Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts
and New York

June 23, 2021

Via Electronic Mail

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

Re: **Notice of Exempt Modification – Facility Modification**
60 Rice Lane, Beacon Falls, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains an existing wireless telecommunications facility at the above-referenced property address (the "Property"). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The tower was approved by the Town of Beacon Falls ("Town") in December 1999. Cellco's shared use of the tower was approved by the Council in 2009 (Petition No. 911). A copy of the Town's tower approval and Cellco's Petition No. 911 Staff Report are included in Attachment 1.

Cellco now intends to modify its facility by replacing nine (9) existing antennas with three (3) new Samsung MT6407-77A antennas and six (6) JAHH-65B-R3B antennas and replacing six (6) remote radio heads ("RRHs") with six (6) new RRHs all on Cellco's existing antenna platform. A set of project plans showing Cellco's proposed facility modifications and new antennas and RRHs specifications are included in Attachment 2.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the Beacon Falls Chief Elected Official and Land Use Officer.

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

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's replacement antennas will be installed on an existing antenna platform.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

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

4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A Cumulative General Power Density table for Cellco's modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.

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

6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna platform, with certain modifications, can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4. Also included in Attachment 4 is a separate letter prepared by the consulting engineer responsible for the preparation of the SA verifying that the antenna model described in the SA as a VZS01 Antenna, is the Samsung 64T64R (MT6407-77A) model antenna that will be installed on the tower.

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 6.

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:

Gerard Smith, First Selectman for the Town of Beacon Falls
Keith Rosenfeld, Beacon Falls Town Planner
Edward Charles, Property Owner
Aleksey Tyurin

ATTACHMENT 1

TOWN OF BEACON FALLS
Planning & Zoning Commission
10 Maple Avenue
Beacon Falls CT 06403

DEC 20 1999
3:40 P.M.
Paula D'Blair

Regular Meeting
December 16, 1999
Minutes

Draft Minutes Subject to Modification Prior to Approval

I. Call to Order
Chairman Harvey called the Regular Meeting of the Beacon Falls Planning and Zoning Commission to order at 7:30 PM in the Public Meeting Room.

Chairman Harvey recessed the Regular Meeting at 7:31 PM to continue the Public Hearing.

Present: Chairman Mary Harvey, Commissioners Evan Betts, David Moran, Donald Perkins and Lynn Sirowich

Absent: Commissioners David D'Amico, Ellen Schultz and William Ambromaitis.

Chairman Harvey reconvened the Regular Meeting at 7:55 PM

II. Approval of Minutes
November 18, 1999 Public Hearing-Application P-99-86, Frank Kerski
Correction: Page 1, Commissioner Sirowich was not present at the meeting.

Motion: Commissioner Moran made a motion seconded by Commissioner Perkins to approve as Submitted the revised minutes of the November 18, 1999 Public Hearing. All voted in favor and the motion was carried 5-0.

November 18, 1999 Regular Meeting
Correction: Page 1, Section II should reflect that the motion was carried 5-0-1.

Motion: Commissioner Perkins made a motion seconded by Commissioner Betts to approve as submitted the revised minutes of the November 18, 1999 meeting. All voted in favor and the motion was carried 5-0.

III. Correspondence and Payment of Bills
Correspondence and Payment of Bills was tabled until the January 21, 1999 meeting.

IV. Comments from the Public
There were no comments from the Public

V. Zoning Enforcement Officer's Report
ZEO Tarascio was not present and therefore no report was submitted.

VI. Town Engineer's Report

Beacon Falls

SITE # 10125-003
FILE TYPE Zoning
SECTION Zoning

Town Engineer Sudimick distributed his report dated December 16, 1999 and reviewed activity pertaining to the Stop & Shop Development

I. Town Engineer's Report (Continued)

Motion: Commissioner Betts made a motion seconded by Commission Sirowich to approve and include the Town Engineer's Report in the minutes. All voted in favor and the motion carried 5-0.

II. Gravel
No Activity, no discussion

Motion: Commissioner Perkins made a motion to add to the agenda under Old Business the Sprint Application as #5 and Doug Crossley as #6. Seconded by Commissioner Betts.

III. Old Business:

1. Application P-94-30, Hockanum Glen Subdivision (Monthly Report)
No one was present representing the applicant. Town Engineer Sudimick asked if the Planning and Zoning Commission had ever sent correspondence to the First Selectman's Office regarding the acceptance of the road in Hockanum Glen. Commissioner Harvey said she would look into the matter.

2. Application P-98-67, Haley Ridge Subdivision, James Martin (Monthly Report)
Mr. Martin stated that the Driveway Maintenance & Easement Agreements were filed today at the Town Hall for Lots 19, 20, 21 & 22.
Mr. Martin requested his bond be reduced to 10%. He was referred to the Town Engineer's Report which notes items to be completed prior to approval of a reduction in the bond.

3. Application P-99-85, Rebecca Betkowski, Proposed Child Development Center
Discussion by the Commissioners

Motion: Commissioner Perkins made a motion seconded by Commissioner Sirowich to table this application to the January 21, 1999 Regular Meeting to allow the members of the Planning & Zoning Commission to investigate the concerns of the Beacon Street residents.

4. Application P-99-83, C.B.L., Inc., Wood Ridge Section 2 Subdivision.
Tabled until the January 21, 1999 Regular Meeting.

5. Sprint PCS
Steven T. Carty, representing Sprint as the Engineer for the project submitted revised plans that have addressed concerns of Town Engineer Sudimick.

Motion: Commissioner Sirowich made a motion seconded by Commission Betts that the plans as submitted be approved with conditions that the Easement must be filed in the Beacon Falls Land Records and that a Performance Bond be set. All voted in favor and the motion was carried 5-0.

6. Mr. Doug Crossley, represented by Attorney Mark Malloy. Mr. Malley presented a lot line revision for a parcel of land on Bethany Road. Mr. Crossley currently owns three parcel of land which are adjacent to one another. Two of the lots are on Bethany Road and are each 75 feet wide by 150 feet deep. These two parcels are one behind the other so that there is only 75foot frontage on

SPRINT ASSIGNED LEASE TO SBA - 12/99

DEC 2 2 '99

Beacon Falls
CT02049-S

Zoning

November 28, 1999

Ted Smith
Chief
Beacon Hose Co. #1
35 North Main St.
Beacon Falls, CT 06403

RE: 10125-003/Beacon Falls (11/23/99 meeting)

Dear Ted,

As per our meeting last Tuesday, the following is a summary of the issues we discussed:

1) SBA Inc. will provide space on our monopole tower for your **12ft. whip antenna** at **80ft. AGL** (Above Ground Level). Rent for this space on the tower will be $0 per month.

2) SBA Inc. will install your antenna and the approx. 6ft. side mount on to our tower at no cost to Beacon Hose Co. #1 .

3) SBA Inc. will pay for your 12ft. whip antenna and coax cable, which the total shall not exceed $1000.

4) Beacon Hose Co. #1 will be responsible for : a) equipment shed b) emergency power* c) utilities to power your antenna.

- I understand that emergency power is a concern for you. However, there probably will not be a generator at the site for some time.
- Please mail me back the completed "Collocation Application" as soon as possible so we can begin to make the appropriate arrangements. Thank you for your cooperation. SBA Inc. looks forward to building a relationship with Beacon Hose Co. #1.
- I look forward to seeing you again at the **Dec. 16, 1999** Beacon Falls Zoning Commission meeting .

Sincerely yours,

Joe Tassone
Project Manager
SBA, Inc.

cc. Julie Reibold (NE Communications)
Randy Freschlin (SBA)
Steven Carty (SEA Consultants)
Charlie Edwards (Land Owner)
Paul McGinn (SBA)

JFT:jft

Petition No. 911
Cellco Partnership d/b/a Verizon Wireless
Beacon Falls, Connecticut
Staff Report
August 27, 2009

On July 7, 2009, the Connecticut Siting Council (Council) received a petition from Cellco Partnership LLC d/b/a Verizon Wireless (Verizon) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for a ten-foot extension of an existing 150-foot monopole telecommunications tower at 60 Rice Lane in Beacon Falls, Connecticut. Council member Ed Wilensky and staff member David Martin visited the property on July 31, 2009 to review the proposal. Attorney Joey Lee Miranda represented Verizon at the field review.

The existing tower is owned by SBA Communications. There are currently 3 carriers on the tower: Sprint at a centerline height of 152 feet, T-Mobile at 143.5 feet, and AT&T at 134.5 feet. The Town of Beacon Falls also has emergency service antennas at the 86-foot level. Verizon wants to go on this tower in order to fill existing coverage gaps on portions of Routes 63, 42 and 8, as well as local roads in northeast Beacon Falls, south Naugatuck, and northwest Bethany. Verizon investigated putting its antennas at the 124-foot level of the tower but found it could not achieve its coverage objectives at this height. With its antennas at a centerline height of 162 feet, Verizon could cover the gaps it could not reach at 124 feet.

In order to successfully cover its target area, Verizon seeks to add ten feet to the existing tower and install a platform with 15 antennas at a centerline height of 162 feet. The structural analysis of this proposed extension concludes that the tower's shaft needs reinforcement and base transfer stiffeners to support the additional height and antennas. The addition of Verizon's antennas would bring the tower's aggregate power density to 29.87% of the FCC's Maximum Permissible Emission.

The existing tower is located deep in the woods near the end of a long gravel road. The topography and thick growth of mature, deciduous trees around the site minimize near-field views of the tower. Other than from a very, short distance on Rice Lane Extension, the tower is scarcely visible from the nearest residential streets. In fact, the tower's lack of visibility made it difficult for the representatives of both the Council and Verizon to find it. There are neighborhoods farther away from the tower that have far-field views of the tower. From these areas, the tower rises noticeably above the tree line, but the distance of the views lessens the tower's presence in the landscape.

Prior to submitting its petition to the Council, Verizon sent notices of its plans to abutting property owners. Neither Verizon nor the Council received any adverse comments regarding this proposal.

ATTACHMENT 2

WIRELESS COMMUNICATIONS FACILITY

BETHANY WEST CT
60 RICE LANE
BEACON FALLS, CT 06403

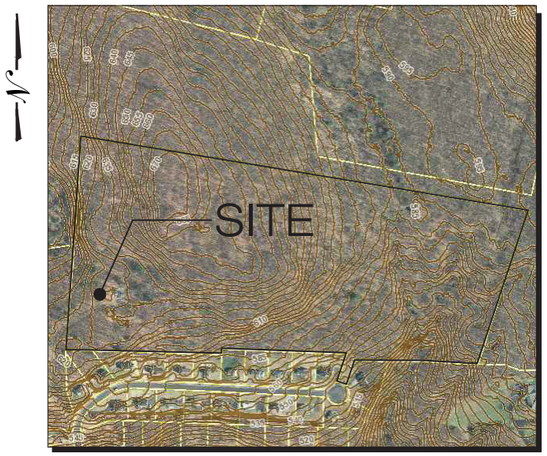
DRAWING INDEX

SITE DIRECTIONS

START: 20 ALEXANDER DRIVE
WALLINGFORD, CONNECTICUT 06492

END: 60 RICE LANE
BEACON FALLS, CT 06403

1.	HEAD SOUTH TOWARD ALEXANDER DRIVE	279 FT
2.	SLIGHT RIGHT TOWARDS ALEXANDER DRIVE	289 FT
3.	TURN RIGHT TOWARD ALEXANDER DRIVE	167 FT
4.	TURN RIGHT ONTO ALEXANDER DRIVE	0.3 MI
5.	TURN RIGHT ONTO BARNES INDUSTRIAL ROAD S.	0.1 MI
6.	TURN LEFT AT THE 1ST CROSS STREET ONTO CT-68W	4.4 MI
7.	TURN LEFT ONTO CT-68W/ CT-70 W	1.2 MI
8.	TURN RIGHT ONTO S MAIN STREET	1.2 MI
9.	TURN RIGHT ONTO CT-42 W	1.8 MI
10.	TURN RIGHT TO STAY ON CT-42 W	3.4 MI
11.	TURN LEFT ONTO CT-42 W/CT-63 S	0.1 MI
12.	TURN RIGHT ONTO CT-42 W/ STATE HWY 703	0.1 MI
13.	TURN RIGHT ONTO CT-42 W	2.7 MI
14.	TURN RIGHT ONTO BURTON ROAD	0.5 MI
15.	CONTINUE STRAIGHT ONTO RICE LANE (DESTINATION WILL BE ON THE LEFT)	0.4 MI



LOCATION MAP
SCALE : 1" = 2000'-0"

SITE INFORMATION

VZ SITE NAME: BETHANY WEST CT
VZ PROJ FUZE I.D.: 16244612
VZ LOCATION CODE: 469129
VZ PROJECT CODE: 20212220021
LOCATION: 60 RICE LANE
BEACON FALLS, CT 06403

PROJECT SCOPE: REFER TO NOTES ON C-1 FOR SCOPE OF WORK.

MAP/BLOCK/LOT: 017/002/0002

ZONING DISTRICT: R-1 (SINGLE FAMILY RESIDENTIAL)

LATITUDE: 41° 27' 20.4804" N (41.4556891° N)

LONGITUDE: 73° 02' 23.0316" W (73.039731° W)

SITE COORDINATES & GROUND ELEVATION OBTAINED FROM GOOGLE EARTH.

GROUND ELEVATION: 624'± AMSL

PROPERTY OWNER: CHARLES EDWARDS
30 LORRAINE DRIVE
BEACON FALLS, CT 06403

APPLICANT: CELLCO PARTNERSHIP
d/b/a VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

LEGAL/REGULATORY COUNSEL: ROBINSON & COLE, LLP
KENNETH C. BALDWIN, ESQ.
280 TRUMBULL STREET
HARTFORD, CT 06103

ENGINEER CONTACT: ALL-POINTS TECHNOLOGY CORP., P.C.
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385
(860) 663-1697

VERIZON SMART TOOL PROJECT # 10037950

Cellco Partnership d/b/a
verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CONSTRUCTION DOCUMENTS

NO	DATE	REVISION
0	03/26/21	FOR REVIEW: JRM
1	04/21/21	FOR CONSTRUCTION: JRM
2	05/25/21	REVISED RFDS: JRM
3		
4		
5		
6		

STATE OF CONNECTICUT
MICHAEL TRODDEN
33313
LICENSED
PROFESSIONAL ENGINEER

DESIGN PROFESSIONALS OF RECORD

PROF: MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT. SUITE 311 WATERFORD, CT 06385

OWNER: CHARLES EDWARDS, 30 LORRAINE DRIVE
ADDRESS: BEACON FALLS, CT 06403

BETHANY WEST CT

SITE ADDRESS: 60 RICE LANE BEACON FALLS, CT 06403

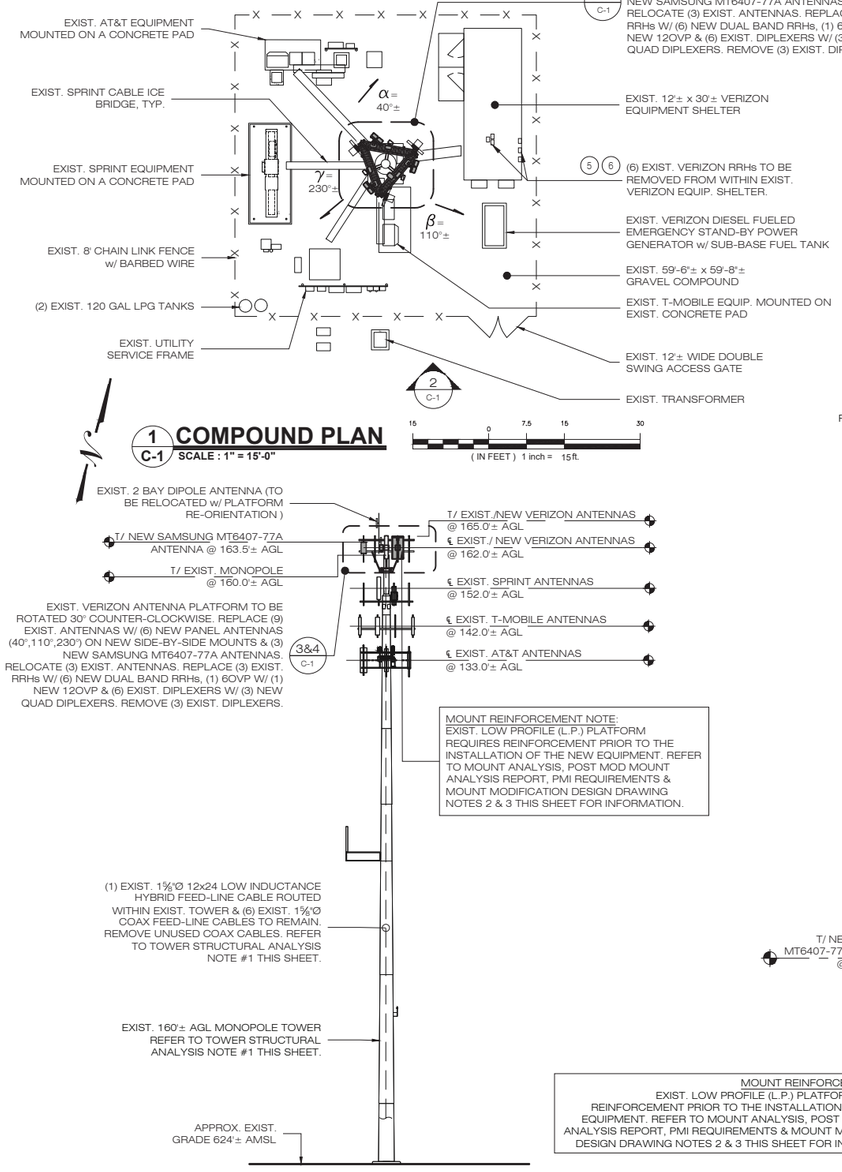
APT FILING NUMBER: CT141_12090

DRAWN BY: DRA
DATE: 03/26/21
CHECKED BY: JRM

VZ PROJECT CODE: 20212220021
VZ LOCATION CODE: 469129
VZ FUZE ID: 16244612

SHEET TITLE:
TITLE SHEET

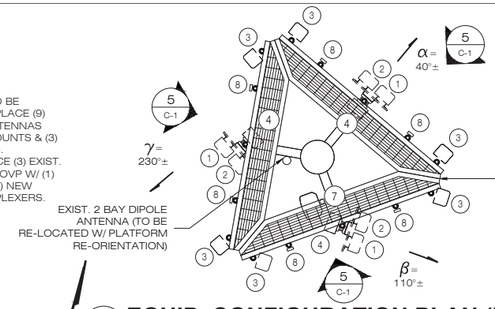
SHEET NUMBER:
T-1



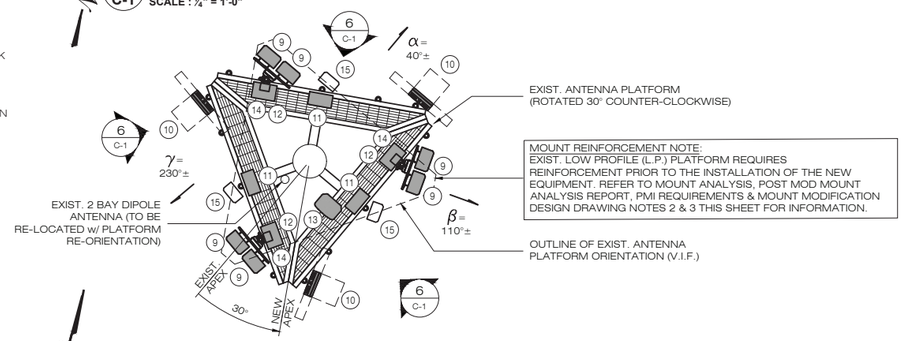
1 COMPOUND PLAN
C-1 SCALE : 1" = 15'-0"

2 TOWER ELEVATION
C-1 SCALE : 1" = 20'-0"

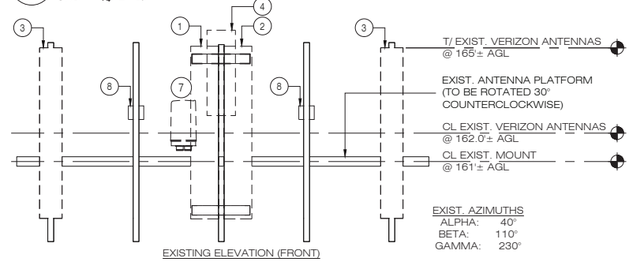
20 0 10 20 40
(IN FEET) 1 inch = 20ft.



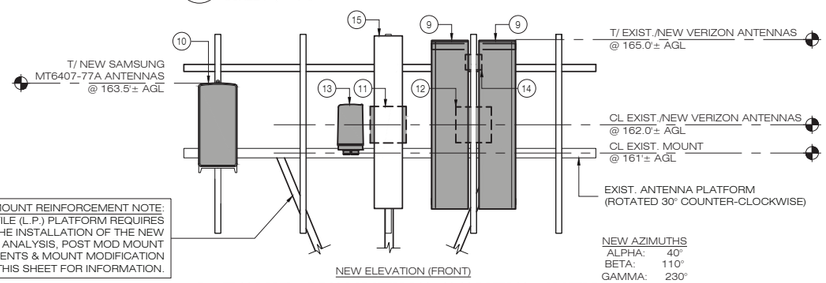
3 EQUIP. CONFIGURATION PLAN (EXIST.)
C-1 SCALE : ¼" = 1'-0"



4 EQUIP. CONFIGURATION PLAN (NEW)
C-1 SCALE : ¼" = 1'-0"



5 EQUIP. MOUNTING CONFIG. (EXIST.)
C-1 SCALE : ⅜" = 1'-0"



6 EQUIP. MOUNTING CONFIG. (NEW)
C-1 SCALE : ⅜" = 1'-0"

LOCATION PLAN
SCALE: 1" = 300'

GENERAL ABBREVIATION LIST:

ABP	ABOVE BASE PLATE
AGL	ABOVE GROUND LEVEL
AMSL	ABOVE MEAN SEA LEVEL
AWS	ADVANCED WIRELESS SERVICE
HDG	HOT DIP GALVANIZED
OVP	OVER VOLTAGE PROTECTION
RRH	REMOTE RADIO HEAD
V.I.F.	VERIFY IN FIELD
W.P.	WORK POINT
A.F.R.	ABOVE FINISH ROOF

SCOPE OF WORK (ALL) SECTORS

1. EXIST. ANTENNA (TO BE REPLACED) MODEL: ANDREW SBNHH-1D65B
2. EXIST. ANTENNA (TO BE RELOCATED) MODEL: ANDREW SBNHH-1D65B
3. EXIST. ANTENNA (TO BE REPLACED) MODEL: ANDREW DB846F65ZAXY
4. EXIST. RRH (TO BE REPLACED) MODEL: NOKIA B4 2x60W AWS RRH
5. EXIST. RRH (TO BE REMOVED & REPLACED FROM WITHIN EXIST. EQUIP. SHELTER) MODEL: NOKIA B13 4x30W LTE RRH
6. EXIST. RRH (TO BE REMOVED FROM WITHIN EXIST. EQUIP. SHELTER) MODEL: NOKIA B4 RRH 2x60 AWS RRH
7. EXIST. 6 OVP (TO BE REPLACED) (BETA) MODEL: RAYCAP RRFDC-3315-PF-48 (V.I.F.)
8. EXIST. DIPLEXER (TO BE REPLACED)
9. NEW ANTENNA MOUNTED VIA NEW SIDE-BY-SIDE MOUNT BRACKETS (COMMSCOPE BSAMNT-SBS-2-2) MODEL: COMMSCOPE JAHH-65B-R3B
10. NEW SAMSUNG MT6407-77A ANTENNA MOUNTED ON EXIST. PIPE MAST
11. NEW DUAL BAND RRH MODEL: SAMSUNG B13/B5 RRH-BR04C (RFV01U-D2A)
12. NEW DUAL BAND RRH MODEL: SAMSUNG B66/B2A RRH-BR049 (RFV01U-D1A)
13. NEW 12OVP (BETA) MODEL: RAYCAP RVZDC-6627-PF-48
14. NEW QUAD DIPLEXER MODEL: COMMSCOPE CBC78T-DS-43-2X
15. RELOCATED ANTENNA MODEL: ANDREW SBNHH-1D65B

NOTES:

1. REFER TO TOWER STRUCTURAL ANALYSIS REPORT PREPARED BY OTHERS AVAILABLE UNDER SEPARATE COVER.
2. REFER TO MOUNT ANALYSIS REPORT PREPARED BY MASER CONSULTING, P.A., PROJECT #21777109A MARKED REV0, DATED 03/12/21 AVAILABLE UNDER SEPARATE COVER.
3. REFER TO POST MOD MOUNT ANALYSIS REPORT, PMI REQUIREMENTS & MOUNT MODIFICATION DESIGN DRAWINGS PREPARED BY MASER CONSULTING, P.A., PROJECT #21777109A DATED 04/15/21. AVAILABLE UNDER SEPARATE COVER.
4. PROJECT SCOPE INCLUDES THE FOLLOWING:
   - REPLACEMENT OF (6) EXIST. PANEL ANTENNAS w/ (6) NEW PANEL ANTENNAS MOUNTED VIA NEW SIDE-BY-SIDE BRACKETS (COMMSCOPE BSAMNT-SBS-2-2).
   - REPLACEMENT OF (3) EXIST. PANEL ANTENNAS w/ (3) NEW SAMSUNG MT6407-77A ANTENNAS.
   - REPLACEMENT OF (3) EXIST. PLATFORM MOUNTED RRHs w/ (6) NEW DUAL- BAND RRHs.
   - REPLACEMENT OF (1) EXIST. 6OVP w/ (1) NEW 12OVP.
   - REPLACEMENT OF (3) EXIST. DIPLEXERS w/ (3) NEW QUAD DIPLEXERS.
   - REMOVAL OF (3) EXIST. DIPLEXERS
   - REMOVAL OF (6) EXIST RRHs FROM WITHIN EQUIPMENT SHELTER.
   - ROTATION OF EXIST. ANTENNA PLATFORM 30° COUNTER-CLOCKWISE.
4. ALL EXPOSED STEEL AND HARDWARE TO BE HOT DIP GALV. (HDG). PAINT TO MATCH EXIST. (WHERE APPLICABLE)
5. CAP & WEATHERPROOF ALL UN-USED CABLE ENTRY PORTS (WHERE APPLICABLE).
6. MOUNT & GROUND ALL NEW EQUIPMENT IN ACCORDANCE WITH NEC (NFPA-70), NESC AND MANUFACTURERS SPECIFICATION.
7. SECURE ALL NEW ANTENNA CABLES PER MANUFACTURER RECOMMENDATIONS.
8. BOND NEW ANTENNA MOUNTING PIPES TO ANTENNA SECTOR GROUND BAR w/ # 2 AWG, BCW, (WHERE APPLICABLE).
9. CONTRACTOR SHALL INSTALL NEW SIDE-BY-SIDE & DUAL-MOUNT BRACKETS PER ANTENNA MOUNT MANUFACTURER RECOMMENDATIONS, INCLUDING VERIFICATION OF MINIMUM PIPE MAST DIAMETER REQUIRED TO INSTALL NEW MOUNT BRACKETS. UNLESS NOTED OTHER WISE, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD SHOULD EXIST. PIPE MASTS REQUIRE REPLACEMENT TO SUPPORT THE NEW MOUNT BRACKETS.
10. ANTENNA CONFIGURATIONS SHOWN HEREIN ARE FRONT ELEVATIONS.
11. ANTENNA SPACING DIMENSIONS ARE TO THE CENTER OF THE EXIST. ANTENNA AND PROP. ANTENNA FACE.
12. REFER TO THE FINAL RFDS PROVIDED BY VERIZON FOR THE LATEST INFORMATION REGARDING EQUIPMENT MODELS, REQUIRED CABLING & DOWN-TILT INFORMATION.
13. APPLY 3M FILM OVER ALL EXPOSED MMWAVE ANTENNAS COLOR TO MATCH EXIST. STRUCTURE (WHERE APPLICABLE) COORDINATE WITH VERIZON CONSTRUCTION MANAGER AND LL.
14. PAINT ALL NEW NON SAMSUNG MT6407-77A ANTENNAS & APPURTENANCES TO MATCH EXIST. STRUCTURE (WHERE APPLICABLE) COORDINATE W/ VERIZON CONSTRUCTION MANAGER & BUILDING OWNER.

Cellco Partnership d/b/a
verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CONSTRUCTION DOCUMENTS

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4		
5		
6		

STATE OF CONNECTICUT MICHAEL TRODDEN 33313 LICENSED PROFESSIONAL ENGINEER

DESIGN PROFESSIONALS OF RECORD

PROF: MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT. SUITE 311 WATERFORD, CT 06385

OWNER: CHARLES EDWARDS, 30 LORRAINE DRIVE
ADDRESS: BEACON FALLS, CT 06403

BETHANY WEST CT

SITE ADDRESS: 60 RICE LANE BEACON FALLS, CT 06403

APT FILING NUMBER: CT141_12090

DRAWN BY: DRA
DATE: 03/26/21 CHECKED BY: JRM

VZ PROJECT CODE: 20212220021
VZ LOCATION CODE: 469129
VZ FUZE ID: 16244612

SHEET TITLE:
COMPOUND PLAN, TOWER ELEVATION, EQUIP. CONFIGURATION PLANS & ELEVATIONS

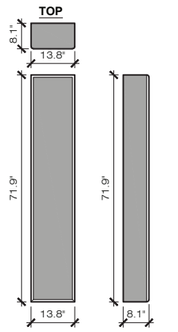
SHEET NUMBER:
C-1

EQUIPMENT DATA

EQUIPMENT SPECIFICATIONS

SECTOR	ANTENNA MAKE/MODEL	QTY	AZIMUTH	EQUIPMENT STATUS	HEIGHT (IN)	WIDTH (IN)	DEPTH (IN)	WEIGHT (LBS)
ALPHA	700/850/1900/2100: COMMSCOPE JAHH-65B-R3B	1	40°	NEW	72.0	13.8	8.2	68.6(2)
	700/850/1900/2100: COMMSCOPE JAHH-65B-R3B	1	40°	NEW	72.0	13.8	8.2	68.6(2)
	850 CDMA: ANDREW SBNHH-1D65B	1	40°	ERL	72.9	11.9	7.1	40.6(2)
	SAMSUNG MT6407-77A	1	40°	NEW	35.1(5)	16.1(5)	5.51(5)	87.1(2)(5)
BETA	700/850/1900/2100: COMMSCOPE JAHH-65B-R3B	1	110°	NEW	72.0	13.8	8.2	68.6(2)
	700/850/1900/2100: COMMSCOPE JAHH-65B-R3B	1	110°	NEW	72.0	13.8	8.2	68.6(2)
	850 CDMA: ANDREW SBNHH-1D65B	1	110°	ERL	72.9	11.9	7.1	40.6(2)
	SAMSUNG MT6407-77A	1	110°	NEW	35.1(5)	16.1(5)	5.51(5)	87.1(2)(5)
GAMMA	700/850/1900/2100: COMMSCOPE JAHH-65B-R3B	1	230°	NEW	72.0	13.8	8.2	68.6(2)
	700/850/1900/2100: COMMSCOPE JAHH-65B-R3B	1	230°	NEW	72.0	13.8	8.2	68.6(2)
	850 CDMA: ANDREW SBNHH-1D65B	1	230°	ERL	72.9	11.9	7.1	40.6(2)
	SAMSUNG MT6407-77A	1	230°	NEW	35.1(5)	16.1(5)	5.51(5)	87.1(2)(5)
	APPURTENANCE MAKE/MODEL							
	SAMSUNG B2/B66A RRH-BR049 (RFV01U-D1A)	3	-	NEW	14.9	14.9	10.04	97.5
	SAMSUNG B5/B13 RRH-BR04C (RFV01U-D2A)	3	-	NEW	14.9	14.9	8.14	82.0
	COMMSCOPE CB78T-43-2X QUAD DIPLEXERS	3	-	NEW	6.4	6.9	9.6	20.7
	RAYCAP RCMDC-6627-PF-48	1	-	NEW	29.5	16.5	12.6	32

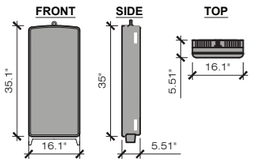
(1) 'ETR' DENOTES EXIST. TO REMAIN, 'ERL' DENOTES EXIST. TO BE RELOCATED
(2) WEIGHT WITHOUT MOUNTING BRACKET.
(3) REFER TO FINAL RFDS PROVIDED BY VERIZON.
(4) EQUIPMENT CONFIGURATION INDICATED ABOVE VIEWED FROM BEHIND.
(5) NOT TO EXCEED



COMMSCOPE JAHH-65B-R3B
HxWxD=71.9"x13.8"x8.1 (68.6 Lbs)

2 B-1 NEW ANTENNA DETAIL

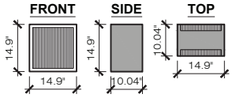
SCALE : ½" = 1'-0"



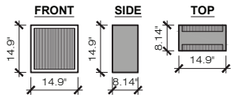
SAMSUNG MT6407-77A
HxWxD=35.1"x16.1"x5.51"
WT=87.1 Lbs
(NOT TO EXCEED)

3 B-1 NEW ANTENNA DETAIL

SCALE : ½" = 1'-0"



SAMSUNG DUAL HIGH BAND B2/B66A
RRH-BR049 (RFV01U-D1A)
RRH PCS/AWS
REMOTE RADIO HEAD (RRH)
WxDxH=14.9"x14.9"x10.04" (97.5 Lbs)

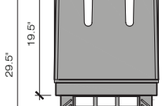


SAMSUNG DUAL LOW BAND B5/B13
RRH-BR04C (RFV01U-D2A)
RRH 850/700
REMOTE RADIO HEAD (RRH)
WxDxH=14.9"x14.9"x8.14" (82.0 Lbs)

NOTE: WEIGHTS INCLUDE SOLAR SHIELD & MOUNTING BRACKET

4 B-1 RRH EQUIPMENT DETAILS

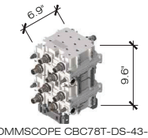
SCALE : ½" = 1'-0"



RAYCAP RCMDC-6627-PF-48
OVER VOLTAGE PROTECTION BOX (OVP)
WxDxH = 16.5"x12.6"x29.5" (32.0 lbs)

5 C-1 OVER VOLTAGE PROTECTION BOX (OVP)

SCALE: 1" = 1'-0"



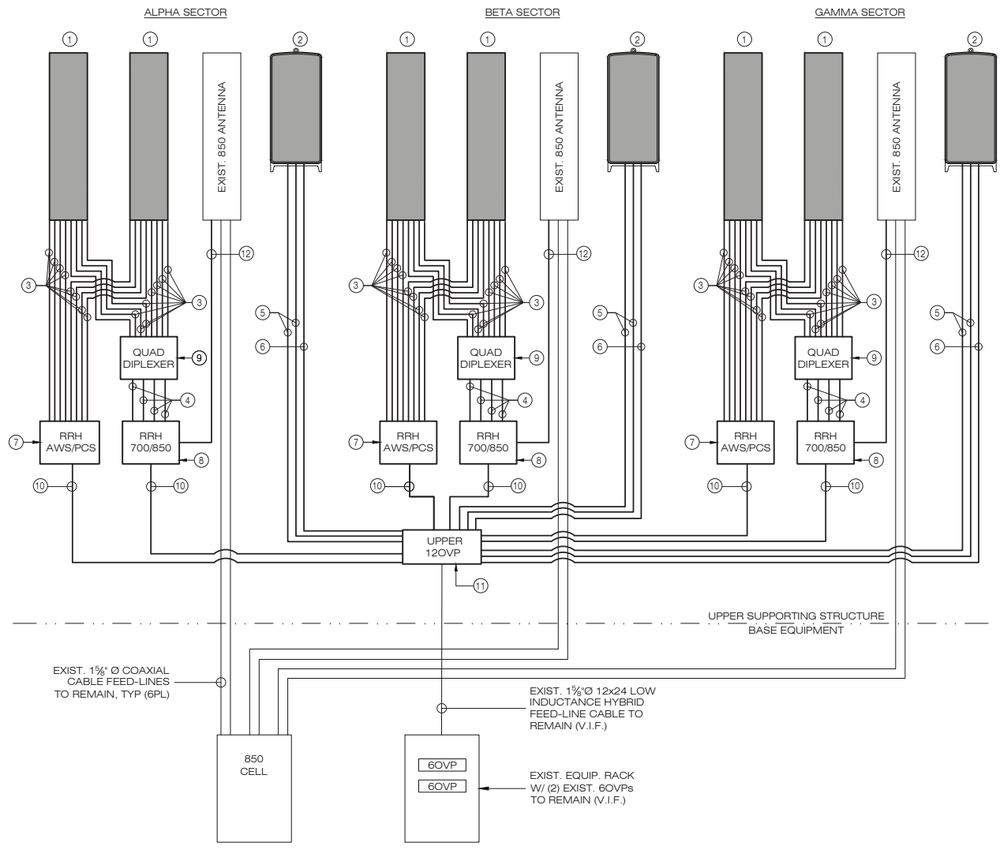
COMMSCOPE CBC78T-DS-43-2X
QUAD DIPLEXER
HxWxD=6.4"x6.9"x9.6" (20.7 Lbs)

6 B-1 QUAD DIPLEXER

SCALE: 1" = 1'-0"

BILL OF MATERIALS				
		QUANTITY	LENGTH	COMMENTS
1	700/850/1900/2100	6		(COMMSCOPE JAHH-65B-R3B) MOUNTED TO EXIST. PIPE MAST VIA NEW SBS MOUNT (COMMSCOPE BSAMNT-SBS-2-2)
2	SAMSUNG MT6407-77A	3		MOUNTED ON EXIST. PIPE MAST
3	1/2" JUMPER CABLE	48	15 FT	ROUTE FROM RRH TO ANTENNAS & FROM DIPLEXERS
4	1/2" JUMPER CABLE	12	6 FT	ROUTE FROM RRH TO DIPLEXERS
5	ANTENNA LINK CABLES	6	15 M	ROUTE FROM UPPER OVP TO ANTENNAS
6	ANTENNA POWER CABLES	3	15 M	PROPRIETARY POWER CABLE FROM UPPER OVP TO ANTENNAS
7	AWS/PCS RRH	3		SAMSUNG B2/B66 RRH-BR049 (RFV01U-D1A) MOUNTED TO EXIST. PIPE MAST
8	700/850 RRH	3		SAMSUNG B5/B13 RRH-BR04C (RFV01U-D2A) MOUNTED TO EXIST. PIPE MAST
9	QUAD DIPLEXER	3		COMMSCOPE CSC78T-DS-43-2X
10	RRH CABLES	6	15M	PROPRIETARY POWER & FIBER CABLES
11	UPPER 12OVP	1		(RAYCAP RCMDC-6627-PF-48)
12	RET CABLES	3	6FT	ROUTE FROM RRH TO ANTENNA

NOTES:
1. INFORMATION SHOWN HEREON IS FOR USE BY VERIZON EQUIPMENT OPERATIONS.
2. REFER TO FINAL RFDS PROVIDED BY VERIZON.
3. * DENOTES EQUIPMENT DESIGNATED "FOR LEASING ONLY" (WHERE APPLICABLE)
4. INSTALL ALARM BOARDS AT ALL OVPs WHERE REQUIRED. COORDINATE w/ VERIZON EQUIPMENT ENGINEERING.
5. INSTALL UP-CONVERTER(S) LOCATED AT BASE OVPs WHERE REQUIRED. COORDINATE w/ VERIZON EQUIPMENT ENGINEERING AS NECESSARY.
6. COORDINATE ANTENNA CABLING REQUIREMENTS WITH VERIZON ENGINEERING.
7. CONTRACTOR SHALL INSTALL NEW SIDE-BY-SIDE & DUAL-MOUNT BRACKETS PER ANTENNA MOUNT MANUFACTURER RECOMMENDATIONS, INCLUDING VERIFICATION OF MINIMUM PIPE MAST DIAMETER REQUIRED TO INSTALL NEW MOUNT BRACKETS. UNLESS NOTED OTHER WISE, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD SHOULD EXIST. PIPE MASTS REQUIRE REPLACEMENT TO SUPPORT THE NEW MOUNT BRACKETS.



1 B-1 PLUMBING DIAGRAM

SCALE : N.T.S.

NOTE: EQUIPMENT CONFIGURATION AS VIEWED FROM BEHIND.

Cellco Partnership d/b/a
verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CONSTRUCTION DOCUMENTS

NO	DATE	REVISION
0	03/26/21	FOR REVIEW: JRM
1	04/21/21	FOR CONSTRUCTION: JRM
2	05/25/21	REVISED RFDS: JRM
3		
4		
5		
6		

STATE OF CONNECTICUT
MICHAEL TRODDEN
33313
LICENSED
PROFESSIONAL ENGINEER

DESIGN PROFESSIONALS OF RECORD

PROF: MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT. SUITE 311 WATERFORD, CT 06385

OWNER: CHARLES EDWARDS, 30 LORRAINE DRIVE
ADDRESS: BEACON FALLS, CT 06403

BETHANY WEST CT

SITE ADDRESS: 60 RICE LANE BEACON FALLS, CT 06403

APT FILING NUMBER: CT141_12090

DRAWN BY: DRA
DATE: 03/26/21
CHECKED BY: JRM
VZ PROJECT CODE: 20212220021
VZ LOCATION CODE: 469129
VZ FUZE ID: 16244612

SHEET TITLE:
RF BILL OF MATERIALS, MECHANICAL SPECIFICATIONS & EQUIPMENT DETAILS

SHEET NUMBER:
B-1

DESIGN BASIS:

GOVERNING CODES/DESIGN STANDARDS:

2015 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE 2018 CONNECTICUT STATE BUILDING CODE
ASCE 7-10
TIA-222-G (TOWER)

01 GENERAL:

ABBREVIATIONS USED IN THESE SPECIFICATIONS INCLUDE THE FOLLOWING:

ACI	AMERICAN CONCRETE INSTITUTE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AWS	AMERICAN WELDING SOCIETY
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	AMERICAN STANDARDS AND TESTING METHODS
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
ICC-ES	INTERNATIONAL CODE COUNCIL EVALUATION SERVICE
TIA	TELECOMMUNICATIONS INDUSTRY ASSOCIATION
UL	UNDERWRITERS LABORATORIES
NEC	NATIONAL ELECTRICAL CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

EVERY INDIVIDUAL TRADE, DISCIPLINE, AND CONTRACTOR SHALL INCLUDE THESE GENERAL SPECIFICATIONS.

THE ENGINEER IS NOT RESPONSIBLE FOR NOR A GUARANTOR OF THE INSTALLING CONTRACTORS WORK, ADEQUACY OF ANY SITE COMPONENT, SUPERVISION OF ANY WORK, AND SAFETY IN, ON, OR ABOUT THE WORK SITE.

ANY REFERENCE HEREIN TO AN OR EQUAL ITEM, THAT EQUAL ITEM SHALL BE PRE-APPROVED BY THE CONSTRUCTION MANAGER BEFORE INSTALLATION

ALL TRADES SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES AND OTHER WORK AND CONDITIONS AS APPROPRIATE OR REQUIRED TO AVOID CONFLICTS. RESOLVE AND COORDINATE ALL CONFLICTS WITH ALL AFFECTED WORK AND SITE OPERATIONS. COORDINATION WITH THE SITE SHALL BE WITH THE OWNER, OR OWNER'S SPECIFIED REPRESENTATIVE, FOR EVERYTHING RELATED TO THE INSTALLATION OF THIS PROJECT.

ALL WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE EDITIONS OF ALL APPLICABLE CODES AND SHALL BE ACCEPTABLE TO ALL AUTHORITIES HAVING JURISDICTION (AHJ). WHERE A CONFLICT EXISTS BETWEEN CODES, PLANS, SPECIFICATIONS, AND/OR AHJ, THE MORE STRINGENT AUTHORITY SHALL APPLY. WHERE CONFLICT EXISTS BETWEEN PLANS AND SPECIFICATIONS, PLAN SHALL APPLY. WHERE CONFLICT EXISTS BETWEEN PLAN SHEETS, CONSTRUCTION MANAGER SHALL BE CONSULTED PRIOR TO COMMENCING ANY WORK.

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE AND PROPERLY OPERATIVE AND USABLE SYSTEM THROUGHOUT AND AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN AND/OR OTHERWISE REQUIRED.

CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, INSTALLATIONS, AND EQUIPMENT IN THE FIELD PRIOR TO BID, FABRICATION, AND INSTALLATION OF ANY WORK.

CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. THE ENGINEER SHALL BE NOTIFIED FOR INSPECTIONS PRIOR TO CLOSING PENETRATIONS AND OF ANY CONDITIONS WHICH PRECLUDE COMPLETION OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

CONTRACTOR SHALL VISIT THE SITE TO MANAGE AND GAIN APPROVAL FOR ALL TENANT DISRUPTIONS, POWER OUTAGES, WORK SCHEDULES, DEFINITION OF WORK AREA AND WORK STORAGE, NEWER BUILDING/SITE ACCESS, NOISE AND CLEANLINESS REQUIREMENTS WITH THE BUILDING/SITE MANAGEMENT PRIOR TO ALL WORK. ANY DISRUPTIONS SHALL BE KEPT TO A MINIMUM AND SHALL BE IMPLEMENTED ONLY UPON WRITTEN APPROVAL OF THE OWNER.

THE CONTRACTOR SHALL SAFEGUARD AGAINST CREATING ANY HAZARD AFFECTING TENANT EGRESS OR COMPROMISING SITE SECURITY MEASURES.

PRIOR TO ALL BELOW-GRADE WORK AND ANY SURFACE WORK IN A NEW AREA FOR STRUCTURES OR VEHICLES, CONTRACTOR SHALL ENGAGE A MARKOUT SERVICE TO IDENTIFY ANY UNDERGROUND STRUCTURES, CONDUITS, AND PIPELINES IN THE AREA. ALL EXISTING SEWER, WATER, GAS, ELECTRIC, FIBER OPTIC, AND OTHER UNDERGROUND UTILITIES IDENTIFIED OR ENCOUNTERED, SHALL BE PROTECTED AT ALL TIMES. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN DIGGING OR EXCAVATING IN ANY MANNER AROUND OR NEAR SUCH UTILITIES. CONTRACTOR IS RESPONSIBLE FOR REPAIRS, REPLACEMENT, AND ALL DAMAGES DUE TO DAMAGE OF UTILITIES BY HIS OPERATIONS.

ALL EXISTING AND NEW EQUIPMENT AND MATERIAL LOCATIONS, ROUTING, ORIENTATION, MOUNTING, SPECIFICATIONS AND GENERAL INSTALLED CHARACTERISTICS SHALL BE CONSIDERED DIAGRAMMATIC ON THE PLANS. EXACT CONDITIONS SHALL BE DETERMINED IN THE FIELD PRIOR TO ANY INSTALLATION. ANY DIFFERENCES THAT MAY CAUSE SCHEDULE, COST, OR QUALITY SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER OR ENGINEER PRIOR TO ANY WORK.

ALL REFERENCES HEREIN TO VERIFICATION OF ANY CONDITION OF SITE, FIELD, PLANS, OR SPECIFICATIONS PRIOR TO ANY WORK SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR. ANY AND ALL ADDITIONS, MODIFICATIONS, CHANGES, REPAIR, OR DEMOLITION AS A RESULT OF FAILURE TO BRING ANY EXISTING CONDITION PROPERLY TO THE ATTENTION OF THE OWNER OR ENGINEER SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR WITHOUT DELAY, COST, OR CHANGES IN QUALITY.

ALL NOTES THIS SHEET SHALL APPLY UNLESS SPECIFICALLY NOTED OTHERWISE ON THE INCLUDED DRAWINGS OR IN SEPARATE PROJECT SPECIFICATIONS AS APPLICABLE. ALL SPECIFICATIONS SHALL BE CONSIDERED REQUIRED UNLESS APPROVED EQUAL BY THE OWNER, CONSTRUCTION MANAGER, OR ENGINEER AS APPLICABLE.

THE WORDS "PROVIDE" OR "INSTALL" SHALL MEAN FURNISH AND INSTALL.

CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING AS REQUIRED FOR THE INSTALLATION OF HIS WORK. ANY PATCHING SHALL MATCH EXISTING SURROUNDING AREA IN ALL RESPECTS. ALL REMOVED MATERIAL SHALL BE REMOVED FROM THE PREMISES DAILY IN AN APPROVED SAFE MANNER.

ALL SURPLUS MATERIAL SHALL BE REMOVED FROM THE SITE PROMPTLY WHEN DEEMED TO BE SURPLUS.

EVERY CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF HIS WORK AND NEWLY INSTALLED OR EXISTING WORK, INCLUDING PROTECTION OF THE SITE, ALL STRUCTURES, AND ALL OCCUPANTS. FURNISH, INSTALL, MAINTAIN, AND REMOVE AS APPROPRIATE, ALL APPROPRIATE BARRIERS, SAFETY GUARDS, SIGNAGE, AND SECURITY AS REQUIRED.

EVERY CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR RESPECTIVE FEES, PERMITS, INSPECTIONS, TESTING, CERTIFICATES, AND ALL MANAGEMENT OF SAME REQUIRED FOR COMPLETION OF AND LEGAL OCCUPANCY OF THE FINISHED PROJECT.

ALL CONTRACTORS SHALL PROVIDE ALL NECESSARY TOOLS, FIXTURES, SERVICES, MATERIALS, JOB AIDS, AND PERSONNEL REQUIRED FOR THE EXECUTION OF THEIR WORK.

EACH CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP BY THEM TO BE FREE OF DEFECTS AND MAINTAINED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF THE INSTALLATION BY THE OWNER AND ENGINEER.

ALL WORK SHALL BE PERFORMED BY LICENSED CONTRACTORS IN THE TRADE HAVING JURISDICTION.

ANY DEVIATION, MODIFICATION, ADDITION, OR CHANGE IN DESIGN SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE OWNER OR ENGINEER.

ALL CONTRACTORS SHALL SUBMIT SHOP DRAWINGS OF ALL EQUIPMENT AND MATERIALS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION AND INSTALLATION, AND SHALL NOT PROCEED UNTIL ENGINEER APPROVAL IN WRITING IS RETURNED. EACH CONTRACTOR SHALL MAINTAIN ON JOB SITE A COMPLETE SET OF SHOP DRAWINGS WITH ANY DEVIATIONS FROM THE ORIGINAL DESIGN SHALL BE NOTED.

ALL MATERIALS AND EQUIPMENT SHALL BE NEW, WITHOUT BLEMISH OR DEFECT, AND SUITABLE AND LISTED FOR THE INSTALLATION AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS OR SPECIFICATIONS. ALL ITEMS OF EQUIPMENT OR MATERIAL THAT ARE OF ONE GENERIC TYPE SHALL BE ONE MANUFACTURER THROUGHOUT.

ALL MATERIALS, EQUIPMENT, TOOLS, AND ITEMS UNDER THE CONTRACTOR'S RESPONSIBILITY ON THE JOBSITE SHALL BE ADEQUATELY SECURED, MAINTAINED, AND PROTECTED, SO AS NOT TO BECOME DAMAGED OR CREATE ANY HAZARD TO PERSONNEL OR PROPERTY.

THE CONTRACTORS HOURS OF WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES AND BE APPROVED BY THE OWNER.

CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR ALL OF HIS CREW AND INSURE THAT EVERY CREW MEMBER FOLLOWS SAVE WORK PRACTICES. SAFETY TRAINING SHALL INCLUDE, BUT NOT BE LIMITED TO, FALL PROTECTION, CONFINED SPACE ENTRY, ELECTRICAL SAFETY, AND TRENCHING/EXCAVATION SAFETY WHERE SUCH WORK IS EXECUTED OR ENCOUNTERED.

ALL TEMPORARY WORK REQUIRED OR SPECIFIED AS A PART OF THIS WORK, SHALL MEET ALL OF THE SAME REQUIREMENTS AS PERMANENT INSTALLATIONS, SHALL MEET ALL APPLICABLE CODE REQUIREMENTS, AND SHALL BE COMPLETELY REMOVED AFTER ITS PURPOSES HAVE BEEN SERVED.

ANY EXISTING UTILITY, SERVICE, STRUCTURE, EQUIPMENT, OR FIXTURE OBSTRUCTING THE WORK SHALL BE REMOVED AND/OR RELOCATED AS DIRECTED BY THE CONSTRUCTION MANAGER.

IF ASBESTOS IS ENCOUNTERED DURING WORK EXECUTION, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER AND CEASE ALL ACTIVITIES IN AFFECTED AREAS UNTIL NOTIFIED BY THE CONSTRUCTION TO RESUME OPERATIONS.

EXIST. ELECTRICAL AND MECHANICAL FIXTURES, PIPING, WIRING AND EQUIPMENT OBSTRUCTING THE WORK SHALL BE REMOVED AND/OR RELOCATED AS DIRECTED BY THE CONSTRUCTION MANAGER. TEMPORARY SERVICE INTERRUPTIONS MUST BE COORDINATED WITH OWNER.

05 STEEL:

THESE SPECIFICATIONS SHALL INCLUDE THE GENERAL SPECIFICATIONS HEREIN.

MATERIALS:

WIDE FLANGE	ASTM A992, GR 50
TUBING	ASTM A500, GR B
PIPE	ASTM A53, GR B
BOLTS	ASTM A325
GRATING	TYPE GW-2 (1-1/4"x3/16" BARS)
EXISTING METALS	ASTM A36

PROVIDE CERTIFICATION THAT WELDERS TO BE USED IN WORK ARE LICENSED AND HAVE SATISFACTORILY PASSED AWS QUALIFICATION TEST UNDER THE PROVISIONS OF APPENDIX D, PARTS II AND III OF THE AWS CODE FOR WELDING IN BUILDING CONSTRUCTION.

ALL BUILDING CONNECTION POINTS TO BE CENTERED ON EXISTING STRUCTURAL BEARING POINTS AND THE LOCATIONS ARE TO BE VERIFIED IN FIELD PRIOR TO THE FABRICATION OF STEEL.

DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF AISC SPECIFICATION FOR *"THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS"*.

NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIAMETER GALVANIZED ASTM A 307 BOLTS UNLESS OTHERWISE NOTED.

ALL STEEL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIPPED GALVANIZED) COATINGS" ON IRON AND STEEL PRODUCTS WITH A COATING WEIGHT OF 2 OZ/SF.

ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE EXPOSED TO WEATHER SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC COATING (HOT-DIP) ON IRON AND STEEL HARDWARE."

DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED BY TOUCHING UP ALL DAMAGED GALVANIZED STEEL WITH COLD ZINC, "GALVANOX", "DRY GALV", OR "ZINC IT", IN ACCORDANCE WITH MANUFACTURERS GUIDELINES. TOUCH UP DAMAGED NON-GALVANIZED STEEL WITH SAME PAINT APPLIED IN SHOP OR FIELD.

THE ENGINEER SHALL BE NOTIFIED OF ANY INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE ENGINEER REVIEW. FIELD CUTTING OF STRUCTURAL STEEL IS NOT PERMITTED EXCEPT WITH THE PRIOR APPROVAL OF THE ENGINEER.

CONTRACTOR TO REMOVE AND RE-INSTALL ALL FIRE PROOFING AS REQUIRED DURING CONSTRUCTION.

THE STEEL STRUCTURE SHALL BE DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER COMPLETION. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION.

ALL STEEL ELEMENTS SHALL BE INSTALLED PLUMB AND LEVEL.

TOWER MANUFACTURER'S DESIGNS SHALL PREVAIL FOR TOWER.

CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC *"MANUAL OF STEEL CONSTRUCTION"*. CONNECTIONS SHALL BE PROVIDED TO CONFORM TO THE REQUIREMENTS OF TYPE 2 CONSTRUCTION.

STRUCTURAL CONNECTION BOLTS SHALL CONFORM TO ASTM A325. ALL BOLTS SHALL BE MINIMUM 3/4" DIAMETER AND EACH CONNECTION SHALL HAVE MINIMUM TWO BOLTS. LOCK WASHERS ARE NOT PERMITTED FOR A325 STEEL ASSEMBLIES. IF TENSION CONTROL BOLTS ARE USED, CONNECTIONS SHALL BE DESIGNED FOR SLIP CRITICAL BOLT ALLOWABLE LOAD VALUES.

DESIGN CONNECTIONS AT BEAM ENDS FOR 10 KIPS (MIN).

ALL U-BOLTED CONNECTIONS SHALL BE COMPLETED WITH DOUBLE NUTS OR A LOCK WASHER.

CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS *"STANDARD QUALIFICATION PROCEDURES"*. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND SHALL CONFORM TO AISC AND D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE LARGER OF 1/4" FILLET OR MINIMUM SIZE PER TABLE J2.4 IN THE AISC *"MANUAL OF STEEL CONSTRUCTION"*. AT THE COMPLETION OF WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED. SEE NOTE REGARDING DAMAGED GALVANIZED SURFACES.

ALL ARC AND GAS WELDING SHALL BE DONE BY A LICENSED AND CERTIFIED WELDER IN ACCORDANCE WITH AWS.

SEAL ALL PENETRATIONS AND SEAMS BETWEEN MASONRY AND STEEL WITH DOW CORNING 790 SILICONE BUILDING SEALANT OR EQUAL.

26 ELECTRICAL:

THESE SPECIFICATIONS SHALL INCLUDE THE GENERAL SPECIFICATIONS HEREIN.

ALL ELECTRICAL CONDUCTORS:

- INSULATION SHALL BE MINIMUM 600V TYPE THHN, THWN-2, OR XHHW.
- BRANCH CIRCUIT CONDUCTORS SHALL BE SOFT DRAWN 98% MINIMUM CONDUCTIVITY PROPERLY REFINED COPPER.
- FEEDER CIRCUIT CONDUCTORS SHALL BE EITHER COPPER OR ALUMINUM OF THE APPROPRIATE SIZE FOR THE APPLICATION, OR AS SPECIFICALLY NOTED.
- PERMANENTLY LABEL OR TAG ALL CONDUCTORS WITH THEIR CIRCUIT DESIGNATION AT ALL TERMINATION ENDS, SPLICES, AND VISIBLE AS PASS-THROUGH IN ALL ENCLOSURES.

ALL CONDUIT, RACEWAY, WIREWAYS, DUCTS, ETC. SHALL BE LISTED AND SUITABLE FOR THE APPLICATION. ONLY THE FOLLOWING CONDUITS AS APPROVED AND LISTED FOR THE APPLICATION SHALL BE ACCEPTABLE:

- ELECTRICAL METALLIC TUBING (EMT).
- COMPRESSION COUPLINGS AND CONNECTORS ONLY MADE UP WRENCH TIGHT.
- FLEXIBLE METAL CONDUIT (FMC) AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC).
- FINAL CONNECTIONS TO VIBRATING OR ADJUSTABLE EQUIPMENT INCLUDING, BUT NOT LIMITED TO, LIGHT FIXTURES, HVAC UNITS, TRANSFORMERS, MOTORS, ETC. OR WHERE EQUIPMENT IS PLACED UPON SLAB ON-GRADE.
- RIGID GALVANIZED STEEL (RGS).
- ALL FITTINGS, CONNECTORS, AND COUPLINGS SHALL BE THREADED MADE UP WRENCH TIGHT.
- RIGID POLYVINYL CHLORIDE (PVC) SCHEDULE 40 OR SCHEDULE 80.
- MAY BE USED FOR SERVICES, EXTERIOR, BELOW GRADE, AND WET LOCATIONS.
- SHALL NOT BE USED IN CONCRETE SLABS NOR EXPOSED WITHIN A BUILDING OR STRUCTURE.
- METAL-CLAD CABLE (MC)
- CONCEALED INSTALLATIONS ONLY.
- WITHIN A DUCT WITH SMOOTH OR CORRUGATED METAL JACKET AND NO OUTER COVERING OVER THE METAL JACKET.

IN FINISHED SPACES, ALL CONDUITS SHALL BE CONCEALED EXCEPT TO MAKE A FINAL CONNECTION TO EQUIPMENT NOT MOUNTED IN OR AGAINST FINISH MATERIAL.

ALL FEEDER AND BRANCH CIRCUITS SHALL HAVE A SEPARATE PROPERLY SIZED AND MARKED GROUNDING CONDUCTOR, PER APPLICABLE CODES, THAT BONDS ALL ENCLOSURES, BOXES, ETC. CONDUIT SHALL NOT BE USED AS A GROUNDING OR BONDING CONDUCTOR.

IF EXISTING ELECTRIC SERVICE IS TO REMAIN, CONTRACTOR SHALL BE VERIFY THAT IT MEETS PROJECT REQUIREMENTS WITHOUT MODIFICATION. IF IT IS TO BE ADDED OR REPLACED AS A PART OF THIS WORK, CONTRACTOR SHALL ORDER FROM, COORDINATE WITH, AND GAIN APPROVAL FROM THE ELECTRICAL UTILITY. ALL ELECTRICAL EQUIPMENT SHALL BE AS SPECIFIED AND AS APPROVED BY THE LOCAL UTILITY WHERE APPLICABLE.

ALL EQUIPMENT, ENCLOSURES, ETC. SHALL BE SUITABLE FOR THE INSTALLED ENVIRONMENT, MINIMUM NEMA 3R FOR ALL EXTERIOR INSTALLATIONS.

WIRING DEVICES SHALL BE SPECIFICATION GRADE AND WIRING DEVICE COVER PLATES SHALL BE PLASTIC WITH ENGRAVING AS SPECIFIED. COLOR SHALL BE IVORY. ALL DEVICES AND COVER PLATES SHALL BE OF THE SAME MANUFACTURER.

ALL FIRE-RATED PENETRATIONS SHALL BE SEALED USING A SUITABLE AND LISTED FIRE SEALING DEVICE OR GROUT THAT WILL MAINTAIN THE FIRE RATING OF THE STRUCTURE PENETRATED.

PROVIDE PERMANENTLY AFFIXED ENGRAVED NAMEPLATES FOR ALL CODE REQUIRED LABELING AND ON ALL PANELS, METERING, DISCONNECTS, AND ELECTRICAL EQUIPMENT THAT IDENTIFIES EQUIPMENT SERVED, ELECTRICAL SOURCE WITH CIRCUIT IDENTIFICATION, AND VOLTAGES WITHIN.

ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL FINAL TERMINATIONS TO ALL EQUIPMENT.

ALL ELECTRICAL APPURTENANCES THAT ARE DISCONNECTED SHALL BE COMPLETELY REMOVED WITH EXISTING STRUCTURES TO REMAIN, REPAIRED, FINISHED, FILLED, PAINTED, ETC. ALL PANEL SCHEDULES, EQUIPMENT LABELING, AND CODE-REQUIRED LABELING, SHALL BE VERIFIED AND PROPERLY COMPLETED TO MATCH THE INSTALLATION.

26 GROUNDING:

THESE SPECIFICATIONS SHALL INCLUDE THE GENERAL SPECIFICATIONS HEREIN.

GROUND ALL SYSTEMS AND EQUIPMENT IN ACCORDANCE WITH BEST INDUSTRY PRACTICE, THE REQUIREMENTS OF THE NFPA 70 NATIONAL ELECTRICAL CODE (NEC), AND ALL OTHER APPLICABLE CODES AND REGULATIONS.

ALL GROUNDING ELECTRODES PRESENT AT EACH SERVICE LOCATION SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM.

ALL EQUIPMENT ENCLOSURES, DEVICES, AND CONDUITS SHALL BE GROUNDED BY THE INSTALLATION OF A SEPARATE GROUNDING CONDUCTOR FOR ALL FEEDER AND BRANCH CIRCUITS THAT IS SIZED PER CODE OR IS OF THE SIZE INDICATED ON THE DRAWINGS, SHALL BE CONTINUOUS IN LENGTH, AND SHALL BE BONDED TO EACH ENCLOSURE PASSED THROUGH. CONDUIT SHALL NOT BE USED AS A GROUNDING OR BONDING WIRE OR CIRCUIT.

BOND ALL METALLIC CONDUITS TOGETHER THAT ARE CONNECTED TO NON-METALLIC ENCLOSURES, IN-GROUND BOXES, AND TO AN ENCLOSURE WHERE A GROUND BUS IS SPECIFIED OR SUPPLIED. ACCOMPLISH THIS BOND WITH GROUNDING CONDUCTORS MINIMUM SIZED TO THE LARGEST GROUNDING CONDUCTOR PRESENT IN THE ENCLOSURE CONNECTED TO A GROUNDING TYPE BUSHING EQUALLY SIZED OR MAXIMUM GROUND WIRE ACCOMMODATION AVAILABLE IN STANDARD MANUFACTURE FOR THE CONDUIT SIZE, WHICHEVER IS LESS.

EQUIPMENT GROUNDING AND LOAD SIDE BONDING CONDUCTORS SHALL BE SIZED PER THE CIRCUIT'S OVER-CURRENT PROTECTIVE DEVICE (OCPD) SIZE. WHERE THE UNGROUNDED CONDUCTORS ARE INCREASED IN SIZE ABOVE THE STANDARD FOR THE CIRCUIT'S OCPD, INCREASE THE GROUNDING CONDUCTOR PROPORTIONATELY TO THE CROSS-SECTIONAL AREA OF THE UNGROUNDED CONDUCTORS.

SERVICE MAIN BONDING JUMPERS AND GROUNDING ELECTRODE CONDUCTORS SHALL BE SIZED AND INSTALLED PER THE MINIMUM OF ALL APPLICABLE CODES AND REGULATIONS.

26 LIGHTNING PROTECTION:

THESE SPECIFICATIONS SHALL INCLUDE THE GENERAL SPECIFICATIONS AND THE GROUNDING SPECIFICATIONS HEREIN.

THE LIGHTNING PROTECTION GROUNDING SYSTEM (LPGS) SHALL CONSIST OF BONDING ALL EQUIPMENT AND CONDUCTIVE STRUCTURES TO LOCALIZED SINGLE-POINT GROUNDING CONNECTIONS (TYPICALLY GROUND BARS) WHICH ARE BONDED TOGETHER AND TO AN IN-GROUND SYSTEM. IF THE LPGS IS ON A BUILDING, IT SHALL BE EFFECTIVELY BONDED TO THE ELECTRICAL SERVICE MAIN BONDING JUMPER AND TO ADDITIONAL IN-GROUND ELECTRODES AS MAY BE REQUIRED OR INDICATED. IF THE LPGS IS ON A DEDICATED COMMUNICATION SITE, ALL EQUIPMENT AREAS AND TOWERS SHALL EACH HAVE THEIR OWN IN-GROUND RING WITH EVERY RING BONDED TOGETHER, AND ALL CONDUCTIVE STRUCTURES IN CLOSE PROXIMITY (FENCES, ICE BRIDGES, ISOLATED EQUIPMENT, ETC.) ALSO BONDED TO PROVIDE A COMMON ELECTRICAL EQUIPOTENTIAL SYSTEM FOR ALL CONDUCTIVE ELEMENTS AND STRUCTURES.

CONDUCTORS:

- MIN #2 AWG SOLID BARE TINNED COPPER (SBTC) FOR ALL IN-GROUND CONDUCTORS.
- MIN #2 AWG COPPER GREEN STRANDED FOR BONDING STRUCTURES, AND FOR INTER-SYSTEM BONDING OF INDIVIDUAL ELEMENTS SUCH AS GROUND BAR TO GROUND BAR.
- MIN #6 AWG COPPER GREEN STRANDED OR ALL EQUIPMENT BONDING.
- INSTALL ALL IN-GROUND CONDUCTORS IN THE SAME HORIZONTAL PLANE OR IN A DOWNWARD DIRECTION AWAY FROM THE TOWER AND EQUIPMENT AREAS.
- AVOID LONG RUNS. MAKE DIRECT RUNS AS MUCH AS POSSIBLE.
- PLACE THROUGH NON-METALLIC SLEEVES WHEN PASSING THROUGH FLOORS, WALLS, CEILINGS, AND SIMILAR STRUCTURES.
- MAKE ALL CONNECTIONS IN CONTACT WITH EARTH WITH EXOTHERMIC WELDING. MAKE ALL OTHER CONNECTIONS WITH EXOTHERMIC WELDING, IRREVERSIBLE COMPRESSION CONNECTORS, OR LISTED COMPRESSION TWO-HOLE LUGS.
- INSTALL ALL CONDUCTORS WITH A MINIMUM 18 INCH BEND RADIUS AND NO BEND LONGER THAN A 90 DEGREE ARC. ALL BENDS SHALL BE HORIZONTAL, OR DOWNWARD TOWARDS EARTH.
- ALL CONDUCTORS PASSING FROM ABOVE-GROUND TO IN-GROUND CONNECTIONS, WHERE EXPOSED, SHALL BE COVERED AND PROTECTED WITH A NON-METALLIC CONDUIT SEALED AT BOTH ENDS.
- IF 2 OR MORE IN-GROUND CONDUCTORS ARE IN THE SAME PATH (2 RINGS OVERLAPPING, BONDING FOLLOWING ANOTHER RING OR RADIAL, OR SIMILAR), COMBINE WITH A SHARED SINGLE CONDUCTOR.

EQUIPMENT AND TOWER GROUND RINGS SHALL BE:

- BONDED TO ANY CONDUCTIVE OBJECT OR STRUCTURE WITHIN 5 FEET OF EQUIPMENT GROUND RINGS AND WITHIN 20 FEET OF TOWER GROUND RINGS.
- INSTALLED MINIMUM 18 INCHES FROM FOUNDATIONS, FOOTINGS, AND SIMILAR.

INSTALL ALL IN-GROUND RINGS, RADIALS, BONDS CONNECTING THEM, AND ALL SIMILAR GROUNDING:

- MIN 30 INCHES BELOW GRADE, OR 6 INCHES BELOW THE FROST LINE, WHICHEVER IS GREATER DEPTH.
- MIN 2 FEET FROM FOUNDATIONS, FOOTINGS, OTHER GROUNDING SYSTEMS, AND SIMILAR STRUCTURES, EXCEPT WHEN MAKING A BOND TO ANY OF THESE STRUCTURES. DO NOT BOND TO FOUNDATION INTERNAL REINFORCEMENT.

ALL EQUIPMENT GROUPED IN A COMMON AREA, COMPOUND, STRUCTURE, OR SIMILAR SHALL BE BONDED TO A SINGLE-POINT GROUND, PREFERABLY AN ISOLATED GROUND BAR. BOND THE GROUND BAR TO THE SYSTEM WITH MINIMUM SINGLE BONDING CONDUCTOR. IF BONDING TO AN IN-GROUND RING, INSTALL 2 BONDING CONDUCTORS MINIMUM WITH EACH CONDUCTOR INSTALLED DIRECTIONALLY AWAY FROM EACH OTHER AND PARALLEL TO THE IN-GROUND CONDUCTOR, WITH NO TEE CONNECTIONS.

TOWER GROUNDING:

- EACH TOWER LEG SHALL BE BONDED TO ITS RING. SINGLE-LEGGED TOWERS, OR MONOPOLES, SHALL HAVE 2 BONDS ON OPPOSITE SIDES.
- BOND TO TOWER BASE, NOT TO VERTICAL TOWER STRUCTURE, AWAY FROM TOWER MOUNTING HARDWARE.
- EACH BOND SHALL HAVE A CORRESPONDING GROUND ROD ON THE RING.
- EACH BOND SHALL CONSIST OF 2 CONDUCTORS FROM THE TOWER TO ITS RING WITH EACH CONDUCTOR DIRECTED IN OPPOSITE DIRECTIONS WITH A PARALLEL CONNECTION ON THE RING ON OPPOSITE SIDES OF THE GROUND ROD.

EQUIPMENT AREA GROUNDING:

- COMMUNICATION AREAS ON EARTH SHALL HAVE A GROUND RING.
- BOND ALL EQUIPMENT TO A SINGLE-POINT GROUND (GROUND BAR).
- BOND THE EQUIPMENT SINGLE-POINT GROUND TO THE EQUIPMENT GROUND RING WITH MINIMUM 2 CONDUCTORS DIRECTED IN OPPOSITE DIRECTIONS WITH PARALLEL CONNECTIONS ON THE RING.
- IF EQUIPMENT IS ENCLOSED IN A SHELTER:
- IF THE SHELTER IS CONSIDERED TO BE EXPOSED TO A DIRECT LIGHTNING STRIKE, INSTALL A BUILDING LIGHTNING PROTECTION SYSTEM PER APPLICABLE VERSION OF NFPA 780.
- BOND ALL FIXED CONDUCTIVE BUILDING COMPONENTS TOGETHER AND TO THE BUILDING RING GROUND AT THE CORNERS. THIS IS TYPICALLY CALLED THE HALO GROUND. DO NOT BOND EQUIPMENT TO THE HALO GROUND.
- BOND ALL EQUIPMENT TOGETHER TO A SINGLE-POINT OR INTERIOR EQUIPMENT RING GROUND (IEGR). BOND THE SINGLE-POINT OR IEGR TO THE EXTERNAL EQUIPMENT RING GROUND.
- PLACE GROUND RODS AT THE EQUIPMENT GROUND RING CORNERS.

GROUND RODS:

- SEPARATION SPACE BETWEEN ANY 2 GROUND RODS SHALL BE NO CLOSER THAN THEIR DEPTH. THIS APPLIES TO ALL RODS IN THE COMPLETE SYSTEM.
- DRIVE VERTICALLY IN UNDISTURBED SOIL WITH THE TOP AT SAME DEPTH AS THE IN-GROUND CONDUCTOR. IF NOT POSSIBLE TO INSTALL VERTICALLY, PLACE AS CLOSE TO VERTICAL AS POSSIBLE AND IN A DIRECTION AWAY FROM THE NEAREST ABOVE-GROUND CONDUCTIVE ELEMENT (TOWER, EQUIPMENT, ETC.).

RADIALS (TYP. NEW DEDICATED COMMUNICATION SITES):

- WHERE FEASIBLE WITH ENOUGH SPACE AVAILABLE, INSTALL A MINIMUM OF 4, MAXIMUM 10 RING RADIALS.
- EACH RADIAL'S LENGTH SHALL BE MIN 20 FT, MAX 80 FT.
- EXTEND RADIALS PERPENDICULAR FROM RINGS IN AS STRAIGHT LINE AS POSSIBLE, AWAY FROM OTHER RING GROUNDS, RADIALS, BONDS, AND SIMILAR.
- A COMMON PRACTICE IS TO PLACE 4 RADIALS FROM THE TOWER RING TO THE 4 CORNERS OF THE AVAILABLE AREA.

AT A MINIMUM, BOND ALL COMPOUND CONDUCTIVE FENCE CORNER POSTS AND GATE POSTS TO THE LPGS. PREFERABLY, INSTALL A GROUND RING THAT FOLLOWS THE FENCE LINE, BONDING ALL POSTS TO THE RING.

27 ANTENNAS & CABLES:

THESE SPECIFICATIONS SHALL INCLUDE THE GENERAL SPECIFICATIONS HEREIN.

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TRANSMISSION CABLES, JUMPERS, CONNECTORS, GROUNDING STRAPS, ANTENNAS, MOUNT AND HARDWARE. ALL MATERIALS SHALL BE INSPECTED BY THE CONTRACTOR FOR DAMAGE UPON DELIVERY. JUMPERS SHALL BE SUPPLIED AT ANTENNAS AND EQUIPMENT INSIDE SHELTER. COORDINATE LENGTH OF JUMPER CABLES WITH OWNER. COORDINATE AND VERIFY ALL OF THE MATERIALS TO BE PROVIDED WITH OWNER PRIOR TO SUBMITTING BID AND ORDERING MATERIALS.

AFTER INSTALLATION, THE TRANSMISSION LINE SYSTEM SHALL BE PIM / SWEEP TESTED FOR NEWER INSTALLATION AND DAMAGE WITH ANTENNAS CONNECTED. CONTRACTOR SHALL OBTAIN AND USE LATEST TESTING PROCEDURES FROM OWNER OR MANUFACTURER PRIOR TO BIDDING.

ANTENNA CABLES SHALL BE UNIQUELY COLOR-CODED AT THE ANTENNAS, BOTH SIDES OF EQUIPMENT SHELTER WALL, AND JUMPER CABLES AT THE EQUIPMENT.

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL CONNECTORS, ASSOCIATED CABLE MOUNTING AND GROUNDING HARDWARE, WALL MOUNTS, STANDOFFS, AND ALL ASSOCIATED HARDWARE TO INSTALL ALL CABLES AND ANTENNAS TO THE MANUFACTURER'S AND OWNER'S SPECIFICATIONS.

ANTENNA CABLES SHALL BE FOAM DIELECTRIC COAXIAL CABLES AS FOLLOWS:

- BASE STATION ANTENNAS:
  - 7/8" DIAMETER FOR CABLE LENGTHS UP TO 100 FT.
  - 1-5/8" DIAMETER FOR CABLE LENGTHS GREATER THAN 100 FT.
  - GPS ANTENNAS:
  - 7/8" DIAMETER FOR CABLE LENGTHS UP TO 200 FT.
  - 1-5/8" DIAMETER FOR CABLE LENGTHS GREATER THAN 200 FT.

MINIMUM BENDING RADIUS FOR COAXIAL CABLES SHALL BE:

- 15 FT FOR 7/8" COAXIAL CABLES.
- 25 FT FOR 1-5/8" COAXIAL CABLES.

CABLE SHALL BE INSTALLED WITH A MINIMUM NUMBER OF BENDS WHERE POSSIBLE. CABLE SHALL NOT BE LEFT UNTERMINATED AND SHALL BE SEALED IMMEDIATELY AFTER BEING INSTALLED.

ALL EXTERIOR CABLE CONNECTIONS SHALL BE COVERED WITH A WATERPROOF SPLICING KIT.

CONTRACTOR SHALL VERIFY EXACT LENGTH AND DIRECTION OF TRAVEL IN FIELD PRIOR TO CONSTRUCTION.

CABLE SHALL BE FURNISHED AND INSTALLED WITHOUT SPLICES AND WITH CONNECTORS AT EACH END.

27 CABLE TRAY:

THESE SPECIFICATIONS SHALL INCLUDE THE GENERAL SPECIFICATIONS HEREIN.

CABLE TRAY SHALL BE MADE OF EITHER CORROSION RESISTANT METAL OR WITH A CORROSION RESISTANT FINISH.

CABLE TRAY SHALL BE OF LADDER TRAY TYPE WITH FLAT COVER CLAMPED TO SIDE RAILS.

CABLE LADDER SHALL BE SIZED TO FIT ALL CABLES IN ACCORDANCE WITH NEC AND NEMA 11-15-84.

CABLE LADDER TRAYS SHALL BE NEMA CLASS 12A BY PW INDUSTRIES, INC. OR EQUAL.

CABLE LADDER TRAY SHALL BE SUPPORTED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

ALL WORKMANSHIP SHALL CONFORM TO THESE REQUIREMENTS AND ALL LOCAL CODES AND STANDARDS TO ENSURE SAFE AND ADEQUATE GROUNDING SYSTEM.

Cellco Partnership d/b/a

verizon

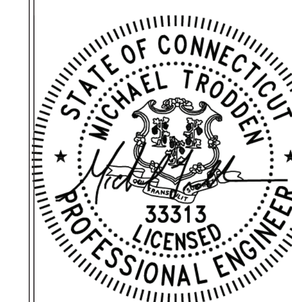
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

ALL-POINTS TECHNOLOGY CORPORATION

567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CONSTRUCTION DOCUMENTS

NO	DATE	REVISION
0	03/26/21	FOR REVIEW: JRM
1	04/21/21	FOR CONSTRUCTION: JRM
2	05/25/21	REVISED RFDS: JRM
3		
4		
5		
6		



DESIGN PROFESSIONALS OF RECORD

PROF: MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT. SUITE 311 WATERFORD, CT 06385

OWNER: CHARLES EDWARDS, 30 LORRAINE DRIVE
ADDRESS: BEACON FALLS, CT 06403

BETHANY WEST CT

SITE ADDRESS: 60 RICE LANE BEACON FALLS, CT 06403

APT FILING NUMBER: CT141_12090

DRAWN BY: DRA

DATE: 03/26/21 **CHECKED BY:** JRM

VZ PROJECT CODE: 20212220021

VZ LOCATION CODE: 469129

VZ FUZE ID: 16244612

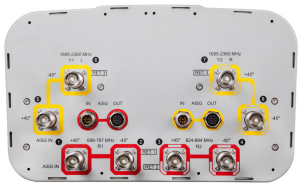
SHEET TITLE:

NOTES & SPECIFICATIONS

SHEET NUMBER:

N-1

JAHH-65B-R3B



8-port sector antenna, 2x 698–787, 2x 824-894 and 4x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have diplexers. Internal SBT's on first LB(Port 1) and first HB(Port 5).

