183	-.000183	0	0
50	PL2	PX	-.000594	-.000594	0	0
51	SO3	PX	-.000228	-.000228	0	0
52	GRAT SUP5	PX	-.000183	-.000183	0	0
53	GRAT SUP6	PX	-.000183	-.000183	0	0
54	PL3	PX	-.000594	-.000594	0	0
55	FACE2	PX	-.00011	-.00011	0	0
56	MP ALPHA1	PX	-.00026	-.00026	0	0
57	MP ALPHA3	PX	-.00026	-.00026	0	0
58	RAIL2	PX	-7.7e-5	-7.7e-5	0	0
59	RAIL CON3	PX	-.000603	-.000603	0	0
60	RAIL CON1	PX	-.000603	-.000603	0	0
61	RAIL CON2	PX	-.000603	-.000603	0	0
62	CR1	PX	-.000309	-.000309	0	0
63	CR2	PX	-.000309	-.000309	0	0
64	CR3	PX	-.000309	-.000309	0	0
65	CR4	PX	-.000309	-.000309	0	0
66	CR5	PX	-.000309	-.000309	0	0
67	CR6	PX	-.000309	-.000309	0	0
68	PL4	PX	-.000217	-.000217	0	0
69	PL5	PX	-.000217	-.000217	0	0
70	PL6	PX	-.000217	-.000217	0	0
71	PL7	PX	-.000217	-.000217	0	0
72	PL8	PX	-.000217	-.000217	0	0
73	PL9	PX	-.000217	-.000217	0	0
74	MP ALPHA2	PX	-.00026	-.00026	0	0
75	FACE3	PX	-.000219	-.000219	0	0

Member Distributed Loads (BLC 20 : Maintanence (150)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
76	MP GAMMA1	PX	-.00026	-.00026	0	0
77	MP GAMMA3	PX	-.00026	-.00026	0	0
78	RAIL3	PX	-.000153	-.000153	0	0
79	FACE1	PX	-.000219	-.000219	0	0
80	MP BETA1	PX	-.00026	-.00026	0	0
81	MP BETA3	PX	-.00026	-.00026	0	0
82	RAIL1	PX	-.000153	-.000153	0	0
83	MP BETA2	PX	-.00026	-.00026	0	0
84	MP GAMMA2	PX	-.00026	-.00026	0	0

Member Distributed Loads (BLC 21 : Maintanence (180))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.000457	.000457	0	0
2	GRAT SUP	PY	.000365	.000365	0	0
3	GRAT SUP2	PY	.000365	.000365	0	0
4	PL1	PY	.001	.001	0	0
5	SO2	PY	.000457	.000457	0	0
6	GRAT SUP3	PY	.000365	.000365	0	0
7	GRAT SUP4	PY	.000365	.000365	0	0
8	PL2	PY	.001	.001	0	0
9	SO3	PY	.000457	.000457	0	0
10	GRAT SUP5	PY	.000365	.000365	0	0
11	GRAT SUP6	PY	.000365	.000365	0	0
12	PL3	PY	.001	.001	0	0
13	FACE2	PY	.000219	.000219	0	0
14	MP ALPHA1	PY	.000521	.000521	0	0
15	MP ALPHA3	PY	.000521	.000521	0	0
16	RAIL2	PY	.000153	.000153	0	0
17	RAIL CON3	PY	.001	.001	0	0
18	RAIL CON1	PY	.001	.001	0	0
19	RAIL CON2	PY	.001	.001	0	0
20	CR1	PY	.000618	.000618	0	0
21	CR2	PY	.000618	.000618	0	0
22	CR3	PY	.000618	.000618	0	0
23	CR4	PY	.000618	.000618	0	0
24	CR5	PY	.000618	.000618	0	0
25	CR6	PY	.000618	.000618	0	0
26	PL4	PY	.000434	.000434	0	0
27	PL5	PY	.000434	.000434	0	0
28	PL6	PY	.000434	.000434	0	0
29	PL7	PY	.000434	.000434	0	0
30	PL8	PY	.000434	.000434	0	0
31	PL9	PY	.000434	.000434	0	0
32	MP ALPHA2	PY	.000521	.000521	0	0
33	FACE3	PY	.000438	.000438	0	0
34	MP GAMMA1	PY	.000521	.000521	0	0
35	MP GAMMA3	PY	.000521	.000521	0	0
36	RAIL3	PY	.000306	.000306	0	0
37	FACE1	PY	.000438	.000438	0	0
38	MP BETA1	PY	.000521	.000521	0	0
39	MP BETA3	PY	.000521	.000521	0	0
40	RAIL1	PY	.000306	.000306	0	0
41	MP BETA2	PY	.000521	.000521	0	0
42	MP GAMMA2	PY	.000521	.000521	0	0

Member Distributed Loads (BLC 22 : Maintanence (210))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.000396	.000396	0	0
2	GRAT SUP	PY	.000316	.000316	0	0
3	GRAT SUP2	PY	.000316	.000316	0	0
4	PL1	PY	.001	.001	0	0
5	SO2	PY	.000396	.000396	0	0
6	GRAT SUP3	PY	.000316	.000316	0	0
7	GRAT SUP4	PY	.000316	.000316	0	0
8	PL2	PY	.001	.001	0	0
9	SO3	PY	.000396	.000396	0	0
10	GRAT SUP5	PY	.000316	.000316	0	0
11	GRAT SUP6	PY	.000316	.000316	0	0
12	PL3	PY	.001	.001	0	0
13	FACE3	PY	.00019	.00019	0	0
14	MP ALPHA1	PY	.000451	.000451	0	0
15	MP ALPHA3	PY	.000451	.000451	0	0
16	RAIL3	PY	.000133	.000133	0	0
17	RAIL CON3	PY	.001	.001	0	0
18	RAIL CON1	PY	.001	.001	0	0
19	RAIL CON2	PY	.001	.001	0	0
20	CR1	PY	.000535	.000535	0	0
21	CR2	PY	.000535	.000535	0	0
22	CR3	PY	.000535	.000535	0	0
23	CR4	PY	.000535	.000535	0	0
24	CR5	PY	.000535	.000535	0	0
25	CR6	PY	.000535	.000535	0	0
26	PL4	PY	.000376	.000376	0	0
27	PL5	PY	.000376	.000376	0	0
28	PL6	PY	.000376	.000376	0	0
29	PL7	PY	.000376	.000376	0	0
30	PL8	PY	.000376	.000376	0	0
31	PL9	PY	.000376	.000376	0	0
32	MP ALPHA2	PY	.000451	.000451	0	0
33	FACE1	PY	.00038	.00038	0	0
34	MP GAMMA1	PY	.000451	.000451	0	0
35	MP GAMMA3	PY	.000451	.000451	0	0
36	RAIL1	PY	.000265	.000265	0	0
37	FACE2	PY	.00038	.00038	0	0
38	MP BETA1	PY	.000451	.000451	0	0
39	MP BETA3	PY	.000451	.000451	0	0
40	RAIL2	PY	.000265	.000265	0	0
41	MP BETA2	PY	.000451	.000451	0	0
42	MP GAMMA2	PY	.000451	.000451	0	0
43	SO1	PX	.000228	.000228	0	0
44	GRAT SUP	PX	.000183	.000183	0	0
45	GRAT SUP2	PX	.000183	.000183	0	0
46	PL1	PX	.000594	.000594	0	0
47	SO2	PX	.000228	.000228	0	0
48	GRAT SUP3	PX	.000183	.000183	0	0
49	GRAT SUP4	PX	.000183	.000183	0	0
50	PL2	PX	.000594	.000594	0	0
51	SO3	PX	.000228	.000228	0	0
52	GRAT SUP5	PX	.000183	.000183	0	0
53	GRAT SUP6	PX	.000183	.000183	0	0
54	PL3	PX	.000594	.000594	0	0
55	FACE3	PX	.00011	.00011	0	0
56	MP ALPHA1	PX	.00026	.00026	0	0
57	MP ALPHA3	PX	.00026	.00026	0	0

Member Distributed Loads (BLC 22 : Maintanence (210)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	RAIL3	PX	7.7e-5	7.7e-5	0	0
59	RAIL CON3	PX	.000603	.000603	0	0
60	RAIL CON1	PX	.000603	.000603	0	0
61	RAIL CON2	PX	.000603	.000603	0	0
62	CR1	PX	.000309	.000309	0	0
63	CR2	PX	.000309	.000309	0	0
64	CR3	PX	.000309	.000309	0	0
65	CR4	PX	.000309	.000309	0	0
66	CR5	PX	.000309	.000309	0	0
67	CR6	PX	.000309	.000309	0	0
68	PL4	PX	.000217	.000217	0	0
69	PL5	PX	.000217	.000217	0	0
70	PL6	PX	.000217	.000217	0	0
71	PL7	PX	.000217	.000217	0	0
72	PL8	PX	.000217	.000217	0	0
73	PL9	PX	.000217	.000217	0	0
74	MP ALPHA2	PX	.00026	.00026	0	0
75	FACE1	PX	.000219	.000219	0	0
76	MP GAMMA1	PX	.00026	.00026	0	0
77	MP GAMMA3	PX	.00026	.00026	0	0
78	RAIL1	PX	.000153	.000153	0	0
79	FACE2	PX	.000219	.000219	0	0
80	MP BETA1	PX	.00026	.00026	0	0
81	MP BETA3	PX	.00026	.00026	0	0
82	RAIL2	PX	.000153	.000153	0	0
83	MP BETA2	PX	.00026	.00026	0	0
84	MP GAMMA2	PX	.00026	.00026	0	0

Member Distributed Loads (BLC 23 : Maintanence (240))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.000228	.000228	0	0
2	GRAT SUP	PY	.000183	.000183	0	0
3	GRAT SUP2	PY	.000183	.000183	0	0
4	PL1	PY	.000594	.000594	0	0
5	SO2	PY	.000228	.000228	0	0
6	GRAT SUP3	PY	.000183	.000183	0	0
7	GRAT SUP4	PY	.000183	.000183	0	0
8	PL2	PY	.000594	.000594	0	0
9	SO3	PY	.000228	.000228	0	0
10	GRAT SUP5	PY	.000183	.000183	0	0
11	GRAT SUP6	PY	.000183	.000183	0	0
12	PL3	PY	.000594	.000594	0	0
13	FACE3	PY	.00011	.00011	0	0
14	MP ALPHA1	PY	.00026	.00026	0	0
15	MP ALPHA3	PY	.00026	.00026	0	0
16	RAIL3	PY	7.7e-5	7.7e-5	0	0
17	RAIL CON3	PY	.000603	.000603	0	0
18	RAIL CON1	PY	.000603	.000603	0	0
19	RAIL CON2	PY	.000603	.000603	0	0
20	CR1	PY	.000309	.000309	0	0
21	CR2	PY	.000309	.000309	0	0
22	CR3	PY	.000309	.000309	0	0
23	CR4	PY	.000309	.000309	0	0
24	CR5	PY	.000309	.000309	0	0
25	CR6	PY	.000309	.000309	0	0
26	PL4	PY	.000217	.000217	0	0

Member Distributed Loads (BLC 23 : Maintanence (240)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
27	PL5	PY	.000217	.000217	0	0
28	PL6	PY	.000217	.000217	0	0
29	PL7	PY	.000217	.000217	0	0
30	PL8	PY	.000217	.000217	0	0
31	PL9	PY	.000217	.000217	0	0
32	MP ALPHA2	PY	.00026	.00026	0	0
33	FACE1	PY	.000219	.000219	0	0
34	MP GAMMA1	PY	.00026	.00026	0	0
35	MP GAMMA3	PY	.00026	.00026	0	0
36	RAIL1	PY	.000153	.000153	0	0
37	FACE2	PY	.000219	.000219	0	0
38	MP BETA1	PY	.00026	.00026	0	0
39	MP BETA3	PY	.00026	.00026	0	0
40	RAIL2	PY	.000153	.000153	0	0
41	MP BETA2	PY	.00026	.00026	0	0
42	MP GAMMA2	PY	.00026	.00026	0	0
43	SO1	PX	.000396	.000396	0	0
44	GRAT SUP	PX	.000316	.000316	0	0
45	GRAT SUP2	PX	.000316	.000316	0	0
46	PL1	PX	.001	.001	0	0
47	SO2	PX	.000396	.000396	0	0
48	GRAT SUP3	PX	.000316	.000316	0	0
49	GRAT SUP4	PX	.000316	.000316	0	0
50	PL2	PX	.001	.001	0	0
51	SO3	PX	.000396	.000396	0	0
52	GRAT SUP5	PX	.000316	.000316	0	0
53	GRAT SUP6	PX	.000316	.000316	0	0
54	PL3	PX	.001	.001	0	0
55	FACE3	PX	.00019	.00019	0	0
56	MP ALPHA1	PX	.000451	.000451	0	0
57	MP ALPHA3	PX	.000451	.000451	0	0
58	RAIL3	PX	.000133	.000133	0	0
59	RAIL CON3	PX	.001	.001	0	0
60	RAIL CON1	PX	.001	.001	0	0
61	RAIL CON2	PX	.001	.001	0	0
62	CR1	PX	.000535	.000535	0	0
63	CR2	PX	.000535	.000535	0	0
64	CR3	PX	.000535	.000535	0	0
65	CR4	PX	.000535	.000535	0	0
66	CR5	PX	.000535	.000535	0	0
67	CR6	PX	.000535	.000535	0	0
68	PL4	PX	.000376	.000376	0	0
69	PL5	PX	.000376	.000376	0	0
70	PL6	PX	.000376	.000376	0	0
71	PL7	PX	.000376	.000376	0	0
72	PL8	PX	.000376	.000376	0	0
73	PL9	PX	.000376	.000376	0	0
74	MP ALPHA2	PX	.000451	.000451	0	0
75	FACE1	PX	.00038	.00038	0	0
76	MP GAMMA1	PX	.000451	.000451	0	0
77	MP GAMMA3	PX	.000451	.000451	0	0
78	RAIL1	PX	.000265	.000265	0	0
79	FACE2	PX	.00038	.00038	0	0
80	MP BETA1	PX	.000451	.000451	0	0
81	MP BETA3	PX	.000451	.000451	0	0
82	RAIL2	PX	.000265	.000265	0	0
83	MP BETA2	PX	.000451	.000451	0	0

Member Distributed Loads (BLC 23 : Maintanence (240)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
84	MP GAMMA2	PX	.000451	.000451	0	0

Member Distributed Loads (BLC 24 : Maintanence (270))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PX	.000457	.000457	0	0
2	GRAT SUP	PX	.000365	.000365	0	0
3	GRAT SUP2	PX	.000365	.000365	0	0
4	PL1	PX	.001	.001	0	0
5	SO2	PX	.000457	.000457	0	0
6	GRAT SUP3	PX	.000365	.000365	0	0
7	GRAT SUP4	PX	.000365	.000365	0	0
8	PL2	PX	.001	.001	0	0
9	SO3	PX	.000457	.000457	0	0
10	GRAT SUP5	PX	.000365	.000365	0	0
11	GRAT SUP6	PX	.000365	.000365	0	0
12	PL3	PX	.001	.001	0	0
13	FACE3	PX	.000219	.000219	0	0
14	MP ALPHA1	PX	.000521	.000521	0	0
15	MP ALPHA3	PX	.000521	.000521	0	0
16	RAIL3	PX	.000153	.000153	0	0
17	RAIL CON3	PX	.001	.001	0	0
18	RAIL CON1	PX	.001	.001	0	0
19	RAIL CON2	PX	.001	.001	0	0
20	CR1	PX	.000618	.000618	0	0
21	CR2	PX	.000618	.000618	0	0
22	CR3	PX	.000618	.000618	0	0
23	CR4	PX	.000618	.000618	0	0
24	CR5	PX	.000618	.000618	0	0
25	CR6	PX	.000618	.000618	0	0
26	PL4	PX	.000434	.000434	0	0
27	PL5	PX	.000434	.000434	0	0
28	PL6	PX	.000434	.000434	0	0
29	PL7	PX	.000434	.000434	0	0
30	PL8	PX	.000434	.000434	0	0
31	PL9	PX	.000434	.000434	0	0
32	MP ALPHA2	PX	.000521	.000521	0	0
33	FACE1	PX	.000438	.000438	0	0
34	MP GAMMA1	PX	.000521	.000521	0	0
35	MP GAMMA3	PX	.000521	.000521	0	0
36	RAIL1	PX	.000306	.000306	0	0
37	FACE2	PX	.000438	.000438	0	0
38	MP BETA1	PX	.000521	.000521	0	0
39	MP BETA3	PX	.000521	.000521	0	0
40	RAIL2	PX	.000306	.000306	0	0
41	MP BETA2	PX	.000521	.000521	0	0
42	MP GAMMA2	PX	.000521	.000521	0	0