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
Effective Projective Area (EPA), frontal	0.28 m^2 | 3.014 ft^2
Effective Projective Area (EPA), lateral	0.24 m^2 | 2.583 ft^2
Grounding Type	RF connector body grounded to reflector and mounting bracket
Performance Note	Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Aluminum | Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information, General

RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	2 female | 2 male

Dimensions

Width	350 mm | 13.78 in

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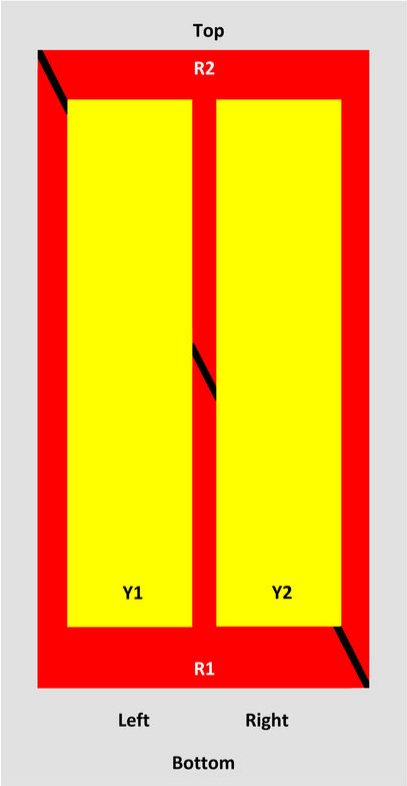
Length	1828 mm | 71.969 in
Depth	208 mm | 8.189 in

Array Layout

JAHH-65A-R3B JAHH-65B-R3B JAHH-65C-R3B



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-798	1-2	1	ANxxxxxxxxxxxxxxx1
R2	824-894	3-4	2	ANxxxxxxxxxxxxxxx2
Y1	1695-2360	5-6	3	ANxxxxxxxxxxxxxxx3
Y2	1695-2360	7-8		

View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz | 698 – 787 MHz | 824 – 894 MHz
Polarization	±45°

Remote Electrical Tilt (RET) Information, Electrical

Protocol	3GPP/AISG 2.0 (Single RET)
Power Consumption, idle state, maximum	2 W

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Power Consumption, normal conditions, maximum	13 W
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 | Port 5
Internal RET	High band (1) | Low band (2)

Electrical Specifications

Frequency Band, MHz	**698–787**	**824–894**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
Gain, dBi	14.5	15.8	18	18.4	18.5	18.8
Beamwidth, Horizontal, degrees	67	65	63	63	65	68
Beamwidth, Vertical, degrees	12.4	10.5	5.7	5.2	4.9	4.4
Beam Tilt, degrees	2–14	2–14	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	20	20	21	23
Front-to-Back Ratio at 180°, dB	32	34	31	35	36	38
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50° C, maximum, watts	200	200	300	300	300	250

Electrical Specifications, BASTA

Frequency Band, MHz	**698–787**	**824–894**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
Gain by all Beam Tilts, average, dBi	14.3	14.9	17.6	18.1	18.2	18.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.5	±0.6	±0.4	±0.5	±0.6
Gain by Beam Tilt, average, dBi	2 ° | 14.3 8 ° | 14.3 14 ° | 14.3	2 ° | 15.0 8 ° | 14.9 14 ° | 15.4	0 ° | 17.2 5 ° | 17.6 10 ° | 17.6	0 ° | 17.6 5 ° | 18.2 10 ° | 18.2	0 ° | 17.7 5 ° | 18.3 10 ° | 18.3	0 ° | 17.9 5 ° | 18.7 10 ° | 18.7
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.4	±4	±2.4	±2.9	±2.7
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.5	±0.3	±0.2	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	18	17	17	18	19	18
Front-to-Back Total Power at 180° ± 30°, dB	25	24	26	29	27	29
CPR at Boresight, dB	22	23	20	21	21	24

JAHH-65B-R3B

CPR at Sector, dB	11	12	11	11	11	8

Mechanical Specifications

Wind Loading at Velocity, frontal	301.0 N @ 150 km/h | 67.7 lbf @ 150 km/h
Wind Loading at Velocity, lateral	254.0 N @ 150 km/h | 57.1 lbf @ 150 km/h
Wind Loading at Velocity, maximum	143.4 lbf @ 150 km/h | 638.0 N @ 150 km/h
Wind Speed, maximum	241 km/h | 149.75 mph

Packaging and Weights

Width, packed	456 mm | 17.953 in
Depth, packed	357 mm | 14.055 in
Length, packed	1975 mm | 77.756 in
Net Weight, without mounting kit	29.2 kg | 64.375 lb
Weight, gross	42.5 kg | 93.696 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted

Included Products

BSAMNT-3	Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

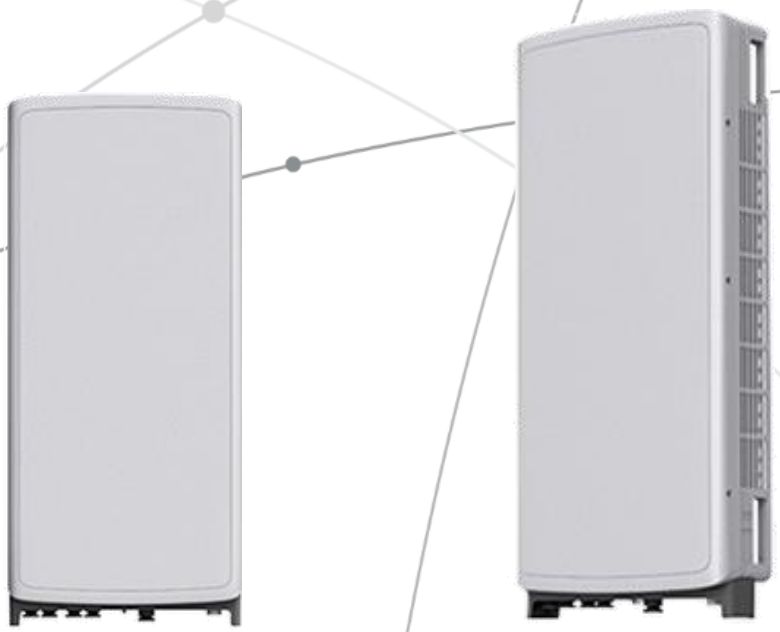
SAMSUNG

SAMSUNG C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

Samsung C-Band 64T64R Massive MIMO Radio enables mobile operators to increase coverage range, boost data speeds and ultimately offer enriched 5G experiences to users in the U.S..

Model Code : MT6407-77A

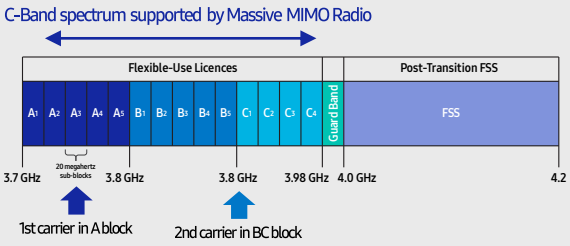


Points of Differentiation

Wide Bandwidth

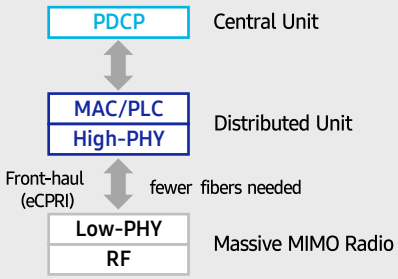
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks



Future Proof Product

Samsung C-Band 64T64R Massive MIMO radio supports not only CPRI but also eCPRI as front-haul interface.
It enables operators can cut down on OPEX/CAPEX by reducing front-haul bandwidth through low layer split and using ethernet based higher efficient line.



Enhanced Performance

C-Band massive MIMO Radio creates sharp beams and extends networks' coverage on the critical mid-band spectrum using a large number of antenna elements and high output power to boost data speeds.

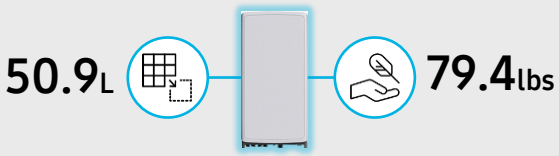
This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

Furthermore, as C-Band massive MIMO Radio supports MU-MIMO(Multi-user MIMO) , it enables to increase user throughput by minimizing interference.

Well Matched Design

Samsung C-Band Massive MIMO radio utilizes 64 antennas, supports up to 280MHz bandwidth, and delivers a 200W output power. despite the above advanced performance, the Radio has a compact size of 50.9L and 79.4lbs. This makes it easy to install the Radio.

It is designed to look solid and compact, with a low profile appearance so that, when installed, harmonizes well with the surrounding environment..



Technical Specifications

Item	Specification
Tech	NR
Band	n77
Frequency Band	3700 - 3980 MHz
EIRP	78.5dBm (53.0 dBm+25.5 dBi)
IBW/OBW	280 MHz / 200 MHz
Installation	Pole/Wall
Size/ Weight	16.06 x 35.06 x 5.51 inch (50.86L)/ 79.4 lbs

SAMSUNG

About Samsung Electronics Co., Ltd.

Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

129 Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, Korea

SAMSUNG

Dual-Band Radio Unit
AWS/PCS (B66/B2)
RFV01U-D1A

Samsung's RFV01U-D1A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.

The RFV01U-D1A RU targets dual-band support across Band 66 (AWS) and Band 2 (PCS), making it an ideal product for broad coverage footprints across multiple common mid-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation
- Built-in Broadcast Auxiliary Services (BAS) filter ensures compliant AWS operation without impacting footprint

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
    B66: DL(2,110-2,180MHz)/UL(1,710-1,780MHz)
    B2: DL(1,930-1,990MHz)/UL(1,850-1,910MHz)
Instantaneous Bandwidth:
    70MHz(B66) + 60MHz(B2)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 255mm (36.8L)
Weight: 38.3kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

SAMSUNG

Dual-Band Radio Unit
700/850MHz (B13/B5)
RFV01U-D2A

Samsung's RFV01U-D2A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.

The RFV01U-D2A RU targets dual-band support across Band 13 (700MHz) and Band 5 (850MHz), making it an ideal product for broad coverage footprints across multiple common low-end, long-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
B13: DL(746-756MHz)/UL(777-787MHz)
B5: DL(869-894MHz)/UL(824-849MHz)
Instantaneous Bandwidth: 10MHz(B13) + 25MHz(B5)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 207mm (29.9L)
Weight: 31.9kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

ATTACHMENT 3

	General	Power	Density					
Site Name: Bethany W (Beacon Falls)								
Tower Height: Verizon @ 97ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**CALC. POWER DENS**	**FREQ.**	**MAX. PERMISS. EXP.**	**FRACTION MPE**	**Total**
*T-Mobile-AWS-LTE	1	19239	142	2500	0.3741	1.0000	3.74%	
*T-Mobile-AWS-LTE	1	19239	142	2500	0.3741	1.0000	3.74%	
*T-Mobile-AWS-LTE	4	1028	142	1900	0.0800	1.0000	0.80%	
*T-Mobile-AWS-UMTS	2	2057	142	1900	0.0800	1.0000	0.80%	
*T-Mobile-PCS-UMTS	2	2308	142	2100	0.0897	1.0000	0.90%	
*T-Mobile-PCS-GSM	2	592	142	600	0.0230	0.4000	0.58%	
*T-Mobile-AWS-LTE	1	1578	142	600	0.0307	0.4000	0.77%	
*T-Mobile-AWS-LTE	2	649	142	700	0.0252	0.4667	0.54%	
*T-Mobile-AWS-LTE	2	1102	142	1900	0.0429	1.0000	0.43%	
*T-Mobile-AWS-UMTS	2	2204	142	1900	0.0857	1.0000	0.86%	
*T-Mobile-LTE	2	1295	142	2100	0.0504	1.0000	0.50%	
*AT&T	2	419	133	850	0.0187	0.5667	0.33%	
*AT&T	4	917	133	2300	0.0818	1.0000	0.82%	
*AT&T	4	971	133	1900	0.0866	1.0000	0.87%	
*AT&T	2	736	133	700	0.0328	0.4667	0.70%	
*AT&T	2	885	133	850	0.0395	0.5667	0.70%	
*AT&T	4	1181	133	2100	0.1053	1.0000	1.05%	
*AT&T	2	553	133	850	0.0247	0.5667	0.44%	
*Clearwire	2	152	155	2496	0.0049	1.0000	0.05%	
*Clearwire	1	211	155	11 GHz	0.0034	1.0000	0.03%	
*Sprint	4	13	152	1900	0.0009	1.0000	0.01%	
*Sprint	1	12	152	850	0.0002	0.5667	0.00%	
*Sprint	2	12	152	2500	0.0004	1.0000	0.00%	
*Beacon Hose Co.	1	100	90	33	0.0051	0.2000	0.25%	
VZW 700	**4**	**642**	**162**	**0.0035**	**751**	**0.5007**	**0.70%**	
VZW CDMA	**2**	**376**	**162**	**0.0010**	**877.26**	**0.5848**	**0.18%**	
VZW Cellular	**4**	**742**	**162**	**0.0041**	**874**	**0.5827**	**0.70%**	
VZW PCS	**4**	**1561**	**162**	**0.0086**	**1975**	**1.0000**	**0.86%**	
VZW AWS	**4**	**1528**	**162**	**0.0084**	**2120**	**1.0000**	**0.84%**	
VZW CBAND	**4**	**6531**	**162**	**0.0358**	**3730.005**	**1.0000**	**3.58%**	
								25.77%
* Source: Siting Council								

ATTACHMENT 4

Tower Engineering Solutions
Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Structural Analysis Report

Existing 160 ft Nudd Corporation Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT02049-S

Customer Site Name: Beacon Falls

Carrier Name: Verizon (App#: 149957, V1)

Carrier Site ID / Name: 469129 / BETHANY_WEST_CT

Site Location: 60 Rice Lane

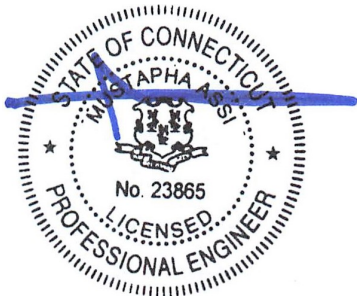
Beacon Falls, Connecticut

New Haven County

Latitude: 41.455689

Longitude: -73.039866

Exp.10/31/2021



05/25/2021

Analysis Result:

Max Structural Usage: 97.7% [Pass]

Max Foundation Usage: 71.0% [Pass]

Additional Usage Caused by New Mount/Mount Modification: N/A

Report Prepared By: Morteza Shakeri

Tower Engineering Solutions
Phone (972) 483-0607, Fax (972) 975-9615
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Analysis Result:

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Max Foundation Usage: 71.0% [Pass]

Additional Usage Caused by New Mount/Mount Modification: N/A

Report Prepared By: Morteza Shakeri

Introduction

The purpose of this report is to summarize the analysis results on the 160 ft Nudd Corporation Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	Tower Drawing prepared by Fred A. Nudd, Project #7342 dated 1/14/00
Foundation Drawing	Foundation Drawing prepared by Fred A. Nudd, Project #7342 dated 1/14/00
Geotechnical Report	Geotechnical Report prepared by SEA Consultants, Ref #99339.02-A dated 8/2/99
Modification Drawings	Modification Drawing prepared by O2Wireless Solutions, Job #2230-022 dated 5/23/02 Modification Drawing prepared by FDH, Project #09-04232E S2 dated 1/03/09 Modification Drawing prepared by FDH, Project #12-04772E S3 dated 10/15/13 Modification Drawing prepared by TES, Job #20939 Rev3 dated 9/28/16 TES, Job# 20939 Rev3, Dated 09/28/16 TES, Job# 80199, Dated 04/30/20

Analysis Criteria

The comprehensive analysis was performed in accordance with the requirements and stipulations of the TIA-222-H**.** In accordance with this standard, the structure was analyzed using **TESPoles,** a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Wind Speed Used in the Analysis:	125.0 mph (3-Sec. Gust) (Ultimate wind speed)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1" radial ice concurrent
Service Load Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-H / 2018 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	S_S = 0.198, S_1 = 0.054

This structural analysis is based upon the tower being classified as a Risk Category II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

Existing Antennas, Mounts and Transmission Lines

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	165.0	1	Andrew - DB222 - Whip	Low Profile Platform	(1) 7/8"	BFFD
-	162.0	6	Decibel - DB846F65ZAXY - Panel		(18) 1 5/8" (1) 1 5/8" Fiber	Verizon
-		9	Andrew - SBNHH-1D65B - Panel			
-		3	Alcatel Lucent - RRH2x90-AWS - RRU			
-		1	Celwave - DB-T1-6Z-8AB-0Z - Dist. Box			
9	152.0	3	RFS - APXVSPP18-C-A20 - Panel	Low Profile Platform	(3) 1-1/4" (1) 1-1/4"	Sprint***
10		3	ALU - 1900MHz - RRU			
11		3	ALU - 800MHz - Filter			
12		3	ALU - 800 MHz - RRU			
13		4	RFS - ACU-A20-N - RET			
14	150.0	3	RFS - APXVTM14-C-120 - Panel			
15		3	Alcatel Lucent - TD-RRH8x20-25 - RRU			
16	142.0	3	Ericsson KRY 112 144/1 TMA	Modified T-arms w/Handrail & Kickers	(8) 1 5/8" (4) 1 5/8" Fiber (2) 1-1/4" Fiber	T-Mobile
17		4	Commscope SDX1926Q-43 Diplexer			
18		4	Ericsson 4415 B25 RRUs			
19		4	Ericsson AIR6449 B41 - Panel			
20		4	Ericsson Air 32 KRD901146-1_B66A_B2A – Panel			
21		3	RFS APXVAARR24_43-U-NA20 - Panel			
22		1	RFS APXVAARR18_43-U-NA20 - Panel			
23		4	Ericsson Radio 4449 B71+B85 RRUs			
24		1	Ericsson Radio 4415 B66A RRUs			
25	133.0	3	Raycap DC6-48-60-18-8F Junction Box	T-Frames* (3) SitePro 1 P/N RMV12-NP W/ (3) 2-1/2" (2.88" O.D.) Pipe Masts	(6) 1 1/4" (6) 1 5/8" (6) 3/4" DC Power** (2) 3/8" Fiber	AT&T
26		3	Kathrein 800 10121 - Panel			
27		3	Kathrein 800-10965 - Panel			
28		1	Cci TPA-65R-LCUUUU-H8 - Panel			
29		2	Quintel QS66512-2 - Panel			
30		6	Powerwave LGP21401 TMA			
31		3	Ericsson RRUS-32 RRU			
32		3	Ericsson B2/B66A 8843 RRU			
33		3	Ericsson B5/B12 4449 RRU			
34	115.0	1	DB222 - Whip	(1) 3 ft. Standoff	(1) 7/8"	BFFD
35	40.0	1	GPS	Standoff	(1) 1/2"	Sprint

*Modified by HUDSON Design, Site No. CT5416 (LTE 4C/5C), Dated 01/24/19.

** (4) 3/4" DC inside 3" Conduit.

*** Terminated but not removed.

Proposed Carrier's Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier's final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
2	162.0	6	Andrew DB846F65ZAXY - Panel	Low Profile Platform	(2) 1 5/8" Hybrid (17) 1 5/8"	Verizon
3		6	Andrew JAHH-65B-R3B - Panel			
4		3	Samsung VZS01 - Panel			
5		1	Commscope CBC78T-DS-43-2X - Diplexer			
6		3	Samsung B2/B66A RRH-BR049 - RRU			
7		3	Samsung Telecommunications B5/B13 RRH-BR04C - RRU			
8		1	Commscope FE-16148-OVP-B12 - OVP			

See the attached coax layout for the line placement considered in the analysis.

Analysis Results

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

	Pole shafts	Anchor Bolts	Base Plate	Flange Connection
Max. Usage:	**97.7%**	**73.2%**	**71.2%**	**87.8%**
Pass/Fail	**Pass**	**Pass**	**Pass**	**Pass**

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	4328.0	37.2	53.9

The foundation has been investigated using the supplied documents and soils report and was found **adequate**. Therefore, no modification to the foundation will be required.

Service Load Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.4682 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the existing structure and its foundation were found to be **adequate** to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222 Standard under the design basic wind speed as specified in the Analysis Criteria.

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC.** Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.

2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.

3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.

4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.

5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.

6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Usage Diagram - Max Ratio 81.78% at 96.0ft

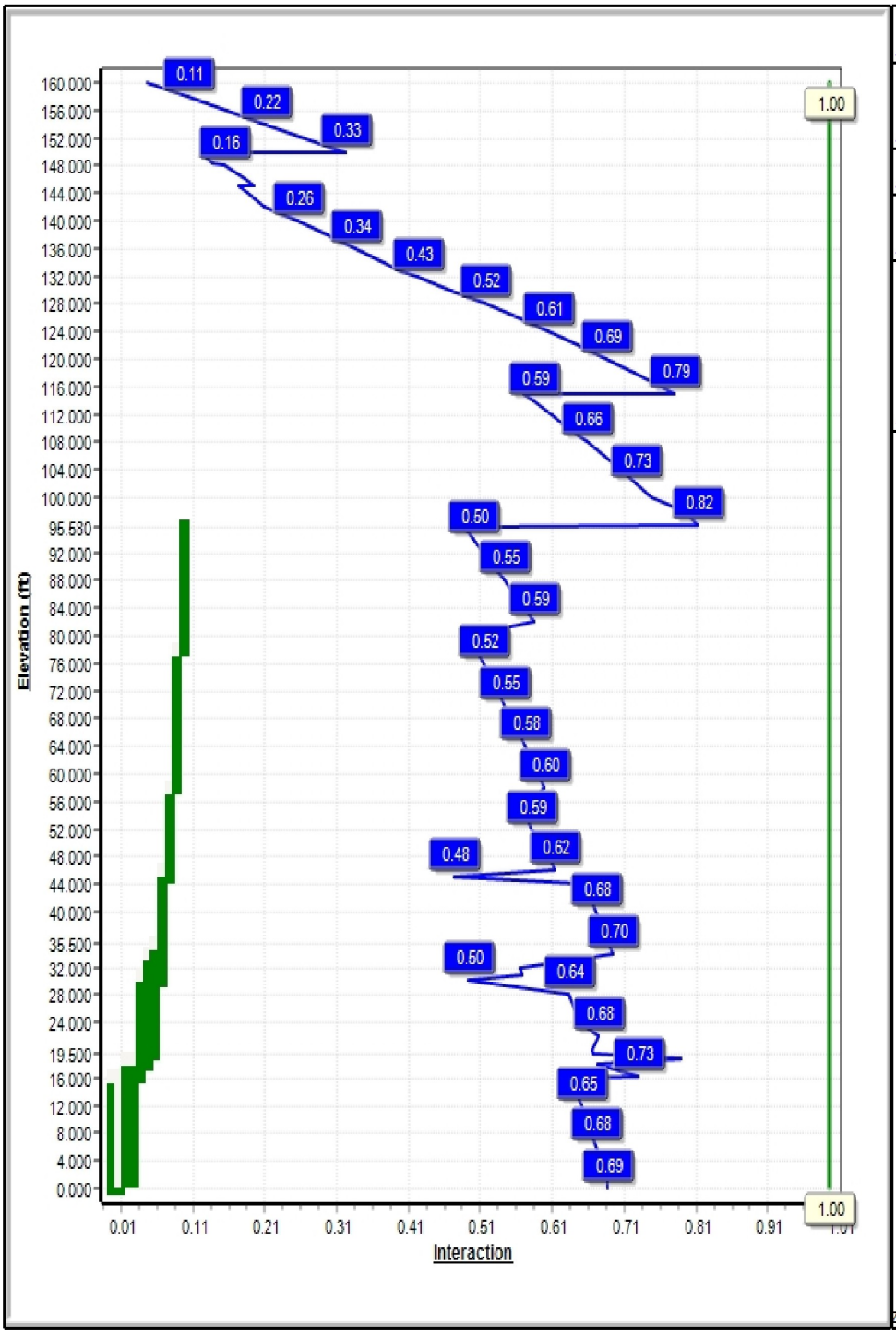
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021
Site Name:	Beacon Falls	**Exposure:**	B	
Height:	160.00 (ft)	**Gh:**	1.1	
Base Elev:	0.000 (ft)			Page: 1

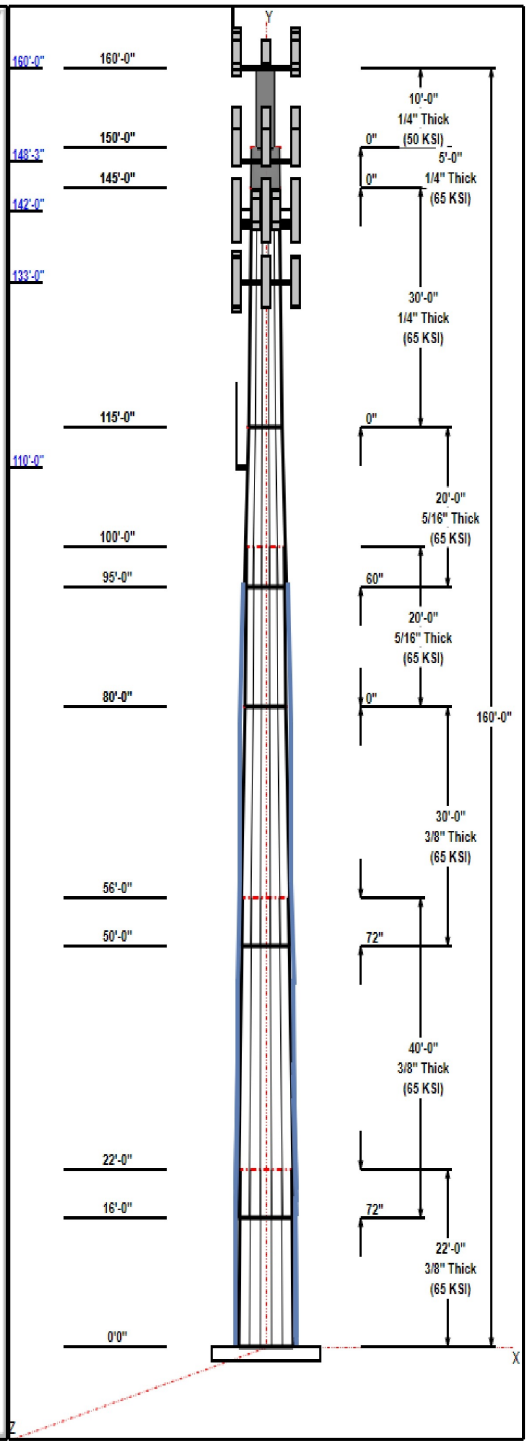
Tower Engineering Solutions

Dead Load Factor:	1.20
Wind Load Factor:	1.00

Load Case : 1.2D + 1.0W 125 mph Wind

Iterations: 28





Structure: CT02049-S-SBA

Type: Custom
Site Name: Beacon Falls
Height: 160.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 12 Sided
Taper: 0.19400

5/25/2021

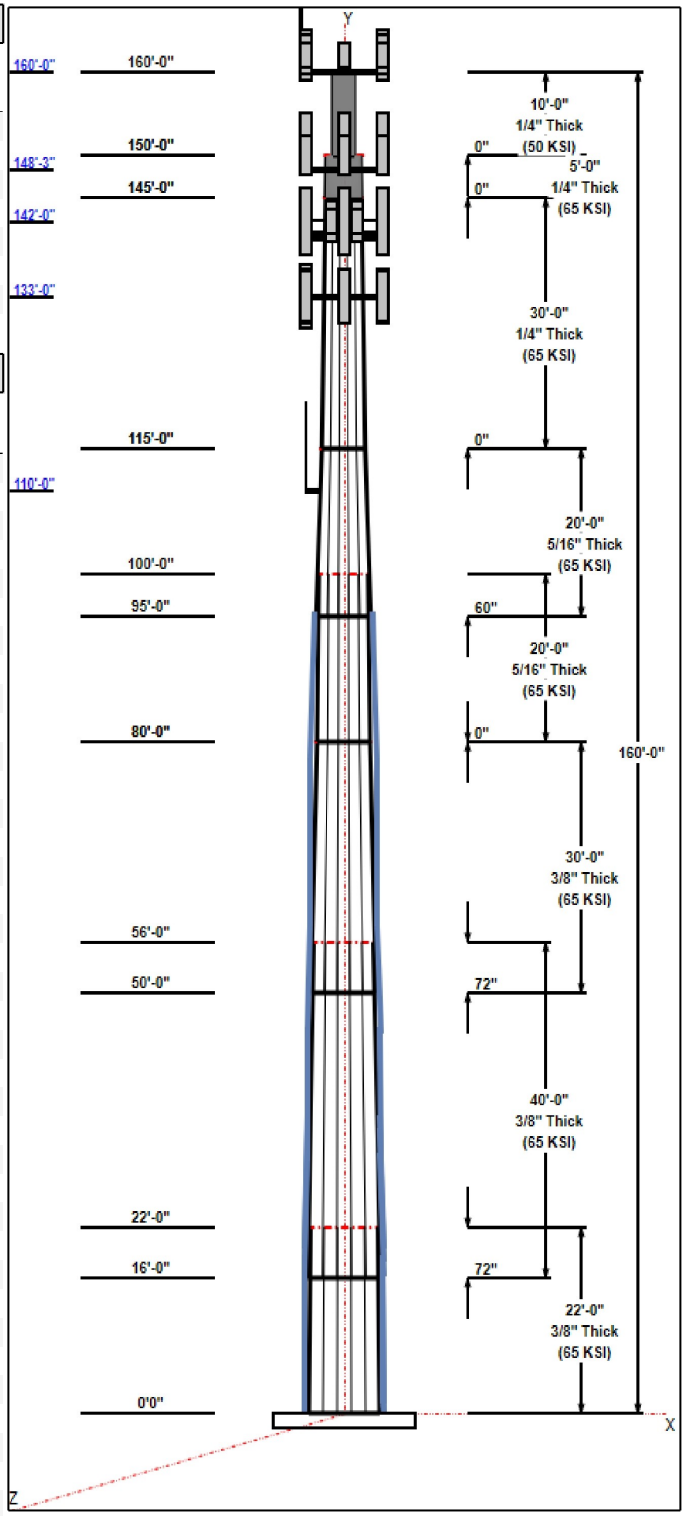
Tower Engineering Solutions

Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	22.00	46.11	50.38	0.375		0.19400	65
2	40.00	40.26	48.02	0.375	Slip	0.19400	65
3	30.00	36.35	42.17	0.375	Slip	0.19400	65
4	20.00	32.48	36.35	0.313	Butt	0.19400	65
5	20.00	30.19	34.07	0.313	Slip	0.19400	65
6	30.00	24.38	30.19	0.250	Butt	0.19400	65
7	5.00	24.38	24.38	0.250	Butt	0.19400	65
8	10.00	16.00	16.00	0.250	Butt	0.00000	50

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
160.00	165.00	1	DB222	BFFD
160.00	162.00	6	DB846F65ZAXY	Verizon
160.00	162.00	1	Low Profile Platform	Verizon
160.00	163.00	1	6' Lightning rod	--
160.00	162.00	6	JAHH-65B-R3B	Verizon
160.00	162.00	3	VZS01	Verizon
160.00	162.00	1	CBC78T-DS-43	Verizon
160.00	162.00	3	B2/B66A RRH-BR049	Verizon
160.00	162.00	3	B5/B13 RRH-BR04C	Verizon
160.00	162.00	1	RCMDC-3315V-PF-48	Verizon
148.30	152.00	3	APXVSPP18-C-A20	Sprint
148.30	150.00	3	APXVTM14-C-120	Sprint
148.30	152.00	3	1900MHz RRH	Sprint
148.30	152.00	3	800 MHz RRH	Sprint
148.30	152.00	3	ALU 800MHz External	Sprint
148.30	150.00	3	TD-RRH8x20-25	Sprint
148.30	152.00	4	ACU-A20-N	Sprint
148.30	148.30	1	Low Profile Platform	Sprint
142.00	142.70	3	Ericsson KRY 112 144/1	T-Mobile
142.00	142.00	1	Platform w/ HR & Bracing	T-Mobile
142.00	142.00	4	Ericsson Air 32	T-Mobile
142.00	142.00	3	RFS	T-Mobile
142.00	142.00	1	RFS	T-Mobile
142.00	142.00	4	Ericsson Radio 4449	T-Mobile
142.00	142.00	1	Ericsson Radio 4415 B66A	T-Mobile
142.00	142.00	4	Ericsson AIR6449 B41	T-Mobile
142.00	142.00	4	Commscope	T-Mobile
142.00	142.00	4	Ericsson 4415 B25 RRU	T-Mobile
142.00	142.00	1	Mod	T-Mobile
133.00	133.00	3	Kathrein 800 10121	AT&T
133.00	133.00	3	Kathrein 800-10965	AT&T
133.00	133.00	1	Cci TPA-65R-LCUUUU-H8	AT&T
133.00	133.00	2	Quintel QS66512-2	AT&T
133.00	133.00	2	(3) SitePro 1 P/N	AT&T
133.00	133.00	6	Powerwave LGP21401	AT&T
133.00	133.00	3	Ericsson RRUS-32 RRU	AT&T
133.00	133.00	3	Ericsson B2/B66A 8843	AT&T
133.00	133.00	3	Ericsson B5/B12 4449	AT&T
133.00	133.00	3	Raycap DC6-48-60-18-8F	AT&T
110.00	115.29	1	DB222	BFFD
110.00	110.00	1	3 ft Standoff	BFFD



40.00	40.00	1	GPS	Sprint

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	160.00	Inside	1 5/8" Coax	Verizon
0.00	160.00	Outside	1 5/8" Hybrid	Verizon
0.00	160.00	Outside	7/8" Coax	BFFD
0.00	148.30	Inside	1-1/4" Hybrid	Sprint
0.00	142.00	Inside	1 5/8" Coax	T-Mobile
0.00	142.00	Outside	1 5/8" Fiber	T-Mobile
0.00	142.00	Outside	1-1/4" Fiber	T-Mobile
0.00	133.00	Inside	1 1/4" Coax	AT&T
0.00	133.00	Inside	1 5/8" Coax	AT&T
0.00	133.00	Inside	3/4" DC Power	AT&T
0.00	133.00	Inside	3/8" Fiber	AT&T
0.00	110.00	Outside	7/8" Coax	BFFD
0.00	98.00	Outside	1.25" Reinforcing plate	
0.00	40.00	Inside	1/2" Coax	Sprint
0.00	32.00	Outside	1.25" Reinforcing plate	

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
18	2.00" F1554 105	105.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
1.5000	63.0	50.0	Round

Reactions

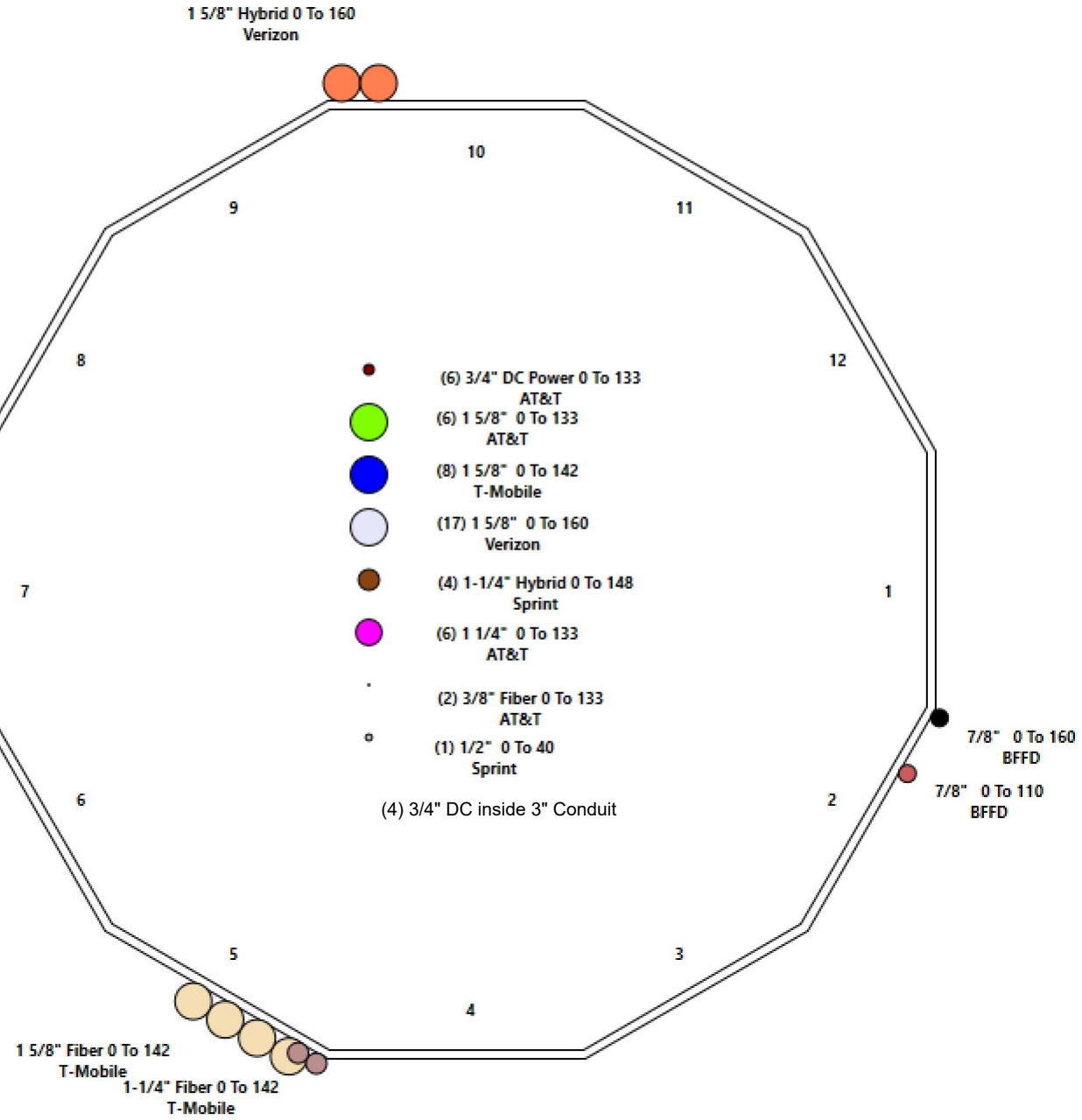
Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 125 mph Wind	4328.0	37.2	53.9
0.9D + 1.0W 118 mph Wind	3808.7	33.1	40.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind	939.6	7.9	75.2
1.2D + 1.0Ev + 1.0Eh	78.6	0.5	55.9
0.9D + 1.0Ev + 1.0Eh	77.7	0.5	42.3
1.0D + 1.0W 60 mph Wind	886.0	7.7	44.9

Structure: CT02049-S-SBA - Coax Line Placement

Type: Monopole
Site Name: Beacon Falls
Height: 160.00 (ft)

5/25/2021

Tower Engineering Solutions



Shaft Properties

Structure:	CT02049-S-SBA		**Code:**	EIA/TIA-222-H	5/25/2021
Site Name:	Beacon Falls		**Exposure:**	B	
Height:	160.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 5

Tower Engineering Solutions

Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	12	22.000	0.3750	65		0.00	4,327
2	12	40.000	0.3750	65	Slip	72.00	7,193
3	12	30.000	0.3750	65	Slip	72.00	4,794
4	12	20.000	0.3125	65	Flange	0.00	2,335
5	12	20.000	0.3125	65	Slip	60.00	2,179
6	12	30.000	0.2500	65	Flange	0.00	2,221
7	R	5.000	0.2500	65	Flange	0.00	316
8	R	10.000	0.2500	50	Flange	0.00	421
					Total Shaft Weight:		**23,786**

	Bottom						Top						
Sec. No.	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper
1	50.38	0.00	60.38	19265.63	33.85	134.33	46.11	22.00	55.22	14741.2	30.80	122.9	0.194000
2	48.02	16.00	57.53	16670.65	32.17	128.06	40.26	56.00	48.16	9779.90	26.62	107.3	0.194000
3	42.17	50.00	50.47	11256.46	27.99	112.47	36.35	80.00	43.45	7178.88	23.83	96.95	0.194000
4	36.35	80.00	36.27	6013.63	29.03	116.34	32.48	100.00	32.36	4273.08	25.70	103.9	0.194000
5	34.07	95.00	33.97	4940.86	27.07	109.02	30.19	115.00	30.06	3425.51	23.74	96.61	0.194000
6	30.19	115.0	24.10	2757.64	30.21	120.76	24.38	145.00	19.42	1441.83	23.98	97.50	0.194000
7	24.38	145.0	18.95	1379.54	0.00	97.50	24.38	150.00	18.19	1219.74	0.00	97.50	0.194000
8	16.00	150.0	12.37	383.86	0.00	64.00	16.00	160.00	12.37	383.86	0.00	64.00	0.000000

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Fu (ksi)	Offset (in)	Intermediate Connectors: Description	Intermediate Connectors: Spacing (in)	Termination Connectors: Description	Termination Connectors: Spacing (in)	Termination Connectors: Lower Qty	Termination Connectors: Upper Qty
0.00	16.25	3	PLT C10x30(1.5" Hole)	65	80	0.00	AJM20&sleeve	20.00	AJM20&sleeve	3.00		
0.00	1.00	3	SOL 2 1/4" William R71	128	150	5.62	5/8" Hollo Bolt	12.00	5/8" Hollo Bolt	3.00		
1.00	18.75	2	LNP LP6X100-BW-20T	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00		8
1.00	18.75	1	LNP LP6x100-B2-20T	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00		8
16.25	31.00	3	PLT C10x15.3(1.5" Hole)	65	80	0.00	AJM20&sleeve	20.00	AJM20&sleeve	3.00		
18.00	34.00	2	LNP LP6X100-G-20TT	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00	10	10
19.50	35.50	1	LNP LP6X100-G-20TT	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00	10	10
30.00	46.00	3	PLT 6"X1-1/4"(1.25" Hole	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00	8	8
45.16	58.00	3	PLT 7" x 1.25"(1.25"Hole	65	80	0.00	AJM20&sleeve	12.00	AJM20&sleeve	3.00	13	
58.00	78.00	3	PLT 5.5"x1 1/4"(1.25"hol	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00		
78.00	95.58	3	PLT 5.5"x1 1/4"(1.25"hol	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00		10

Load Summary

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 6	

Tower Engineering Solutions

Discrete Appurtenances

				No Ice			Ice				
No.	Elev (ft)	Description	Qty	Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
1	160.00	DB222	1	16.00	2.25	1.00	62.50	6.317	1.00	0.00	5.00
2	160.00	DB846F65ZAXY	6	21.00	7.05	0.93	145.05	7.851	0.93	0.00	2.00
3	160.00	Low Profile Platform	1	1200.00	22.00	1.00	1902.61	33.851	1.00	0.00	2.00
4	160.00	6' Lightning rod	1	6.50	0.38	1.00	30.86	1.110	1.00	0.00	3.00
5	160.00	JAHH-65B-R3B	6	54.00	9.11	0.83	168.75	7.426	0.83	0.00	2.00
6	160.00	VZS01	3	87.10	4.30	0.69	161.90	5.322	0.69	0.00	2.00
7	160.00	CBC78T-DS-43	1	20.70	0.37	1.00	38.29	0.546	1.00	0.00	2.00
8	160.00	B2/B66A RRH-BR049	3	70.00	1.87	0.67	112.71	2.243	0.67	0.00	2.00
9	160.00	B5/B13 RRH-BR04C (RFV01U-D2A)	3	84.40	1.87	0.67	131.77	2.243	0.67	0.00	2.00
10	160.00	RCMDC-3315V-PF-48	1	15.00	2.51	1.00	57.39	2.235	1.00	0.00	2.00
11	148.30	APXVSPP18-C-A20	3	57.00	8.02	0.83	172.10	9.880	0.83	0.00	3.70
12	148.30	APXVTM14-C-120	3	56.00	6.34	0.76	155.70	7.065	0.77	0.00	1.70
13	148.30	1900MHz RRH	3	44.00	3.80	0.67	116.69	4.726	0.67	0.00	3.70
14	148.30	800 MHz RRH	3	53.00	2.49	0.67	102.25	3.252	0.67	0.00	3.70
15	148.30	ALU 800MHz External Notch Filt	3	8.80	0.78	0.67	20.55	1.211	0.67	0.00	3.70
16	148.30	TD-RRH8x20-25	3	70.00	4.05	0.67	138.53	4.577	0.67	0.00	1.70
17	148.30	ACU-A20-N	4	1.00	0.14	0.67	3.86	0.338	0.67	0.00	3.70
18	148.30	Low Profile Platform	1	1200.00	22.00	1.00	1897.29	33.761	1.00	0.00	0.00
19	142.00	Ericsson KRY 112 144/1 TMA	3	11.00	0.41	0.67	18.15	0.725	0.67	0.00	0.70
20	142.00	Platform w/ HR & Bracing	1	2246.00	52.00	1.00	4325.11	77.512	1.00	0.00	0.00
21	142.00	Ericsson Air 32	4	132.20	6.51	0.87	247.00	7.293	0.87	0.00	0.00
22	142.00	RFS APXVAARR24_43-U-NA20	3	128.00	20.24	0.70	393.32	21.484	0.70	0.00	0.00
23	142.00	RFS APXVAARR18_43-U-NA20	1	106.00	14.67	0.70	315.33	15.690	0.70	0.00	0.00
24	142.00	Ericsson Radio 4449 B71+B85 RRUs	4	70.00	1.65	0.67	111.43	1.993	0.67	0.00	0.00
25	142.00	Ericsson Radio 4415 B66A RRUs	1	44.10	1.86	0.67	75.55	2.240	0.67	0.00	0.00
26	142.00	Ericsson AIR6449 B41	4	103.00	5.65	0.71	193.91	6.280	0.71	0.00	0.00
27	142.00	Commscope SDX1926Q-43 Diplexer	4	2.90	0.12	0.67	5.58	0.303	0.67	0.00	0.00
28	142.00	Ericsson 4415 B25 RRU	4	49.60	1.86	0.67	87.18	2.220	0.67	0.00	0.00
29	142.00	Mod	1	300.00	12.00	1.00	577.71	20.331	1.00	0.00	0.00
30	133.00	Kathrein 800 10121	3	46.30	5.15	0.79	121.96	6.538	0.79	0.00	0.00
31	133.00	Kathrein 800-10965	3	108.60	13.81	0.71	295.10	14.836	0.71	0.00	0.00
32	133.00	Cci TPA-65R-LCUUUU-H8	1	105.00	12.75	0.79	280.26	13.784	0.79	0.00	0.00
33	133.00	Quintel QS66512-2	2	111.00	8.13	0.92	251.89	8.966	0.92	0.00	0.00
34	133.00	(3) SitePro 1 P/N RMV12-NP W/3	2	1357.77	21.34	0.75	2231.84	39.003	0.75	0.00	0.00
35	133.00	Powerwave LGP21401 TMA	6	14.10	1.29	0.67	30.57	1.841	0.67	0.00	0.00
36	133.00	Ericsson RRUS-32 RRU	3	77.00	3.87	0.67	146.63	3.822	0.67	0.00	0.00
37	133.00	Ericsson B2/B66A 8843 RRU	3	72.00	1.64	0.67	102.86	1.967	0.67	0.00	0.00
38	133.00	Ericsson B5/B12 4449 RRU	3	71.00	1.97	0.67	106.16	2.330	0.67	0.00	0.00
39	133.00	Raycap DC6-48-60-18-8F Junction	3	31.80	0.92	0.67	72.52	1.208	0.67	0.00	0.00
40	110.00	DB222	1	16.00	2.65	1.00	60.79	7.264	1.00	0.00	5.29
41	110.00	3 ft Standoff	1	40.00	2.63	1.00	91.89	6.488	1.00	0.00	0.00
42	40.00	GPS	1	10.00	1.00	1.00	27.13	1.416	1.00	0.00	0.00
		Totals:	**111**	**13,460.24**			**26,479.03**				

Linear Appurtenances

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
Bottom Elev. (ft)	**Top Elev. (ft)**	**Description**		**Exposed Width**		**Exposed**					
0.00	160.00	(17) 1 5/8" Coax		0.00		Inside					
0.00	160.00	(2) 1 5/8" Hybrid		2.00		Outside					
0.00	160.00	(1) 7/8" Coax		0.00		Outside					
0.00	148.30	(4) 1-1/4" Hybrid		0.00		Inside					
0.00	142.00	(8) 1 5/8" Coax		0.00		Inside					
0.00	142.00	(4) 1 5/8" Fiber		2.00		Outside					
0.00	142.00	(2) 1-1/4" Fiber		0.00		Outside					
0.00	133.00	(6) 1 1/4" Coax		0.00		Inside					
0.00	133.00	(6) 1 5/8" Coax		0.00		Inside					
0.00	133.00	(6) 3/4" DC Power		0.00		Inside					
0.00	133.00	(2) 3/8" Fiber		0.00		Inside					
0.00	110.00	(1) 7/8" Coax		0.00		Outside					
0.00	98.00	(3) 1.25" Reinforcing plate		1.25		Outside					
0.00	40.00	(1) 1/2" Coax		0.00		Inside					
0.00	32.00	(3) 1.25" Reinforcing plate		2.50		Outside					

Shaft Section Properties

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 8	

Tower Engineering Solutions

Increment Length: **2 (ft)**

											Additional Reinforcing			
Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
0.00	RB1 RB2	0.3750	50.375	60.375	19265.6	33.85	134.33	65	68	0.0	38.70	17446.6	13285.7	
1.00	RT2 RB3 RB4	0.3750	50.181	60.141	19042.2	33.71	133.82	65	68	205.0	44.46	16928.4	13002.7	151.2
2.00		0.3750	49.987	59.906	18820.6	33.57	133.30	65	68	204.2	44.46	16802.1	12906.2	151.2
4.00		0.3750	49.599	59.438	18382.5	33.30	132.26	65	68	406.1	44.46	16551.1	12714.2	302.5
6.00		0.3750	49.211	58.969	17951.2	33.02	131.23	65	69	402.9	44.46	16301.9	12523.7	302.5
8.00		0.3750	48.823	58.501	17526.7	32.74	130.19	65	69	399.7	44.46	16054.6	12334.6	302.5
10.00		0.3750	48.435	58.032	17109.0	32.46	129.16	65	69	396.5	44.46	15809.2	12147.0	302.5
12.00		0.3750	48.047	57.564	16698.0	32.19	128.13	65	70	393.3	44.46	15565.7	11960.8	302.5
14.00		0.3750	47.659	57.095	16293.5	31.91	127.09	65	70	390.2	44.46	15324.1	11776.1	302.5
16.00	Bot - Section 2	0.3750	47.271	56.627	15895.7	31.63	126.06	65	70	387.0	44.46	15084.3	11592.8	302.5
16.25	RT1 RB5	0.3750	47.222	56.568	15846.5	31.60	125.93	65	70	97.1	31.47	11629.5	8035.3	26.8
18.00	RB6	0.3750	46.883	56.158	15504.4	31.36	125.02	65	71	676.7	43.47	16818.9	9640.8	259.0
18.75	RT3 RT4	0.3750	46.737	55.983	15359.4	31.25	124.63	65	71	288.5	25.47	9684.9	5724.4	65.0
19.50	RB7	0.3750	46.592	55.807	15215.2	31.15	124.25	65	71	287.6	31.47	9639.7	9639.7	80.4
20.00		0.3750	46.495	55.690	15119.6	31.08	123.99	65	71	191.2	31.47	9602.0	9602.0	53.6
22.00	Top - Section 1	0.3750	46.857	56.127	15478.5	31.34	124.95	65	71	761.0	31.47	9452.1	9452.1	214.3
24.00		0.3750	46.469	55.659	15094.1	31.06	123.92	65	71	380.4	31.47	9303.4	9303.4	214.3
26.00		0.3750	46.081	55.190	14716.1	30.78	122.88	65	71	377.2	31.47	9155.8	9155.8	214.3
28.00		0.3750	45.693	54.721	14344.5	30.51	121.85	65	71	374.0	31.47	9009.5	9009.5	214.3
30.00	RB8	0.3750	45.305	54.253	13979.2	30.23	120.81	65	72	370.8	53.97	14995.2	14995.2	367.4
31.00	RT5	0.3750	45.111	54.019	13798.9	30.09	120.30	65	72	184.2	40.50	10892.0	10892.0	137.8
32.00		0.3750	44.917	53.784	13620.2	29.95	119.78	65	72	183.4	40.50	10801.3	10801.3	137.8
34.00	RT6	0.3750	44.529	53.316	13267.3	29.67	118.74	65	72	364.4	28.50	8669.2	5940.9	194.0
35.50	RT7	0.3750	44.238	52.965	13006.7	29.47	117.97	65	73	271.2	22.50	5854.7	5854.7	114.8
36.00		0.3750	44.141	52.847	12920.6	29.40	117.71	65	73	90.0	22.50	5829.9	5829.9	38.3
38.00		0.3750	43.753	52.379	12580.0	29.12	116.67	65	73	358.1	22.50	5731.3	5731.3	153.1
40.00		0.3750	43.365	51.910	12245.5	28.84	115.64	65	73	354.9	22.50	5633.5	5633.5	153.1
42.00		0.3750	42.977	51.442	11916.9	28.56	114.61	65	74	351.7	22.50	5536.5	5536.5	153.1
44.00		0.3750	42.589	50.973	11594.2	28.29	113.57	65	74	348.5	22.50	5440.4	5440.4	153.1
45.16	RB9	0.3750	42.364	50.702	11409.8	28.13	112.97	65	74	200.7	48.75	11681.9	11681.9	192.4
46.00	RT8	0.3750	42.201	50.505	11277.5	28.01	112.54	65	74	144.6	26.25	6250.3	6250.3	75.0
48.00		0.3750	41.813	50.036	10966.5	27.73	111.50	65	74	342.1	26.25	6140.1	6140.1	178.6
50.00	Bot - Section 3	0.3750	41.425	49.568	10661.4	27.46	110.47	65	75	338.9	26.25	6031.0	6031.0	178.6
52.00		0.3750	41.037	49.099	10361.9	27.18	109.43	65	75	677.6	26.25	6132.8	6132.8	178.6
54.00		0.3750	40.649	48.631	10068.1	26.90	108.40	65	75	671.3	26.25	6023.7	6023.7	178.6
56.00	Top - Section 2	0.3750	41.011	49.068	10342.0	27.16	109.36	65	75	664.9	26.25	5915.6	5915.6	178.6
58.00	RT9 RB10	0.3750	40.623	48.599	10048.6	26.88	108.33	65	75	332.3	20.63	4547.7	4547.7	140.4
60.00		0.3750	40.235	48.131	9760.8	26.61	107.29	65	76	329.2	20.63	4464.3	4464.3	140.4
62.00		0.3750	39.847	47.662	9478.5	26.33	106.26	65	76	326.0	20.63	4381.7	4381.7	140.4
64.00		0.3750	39.459	47.194	9201.7	26.05	105.22	65	76	322.8	20.63	4299.9	4299.9	140.4
66.00		0.3750	39.071	46.725	8930.4	25.77	104.19	65	77	319.6	20.63	4218.8	4218.8	140.4
68.00		0.3750	38.683	46.257	8664.5	25.50	103.15	65	77	316.4	20.63	4138.5	4138.5	140.4
70.00		0.3750	38.295	45.788	8403.8	25.22	102.12	65	77	313.2	20.63	4059.0	4059.0	140.4
72.00		0.3750	37.907	45.320	8148.5	24.94	101.09	65	78	310.0	20.63	3980.3	3980.3	140.4
74.00		0.3750	37.519	44.851	7898.4	24.66	100.05	65	78	306.8	20.63	3902.4	3902.4	140.4
76.00		0.3750	37.131	44.383	7653.5	24.39	99.02	65	78	303.6	20.63	3825.2	3825.2	140.4
78.00	RT10 RB11	0.3750	36.743	43.914	7413.6	24.11	97.98	65	78	300.5	20.63	3748.8	3748.8	140.4
80.00	Top - Section 3	0.3750	36.355	43.446	7178.9	23.83	96.95	65	79	297.3	20.63	3673.2	3673.2	140.4
80.00	Bot - Section 4	0.3125	36.355	36.268	6013.6	28.60	116.34	65	73					
82.00		0.3125	35.967	35.877	5821.5	28.70	115.09	65	73	245.5	20.63	3598.3	3598.3	140.4

Increment Length: **2 (ft)**

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
84.00		0.3125	35.579	35.487	5633.5	28.36	113.85	65	74	242.8	20.63	3524.2	3524.2	140.4
86.00		0.3125	35.191	35.096	5449.6	28.03	112.61	65	74	240.2	20.63	3451.0	3451.0	140.4
88.00		0.3125	34.803	34.706	5269.8	27.70	111.37	65	75	237.5	20.63	3378.4	3378.4	140.4
90.00		0.3125	34.415	34.316	5093.9	27.37	110.13	65	75	234.9	20.63	3306.7	3306.7	140.4
92.00		0.3125	34.027	33.925	4922.0	27.03	108.89	65	75	232.2	20.63	3235.7	3235.7	140.4
94.00		0.3125	33.639	33.535	4754.0	26.70	107.64	65	76	229.6	20.63	3165.5	3165.5	140.4
95.00	Bot - Section 5	0.3125	33.445	33.340	4671.5	26.53	107.02	65	76	113.8	20.63	3130.7	3130.7	70.2
95.58	RT11	0.3125	33.332	33.226	4624.0	26.44	106.66	65	76	132.6	20.63	3223.1	3223.1	40.7
96.00		0.3125	33.251	33.144	4589.9	26.37	106.40	65	76	95.8				
98.00		0.3125	32.863	32.754	4429.6	26.03	105.16	65	76	452.8				
100.00	Top - Section 4	0.3125	33.100	32.992	4527.1	26.24	105.92	65	76	447.4				
102.00		0.3125	32.712	32.602	4368.2	25.90	104.68	65	76	223.2				
104.00		0.3125	32.324	32.212	4213.2	25.57	103.44	65	77	220.5				
106.00		0.3125	31.936	31.821	4061.8	25.24	102.20	65	77	217.9				
108.00		0.3125	31.548	31.431	3914.1	24.91	100.95	65	78	215.2				
110.00		0.3125	31.160	31.040	3770.1	24.57	99.71	65	78	212.6				
112.00		0.3125	30.772	30.650	3629.6	24.24	98.47	65	78	209.9				
114.00		0.3125	30.384	30.259	3492.7	23.91	97.23	65	79	207.3				
115.00	Top - Section 5	0.3125	30.190	30.064	3425.5	23.74	96.61	65	79	102.6				
115.00	Bot - Section 6	0.2500	30.190	24.102	2757.6	29.68	120.76	65	72					
116.00		0.2500	29.996	23.946	2704.4	30.01	119.98	65	72	81.7				
118.00		0.2500	29.608	23.633	2599.9	29.59	118.43	65	72	161.9				
120.00		0.2500	29.220	23.321	2498.2	29.17	116.88	65	73	159.8				
122.00		0.2500	28.832	23.009	2399.2	28.76	115.33	65	73	157.6				
124.00		0.2500	28.444	22.696	2302.8	28.34	113.78	65	74	155.5				
126.00		0.2500	28.056	22.384	2209.0	27.93	112.22	65	74	153.4				
128.00		0.2500	27.668	22.071	2117.8	27.51	110.67	65	75	151.3				
130.00		0.2500	27.280	21.759	2029.2	27.10	109.12	65	75	149.1				
132.00		0.2500	26.892	21.447	1943.0	26.68	107.57	65	76	147.0				
133.00		0.2500	26.698	21.291	1900.9	26.47	106.79	65	76	72.7				
134.00		0.2500	26.504	21.134	1859.4	26.26	106.02	65	76	72.2				
136.00		0.2500	26.116	20.822	1778.2	25.85	104.46	65	77	142.8				
138.00		0.2500	25.728	20.510	1699.3	25.43	102.91	65	77	140.6				
140.00		0.2500	25.340	20.197	1622.9	25.02	101.36	65	77	138.5				
142.00		0.2500	24.952	19.885	1548.7	24.60	99.81	65	78	136.4				
144.00		0.2500	24.564	19.573	1476.9	24.18	98.26	65	78	134.3				
145.00	Top - Section 6	0.2500	24.370	19.417	1441.8	23.98	97.48	65	79	66.3				
145.00	Bot - Section 7	0.2500	24.375	18.948	1379.5	23.98	97.48	65	55					
146.00		0.2500	24.181	18.795	1346.5	0.00	96.72	65	55	64.2				
148.00		0.2500	23.793	18.491	1282.1	0.00	95.17	65	55	126.9				
148.30		0.2500	23.735	18.445	1272.6	0.00	94.94	65	55	18.9				
150.00	Top - Section 7	0.2500	23.405	18.186	1219.7	0.00	93.62	65	55	105.9				
150.00	Bot - Section 8	0.2500	16.000	12.370	383.9	0.00	93.62	50	50					
152.00		0.2500	16.000	12.370	383.9	0.00	64.00	50	50	84.2				
154.00		0.2500	16.000	12.370	383.9	0.00	64.00	50	50	84.2				
156.00		0.2500	16.000	12.370	383.9	0.00	64.00	50	50	84.2				
158.00		0.2500	16.000	12.370	383.9	0.00	64.00	50	50	84.2				
160.00		0.2500	16.000	12.370	383.9	0.00	64.00	50	50	84.2				
									Total Weight	**23786.1**				**9302.9**

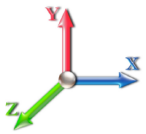
Wind Loading - Shaft

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 10	

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2	1.00	0.70	26.005	28.61	449.40	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT2 RB3 RB4	1.00	0.70	26.005	28.61	447.67	1.089 *	0.000	1.00	4.338	4.73	135.2	0.0	246.1
2.00		1.00	0.70	26.005	28.61	445.94	1.091 *	0.000	1.00	4.321	4.71	134.8	0.0	245.1
4.00		1.00	0.70	26.005	28.61	442.48	1.093 *	0.000	2.00	8.592	9.39	268.7	0.0	487.3
6.00		1.00	0.70	26.005	28.61	439.02	1.097 *	0.000	2.00	8.525	9.35	267.5	0.0	483.5
8.00		1.00	0.70	26.005	28.61	435.56	1.100 *	0.000	2.00	8.458	9.31	266.2	0.0	479.7
10.00		1.00	0.70	26.005	28.61	432.09	1.104 *	0.000	2.00	8.391	9.26	264.9	0.0	475.8
12.00		1.00	0.70	26.005	28.61	428.63	1.107 *	0.000	2.00	8.324	9.22	263.6	0.0	472.0
14.00		1.00	0.70	26.005	28.61	425.17	1.111 *	0.000	2.00	8.257	9.17	262.4	0.0	468.2
16.00	Bot - Section 2	1.00	0.70	26.005	28.61	421.71	1.114 *	0.000	2.00	8.190	9.13	261.1	0.0	464.4
16.25	RT1 RB5	1.00	0.70	26.005	28.61	421.28	1.117 *	0.000	0.25	1.035	1.16	33.1	0.0	116.5
18.00	RB6	1.00	0.70	26.005	28.61	418.25	1.118 *	0.000	1.75	7.217	8.07	230.9	0.0	812.0
18.75	RT3 RT4	1.00	0.70	26.005	28.61	416.95	1.121 *	0.000	0.75	3.077	3.45	98.7	0.0	346.2
19.50	RB7	1.00	0.70	26.005	28.61	415.65	1.122 *	0.000	0.75	3.068	3.44	98.5	0.0	345.1
20.00		1.00	0.70	26.005	28.61	414.79	1.123 *	0.000	0.50	2.040	2.29	65.6	0.0	229.5
22.00	Top - Section 1	1.00	0.70	26.005	28.61	411.33	1.126 *	0.000	2.00	8.118	9.14	261.4	0.0	913.2
24.00		1.00	0.70	26.005	28.61	414.56	1.122 *	0.000	2.00	8.052	9.04	258.5	0.0	456.5
26.00		1.00	0.70	26.005	28.61	411.09	1.126 *	0.000	2.00	7.985	8.99	257.2	0.0	452.6
28.00		1.00	0.70	26.005	28.61	407.63	1.130 *	0.000	2.00	7.918	8.95	255.9	0.0	448.8
30.00	RB8	1.00	0.70	26.027	28.63	404.34	1.134 *	0.000	2.00	7.851	8.90	254.9	0.0	445.0
31.00	RT5	1.00	0.71	26.272	28.90	404.50	1.137 *	0.000	1.00	3.900	4.43	128.1	0.0	221.1
32.00		1.00	0.71	26.511	29.16	404.59	1.139 *	0.000	1.00	3.883	4.42	129.0	0.0	220.1
34.00	RT6	1.00	0.73	26.974	29.67	404.59	0.988 *	0.000	2.00	7.717	7.63	226.3	0.0	437.3
35.50	RT7	1.00	0.74	27.309	30.04	404.43	0.991 *	0.000	1.50	5.744	5.69	170.9	0.0	325.5
36.00		1.00	0.74	27.418	30.16	404.35	0.992 *	0.000	0.50	1.906	1.89	57.0	0.0	108.0
38.00		1.00	0.75	27.845	30.63	403.90	0.994 *	0.000	2.00	7.583	7.54	230.8	0.0	429.7
40.00	Appurtenance(s)	1.00	0.76	28.256	31.08	403.26	0.997 *	0.000	2.00	7.516	7.49	232.9	0.0	425.8
42.00		1.00	0.77	28.653	31.52	402.45	1.000 *	0.000	2.00	7.449	7.45	234.7	0.0	422.0
44.00		1.00	0.78	29.036	31.94	401.48	1.003 *	0.000	2.00	7.382	7.40	236.4	0.0	418.2
45.16	RB9	1.00	0.79	29.253	32.18	400.84	1.005 *	0.000	1.16	4.251	4.27	137.5	0.0	240.8
46.00	RT8	1.00	0.79	29.407	32.35	400.35	1.007 *	0.000	0.84	3.064	3.09	99.8	0.0	173.6
48.00		1.00	0.80	29.767	32.74	399.09	1.009 *	0.000	2.00	7.248	7.31	239.5	0.0	410.5
50.00	Bot - Section 3	1.00	0.81	30.116	33.13	397.70	1.012 *	0.000	2.00	7.181	7.27	240.8	0.0	406.7
52.00		1.00	0.82	30.456	33.50	396.19	1.016 *	0.000	2.00	7.244	7.36	246.4	0.0	813.2
54.00		1.00	0.83	30.786	33.86	394.57	1.019 *	0.000	2.00	7.177	7.31	247.6	0.0	805.5
56.00	Top - Section 2	1.00	0.84	31.108	34.22	392.84	1.022 *	0.000	2.00	7.110	7.27	248.7	0.0	797.9
58.00	RT9 RB10	1.00	0.85	31.421	34.56	398.36	1.019 *	0.000	2.00	7.043	7.18	248.1	0.0	398.8
60.00		1.00	0.85	31.727	34.90	396.47	1.022 *	0.000	2.00	6.976	7.13	248.9	0.0	395.0
62.00		1.00	0.86	32.025	35.23	394.49	1.026 *	0.000	2.00	6.909	7.09	249.7	0.0	391.2
64.00		1.00	0.87	32.317	35.55	392.43	1.029 *	0.000	2.00	6.842	7.04	250.4	0.0	387.3
66.00		1.00	0.88	32.603	35.86	390.28	1.033 *	0.000	2.00	6.775	7.00	251.0	0.0	383.5
68.00		1.00	0.89	32.882	36.17	388.05	1.037 *	0.000	2.00	6.708	6.95	251.5	0.0	379.7
70.00		1.00	0.89	33.155	36.47	385.76	1.041 *	0.000	2.00	6.641	6.91	252.0	0.0	375.9
72.00		1.00	0.90	33.423	36.77	383.39	1.044 *	0.000	2.00	6.574	6.87	252.4	0.0	372.0
74.00		1.00	0.91	33.686	37.05	380.95	1.048 *	0.000	2.00	6.507	6.82	252.8	0.0	368.2
76.00		1.00	0.91	33.944	37.34	378.45	1.052 *	0.000	2.00	6.440	6.78	253.0	0.0	364.4
78.00	RT10 RB11	1.00	0.92	34.197	37.62	375.89	1.056 *	0.000	2.00	6.373	6.73	253.2	0.0	360.5

Wind Loading - Shaft

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 11

TES Tower Engineering Solutions

80.00	Top - Section 3	1.00	0.93	34.445	37.89	373.27	1.060 *	0.000	2.00	6.306	6.69	253.4	0.0	356.7
82.00		1.00	0.93	34.689	38.16	370.59	1.065 *	0.000	2.00	6.239	6.64	253.5	0.0	294.6
84.00		1.00	0.94	34.928	38.42	367.85	1.069 *	0.000	2.00	6.172	6.60	253.5	0.0	291.4
86.00		1.00	0.95	35.164	38.68	365.07	1.073 *	0.000	2.00	6.106	6.55	253.5	0.0	288.2
88.00		1.00	0.95	35.396	38.94	362.23	1.078 *	0.000	2.00	6.039	6.51	253.4	0.0	285.0
90.00		1.00	0.96	35.624	39.19	359.34	1.083 *	0.000	2.00	5.972	6.46	253.3	0.0	281.8
92.00		1.00	0.96	35.848	39.43	356.41	1.087 *	0.000	2.00	5.905	6.42	253.2	0.0	278.7
94.00		1.00	0.97	36.069	39.68	353.43	1.092 *	0.000	2.00	5.838	6.38	253.0	0.0	275.5
95.00	Bot - Section 5	1.00	0.97	36.178	39.80	351.92	1.096 *	0.000	1.00	2.894	3.17	126.2	0.0	136.5
95.58	RT11	1.00	0.98	36.241	39.87	351.04	1.098 *	0.000	0.58	1.702	1.87	74.5	0.0	159.1
96.00		1.00	0.98	36.287	39.92	350.41	1.099 *	0.000	0.42	1.229	1.35	53.9	0.0	114.9
98.00		1.00	0.98	36.501	40.15	347.34	1.102 *	0.000	2.00	5.812	6.41	257.2	0.0	543.3
100.00	Top - Section 4	1.00	0.99	36.712	40.38	344.23	1.002 *	0.000	2.00	5.745	5.76	232.5	0.0	536.9
102.00		1.00	0.99	36.921	40.61	347.72	1.000 *	0.000	2.00	5.678	5.68	230.5	0.0	267.8
104.00		1.00	1.00	37.126	40.84	344.55	1.004 *	0.000	2.00	5.611	5.63	230.0	0.0	264.7
106.00		1.00	1.00	37.329	41.06	341.35	1.008 *	0.000	2.00	5.544	5.59	229.4	0.0	261.5
108.00		1.00	1.01	37.529	41.28	338.10	1.012 *	0.000	2.00	5.477	5.54	228.8	0.0	258.3
110.00	Appurtenance(s)	1.00	1.02	37.726	41.50	334.82	1.016 *	0.000	2.00	5.410	5.50	228.1	0.0	255.1
112.00		1.00	1.02	37.921	41.71	331.50	1.021 *	0.000	2.00	5.343	5.45	227.5	0.0	251.9
114.00		1.00	1.03	38.113	41.92	328.15	1.025 *	0.000	2.00	5.276	5.41	226.8	0.0	248.7
115.00	Top - Section 5	1.00	1.03	38.208	42.03	326.46	1.029 *	0.000	1.00	2.613	2.69	113.0	0.0	123.2
116.00		1.00	1.03	38.303	42.13	324.77	1.031 *	0.000	1.00	2.596	2.68	112.8	0.0	98.1
118.00		1.00	1.04	38.490	42.34	321.35	1.034 *	0.000	2.00	5.142	5.32	225.2	0.0	194.3
120.00		1.00	1.04	38.675	42.54	317.90	1.039 *	0.000	2.00	5.075	5.28	224.4	0.0	191.7
122.00		1.00	1.05	38.859	42.74	314.42	1.044 *	0.000	2.00	5.008	5.23	223.6	0.0	189.2
124.00		1.00	1.05	39.040	42.94	310.91	1.050 *	0.000	2.00	4.941	5.19	222.7	0.0	186.6
126.00		1.00	1.06	39.218	43.14	307.37	1.055 *	0.000	2.00	4.874	5.14	221.8	0.0	184.1
128.00		1.00	1.06	39.395	43.33	303.80	1.060 *	0.000	2.00	4.807	5.10	220.9	0.0	181.5
130.00		1.00	1.07	39.570	43.53	300.21	1.066 *	0.000	2.00	4.741	5.05	219.9	0.0	179.0
132.00		1.00	1.07	39.743	43.72	296.58	1.072 *	0.000	2.00	4.674	5.01	218.9	0.0	176.4
133.00	Appurtenance(s)	1.00	1.07	39.829	43.81	294.76	1.076 *	0.000	1.00	2.312	2.49	109.0	0.0	87.3
134.00		1.00	1.07	39.914	43.91	292.93	1.079 *	0.000	1.00	2.295	2.48	108.7	0.0	86.6
136.00		1.00	1.08	40.084	44.09	289.26	1.084 *	0.000	2.00	4.540	4.92	216.9	0.0	171.3
138.00		1.00	1.08	40.251	44.28	285.55	1.090 *	0.000	2.00	4.473	4.87	215.8	0.0	168.8
140.00		1.00	1.09	40.417	44.46	281.83	1.096 *	0.000	2.00	4.406	4.83	214.7	0.0	166.2
142.00	Appurtenance(s)	1.00	1.09	40.581	44.64	278.07	1.103 *	0.000	2.00	4.339	4.79	213.6	0.0	163.7
144.00		1.00	1.10	40.744	44.82	274.30	0.950	0.000	2.00	4.272	4.06	181.9	0.0	161.1
145.00	Top - Section 6	1.00	1.10	40.824	44.91	272.40	0.950	0.000	1.00	2.111	2.01	90.1	0.0	79.6
146.00		1.00	1.10	40.904	44.99	261.33	0.600	0.000	1.00	2.023	1.21	54.6	0.0	77.1
148.00		1.00	1.11	41.064	45.17	257.64	0.600	0.000	2.00	3.998	2.40	108.3	0.0	152.3
148.30	Appurtenance(s)	1.00	1.11	41.088	45.20	257.09	0.600	0.000	0.30	0.594	0.36	16.1	0.0	22.6
150.00	Top - Section 7	1.00	1.11	41.222	45.34	253.93	0.600	0.000	1.70	3.339	2.00	90.8	0.0	127.1
152.00		1.00	1.11	41.378	45.52	173.92	0.645 *	0.000	2.00	2.667	1.72	78.3	0.0	101.0
154.00		1.00	1.12	41.533	45.69	174.24	0.645 *	0.000	2.00	2.667	1.72	78.6	0.0	101.0
156.00		1.00	1.12	41.686	45.85	174.56	0.645 *	0.000	2.00	2.667	1.72	78.9	0.0	101.0
158.00		1.00	1.13	41.838	46.02	174.88	0.645 *	0.000	2.00	2.667	1.72	79.2	0.0	101.0
160.00	Appurtenance(s)	1.00	1.13	41.989	46.19	175.20	0.645 *	0.000	2.00	2.667	1.72	79.4	0.0	101.0
								Totals:	**160.00**			**18,198.8**		**28,543.3**

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

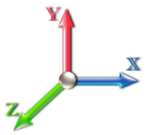
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 12	

Tower Engineering Solutions

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	160.00	JAHH-65B-R3B	6	42.138	46.352	0.66	0.80	36.29	388.80	0.000	2.000	1682.30	0.00	3364.61
2	160.00	DB222	1	42.359	46.595	1.00	1.00	2.25	19.20	0.000	5.000	104.84	0.00	524.20
3	160.00	DB846F65ZAXY	6	42.138	46.352	0.74	0.80	31.47	151.20	0.000	2.000	1458.75	0.00	2917.49
4	160.00	Low Profile Platform	1	42.138	46.352	1.00	1.00	22.00	1440.00	0.000	2.000	1019.74	0.00	2039.48
5	160.00	6' Lightning rod	1	42.212	46.433	1.00	1.00	0.38	7.80	0.000	3.000	17.64	0.00	52.93
6	160.00	RCMDC-3315V-PF-48	1	42.138	46.352	1.00	1.00	2.51	18.00	0.000	2.000	116.34	0.00	232.69
7	160.00	VZS01	3	42.138	46.352	0.69	1.00	8.90	313.56	0.000	2.000	412.58	0.00	825.15
8	160.00	CBC78T-DS-43	1	42.138	46.352	1.00	1.00	0.37	24.84	0.000	2.000	17.15	0.00	34.30
9	160.00	B2/B66A RRH-BR049	3	42.138	46.352	0.67	1.00	3.76	252.00	0.000	2.000	174.22	0.00	348.44
10	160.00	B5/B13 RRH-BR04C	3	42.138	46.352	0.67	1.00	3.76	303.84	0.000	2.000	174.22	0.00	348.44
11	148.30	1900MHz RRH	3	41.378	45.516	0.54	0.80	6.11	158.40	0.000	3.700	278.12	0.00	1029.04
12	148.30	APXVTM14-C-120	3	41.222	45.344	0.61	0.80	11.59	201.60	0.000	1.700	525.74	0.00	893.76
13	148.30	800 MHz RRH	3	41.378	45.516	0.54	0.80	4.00	190.80	0.000	3.700	182.24	0.00	674.29
14	148.30	APXVSPP18-C-A20	3	41.378	45.516	0.66	0.80	15.98	205.20	0.000	3.700	727.15	0.00	2690.46
15	148.30	Low Profile Platform	1	41.088	45.196	1.00	1.00	22.00	1440.00	0.000	0.000	994.32	0.00	0.00
16	148.30	ALU 800MHz External	3	41.378	45.516	0.54	0.80	1.25	31.68	0.000	3.700	57.09	0.00	211.22
17	148.30	TD-RRH8x20-25	3	41.222	45.344	0.54	0.80	6.51	252.00	0.000	1.700	295.30	0.00	502.00
18	148.30	ACU-A20-N	4	41.378	45.516	0.54	0.80	0.30	4.80	0.000	3.700	13.66	0.00	50.55
19	142.00	Mod	1	40.581	44.639	1.00	1.00	12.00	360.00	0.000	0.000	535.67	0.00	0.00
20	142.00	Ericsson 4415 B25 RRU	4	40.581	44.639	0.50	0.75	3.74	238.08	0.000	0.000	166.89	0.00	0.00
21	142.00	Commscope	4	40.581	44.639	0.50	0.75	0.24	13.92	0.000	0.000	10.77	0.00	0.00
22	142.00	Ericsson Radio 4415	1	40.581	44.639	0.50	0.75	0.93	52.92	0.000	0.000	41.72	0.00	0.00
23	142.00	Ericsson Radio 4449	4	40.581	44.639	0.50	0.75	3.32	336.00	0.000	0.000	148.05	0.00	0.00
24	142.00	RFS	1	40.581	44.639	0.52	0.75	7.70	127.20	0.000	0.000	343.80	0.00	0.00
25	142.00	RFS	3	40.581	44.639	0.52	0.75	31.88	460.80	0.000	0.000	1423.01	0.00	0.00
26	142.00	Ericsson Air 32	4	40.581	44.639	0.65	0.75	16.99	634.56	0.000	0.000	758.47	0.00	0.00
27	142.00	Ericsson AIR6449 B41	4	40.581	44.639	0.53	0.75	12.03	494.40	0.000	0.000	537.21	0.00	0.00
28	142.00	Platform w/ HR & Bracing	1	40.581	44.639	1.00	1.00	52.00	2695.20	0.000	0.000	2321.24	0.00	0.00
29	142.00	Ericsson KRY 112 144/1	3	40.638	44.702	0.50	0.75	0.62	39.60	0.000	0.700	27.63	0.00	19.34
30	133.00	Quintel QS66512-2	2	39.829	43.812	0.74	0.80	11.97	266.40	0.000	0.000	524.31	0.00	0.00
31	133.00	Cci TPA-65R-LCUUUU-H8	1	39.829	43.812	0.63	0.80	8.06	126.00	0.000	0.000	353.04	0.00	0.00
32	133.00	(3) SitePro 1 P/N	2	39.829	43.812	0.56	0.75	24.01	3258.65	0.000	0.000	1051.81	0.00	0.00
33	133.00	Kathrein 800-10965	3	39.829	43.812	0.57	0.80	23.53	390.96	0.000	0.000	1030.99	0.00	0.00
34	133.00	Kathrein 800 10121	3	39.829	43.812	0.63	0.80	9.76	166.68	0.000	0.000	427.80	0.00	0.00
35	133.00	Ericsson B2/B66A 8843	3	39.829	43.812	0.54	0.80	2.64	259.20	0.000	0.000	115.54	0.00	0.00
36	133.00	Powerwave LGP21401	6	39.829	43.812	0.54	0.80	4.15	101.52	0.000	0.000	181.76	0.00	0.00
37	133.00	Ericsson RRUS-32 RRU	3	39.829	43.812	0.54	0.80	6.22	277.20	0.000	0.000	272.64	0.00	0.00
38	133.00	Ericsson B5/B12 4449	3	39.829	43.812	0.54	0.80	3.17	255.60	0.000	0.000	138.79	0.00	0.00
39	133.00	Raycap DC6-48-60-18-8F	3	39.829	43.812	0.54	0.80	1.48	114.48	0.000	0.000	64.81	0.00	0.00
40	110.00	3 ft Standoff	1	37.726	41.498	1.00	1.00	2.63	48.00	0.000	0.000	109.14	0.00	0.00
41	110.00	DB222	1	38.236	42.059	1.00	1.00	2.65	19.20	0.000	5.292	111.46	0.00	589.80
42	40.00	GPS	1	28.256	31.082	1.00	1.00	1.00	12.00	0.000	0.000	31.08	0.00	0.00
							Totals:		**16,152.29**			**18,979.01**		

Total Applied Force Summary

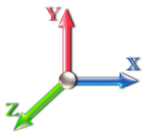
Structure:	CT02049-S-SBA		**Code:**	EIA/TIA-222-H	5/25/2021
Site Name:	Beacon Falls		**Exposure:**	B	
Height:	160.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 13

Tower Engineering Solutions

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		135.16	308.75	0.00	0.00
2.00		134.85	307.79	0.00	0.00
4.00		268.74	612.71	0.00	0.00
6.00		267.46	608.88	0.00	0.00
8.00		266.19	605.06	0.00	0.00
10.00		264.92	601.23	0.00	0.00
12.00		263.64	597.40	0.00	0.00
14.00		262.37	593.58	0.00	0.00
16.00		261.09	589.75	0.00	0.00
16.25		33.06	132.15	0.00	0.00
18.00		230.90	921.71	0.00	0.00
18.75		98.66	393.23	0.00	0.00
19.50		98.48	392.15	0.00	0.00
20.00		65.56	260.83	0.00	0.00
22.00		261.44	1038.56	0.00	0.00
24.00		258.46	581.84	0.00	0.00
26.00		257.19	578.02	0.00	0.00
28.00		255.92	574.19	0.00	0.00
30.00		254.86	570.36	0.00	0.00
31.00		128.15	283.75	0.00	0.00
32.00		128.99	282.79	0.00	0.00
34.00		226.26	562.71	0.00	0.00
35.50		170.92	419.52	0.00	0.00
36.00		57.03	139.36	0.00	0.00
38.00		230.84	555.06	0.00	0.00
40.00	(1) attachments	263.94	563.23	0.00	0.00
42.00		234.73	547.02	0.00	0.00
44.00		236.45	543.20	0.00	0.00
45.16		137.51	313.30	0.00	0.00
46.00		99.80	226.07	0.00	0.00
48.00		239.48	535.55	0.00	0.00
50.00		240.82	531.72	0.00	0.00
52.00		246.44	938.18	0.00	0.00
54.00		247.62	930.53	0.00	0.00
56.00		248.70	922.88	0.00	0.00
58.00		248.07	523.81	0.00	0.00
60.00		248.93	519.98	0.00	0.00
62.00		249.70	516.16	0.00	0.00
64.00		250.40	512.33	0.00	0.00
66.00		251.01	508.51	0.00	0.00
68.00		251.55	504.68	0.00	0.00
70.00		252.02	500.85	0.00	0.00
72.00		252.42	497.03	0.00	0.00
74.00		252.75	493.20	0.00	0.00
76.00		253.02	489.37	0.00	0.00
78.00		253.23	485.55	0.00	0.00

Total Applied Force Summary

Structure:	CT02049-S-SBA		**Code:**	EIA/TIA-222-H	5/25/2021
Site Name:	Beacon Falls		**Exposure:**	B	
Height:	160.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 14

80.00		253.38	481.72	0.00	0.00
82.00		253.48	419.59	0.00	0.00
84.00		253.52	416.41	0.00	0.00
86.00		253.51	413.22	0.00	0.00
88.00		253.45	410.03	0.00	0.00
90.00		253.33	406.84	0.00	0.00
92.00		253.17	403.65	0.00	0.00
94.00		252.97	400.46	0.00	0.00
95.00		126.20	199.04	0.00	0.00
95.58		74.49	195.39	0.00	0.00
96.00		53.92	141.15	0.00	0.00
98.00		257.20	668.31	0.00	0.00
100.00		232.47	661.93	0.00	0.00
102.00		230.51	392.85	0.00	0.00
104.00		229.97	389.66	0.00	0.00
106.00		229.40	386.47	0.00	0.00
108.00		228.79	383.28	0.00	0.00
110.00	(2) attachments	448.74	447.29	0.00	589.80
112.00		227.46	375.66	0.00	0.00
114.00		226.75	372.47	0.00	0.00
115.00		112.96	185.04	0.00	0.00
116.00		112.77	159.97	0.00	0.00
118.00		225.23	318.03	0.00	0.00
120.00		224.42	315.48	0.00	0.00
122.00		223.58	312.93	0.00	0.00
124.00		222.71	310.38	0.00	0.00
126.00		221.81	307.83	0.00	0.00
128.00		220.88	305.28	0.00	0.00
130.00		219.92	302.73	0.00	0.00
132.00		218.93	300.18	0.00	0.00
133.00	(29) attachments	4270.45	5365.82	0.00	0.00
134.00		108.72	133.23	0.00	0.00
136.00		216.88	264.55	0.00	0.00
138.00		215.82	262.00	0.00	0.00
140.00		214.73	259.45	0.00	0.00
142.00	(30) attachments	6528.06	5709.58	0.00	19.34
144.00		181.88	219.24	0.00	0.00
145.00		90.05	108.66	0.00	0.00
146.00		54.62	106.12	0.00	0.00
148.00		108.35	210.37	0.00	0.00
148.30	(23) attachments	3089.73	2515.82	0.00	6051.32
150.00		90.84	168.76	0.00	0.00
152.00		78.29	149.98	0.00	0.00
154.00		78.58	149.98	0.00	0.00
156.00		78.87	149.98	0.00	0.00
158.00		79.16	149.98	0.00	0.00
160.00	(26) attachments	5257.23	3069.22	0.00	10687.74
	Totals:	**37,177.85**	**53,890.53**	**0.00**	**17,348.20**

Linear Appurtenance Segment Forces (Factored)

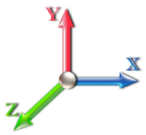
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 15	

Tower Engineering Solutions

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.147	26.005	0.00	2.64
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	26.005	0.00	0.62
1.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.147	26.005	0.00	5.28
1.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	26.005	0.00	2.29
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	26.005	0.00	0.62
1.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.149	1.147	26.005	0.00	0.00
1.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.149	1.147	26.005	0.00	0.00
2.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.148	26.005	0.00	2.64
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	26.005	0.00	0.62
2.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.148	26.005	0.00	5.28
2.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	26.005	0.00	2.29
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	26.005	0.00	0.62
2.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.149	1.148	26.005	0.00	0.00
2.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.149	1.148	26.005	0.00	0.00
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.151	26.005	0.00	5.28
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	26.005	0.00	1.25
4.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.151	26.005	0.00	10.56
4.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	26.005	0.00	4.58
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	26.005	0.00	1.25
4.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.151	26.005	0.00	0.00
4.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.150	1.151	26.005	0.00	0.00
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.152	1.155	26.005	0.00	5.28
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	26.005	0.00	1.25
6.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.152	1.155	26.005	0.00	10.56
6.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	26.005	0.00	4.58
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	26.005	0.00	1.25
6.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.152	1.155	26.005	0.00	0.00
6.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.152	1.155	26.005	0.00	0.00
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.158	26.005	0.00	5.28
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	26.005	0.00	1.25
8.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.158	26.005	0.00	10.56
8.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	26.005	0.00	4.58
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	26.005	0.00	1.25
8.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.158	26.005	0.00	0.00
8.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.153	1.158	26.005	0.00	0.00
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.162	26.005	0.00	5.28
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	26.005	0.00	1.25
10.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.162	26.005	0.00	10.56
10.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	26.005	0.00	4.58
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	26.005	0.00	1.25
10.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.154	1.162	26.005	0.00	0.00
10.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.154	1.162	26.005	0.00	0.00
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.155	1.166	26.005	0.00	5.28
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	26.005	0.00	1.25
12.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.155	1.166	26.005	0.00	10.56
12.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	26.005	0.00	4.58
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	26.005	0.00	1.25

Linear Appurtenance Segment Forces (Factored)

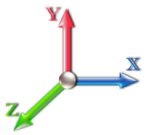
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 16	

Tower Engineering Solutions

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
12.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.155	1.166	26.005	0.00	0.00
12.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.155	1.166	26.005	0.00	0.00
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.169	26.005	0.00	5.28
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	26.005	0.00	1.25
14.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.169	26.005	0.00	10.56
14.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	26.005	0.00	4.58
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	26.005	0.00	1.25
14.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.156	1.169	26.005	0.00	0.00
14.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.156	1.169	26.005	0.00	0.00
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.173	26.005	0.00	5.28
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	26.005	0.00	1.25
16.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.173	26.005	0.00	10.56
16.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	26.005	0.00	4.58
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	26.005	0.00	1.25
16.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.158	1.173	26.005	0.00	0.00
16.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.158	1.173	26.005	0.00	0.00
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.158	1.175	26.005	0.00	0.66
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	26.005	0.00	0.16
16.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.04	0.00	0.158	1.175	26.005	0.00	1.32
16.25	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	26.005	0.00	0.57
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	26.005	0.00	0.16
16.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.158	1.175	26.005	0.00	0.00
16.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.158	1.175	26.005	0.00	0.00
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.159	1.177	26.005	0.00	4.62
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	26.005	0.00	1.09
18.00	1 5/8" Fiber	Yes	1.75	0.000	2.00	0.29	0.00	0.159	1.177	26.005	0.00	9.24
18.00	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	26.005	0.00	4.01
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	26.005	0.00	1.09
18.00	1.25" Reinforcing	Yes	1.75	0.000	1.25	0.18	0.00	0.159	1.177	26.005	0.00	0.00
18.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.159	1.177	26.005	0.00	0.00
18.75	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.180	26.005	0.00	1.98
18.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	26.005	0.00	0.47
18.75	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.180	26.005	0.00	3.96
18.75	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	26.005	0.00	1.72
18.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	26.005	0.00	0.47
18.75	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.160	1.180	26.005	0.00	0.00
18.75	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.16	0.00	0.160	1.180	26.005	0.00	0.00
19.50	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.181	26.005	0.00	1.98
19.50	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	26.005	0.00	0.47
19.50	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.181	26.005	0.00	3.96
19.50	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	26.005	0.00	1.72
19.50	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	26.005	0.00	0.47
19.50	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.160	1.181	26.005	0.00	0.00
19.50	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.16	0.00	0.160	1.181	26.005	0.00	0.00
20.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.161	1.183	26.005	0.00	1.32
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	26.005	0.00	0.31
20.00	1 5/8" Fiber	Yes	0.50	0.000	2.00	0.08	0.00	0.161	1.183	26.005	0.00	2.64

Linear Appurtenance Segment Forces (Factored)

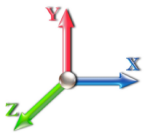
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 17	

Tower Engineering Solutions

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
20.00	1-1/4" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	26.005	0.00	1.14
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	26.005	0.00	0.31
20.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.161	1.183	26.005	0.00	0.00
20.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.161	1.183	26.005	0.00	0.00
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	26.005	0.00	5.28
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	26.005	0.00	1.25
22.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	26.005	0.00	10.56
22.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	26.005	0.00	4.58
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	26.005	0.00	1.25
22.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	26.005	0.00	0.00
22.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	26.005	0.00	0.00
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	26.005	0.00	5.28
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	26.005	0.00	1.25
24.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	26.005	0.00	10.56
24.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	26.005	0.00	4.58
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	26.005	0.00	1.25
24.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.160	1.181	26.005	0.00	0.00
24.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.160	1.181	26.005	0.00	0.00
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	26.005	0.00	5.28
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	26.005	0.00	1.25
26.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	26.005	0.00	10.56
26.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	26.005	0.00	4.58
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	26.005	0.00	1.25
26.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	26.005	0.00	0.00
26.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	26.005	0.00	0.00
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.189	26.005	0.00	5.28
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	26.005	0.00	1.25
28.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.189	26.005	0.00	10.56
28.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	26.005	0.00	4.58
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	26.005	0.00	1.25
28.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.163	1.189	26.005	0.00	0.00
28.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.163	1.189	26.005	0.00	0.00
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.165	1.194	26.027	0.00	5.28
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	26.027	0.00	1.25
30.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.165	1.194	26.027	0.00	10.56
30.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	26.027	0.00	4.58
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	26.027	0.00	1.25
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.165	1.194	26.027	0.00	0.00
30.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.165	1.194	26.027	0.00	0.00
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.197	26.272	0.00	2.64
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	26.272	0.00	0.62
31.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.197	26.272	0.00	5.28
31.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	26.272	0.00	2.29
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	26.272	0.00	0.62
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.197	26.272	0.00	0.00
31.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.197	26.272	0.00	0.00
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.199	26.511	0.00	2.64

Linear Appurtenance Segment Forces (Factored)

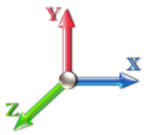
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 18	

Tower Engineering Solutions

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	26.511	0.00	0.62
32.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.199	26.511	0.00	5.28
32.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	26.511	0.00	2.29
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	26.511	0.00	0.62
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.199	26.511	0.00	0.00
32.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.199	26.511	0.00	0.00
34.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.040	26.974	0.00	5.28
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	26.974	0.00	1.25
34.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.040	26.974	0.00	10.56
34.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	26.974	0.00	4.58
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	26.974	0.00	1.25
34.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.113	1.040	26.974	0.00	0.00
35.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.114	1.043	27.309	0.00	3.96
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	27.309	0.00	0.94
35.50	1 5/8" Fiber	Yes	1.50	0.000	2.00	0.25	0.00	0.114	1.043	27.309	0.00	7.92
35.50	1-1/4" Fiber	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	27.309	0.00	3.43
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	27.309	0.00	0.94
35.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.114	1.043	27.309	0.00	0.00
36.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.044	27.418	0.00	1.32
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	27.418	0.00	0.31
36.00	1 5/8" Fiber	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.044	27.418	0.00	2.64
36.00	1-1/4" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	27.418	0.00	1.14
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	27.418	0.00	0.31
36.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.115	1.044	27.418	0.00	0.00
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	27.845	0.00	5.28
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	27.845	0.00	1.25
38.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	27.845	0.00	10.56
38.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	27.845	0.00	4.58
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	27.845	0.00	1.25
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.115	1.046	27.845	0.00	0.00
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.049	28.256	0.00	5.28
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	28.256	0.00	1.25
40.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.049	28.256	0.00	10.56
40.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	28.256	0.00	4.58
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	28.256	0.00	1.25
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.116	1.049	28.256	0.00	0.00
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	28.653	0.00	5.28
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	28.653	0.00	1.25
42.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	28.653	0.00	10.56
42.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	28.653	0.00	4.58
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	28.653	0.00	1.25
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.117	1.052	28.653	0.00	0.00
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	29.036	0.00	5.28
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	29.036	0.00	1.25
44.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	29.036	0.00	10.56
44.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	29.036	0.00	4.58
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	29.036	0.00	1.25

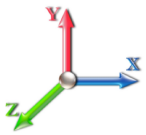
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 19	

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.119	1.056	29.036	0.00	0.00
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.19	0.00	0.119	1.058	29.253	0.00	3.06
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	29.253	0.00	0.72
45.16	1 5/8" Fiber	Yes	1.16	0.000	2.00	0.19	0.00	0.119	1.058	29.253	0.00	6.12
45.16	1-1/4" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	29.253	0.00	2.66
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	29.253	0.00	0.72
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.12	0.00	0.119	1.058	29.253	0.00	0.00
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.14	0.00	0.120	1.060	29.407	0.00	2.22
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	29.407	0.00	0.52
46.00	1 5/8" Fiber	Yes	0.84	0.000	2.00	0.14	0.00	0.120	1.060	29.407	0.00	4.44
46.00	1-1/4" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	29.407	0.00	1.92
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	29.407	0.00	0.52
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.09	0.00	0.120	1.060	29.407	0.00	0.00
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	29.767	0.00	5.28
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	29.767	0.00	1.25
48.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	29.767	0.00	10.56
48.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	29.767	0.00	4.58
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	29.767	0.00	1.25
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.121	1.062	29.767	0.00	0.00
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	30.116	0.00	5.28
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	30.116	0.00	1.25
50.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	30.116	0.00	10.56
50.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	30.116	0.00	4.58
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	30.116	0.00	1.25
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.122	1.066	30.116	0.00	0.00
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.069	30.456	0.00	5.28
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	30.456	0.00	1.25
52.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.069	30.456	0.00	10.56
52.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	30.456	0.00	4.58
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	30.456	0.00	1.25
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.123	1.069	30.456	0.00	0.00
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.072	30.786	0.00	5.28
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	30.786	0.00	1.25
54.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.072	30.786	0.00	10.56
54.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	30.786	0.00	4.58
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	30.786	0.00	1.25
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.072	30.786	0.00	0.00
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	31.108	0.00	5.28
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	31.108	0.00	1.25
56.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	31.108	0.00	10.56
56.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	31.108	0.00	4.58
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	31.108	0.00	1.25
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	31.108	0.00	0.00
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.073	31.421	0.00	5.28
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	31.421	0.00	1.25
58.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.073	31.421	0.00	10.56
58.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	31.421	0.00	4.58

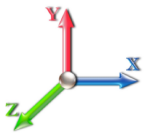
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 20	

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	31.421	0.00	1.25
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.073	31.421	0.00	0.00
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	31.727	0.00	5.28
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	31.727	0.00	1.25
60.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	31.727	0.00	10.56
60.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	31.727	0.00	4.58
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	31.727	0.00	1.25
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	31.727	0.00	0.00
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	32.025	0.00	5.28
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	32.025	0.00	1.25
62.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	32.025	0.00	10.56
62.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	32.025	0.00	4.58
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	32.025	0.00	1.25
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.127	1.080	32.025	0.00	0.00
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	32.317	0.00	5.28
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	32.317	0.00	1.25
64.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	32.317	0.00	10.56
64.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	32.317	0.00	4.58
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	32.317	0.00	1.25
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.128	1.084	32.317	0.00	0.00
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	32.603	0.00	5.28
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	32.603	0.00	1.25
66.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	32.603	0.00	10.56
66.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	32.603	0.00	4.58
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	32.603	0.00	1.25
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.129	1.087	32.603	0.00	0.00
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.091	32.882	0.00	5.28
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	32.882	0.00	1.25
68.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.091	32.882	0.00	10.56
68.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	32.882	0.00	4.58
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	32.882	0.00	1.25
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.130	1.091	32.882	0.00	0.00
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.095	33.155	0.00	5.28
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	33.155	0.00	1.25
70.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.095	33.155	0.00	10.56
70.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	33.155	0.00	4.58
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	33.155	0.00	1.25
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.132	1.095	33.155	0.00	0.00
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	33.423	0.00	5.28
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	33.423	0.00	1.25
72.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	33.423	0.00	10.56
72.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	33.423	0.00	4.58
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	33.423	0.00	1.25
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.133	1.099	33.423	0.00	0.00
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	33.686	0.00	5.28
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	33.686	0.00	1.25
74.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	33.686	0.00	10.56

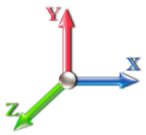
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 21	

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
74.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	33.686	0.00	4.58
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	33.686	0.00	1.25
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.134	1.103	33.686	0.00	0.00
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	33.944	0.00	5.28
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	33.944	0.00	1.25
76.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	33.944	0.00	10.56
76.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	33.944	0.00	4.58
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	33.944	0.00	1.25
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.136	1.108	33.944	0.00	0.00
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.112	34.197	0.00	5.28
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	34.197	0.00	1.25
78.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.112	34.197	0.00	10.56
78.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	34.197	0.00	4.58
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	34.197	0.00	1.25
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.137	1.112	34.197	0.00	0.00
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	34.445	0.00	5.28
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	34.445	0.00	1.25
80.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	34.445	0.00	10.56
80.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	34.445	0.00	4.58
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	34.445	0.00	1.25
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.139	1.116	34.445	0.00	0.00
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.121	34.689	0.00	5.28
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	34.689	0.00	1.25
82.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.121	34.689	0.00	10.56
82.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	34.689	0.00	4.58
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	34.689	0.00	1.25
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.140	1.121	34.689	0.00	0.00
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.125	34.928	0.00	5.28
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	34.928	0.00	1.25
84.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.125	34.928	0.00	10.56
84.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	34.928	0.00	4.58
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	34.928	0.00	1.25
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.142	1.125	34.928	0.00	0.00
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.130	35.164	0.00	5.28
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	35.164	0.00	1.25
86.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.130	35.164	0.00	10.56
86.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	35.164	0.00	4.58
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	35.164	0.00	1.25
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.143	1.130	35.164	0.00	0.00
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.135	35.396	0.00	5.28
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	35.396	0.00	1.25
88.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.135	35.396	0.00	10.56
88.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	35.396	0.00	4.58
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	35.396	0.00	1.25
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.145	1.135	35.396	0.00	0.00
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.140	35.624	0.00	5.28
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	35.624	0.00	1.25

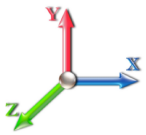
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 22	

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.140	35.624	0.00	10.56
90.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	35.624	0.00	4.58
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	35.624	0.00	1.25
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.147	1.140	35.624	0.00	0.00
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.148	1.145	35.848	0.00	5.28
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	35.848	0.00	1.25
92.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.148	1.145	35.848	0.00	10.56
92.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	35.848	0.00	4.58
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	35.848	0.00	1.25
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.148	1.145	35.848	0.00	0.00
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.150	36.069	0.00	5.28
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	36.069	0.00	1.25
94.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.150	36.069	0.00	10.56
94.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	36.069	0.00	4.58
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	36.069	0.00	1.25
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.150	36.069	0.00	0.00
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.151	1.154	36.178	0.00	2.64
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	36.178	0.00	0.62
95.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.151	1.154	36.178	0.00	5.28
95.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	36.178	0.00	2.29
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	36.178	0.00	0.62
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.151	1.154	36.178	0.00	0.00
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.10	0.00	0.152	1.156	36.241	0.00	1.53
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	36.241	0.00	0.36
95.58	1 5/8" Fiber	Yes	0.58	0.000	2.00	0.10	0.00	0.152	1.156	36.241	0.00	3.06
95.58	1-1/4" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	36.241	0.00	1.33
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	36.241	0.00	0.36
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.06	0.00	0.152	1.156	36.241	0.00	0.00
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.07	0.00	0.152	1.157	36.287	0.00	1.11
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	36.287	0.00	0.26
96.00	1 5/8" Fiber	Yes	0.42	0.000	2.00	0.07	0.00	0.152	1.157	36.287	0.00	2.22
96.00	1-1/4" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	36.287	0.00	0.96
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	36.287	0.00	0.26
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.04	0.00	0.152	1.157	36.287	0.00	0.00
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	36.501	0.00	5.28
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	36.501	0.00	1.25
98.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	36.501	0.00	10.56
98.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	36.501	0.00	4.58
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	36.501	0.00	1.25
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.160	36.501	0.00	0.00
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.055	36.712	0.00	5.28
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	36.712	0.00	1.25
100.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.055	36.712	0.00	10.56
100.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	36.712	0.00	4.58
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	36.712	0.00	1.25
102.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	36.921	0.00	5.28
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	36.921	0.00	1.25

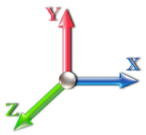
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 23	

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
102.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	36.921	0.00	10.56
102.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	36.921	0.00	4.58
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	36.921	0.00	1.25
104.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	37.126	0.00	5.28
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	37.126	0.00	1.25
104.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	37.126	0.00	10.56
104.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	37.126	0.00	4.58
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	37.126	0.00	1.25
106.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.120	1.061	37.329	0.00	5.28
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	37.329	0.00	1.25
106.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.120	1.061	37.329	0.00	10.56
106.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	37.329	0.00	4.58
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	37.329	0.00	1.25
108.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.065	37.529	0.00	5.28
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	37.529	0.00	1.25
108.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.065	37.529	0.00	10.56
108.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	37.529	0.00	4.58
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	37.529	0.00	1.25
110.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.070	37.726	0.00	5.28
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	37.726	0.00	1.25
110.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.070	37.726	0.00	10.56
110.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	37.726	0.00	4.58
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	37.726	0.00	1.25
112.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.074	37.921	0.00	5.28
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	37.921	0.00	1.25
112.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.074	37.921	0.00	10.56
112.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	37.921	0.00	4.58
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	38.113	0.00	5.28
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	38.113	0.00	1.25
114.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	38.113	0.00	10.56
114.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	38.113	0.00	4.58
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.083	38.208	0.00	2.64
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	38.208	0.00	0.62
115.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.083	38.208	0.00	5.28
115.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	38.208	0.00	2.29
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.085	38.303	0.00	2.64
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	38.303	0.00	0.62
116.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.085	38.303	0.00	5.28
116.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	38.303	0.00	2.29
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.089	38.490	0.00	5.28
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	38.490	0.00	1.25
118.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.089	38.490	0.00	10.56
118.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	38.490	0.00	4.58
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.094	38.675	0.00	5.28
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	38.675	0.00	1.25
120.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.094	38.675	0.00	10.56
120.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	38.675	0.00	4.58

Linear Appurtenance Segment Forces (Factored)

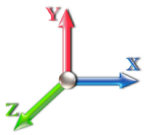
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 24	

Tower Engineering Solutions

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	38.859	0.00	5.28
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	38.859	0.00	1.25
122.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	38.859	0.00	10.56
122.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	38.859	0.00	4.58
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.135	1.105	39.040	0.00	5.28
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	39.040	0.00	1.25
124.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.135	1.105	39.040	0.00	10.56
124.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	39.040	0.00	4.58
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.110	39.218	0.00	5.28
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	39.218	0.00	1.25
126.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.110	39.218	0.00	10.56
126.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	39.218	0.00	4.58
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	39.395	0.00	5.28
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	39.395	0.00	1.25
128.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	39.395	0.00	10.56
128.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	39.395	0.00	4.58
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.141	1.122	39.570	0.00	5.28
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	39.570	0.00	1.25
130.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.141	1.122	39.570	0.00	10.56
130.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	39.570	0.00	4.58
132.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.128	39.743	0.00	5.28
132.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	39.743	0.00	1.25
132.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.128	39.743	0.00	10.56
132.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	39.743	0.00	4.58
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.144	1.133	39.829	0.00	2.64
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	39.829	0.00	0.62
133.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.144	1.133	39.829	0.00	5.28
133.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	39.829	0.00	2.29
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.145	1.136	39.914	0.00	2.64
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	39.914	0.00	0.62
134.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.145	1.136	39.914	0.00	5.28
134.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	39.914	0.00	2.29
136.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.141	40.084	0.00	5.28
136.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	40.084	0.00	1.25
136.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.141	40.084	0.00	10.56
136.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	40.084	0.00	4.58
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.147	40.251	0.00	5.28
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	40.251	0.00	1.25
138.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.147	40.251	0.00	10.56
138.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	40.251	0.00	4.58
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.154	40.417	0.00	5.28
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	40.417	0.00	1.25
140.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.154	40.417	0.00	10.56
140.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	40.417	0.00	4.58
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.161	40.581	0.00	5.28
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	40.581	0.00	1.25
142.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.161	40.581	0.00	10.56

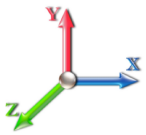
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 25	

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
142.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	40.581	0.00	4.58
144.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	40.744	0.00	5.28
144.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.744	0.00	1.25
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.079	0.000	40.824	0.00	2.64
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	40.824	0.00	0.62
146.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.082	0.000	40.904	0.00	2.64
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	40.904	0.00	0.62
148.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	41.064	0.00	5.28
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	41.064	0.00	1.25
148.30	1 5/8" Hybrid	Yes	0.30	0.000	2.00	0.05	0.00	0.084	0.000	41.088	0.00	0.79
148.30	7/8" Coax	Yes	0.30	0.000	0.00	0.00	0.00	0.084	0.000	41.088	0.00	0.19
150.00	1 5/8" Hybrid	Yes	1.70	0.000	2.00	0.28	0.00	0.085	0.000	41.222	0.00	4.49
150.00	7/8" Coax	Yes	1.70	0.000	0.00	0.00	0.00	0.085	0.000	41.222	0.00	1.06
152.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.378	0.00	5.28
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.378	0.00	1.25
154.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.533	0.00	5.28
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.533	0.00	1.25
156.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.686	0.00	5.28
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.686	0.00	1.25
158.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.838	0.00	5.28
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.838	0.00	1.25
160.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.989	0.00	5.28
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.989	0.00	1.25
										Totals:	**0.0**	**1,665.8**

Calculated Forces

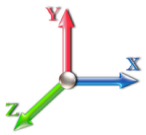
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 26	

Tower Engineering Solutions

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-53.88	-37.20	0.00	-4328.0	0.00	4328.04	3683.82	1059.58	4414.92	3756.66	0.00	0.000	0.000	0.692
1.00	-53.54	-37.10	0.00	-4290.8	0.00	4290.84	3677.71	1055.47	4380.73	3735.77	0.00	-0.038	0.000	0.692
2.00	-53.20	-37.01	0.00	-4253.7	0.00	4253.75	3671.54	1051.36	4346.67	3714.86	0.02	-0.076	0.000	0.688
4.00	-52.54	-36.81	0.00	-4179.7	0.00	4179.72	3659.00	1043.14	4278.95	3673.00	0.06	-0.151	0.000	0.682
6.00	-51.88	-36.61	0.00	-4106.1	0.00	4106.10	3646.20	1034.91	4211.76	3631.09	0.14	-0.227	0.000	0.675
8.00	-51.23	-36.41	0.00	-4032.8	0.00	4032.87	3633.16	1026.69	4145.10	3589.13	0.26	-0.303	0.000	0.668
10.00	-50.58	-36.21	0.00	-3960.0	0.00	3960.05	3619.85	1018.47	4078.97	3547.13	0.40	-0.379	0.000	0.662
12.00	-49.94	-36.01	0.00	-3887.6	0.00	3887.63	3606.29	1010.25	4013.38	3505.10	0.57	-0.455	0.000	0.655
14.00	-49.30	-35.81	0.00	-3815.6	0.00	3815.62	3592.48	1002.02	3948.31	3463.03	0.78	-0.532	0.000	0.648
16.00	-48.69	-35.58	0.00	-3744.0	0.00	3744.00	3578.41	993.80	3883.78	3420.94	1.02	-0.608	0.000	0.641
16.25	-48.53	-35.58	0.00	-3735.1	0.00	3735.11	3576.63	992.77	3875.75	3415.68	1.05	-0.618	0.000	0.735
18.00	-47.58	-35.38	0.00	-3672.8	0.00	3672.85	3564.09	985.58	3819.78	3378.83	1.29	-0.695	0.000	0.678
18.75	-47.16	-35.31	0.00	-3646.3	0.00	3646.31	3558.65	982.50	3795.92	3363.04	1.41	-0.726	0.000	0.794
19.50	-46.75	-35.23	0.00	-3619.8	0.00	3619.83	3553.18	979.41	3772.13	3347.24	1.52	-0.763	0.000	0.672
20.00	-46.46	-35.20	0.00	-3602.2	0.00	3602.22	3549.51	977.36	3756.31	3336.71	1.60	-0.783	0.000	0.670
22.00	-45.38	-34.99	0.00	-3531.8	0.00	3531.82	3563.12	985.03	3815.51	3376.01	1.95	-0.865	0.000	0.679
24.00	-44.75	-34.78	0.00	-3461.8	0.00	3461.84	3548.52	976.81	3752.08	3333.89	2.33	-0.948	0.000	0.652
26.00	-44.13	-34.58	0.00	-3392.2	0.00	3392.28	3533.67	968.58	3689.18	3291.77	2.75	-1.027	0.000	0.645
28.00	-43.51	-34.37	0.00	-3323.1	0.00	3323.12	3518.56	960.36	3626.81	3249.64	3.19	-1.107	0.000	0.637
30.00	-42.91	-34.15	0.00	-3254.3	0.00	3254.38	3503.20	952.14	3564.97	3207.53	3.67	-1.188	0.000	0.497
31.00	-42.61	-34.04	0.00	-3220.2	0.00	3220.23	3495.43	948.03	3534.25	3186.48	3.93	-1.219	0.000	0.573
32.00	-42.30	-33.95	0.00	-3186.1	0.00	3186.19	3487.59	943.92	3503.66	3165.43	4.19	-1.256	0.000	0.570
34.00	-41.70	-33.76	0.00	-3118.3	0.00	3118.30	3471.72	935.70	3442.89	3123.35	4.73	-1.330	0.000	0.699
35.50	-41.26	-33.61	0.00	-3067.6	0.00	3067.67	3459.65	929.53	3397.66	3091.80	5.16	-1.398	0.000	0.694
36.00	-41.09	-33.59	0.00	-3050.8	0.00	3050.86	3455.59	927.47	3382.65	3081.29	5.31	-1.422	0.000	0.692
38.00	-40.48	-33.41	0.00	-2983.6	0.00	2983.68	3439.21	919.25	3322.94	3039.26	5.92	-1.513	0.000	0.684
40.00	-39.88	-33.20	0.00	-2916.8	0.00	2916.86	3422.57	911.03	3263.76	2997.28	6.57	-1.605	0.000	0.676
42.00	-39.28	-33.01	0.00	-2850.4	0.00	2850.47	3405.68	902.81	3205.11	2955.34	7.27	-1.697	0.000	0.668
44.00	-38.71	-32.80	0.00	-2784.4	0.00	2784.45	3388.54	894.58	3146.99	2913.44	8.00	-1.788	0.000	0.660
45.16	-38.37	-32.68	0.00	-2746.4	0.00	2746.40	3378.48	889.81	3113.53	2889.17	8.44	-1.842	0.000	0.477
46.00	-38.12	-32.62	0.00	-2718.9	0.00	2718.95	3371.14	886.36	3089.41	2871.61	8.77	-1.870	0.000	0.618
48.00	-37.54	-32.42	0.00	-2653.7	0.00	2653.72	3353.48	878.14	3032.36	2829.83	9.57	-1.957	0.000	0.610
50.00	-36.97	-32.21	0.00	-2588.8	0.00	2588.89	3335.57	869.92	2975.84	2788.13	10.41	-2.045	0.000	0.602
52.00	-35.99	-31.99	0.00	-2524.4	0.00	2524.46	3317.41	861.69	2919.85	2746.50	11.28	-2.132	0.000	0.586
54.00	-35.02	-31.76	0.00	-2460.4	0.00	2460.49	3298.98	853.47	2864.39	2704.94	12.19	-2.218	0.000	0.577
56.00	-34.06	-31.52	0.00	-2396.9	0.00	2396.98	3316.18	861.14	2916.12	2743.71	13.14	-2.304	0.000	0.584
58.00	-33.50	-31.30	0.00	-2333.9	0.00	2333.93	3297.74	852.92	2860.70	2702.16	14.12	-2.389	0.000	0.603
60.00	-32.95	-31.09	0.00	-2271.3	0.00	2271.32	3279.05	844.70	2805.81	2660.71	15.14	-2.479	0.000	0.594
62.00	-32.39	-30.86	0.00	-2209.1	0.00	2209.15	3260.10	836.48	2751.45	2619.34	16.20	-2.569	0.000	0.585
64.00	-31.84	-30.64	0.00	-2147.4	0.00	2147.43	3240.90	828.25	2697.62	2578.08	17.30	-2.658	0.000	0.576
66.00	-31.30	-30.41	0.00	-2086.1	0.00	2086.15	3221.44	820.03	2644.33	2536.92	18.43	-2.747	0.000	0.567
68.00	-30.76	-30.19	0.00	-2025.3	0.00	2025.32	3201.73	811.81	2591.56	2495.87	19.60	-2.836	0.000	0.557
70.00	-30.23	-29.96	0.00	-1964.9	0.00	1964.95	3181.76	803.59	2539.33	2454.94	20.81	-2.925	0.000	0.548
72.00	-29.70	-29.72	0.00	-1905.0	0.00	1905.04	3161.54	795.36	2487.63	2414.13	22.05	-3.013	0.000	0.538
74.00	-29.18	-29.49	0.00	-1845.5	0.00	1845.59	3141.06	787.14	2436.47	2373.45	23.33	-3.101	0.000	0.528
76.00	-28.66	-29.25	0.00	-1786.6	0.00	1786.61	3120.33	778.92	2385.83	2332.91	24.65	-3.189	0.000	0.518
78.00	-28.14	-29.02	0.00	-1728.1	0.00	1728.10	3099.34	770.70	2335.73	2292.51	26.00	-3.276	0.000	0.508
80.00	-27.63	-28.78	0.00	-1670.0	0.00	1670.07	3078.09	762.47	2286.15	2252.26	27.39	-3.363	0.000	0.498

Calculated Forces

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 27

80.00	-27.63	-28.78	0.00	-1670.0	0.00	1670.07	2384.58	636.50	1911.75	1750.88	27.39	-3.363	0.000	0.537
82.00	-27.18	-28.54	0.00	-1612.5	0.00	1612.52	2370.62	629.65	1870.81	1721.73	28.82	-3.449	0.000	0.588
84.00	-26.74	-28.31	0.00	-1555.4	0.00	1555.43	2356.42	622.80	1830.32	1692.63	30.29	-3.544	0.000	0.575
86.00	-26.29	-28.07	0.00	-1498.8	0.00	1498.82	2341.95	615.94	1790.27	1663.57	31.79	-3.639	0.000	0.561
88.00	-25.86	-27.84	0.00	-1442.6	0.00	1442.67	2327.23	609.09	1750.66	1634.56	33.33	-3.733	0.000	0.547
90.00	-25.42	-27.60	0.00	-1387.0	0.00	1387.00	2312.26	602.24	1711.49	1605.61	34.92	-3.826	0.000	0.533
92.00	-24.99	-27.36	0.00	-1331.8	0.00	1331.80	2297.03	595.39	1672.77	1576.72	36.54	-3.918	0.000	0.519
94.00	-24.58	-27.11	0.00	-1277.0	0.00	1277.09	2281.55	588.54	1634.49	1547.90	38.20	-4.009	0.000	0.504
95.00	-24.37	-26.98	0.00	-1249.9	0.00	1249.98	2273.71	585.11	1615.51	1533.52	39.04	-4.055	0.000	0.497
95.58	-24.17	-26.90	0.00	-1234.3	0.00	1234.33	2269.13	583.12	1604.56	1525.19	39.54	-4.081	0.000	0.486
95.58	-24.17	-26.90	0.00	-1234.3	0.00	1234.33	2269.13	583.12	1604.56	1525.19	39.54	-4.081	0.000	0.486
96.00	-23.99	-26.88	0.00	-1223.0	0.00	1223.03	2265.81	581.68	1596.65	1519.16	39.90	-4.100	0.000	0.818
98.00	-23.28	-26.63	0.00	-1169.2	0.00	1169.28	2249.81	574.83	1559.25	1490.50	41.64	-4.248	0.000	0.797
100.00	-22.57	-26.41	0.00	-1116.0	0.00	1116.03	2259.61	579.02	1582.04	1508.00	43.45	-4.395	0.000	0.752
102.00	-22.13	-26.20	0.00	-1063.2	0.00	1063.21	2243.52	572.17	1544.82	1479.37	45.33	-4.540	0.000	0.731
104.00	-21.70	-25.99	0.00	-1010.8	0.00	1010.82	2227.17	565.31	1508.04	1450.84	47.26	-4.675	0.000	0.709
106.00	-21.27	-25.78	0.00	-958.84	0.00	958.84	2210.57	558.46	1471.71	1422.40	49.24	-4.808	0.000	0.686
108.00	-20.85	-25.57	0.00	-907.28	0.00	907.28	2193.71	551.61	1435.82	1394.06	51.28	-4.939	0.000	0.662
110.00	-20.39	-25.12	0.00	-855.56	0.00	855.56	2176.60	544.76	1400.37	1365.84	53.38	-5.067	0.000	0.638
112.00	-19.98	-24.91	0.00	-805.31	0.00	805.31	2159.23	537.91	1365.36	1337.73	55.52	-5.192	0.000	0.613
114.00	-19.60	-24.68	0.00	-755.50	0.00	755.50	2141.61	531.05	1330.80	1309.73	57.72	-5.315	0.000	0.588
115.00	-19.40	-24.57	0.00	-730.82	0.00	730.82	2132.70	527.63	1313.68	1295.79	58.84	-5.375	0.000	0.575
115.00	-19.40	-24.57	0.00	-730.82	0.00	730.82	1556.62	422.98	1055.35	949.74	58.84	-5.375	0.000	0.785
116.00	-19.20	-24.48	0.00	-706.25	0.00	706.25	1551.43	420.24	1041.71	940.38	59.97	-5.435	0.000	0.767
118.00	-18.85	-24.27	0.00	-657.30	0.00	657.30	1540.84	414.76	1014.72	921.68	62.28	-5.578	0.000	0.729
120.00	-18.50	-24.06	0.00	-608.76	0.00	608.76	1529.99	409.28	988.07	902.99	64.64	-5.717	0.000	0.690
122.00	-18.16	-23.85	0.00	-560.65	0.00	560.65	1518.89	403.80	961.78	884.33	67.06	-5.850	0.000	0.649
124.00	-17.82	-23.63	0.00	-512.96	0.00	512.96	1507.54	398.32	935.85	865.70	69.54	-5.977	0.000	0.608
126.00	-17.49	-23.41	0.00	-465.70	0.00	465.70	1495.93	392.84	910.27	847.11	72.06	-6.098	0.000	0.565
128.00	-17.17	-23.19	0.00	-418.87	0.00	418.87	1484.06	387.35	885.04	828.56	74.64	-6.212	0.000	0.521
130.00	-16.85	-22.97	0.00	-372.49	0.00	372.49	1471.95	381.87	860.17	810.06	77.26	-6.319	0.000	0.475
132.00	-16.54	-22.74	0.00	-326.54	0.00	326.54	1459.57	376.39	835.65	791.62	79.92	-6.417	0.000	0.427
133.00	-11.68	-17.91	0.00	-303.80	0.00	303.80	1453.29	373.65	823.53	782.42	81.27	-6.463	0.000	0.399
134.00	-11.54	-17.80	0.00	-285.90	0.00	285.90	1446.94	370.91	811.49	773.23	82.63	-6.507	0.000	0.380
136.00	-11.28	-17.57	0.00	-250.30	0.00	250.30	1434.06	365.43	787.68	754.91	85.36	-6.589	0.000	0.342
138.00	-11.02	-17.33	0.00	-215.17	0.00	215.17	1420.92	359.95	764.23	736.67	88.14	-6.663	0.000	0.302
140.00	-10.77	-17.10	0.00	-180.51	0.00	180.51	1407.52	354.47	741.13	718.50	90.94	-6.730	0.000	0.261
142.00	-5.86	-9.95	0.00	-146.28	0.00	146.28	1393.87	348.98	718.38	700.42	93.76	-6.787	0.000	0.214
144.00	-5.66	-9.75	0.00	-126.38	0.00	126.38	1379.97	343.50	695.99	682.44	96.61	-6.837	0.000	0.190
145.00	-5.56	-9.65	0.00	-116.63	0.00	116.63	1372.92	340.76	684.93	673.48	98.04	-6.860	0.000	0.178
145.00	-5.56	-9.65	0.00	-116.63	0.00	116.63	931.20	332.53	24157.3	604.09	98.04	-6.860	0.000	0.200
146.00	-5.45	-9.59	0.00	-106.98	0.00	106.98	925.24	329.86	23770.3	594.77	99.48	-6.882	0.000	0.187
148.00	-5.25	-9.46	0.00	-87.81	0.00	87.81	913.32	324.51	23005.8	576.36	102.36	-6.924	0.000	0.159
148.30	-3.13	-6.09	0.00	-78.92	0.00	78.92	911.53	323.71	22892.2	573.63	102.80	-6.929	0.000	0.141
150.00	-2.97	-5.98	0.00	-68.57	0.00	68.57	901.40	319.16	22253.7	558.24	105.26	-6.957	0.000	0.126
150.00	-2.97	-5.98	0.00	-68.57	0.00	68.57	556.65	167.00	10296.1	213.69	105.26	-6.957	0.000	0.328
152.00	-2.82	-5.88	0.00	-56.62	0.00	56.62	556.65	167.00	10296.1	213.69	108.18	-6.987	0.000	0.271
154.00	-2.67	-5.79	0.00	-44.86	0.00	44.86	556.65	167.00	10296.1	213.69	111.11	-7.062	0.000	0.216
156.00	-2.53	-5.70	0.00	-33.28	0.00	33.28	556.65	167.00	10296.1	213.69	114.08	-7.120	0.000	0.161
158.00	-2.39	-5.60	0.00	-21.89	0.00	21.89	556.65	167.00	10296.1	213.69	117.06	-7.161	0.000	0.108
160.00	0.00	-5.26	0.00	-10.69	0.00	10.69	556.65	167.00	10296.1	213.69	120.06	-7.185	0.000	0.051

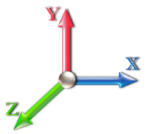
Wind Loading - Shaft

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 28	

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2	1.00	0.70	23.174	25.49	424.23	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT2 RB3 RB4	1.00	0.70	23.174	25.49	422.60	1.089 *	0.000	1.00	4.338	4.73	120.4	0.0	184.5
2.00		1.00	0.70	23.174	25.49	420.97	1.091 *	0.000	1.00	4.321	4.71	120.2	0.0	183.8
4.00		1.00	0.70	23.174	25.49	417.70	1.093 *	0.000	2.00	8.592	9.39	239.5	0.0	365.5
6.00		1.00	0.70	23.174	25.49	414.43	1.097 *	0.000	2.00	8.525	9.35	238.3	0.0	362.6
8.00		1.00	0.70	23.174	25.49	411.16	1.100 *	0.000	2.00	8.458	9.31	237.2	0.0	359.8
10.00		1.00	0.70	23.174	25.49	407.90	1.104 *	0.000	2.00	8.391	9.26	236.1	0.0	356.9
12.00		1.00	0.70	23.174	25.49	404.63	1.107 *	0.000	2.00	8.324	9.22	234.9	0.0	354.0
14.00		1.00	0.70	23.174	25.49	401.36	1.111 *	0.000	2.00	8.257	9.17	233.8	0.0	351.1
16.00	Bot - Section 2	1.00	0.70	23.174	25.49	398.09	1.114 *	0.000	2.00	8.190	9.13	232.7	0.0	348.3
16.25	RT1 RB5	1.00	0.70	23.174	25.49	397.69	1.117 *	0.000	0.25	1.035	1.16	29.5	0.0	87.4
18.00	RB6	1.00	0.70	23.174	25.49	394.83	1.118 *	0.000	1.75	7.217	8.07	205.8	0.0	609.0
18.75	RT3 RT4	1.00	0.70	23.174	25.49	393.60	1.121 *	0.000	0.75	3.077	3.45	87.9	0.0	259.7
19.50	RB7	1.00	0.70	23.174	25.49	392.38	1.122 *	0.000	0.75	3.068	3.44	87.8	0.0	258.8
20.00		1.00	0.70	23.174	25.49	391.56	1.123 *	0.000	0.50	2.040	2.29	58.4	0.0	172.1
22.00	Top - Section 1	1.00	0.70	23.174	25.49	388.29	1.126 *	0.000	2.00	8.118	9.14	233.0	0.0	684.9
24.00		1.00	0.70	23.174	25.49	391.34	1.122 *	0.000	2.00	8.052	9.04	230.3	0.0	342.3
26.00		1.00	0.70	23.174	25.49	388.07	1.126 *	0.000	2.00	7.985	8.99	229.2	0.0	339.5
28.00		1.00	0.70	23.174	25.49	384.81	1.130 *	0.000	2.00	7.918	8.95	228.1	0.0	336.6
30.00	RB8	1.00	0.70	23.193	25.51	381.70	1.134 *	0.000	2.00	7.851	8.90	227.1	0.0	333.7
31.00	RT5	1.00	0.71	23.412	25.75	381.85	1.137 *	0.000	1.00	3.900	4.43	114.2	0.0	165.8
32.00		1.00	0.71	23.625	25.99	381.93	1.139 *	0.000	1.00	3.883	4.42	114.9	0.0	165.1
34.00	RT6	1.00	0.73	24.038	26.44	381.93	0.988 *	0.000	2.00	7.717	7.63	201.6	0.0	328.0
35.50	RT7	1.00	0.74	24.336	26.77	381.78	0.991 *	0.000	1.50	5.744	5.69	152.3	0.0	244.1
36.00		1.00	0.74	24.433	26.88	381.71	0.992 *	0.000	0.50	1.906	1.89	50.8	0.0	81.0
38.00		1.00	0.75	24.814	27.30	381.28	0.994 *	0.000	2.00	7.583	7.54	205.7	0.0	322.3
40.00	Appurtenance(s)	1.00	0.76	25.180	27.70	380.68	0.997 *	0.000	2.00	7.516	7.49	207.5	0.0	319.4
42.00		1.00	0.77	25.534	28.09	379.91	1.000 *	0.000	2.00	7.449	7.45	209.2	0.0	316.5
44.00		1.00	0.78	25.875	28.46	379.00	1.003 *	0.000	2.00	7.382	7.40	210.7	0.0	313.6
45.16	RB9	1.00	0.79	26.068	28.68	378.40	1.005 *	0.000	1.16	4.251	4.27	122.5	0.0	180.6
46.00	RT8	1.00	0.79	26.206	28.83	377.93	1.007 *	0.000	0.84	3.064	3.09	88.9	0.0	130.2
48.00		1.00	0.80	26.527	29.18	376.74	1.009 *	0.000	2.00	7.248	7.31	213.4	0.0	307.9
50.00	Bot - Section 3	1.00	0.81	26.838	29.52	375.43	1.012 *	0.000	2.00	7.181	7.27	214.6	0.0	305.0
52.00		1.00	0.82	27.140	29.85	374.00	1.016 *	0.000	2.00	7.244	7.36	219.6	0.0	609.9
54.00		1.00	0.83	27.435	30.18	372.47	1.019 *	0.000	2.00	7.177	7.31	220.7	0.0	604.1
56.00	Top - Section 2	1.00	0.84	27.721	30.49	370.84	1.022 *	0.000	2.00	7.110	7.27	221.6	0.0	598.4
58.00	RT9 RB10	1.00	0.85	28.000	30.80	376.05	1.019 *	0.000	2.00	7.043	7.18	221.1	0.0	299.1
60.00		1.00	0.85	28.273	31.10	374.27	1.022 *	0.000	2.00	6.976	7.13	221.8	0.0	296.2
62.00		1.00	0.86	28.539	31.39	372.40	1.026 *	0.000	2.00	6.909	7.09	222.5	0.0	293.4
64.00		1.00	0.87	28.799	31.68	370.45	1.029 *	0.000	2.00	6.842	7.04	223.1	0.0	290.5
66.00		1.00	0.88	29.053	31.96	368.42	1.033 *	0.000	2.00	6.775	7.00	223.7	0.0	287.6
68.00		1.00	0.89	29.302	32.23	366.32	1.037 *	0.000	2.00	6.708	6.95	224.2	0.0	284.8
70.00		1.00	0.89	29.546	32.50	364.15	1.041 *	0.000	2.00	6.641	6.91	224.6	0.0	281.9
72.00		1.00	0.90	29.785	32.76	361.92	1.044 *	0.000	2.00	6.574	6.87	224.9	0.0	279.0
74.00		1.00	0.91	30.019	33.02	359.62	1.048 *	0.000	2.00	6.507	6.82	225.2	0.0	276.1
76.00		1.00	0.91	30.248	33.27	357.26	1.052 *	0.000	2.00	6.440	6.78	225.5	0.0	273.3
78.00	RT10 RB11	1.00	0.92	30.474	33.52	354.84	1.056 *	0.000	2.00	6.373	6.73	225.7	0.0	270.4

Wind Loading - Shaft

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 29

TES Tower Engineering Solutions

80.00	Top - Section 3	1.00	0.93	30.695	33.76	352.36	1.060 *	0.000	2.00	6.306	6.69	225.8	0.0	267.5
82.00		1.00	0.93	30.912	34.00	349.84	1.065 *	0.000	2.00	6.239	6.64	225.9	0.0	220.9
84.00		1.00	0.94	31.126	34.24	347.25	1.069 *	0.000	2.00	6.172	6.60	225.9	0.0	218.6
86.00		1.00	0.95	31.336	34.47	344.62	1.073 *	0.000	2.00	6.106	6.55	225.9	0.0	216.2
88.00		1.00	0.95	31.542	34.70	341.95	1.078 *	0.000	2.00	6.039	6.51	225.9	0.0	213.8
90.00		1.00	0.96	31.746	34.92	339.22	1.083 *	0.000	2.00	5.972	6.46	225.8	0.0	211.4
92.00		1.00	0.96	31.946	35.14	336.45	1.087 *	0.000	2.00	5.905	6.42	225.6	0.0	209.0
94.00		1.00	0.97	32.142	35.36	333.64	1.092 *	0.000	2.00	5.838	6.38	225.4	0.0	206.6
95.00	Bot - Section 5	1.00	0.97	32.240	35.46	332.22	1.096 *	0.000	1.00	2.894	3.17	112.5	0.0	102.4
95.58	RT11	1.00	0.98	32.296	35.53	331.39	1.098 *	0.000	0.58	1.702	1.87	66.4	0.0	119.4
96.00		1.00	0.98	32.336	35.57	330.78	1.099 *	0.000	0.42	1.229	1.35	48.0	0.0	86.2
98.00		1.00	0.98	32.527	35.78	327.89	1.102 *	0.000	2.00	5.812	6.41	229.2	0.0	407.5
100.00	Top - Section 4	1.00	0.99	32.716	35.99	324.95	1.002 *	0.000	2.00	5.745	5.76	207.2	0.0	402.7
102.00		1.00	0.99	32.901	36.19	328.25	1.000 *	0.000	2.00	5.678	5.68	205.4	0.0	200.9
104.00		1.00	1.00	33.084	36.39	325.26	1.004 *	0.000	2.00	5.611	5.63	204.9	0.0	198.5
106.00		1.00	1.00	33.265	36.59	322.23	1.008 *	0.000	2.00	5.544	5.59	204.4	0.0	196.1
108.00		1.00	1.01	33.443	36.79	319.17	1.012 *	0.000	2.00	5.477	5.54	203.9	0.0	193.7
110.00	Appurtenance(s)	1.00	1.02	33.619	36.98	316.07	1.016 *	0.000	2.00	5.410	5.50	203.3	0.0	191.3
112.00		1.00	1.02	33.792	37.17	312.94	1.021 *	0.000	2.00	5.343	5.45	202.7	0.0	188.9
114.00		1.00	1.03	33.964	37.36	309.77	1.025 *	0.000	2.00	5.276	5.41	202.1	0.0	186.5
115.00	Top - Section 5	1.00	1.03	34.049	37.45	308.18	1.029 *	0.000	1.00	2.613	2.69	100.7	0.0	92.4
116.00		1.00	1.03	34.133	37.55	306.58	1.031 *	0.000	1.00	2.596	2.68	100.5	0.0	73.6
118.00		1.00	1.04	34.300	37.73	303.35	1.034 *	0.000	2.00	5.142	5.32	200.7	0.0	145.7
120.00		1.00	1.04	34.465	37.91	300.10	1.039 *	0.000	2.00	5.075	5.28	200.0	0.0	143.8
122.00		1.00	1.05	34.628	38.09	296.81	1.044 *	0.000	2.00	5.008	5.23	199.2	0.0	141.9
124.00		1.00	1.05	34.790	38.27	293.50	1.050 *	0.000	2.00	4.941	5.19	198.5	0.0	140.0
126.00		1.00	1.06	34.949	38.44	290.16	1.055 *	0.000	2.00	4.874	5.14	197.7	0.0	138.1
128.00		1.00	1.06	35.107	38.62	286.79	1.060 *	0.000	2.00	4.807	5.10	196.8	0.0	136.1
130.00		1.00	1.07	35.262	38.79	283.40	1.066 *	0.000	2.00	4.741	5.05	196.0	0.0	134.2
132.00		1.00	1.07	35.417	38.96	279.98	1.072 *	0.000	2.00	4.674	5.01	195.1	0.0	132.3
133.00	Appurtenance(s)	1.00	1.07	35.493	39.04	278.26	1.076 *	0.000	1.00	2.312	2.49	97.1	0.0	65.4
134.00		1.00	1.07	35.569	39.13	276.53	1.079 *	0.000	1.00	2.295	2.48	96.9	0.0	65.0
136.00		1.00	1.08	35.720	39.29	273.06	1.084 *	0.000	2.00	4.540	4.92	193.3	0.0	128.5
138.00		1.00	1.08	35.869	39.46	269.56	1.090 *	0.000	2.00	4.473	4.87	192.3	0.0	126.6
140.00		1.00	1.09	36.017	39.62	266.04	1.096 *	0.000	2.00	4.406	4.83	191.4	0.0	124.7
142.00	Appurtenance(s)	1.00	1.09	36.163	39.78	262.50	1.103 *	0.000	2.00	4.339	4.79	190.4	0.0	122.8
144.00		1.00	1.10	36.308	39.94	258.94	0.950	0.000	2.00	4.272	4.06	162.1	0.0	120.8
145.00	Top - Section 6	1.00	1.10	36.380	40.02	257.15	0.950	0.000	1.00	2.111	2.01	80.2	0.0	59.7
146.00		1.00	1.10	36.451	40.10	246.70	0.600	0.000	1.00	2.023	1.21	48.7	0.0	57.8
148.00		1.00	1.11	36.593	40.25	243.21	0.600	0.000	2.00	3.998	2.40	96.6	0.0	114.2
148.30	Appurtenance(s)	1.00	1.11	36.615	40.28	242.69	0.600	0.000	0.30	0.594	0.36	14.4	0.0	17.0
150.00	Top - Section 7	1.00	1.11	36.734	40.41	239.71	0.600	0.000	1.70	3.339	2.00	81.0	0.0	95.4
152.00		1.00	1.11	36.873	40.56	164.18	0.645 *	0.000	2.00	2.667	1.72	69.8	0.0	75.8
154.00		1.00	1.12	37.011	40.71	164.48	0.645 *	0.000	2.00	2.667	1.72	70.0	0.0	75.8
156.00		1.00	1.12	37.148	40.86	164.79	0.645 *	0.000	2.00	2.667	1.72	70.3	0.0	75.8
158.00		1.00	1.13	37.283	41.01	165.09	0.645 *	0.000	2.00	2.667	1.72	70.5	0.0	75.8
160.00	Appurtenance(s)	1.00	1.13	37.418	41.16	165.38	0.645 *	0.000	2.00	2.667	1.72	70.8	0.0	75.8
								Totals:	**160.00**			**16,217.6**		**21,407.5**

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

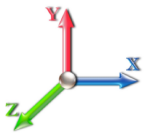
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 30	

Tower Engineering Solutions

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	160.00	JAHH-65B-R3B	6	37.551	41.306	0.66	0.80	36.29	291.60	0.000	2.000	1499.16	0.00	2998.32
2	160.00	DB222	1	37.748	41.523	1.00	1.00	2.25	14.40	0.000	5.000	93.43	0.00	467.13
3	160.00	DB846F65ZAXY	6	37.551	41.306	0.74	0.80	31.47	113.40	0.000	2.000	1299.94	0.00	2599.88
4	160.00	Low Profile Platform	1	37.551	41.306	1.00	1.00	22.00	1080.00	0.000	2.000	908.73	0.00	1817.45
5	160.00	6' Lightning rod	1	37.617	41.378	1.00	1.00	0.38	5.85	0.000	3.000	15.72	0.00	47.17
6	160.00	RCMDC-3315V-PF-48	1	37.551	41.306	1.00	1.00	2.51	13.50	0.000	2.000	103.68	0.00	207.35
7	160.00	VZS01	3	37.551	41.306	0.69	1.00	8.90	235.17	0.000	2.000	367.66	0.00	735.32
8	160.00	CBC78T-DS-43	1	37.551	41.306	1.00	1.00	0.37	18.63	0.000	2.000	15.28	0.00	30.57
9	160.00	B2/B66A RRH-BR049	3	37.551	41.306	0.67	1.00	3.76	189.00	0.000	2.000	155.26	0.00	310.51
10	160.00	B5/B13 RRH-BR04C	3	37.551	41.306	0.67	1.00	3.76	227.88	0.000	2.000	155.26	0.00	310.51
11	148.30	1900MHz RRH	3	36.873	40.561	0.54	0.80	6.11	118.80	0.000	3.700	247.84	0.00	917.01
12	148.30	APXVTM14-C-120	3	36.734	40.407	0.61	0.80	11.59	151.20	0.000	1.700	468.51	0.00	796.46
13	148.30	800 MHz RRH	3	36.873	40.561	0.54	0.80	4.00	143.10	0.000	3.700	162.40	0.00	600.89
14	148.30	APXVSPP18-C-A20	3	36.873	40.561	0.66	0.80	15.98	153.90	0.000	3.700	647.99	0.00	2397.56
15	148.30	Low Profile Platform	1	36.615	40.276	1.00	1.00	22.00	1080.00	0.000	0.000	886.07	0.00	0.00
16	148.30	ALU 800MHz External	3	36.873	40.561	0.54	0.80	1.25	23.76	0.000	3.700	50.87	0.00	188.23
17	148.30	TD-RRH8x20-25	3	36.734	40.407	0.54	0.80	6.51	189.00	0.000	1.700	263.15	0.00	447.35
18	148.30	ACU-A20-N	4	36.873	40.561	0.54	0.80	0.30	3.60	0.000	3.700	12.17	0.00	45.05
19	142.00	Mod	1	36.163	39.780	1.00	1.00	12.00	270.00	0.000	0.000	477.35	0.00	0.00
20	142.00	Ericsson 4415 B25 RRU	4	36.163	39.780	0.50	0.75	3.74	178.56	0.000	0.000	148.72	0.00	0.00
21	142.00	Commscope	4	36.163	39.780	0.50	0.75	0.24	10.44	0.000	0.000	9.59	0.00	0.00
22	142.00	Ericsson Radio 4415	1	36.163	39.780	0.50	0.75	0.93	39.69	0.000	0.000	37.18	0.00	0.00
23	142.00	Ericsson Radio 4449	4	36.163	39.780	0.50	0.75	3.32	252.00	0.000	0.000	131.93	0.00	0.00
24	142.00	RFS	1	36.163	39.780	0.52	0.75	7.70	95.40	0.000	0.000	306.37	0.00	0.00
25	142.00	RFS	3	36.163	39.780	0.52	0.75	31.88	345.60	0.000	0.000	1268.09	0.00	0.00
26	142.00	Ericsson Air 32	4	36.163	39.780	0.65	0.75	16.99	475.92	0.000	0.000	675.90	0.00	0.00
27	142.00	Ericsson AIR6449 B41	4	36.163	39.780	0.53	0.75	12.03	370.80	0.000	0.000	478.73	0.00	0.00
28	142.00	Platform w/ HR & Bracing	1	36.163	39.780	1.00	1.00	52.00	2021.40	0.000	0.000	2068.54	0.00	0.00
29	142.00	Ericsson KRY 112 144/1	3	36.214	39.835	0.50	0.75	0.62	29.70	0.000	0.700	24.62	0.00	17.23
30	133.00	Quintel QS66512-2	2	35.493	39.042	0.74	0.80	11.97	199.80	0.000	0.000	467.23	0.00	0.00
31	133.00	Cci TPA-65R-LCUUUU-H8	1	35.493	39.042	0.63	0.80	8.06	94.50	0.000	0.000	314.60	0.00	0.00
32	133.00	(3) SitePro 1 P/N	2	35.493	39.042	0.56	0.75	24.01	2443.99	0.000	0.000	937.31	0.00	0.00
33	133.00	Kathrein 800-10965	3	35.493	39.042	0.57	0.80	23.53	293.22	0.000	0.000	918.75	0.00	0.00
34	133.00	Kathrein 800 10121	3	35.493	39.042	0.63	0.80	9.76	125.01	0.000	0.000	381.22	0.00	0.00
35	133.00	Ericsson B2/B66A 8843	3	35.493	39.042	0.54	0.80	2.64	194.40	0.000	0.000	102.96	0.00	0.00
36	133.00	Powerwave LGP21401	6	35.493	39.042	0.54	0.80	4.15	76.14	0.000	0.000	161.97	0.00	0.00
37	133.00	Ericsson RRUS-32 RRU	3	35.493	39.042	0.54	0.80	6.22	207.90	0.000	0.000	242.96	0.00	0.00
38	133.00	Ericsson B5/B12 4449	3	35.493	39.042	0.54	0.80	3.17	191.70	0.000	0.000	123.68	0.00	0.00
39	133.00	Raycap DC6-48-60-18-8F	3	35.493	39.042	0.54	0.80	1.48	85.86	0.000	0.000	57.76	0.00	0.00
40	110.00	3 ft Standoff	1	33.619	36.981	1.00	1.00	2.63	36.00	0.000	0.000	97.26	0.00	0.00
41	110.00	DB222	1	34.073	37.481	1.00	1.00	2.65	14.40	0.000	5.292	99.32	0.00	525.59
42	40.00	GPS	1	25.180	27.698	1.00	1.00	1.00	9.00	0.000	0.000	27.70	0.00	0.00
							Totals:		**12,114.22**			**16,912.88**		

Total Applied Force Summary

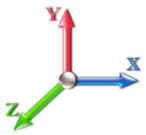
Structure:	CT02049-S-SBA		**Code:**	EIA/TIA-222-H	5/25/2021
Site Name:	Beacon Falls		**Exposure:**	B	
Height:	160.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 31

Tower Engineering Solutions

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		120.45	231.56	0.00	0.00
2.00		120.17	230.84	0.00	0.00
4.00		239.48	459.53	0.00	0.00
6.00		238.35	456.66	0.00	0.00
8.00		237.21	453.79	0.00	0.00
10.00		236.08	450.92	0.00	0.00
12.00		234.94	448.05	0.00	0.00
14.00		233.81	445.18	0.00	0.00
16.00		232.67	442.31	0.00	0.00
16.25		29.46	99.11	0.00	0.00
18.00		205.76	691.28	0.00	0.00
18.75		87.92	294.92	0.00	0.00
19.50		87.76	294.11	0.00	0.00
20.00		58.42	195.63	0.00	0.00
22.00		232.98	778.92	0.00	0.00
24.00		230.33	436.38	0.00	0.00
26.00		229.19	433.51	0.00	0.00
28.00		228.06	430.64	0.00	0.00
30.00		227.11	427.77	0.00	0.00
31.00		114.19	212.81	0.00	0.00
32.00		114.95	212.09	0.00	0.00
34.00		201.63	422.03	0.00	0.00
35.50		152.32	314.64	0.00	0.00
36.00		50.83	104.52	0.00	0.00
38.00		205.71	416.29	0.00	0.00
40.00	(1) attachments	235.21	422.43	0.00	0.00
42.00		209.17	410.27	0.00	0.00
44.00		210.70	407.40	0.00	0.00
45.16		122.54	234.98	0.00	0.00
46.00		88.93	169.55	0.00	0.00
48.00		213.41	401.66	0.00	0.00
50.00		214.60	398.79	0.00	0.00
52.00		219.61	703.63	0.00	0.00
54.00		220.66	697.90	0.00	0.00
56.00		221.62	692.16	0.00	0.00
58.00		221.06	392.86	0.00	0.00
60.00		221.83	389.99	0.00	0.00
62.00		222.52	387.12	0.00	0.00
64.00		223.14	384.25	0.00	0.00
66.00		223.68	381.38	0.00	0.00
68.00		224.16	378.51	0.00	0.00
70.00		224.58	375.64	0.00	0.00
72.00		224.94	372.77	0.00	0.00
74.00		225.24	369.90	0.00	0.00
76.00		225.48	367.03	0.00	0.00
78.00		225.66	364.16	0.00	0.00

Total Applied Force Summary

Structure:	CT02049-S-SBA		**Code:**	EIA/TIA-222-H	5/25/2021
Site Name:	Beacon Falls		**Exposure:**	B	
Height:	160.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 32

80.00		225.80	361.29	0.00	0.00
82.00		225.88	314.70	0.00	0.00
84.00		225.92	312.30	0.00	0.00
86.00		225.91	309.91	0.00	0.00
88.00		225.85	307.52	0.00	0.00
90.00		225.75	305.13	0.00	0.00
92.00		225.61	302.74	0.00	0.00
94.00		225.43	300.35	0.00	0.00
95.00		112.46	149.28	0.00	0.00
95.58		66.38	146.54	0.00	0.00
96.00		48.05	105.87	0.00	0.00
98.00		229.20	501.23	0.00	0.00
100.00		207.16	496.45	0.00	0.00
102.00		205.41	294.63	0.00	0.00
104.00		204.94	292.24	0.00	0.00
106.00		204.43	289.85	0.00	0.00
108.00		203.88	287.46	0.00	0.00
110.00	(2) attachments	399.89	335.47	0.00	525.59
112.00		202.70	281.74	0.00	0.00
114.00		202.07	279.35	0.00	0.00
115.00		100.66	138.78	0.00	0.00
116.00		100.49	119.98	0.00	0.00
118.00		200.71	238.53	0.00	0.00
120.00		199.99	236.61	0.00	0.00
122.00		199.24	234.70	0.00	0.00
124.00		198.46	232.79	0.00	0.00
126.00		197.66	230.87	0.00	0.00
128.00		196.83	228.96	0.00	0.00
130.00		195.98	227.05	0.00	0.00
132.00		195.10	225.13	0.00	0.00
133.00	(29) attachments	3805.55	4024.37	0.00	0.00
134.00		96.88	99.92	0.00	0.00
136.00		193.27	198.41	0.00	0.00
138.00		192.32	196.50	0.00	0.00
140.00		191.35	194.59	0.00	0.00
142.00	(30) attachments	5817.39	4282.18	0.00	17.23
144.00		162.08	164.43	0.00	0.00
145.00		80.25	81.50	0.00	0.00
146.00		48.67	79.59	0.00	0.00
148.00		96.55	157.78	0.00	0.00
148.30	(23) attachments	2753.37	1886.87	0.00	5392.55
150.00		80.95	126.57	0.00	0.00
152.00		69.76	112.49	0.00	0.00
154.00		70.03	112.49	0.00	0.00
156.00		70.28	112.49	0.00	0.00
158.00		70.54	112.49	0.00	0.00
160.00	(26) attachments	4684.91	2301.92	0.00	9524.23
	Totals:	**33,130.52**	**40,417.90**	**0.00**	**15,459.61**

Linear Appurtenance Segment Forces (Factored)

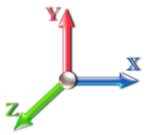
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 33	

Tower Engineering Solutions

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.147	23.174	0.00	1.98
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	23.174	0.00	0.47
1.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.147	23.174	0.00	3.96
1.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	23.174	0.00	1.72
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	23.174	0.00	0.47
1.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.149	1.147	23.174	0.00	0.00
1.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.149	1.147	23.174	0.00	0.00
2.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.148	23.174	0.00	1.98
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	23.174	0.00	0.47
2.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.148	23.174	0.00	3.96
2.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	23.174	0.00	1.72
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	23.174	0.00	0.47
2.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.149	1.148	23.174	0.00	0.00
2.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.149	1.148	23.174	0.00	0.00
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.151	23.174	0.00	3.96
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	23.174	0.00	0.94
4.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.151	23.174	0.00	7.92
4.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	23.174	0.00	3.43
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	23.174	0.00	0.94
4.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.151	23.174	0.00	0.00
4.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.150	1.151	23.174	0.00	0.00
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.152	1.155	23.174	0.00	3.96
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	23.174	0.00	0.94
6.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.152	1.155	23.174	0.00	7.92
6.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	23.174	0.00	3.43
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	23.174	0.00	0.94
6.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.152	1.155	23.174	0.00	0.00
6.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.152	1.155	23.174	0.00	0.00
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.158	23.174	0.00	3.96
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	23.174	0.00	0.94
8.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.158	23.174	0.00	7.92
8.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	23.174	0.00	3.43
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	23.174	0.00	0.94
8.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.158	23.174	0.00	0.00
8.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.153	1.158	23.174	0.00	0.00
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.162	23.174	0.00	3.96
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	23.174	0.00	0.94
10.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.162	23.174	0.00	7.92
10.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	23.174	0.00	3.43
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	23.174	0.00	0.94
10.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.154	1.162	23.174	0.00	0.00
10.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.154	1.162	23.174	0.00	0.00
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.155	1.166	23.174	0.00	3.96
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	23.174	0.00	0.94
12.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.155	1.166	23.174	0.00	7.92
12.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	23.174	0.00	3.43
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	23.174	0.00	0.94

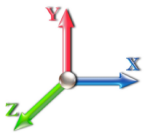
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 34	

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
12.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.155	1.166	23.174	0.00	0.00
12.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.155	1.166	23.174	0.00	0.00
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.169	23.174	0.00	3.96
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	23.174	0.00	0.94
14.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.169	23.174	0.00	7.92
14.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	23.174	0.00	3.43
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	23.174	0.00	0.94
14.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.156	1.169	23.174	0.00	0.00
14.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.156	1.169	23.174	0.00	0.00
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.173	23.174	0.00	3.96
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	23.174	0.00	0.94
16.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.173	23.174	0.00	7.92
16.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	23.174	0.00	3.43
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	23.174	0.00	0.94
16.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.158	1.173	23.174	0.00	0.00
16.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.158	1.173	23.174	0.00	0.00
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.158	1.175	23.174	0.00	0.50
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	23.174	0.00	0.12
16.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.04	0.00	0.158	1.175	23.174	0.00	0.99
16.25	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	23.174	0.00	0.43
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	23.174	0.00	0.12
16.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.158	1.175	23.174	0.00	0.00
16.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.158	1.175	23.174	0.00	0.00
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.159	1.177	23.174	0.00	3.47
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	23.174	0.00	0.82
18.00	1 5/8" Fiber	Yes	1.75	0.000	2.00	0.29	0.00	0.159	1.177	23.174	0.00	6.93
18.00	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	23.174	0.00	3.01
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	23.174	0.00	0.82
18.00	1.25" Reinforcing	Yes	1.75	0.000	1.25	0.18	0.00	0.159	1.177	23.174	0.00	0.00
18.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.159	1.177	23.174	0.00	0.00
18.75	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.180	23.174	0.00	1.49
18.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	23.174	0.00	0.35
18.75	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.180	23.174	0.00	2.97
18.75	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	23.174	0.00	1.29
18.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	23.174	0.00	0.35
18.75	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.160	1.180	23.174	0.00	0.00
18.75	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.16	0.00	0.160	1.180	23.174	0.00	0.00
19.50	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.181	23.174	0.00	1.49
19.50	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	23.174	0.00	0.35
19.50	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.181	23.174	0.00	2.97
19.50	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	23.174	0.00	1.29
19.50	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	23.174	0.00	0.35
19.50	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.160	1.181	23.174	0.00	0.00
19.50	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.16	0.00	0.160	1.181	23.174	0.00	0.00
20.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.161	1.183	23.174	0.00	0.99
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	23.174	0.00	0.23
20.00	1 5/8" Fiber	Yes	0.50	0.000	2.00	0.08	0.00	0.161	1.183	23.174	0.00	1.98

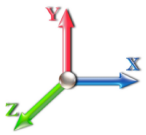
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 35	

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
20.00	1-1/4" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	23.174	0.00	0.86
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	23.174	0.00	0.23
20.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.161	1.183	23.174	0.00	0.00
20.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.161	1.183	23.174	0.00	0.00
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	23.174	0.00	3.96
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	23.174	0.00	0.94
22.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	23.174	0.00	7.92
22.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	23.174	0.00	3.43
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	23.174	0.00	0.94
22.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	23.174	0.00	0.00
22.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	23.174	0.00	0.00
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	23.174	0.00	3.96
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	23.174	0.00	0.94
24.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	23.174	0.00	7.92
24.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	23.174	0.00	3.43
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	23.174	0.00	0.94
24.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.160	1.181	23.174	0.00	0.00
24.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.160	1.181	23.174	0.00	0.00
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	23.174	0.00	3.96
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	23.174	0.00	0.94
26.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	23.174	0.00	7.92
26.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	23.174	0.00	3.43
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	23.174	0.00	0.94
26.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	23.174	0.00	0.00
26.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	23.174	0.00	0.00
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.189	23.174	0.00	3.96
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	23.174	0.00	0.94
28.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.189	23.174	0.00	7.92
28.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	23.174	0.00	3.43
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	23.174	0.00	0.94
28.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.163	1.189	23.174	0.00	0.00
28.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.163	1.189	23.174	0.00	0.00
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.165	1.194	23.193	0.00	3.96
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	23.193	0.00	0.94
30.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.165	1.194	23.193	0.00	7.92
30.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	23.193	0.00	3.43
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	23.193	0.00	0.94
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.165	1.194	23.193	0.00	0.00
30.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.165	1.194	23.193	0.00	0.00
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.197	23.412	0.00	1.98
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	23.412	0.00	0.47
31.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.197	23.412	0.00	3.96
31.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	23.412	0.00	1.72
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	23.412	0.00	0.47
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.197	23.412	0.00	0.00
31.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.197	23.412	0.00	0.00
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.199	23.625	0.00	1.98

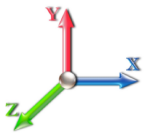
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 36	

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	23.625	0.00	0.47
32.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.199	23.625	0.00	3.96
32.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	23.625	0.00	1.72
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	23.625	0.00	0.47
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.199	23.625	0.00	0.00
32.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.199	23.625	0.00	0.00
34.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.040	24.038	0.00	3.96
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	24.038	0.00	0.94
34.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.040	24.038	0.00	7.92
34.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	24.038	0.00	3.43
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	24.038	0.00	0.94
34.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.113	1.040	24.038	0.00	0.00
35.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.114	1.043	24.336	0.00	2.97
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	24.336	0.00	0.70
35.50	1 5/8" Fiber	Yes	1.50	0.000	2.00	0.25	0.00	0.114	1.043	24.336	0.00	5.94
35.50	1-1/4" Fiber	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	24.336	0.00	2.58
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	24.336	0.00	0.70
35.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.114	1.043	24.336	0.00	0.00
36.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.044	24.433	0.00	0.99
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	24.433	0.00	0.23
36.00	1 5/8" Fiber	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.044	24.433	0.00	1.98
36.00	1-1/4" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	24.433	0.00	0.86
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	24.433	0.00	0.23
36.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.115	1.044	24.433	0.00	0.00
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	24.814	0.00	3.96
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	24.814	0.00	0.94
38.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	24.814	0.00	7.92
38.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	24.814	0.00	3.43
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	24.814	0.00	0.94
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.115	1.046	24.814	0.00	0.00
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.049	25.180	0.00	3.96
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	25.180	0.00	0.94
40.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.049	25.180	0.00	7.92
40.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	25.180	0.00	3.43
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	25.180	0.00	0.94
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.116	1.049	25.180	0.00	0.00
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	25.534	0.00	3.96
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	25.534	0.00	0.94
42.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	25.534	0.00	7.92
42.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	25.534	0.00	3.43
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	25.534	0.00	0.94
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.117	1.052	25.534	0.00	0.00
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	25.875	0.00	3.96
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	25.875	0.00	0.94
44.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	25.875	0.00	7.92
44.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	25.875	0.00	3.43
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	25.875	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

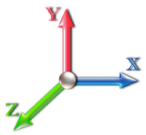
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 37	