Member Distributed Loads (BLC 25 : Maintanence (300))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.000228	-.000228	0	0
2	GRAT SUP	PY	-.000183	-.000183	0	0
3	GRAT SUP2	PY	-.000183	-.000183	0	0
4	PL1	PY	-.000594	-.000594	0	0
5	SO2	PY	-.000228	-.000228	0	0
6	GRAT SUP3	PY	-.000183	-.000183	0	0
7	GRAT SUP4	PY	-.000183	-.000183	0	0

Member Distributed Loads (BLC 25 : Maintanence (300)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
8	PL2	PY	-.000594	-.000594	0	0
9	SO3	PY	-.000228	-.000228	0	0
10	GRAT SUP5	PY	-.000183	-.000183	0	0
11	GRAT SUP6	PY	-.000183	-.000183	0	0
12	PL3	PY	-.000594	-.000594	0	0
13	FACE3	PY	-.00011	-.00011	0	0
14	MP ALPHA1	PY	-.00026	-.00026	0	0
15	MP ALPHA3	PY	-.00026	-.00026	0	0
16	RAIL3	PY	-7.7e-5	-7.7e-5	0	0
17	RAIL CON3	PY	-.000603	-.000603	0	0
18	RAIL CON1	PY	-.000603	-.000603	0	0
19	RAIL CON2	PY	-.000603	-.000603	0	0
20	CR1	PY	-.000309	-.000309	0	0
21	CR2	PY	-.000309	-.000309	0	0
22	CR3	PY	-.000309	-.000309	0	0
23	CR4	PY	-.000309	-.000309	0	0
24	CR5	PY	-.000309	-.000309	0	0
25	CR6	PY	-.000309	-.000309	0	0
26	PL4	PY	-.000217	-.000217	0	0
27	PL5	PY	-.000217	-.000217	0	0
28	PL6	PY	-.000217	-.000217	0	0
29	PL7	PY	-.000217	-.000217	0	0
30	PL8	PY	-.000217	-.000217	0	0
31	PL9	PY	-.000217	-.000217	0	0
32	MP ALPHA2	PY	-.00026	-.00026	0	0
33	FACE1	PY	-.000219	-.000219	0	0
34	MP GAMMA1	PY	-.00026	-.00026	0	0
35	MP GAMMA3	PY	-.00026	-.00026	0	0
36	RAIL1	PY	-.000153	-.000153	0	0
37	FACE2	PY	-.000219	-.000219	0	0
38	MP BETA1	PY	-.00026	-.00026	0	0
39	MP BETA3	PY	-.00026	-.00026	0	0
40	RAIL2	PY	-.000153	-.000153	0	0
41	MP BETA2	PY	-.00026	-.00026	0	0
42	MP GAMMA2	PY	-.00026	-.00026	0	0
43	SO1	PX	.000396	.000396	0	0
44	GRAT SUP	PX	.000316	.000316	0	0
45	GRAT SUP2	PX	.000316	.000316	0	0
46	PL1	PX	.001	.001	0	0
47	SO2	PX	.000396	.000396	0	0
48	GRAT SUP3	PX	.000316	.000316	0	0
49	GRAT SUP4	PX	.000316	.000316	0	0
50	PL2	PX	.001	.001	0	0
51	SO3	PX	.000396	.000396	0	0
52	GRAT SUP5	PX	.000316	.000316	0	0
53	GRAT SUP6	PX	.000316	.000316	0	0
54	PL3	PX	.001	.001	0	0
55	FACE3	PX	.00019	.00019	0	0
56	MP ALPHA1	PX	.000451	.000451	0	0
57	MP ALPHA3	PX	.000451	.000451	0	0
58	RAIL3	PX	.000133	.000133	0	0
59	RAIL CON3	PX	.001	.001	0	0
60	RAIL CON1	PX	.001	.001	0	0
61	RAIL CON2	PX	.001	.001	0	0
62	CR1	PX	.000535	.000535	0	0
63	CR2	PX	.000535	.000535	0	0
64	CR3	PX	.000535	.000535	0	0

Member Distributed Loads (BLC 25 : Maintanence (300)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
65	CR4	PX	.000535	.000535	0	0
66	CR5	PX	.000535	.000535	0	0
67	CR6	PX	.000535	.000535	0	0
68	PL4	PX	.000376	.000376	0	0
69	PL5	PX	.000376	.000376	0	0
70	PL6	PX	.000376	.000376	0	0
71	PL7	PX	.000376	.000376	0	0
72	PL8	PX	.000376	.000376	0	0
73	PL9	PX	.000376	.000376	0	0
74	MP ALPHA2	PX	.000451	.000451	0	0
75	FACE1	PX	.00038	.00038	0	0
76	MP GAMMA1	PX	.000451	.000451	0	0
77	MP GAMMA3	PX	.000451	.000451	0	0
78	RAIL1	PX	.000265	.000265	0	0
79	FACE2	PX	.00038	.00038	0	0
80	MP BETA1	PX	.000451	.000451	0	0
81	MP BETA3	PX	.000451	.000451	0	0
82	RAIL2	PX	.000265	.000265	0	0
83	MP BETA2	PX	.000451	.000451	0	0
84	MP GAMMA2	PX	.000451	.000451	0	0

Member Distributed Loads (BLC 26 : Maintanence (330))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.000396	-.000396	0	0
2	GRAT SUP	PY	-.000316	-.000316	0	0
3	GRAT SUP2	PY	-.000316	-.000316	0	0
4	PL1	PY	-.001	-.001	0	0
5	SO2	PY	-.000396	-.000396	0	0
6	GRAT SUP3	PY	-.000316	-.000316	0	0
7	GRAT SUP4	PY	-.000316	-.000316	0	0
8	PL2	PY	-.001	-.001	0	0
9	SO3	PY	-.000396	-.000396	0	0
10	GRAT SUP5	PY	-.000316	-.000316	0	0
11	GRAT SUP6	PY	-.000316	-.000316	0	0
12	PL3	PY	-.001	-.001	0	0
13	FACE1	PY	-.00019	-.00019	0	0
14	MP ALPHA1	PY	-.000451	-.000451	0	0
15	MP ALPHA3	PY	-.000451	-.000451	0	0
16	RAIL1	PY	-.000133	-.000133	0	0
17	RAIL CON3	PY	-.001	-.001	0	0
18	RAIL CON1	PY	-.001	-.001	0	0
19	RAIL CON2	PY	-.001	-.001	0	0
20	CR1	PY	-.000535	-.000535	0	0
21	CR2	PY	-.000535	-.000535	0	0
22	CR3	PY	-.000535	-.000535	0	0
23	CR4	PY	-.000535	-.000535	0	0
24	CR5	PY	-.000535	-.000535	0	0
25	CR6	PY	-.000535	-.000535	0	0
26	PL4	PY	-.000376	-.000376	0	0
27	PL5	PY	-.000376	-.000376	0	0
28	PL6	PY	-.000376	-.000376	0	0
29	PL7	PY	-.000376	-.000376	0	0
30	PL8	PY	-.000376	-.000376	0	0
31	PL9	PY	-.000376	-.000376	0	0
32	MP ALPHA2	PY	-.000451	-.000451	0	0
33	FACE3	PY	-.00038	-.00038	0	0

Member Distributed Loads (BLC 26 : Maintanence (330)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
34	MP GAMMA1	PY	-.000451	-.000451	0	0
35	MP GAMMA3	PY	-.000451	-.000451	0	0
36	RAIL3	PY	-.000265	-.000265	0	0
37	FACE2	PY	-.00038	-.00038	0	0
38	MP BETA1	PY	-.000451	-.000451	0	0
39	MP BETA3	PY	-.000451	-.000451	0	0
40	RAIL2	PY	-.000265	-.000265	0	0
41	MP BETA2	PY	-.000451	-.000451	0	0
42	MP GAMMA2	PY	-.000451	-.000451	0	0
43	SO1	PX	.000228	.000228	0	0
44	GRAT SUP	PX	.000183	.000183	0	0
45	GRAT SUP2	PX	.000183	.000183	0	0
46	PL1	PX	.000594	.000594	0	0
47	SO2	PX	.000228	.000228	0	0
48	GRAT SUP3	PX	.000183	.000183	0	0
49	GRAT SUP4	PX	.000183	.000183	0	0
50	PL2	PX	.000594	.000594	0	0
51	SO3	PX	.000228	.000228	0	0
52	GRAT SUP5	PX	.000183	.000183	0	0
53	GRAT SUP6	PX	.000183	.000183	0	0
54	PL3	PX	.000594	.000594	0	0
55	FACE1	PX	.00011	.00011	0	0
56	MP ALPHA1	PX	.00026	.00026	0	0
57	MP ALPHA3	PX	.00026	.00026	0	0
58	RAIL1	PX	7.7e-5	7.7e-5	0	0
59	RAIL CON3	PX	.000603	.000603	0	0
60	RAIL CON1	PX	.000603	.000603	0	0
61	RAIL CON2	PX	.000603	.000603	0	0
62	CR1	PX	.000309	.000309	0	0
63	CR2	PX	.000309	.000309	0	0
64	CR3	PX	.000309	.000309	0	0
65	CR4	PX	.000309	.000309	0	0
66	CR5	PX	.000309	.000309	0	0
67	CR6	PX	.000309	.000309	0	0
68	PL4	PX	.000217	.000217	0	0
69	PL5	PX	.000217	.000217	0	0
70	PL6	PX	.000217	.000217	0	0
71	PL7	PX	.000217	.000217	0	0
72	PL8	PX	.000217	.000217	0	0
73	PL9	PX	.000217	.000217	0	0
74	MP ALPHA2	PX	.00026	.00026	0	0
75	FACE3	PX	.000219	.000219	0	0
76	MP GAMMA1	PX	.00026	.00026	0	0
77	MP GAMMA3	PX	.00026	.00026	0	0
78	RAIL3	PX	.000153	.000153	0	0
79	FACE2	PX	.000219	.000219	0	0
80	MP BETA1	PX	.00026	.00026	0	0
81	MP BETA3	PX	.00026	.00026	0	0
82	RAIL2	PX	.000153	.000153	0	0
83	MP BETA2	PX	.00026	.00026	0	0
84	MP GAMMA2	PX	.00026	.00026	0	0

Member Distributed Loads (BLC 27 : Ice Dead Load)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	Z	-.009	-.009	0	0
2	GRAT SUP	Z	-.006	-.006	0	0

Member Distributed Loads (BLC 27 : Ice Dead Load) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
3	GRAT SUP2	Z	-.006	-.006	0	0
4	PL1	Z	-.008	-.008	0	0
5	SO2	Z	-.009	-.009	0	0
6	GRAT SUP3	Z	-.006	-.006	0	0
7	GRAT SUP4	Z	-.006	-.006	0	0
8	PL2	Z	-.008	-.008	0	0
9	SO3	Z	-.009	-.009	0	0
10	GRAT SUP5	Z	-.006	-.006	0	0
11	GRAT SUP6	Z	-.006	-.006	0	0
12	PL3	Z	-.008	-.008	0	0
13	FACE1	Z	-.007	-.007	0	0
14	MP ALPHA1	Z	-.005	-.005	0	0
15	MP ALPHA3	Z	-.005	-.005	0	0
16	RAIL1	Z	-.005	-.005	0	0
17	RAIL CON3	Z	-.01	-.01	0	0
18	RAIL CON1	Z	-.01	-.01	0	0
19	RAIL CON2	Z	-.01	-.01	0	0
20	CR1	Z	-.009	-.009	0	0
21	CR2	Z	-.009	-.009	0	0
22	CR3	Z	-.009	-.009	0	0
23	CR4	Z	-.009	-.009	0	0
24	CR5	Z	-.009	-.009	0	0
25	CR6	Z	-.009	-.009	0	0
26	PL4	Z	-.005	-.005	0	0
27	PL5	Z	-.005	-.005	0	0
28	PL6	Z	-.005	-.005	0	0
29	PL7	Z	-.005	-.005	0	0
30	PL8	Z	-.005	-.005	0	0
31	PL9	Z	-.005	-.005	0	0
32	MP ALPHA2	Z	-.005	-.005	0	0
33	FACE3	Z	-.007	-.007	0	0
34	MP GAMMA1	Z	-.005	-.005	0	0
35	MP GAMMA3	Z	-.005	-.005	0	0
36	RAIL3	Z	-.005	-.005	0	0
37	FACE2	Z	-.007	-.007	0	0
38	MP BETA1	Z	-.005	-.005	0	0
39	MP BETA3	Z	-.005	-.005	0	0
40	RAIL2	Z	-.005	-.005	0	0
41	MP BETA2	Z	-.005	-.005	0	0
42	MP GAMMA2	Z	-.005	-.005	0	0

Member Distributed Loads (BLC 28 : Ice Wind Load (0))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.001	-.001	0	0
2	GRAT SUP	PY	-.001	-.001	0	0
3	GRAT SUP2	PY	-.001	-.001	0	0
4	PL1	PY	-.003	-.003	0	0
5	SO2	PY	-.001	-.001	0	0
6	GRAT SUP3	PY	-.001	-.001	0	0
7	GRAT SUP4	PY	-.001	-.001	0	0
8	PL2	PY	-.003	-.003	0	0
9	SO3	PY	-.001	-.001	0	0
10	GRAT SUP5	PY	-.001	-.001	0	0
11	GRAT SUP6	PY	-.001	-.001	0	0
12	PL3	PY	-.003	-.003	0	0
13	FACE1	PY	-.001	-.001	0	0

Member Distributed Loads (BLC 28 : Ice Wind Load (0)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
14	MP ALPHA1	PY	-.003	-.003	0	0
15	MP ALPHA3	PY	-.003	-.003	0	0
16	RAIL1	PY	-.000939	-.000939	0	0
17	RAIL CON3	PY	-.003	-.003	0	0
18	RAIL CON1	PY	-.003	-.003	0	0
19	RAIL CON2	PY	-.003	-.003	0	0
20	CR1	PY	-.002	-.002	0	0
21	CR2	PY	-.002	-.002	0	0
22	CR3	PY	-.002	-.002	0	0
23	CR4	PY	-.002	-.002	0	0
24	CR5	PY	-.002	-.002	0	0
25	CR6	PY	-.002	-.002	0	0
26	PL4	PY	-.002	-.002	0	0
27	PL5	PY	-.002	-.002	0	0
28	PL6	PY	-.002	-.002	0	0
29	PL7	PY	-.002	-.002	0	0
30	PL8	PY	-.002	-.002	0	0
31	PL9	PY	-.002	-.002	0	0
32	MP ALPHA2	PY	-.003	-.003	0	0
33	FACE3	PY	-.002	-.002	0	0
34	MP GAMMA1	PY	-.003	-.003	0	0
35	MP GAMMA3	PY	-.003	-.003	0	0
36	RAIL3	PY	-.002	-.002	0	0
37	FACE2	PY	-.002	-.002	0	0
38	MP BETA1	PY	-.003	-.003	0	0
39	MP BETA3	PY	-.003	-.003	0	0
40	RAIL2	PY	-.002	-.002	0	0
41	MP BETA2	PY	-.003	-.003	0	0
42	MP GAMMA2	PY	-.003	-.003	0	0

Member Distributed Loads (BLC 29 : Ice Wind Load (30))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.001	-.001	0	0
2	GRAT SUP	PY	-.001	-.001	0	0
3	GRAT SUP2	PY	-.001	-.001	0	0
4	PL1	PY	-.003	-.003	0	0
5	SO2	PY	-.001	-.001	0	0
6	GRAT SUP3	PY	-.001	-.001	0	0
7	GRAT SUP4	PY	-.001	-.001	0	0
8	PL2	PY	-.003	-.003	0	0
9	SO3	PY	-.001	-.001	0	0
10	GRAT SUP5	PY	-.001	-.001	0	0
11	GRAT SUP6	PY	-.001	-.001	0	0
12	PL3	PY	-.003	-.003	0	0
13	FACE1	PY	-.00099	-.00099	0	0
14	MP ALPHA1	PY	-.003	-.003	0	0
15	MP ALPHA3	PY	-.003	-.003	0	0
16	RAIL1	PY	-.000813	-.000813	0	0
17	RAIL CON3	PY	-.003	-.003	0	0
18	RAIL CON1	PY	-.003	-.003	0	0
19	RAIL CON2	PY	-.003	-.003	0	0
20	CR1	PY	-.002	-.002	0	0
21	CR2	PY	-.002	-.002	0	0
22	CR3	PY	-.002	-.002	0	0
23	CR4	PY	-.002	-.002	0	0
24	CR5	PY	-.002	-.002	0	0