Tower Engineering Solutions

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.119	1.056	25.875	0.00	0.00
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.19	0.00	0.119	1.058	26.068	0.00	2.30
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	26.068	0.00	0.54
45.16	1 5/8" Fiber	Yes	1.16	0.000	2.00	0.19	0.00	0.119	1.058	26.068	0.00	4.59
45.16	1-1/4" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	26.068	0.00	1.99
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	26.068	0.00	0.54
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.12	0.00	0.119	1.058	26.068	0.00	0.00
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.14	0.00	0.120	1.060	26.206	0.00	1.66
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	26.206	0.00	0.39
46.00	1 5/8" Fiber	Yes	0.84	0.000	2.00	0.14	0.00	0.120	1.060	26.206	0.00	3.33
46.00	1-1/4" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	26.206	0.00	1.44
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	26.206	0.00	0.39
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.09	0.00	0.120	1.060	26.206	0.00	0.00
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	26.527	0.00	3.96
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	26.527	0.00	0.94
48.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	26.527	0.00	7.92
48.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	26.527	0.00	3.43
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	26.527	0.00	0.94
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.121	1.062	26.527	0.00	0.00
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	26.838	0.00	3.96
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	26.838	0.00	0.94
50.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	26.838	0.00	7.92
50.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	26.838	0.00	3.43
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	26.838	0.00	0.94
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.122	1.066	26.838	0.00	0.00
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.069	27.140	0.00	3.96
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	27.140	0.00	0.94
52.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.069	27.140	0.00	7.92
52.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	27.140	0.00	3.43
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	27.140	0.00	0.94
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.123	1.069	27.140	0.00	0.00
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.072	27.435	0.00	3.96
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	27.435	0.00	0.94
54.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.072	27.435	0.00	7.92
54.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	27.435	0.00	3.43
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	27.435	0.00	0.94
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.072	27.435	0.00	0.00
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	27.721	0.00	3.96
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	27.721	0.00	0.94
56.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	27.721	0.00	7.92
56.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	27.721	0.00	3.43
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	27.721	0.00	0.94
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	27.721	0.00	0.00
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.073	28.000	0.00	3.96
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	28.000	0.00	0.94
58.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.073	28.000	0.00	7.92
58.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	28.000	0.00	3.43

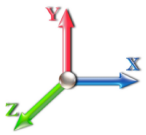
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 38	

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	28.000	0.00	0.94
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.073	28.000	0.00	0.00
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	28.273	0.00	3.96
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	28.273	0.00	0.94
60.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	28.273	0.00	7.92
60.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	28.273	0.00	3.43
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	28.273	0.00	0.94
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	28.273	0.00	0.00
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	28.539	0.00	3.96
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	28.539	0.00	0.94
62.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	28.539	0.00	7.92
62.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	28.539	0.00	3.43
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	28.539	0.00	0.94
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.127	1.080	28.539	0.00	0.00
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	28.799	0.00	3.96
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	28.799	0.00	0.94
64.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	28.799	0.00	7.92
64.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	28.799	0.00	3.43
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	28.799	0.00	0.94
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.128	1.084	28.799	0.00	0.00
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	29.053	0.00	3.96
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	29.053	0.00	0.94
66.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	29.053	0.00	7.92
66.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	29.053	0.00	3.43
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	29.053	0.00	0.94
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.129	1.087	29.053	0.00	0.00
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.091	29.302	0.00	3.96
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	29.302	0.00	0.94
68.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.091	29.302	0.00	7.92
68.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	29.302	0.00	3.43
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	29.302	0.00	0.94
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.130	1.091	29.302	0.00	0.00
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.095	29.546	0.00	3.96
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	29.546	0.00	0.94
70.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.095	29.546	0.00	7.92
70.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	29.546	0.00	3.43
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	29.546	0.00	0.94
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.132	1.095	29.546	0.00	0.00
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	29.785	0.00	3.96
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	29.785	0.00	0.94
72.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	29.785	0.00	7.92
72.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	29.785	0.00	3.43
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	29.785	0.00	0.94
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.133	1.099	29.785	0.00	0.00
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	30.019	0.00	3.96
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	30.019	0.00	0.94
74.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	30.019	0.00	7.92

Linear Appurtenance Segment Forces (Factored)

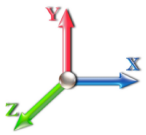
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 39	

Tower Engineering Solutions

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
74.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	30.019	0.00	3.43
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	30.019	0.00	0.94
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.134	1.103	30.019	0.00	0.00
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	30.248	0.00	3.96
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	30.248	0.00	0.94
76.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	30.248	0.00	7.92
76.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	30.248	0.00	3.43
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	30.248	0.00	0.94
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.136	1.108	30.248	0.00	0.00
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.112	30.474	0.00	3.96
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	30.474	0.00	0.94
78.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.112	30.474	0.00	7.92
78.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	30.474	0.00	3.43
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	30.474	0.00	0.94
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.137	1.112	30.474	0.00	0.00
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	30.695	0.00	3.96
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	30.695	0.00	0.94
80.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	30.695	0.00	7.92
80.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	30.695	0.00	3.43
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	30.695	0.00	0.94
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.139	1.116	30.695	0.00	0.00
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.121	30.912	0.00	3.96
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	30.912	0.00	0.94
82.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.121	30.912	0.00	7.92
82.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	30.912	0.00	3.43
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	30.912	0.00	0.94
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.140	1.121	30.912	0.00	0.00
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.125	31.126	0.00	3.96
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	31.126	0.00	0.94
84.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.125	31.126	0.00	7.92
84.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	31.126	0.00	3.43
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	31.126	0.00	0.94
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.142	1.125	31.126	0.00	0.00
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.130	31.336	0.00	3.96
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	31.336	0.00	0.94
86.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.130	31.336	0.00	7.92
86.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	31.336	0.00	3.43
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	31.336	0.00	0.94
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.143	1.130	31.336	0.00	0.00
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.135	31.542	0.00	3.96
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	31.542	0.00	0.94
88.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.135	31.542	0.00	7.92
88.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	31.542	0.00	3.43
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	31.542	0.00	0.94
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.145	1.135	31.542	0.00	0.00
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.140	31.746	0.00	3.96
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	31.746	0.00	0.94

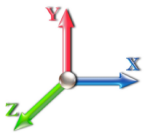
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 40	

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.140	31.746	0.00	7.92
90.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	31.746	0.00	3.43
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	31.746	0.00	0.94
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.147	1.140	31.746	0.00	0.00
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.148	1.145	31.946	0.00	3.96
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	31.946	0.00	0.94
92.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.148	1.145	31.946	0.00	7.92
92.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	31.946	0.00	3.43
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	31.946	0.00	0.94
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.148	1.145	31.946	0.00	0.00
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.150	32.142	0.00	3.96
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	32.142	0.00	0.94
94.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.150	32.142	0.00	7.92
94.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	32.142	0.00	3.43
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	32.142	0.00	0.94
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.150	32.142	0.00	0.00
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.151	1.154	32.240	0.00	1.98
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	32.240	0.00	0.47
95.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.151	1.154	32.240	0.00	3.96
95.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	32.240	0.00	1.72
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	32.240	0.00	0.47
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.151	1.154	32.240	0.00	0.00
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.10	0.00	0.152	1.156	32.296	0.00	1.15
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	32.296	0.00	0.27
95.58	1 5/8" Fiber	Yes	0.58	0.000	2.00	0.10	0.00	0.152	1.156	32.296	0.00	2.30
95.58	1-1/4" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	32.296	0.00	1.00
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	32.296	0.00	0.27
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.06	0.00	0.152	1.156	32.296	0.00	0.00
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.07	0.00	0.152	1.157	32.336	0.00	0.83
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	32.336	0.00	0.20
96.00	1 5/8" Fiber	Yes	0.42	0.000	2.00	0.07	0.00	0.152	1.157	32.336	0.00	1.66
96.00	1-1/4" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	32.336	0.00	0.72
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	32.336	0.00	0.20
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.04	0.00	0.152	1.157	32.336	0.00	0.00
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	32.527	0.00	3.96
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	32.527	0.00	0.94
98.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	32.527	0.00	7.92
98.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	32.527	0.00	3.43
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	32.527	0.00	0.94
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.160	32.527	0.00	0.00
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.055	32.716	0.00	3.96
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	32.716	0.00	0.94
100.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.055	32.716	0.00	7.92
100.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	32.716	0.00	3.43
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	32.716	0.00	0.94
102.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	32.901	0.00	3.96
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	32.901	0.00	0.94

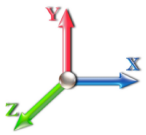
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 41	

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
102.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	32.901	0.00	7.92
102.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	32.901	0.00	3.43
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	32.901	0.00	0.94
104.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	33.084	0.00	3.96
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	33.084	0.00	0.94
104.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	33.084	0.00	7.92
104.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	33.084	0.00	3.43
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	33.084	0.00	0.94
106.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.120	1.061	33.265	0.00	3.96
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	33.265	0.00	0.94
106.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.120	1.061	33.265	0.00	7.92
106.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	33.265	0.00	3.43
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	33.265	0.00	0.94
108.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.065	33.443	0.00	3.96
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	33.443	0.00	0.94
108.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.065	33.443	0.00	7.92
108.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	33.443	0.00	3.43
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	33.443	0.00	0.94
110.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.070	33.619	0.00	3.96
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	33.619	0.00	0.94
110.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.070	33.619	0.00	7.92
110.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	33.619	0.00	3.43
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	33.619	0.00	0.94
112.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.074	33.792	0.00	3.96
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	33.792	0.00	0.94
112.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.074	33.792	0.00	7.92
112.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	33.792	0.00	3.43
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	33.964	0.00	3.96
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	33.964	0.00	0.94
114.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	33.964	0.00	7.92
114.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	33.964	0.00	3.43
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.083	34.049	0.00	1.98
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	34.049	0.00	0.47
115.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.083	34.049	0.00	3.96
115.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	34.049	0.00	1.72
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.085	34.133	0.00	1.98
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	34.133	0.00	0.47
116.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.085	34.133	0.00	3.96
116.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	34.133	0.00	1.72
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.089	34.300	0.00	3.96
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	34.300	0.00	0.94
118.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.089	34.300	0.00	7.92
118.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	34.300	0.00	3.43
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.094	34.465	0.00	3.96
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	34.465	0.00	0.94
120.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.094	34.465	0.00	7.92
120.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	34.465	0.00	3.43

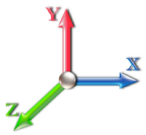
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 42	

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	34.628	0.00	3.96
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	34.628	0.00	0.94
122.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	34.628	0.00	7.92
122.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	34.628	0.00	3.43
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.135	1.105	34.790	0.00	3.96
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	34.790	0.00	0.94
124.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.135	1.105	34.790	0.00	7.92
124.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	34.790	0.00	3.43
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.110	34.949	0.00	3.96
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	34.949	0.00	0.94
126.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.110	34.949	0.00	7.92
126.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	34.949	0.00	3.43
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	35.107	0.00	3.96
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	35.107	0.00	0.94
128.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	35.107	0.00	7.92
128.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	35.107	0.00	3.43
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.141	1.122	35.262	0.00	3.96
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	35.262	0.00	0.94
130.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.141	1.122	35.262	0.00	7.92
130.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	35.262	0.00	3.43
132.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.128	35.417	0.00	3.96
132.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	35.417	0.00	0.94
132.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.128	35.417	0.00	7.92
132.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	35.417	0.00	3.43
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.144	1.133	35.493	0.00	1.98
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	35.493	0.00	0.47
133.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.144	1.133	35.493	0.00	3.96
133.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	35.493	0.00	1.72
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.145	1.136	35.569	0.00	1.98
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	35.569	0.00	0.47
134.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.145	1.136	35.569	0.00	3.96
134.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	35.569	0.00	1.72
136.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.141	35.720	0.00	3.96
136.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	35.720	0.00	0.94
136.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.141	35.720	0.00	7.92
136.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	35.720	0.00	3.43
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.147	35.869	0.00	3.96
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	35.869	0.00	0.94
138.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.147	35.869	0.00	7.92
138.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	35.869	0.00	3.43
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.154	36.017	0.00	3.96
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	36.017	0.00	0.94
140.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.154	36.017	0.00	7.92
140.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	36.017	0.00	3.43
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.161	36.163	0.00	3.96
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	36.163	0.00	0.94
142.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.161	36.163	0.00	7.92

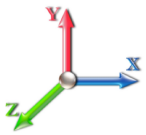
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 43	

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
142.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	36.163	0.00	3.43
144.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	36.308	0.00	3.96
144.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	36.308	0.00	0.94
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.079	0.000	36.380	0.00	1.98
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	36.380	0.00	0.47
146.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.082	0.000	36.451	0.00	1.98
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	36.451	0.00	0.47
148.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	36.593	0.00	3.96
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	36.593	0.00	0.94
148.30	1 5/8" Hybrid	Yes	0.30	0.000	2.00	0.05	0.00	0.084	0.000	36.615	0.00	0.59
148.30	7/8" Coax	Yes	0.30	0.000	0.00	0.00	0.00	0.084	0.000	36.615	0.00	0.14
150.00	1 5/8" Hybrid	Yes	1.70	0.000	2.00	0.28	0.00	0.085	0.000	36.734	0.00	3.37
150.00	7/8" Coax	Yes	1.70	0.000	0.00	0.00	0.00	0.085	0.000	36.734	0.00	0.80
152.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	36.873	0.00	3.96
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	36.873	0.00	0.94
154.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	37.011	0.00	3.96
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	37.011	0.00	0.94
156.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	37.148	0.00	3.96
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	37.148	0.00	0.94
158.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	37.283	0.00	3.96
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	37.283	0.00	0.94
160.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	37.418	0.00	3.96
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	37.418	0.00	0.94
										Totals:	**0.0**	**1,249.3**

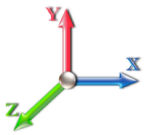
Calculated Forces

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 44	

Load Case: 0.9D + 1.0W 118 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 27

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-40.41	-33.14	0.00	-3808.7	0.00	3808.71	3683.82	1059.58	4414.92	3756.66	0.00	0.000	0.000	0.607
1.00	-40.16	-33.04	0.00	-3775.5	0.00	3775.57	3677.71	1055.47	4380.73	3735.77	0.00	-0.033	0.000	0.607
2.00	-39.90	-32.96	0.00	-3742.5	0.00	3742.53	3671.54	1051.36	4346.67	3714.86	0.01	-0.066	0.000	0.605
4.00	-39.40	-32.76	0.00	-3676.6	0.00	3676.62	3659.00	1043.14	4278.95	3673.00	0.06	-0.133	0.000	0.599
6.00	-38.91	-32.57	0.00	-3611.0	0.00	3611.09	3646.20	1034.91	4211.76	3631.09	0.13	-0.200	0.000	0.593
8.00	-38.42	-32.38	0.00	-3545.9	0.00	3545.95	3633.16	1026.69	4145.10	3589.13	0.23	-0.266	0.000	0.587
10.00	-37.93	-32.18	0.00	-3481.2	0.00	3481.20	3619.85	1018.47	4078.97	3547.13	0.35	-0.333	0.000	0.581
12.00	-37.44	-31.99	0.00	-3416.8	0.00	3416.84	3606.29	1010.25	4013.38	3505.10	0.51	-0.400	0.000	0.575
14.00	-36.96	-31.79	0.00	-3352.8	0.00	3352.87	3592.48	1002.02	3948.31	3463.03	0.69	-0.468	0.000	0.568
16.00	-36.50	-31.58	0.00	-3289.2	0.00	3289.28	3578.41	993.80	3883.78	3420.94	0.90	-0.535	0.000	0.562
16.25	-36.38	-31.57	0.00	-3281.3	0.00	3281.39	3576.63	992.77	3875.75	3415.68	0.93	-0.543	0.000	0.644
18.00	-35.67	-31.39	0.00	-3226.1	0.00	3226.13	3564.09	985.58	3819.78	3378.83	1.14	-0.611	0.000	0.594
18.75	-35.36	-31.32	0.00	-3202.5	0.00	3202.59	3558.65	982.50	3795.92	3363.04	1.24	-0.638	0.000	0.696
19.50	-35.05	-31.24	0.00	-3179.1	0.00	3179.10	3553.18	979.41	3772.13	3347.24	1.34	-0.670	0.000	0.589
20.00	-34.83	-31.21	0.00	-3163.4	0.00	3163.48	3549.51	977.36	3756.31	3336.71	1.41	-0.688	0.000	0.587
22.00	-34.02	-31.01	0.00	-3101.0	0.00	3101.06	3563.12	985.03	3815.51	3376.01	1.72	-0.761	0.000	0.595
24.00	-33.54	-30.82	0.00	-3039.0	0.00	3039.04	3548.52	976.81	3752.08	3333.89	2.05	-0.833	0.000	0.571
26.00	-33.08	-30.62	0.00	-2977.4	0.00	2977.41	3533.67	968.58	3689.18	3291.77	2.41	-0.903	0.000	0.565
28.00	-32.61	-30.42	0.00	-2916.1	0.00	2916.17	3518.56	960.36	3626.81	3249.64	2.81	-0.973	0.000	0.558
30.00	-32.16	-30.22	0.00	-2855.3	0.00	2855.33	3503.20	952.14	3564.97	3207.53	3.23	-1.043	0.000	0.435
31.00	-31.94	-30.12	0.00	-2825.1	0.00	2825.11	3495.43	948.03	3534.25	3186.48	3.45	-1.071	0.000	0.502
32.00	-31.70	-30.02	0.00	-2794.9	0.00	2794.99	3487.59	943.92	3503.66	3165.43	3.68	-1.104	0.000	0.499
34.00	-31.25	-29.85	0.00	-2734.9	0.00	2734.95	3471.72	935.70	3442.89	3123.35	4.16	-1.168	0.000	0.612
35.50	-30.92	-29.71	0.00	-2690.1	0.00	2690.17	3459.65	929.53	3397.66	3091.80	4.53	-1.228	0.000	0.607
36.00	-30.79	-29.69	0.00	-2675.3	0.00	2675.32	3455.59	927.47	3382.65	3081.29	4.66	-1.249	0.000	0.606
38.00	-30.34	-29.51	0.00	-2615.9	0.00	2615.95	3439.21	919.25	3322.94	3039.26	5.20	-1.329	0.000	0.599
40.00	-29.88	-29.31	0.00	-2556.9	0.00	2556.92	3422.57	911.03	3263.76	2997.28	5.78	-1.409	0.000	0.591
42.00	-29.43	-29.13	0.00	-2498.3	0.00	2498.31	3405.68	902.81	3205.11	2955.34	6.39	-1.490	0.000	0.584
44.00	-29.00	-28.94	0.00	-2440.0	0.00	2440.04	3388.54	894.58	3146.99	2913.44	7.03	-1.570	0.000	0.577
45.16	-28.75	-28.83	0.00	-2406.4	0.00	2406.47	3378.48	889.81	3113.53	2889.17	7.41	-1.617	0.000	0.417
46.00	-28.56	-28.76	0.00	-2382.2	0.00	2382.25	3371.14	886.36	3089.41	2871.61	7.70	-1.642	0.000	0.540
48.00	-28.12	-28.58	0.00	-2324.7	0.00	2324.73	3353.48	878.14	3032.36	2829.83	8.41	-1.718	0.000	0.533
50.00	-27.69	-28.39	0.00	-2267.5	0.00	2267.58	3335.57	869.92	2975.84	2788.13	9.14	-1.795	0.000	0.526
52.00	-26.96	-28.18	0.00	-2210.8	0.00	2210.81	3317.41	861.69	2919.85	2746.50	9.91	-1.871	0.000	0.512
54.00	-26.23	-27.97	0.00	-2154.4	0.00	2154.45	3298.98	853.47	2864.39	2704.94	10.71	-1.946	0.000	0.505
56.00	-25.51	-27.76	0.00	-2098.5	0.00	2098.52	3316.18	861.14	2916.12	2743.71	11.54	-2.022	0.000	0.510
58.00	-25.09	-27.56	0.00	-2043.0	0.00	2043.00	3297.74	852.92	2860.70	2702.16	12.41	-2.097	0.000	0.527
60.00	-24.67	-27.35	0.00	-1987.8	0.00	1987.89	3279.05	844.70	2805.81	2660.71	13.30	-2.175	0.000	0.519
62.00	-24.26	-27.15	0.00	-1933.1	0.00	1933.18	3260.10	836.48	2751.45	2619.34	14.23	-2.254	0.000	0.511
64.00	-23.85	-26.94	0.00	-1878.8	0.00	1878.88	3240.90	828.25	2697.62	2578.08	15.19	-2.332	0.000	0.503
66.00	-23.44	-26.74	0.00	-1825.0	0.00	1825.00	3221.44	820.03	2644.33	2536.92	16.18	-2.410	0.000	0.495
68.00	-23.03	-26.53	0.00	-1771.5	0.00	1771.52	3201.73	811.81	2591.56	2495.87	17.21	-2.488	0.000	0.486
70.00	-22.63	-26.32	0.00	-1718.4	0.00	1718.47	3181.76	803.59	2539.33	2454.94	18.27	-2.565	0.000	0.478
72.00	-22.24	-26.11	0.00	-1665.8	0.00	1665.83	3161.54	795.36	2487.63	2414.13	19.36	-2.643	0.000	0.469
74.00	-21.84	-25.89	0.00	-1613.6	0.00	1613.62	3141.06	787.14	2436.47	2373.45	20.48	-2.719	0.000	0.461
76.00	-21.45	-25.68	0.00	-1561.8	0.00	1561.84	3120.33	778.92	2385.83	2332.91	21.64	-2.796	0.000	0.452
78.00	-21.07	-25.46	0.00	-1510.4	0.00	1510.48	3099.34	770.70	2335.73	2292.51	22.83	-2.872	0.000	0.443
80.00	-20.68	-25.25	0.00	-1459.5	0.00	1459.56	3078.09	762.47	2286.15	2252.26	24.04	-2.948	0.000	0.434

Calculated Forces

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 45

TES Tower Engineering Solutions

80.00	-20.68	-25.25	0.00	-1459.5	0.00	1459.56	2384.58	636.50	1911.75	1750.88	24.04	-2.948	0.000	0.468
82.00	-20.35	-25.03	0.00	-1409.0	0.00	1409.07	2370.62	629.65	1870.81	1721.73	25.30	-3.023	0.000	0.513
84.00	-20.01	-24.82	0.00	-1359.0	0.00	1359.00	2356.42	622.80	1830.32	1692.63	26.58	-3.107	0.000	0.501
86.00	-19.68	-24.61	0.00	-1309.3	0.00	1309.36	2341.95	615.94	1790.27	1663.57	27.90	-3.190	0.000	0.489
88.00	-19.35	-24.39	0.00	-1260.1	0.00	1260.15	2327.23	609.09	1750.66	1634.56	29.25	-3.272	0.000	0.477
90.00	-19.02	-24.17	0.00	-1211.3	0.00	1211.37	2312.26	602.24	1711.49	1605.61	30.64	-3.353	0.000	0.464
92.00	-18.70	-23.96	0.00	-1163.0	0.00	1163.02	2297.03	595.39	1672.77	1576.72	32.06	-3.433	0.000	0.452
94.00	-18.39	-23.73	0.00	-1115.1	0.00	1115.11	2281.55	588.54	1634.49	1547.90	33.52	-3.513	0.000	0.439
95.00	-18.24	-23.62	0.00	-1091.3	0.00	1091.38	2273.71	585.11	1615.51	1533.52	34.25	-3.553	0.000	0.433
95.58	-18.08	-23.55	0.00	-1077.6	0.00	1077.68	2269.13	583.12	1604.56	1525.19	34.69	-3.575	0.000	0.423
95.58	-18.08	-23.55	0.00	-1077.6	0.00	1077.68	2269.13	583.12	1604.56	1525.19	34.69	-3.575	0.000	0.423
96.00	-17.95	-23.52	0.00	-1067.7	0.00	1067.79	2265.81	581.68	1596.65	1519.16	35.00	-3.592	0.000	0.712
98.00	-17.41	-23.30	0.00	-1020.7	0.00	1020.75	2249.81	574.83	1559.25	1490.50	36.53	-3.721	0.000	0.694
100.00	-16.88	-23.10	0.00	-974.15	0.00	974.15	2259.61	579.02	1582.04	1508.00	38.12	-3.849	0.000	0.655
102.00	-16.55	-22.91	0.00	-927.95	0.00	927.95	2243.52	572.17	1544.82	1479.37	39.76	-3.976	0.000	0.636
104.00	-16.23	-22.72	0.00	-882.14	0.00	882.14	2227.17	565.31	1508.04	1450.84	41.45	-4.094	0.000	0.617
106.00	-15.91	-22.52	0.00	-836.71	0.00	836.71	2210.57	558.46	1471.71	1422.40	43.19	-4.210	0.000	0.597
108.00	-15.59	-22.33	0.00	-791.66	0.00	791.66	2193.71	551.61	1435.82	1394.06	44.98	-4.324	0.000	0.577
110.00	-15.25	-21.93	0.00	-746.48	0.00	746.48	2176.60	544.76	1400.37	1365.84	46.81	-4.436	0.000	0.555
112.00	-14.94	-21.74	0.00	-702.61	0.00	702.61	2159.23	537.91	1365.36	1337.73	48.69	-4.545	0.000	0.534
114.00	-14.65	-21.54	0.00	-659.13	0.00	659.13	2141.61	531.05	1330.80	1309.73	50.62	-4.652	0.000	0.512
115.00	-14.50	-21.44	0.00	-637.60	0.00	637.60	2132.70	527.63	1313.68	1295.79	51.60	-4.705	0.000	0.501
115.00	-14.50	-21.44	0.00	-637.60	0.00	637.60	1556.62	422.98	1055.35	949.74	51.60	-4.705	0.000	0.683
116.00	-14.35	-21.35	0.00	-616.16	0.00	616.16	1551.43	420.24	1041.71	940.38	52.59	-4.757	0.000	0.667
118.00	-14.09	-21.16	0.00	-573.46	0.00	573.46	1540.84	414.76	1014.72	921.68	54.60	-4.882	0.000	0.634
120.00	-13.83	-20.97	0.00	-531.14	0.00	531.14	1529.99	409.28	988.07	902.99	56.67	-5.003	0.000	0.600
122.00	-13.57	-20.78	0.00	-489.21	0.00	489.21	1518.89	403.80	961.78	884.33	58.79	-5.119	0.000	0.565
124.00	-13.32	-20.58	0.00	-447.65	0.00	447.65	1507.54	398.32	935.85	865.70	60.96	-5.230	0.000	0.529
126.00	-13.07	-20.39	0.00	-406.49	0.00	406.49	1495.93	392.84	910.27	847.11	63.17	-5.336	0.000	0.491
128.00	-12.83	-20.19	0.00	-365.71	0.00	365.71	1484.06	387.35	885.04	828.56	65.42	-5.435	0.000	0.453
130.00	-12.59	-20.00	0.00	-325.33	0.00	325.33	1471.95	381.87	860.17	810.06	67.72	-5.528	0.000	0.413
132.00	-12.36	-19.79	0.00	-285.34	0.00	285.34	1459.57	376.39	835.65	791.62	70.05	-5.614	0.000	0.372
133.00	-8.72	-15.62	0.00	-265.55	0.00	265.55	1453.29	373.65	823.53	782.42	71.23	-5.654	0.000	0.347
134.00	-8.61	-15.52	0.00	-249.93	0.00	249.93	1446.94	370.91	811.49	773.23	72.42	-5.693	0.000	0.331
136.00	-8.42	-15.32	0.00	-218.89	0.00	218.89	1434.06	365.43	787.68	754.91	74.81	-5.764	0.000	0.298
138.00	-8.22	-15.11	0.00	-188.26	0.00	188.26	1420.92	359.95	764.23	736.67	77.24	-5.829	0.000	0.263
140.00	-8.04	-14.91	0.00	-158.03	0.00	158.03	1407.52	354.47	741.13	718.50	79.69	-5.887	0.000	0.227
142.00	-4.37	-8.69	0.00	-128.19	0.00	128.19	1393.87	348.98	718.38	700.42	82.16	-5.938	0.000	0.187
144.00	-4.22	-8.51	0.00	-110.82	0.00	110.82	1379.97	343.50	695.99	682.44	84.66	-5.981	0.000	0.166
145.00	-4.14	-8.42	0.00	-102.30	0.00	102.30	1372.92	340.76	684.93	673.48	85.91	-6.002	0.000	0.156
145.00	-4.14	-8.42	0.00	-102.30	0.00	102.30	931.20	332.53	24157.3	604.09	85.91	-6.002	0.000	0.174
146.00	-4.06	-8.37	0.00	-93.88	0.00	93.88	925.24	329.86	23770.3	594.77	87.17	-6.021	0.000	0.163
148.00	-3.92	-8.26	0.00	-77.14	0.00	77.14	913.32	324.51	23005.8	576.36	89.69	-6.057	0.000	0.139
148.30	-2.33	-5.32	0.00	-69.27	0.00	69.27	911.53	323.71	22892.2	573.63	90.07	-6.063	0.000	0.124
150.00	-2.21	-5.23	0.00	-60.22	0.00	60.22	901.40	319.16	22253.7	558.24	92.23	-6.087	0.000	0.111
150.00	-2.21	-5.23	0.00	-60.22	0.00	60.22	556.65	167.00	10296.1	213.69	92.23	-6.087	0.000	0.287
152.00	-2.10	-5.15	0.00	-49.76	0.00	49.76	556.65	167.00	10296.1	213.69	94.78	-6.113	0.000	0.238
154.00	-1.99	-5.07	0.00	-39.46	0.00	39.46	556.65	167.00	10296.1	213.69	97.35	-6.179	0.000	0.189
156.00	-1.88	-4.99	0.00	-29.32	0.00	29.32	556.65	167.00	10296.1	213.69	99.95	-6.230	0.000	0.141
158.00	-1.78	-4.91	0.00	-19.34	0.00	19.34	556.65	167.00	10296.1	213.69	102.56	-6.266	0.000	0.095
160.00	0.00	-4.68	0.00	-9.52	0.00	9.52	556.65	167.00	10296.1	213.69	105.19	-6.287	0.000	0.045

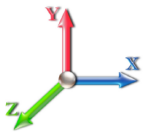
Wind Loading - Shaft

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 46	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2	1.00	0.70	4.161	4.58	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT2 RB3 RB4	1.00	0.70	4.161	4.58	0.00	1.376 *	0.705	1.00	4.455	6.13	28.1	45.3	291.4
2.00		1.00	0.70	4.161	4.58	0.00	1.378 *	0.756	1.00	4.447	6.13	28.0	48.5	293.6
4.00		1.00	0.70	4.161	4.58	0.00	1.381 *	0.810	2.00	8.862	12.24	56.0	103.2	590.5
6.00		1.00	0.70	4.161	4.58	0.00	1.385 *	0.843	2.00	8.806	12.20	55.8	106.7	590.2
8.00		1.00	0.70	4.161	4.58	0.00	1.390 *	0.868	2.00	8.747	12.16	55.6	109.0	588.7
10.00		1.00	0.70	4.161	4.58	0.00	1.394 *	0.887	2.00	8.687	12.11	55.4	110.7	586.5
12.00		1.00	0.70	4.161	4.58	0.00	1.399 *	0.904	2.00	8.625	12.06	55.2	111.8	583.9
14.00		1.00	0.70	4.161	4.58	0.00	1.403 *	0.918	2.00	8.563	12.02	55.0	112.7	580.9
16.00	Bot - Section 2	1.00	0.70	4.161	4.58	0.00	1.408 *	0.930	2.00	8.500	11.97	54.8	113.3	577.7
16.25	RT1 RB5	1.00	0.70	4.161	4.58	0.00	1.410 *	0.932	0.25	1.074	1.51	6.9	14.4	130.9
18.00	RB6	1.00	0.70	4.161	4.58	0.00	1.413 *	0.941	1.75	7.492	10.58	48.4	101.1	913.1
18.75	RT3 RT4	1.00	0.70	4.161	4.58	0.00	1.416 *	0.945	0.75	3.196	4.52	20.7	43.4	389.6
19.50	RB7	1.00	0.70	4.161	4.58	0.00	1.418 *	0.949	0.75	3.187	4.52	20.7	43.4	388.6
20.00		1.00	0.70	4.161	4.58	0.00	1.419 *	0.951	0.50	2.119	3.01	13.8	29.0	258.5
22.00	Top - Section 1	1.00	0.70	4.161	4.58	0.00	1.422 *	0.960	2.00	8.439	12.00	54.9	116.1	1029.2
24.00		1.00	0.70	4.161	4.58	0.00	1.418 *	0.969	2.00	8.374	11.87	54.3	116.2	572.6
26.00		1.00	0.70	4.161	4.58	0.00	1.422 *	0.976	2.00	8.310	11.82	54.1	116.2	568.8
28.00		1.00	0.70	4.161	4.58	0.00	1.427 *	0.984	2.00	8.246	11.77	53.9	116.1	564.9
30.00	RB8	1.00	0.70	4.164	4.58	0.00	1.432 *	0.991	2.00	8.181	11.72	53.7	115.9	560.9
31.00	RT5	1.00	0.71	4.203	4.62	0.00	1.436 *	0.994	1.00	4.066	5.84	27.0	57.9	279.0
32.00		1.00	0.71	4.242	4.67	0.00	1.439 *	0.997	1.00	4.050	5.83	27.2	57.9	278.0
34.00	RT6	1.00	0.73	4.316	4.75	0.00	1.248 *	1.003	2.00	8.051	10.05	47.7	115.4	552.8
35.50	RT7	1.00	0.74	4.369	4.81	0.00	1.251 *	1.007	1.50	5.995	7.50	36.1	86.4	411.9
36.00		1.00	0.74	4.387	4.83	0.00	1.253 *	1.009	0.50	1.990	2.49	12.0	28.8	136.8
38.00		1.00	0.75	4.455	4.90	0.00	1.255 *	1.014	2.00	7.921	9.94	48.7	114.8	544.4
40.00	Appurtenance(s)	1.00	0.76	4.521	4.97	0.00	1.259 *	1.019	2.00	7.856	9.89	49.2	114.4	540.2
42.00		1.00	0.77	4.584	5.04	0.00	1.263 *	1.024	2.00	7.790	9.84	49.6	113.9	536.0
44.00		1.00	0.78	4.646	5.11	0.00	1.267 *	1.029	2.00	7.725	9.79	50.0	113.5	531.7
45.16	RB9	1.00	0.79	4.680	5.15	0.00	1.270 *	1.032	1.16	4.450	5.65	29.1	65.6	306.4
46.00	RT8	1.00	0.79	4.705	5.18	0.00	1.272 *	1.034	0.84	3.209	4.08	21.1	47.4	221.0
48.00		1.00	0.80	4.763	5.24	0.00	1.275 *	1.038	2.00	7.594	9.68	50.7	112.4	523.0
50.00	Bot - Section 3	1.00	0.81	4.819	5.30	0.00	1.279 *	1.042	2.00	7.529	9.63	51.0	111.9	518.6
52.00		1.00	0.82	4.873	5.36	0.00	1.283 *	1.047	2.00	7.592	9.74	52.2	113.3	926.5
54.00		1.00	0.83	4.926	5.42	0.00	1.287 *	1.050	2.00	7.527	9.69	52.5	112.7	918.2
56.00	Top - Section 2	1.00	0.84	4.977	5.47	0.00	1.291 *	1.054	2.00	7.461	9.63	52.7	112.1	910.0
58.00	RT9 RB10	1.00	0.85	5.027	5.53	0.00	1.287 *	1.058	2.00	7.395	9.52	52.6	111.5	510.3
60.00		1.00	0.85	5.076	5.58	0.00	1.292 *	1.062	2.00	7.330	9.47	52.9	110.8	505.8
62.00		1.00	0.86	5.124	5.64	0.00	1.296 *	1.065	2.00	7.264	9.41	53.1	110.1	501.3
64.00		1.00	0.87	5.171	5.69	0.00	1.300 *	1.068	2.00	7.198	9.36	53.2	109.4	496.8
66.00		1.00	0.88	5.216	5.74	0.00	1.305 *	1.072	2.00	7.132	9.31	53.4	108.7	492.2
68.00		1.00	0.89	5.261	5.79	0.00	1.310 *	1.075	2.00	7.066	9.25	53.6	108.0	487.7
70.00		1.00	0.89	5.305	5.84	0.00	1.314 *	1.078	2.00	7.000	9.20	53.7	107.3	483.1
72.00		1.00	0.90	5.348	5.88	0.00	1.319 *	1.081	2.00	6.935	9.15	53.8	106.5	478.6
74.00		1.00	0.91	5.390	5.93	0.00	1.324 *	1.084	2.00	6.869	9.09	53.9	105.8	474.0
76.00		1.00	0.91	5.431	5.97	0.00	1.329 *	1.087	2.00	6.803	9.04	54.0	105.0	469.4
78.00	RT10 RB11	1.00	0.92	5.471	6.02	0.00	1.334 *	1.090	2.00	6.737	8.99	54.1	104.2	464.7

Wind Loading - Shaft

Structure: CT02049-S-SBA | **Code:** EIA/TIA-222-H | 5/25/2021

Site Name: Beacon Falls | **Exposure:** B

Height: 160.00 (ft) | **Crest Height:** 0.00

Base Elev: 0.000 (ft) | **Site Class:** D - Stiff Soil

Gh: 1.1 | **Topography:** 1 | **Struct Class:** II | Page: 47

Tower Engineering Solutions

80.00 Top - Section 3	1.00	0.93	5.511	6.06	0.00	1.339 *	1.093	2.00	6.671	8.94	54.2	103.4	460.1
82.00	1.00	0.93	5.550	6.11	0.00	1.345 *	1.095	2.00	6.605	8.88	54.2	102.6	397.2
84.00	1.00	0.94	5.589	6.15	0.00	1.350 *	1.098	2.00	6.538	8.83	54.3	101.8	393.2
86.00	1.00	0.95	5.626	6.19	0.00	1.356 *	1.101	2.00	6.472	8.78	54.3	100.9	389.1
88.00	1.00	0.95	5.663	6.23	0.00	1.362 *	1.103	2.00	6.406	8.72	54.3	100.1	385.1
90.00	1.00	0.96	5.700	6.27	0.00	1.367 *	1.106	2.00	6.340	8.67	54.4	99.2	381.1
92.00	1.00	0.96	5.736	6.31	0.00	1.373 *	1.108	2.00	6.274	8.62	54.4	98.4	377.0
94.00	1.00	0.97	5.771	6.35	0.00	1.380 *	1.110	2.00	6.208	8.56	54.4	97.5	373.0
95.00 Bot - Section 5	1.00	0.97	5.789	6.37	0.00	1.384 *	1.112	1.00	3.079	4.26	27.1	48.5	185.1
95.58 RT11	1.00	0.98	5.799	6.38	0.00	1.387 *	1.112	0.58	1.810	2.51	16.0	28.6	187.7
96.00	1.00	0.98	5.806	6.39	0.00	1.388 *	1.113	0.42	1.307	1.81	11.6	20.7	135.6
98.00	1.00	0.98	5.840	6.42	0.00	1.392 *	1.115	2.00	6.183	8.61	55.3	97.5	640.8
100.00 Top - Section 4	1.00	0.99	5.874	6.46	0.00	1.266 *	1.117	2.00	6.117	7.74	50.0	96.6	633.5
102.00	1.00	0.99	5.907	6.50	0.00	1.263 *	1.119	2.00	6.051	7.64	49.6	95.7	363.5
104.00	1.00	1.00	5.940	6.53	0.00	1.268 *	1.122	2.00	5.985	7.59	49.6	94.8	359.4
106.00	1.00	1.00	5.973	6.57	0.00	1.273 *	1.124	2.00	5.918	7.53	49.5	93.9	355.3
108.00	1.00	1.01	6.005	6.61	0.00	1.278 *	1.126	2.00	5.852	7.48	49.4	92.9	351.2
110.00 Appurtenance(s)	1.00	1.02	6.036	6.64	0.00	1.284 *	1.128	2.00	5.786	7.43	49.3	92.0	347.1
112.00	1.00	1.02	6.067	6.67	0.00	1.289 *	1.130	2.00	5.720	7.37	49.2	91.1	343.0
114.00	1.00	1.03	6.098	6.71	0.00	1.295 *	1.132	2.00	5.653	7.32	49.1	90.1	338.8
115.00 Top - Section 5	1.00	1.03	6.113	6.72	0.00	1.299 *	1.133	1.00	2.802	3.64	24.5	44.8	168.0
116.00	1.00	1.03	6.128	6.74	0.00	1.302 *	1.134	1.00	2.785	3.63	24.5	44.6	142.7
118.00	1.00	1.04	6.158	6.77	0.00	1.307 *	1.136	2.00	5.521	7.21	48.9	88.2	282.5
120.00	1.00	1.04	6.188	6.81	0.00	1.313 *	1.138	2.00	5.455	7.16	48.7	87.3	279.0
122.00	1.00	1.05	6.217	6.84	0.00	1.319 *	1.140	2.00	5.388	7.11	48.6	86.3	275.5
124.00	1.00	1.05	6.246	6.87	0.00	1.326 *	1.142	2.00	5.322	7.06	48.5	85.3	271.9
126.00	1.00	1.06	6.275	6.90	0.00	1.332 *	1.143	2.00	5.256	7.00	48.3	84.3	268.4
128.00	1.00	1.06	6.303	6.93	0.00	1.339 *	1.145	2.00	5.189	6.95	48.2	83.4	264.9
130.00	1.00	1.07	6.331	6.96	0.00	1.346 *	1.147	2.00	5.123	6.90	48.0	82.4	261.3
132.00	1.00	1.07	6.359	6.99	0.00	1.354 *	1.149	2.00	5.056	6.84	47.9	81.4	257.8
133.00 Appurtenance(s)	1.00	1.07	6.373	7.01	0.00	1.359 *	1.150	1.00	2.503	3.40	23.8	40.4	127.7
134.00	1.00	1.07	6.386	7.02	0.00	1.363 *	1.150	1.00	2.487	3.39	23.8	40.2	126.8
136.00	1.00	1.08	6.413	7.05	0.00	1.369 *	1.152	2.00	4.924	6.74	47.5	79.4	250.7
138.00	1.00	1.08	6.440	7.08	0.00	1.377 *	1.154	2.00	4.857	6.69	47.4	78.3	247.1
140.00	1.00	1.09	6.467	7.11	0.00	1.385 *	1.155	2.00	4.791	6.63	47.2	77.3	243.6
142.00 Appurtenance(s)	1.00	1.09	6.493	7.14	0.00	1.393 *	1.157	2.00	4.725	6.58	47.0	76.3	240.0
144.00	1.00	1.10	6.519	7.17	0.00	1.200	1.159	2.00	4.658	5.59	40.1	75.3	236.4
145.00 Top - Section 6	1.00	1.10	6.532	7.19	0.00	1.200	1.160	1.00	2.304	2.76	19.9	37.4	117.0
146.00	1.00	1.10	6.545	7.20	0.00	1.200	1.160	1.00	2.217	2.66	19.1	35.9	113.0
148.00	1.00	1.11	6.570	7.23	0.00	1.200	1.162	2.00	4.385	5.26	38.0	70.8	223.1
148.30 Appurtenance(s)	1.00	1.11	6.574	7.23	0.00	1.200	1.162	0.30	0.652	0.78	5.7	10.6	33.2
150.00 Top - Section 7	1.00	1.11	6.595	7.25	0.00	1.200	1.163	1.70	3.669	4.40	31.9	59.4	186.5
152.00	1.00	1.11	6.620	7.28	0.00	1.290 *	1.165	2.00	3.055	3.94	28.7	48.9	149.9
154.00	1.00	1.12	6.645	7.31	0.00	1.290 *	1.167	2.00	3.056	3.94	28.8	48.9	150.0
156.00	1.00	1.12	6.670	7.34	0.00	1.290 *	1.168	2.00	3.056	3.94	28.9	49.0	150.0
158.00	1.00	1.13	6.694	7.36	0.00	1.290 *	1.170	2.00	3.057	3.94	29.0	49.1	150.1
160.00 Appurtenance(s)	1.00	1.13	6.718	7.39	0.00	1.290 *	1.171	2.00	3.057	3.94	29.1	49.1	150.2
							Totals:	**160.00**			**3,983.0**		**36,322.7**

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

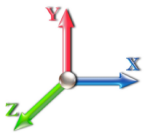
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 48	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	160.00	JAHH-65B-R3B	6	6.742	7.416	0.66	0.80	29.59	1077.31	0.000	2.000	219.42	0.00	438.84
2	160.00	DB222	1	6.778	7.455	1.00	1.00	6.32	45.80	0.000	5.000	47.10	0.00	235.48
3	160.00	DB846F65ZAXY	6	6.742	7.416	0.74	0.80	35.05	895.51	0.000	2.000	259.91	0.00	519.81
4	160.00	Low Profile Platform	1	6.742	7.416	1.00	1.00	33.85	1542.61	0.000	2.000	251.05	0.00	502.09
5	160.00	6' Lightning rod	1	6.754	7.429	1.00	1.00	1.11	26.86	0.000	3.000	8.24	0.00	24.73
6	160.00	RCMDC-3315V-PF-48	1	6.742	7.416	1.00	1.00	2.23	60.39	0.000	2.000	16.57	0.00	33.15
7	160.00	VZS01	3	6.742	7.416	0.69	1.00	11.02	537.95	0.000	2.000	81.70	0.00	163.40
8	160.00	CBC78T-DS-43	1	6.742	7.416	1.00	1.00	0.55	42.43	0.000	2.000	4.05	0.00	8.10
9	160.00	B2/B66A RRH-BR049	3	6.742	7.416	0.67	1.00	4.51	380.13	0.000	2.000	33.44	0.00	66.88
10	160.00	B5/B13 RRH-BR04C	3	6.742	7.416	0.67	1.00	4.51	445.96	0.000	2.000	33.44	0.00	66.88
11	148.30	1900MHz RRH	3	6.620	7.282	0.54	0.80	7.60	282.88	0.000	3.700	55.34	0.00	204.75
12	148.30	APXVTM14-C-120	3	6.595	7.255	0.61	0.80	12.99	500.71	0.000	1.700	94.24	0.00	160.20
13	148.30	800 MHz RRH	3	6.620	7.282	0.54	0.80	5.23	275.25	0.000	3.700	38.08	0.00	140.89
14	148.30	APXVSPP18-C-A20	3	6.620	7.282	0.66	0.80	19.68	402.01	0.000	3.700	143.33	0.00	530.33
15	148.30	Low Profile Platform	1	6.574	7.231	1.00	1.00	33.76	1537.29	0.000	0.000	244.14	0.00	0.00
16	148.30	ALU 800MHz External	3	6.620	7.282	0.54	0.80	1.95	51.93	0.000	3.700	14.18	0.00	52.46
17	148.30	TD-RRH8x20-25	3	6.595	7.255	0.54	0.80	7.36	457.60	0.000	1.700	53.39	0.00	90.77
18	148.30	ACU-A20-N	4	6.620	7.282	0.54	0.80	0.72	11.04	0.000	3.700	5.27	0.00	19.50
19	142.00	Mod	1	6.493	7.142	1.00	1.00	20.33	727.71	0.000	0.000	145.21	0.00	0.00
20	142.00	Ericsson 4415 B25 RRU	4	6.493	7.142	0.50	0.75	4.46	388.41	0.000	0.000	31.87	0.00	0.00
21	142.00	Commscope	4	6.493	7.142	0.50	0.75	0.61	20.26	0.000	0.000	4.34	0.00	0.00
22	142.00	Ericsson Radio 4415	1	6.493	7.142	0.50	0.75	1.13	74.17	0.000	0.000	8.04	0.00	0.00
23	142.00	Ericsson Radio 4449	4	6.493	7.142	0.50	0.75	4.01	501.72	0.000	0.000	28.62	0.00	0.00
24	142.00	RFS	1	6.493	7.142	0.52	0.75	8.24	336.53	0.000	0.000	58.83	0.00	0.00
25	142.00	RFS	3	6.493	7.142	0.52	0.75	33.84	1256.77	0.000	0.000	241.68	0.00	0.00
26	142.00	Ericsson Air 32	4	6.493	7.142	0.65	0.75	19.04	1093.76	0.000	0.000	135.96	0.00	0.00
27	142.00	Ericsson AIR6449 B41	4	6.493	7.142	0.53	0.75	13.38	731.25	0.000	0.000	95.54	0.00	0.00
28	142.00	Platform w/ HR & Bracing	1	6.493	7.142	1.00	1.00	77.51	3770.31	0.000	0.000	553.61	0.00	0.00
29	142.00	Ericsson KRY 112 144/1	3	6.502	7.152	0.50	0.75	1.09	51.74	0.000	0.700	7.82	0.00	5.47
30	133.00	Quintel QS66512-2	2	6.373	7.010	0.74	0.80	13.20	548.18	0.000	0.000	92.52	0.00	0.00
31	133.00	Cci TPA-65R-LCUUUU-H8	1	6.373	7.010	0.63	0.80	8.71	301.26	0.000	0.000	61.07	0.00	0.00
32	133.00	(3) SitePro 1 P/N	2	6.373	7.010	0.56	0.75	43.88	4522.34	0.000	0.000	307.58	0.00	0.00
33	133.00	Kathrein 800-10965	3	6.373	7.010	0.57	0.80	25.28	950.47	0.000	0.000	177.22	0.00	0.00
34	133.00	Kathrein 800 10121	3	6.373	7.010	0.63	0.80	12.40	294.97	0.000	0.000	86.89	0.00	0.00
35	133.00	Ericsson B2/B66A 8843	3	6.373	7.010	0.54	0.80	3.16	315.77	0.000	0.000	22.18	0.00	0.00
36	133.00	Powerwave LGP21401	6	6.373	7.010	0.54	0.80	5.92	157.73	0.000	0.000	41.49	0.00	0.00
37	133.00	Ericsson RRUS-32 RRU	3	6.373	7.010	0.54	0.80	6.15	486.09	0.000	0.000	43.09	0.00	0.00
38	133.00	Ericsson B5/B12 4449	3	6.373	7.010	0.54	0.80	3.75	320.28	0.000	0.000	26.27	0.00	0.00
39	133.00	Raycap DC6-48-60-18-8F	3	6.373	7.010	0.54	0.80	1.94	183.55	0.000	0.000	13.62	0.00	0.00
40	110.00	3 ft Standoff	1	6.036	6.640	1.00	1.00	6.49	76.89	0.000	0.000	43.08	0.00	0.00
41	110.00	DB222	1	6.118	6.729	1.00	1.00	7.26	44.09	0.000	5.292	48.88	0.00	258.67
42	40.00	GPS	1	4.521	4.973	1.00	1.00	1.42	21.13	0.000	0.000	7.04	0.00	0.00
							Totals:		**25,749.01**			**3,885.30**		

Total Applied Force Summary

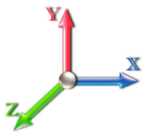
Structure:	CT02049-S-SBA		**Code:**	EIA/TIA-222-H	5/25/2021
Site Name:	Beacon Falls		**Exposure:**	B	
Height:	160.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 49

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		28.06	374.88	0.00	0.00
2.00		28.05	378.62	0.00	0.00
4.00		56.02	764.14	0.00	0.00
6.00		55.84	766.03	0.00	0.00
8.00		55.64	766.17	0.00	0.00
10.00		55.43	765.30	0.00	0.00
12.00		55.21	763.77	0.00	0.00
14.00		54.99	761.78	0.00	0.00
16.00		54.77	759.44	0.00	0.00
16.25		6.93	153.60	0.00	0.00
18.00		48.44	1072.81	0.00	0.00
18.75		20.71	458.13	0.00	0.00
19.50		20.67	457.20	0.00	0.00
20.00		13.76	304.26	0.00	0.00
22.00		54.92	1213.09	0.00	0.00
24.00		54.33	757.05	0.00	0.00
26.00		54.10	753.77	0.00	0.00
28.00		53.86	750.38	0.00	0.00
30.00		53.67	746.88	0.00	0.00
31.00		27.00	372.07	0.00	0.00
32.00		27.18	371.17	0.00	0.00
34.00		47.71	730.56	0.00	0.00
35.50		36.06	545.43	0.00	0.00
36.00		12.04	181.33	0.00	0.00
38.00		48.73	722.92	0.00	0.00
40.00	(1) attachments	56.23	740.15	0.00	0.00
42.00		49.61	714.68	0.00	0.00
44.00		50.01	710.69	0.00	0.00
45.16		29.09	410.38	0.00	0.00
46.00		21.12	296.33	0.00	0.00
48.00		50.71	702.57	0.00	0.00
50.00		51.03	698.46	0.00	0.00
52.00		52.21	1106.58	0.00	0.00
54.00		52.49	1098.59	0.00	0.00
56.00		52.75	1090.56	0.00	0.00
58.00		52.65	691.09	0.00	0.00
60.00		52.86	686.84	0.00	0.00
62.00		53.06	682.56	0.00	0.00
64.00		53.24	678.26	0.00	0.00
66.00		53.41	673.93	0.00	0.00
68.00		53.56	669.59	0.00	0.00
70.00		53.69	665.22	0.00	0.00
72.00		53.81	660.84	0.00	0.00
74.00		53.92	656.44	0.00	0.00
76.00		54.01	652.02	0.00	0.00
78.00		54.10	647.58	0.00	0.00

Total Applied Force Summary

Structure:	CT02049-S-SBA		**Code:**	EIA/TIA-222-H	5/25/2021
Site Name:	Beacon Falls		**Exposure:**	B	
Height:	160.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 50

Tower Engineering Solutions

80.00		54.17	643.13	0.00	0.00
82.00		54.23	580.37	0.00	0.00
84.00		54.28	576.52	0.00	0.00
86.00		54.31	572.67	0.00	0.00
88.00		54.34	568.80	0.00	0.00
90.00		54.36	564.92	0.00	0.00
92.00		54.37	561.02	0.00	0.00
94.00		54.37	557.11	0.00	0.00
95.00		27.14	277.18	0.00	0.00
95.58		16.01	241.16	0.00	0.00
96.00		11.59	174.27	0.00	0.00
98.00		55.30	825.25	0.00	0.00
100.00		50.03	807.78	0.00	0.00
102.00		49.65	537.91	0.00	0.00
104.00		49.58	533.93	0.00	0.00
106.00		49.50	529.94	0.00	0.00
108.00		49.41	525.94	0.00	0.00
110.00	(2) attachments	141.27	642.91	0.00	258.67
112.00		49.21	511.39	0.00	0.00
114.00		49.11	507.35	0.00	0.00
115.00		24.48	252.26	0.00	0.00
116.00		24.45	226.98	0.00	0.00
118.00		48.87	451.19	0.00	0.00
120.00		48.75	447.76	0.00	0.00
122.00		48.61	444.33	0.00	0.00
124.00		48.48	440.89	0.00	0.00
126.00		48.33	437.45	0.00	0.00
128.00		48.18	433.99	0.00	0.00
130.00		48.03	430.53	0.00	0.00
132.00		47.87	427.07	0.00	0.00
133.00	(29) attachments	895.77	8292.99	0.00	0.00
134.00		23.81	196.22	0.00	0.00
136.00		47.54	389.59	0.00	0.00
138.00		47.37	386.11	0.00	0.00
140.00		47.19	382.62	0.00	0.00
142.00	(30) attachments	1358.52	9331.75	0.00	5.47
144.00		40.08	311.83	0.00	0.00
145.00		19.87	154.71	0.00	0.00
146.00		19.15	150.71	0.00	0.00
148.00		38.03	298.59	0.00	0.00
148.30	(23) attachments	653.62	3563.26	0.00	1198.90
150.00		31.94	242.92	0.00	0.00
152.00		28.70	216.28	0.00	0.00
154.00		28.81	216.38	0.00	0.00
156.00		28.92	216.47	0.00	0.00
158.00		29.03	216.57	0.00	0.00
160.00	(26) attachments	984.05	5271.60	0.00	2059.35
	Totals:	**7,868.35**	**75,194.72**	**0.00**	**3,522.39**

Linear Appurtenance Segment Forces (Factored)

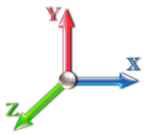
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 51	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.28	0.00	0.149	1.147	4.161	0.00	6.11
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	4.161	0.00	1.94
1.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.28	0.00	0.149	1.147	4.161	0.00	11.61
1.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	4.161	0.00	4.53
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	4.161	0.00	1.94
1.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.22	0.00	0.149	1.147	4.161	0.00	3.05
1.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.33	0.00	0.149	1.147	4.161	0.00	3.05
2.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.29	0.00	0.149	1.148	4.161	0.00	6.36
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	4.161	0.00	2.08
2.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.29	0.00	0.149	1.148	4.161	0.00	12.01
2.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	4.161	0.00	4.72
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	4.161	0.00	2.08
2.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.23	0.00	0.149	1.148	4.161	0.00	3.29
2.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.33	0.00	0.149	1.148	4.161	0.00	3.29
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.60	0.00	0.150	1.151	4.161	0.00	13.26
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	4.161	0.00	4.45
4.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.60	0.00	0.150	1.151	4.161	0.00	24.91
4.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	4.161	0.00	9.85
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	4.161	0.00	4.45
4.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.48	0.00	0.150	1.151	4.161	0.00	7.11
4.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.69	0.00	0.150	1.151	4.161	0.00	7.11
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.61	0.00	0.152	1.155	4.161	0.00	13.60
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	4.161	0.00	4.65
6.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.61	0.00	0.152	1.155	4.161	0.00	25.46
6.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	4.161	0.00	10.12
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	4.161	0.00	4.65
6.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.49	0.00	0.152	1.155	4.161	0.00	7.44
6.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.70	0.00	0.152	1.155	4.161	0.00	7.44
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.62	0.00	0.153	1.158	4.161	0.00	13.86
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	4.161	0.00	4.79
8.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.62	0.00	0.153	1.158	4.161	0.00	25.87
8.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	4.161	0.00	10.32
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	4.161	0.00	4.79
8.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.50	0.00	0.153	1.158	4.161	0.00	7.69
8.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.71	0.00	0.153	1.158	4.161	0.00	7.69
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.63	0.00	0.154	1.162	4.161	0.00	14.06
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	4.161	0.00	4.91
10.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.63	0.00	0.154	1.162	4.161	0.00	26.20
10.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	4.161	0.00	10.48
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	4.161	0.00	4.91
10.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.50	0.00	0.154	1.162	4.161	0.00	7.88
10.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.71	0.00	0.154	1.162	4.161	0.00	7.88
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.63	0.00	0.155	1.166	4.161	0.00	14.23
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	4.161	0.00	5.01
12.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.63	0.00	0.155	1.166	4.161	0.00	26.47
12.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	4.161	0.00	10.61
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	4.161	0.00	5.01

Linear Appurtenance Segment Forces (Factored)

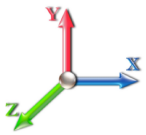
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 52	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
12.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.51	0.00	0.155	1.166	4.161	0.00	8.05
12.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.72	0.00	0.155	1.166	4.161	0.00	8.05
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.64	0.00	0.156	1.169	4.161	0.00	14.38
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	4.161	0.00	5.10
14.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.64	0.00	0.156	1.169	4.161	0.00	26.71
14.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	4.161	0.00	10.73
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	4.161	0.00	5.10
14.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.51	0.00	0.156	1.169	4.161	0.00	8.19
14.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.72	0.00	0.156	1.169	4.161	0.00	8.19
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.64	0.00	0.158	1.173	4.161	0.00	14.52
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	4.161	0.00	5.17
16.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.64	0.00	0.158	1.173	4.161	0.00	26.92
16.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	4.161	0.00	10.83
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	4.161	0.00	5.17
16.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.52	0.00	0.158	1.173	4.161	0.00	8.32
16.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.73	0.00	0.158	1.173	4.161	0.00	8.32
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.08	0.00	0.158	1.175	4.161	0.00	1.82
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	4.161	0.00	0.65
16.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.08	0.00	0.158	1.175	4.161	0.00	3.37
16.25	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	4.161	0.00	1.36
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	4.161	0.00	0.65
16.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.06	0.00	0.158	1.175	4.161	0.00	1.04
16.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.09	0.00	0.158	1.175	4.161	0.00	1.04
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.57	0.00	0.159	1.177	4.161	0.00	12.81
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	4.161	0.00	4.59
18.00	1 5/8" Fiber	Yes	1.75	0.000	2.00	0.57	0.00	0.159	1.177	4.161	0.00	23.72
18.00	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	4.161	0.00	9.56
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	4.161	0.00	4.59
18.00	1.25" Reinforcing	Yes	1.75	0.000	1.25	0.46	0.00	0.159	1.177	4.161	0.00	7.38
18.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.64	0.00	0.159	1.177	4.161	0.00	7.38
18.75	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.24	0.00	0.160	1.180	4.161	0.00	5.50
18.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	4.161	0.00	1.98
18.75	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.24	0.00	0.160	1.180	4.161	0.00	10.19
18.75	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	4.161	0.00	4.11
18.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	4.161	0.00	1.98
18.75	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.20	0.00	0.160	1.180	4.161	0.00	3.18
18.75	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.27	0.00	0.160	1.180	4.161	0.00	3.18
19.50	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.24	0.00	0.160	1.181	4.161	0.00	5.52
19.50	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	4.161	0.00	1.98
19.50	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.24	0.00	0.160	1.181	4.161	0.00	10.21
19.50	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	4.161	0.00	4.12
19.50	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	4.161	0.00	1.98
19.50	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.20	0.00	0.160	1.181	4.161	0.00	3.19
19.50	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.27	0.00	0.160	1.181	4.161	0.00	3.19
20.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.16	0.00	0.161	1.183	4.161	0.00	3.69
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	4.161	0.00	1.33
20.00	1 5/8" Fiber	Yes	0.50	0.000	2.00	0.16	0.00	0.161	1.183	4.161	0.00	6.82

Linear Appurtenance Segment Forces (Factored)

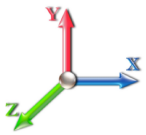
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 53	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
20.00	1-1/4" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	4.161	0.00	2.75
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	4.161	0.00	1.33
20.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.13	0.00	0.161	1.183	4.161	0.00	2.14
20.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.18	0.00	0.161	1.183	4.161	0.00	2.14
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.65	0.00	0.162	1.185	4.161	0.00	14.84
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.161	0.00	5.36
22.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.65	0.00	0.162	1.185	4.161	0.00	27.43
22.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.161	0.00	11.09
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.161	0.00	5.36
22.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.53	0.00	0.162	1.185	4.161	0.00	8.64
22.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.74	0.00	0.162	1.185	4.161	0.00	8.64
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.66	0.00	0.160	1.181	4.161	0.00	14.94
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	4.161	0.00	5.42
24.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.66	0.00	0.160	1.181	4.161	0.00	27.58
24.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	4.161	0.00	11.16
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	4.161	0.00	5.42
24.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.53	0.00	0.160	1.181	4.161	0.00	8.73
24.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.74	0.00	0.160	1.181	4.161	0.00	8.73
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.66	0.00	0.162	1.185	4.161	0.00	15.02
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.161	0.00	5.47
26.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.66	0.00	0.162	1.185	4.161	0.00	27.71
26.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.161	0.00	11.23
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.161	0.00	5.47
26.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.53	0.00	0.162	1.185	4.161	0.00	8.81
26.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.74	0.00	0.162	1.185	4.161	0.00	8.81
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.66	0.00	0.163	1.189	4.161	0.00	15.10
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	4.161	0.00	5.52
28.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.66	0.00	0.163	1.189	4.161	0.00	27.84
28.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	4.161	0.00	11.29
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	4.161	0.00	5.52
28.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.54	0.00	0.163	1.189	4.161	0.00	8.89
28.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.74	0.00	0.163	1.189	4.161	0.00	8.89
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.66	0.00	0.165	1.194	4.164	0.00	15.18
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	4.164	0.00	5.56
30.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.66	0.00	0.165	1.194	4.164	0.00	27.95
30.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	4.164	0.00	11.35
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	4.164	0.00	5.56
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.54	0.00	0.165	1.194	4.164	0.00	8.96
30.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.75	0.00	0.165	1.194	4.164	0.00	8.96
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.33	0.00	0.166	1.197	4.203	0.00	7.61
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	4.203	0.00	2.79
31.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.33	0.00	0.166	1.197	4.203	0.00	14.01
31.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	4.203	0.00	5.69
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	4.203	0.00	2.79
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.27	0.00	0.166	1.197	4.203	0.00	4.50
31.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.37	0.00	0.166	1.197	4.203	0.00	4.50
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.33	0.00	0.166	1.199	4.242	0.00	7.62

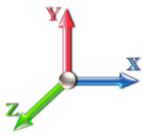
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 54	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	4.242	0.00	2.80
32.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.33	0.00	0.166	1.199	4.242	0.00	14.03
32.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	4.242	0.00	5.70
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	4.242	0.00	2.80
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.27	0.00	0.166	1.199	4.242	0.00	4.51
32.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.37	0.00	0.166	1.199	4.242	0.00	4.51
34.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.67	0.00	0.113	1.040	4.316	0.00	15.31
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	4.316	0.00	5.64
34.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.67	0.00	0.113	1.040	4.316	0.00	28.17
34.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	4.316	0.00	11.46
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	4.316	0.00	5.64
34.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.54	0.00	0.113	1.040	4.316	0.00	9.09
35.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.50	0.00	0.114	1.043	4.369	0.00	11.52
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	4.369	0.00	4.25
35.50	1 5/8" Fiber	Yes	1.50	0.000	2.00	0.50	0.00	0.114	1.043	4.369	0.00	21.18
35.50	1-1/4" Fiber	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	4.369	0.00	8.62
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	4.369	0.00	4.25
35.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.41	0.00	0.114	1.043	4.369	0.00	6.85
36.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.17	0.00	0.115	1.044	4.387	0.00	3.84
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	4.387	0.00	1.42
36.00	1 5/8" Fiber	Yes	0.50	0.000	2.00	0.17	0.00	0.115	1.044	4.387	0.00	7.07
36.00	1-1/4" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	4.387	0.00	2.88
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	4.387	0.00	1.42
36.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.14	0.00	0.115	1.044	4.387	0.00	2.29
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.67	0.00	0.115	1.046	4.455	0.00	15.44
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	4.455	0.00	5.72
38.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.67	0.00	0.115	1.046	4.455	0.00	28.37
38.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	4.455	0.00	11.56
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	4.455	0.00	5.72
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.55	0.00	0.115	1.046	4.455	0.00	9.21
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.67	0.00	0.116	1.049	4.521	0.00	15.50
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	4.521	0.00	5.75
40.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.67	0.00	0.116	1.049	4.521	0.00	28.46
40.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	4.521	0.00	11.60
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	4.521	0.00	5.75
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.55	0.00	0.116	1.049	4.521	0.00	9.27
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.67	0.00	0.117	1.052	4.584	0.00	15.55
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	4.584	0.00	5.79
42.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.67	0.00	0.117	1.052	4.584	0.00	28.54
42.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	4.584	0.00	11.65
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	4.584	0.00	5.79
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.55	0.00	0.117	1.052	4.584	0.00	9.32
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.119	1.056	4.646	0.00	15.61
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	4.646	0.00	5.82
44.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.68	0.00	0.119	1.056	4.646	0.00	28.63
44.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	4.646	0.00	11.69
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	4.646	0.00	5.82

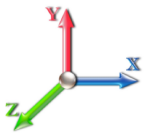
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 55	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.55	0.00	0.119	1.056	4.646	0.00	9.37
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.39	0.00	0.119	1.058	4.680	0.00	9.07
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	4.680	0.00	3.39
45.16	1 5/8" Fiber	Yes	1.16	0.000	2.00	0.39	0.00	0.119	1.058	4.680	0.00	16.63
45.16	1-1/4" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	4.680	0.00	6.79
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	4.680	0.00	3.39
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.32	0.00	0.119	1.058	4.680	0.00	5.45
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.28	0.00	0.120	1.060	4.705	0.00	6.58
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	4.705	0.00	2.46
46.00	1 5/8" Fiber	Yes	0.84	0.000	2.00	0.28	0.00	0.120	1.060	4.705	0.00	12.06
46.00	1-1/4" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	4.705	0.00	4.93
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	4.705	0.00	2.46
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.23	0.00	0.120	1.060	4.705	0.00	3.96
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.121	1.062	4.763	0.00	15.71
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	4.763	0.00	5.88
48.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.68	0.00	0.121	1.062	4.763	0.00	28.78
48.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	4.763	0.00	11.77
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	4.763	0.00	5.88
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.55	0.00	0.121	1.062	4.763	0.00	9.47
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.122	1.066	4.819	0.00	15.76
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	4.819	0.00	5.91
50.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.68	0.00	0.122	1.066	4.819	0.00	28.86
50.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	4.819	0.00	11.81
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	4.819	0.00	5.91
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.122	1.066	4.819	0.00	9.52
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.123	1.069	4.873	0.00	15.80
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	4.873	0.00	5.94
52.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.68	0.00	0.123	1.069	4.873	0.00	28.93
52.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	4.873	0.00	11.85
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	4.873	0.00	5.94
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.123	1.069	4.873	0.00	9.56
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.124	1.072	4.926	0.00	15.85
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	4.926	0.00	5.96
54.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.68	0.00	0.124	1.072	4.926	0.00	29.00
54.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	4.926	0.00	11.88
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	4.926	0.00	5.96
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.124	1.072	4.926	0.00	9.61
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.125	1.076	4.977	0.00	15.89
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	4.977	0.00	5.99
56.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.68	0.00	0.125	1.076	4.977	0.00	29.07
56.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	4.977	0.00	11.92
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	4.977	0.00	5.99
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.125	1.076	4.977	0.00	9.65
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.124	1.073	5.027	0.00	15.93
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	5.027	0.00	6.02
58.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.69	0.00	0.124	1.073	5.027	0.00	29.13
58.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	5.027	0.00	11.95

Linear Appurtenance Segment Forces (Factored)

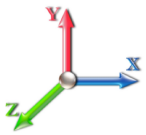
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 56	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	5.027	0.00	6.02
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.124	1.073	5.027	0.00	9.69
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.125	1.076	5.076	0.00	15.97
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	5.076	0.00	6.04
60.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.69	0.00	0.125	1.076	5.076	0.00	29.20
60.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	5.076	0.00	11.98
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	5.076	0.00	6.04
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.125	1.076	5.076	0.00	9.73
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.127	1.080	5.124	0.00	16.01
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	5.124	0.00	6.06
62.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.69	0.00	0.127	1.080	5.124	0.00	29.26
62.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	5.124	0.00	12.01
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	5.124	0.00	6.06
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.127	1.080	5.124	0.00	9.77
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.128	1.084	5.171	0.00	16.05
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	5.171	0.00	6.09
64.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.69	0.00	0.128	1.084	5.171	0.00	29.32
64.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	5.171	0.00	12.05
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	5.171	0.00	6.09
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.128	1.084	5.171	0.00	9.80
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.129	1.087	5.216	0.00	16.09
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	5.216	0.00	6.11
66.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.69	0.00	0.129	1.087	5.216	0.00	29.38
66.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	5.216	0.00	12.08
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	5.216	0.00	6.11
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.129	1.087	5.216	0.00	9.84
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.130	1.091	5.261	0.00	16.13
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	5.261	0.00	6.13
68.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.69	0.00	0.130	1.091	5.261	0.00	29.43
68.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	5.261	0.00	12.10
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	5.261	0.00	6.13
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.130	1.091	5.261	0.00	9.88
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.132	1.095	5.305	0.00	16.16
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	5.305	0.00	6.16
70.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.69	0.00	0.132	1.095	5.305	0.00	29.49
70.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	5.305	0.00	12.13
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	5.305	0.00	6.16
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.132	1.095	5.305	0.00	9.91
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.133	1.099	5.348	0.00	16.20
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	5.348	0.00	6.18
72.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.69	0.00	0.133	1.099	5.348	0.00	29.54
72.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	5.348	0.00	12.16
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	5.348	0.00	6.18
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.133	1.099	5.348	0.00	9.95
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.134	1.103	5.390	0.00	16.23
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	5.390	0.00	6.20
74.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.69	0.00	0.134	1.103	5.390	0.00	29.59

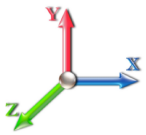
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 57	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
74.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	5.390	0.00	12.19
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	5.390	0.00	6.20
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.134	1.103	5.390	0.00	9.98
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.136	1.108	5.431	0.00	16.27
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	5.431	0.00	6.22
76.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.136	1.108	5.431	0.00	29.64
76.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	5.431	0.00	12.22
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	5.431	0.00	6.22
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.136	1.108	5.431	0.00	10.01
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.137	1.112	5.471	0.00	16.30
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	5.471	0.00	6.24
78.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.137	1.112	5.471	0.00	29.70
78.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	5.471	0.00	12.24
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	5.471	0.00	6.24
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.137	1.112	5.471	0.00	10.04
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.139	1.116	5.511	0.00	16.33
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	5.511	0.00	6.26
80.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.139	1.116	5.511	0.00	29.74
80.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	5.511	0.00	12.27
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	5.511	0.00	6.26
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.139	1.116	5.511	0.00	10.07
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.140	1.121	5.550	0.00	16.36
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	5.550	0.00	6.28
82.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.140	1.121	5.550	0.00	29.79
82.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	5.550	0.00	12.29
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	5.550	0.00	6.28
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.140	1.121	5.550	0.00	10.10
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.142	1.125	5.589	0.00	16.39
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	5.589	0.00	6.29
84.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.142	1.125	5.589	0.00	29.84
84.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	5.589	0.00	12.32
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	5.589	0.00	6.29
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.142	1.125	5.589	0.00	10.13
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.143	1.130	5.626	0.00	16.42
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	5.626	0.00	6.31
86.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.143	1.130	5.626	0.00	29.89
86.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	5.626	0.00	12.34
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	5.626	0.00	6.31
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.143	1.130	5.626	0.00	10.16
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.145	1.135	5.663	0.00	16.45
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	5.663	0.00	6.33
88.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.145	1.135	5.663	0.00	29.93
88.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	5.663	0.00	12.36
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	5.663	0.00	6.33
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.145	1.135	5.663	0.00	10.19
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.147	1.140	5.700	0.00	16.48
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	5.700	0.00	6.35

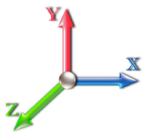
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 58	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.147	1.140	5.700	0.00	29.97
90.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	5.700	0.00	12.39
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	5.700	0.00	6.35
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.147	1.140	5.700	0.00	10.22
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.148	1.145	5.736	0.00	16.51
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	5.736	0.00	6.37
92.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.148	1.145	5.736	0.00	30.02
92.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	5.736	0.00	12.41
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	5.736	0.00	6.37
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.148	1.145	5.736	0.00	10.25
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.150	1.150	5.771	0.00	16.54
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	5.771	0.00	6.38
94.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.150	1.150	5.771	0.00	30.06
94.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	5.771	0.00	12.43
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	5.771	0.00	6.38
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.150	1.150	5.771	0.00	10.27
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.35	0.00	0.151	1.154	5.789	0.00	8.28
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	5.789	0.00	3.20
95.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.35	0.00	0.151	1.154	5.789	0.00	15.04
95.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	5.789	0.00	6.22
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	5.789	0.00	3.20
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.29	0.00	0.151	1.154	5.789	0.00	5.14
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.20	0.00	0.152	1.156	5.799	0.00	4.80
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	5.799	0.00	1.86
95.58	1 5/8" Fiber	Yes	0.58	0.000	2.00	0.20	0.00	0.152	1.156	5.799	0.00	8.73
95.58	1-1/4" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	5.799	0.00	3.61
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	5.799	0.00	1.86
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.17	0.00	0.152	1.156	5.799	0.00	2.98
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.15	0.00	0.152	1.157	5.806	0.00	3.48
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	5.806	0.00	1.34
96.00	1 5/8" Fiber	Yes	0.42	0.000	2.00	0.15	0.00	0.152	1.157	5.806	0.00	6.32
96.00	1-1/4" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	5.806	0.00	2.62
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	5.806	0.00	1.34
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.12	0.00	0.152	1.157	5.806	0.00	2.16
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.153	1.160	5.840	0.00	16.59
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	5.840	0.00	6.42
98.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.70	0.00	0.153	1.160	5.840	0.00	30.14
98.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	5.840	0.00	12.47
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	5.840	0.00	6.42
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.153	1.160	5.840	0.00	10.32
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.118	1.055	5.874	0.00	16.62
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	5.874	0.00	6.43
100.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.118	1.055	5.874	0.00	30.18
100.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	5.874	0.00	12.50
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	5.874	0.00	6.43
102.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.117	1.052	5.907	0.00	16.64
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	5.907	0.00	6.45

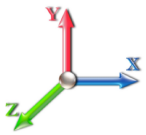
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 59	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
102.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.117	1.052	5.907	0.00	30.22
102.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	5.907	0.00	12.52
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	5.907	0.00	6.45
104.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.119	1.056	5.940	0.00	16.67
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	5.940	0.00	6.46
104.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.119	1.056	5.940	0.00	30.26
104.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	5.940	0.00	12.54
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	5.940	0.00	6.46
106.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.120	1.061	5.973	0.00	16.69
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	5.973	0.00	6.48
106.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.120	1.061	5.973	0.00	30.30
106.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	5.973	0.00	12.56
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	5.973	0.00	6.48
108.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.122	1.065	6.005	0.00	16.72
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	6.005	0.00	6.49
108.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.122	1.065	6.005	0.00	30.34
108.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	6.005	0.00	12.58
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	6.005	0.00	6.49
110.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.123	1.070	6.036	0.00	16.74
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	6.036	0.00	6.51
110.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.123	1.070	6.036	0.00	30.38
110.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	6.036	0.00	12.60
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	6.036	0.00	6.51
112.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.125	1.074	6.067	0.00	16.77
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	6.067	0.00	6.52
112.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.125	1.074	6.067	0.00	30.41
112.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	6.067	0.00	12.62
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.126	1.079	6.098	0.00	16.79
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	6.098	0.00	6.54
114.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.126	1.079	6.098	0.00	30.45
114.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	6.098	0.00	12.63
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.128	1.083	6.113	0.00	8.40
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	6.113	0.00	3.27
115.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.36	0.00	0.128	1.083	6.113	0.00	15.23
115.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	6.113	0.00	6.32
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.128	1.085	6.128	0.00	8.41
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	6.128	0.00	3.28
116.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.36	0.00	0.128	1.085	6.128	0.00	15.24
116.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	6.128	0.00	6.33
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.130	1.089	6.158	0.00	16.84
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	6.158	0.00	6.57
118.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.130	1.089	6.158	0.00	30.52
118.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	6.158	0.00	12.67
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.131	1.094	6.188	0.00	16.86
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	6.188	0.00	6.58
120.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.131	1.094	6.188	0.00	30.55
120.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	6.188	0.00	12.69

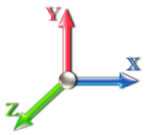
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 60	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.133	1.099	6.217	0.00	16.88
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	6.217	0.00	6.60
122.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.133	1.099	6.217	0.00	30.59
122.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	6.217	0.00	12.71
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.135	1.105	6.246	0.00	16.90
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	6.246	0.00	6.61
124.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.135	1.105	6.246	0.00	30.62
124.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	6.246	0.00	12.72
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.137	1.110	6.275	0.00	16.92
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	6.275	0.00	6.62
126.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.71	0.00	0.137	1.110	6.275	0.00	30.65
126.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	6.275	0.00	12.74
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.139	1.116	6.303	0.00	16.95
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	6.303	0.00	6.64
128.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.72	0.00	0.139	1.116	6.303	0.00	30.69
128.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	6.303	0.00	12.76
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.141	1.122	6.331	0.00	16.97
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	6.331	0.00	6.65
130.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.72	0.00	0.141	1.122	6.331	0.00	30.72
130.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	6.331	0.00	12.78
132.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.143	1.128	6.359	0.00	16.99
132.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	6.359	0.00	6.66
132.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.72	0.00	0.143	1.128	6.359	0.00	30.75
132.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	6.359	0.00	12.79
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.144	1.133	6.373	0.00	8.50
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	6.373	0.00	3.33
133.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.36	0.00	0.144	1.133	6.373	0.00	15.38
133.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	6.373	0.00	6.40
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.145	1.136	6.386	0.00	8.50
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	6.386	0.00	3.34
134.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.36	0.00	0.145	1.136	6.386	0.00	15.39
134.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	6.386	0.00	6.40
136.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.147	1.141	6.413	0.00	17.03
136.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	6.413	0.00	6.69
136.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.72	0.00	0.147	1.141	6.413	0.00	30.81
136.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	6.413	0.00	12.82
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.149	1.147	6.440	0.00	17.05
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	6.440	0.00	6.70
138.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.72	0.00	0.149	1.147	6.440	0.00	30.84
138.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	6.440	0.00	12.84
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.151	1.154	6.467	0.00	17.07
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	6.467	0.00	6.71
140.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.72	0.00	0.151	1.154	6.467	0.00	30.87
140.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	6.467	0.00	12.86
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.154	1.161	6.493	0.00	17.09
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	6.493	0.00	6.72
142.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.72	0.00	0.154	1.161	6.493	0.00	30.90