Member Distributed Loads (BLC 29 : Ice Wind Load (30)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
25	CR6	PY	-.002	-.002	0	0
26	PL4	PY	-.001	-.001	0	0
27	PL5	PY	-.001	-.001	0	0
28	PL6	PY	-.001	-.001	0	0
29	PL7	PY	-.001	-.001	0	0
30	PL8	PY	-.001	-.001	0	0
31	PL9	PY	-.001	-.001	0	0
32	MP ALPHA2	PY	-.003	-.003	0	0
33	FACE3	PY	-.002	-.002	0	0
34	MP GAMMA1	PY	-.003	-.003	0	0
35	MP GAMMA3	PY	-.003	-.003	0	0
36	RAIL3	PY	-.002	-.002	0	0
37	FACE2	PY	-.002	-.002	0	0
38	MP BETA1	PY	-.003	-.003	0	0
39	MP BETA3	PY	-.003	-.003	0	0
40	RAIL2	PY	-.002	-.002	0	0
41	MP BETA2	PY	-.003	-.003	0	0
42	MP GAMMA2	PY	-.003	-.003	0	0
43	SO1	PX	-.000658	-.000658	0	0
44	GRAT SUP	PX	-.00072	-.00072	0	0
45	GRAT SUP2	PX	-.00072	-.00072	0	0
46	PL1	PX	-.001	-.001	0	0
47	SO2	PX	-.000658	-.000658	0	0
48	GRAT SUP3	PX	-.00072	-.00072	0	0
49	GRAT SUP4	PX	-.00072	-.00072	0	0
50	PL2	PX	-.001	-.001	0	0
51	SO3	PX	-.000658	-.000658	0	0
52	GRAT SUP5	PX	-.00072	-.00072	0	0
53	GRAT SUP6	PX	-.00072	-.00072	0	0
54	PL3	PX	-.001	-.001	0	0
55	FACE1	PX	-.000571	-.000571	0	0
56	MP ALPHA1	PX	-.001	-.001	0	0
57	MP ALPHA3	PX	-.001	-.001	0	0
58	RAIL1	PX	-.000469	-.000469	0	0
59	RAIL CON3	PX	-.001	-.001	0	0
60	RAIL CON1	PX	-.001	-.001	0	0
61	RAIL CON2	PX	-.001	-.001	0	0
62	CR1	PX	-.000949	-.000949	0	0
63	CR2	PX	-.000949	-.000949	0	0
64	CR3	PX	-.000949	-.000949	0	0
65	CR4	PX	-.000949	-.000949	0	0
66	CR5	PX	-.000949	-.000949	0	0
67	CR6	PX	-.000949	-.000949	0	0
68	PL4	PX	-.000782	-.000782	0	0
69	PL5	PX	-.000782	-.000782	0	0
70	PL6	PX	-.000782	-.000782	0	0
71	PL7	PX	-.000782	-.000782	0	0
72	PL8	PX	-.000782	-.000782	0	0
73	PL9	PX	-.000782	-.000782	0	0
74	MP ALPHA2	PX	-.001	-.001	0	0
75	FACE3	PX	-.001	-.001	0	0
76	MP GAMMA1	PX	-.001	-.001	0	0
77	MP GAMMA3	PX	-.001	-.001	0	0
78	RAIL3	PX	-.000939	-.000939	0	0
79	FACE2	PX	-.001	-.001	0	0
80	MP BETA1	PX	-.001	-.001	0	0
81	MP BETA3	PX	-.001	-.001	0	0

Member Distributed Loads (BLC 29 : Ice Wind Load (30)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
82	RAIL2	PX	-.000939	-.000939	0	0
83	MP BETA2	PX	-.001	-.001	0	0
84	MP GAMMA2	PX	-.001	-.001	0	0

Member Distributed Loads (BLC 30 : Ice Wind Load (60))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.000658	-.000658	0	0
2	GRAT SUP	PY	-.00072	-.00072	0	0
3	GRAT SUP2	PY	-.00072	-.00072	0	0
4	PL1	PY	-.001	-.001	0	0
5	SO2	PY	-.000658	-.000658	0	0
6	GRAT SUP3	PY	-.00072	-.00072	0	0
7	GRAT SUP4	PY	-.00072	-.00072	0	0
8	PL2	PY	-.001	-.001	0	0
9	SO3	PY	-.000658	-.000658	0	0
10	GRAT SUP5	PY	-.00072	-.00072	0	0
11	GRAT SUP6	PY	-.00072	-.00072	0	0
12	PL3	PY	-.001	-.001	0	0
13	FACE1	PY	-.000571	-.000571	0	0
14	MP ALPHA1	PY	-.001	-.001	0	0
15	MP ALPHA3	PY	-.001	-.001	0	0
16	RAIL1	PY	-.000469	-.000469	0	0
17	RAIL CON3	PY	-.001	-.001	0	0
18	RAIL CON1	PY	-.001	-.001	0	0
19	RAIL CON2	PY	-.001	-.001	0	0
20	CR1	PY	-.000949	-.000949	0	0
21	CR2	PY	-.000949	-.000949	0	0
22	CR3	PY	-.000949	-.000949	0	0
23	CR4	PY	-.000949	-.000949	0	0
24	CR5	PY	-.000949	-.000949	0	0
25	CR6	PY	-.000949	-.000949	0	0
26	PL4	PY	-.000782	-.000782	0	0
27	PL5	PY	-.000782	-.000782	0	0
28	PL6	PY	-.000782	-.000782	0	0
29	PL7	PY	-.000782	-.000782	0	0
30	PL8	PY	-.000782	-.000782	0	0
31	PL9	PY	-.000782	-.000782	0	0
32	MP ALPHA2	PY	-.001	-.001	0	0
33	FACE3	PY	-.001	-.001	0	0
34	MP GAMMA1	PY	-.001	-.001	0	0
35	MP GAMMA3	PY	-.001	-.001	0	0
36	RAIL3	PY	-.000939	-.000939	0	0
37	FACE2	PY	-.001	-.001	0	0
38	MP BETA1	PY	-.001	-.001	0	0
39	MP BETA3	PY	-.001	-.001	0	0
40	RAIL2	PY	-.000939	-.000939	0	0
41	MP BETA2	PY	-.001	-.001	0	0
42	MP GAMMA2	PY	-.001	-.001	0	0
43	SO1	PX	-.001	-.001	0	0
44	GRAT SUP	PX	-.001	-.001	0	0
45	GRAT SUP2	PX	-.001	-.001	0	0
46	PL1	PX	-.003	-.003	0	0
47	SO2	PX	-.001	-.001	0	0
48	GRAT SUP3	PX	-.001	-.001	0	0
49	GRAT SUP4	PX	-.001	-.001	0	0
50	PL2	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 30 : Ice Wind Load (60)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
51	SO3	PX	-.001	-.001	0	0
52	GRAT SUP5	PX	-.001	-.001	0	0
53	GRAT SUP6	PX	-.001	-.001	0	0
54	PL3	PX	-.003	-.003	0	0
55	FACE1	PX	-.00099	-.00099	0	0
56	MP ALPHA1	PX	-.003	-.003	0	0
57	MP ALPHA3	PX	-.003	-.003	0	0
58	RAIL1	PX	-.000813	-.000813	0	0
59	RAIL CON3	PX	-.003	-.003	0	0
60	RAIL CON1	PX	-.003	-.003	0	0
61	RAIL CON2	PX	-.003	-.003	0	0
62	CR1	PX	-.002	-.002	0	0
63	CR2	PX	-.002	-.002	0	0
64	CR3	PX	-.002	-.002	0	0
65	CR4	PX	-.002	-.002	0	0
66	CR5	PX	-.002	-.002	0	0
67	CR6	PX	-.002	-.002	0	0
68	PL4	PX	-.001	-.001	0	0
69	PL5	PX	-.001	-.001	0	0
70	PL6	PX	-.001	-.001	0	0
71	PL7	PX	-.001	-.001	0	0
72	PL8	PX	-.001	-.001	0	0
73	PL9	PX	-.001	-.001	0	0
74	MP ALPHA2	PX	-.003	-.003	0	0
75	FACE3	PX	-.002	-.002	0	0
76	MP GAMMA1	PX	-.003	-.003	0	0
77	MP GAMMA3	PX	-.003	-.003	0	0
78	RAIL3	PX	-.002	-.002	0	0
79	FACE2	PX	-.002	-.002	0	0
80	MP BETA1	PX	-.003	-.003	0	0
81	MP BETA3	PX	-.003	-.003	0	0
82	RAIL2	PX	-.002	-.002	0	0
83	MP BETA2	PX	-.003	-.003	0	0
84	MP GAMMA2	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 31 : Ice Wind Load (90))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PX	-.001	-.001	0	0
2	GRAT SUP	PX	-.001	-.001	0	0
3	GRAT SUP2	PX	-.001	-.001	0	0
4	PL1	PX	-.003	-.003	0	0
5	SO2	PX	-.001	-.001	0	0
6	GRAT SUP3	PX	-.001	-.001	0	0
7	GRAT SUP4	PX	-.001	-.001	0	0
8	PL2	PX	-.003	-.003	0	0
9	SO3	PX	-.001	-.001	0	0
10	GRAT SUP5	PX	-.001	-.001	0	0
11	GRAT SUP6	PX	-.001	-.001	0	0
12	PL3	PX	-.003	-.003	0	0
13	FACE2	PX	-.001	-.001	0	0
14	MP ALPHA1	PX	-.003	-.003	0	0
15	MP ALPHA3	PX	-.003	-.003	0	0
16	RAIL2	PX	-.000939	-.000939	0	0
17	RAIL CON3	PX	-.003	-.003	0	0
18	RAIL CON1	PX	-.003	-.003	0	0
19	RAIL CON2	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 31 : Ice Wind Load (90)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
20	CR1	PX	-.002	-.002	0	0
21	CR2	PX	-.002	-.002	0	0
22	CR3	PX	-.002	-.002	0	0
23	CR4	PX	-.002	-.002	0	0
24	CR5	PX	-.002	-.002	0	0
25	CR6	PX	-.002	-.002	0	0
26	PL4	PX	-.002	-.002	0	0
27	PL5	PX	-.002	-.002	0	0
28	PL6	PX	-.002	-.002	0	0
29	PL7	PX	-.002	-.002	0	0
30	PL8	PX	-.002	-.002	0	0
31	PL9	PX	-.002	-.002	0	0
32	MP ALPHA2	PX	-.003	-.003	0	0
33	FACE3	PX	-.002	-.002	0	0
34	MP GAMMA1	PX	-.003	-.003	0	0
35	MP GAMMA3	PX	-.003	-.003	0	0
36	RAIL3	PX	-.002	-.002	0	0
37	FACE1	PX	-.002	-.002	0	0
38	MP BETA1	PX	-.003	-.003	0	0
39	MP BETA3	PX	-.003	-.003	0	0
40	RAIL1	PX	-.002	-.002	0	0
41	MP BETA2	PX	-.003	-.003	0	0
42	MP GAMMA2	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 32 : Ice Wind Load (120))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.000658	.000658	0	0
2	GRAT SUP	PY	.00072	.00072	0	0
3	GRAT SUP2	PY	.00072	.00072	0	0
4	PL1	PY	.001	.001	0	0
5	SO2	PY	.000658	.000658	0	0
6	GRAT SUP3	PY	.00072	.00072	0	0
7	GRAT SUP4	PY	.00072	.00072	0	0
8	PL2	PY	.001	.001	0	0
9	SO3	PY	.000658	.000658	0	0
10	GRAT SUP5	PY	.00072	.00072	0	0
11	GRAT SUP6	PY	.00072	.00072	0	0
12	PL3	PY	.001	.001	0	0
13	FACE2	PY	.000571	.000571	0	0
14	MP ALPHA1	PY	.001	.001	0	0
15	MP ALPHA3	PY	.001	.001	0	0
16	RAIL2	PY	.000469	.000469	0	0
17	RAIL CON3	PY	.001	.001	0	0
18	RAIL CON1	PY	.001	.001	0	0
19	RAIL CON2	PY	.001	.001	0	0
20	CR1	PY	.000949	.000949	0	0
21	CR2	PY	.000949	.000949	0	0
22	CR3	PY	.000949	.000949	0	0
23	CR4	PY	.000949	.000949	0	0
24	CR5	PY	.000949	.000949	0	0
25	CR6	PY	.000949	.000949	0	0
26	PL4	PY	.000782	.000782	0	0
27	PL5	PY	.000782	.000782	0	0
28	PL6	PY	.000782	.000782	0	0
29	PL7	PY	.000782	.000782	0	0
30	PL8	PY	.000782	.000782	0	0

Member Distributed Loads (BLC 32 : Ice Wind Load (120)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
31	PL9	PY	.000782	.000782	0	0
32	MP ALPHA2	PY	.001	.001	0	0
33	FACE3	PY	.001	.001	0	0
34	MP GAMMA1	PY	.001	.001	0	0
35	MP GAMMA3	PY	.001	.001	0	0
36	RAIL3	PY	.000939	.000939	0	0
37	FACE1	PY	.001	.001	0	0
38	MP BETA1	PY	.001	.001	0	0
39	MP BETA3	PY	.001	.001	0	0
40	RAIL1	PY	.000939	.000939	0	0
41	MP BETA2	PY	.001	.001	0	0
42	MP GAMMA2	PY	.001	.001	0	0
43	SO1	PX	-.001	-.001	0	0
44	GRAT SUP	PX	-.001	-.001	0	0
45	GRAT SUP2	PX	-.001	-.001	0	0
46	PL1	PX	-.003	-.003	0	0
47	SO2	PX	-.001	-.001	0	0
48	GRAT SUP3	PX	-.001	-.001	0	0
49	GRAT SUP4	PX	-.001	-.001	0	0
50	PL2	PX	-.003	-.003	0	0
51	SO3	PX	-.001	-.001	0	0
52	GRAT SUP5	PX	-.001	-.001	0	0
53	GRAT SUP6	PX	-.001	-.001	0	0
54	PL3	PX	-.003	-.003	0	0
55	FACE2	PX	-.00099	-.00099	0	0
56	MP ALPHA1	PX	-.003	-.003	0	0
57	MP ALPHA3	PX	-.003	-.003	0	0
58	RAIL2	PX	-.000813	-.000813	0	0
59	RAIL CON3	PX	-.003	-.003	0	0
60	RAIL CON1	PX	-.003	-.003	0	0
61	RAIL CON2	PX	-.003	-.003	0	0
62	CR1	PX	-.002	-.002	0	0
63	CR2	PX	-.002	-.002	0	0
64	CR3	PX	-.002	-.002	0	0
65	CR4	PX	-.002	-.002	0	0
66	CR5	PX	-.002	-.002	0	0
67	CR6	PX	-.002	-.002	0	0
68	PL4	PX	-.001	-.001	0	0
69	PL5	PX	-.001	-.001	0	0
70	PL6	PX	-.001	-.001	0	0
71	PL7	PX	-.001	-.001	0	0
72	PL8	PX	-.001	-.001	0	0
73	PL9	PX	-.001	-.001	0	0
74	MP ALPHA2	PX	-.003	-.003	0	0
75	FACE3	PX	-.002	-.002	0	0
76	MP GAMMA1	PX	-.003	-.003	0	0
77	MP GAMMA3	PX	-.003	-.003	0	0
78	RAIL3	PX	-.002	-.002	0	0
79	FACE1	PX	-.002	-.002	0	0
80	MP BETA1	PX	-.003	-.003	0	0
81	MP BETA3	PX	-.003	-.003	0	0
82	RAIL1	PX	-.002	-.002	0	0
83	MP BETA2	PX	-.003	-.003	0	0
84	MP GAMMA2	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 33 : Ice Wind Load (150))

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

Member Distributed Loads (BLC 33 : Ice Wind Load (150)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.001	.001	0	0
2	GRAT SUP	PY	.001	.001	0	0
3	GRAT SUP2	PY	.001	.001	0	0
4	PL1	PY	.003	.003	0	0
5	SO2	PY	.001	.001	0	0
6	GRAT SUP3	PY	.001	.001	0	0
7	GRAT SUP4	PY	.001	.001	0	0
8	PL2	PY	.003	.003	0	0
9	SO3	PY	.001	.001	0	0
10	GRAT SUP5	PY	.001	.001	0	0
11	GRAT SUP6	PY	.001	.001	0	0
12	PL3	PY	.003	.003	0	0
13	FACE2	PY	.00099	.00099	0	0
14	MP ALPHA1	PY	.003	.003	0	0
15	MP ALPHA3	PY	.003	.003	0	0
16	RAIL2	PY	.000813	.000813	0	0
17	RAIL CON3	PY	.003	.003	0	0
18	RAIL CON1	PY	.003	.003	0	0
19	RAIL CON2	PY	.003	.003	0	0
20	CR1	PY	.002	.002	0	0
21	CR2	PY	.002	.002	0	0
22	CR3	PY	.002	.002	0	0
23	CR4	PY	.002	.002	0	0
24	CR5	PY	.002	.002	0	0
25	CR6	PY	.002	.002	0	0
26	PL4	PY	.001	.001	0	0
27	PL5	PY	.001	.001	0	0
28	PL6	PY	.001	.001	0	0
29	PL7	PY	.001	.001	0	0
30	PL8	PY	.001	.001	0	0
31	PL9	PY	.001	.001	0	0
32	MP ALPHA2	PY	.003	.003	0	0
33	FACE3	PY	.002	.002	0	0
34	MP GAMMA1	PY	.003	.003	0	0
35	MP GAMMA3	PY	.003	.003	0	0
36	RAIL3	PY	.002	.002	0	0
37	FACE1	PY	.002	.002	0	0
38	MP BETA1	PY	.003	.003	0	0
39	MP BETA3	PY	.003	.003	0	0
40	RAIL1	PY	.002	.002	0	0
41	MP BETA2	PY	.003	.003	0	0
42	MP GAMMA2	PY	.003	.003	0	0
43	SO1	PX	-.000658	-.000658	0	0
44	GRAT SUP	PX	-.00072	-.00072	0	0
45	GRAT SUP2	PX	-.00072	-.00072	0	0
46	PL1	PX	-.001	-.001	0	0
47	SO2	PX	-.000658	-.000658	0	0
48	GRAT SUP3	PX	-.00072	-.00072	0	0
49	GRAT SUP4	PX	-.00072	-.00072	0	0
50	PL2	PX	-.001	-.001	0	0
51	SO3	PX	-.000658	-.000658	0	0
52	GRAT SUP5	PX	-.00072	-.00072	0	0
53	GRAT SUP6	PX	-.00072	-.00072	0	0
54	PL3	PX	-.001	-.001	0	0
55	FACE2	PX	-.000571	-.000571	0	0
56	MP ALPHA1	PX	-.001	-.001	0	0
57	MP ALPHA3	PX	-.001	-.001	0	0

Member Distributed Loads (BLC 33 : Ice Wind Load (150)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	RAIL2	PX	-.000469	-.000469	0	0
59	RAIL CON3	PX	-.001	-.001	0	0
60	RAIL CON1	PX	-.001	-.001	0	0
61	RAIL CON2	PX	-.001	-.001	0	0
62	CR1	PX	-.000949	-.000949	0	0
63	CR2	PX	-.000949	-.000949	0	0
64	CR3	PX	-.000949	-.000949	0	0
65	CR4	PX	-.000949	-.000949	0	0
66	CR5	PX	-.000949	-.000949	0	0
67	CR6	PX	-.000949	-.000949	0	0
68	PL4	PX	-.000782	-.000782	0	0
69	PL5	PX	-.000782	-.000782	0	0
70	PL6	PX	-.000782	-.000782	0	0
71	PL7	PX	-.000782	-.000782	0	0
72	PL8	PX	-.000782	-.000782	0	0
73	PL9	PX	-.000782	-.000782	0	0
74	MP ALPHA2	PX	-.001	-.001	0	0
75	FACE3	PX	-.001	-.001	0	0
76	MP GAMMA1	PX	-.001	-.001	0	0
77	MP GAMMA3	PX	-.001	-.001	0	0
78	RAIL3	PX	-.000939	-.000939	0	0
79	FACE1	PX	-.001	-.001	0	0
80	MP BETA1	PX	-.001	-.001	0	0
81	MP BETA3	PX	-.001	-.001	0	0
82	RAIL1	PX	-.000939	-.000939	0	0
83	MP BETA2	PX	-.001	-.001	0	0
84	MP GAMMA2	PX	-.001	-.001	0	0

Member Distributed Loads (BLC 34 : Ice Wind Load (180))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.001	.001	0	0
2	GRAT SUP	PY	.001	.001	0	0
3	GRAT SUP2	PY	.001	.001	0	0
4	PL1	PY	.003	.003	0	0
5	SO2	PY	.001	.001	0	0
6	GRAT SUP3	PY	.001	.001	0	0
7	GRAT SUP4	PY	.001	.001	0	0
8	PL2	PY	.003	.003	0	0
9	SO3	PY	.001	.001	0	0
10	GRAT SUP5	PY	.001	.001	0	0
11	GRAT SUP6	PY	.001	.001	0	0
12	PL3	PY	.003	.003	0	0
13	FACE2	PY	.001	.001	0	0
14	MP ALPHA1	PY	.003	.003	0	0
15	MP ALPHA3	PY	.003	.003	0	0
16	RAIL2	PY	.000939	.000939	0	0
17	RAIL CON3	PY	.003	.003	0	0
18	RAIL CON1	PY	.003	.003	0	0
19	RAIL CON2	PY	.003	.003	0	0
20	CR1	PY	.002	.002	0	0
21	CR2	PY	.002	.002	0	0
22	CR3	PY	.002	.002	0	0
23	CR4	PY	.002	.002	0	0
24	CR5	PY	.002	.002	0	0
25	CR6	PY	.002	.002	0	0
26	PL4	PY	.002	.002	0	0

Member Distributed Loads (BLC 34 : Ice Wind Load (180)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
27	PL5	PY	.002	.002	0	0
28	PL6	PY	.002	.002	0	0
29	PL7	PY	.002	.002	0	0
30	PL8	PY	.002	.002	0	0
31	PL9	PY	.002	.002	0	0
32	MP ALPHA2	PY	.003	.003	0	0
33	FACE3	PY	.002	.002	0	0
34	MP GAMMA1	PY	.003	.003	0	0
35	MP GAMMA3	PY	.003	.003	0	0
36	RAIL3	PY	.002	.002	0	0
37	FACE1	PY	.002	.002	0	0
38	MP BETA1	PY	.003	.003	0	0
39	MP BETA3	PY	.003	.003	0	0
40	RAIL1	PY	.002	.002	0	0
41	MP BETA2	PY	.003	.003	0	0
42	MP GAMMA2	PY	.003	.003	0	0

Member Distributed Loads (BLC 35 : Ice Wind Load (210))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.001	.001	0	0
2	GRAT SUP	PY	.001	.001	0	0
3	GRAT SUP2	PY	.001	.001	0	0
4	PL1	PY	.003	.003	0	0
5	SO2	PY	.001	.001	0	0
6	GRAT SUP3	PY	.001	.001	0	0
7	GRAT SUP4	PY	.001	.001	0	0
8	PL2	PY	.003	.003	0	0
9	SO3	PY	.001	.001	0	0
10	GRAT SUP5	PY	.001	.001	0	0
11	GRAT SUP6	PY	.001	.001	0	0
12	PL3	PY	.003	.003	0	0
13	FACE3	PY	.00099	.00099	0	0
14	MP ALPHA1	PY	.003	.003	0	0
15	MP ALPHA3	PY	.003	.003	0	0
16	RAIL3	PY	.000813	.000813	0	0
17	RAIL CON3	PY	.003	.003	0	0
18	RAIL CON1	PY	.003	.003	0	0
19	RAIL CON2	PY	.003	.003	0	0
20	CR1	PY	.002	.002	0	0
21	CR2	PY	.002	.002	0	0
22	CR3	PY	.002	.002	0	0
23	CR4	PY	.002	.002	0	0
24	CR5	PY	.002	.002	0	0
25	CR6	PY	.002	.002	0	0
26	PL4	PY	.001	.001	0	0
27	PL5	PY	.001	.001	0	0
28	PL6	PY	.001	.001	0	0
29	PL7	PY	.001	.001	0	0
30	PL8	PY	.001	.001	0	0
31	PL9	PY	.001	.001	0	0
32	MP ALPHA2	PY	.003	.003	0	0
33	FACE1	PY	.002	.002	0	0
34	MP GAMMA1	PY	.003	.003	0	0
35	MP GAMMA3	PY	.003	.003	0	0
36	RAIL1	PY	.002	.002	0	0
37	FACE2	PY	.002	.002	0	0

Member Distributed Loads (BLC 35 : Ice Wind Load (210)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
38	MP BETA1	PY	.003	.003	0	0
39	MP BETA3	PY	.003	.003	0	0
40	RAIL2	PY	.002	.002	0	0
41	MP BETA2	PY	.003	.003	0	0
42	MP GAMMA2	PY	.003	.003	0	0
43	SO1	PX	.000658	.000658	0	0
44	GRAT SUP	PX	.00072	.00072	0	0
45	GRAT SUP2	PX	.00072	.00072	0	0
46	PL1	PX	.001	.001	0	0
47	SO2	PX	.000658	.000658	0	0
48	GRAT SUP3	PX	.00072	.00072	0	0
49	GRAT SUP4	PX	.00072	.00072	0	0
50	PL2	PX	.001	.001	0	0
51	SO3	PX	.000658	.000658	0	0
52	GRAT SUP5	PX	.00072	.00072	0	0
53	GRAT SUP6	PX	.00072	.00072	0	0
54	PL3	PX	.001	.001	0	0
55	FACE3	PX	.000571	.000571	0	0
56	MP ALPHA1	PX	.001	.001	0	0
57	MP ALPHA3	PX	.001	.001	0	0
58	RAIL3	PX	.000469	.000469	0	0
59	RAIL CON3	PX	.001	.001	0	0
60	RAIL CON1	PX	.001	.001	0	0
61	RAIL CON2	PX	.001	.001	0	0
62	CR1	PX	.000949	.000949	0	0
63	CR2	PX	.000949	.000949	0	0
64	CR3	PX	.000949	.000949	0	0
65	CR4	PX	.000949	.000949	0	0
66	CR5	PX	.000949	.000949	0	0
67	CR6	PX	.000949	.000949	0	0
68	PL4	PX	.000782	.000782	0	0
69	PL5	PX	.000782	.000782	0	0
70	PL6	PX	.000782	.000782	0	0
71	PL7	PX	.000782	.000782	0	0
72	PL8	PX	.000782	.000782	0	0
73	PL9	PX	.000782	.000782	0	0
74	MP ALPHA2	PX	.001	.001	0	0
75	FACE1	PX	.001	.001	0	0
76	MP GAMMA1	PX	.001	.001	0	0
77	MP GAMMA3	PX	.001	.001	0	0
78	RAIL1	PX	.000939	.000939	0	0
79	FACE2	PX	.001	.001	0	0
80	MP BETA1	PX	.001	.001	0	0
81	MP BETA3	PX	.001	.001	0	0
82	RAIL2	PX	.000939	.000939	0	0
83	MP BETA2	PX	.001	.001	0	0
84	MP GAMMA2	PX	.001	.001	0	0

Member Distributed Loads (BLC 36 : Ice Wind Load (240))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	.000658	.000658	0	0
2	GRAT SUP	PY	.00072	.00072	0	0
3	GRAT SUP2	PY	.00072	.00072	0	0
4	PL1	PY	.001	.001	0	0
5	SO2	PY	.000658	.000658	0	0
6	GRAT SUP3	PY	.00072	.00072	0	0

Member Distributed Loads (BLC 36 : Ice Wind Load (240)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
7	GRAT SUP4	PY	.00072	.00072	0	0
8	PL2	PY	.001	.001	0	0
9	SO3	PY	.000658	.000658	0	0
10	GRAT SUP5	PY	.00072	.00072	0	0
11	GRAT SUP6	PY	.00072	.00072	0	0
12	PL3	PY	.001	.001	0	0
13	FACE3	PY	.000571	.000571	0	0
14	MP ALPHA1	PY	.001	.001	0	0
15	MP ALPHA3	PY	.001	.001	0	0
16	RAIL3	PY	.000469	.000469	0	0
17	RAIL CON3	PY	.001	.001	0	0
18	RAIL CON1	PY	.001	.001	0	0
19	RAIL CON2	PY	.001	.001	0	0
20	CR1	PY	.000949	.000949	0	0
21	CR2	PY	.000949	.000949	0	0
22	CR3	PY	.000949	.000949	0	0
23	CR4	PY	.000949	.000949	0	0
24	CR5	PY	.000949	.000949	0	0
25	CR6	PY	.000949	.000949	0	0
26	PL4	PY	.000782	.000782	0	0
27	PL5	PY	.000782	.000782	0	0
28	PL6	PY	.000782	.000782	0	0
29	PL7	PY	.000782	.000782	0	0
30	PL8	PY	.000782	.000782	0	0
31	PL9	PY	.000782	.000782	0	0
32	MP ALPHA2	PY	.001	.001	0	0
33	FACE1	PY	.001	.001	0	0
34	MP GAMMA1	PY	.001	.001	0	0
35	MP GAMMA3	PY	.001	.001	0	0
36	RAIL1	PY	.000939	.000939	0	0
37	FACE2	PY	.001	.001	0	0
38	MP BETA1	PY	.001	.001	0	0
39	MP BETA3	PY	.001	.001	0	0
40	RAIL2	PY	.000939	.000939	0	0
41	MP BETA2	PY	.001	.001	0	0
42	MP GAMMA2	PY	.001	.001	0	0
43	SO1	PX	.001	.001	0	0
44	GRAT SUP	PX	.001	.001	0	0
45	GRAT SUP2	PX	.001	.001	0	0
46	PL1	PX	.003	.003	0	0
47	SO2	PX	.001	.001	0	0
48	GRAT SUP3	PX	.001	.001	0	0
49	GRAT SUP4	PX	.001	.001	0	0
50	PL2	PX	.003	.003	0	0
51	SO3	PX	.001	.001	0	0
52	GRAT SUP5	PX	.001	.001	0	0
53	GRAT SUP6	PX	.001	.001	0	0
54	PL3	PX	.003	.003	0	0
55	FACE3	PX	.00099	.00099	0	0
56	MP ALPHA1	PX	.003	.003	0	0
57	MP ALPHA3	PX	.003	.003	0	0
58	RAIL3	PX	.000813	.000813	0	0
59	RAIL CON3	PX	.003	.003	0	0
60	RAIL CON1	PX	.003	.003	0	0
61	RAIL CON2	PX	.003	.003	0	0
62	CR1	PX	.002	.002	0	0
63	CR2	PX	.002	.002	0	0

Member Distributed Loads (BLC 36 : Ice Wind Load (240)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
64	CR3	PX	.002	.002	0	0
65	CR4	PX	.002	.002	0	0
66	CR5	PX	.002	.002	0	0
67	CR6	PX	.002	.002	0	0
68	PL4	PX	.001	.001	0	0
69	PL5	PX	.001	.001	0	0
70	PL6	PX	.001	.001	0	0
71	PL7	PX	.001	.001	0	0
72	PL8	PX	.001	.001	0	0
73	PL9	PX	.001	.001	0	0
74	MP ALPHA2	PX	.003	.003	0	0
75	FACE1	PX	.002	.002	0	0
76	MP GAMMA1	PX	.003	.003	0	0
77	MP GAMMA3	PX	.003	.003	0	0
78	RAIL1	PX	.002	.002	0	0
79	FACE2	PX	.002	.002	0	0
80	MP BETA1	PX	.003	.003	0	0
81	MP BETA3	PX	.003	.003	0	0
82	RAIL2	PX	.002	.002	0	0
83	MP BETA2	PX	.003	.003	0	0
84	MP GAMMA2	PX	.003	.003	0	0

Member Distributed Loads (BLC 37 : Ice Wind Load (270))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PX	.001	.001	0	0
2	GRAT SUP	PX	.001	.001	0	0
3	GRAT SUP2	PX	.001	.001	0	0
4	PL1	PX	.003	.003	0	0
5	SO2	PX	.001	.001	0	0
6	GRAT SUP3	PX	.001	.001	0	0
7	GRAT SUP4	PX	.001	.001	0	0
8	PL2	PX	.003	.003	0	0
9	SO3	PX	.001	.001	0	0
10	GRAT SUP5	PX	.001	.001	0	0
11	GRAT SUP6	PX	.001	.001	0	0
12	PL3	PX	.003	.003	0	0
13	FACE3	PX	.001	.001	0	0
14	MP ALPHA1	PX	.003	.003	0	0
15	MP ALPHA3	PX	.003	.003	0	0
16	RAIL3	PX	.000939	.000939	0	0
17	RAIL CON3	PX	.003	.003	0	0
18	RAIL CON1	PX	.003	.003	0	0
19	RAIL CON2	PX	.003	.003	0	0
20	CR1	PX	.002	.002	0	0
21	CR2	PX	.002	.002	0	0
22	CR3	PX	.002	.002	0	0
23	CR4	PX	.002	.002	0	0
24	CR5	PX	.002	.002	0	0
25	CR6	PX	.002	.002	0	0
26	PL4	PX	.002	.002	0	0
27	PL5	PX	.002	.002	0	0
28	PL6	PX	.002	.002	0	0
29	PL7	PX	.002	.002	0	0
30	PL8	PX	.002	.002	0	0
31	PL9	PX	.002	.002	0	0
32	MP ALPHA2	PX	.003	.003	0	0

Member Distributed Loads (BLC 37 : Ice Wind Load (270)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
33	FACE1	PX	.002	.002	0	0
34	MP GAMMA1	PX	.003	.003	0	0
35	MP GAMMA3	PX	.003	.003	0	0
36	RAIL1	PX	.002	.002	0	0
37	FACE2	PX	.002	.002	0	0
38	MP BETA1	PX	.003	.003	0	0
39	MP BETA3	PX	.003	.003	0	0
40	RAIL2	PX	.002	.002	0	0
41	MP BETA2	PX	.003	.003	0	0
42	MP GAMMA2	PX	.003	.003	0	0