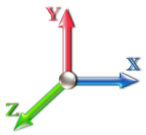
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 61	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
142.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	6.493	0.00	12.87
144.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.078	0.000	6.519	0.00	17.11
144.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.519	0.00	6.74
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.079	0.000	6.532	0.00	8.56
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	6.532	0.00	3.37
146.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.082	0.000	6.545	0.00	8.56
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	6.545	0.00	3.37
148.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.083	0.000	6.570	0.00	17.14
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.570	0.00	6.76
148.30	1 5/8" Hybrid	Yes	0.30	0.000	2.00	0.11	0.00	0.084	0.000	6.574	0.00	2.57
148.30	7/8" Coax	Yes	0.30	0.000	0.00	0.00	0.00	0.084	0.000	6.574	0.00	1.01
150.00	1 5/8" Hybrid	Yes	1.70	0.000	2.00	0.61	0.00	0.085	0.000	6.595	0.00	14.59
150.00	7/8" Coax	Yes	1.70	0.000	0.00	0.00	0.00	0.085	0.000	6.595	0.00	5.75
152.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.125	1.075	6.620	0.00	17.18
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.620	0.00	6.78
154.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.125	1.075	6.645	0.00	17.20
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.645	0.00	6.79
156.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.125	1.075	6.670	0.00	17.22
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.670	0.00	6.80
158.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.125	1.075	6.694	0.00	17.23
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.694	0.00	6.82
160.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.125	1.075	6.718	0.00	17.25
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.718	0.00	6.83
									Totals:		**0.0**	**5,593.8**

Calculated Forces

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 62	

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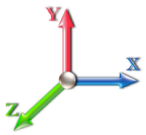
Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-75.19	-7.87	0.00	-939.64	0.00	939.64	3683.82	1059.58	4414.92	3756.66	0.00	0.000	0.000	0.160
1.00	-74.82	-7.85	0.00	-931.77	0.00	931.77	3677.71	1055.47	4380.73	3735.77	0.00	-0.008	0.000	0.160
2.00	-74.44	-7.84	0.00	-923.92	0.00	923.92	3671.54	1051.36	4346.67	3714.86	0.00	-0.016	0.000	0.159
4.00	-73.67	-7.81	0.00	-908.23	0.00	908.23	3659.00	1043.14	4278.95	3673.00	0.01	-0.033	0.000	0.158
6.00	-72.90	-7.77	0.00	-892.62	0.00	892.62	3646.20	1034.91	4211.76	3631.09	0.03	-0.049	0.000	0.156
8.00	-72.13	-7.74	0.00	-877.08	0.00	877.08	3633.16	1026.69	4145.10	3589.13	0.06	-0.066	0.000	0.155
10.00	-71.37	-7.70	0.00	-861.60	0.00	861.60	3619.85	1018.47	4078.97	3547.13	0.09	-0.082	0.000	0.153
12.00	-70.60	-7.66	0.00	-846.20	0.00	846.20	3606.29	1010.25	4013.38	3505.10	0.12	-0.099	0.000	0.152
14.00	-69.84	-7.63	0.00	-830.87	0.00	830.87	3592.48	1002.02	3948.31	3463.03	0.17	-0.116	0.000	0.150
16.00	-69.08	-7.58	0.00	-815.62	0.00	815.62	3578.41	993.80	3883.78	3420.94	0.22	-0.132	0.000	0.149
16.25	-68.92	-7.59	0.00	-813.72	0.00	813.72	3576.63	992.77	3875.75	3415.68	0.23	-0.134	0.000	0.170
18.00	-67.85	-7.55	0.00	-800.44	0.00	800.44	3564.09	985.58	3819.78	3378.83	0.28	-0.151	0.000	0.157
18.75	-67.39	-7.54	0.00	-794.78	0.00	794.78	3558.65	982.50	3795.92	3363.04	0.31	-0.158	0.000	0.184
19.50	-66.93	-7.52	0.00	-789.13	0.00	789.13	3553.18	979.41	3772.13	3347.24	0.33	-0.166	0.000	0.156
20.00	-66.63	-7.52	0.00	-785.37	0.00	785.37	3549.51	977.36	3756.31	3336.71	0.35	-0.170	0.000	0.156
22.00	-65.41	-7.48	0.00	-770.33	0.00	770.33	3563.12	985.03	3815.51	3376.01	0.42	-0.188	0.000	0.158
24.00	-64.65	-7.45	0.00	-755.36	0.00	755.36	3548.52	976.81	3752.08	3333.89	0.51	-0.206	0.000	0.152
26.00	-63.90	-7.41	0.00	-740.47	0.00	740.47	3533.67	968.58	3689.18	3291.77	0.60	-0.224	0.000	0.150
28.00	-63.14	-7.37	0.00	-725.66	0.00	725.66	3518.56	960.36	3626.81	3249.64	0.69	-0.241	0.000	0.149
30.00	-62.39	-7.33	0.00	-710.92	0.00	710.92	3503.20	952.14	3564.97	3207.53	0.80	-0.259	0.000	0.116
31.00	-62.02	-7.31	0.00	-703.59	0.00	703.59	3495.43	948.03	3534.25	3186.48	0.85	-0.266	0.000	0.134
32.00	-61.65	-7.29	0.00	-696.28	0.00	696.28	3487.59	943.92	3503.66	3165.43	0.91	-0.274	0.000	0.133
34.00	-60.92	-7.26	0.00	-681.70	0.00	681.70	3471.72	935.70	3442.89	3123.35	1.03	-0.290	0.000	0.162
35.50	-60.37	-7.23	0.00	-670.82	0.00	670.82	3459.65	929.53	3397.66	3091.80	1.12	-0.305	0.000	0.162
36.00	-60.19	-7.23	0.00	-667.21	0.00	667.21	3455.59	927.47	3382.65	3081.29	1.15	-0.310	0.000	0.161
38.00	-59.46	-7.20	0.00	-652.75	0.00	652.75	3439.21	919.25	3322.94	3039.26	1.29	-0.330	0.000	0.160
40.00	-58.72	-7.16	0.00	-638.36	0.00	638.36	3422.57	911.03	3263.76	2997.28	1.43	-0.350	0.000	0.158
42.00	-58.00	-7.12	0.00	-624.05	0.00	624.05	3405.68	902.81	3205.11	2955.34	1.58	-0.370	0.000	0.156
44.00	-57.29	-7.08	0.00	-609.81	0.00	609.81	3388.54	894.58	3146.99	2913.44	1.74	-0.390	0.000	0.154
45.16	-56.88	-7.06	0.00	-601.59	0.00	601.59	3378.48	889.81	3113.53	2889.17	1.84	-0.402	0.000	0.112
46.00	-56.58	-7.05	0.00	-595.66	0.00	595.66	3371.14	886.36	3089.41	2871.61	1.91	-0.408	0.000	0.145
48.00	-55.88	-7.01	0.00	-581.57	0.00	581.57	3353.48	878.14	3032.36	2829.83	2.08	-0.427	0.000	0.143
50.00	-55.18	-6.97	0.00	-567.54	0.00	567.54	3335.57	869.92	2975.84	2788.13	2.27	-0.446	0.000	0.141
52.00	-54.07	-6.93	0.00	-553.60	0.00	553.60	3317.41	861.69	2919.85	2746.50	2.46	-0.465	0.000	0.137
54.00	-52.97	-6.89	0.00	-539.73	0.00	539.73	3298.98	853.47	2864.39	2704.94	2.66	-0.484	0.000	0.135
56.00	-51.88	-6.84	0.00	-525.96	0.00	525.96	3316.18	861.14	2916.12	2743.71	2.86	-0.503	0.000	0.137
58.00	-51.18	-6.80	0.00	-512.28	0.00	512.28	3297.74	852.92	2860.70	2702.16	3.08	-0.522	0.000	0.141
60.00	-50.49	-6.76	0.00	-498.68	0.00	498.68	3279.05	844.70	2805.81	2660.71	3.30	-0.542	0.000	0.139
62.00	-49.81	-6.72	0.00	-485.16	0.00	485.16	3260.10	836.48	2751.45	2619.34	3.53	-0.561	0.000	0.137
64.00	-49.13	-6.67	0.00	-471.73	0.00	471.73	3240.90	828.25	2697.62	2578.08	3.77	-0.581	0.000	0.135
66.00	-48.45	-6.63	0.00	-458.39	0.00	458.39	3221.44	820.03	2644.33	2536.92	4.02	-0.600	0.000	0.133
68.00	-47.78	-6.58	0.00	-445.13	0.00	445.13	3201.73	811.81	2591.56	2495.87	4.28	-0.620	0.000	0.131
70.00	-47.12	-6.54	0.00	-431.96	0.00	431.96	3181.76	803.59	2539.33	2454.94	4.54	-0.640	0.000	0.129
72.00	-46.45	-6.49	0.00	-418.88	0.00	418.88	3161.54	795.36	2487.63	2414.13	4.81	-0.659	0.000	0.127
74.00	-45.80	-6.45	0.00	-405.90	0.00	405.90	3141.06	787.14	2436.47	2373.45	5.09	-0.678	0.000	0.125
76.00	-45.14	-6.40	0.00	-393.00	0.00	393.00	3120.33	778.92	2385.83	2332.91	5.38	-0.698	0.000	0.122
78.00	-44.49	-6.35	0.00	-380.20	0.00	380.20	3099.34	770.70	2335.73	2292.51	5.68	-0.717	0.000	0.120
80.00	-43.85	-6.31	0.00	-367.50	0.00	367.50	3078.09	762.47	2286.15	2252.26	5.98	-0.736	0.000	0.118

Calculated Forces

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 63

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80.00	-43.85	-6.31	0.00	-367.50	0.00	367.50	2384.58	636.50	1911.75	1750.88	5.98	-0.736	0.000	0.127
82.00	-43.27	-6.26	0.00	-354.88	0.00	354.88	2370.62	629.65	1870.81	1721.73	6.29	-0.755	0.000	0.139
84.00	-42.69	-6.21	0.00	-342.37	0.00	342.37	2356.42	622.80	1830.32	1692.63	6.61	-0.776	0.000	0.136
86.00	-42.12	-6.17	0.00	-329.94	0.00	329.94	2341.95	615.94	1790.27	1663.57	6.94	-0.797	0.000	0.133
88.00	-41.54	-6.12	0.00	-317.61	0.00	317.61	2327.23	609.09	1750.66	1634.56	7.28	-0.817	0.000	0.130
90.00	-40.98	-6.07	0.00	-305.37	0.00	305.37	2312.26	602.24	1711.49	1605.61	7.63	-0.838	0.000	0.126
92.00	-40.42	-6.02	0.00	-293.23	0.00	293.23	2297.03	595.39	1672.77	1576.72	7.98	-0.858	0.000	0.123
94.00	-39.86	-5.97	0.00	-281.19	0.00	281.19	2281.55	588.54	1634.49	1547.90	8.35	-0.878	0.000	0.120
95.00	-39.58	-5.94	0.00	-275.22	0.00	275.22	2273.71	585.11	1615.51	1533.52	8.53	-0.888	0.000	0.118
95.58	-39.34	-5.93	0.00	-271.77	0.00	271.77	2269.13	583.12	1604.56	1525.19	8.64	-0.894	0.000	0.116
95.58	-39.34	-5.93	0.00	-271.77	0.00	271.77	2269.13	583.12	1604.56	1525.19	8.64	-0.894	0.000	0.116
96.00	-39.16	-5.93	0.00	-269.28	0.00	269.28	2265.81	581.68	1596.65	1519.16	8.72	-0.898	0.000	0.195
98.00	-38.34	-5.88	0.00	-257.43	0.00	257.43	2249.81	574.83	1559.25	1490.50	9.10	-0.931	0.000	0.190
100.00	-37.53	-5.84	0.00	-245.67	0.00	245.67	2259.61	579.02	1582.04	1508.00	9.50	-0.963	0.000	0.180
102.00	-36.99	-5.80	0.00	-234.00	0.00	234.00	2243.52	572.17	1544.82	1479.37	9.91	-0.995	0.000	0.175
104.00	-36.45	-5.76	0.00	-222.40	0.00	222.40	2227.17	565.31	1508.04	1450.84	10.33	-1.025	0.000	0.170
106.00	-35.92	-5.72	0.00	-210.89	0.00	210.89	2210.57	558.46	1471.71	1422.40	10.77	-1.054	0.000	0.165
108.00	-35.39	-5.68	0.00	-199.45	0.00	199.45	2193.71	551.61	1435.82	1394.06	11.22	-1.083	0.000	0.159
110.00	-34.75	-5.54	0.00	-187.84	0.00	187.84	2176.60	544.76	1400.37	1365.84	11.68	-1.111	0.000	0.154
112.00	-34.23	-5.50	0.00	-176.76	0.00	176.76	2159.23	537.91	1365.36	1337.73	12.15	-1.138	0.000	0.148
114.00	-33.73	-5.45	0.00	-165.77	0.00	165.77	2141.61	531.05	1330.80	1309.73	12.63	-1.165	0.000	0.142
115.00	-33.47	-5.43	0.00	-160.33	0.00	160.33	2132.70	527.63	1313.68	1295.79	12.88	-1.178	0.000	0.140
115.00	-33.47	-5.43	0.00	-160.33	0.00	160.33	1556.62	422.98	1055.35	949.74	12.88	-1.178	0.000	0.190
116.00	-33.25	-5.41	0.00	-154.90	0.00	154.90	1551.43	420.24	1041.71	940.38	13.13	-1.192	0.000	0.186
118.00	-32.79	-5.37	0.00	-144.08	0.00	144.08	1540.84	414.76	1014.72	921.68	13.63	-1.223	0.000	0.178
120.00	-32.34	-5.33	0.00	-133.34	0.00	133.34	1529.99	409.28	988.07	902.99	14.15	-1.253	0.000	0.169
122.00	-31.90	-5.29	0.00	-122.68	0.00	122.68	1518.89	403.80	961.78	884.33	14.68	-1.283	0.000	0.160
124.00	-31.45	-5.24	0.00	-112.11	0.00	112.11	1507.54	398.32	935.85	865.70	15.23	-1.310	0.000	0.151
126.00	-31.02	-5.20	0.00	-101.63	0.00	101.63	1495.93	392.84	910.27	847.11	15.78	-1.337	0.000	0.141
128.00	-30.58	-5.15	0.00	-91.23	0.00	91.23	1484.06	387.35	885.04	828.56	16.35	-1.362	0.000	0.131
130.00	-30.15	-5.11	0.00	-80.93	0.00	80.93	1471.95	381.87	860.17	810.06	16.92	-1.385	0.000	0.121
132.00	-29.72	-5.06	0.00	-70.72	0.00	70.72	1459.57	376.39	835.65	791.62	17.51	-1.406	0.000	0.110
133.00	-21.45	-3.96	0.00	-65.66	0.00	65.66	1453.29	373.65	823.53	782.42	17.80	-1.416	0.000	0.099
134.00	-21.26	-3.94	0.00	-61.71	0.00	61.71	1446.94	370.91	811.49	773.23	18.10	-1.426	0.000	0.095
136.00	-20.87	-3.88	0.00	-53.83	0.00	53.83	1434.06	365.43	787.68	754.91	18.70	-1.443	0.000	0.086
138.00	-20.48	-3.83	0.00	-46.07	0.00	46.07	1420.92	359.95	764.23	736.67	19.31	-1.459	0.000	0.077
140.00	-20.10	-3.78	0.00	-38.40	0.00	38.40	1407.52	354.47	741.13	718.50	19.92	-1.473	0.000	0.068
142.00	-10.81	-2.18	0.00	-30.83	0.00	30.83	1393.87	348.98	718.38	700.42	20.54	-1.485	0.000	0.052
144.00	-10.50	-2.14	0.00	-26.47	0.00	26.47	1379.97	343.50	695.99	682.44	21.17	-1.496	0.000	0.046
145.00	-10.34	-2.11	0.00	-24.33	0.00	24.33	1372.92	340.76	684.93	673.48	21.48	-1.501	0.000	0.044
145.00	-10.34	-2.11	0.00	-24.33	0.00	24.33	931.20	332.53	24157.3	604.09	21.48	-1.501	0.000	0.051
146.00	-10.19	-2.09	0.00	-22.22	0.00	22.22	925.24	329.86	23770.3	594.77	21.80	-1.506	0.000	0.048
148.00	-9.89	-2.05	0.00	-18.03	0.00	18.03	913.32	324.51	23005.8	576.36	22.43	-1.514	0.000	0.042
148.30	-6.35	-1.30	0.00	-16.22	0.00	16.22	911.53	323.71	22892.2	573.63	22.53	-1.515	0.000	0.035
150.00	-6.11	-1.26	0.00	-14.01	0.00	14.01	901.40	319.16	22253.7	558.24	23.07	-1.521	0.000	0.032
150.00	-6.11	-1.26	0.00	-14.01	0.00	14.01	556.65	167.00	10296.1	213.69	23.07	-1.521	0.000	0.077
152.00	-5.89	-1.23	0.00	-11.49	0.00	11.49	556.65	167.00	10296.1	213.69	23.70	-1.527	0.000	0.064
154.00	-5.67	-1.20	0.00	-9.03	0.00	9.03	556.65	167.00	10296.1	213.69	24.35	-1.542	0.000	0.052
156.00	-5.46	-1.16	0.00	-6.64	0.00	6.64	556.65	167.00	10296.1	213.69	25.00	-1.554	0.000	0.041
158.00	-5.24	-1.13	0.00	-4.31	0.00	4.31	556.65	167.00	10296.1	213.69	25.65	-1.562	0.000	0.030
160.00	0.00	-0.98	0.00	-2.06	0.00	2.06	556.65	167.00	10296.1	213.69	26.30	-1.567	0.000	0.010

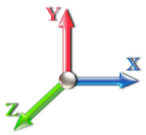
Seismic Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 64	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Ev + 1.0Eh

Gust Response Factor	1.10			**Sds**	0.21	**Iterations**	23
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.09	**Ss**	0.20
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.25	**SA**	0.02	**S1**	0.05
						Seismic Importance Factor	1.00



Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00	RB1 RB2	0.00	0.00	0.00	0.00	
1.00	RT2 RB3 RB4	267.74	0.50	11.31	0.00	
2.00		266.94	1.50	11.28	0.00	
4.00		531.49	3.00	22.45	0.00	
6.00		528.30	5.00	22.32	0.00	
8.00		525.11	7.00	22.18	0.01	
10.00		521.92	9.00	22.05	0.01	
12.00		518.73	11.00	21.91	0.02	
14.00		515.55	13.00	21.78	0.02	
16.00	Bot - Section 2	512.36	15.00	21.64	0.03	
16.25	RT1 RB5	112.74	16.13	4.76	0.00	
18.00	RB6	786.38	17.13	33.22	0.09	
18.75	RT3 RT4	335.52	18.38	14.17	0.02	
19.50	RB7	334.63	19.13	14.13	0.02	
20.00		222.59	19.75	9.40	0.01	
22.00	Top - Section 1	886.36	21.00	37.44	0.16	
24.00		505.77	23.00	21.36	0.06	
26.00		502.58	25.00	21.23	0.07	
28.00		499.39	27.00	21.09	0.09	
30.00	RB8	496.20	29.00	20.96	0.10	
31.00	RT5	246.91	30.50	10.43	0.03	
32.00		246.11	31.50	10.40	0.03	
34.00	RT6	489.82	33.00	20.69	0.12	
35.50	RT7	365.28	34.75	15.43	0.08	
36.00		121.36	35.75	5.13	0.01	
38.00		483.45	37.00	20.42	0.15	
40.00	Appurtenance(s)	490.26	39.00	20.71	0.17	
42.00		476.69	41.00	20.14	0.18	
44.00		473.50	43.00	20.00	0.20	
45.16	RB9	273.17	44.58	11.54	0.07	
46.00	RT8	197.14	45.58	8.33	0.04	
48.00		467.12	47.00	19.73	0.23	
50.00	Bot - Section 3	463.93	49.00	19.60	0.24	
52.00		802.65	51.00	33.90	0.79	
54.00		796.27	53.00	33.63	0.84	
56.00	Top - Section 2	789.90	55.00	33.37	0.89	
58.00	RT9 RB10	457.34	57.00	19.32	0.32	
60.00		454.15	59.00	19.18	0.34	
62.00		450.97	61.00	19.05	0.36	
64.00		447.78	63.00	18.91	0.38	
66.00		444.59	65.00	18.78	0.39	
68.00		441.40	67.00	18.64	0.41	
70.00		438.21	69.00	18.51	0.43	
72.00		435.02	71.00	18.38	0.45	
74.00		431.83	73.00	18.24	0.47	
76.00		428.65	75.00	18.11	0.49	

Seismic Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 65	

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78.00	RT10 RB11		425.46	77.00	17.97	0.51		
80.00	Top - Section 3		422.27	79.00	17.84	0.53		
82.00			370.50	81.00	15.65	0.43		
84.00			367.84	83.00	15.54	0.44		
86.00			365.18	85.00	15.43	0.45		
88.00			362.52	87.00	15.31	0.47		
90.00			359.87	89.00	15.20	0.48		
92.00			357.21	91.00	15.09	0.50		
94.00			354.55	93.00	14.98	0.51		
95.00	Bot - Section 5		176.28	94.50	7.45	0.13		
95.58	RT11		168.87	95.29	7.13	0.12		
96.00			122.00	95.79	5.15	0.06		
98.00			577.76	97.00	24.40	1.48		
100.00	Top - Section 4		572.44	99.00	24.18	1.52		
102.00			348.20	101.00	14.71	0.58		
104.00			345.55	103.00	14.60	0.60		
106.00			342.89	105.00	14.48	0.61		
108.00			340.23	107.00	14.37	0.63		
110.00	Appurtenance(s)		393.58	109.00	16.62	0.87		
112.00			333.67	111.00	14.09	0.65		
114.00			331.01	113.00	13.98	0.66		
115.00	Top - Section 5		164.51	114.50	6.95	0.17		
116.00			143.62	115.50	6.07	0.13		
118.00			285.65	117.00	12.07	0.53		
120.00			283.53	119.00	11.98	0.54		
122.00			281.40	121.00	11.89	0.55		
124.00			279.28	123.00	11.80	0.56		
126.00			277.15	125.00	11.71	0.57		
128.00			275.03	127.00	11.62	0.58		
130.00			272.90	129.00	11.53	0.59		
132.00			270.77	131.00	11.44	0.59		
133.00	Appurtenance(s)		4481.8	132.50	189.31	166.52		
134.00			118.79	133.50	5.02	0.12		
136.00			235.99	135.00	9.97	0.48		
138.00			233.87	137.00	9.88	0.48		
140.00			231.74	139.00	9.79	0.49		
142.00	Appurtenance(s)		4773.5	141.00	201.63	213.91		
144.00			192.38	143.00	8.13	0.36		
145.00	Top - Section 6		95.40	144.50	4.03	0.09		
146.00			93.27	145.50	3.94	0.09		
148.00			184.99	147.00	7.81	0.35		
148.30	Appurtenance(s)		2097.9	148.15	88.62	45.62		
150.00	Top - Section 7		147.57	149.15	6.23	0.23		
152.00			133.14	151.00	5.62	0.19		
154.00			133.14	153.00	5.62	0.20		
156.00			133.14	155.00	5.62	0.20		
158.00			133.14	157.00	5.62	0.21		
160.00	Appurtenance(s)		2565.8	159.00	108.38	78.59		
		Totals:	**46,441.3**		**1,961.7**	**534.0**	**Total Wind:**	**37,177.8**

Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 66	

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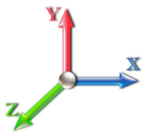
Load Case: 1.2D + 1.0Ev + 1.0Eh



Gust Response Factor	1.10			**Sds**	0.21	**Iterations**	23		
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.09	**Ss**	0.20		
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.25	**SA**	0.02	**S1**	0.05	**Seismic Importance Factor**	1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-55.85	-0.53	0.00	-78.63	0.00	78.63	3683.82	1059.58	4414.92	3756.66		0.00	0.00	0.022
1.00	-55.53	-0.53	0.00	-78.10	0.00	78.10	3677.71	1055.47	4380.73	3735.77		0.00	0.00	0.021
2.00	-55.21	-0.53	0.00	-77.57	0.00	77.57	3671.54	1051.36	4346.67	3714.86		0.00	0.00	0.021
4.00	-54.58	-0.53	0.00	-76.50	0.00	76.50	3659.00	1043.14	4278.95	3673.00		0.00	0.00	0.021
6.00	-53.95	-0.54	0.00	-75.43	0.00	75.43	3646.20	1034.91	4211.76	3631.09		0.00	0.00	0.021
8.00	-53.32	-0.54	0.00	-74.36	0.00	74.36	3633.16	1026.69	4145.10	3589.13		0.00	-0.01	0.020
10.00	-52.70	-0.54	0.00	-73.29	0.00	73.29	3619.85	1018.47	4078.97	3547.13		0.01	-0.01	0.020
12.00	-52.08	-0.54	0.00	-72.21	0.00	72.21	3606.29	1010.25	4013.38	3505.10		0.01	-0.01	0.020
14.00	-51.46	-0.54	0.00	-71.13	0.00	71.13	3592.48	1002.02	3948.31	3463.03		0.01	-0.01	0.020
16.00	-50.85	-0.54	0.00	-70.05	0.00	70.05	3578.41	993.80	3883.78	3420.94		0.02	-0.01	0.020
16.25	-50.71	-0.54	0.00	-69.91	0.00	69.91	3576.63	992.77	3875.75	3415.68		0.02	-0.01	0.023
18.00	-49.76	-0.54	0.00	-68.97	0.00	68.97	3564.09	985.58	3819.78	3378.83		0.02	-0.01	0.020
18.75	-49.35	-0.54	0.00	-68.56	0.00	68.56	3558.65	982.50	3795.92	3363.04		0.03	-0.01	0.024
19.50	-48.94	-0.54	0.00	-68.15	0.00	68.15	3553.18	979.41	3772.13	3347.24		0.03	-0.01	0.021
20.00	-48.67	-0.54	0.00	-67.88	0.00	67.88	3549.51	977.36	3756.31	3336.71		0.03	-0.01	0.021
22.00	-47.60	-0.54	0.00	-66.79	0.00	66.79	3563.12	985.03	3815.51	3376.01		0.04	-0.02	0.021
24.00	-47.00	-0.55	0.00	-65.70	0.00	65.70	3548.52	976.81	3752.08	3333.89		0.04	-0.02	0.021
26.00	-46.40	-0.55	0.00	-64.61	0.00	64.61	3533.67	968.58	3689.18	3291.77		0.05	-0.02	0.020
28.00	-45.80	-0.55	0.00	-63.52	0.00	63.52	3518.56	960.36	3626.81	3249.64		0.06	-0.02	0.020
30.00	-45.21	-0.55	0.00	-62.42	0.00	62.42	3503.20	952.14	3564.97	3207.53		0.07	-0.02	0.016
31.00	-44.91	-0.55	0.00	-61.87	0.00	61.87	3495.43	948.03	3534.25	3186.48		0.07	-0.02	0.018
32.00	-44.62	-0.55	0.00	-61.32	0.00	61.32	3487.59	943.92	3503.66	3165.43		0.08	-0.02	0.018
34.00	-44.04	-0.55	0.00	-60.22	0.00	60.22	3471.72	935.70	3442.89	3123.35		0.09	-0.02	0.022
35.50	-43.60	-0.55	0.00	-59.40	0.00	59.40	3459.65	929.53	3397.66	3091.80		0.10	-0.03	0.022
36.00	-43.46	-0.55	0.00	-59.12	0.00	59.12	3455.59	927.47	3382.65	3081.29		0.10	-0.03	0.022
38.00	-42.88	-0.55	0.00	-58.02	0.00	58.02	3439.21	919.25	3322.94	3039.26		0.11	-0.03	0.022
40.00	-42.30	-0.55	0.00	-56.92	0.00	56.92	3422.57	911.03	3263.76	2997.28		0.12	-0.03	0.022
42.00	-41.73	-0.55	0.00	-55.81	0.00	55.81	3405.68	902.81	3205.11	2955.34		0.14	-0.03	0.021
44.00	-41.17	-0.55	0.00	-54.70	0.00	54.70	3388.54	894.58	3146.99	2913.44		0.15	-0.03	0.021
45.16	-40.84	-0.55	0.00	-54.06	0.00	54.06	3378.48	889.81	3113.53	2889.17		0.16	-0.03	0.015
46.00	-40.61	-0.56	0.00	-53.59	0.00	53.59	3371.14	886.36	3089.41	2871.61		0.16	-0.04	0.020
48.00	-40.05	-0.56	0.00	-52.48	0.00	52.48	3353.48	878.14	3032.36	2829.83		0.18	-0.04	0.020
50.00	-39.50	-0.56	0.00	-51.37	0.00	51.37	3335.57	869.92	2975.84	2788.13		0.20	-0.04	0.020
52.00	-38.53	-0.56	0.00	-50.26	0.00	50.26	3317.41	861.69	2919.85	2746.50		0.21	-0.04	0.019
54.00	-37.57	-0.56	0.00	-49.15	0.00	49.15	3298.98	853.47	2864.39	2704.94		0.23	-0.04	0.019
56.00	-36.61	-0.56	0.00	-48.03	0.00	48.03	3316.18	861.14	2916.12	2743.71		0.25	-0.04	0.019
58.00	-36.07	-0.56	0.00	-46.92	0.00	46.92	3297.74	852.92	2860.70	2702.16		0.27	-0.05	0.020
60.00	-35.53	-0.56	0.00	-45.81	0.00	45.81	3279.05	844.70	2805.81	2660.71		0.29	-0.05	0.019
62.00	-34.99	-0.56	0.00	-44.70	0.00	44.70	3260.10	836.48	2751.45	2619.34		0.31	-0.05	0.019
64.00	-34.46	-0.56	0.00	-43.59	0.00	43.59	3240.90	828.25	2697.62	2578.08		0.33	-0.05	0.019
66.00	-33.93	-0.56	0.00	-42.47	0.00	42.47	3221.44	820.03	2644.33	2536.92		0.35	-0.05	0.019
68.00	-33.41	-0.56	0.00	-41.36	0.00	41.36	3201.73	811.81	2591.56	2495.87		0.37	-0.05	0.018
70.00	-32.89	-0.56	0.00	-40.25	0.00	40.25	3181.76	803.59	2539.33	2454.94		0.39	-0.06	0.018
72.00	-32.38	-0.56	0.00	-39.13	0.00	39.13	3161.54	795.36	2487.63	2414.13		0.42	-0.06	0.018
74.00	-31.86	-0.56	0.00	-38.02	0.00	38.02	3141.06	787.14	2436.47	2373.45		0.44	-0.06	0.018
76.00	-31.36	-0.56	0.00	-36.90	0.00	36.90	3120.33	778.92	2385.83	2332.91		0.47	-0.06	0.017
78.00	-30.85	-0.56	0.00	-35.79	0.00	35.79	3099.34	770.70	2335.73	2292.51		0.50	-0.06	0.017

Calculated Forces

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 67

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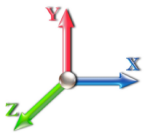
80.00	-30.35	-0.56	0.00	-34.67	0.00	34.67	3078.09	762.47	2286.15	2252.26	0.52	-0.07	0.017
80.00	-30.35	-0.56	0.00	-34.67	0.00	34.67	2384.58	636.50	1911.75	1750.88	0.52	-0.07	0.018
82.00	-29.92	-0.56	0.00	-33.56	0.00	33.56	2370.62	629.65	1870.81	1721.73	0.55	-0.07	0.020
84.00	-29.49	-0.56	0.00	-32.44	0.00	32.44	2356.42	622.80	1830.32	1692.63	0.58	-0.07	0.020
86.00	-29.06	-0.56	0.00	-31.33	0.00	31.33	2341.95	615.94	1790.27	1663.57	0.61	-0.07	0.019
88.00	-28.63	-0.56	0.00	-30.22	0.00	30.22	2327.23	609.09	1750.66	1634.56	0.64	-0.07	0.019
90.00	-28.21	-0.56	0.00	-29.10	0.00	29.10	2312.26	602.24	1711.49	1605.61	0.67	-0.08	0.019
92.00	-27.79	-0.56	0.00	-27.99	0.00	27.99	2297.03	595.39	1672.77	1576.72	0.70	-0.08	0.018
94.00	-27.38	-0.56	0.00	-26.87	0.00	26.87	2281.55	588.54	1634.49	1547.90	0.74	-0.08	0.018
95.00	-27.17	-0.56	0.00	-26.32	0.00	26.32	2273.71	585.11	1615.51	1533.52	0.75	-0.08	0.018
95.58	-26.97	-0.56	0.00	-25.99	0.00	25.99	2269.13	583.12	1604.56	1525.19	0.76	-0.08	0.017
95.58	-26.97	-0.56	0.00	-25.99	0.00	25.99	2269.13	583.12	1604.56	1525.19	0.76	-0.08	0.017
96.00	-26.82	-0.56	0.00	-25.76	0.00	25.76	2265.81	581.68	1596.65	1519.16	0.77	-0.08	0.029
98.00	-26.13	-0.56	0.00	-24.65	0.00	24.65	2249.81	574.83	1559.25	1490.50	0.80	-0.08	0.028
100.00	-25.44	-0.56	0.00	-23.53	0.00	23.53	2259.61	579.02	1582.04	1508.00	0.84	-0.09	0.027
102.00	-25.03	-0.56	0.00	-22.42	0.00	22.42	2243.52	572.17	1544.82	1479.37	0.88	-0.09	0.026
104.00	-24.63	-0.56	0.00	-21.31	0.00	21.31	2227.17	565.31	1508.04	1450.84	0.92	-0.09	0.026
106.00	-24.23	-0.56	0.00	-20.20	0.00	20.20	2210.57	558.46	1471.71	1422.40	0.96	-0.10	0.025
108.00	-23.83	-0.55	0.00	-19.09	0.00	19.09	2193.71	551.61	1435.82	1394.06	1.00	-0.10	0.025
110.00	-23.37	-0.55	0.00	-17.98	0.00	17.98	2176.60	544.76	1400.37	1365.84	1.04	-0.10	0.024
112.00	-22.98	-0.55	0.00	-16.87	0.00	16.87	2159.23	537.91	1365.36	1337.73	1.08	-0.10	0.023
114.00	-22.59	-0.55	0.00	-15.77	0.00	15.77	2141.61	531.05	1330.80	1309.73	1.13	-0.11	0.023
115.00	-22.40	-0.55	0.00	-15.21	0.00	15.21	2132.70	527.63	1313.68	1295.79	1.15	-0.11	0.022
115.00	-22.40	-0.55	0.00	-15.21	0.00	15.21	1556.62	422.98	1055.35	949.74	1.15	-0.11	0.030
116.00	-22.23	-0.55	0.00	-14.66	0.00	14.66	1551.43	420.24	1041.71	940.38	1.17	-0.11	0.030
118.00	-21.90	-0.55	0.00	-13.55	0.00	13.55	1540.84	414.76	1014.72	921.68	1.22	-0.11	0.029
120.00	-21.58	-0.55	0.00	-12.44	0.00	12.44	1529.99	409.28	988.07	902.99	1.26	-0.12	0.028
122.00	-21.25	-0.55	0.00	-11.34	0.00	11.34	1518.89	403.80	961.78	884.33	1.31	-0.12	0.027
124.00	-20.93	-0.55	0.00	-10.23	0.00	10.23	1507.54	398.32	935.85	865.70	1.36	-0.12	0.026
126.00	-20.61	-0.55	0.00	-9.12	0.00	9.12	1495.93	392.84	910.27	847.11	1.41	-0.12	0.025
128.00	-20.29	-0.55	0.00	-8.02	0.00	8.02	1484.06	387.35	885.04	828.56	1.47	-0.12	0.023
130.00	-19.98	-0.55	0.00	-6.91	0.00	6.91	1471.95	381.87	860.17	810.06	1.52	-0.13	0.022
132.00	-19.67	-0.55	0.00	-5.81	0.00	5.81	1459.57	376.39	835.65	791.62	1.57	-0.13	0.021
133.00	-14.11	-0.37	0.00	-5.26	0.00	5.26	1453.29	373.65	823.53	782.42	1.60	-0.13	0.016
134.00	-13.97	-0.37	0.00	-4.88	0.00	4.88	1446.94	370.91	811.49	773.23	1.63	-0.13	0.016
136.00	-13.70	-0.37	0.00	-4.14	0.00	4.14	1434.06	365.43	787.68	754.91	1.68	-0.13	0.015
138.00	-13.43	-0.37	0.00	-3.40	0.00	3.40	1420.92	359.95	764.23	736.67	1.74	-0.13	0.014
140.00	-13.16	-0.37	0.00	-2.65	0.00	2.65	1407.52	354.47	741.13	718.50	1.79	-0.13	0.013
142.00	-7.25	-0.14	0.00	-1.91	0.00	1.91	1393.87	348.98	718.38	700.42	1.85	-0.13	0.008
144.00	-7.02	-0.14	0.00	-1.63	0.00	1.63	1379.97	343.50	695.99	682.44	1.91	-0.14	0.007
145.00	-6.91	-0.14	0.00	-1.49	0.00	1.49	1372.92	340.76	684.93	673.48	1.93	-0.14	0.007
145.00	-6.91	-0.14	0.00	-1.49	0.00	1.49	931.20	332.53	24157.3	604.09	1.93	-0.14	0.010
146.00	-6.80	-0.14	0.00	-1.35	0.00	1.35	925.24	329.86	23770.3	594.77	1.96	-0.14	0.010
148.00	-6.58	-0.14	0.00	-1.06	0.00	1.06	913.32	324.51	23005.8	576.36	2.02	-0.14	0.009
148.30	-3.97	-0.09	0.00	-1.02	0.00	1.02	911.53	323.71	22892.2	573.63	2.03	-0.14	0.006
150.00	-3.80	-0.09	0.00	-0.87	0.00	0.87	901.40	319.16	22253.7	558.24	2.08	-0.14	0.006
150.00	-3.80	-0.09	0.00	-0.87	0.00	0.87	556.65	167.00	10296.1	213.69	2.08	-0.14	0.011
152.00	-3.64	-0.09	0.00	-0.70	0.00	0.70	556.65	167.00	10296.1	213.69	2.13	-0.14	0.010
154.00	-3.49	-0.09	0.00	-0.52	0.00	0.52	556.65	167.00	10296.1	213.69	2.19	-0.14	0.009
156.00	-3.33	-0.09	0.00	-0.35	0.00	0.35	556.65	167.00	10296.1	213.69	2.25	-0.14	0.008
158.00	-3.18	-0.09	0.00	-0.17	0.00	0.17	556.65	167.00	10296.1	213.69	2.31	-0.14	0.007
160.00	0.00	-0.08	0.00	0.00	0.00	0.00	556.65	167.00	10296.1	213.69	2.37	-0.14	0.000

Seismic Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 68	

Tower Engineering Solutions

Load Case: 0.9D + 1.0Ev + 1.0Eh



Gust Response Factor	1.10			**Sds**	0.21	**Iterations**	23
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.09	**Ss**	0.20
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.25	**SA**	0.02	**S1**	0.05
						Seismic Importance Factor	1.00

Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00	RB1 RB2	0.00	0.00	0.00	0.00	
1.00	RT2 RB3 RB4	252.06	0.50	10.65	0.00	
2.00		251.27	1.50	10.61	0.00	
4.00		500.14	3.00	21.13	0.00	
6.00		496.95	5.00	20.99	0.00	
8.00		493.76	7.00	20.86	0.01	
10.00		490.58	9.00	20.72	0.01	
12.00		487.39	11.00	20.59	0.01	
14.00		484.20	13.00	20.45	0.02	
16.00	Bot - Section 2	481.01	15.00	20.32	0.02	
16.25	RT1 RB5	108.82	16.13	4.60	0.00	
18.00	RB6	758.95	17.13	32.06	0.08	
18.75	RT3 RT4	323.77	18.38	13.68	0.02	
19.50	RB7	322.87	19.13	13.64	0.02	
20.00		214.75	19.75	9.07	0.01	
22.00	Top - Section 1	855.02	21.00	36.12	0.15	
24.00		474.42	23.00	20.04	0.06	
26.00		471.23	25.00	19.90	0.07	
28.00		468.04	27.00	19.77	0.08	
30.00	RB8	464.86	29.00	19.64	0.09	
31.00	RT5	231.23	30.50	9.77	0.02	
32.00		230.43	31.50	9.73	0.03	
34.00	RT6	458.48	33.00	19.37	0.11	
35.50	RT7	341.77	34.75	14.44	0.07	
36.00		113.52	35.75	4.80	0.01	
38.00		452.10	37.00	19.10	0.13	
40.00	Appurtenance(s)	458.91	39.00	19.38	0.15	
42.00		445.44	41.00	18.82	0.16	
44.00		442.25	43.00	18.68	0.17	
45.16	RB9	255.04	44.58	10.77	0.06	
46.00	RT8	184.02	45.58	7.77	0.03	
48.00		435.87	47.00	18.41	0.20	
50.00	Bot - Section 3	432.68	49.00	18.28	0.22	
52.00		771.40	51.00	32.58	0.74	
54.00		765.02	53.00	32.31	0.79	
56.00	Top - Section 2	758.65	55.00	32.05	0.84	
58.00	RT9 RB10	426.09	57.00	18.00	0.28	
60.00		422.90	59.00	17.86	0.30	
62.00		419.71	61.00	17.73	0.31	
64.00		416.53	63.00	17.59	0.33	
66.00		413.34	65.00	17.46	0.35	
68.00		410.15	67.00	17.32	0.36	
70.00		406.96	69.00	17.19	0.38	
72.00		403.77	71.00	17.06	0.39	
74.00		400.58	73.00	16.92	0.41	
76.00		397.40	75.00	16.79	0.43	

Seismic Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 69	

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78.00	RT10 RB11		394.21	77.00	16.65	0.44		
80.00	Top - Section 3		391.02	79.00	16.52	0.46		
82.00			339.24	81.00	14.33	0.36		
84.00			336.59	83.00	14.22	0.37		
86.00			333.93	85.00	14.11	0.39		
88.00			331.27	87.00	13.99	0.40		
90.00			328.62	89.00	13.88	0.41		
92.00			325.96	91.00	13.77	0.42		
94.00			323.30	93.00	13.66	0.43		
95.00	Bot - Section 5		160.65	94.50	6.79	0.11		
95.58	RT11		159.80	95.29	6.75	0.11		
96.00			115.44	95.79	4.88	0.06		
98.00			546.51	97.00	23.08	1.35		
100.00	Top - Section 4		541.19	99.00	22.86	1.38		
102.00			316.95	101.00	13.39	0.49		
104.00			314.30	103.00	13.28	0.50		
106.00			311.64	105.00	13.16	0.51		
108.00			308.98	107.00	13.05	0.52		
110.00	Appurtenance(s)		362.33	109.00	15.30	0.75		
112.00			302.73	111.00	12.79	0.54		
114.00			300.08	113.00	12.68	0.55		
115.00	Top - Section 5		149.04	114.50	6.30	0.14		
116.00			128.15	115.50	5.41	0.11		
118.00			254.72	117.00	10.76	0.43		
120.00			252.59	119.00	10.67	0.43		
122.00			250.46	121.00	10.58	0.44		
124.00			248.34	123.00	10.49	0.45		
126.00			246.21	125.00	10.40	0.45		
128.00			244.09	127.00	10.31	0.46		
130.00			241.96	129.00	10.22	0.47		
132.00			239.84	131.00	10.13	0.47		
133.00	Appurtenance(s)		4466.3	132.50	188.66	168.05		
134.00			107.14	133.50	4.53	0.10		
136.00			212.69	135.00	8.98	0.40		
138.00			210.56	137.00	8.89	0.40		
140.00			208.44	139.00	8.80	0.40		
142.00	Appurtenance(s)		4750.2	141.00	200.65	215.26		
144.00			177.86	143.00	7.51	0.31		
145.00	Top - Section 6		88.13	144.50	3.72	0.08		
146.00			86.01	145.50	3.63	0.08		
148.00			170.46	147.00	7.20	0.30		
148.30	Appurtenance(s)		2095.7	148.15	88.53	46.26		
150.00	Top - Section 7		137.16	149.15	5.79	0.20		
152.00			120.90	151.00	5.11	0.16		
154.00			120.90	153.00	5.11	0.16		
156.00			120.90	155.00	5.11	0.17		
158.00			120.90	157.00	5.11	0.17		
160.00	Appurtenance(s)		2553.6	159.00	107.86	79.11		
		Totals:	**44,142.5**		**1,864.6**	**534.0**	**Total Wind:**	**37,177.8**

Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 70	

Tower Engineering Solutions

Load Case: 0.9D + 1.0Ev + 1.0Eh

Iterations 23

Gust Response Factor	1.10			**Sds**	0.21			**Ss**	0.20
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.09			**S1**	0.05
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.25	**SA**	0.02			**Seismic Importance Factor**	1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-42.28	-0.53	0.00	-77.72	0.00	77.72	3683.82	1059.58	4414.92	3756.66		0.00	0.00	0.019
1.00	-42.04	-0.53	0.00	-77.19	0.00	77.19	3677.71	1055.47	4380.73	3735.77		0.00	0.00	0.019
2.00	-41.80	-0.53	0.00	-76.66	0.00	76.66	3671.54	1051.36	4346.67	3714.86		0.00	0.00	0.019
4.00	-41.32	-0.53	0.00	-75.59	0.00	75.59	3659.00	1043.14	4278.95	3673.00		0.00	0.00	0.019
6.00	-40.84	-0.53	0.00	-74.52	0.00	74.52	3646.20	1034.91	4211.76	3631.09		0.00	0.00	0.018
8.00	-40.37	-0.54	0.00	-73.45	0.00	73.45	3633.16	1026.69	4145.10	3589.13		0.00	-0.01	0.018
10.00	-39.89	-0.54	0.00	-72.38	0.00	72.38	3619.85	1018.47	4078.97	3547.13		0.01	-0.01	0.018
12.00	-39.43	-0.54	0.00	-71.31	0.00	71.31	3606.29	1010.25	4013.38	3505.10		0.01	-0.01	0.018
14.00	-38.96	-0.54	0.00	-70.23	0.00	70.23	3592.48	1002.02	3948.31	3463.03		0.01	-0.01	0.018
16.00	-38.50	-0.54	0.00	-69.16	0.00	69.16	3578.41	993.80	3883.78	3420.94		0.02	-0.01	0.018
16.25	-38.39	-0.54	0.00	-69.02	0.00	69.02	3576.63	992.77	3875.75	3415.68		0.02	-0.01	0.020
18.00	-37.67	-0.54	0.00	-68.08	0.00	68.08	3564.09	985.58	3819.78	3378.83		0.02	-0.01	0.018
18.75	-37.36	-0.54	0.00	-67.67	0.00	67.67	3558.65	982.50	3795.92	3363.04		0.03	-0.01	0.022
19.50	-37.05	-0.54	0.00	-67.27	0.00	67.27	3553.18	979.41	3772.13	3347.24		0.03	-0.01	0.019
20.00	-36.85	-0.54	0.00	-67.00	0.00	67.00	3549.51	977.36	3756.31	3336.71		0.03	-0.01	0.019
22.00	-36.03	-0.54	0.00	-65.92	0.00	65.92	3563.12	985.03	3815.51	3376.01		0.04	-0.02	0.019
24.00	-35.58	-0.54	0.00	-64.83	0.00	64.83	3548.52	976.81	3752.08	3333.89		0.04	-0.02	0.018
26.00	-35.12	-0.54	0.00	-63.75	0.00	63.75	3533.67	968.58	3689.18	3291.77		0.05	-0.02	0.018
28.00	-34.67	-0.54	0.00	-62.66	0.00	62.66	3518.56	960.36	3626.81	3249.64		0.06	-0.02	0.018
30.00	-34.23	-0.54	0.00	-61.58	0.00	61.58	3503.20	952.14	3564.97	3207.53		0.07	-0.02	0.014
31.00	-34.00	-0.54	0.00	-61.03	0.00	61.03	3495.43	948.03	3534.25	3186.48		0.07	-0.02	0.016
32.00	-33.78	-0.54	0.00	-60.49	0.00	60.49	3487.59	943.92	3503.66	3165.43		0.08	-0.02	0.016
34.00	-33.34	-0.55	0.00	-59.40	0.00	59.40	3471.72	935.70	3442.89	3123.35		0.09	-0.02	0.019
35.50	-33.01	-0.55	0.00	-58.58	0.00	58.58	3459.65	929.53	3397.66	3091.80		0.09	-0.03	0.020
36.00	-32.90	-0.55	0.00	-58.31	0.00	58.31	3455.59	927.47	3382.65	3081.29		0.10	-0.03	0.020
38.00	-32.47	-0.55	0.00	-57.21	0.00	57.21	3439.21	919.25	3322.94	3039.26		0.11	-0.03	0.020
40.00	-32.02	-0.55	0.00	-56.12	0.00	56.12	3422.57	911.03	3263.76	2997.28		0.12	-0.03	0.019
42.00	-31.60	-0.55	0.00	-55.03	0.00	55.03	3405.68	902.81	3205.11	2955.34		0.13	-0.03	0.019
44.00	-31.17	-0.55	0.00	-53.93	0.00	53.93	3388.54	894.58	3146.99	2913.44		0.15	-0.03	0.019
45.16	-30.92	-0.55	0.00	-53.29	0.00	53.29	3378.48	889.81	3113.53	2889.17		0.16	-0.03	0.014
46.00	-30.75	-0.55	0.00	-52.83	0.00	52.83	3371.14	886.36	3089.41	2871.61		0.16	-0.04	0.018
48.00	-30.33	-0.55	0.00	-51.73	0.00	51.73	3353.48	878.14	3032.36	2829.83		0.18	-0.04	0.018
50.00	-29.91	-0.55	0.00	-50.63	0.00	50.63	3335.57	869.92	2975.84	2788.13		0.19	-0.04	0.017
52.00	-29.17	-0.55	0.00	-49.53	0.00	49.53	3317.41	861.69	2919.85	2746.50		0.21	-0.04	0.017
54.00	-28.44	-0.55	0.00	-48.44	0.00	48.44	3298.98	853.47	2864.39	2704.94		0.23	-0.04	0.017
56.00	-27.72	-0.55	0.00	-47.34	0.00	47.34	3316.18	861.14	2916.12	2743.71		0.24	-0.04	0.017
58.00	-27.31	-0.55	0.00	-46.24	0.00	46.24	3297.74	852.92	2860.70	2702.16		0.26	-0.05	0.018
60.00	-26.90	-0.55	0.00	-45.14	0.00	45.14	3279.05	844.70	2805.81	2660.71		0.28	-0.05	0.017
62.00	-26.50	-0.55	0.00	-44.04	0.00	44.04	3260.10	836.48	2751.45	2619.34		0.30	-0.05	0.017
64.00	-26.09	-0.55	0.00	-42.95	0.00	42.95	3240.90	828.25	2697.62	2578.08		0.32	-0.05	0.017
66.00	-25.69	-0.55	0.00	-41.85	0.00	41.85	3221.44	820.03	2644.33	2536.92		0.34	-0.05	0.017
68.00	-25.30	-0.55	0.00	-40.75	0.00	40.75	3201.73	811.81	2591.56	2495.87		0.37	-0.05	0.017
70.00	-24.91	-0.55	0.00	-39.65	0.00	39.65	3181.76	803.59	2539.33	2454.94		0.39	-0.06	0.016
72.00	-24.52	-0.55	0.00	-38.55	0.00	38.55	3161.54	795.36	2487.63	2414.13		0.41	-0.06	0.016
74.00	-24.13	-0.55	0.00	-37.45	0.00	37.45	3141.06	787.14	2436.47	2373.45		0.44	-0.06	0.016
76.00	-23.75	-0.55	0.00	-36.35	0.00	36.35	3120.33	778.92	2385.83	2332.91		0.46	-0.06	0.016
78.00	-23.36	-0.55	0.00	-35.25	0.00	35.25	3099.34	770.70	2335.73	2292.51		0.49	-0.06	0.015

Calculated Forces

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 71

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80.00	-22.99	-0.55	0.00	-34.15	0.00	34.15	3078.09	762.47	2286.15	2252.26	0.52	-0.06	0.015
80.00	-22.99	-0.55	0.00	-34.15	0.00	34.15	2384.58	636.50	1911.75	1750.88	0.52	-0.06	0.016
82.00	-22.66	-0.55	0.00	-33.05	0.00	33.05	2370.62	629.65	1870.81	1721.73	0.54	-0.07	0.018
84.00	-22.33	-0.55	0.00	-31.96	0.00	31.96	2356.42	622.80	1830.32	1692.63	0.57	-0.07	0.018
86.00	-22.01	-0.55	0.00	-30.86	0.00	30.86	2341.95	615.94	1790.27	1663.57	0.60	-0.07	0.017
88.00	-21.69	-0.55	0.00	-29.76	0.00	29.76	2327.23	609.09	1750.66	1634.56	0.63	-0.07	0.017
90.00	-21.37	-0.55	0.00	-28.66	0.00	28.66	2312.26	602.24	1711.49	1605.61	0.66	-0.07	0.017
92.00	-21.05	-0.55	0.00	-27.56	0.00	27.56	2297.03	595.39	1672.77	1576.72	0.69	-0.08	0.016
94.00	-20.74	-0.55	0.00	-26.46	0.00	26.46	2281.55	588.54	1634.49	1547.90	0.73	-0.08	0.016
95.00	-20.58	-0.55	0.00	-25.92	0.00	25.92	2273.71	585.11	1615.51	1533.52	0.74	-0.08	0.016
95.58	-20.43	-0.55	0.00	-25.60	0.00	25.60	2269.13	583.12	1604.56	1525.19	0.75	-0.08	0.015
95.58	-20.43	-0.55	0.00	-25.60	0.00	25.60	2269.13	583.12	1604.56	1525.19	0.75	-0.08	0.015
96.00	-20.32	-0.55	0.00	-25.37	0.00	25.37	2265.81	581.68	1596.65	1519.16	0.76	-0.08	0.026
98.00	-19.79	-0.55	0.00	-24.27	0.00	24.27	2249.81	574.83	1559.25	1490.50	0.79	-0.08	0.025
100.00	-19.27	-0.55	0.00	-23.17	0.00	23.17	2259.61	579.02	1582.04	1508.00	0.83	-0.09	0.024
102.00	-18.96	-0.55	0.00	-22.08	0.00	22.08	2243.52	572.17	1544.82	1479.37	0.87	-0.09	0.023
104.00	-18.66	-0.55	0.00	-20.98	0.00	20.98	2227.17	565.31	1508.04	1450.84	0.90	-0.09	0.023
106.00	-18.36	-0.55	0.00	-19.89	0.00	19.89	2210.57	558.46	1471.71	1422.40	0.94	-0.09	0.022
108.00	-18.05	-0.55	0.00	-18.80	0.00	18.80	2193.71	551.61	1435.82	1394.06	0.98	-0.10	0.022
110.00	-17.70	-0.55	0.00	-17.70	0.00	17.70	2176.60	544.76	1400.37	1365.84	1.02	-0.10	0.021
112.00	-17.41	-0.55	0.00	-16.61	0.00	16.61	2159.23	537.91	1365.36	1337.73	1.07	-0.10	0.020
114.00	-17.12	-0.55	0.00	-15.52	0.00	15.52	2141.61	531.05	1330.80	1309.73	1.11	-0.11	0.020
115.00	-16.97	-0.55	0.00	-14.97	0.00	14.97	2132.70	527.63	1313.68	1295.79	1.13	-0.11	0.020
115.00	-16.97	-0.55	0.00	-14.97	0.00	14.97	1556.62	422.98	1055.35	949.74	1.13	-0.11	0.027
116.00	-16.85	-0.55	0.00	-14.43	0.00	14.43	1551.43	420.24	1041.71	940.38	1.15	-0.11	0.026
118.00	-16.60	-0.55	0.00	-13.34	0.00	13.34	1540.84	414.76	1014.72	921.68	1.20	-0.11	0.025
120.00	-16.35	-0.55	0.00	-12.25	0.00	12.25	1529.99	409.28	988.07	902.99	1.25	-0.11	0.024
122.00	-16.10	-0.55	0.00	-11.16	0.00	11.16	1518.89	403.80	961.78	884.33	1.30	-0.12	0.023
124.00	-15.86	-0.55	0.00	-10.06	0.00	10.06	1507.54	398.32	935.85	865.70	1.34	-0.12	0.022
126.00	-15.62	-0.55	0.00	-8.97	0.00	8.97	1495.93	392.84	910.27	847.11	1.39	-0.12	0.021
128.00	-15.38	-0.54	0.00	-7.88	0.00	7.88	1484.06	387.35	885.04	828.56	1.45	-0.12	0.020
130.00	-15.14	-0.54	0.00	-6.79	0.00	6.79	1471.95	381.87	860.17	810.06	1.50	-0.13	0.019
132.00	-14.91	-0.54	0.00	-5.71	0.00	5.71	1459.57	376.39	835.65	791.62	1.55	-0.13	0.017
133.00	-10.70	-0.37	0.00	-5.16	0.00	5.16	1453.29	373.65	823.53	782.42	1.58	-0.13	0.014
134.00	-10.59	-0.37	0.00	-4.80	0.00	4.80	1446.94	370.91	811.49	773.23	1.60	-0.13	0.014
136.00	-10.38	-0.37	0.00	-4.06	0.00	4.06	1434.06	365.43	787.68	754.91	1.66	-0.13	0.013
138.00	-10.18	-0.37	0.00	-3.33	0.00	3.33	1420.92	359.95	764.23	736.67	1.71	-0.13	0.012
140.00	-9.98	-0.36	0.00	-2.60	0.00	2.60	1407.52	354.47	741.13	718.50	1.77	-0.13	0.011
142.00	-5.49	-0.14	0.00	-1.87	0.00	1.87	1393.87	348.98	718.38	700.42	1.82	-0.13	0.007
144.00	-5.32	-0.14	0.00	-1.60	0.00	1.60	1379.97	343.50	695.99	682.44	1.88	-0.13	0.006
145.00	-5.24	-0.14	0.00	-1.46	0.00	1.46	1372.92	340.76	684.93	673.48	1.91	-0.13	0.006
145.00	-5.24	-0.14	0.00	-1.46	0.00	1.46	931.20	332.53	24157.3	604.09	1.91	-0.13	0.008
146.00	-5.15	-0.14	0.00	-1.32	0.00	1.32	925.24	329.86	23770.3	594.77	1.94	-0.13	0.008
148.00	-4.99	-0.14	0.00	-1.04	0.00	1.04	913.32	324.51	23005.8	576.36	1.99	-0.13	0.007
148.30	-3.01	-0.09	0.00	-1.00	0.00	1.00	911.53	323.71	22892.2	573.63	2.00	-0.13	0.005
150.00	-2.88	-0.09	0.00	-0.85	0.00	0.85	901.40	319.16	22253.7	558.24	2.05	-0.13	0.005
150.00	-2.88	-0.09	0.00	-0.85	0.00	0.85	556.65	167.00	10296.1	213.69	2.05	-0.13	0.009
152.00	-2.76	-0.09	0.00	-0.68	0.00	0.68	556.65	167.00	10296.1	213.69	2.10	-0.14	0.008
154.00	-2.64	-0.09	0.00	-0.51	0.00	0.51	556.65	167.00	10296.1	213.69	2.16	-0.14	0.007
156.00	-2.53	-0.09	0.00	-0.34	0.00	0.34	556.65	167.00	10296.1	213.69	2.22	-0.14	0.006
158.00	-2.41	-0.08	0.00	-0.17	0.00	0.17	556.65	167.00	10296.1	213.69	2.28	-0.14	0.005
160.00	0.00	-0.08	0.00	0.00	0.00	0.00	556.65	167.00	10296.1	213.69	2.33	-0.14	0.000

Wind Loading - Shaft

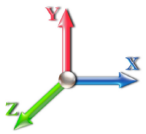
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 72	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2	1.00	0.70	5.361	5.90	215.71	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT2 RB3 RB4	1.00	0.70	5.361	5.90	214.88	1.089 *	0.000	1.00	4.338	4.73	27.9	0.0	205.0
2.00		1.00	0.70	5.361	5.90	214.05	1.091 *	0.000	1.00	4.321	4.71	27.8	0.0	204.2
4.00		1.00	0.70	5.361	5.90	212.39	1.093 *	0.000	2.00	8.592	9.39	55.4	0.0	406.1
6.00		1.00	0.70	5.361	5.90	210.73	1.097 *	0.000	2.00	8.525	9.35	55.1	0.0	402.9
8.00		1.00	0.70	5.361	5.90	209.07	1.100 *	0.000	2.00	8.458	9.31	54.9	0.0	399.7
10.00		1.00	0.70	5.361	5.90	207.41	1.104 *	0.000	2.00	8.391	9.26	54.6	0.0	396.5
12.00		1.00	0.70	5.361	5.90	205.74	1.107 *	0.000	2.00	8.324	9.22	54.3	0.0	393.3
14.00		1.00	0.70	5.361	5.90	204.08	1.111 *	0.000	2.00	8.257	9.17	54.1	0.0	390.2
16.00	Bot - Section 2	1.00	0.70	5.361	5.90	202.42	1.114 *	0.000	2.00	8.190	9.13	53.8	0.0	387.0
16.25	RT1 RB5	1.00	0.70	5.361	5.90	202.21	1.117 *	0.000	0.25	1.035	1.16	6.8	0.0	97.1
18.00	RB6	1.00	0.70	5.361	5.90	200.76	1.118 *	0.000	1.75	7.217	8.07	47.6	0.0	676.7
18.75	RT3 RT4	1.00	0.70	5.361	5.90	200.14	1.121 *	0.000	0.75	3.077	3.45	20.3	0.0	288.5
19.50	RB7	1.00	0.70	5.361	5.90	199.51	1.122 *	0.000	0.75	3.068	3.44	20.3	0.0	287.6
20.00		1.00	0.70	5.361	5.90	199.10	1.123 *	0.000	0.50	2.040	2.29	13.5	0.0	191.2
22.00	Top - Section 1	1.00	0.70	5.361	5.90	197.44	1.126 *	0.000	2.00	8.118	9.14	53.9	0.0	761.0
24.00		1.00	0.70	5.361	5.90	198.99	1.122 *	0.000	2.00	8.052	9.04	53.3	0.0	380.4
26.00		1.00	0.70	5.361	5.90	197.33	1.126 *	0.000	2.00	7.985	8.99	53.0	0.0	377.2
28.00		1.00	0.70	5.361	5.90	195.66	1.130 *	0.000	2.00	7.918	8.95	52.8	0.0	374.0
30.00	RB8	1.00	0.70	5.365	5.90	194.08	1.134 *	0.000	2.00	7.851	8.90	52.5	0.0	370.8
31.00	RT5	1.00	0.71	5.416	5.96	194.16	1.137 *	0.000	1.00	3.900	4.43	26.4	0.0	184.2
32.00		1.00	0.71	5.465	6.01	194.20	1.139 *	0.000	1.00	3.883	4.42	26.6	0.0	183.4
34.00	RT6	1.00	0.73	5.561	6.12	194.20	0.988 *	0.000	2.00	7.717	7.63	46.6	0.0	364.4
35.50	RT7	1.00	0.74	5.630	6.19	194.13	0.991 *	0.000	1.50	5.744	5.69	35.2	0.0	271.2
36.00		1.00	0.74	5.652	6.22	194.09	0.992 *	0.000	0.50	1.906	1.89	11.8	0.0	90.0
38.00		1.00	0.75	5.740	6.31	193.87	0.994 *	0.000	2.00	7.583	7.54	47.6	0.0	358.1
40.00	Appurtenance(s)	1.00	0.76	5.825	6.41	193.57	0.997 *	0.000	2.00	7.516	7.49	48.0	0.0	354.9
42.00		1.00	0.77	5.907	6.50	193.18	1.000 *	0.000	2.00	7.449	7.45	48.4	0.0	351.7
44.00		1.00	0.78	5.986	6.58	192.71	1.003 *	0.000	2.00	7.382	7.40	48.7	0.0	348.5
45.16	RB9	1.00	0.79	6.030	6.63	192.40	1.005 *	0.000	1.16	4.251	4.27	28.3	0.0	200.7
46.00	RT8	1.00	0.79	6.062	6.67	192.17	1.007 *	0.000	0.84	3.064	3.09	20.6	0.0	144.6
48.00		1.00	0.80	6.136	6.75	191.56	1.009 *	0.000	2.00	7.248	7.31	49.4	0.0	342.1
50.00	Bot - Section 3	1.00	0.81	6.208	6.83	190.90	1.012 *	0.000	2.00	7.181	7.27	49.6	0.0	338.9
52.00		1.00	0.82	6.278	6.91	190.17	1.016 *	0.000	2.00	7.244	7.36	50.8	0.0	677.6
54.00		1.00	0.83	6.346	6.98	189.39	1.019 *	0.000	2.00	7.177	7.31	51.0	0.0	671.3
56.00	Top - Section 2	1.00	0.84	6.413	7.05	188.56	1.022 *	0.000	2.00	7.110	7.27	51.3	0.0	664.9
58.00	RT9 RB10	1.00	0.85	6.477	7.13	191.21	1.019 *	0.000	2.00	7.043	7.18	51.1	0.0	332.3
60.00		1.00	0.85	6.540	7.19	190.31	1.022 *	0.000	2.00	6.976	7.13	51.3	0.0	329.2
62.00		1.00	0.86	6.602	7.26	189.36	1.026 *	0.000	2.00	6.909	7.09	51.5	0.0	326.0
64.00		1.00	0.87	6.662	7.33	188.36	1.029 *	0.000	2.00	6.842	7.04	51.6	0.0	322.8
66.00		1.00	0.88	6.721	7.39	187.33	1.033 *	0.000	2.00	6.775	7.00	51.7	0.0	319.6
68.00		1.00	0.89	6.779	7.46	186.27	1.037 *	0.000	2.00	6.708	6.95	51.9	0.0	316.4
70.00		1.00	0.89	6.835	7.52	185.16	1.041 *	0.000	2.00	6.641	6.91	52.0	0.0	313.2
72.00		1.00	0.90	6.890	7.58	184.03	1.044 *	0.000	2.00	6.574	6.87	52.0	0.0	310.0
74.00		1.00	0.91	6.944	7.64	182.86	1.048 *	0.000	2.00	6.507	6.82	52.1	0.0	306.8
76.00		1.00	0.91	6.997	7.70	181.66	1.052 *	0.000	2.00	6.440	6.78	52.2	0.0	303.6
78.00	RT10 RB11	1.00	0.92	7.050	7.75	180.43	1.056 *	0.000	2.00	6.373	6.73	52.2	0.0	300.5

Wind Loading - Shaft

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 73	

TES Tower Engineering Solutions

80.00	Top - Section 3	1.00	0.93	7.101	7.81	179.17	1.060 *	0.000	2.00	6.306	6.69	52.2	0.0	297.3
82.00		1.00	0.93	7.151	7.87	177.88	1.065 *	0.000	2.00	6.239	6.64	52.3	0.0	245.5
84.00		1.00	0.94	7.200	7.92	176.57	1.069 *	0.000	2.00	6.172	6.60	52.3	0.0	242.8
86.00		1.00	0.95	7.249	7.97	175.23	1.073 *	0.000	2.00	6.106	6.55	52.3	0.0	240.2
88.00		1.00	0.95	7.297	8.03	173.87	1.078 *	0.000	2.00	6.039	6.51	52.2	0.0	237.5
90.00		1.00	0.96	7.344	8.08	172.49	1.083 *	0.000	2.00	5.972	6.46	52.2	0.0	234.9
92.00		1.00	0.96	7.390	8.13	171.08	1.087 *	0.000	2.00	5.905	6.42	52.2	0.0	232.2
94.00		1.00	0.97	7.436	8.18	169.65	1.092 *	0.000	2.00	5.838	6.38	52.1	0.0	229.6
95.00	Bot - Section 5	1.00	0.97	7.458	8.20	168.92	1.096 *	0.000	1.00	2.894	3.17	26.0	0.0	113.8
95.58	RT11	1.00	0.98	7.471	8.22	168.50	1.098 *	0.000	0.58	1.702	1.87	15.4	0.0	132.6
96.00		1.00	0.98	7.480	8.23	168.19	1.099 *	0.000	0.42	1.229	1.35	11.1	0.0	95.8
98.00		1.00	0.98	7.525	8.28	166.72	1.102 *	0.000	2.00	5.812	6.41	53.0	0.0	452.8
100.00	Top - Section 4	1.00	0.99	7.568	8.32	165.23	1.002 *	0.000	2.00	5.745	5.76	47.9	0.0	447.4
102.00		1.00	0.99	7.611	8.37	166.91	1.000 *	0.000	2.00	5.678	5.68	47.5	0.0	223.2
104.00		1.00	1.00	7.653	8.42	165.39	1.004 *	0.000	2.00	5.611	5.63	47.4	0.0	220.5
106.00		1.00	1.00	7.695	8.46	163.85	1.008 *	0.000	2.00	5.544	5.59	47.3	0.0	217.9
108.00		1.00	1.01	7.736	8.51	162.29	1.012 *	0.000	2.00	5.477	5.54	47.2	0.0	215.2
110.00	Appurtenance(s)	1.00	1.02	7.777	8.55	160.71	1.016 *	0.000	2.00	5.410	5.50	47.0	0.0	212.6
112.00		1.00	1.02	7.817	8.60	159.12	1.021 *	0.000	2.00	5.343	5.45	46.9	0.0	209.9
114.00		1.00	1.03	7.857	8.64	157.51	1.025 *	0.000	2.00	5.276	5.41	46.7	0.0	207.3
115.00	Top - Section 5	1.00	1.03	7.876	8.66	156.70	1.029 *	0.000	1.00	2.613	2.69	23.3	0.0	102.6
116.00		1.00	1.03	7.896	8.69	155.89	1.031 *	0.000	1.00	2.596	2.68	23.2	0.0	81.7
118.00		1.00	1.04	7.935	8.73	154.25	1.034 *	0.000	2.00	5.142	5.32	46.4	0.0	161.9
120.00		1.00	1.04	7.973	8.77	152.59	1.039 *	0.000	2.00	5.075	5.28	46.3	0.0	159.8
122.00		1.00	1.05	8.011	8.81	150.92	1.044 *	0.000	2.00	5.008	5.23	46.1	0.0	157.6
124.00		1.00	1.05	8.048	8.85	149.24	1.050 *	0.000	2.00	4.941	5.19	45.9	0.0	155.5
126.00		1.00	1.06	8.085	8.89	147.54	1.055 *	0.000	2.00	4.874	5.14	45.7	0.0	153.4
128.00		1.00	1.06	8.121	8.93	145.83	1.060 *	0.000	2.00	4.807	5.10	45.5	0.0	151.3
130.00		1.00	1.07	8.157	8.97	144.10	1.066 *	0.000	2.00	4.741	5.05	45.3	0.0	149.1
132.00		1.00	1.07	8.193	9.01	142.36	1.072 *	0.000	2.00	4.674	5.01	45.1	0.0	147.0
133.00	Appurtenance(s)	1.00	1.07	8.211	9.03	141.49	1.076 *	0.000	1.00	2.312	2.49	22.5	0.0	72.7
134.00		1.00	1.07	8.228	9.05	140.61	1.079 *	0.000	1.00	2.295	2.48	22.4	0.0	72.2
136.00		1.00	1.08	8.263	9.09	138.84	1.084 *	0.000	2.00	4.540	4.92	44.7	0.0	142.8
138.00		1.00	1.08	8.298	9.13	137.07	1.090 *	0.000	2.00	4.473	4.87	44.5	0.0	140.6
140.00		1.00	1.09	8.332	9.17	135.28	1.096 *	0.000	2.00	4.406	4.83	44.3	0.0	138.5
142.00	Appurtenance(s)	1.00	1.09	8.366	9.20	133.48	1.103 *	0.000	2.00	4.339	4.79	44.0	0.0	136.4
144.00		1.00	1.10	8.399	9.24	131.66	0.950	0.000	2.00	4.272	4.06	37.5	0.0	134.3
145.00	Top - Section 6	1.00	1.10	8.416	9.26	130.75	0.950	0.000	1.00	2.111	2.01	18.6	0.0	66.3
146.00		1.00	1.10	8.432	9.28	125.44	0.600	0.000	1.00	2.023	1.21	11.3	0.0	64.2
148.00		1.00	1.11	8.465	9.31	123.67	0.600	0.000	2.00	3.998	2.40	22.3	0.0	126.9
148.30	Appurtenance(s)	1.00	1.11	8.470	9.32	123.40	0.600	0.000	0.30	0.594	0.36	3.3	0.0	18.9
150.00	Top - Section 7	1.00	1.11	8.498	9.35	121.88	0.600	0.000	1.70	3.339	2.00	18.7	0.0	105.9
152.00		1.00	1.11	8.530	9.38	83.48	0.645 *	0.000	2.00	2.667	1.72	16.1	0.0	84.2
154.00		1.00	1.12	8.562	9.42	83.64	0.645 *	0.000	2.00	2.667	1.72	16.2	0.0	84.2
156.00		1.00	1.12	8.593	9.45	83.79	0.645 *	0.000	2.00	2.667	1.72	16.3	0.0	84.2
158.00		1.00	1.13	8.625	9.49	83.94	0.645 *	0.000	2.00	2.667	1.72	16.3	0.0	84.2
160.00	Appurtenance(s)	1.00	1.13	8.656	9.52	84.09	0.645 *	0.000	2.00	2.667	1.72	16.4	0.0	84.2
								Totals:	**160.00**			**3,751.6**		**23,786.1**

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

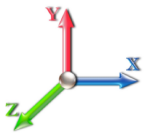
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 74	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	160.00	JAHH-65B-R3B	6	8.687	9.555	0.66	0.80	36.29	324.00	0.000	2.000	346.80	0.00	693.60
2	160.00	DB222	1	8.732	9.606	1.00	1.00	2.25	16.00	0.000	5.000	21.61	0.00	108.06
3	160.00	DB846F65ZAXY	6	8.687	9.555	0.74	0.80	31.47	126.00	0.000	2.000	300.72	0.00	601.43
4	160.00	Low Profile Platform	1	8.687	9.555	1.00	1.00	22.00	1200.00	0.000	2.000	210.22	0.00	420.43
5	160.00	6' Lightning rod	1	8.702	9.572	1.00	1.00	0.38	6.50	0.000	3.000	3.64	0.00	10.91
6	160.00	RCMDC-3315V-PF-48	1	8.687	9.555	1.00	1.00	2.51	15.00	0.000	2.000	23.98	0.00	47.97
7	160.00	VZS01	3	8.687	9.555	0.69	1.00	8.90	261.30	0.000	2.000	85.05	0.00	170.10
8	160.00	CBC78T-DS-43	1	8.687	9.555	1.00	1.00	0.37	20.70	0.000	2.000	3.54	0.00	7.07
9	160.00	B2/B66A RRH-BR049	3	8.687	9.555	0.67	1.00	3.76	210.00	0.000	2.000	35.92	0.00	71.83
10	160.00	B5/B13 RRH-BR04C	3	8.687	9.555	0.67	1.00	3.76	253.20	0.000	2.000	35.92	0.00	71.83
11	148.30	1900MHz RRH	3	8.530	9.383	0.54	0.80	6.11	132.00	0.000	3.700	57.33	0.00	212.13
12	148.30	APXVTM14-C-120	3	8.498	9.347	0.61	0.80	11.59	168.00	0.000	1.700	108.38	0.00	184.25
13	148.30	800 MHz RRH	3	8.530	9.383	0.54	0.80	4.00	159.00	0.000	3.700	37.57	0.00	139.00
14	148.30	APXVSPP18-C-A20	3	8.530	9.383	0.66	0.80	15.98	171.00	0.000	3.700	149.90	0.00	554.63
15	148.30	Low Profile Platform	1	8.470	9.317	1.00	1.00	22.00	1200.00	0.000	0.000	204.98	0.00	0.00
16	148.30	ALU 800MHz External	3	8.530	9.383	0.54	0.80	1.25	26.40	0.000	3.700	11.77	0.00	43.54
17	148.30	TD-RRH8x20-25	3	8.498	9.347	0.54	0.80	6.51	210.00	0.000	1.700	60.87	0.00	103.49
18	148.30	ACU-A20-N	4	8.530	9.383	0.54	0.80	0.30	4.00	0.000	3.700	2.82	0.00	10.42
19	142.00	Mod	1	8.366	9.202	1.00	1.00	12.00	300.00	0.000	0.000	110.43	0.00	0.00
20	142.00	Ericsson 4415 B25 RRU	4	8.366	9.202	0.50	0.75	3.74	198.40	0.000	0.000	34.40	0.00	0.00
21	142.00	Commscope	4	8.366	9.202	0.50	0.75	0.24	11.60	0.000	0.000	2.22	0.00	0.00
22	142.00	Ericsson Radio 4415	1	8.366	9.202	0.50	0.75	0.93	44.10	0.000	0.000	8.60	0.00	0.00
23	142.00	Ericsson Radio 4449	4	8.366	9.202	0.50	0.75	3.32	280.00	0.000	0.000	30.52	0.00	0.00
24	142.00	RFS	1	8.366	9.202	0.52	0.75	7.70	106.00	0.000	0.000	70.87	0.00	0.00
25	142.00	RFS	3	8.366	9.202	0.52	0.75	31.88	384.00	0.000	0.000	293.35	0.00	0.00
26	142.00	Ericsson Air 32	4	8.366	9.202	0.65	0.75	16.99	528.80	0.000	0.000	156.36	0.00	0.00
27	142.00	Ericsson AIR6449 B41	4	8.366	9.202	0.53	0.75	12.03	412.00	0.000	0.000	110.74	0.00	0.00
28	142.00	Platform w/ HR & Bracing	1	8.366	9.202	1.00	1.00	52.00	2246.00	0.000	0.000	478.52	0.00	0.00
29	142.00	Ericsson KRY 112 144/1	3	8.377	9.215	0.50	0.75	0.62	33.00	0.000	0.700	5.70	0.00	3.99
30	133.00	Quintel QS66512-2	2	8.211	9.032	0.74	0.80	11.97	222.00	0.000	0.000	108.09	0.00	0.00
31	133.00	Cci TPA-65R-LCUUUU-H8	1	8.211	9.032	0.63	0.80	8.06	105.00	0.000	0.000	72.78	0.00	0.00
32	133.00	(3) SitePro 1 P/N	2	8.211	9.032	0.56	0.75	24.01	2715.54	0.000	0.000	216.83	0.00	0.00
33	133.00	Kathrein 800-10965	3	8.211	9.032	0.57	0.80	23.53	325.80	0.000	0.000	212.54	0.00	0.00
34	133.00	Kathrein 800 10121	3	8.211	9.032	0.63	0.80	9.76	138.90	0.000	0.000	88.19	0.00	0.00
35	133.00	Ericsson B2/B66A 8843	3	8.211	9.032	0.54	0.80	2.64	216.00	0.000	0.000	23.82	0.00	0.00
36	133.00	Powerwave LGP21401	6	8.211	9.032	0.54	0.80	4.15	84.60	0.000	0.000	37.47	0.00	0.00
37	133.00	Ericsson RRUS-32 RRU	3	8.211	9.032	0.54	0.80	6.22	231.00	0.000	0.000	56.20	0.00	0.00
38	133.00	Ericsson B5/B12 4449	3	8.211	9.032	0.54	0.80	3.17	213.00	0.000	0.000	28.61	0.00	0.00
39	133.00	Raycap DC6-48-60-18-8F	3	8.211	9.032	0.54	0.80	1.48	95.40	0.000	0.000	13.36	0.00	0.00
40	110.00	3 ft Standoff	1	7.777	8.555	1.00	1.00	2.63	40.00	0.000	0.000	22.50	0.00	0.00
41	110.00	DB222	1	7.882	8.670	1.00	1.00	2.65	16.00	0.000	5.292	22.98	0.00	121.59
42	40.00	GPS	1	5.825	6.407	1.00	1.00	1.00	10.00	0.000	0.000	6.41	0.00	0.00
							Totals:		**13,460.24**			**3,912.47**		

Total Applied Force Summary

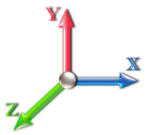
Structure:	CT02049-S-SBA		**Code:**	EIA/TIA-222-H	5/25/2021
Site Name:	Beacon Falls		**Exposure:**	B	
Height:	160.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 75

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		27.86	257.29	0.00	0.00
2.00		27.80	256.49	0.00	0.00
4.00		55.40	510.59	0.00	0.00
6.00		55.14	507.40	0.00	0.00
8.00		54.87	504.21	0.00	0.00
10.00		54.61	501.03	0.00	0.00
12.00		54.35	497.84	0.00	0.00
14.00		54.09	494.65	0.00	0.00
16.00		53.82	491.46	0.00	0.00
16.25		6.82	110.13	0.00	0.00
18.00		47.60	768.09	0.00	0.00
18.75		20.34	327.69	0.00	0.00
19.50		20.30	326.79	0.00	0.00
20.00		13.51	217.36	0.00	0.00
22.00		53.90	865.46	0.00	0.00
24.00		53.28	484.87	0.00	0.00
26.00		53.02	481.68	0.00	0.00
28.00		52.76	478.49	0.00	0.00
30.00		52.54	475.30	0.00	0.00
31.00		26.42	236.46	0.00	0.00
32.00		26.59	235.66	0.00	0.00
34.00		46.64	468.93	0.00	0.00
35.50		35.24	349.60	0.00	0.00
36.00		11.76	116.14	0.00	0.00
38.00		47.59	462.55	0.00	0.00
40.00	(1) attachments	54.41	469.36	0.00	0.00
42.00		48.39	455.85	0.00	0.00
44.00		48.74	452.66	0.00	0.00
45.16		28.35	261.08	0.00	0.00
46.00		20.57	188.39	0.00	0.00
48.00		49.37	446.29	0.00	0.00
50.00		49.64	443.10	0.00	0.00
52.00		50.80	781.82	0.00	0.00
54.00		51.05	775.44	0.00	0.00
56.00		51.27	769.06	0.00	0.00
58.00		51.14	436.51	0.00	0.00
60.00		51.32	433.32	0.00	0.00
62.00		51.48	430.13	0.00	0.00
64.00		51.62	426.94	0.00	0.00
66.00		51.75	423.75	0.00	0.00
68.00		51.86	420.57	0.00	0.00
70.00		51.95	417.38	0.00	0.00
72.00		52.04	414.19	0.00	0.00
74.00		52.10	411.00	0.00	0.00
76.00		52.16	407.81	0.00	0.00
78.00		52.20	404.62	0.00	0.00

Total Applied Force Summary

Structure:	CT02049-S-SBA		**Code:**	EIA/TIA-222-H	5/25/2021
Site Name:	Beacon Falls		**Exposure:**	B	
Height:	160.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 76

Tower Engineering Solutions

80.00		52.23	401.44	0.00	0.00
82.00		52.25	349.66	0.00	0.00
84.00		52.26	347.00	0.00	0.00
86.00		52.26	344.35	0.00	0.00
88.00		52.25	341.69	0.00	0.00
90.00		52.22	339.03	0.00	0.00
92.00		52.19	336.38	0.00	0.00
94.00		52.15	333.72	0.00	0.00
95.00		26.02	165.86	0.00	0.00
95.58		15.36	162.83	0.00	0.00
96.00		11.11	117.63	0.00	0.00
98.00		53.02	556.92	0.00	0.00
100.00		47.92	551.61	0.00	0.00
102.00		47.52	327.37	0.00	0.00
104.00		47.41	324.71	0.00	0.00
106.00		47.29	322.06	0.00	0.00
108.00		47.16	319.40	0.00	0.00
110.00	(2) attachments	92.51	372.74	0.00	121.59
112.00		46.89	313.05	0.00	0.00
114.00		46.74	310.39	0.00	0.00
115.00		23.29	154.20	0.00	0.00
116.00		23.25	133.31	0.00	0.00
118.00		46.43	265.03	0.00	0.00
120.00		46.26	262.90	0.00	0.00
122.00		46.09	260.78	0.00	0.00
124.00		45.91	258.65	0.00	0.00
126.00		45.72	256.53	0.00	0.00
128.00		45.53	254.40	0.00	0.00
130.00		45.34	252.27	0.00	0.00
132.00		45.13	250.15	0.00	0.00
133.00	(29) attachments	880.34	4471.52	0.00	0.00
134.00		22.41	111.03	0.00	0.00
136.00		44.71	220.46	0.00	0.00
138.00		44.49	218.33	0.00	0.00
140.00		44.27	216.21	0.00	0.00
142.00	(30) attachments	1345.74	4757.98	0.00	3.99
144.00		37.50	182.70	0.00	0.00
145.00		18.56	90.55	0.00	0.00
146.00		11.26	88.43	0.00	0.00
148.00		22.34	175.31	0.00	0.00
148.30	(23) attachments	636.94	2096.52	0.00	1247.46
150.00		18.73	140.63	0.00	0.00
152.00		16.14	124.98	0.00	0.00
154.00		16.20	124.98	0.00	0.00
156.00		16.26	124.98	0.00	0.00
158.00		16.32	124.98	0.00	0.00
160.00	(26) attachments	1083.76	2557.68	0.00	2203.25
	Totals:	**7,664.12**	**44,908.78**	**0.00**	**3,576.29**

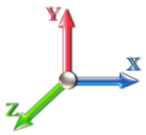
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 77	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.147	5.361	0.00	2.20
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	5.361	0.00	0.52
1.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.147	5.361	0.00	4.40
1.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	5.361	0.00	1.91
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	5.361	0.00	0.52
1.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.149	1.147	5.361	0.00	0.00
1.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.149	1.147	5.361	0.00	0.00
2.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.148	5.361	0.00	2.20
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	5.361	0.00	0.52
2.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.148	5.361	0.00	4.40
2.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	5.361	0.00	1.91
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.148	5.361	0.00	0.52
2.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.149	1.148	5.361	0.00	0.00
2.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.149	1.148	5.361	0.00	0.00
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.151	5.361	0.00	4.40
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	5.361	0.00	1.04
4.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.151	5.361	0.00	8.80
4.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	5.361	0.00	3.82
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	5.361	0.00	1.04
4.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.151	5.361	0.00	0.00
4.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.150	1.151	5.361	0.00	0.00
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.152	1.155	5.361	0.00	4.40
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	5.361	0.00	1.04
6.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.152	1.155	5.361	0.00	8.80
6.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	5.361	0.00	3.82
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	5.361	0.00	1.04
6.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.152	1.155	5.361	0.00	0.00
6.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.152	1.155	5.361	0.00	0.00
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.158	5.361	0.00	4.40
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	5.361	0.00	1.04
8.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.158	5.361	0.00	8.80
8.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	5.361	0.00	3.82
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	5.361	0.00	1.04
8.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.158	5.361	0.00	0.00
8.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.153	1.158	5.361	0.00	0.00
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.162	5.361	0.00	4.40
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	5.361	0.00	1.04
10.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.162	5.361	0.00	8.80
10.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	5.361	0.00	3.82
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	5.361	0.00	1.04
10.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.154	1.162	5.361	0.00	0.00
10.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.154	1.162	5.361	0.00	0.00
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.155	1.166	5.361	0.00	4.40
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	5.361	0.00	1.04
12.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.155	1.166	5.361	0.00	8.80
12.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	5.361	0.00	3.82
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	5.361	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

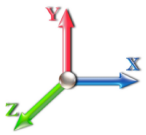
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 78	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
12.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.155	1.166	5.361	0.00	0.00
12.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.155	1.166	5.361	0.00	0.00
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.169	5.361	0.00	4.40
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	5.361	0.00	1.04
14.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.169	5.361	0.00	8.80
14.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	5.361	0.00	3.82
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	5.361	0.00	1.04
14.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.156	1.169	5.361	0.00	0.00
14.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.156	1.169	5.361	0.00	0.00
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.173	5.361	0.00	4.40
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	5.361	0.00	1.04
16.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.173	5.361	0.00	8.80
16.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	5.361	0.00	3.82
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	5.361	0.00	1.04
16.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.158	1.173	5.361	0.00	0.00
16.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.158	1.173	5.361	0.00	0.00
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.158	1.175	5.361	0.00	0.55
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	5.361	0.00	0.13
16.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.04	0.00	0.158	1.175	5.361	0.00	1.10
16.25	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	5.361	0.00	0.48
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	5.361	0.00	0.13
16.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.158	1.175	5.361	0.00	0.00
16.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.158	1.175	5.361	0.00	0.00
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.159	1.177	5.361	0.00	3.85
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	5.361	0.00	0.91
18.00	1 5/8" Fiber	Yes	1.75	0.000	2.00	0.29	0.00	0.159	1.177	5.361	0.00	7.70
18.00	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	5.361	0.00	3.34
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	5.361	0.00	0.91
18.00	1.25" Reinforcing	Yes	1.75	0.000	1.25	0.18	0.00	0.159	1.177	5.361	0.00	0.00
18.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.159	1.177	5.361	0.00	0.00
18.75	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.180	5.361	0.00	1.65
18.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	5.361	0.00	0.39
18.75	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.180	5.361	0.00	3.30
18.75	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	5.361	0.00	1.43
18.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.180	5.361	0.00	0.39
18.75	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.160	1.180	5.361	0.00	0.00
18.75	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.16	0.00	0.160	1.180	5.361	0.00	0.00
19.50	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.181	5.361	0.00	1.65
19.50	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	5.361	0.00	0.39
19.50	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.160	1.181	5.361	0.00	3.30
19.50	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	5.361	0.00	1.43
19.50	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.160	1.181	5.361	0.00	0.39
19.50	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.160	1.181	5.361	0.00	0.00
19.50	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.16	0.00	0.160	1.181	5.361	0.00	0.00
20.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.161	1.183	5.361	0.00	1.10
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	5.361	0.00	0.26
20.00	1 5/8" Fiber	Yes	0.50	0.000	2.00	0.08	0.00	0.161	1.183	5.361	0.00	2.20

Linear Appurtenance Segment Forces (Factored)

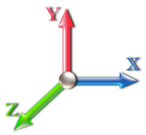
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 79	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
20.00	1-1/4" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	5.361	0.00	0.95
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	5.361	0.00	0.26
20.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.161	1.183	5.361	0.00	0.00
20.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.161	1.183	5.361	0.00	0.00
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	5.361	0.00	4.40
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	5.361	0.00	1.04
22.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	5.361	0.00	8.80
22.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	5.361	0.00	3.82
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	5.361	0.00	1.04
22.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	5.361	0.00	0.00
22.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	5.361	0.00	0.00
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	5.361	0.00	4.40
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	5.361	0.00	1.04
24.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	5.361	0.00	8.80
24.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	5.361	0.00	3.82
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	5.361	0.00	1.04
24.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.160	1.181	5.361	0.00	0.00
24.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.160	1.181	5.361	0.00	0.00
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	5.361	0.00	4.40
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	5.361	0.00	1.04
26.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	5.361	0.00	8.80
26.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	5.361	0.00	3.82
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	5.361	0.00	1.04
26.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	5.361	0.00	0.00
26.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	5.361	0.00	0.00
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.189	5.361	0.00	4.40
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	5.361	0.00	1.04
28.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.189	5.361	0.00	8.80
28.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	5.361	0.00	3.82
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	5.361	0.00	1.04
28.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.163	1.189	5.361	0.00	0.00
28.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.163	1.189	5.361	0.00	0.00
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.165	1.194	5.365	0.00	4.40
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	5.365	0.00	1.04
30.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.165	1.194	5.365	0.00	8.80
30.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	5.365	0.00	3.82
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	5.365	0.00	1.04
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.165	1.194	5.365	0.00	0.00
30.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.165	1.194	5.365	0.00	0.00
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.197	5.416	0.00	2.20
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	5.416	0.00	0.52
31.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.197	5.416	0.00	4.40
31.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	5.416	0.00	1.91
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	5.416	0.00	0.52
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.197	5.416	0.00	0.00
31.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.197	5.416	0.00	0.00
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.199	5.465	0.00	2.20

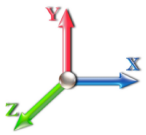
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 80	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	5.465	0.00	0.52
32.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.199	5.465	0.00	4.40
32.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	5.465	0.00	1.91
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	5.465	0.00	0.52
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.199	5.465	0.00	0.00
32.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.199	5.465	0.00	0.00
34.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.040	5.561	0.00	4.40
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	5.561	0.00	1.04
34.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.040	5.561	0.00	8.80
34.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	5.561	0.00	3.82
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	5.561	0.00	1.04
34.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.113	1.040	5.561	0.00	0.00
35.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.114	1.043	5.630	0.00	3.30
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	5.630	0.00	0.78
35.50	1 5/8" Fiber	Yes	1.50	0.000	2.00	0.25	0.00	0.114	1.043	5.630	0.00	6.60
35.50	1-1/4" Fiber	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	5.630	0.00	2.86
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	5.630	0.00	0.78
35.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.114	1.043	5.630	0.00	0.00
36.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.044	5.652	0.00	1.10
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	5.652	0.00	0.26
36.00	1 5/8" Fiber	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.044	5.652	0.00	2.20
36.00	1-1/4" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	5.652	0.00	0.95
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	5.652	0.00	0.26
36.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.115	1.044	5.652	0.00	0.00
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	5.740	0.00	4.40
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	5.740	0.00	1.04
38.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	5.740	0.00	8.80
38.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	5.740	0.00	3.82
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	5.740	0.00	1.04
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.115	1.046	5.740	0.00	0.00
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.049	5.825	0.00	4.40
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	5.825	0.00	1.04
40.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.049	5.825	0.00	8.80
40.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	5.825	0.00	3.82
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	5.825	0.00	1.04
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.116	1.049	5.825	0.00	0.00
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	5.907	0.00	4.40
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	5.907	0.00	1.04
42.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	5.907	0.00	8.80
42.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	5.907	0.00	3.82
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	5.907	0.00	1.04
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.117	1.052	5.907	0.00	0.00
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	5.986	0.00	4.40
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	5.986	0.00	1.04
44.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	5.986	0.00	8.80
44.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	5.986	0.00	3.82
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	5.986	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

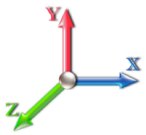
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 81	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.119	1.056	5.986	0.00	0.00
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.19	0.00	0.119	1.058	6.030	0.00	2.55
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	6.030	0.00	0.60
45.16	1 5/8" Fiber	Yes	1.16	0.000	2.00	0.19	0.00	0.119	1.058	6.030	0.00	5.10
45.16	1-1/4" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	6.030	0.00	2.21
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	6.030	0.00	0.60
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.12	0.00	0.119	1.058	6.030	0.00	0.00
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.14	0.00	0.120	1.060	6.062	0.00	1.85
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	6.062	0.00	0.44
46.00	1 5/8" Fiber	Yes	0.84	0.000	2.00	0.14	0.00	0.120	1.060	6.062	0.00	3.70
46.00	1-1/4" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	6.062	0.00	1.60
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	6.062	0.00	0.44
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.09	0.00	0.120	1.060	6.062	0.00	0.00
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	6.136	0.00	4.40
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	6.136	0.00	1.04
48.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	6.136	0.00	8.80
48.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	6.136	0.00	3.82
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	6.136	0.00	1.04
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.121	1.062	6.136	0.00	0.00
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	6.208	0.00	4.40
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	6.208	0.00	1.04
50.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	6.208	0.00	8.80
50.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	6.208	0.00	3.82
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	6.208	0.00	1.04
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.122	1.066	6.208	0.00	0.00
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.069	6.278	0.00	4.40
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	6.278	0.00	1.04
52.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.069	6.278	0.00	8.80
52.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	6.278	0.00	3.82
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	6.278	0.00	1.04
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.123	1.069	6.278	0.00	0.00
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.072	6.346	0.00	4.40
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	6.346	0.00	1.04
54.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.072	6.346	0.00	8.80
54.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	6.346	0.00	3.82
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	6.346	0.00	1.04
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.072	6.346	0.00	0.00
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	6.413	0.00	4.40
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	6.413	0.00	1.04
56.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	6.413	0.00	8.80
56.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	6.413	0.00	3.82
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	6.413	0.00	1.04
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	6.413	0.00	0.00
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.073	6.477	0.00	4.40
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	6.477	0.00	1.04
58.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.073	6.477	0.00	8.80
58.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	6.477	0.00	3.82

Linear Appurtenance Segment Forces (Factored)

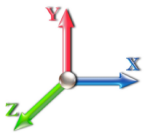
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 82	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	6.477	0.00	1.04
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.073	6.477	0.00	0.00
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	6.540	0.00	4.40
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	6.540	0.00	1.04
60.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	6.540	0.00	8.80
60.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	6.540	0.00	3.82
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	6.540	0.00	1.04
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	6.540	0.00	0.00
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	6.602	0.00	4.40
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	6.602	0.00	1.04
62.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	6.602	0.00	8.80
62.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	6.602	0.00	3.82
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	6.602	0.00	1.04
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.127	1.080	6.602	0.00	0.00
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	6.662	0.00	4.40
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	6.662	0.00	1.04
64.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	6.662	0.00	8.80
64.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	6.662	0.00	3.82
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	6.662	0.00	1.04
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.128	1.084	6.662	0.00	0.00
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	6.721	0.00	4.40
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	6.721	0.00	1.04
66.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	6.721	0.00	8.80
66.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	6.721	0.00	3.82
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	6.721	0.00	1.04
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.129	1.087	6.721	0.00	0.00
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.091	6.779	0.00	4.40
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	6.779	0.00	1.04
68.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.091	6.779	0.00	8.80
68.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	6.779	0.00	3.82
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	6.779	0.00	1.04
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.130	1.091	6.779	0.00	0.00
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.095	6.835	0.00	4.40
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	6.835	0.00	1.04
70.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.095	6.835	0.00	8.80
70.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	6.835	0.00	3.82
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	6.835	0.00	1.04
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.132	1.095	6.835	0.00	0.00
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	6.890	0.00	4.40
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	6.890	0.00	1.04
72.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	6.890	0.00	8.80
72.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	6.890	0.00	3.82
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	6.890	0.00	1.04
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.133	1.099	6.890	0.00	0.00
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	6.944	0.00	4.40
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	6.944	0.00	1.04
74.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	6.944	0.00	8.80

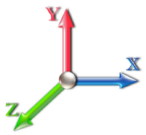
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 83	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
74.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	6.944	0.00	3.82
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	6.944	0.00	1.04
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.134	1.103	6.944	0.00	0.00
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	6.997	0.00	4.40
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	6.997	0.00	1.04
76.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	6.997	0.00	8.80
76.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	6.997	0.00	3.82
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	6.997	0.00	1.04
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.136	1.108	6.997	0.00	0.00
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.112	7.050	0.00	4.40
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	7.050	0.00	1.04
78.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.112	7.050	0.00	8.80
78.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	7.050	0.00	3.82
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	7.050	0.00	1.04
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.137	1.112	7.050	0.00	0.00
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	7.101	0.00	4.40
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	7.101	0.00	1.04
80.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	7.101	0.00	8.80
80.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	7.101	0.00	3.82
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	7.101	0.00	1.04
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.139	1.116	7.101	0.00	0.00
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.121	7.151	0.00	4.40
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	7.151	0.00	1.04
82.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.121	7.151	0.00	8.80
82.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	7.151	0.00	3.82
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	7.151	0.00	1.04
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.140	1.121	7.151	0.00	0.00
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.125	7.200	0.00	4.40
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	7.200	0.00	1.04
84.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.125	7.200	0.00	8.80
84.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	7.200	0.00	3.82
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	7.200	0.00	1.04
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.142	1.125	7.200	0.00	0.00
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.130	7.249	0.00	4.40
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	7.249	0.00	1.04
86.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.130	7.249	0.00	8.80
86.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	7.249	0.00	3.82
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	7.249	0.00	1.04
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.143	1.130	7.249	0.00	0.00
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.135	7.297	0.00	4.40
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	7.297	0.00	1.04
88.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.135	7.297	0.00	8.80
88.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	7.297	0.00	3.82
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	7.297	0.00	1.04
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.145	1.135	7.297	0.00	0.00
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.140	7.344	0.00	4.40
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	7.344	0.00	1.04

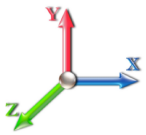
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 84	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.140	7.344	0.00	8.80
90.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	7.344	0.00	3.82
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	7.344	0.00	1.04
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.147	1.140	7.344	0.00	0.00
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.148	1.145	7.390	0.00	4.40
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	7.390	0.00	1.04
92.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.148	1.145	7.390	0.00	8.80
92.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	7.390	0.00	3.82
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	7.390	0.00	1.04
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.148	1.145	7.390	0.00	0.00
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.150	7.436	0.00	4.40
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	7.436	0.00	1.04
94.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.150	7.436	0.00	8.80
94.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	7.436	0.00	3.82
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	7.436	0.00	1.04
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.150	7.436	0.00	0.00
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.151	1.154	7.458	0.00	2.20
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	7.458	0.00	0.52
95.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.151	1.154	7.458	0.00	4.40
95.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	7.458	0.00	1.91
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	7.458	0.00	0.52
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.151	1.154	7.458	0.00	0.00
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.10	0.00	0.152	1.156	7.471	0.00	1.28
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	7.471	0.00	0.30
95.58	1 5/8" Fiber	Yes	0.58	0.000	2.00	0.10	0.00	0.152	1.156	7.471	0.00	2.55
95.58	1-1/4" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	7.471	0.00	1.11
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	7.471	0.00	0.30
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.06	0.00	0.152	1.156	7.471	0.00	0.00
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.07	0.00	0.152	1.157	7.480	0.00	0.92
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	7.480	0.00	0.22
96.00	1 5/8" Fiber	Yes	0.42	0.000	2.00	0.07	0.00	0.152	1.157	7.480	0.00	1.85
96.00	1-1/4" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	7.480	0.00	0.80
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	7.480	0.00	0.22
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.04	0.00	0.152	1.157	7.480	0.00	0.00
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	7.525	0.00	4.40
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	7.525	0.00	1.04
98.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	7.525	0.00	8.80
98.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	7.525	0.00	3.82
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	7.525	0.00	1.04
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.160	7.525	0.00	0.00
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.055	7.568	0.00	4.40
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	7.568	0.00	1.04
100.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.055	7.568	0.00	8.80
100.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	7.568	0.00	3.82
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	7.568	0.00	1.04
102.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	7.611	0.00	4.40
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	7.611	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

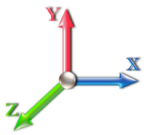
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 85	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
102.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	7.611	0.00	8.80
102.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	7.611	0.00	3.82
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	7.611	0.00	1.04
104.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	7.653	0.00	4.40
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	7.653	0.00	1.04
104.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	7.653	0.00	8.80
104.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	7.653	0.00	3.82
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	7.653	0.00	1.04
106.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.120	1.061	7.695	0.00	4.40
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	7.695	0.00	1.04
106.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.120	1.061	7.695	0.00	8.80
106.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	7.695	0.00	3.82
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	7.695	0.00	1.04
108.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.065	7.736	0.00	4.40
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	7.736	0.00	1.04
108.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.065	7.736	0.00	8.80
108.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	7.736	0.00	3.82
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	7.736	0.00	1.04
110.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.070	7.777	0.00	4.40
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	7.777	0.00	1.04
110.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.070	7.777	0.00	8.80
110.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	7.777	0.00	3.82
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	7.777	0.00	1.04
112.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.074	7.817	0.00	4.40
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	7.817	0.00	1.04
112.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.074	7.817	0.00	8.80
112.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	7.817	0.00	3.82
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	7.857	0.00	4.40
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	7.857	0.00	1.04
114.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	7.857	0.00	8.80
114.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	7.857	0.00	3.82
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.083	7.876	0.00	2.20
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	7.876	0.00	0.52
115.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.083	7.876	0.00	4.40
115.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	7.876	0.00	1.91
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.085	7.896	0.00	2.20
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	7.896	0.00	0.52
116.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.085	7.896	0.00	4.40
116.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	7.896	0.00	1.91
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.089	7.935	0.00	4.40
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	7.935	0.00	1.04
118.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.089	7.935	0.00	8.80
118.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	7.935	0.00	3.82
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.094	7.973	0.00	4.40
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	7.973	0.00	1.04
120.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.094	7.973	0.00	8.80
120.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	7.973	0.00	3.82

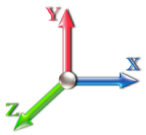
Linear Appurtenance Segment Forces (Factored)

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 86	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	8.011	0.00	4.40
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	8.011	0.00	1.04
122.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	8.011	0.00	8.80
122.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	8.011	0.00	3.82
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.135	1.105	8.048	0.00	4.40
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	8.048	0.00	1.04
124.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.135	1.105	8.048	0.00	8.80
124.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	8.048	0.00	3.82
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.110	8.085	0.00	4.40
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	8.085	0.00	1.04
126.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.110	8.085	0.00	8.80
126.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	8.085	0.00	3.82
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	8.121	0.00	4.40
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	8.121	0.00	1.04
128.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	8.121	0.00	8.80
128.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	8.121	0.00	3.82
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.141	1.122	8.157	0.00	4.40
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	8.157	0.00	1.04
130.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.141	1.122	8.157	0.00	8.80
130.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	8.157	0.00	3.82
132.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.128	8.193	0.00	4.40
132.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	8.193	0.00	1.04
132.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.128	8.193	0.00	8.80
132.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	8.193	0.00	3.82
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.144	1.133	8.211	0.00	2.20
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	8.211	0.00	0.52
133.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.144	1.133	8.211	0.00	4.40
133.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	8.211	0.00	1.91
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.145	1.136	8.228	0.00	2.20
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	8.228	0.00	0.52
134.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.145	1.136	8.228	0.00	4.40
134.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	8.228	0.00	1.91
136.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.141	8.263	0.00	4.40
136.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	8.263	0.00	1.04
136.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.141	8.263	0.00	8.80
136.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	8.263	0.00	3.82
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.147	8.298	0.00	4.40
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	8.298	0.00	1.04
138.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.147	8.298	0.00	8.80
138.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	8.298	0.00	3.82
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.154	8.332	0.00	4.40
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	8.332	0.00	1.04
140.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.154	8.332	0.00	8.80
140.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	8.332	0.00	3.82
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.161	8.366	0.00	4.40
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	8.366	0.00	1.04
142.00	1 5/8" Fiber	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.161	8.366	0.00	8.80

Linear Appurtenance Segment Forces (Factored)

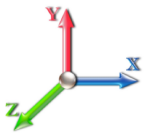
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 87	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
142.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	8.366	0.00	3.82
144.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	8.399	0.00	4.40
144.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	8.399	0.00	1.04
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.079	0.000	8.416	0.00	2.20
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	8.416	0.00	0.52
146.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.082	0.000	8.432	0.00	2.20
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	8.432	0.00	0.52
148.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	8.465	0.00	4.40
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	8.465	0.00	1.04
148.30	1 5/8" Hybrid	Yes	0.30	0.000	2.00	0.05	0.00	0.084	0.000	8.470	0.00	0.66
148.30	7/8" Coax	Yes	0.30	0.000	0.00	0.00	0.00	0.084	0.000	8.470	0.00	0.16
150.00	1 5/8" Hybrid	Yes	1.70	0.000	2.00	0.28	0.00	0.085	0.000	8.498	0.00	3.74
150.00	7/8" Coax	Yes	1.70	0.000	0.00	0.00	0.00	0.085	0.000	8.498	0.00	0.88
152.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	8.530	0.00	4.40
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.530	0.00	1.04
154.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	8.562	0.00	4.40
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.562	0.00	1.04
156.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	8.593	0.00	4.40
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.593	0.00	1.04
158.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	8.625	0.00	4.40
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.625	0.00	1.04
160.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	8.656	0.00	4.40
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.656	0.00	1.04
										Totals:	**0.0**	**1,388.1**

Calculated Forces

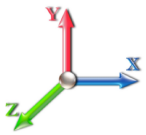
Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 88	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-44.91	-7.67	0.00	-886.01	0.00	886.01	3683.82	1059.58	4414.92	3756.66	0.00	0.000	0.000	0.147
1.00	-44.65	-7.64	0.00	-878.34	0.00	878.34	3677.71	1055.47	4380.73	3735.77	0.00	-0.008	0.000	0.147
2.00	-44.39	-7.63	0.00	-870.70	0.00	870.70	3671.54	1051.36	4346.67	3714.86	0.00	-0.015	0.000	0.146
4.00	-43.88	-7.58	0.00	-855.45	0.00	855.45	3659.00	1043.14	4278.95	3673.00	0.01	-0.031	0.000	0.145
6.00	-43.37	-7.54	0.00	-840.28	0.00	840.28	3646.20	1034.91	4211.76	3631.09	0.03	-0.046	0.000	0.143
8.00	-42.86	-7.49	0.00	-825.21	0.00	825.21	3633.16	1026.69	4145.10	3589.13	0.05	-0.062	0.000	0.142
10.00	-42.36	-7.45	0.00	-810.22	0.00	810.22	3619.85	1018.47	4078.97	3547.13	0.08	-0.078	0.000	0.140
12.00	-41.86	-7.41	0.00	-795.32	0.00	795.32	3606.29	1010.25	4013.38	3505.10	0.12	-0.093	0.000	0.139
14.00	-41.36	-7.36	0.00	-780.51	0.00	780.51	3592.48	1002.02	3948.31	3463.03	0.16	-0.109	0.000	0.137
16.00	-40.87	-7.31	0.00	-765.78	0.00	765.78	3578.41	993.80	3883.78	3420.94	0.21	-0.124	0.000	0.136
16.25	-40.76	-7.31	0.00	-763.95	0.00	763.95	3576.63	992.77	3875.75	3415.68	0.22	-0.126	0.000	0.156
18.00	-39.99	-7.27	0.00	-751.15	0.00	751.15	3564.09	985.58	3819.78	3378.83	0.26	-0.142	0.000	0.143
18.75	-39.66	-7.26	0.00	-745.70	0.00	745.70	3558.65	982.50	3795.92	3363.04	0.29	-0.149	0.000	0.168
19.50	-39.34	-7.24	0.00	-740.26	0.00	740.26	3553.18	979.41	3772.13	3347.24	0.31	-0.156	0.000	0.143
20.00	-39.12	-7.23	0.00	-736.64	0.00	736.64	3549.51	977.36	3756.31	3336.71	0.33	-0.160	0.000	0.142
22.00	-38.25	-7.19	0.00	-722.18	0.00	722.18	3563.12	985.03	3815.51	3376.01	0.40	-0.177	0.000	0.144
24.00	-37.76	-7.14	0.00	-707.80	0.00	707.80	3548.52	976.81	3752.08	3333.89	0.48	-0.194	0.000	0.138
26.00	-37.28	-7.10	0.00	-693.52	0.00	693.52	3533.67	968.58	3689.18	3291.77	0.56	-0.210	0.000	0.137
28.00	-36.80	-7.05	0.00	-679.32	0.00	679.32	3518.56	960.36	3626.81	3249.64	0.65	-0.227	0.000	0.135
30.00	-36.32	-7.01	0.00	-665.22	0.00	665.22	3503.20	952.14	3564.97	3207.53	0.75	-0.243	0.000	0.105
31.00	-36.08	-6.98	0.00	-658.21	0.00	658.21	3495.43	948.03	3534.25	3186.48	0.80	-0.249	0.000	0.121
32.00	-35.85	-6.96	0.00	-651.23	0.00	651.23	3487.59	943.92	3503.66	3165.43	0.86	-0.257	0.000	0.121
34.00	-35.38	-6.92	0.00	-637.30	0.00	637.30	3471.72	935.70	3442.89	3123.35	0.97	-0.272	0.000	0.148
35.50	-35.03	-6.89	0.00	-626.91	0.00	626.91	3459.65	929.53	3397.66	3091.80	1.06	-0.286	0.000	0.147
36.00	-34.91	-6.89	0.00	-623.47	0.00	623.47	3455.59	927.47	3382.65	3081.29	1.09	-0.291	0.000	0.147
38.00	-34.44	-6.85	0.00	-609.69	0.00	609.69	3439.21	919.25	3322.94	3039.26	1.21	-0.309	0.000	0.145
40.00	-33.97	-6.80	0.00	-596.00	0.00	596.00	3422.57	911.03	3263.76	2997.28	1.35	-0.328	0.000	0.143
42.00	-33.52	-6.76	0.00	-582.39	0.00	582.39	3405.68	902.81	3205.11	2955.34	1.49	-0.347	0.000	0.141
44.00	-33.06	-6.72	0.00	-568.87	0.00	568.87	3388.54	894.58	3146.99	2913.44	1.64	-0.366	0.000	0.140
45.16	-32.80	-6.69	0.00	-561.07	0.00	561.07	3378.48	889.81	3113.53	2889.17	1.73	-0.377	0.000	0.101
46.00	-32.61	-6.68	0.00	-555.45	0.00	555.45	3371.14	886.36	3089.41	2871.61	1.79	-0.382	0.000	0.131
48.00	-32.16	-6.64	0.00	-542.09	0.00	542.09	3353.48	878.14	3032.36	2829.83	1.96	-0.400	0.000	0.129
50.00	-31.72	-6.59	0.00	-528.82	0.00	528.82	3335.57	869.92	2975.84	2788.13	2.13	-0.418	0.000	0.127
52.00	-30.93	-6.55	0.00	-515.63	0.00	515.63	3317.41	861.69	2919.85	2746.50	2.31	-0.436	0.000	0.124
54.00	-30.16	-6.50	0.00	-502.54	0.00	502.54	3298.98	853.47	2864.39	2704.94	2.49	-0.453	0.000	0.122
56.00	-29.39	-6.45	0.00	-489.54	0.00	489.54	3316.18	861.14	2916.12	2743.71	2.69	-0.471	0.000	0.123
58.00	-28.95	-6.40	0.00	-476.64	0.00	476.64	3297.74	852.92	2860.70	2702.16	2.89	-0.488	0.000	0.128
60.00	-28.51	-6.36	0.00	-463.83	0.00	463.83	3279.05	844.70	2805.81	2660.71	3.10	-0.507	0.000	0.126
62.00	-28.08	-6.31	0.00	-451.12	0.00	451.12	3260.10	836.48	2751.45	2619.34	3.31	-0.525	0.000	0.124
64.00	-27.65	-6.27	0.00	-438.49	0.00	438.49	3240.90	828.25	2697.62	2578.08	3.54	-0.543	0.000	0.122
66.00	-27.23	-6.22	0.00	-425.96	0.00	425.96	3221.44	820.03	2644.33	2536.92	3.77	-0.562	0.000	0.120
68.00	-26.81	-6.17	0.00	-413.53	0.00	413.53	3201.73	811.81	2591.56	2495.87	4.01	-0.580	0.000	0.118
70.00	-26.39	-6.12	0.00	-401.18	0.00	401.18	3181.76	803.59	2539.33	2454.94	4.26	-0.598	0.000	0.116
72.00	-25.97	-6.07	0.00	-388.94	0.00	388.94	3161.54	795.36	2487.63	2414.13	4.51	-0.616	0.000	0.114
74.00	-25.56	-6.03	0.00	-376.79	0.00	376.79	3141.06	787.14	2436.47	2373.45	4.77	-0.634	0.000	0.112
76.00	-25.15	-5.98	0.00	-364.74	0.00	364.74	3120.33	778.92	2385.83	2332.91	5.04	-0.652	0.000	0.110
78.00	-24.74	-5.93	0.00	-352.78	0.00	352.78	3099.34	770.70	2335.73	2292.51	5.32	-0.669	0.000	0.108
80.00	-24.34	-5.88	0.00	-340.93	0.00	340.93	3078.09	762.47	2286.15	2252.26	5.60	-0.687	0.000	0.106

Calculated Forces

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 89

80.00	-24.34	-5.88	0.00	-340.93	0.00	340.93	2384.58	636.50	1911.75	1750.88	5.60	-0.687	0.000	0.114
82.00	-23.99	-5.83	0.00	-329.17	0.00	329.17	2370.62	629.65	1870.81	1721.73	5.89	-0.705	0.000	0.125
84.00	-23.64	-5.78	0.00	-317.51	0.00	317.51	2356.42	622.80	1830.32	1692.63	6.19	-0.724	0.000	0.122
86.00	-23.30	-5.73	0.00	-305.95	0.00	305.95	2341.95	615.94	1790.27	1663.57	6.50	-0.744	0.000	0.119
88.00	-22.95	-5.68	0.00	-294.49	0.00	294.49	2327.23	609.09	1750.66	1634.56	6.82	-0.763	0.000	0.116
90.00	-22.61	-5.63	0.00	-283.12	0.00	283.12	2312.26	602.24	1711.49	1605.61	7.14	-0.782	0.000	0.113
92.00	-22.28	-5.58	0.00	-271.85	0.00	271.85	2297.03	595.39	1672.77	1576.72	7.47	-0.801	0.000	0.110
94.00	-21.94	-5.53	0.00	-260.68	0.00	260.68	2281.55	588.54	1634.49	1547.90	7.81	-0.819	0.000	0.107
95.00	-21.78	-5.51	0.00	-255.15	0.00	255.15	2273.71	585.11	1615.51	1533.52	7.98	-0.828	0.000	0.106
95.58	-21.61	-5.49	0.00	-251.96	0.00	251.96	2269.13	583.12	1604.56	1525.19	8.09	-0.834	0.000	0.103
95.58	-21.61	-5.49	0.00	-251.96	0.00	251.96	2269.13	583.12	1604.56	1525.19	8.09	-0.834	0.000	0.103
96.00	-21.49	-5.49	0.00	-249.65	0.00	249.65	2265.81	581.68	1596.65	1519.16	8.16	-0.838	0.000	0.174
98.00	-20.94	-5.43	0.00	-238.68	0.00	238.68	2249.81	574.83	1559.25	1490.50	8.52	-0.868	0.000	0.170
100.00	-20.38	-5.39	0.00	-227.81	0.00	227.81	2259.61	579.02	1582.04	1508.00	8.89	-0.898	0.000	0.160
102.00	-20.05	-5.35	0.00	-217.04	0.00	217.04	2243.52	572.17	1544.82	1479.37	9.27	-0.928	0.000	0.156
104.00	-19.73	-5.30	0.00	-206.34	0.00	206.34	2227.17	565.31	1508.04	1450.84	9.66	-0.955	0.000	0.151
106.00	-19.40	-5.26	0.00	-195.74	0.00	195.74	2210.57	558.46	1471.71	1422.40	10.07	-0.982	0.000	0.146
108.00	-19.08	-5.22	0.00	-185.22	0.00	185.22	2193.71	551.61	1435.82	1394.06	10.49	-1.009	0.000	0.142
110.00	-18.71	-5.12	0.00	-174.67	0.00	174.67	2176.60	544.76	1400.37	1365.84	10.92	-1.035	0.000	0.137
112.00	-18.39	-5.08	0.00	-164.42	0.00	164.42	2159.23	537.91	1365.36	1337.73	11.35	-1.061	0.000	0.132
114.00	-18.08	-5.03	0.00	-154.26	0.00	154.26	2141.61	531.05	1330.80	1309.73	11.80	-1.086	0.000	0.126
115.00	-17.93	-5.01	0.00	-149.22	0.00	149.22	2132.70	527.63	1313.68	1295.79	12.03	-1.098	0.000	0.124
115.00	-17.93	-5.01	0.00	-149.22	0.00	149.22	1556.62	422.98	1055.35	949.74	12.03	-1.098	0.000	0.169
116.00	-17.79	-4.99	0.00	-144.21	0.00	144.21	1551.43	420.24	1041.71	940.38	12.26	-1.110	0.000	0.165
118.00	-17.53	-4.95	0.00	-134.23	0.00	134.23	1540.84	414.76	1014.72	921.68	12.74	-1.139	0.000	0.157
120.00	-17.26	-4.91	0.00	-124.33	0.00	124.33	1529.99	409.28	988.07	902.99	13.22	-1.168	0.000	0.149
122.00	-17.00	-4.86	0.00	-114.52	0.00	114.52	1518.89	403.80	961.78	884.33	13.71	-1.195	0.000	0.141
124.00	-16.74	-4.82	0.00	-104.79	0.00	104.79	1507.54	398.32	935.85	865.70	14.22	-1.221	0.000	0.132
126.00	-16.48	-4.77	0.00	-95.16	0.00	95.16	1495.93	392.84	910.27	847.11	14.74	-1.246	0.000	0.123
128.00	-16.23	-4.73	0.00	-85.61	0.00	85.61	1484.06	387.35	885.04	828.56	15.27	-1.269	0.000	0.114
130.00	-15.98	-4.68	0.00	-76.15	0.00	76.15	1471.95	381.87	860.17	810.06	15.80	-1.291	0.000	0.105
132.00	-15.72	-4.64	0.00	-66.78	0.00	66.78	1459.57	376.39	835.65	791.62	16.35	-1.311	0.000	0.095
133.00	-11.27	-3.66	0.00	-62.14	0.00	62.14	1453.29	373.65	823.53	782.42	16.62	-1.320	0.000	0.087
134.00	-11.16	-3.63	0.00	-58.49	0.00	58.49	1446.94	370.91	811.49	773.23	16.90	-1.329	0.000	0.083
136.00	-10.94	-3.59	0.00	-51.22	0.00	51.22	1434.06	365.43	787.68	754.91	17.46	-1.346	0.000	0.076
138.00	-10.72	-3.54	0.00	-44.04	0.00	44.04	1420.92	359.95	764.23	736.67	18.03	-1.361	0.000	0.067
140.00	-10.51	-3.49	0.00	-36.96	0.00	36.96	1407.52	354.47	741.13	718.50	18.60	-1.375	0.000	0.059
142.00	-5.78	-2.03	0.00	-29.97	0.00	29.97	1393.87	348.98	718.38	700.42	19.18	-1.387	0.000	0.047
144.00	-5.60	-1.99	0.00	-25.90	0.00	25.90	1379.97	343.50	695.99	682.44	19.76	-1.397	0.000	0.042
145.00	-5.51	-1.97	0.00	-23.91	0.00	23.91	1372.92	340.76	684.93	673.48	20.06	-1.402	0.000	0.040
145.00	-5.51	-1.97	0.00	-23.91	0.00	23.91	931.20	332.53	24157.3	604.09	20.06	-1.402	0.000	0.046
146.00	-5.42	-1.96	0.00	-21.94	0.00	21.94	925.24	329.86	23770.3	594.77	20.35	-1.406	0.000	0.043
148.00	-5.25	-1.93	0.00	-18.02	0.00	18.02	913.32	324.51	23005.8	576.36	20.94	-1.415	0.000	0.037
148.30	-3.17	-1.25	0.00	-16.19	0.00	16.19	911.53	323.71	22892.2	573.63	21.03	-1.416	0.000	0.032
150.00	-3.03	-1.22	0.00	-14.07	0.00	14.07	901.40	319.16	22253.7	558.24	21.54	-1.421	0.000	0.029
150.00	-3.03	-1.22	0.00	-14.07	0.00	14.07	556.65	167.00	10296.1	213.69	21.54	-1.421	0.000	0.071
152.00	-2.90	-1.21	0.00	-11.62	0.00	11.62	556.65	167.00	10296.1	213.69	22.13	-1.427	0.000	0.060
154.00	-2.78	-1.19	0.00	-9.21	0.00	9.21	556.65	167.00	10296.1	213.69	22.73	-1.443	0.000	0.048
156.00	-2.65	-1.17	0.00	-6.84	0.00	6.84	556.65	167.00	10296.1	213.69	23.34	-1.455	0.000	0.037
158.00	-2.53	-1.15	0.00	-4.50	0.00	4.50	556.65	167.00	10296.1	213.69	23.95	-1.463	0.000	0.026
160.00	0.00	-1.08	0.00	-2.20	0.00	2.20	556.65	167.00	10296.1	213.69	24.57	-1.468	0.000	0.010

Final Analysis Summary

Structure:	CT02049-S-SBA	**Code:**	EIA/TIA-222-H	5/25/2021	
Site Name:	Beacon Falls	**Exposure:**	B		
Height:	160.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 90	

Tower Engineering Solutions

Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.0W 125 mph Wind	37.2	0.00	53.88	0.00	0.00	4328.04
0.9D + 1.0W 118 mph Wind	33.1	0.00	40.41	0.00	0.00	3808.71
1.2D + 1.0Di + 1.0Wi 50 mph Wind	7.9	0.00	75.19	0.00	0.00	939.64
1.2D + 1.0Ev + 1.0Eh	0.5	0.00	55.85	0.00	0.00	78.63
0.9D + 1.0Ev + 1.0Eh	0.5	0.00	42.28	0.00	0.00	77.72
1.0D + 1.0W 60 mph Wind	7.7	0.00	44.91	0.00	0.00	886.01

Max Stresses

Load Case	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Elev (ft)	Stress Ratio
1.2D + 1.0W 125 mph Wind	-23.99	-26.88	0.00	-1223.0	0.00	-1223.0	2265.81	581.68	1596.65	1519.16	96.00	0.818
0.9D + 1.0W 118 mph Wind	-17.95	-23.52	0.00	-1067.7	0.00	-1067.7	2265.81	581.68	1596.65	1519.16	96.00	0.712
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-39.16	-5.93	0.00	-269.28	0.00	-269.28	2265.81	581.68	1596.65	1519.16	96.00	0.195
1.2D + 1.0Ev + 1.0Eh	-22.40	-0.55	0.00	-15.21	0.00	-15.21	2132.70	527.63	1313.68	1295.79	115.00	0.030
0.9D + 1.0Ev + 1.0Eh	-16.97	-0.55	0.00	-14.97	0.00	-14.97	2132.70	527.63	1313.68	1295.79	115.00	0.027
1.0D + 1.0W 60 mph Wind	-21.49	-5.49	0.00	-249.65	0.00	-249.65	2265.81	581.68	1596.65	1519.16	96.00	0.174

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors VQ/I (lb/in)	Vu (kips)	phi Vn (kips)	Lower Termination MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Upper Termination MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Max Member Pu (kips)	phi Pn (kips)	phi Tn (kips)	Ratio
0.0	16.3	(3) PLT-C10x30(1.5" Hole)	-283.4	-5.67	37.1	368.6	37.1	10	0	357.1	37.1			371.28	505.1	468.64	0.792
0.0	1.0	(3) SOL-2 1/4" William R71	142.5	1.71	25.3	198.2	25.3	8	0	197.8	25.3	8	0	198.21	459.1	468.91	0.432
1.0	18.8	(2) LNP-LP6X100-BW-20T	206.4	4.95	25.3	233.6	25.3	11	0	248.7	25.3	11	8	258.36	297.8	288.75	0.895
1.0	18.8	(1) LNP-LP6x100-B2-20T	-197.8	-4.75	25.3	225.6	25.3	10	0	204.9	25.3	10	8	247.69	297.8	288.75	0.858
16.3	31.0	(3) PLT-C10x15.3(1.5" Hole)	-283.4	-5.67	37.1	216.7	37.1			147.0	37.1	4	0	242.04	257.8	247.80	0.977
18.0	34.0	(2) LNP-LP6X100-G-20TT	207.7	4.98	25.3	211.9	22.7	10	10	214.0	22.7	10	10	254.45	297.8	288.75	0.881
19.5	35.5	(1) LNP-LP6X100-G-20TT	207.7	4.98	25.3	253.5	22.7	12	10	213.2	22.7	10	10	253.46	297.8	288.75	0.878
30.0	46.0	(3) PLT-6"X1-1/4"(1.25" Hole	318.3	5.73	37.1	235.3	33.4	8	8	232.4	33.4	7	8	335.11	413.6	351.56	0.953
45.2	58.0	(3) PLT-7" x 1.25"(1.25"Hole	-371.3	-4.46	37.1	272.3	33.4	8	13	323.6	37.1			353.86	498.6	426.56	0.830
58.0	78.0	(3) PLT-5.5"x1 1/4"(1.25"hol	-361.7	-6.51	37.1	276.2	37.1			242.6	33.4			276.19	379.1	314.06	0.879
78.0	95.6	(3) PLT-5.5"x1 1/4"(1.25"hol	-414.9	-7.47	37.1	242.6	37.1			228.4	37.1	7	10	262.80	379.1	314.06	0.837

Monopole Mat Foundation Design

			Date: 5/25/2021
Customer Name:	Verizon	**EIA/TIA Standard:**	EIA-222-H
Site Name:		**Structure Height (Ft.):**	160
Site Number:	CT02049-S-SBA	**Engineer Name:**	J. Tibbetts
Engr. Number:	107674	**Engineer Login ID:**	

Foundation Info Obtained from: Drawings/Calculations

Structure Type: Monopole

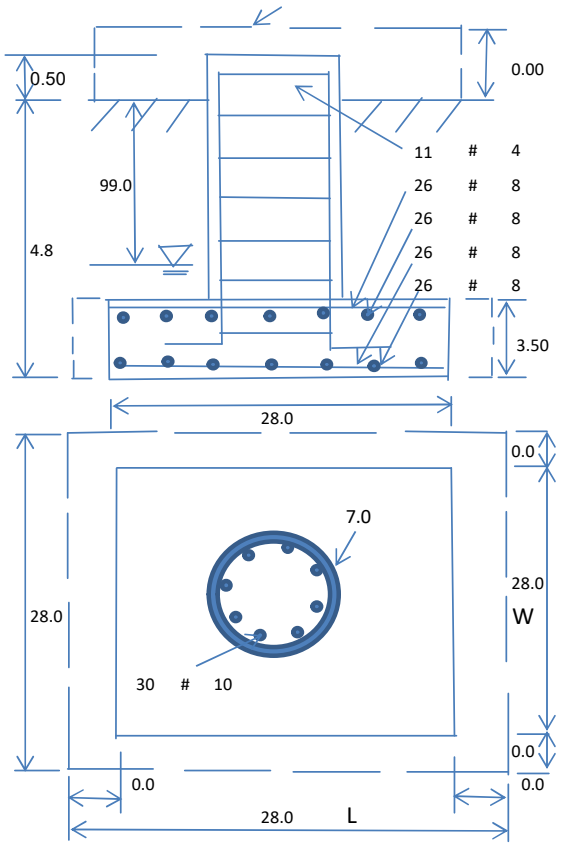
Analysis or Design? Analysis

Base Reactions (Factored):

Axial Load (Kips):	53.9	Shear Force (Kips):	37.2
Uplift Force (Kips):	0.0	Moment (Kips-ft):	4328.0
Allowable overstress %:	5.0%		

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	7.0	Depth of Base BG (ft.):	4.8
Pier Height A. G. (ft.):	0.50	Thickness of Pad (ft):	3.50
Length of Pad (ft.):	28	Width of Pad (ft.):	28
Final Length of pad (ft)	28.0	Final width of pad (ft):	28.0



Material Properties and Reabr Info:

Concrete Strength (psi):	3000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	10	Tie / Stirrup Size #:	4	
Qty. of Vertical Rebars:	30	Tie Spacing (in):	6.0	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	8	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf
Rebar at the bottom of the concrete pad:				
Qty. of Rebar in Pad (L):	26	Qty. of Rebar in Pad (W):	26	
Rebar at the top of the concrete pad:				
Qty. of Rebar in Pad (L):	26	Qty. of Rebar in Pad (W):	26	
Apply 1.35 factor for e/w Per G:	1.35			

Soil Design Parameters:

Soil Unit Weight (pcf):	115.0	Soil Buoyant Weight:	50.0	Pcf		
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	6000	Ultimate Skin Friction:	0	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	No		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	No	Reduction factor on the maximum soil bearing pressure:			1.00	

Foundation Analysis and Design: Uplift Strength Reduction Factor: 0.75 — Compression Strength Reduction Factor: 0.75

Total Dry Soil Volume (cu. Ft.):	969.17	Total Dry Soil Weight (Kips):	111.45
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	111.45	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	2813.27	Total Dry Concrete Weight (Kips):	421.99
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	421.99	Total Vertical Load on Base (Kips):	587.35

Check Soil Capacities:

				Load/ Capacity Ratio	
Calculated Maxium Net Soil Pressure under the base (psf):	2280	<	Allowable Factored Soil Bearing (psf): 4500	0.51	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	7476.0	>	Design Factored Momont (kips-ft): 4525	0.61	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.65	OK!			

Check the capacities of Reinforceing Concrete:

Strength reduction factor (Flexure and axial tension):	0.90		Strength reduction factor (Shear):	0.75		
Strength reduction factor (Axial compresion):	0.65		Wind Load Factor on Concrete Design:	1.00		
					Load/ Capacity Ratio	
(1) Concrete Pier:						
Vertical Steel Rebar Area (sq. in./each):	1.27		Tie / Stirrup Area (sq. in./each):	0.20		
Calculated Moment Capacity (Mn,Kips-Ft):	6154.8	>	Design Factored Moment (Mu, Kips-F	4395.0	0.71	OK!
Calculated Shear Capacity (Kips):	724.1	>	Design Factored Shear (Kips):	37.2	0.05	OK!
Calculated Tension Capacity (Tn, Kips):	2057.4	>	Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	7297.9	>	Design Factored Axial Load (Pu Kips):	53.9	0.01	OK!
Moment & Axial Strength Combination:	0.71	OK!	Check Tie Spacing (Design/Required):		0.5	OK!
Pier Reinforcement Ratio:	0.007		Reinforcement Ratio is satisfied per ACI			
(2).Concrete Pad:						
One-Way Design Shear Capacity (L-Direction, Kips):	1062.8	>	One-Way Factored Shear (L-D. Kips):	256.5	0.24	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	1062.8	>	One-Way Factored Shear (W-D., Kips)	256.5	0.24	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	993.8	>	One-Way Factored Shear (C-C, Kips):	251.1	0.25	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0016	OK!	Lower Steel Pad Reinf. Ratio (W-Direc	0.0016		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	3492.1	>	Moment at Bottom (L-Dir. K-Ft):	1641.2	0.47	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	3492.1	>	Moment at Bottom (W-Dir. K-Ft):	1641.2	0.47	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	4918.4	>	Moment at Bottom (C-C Dir. K-Ft):	2321.0	0.47	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0016	OK!	Upper Steel Reinf. Ratio (W-Dir.):	0.0016		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	3492.1	>	Moment at the top (L-Dir K-Ft):	756.2	0.22	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	3492.1	>	Moment at the top (W-Dir K-Ft):	756.2	0.22	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	4918.4	>	Moment at the top (C-C Dir. K-Ft):	707.1	0.14	OK!
(3).Check Punching Shear Capacity due to Moment in the Pier:						
Moment transferred by punching shear:	1731.2	k-ft.	Max. factored shear stress v_{u_CD}:		4.4	Psi
Max. factored shear stress v_{u_AB}:	9.9	Psi	Factored shear Strength ϕv_n:		164.3	Psi
Max. factored shear stress v_u:	9.9	Psi	Check Usage of Punching Shear Capacity:		0.06	OK!

Tower Engineering Solutions, LLC

June 14, 2021

Mr. Andrew Leone
Verizon Wireless
20 Alexander Dr.
Wallingford, CT 06492

Re: Verizon Wireless antenna Model Clarification for CT Siting Council

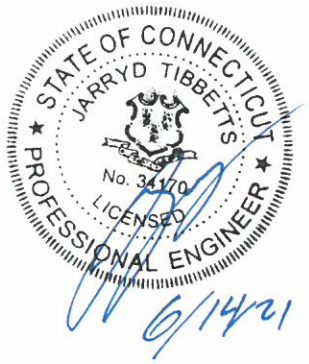
Dear Mr. Leone,

This letter is intended to clarify and confirm the antenna naming convention used by Verizon Wireless as a part of an antenna upgrade project on numerous wireless facilities.

The antenna naming convention "Licensed Sub-6, L-Sub6, nL-Sub6, VZS01" and any other slight variants refer to the 64T64RMMU, Model Code: MT6407-77A manufactured by Samsung Electronics. These names are interchangeable and are used in various documents, including but not limited to the "Structural Analysis".

If you have any questions or comments, or require additional information, please do not hesitate to contact me.

Sincerely,
Tower Engineering Solutions, LLC



1320 Greenway Drive - Suite 600, Irving, Texas 75038 Phone: (972) 483-0607, Fax: (972) 975-9615

Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
856.797.0412
Greg.dulnik@collierrengineering.com

Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10054208
Maser Consulting Connecticut Project #: 21777109A

April 15, 2021

Site Information	*Site ID:*	*469129-VZW / BETHANY WEST CT*
	Site Name:	*BETHANY WEST CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*60 Rice Lane* *Beacon Falls, Connecticut 06403* *New Haven County*
	Latitude:	*41.455689°*
	Longitude:	*-73.039731°*
Structure Information	*Tower Type:*	*161-Ft Monopole*
	Mount Type:	*14.50-Ft Platform*

FUZE ID # 16244612

Analysis Results

Platform: **69.9% Pass**

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

Report Prepared By: Zachary Bandilla

Digitally signed by Justin Peter Linette
Date: 2021.04.15 14:28:46-04'00'

Executive Summary:

The objective of this report is to summarize the analysis results of the antenna support mount including the proposed modifications at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards.

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS, Site ID: 600876, dated February 3, 2021*
Mount Mapping Report	*Level-Up Towers, Site ID: 469129, dated February 21, 2021*
Previous Mount Analysis	*Maser Consulting Connecticut, Project #: 21777109A, Dated March 12, 2021*
Mount Modification Drawings	*Maser Consulting Connecticut, Project #: 21777109A, Dated April 15, 2021*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	118 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.978
Seismic Parameters:	S_S:	0.198
	S_1:	0.054
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
161.00	162.00	6	Commscope	JAHH-65B-R3B	Added
		3	Samsung	MT6407-77A	
		3	Commscope	CBC78T-DS-43	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		1	Raycap	RVZDC-6627-PF-48	
		1	-	Omni-Antenna	Retained
		6	Andrew	DB846F65ZAXY	

Standard Conditions:

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

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

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

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

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

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

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

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

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

8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

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

Analysis Results:

Component	Utilization %	Pass/Fail
Antenna Pipe	*42.4%*	*Pass*
Standoff Arm	*69.9%*	*Pass*
Face Horizontal	*42.5%*	*Pass*
Grate Angle	*42.5%*	*Pass*
Sector Connection Angle	*3.4%*	*Pass*
MOD Kicker	*13.4%*	*Pass*
MOD Support Rail	*24.8%*	*Pass*
MOD Bracket	*37.2%*	*Pass*
MOD PIPE	*71.6%*	*Pass*
Connection Check	*61.4%*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**69.9%**

Recommendation:

The existing mount will be **SUFFICIENT** for the final loading after the proposed modifications are successfully completed.

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

Attachments:

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


21/02/2021 12:24

V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

FCC #	

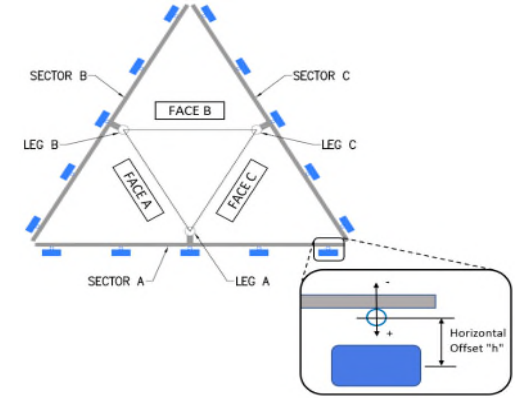
Tower Owner:	SBA Towers	**Mapping Date:**	2/21/2021
Site Name:	BETHANY WEST CT	**Tower Type:**	Monopole
Site Number or ID:	469129	**Tower Height (Ft.):**	155
Mapping Contractor:	Level-Up Towers	**Mount Elevation (Ft.):**	155

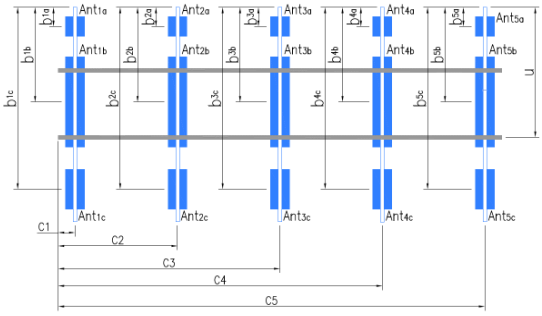
Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	P2.38x0.21", 72" Long	48.50	12.00	C1	P2.38x0.21", 72" Long	48.50	12.00
A2	P2.38x0.16", 72" Long	48.00	38.00	C2	P2.38x0.16", 72" Long	48.00	38.00
A3	P2.38x0.16", 84" Long	52.00	87.50	C3	P2.38x0.16", 84" Long	52.00	87.50
A4	P2.38x0.16", 72" Long	48.00	137.50	C4	P2.38x0.16", 72" Long	48.00	137.50
A5	P2.38x0.21", 72" Long	48.75	162.50	C5	P2.38x0.21", 72" Long	48.75	162.50
A6				C6			
B1	P2.38x0.21", 72" Long	48.50	12.00	D1			
B2	P2.38x0.16", 72" Long	48.00	38.00	D2			
B3	P2.38x0.16", 84" Long	52.00	87.50	D3			
B4	P2.38x0.16", 72" Long	48.00	137.50	D4			
B5	P2.38x0.21", 72" Long	48.75	162.50	D5			
B6				D6			

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

Tower Face Width at Mount Elev. (ft.):	16.5	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	



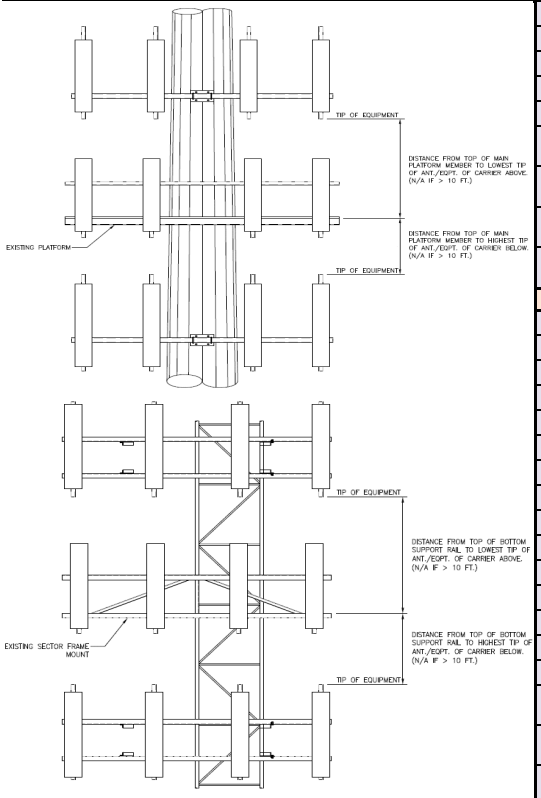


Antenna Layout (Looking Out From Tower)

Ants. Items	Enter antenna model. If not labeled, enter "Unknown". Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Mounting Locations [Units are inches and degrees] Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photos of antennas Photo Numbers
Sector A										
Ant_{1a}	Worn Label	8.00	9.50	72.00		156.292	33.00	7.50	45.00	156
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	RFS Filter	6.50	0.50	4.75	2 - 1-5/8	157.167	22.00	-3.00	30.00	157
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	Commscope SBNHH-1	12.00	7.50	72.00		156.271	36.75	10.50	35.00	158
Ant_{3b}	Commscope SBNHH-1	12.00	7.50	72.00		156.271	36.75	10.50	35.00	158
Ant_{3c}	ALU B4 RRH2x60-4R	10.75	6.00	37.00		158.333	12.00	-7.00	30.00	158
Ant_{4a}	RFS Filter	6.50	0.50	4.75	2 - 1-5/8	157.167	22.00	-3.00	30.00	159
Ant_{4b}										
Ant_{4c}										
Ant_{5a}	Worn Label	8.00	9.50	72.00		156.313	33.00	7.50	65.00	160
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

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

Climbing Facility Information			
Location:	30.00	Deg	Sector A
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was obstructed.
	Condition:		Good condition.



Sector B										
Ant_{1a}	Worn Label	8.00	9.50	72.00		156.292	33.00	7.50	120.00	161
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	RFS Filter	6.50	0.50	4.75	2 - 1-5/8	157.167	22.00	-3.00	150.00	162
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	Commscope SBNHH-1	12.00	7.50	72.00		156.271	36.75	10.50	120.00	163
Ant_{3b}	Commscope SBNHH-1	12.00	7.50	72.00		156.271	36.75	10.50	120.00	163
Ant_{3c}	ALU B4 RRH2x60-4R	10.75	6.00	37.00		158.333	12.00	-7.00	150.00	163
Ant_{4a}	RFS Filter	6.50	0.50	4.75	2 - 1-5/8	157.167	22.00	-3.00	150.00	164
Ant_{4b}										
Ant_{4c}										
Ant_{5a}	Worn Label	8.00	9.50	72.00		156.313	33.00	7.50	120.00	165
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}	Worn Label	8.00	9.50	72.00		156.292	33.00	7.50	260.00	133
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	RFS Filter	6.50	0.50	4.75	2 - 1-5/8	157.167	22.00	-3.00	150.00	137
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	Commscope SBNHH-1	12.00	7.50	72.00		156.271	36.75	10.50	250.00	140
Ant_{3b}	Commscope SBNHH-1	12.00	7.50	72.00		156.271	36.75	10.50	250.00	140
Ant_{3c}	ALU B4 RRH2x60-4R	10.75	6.00	37.00		158.333	12.00	-7.00	150.00	146
Ant_{4a}	RFS Filter	6.50	0.50	4.75	2 - 1-5/8	157.167	22.00	-3.00	150.00	150
Ant_{4b}										
Ant_{4c}										
Ant_{5a}	Worn Label	8.00	9.50	72.00		156.313	33.00	7.50	250.00	153
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

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

1		
2		
3		
4		
5		
6		
7		
8		

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

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

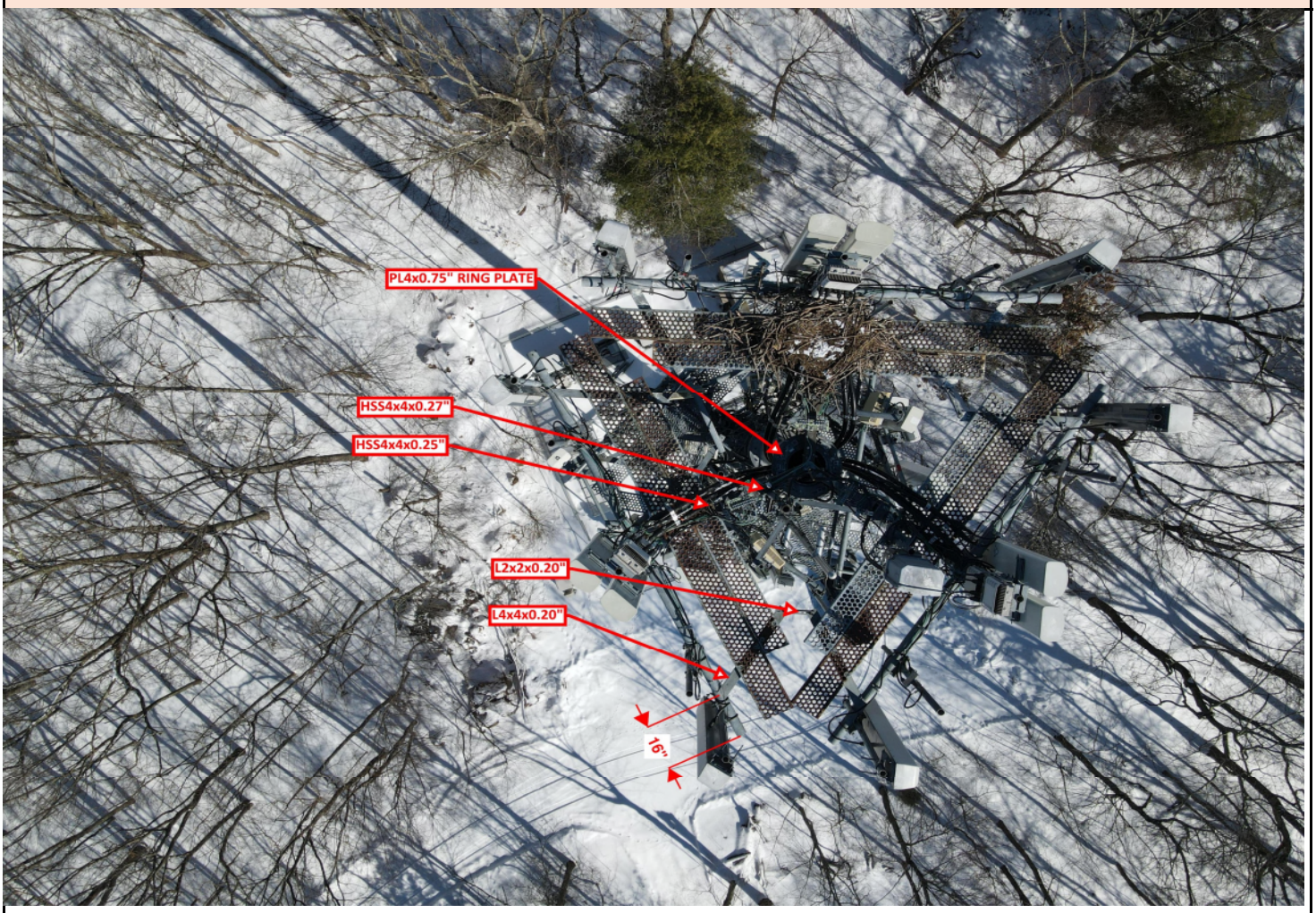
V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

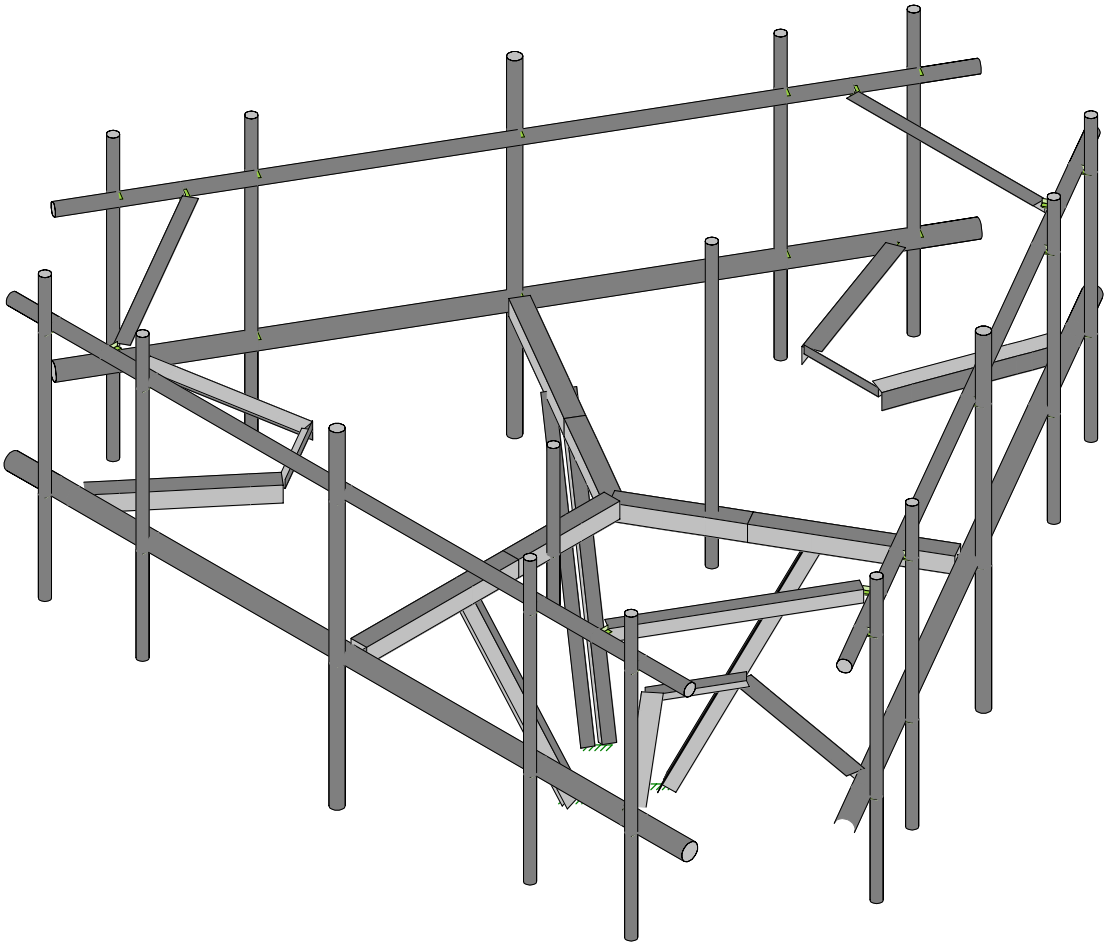
FCC #

Tower Owner:	SBA Towers	**Mapping Date:**	2/21/2021
Site Name:	BETHANY WEST CT	**Tower Type:**	Monopole
Site Number or ID:	469129	**Tower Height (Ft.):**	155
Mapping Contractor:	Level-Up Towers	**Mount Elevation (Ft.):**	155

Please Insert Sketches of the Antenna Mount



Please Insert Sketches of the Antenna Mount, cont'd



Envelope Only Solution

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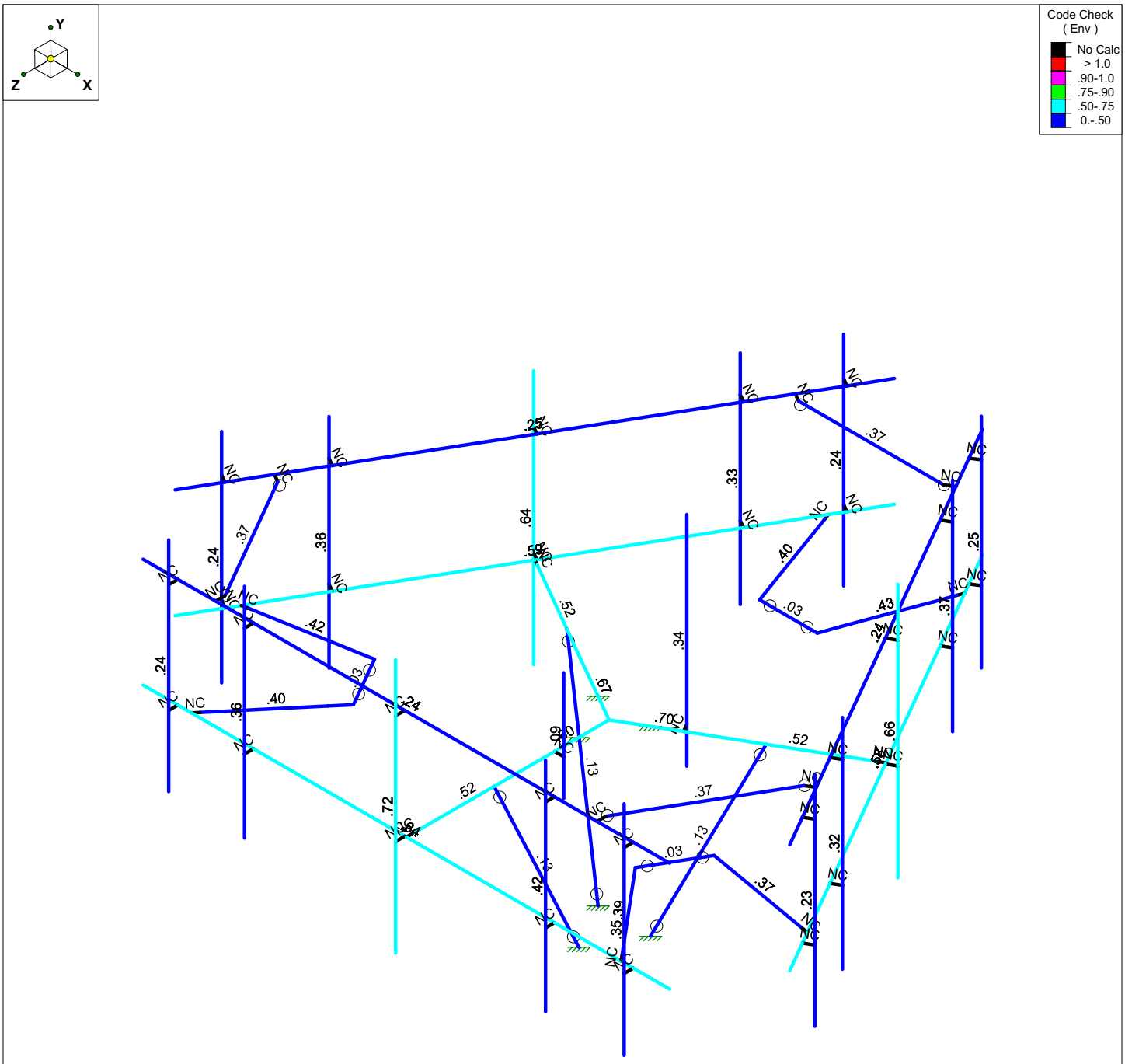

Member Code Checks Displayed (Enveloped)
Envelope Only Solution

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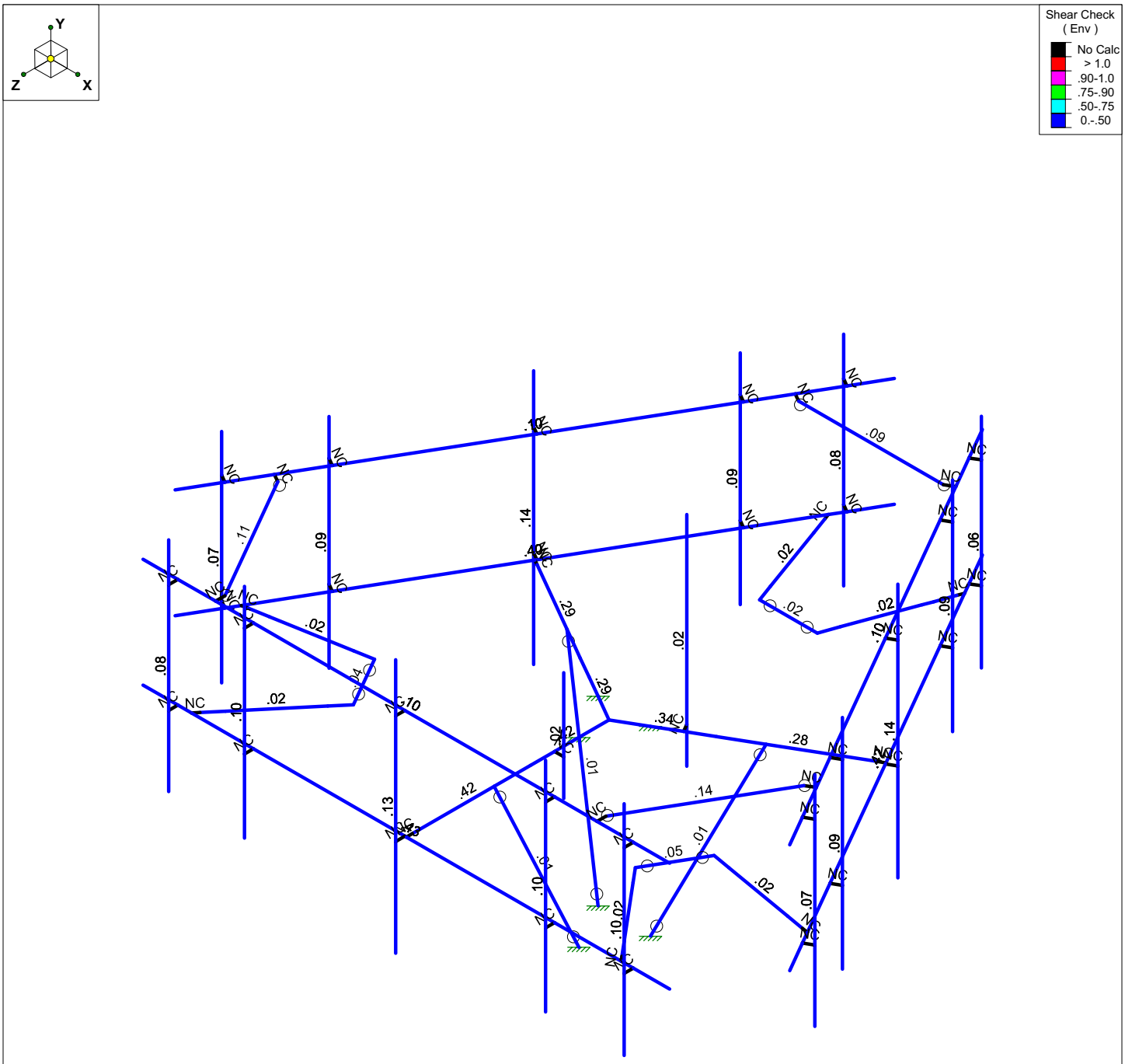

Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	469129-VZW_MT_LO_H	SK - 3
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		469129-VZW_MT_LO_H - MOD L...