Member Distributed Loads (BLC 38 : Ice Wind Load (300))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.000658	-.000658	0	0
2	GRAT SUP	PY	-.00072	-.00072	0	0
3	GRAT SUP2	PY	-.00072	-.00072	0	0
4	PL1	PY	-.001	-.001	0	0
5	SO2	PY	-.000658	-.000658	0	0
6	GRAT SUP3	PY	-.00072	-.00072	0	0
7	GRAT SUP4	PY	-.00072	-.00072	0	0
8	PL2	PY	-.001	-.001	0	0
9	SO3	PY	-.000658	-.000658	0	0
10	GRAT SUP5	PY	-.00072	-.00072	0	0
11	GRAT SUP6	PY	-.00072	-.00072	0	0
12	PL3	PY	-.001	-.001	0	0
13	FACE3	PY	-.000571	-.000571	0	0
14	MP ALPHA1	PY	-.001	-.001	0	0
15	MP ALPHA3	PY	-.001	-.001	0	0
16	RAIL3	PY	-.000469	-.000469	0	0
17	RAIL CON3	PY	-.001	-.001	0	0
18	RAIL CON1	PY	-.001	-.001	0	0
19	RAIL CON2	PY	-.001	-.001	0	0
20	CR1	PY	-.000949	-.000949	0	0
21	CR2	PY	-.000949	-.000949	0	0
22	CR3	PY	-.000949	-.000949	0	0
23	CR4	PY	-.000949	-.000949	0	0
24	CR5	PY	-.000949	-.000949	0	0
25	CR6	PY	-.000949	-.000949	0	0
26	PL4	PY	-.000782	-.000782	0	0
27	PL5	PY	-.000782	-.000782	0	0
28	PL6	PY	-.000782	-.000782	0	0
29	PL7	PY	-.000782	-.000782	0	0
30	PL8	PY	-.000782	-.000782	0	0
31	PL9	PY	-.000782	-.000782	0	0
32	MP ALPHA2	PY	-.001	-.001	0	0
33	FACE1	PY	-.001	-.001	0	0
34	MP GAMMA1	PY	-.001	-.001	0	0
35	MP GAMMA3	PY	-.001	-.001	0	0
36	RAIL1	PY	-.000939	-.000939	0	0
37	FACE2	PY	-.001	-.001	0	0
38	MP BETA1	PY	-.001	-.001	0	0
39	MP BETA3	PY	-.001	-.001	0	0
40	RAIL2	PY	-.000939	-.000939	0	0
41	MP BETA2	PY	-.001	-.001	0	0
42	MP GAMMA2	PY	-.001	-.001	0	0
43	SO1	PX	.001	.001	0	0

Member Distributed Loads (BLC 38 : Ice Wind Load (300)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
44	GRAT SUP	PX	.001	.001	0	0
45	GRAT SUP2	PX	.001	.001	0	0
46	PL1	PX	.003	.003	0	0
47	SO2	PX	.001	.001	0	0
48	GRAT SUP3	PX	.001	.001	0	0
49	GRAT SUP4	PX	.001	.001	0	0
50	PL2	PX	.003	.003	0	0
51	SO3	PX	.001	.001	0	0
52	GRAT SUP5	PX	.001	.001	0	0
53	GRAT SUP6	PX	.001	.001	0	0
54	PL3	PX	.003	.003	0	0
55	FACE3	PX	.00099	.00099	0	0
56	MP ALPHA1	PX	.003	.003	0	0
57	MP ALPHA3	PX	.003	.003	0	0
58	RAIL3	PX	.000813	.000813	0	0
59	RAIL CON3	PX	.003	.003	0	0
60	RAIL CON1	PX	.003	.003	0	0
61	RAIL CON2	PX	.003	.003	0	0
62	CR1	PX	.002	.002	0	0
63	CR2	PX	.002	.002	0	0
64	CR3	PX	.002	.002	0	0
65	CR4	PX	.002	.002	0	0
66	CR5	PX	.002	.002	0	0
67	CR6	PX	.002	.002	0	0
68	PL4	PX	.001	.001	0	0
69	PL5	PX	.001	.001	0	0
70	PL6	PX	.001	.001	0	0
71	PL7	PX	.001	.001	0	0
72	PL8	PX	.001	.001	0	0
73	PL9	PX	.001	.001	0	0
74	MP ALPHA2	PX	.003	.003	0	0
75	FACE1	PX	.002	.002	0	0
76	MP GAMMA1	PX	.003	.003	0	0
77	MP GAMMA3	PX	.003	.003	0	0
78	RAIL1	PX	.002	.002	0	0
79	FACE2	PX	.002	.002	0	0
80	MP BETA1	PX	.003	.003	0	0
81	MP BETA3	PX	.003	.003	0	0
82	RAIL2	PX	.002	.002	0	0
83	MP BETA2	PX	.003	.003	0	0
84	MP GAMMA2	PX	.003	.003	0	0

Member Distributed Loads (BLC 39 : Ice Wind Load (330))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO1	PY	-.001	-.001	0	0
2	GRAT SUP	PY	-.001	-.001	0	0
3	GRAT SUP2	PY	-.001	-.001	0	0
4	PL1	PY	-.003	-.003	0	0
5	SO2	PY	-.001	-.001	0	0
6	GRAT SUP3	PY	-.001	-.001	0	0
7	GRAT SUP4	PY	-.001	-.001	0	0
8	PL2	PY	-.003	-.003	0	0
9	SO3	PY	-.001	-.001	0	0
10	GRAT SUP5	PY	-.001	-.001	0	0
11	GRAT SUP6	PY	-.001	-.001	0	0
12	PL3	PY	-.003	-.003	0	0

Member Distributed Loads (BLC 39 : Ice Wind Load (330)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	FACE1	PY	-.00099	-.00099	0	0
14	MP ALPHA1	PY	-.003	-.003	0	0
15	MP ALPHA3	PY	-.003	-.003	0	0
16	RAIL1	PY	-.000813	-.000813	0	0
17	RAIL CON3	PY	-.003	-.003	0	0
18	RAIL CON1	PY	-.003	-.003	0	0
19	RAIL CON2	PY	-.003	-.003	0	0
20	CR1	PY	-.002	-.002	0	0
21	CR2	PY	-.002	-.002	0	0
22	CR3	PY	-.002	-.002	0	0
23	CR4	PY	-.002	-.002	0	0
24	CR5	PY	-.002	-.002	0	0
25	CR6	PY	-.002	-.002	0	0
26	PL4	PY	-.001	-.001	0	0
27	PL5	PY	-.001	-.001	0	0
28	PL6	PY	-.001	-.001	0	0
29	PL7	PY	-.001	-.001	0	0
30	PL8	PY	-.001	-.001	0	0
31	PL9	PY	-.001	-.001	0	0
32	MP ALPHA2	PY	-.003	-.003	0	0
33	FACE3	PY	-.002	-.002	0	0
34	MP GAMMA1	PY	-.003	-.003	0	0
35	MP GAMMA3	PY	-.003	-.003	0	0
36	RAIL3	PY	-.002	-.002	0	0
37	FACE2	PY	-.002	-.002	0	0
38	MP BETA1	PY	-.003	-.003	0	0
39	MP BETA3	PY	-.003	-.003	0	0
40	RAIL2	PY	-.002	-.002	0	0
41	MP BETA2	PY	-.003	-.003	0	0
42	MP GAMMA2	PY	-.003	-.003	0	0
43	SO1	PX	.000658	.000658	0	0
44	GRAT SUP	PX	.00072	.00072	0	0
45	GRAT SUP2	PX	.00072	.00072	0	0
46	PL1	PX	.001	.001	0	0
47	SO2	PX	.000658	.000658	0	0
48	GRAT SUP3	PX	.00072	.00072	0	0
49	GRAT SUP4	PX	.00072	.00072	0	0
50	PL2	PX	.001	.001	0	0
51	SO3	PX	.000658	.000658	0	0
52	GRAT SUP5	PX	.00072	.00072	0	0
53	GRAT SUP6	PX	.00072	.00072	0	0
54	PL3	PX	.001	.001	0	0
55	FACE1	PX	.000571	.000571	0	0
56	MP ALPHA1	PX	.001	.001	0	0
57	MP ALPHA3	PX	.001	.001	0	0
58	RAIL1	PX	.000469	.000469	0	0
59	RAIL CON3	PX	.001	.001	0	0
60	RAIL CON1	PX	.001	.001	0	0
61	RAIL CON2	PX	.001	.001	0	0
62	CR1	PX	.000949	.000949	0	0
63	CR2	PX	.000949	.000949	0	0
64	CR3	PX	.000949	.000949	0	0
65	CR4	PX	.000949	.000949	0	0
66	CR5	PX	.000949	.000949	0	0
67	CR6	PX	.000949	.000949	0	0
68	PL4	PX	.000782	.000782	0	0
69	PL5	PX	.000782	.000782	0	0

Member Distributed Loads (BLC 39 : Ice Wind Load (330)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
70	PL6	PX	.000782	.000782	0	0
71	PL7	PX	.000782	.000782	0	0
72	PL8	PX	.000782	.000782	0	0
73	PL9	PX	.000782	.000782	0	0
74	MP ALPHA2	PX	.001	.001	0	0
75	FACE3	PX	.001	.001	0	0
76	MP GAMMA1	PX	.001	.001	0	0
77	MP GAMMA3	PX	.001	.001	0	0
78	RAIL3	PX	.000939	.000939	0	0
79	FACE2	PX	.001	.001	0	0
80	MP BETA1	PX	.001	.001	0	0
81	MP BETA3	PX	.001	.001	0	0
82	RAIL2	PX	.000939	.000939	0	0
83	MP BETA2	PX	.001	.001	0	0
84	MP GAMMA2	PX	.001	.001	0	0

Member Distributed Loads (BLC 43 : BLC 3 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO2	Z	-.018	-.018	0	1.966
2	GRAT SUP3	Z	-.009	-.009	.319	2.275
3	GRAT SUP4	Z	-.009	-.009	.319	2.275
4	SO3	Z	-.018	-.018	0	1.966
5	GRAT SUP5	Z	-.009	-.009	.319	2.275
6	GRAT SUP6	Z	-.009	-.009	.319	2.275
7	SO1	Z	-.018	-.018	0	1.966
8	GRAT SUP	Z	-.009	-.009	.319	2.275
9	GRAT SUP2	Z	-.009	-.009	.319	2.275

Member Distributed Loads (BLC 44 : BLC 27 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	SO2	Z	-.025	-.025	0	1.966
2	GRAT SUP3	Z	-.013	-.013	.319	2.275
3	GRAT SUP4	Z	-.013	-.013	.319	2.275
4	SO3	Z	-.025	-.025	0	1.966
5	GRAT SUP5	Z	-.013	-.013	.319	2.275
6	GRAT SUP6	Z	-.013	-.013	.319	2.275
7	SO1	Z	-.025	-.025	0	1.966
8	GRAT SUP	Z	-.013	-.013	.319	2.275
9	GRAT SUP2	Z	-.013	-.013	.319	2.275

Member Area Loads (BLC 3 : Dead Load)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	P22	P21	P20	P23	Z	Two Way	-.01
2	P31	P34	P33	P32	Z	Two Way	-.01
3	P9	P12	P11	P10	Z	Two Way	-.01

Member Area Loads (BLC 27 : Ice Dead Load)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	P22	P21	P20	P23	Z	Two Way	-.014
2	P31	P34	P33	P32	Z	Two Way	-.014
3	P9	P12	P11	P10	Z	Two Way	-.014

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	P24	max	.417	5	.72	5	1.049	33	-.313	17	-.589	14	.855	5
2		min	-.424	23	-.724	23	.433	14	-1.135	35	-1.936	32	-.879	23
3	P13	max	.424	17	.72	35	1.525	10	-.313	23	2.823	10	.878	17
4		min	-.417	35	-.724	17	.433	26	-2.593	7	.589	26	-.855	35
5	P1	max	.778	11	.151	2	.967	21	2.141	20	.236	11	.796	29
6		min	-.778	29	-.142	20	.374	2	.521	2	-.236	29	-.796	11
7	Totals:	max	1.248	11	1.284	2	2.947	36						
8		min	-1.248	29	-1.284	20	2.083	17						

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Live Load	DL					1			
2	Wind Load (0)	DL					13	42		
3	Dead Load	DL			-1.1		13		3	
4	Wind Load (30)	DL					26	84		
5	Wind Load (60)	DL					26	84		
6	Wind Load (90)	DL					13	42		
7	Wind Load (120)	DL					26	84		
8	Wind Load (150)	DL					26	84		
9	Wind Load (180)	DL					13	42		
10	Wind Load (210)	DL					26	84		
11	Wind Load (240)	DL					26	84		
12	Wind Load (270)	DL					13	42		
13	Wind Load (300)	DL					26	84		
14	Wind Load (330)	DL					26	84		
15	Maintanence (0)	DL					13	42		
16	Maintanence (30)	DL					26	84		
17	Maintanence (60)	DL					26	84		
18	Maintanence (90)	DL					13	42		
19	Maintanence (120)	DL					26	84		
20	Maintanence (150)	DL					26	84		
21	Maintanence (180)	DL					13	42		
22	Maintanence (210)	DL					26	84		
23	Maintanence (240)	DL					26	84		
24	Maintanence (270)	DL					13	42		
25	Maintanence (300)	DL					26	84		
26	Maintanence (330)	DL					26	84		
27	Ice Dead Load	DL					13	42	3	
28	Ice Wind Load (0)	DL					13	42		
29	Ice Wind Load (30)	DL					26	84		
30	Ice Wind Load (60)	DL					26	84		
31	Ice Wind Load (90)	DL					13	42		
32	Ice Wind Load (120)	DL					26	84		
33	Ice Wind Load (150)	DL					26	84		
34	Ice Wind Load (180)	DL					13	42		
35	Ice Wind Load (210)	DL					26	84		
36	Ice Wind Load (240)	DL					26	84		
37	Ice Wind Load (270)	DL					13	42		
38	Ice Wind Load (300)	DL					26	84		
39	Ice Wind Load (330)	DL					26	84		
40	Earthquake (x-directio...	DL	-.096				13			
41	Earthquake (y-directio...	DL		-.096			13			
42	Earthquake (z-directio...	DL			-.038		13			
43	BLC 3 Transient Area...	None						9		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
44	BLC 27 Transient Are...	None						9		

Load Combinations

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4D	Yes	Y		3	1.4																		
2	1.2D + 1.0W(0)	Yes	Y		3	1.2	2	1																
3	1.2D + 1.0Di + 1.0Wi(0)	Yes	Y		3	1.2	27	1	28	1														
4	1.2D + 1.5L + 1.0Wl(0)	Yes	Y		3	1.2	1	1.5	15	1														
5	1.2D + 1.0W(30)	Yes	Y		3	1.2	4	1																
6	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	29	1														
7	1.2D + 1.5L + 1.0Wl(3...	Yes	Y		3	1.2	1	1.5	16	1														
8	1.2D + 1.0W(60)	Yes	Y		3	1.2	5	1																
9	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	30	1														
10	1.2D + 1.5L + 1.0Wl(6...	Yes	Y		3	1.2	1	1.5	17	1														
11	1.2D + 1.0W(90)	Yes	Y		3	1.2	6	1																
12	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	31	1														
13	1.2D + 1.5L + 1.0Wl(9...	Yes	Y		3	1.2	1	1.5	18	1														
14	1.2D + 1.0W(120)	Yes	Y		3	1.2	7	1																
15	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	32	1														
16	1.2D + 1.5L + 1.0Wl(1...	Yes	Y		3	1.2	1	1.5	19	1														
17	1.2D + 1.0W(150)	Yes	Y		3	1.2	8	1																
18	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	33	1														
19	1.2D + 1.5L + 1.0Wl(1...	Yes	Y		3	1.2	1	1.5	20	1														
20	1.2D + 1.0W(180)	Yes	Y		3	1.2	9	1																
21	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	34	1														
22	1.2D + 1.5L + 1.0Wl(1...	Yes	Y		3	1.2	1	1.5	21	1														
23	1.2D + 1.0W(210)	Yes	Y		3	1.2	10	1																
24	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	35	1														
25	1.2D + 1.5L + 1.0Wl(2...	Yes	Y		3	1.2	1	1.5	22	1														
26	1.2D + 1.0W(240)	Yes	Y		3	1.2	11	1																
27	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	36	1														
28	1.2D + 1.5L + 1.0Wl(2...	Yes	Y		3	1.2	1	1.5	23	1														
29	1.2D + 1.0W(270)	Yes	Y		3	1.2	12	1																
30	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	37	1														
31	1.2D + 1.5L + 1.0Wl(2...	Yes	Y		3	1.2	1	1.5	24	1														
32	1.2D + 1.0W(300)	Yes	Y		3	1.2	13	1																
33	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	38	1														
34	1.2D + 1.5L + 1.0Wl(3...	Yes	Y		3	1.2	1	1.5	25	1														
35	1.2D + 1.0W(330)	Yes	Y		3	1.2	14	1																
36	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	39	1														
37	1.2D + 1.5L + 1.0Wl(3...	Yes	Y		3	1.2	1	1.5	26	1														
38	1.2D + 1.0E(x) + 1.0E...	Yes	Y		3	1.2	40	1	42	1	1	1												
39	1.2D + 1.0E(y) + 1.0E...	Yes	Y		3	1.2	41	1	42	1	1	1												
40	1.2D - 1.0E(x) + 1.0E(...	Yes	Y		3	1.2	40	-1	42	1	1	1												
41	1.2D - 1.0E(y) + 1.0E(...	Yes	Y		3	1.2	41	-1	42	1	1	1												