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					123			
2	Antenna Di	None					123			
3	Antenna Wo (0 Deg)	None					123			
4	Antenna Wo (30 Deg)	None					123			
5	Antenna Wo (60 Deg)	None					123			
6	Antenna Wo (90 Deg)	None					123			
7	Antenna Wo (120 Deg)	None					123			
8	Antenna Wo (150 Deg)	None					123			
9	Antenna Wo (180 Deg)	None					123			
10	Antenna Wo (210 Deg)	None					123			
11	Antenna Wo (240 Deg)	None					123			
12	Antenna Wo (270 Deg)	None					123			
13	Antenna Wo (300 Deg)	None					123			
14	Antenna Wo (330 Deg)	None					123			
15	Antenna Wi (0 Deg)	None					123			
16	Antenna Wi (30 Deg)	None					123			
17	Antenna Wi (60 Deg)	None					123			
18	Antenna Wi (90 Deg)	None					123			
19	Antenna Wi (120 Deg)	None					123			
20	Antenna Wi (150 Deg)	None					123			
21	Antenna Wi (180 Deg)	None					123			
22	Antenna Wi (210 Deg)	None					123			
23	Antenna Wi (240 Deg)	None					123			
24	Antenna Wi (270 Deg)	None					123			
25	Antenna Wi (300 Deg)	None					123			
26	Antenna Wi (330 Deg)	None					123			
27	Antenna Wm (0 Deg)	None					123			
28	Antenna Wm (30 Deg)	None					123			
29	Antenna Wm (60 Deg)	None					123			
30	Antenna Wm (90 Deg)	None					123			
31	Antenna Wm (120 Deg)	None					123			
32	Antenna Wm (150 Deg)	None					123			
33	Antenna Wm (180 Deg)	None					123			
34	Antenna Wm (210 Deg)	None					123			
35	Antenna Wm (240 Deg)	None					123			
36	Antenna Wm (270 Deg)	None					123			
37	Antenna Wm (300 Deg)	None					123			
38	Antenna Wm (330 Deg)	None					123			
39	Structure D	None		-1					3	
40	Structure Di	None						44	3	
41	Structure Wo (0 Deg)	None						88		
42	Structure Wo (30 Deg)	None						88		
43	Structure Wo (60 Deg)	None						88		
44	Structure Wo (90 Deg)	None						88		
45	Structure Wo (120 D...	None						88		
46	Structure Wo (150 D...	None						88		
47	Structure Wo (180 D...	None						88		
48	Structure Wo (210 D...	None						88		
49	Structure Wo (240 D...	None						88		
50	Structure Wo (270 D...	None						88		
51	Structure Wo (300 D...	None						88		
52	Structure Wo (330 D...	None						88		
53	Structure Wi (0 Deg)	None						88		
54	Structure Wi (30 Deg)	None						88		
55	Structure Wi (60 Deg)	None						88		
56	Structure Wi (90 Deg)	None						88		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
57	Structure Wi (120 De...	None						88		
58	Structure Wi (150 De...	None						88		
59	Structure Wi (180 De...	None						88		
60	Structure Wi (210 De...	None						88		
61	Structure Wi (240 De...	None						88		
62	Structure Wi (270 De...	None						88		
63	Structure Wi (300 De...	None						88		
64	Structure Wi (330 De...	None						88		
65	Structure Wm (0 Deg)	None						88		
66	Structure Wm (30 De...	None						88		
67	Structure Wm (60 De...	None						88		
68	Structure Wm (90 De...	None						88		
69	Structure Wm (120 D...	None						88		
70	Structure Wm (150 D...	None						88		
71	Structure Wm (180 D...	None						88		
72	Structure Wm (210 D...	None						88		
73	Structure Wm (240 D...	None						88		
74	Structure Wm (270 D...	None						88		
75	Structure Wm (300 D...	None						88		
76	Structure Wm (330 D...	None						88		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	BLC 39 Transient Are...	None						30		
82	BLC 40 Transient Are...	None						30		

Load Combinations

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

Load Combinations (Continued)

	Description	Solve	P...	SR...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...
27	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	0	0	0	0	
2	N2	-1.876388	0	-1.083333	0	
3	N3	-4.690971	0	-2.708333	0	
4	N7	0.	0	2.166667	0	
5	N8	0.	0	5.416667	0	
6	N9	-7.25	0	5.583333	0	
7	N10	7.25	0	5.583333	0	
8	N12	1.876388	0	-1.083333	0	
9	N13	4.690971	0	-2.708333	0	
10	N14A	-5.916667	0	5.583333	0	
11	N15A	5.916667	0	5.583333	0	
12	N12A	0.	0	5.583333	0	
13	N13A	-5.809535	0	5.455659	0	
14	N14	5.809535	0	5.455659	0	
15	N18	8.460309	0	3.487018	0	
16	N19	1.210309	0	-9.070351	0	
17	N20	4.835309	0	-2.791667	0	
18	N22	-1.210309	0	-9.070351	0	
19	N23	-8.460309	0	3.487018	0	
20	N24	-4.835309	0	-2.791667	0	
21	N21	-3.881173	0	3.157526	0	
22	N22A	3.881173	0	3.157526	0	
23	N23A	7.793642	0	2.332317	0	
24	N24A	1.876975	0	-7.91565	0	
25	N25	7.629507	0	2.303376	0	
26	N26	1.819972	0	-7.759035	0	
27	N27	4.675084	0	1.782431	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
28	N28	0.793911	0	-4.939957	0	
29	N29	-1.876975	0	-7.91565	0	
30	N30	-7.793642	0	2.332317	0	
31	N31	-1.819972	0	-7.759035	0	
32	N32	-7.629507	0	2.303376	0	
33	N33	-0.793911	0	-4.939957	0	
34	N34	-4.675084	0	1.782431	0	
35	N35	0	0	0.833333	0	
36	N37	0.721688	0	-0.416667	0	
37	N39	-0.721688	0	-0.416667	0	
38	N38	6.25	0	5.583333	0	
39	N39A	4.083333	0	5.583333	0	
40	N40	-0.041667	0	5.583333	0	
41	N41	-4.208333	0	5.583333	0	
42	N42	-6.291667	0	5.583333	0	
43	N43	6.25	0	5.833333	0	
44	N44	4.083333	0	5.833333	0	
45	N45	-0.041667	0	5.833333	0	
46	N46	-4.208333	0	5.833333	0	
47	N47	-6.291667	0	5.833333	0	
48	N48	4.083333	4	5.833333	0	
49	N49	-4.208333	4	5.833333	0	
50	N50	4.083333	-2	5.833333	0	
51	N51	-4.208333	-2	5.833333	0	
52	N52	-0.041667	4.333333	5.833333	0	
53	N53	-0.041667	-2.666667	5.833333	0	
54	N54	-6.291667	4.0625	5.833333	0	
55	N55	-6.291667	-1.9375	5.833333	0	
56	N56	6.25	4.041667	5.833333	0	
57	N57	6.25	-1.958333	5.833333	0	
58	N58	1.710309	0	-8.204325	0	
59	N59	2.793642	0	-6.327937	0	
60	N60	4.856142	0	-2.755582	0	
61	N61	6.939475	0	0.852857	0	
62	N62	7.981142	0	2.657076	0	
63	N63	1.926815	0	-8.329325	0	
64	N64	3.010148	0	-6.452937	0	
65	N65	5.072648	0	-2.880582	0	
66	N66	7.155982	0	0.727857	0	
67	N67	8.197648	0	2.532076	0	
68	N68	3.010148	4	-6.452937	0	
69	N69	7.155982	4	0.727857	0	
70	N70	3.010148	-2	-6.452937	0	
71	N71	7.155982	-2	0.727857	0	
72	N72	5.072648	4.333333	-2.880582	0	
73	N73	5.072648	-2.666667	-2.880582	0	
74	N74	8.197648	4.0625	2.532076	0	
75	N75	8.197648	-1.9375	2.532076	0	
76	N76	1.926815	4.041667	-8.329325	0	
77	N77	1.926815	-1.958333	-8.329325	0	
78	N78	-7.960309	0	2.620992	0	
79	N79	-6.876975	0	0.744604	0	
80	N80	-4.814475	0	-2.827751	0	
81	N81	-2.731142	0	-6.43619	0	
82	N82	-1.689475	0	-8.24041	0	
83	N83	-8.176815	0	2.495992	0	
84	N84	-7.093482	0	0.619604	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
85	N85	-5.030982	0	-2.952751	0	
86	N86	-2.947648	0	-6.56119	0	
87	N87	-1.905982	0	-8.36541	0	
88	N88	-7.093482	4	0.619604	0	
89	N89	-2.947648	4	-6.56119	0	
90	N90	-7.093482	-2	0.619604	0	
91	N91	-2.947648	-2	-6.56119	0	
92	N92	-5.030982	4.333333	-2.952751	0	
93	N93	-5.030982	-2.666667	-2.952751	0	
94	N94	-1.905982	4.0625	-8.36541	0	
95	N95	-1.905982	-1.9375	-8.36541	0	
96	N96	-8.176815	4.041667	2.495992	0	
97	N97	-8.176815	-1.958333	2.495992	0	
98	N101	0.	0	1.5	0	
99	N102	1.299038	0	-.75	0	
100	N103	-1.299038	0	-.75	0	
101	N104	.25	0	1.5	0	
102	N105	.25	-1	1.5	0	
103	N106	.25	2	1.5	0	
104	N108	1.174038	0	-0.966506	0	
105	N108A	1.174038	5	-0.966506	0	
106	N109	1.174038	-1	-0.966506	0	
107	N107	-5.488142	0	5.072637	0	
108	N108B	5.488142	0	5.072637	0	
109	N109A	7.137103	0	2.216552	0	
110	N110	1.648962	0	-7.289189	0	
111	N111	-1.648962	0	-7.289189	0	
112	N112	-7.137103	0	2.216552	0	
113	N113	-4.202566	0	3.540548	0	
114	N114	4.202566	0	3.540548	0	
115	N115	5.167488	0	1.869255	0	
116	N116	0.964921	0	-5.409803	0	
117	N117	-0.964921	0	-5.409803	0	
118	N118	-5.167488	0	1.869255	0	
119	N119	1.563457	0	-7.054265	0	
120	N120	0.	0	3.166667	0	
121	N121	0	-5	0.833333	0	
122	N122	0.721688	-5	-0.416667	0	
123	N123	-0.721688	-5	-0.416667	0	
124	N124	2.742414	0	-1.583333	0	
125	N128	-2.742414	0	-1.583333	0	
126	N126	-7.25	3	5.583333	0	
127	N127	7.25	3	5.583333	0	
128	N128A	6.25	3	5.583333	0	
129	N129	4.083333	3	5.583333	0	
130	N130	-0.041667	3	5.583333	0	
131	N131	-4.208333	3	5.583333	0	
132	N132	-6.291667	3	5.583333	0	
133	N133	6.25	3	5.833333	0	
134	N134	4.083333	3	5.833333	0	
135	N135	-0.041667	3	5.833333	0	
136	N136	-4.208333	3	5.833333	0	
137	N137	-6.291667	3	5.833333	0	
138	N138	-5.25	3	5.583333	0	
139	N139	5.25	3	5.583333	0	
140	N140	-5.25	3	5.333333	0	
141	N141	5.25	3	5.333333	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
142	N142	8.460309	3	3.487018	0	
143	N143	1.210309	3	-9.070351	0	
144	N144	1.710309	3	-8.204325	0	
145	N145	2.793642	3	-6.327937	0	
146	N146	4.856142	3	-2.755582	0	
147	N147	6.939475	3	0.852857	0	
148	N148	7.981142	3	2.657076	0	
149	N149	1.926815	3	-8.329325	0	
150	N150	3.010148	3	-6.452937	0	
151	N151	5.072648	3	-2.880582	0	
152	N152	7.155982	3	0.727857	0	
153	N153	8.197648	3	2.532076	0	
154	N154	7.460309	3	1.754967	0	
155	N155	2.210309	3	-7.3383	0	
156	N156	7.243802	3	1.879967	0	
157	N157	1.993802	3	-7.2133	0	
158	N158	-1.210309	3	-9.070351	0	
159	N159	-8.460309	3	3.487018	0	
160	N160	-7.960309	3	2.620992	0	
161	N161	-6.876975	3	0.744604	0	
162	N162	-4.814475	3	-2.827751	0	
163	N163	-2.731142	3	-6.43619	0	
164	N164	-1.689475	3	-8.24041	0	
165	N165	-8.176815	3	2.495992	0	
166	N166	-7.093482	3	0.619604	0	
167	N167	-5.030982	3	-2.952751	0	
168	N168	-2.947648	3	-6.56119	0	
169	N169	-1.905982	3	-8.36541	0	
170	N170	-2.210309	3	-7.3383	0	
171	N171	-7.460309	3	1.754967	0	
172	N172	-1.993802	3	-7.2133	0	
173	N173	-7.243802	3	1.879967	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design L...	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Standoff Arm	HSS4X4X4	Column	Pipe	A53 Gr. B	Typical	3.37	7.8	7.8	12.8
3	Face Horizontal	PIPE_3.5	Column	Pipe	A53 Gr. B	Typical	2.5	4.52	4.52	9.04
4	Grate Angle	L4x4x3	Column	Pipe	A36 Gr.36	Typical	1.465	2.332	2.332	.017
5	Sector Connection Ang...	L2x2x2	Column	Pipe	A36 Gr.36	Typical	.491	.189	.189	.003
6	MOD Kicker	LL3x3x3x6	Column	Pipe	A36 Gr.36	Typical	2.18	4.97	1.9	.027
7	MOD Supprt Rail	PIPE_2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
8	MOD Bracket	L3X3X4	Column	Pipe	A36 Gr.36	Typical	1.44	1.23	1.23	.031
9	MOD PIPE	PIPE_2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M1	Standoff Arm	2.167									Lateral
2	M2	Standoff Arm	3.25									Lateral
3	M4	Standoff Arm	2.167									Lateral
4	M5	Standoff Arm	3.25									Lateral
5	M6	Face Horizo...	14.5									Lateral
6	M7	Standoff Arm	2.167									Lateral
7	M8	Standoff Arm	3.25									Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
8	M9	Face Horizo...	14.5									Lateral
9	M11	Face Horizo...	14.5									Lateral
10	M15	Grate Angle	3									Lateral
11	M16	Grate Angle	3									Lateral
12	M18	Grate Angle	3									Lateral
13	M19	Grate Angle	3									Lateral
14	M21	Grate Angle	3									Lateral
15	M22	Grate Angle	3									Lateral
16	M23	Sector Con...	1.588									Lateral
17	M24	Sector Con...	1.588									Lateral
18	M25	Sector Con...	1.588									Lateral
19	MP1A	Antenna Pipe	6									Lateral
20	MP2A	Antenna Pipe	6									Lateral
21	MP3A	MOD PIPE	7									Lateral
22	MP4A	Antenna Pipe	6									Lateral
23	MP5A	Antenna Pipe	6									Lateral
24	MP1C	Antenna Pipe	6									Lateral
25	MP2C	Antenna Pipe	6									Lateral
26	MP3C	MOD PIPE	7									Lateral
27	MP4C	Antenna Pipe	6									Lateral
28	MP5C	Antenna Pipe	6									Lateral
29	MP1B	Antenna Pipe	6									Lateral
30	MP2B	Antenna Pipe	6									Lateral
31	MP3B	MOD PIPE	7									Lateral
32	MP4B	Antenna Pipe	6									Lateral
33	MP5B	Antenna Pipe	6									Lateral
34	OVP2	Antenna Pipe	3									Lateral
35	LR1	Antenna Pipe	6									Lateral
36	M62	MOD Kicker	5.518									Lateral
37	M63	MOD Kicker	5.518									Lateral
38	M64	MOD Kicker	5.518									Lateral
39	M70	MOD Suppr...	14.5									Lateral
40	M76	MOD Suppr...	14.5									Lateral
41	M82	MOD Suppr...	14.5									Lateral
42	M85	MOD Bracket	3.988									Lateral
43	M88	MOD Bracket	3.988									Lateral
44	M91	MOD Bracket	3.988									Lateral

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N1	N2			Standoff Arm	Column	Pipe	A53 Gr. B	Typical
2	M2	N2	N3			Standoff Arm	Column	Pipe	A53 Gr. B	Typical
3	M4	N1	N7			Standoff Arm	Column	Pipe	A53 Gr. B	Typical
4	M5	N7	N8			Standoff Arm	Column	Pipe	A53 Gr. B	Typical
5	M6	N10	N9			Face Horizontal	Column	Pipe	A53 Gr. B	Typical
6	M7	N1	N12			Standoff Arm	Column	Pipe	A53 Gr. B	Typical
7	M8	N12	N13			Standoff Arm	Column	Pipe	A53 Gr. B	Typical
8	M8A	N8	N12A			RIGID	None	None	RIGID	Typical
9	M9	N19	N18			Face Horizontal	Column	Pipe	A53 Gr. B	Typical
10	M10	N13	N20			RIGID	None	None	RIGID	Typical
11	M11	N23	N22			Face Horizontal	Column	Pipe	A53 Gr. B	Typical
12	M12	N3	N24			RIGID	None	None	RIGID	Typical
13	M13	N15A	N14			RIGID	None	None	RIGID	Typical
14	M14	N14A	N13A			RIGID	None	None	RIGID	Typical
15	M15	N13A	N21		180	Grate Angle	Column	Pipe	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
16	M16	N14	N22A		90	Grate Angle	Column	Pipe	A36 Gr.36	Typical
17	M17	N24A	N26			RIGID	None	None	RIGID	Typical
18	M18	N25	N27		180	Grate Angle	Column	Pipe	A36 Gr.36	Typical
19	M19	N26	N28		90	Grate Angle	Column	Pipe	A36 Gr.36	Typical
20	M20	N30	N32			RIGID	None	None	RIGID	Typical
21	M21	N31	N33		180	Grate Angle	Column	Pipe	A36 Gr.36	Typical
22	M22	N32	N34		90	Grate Angle	Column	Pipe	A36 Gr.36	Typical
23	M23	N21	N34		270	Sector Connec...	Column	Pipe	A36 Gr.36	Typical
24	M24	N27	N22A		270	Sector Connec...	Column	Pipe	A36 Gr.36	Typical
25	M25	N33	N28		270	Sector Connec...	Column	Pipe	A36 Gr.36	Typical
26	MP1A	N56	N57			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
27	MP2A	N48	N50			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
28	MP3A	N52	N53			MOD PIPE	Column	Pipe	A53 Gr. B	Typical
29	MP4A	N49	N51			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
30	MP5A	N54	N55			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
31	M31	N42	N47			RIGID	None	None	RIGID	Typical
32	M32	N41	N46			RIGID	None	None	RIGID	Typical
33	M33	N40	N45			RIGID	None	None	RIGID	Typical
34	M34	N39A	N44			RIGID	None	None	RIGID	Typical
35	M35	N38	N43			RIGID	None	None	RIGID	Typical
36	MP1C	N76	N77			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
37	MP2C	N68	N70			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
38	MP3C	N72	N73			MOD PIPE	Column	Pipe	A53 Gr. B	Typical
39	MP4C	N69	N71			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
40	MP5C	N74	N75			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
41	M41	N62	N67			RIGID	None	None	RIGID	Typical
42	M42	N61	N66			RIGID	None	None	RIGID	Typical
43	M43	N60	N65			RIGID	None	None	RIGID	Typical
44	M44	N59	N64			RIGID	None	None	RIGID	Typical
45	M45	N58	N63			RIGID	None	None	RIGID	Typical
46	MP1B	N96	N97			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
47	MP2B	N88	N90			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
48	MP3B	N92	N93			MOD PIPE	Column	Pipe	A53 Gr. B	Typical
49	MP4B	N89	N91			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
50	MP5B	N94	N95			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
51	M51	N82	N87			RIGID	None	None	RIGID	Typical
52	M52	N81	N86			RIGID	None	None	RIGID	Typical
53	M53	N80	N85			RIGID	None	None	RIGID	Typical
54	M54	N79	N84			RIGID	None	None	RIGID	Typical
55	M55	N78	N83			RIGID	None	None	RIGID	Typical
56	M58	N101	N104			RIGID	None	None	RIGID	Typical
57	OVP2	N106	N105			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
58	M60	N102	N108			RIGID	None	None	RIGID	Typical
59	LR1	N108A	N109			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
60	M60A	N23A	N25			RIGID	None	None	RIGID	Typical
61	M61	N29	N31			RIGID	None	None	RIGID	Typical
62	M62	N121	N120			MOD Kicker	Column	Pipe	A36 Gr.36	Typical
63	M63	N122	N124			MOD Kicker	Column	Pipe	A36 Gr.36	Typical
64	M64	N123	N128			MOD Kicker	Column	Pipe	A36 Gr.36	Typical
65	M65	N132	N137			RIGID	None	None	RIGID	Typical
66	M66	N131	N136			RIGID	None	None	RIGID	Typical
67	M67	N130	N135			RIGID	None	None	RIGID	Typical
68	M68	N129	N134			RIGID	None	None	RIGID	Typical
69	M69	N128A	N133			RIGID	None	None	RIGID	Typical
70	M70	N126	N127			MOD Supprt R...	Column	Pipe	A53 Gr. B	Typical
71	M71	N148	N153			RIGID	None	None	RIGID	Typical
72	M72	N147	N152			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
73	M73	N146	N151			RIGID	None	None	RIGID	Typical
74	M74	N145	N150			RIGID	None	None	RIGID	Typical
75	M75	N144	N149			RIGID	None	None	RIGID	Typical
76	M76	N142	N143			MOD Supprt R...	Column	Pipe	A53 Gr. B	Typical
77	M77	N164	N169			RIGID	None	None	RIGID	Typical
78	M78	N163	N168			RIGID	None	None	RIGID	Typical
79	M79	N162	N167			RIGID	None	None	RIGID	Typical
80	M80	N161	N166			RIGID	None	None	RIGID	Typical
81	M81	N160	N165			RIGID	None	None	RIGID	Typical
82	M82	N158	N159			MOD Supprt R...	Column	Pipe	A53 Gr. B	Typical
83	M83	N138	N140			RIGID	None	None	RIGID	Typical
84	M84	N171	N173			RIGID	None	None	RIGID	Typical
85	M85	N173	N140		180	MOD Bracket	Column	Pipe	A36 Gr.36	Typical
86	M86	N154	N156			RIGID	None	None	RIGID	Typical
87	M87	N139	N141			RIGID	None	None	RIGID	Typical
88	M88	N141	N156		180	MOD Bracket	Column	Pipe	A36 Gr.36	Typical
89	M89	N170	N172			RIGID	None	None	RIGID	Typical
90	M90	N155	N157			RIGID	None	None	RIGID	Typical
91	M91	N157	N172		180	MOD Bracket	Column	Pipe	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes	** NA **			None
2	M2						Yes	** NA **			None
3	M4						Yes	** NA **			None
4	M5						Yes	** NA **			None
5	M6						Yes	** NA **			None
6	M7						Yes	** NA **			None
7	M8						Yes	** NA **			None
8	M8A						Yes	** NA **			None
9	M9						Yes	** NA **			None
10	M10						Yes	** NA **			None
11	M11						Yes	** NA **			None
12	M12						Yes	** NA **			None
13	M13						Yes	** NA **			None
14	M14						Yes	** NA **			None
15	M15						Yes	** NA **			None
16	M16						Yes	** NA **			None
17	M17						Yes	** NA **			None
18	M18						Yes	** NA **			None
19	M19						Yes	** NA **			None
20	M20						Yes	** NA **			None
21	M21						Yes	** NA **			None
22	M22						Yes	** NA **			None
23	M23	BenPIN	BenPIN				Yes	** NA **			None
24	M24	BenPIN	BenPIN				Yes	** NA **			None
25	M25	BenPIN	BenPIN				Yes	** NA **			None
26	MP1A						Yes	** NA **			None
27	MP2A						Yes	** NA **			None
28	MP3A						Yes	** NA **			None
29	MP4A						Yes	** NA **			None
30	MP5A						Yes	** NA **			None
31	M31						Yes	** NA **			None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
34	M34						Yes	** NA **			None
35	M35						Yes	** NA **			None
36	MP1C						Yes	** NA **			None
37	MP2C						Yes	** NA **			None
38	MP3C						Yes	** NA **			None
39	MP4C						Yes	** NA **			None
40	MP5C						Yes	** NA **			None
41	M41						Yes	** NA **			None
42	M42						Yes	** NA **			None
43	M43						Yes	** NA **			None
44	M44						Yes	** NA **			None
45	M45						Yes	** NA **			None
46	MP1B						Yes	** NA **			None
47	MP2B						Yes	** NA **			None
48	MP3B						Yes	** NA **			None
49	MP4B						Yes	** NA **			None
50	MP5B						Yes	** NA **			None
51	M51						Yes	** NA **			None
52	M52						Yes	** NA **			None
53	M53						Yes	** NA **			None
54	M54						Yes	** NA **			None
55	M55						Yes	** NA **			None
56	M58						Yes	** NA **			None
57	OVP2						Yes	** NA **			None
58	M60						Yes	** NA **			None
59	LR1						Yes	** NA **			None
60	M60A						Yes	** NA **			None
61	M61						Yes	** NA **			None
62	M62	BenPIN	BenPIN				Yes	** NA **			None
63	M63	BenPIN	BenPIN				Yes	** NA **			None
64	M64	BenPIN	BenPIN				Yes	** NA **			None
65	M65						Yes	** NA **			None
66	M66						Yes	** NA **			None
67	M67						Yes	** NA **			None
68	M68						Yes	** NA **			None
69	M69						Yes	** NA **			None
70	M70						Yes	** NA **			None
71	M71						Yes	** NA **			None
72	M72						Yes	** NA **			None
73	M73						Yes	** NA **			None
74	M74						Yes	** NA **			None
75	M75						Yes	** NA **			None
76	M76						Yes	** NA **			None
77	M77						Yes	** NA **			None
78	M78						Yes	** NA **			None
79	M79						Yes	** NA **			None
80	M80						Yes	** NA **			None
81	M81						Yes	** NA **			None
82	M82						Yes	** NA **			None
83	M83	OOOOOX					Yes	** NA **			None
84	M84	OOOOOX					Yes	** NA **			None
85	M85						Yes	** NA **			None
86	M86	OOOOOX					Yes	** NA **			None
87	M87	OOOOOX					Yes	** NA **			None
88	M88						Yes	** NA **			None
89	M89	OOOOOX					Yes	** NA **			None
90	M90	OOOOOX					Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
91	M91						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-10.5	.25
2	MP1A	My	-.005	.25
3	MP1A	Mz	0	.25
4	MP1A	Y	-10.5	5.75
5	MP1A	My	-.005	5.75
6	MP1A	Mz	0	5.75
7	MP1B	Y	-10.5	.25
8	MP1B	My	-.002	.25
9	MP1B	Mz	-.005	.25
10	MP1B	Y	-10.5	5.75
11	MP1B	My	-.002	5.75
12	MP1B	Mz	-.005	5.75
13	MP1C	Y	-10.5	.25
14	MP1C	My	.005	.25
15	MP1C	Mz	.000912	.25
16	MP1C	Y	-10.5	5.75
17	MP1C	My	.005	5.75
18	MP1C	Mz	.000912	5.75
19	MP5A	Y	-10.5	.25
20	MP5A	My	-.005	.25
21	MP5A	Mz	0	.25
22	MP5A	Y	-10.5	5.75
23	MP5A	My	-.005	5.75
24	MP5A	Mz	0	5.75
25	MP5B	Y	-10.5	.25
26	MP5B	My	-.002	.25
27	MP5B	Mz	-.005	.25
28	MP5B	Y	-10.5	5.75
29	MP5B	My	-.002	5.75
30	MP5B	Mz	-.005	5.75
31	MP5C	Y	-10.5	.25
32	MP5C	My	.005	.25
33	MP5C	Mz	.000912	.25
34	MP5C	Y	-10.5	5.75
35	MP5C	My	.005	5.75
36	MP5C	Mz	.000912	5.75
37	MP3A	Y	-31.65	.5
38	MP3A	My	-.016	.5
39	MP3A	Mz	-.024	.5
40	MP3A	Y	-31.65	5.5
41	MP3A	My	-.016	5.5
42	MP3A	Mz	-.024	5.5
43	MP3B	Y	-31.65	.5
44	MP3B	My	.017	.5
45	MP3B	Mz	-.023	.5
46	MP3B	Y	-31.65	5.5
47	MP3B	My	.017	5.5
48	MP3B	Mz	-.023	5.5
49	MP3C	Y	-31.65	.5
50	MP3C	My	.011	.5
51	MP3C	Mz	.026	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
52	MP3C	Y	-31.65	5.5
53	MP3C	My	.011	5.5
54	MP3C	Mz	.026	5.5
55	MP3A	Y	-31.65	.5
56	MP3A	My	-.016	.5
57	MP3A	Mz	.024	.5
58	MP3A	Y	-31.65	5.5
59	MP3A	My	-.016	5.5
60	MP3A	Mz	.024	5.5
61	MP3B	Y	-31.65	.5
62	MP3B	My	-.028	.5
63	MP3B	Mz	-.007	.5
64	MP3B	Y	-31.65	5.5
65	MP3B	My	-.028	5.5
66	MP3B	Mz	-.007	5.5
67	MP3C	Y	-31.65	.5
68	MP3C	My	.02	.5
69	MP3C	Mz	-.021	.5
70	MP3C	Y	-31.65	5.5
71	MP3C	My	.02	5.5
72	MP3C	Mz	-.021	5.5
73	MP4A	Y	-44	2
74	MP4A	My	-.022	2
75	MP4A	Mz	0	2
76	MP4A	Y	-44	4
77	MP4A	My	-.022	4
78	MP4A	Mz	0	4
79	MP4B	Y	-44	2
80	MP4B	My	-.008	2
81	MP4B	Mz	-.021	2
82	MP4B	Y	-44	4
83	MP4B	My	-.008	4
84	MP4B	Mz	-.021	4
85	MP4C	Y	-44	2
86	MP4C	My	.022	2
87	MP4C	Mz	.004	2
88	MP4C	Y	-44	4
89	MP4C	My	.022	4
90	MP4C	Mz	.004	4
91	MP3A	Y	-10.4	1
92	MP3A	My	.005	1
93	MP3A	Mz	0	1
94	MP3B	Y	-10.4	1
95	MP3B	My	.002	1
96	MP3B	Mz	.005	1
97	MP3C	Y	-10.4	1
98	MP3C	My	-.005	1
99	MP3C	Mz	-.000903	1
100	MP2A	Y	-84.4	3
101	MP2A	My	.042	3
102	MP2A	Mz	0	3
103	MP2B	Y	-84.4	3
104	MP2B	My	.014	3
105	MP2B	Mz	.04	3
106	MP2C	Y	-84.4	3
107	MP2C	My	-.042	3
108	MP2C	Mz	-.007	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
109	MP3A	Y	-70.3	3
110	MP3A	My	.035	3
111	MP3A	Mz	0	3
112	MP3B	Y	-70.3	3
113	MP3B	My	.012	3
114	MP3B	Mz	.033	3
115	MP3C	Y	-70.3	3
116	MP3C	My	-.035	3
117	MP3C	Mz	-.006	3
118	OVP2	Y	-32	1
119	OVP2	My	0	1
120	OVP2	Mz	0	1
121	LR1	Y	-24	1
122	LR1	My	0	1
123	LR1	Mz	0	1

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-60.242	.25
2	MP1A	My	-.03	.25
3	MP1A	Mz	0	.25
4	MP1A	Y	-60.242	5.75
5	MP1A	My	-.03	5.75
6	MP1A	Mz	0	5.75
7	MP1B	Y	-60.242	.25
8	MP1B	My	-.01	.25
9	MP1B	Mz	-.028	.25
10	MP1B	Y	-60.242	5.75
11	MP1B	My	-.01	5.75
12	MP1B	Mz	-.028	5.75
13	MP1C	Y	-60.242	.25
14	MP1C	My	.03	.25
15	MP1C	Mz	.005	.25
16	MP1C	Y	-60.242	5.75
17	MP1C	My	.03	5.75
18	MP1C	Mz	.005	5.75
19	MP5A	Y	-60.242	.25
20	MP5A	My	-.03	.25
21	MP5A	Mz	0	.25
22	MP5A	Y	-60.242	5.75
23	MP5A	My	-.03	5.75
24	MP5A	Mz	0	5.75
25	MP5B	Y	-60.242	.25
26	MP5B	My	-.01	.25
27	MP5B	Mz	-.028	.25
28	MP5B	Y	-60.242	5.75
29	MP5B	My	-.01	5.75
30	MP5B	Mz	-.028	5.75
31	MP5C	Y	-60.242	.25
32	MP5C	My	.03	.25
33	MP5C	Mz	.005	.25
34	MP5C	Y	-60.242	5.75
35	MP5C	My	.03	5.75
36	MP5C	Mz	.005	5.75
37	MP3A	Y	-71.125	.5
38	MP3A	My	-.036	.5

Member Point Loads (BLC 2 : Antenna Di) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
39	MP3A	Mz	-.053	.5
40	MP3A	Y	-71.125	5.5
41	MP3A	My	-.036	5.5
42	MP3A	Mz	-.053	5.5
43	MP3B	Y	-71.125	.5
44	MP3B	My	.038	.5
45	MP3B	Mz	-.052	.5
46	MP3B	Y	-71.125	5.5
47	MP3B	My	.038	5.5
48	MP3B	Mz	-.052	5.5
49	MP3C	Y	-71.125	.5
50	MP3C	My	.026	.5
51	MP3C	Mz	.059	.5
52	MP3C	Y	-71.125	5.5
53	MP3C	My	.026	5.5
54	MP3C	Mz	.059	5.5
55	MP3A	Y	-71.125	.5
56	MP3A	My	-.036	.5
57	MP3A	Mz	.053	.5
58	MP3A	Y	-71.125	5.5
59	MP3A	My	-.036	5.5
60	MP3A	Mz	.053	5.5
61	MP3B	Y	-71.125	.5
62	MP3B	My	-.062	.5
63	MP3B	Mz	-.015	.5
64	MP3B	Y	-71.125	5.5
65	MP3B	My	-.062	5.5
66	MP3B	Mz	-.015	5.5
67	MP3C	Y	-71.125	.5
68	MP3C	My	.044	.5
69	MP3C	Mz	-.046	.5
70	MP3C	Y	-71.125	5.5
71	MP3C	My	.044	5.5
72	MP3C	Mz	-.046	5.5
73	MP4A	Y	-42.206	2
74	MP4A	My	-.021	2
75	MP4A	Mz	0	2
76	MP4A	Y	-42.206	4
77	MP4A	My	-.021	4
78	MP4A	Mz	0	4
79	MP4B	Y	-42.206	2
80	MP4B	My	-.007	2
81	MP4B	Mz	-.02	2
82	MP4B	Y	-42.206	4
83	MP4B	My	-.007	4
84	MP4B	Mz	-.02	4
85	MP4C	Y	-42.206	2
86	MP4C	My	.021	2
87	MP4C	Mz	.004	2
88	MP4C	Y	-42.206	4
89	MP4C	My	.021	4
90	MP4C	Mz	.004	4
91	MP3A	Y	-10.951	1
92	MP3A	My	.005	1
93	MP3A	Mz	0	1
94	MP3B	Y	-10.951	1
95	MP3B	My	.002	1

Member Point Loads (BLC 2 : Antenna Di) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
96	MP3B	Mz	.005	1
97	MP3C	Y	-10.951	1
98	MP3C	My	-.005	1
99	MP3C	Mz	-.000951	1
100	MP2A	Y	-45.681	3
101	MP2A	My	.023	3
102	MP2A	Mz	0	3
103	MP2B	Y	-45.681	3
104	MP2B	My	.008	3
105	MP2B	Mz	.021	3
106	MP2C	Y	-45.681	3
107	MP2C	My	-.022	3
108	MP2C	Mz	-.004	3
109	MP3A	Y	-41.087	3
110	MP3A	My	.021	3
111	MP3A	Mz	0	3
112	MP3B	Y	-41.087	3
113	MP3B	My	.007	3
114	MP3B	Mz	.019	3
115	MP3C	Y	-41.087	3
116	MP3C	My	-.02	3
117	MP3C	Mz	-.004	3
118	OVP2	Y	-77.24	1
119	OVP2	My	0	1
120	OVP2	Mz	0	1
121	LR1	Y	-24	1
122	LR1	My	0	1
123	LR1	Mz	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	-146.942	.25
3	MP1A	Mx	0	.25
4	MP1A	X	0	5.75
5	MP1A	Z	-146.942	5.75
6	MP1A	Mx	0	5.75
7	MP1B	X	0	.25
8	MP1B	Z	-130.531	.25
9	MP1B	Mx	.061	.25
10	MP1B	X	0	5.75
11	MP1B	Z	-130.531	5.75
12	MP1B	Mx	.061	5.75
13	MP1C	X	0	.25
14	MP1C	Z	-146.381	.25
15	MP1C	Mx	-.013	.25
16	MP1C	X	0	5.75
17	MP1C	Z	-146.381	5.75
18	MP1C	Mx	-.013	5.75
19	MP5A	X	0	.25
20	MP5A	Z	-146.942	.25
21	MP5A	Mx	0	.25
22	MP5A	X	0	5.75
23	MP5A	Z	-146.942	5.75
24	MP5A	Mx	0	5.75
25	MP5B	X	0	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
26	MP5B	Z	-130.531	.25
27	MP5B	Mx	.061	.25
28	MP5B	X	0	5.75
29	MP5B	Z	-130.531	5.75
30	MP5B	Mx	.061	5.75
31	MP5C	X	0	.25
32	MP5C	Z	-146.381	.25
33	MP5C	Mx	-.013	.25
34	MP5C	X	0	5.75
35	MP5C	Z	-146.381	5.75
36	MP5C	Mx	-.013	5.75
37	MP3A	X	0	.5
38	MP3A	Z	-189.878	.5
39	MP3A	Mx	.142	.5
40	MP3A	X	0	5.5
41	MP3A	Z	-189.878	5.5
42	MP3A	Mx	.142	5.5
43	MP3B	X	0	.5
44	MP3B	Z	-132.333	.5
45	MP3B	Mx	.096	.5
46	MP3B	X	0	5.5
47	MP3B	Z	-132.333	5.5
48	MP3B	Mx	.096	5.5
49	MP3C	X	0	.5
50	MP3C	Z	-187.913	.5
51	MP3C	Mx	-.155	.5
52	MP3C	X	0	5.5
53	MP3C	Z	-187.913	5.5
54	MP3C	Mx	-.155	5.5
55	MP3A	X	0	.5
56	MP3A	Z	-189.878	.5
57	MP3A	Mx	-.142	.5
58	MP3A	X	0	5.5
59	MP3A	Z	-189.878	5.5
60	MP3A	Mx	-.142	5.5
61	MP3B	X	0	.5
62	MP3B	Z	-132.333	.5
63	MP3B	Mx	.028	.5
64	MP3B	X	0	5.5
65	MP3B	Z	-132.333	5.5
66	MP3B	Mx	.028	5.5
67	MP3C	X	0	.5
68	MP3C	Z	-187.913	.5
69	MP3C	Mx	.122	.5
70	MP3C	X	0	5.5
71	MP3C	Z	-187.913	5.5
72	MP3C	Mx	.122	5.5
73	MP4A	X	0	2
74	MP4A	Z	-86.081	2
75	MP4A	Mx	0	2
76	MP4A	X	0	4
77	MP4A	Z	-86.081	4
78	MP4A	Mx	0	4
79	MP4B	X	0	2
80	MP4B	Z	-61.752	2
81	MP4B	Mx	.029	2
82	MP4B	X	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP4B	Z	-61.752	4
84	MP4B	Mx	.029	4
85	MP4C	X	0	2
86	MP4C	Z	-85.25	2
87	MP4C	Mx	-.007	2
88	MP4C	X	0	4
89	MP4C	Z	-85.25	4
90	MP4C	Mx	-.007	4
91	MP3A	X	0	1
92	MP3A	Z	-15.424	1
93	MP3A	Mx	0	1
94	MP3B	X	0	1
95	MP3B	Z	-11.227	1
96	MP3B	Mx	-.005	1
97	MP3C	X	0	1
98	MP3C	Z	-15.28	1
99	MP3C	Mx	.001	1
100	MP2A	X	0	3
101	MP2A	Z	-77.952	3
102	MP2A	Mx	0	3
103	MP2B	X	0	3
104	MP2B	Z	-55.13	3
105	MP2B	Mx	-.026	3
106	MP2C	X	0	3
107	MP2C	Z	-77.173	3
108	MP2C	Mx	.007	3
109	MP3A	X	0	3
110	MP3A	Z	-77.952	3
111	MP3A	Mx	0	3
112	MP3B	X	0	3
113	MP3B	Z	-46.388	3
114	MP3B	Mx	-.022	3
115	MP3C	X	0	3
116	MP3C	Z	-76.874	3
117	MP3C	Mx	.007	3
118	OVP2	X	0	1
119	OVP2	Z	-135.92	1
120	OVP2	Mx	0	1
121	LR1	X	0	1
122	LR1	Z	-75.833	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	71.148	.25
2	MP1A	Z	-123.232	.25
3	MP1A	Mx	-.036	.25
4	MP1A	X	71.148	5.75
5	MP1A	Z	-123.232	5.75
6	MP1A	Mx	-.036	5.75
7	MP1B	X	69.631	.25
8	MP1B	Z	-120.605	.25
9	MP1B	Mx	.045	.25
10	MP1B	X	69.631	5.75
11	MP1B	Z	-120.605	5.75
12	MP1B	Mx	.045	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP1C	X	72.384	.25
14	MP1C	Z	-125.373	.25
15	MP1C	Mx	.025	.25
16	MP1C	X	72.384	5.75
17	MP1C	Z	-125.373	5.75
18	MP1C	Mx	.025	5.75
19	MP5A	X	71.148	.25
20	MP5A	Z	-123.232	.25
21	MP5A	Mx	-.036	.25
22	MP5A	X	71.148	5.75
23	MP5A	Z	-123.232	5.75
24	MP5A	Mx	-.036	5.75
25	MP5B	X	69.631	.25
26	MP5B	Z	-120.605	.25
27	MP5B	Mx	.045	.25
28	MP5B	X	69.631	5.75
29	MP5B	Z	-120.605	5.75
30	MP5B	Mx	.045	5.75
31	MP5C	X	72.384	.25
32	MP5C	Z	-125.373	.25
33	MP5C	Mx	.025	.25
34	MP5C	X	72.384	5.75
35	MP5C	Z	-125.373	5.75
36	MP5C	Mx	.025	5.75
37	MP3A	X	86.793	.5
38	MP3A	Z	-150.33	.5
39	MP3A	Mx	.069	.5
40	MP3A	X	86.793	5.5
41	MP3A	Z	-150.33	5.5
42	MP3A	Mx	.069	5.5
43	MP3B	X	81.476	.5
44	MP3B	Z	-141.12	.5
45	MP3B	Mx	.146	.5
46	MP3B	X	81.476	5.5
47	MP3B	Z	-141.12	5.5
48	MP3B	Mx	.146	5.5
49	MP3C	X	91.127	.5
50	MP3C	Z	-157.837	.5
51	MP3C	Mx	-.097	.5
52	MP3C	X	91.127	5.5
53	MP3C	Z	-157.837	5.5
54	MP3C	Mx	-.097	5.5
55	MP3A	X	86.793	.5
56	MP3A	Z	-150.33	.5
57	MP3A	Mx	-.156	.5
58	MP3A	X	86.793	5.5
59	MP3A	Z	-150.33	5.5
60	MP3A	Mx	-.156	5.5
61	MP3B	X	81.476	.5
62	MP3B	Z	-141.12	.5
63	MP3B	Mx	-.041	.5
64	MP3B	X	81.476	5.5
65	MP3B	Z	-141.12	5.5
66	MP3B	Mx	-.041	5.5
67	MP3C	X	91.127	.5
68	MP3C	Z	-157.837	.5
69	MP3C	Mx	.16	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP3C	X	91.127	5.5
71	MP3C	Z	-157.837	5.5
72	MP3C	Mx	.16	5.5
73	MP4A	X	39.596	2
74	MP4A	Z	-68.583	2
75	MP4A	Mx	-.02	2
76	MP4A	X	39.596	4
77	MP4A	Z	-68.583	4
78	MP4A	Mx	-.02	4
79	MP4B	X	37.349	2
80	MP4B	Z	-64.69	2
81	MP4B	Mx	.024	2
82	MP4B	X	37.349	4
83	MP4B	Z	-64.69	4
84	MP4B	Mx	.024	4
85	MP4C	X	41.429	2
86	MP4C	Z	-71.757	2
87	MP4C	Mx	.014	2
88	MP4C	X	41.429	4
89	MP4C	Z	-71.757	4
90	MP4C	Mx	.014	4
91	MP3A	X	7.118	1
92	MP3A	Z	-12.328	1
93	MP3A	Mx	.004	1
94	MP3B	X	6.73	1
95	MP3B	Z	-11.657	1
96	MP3B	Mx	-.004	1
97	MP3C	X	7.434	1
98	MP3C	Z	-12.876	1
99	MP3C	Mx	-.003	1
100	MP2A	X	35.745	3
101	MP2A	Z	-61.913	3
102	MP2A	Mx	.018	3
103	MP2B	X	33.637	3
104	MP2B	Z	-58.261	3
105	MP2B	Mx	-.022	3
106	MP2C	X	37.464	3
107	MP2C	Z	-64.89	3
108	MP2C	Mx	-.013	3
109	MP3A	X	34.508	3
110	MP3A	Z	-59.769	3
111	MP3A	Mx	.017	3
112	MP3B	X	31.591	3
113	MP3B	Z	-54.718	3
114	MP3B	Mx	-.02	3
115	MP3C	X	36.885	3
116	MP3C	Z	-63.887	3
117	MP3C	Mx	-.013	3
118	OVP2	X	55.412	1
119	OVP2	Z	-95.976	1
120	OVP2	Mx	0	1
121	LR1	X	7.558	1
122	LR1	Z	-13.091	1
123	LR1	Mx	0	1