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	...	LC	phi*P...	phi*P...	phi*M...	phi*M...	...	Eqn
1	SO2	HSS4X...	.236	3.333	16	.101	3.333	y	4	133.1...	139.5...	16.181	16.181	...	H1-1b
2	CR3	C3.38x2...	.163	0	34	.032	0	y	37	47.76	56.7	2.203	5.752	...	H1-1b
3	CR4	C3.38x2...	.160	0	10	.031	2.349	y	34	47.76	56.7	2.203	5.752	...	H1-1b
4	PL2	PL 6.5x...	.158	1.75	7	.094	.474	y	2	3.658	78.975	.617	8.359	...	H1-1b
5	CR6	C3.38x2...	.158	0	33	.026	2.349	y	21	47.76	56.7	2.203	5.752	...	H1-1b
6	CR5	C3.38x2...	.154	0	32	.024	2.349	y	9	47.76	56.7	2.203	5.752	...	H1-1b

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	...	LC	phi*P...	phi*P...	phi*M...	phi*M.....		Eqn
7	SO3	HSS4X...	.153	3.333	26	.036	3.333	z	23	133.1...	139.5...	16.181	16.181	...	H1-1b
8	CR2	C3.38x2...	.151	0	20	.024	2.349	y	9	47.76	56.7	2.203	5.752	...	H1-1b
9	CR1	C3.38x2...	.151	0	20	.023	2.349	y	33	47.76	56.7	2.203	5.752	...	H1-1b
10	MP ALPHA2	PIPE_2.0	.142	2.167	26	.040	2.167		26	15.37	42.228	2.46	2.46	...	H1-1b
11	SO1	HSS4X...	.142	3.333	26	.038	3.333	z	29	133.1...	139.5...	16.181	16.181	...	H1-1b
12	MP GAMMA2	PIPE_2.0	.140	2.167	2	.043	2.167		2	15.37	42.228	2.46	2.46	...	H1-1b
13	MP BETA2	PIPE_2.0	.140	2.167	2	.043	2.167		2	15.37	42.228	2.46	2.46	...	H1-1b
14	RAIL1	PIPE_2.0	.133	4	2	.102	7.667		23	15.37	42.228	2.46	2.46	...	H1-1b
15	MP ALPHA3	PIPE_2.0	.118	2.167	8	.042	5.75		2	15.37	42.228	2.46	2.46	...	H1-1b
16	MP ALPHA1	PIPE_2.0	.118	2.167	32	.041	5.75		2	15.37	42.228	2.46	2.46	...	H1-1b
17	RAIL3	PIPE_2.0	.115	4	26	.122	.333		5	15.37	42.228	2.46	2.46	...	H1-1b
18	MP GAMMA3	PIPE_2.0	.113	5.75	5	.038	2.167		5	15.37	42.228	2.46	2.46	...	H1-1b
19	MP BETA1	PIPE_2.0	.113	5.75	35	.038	2.167		35	15.37	42.228	2.46	2.46	...	H1-1b
20	RAIL2	PIPE_2.0	.112	4	14	.122	7.667		35	15.37	42.228	2.46	2.46	...	H1-1b
21	MP BETA3	PIPE_2.0	.107	5.75	29	.032	2.167		32	15.37	42.228	2.46	2.46	...	H1-1b
22	MP GAMMA1	PIPE_2.0	.107	5.75	11	.032	2.167		8	15.37	42.228	2.46	2.46	...	H1-1b
23	RAIL CON3	L6.6x4....	.104	0	20	.013	3.5	y	35	50.616	87.561	2.465	7.125	...	H2-1
24	RAIL CON2	L6.6x4....	.104	3.5	20	.013	0	y	5	50.616	87.561	2.465	7.125	...	H2-1
25	PL4	PL 2.37...	.101	.125	5	.162	0	y	36	38.257	38.475	.401	1.904	...	H1-1b
26	PL7	PL 2.37...	.101	.125	35	.162	0	y	6	38.257	38.475	.401	1.904	...	H1-1b
27	PL3	PL 6.5x...	.099	1.75	32	.094	3.026	y	2	3.658	78.975	.617	7.596	...	H1-1b
28	PL8	PL 2.37...	.094	.125	5	.150	0	y	30	38.257	38.475	.401	1.904	...	H1-1b
29	PL6	PL 2.37...	.094	.125	35	.156	0	y	13	38.257	38.475	.401	1.904	...	H1-1b
30	RAIL CON1	L6.6x4....	.092	0	32	.013	0	y	29	50.616	87.561	2.465	7.125	...	H2-1
31	PL9	PL 2.37...	.091	.125	11	.147	0	y	18	38.257	38.475	.401	1.904	...	H1-1b
32	PL5	PL 2.37...	.091	.125	29	.147	0	y	24	38.257	38.475	.401	1.904	...	H1-1b
33	PL1	PL 6.5x...	.084	1.75	23	.071	3.026	y	8	3.658	78.975	.617	7.694	...	H1-1b
34	FACE1	PIPE_3.0	.059	4	27	.035	2.667		8	54.629	85.698	7.555	7.555	...	H1-1b
35	FACE2	PIPE_3.0	.054	4	35	.033	5.333		8	54.629	85.698	7.555	7.555	...	H1-1b
36	FACE3	PIPE_3.0	.050	3.917	5	.033	2.667		32	54.629	85.698	7.555	7.555	...	H1-1b
37	GRAT SUP5	L2x2x4	.047	2.275	5	.009	2.275	z	30	29.528	42.48	.96	2.19	...	H2-1
38	GRAT SUP4	L2x2x4	.047	2.275	35	.009	2.275	y	12	29.528	42.48	.96	2.19	...	H2-1
39	GRAT SUP3	L2x2x4	.047	0	8	.013	2.275	z	4	29.528	42.48	.96	2.19	...	H2-1
40	GRAT SUP6	L2x2x4	.047	0	32	.008	0	z	11	29.528	42.48	.96	2.19	...	H2-1
41	GRAT SUP2	L2x2x4	.042	0	2	.008	0	z	35	29.528	42.48	.96	2.19	...	H2-1
42	GRAT SUP	L2x2x4	.042	0	2	.008	0	y	5	29.528	42.48	.96	2.19	...	H2-1

APPENDIX D

Additional Calculations

POD Job #	**21-113671**
Site Number	**823529**
Site Name	**CT038/Easylyme/ I-95/ X72**

Calculations Based on *TIA-222-H*

Reactions from RISA-3D

Moment	3.74	ft-kip
Axial	0.146	kips
Shear	1.525	kips

Capacities

Bolts	*2.6%*
Flange Plate	*24.6%*

Bolt Information

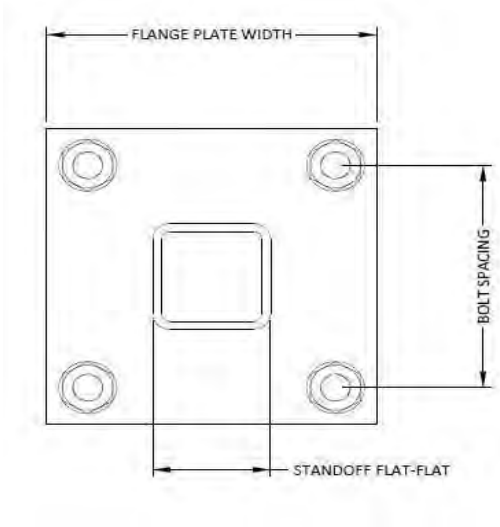
Grade	A325	
Threads in Shear Plane	Included	
Diameter	0.625	in.
Bolt Spacing	7	in.
Number of Rods	4	

Flange Plate Inforation

Width	9	in.
Thickness	0.625	in.
Grade	A572-50	

Standoff Information

Standoff Member	HSS	
Flat-Flat	4	in.
Thickness	0.25	in.



Bolt Calculations

ϕ	0.75	
A_{nt}	0.226	in^2
A_b	0.307	in^2
Fu	120	ksi
ϕR_{nV}	13.81	kips
ϕR_{nt}	20.34	kips
V	0.38	kips
F	3.24	kips
Capacity	2.6%	

Flange Plate Calculations

ϕ	0.9	
Fy	50	ksi
t_{min}	0.19	in
Z	0.9	in^3
ϕM_n	39.6	in-kip
M_u	9.7	in-kip
Capacity	24.6%	

APPENDIX E

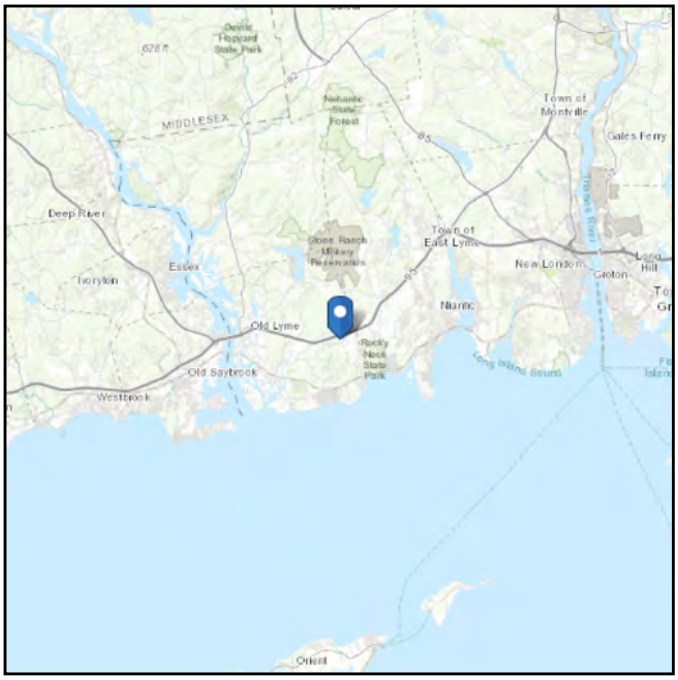
Design Criteria

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Elevation: 0 ft (NAVD 88)
Latitude: 41.317572
Longitude: -72.269964



Wind

Results:

Wind Speed:	133 Vmph
10-year MRI	79 Vmph
25-year MRI	89 Vmph
50-year MRI	98 Vmph
100-year MRI	108 Vmph

Data Accessed: Tue Nov 02 2021
Date Source: ASCE/SEI 7-10, Fig. 26.5-1A and Figs. CC-1–CC-4, and Section 26.5.2, incorporating errata of March 12, 2014

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

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

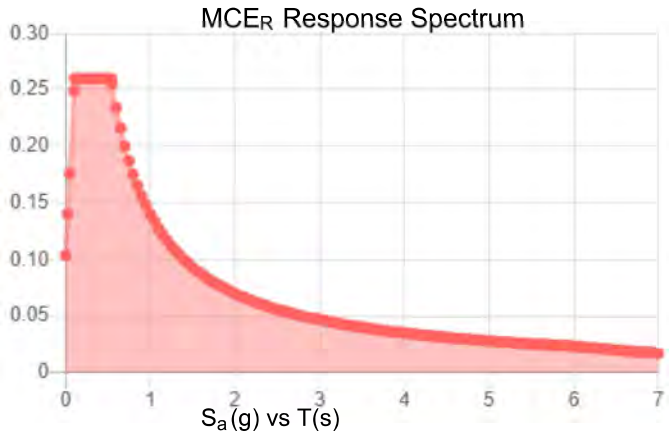
Seismic

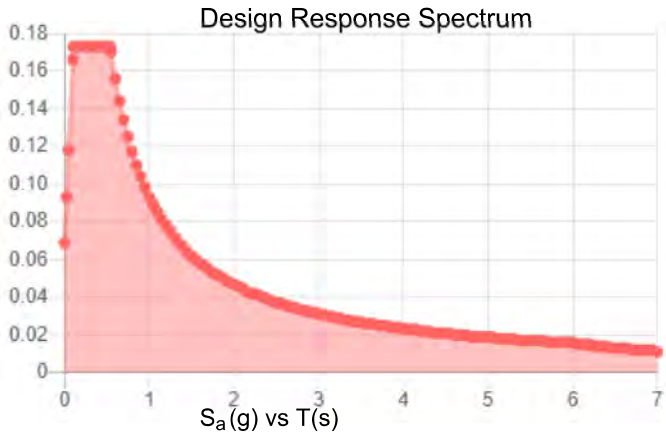
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.163	S_{DS} :	0.173
S_1 :	0.058	S_{D1} :	0.093
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.081
S_{MS} :	0.26	PGA_M :	0.13
S_{M1} :	0.14	F_{PGA} :	1.6
		I_e :	1

Seismic Design Category B





Data Accessed: Tue Nov 02 2021

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

Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	15 F
Gust Speed:	50 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Tue Nov 02 2021

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

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

APPENDIX F

Mount Specification Sheets

NOTES:

1.0 GENERAL
- 1.1 ALL METRIC DIMENSIONS ARE IN BRACKETS
- 1.2 FOR PATENTS, SEE WWW.CS-PAT.COM

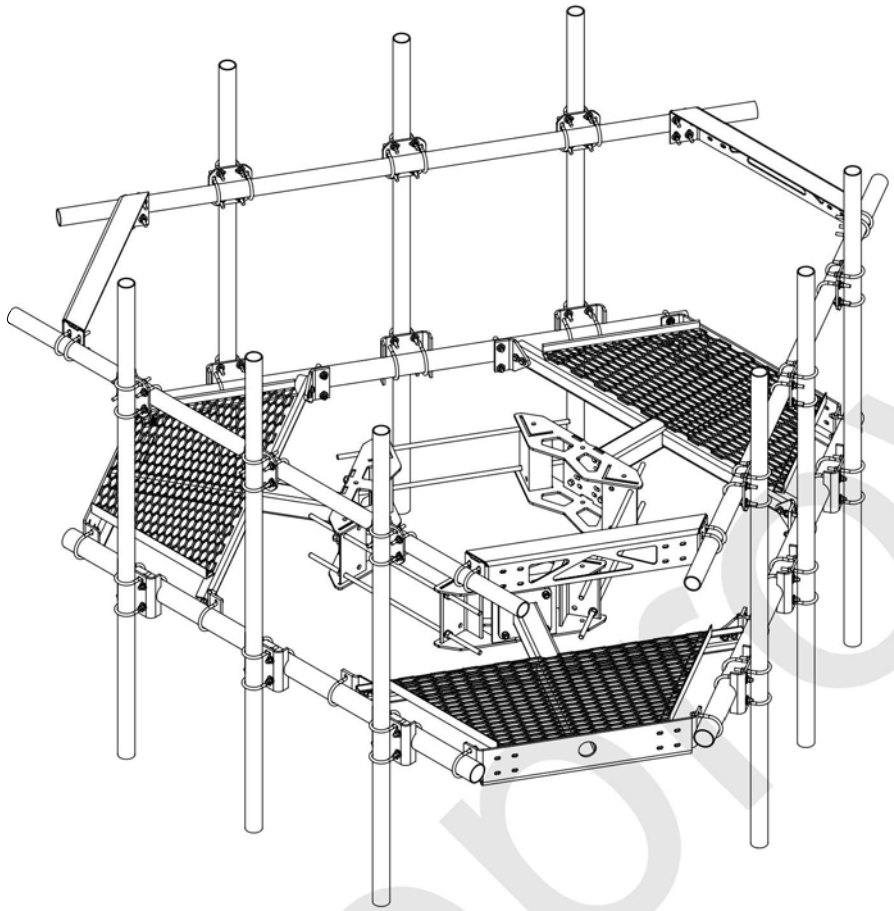
2.0 DESIGN NOTES
- 2.1 TORQUE U-BOLTS TO 44 FT-LBS

3.0 MANUFACTURING/SPECIAL REQUIREMENTS

4.0 TEST

5.0 PACKAGING

REVISIONS				
REV.	ECN	DESCRIPTION	BY	DATE
A	10272PC	INITIAL RELEASE	HDAI	03/08/2021



PATENT PENDING

COMMSCOPE, INC. OF NORTH CAROLINA

TOLERANCES
1 PLACE .X ± .25 | 3 PLACE .XXX ± 0.06
2 PLACE .XX ± 0.12 | ANGLES ± 2°

SAP MATERIAL MASTER: MC-PK8-DSH

FINISH: GALV A123

MATERIAL: A500, A1011/A1018

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES INTERPRET PER ANSI Y 14.5M-1994

	NAME	DATE
CE	MRC	02/17/20
RW	ROGHANSON	03/16/2021
AD	BCROSS	03/17/2021
RE	FA1024	02/27/2020

ECN 10272PC

TITLE: **LOW PROFILE PLATFORM FACE**

SCALE: 1:32

DOCUMENT NO.: MC-PK8-DSH

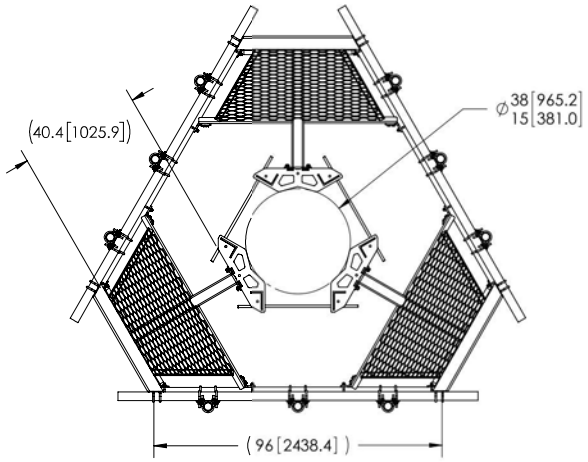
DENSITY	lbs/in³
MASS	lbs
VOLUME	in³
SURFACE AREA	in²
HEIGHT	96"
LENGTH	46"
WIDTH	29"

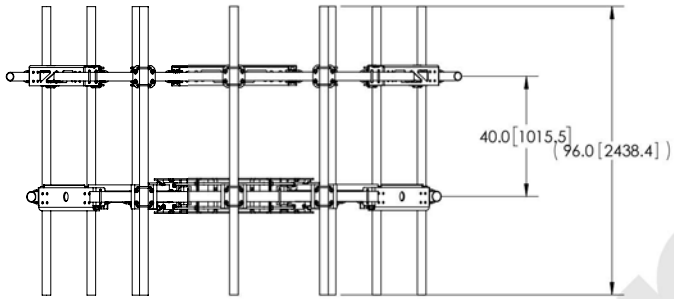
SIZE: C

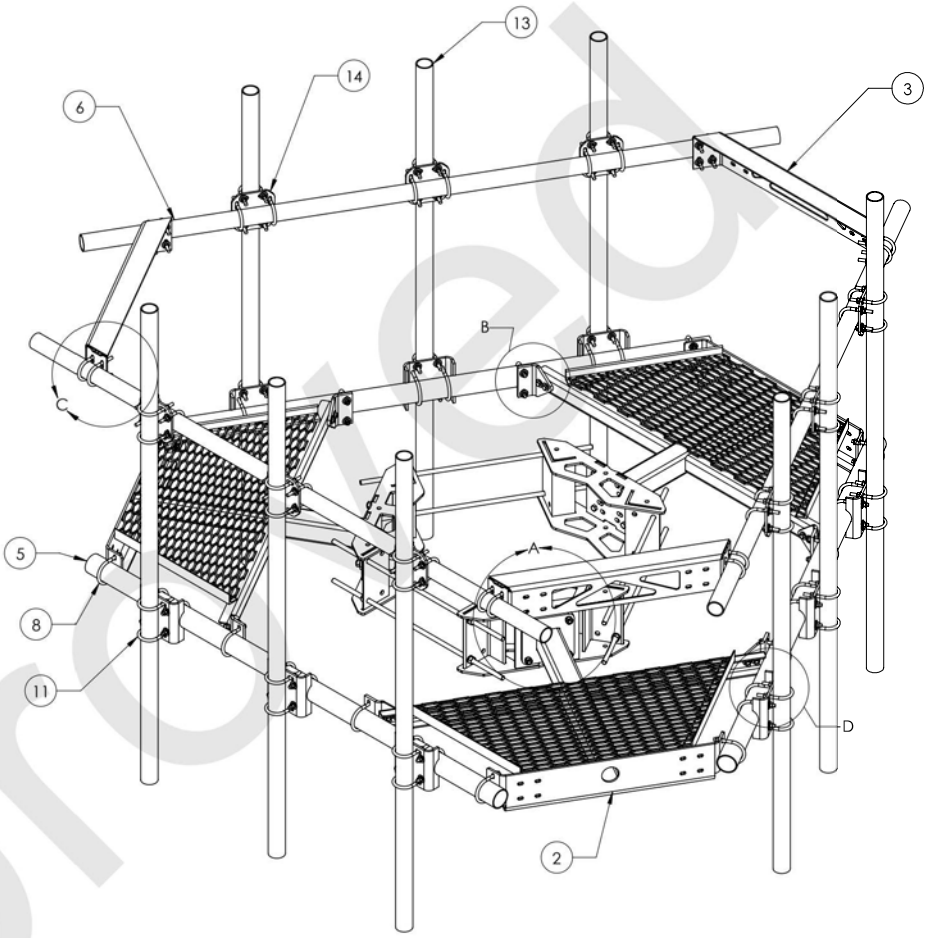
Auth Group: INSL

MODEL			DRAWING			SHEET
VERSION	STATUS	REVISION	VERSION	STATUS	REVISION	
01	AD		00	AD	A	1 OF 3

NOTES:







ITEM	PART NO.	DESCRIPTION	QTY.
1	MC-RM1550-3	12" - 50" OD RINGMOUNT	1
2	MTC300602	SECTOR WELDMENT FOR SNUB NOSE PLATFORM	3
3	MT195801	Corner Weldment Snub Nose Handrail	3
4	GB-0520A	5/8" X 2" GALV BOLT KIT (A325)	12
5	MT54796	3.50" OD X 96" GALV PIPE	3
6	MT546120	2.875" O.D. X 120" PIPE	3
7	GWF-04	1/2" GALV FLAT WASHER	12
8	GUB-4355	1/2" X 3-5/8" X 5" GALV U-BOLT	12
9	MTC300618	MOUNTING PLATE FOR MT-196	6
10	GB-04205	1/2" X 2" GALV BOLT KIT	12
11	MT-219M-H	3.5" OD X 2-7/8" OD Clamp Bracket Assembly	9
12	GUB-4352	1/2" X 3" X 5-1/4" GALV U-BOLT	12
13	MT54696	Ø 2.875" O.D. X 96 PIPE	9
14	XP-2525	CROSSOVER PLATE KIT, 2-7/8 OD X 2-7/8 OD	9

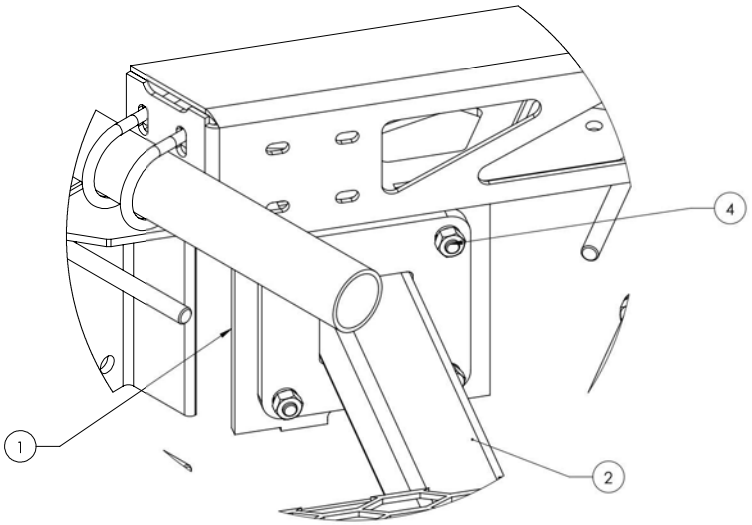
COMMSCOPE, INC. OF NORTH CAROLINA

TITLE: LOW PROFILE PLATFORM FACE

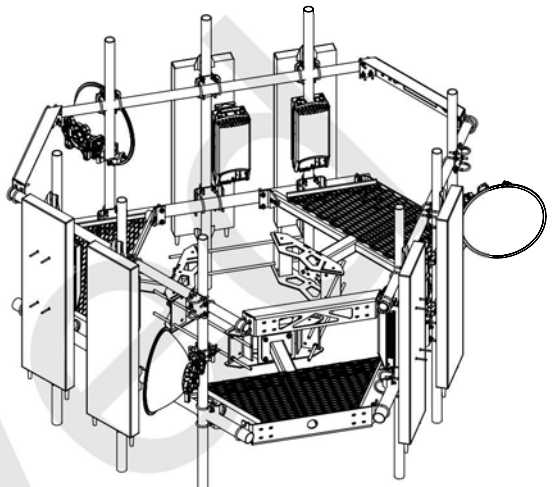
SIZE	SCALE	DOCUMENT NO.
C	1:32	MC-PK8-DSH

DRAWING			SHEET
VERSION	STATUS	REVISION	
00	AD	A	

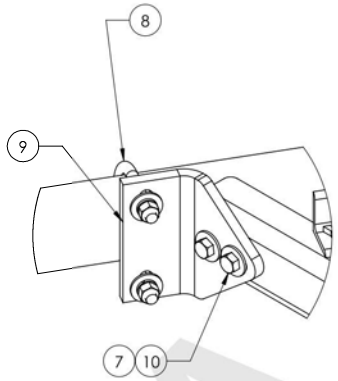
NOTES:



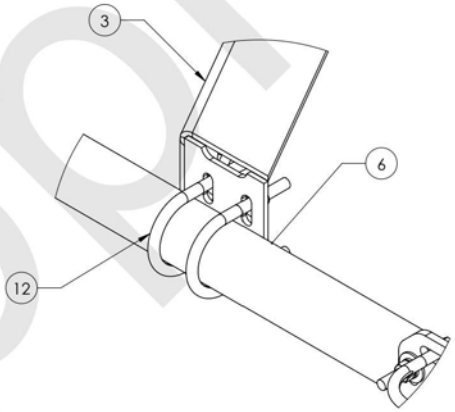
DETAIL A
SCALE 1 : 4



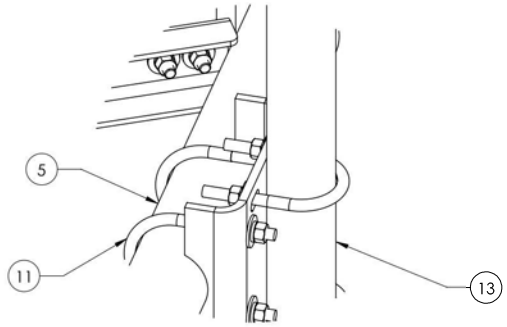
WITH ANTENNAS



DETAIL B
SCALE 1 : 4



DETAIL C
SCALE 1 : 4



DETAIL D
SCALE 1 : 4

COMMSCOPE, INC. OF NORTH CAROLINA			
TITLE: LOW PROFILE PLATFORM FACE			
SIZE: C	SCALE: 1:24	DOCUMENT NO.: MC-PK8-DSH	
		DRAWING: VERSION 00 / STATUS AD / REVISION A	SHEET: 3 OF 3

ATTACHMENT 6

EBI Consulting

environmental | engineering | due diligence

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

Dish Wireless Existing Facility

Site ID: BOBOS00034A

823529
38 Hatchets Hill Road
Old Lyme, Connecticut 06371

November 18, 2021

EBI Project Number: 6221007187

Site Compliance Summary	
Compliance Status:	**COMPLIANT**
Site total MPE% of FCC general population allowable limit:	**16.00%**

November 18, 2021

Dish Wireless

Emissions Analysis for Site: BOBOS00034A - 823529

EBI Consulting was directed to analyze the proposed Dish Wireless facility located at **38 Hatchets Hill Road** in **Old Lyme, Connecticut** for the purpose of determining whether the emissions from the Proposed Dish Wireless Antenna Installation located on this property are within specified federal limits.

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

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

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

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

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed Dish Wireless Wireless antenna facility located at 38 Hatchets Hill Road in Old Lyme, Connecticut using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since Dish Wireless is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 20 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was focused at the base of the tower. For this report, the sample point is the top of a 6-foot person standing at the base of the tower.

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

1) 4 n71 channels (600 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

2) 4 n70 channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.

3) 4 n66 channels (AWS Band - 2190 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.

4) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.

5) For the following calculations, the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 20 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used in this direction. This value is a very conservative

estimate as gain reductions for these particular antennas are typically much higher in this direction.

6) The antennas used in this modeling are the JMA MX08FRO665-20 for the 600 MHz / 1900 MHz / 2190 MHz channel(s) in Sector A, the JMA MX08FRO665-20 for the 600 MHz / 1900 MHz / 2190 MHz channel(s) in Sector B, the JMA MX08FRO665-20 for the 600 MHz / 1900 MHz / 2190 MHz channel(s) in Sector C. This is based on feedback from the carrier with regard to anticipated antenna selection. All Antenna gain values and associated transmit power levels are shown in the Site Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 20 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

7) The antenna mounting height centerline of the proposed antennas is 155 feet above ground level (AGL).

8) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

9) All calculations were done with respect to uncontrolled / general population threshold limits.

Dish Wireless Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	JMA MX08FRO665-20	Make / Model:	JMA MX08FRO665-20	Make / Model:	JMA MX08FRO665-20
Frequency Bands:	600 MHz / 1900 MHz / 2190 MHz	Frequency Bands:	600 MHz / 1900 MHz / 2190 MHz	Frequency Bands:	600 MHz / 1900 MHz / 2190 MHz
Gain:	17.45 dBd / 22.65 dBd / 22.65 dBd	Gain:	17.45 dBd / 22.65 dBd / 22.65 dBd	Gain:	17.45 dBd / 22.65 dBd / 22.65 dBd
Height (AGL):	155 feet	Height (AGL):	155 feet	Height (AGL):	155 feet
Channel Count:	12	Channel Count:	12	Channel Count:	12
Total TX Power (W):	440 Watts	Total TX Power (W):	440 Watts	Total TX Power (W):	440 Watts
ERP (W):	5,236.31	ERP (W):	5,236.31	ERP (W):	5,236.31
Antenna A1 MPE %:	**1.07%**	Antenna B1 MPE %:	**1.07%**	Antenna C1 MPE %:	**1.07%**

Site Composite MPE %	
Carrier	**MPE %**
Dish Wireless (Max at Sector A):	1.07%
AT&T	2.51%
Verizon	6.28%
T-Mobile	6.14%
Site Total MPE % :	16.00%

Dish Wireless MPE % Per Sector	
Dish Wireless Sector A Total:	1.07%
Dish Wireless Sector B Total:	1.07%
Dish Wireless Sector C Total:	1.07%
Site Total MPE % :	16.00%

Dish Wireless Maximum MPE Power Values (Sector A)

Dish Wireless Frequency Band / Technology (Sector A)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density (μW/cm²)	Frequency (MHz)	Allowable MPE (μW/cm²)	Calculated % MPE
Dish Wireless 600 MHz n71	4	223.68	155.0	1.45	600 MHz n71	400	0.36%
Dish Wireless 1900 MHz n70	4	542.70	155.0	3.52	1900 MHz n70	1000	0.35%
Dish Wireless 2190 MHz n66	4	542.70	155.0	3.52	2190 MHz n66	1000	0.35%
						Total:	**1.07%**

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

Summary

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

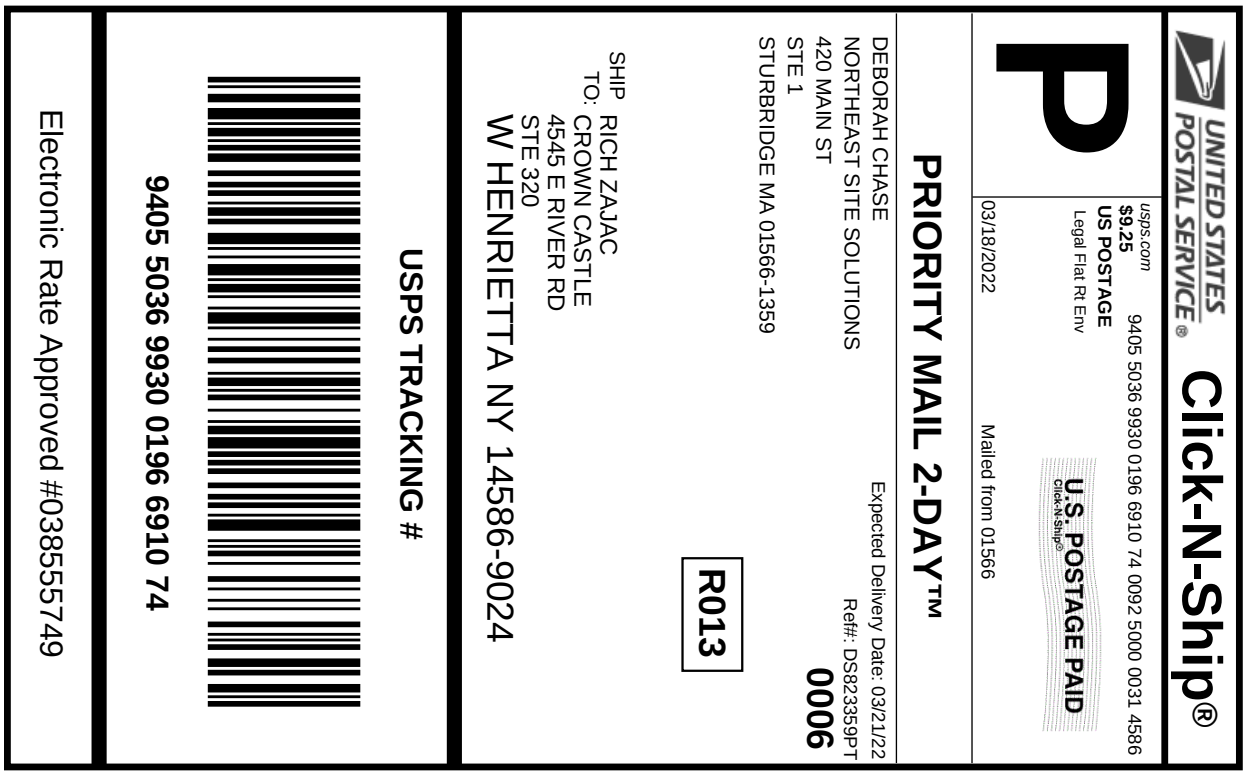
The anticipated maximum composite contributions from the Dish Wireless facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

Dish Wireless Sector	Power Density Value (%)
Sector A:	1.07%
Sector B:	1.07%
Sector C:	1.07%
Dish Wireless Maximum MPE % (Sector A):	1.07%
Site Total:	16.00%
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **16.00%** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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

ATTACHMENT 7



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9405 5036 9930 0196 6910 74

Trans. #:	559144987
Print Date:	03/18/2022
Ship Date:	03/18/2022
Expected Delivery Date:	03/21/2022

Priority Mail® Postage:	**$9.25**
Total:	**$9.25**

From: DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

Ref#: DS823359PT

To: RICH ZAJAC
CROWN CASTLE
4545 E RIVER RD
STE 320
W HENRIETTA NY 14586-9024

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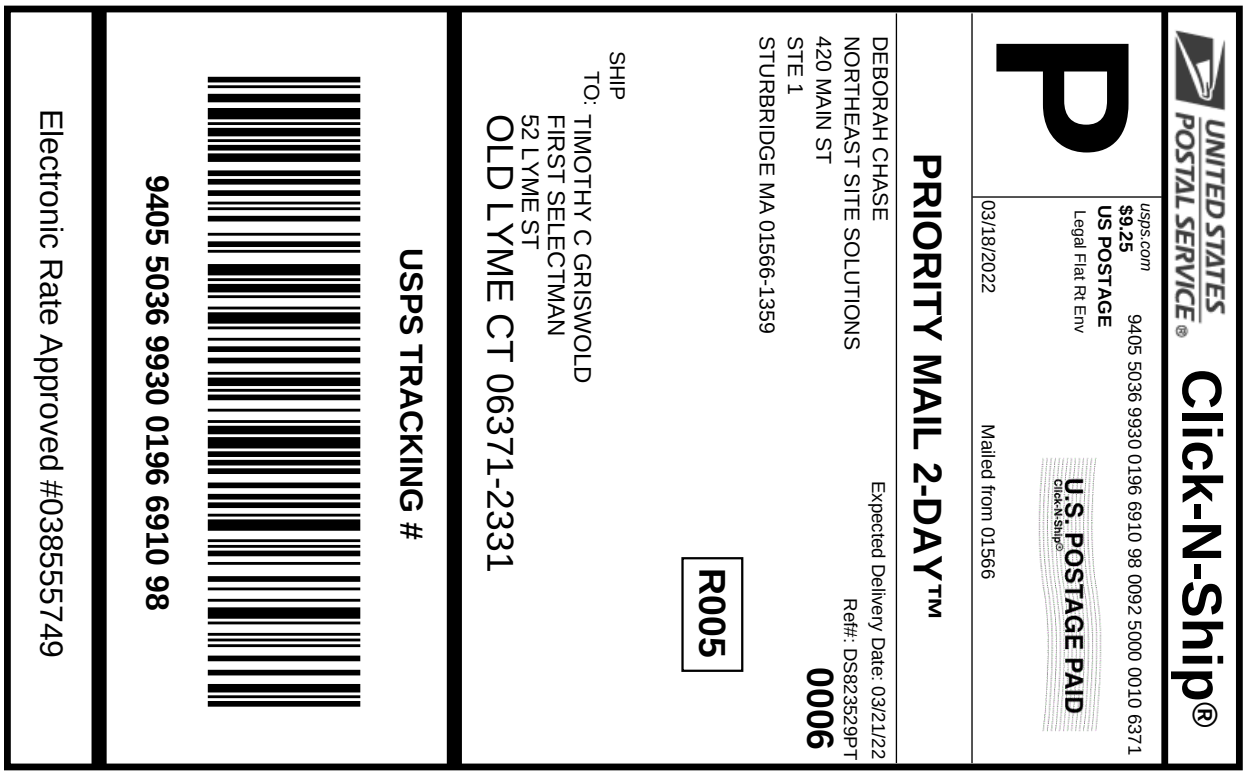

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Ship Date:	03/18/2022
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Total:	**$9.25**

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NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

Ref#: DS823529PT

To: TIMOTHY C GRISWOLD
FIRST SELECTMAN
52 LYME ST
OLD LYME CT 06371-2331

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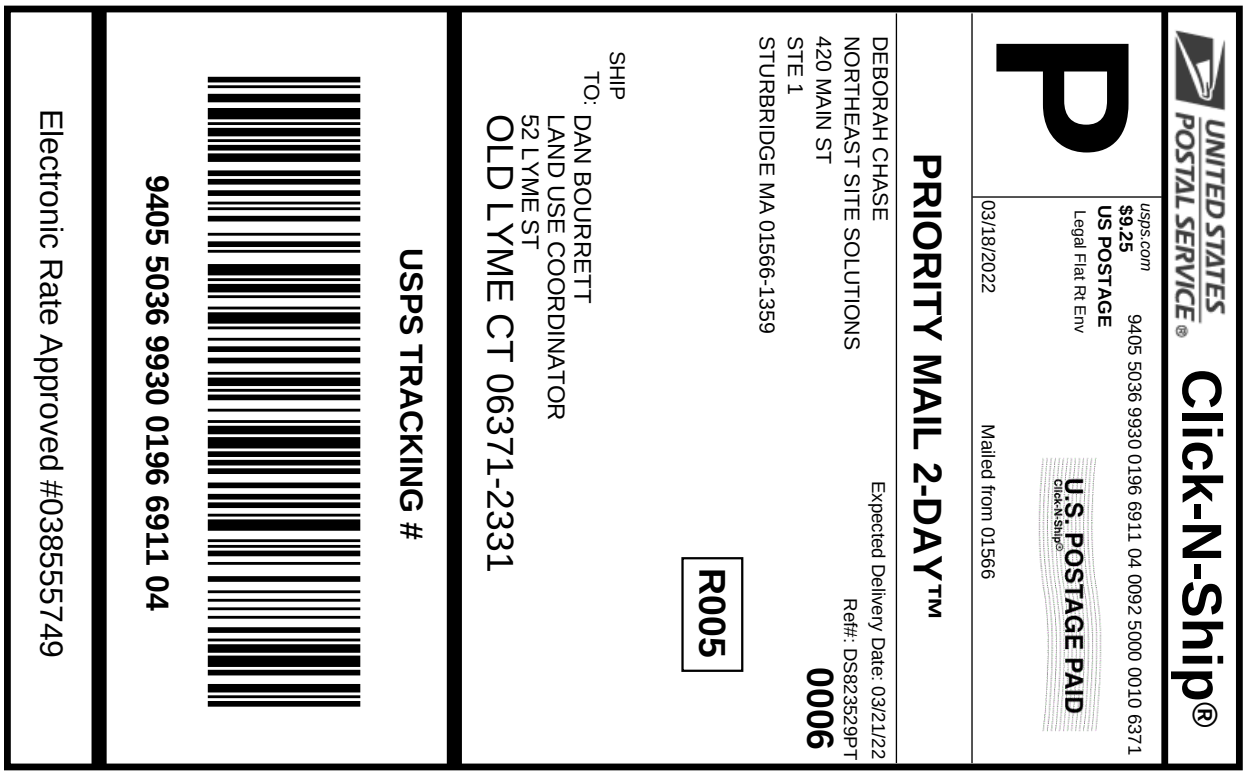

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Trans. #:	559144987
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Ship Date:	03/18/2022
Expected Delivery Date:	03/21/2022

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Total:	**$9.25**

From: DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

Ref#: DS823529PT

To: DAN BOURRETT
LAND USE COORDINATOR
52 LYME ST
OLD LYME CT 06371-2331

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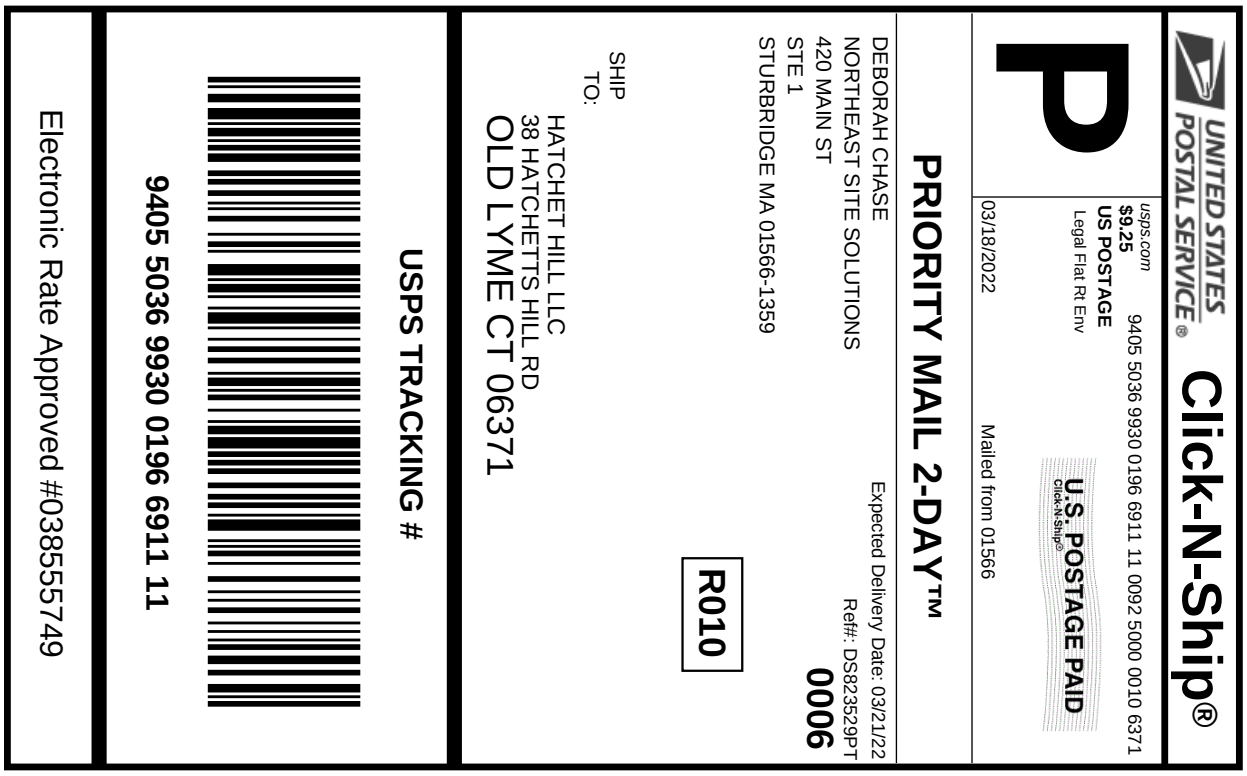

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Trans. #:	559144987
Print Date:	03/18/2022
Ship Date:	03/18/2022
Expected Delivery Date:	03/21/2022

Priority Mail® Postage:	**$9.25**
Total:	**$9.25**

From: DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

Ref#: DS823529PT

To: HATCHET HILL LLC
38 HATCHETTS HILL RD
OLD LYME CT 06371

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823529 Crown Dish

UNITED STATES POSTAL SERVICE.

FARMINGTON
210 MAIN ST
FARMINGTON, CT 06032-9998
(800)275-8777

03/22/2022 04:17 PM

Product	Qty	Unit Price	Price
Prepaid Mail West Henrietta, NY 14586 Weight: 1 lb 0.80 oz Acceptance Date: Tue 03/22/2022 Tracking #: 9405 5036 9930 0196 6910 74	1		$0.00
Prepaid Mail Old Lyme, CT 06371 Weight: 1 lb 0.80 oz Acceptance Date: Tue 03/22/2022 Tracking #: 9405 5036 9930 0196 6910 98	1		$0.00
Prepaid Mail Old Lyme, CT 06371 Weight: 1 lb 0.70 oz Acceptance Date: Tue 03/22/2022 Tracking #: 9405 5036 9930 0196 6911 04	1		$0.00
Prepaid Mail Old Lyme, CT 06371 Weight: 1 lb 0.70 oz Acceptance Date: Tue 03/22/2022 Tracking #: 9405 5036 9930 0196 6911 11	1		$0.00
Grand Total:			$0.00

****
Every household in the U.S. is now

CERTIFICATION OF SERVICE

I hereby certify that on the 18th day of March 2022, DISH Wireless, LLC provided notice of its intent to file a Petition for a declaratory ruling that a Certificate of Environmental Compatibility and Public Need is not required for the modification of a wireless telecommunications facility at 36 Hatchetts Hill Road in Old Lyme, Connecticut, to the following:

Abutters

GOUVNA GROUP LLC
107 BROCK HILLS RD
GRAFTON, NH 03240

PROSPECT TRANSPORTATION OF NEW ENGLAND INC
630 INDUSTRIAL RD
CARLSTADT, NJ 07072

OLD LYME LAND TRUST INC
PO BOX 163
OLD LYME, CT 06371

TOWN OF OLD LYME
OLD LYME MEMORIAL HALL
52 LYME STREET
OLD LYME, CT 06371

B M J INC
PO BOX 574
WESTBROOK, CT 06498

Owner

HATCHETTS HILL LLC
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

Respectfully Submitted,

Victoria Masse
Northeast Site Solutions
420 Main Street #2
Sturbridge, MA 01566

NORTHEAST SITE SOLUTIONS, LLC
1053 FARMINGTON AVE. STE G
FARMINGTON, CT 06032

WEBSTER BANK
51-7010/2111

0406

03/21/2022

PAY TO THE ORDER OF Connecticut Siting Council

$ *625.00

EXACTLY SIX HUNDRED TWENTY-FIVE DOLLARS DOLLARS

Connecticut Siting Council
10 Franklin Square
New Britain CT 06051

MEMO

AUTHORIZED SIGNATURE

⑈000406⑈ ⑆211170101⑆10 00114890921⑈

NORTHEAST SITE SOLUTIONS, LLC

0406

Check#: 406 **Date:** 03/21/2022 **Vendor#:** 10023 Connecticut Siting Council **Check Total:** *625.00

Invoice#	*Invoice Date*	*Job/Description*	*Balance*	*Retain*	*Discount*	*This Check*
823529	03/21/2022	121 Crown Dish	625.00			625.00

NORTHEAST SITE SOLUTIONS, LLC

0406

Check#: 406 **Date:** 03/21/2022 **Vendor#:** 10023 Connecticut Siting Council **Check Total:** *625.00

Invoice#	*Invoice Date*	*Job/Description*	*Balance*	*Retain*	*Discount*	*This Check*
823529	03/21/2022	121 Crown Dish	625.00			625.00

March 18, 2022

VIA USPS CERTIFIED MAIL/
RETURN RECEIPT REQUESTED

HATCHETTS HILL LLC
38 HATCHETTS HILL ROAD
OLD LYME, CT 06371

RE: Proposed Modification to Existing Wireless Telecommunications Facility at 36 Hatchetts Hill Road, Old Lyme, Connecticut

To Whom It May Concern:

I am writing to you on behalf of DISH Wireless, LLC ("DISH"). DISH intends to file with the Connecticut Siting Council ("Council") a petition for declaratory ruling ("Petition") that a Certificate of Environmental Compatibility and Public Need is not required.

The Petition will provide details of the Existing Facility modification and explain why it will have no significant adverse environmental effect.

This letter serves as notice to you as an abutting property owner pursuant to § 16-50j-40 of the Regulations of Connecticut State Agencies. DISH will file the Petition on or about March 18, 2022 and will request that the Council place the Petition on some future agenda.

You may review the Petition at the office of the Council, which is located at Ten Franklin Square, New Britain, Connecticut, 06051, or at the Office of the Town Clerk at the Old Lyme Town Hall. All inquiries should be addressed to Council or to the undersigned.

Sincerely,

Victoria Masse
Northeast Site Solutions
420 Main Street #2
Sturbridge, MA 01566

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