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	115.184	.25
2	MP1A	Z	-66.502	.25
3	MP1A	Mx	-.058	.25
4	MP1A	X	115.184	5.75
5	MP1A	Z	-66.502	5.75
6	MP1A	Mx	-.058	5.75
7	MP1B	X	126.77	.25
8	MP1B	Z	-73.191	.25
9	MP1B	Mx	.013	.25
10	MP1B	X	126.77	5.75
11	MP1B	Z	-73.191	5.75
12	MP1B	Mx	.013	5.75
13	MP1C	X	117.81	.25
14	MP1C	Z	-68.018	.25
15	MP1C	Mx	.052	.25
16	MP1C	X	117.81	5.75
17	MP1C	Z	-68.018	5.75
18	MP1C	Mx	.052	5.75
19	MP5A	X	115.184	.25
20	MP5A	Z	-66.502	.25
21	MP5A	Mx	-.058	.25
22	MP5A	X	115.184	5.75
23	MP5A	Z	-66.502	5.75
24	MP5A	Mx	-.058	5.75
25	MP5B	X	126.77	.25
26	MP5B	Z	-73.191	.25
27	MP5B	Mx	.013	.25
28	MP5B	X	126.77	5.75
29	MP5B	Z	-73.191	5.75
30	MP5B	Mx	.013	5.75
31	MP5C	X	117.81	.25
32	MP5C	Z	-68.018	.25
33	MP5C	Mx	.052	.25
34	MP5C	X	117.81	5.75
35	MP5C	Z	-68.018	5.75
36	MP5C	Mx	.052	5.75
37	MP3A	X	122.111	.5
38	MP3A	Z	-70.501	.5
39	MP3A	Mx	-.008	.5
40	MP3A	X	122.111	5.5
41	MP3A	Z	-70.501	5.5
42	MP3A	Mx	-.008	5.5
43	MP3B	X	162.737	.5
44	MP3B	Z	-93.956	.5
45	MP3B	Mx	.155	.5
46	MP3B	X	162.737	5.5
47	MP3B	Z	-93.956	5.5
48	MP3B	Mx	.155	5.5
49	MP3C	X	131.32	.5
50	MP3C	Z	-75.818	.5
51	MP3C	Mx	-.015	.5
52	MP3C	X	131.32	5.5
53	MP3C	Z	-75.818	5.5
54	MP3C	Mx	-.015	5.5
55	MP3A	X	122.111	.5
56	MP3A	Z	-70.501	.5
57	MP3A	Mx	-.114	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3A	X	122.111	5.5
59	MP3A	Z	-70.501	5.5
60	MP3A	Mx	-.114	5.5
61	MP3B	X	162.737	.5
62	MP3B	Z	-93.956	.5
63	MP3B	Mx	-.122	.5
64	MP3B	X	162.737	5.5
65	MP3B	Z	-93.956	5.5
66	MP3B	Mx	-.122	5.5
67	MP3C	X	131.32	.5
68	MP3C	Z	-75.818	.5
69	MP3C	Mx	.131	.5
70	MP3C	X	131.32	5.5
71	MP3C	Z	-75.818	5.5
72	MP3C	Mx	.131	5.5
73	MP4A	X	56.653	2
74	MP4A	Z	-32.709	2
75	MP4A	Mx	-.028	2
76	MP4A	X	56.653	4
77	MP4A	Z	-32.709	4
78	MP4A	Mx	-.028	4
79	MP4B	X	73.829	2
80	MP4B	Z	-42.625	2
81	MP4B	Mx	.007	2
82	MP4B	X	73.829	4
83	MP4B	Z	-42.625	4
84	MP4B	Mx	.007	4
85	MP4C	X	60.546	2
86	MP4C	Z	-34.956	2
87	MP4C	Mx	.027	2
88	MP4C	X	60.546	4
89	MP4C	Z	-34.956	4
90	MP4C	Mx	.027	4
91	MP3A	X	10.271	1
92	MP3A	Z	-5.93	1
93	MP3A	Mx	.005	1
94	MP3B	X	13.233	1
95	MP3B	Z	-7.64	1
96	MP3B	Mx	-.001	1
97	MP3C	X	10.942	1
98	MP3C	Z	-6.317	1
99	MP3C	Mx	-.005	1
100	MP2A	X	50.722	3
101	MP2A	Z	-29.284	3
102	MP2A	Mx	.025	3
103	MP2B	X	66.834	3
104	MP2B	Z	-38.586	3
105	MP2B	Mx	-.007	3
106	MP2C	X	54.374	3
107	MP2C	Z	-31.393	3
108	MP2C	Mx	-.024	3
109	MP3A	X	44.291	3
110	MP3A	Z	-25.572	3
111	MP3A	Mx	.022	3
112	MP3B	X	66.575	3
113	MP3B	Z	-38.437	3
114	MP3B	Mx	-.007	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
115	MP3C	X	49.343	3
116	MP3C	Z	-28.488	3
117	MP3C	Mx	-.022	3
118	OVP2	X	91.96	1
119	OVP2	Z	-53.093	1
120	OVP2	Mx	0	1
121	LR1	X	3.375	1
122	LR1	Z	-1.948	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	128.357	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	-.064	.25
4	MP1A	X	128.357	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	-.064	5.75
7	MP1B	X	144.768	.25
8	MP1B	Z	0	.25
9	MP1B	Mx	-.025	.25
10	MP1B	X	144.768	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	-.025	5.75
13	MP1C	X	128.917	.25
14	MP1C	Z	0	.25
15	MP1C	Mx	.063	.25
16	MP1C	X	128.917	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	.063	5.75
19	MP5A	X	128.357	.25
20	MP5A	Z	0	.25
21	MP5A	Mx	-.064	.25
22	MP5A	X	128.357	5.75
23	MP5A	Z	0	5.75
24	MP5A	Mx	-.064	5.75
25	MP5B	X	144.768	.25
26	MP5B	Z	0	.25
27	MP5B	Mx	-.025	.25
28	MP5B	X	144.768	5.75
29	MP5B	Z	0	5.75
30	MP5B	Mx	-.025	5.75
31	MP5C	X	128.917	.25
32	MP5C	Z	0	.25
33	MP5C	Mx	.063	.25
34	MP5C	X	128.917	5.75
35	MP5C	Z	0	5.75
36	MP5C	Mx	.063	5.75
37	MP3A	X	124.709	.5
38	MP3A	Z	0	.5
39	MP3A	Mx	-.062	.5
40	MP3A	X	124.709	5.5
41	MP3A	Z	0	5.5
42	MP3A	Mx	-.062	5.5
43	MP3B	X	182.255	.5
44	MP3B	Z	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
45	MP3B	Mx	.097	.5
46	MP3B	X	182.255	5.5
47	MP3B	Z	0	5.5
48	MP3B	Mx	.097	5.5
49	MP3C	X	126.675	.5
50	MP3C	Z	0	.5
51	MP3C	Mx	.046	.5
52	MP3C	X	126.675	5.5
53	MP3C	Z	0	5.5
54	MP3C	Mx	.046	5.5
55	MP3A	X	124.709	.5
56	MP3A	Z	0	.5
57	MP3A	Mx	-.062	.5
58	MP3A	X	124.709	5.5
59	MP3A	Z	0	5.5
60	MP3A	Mx	-.062	5.5
61	MP3B	X	182.255	.5
62	MP3B	Z	0	.5
63	MP3B	Mx	-.16	.5
64	MP3B	X	182.255	5.5
65	MP3B	Z	0	5.5
66	MP3B	Mx	-.16	5.5
67	MP3C	X	126.675	.5
68	MP3C	Z	0	.5
69	MP3C	Mx	.079	.5
70	MP3C	X	126.675	5.5
71	MP3C	Z	0	5.5
72	MP3C	Mx	.079	5.5
73	MP4A	X	58.529	2
74	MP4A	Z	0	2
75	MP4A	Mx	-.029	2
76	MP4A	X	58.529	4
77	MP4A	Z	0	4
78	MP4A	Mx	-.029	4
79	MP4B	X	82.858	2
80	MP4B	Z	0	2
81	MP4B	Mx	-.014	2
82	MP4B	X	82.858	4
83	MP4B	Z	0	4
84	MP4B	Mx	-.014	4
85	MP4C	X	59.36	2
86	MP4C	Z	0	2
87	MP4C	Mx	.029	2
88	MP4C	X	59.36	4
89	MP4C	Z	0	4
90	MP4C	Mx	.029	4
91	MP3A	X	10.672	1
92	MP3A	Z	0	1
93	MP3A	Mx	.005	1
94	MP3B	X	14.868	1
95	MP3B	Z	0	1
96	MP3B	Mx	.003	1
97	MP3C	X	10.815	1
98	MP3C	Z	0	1
99	MP3C	Mx	-.005	1
100	MP2A	X	52.107	3
101	MP2A	Z	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
102	MP2A	Mx	.026	3
103	MP2B	X	74.929	3
104	MP2B	Z	0	3
105	MP2B	Mx	.013	3
106	MP2C	X	52.886	3
107	MP2C	Z	0	3
108	MP2C	Mx	-.026	3
109	MP3A	X	42.207	3
110	MP3A	Z	0	3
111	MP3A	Mx	.021	3
112	MP3B	X	73.771	3
113	MP3B	Z	0	3
114	MP3B	Mx	.013	3
115	MP3C	X	43.285	3
116	MP3C	Z	0	3
117	MP3C	Mx	-.021	3
118	OVP2	X	126.645	1
119	OVP2	Z	0	1
120	OVP2	Mx	0	1
121	LR1	X	53.393	1
122	LR1	Z	0	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	115.184	.25
2	MP1A	Z	66.502	.25
3	MP1A	Mx	-.058	.25
4	MP1A	X	115.184	5.75
5	MP1A	Z	66.502	5.75
6	MP1A	Mx	-.058	5.75
7	MP1B	X	117.81	.25
8	MP1B	Z	68.018	.25
9	MP1B	Mx	-.052	.25
10	MP1B	X	117.81	5.75
11	MP1B	Z	68.018	5.75
12	MP1B	Mx	-.052	5.75
13	MP1C	X	113.043	.25
14	MP1C	Z	65.265	.25
15	MP1C	Mx	.061	.25
16	MP1C	X	113.043	5.75
17	MP1C	Z	65.265	5.75
18	MP1C	Mx	.061	5.75
19	MP5A	X	115.184	.25
20	MP5A	Z	66.502	.25
21	MP5A	Mx	-.058	.25
22	MP5A	X	115.184	5.75
23	MP5A	Z	66.502	5.75
24	MP5A	Mx	-.058	5.75
25	MP5B	X	117.81	.25
26	MP5B	Z	68.018	.25
27	MP5B	Mx	-.052	.25
28	MP5B	X	117.81	5.75
29	MP5B	Z	68.018	5.75
30	MP5B	Mx	-.052	5.75
31	MP5C	X	113.043	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP5C	Z	65.265	.25
33	MP5C	Mx	.061	.25
34	MP5C	X	113.043	5.75
35	MP5C	Z	65.265	5.75
36	MP5C	Mx	.061	5.75
37	MP3A	X	122.111	.5
38	MP3A	Z	70.501	.5
39	MP3A	Mx	-.114	.5
40	MP3A	X	122.111	5.5
41	MP3A	Z	70.501	5.5
42	MP3A	Mx	-.114	5.5
43	MP3B	X	131.32	.5
44	MP3B	Z	75.818	.5
45	MP3B	Mx	.015	.5
46	MP3B	X	131.32	5.5
47	MP3B	Z	75.818	5.5
48	MP3B	Mx	.015	5.5
49	MP3C	X	114.603	.5
50	MP3C	Z	66.166	.5
51	MP3C	Mx	.096	.5
52	MP3C	X	114.603	5.5
53	MP3C	Z	66.166	5.5
54	MP3C	Mx	.096	5.5
55	MP3A	X	122.111	.5
56	MP3A	Z	70.501	.5
57	MP3A	Mx	-.008	.5
58	MP3A	X	122.111	5.5
59	MP3A	Z	70.501	5.5
60	MP3A	Mx	-.008	5.5
61	MP3B	X	131.32	.5
62	MP3B	Z	75.818	.5
63	MP3B	Mx	-.131	.5
64	MP3B	X	131.32	5.5
65	MP3B	Z	75.818	5.5
66	MP3B	Mx	-.131	5.5
67	MP3C	X	114.603	.5
68	MP3C	Z	66.166	.5
69	MP3C	Mx	.028	.5
70	MP3C	X	114.603	5.5
71	MP3C	Z	66.166	5.5
72	MP3C	Mx	.028	5.5
73	MP4A	X	56.653	2
74	MP4A	Z	32.709	2
75	MP4A	Mx	-.028	2
76	MP4A	X	56.653	4
77	MP4A	Z	32.709	4
78	MP4A	Mx	-.028	4
79	MP4B	X	60.546	2
80	MP4B	Z	34.956	2
81	MP4B	Mx	-.027	2
82	MP4B	X	60.546	4
83	MP4B	Z	34.956	4
84	MP4B	Mx	-.027	4
85	MP4C	X	53.479	2
86	MP4C	Z	30.876	2
87	MP4C	Mx	.029	2
88	MP4C	X	53.479	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
89	MP4C	Z	30.876	4
90	MP4C	Mx	.029	4
91	MP3A	X	10.271	1
92	MP3A	Z	5.93	1
93	MP3A	Mx	.005	1
94	MP3B	X	10.942	1
95	MP3B	Z	6.317	1
96	MP3B	Mx	.005	1
97	MP3C	X	9.723	1
98	MP3C	Z	5.614	1
99	MP3C	Mx	-.005	1
100	MP2A	X	50.722	3
101	MP2A	Z	29.284	3
102	MP2A	Mx	.025	3
103	MP2B	X	54.374	3
104	MP2B	Z	31.393	3
105	MP2B	Mx	.024	3
106	MP2C	X	47.744	3
107	MP2C	Z	27.565	3
108	MP2C	Mx	-.026	3
109	MP3A	X	44.291	3
110	MP3A	Z	25.572	3
111	MP3A	Mx	.022	3
112	MP3B	X	49.343	3
113	MP3B	Z	28.488	3
114	MP3B	Mx	.022	3
115	MP3C	X	40.173	3
116	MP3C	Z	23.194	3
117	MP3C	Mx	-.022	3
118	OVP2	X	131.411	1
119	OVP2	Z	75.87	1
120	OVP2	Mx	0	1
121	LR1	X	98.821	1
122	LR1	Z	57.054	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	71.148	.25
2	MP1A	Z	123.232	.25
3	MP1A	Mx	-.036	.25
4	MP1A	X	71.148	5.75
5	MP1A	Z	123.232	5.75
6	MP1A	Mx	-.036	5.75
7	MP1B	X	64.459	.25
8	MP1B	Z	111.646	.25
9	MP1B	Mx	-.063	.25
10	MP1B	X	64.459	5.75
11	MP1B	Z	111.646	5.75
12	MP1B	Mx	-.063	5.75
13	MP1C	X	69.631	.25
14	MP1C	Z	120.605	.25
15	MP1C	Mx	.045	.25
16	MP1C	X	69.631	5.75
17	MP1C	Z	120.605	5.75
18	MP1C	Mx	.045	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP5A	X	71.148	.25
20	MP5A	Z	123.232	.25
21	MP5A	Mx	-.036	.25
22	MP5A	X	71.148	5.75
23	MP5A	Z	123.232	5.75
24	MP5A	Mx	-.036	5.75
25	MP5B	X	64.459	.25
26	MP5B	Z	111.646	.25
27	MP5B	Mx	-.063	.25
28	MP5B	X	64.459	5.75
29	MP5B	Z	111.646	5.75
30	MP5B	Mx	-.063	5.75
31	MP5C	X	69.631	.25
32	MP5C	Z	120.605	.25
33	MP5C	Mx	.045	.25
34	MP5C	X	69.631	5.75
35	MP5C	Z	120.605	5.75
36	MP5C	Mx	.045	5.75
37	MP3A	X	86.793	.5
38	MP3A	Z	150.33	.5
39	MP3A	Mx	-.156	.5
40	MP3A	X	86.793	5.5
41	MP3A	Z	150.33	5.5
42	MP3A	Mx	-.156	5.5
43	MP3B	X	63.337	.5
44	MP3B	Z	109.703	.5
45	MP3B	Mx	-.046	.5
46	MP3B	X	63.337	5.5
47	MP3B	Z	109.703	5.5
48	MP3B	Mx	-.046	5.5
49	MP3C	X	81.476	.5
50	MP3C	Z	141.12	.5
51	MP3C	Mx	.146	.5
52	MP3C	X	81.476	5.5
53	MP3C	Z	141.12	5.5
54	MP3C	Mx	.146	5.5
55	MP3A	X	86.793	.5
56	MP3A	Z	150.33	.5
57	MP3A	Mx	.069	.5
58	MP3A	X	86.793	5.5
59	MP3A	Z	150.33	5.5
60	MP3A	Mx	.069	5.5
61	MP3B	X	63.337	.5
62	MP3B	Z	109.703	.5
63	MP3B	Mx	-.079	.5
64	MP3B	X	63.337	5.5
65	MP3B	Z	109.703	5.5
66	MP3B	Mx	-.079	5.5
67	MP3C	X	81.476	.5
68	MP3C	Z	141.12	.5
69	MP3C	Mx	-.041	.5
70	MP3C	X	81.476	5.5
71	MP3C	Z	141.12	5.5
72	MP3C	Mx	-.041	5.5
73	MP4A	X	39.596	2
74	MP4A	Z	68.583	2
75	MP4A	Mx	-.02	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
76	MP4A	X	39.596	4
77	MP4A	Z	68.583	4
78	MP4A	Mx	-.02	4
79	MP4B	X	29.68	2
80	MP4B	Z	51.407	2
81	MP4B	Mx	-.029	2
82	MP4B	X	29.68	4
83	MP4B	Z	51.407	4
84	MP4B	Mx	-.029	4
85	MP4C	X	37.349	2
86	MP4C	Z	64.69	2
87	MP4C	Mx	.024	2
88	MP4C	X	37.349	4
89	MP4C	Z	64.69	4
90	MP4C	Mx	.024	4
91	MP3A	X	7.118	1
92	MP3A	Z	12.328	1
93	MP3A	Mx	.004	1
94	MP3B	X	5.407	1
95	MP3B	Z	9.366	1
96	MP3B	Mx	.005	1
97	MP3C	X	6.73	1
98	MP3C	Z	11.657	1
99	MP3C	Mx	-.004	1
100	MP2A	X	35.745	3
101	MP2A	Z	61.913	3
102	MP2A	Mx	.018	3
103	MP2B	X	26.443	3
104	MP2B	Z	45.801	3
105	MP2B	Mx	.026	3
106	MP2C	X	33.637	3
107	MP2C	Z	58.261	3
108	MP2C	Mx	-.022	3
109	MP3A	X	34.508	3
110	MP3A	Z	59.769	3
111	MP3A	Mx	.017	3
112	MP3B	X	21.642	3
113	MP3B	Z	37.486	3
114	MP3B	Mx	.021	3
115	MP3C	X	31.591	3
116	MP3C	Z	54.718	3
117	MP3C	Mx	-.02	3
118	OVP2	X	78.189	1
119	OVP2	Z	135.427	1
120	OVP2	Mx	0	1
121	LR1	X	62.664	1
122	LR1	Z	108.538	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	146.942	.25
3	MP1A	Mx	0	.25
4	MP1A	X	0	5.75
5	MP1A	Z	146.942	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP1A	Mx	0	5.75
7	MP1B	X	0	.25
8	MP1B	Z	130.531	.25
9	MP1B	Mx	-.061	.25
10	MP1B	X	0	5.75
11	MP1B	Z	130.531	5.75
12	MP1B	Mx	-.061	5.75
13	MP1C	X	0	.25
14	MP1C	Z	146.381	.25
15	MP1C	Mx	.013	.25
16	MP1C	X	0	5.75
17	MP1C	Z	146.381	5.75
18	MP1C	Mx	.013	5.75
19	MP5A	X	0	.25
20	MP5A	Z	146.942	.25
21	MP5A	Mx	0	.25
22	MP5A	X	0	5.75
23	MP5A	Z	146.942	5.75
24	MP5A	Mx	0	5.75
25	MP5B	X	0	.25
26	MP5B	Z	130.531	.25
27	MP5B	Mx	-.061	.25
28	MP5B	X	0	5.75
29	MP5B	Z	130.531	5.75
30	MP5B	Mx	-.061	5.75
31	MP5C	X	0	.25
32	MP5C	Z	146.381	.25
33	MP5C	Mx	.013	.25
34	MP5C	X	0	5.75
35	MP5C	Z	146.381	5.75
36	MP5C	Mx	.013	5.75
37	MP3A	X	0	.5
38	MP3A	Z	189.878	.5
39	MP3A	Mx	-.142	.5
40	MP3A	X	0	5.5
41	MP3A	Z	189.878	5.5
42	MP3A	Mx	-.142	5.5
43	MP3B	X	0	.5
44	MP3B	Z	132.333	.5
45	MP3B	Mx	-.096	.5
46	MP3B	X	0	5.5
47	MP3B	Z	132.333	5.5
48	MP3B	Mx	-.096	5.5
49	MP3C	X	0	.5
50	MP3C	Z	187.913	.5
51	MP3C	Mx	.155	.5
52	MP3C	X	0	5.5
53	MP3C	Z	187.913	5.5
54	MP3C	Mx	.155	5.5
55	MP3A	X	0	.5
56	MP3A	Z	189.878	.5
57	MP3A	Mx	.142	.5
58	MP3A	X	0	5.5
59	MP3A	Z	189.878	5.5
60	MP3A	Mx	.142	5.5
61	MP3B	X	0	.5
62	MP3B	Z	132.333	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
63	MP3B	Mx	-.028	.5
64	MP3B	X	0	5.5
65	MP3B	Z	132.333	5.5
66	MP3B	Mx	-.028	5.5
67	MP3C	X	0	.5
68	MP3C	Z	187.913	.5
69	MP3C	Mx	-.122	.5
70	MP3C	X	0	5.5
71	MP3C	Z	187.913	5.5
72	MP3C	Mx	-.122	5.5
73	MP4A	X	0	2
74	MP4A	Z	86.081	2
75	MP4A	Mx	0	2
76	MP4A	X	0	4
77	MP4A	Z	86.081	4
78	MP4A	Mx	0	4
79	MP4B	X	0	2
80	MP4B	Z	61.752	2
81	MP4B	Mx	-.029	2
82	MP4B	X	0	4
83	MP4B	Z	61.752	4
84	MP4B	Mx	-.029	4
85	MP4C	X	0	2
86	MP4C	Z	85.25	2
87	MP4C	Mx	.007	2
88	MP4C	X	0	4
89	MP4C	Z	85.25	4
90	MP4C	Mx	.007	4
91	MP3A	X	0	1
92	MP3A	Z	15.424	1
93	MP3A	Mx	0	1
94	MP3B	X	0	1
95	MP3B	Z	11.227	1
96	MP3B	Mx	.005	1
97	MP3C	X	0	1
98	MP3C	Z	15.28	1
99	MP3C	Mx	-.001	1
100	MP2A	X	0	3
101	MP2A	Z	77.952	3
102	MP2A	Mx	0	3
103	MP2B	X	0	3
104	MP2B	Z	55.13	3
105	MP2B	Mx	.026	3
106	MP2C	X	0	3
107	MP2C	Z	77.173	3
108	MP2C	Mx	-.007	3
109	MP3A	X	0	3
110	MP3A	Z	77.952	3
111	MP3A	Mx	0	3
112	MP3B	X	0	3
113	MP3B	Z	46.388	3
114	MP3B	Mx	.022	3
115	MP3C	X	0	3
116	MP3C	Z	76.874	3
117	MP3C	Mx	-.007	3
118	OVP2	X	0	1
119	OVP2	Z	135.92	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
120	OVP2	Mx	0	1
121	LR1	X	0	1
122	LR1	Z	75.833	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-71.148	.25
2	MP1A	Z	123.232	.25
3	MP1A	Mx	.036	.25
4	MP1A	X	-71.148	5.75
5	MP1A	Z	123.232	5.75
6	MP1A	Mx	.036	5.75
7	MP1B	X	-69.631	.25
8	MP1B	Z	120.605	.25
9	MP1B	Mx	-.045	.25
10	MP1B	X	-69.631	5.75
11	MP1B	Z	120.605	5.75
12	MP1B	Mx	-.045	5.75
13	MP1C	X	-72.384	.25
14	MP1C	Z	125.373	.25
15	MP1C	Mx	-.025	.25
16	MP1C	X	-72.384	5.75
17	MP1C	Z	125.373	5.75
18	MP1C	Mx	-.025	5.75
19	MP5A	X	-71.148	.25
20	MP5A	Z	123.232	.25
21	MP5A	Mx	.036	.25
22	MP5A	X	-71.148	5.75
23	MP5A	Z	123.232	5.75
24	MP5A	Mx	.036	5.75
25	MP5B	X	-69.631	.25
26	MP5B	Z	120.605	.25
27	MP5B	Mx	-.045	.25
28	MP5B	X	-69.631	5.75
29	MP5B	Z	120.605	5.75
30	MP5B	Mx	-.045	5.75
31	MP5C	X	-72.384	.25
32	MP5C	Z	125.373	.25
33	MP5C	Mx	-.025	.25
34	MP5C	X	-72.384	5.75
35	MP5C	Z	125.373	5.75
36	MP5C	Mx	-.025	5.75
37	MP3A	X	-86.793	.5
38	MP3A	Z	150.33	.5
39	MP3A	Mx	-.069	.5
40	MP3A	X	-86.793	5.5
41	MP3A	Z	150.33	5.5
42	MP3A	Mx	-.069	5.5
43	MP3B	X	-81.476	.5
44	MP3B	Z	141.12	.5
45	MP3B	Mx	-.146	.5
46	MP3B	X	-81.476	5.5
47	MP3B	Z	141.12	5.5
48	MP3B	Mx	-.146	5.5
49	MP3C	X	-91.127	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
50	MP3C	Z	157.837	.5
51	MP3C	Mx	.097	.5
52	MP3C	X	-91.127	5.5
53	MP3C	Z	157.837	5.5
54	MP3C	Mx	.097	5.5
55	MP3A	X	-86.793	.5
56	MP3A	Z	150.33	.5
57	MP3A	Mx	.156	.5
58	MP3A	X	-86.793	5.5
59	MP3A	Z	150.33	5.5
60	MP3A	Mx	.156	5.5
61	MP3B	X	-81.476	.5
62	MP3B	Z	141.12	.5
63	MP3B	Mx	.041	.5
64	MP3B	X	-81.476	5.5
65	MP3B	Z	141.12	5.5
66	MP3B	Mx	.041	5.5
67	MP3C	X	-91.127	.5
68	MP3C	Z	157.837	.5
69	MP3C	Mx	-.16	.5
70	MP3C	X	-91.127	5.5
71	MP3C	Z	157.837	5.5
72	MP3C	Mx	-.16	5.5
73	MP4A	X	-39.596	2
74	MP4A	Z	68.583	2
75	MP4A	Mx	.02	2
76	MP4A	X	-39.596	4
77	MP4A	Z	68.583	4
78	MP4A	Mx	.02	4
79	MP4B	X	-37.349	2
80	MP4B	Z	64.69	2
81	MP4B	Mx	-.024	2
82	MP4B	X	-37.349	4
83	MP4B	Z	64.69	4
84	MP4B	Mx	-.024	4
85	MP4C	X	-41.429	2
86	MP4C	Z	71.757	2
87	MP4C	Mx	-.014	2
88	MP4C	X	-41.429	4
89	MP4C	Z	71.757	4
90	MP4C	Mx	-.014	4
91	MP3A	X	-7.118	1
92	MP3A	Z	12.328	1
93	MP3A	Mx	-.004	1
94	MP3B	X	-6.73	1
95	MP3B	Z	11.657	1
96	MP3B	Mx	.004	1
97	MP3C	X	-7.434	1
98	MP3C	Z	12.876	1
99	MP3C	Mx	.003	1
100	MP2A	X	-35.745	3
101	MP2A	Z	61.913	3
102	MP2A	Mx	-.018	3
103	MP2B	X	-33.637	3
104	MP2B	Z	58.261	3
105	MP2B	Mx	.022	3
106	MP2C	X	-37.464	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
107	MP2C	Z	64.89	3
108	MP2C	Mx	.013	3
109	MP3A	X	-34.508	3
110	MP3A	Z	59.769	3
111	MP3A	Mx	-.017	3
112	MP3B	X	-31.591	3
113	MP3B	Z	54.718	3
114	MP3B	Mx	.02	3
115	MP3C	X	-36.885	3
116	MP3C	Z	63.887	3
117	MP3C	Mx	.013	3
118	OVP2	X	-55.412	1
119	OVP2	Z	95.976	1
120	OVP2	Mx	0	1
121	LR1	X	-7.558	1
122	LR1	Z	13.091	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-115.184	.25
2	MP1A	Z	66.502	.25
3	MP1A	Mx	.058	.25
4	MP1A	X	-115.184	5.75
5	MP1A	Z	66.502	5.75
6	MP1A	Mx	.058	5.75
7	MP1B	X	-126.77	.25
8	MP1B	Z	73.191	.25
9	MP1B	Mx	-.013	.25
10	MP1B	X	-126.77	5.75
11	MP1B	Z	73.191	5.75
12	MP1B	Mx	-.013	5.75
13	MP1C	X	-117.81	.25
14	MP1C	Z	68.018	.25
15	MP1C	Mx	-.052	.25
16	MP1C	X	-117.81	5.75
17	MP1C	Z	68.018	5.75
18	MP1C	Mx	-.052	5.75
19	MP5A	X	-115.184	.25
20	MP5A	Z	66.502	.25
21	MP5A	Mx	.058	.25
22	MP5A	X	-115.184	5.75
23	MP5A	Z	66.502	5.75
24	MP5A	Mx	.058	5.75
25	MP5B	X	-126.77	.25
26	MP5B	Z	73.191	.25
27	MP5B	Mx	-.013	.25
28	MP5B	X	-126.77	5.75
29	MP5B	Z	73.191	5.75
30	MP5B	Mx	-.013	5.75
31	MP5C	X	-117.81	.25
32	MP5C	Z	68.018	.25
33	MP5C	Mx	-.052	.25
34	MP5C	X	-117.81	5.75
35	MP5C	Z	68.018	5.75
36	MP5C	Mx	-.052	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
37	MP3A	X	-122.111	.5
38	MP3A	Z	70.501	.5
39	MP3A	Mx	.008	.5
40	MP3A	X	-122.111	5.5
41	MP3A	Z	70.501	5.5
42	MP3A	Mx	.008	5.5
43	MP3B	X	-162.737	.5
44	MP3B	Z	93.956	.5
45	MP3B	Mx	-.155	.5
46	MP3B	X	-162.737	5.5
47	MP3B	Z	93.956	5.5
48	MP3B	Mx	-.155	5.5
49	MP3C	X	-131.32	.5
50	MP3C	Z	75.818	.5
51	MP3C	Mx	.015	.5
52	MP3C	X	-131.32	5.5
53	MP3C	Z	75.818	5.5
54	MP3C	Mx	.015	5.5
55	MP3A	X	-122.111	.5
56	MP3A	Z	70.501	.5
57	MP3A	Mx	.114	.5
58	MP3A	X	-122.111	5.5
59	MP3A	Z	70.501	5.5
60	MP3A	Mx	.114	5.5
61	MP3B	X	-162.737	.5
62	MP3B	Z	93.956	.5
63	MP3B	Mx	.122	.5
64	MP3B	X	-162.737	5.5
65	MP3B	Z	93.956	5.5
66	MP3B	Mx	.122	5.5
67	MP3C	X	-131.32	.5
68	MP3C	Z	75.818	.5
69	MP3C	Mx	-.131	.5
70	MP3C	X	-131.32	5.5
71	MP3C	Z	75.818	5.5
72	MP3C	Mx	-.131	5.5
73	MP4A	X	-56.653	2
74	MP4A	Z	32.709	2
75	MP4A	Mx	.028	2
76	MP4A	X	-56.653	4
77	MP4A	Z	32.709	4
78	MP4A	Mx	.028	4
79	MP4B	X	-73.829	2
80	MP4B	Z	42.625	2
81	MP4B	Mx	-.007	2
82	MP4B	X	-73.829	4
83	MP4B	Z	42.625	4
84	MP4B	Mx	-.007	4
85	MP4C	X	-60.546	2
86	MP4C	Z	34.956	2
87	MP4C	Mx	-.027	2
88	MP4C	X	-60.546	4
89	MP4C	Z	34.956	4
90	MP4C	Mx	-.027	4
91	MP3A	X	-10.271	1
92	MP3A	Z	5.93	1
93	MP3A	Mx	-.005	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
94	MP3B	X	-13.233	1
95	MP3B	Z	7.64	1
96	MP3B	Mx	.001	1
97	MP3C	X	-10.942	1
98	MP3C	Z	6.317	1
99	MP3C	Mx	.005	1
100	MP2A	X	-50.722	3
101	MP2A	Z	29.284	3
102	MP2A	Mx	-.025	3
103	MP2B	X	-66.834	3
104	MP2B	Z	38.586	3
105	MP2B	Mx	.007	3
106	MP2C	X	-54.374	3
107	MP2C	Z	31.393	3
108	MP2C	Mx	.024	3
109	MP3A	X	-44.291	3
110	MP3A	Z	25.572	3
111	MP3A	Mx	-.022	3
112	MP3B	X	-66.575	3
113	MP3B	Z	38.437	3
114	MP3B	Mx	.007	3
115	MP3C	X	-49.343	3
116	MP3C	Z	28.488	3
117	MP3C	Mx	.022	3
118	OVP2	X	-91.96	1
119	OVP2	Z	53.093	1
120	OVP2	Mx	0	1
121	LR1	X	-3.375	1
122	LR1	Z	1.948	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-128.357	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	.064	.25
4	MP1A	X	-128.357	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	.064	5.75
7	MP1B	X	-144.768	.25
8	MP1B	Z	0	.25
9	MP1B	Mx	.025	.25
10	MP1B	X	-144.768	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	.025	5.75
13	MP1C	X	-128.917	.25
14	MP1C	Z	0	.25
15	MP1C	Mx	-.063	.25
16	MP1C	X	-128.917	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	-.063	5.75
19	MP5A	X	-128.357	.25
20	MP5A	Z	0	.25
21	MP5A	Mx	.064	.25
22	MP5A	X	-128.357	5.75
23	MP5A	Z	0	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP5A	Mx	.064	5.75
25	MP5B	X	-144.768	.25
26	MP5B	Z	0	.25
27	MP5B	Mx	.025	.25
28	MP5B	X	-144.768	5.75
29	MP5B	Z	0	5.75
30	MP5B	Mx	.025	5.75
31	MP5C	X	-128.917	.25
32	MP5C	Z	0	.25
33	MP5C	Mx	-.063	.25
34	MP5C	X	-128.917	5.75
35	MP5C	Z	0	5.75
36	MP5C	Mx	-.063	5.75
37	MP3A	X	-124.709	.5
38	MP3A	Z	0	.5
39	MP3A	Mx	.062	.5
40	MP3A	X	-124.709	5.5
41	MP3A	Z	0	5.5
42	MP3A	Mx	.062	5.5
43	MP3B	X	-182.255	.5
44	MP3B	Z	0	.5
45	MP3B	Mx	-.097	.5
46	MP3B	X	-182.255	5.5
47	MP3B	Z	0	5.5
48	MP3B	Mx	-.097	5.5
49	MP3C	X	-126.675	.5
50	MP3C	Z	0	.5
51	MP3C	Mx	-.046	.5
52	MP3C	X	-126.675	5.5
53	MP3C	Z	0	5.5
54	MP3C	Mx	-.046	5.5
55	MP3A	X	-124.709	.5
56	MP3A	Z	0	.5
57	MP3A	Mx	.062	.5
58	MP3A	X	-124.709	5.5
59	MP3A	Z	0	5.5
60	MP3A	Mx	.062	5.5
61	MP3B	X	-182.255	.5
62	MP3B	Z	0	.5
63	MP3B	Mx	.16	.5
64	MP3B	X	-182.255	5.5
65	MP3B	Z	0	5.5
66	MP3B	Mx	.16	5.5
67	MP3C	X	-126.675	.5
68	MP3C	Z	0	.5
69	MP3C	Mx	-.079	.5
70	MP3C	X	-126.675	5.5
71	MP3C	Z	0	5.5
72	MP3C	Mx	-.079	5.5
73	MP4A	X	-58.529	2
74	MP4A	Z	0	2
75	MP4A	Mx	.029	2
76	MP4A	X	-58.529	4
77	MP4A	Z	0	4
78	MP4A	Mx	.029	4
79	MP4B	X	-82.858	2
80	MP4B	Z	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
81	MP4B	Mx	.014	2
82	MP4B	X	-82.858	4
83	MP4B	Z	0	4
84	MP4B	Mx	.014	4
85	MP4C	X	-59.36	2
86	MP4C	Z	0	2
87	MP4C	Mx	-.029	2
88	MP4C	X	-59.36	4
89	MP4C	Z	0	4
90	MP4C	Mx	-.029	4
91	MP3A	X	-10.672	1
92	MP3A	Z	0	1
93	MP3A	Mx	-.005	1
94	MP3B	X	-14.868	1
95	MP3B	Z	0	1
96	MP3B	Mx	-.003	1
97	MP3C	X	-10.815	1
98	MP3C	Z	0	1
99	MP3C	Mx	.005	1
100	MP2A	X	-52.107	3
101	MP2A	Z	0	3
102	MP2A	Mx	-.026	3
103	MP2B	X	-74.929	3
104	MP2B	Z	0	3
105	MP2B	Mx	-.013	3
106	MP2C	X	-52.886	3
107	MP2C	Z	0	3
108	MP2C	Mx	.026	3
109	MP3A	X	-42.207	3
110	MP3A	Z	0	3
111	MP3A	Mx	-.021	3
112	MP3B	X	-73.771	3
113	MP3B	Z	0	3
114	MP3B	Mx	-.013	3
115	MP3C	X	-43.285	3
116	MP3C	Z	0	3
117	MP3C	Mx	.021	3
118	OVP2	X	-126.645	1
119	OVP2	Z	0	1
120	OVP2	Mx	0	1
121	LR1	X	-53.393	1
122	LR1	Z	0	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-115.184	.25
2	MP1A	Z	-66.502	.25
3	MP1A	Mx	.058	.25
4	MP1A	X	-115.184	5.75
5	MP1A	Z	-66.502	5.75
6	MP1A	Mx	.058	5.75
7	MP1B	X	-117.81	.25
8	MP1B	Z	-68.018	.25
9	MP1B	Mx	.052	.25
10	MP1B	X	-117.81	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP1B	Z	-68.018	5.75
12	MP1B	Mx	.052	5.75
13	MP1C	X	-113.043	.25
14	MP1C	Z	-65.265	.25
15	MP1C	Mx	-.061	.25
16	MP1C	X	-113.043	5.75
17	MP1C	Z	-65.265	5.75
18	MP1C	Mx	-.061	5.75
19	MP5A	X	-115.184	.25
20	MP5A	Z	-66.502	.25
21	MP5A	Mx	.058	.25
22	MP5A	X	-115.184	5.75
23	MP5A	Z	-66.502	5.75
24	MP5A	Mx	.058	5.75
25	MP5B	X	-117.81	.25
26	MP5B	Z	-68.018	.25
27	MP5B	Mx	.052	.25
28	MP5B	X	-117.81	5.75
29	MP5B	Z	-68.018	5.75
30	MP5B	Mx	.052	5.75
31	MP5C	X	-113.043	.25
32	MP5C	Z	-65.265	.25
33	MP5C	Mx	-.061	.25
34	MP5C	X	-113.043	5.75
35	MP5C	Z	-65.265	5.75
36	MP5C	Mx	-.061	5.75
37	MP3A	X	-122.111	.5
38	MP3A	Z	-70.501	.5
39	MP3A	Mx	.114	.5
40	MP3A	X	-122.111	5.5
41	MP3A	Z	-70.501	5.5
42	MP3A	Mx	.114	5.5
43	MP3B	X	-131.32	.5
44	MP3B	Z	-75.818	.5
45	MP3B	Mx	-.015	.5
46	MP3B	X	-131.32	5.5
47	MP3B	Z	-75.818	5.5
48	MP3B	Mx	-.015	5.5
49	MP3C	X	-114.603	.5
50	MP3C	Z	-66.166	.5
51	MP3C	Mx	-.096	.5
52	MP3C	X	-114.603	5.5
53	MP3C	Z	-66.166	5.5
54	MP3C	Mx	-.096	5.5
55	MP3A	X	-122.111	.5
56	MP3A	Z	-70.501	.5
57	MP3A	Mx	.008	.5
58	MP3A	X	-122.111	5.5
59	MP3A	Z	-70.501	5.5
60	MP3A	Mx	.008	5.5
61	MP3B	X	-131.32	.5
62	MP3B	Z	-75.818	.5
63	MP3B	Mx	.131	.5
64	MP3B	X	-131.32	5.5
65	MP3B	Z	-75.818	5.5
66	MP3B	Mx	.131	5.5
67	MP3C	X	-114.603	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
68	MP3C	Z	-66.166	.5
69	MP3C	Mx	-.028	.5
70	MP3C	X	-114.603	5.5
71	MP3C	Z	-66.166	5.5
72	MP3C	Mx	-.028	5.5
73	MP4A	X	-56.653	2
74	MP4A	Z	-32.709	2
75	MP4A	Mx	.028	2
76	MP4A	X	-56.653	4
77	MP4A	Z	-32.709	4
78	MP4A	Mx	.028	4
79	MP4B	X	-60.546	2
80	MP4B	Z	-34.956	2
81	MP4B	Mx	.027	2
82	MP4B	X	-60.546	4
83	MP4B	Z	-34.956	4
84	MP4B	Mx	.027	4
85	MP4C	X	-53.479	2
86	MP4C	Z	-30.876	2
87	MP4C	Mx	-.029	2
88	MP4C	X	-53.479	4
89	MP4C	Z	-30.876	4
90	MP4C	Mx	-.029	4
91	MP3A	X	-10.271	1
92	MP3A	Z	-5.93	1
93	MP3A	Mx	-.005	1
94	MP3B	X	-10.942	1
95	MP3B	Z	-6.317	1
96	MP3B	Mx	-.005	1
97	MP3C	X	-9.723	1
98	MP3C	Z	-5.614	1
99	MP3C	Mx	.005	1
100	MP2A	X	-50.722	3
101	MP2A	Z	-29.284	3
102	MP2A	Mx	-.025	3
103	MP2B	X	-54.374	3
104	MP2B	Z	-31.393	3
105	MP2B	Mx	-.024	3
106	MP2C	X	-47.744	3
107	MP2C	Z	-27.565	3
108	MP2C	Mx	.026	3
109	MP3A	X	-44.291	3
110	MP3A	Z	-25.572	3
111	MP3A	Mx	-.022	3
112	MP3B	X	-49.343	3
113	MP3B	Z	-28.488	3
114	MP3B	Mx	-.022	3
115	MP3C	X	-40.173	3
116	MP3C	Z	-23.194	3
117	MP3C	Mx	.022	3
118	OVP2	X	-131.411	1
119	OVP2	Z	-75.87	1
120	OVP2	Mx	0	1
121	LR1	X	-98.821	1
122	LR1	Z	-57.054	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-71.148	.25
2	MP1A	Z	-123.232	.25
3	MP1A	Mx	.036	.25
4	MP1A	X	-71.148	5.75
5	MP1A	Z	-123.232	5.75
6	MP1A	Mx	.036	5.75
7	MP1B	X	-64.459	.25
8	MP1B	Z	-111.646	.25
9	MP1B	Mx	.063	.25
10	MP1B	X	-64.459	5.75
11	MP1B	Z	-111.646	5.75
12	MP1B	Mx	.063	5.75
13	MP1C	X	-69.631	.25
14	MP1C	Z	-120.605	.25
15	MP1C	Mx	-.045	.25
16	MP1C	X	-69.631	5.75
17	MP1C	Z	-120.605	5.75
18	MP1C	Mx	-.045	5.75
19	MP5A	X	-71.148	.25
20	MP5A	Z	-123.232	.25
21	MP5A	Mx	.036	.25
22	MP5A	X	-71.148	5.75
23	MP5A	Z	-123.232	5.75
24	MP5A	Mx	.036	5.75
25	MP5B	X	-64.459	.25
26	MP5B	Z	-111.646	.25
27	MP5B	Mx	.063	.25
28	MP5B	X	-64.459	5.75
29	MP5B	Z	-111.646	5.75
30	MP5B	Mx	.063	5.75
31	MP5C	X	-69.631	.25
32	MP5C	Z	-120.605	.25
33	MP5C	Mx	-.045	.25
34	MP5C	X	-69.631	5.75
35	MP5C	Z	-120.605	5.75
36	MP5C	Mx	-.045	5.75
37	MP3A	X	-86.793	.5
38	MP3A	Z	-150.33	.5
39	MP3A	Mx	.156	.5
40	MP3A	X	-86.793	5.5
41	MP3A	Z	-150.33	5.5
42	MP3A	Mx	.156	5.5
43	MP3B	X	-63.337	.5
44	MP3B	Z	-109.703	.5
45	MP3B	Mx	.046	.5
46	MP3B	X	-63.337	5.5
47	MP3B	Z	-109.703	5.5
48	MP3B	Mx	.046	5.5
49	MP3C	X	-81.476	.5
50	MP3C	Z	-141.12	.5
51	MP3C	Mx	-.146	.5
52	MP3C	X	-81.476	5.5
53	MP3C	Z	-141.12	5.5
54	MP3C	Mx	-.146	5.5
55	MP3A	X	-86.793	.5
56	MP3A	Z	-150.33	.5
57	MP3A	Mx	-.069	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3A	X	-86.793	5.5
59	MP3A	Z	-150.33	5.5
60	MP3A	Mx	-.069	5.5
61	MP3B	X	-63.337	.5
62	MP3B	Z	-109.703	.5
63	MP3B	Mx	.079	.5
64	MP3B	X	-63.337	5.5
65	MP3B	Z	-109.703	5.5
66	MP3B	Mx	.079	5.5
67	MP3C	X	-81.476	.5
68	MP3C	Z	-141.12	.5
69	MP3C	Mx	.041	.5
70	MP3C	X	-81.476	5.5
71	MP3C	Z	-141.12	5.5
72	MP3C	Mx	.041	5.5
73	MP4A	X	-39.596	2
74	MP4A	Z	-68.583	2
75	MP4A	Mx	.02	2
76	MP4A	X	-39.596	4
77	MP4A	Z	-68.583	4
78	MP4A	Mx	.02	4
79	MP4B	X	-29.68	2
80	MP4B	Z	-51.407	2
81	MP4B	Mx	.029	2
82	MP4B	X	-29.68	4
83	MP4B	Z	-51.407	4
84	MP4B	Mx	.029	4
85	MP4C	X	-37.349	2
86	MP4C	Z	-64.69	2
87	MP4C	Mx	-.024	2
88	MP4C	X	-37.349	4
89	MP4C	Z	-64.69	4
90	MP4C	Mx	-.024	4
91	MP3A	X	-7.118	1
92	MP3A	Z	-12.328	1
93	MP3A	Mx	-.004	1
94	MP3B	X	-5.407	1
95	MP3B	Z	-9.366	1
96	MP3B	Mx	-.005	1
97	MP3C	X	-6.73	1
98	MP3C	Z	-11.657	1
99	MP3C	Mx	.004	1
100	MP2A	X	-35.745	3
101	MP2A	Z	-61.913	3
102	MP2A	Mx	-.018	3
103	MP2B	X	-26.443	3
104	MP2B	Z	-45.801	3
105	MP2B	Mx	-.026	3
106	MP2C	X	-33.637	3
107	MP2C	Z	-58.261	3
108	MP2C	Mx	.022	3
109	MP3A	X	-34.508	3
110	MP3A	Z	-59.769	3
111	MP3A	Mx	-.017	3
112	MP3B	X	-21.642	3
113	MP3B	Z	-37.486	3
114	MP3B	Mx	-.021	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
115	MP3C	X	-31.591	3
116	MP3C	Z	-54.718	3
117	MP3C	Mx	.02	3
118	OVP2	X	-78.189	1
119	OVP2	Z	-135.427	1
120	OVP2	Mx	0	1
121	LR1	X	-62.664	1
122	LR1	Z	-108.538	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	-29.381	.25
3	MP1A	Mx	0	.25
4	MP1A	X	0	5.75
5	MP1A	Z	-29.381	5.75
6	MP1A	Mx	0	5.75
7	MP1B	X	0	.25
8	MP1B	Z	-26.559	.25
9	MP1B	Mx	.012	.25
10	MP1B	X	0	5.75
11	MP1B	Z	-26.559	5.75
12	MP1B	Mx	.012	5.75
13	MP1C	X	0	.25
14	MP1C	Z	-29.285	.25
15	MP1C	Mx	-.003	.25
16	MP1C	X	0	5.75
17	MP1C	Z	-29.285	5.75
18	MP1C	Mx	-.003	5.75
19	MP5A	X	0	.25
20	MP5A	Z	-29.381	.25
21	MP5A	Mx	0	.25
22	MP5A	X	0	5.75
23	MP5A	Z	-29.381	5.75
24	MP5A	Mx	0	5.75
25	MP5B	X	0	.25
26	MP5B	Z	-26.559	.25
27	MP5B	Mx	.012	.25
28	MP5B	X	0	5.75
29	MP5B	Z	-26.559	5.75
30	MP5B	Mx	.012	5.75
31	MP5C	X	0	.25
32	MP5C	Z	-29.285	.25
33	MP5C	Mx	-.003	.25
34	MP5C	X	0	5.75
35	MP5C	Z	-29.285	5.75
36	MP5C	Mx	-.003	5.75
37	MP3A	X	0	.5
38	MP3A	Z	-37.411	.5
39	MP3A	Mx	.028	.5
40	MP3A	X	0	5.5
41	MP3A	Z	-37.411	5.5
42	MP3A	Mx	.028	5.5
43	MP3B	X	0	.5
44	MP3B	Z	-26.923	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
45	MP3B	Mx	.02	.5
46	MP3B	X	0	5.5
47	MP3B	Z	-26.923	5.5
48	MP3B	Mx	.02	5.5
49	MP3C	X	0	.5
50	MP3C	Z	-37.052	.5
51	MP3C	Mx	-.031	.5
52	MP3C	X	0	5.5
53	MP3C	Z	-37.052	5.5
54	MP3C	Mx	-.031	5.5
55	MP3A	X	0	.5
56	MP3A	Z	-37.411	.5
57	MP3A	Mx	-.028	.5
58	MP3A	X	0	5.5
59	MP3A	Z	-37.411	5.5
60	MP3A	Mx	-.028	5.5
61	MP3B	X	0	.5
62	MP3B	Z	-26.923	.5
63	MP3B	Mx	.006	.5
64	MP3B	X	0	5.5
65	MP3B	Z	-26.923	5.5
66	MP3B	Mx	.006	5.5
67	MP3C	X	0	.5
68	MP3C	Z	-37.052	.5
69	MP3C	Mx	.024	.5
70	MP3C	X	0	5.5
71	MP3C	Z	-37.052	5.5
72	MP3C	Mx	.024	5.5
73	MP4A	X	0	2
74	MP4A	Z	-17.564	2
75	MP4A	Mx	0	2
76	MP4A	X	0	4
77	MP4A	Z	-17.564	4
78	MP4A	Mx	0	4
79	MP4B	X	0	2
80	MP4B	Z	-12.877	2
81	MP4B	Mx	.006	2
82	MP4B	X	0	4
83	MP4B	Z	-12.877	4
84	MP4B	Mx	.006	4
85	MP4C	X	0	2
86	MP4C	Z	-17.403	2
87	MP4C	Mx	-.002	2
88	MP4C	X	0	4
89	MP4C	Z	-17.403	4
90	MP4C	Mx	-.002	4
91	MP3A	X	0	1
92	MP3A	Z	-4.088	1
93	MP3A	Mx	0	1
94	MP3B	X	0	1
95	MP3B	Z	-3.19	1
96	MP3B	Mx	-.001	1
97	MP3C	X	0	1
98	MP3C	Z	-4.057	1
99	MP3C	Mx	.000352	1
100	MP2A	X	0	3
101	MP2A	Z	-16.791	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
102	MP2A	Mx	0	3
103	MP2B	X	0	3
104	MP2B	Z	-12.284	3
105	MP2B	Mx	-.006	3
106	MP2C	X	0	3
107	MP2C	Z	-16.637	3
108	MP2C	Mx	.001	3
109	MP3A	X	0	3
110	MP3A	Z	-16.791	3
111	MP3A	Mx	0	3
112	MP3B	X	0	3
113	MP3B	Z	-10.571	3
114	MP3B	Mx	-.005	3
115	MP3C	X	0	3
116	MP3C	Z	-16.579	3
117	MP3C	Mx	.001	3
118	OVP2	X	0	1
119	OVP2	Z	-28.09	1
120	OVP2	Mx	0	1
121	LR1	X	0	1
122	LR1	Z	-41.05	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	14.291	.25
2	MP1A	Z	-24.753	.25
3	MP1A	Mx	-.007	.25
4	MP1A	X	14.291	5.75
5	MP1A	Z	-24.753	5.75
6	MP1A	Mx	-.007	5.75
7	MP1B	X	14.03	.25
8	MP1B	Z	-24.301	.25
9	MP1B	Mx	.009	.25
10	MP1B	X	14.03	5.75
11	MP1B	Z	-24.301	5.75
12	MP1B	Mx	.009	5.75
13	MP1C	X	14.504	.25
14	MP1C	Z	-25.121	.25
15	MP1C	Mx	.005	.25
16	MP1C	X	14.504	5.75
17	MP1C	Z	-25.121	5.75
18	MP1C	Mx	.005	5.75
19	MP5A	X	14.291	.25
20	MP5A	Z	-24.753	.25
21	MP5A	Mx	-.007	.25
22	MP5A	X	14.291	5.75
23	MP5A	Z	-24.753	5.75
24	MP5A	Mx	-.007	5.75
25	MP5B	X	14.03	.25
26	MP5B	Z	-24.301	.25
27	MP5B	Mx	.009	.25
28	MP5B	X	14.03	5.75
29	MP5B	Z	-24.301	5.75
30	MP5B	Mx	.009	5.75
31	MP5C	X	14.504	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP5C	Z	-25.121	.25
33	MP5C	Mx	.005	.25
34	MP5C	X	14.504	5.75
35	MP5C	Z	-25.121	5.75
36	MP5C	Mx	.005	5.75
37	MP3A	X	17.221	.5
38	MP3A	Z	-29.827	.5
39	MP3A	Mx	.014	.5
40	MP3A	X	17.221	5.5
41	MP3A	Z	-29.827	5.5
42	MP3A	Mx	.014	5.5
43	MP3B	X	16.252	.5
44	MP3B	Z	-28.149	.5
45	MP3B	Mx	.029	.5
46	MP3B	X	16.252	5.5
47	MP3B	Z	-28.149	5.5
48	MP3B	Mx	.029	5.5
49	MP3C	X	18.011	.5
50	MP3C	Z	-31.195	.5
51	MP3C	Mx	-.019	.5
52	MP3C	X	18.011	5.5
53	MP3C	Z	-31.195	5.5
54	MP3C	Mx	-.019	5.5
55	MP3A	X	17.221	.5
56	MP3A	Z	-29.827	.5
57	MP3A	Mx	-.031	.5
58	MP3A	X	17.221	5.5
59	MP3A	Z	-29.827	5.5
60	MP3A	Mx	-.031	5.5
61	MP3B	X	16.252	.5
62	MP3B	Z	-28.149	.5
63	MP3B	Mx	-.008	.5
64	MP3B	X	16.252	5.5
65	MP3B	Z	-28.149	5.5
66	MP3B	Mx	-.008	5.5
67	MP3C	X	18.011	.5
68	MP3C	Z	-31.195	.5
69	MP3C	Mx	.032	.5
70	MP3C	X	18.011	5.5
71	MP3C	Z	-31.195	5.5
72	MP3C	Mx	.032	5.5
73	MP4A	X	8.118	2
74	MP4A	Z	-14.061	2
75	MP4A	Mx	-.004	2
76	MP4A	X	8.118	4
77	MP4A	Z	-14.061	4
78	MP4A	Mx	-.004	4
79	MP4B	X	7.685	2
80	MP4B	Z	-13.311	2
81	MP4B	Mx	.005	2
82	MP4B	X	7.685	4
83	MP4B	Z	-13.311	4
84	MP4B	Mx	.005	4
85	MP4C	X	8.471	2
86	MP4C	Z	-14.673	2
87	MP4C	Mx	.003	2
88	MP4C	X	8.471	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
89	MP4C	Z	-14.673	4
90	MP4C	Mx	.003	4
91	MP3A	X	1.917	1
92	MP3A	Z	-3.32	1
93	MP3A	Mx	.000958	1
94	MP3B	X	1.834	1
95	MP3B	Z	-3.176	1
96	MP3B	Mx	-.001	1
97	MP3C	X	1.985	1
98	MP3C	Z	-3.437	1
99	MP3C	Mx	-.000679	1
100	MP2A	X	7.758	3
101	MP2A	Z	-13.436	3
102	MP2A	Mx	.004	3
103	MP2B	X	7.341	3
104	MP2B	Z	-12.715	3
105	MP2B	Mx	-.005	3
106	MP2C	X	8.097	3
107	MP2C	Z	-14.024	3
108	MP2C	Mx	-.003	3
109	MP3A	X	7.515	3
110	MP3A	Z	-13.017	3
111	MP3A	Mx	.004	3
112	MP3B	X	6.94	3
113	MP3B	Z	-12.021	3
114	MP3B	Mx	-.004	3
115	MP3C	X	7.984	3
116	MP3C	Z	-13.828	3
117	MP3C	Mx	-.003	3
118	OVP2	X	11.65	1
119	OVP2	Z	-20.179	1
120	OVP2	Mx	0	1
121	LR1	X	20.525	1
122	LR1	Z	-35.551	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	23.369	.25
2	MP1A	Z	-13.492	.25
3	MP1A	Mx	-.012	.25
4	MP1A	X	23.369	5.75
5	MP1A	Z	-13.492	5.75
6	MP1A	Mx	-.012	5.75
7	MP1B	X	25.361	.25
8	MP1B	Z	-14.642	.25
9	MP1B	Mx	.003	.25
10	MP1B	X	25.361	5.75
11	MP1B	Z	-14.642	5.75
12	MP1B	Mx	.003	5.75
13	MP1C	X	23.82	.25
14	MP1C	Z	-13.753	.25
15	MP1C	Mx	.011	.25
16	MP1C	X	23.82	5.75
17	MP1C	Z	-13.753	5.75
18	MP1C	Mx	.011	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP5A	X	23.369	.25
20	MP5A	Z	-13.492	.25
21	MP5A	Mx	-.012	.25
22	MP5A	X	23.369	5.75
23	MP5A	Z	-13.492	5.75
24	MP5A	Mx	-.012	5.75
25	MP5B	X	25.361	.25
26	MP5B	Z	-14.642	.25
27	MP5B	Mx	.003	.25
28	MP5B	X	25.361	5.75
29	MP5B	Z	-14.642	5.75
30	MP5B	Mx	.003	5.75
31	MP5C	X	23.82	.25
32	MP5C	Z	-13.753	.25
33	MP5C	Mx	.011	.25
34	MP5C	X	23.82	5.75
35	MP5C	Z	-13.753	5.75
36	MP5C	Mx	.011	5.75
37	MP3A	X	24.684	.5
38	MP3A	Z	-14.252	.5
39	MP3A	Mx	-.002	.5
40	MP3A	X	24.684	5.5
41	MP3A	Z	-14.252	5.5
42	MP3A	Mx	-.002	5.5
43	MP3B	X	32.088	.5
44	MP3B	Z	-18.526	.5
45	MP3B	Mx	.031	.5
46	MP3B	X	32.088	5.5
47	MP3B	Z	-18.526	5.5
48	MP3B	Mx	.031	5.5
49	MP3C	X	26.363	.5
50	MP3C	Z	-15.221	.5
51	MP3C	Mx	-.003	.5
52	MP3C	X	26.363	5.5
53	MP3C	Z	-15.221	5.5
54	MP3C	Mx	-.003	5.5
55	MP3A	X	24.684	.5
56	MP3A	Z	-14.252	.5
57	MP3A	Mx	-.023	.5
58	MP3A	X	24.684	5.5
59	MP3A	Z	-14.252	5.5
60	MP3A	Mx	-.023	5.5
61	MP3B	X	32.088	.5
62	MP3B	Z	-18.526	.5
63	MP3B	Mx	-.024	.5
64	MP3B	X	32.088	5.5
65	MP3B	Z	-18.526	5.5
66	MP3B	Mx	-.024	5.5
67	MP3C	X	26.363	.5
68	MP3C	Z	-15.221	.5
69	MP3C	Mx	.026	.5
70	MP3C	X	26.363	5.5
71	MP3C	Z	-15.221	5.5
72	MP3C	Mx	.026	5.5
73	MP4A	X	11.763	2
74	MP4A	Z	-6.792	2
75	MP4A	Mx	-.006	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
76	MP4A	X	11.763	4
77	MP4A	Z	-6.792	4
78	MP4A	Mx	-.006	4
79	MP4B	X	15.072	2
80	MP4B	Z	-8.702	2
81	MP4B	Mx	.002	2
82	MP4B	X	15.072	4
83	MP4B	Z	-8.702	4
84	MP4B	Mx	.002	4
85	MP4C	X	12.513	2
86	MP4C	Z	-7.225	2
87	MP4C	Mx	.006	2
88	MP4C	X	12.513	4
89	MP4C	Z	-7.225	4
90	MP4C	Mx	.006	4
91	MP3A	X	2.88	1
92	MP3A	Z	-1.663	1
93	MP3A	Mx	.001	1
94	MP3B	X	3.514	1
95	MP3B	Z	-2.029	1
96	MP3B	Mx	-.000352	1
97	MP3C	X	3.023	1
98	MP3C	Z	-1.746	1
99	MP3C	Mx	-.001	1
100	MP2A	X	11.226	3
101	MP2A	Z	-6.482	3
102	MP2A	Mx	.006	3
103	MP2B	X	14.408	3
104	MP2B	Z	-8.319	3
105	MP2B	Mx	-.001	3
106	MP2C	X	11.948	3
107	MP2C	Z	-6.898	3
108	MP2C	Mx	-.005	3
109	MP3A	X	9.967	3
110	MP3A	Z	-5.754	3
111	MP3A	Mx	.005	3
112	MP3B	X	14.358	3
113	MP3B	Z	-8.289	3
114	MP3B	Mx	-.001	3
115	MP3C	X	10.962	3
116	MP3C	Z	-6.329	3
117	MP3C	Mx	-.005	3
118	OVP2	X	19.412	1
119	OVP2	Z	-11.208	1
120	OVP2	Mx	0	1
121	LR1	X	35.551	1
122	LR1	Z	-20.525	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	26.185	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	-.013	.25
4	MP1A	X	26.185	5.75
5	MP1A	Z	0	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP1A	Mx	-.013	5.75
7	MP1B	X	29.007	.25
8	MP1B	Z	0	.25
9	MP1B	Mx	-.005	.25
10	MP1B	X	29.007	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	-.005	5.75
13	MP1C	X	26.281	.25
14	MP1C	Z	0	.25
15	MP1C	Mx	.013	.25
16	MP1C	X	26.281	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	.013	5.75
19	MP5A	X	26.185	.25
20	MP5A	Z	0	.25
21	MP5A	Mx	-.013	.25
22	MP5A	X	26.185	5.75
23	MP5A	Z	0	5.75
24	MP5A	Mx	-.013	5.75
25	MP5B	X	29.007	.25
26	MP5B	Z	0	.25
27	MP5B	Mx	-.005	.25
28	MP5B	X	29.007	5.75
29	MP5B	Z	0	5.75
30	MP5B	Mx	-.005	5.75
31	MP5C	X	26.281	.25
32	MP5C	Z	0	.25
33	MP5C	Mx	.013	.25
34	MP5C	X	26.281	5.75
35	MP5C	Z	0	5.75
36	MP5C	Mx	.013	5.75
37	MP3A	X	25.534	.5
38	MP3A	Z	0	.5
39	MP3A	Mx	-.013	.5
40	MP3A	X	25.534	5.5
41	MP3A	Z	0	5.5
42	MP3A	Mx	-.013	5.5
43	MP3B	X	36.021	.5
44	MP3B	Z	0	.5
45	MP3B	Mx	.019	.5
46	MP3B	X	36.021	5.5
47	MP3B	Z	0	5.5
48	MP3B	Mx	.019	5.5
49	MP3C	X	25.892	.5
50	MP3C	Z	0	.5
51	MP3C	Mx	.009	.5
52	MP3C	X	25.892	5.5
53	MP3C	Z	0	5.5
54	MP3C	Mx	.009	5.5
55	MP3A	X	25.534	.5
56	MP3A	Z	0	.5
57	MP3A	Mx	-.013	.5
58	MP3A	X	25.534	5.5
59	MP3A	Z	0	5.5
60	MP3A	Mx	-.013	5.5
61	MP3B	X	36.021	.5
62	MP3B	Z	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
63	MP3B	Mx	-.032	.5
64	MP3B	X	36.021	5.5
65	MP3B	Z	0	5.5
66	MP3B	Mx	-.032	5.5
67	MP3C	X	25.892	.5
68	MP3C	Z	0	.5
69	MP3C	Mx	.016	.5
70	MP3C	X	25.892	5.5
71	MP3C	Z	0	5.5
72	MP3C	Mx	.016	5.5
73	MP4A	X	12.256	2
74	MP4A	Z	0	2
75	MP4A	Mx	-.006	2
76	MP4A	X	12.256	4
77	MP4A	Z	0	4
78	MP4A	Mx	-.006	4
79	MP4B	X	16.943	2
80	MP4B	Z	0	2
81	MP4B	Mx	-.003	2
82	MP4B	X	16.943	4
83	MP4B	Z	0	4
84	MP4B	Mx	-.003	4
85	MP4C	X	12.417	2
86	MP4C	Z	0	2
87	MP4C	Mx	.006	2
88	MP4C	X	12.417	4
89	MP4C	Z	0	4
90	MP4C	Mx	.006	4
91	MP3A	X	3.071	1
92	MP3A	Z	0	1
93	MP3A	Mx	.002	1
94	MP3B	X	3.969	1
95	MP3B	Z	0	1
96	MP3B	Mx	.000679	1
97	MP3C	X	3.101	1
98	MP3C	Z	0	1
99	MP3C	Mx	-.002	1
100	MP2A	X	11.687	3
101	MP2A	Z	0	3
102	MP2A	Mx	.006	3
103	MP2B	X	16.194	3
104	MP2B	Z	0	3
105	MP2B	Mx	.003	3
106	MP2C	X	11.841	3
107	MP2C	Z	0	3
108	MP2C	Mx	-.006	3
109	MP3A	X	9.747	3
110	MP3A	Z	0	3
111	MP3A	Mx	.005	3
112	MP3B	X	15.967	3
113	MP3B	Z	0	3
114	MP3B	Mx	.003	3
115	MP3C	X	9.96	3
116	MP3C	Z	0	3
117	MP3C	Mx	-.005	3
118	OVP2	X	26.32	1
119	OVP2	Z	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
120	OVP2	Mx	0	1
121	LR1	X	41.05	1
122	LR1	Z	0	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	23.369	.25
2	MP1A	Z	13.492	.25
3	MP1A	Mx	-.012	.25
4	MP1A	X	23.369	5.75
5	MP1A	Z	13.492	5.75
6	MP1A	Mx	-.012	5.75
7	MP1B	X	23.82	.25
8	MP1B	Z	13.753	.25
9	MP1B	Mx	-.011	.25
10	MP1B	X	23.82	5.75
11	MP1B	Z	13.753	5.75
12	MP1B	Mx	-.011	5.75
13	MP1C	X	23	.25
14	MP1C	Z	13.279	.25
15	MP1C	Mx	.012	.25
16	MP1C	X	23	5.75
17	MP1C	Z	13.279	5.75
18	MP1C	Mx	.012	5.75
19	MP5A	X	23.369	.25
20	MP5A	Z	13.492	.25
21	MP5A	Mx	-.012	.25
22	MP5A	X	23.369	5.75
23	MP5A	Z	13.492	5.75
24	MP5A	Mx	-.012	5.75
25	MP5B	X	23.82	.25
26	MP5B	Z	13.753	.25
27	MP5B	Mx	-.011	.25
28	MP5B	X	23.82	5.75
29	MP5B	Z	13.753	5.75
30	MP5B	Mx	-.011	5.75
31	MP5C	X	23	.25
32	MP5C	Z	13.279	.25
33	MP5C	Mx	.012	.25
34	MP5C	X	23	5.75
35	MP5C	Z	13.279	5.75
36	MP5C	Mx	.012	5.75
37	MP3A	X	24.684	.5
38	MP3A	Z	14.252	.5
39	MP3A	Mx	-.023	.5
40	MP3A	X	24.684	5.5
41	MP3A	Z	14.252	5.5
42	MP3A	Mx	-.023	5.5
43	MP3B	X	26.363	.5
44	MP3B	Z	15.221	.5
45	MP3B	Mx	.003	.5
46	MP3B	X	26.363	5.5
47	MP3B	Z	15.221	5.5
48	MP3B	Mx	.003	5.5
49	MP3C	X	23.316	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
50	MP3C	Z	13.462	.5
51	MP3C	Mx	.02	.5
52	MP3C	X	23.316	5.5
53	MP3C	Z	13.462	5.5
54	MP3C	Mx	.02	5.5
55	MP3A	X	24.684	.5
56	MP3A	Z	14.252	.5
57	MP3A	Mx	-.002	.5
58	MP3A	X	24.684	5.5
59	MP3A	Z	14.252	5.5
60	MP3A	Mx	-.002	5.5
61	MP3B	X	26.363	.5
62	MP3B	Z	15.221	.5
63	MP3B	Mx	-.026	.5
64	MP3B	X	26.363	5.5
65	MP3B	Z	15.221	5.5
66	MP3B	Mx	-.026	5.5
67	MP3C	X	23.316	.5
68	MP3C	Z	13.462	.5
69	MP3C	Mx	.006	.5
70	MP3C	X	23.316	5.5
71	MP3C	Z	13.462	5.5
72	MP3C	Mx	.006	5.5
73	MP4A	X	11.763	2
74	MP4A	Z	6.792	2
75	MP4A	Mx	-.006	2
76	MP4A	X	11.763	4
77	MP4A	Z	6.792	4
78	MP4A	Mx	-.006	4
79	MP4B	X	12.513	2
80	MP4B	Z	7.225	2
81	MP4B	Mx	-.006	2
82	MP4B	X	12.513	4
83	MP4B	Z	7.225	4
84	MP4B	Mx	-.006	4
85	MP4C	X	11.152	2
86	MP4C	Z	6.439	2
87	MP4C	Mx	.006	2
88	MP4C	X	11.152	4
89	MP4C	Z	6.439	4
90	MP4C	Mx	.006	4
91	MP3A	X	2.88	1
92	MP3A	Z	1.663	1
93	MP3A	Mx	.001	1
94	MP3B	X	3.023	1
95	MP3B	Z	1.746	1
96	MP3B	Mx	.001	1
97	MP3C	X	2.762	1
98	MP3C	Z	1.595	1
99	MP3C	Mx	-.001	1
100	MP2A	X	11.226	3
101	MP2A	Z	6.482	3
102	MP2A	Mx	.006	3
103	MP2B	X	11.948	3
104	MP2B	Z	6.898	3
105	MP2B	Mx	.005	3
106	MP2C	X	10.638	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
107	MP2C	Z	6.142	3
108	MP2C	Mx	-.006	3
109	MP3A	X	9.967	3
110	MP3A	Z	5.754	3
111	MP3A	Mx	.005	3
112	MP3B	X	10.962	3
113	MP3B	Z	6.329	3
114	MP3B	Mx	.005	3
115	MP3C	X	9.155	3
116	MP3C	Z	5.286	3
117	MP3C	Mx	-.005	3
118	OVP2	X	26.942	1
119	OVP2	Z	15.555	1
120	OVP2	Mx	0	1
121	LR1	X	35.551	1
122	LR1	Z	20.525	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	14.291	.25
2	MP1A	Z	24.753	.25
3	MP1A	Mx	-.007	.25
4	MP1A	X	14.291	5.75
5	MP1A	Z	24.753	5.75
6	MP1A	Mx	-.007	5.75
7	MP1B	X	13.141	.25
8	MP1B	Z	22.76	.25
9	MP1B	Mx	-.013	.25
10	MP1B	X	13.141	5.75
11	MP1B	Z	22.76	5.75
12	MP1B	Mx	-.013	5.75
13	MP1C	X	14.03	.25
14	MP1C	Z	24.301	.25
15	MP1C	Mx	.009	.25
16	MP1C	X	14.03	5.75
17	MP1C	Z	24.301	5.75
18	MP1C	Mx	.009	5.75
19	MP5A	X	14.291	.25
20	MP5A	Z	24.753	.25
21	MP5A	Mx	-.007	.25
22	MP5A	X	14.291	5.75
23	MP5A	Z	24.753	5.75
24	MP5A	Mx	-.007	5.75
25	MP5B	X	13.141	.25
26	MP5B	Z	22.76	.25
27	MP5B	Mx	-.013	.25
28	MP5B	X	13.141	5.75
29	MP5B	Z	22.76	5.75
30	MP5B	Mx	-.013	5.75
31	MP5C	X	14.03	.25
32	MP5C	Z	24.301	.25
33	MP5C	Mx	.009	.25
34	MP5C	X	14.03	5.75
35	MP5C	Z	24.301	5.75
36	MP5C	Mx	.009	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
37	MP3A	X	17.221	.5
38	MP3A	Z	29.827	.5
39	MP3A	Mx	-.031	.5
40	MP3A	X	17.221	5.5
41	MP3A	Z	29.827	5.5
42	MP3A	Mx	-.031	5.5
43	MP3B	X	12.946	.5
44	MP3B	Z	22.423	.5
45	MP3B	Mx	-.009	.5
46	MP3B	X	12.946	5.5
47	MP3B	Z	22.423	5.5
48	MP3B	Mx	-.009	5.5
49	MP3C	X	16.252	.5
50	MP3C	Z	28.149	.5
51	MP3C	Mx	.029	.5
52	MP3C	X	16.252	5.5
53	MP3C	Z	28.149	5.5
54	MP3C	Mx	.029	5.5
55	MP3A	X	17.221	.5
56	MP3A	Z	29.827	.5
57	MP3A	Mx	.014	.5
58	MP3A	X	17.221	5.5
59	MP3A	Z	29.827	5.5
60	MP3A	Mx	.014	5.5
61	MP3B	X	12.946	.5
62	MP3B	Z	22.423	.5
63	MP3B	Mx	-.016	.5
64	MP3B	X	12.946	5.5
65	MP3B	Z	22.423	5.5
66	MP3B	Mx	-.016	5.5
67	MP3C	X	16.252	.5
68	MP3C	Z	28.149	.5
69	MP3C	Mx	-.008	.5
70	MP3C	X	16.252	5.5
71	MP3C	Z	28.149	5.5
72	MP3C	Mx	-.008	5.5
73	MP4A	X	8.118	2
74	MP4A	Z	14.061	2
75	MP4A	Mx	-.004	2
76	MP4A	X	8.118	4
77	MP4A	Z	14.061	4
78	MP4A	Mx	-.004	4
79	MP4B	X	6.208	2
80	MP4B	Z	10.753	2
81	MP4B	Mx	-.006	2
82	MP4B	X	6.208	4
83	MP4B	Z	10.753	4
84	MP4B	Mx	-.006	4
85	MP4C	X	7.685	2
86	MP4C	Z	13.311	2
87	MP4C	Mx	.005	2
88	MP4C	X	7.685	4
89	MP4C	Z	13.311	4
90	MP4C	Mx	.005	4
91	MP3A	X	1.917	1
92	MP3A	Z	3.32	1
93	MP3A	Mx	.000958	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
94	MP3B	X	1.551	1
95	MP3B	Z	2.686	1
96	MP3B	Mx	.002	1
97	MP3C	X	1.834	1
98	MP3C	Z	3.176	1
99	MP3C	Mx	-.001	1
100	MP2A	X	7.758	3
101	MP2A	Z	13.436	3
102	MP2A	Mx	.004	3
103	MP2B	X	5.92	3
104	MP2B	Z	10.255	3
105	MP2B	Mx	.006	3
106	MP2C	X	7.341	3
107	MP2C	Z	12.715	3
108	MP2C	Mx	-.005	3
109	MP3A	X	7.515	3
110	MP3A	Z	13.017	3
111	MP3A	Mx	.004	3
112	MP3B	X	4.98	3
113	MP3B	Z	8.625	3
114	MP3B	Mx	.005	3
115	MP3C	X	6.94	3
116	MP3C	Z	12.021	3
117	MP3C	Mx	-.004	3
118	OVP2	X	15.997	1
119	OVP2	Z	27.708	1
120	OVP2	Mx	0	1
121	LR1	X	20.525	1
122	LR1	Z	35.551	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	29.381	.25
3	MP1A	Mx	0	.25
4	MP1A	X	0	5.75
5	MP1A	Z	29.381	5.75
6	MP1A	Mx	0	5.75
7	MP1B	X	0	.25
8	MP1B	Z	26.559	.25
9	MP1B	Mx	-.012	.25
10	MP1B	X	0	5.75
11	MP1B	Z	26.559	5.75
12	MP1B	Mx	-.012	5.75
13	MP1C	X	0	.25
14	MP1C	Z	29.285	.25
15	MP1C	Mx	.003	.25
16	MP1C	X	0	5.75
17	MP1C	Z	29.285	5.75
18	MP1C	Mx	.003	5.75
19	MP5A	X	0	.25
20	MP5A	Z	29.381	.25
21	MP5A	Mx	0	.25
22	MP5A	X	0	5.75
23	MP5A	Z	29.381	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP5A	Mx	0	5.75
25	MP5B	X	0	.25
26	MP5B	Z	26.559	.25
27	MP5B	Mx	-.012	.25
28	MP5B	X	0	5.75
29	MP5B	Z	26.559	5.75
30	MP5B	Mx	-.012	5.75
31	MP5C	X	0	.25
32	MP5C	Z	29.285	.25
33	MP5C	Mx	.003	.25
34	MP5C	X	0	5.75
35	MP5C	Z	29.285	5.75
36	MP5C	Mx	.003	5.75
37	MP3A	X	0	.5
38	MP3A	Z	37.411	.5
39	MP3A	Mx	-.028	.5
40	MP3A	X	0	5.5
41	MP3A	Z	37.411	5.5
42	MP3A	Mx	-.028	5.5
43	MP3B	X	0	.5
44	MP3B	Z	26.923	.5
45	MP3B	Mx	-.02	.5
46	MP3B	X	0	5.5
47	MP3B	Z	26.923	5.5
48	MP3B	Mx	-.02	5.5
49	MP3C	X	0	.5
50	MP3C	Z	37.052	.5
51	MP3C	Mx	.031	.5
52	MP3C	X	0	5.5
53	MP3C	Z	37.052	5.5
54	MP3C	Mx	.031	5.5
55	MP3A	X	0	.5
56	MP3A	Z	37.411	.5
57	MP3A	Mx	.028	.5
58	MP3A	X	0	5.5
59	MP3A	Z	37.411	5.5
60	MP3A	Mx	.028	5.5
61	MP3B	X	0	.5
62	MP3B	Z	26.923	.5
63	MP3B	Mx	-.006	.5
64	MP3B	X	0	5.5
65	MP3B	Z	26.923	5.5
66	MP3B	Mx	-.006	5.5
67	MP3C	X	0	.5
68	MP3C	Z	37.052	.5
69	MP3C	Mx	-.024	.5
70	MP3C	X	0	5.5
71	MP3C	Z	37.052	5.5
72	MP3C	Mx	-.024	5.5
73	MP4A	X	0	2
74	MP4A	Z	17.564	2
75	MP4A	Mx	0	2
76	MP4A	X	0	4
77	MP4A	Z	17.564	4
78	MP4A	Mx	0	4
79	MP4B	X	0	2
80	MP4B	Z	12.877	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
81	MP4B	Mx	-.006	2
82	MP4B	X	0	4
83	MP4B	Z	12.877	4
84	MP4B	Mx	-.006	4
85	MP4C	X	0	2
86	MP4C	Z	17.403	2
87	MP4C	Mx	.002	2
88	MP4C	X	0	4
89	MP4C	Z	17.403	4
90	MP4C	Mx	.002	4
91	MP3A	X	0	1
92	MP3A	Z	4.088	1
93	MP3A	Mx	0	1
94	MP3B	X	0	1
95	MP3B	Z	3.19	1
96	MP3B	Mx	.001	1
97	MP3C	X	0	1
98	MP3C	Z	4.057	1
99	MP3C	Mx	-.000352	1
100	MP2A	X	0	3
101	MP2A	Z	16.791	3
102	MP2A	Mx	0	3
103	MP2B	X	0	3
104	MP2B	Z	12.284	3
105	MP2B	Mx	.006	3
106	MP2C	X	0	3
107	MP2C	Z	16.637	3
108	MP2C	Mx	-.001	3
109	MP3A	X	0	3
110	MP3A	Z	16.791	3
111	MP3A	Mx	0	3
112	MP3B	X	0	3
113	MP3B	Z	10.571	3
114	MP3B	Mx	.005	3
115	MP3C	X	0	3
116	MP3C	Z	16.579	3
117	MP3C	Mx	-.001	3
118	OVP2	X	0	1
119	OVP2	Z	28.09	1
120	OVP2	Mx	0	1
121	LR1	X	0	1
122	LR1	Z	41.05	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-14.291	.25
2	MP1A	Z	24.753	.25
3	MP1A	Mx	.007	.25
4	MP1A	X	-14.291	5.75
5	MP1A	Z	24.753	5.75
6	MP1A	Mx	.007	5.75
7	MP1B	X	-14.03	.25
8	MP1B	Z	24.301	.25
9	MP1B	Mx	-.009	.25
10	MP1B	X	-14.03	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP1B	Z	24.301	5.75
12	MP1B	Mx	-.009	5.75
13	MP1C	X	-14.504	.25
14	MP1C	Z	25.121	.25
15	MP1C	Mx	-.005	.25
16	MP1C	X	-14.504	5.75
17	MP1C	Z	25.121	5.75
18	MP1C	Mx	-.005	5.75
19	MP5A	X	-14.291	.25
20	MP5A	Z	24.753	.25
21	MP5A	Mx	.007	.25
22	MP5A	X	-14.291	5.75
23	MP5A	Z	24.753	5.75
24	MP5A	Mx	.007	5.75
25	MP5B	X	-14.03	.25
26	MP5B	Z	24.301	.25
27	MP5B	Mx	-.009	.25
28	MP5B	X	-14.03	5.75
29	MP5B	Z	24.301	5.75
30	MP5B	Mx	-.009	5.75
31	MP5C	X	-14.504	.25
32	MP5C	Z	25.121	.25
33	MP5C	Mx	-.005	.25
34	MP5C	X	-14.504	5.75
35	MP5C	Z	25.121	5.75
36	MP5C	Mx	-.005	5.75
37	MP3A	X	-17.221	.5
38	MP3A	Z	29.827	.5
39	MP3A	Mx	-.014	.5
40	MP3A	X	-17.221	5.5
41	MP3A	Z	29.827	5.5
42	MP3A	Mx	-.014	5.5
43	MP3B	X	-16.252	.5
44	MP3B	Z	28.149	.5
45	MP3B	Mx	-.029	.5
46	MP3B	X	-16.252	5.5
47	MP3B	Z	28.149	5.5
48	MP3B	Mx	-.029	5.5
49	MP3C	X	-18.011	.5
50	MP3C	Z	31.195	.5
51	MP3C	Mx	.019	.5
52	MP3C	X	-18.011	5.5
53	MP3C	Z	31.195	5.5
54	MP3C	Mx	.019	5.5
55	MP3A	X	-17.221	.5
56	MP3A	Z	29.827	.5
57	MP3A	Mx	.031	.5
58	MP3A	X	-17.221	5.5
59	MP3A	Z	29.827	5.5
60	MP3A	Mx	.031	5.5
61	MP3B	X	-16.252	.5
62	MP3B	Z	28.149	.5
63	MP3B	Mx	.008	.5
64	MP3B	X	-16.252	5.5
65	MP3B	Z	28.149	5.5
66	MP3B	Mx	.008	5.5
67	MP3C	X	-18.011	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
68	MP3C	Z	31.195	.5
69	MP3C	Mx	-.032	.5
70	MP3C	X	-18.011	5.5
71	MP3C	Z	31.195	5.5
72	MP3C	Mx	-.032	5.5
73	MP4A	X	-8.118	2
74	MP4A	Z	14.061	2
75	MP4A	Mx	.004	2
76	MP4A	X	-8.118	4
77	MP4A	Z	14.061	4
78	MP4A	Mx	.004	4
79	MP4B	X	-7.685	2
80	MP4B	Z	13.311	2
81	MP4B	Mx	-.005	2
82	MP4B	X	-7.685	4
83	MP4B	Z	13.311	4
84	MP4B	Mx	-.005	4
85	MP4C	X	-8.471	2
86	MP4C	Z	14.673	2
87	MP4C	Mx	-.003	2
88	MP4C	X	-8.471	4
89	MP4C	Z	14.673	4
90	MP4C	Mx	-.003	4
91	MP3A	X	-1.917	1
92	MP3A	Z	3.32	1
93	MP3A	Mx	-.000958	1
94	MP3B	X	-1.834	1
95	MP3B	Z	3.176	1
96	MP3B	Mx	.001	1
97	MP3C	X	-1.985	1
98	MP3C	Z	3.437	1
99	MP3C	Mx	.000679	1
100	MP2A	X	-7.758	3
101	MP2A	Z	13.436	3
102	MP2A	Mx	-.004	3
103	MP2B	X	-7.341	3
104	MP2B	Z	12.715	3
105	MP2B	Mx	.005	3
106	MP2C	X	-8.097	3
107	MP2C	Z	14.024	3
108	MP2C	Mx	.003	3
109	MP3A	X	-7.515	3
110	MP3A	Z	13.017	3
111	MP3A	Mx	-.004	3
112	MP3B	X	-6.94	3
113	MP3B	Z	12.021	3
114	MP3B	Mx	.004	3
115	MP3C	X	-7.984	3
116	MP3C	Z	13.828	3
117	MP3C	Mx	.003	3
118	OVP2	X	-11.65	1
119	OVP2	Z	20.179	1
120	OVP2	Mx	0	1
121	LR1	X	-20.525	1
122	LR1	Z	35.551	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-23.369	.25
2	MP1A	Z	13.492	.25
3	MP1A	Mx	.012	.25
4	MP1A	X	-23.369	5.75
5	MP1A	Z	13.492	5.75
6	MP1A	Mx	.012	5.75
7	MP1B	X	-25.361	.25
8	MP1B	Z	14.642	.25
9	MP1B	Mx	-.003	.25
10	MP1B	X	-25.361	5.75
11	MP1B	Z	14.642	5.75
12	MP1B	Mx	-.003	5.75
13	MP1C	X	-23.82	.25
14	MP1C	Z	13.753	.25
15	MP1C	Mx	-.011	.25
16	MP1C	X	-23.82	5.75
17	MP1C	Z	13.753	5.75
18	MP1C	Mx	-.011	5.75
19	MP5A	X	-23.369	.25
20	MP5A	Z	13.492	.25
21	MP5A	Mx	.012	.25
22	MP5A	X	-23.369	5.75
23	MP5A	Z	13.492	5.75
24	MP5A	Mx	.012	5.75
25	MP5B	X	-25.361	.25
26	MP5B	Z	14.642	.25
27	MP5B	Mx	-.003	.25
28	MP5B	X	-25.361	5.75
29	MP5B	Z	14.642	5.75
30	MP5B	Mx	-.003	5.75
31	MP5C	X	-23.82	.25
32	MP5C	Z	13.753	.25
33	MP5C	Mx	-.011	.25
34	MP5C	X	-23.82	5.75
35	MP5C	Z	13.753	5.75
36	MP5C	Mx	-.011	5.75
37	MP3A	X	-24.684	.5
38	MP3A	Z	14.252	.5
39	MP3A	Mx	.002	.5
40	MP3A	X	-24.684	5.5
41	MP3A	Z	14.252	5.5
42	MP3A	Mx	.002	5.5
43	MP3B	X	-32.088	.5
44	MP3B	Z	18.526	.5
45	MP3B	Mx	-.031	.5
46	MP3B	X	-32.088	5.5
47	MP3B	Z	18.526	5.5
48	MP3B	Mx	-.031	5.5
49	MP3C	X	-26.363	.5
50	MP3C	Z	15.221	.5
51	MP3C	Mx	.003	.5
52	MP3C	X	-26.363	5.5
53	MP3C	Z	15.221	5.5
54	MP3C	Mx	.003	5.5
55	MP3A	X	-24.684	.5
56	MP3A	Z	14.252	.5
57	MP3A	Mx	.023	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3A	X	-24.684	5.5
59	MP3A	Z	14.252	5.5
60	MP3A	Mx	.023	5.5
61	MP3B	X	-32.088	.5
62	MP3B	Z	18.526	.5
63	MP3B	Mx	.024	.5
64	MP3B	X	-32.088	5.5
65	MP3B	Z	18.526	5.5
66	MP3B	Mx	.024	5.5
67	MP3C	X	-26.363	.5
68	MP3C	Z	15.221	.5
69	MP3C	Mx	-.026	.5
70	MP3C	X	-26.363	5.5
71	MP3C	Z	15.221	5.5
72	MP3C	Mx	-.026	5.5
73	MP4A	X	-11.763	2
74	MP4A	Z	6.792	2
75	MP4A	Mx	.006	2
76	MP4A	X	-11.763	4
77	MP4A	Z	6.792	4
78	MP4A	Mx	.006	4
79	MP4B	X	-15.072	2
80	MP4B	Z	8.702	2
81	MP4B	Mx	-.002	2
82	MP4B	X	-15.072	4
83	MP4B	Z	8.702	4
84	MP4B	Mx	-.002	4
85	MP4C	X	-12.513	2
86	MP4C	Z	7.225	2
87	MP4C	Mx	-.006	2
88	MP4C	X	-12.513	4
89	MP4C	Z	7.225	4
90	MP4C	Mx	-.006	4
91	MP3A	X	-2.88	1
92	MP3A	Z	1.663	1
93	MP3A	Mx	-.001	1
94	MP3B	X	-3.514	1
95	MP3B	Z	2.029	1
96	MP3B	Mx	.000352	1
97	MP3C	X	-3.023	1
98	MP3C	Z	1.746	1
99	MP3C	Mx	.001	1
100	MP2A	X	-11.226	3
101	MP2A	Z	6.482	3
102	MP2A	Mx	-.006	3
103	MP2B	X	-14.408	3
104	MP2B	Z	8.319	3
105	MP2B	Mx	.001	3
106	MP2C	X	-11.948	3
107	MP2C	Z	6.898	3
108	MP2C	Mx	.005	3
109	MP3A	X	-9.967	3
110	MP3A	Z	5.754	3
111	MP3A	Mx	-.005	3
112	MP3B	X	-14.358	3
113	MP3B	Z	8.289	3
114	MP3B	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
115	MP3C	X	-10.962	3
116	MP3C	Z	6.329	3
117	MP3C	Mx	.005	3
118	OVP2	X	-19.412	1
119	OVP2	Z	11.208	1
120	OVP2	Mx	0	1
121	LR1	X	-35.551	1
122	LR1	Z	20.525	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-26.185	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	.013	.25
4	MP1A	X	-26.185	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	.013	5.75
7	MP1B	X	-29.007	.25
8	MP1B	Z	0	.25
9	MP1B	Mx	.005	.25
10	MP1B	X	-29.007	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	.005	5.75
13	MP1C	X	-26.281	.25
14	MP1C	Z	0	.25
15	MP1C	Mx	-.013	.25
16	MP1C	X	-26.281	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	-.013	5.75
19	MP5A	X	-26.185	.25
20	MP5A	Z	0	.25
21	MP5A	Mx	.013	.25
22	MP5A	X	-26.185	5.75
23	MP5A	Z	0	5.75
24	MP5A	Mx	.013	5.75
25	MP5B	X	-29.007	.25
26	MP5B	Z	0	.25
27	MP5B	Mx	.005	.25
28	MP5B	X	-29.007	5.75
29	MP5B	Z	0	5.75
30	MP5B	Mx	.005	5.75
31	MP5C	X	-26.281	.25
32	MP5C	Z	0	.25
33	MP5C	Mx	-.013	.25
34	MP5C	X	-26.281	5.75
35	MP5C	Z	0	5.75
36	MP5C	Mx	-.013	5.75
37	MP3A	X	-25.534	.5
38	MP3A	Z	0	.5
39	MP3A	Mx	.013	.5
40	MP3A	X	-25.534	5.5
41	MP3A	Z	0	5.5
42	MP3A	Mx	.013	5.5
43	MP3B	X	-36.021	.5
44	MP3B	Z	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
45	MP3B	Mx	-.019	.5
46	MP3B	X	-36.021	5.5
47	MP3B	Z	0	5.5
48	MP3B	Mx	-.019	5.5
49	MP3C	X	-25.892	.5
50	MP3C	Z	0	.5
51	MP3C	Mx	-.009	.5
52	MP3C	X	-25.892	5.5
53	MP3C	Z	0	5.5
54	MP3C	Mx	-.009	5.5
55	MP3A	X	-25.534	.5
56	MP3A	Z	0	.5
57	MP3A	Mx	.013	.5
58	MP3A	X	-25.534	5.5
59	MP3A	Z	0	5.5
60	MP3A	Mx	.013	5.5
61	MP3B	X	-36.021	.5
62	MP3B	Z	0	.5
63	MP3B	Mx	.032	.5
64	MP3B	X	-36.021	5.5
65	MP3B	Z	0	5.5
66	MP3B	Mx	.032	5.5
67	MP3C	X	-25.892	.5
68	MP3C	Z	0	.5
69	MP3C	Mx	-.016	.5
70	MP3C	X	-25.892	5.5
71	MP3C	Z	0	5.5
72	MP3C	Mx	-.016	5.5
73	MP4A	X	-12.256	2
74	MP4A	Z	0	2
75	MP4A	Mx	.006	2
76	MP4A	X	-12.256	4
77	MP4A	Z	0	4
78	MP4A	Mx	.006	4
79	MP4B	X	-16.943	2
80	MP4B	Z	0	2
81	MP4B	Mx	.003	2
82	MP4B	X	-16.943	4
83	MP4B	Z	0	4
84	MP4B	Mx	.003	4
85	MP4C	X	-12.417	2
86	MP4C	Z	0	2
87	MP4C	Mx	-.006	2
88	MP4C	X	-12.417	4
89	MP4C	Z	0	4
90	MP4C	Mx	-.006	4
91	MP3A	X	-3.071	1
92	MP3A	Z	0	1
93	MP3A	Mx	-.002	1
94	MP3B	X	-3.969	1
95	MP3B	Z	0	1
96	MP3B	Mx	-.000679	1
97	MP3C	X	-3.101	1
98	MP3C	Z	0	1
99	MP3C	Mx	.002	1
100	MP2A	X	-11.687	3
101	MP2A	Z	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
102	MP2A	Mx	-.006	3
103	MP2B	X	-16.194	3
104	MP2B	Z	0	3
105	MP2B	Mx	-.003	3
106	MP2C	X	-11.841	3
107	MP2C	Z	0	3
108	MP2C	Mx	.006	3
109	MP3A	X	-9.747	3
110	MP3A	Z	0	3
111	MP3A	Mx	-.005	3
112	MP3B	X	-15.967	3
113	MP3B	Z	0	3
114	MP3B	Mx	-.003	3
115	MP3C	X	-9.96	3
116	MP3C	Z	0	3
117	MP3C	Mx	.005	3
118	OVP2	X	-26.32	1
119	OVP2	Z	0	1
120	OVP2	Mx	0	1
121	LR1	X	-41.05	1
122	LR1	Z	0	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-23.369	.25
2	MP1A	Z	-13.492	.25
3	MP1A	Mx	.012	.25
4	MP1A	X	-23.369	5.75
5	MP1A	Z	-13.492	5.75
6	MP1A	Mx	.012	5.75
7	MP1B	X	-23.82	.25
8	MP1B	Z	-13.753	.25
9	MP1B	Mx	.011	.25
10	MP1B	X	-23.82	5.75
11	MP1B	Z	-13.753	5.75
12	MP1B	Mx	.011	5.75
13	MP1C	X	-23	.25
14	MP1C	Z	-13.279	.25
15	MP1C	Mx	-.012	.25
16	MP1C	X	-23	5.75
17	MP1C	Z	-13.279	5.75
18	MP1C	Mx	-.012	5.75
19	MP5A	X	-23.369	.25
20	MP5A	Z	-13.492	.25
21	MP5A	Mx	.012	.25
22	MP5A	X	-23.369	5.75
23	MP5A	Z	-13.492	5.75
24	MP5A	Mx	.012	5.75
25	MP5B	X	-23.82	.25
26	MP5B	Z	-13.753	.25
27	MP5B	Mx	.011	.25
28	MP5B	X	-23.82	5.75
29	MP5B	Z	-13.753	5.75
30	MP5B	Mx	.011	5.75
31	MP5C	X	-23	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP5C	Z	-13.279	.25
33	MP5C	Mx	-.012	.25
34	MP5C	X	-23	5.75
35	MP5C	Z	-13.279	5.75
36	MP5C	Mx	-.012	5.75
37	MP3A	X	-24.684	.5
38	MP3A	Z	-14.252	.5
39	MP3A	Mx	.023	.5
40	MP3A	X	-24.684	5.5
41	MP3A	Z	-14.252	5.5
42	MP3A	Mx	.023	5.5
43	MP3B	X	-26.363	.5
44	MP3B	Z	-15.221	.5
45	MP3B	Mx	-.003	.5
46	MP3B	X	-26.363	5.5
47	MP3B	Z	-15.221	5.5
48	MP3B	Mx	-.003	5.5
49	MP3C	X	-23.316	.5
50	MP3C	Z	-13.462	.5
51	MP3C	Mx	-.02	.5
52	MP3C	X	-23.316	5.5
53	MP3C	Z	-13.462	5.5
54	MP3C	Mx	-.02	5.5
55	MP3A	X	-24.684	.5
56	MP3A	Z	-14.252	.5
57	MP3A	Mx	.002	.5
58	MP3A	X	-24.684	5.5
59	MP3A	Z	-14.252	5.5
60	MP3A	Mx	.002	5.5
61	MP3B	X	-26.363	.5
62	MP3B	Z	-15.221	.5
63	MP3B	Mx	.026	.5
64	MP3B	X	-26.363	5.5
65	MP3B	Z	-15.221	5.5
66	MP3B	Mx	.026	5.5
67	MP3C	X	-23.316	.5
68	MP3C	Z	-13.462	.5
69	MP3C	Mx	-.006	.5
70	MP3C	X	-23.316	5.5
71	MP3C	Z	-13.462	5.5
72	MP3C	Mx	-.006	5.5
73	MP4A	X	-11.763	2
74	MP4A	Z	-6.792	2
75	MP4A	Mx	.006	2
76	MP4A	X	-11.763	4
77	MP4A	Z	-6.792	4
78	MP4A	Mx	.006	4
79	MP4B	X	-12.513	2
80	MP4B	Z	-7.225	2
81	MP4B	Mx	.006	2
82	MP4B	X	-12.513	4
83	MP4B	Z	-7.225	4
84	MP4B	Mx	.006	4
85	MP4C	X	-11.152	2
86	MP4C	Z	-6.439	2
87	MP4C	Mx	-.006	2
88	MP4C	X	-11.152	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
89	MP4C	Z	-6.439	4
90	MP4C	Mx	-.006	4
91	MP3A	X	-2.88	1
92	MP3A	Z	-1.663	1
93	MP3A	Mx	-.001	1
94	MP3B	X	-3.023	1
95	MP3B	Z	-1.746	1
96	MP3B	Mx	-.001	1
97	MP3C	X	-2.762	1
98	MP3C	Z	-1.595	1
99	MP3C	Mx	.001	1
100	MP2A	X	-11.226	3
101	MP2A	Z	-6.482	3
102	MP2A	Mx	-.006	3
103	MP2B	X	-11.948	3
104	MP2B	Z	-6.898	3
105	MP2B	Mx	-.005	3
106	MP2C	X	-10.638	3
107	MP2C	Z	-6.142	3
108	MP2C	Mx	.006	3
109	MP3A	X	-9.967	3
110	MP3A	Z	-5.754	3
111	MP3A	Mx	-.005	3
112	MP3B	X	-10.962	3
113	MP3B	Z	-6.329	3
114	MP3B	Mx	-.005	3
115	MP3C	X	-9.155	3
116	MP3C	Z	-5.286	3
117	MP3C	Mx	.005	3
118	OVP2	X	-26.942	1
119	OVP2	Z	-15.555	1
120	OVP2	Mx	0	1
121	LR1	X	-35.551	1
122	LR1	Z	-20.525	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-14.291	.25
2	MP1A	Z	-24.753	.25
3	MP1A	Mx	.007	.25
4	MP1A	X	-14.291	5.75
5	MP1A	Z	-24.753	5.75
6	MP1A	Mx	.007	5.75
7	MP1B	X	-13.141	.25
8	MP1B	Z	-22.76	.25
9	MP1B	Mx	.013	.25
10	MP1B	X	-13.141	5.75
11	MP1B	Z	-22.76	5.75
12	MP1B	Mx	.013	5.75
13	MP1C	X	-14.03	.25
14	MP1C	Z	-24.301	.25
15	MP1C	Mx	-.009	.25
16	MP1C	X	-14.03	5.75
17	MP1C	Z	-24.301	5.75
18	MP1C	Mx	-.009	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP5A	X	-14.291	.25
20	MP5A	Z	-24.753	.25
21	MP5A	Mx	.007	.25
22	MP5A	X	-14.291	5.75
23	MP5A	Z	-24.753	5.75
24	MP5A	Mx	.007	5.75
25	MP5B	X	-13.141	.25
26	MP5B	Z	-22.76	.25
27	MP5B	Mx	.013	.25
28	MP5B	X	-13.141	5.75
29	MP5B	Z	-22.76	5.75
30	MP5B	Mx	.013	5.75
31	MP5C	X	-14.03	.25
32	MP5C	Z	-24.301	.25
33	MP5C	Mx	-.009	.25
34	MP5C	X	-14.03	5.75
35	MP5C	Z	-24.301	5.75
36	MP5C	Mx	-.009	5.75
37	MP3A	X	-17.221	.5
38	MP3A	Z	-29.827	.5
39	MP3A	Mx	.031	.5
40	MP3A	X	-17.221	5.5
41	MP3A	Z	-29.827	5.5
42	MP3A	Mx	.031	5.5
43	MP3B	X	-12.946	.5
44	MP3B	Z	-22.423	.5
45	MP3B	Mx	.009	.5
46	MP3B	X	-12.946	5.5
47	MP3B	Z	-22.423	5.5
48	MP3B	Mx	.009	5.5
49	MP3C	X	-16.252	.5
50	MP3C	Z	-28.149	.5
51	MP3C	Mx	-.029	.5
52	MP3C	X	-16.252	5.5
53	MP3C	Z	-28.149	5.5
54	MP3C	Mx	-.029	5.5
55	MP3A	X	-17.221	.5
56	MP3A	Z	-29.827	.5
57	MP3A	Mx	-.014	.5
58	MP3A	X	-17.221	5.5
59	MP3A	Z	-29.827	5.5
60	MP3A	Mx	-.014	5.5
61	MP3B	X	-12.946	.5
62	MP3B	Z	-22.423	.5
63	MP3B	Mx	.016	.5
64	MP3B	X	-12.946	5.5
65	MP3B	Z	-22.423	5.5
66	MP3B	Mx	.016	5.5
67	MP3C	X	-16.252	.5
68	MP3C	Z	-28.149	.5
69	MP3C	Mx	.008	.5
70	MP3C	X	-16.252	5.5
71	MP3C	Z	-28.149	5.5
72	MP3C	Mx	.008	5.5
73	MP4A	X	-8.118	2
74	MP4A	Z	-14.061	2
75	MP4A	Mx	.004	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
76	MP4A	X	-8.118	4
77	MP4A	Z	-14.061	4
78	MP4A	Mx	.004	4
79	MP4B	X	-6.208	2
80	MP4B	Z	-10.753	2
81	MP4B	Mx	.006	2
82	MP4B	X	-6.208	4
83	MP4B	Z	-10.753	4
84	MP4B	Mx	.006	4
85	MP4C	X	-7.685	2
86	MP4C	Z	-13.311	2
87	MP4C	Mx	-.005	2
88	MP4C	X	-7.685	4
89	MP4C	Z	-13.311	4
90	MP4C	Mx	-.005	4
91	MP3A	X	-1.917	1
92	MP3A	Z	-3.32	1
93	MP3A	Mx	-.000958	1
94	MP3B	X	-1.551	1
95	MP3B	Z	-2.686	1
96	MP3B	Mx	-.002	1
97	MP3C	X	-1.834	1
98	MP3C	Z	-3.176	1
99	MP3C	Mx	.001	1
100	MP2A	X	-7.758	3
101	MP2A	Z	-13.436	3
102	MP2A	Mx	-.004	3
103	MP2B	X	-5.92	3
104	MP2B	Z	-10.255	3
105	MP2B	Mx	-.006	3
106	MP2C	X	-7.341	3
107	MP2C	Z	-12.715	3
108	MP2C	Mx	.005	3
109	MP3A	X	-7.515	3
110	MP3A	Z	-13.017	3
111	MP3A	Mx	-.004	3
112	MP3B	X	-4.98	3
113	MP3B	Z	-8.625	3
114	MP3B	Mx	-.005	3
115	MP3C	X	-6.94	3
116	MP3C	Z	-12.021	3
117	MP3C	Mx	.004	3
118	OVP2	X	-15.997	1
119	OVP2	Z	-27.708	1
120	OVP2	Mx	0	1
121	LR1	X	-20.525	1
122	LR1	Z	-35.551	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	-9.498	.25
3	MP1A	Mx	0	.25
4	MP1A	X	0	5.75
5	MP1A	Z	-9.498	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP1A	Mx	0	5.75
7	MP1B	X	0	.25
8	MP1B	Z	-8.437	.25
9	MP1B	Mx	.004	.25
10	MP1B	X	0	5.75
11	MP1B	Z	-8.437	5.75
12	MP1B	Mx	.004	5.75
13	MP1C	X	0	.25
14	MP1C	Z	-9.462	.25
15	MP1C	Mx	-.000822	.25
16	MP1C	X	0	5.75
17	MP1C	Z	-9.462	5.75
18	MP1C	Mx	-.000822	5.75
19	MP5A	X	0	.25
20	MP5A	Z	-9.498	.25
21	MP5A	Mx	0	.25
22	MP5A	X	0	5.75
23	MP5A	Z	-9.498	5.75
24	MP5A	Mx	0	5.75
25	MP5B	X	0	.25
26	MP5B	Z	-8.437	.25
27	MP5B	Mx	.004	.25
28	MP5B	X	0	5.75
29	MP5B	Z	-8.437	5.75
30	MP5B	Mx	.004	5.75
31	MP5C	X	0	.25
32	MP5C	Z	-9.462	.25
33	MP5C	Mx	-.000822	.25
34	MP5C	X	0	5.75
35	MP5C	Z	-9.462	5.75
36	MP5C	Mx	-.000822	5.75
37	MP3A	X	0	.5
38	MP3A	Z	-12.273	.5
39	MP3A	Mx	.009	.5
40	MP3A	X	0	5.5
41	MP3A	Z	-12.273	5.5
42	MP3A	Mx	.009	5.5
43	MP3B	X	0	.5
44	MP3B	Z	-8.554	.5
45	MP3B	Mx	.006	.5
46	MP3B	X	0	5.5
47	MP3B	Z	-8.554	5.5
48	MP3B	Mx	.006	5.5
49	MP3C	X	0	.5
50	MP3C	Z	-12.146	.5
51	MP3C	Mx	-.01	.5
52	MP3C	X	0	5.5
53	MP3C	Z	-12.146	5.5
54	MP3C	Mx	-.01	5.5
55	MP3A	X	0	.5
56	MP3A	Z	-12.273	.5
57	MP3A	Mx	-.009	.5
58	MP3A	X	0	5.5
59	MP3A	Z	-12.273	5.5
60	MP3A	Mx	-.009	5.5
61	MP3B	X	0	.5
62	MP3B	Z	-8.554	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
63	MP3B	Mx	.002	.5
64	MP3B	X	0	5.5
65	MP3B	Z	-8.554	5.5
66	MP3B	Mx	.002	5.5
67	MP3C	X	0	.5
68	MP3C	Z	-12.146	.5
69	MP3C	Mx	.008	.5
70	MP3C	X	0	5.5
71	MP3C	Z	-12.146	5.5
72	MP3C	Mx	.008	5.5
73	MP4A	X	0	2
74	MP4A	Z	-5.564	2
75	MP4A	Mx	0	2
76	MP4A	X	0	4
77	MP4A	Z	-5.564	4
78	MP4A	Mx	0	4
79	MP4B	X	0	2
80	MP4B	Z	-3.991	2
81	MP4B	Mx	.002	2
82	MP4B	X	0	4
83	MP4B	Z	-3.991	4
84	MP4B	Mx	.002	4
85	MP4C	X	0	2
86	MP4C	Z	-5.51	2
87	MP4C	Mx	-.000478	2
88	MP4C	X	0	4
89	MP4C	Z	-5.51	4
90	MP4C	Mx	-.000478	4
91	MP3A	X	0	1
92	MP3A	Z	-.997	1
93	MP3A	Mx	0	1
94	MP3B	X	0	1
95	MP3B	Z	-.726	1
96	MP3B	Mx	-.000341	1
97	MP3C	X	0	1
98	MP3C	Z	-.988	1
99	MP3C	Mx	8.6e-5	1
100	MP2A	X	0	3
101	MP2A	Z	-5.039	3
102	MP2A	Mx	0	3
103	MP2B	X	0	3
104	MP2B	Z	-3.563	3
105	MP2B	Mx	-.002	3
106	MP2C	X	0	3
107	MP2C	Z	-4.988	3
108	MP2C	Mx	.000433	3
109	MP3A	X	0	3
110	MP3A	Z	-5.039	3
111	MP3A	Mx	0	3
112	MP3B	X	0	3
113	MP3B	Z	-2.998	3
114	MP3B	Mx	-.001	3
115	MP3C	X	0	3
116	MP3C	Z	-4.969	3
117	MP3C	Mx	.000431	3
118	OVP2	X	0	1
119	OVP2	Z	-8.785	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
120	OVP2	Mx	0	1
121	LR1	X	0	1
122	LR1	Z	-4.902	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	4.599	.25
2	MP1A	Z	-7.965	.25
3	MP1A	Mx	-.002	.25
4	MP1A	X	4.599	5.75
5	MP1A	Z	-7.965	5.75
6	MP1A	Mx	-.002	5.75
7	MP1B	X	4.501	.25
8	MP1B	Z	-7.796	.25
9	MP1B	Mx	.003	.25
10	MP1B	X	4.501	5.75
11	MP1B	Z	-7.796	5.75
12	MP1B	Mx	.003	5.75
13	MP1C	X	4.679	.25
14	MP1C	Z	-8.104	.25
15	MP1C	Mx	.002	.25
16	MP1C	X	4.679	5.75
17	MP1C	Z	-8.104	5.75
18	MP1C	Mx	.002	5.75
19	MP5A	X	4.599	.25
20	MP5A	Z	-7.965	.25
21	MP5A	Mx	-.002	.25
22	MP5A	X	4.599	5.75
23	MP5A	Z	-7.965	5.75
24	MP5A	Mx	-.002	5.75
25	MP5B	X	4.501	.25
26	MP5B	Z	-7.796	.25
27	MP5B	Mx	.003	.25
28	MP5B	X	4.501	5.75
29	MP5B	Z	-7.796	5.75
30	MP5B	Mx	.003	5.75
31	MP5C	X	4.679	.25
32	MP5C	Z	-8.104	.25
33	MP5C	Mx	.002	.25
34	MP5C	X	4.679	5.75
35	MP5C	Z	-8.104	5.75
36	MP5C	Mx	.002	5.75
37	MP3A	X	5.61	.5
38	MP3A	Z	-9.717	.5
39	MP3A	Mx	.004	.5
40	MP3A	X	5.61	5.5
41	MP3A	Z	-9.717	5.5
42	MP3A	Mx	.004	5.5
43	MP3B	X	5.266	.5
44	MP3B	Z	-9.122	.5
45	MP3B	Mx	.009	.5
46	MP3B	X	5.266	5.5
47	MP3B	Z	-9.122	5.5
48	MP3B	Mx	.009	5.5
49	MP3C	X	5.89	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
50	MP3C	Z	-10.202	.5
51	MP3C	Mx	-.006	.5
52	MP3C	X	5.89	5.5
53	MP3C	Z	-10.202	5.5
54	MP3C	Mx	-.006	5.5
55	MP3A	X	5.61	.5
56	MP3A	Z	-9.717	.5
57	MP3A	Mx	-.01	.5
58	MP3A	X	5.61	5.5
59	MP3A	Z	-9.717	5.5
60	MP3A	Mx	-.01	5.5
61	MP3B	X	5.266	.5
62	MP3B	Z	-9.122	.5
63	MP3B	Mx	-.003	.5
64	MP3B	X	5.266	5.5
65	MP3B	Z	-9.122	5.5
66	MP3B	Mx	-.003	5.5
67	MP3C	X	5.89	.5
68	MP3C	Z	-10.202	.5
69	MP3C	Mx	.01	.5
70	MP3C	X	5.89	5.5
71	MP3C	Z	-10.202	5.5
72	MP3C	Mx	.01	5.5
73	MP4A	X	2.559	2
74	MP4A	Z	-4.433	2
75	MP4A	Mx	-.001	2
76	MP4A	X	2.559	4
77	MP4A	Z	-4.433	4
78	MP4A	Mx	-.001	4
79	MP4B	X	2.414	2
80	MP4B	Z	-4.181	2
81	MP4B	Mx	.002	2
82	MP4B	X	2.414	4
83	MP4B	Z	-4.181	4
84	MP4B	Mx	.002	4
85	MP4C	X	2.678	2
86	MP4C	Z	-4.638	2
87	MP4C	Mx	.000916	2
88	MP4C	X	2.678	4
89	MP4C	Z	-4.638	4
90	MP4C	Mx	.000916	4
91	MP3A	X	.46	1
92	MP3A	Z	-.797	1
93	MP3A	Mx	.00023	1
94	MP3B	X	.435	1
95	MP3B	Z	-.753	1
96	MP3B	Mx	-.000279	1
97	MP3C	X	.481	1
98	MP3C	Z	-.832	1
99	MP3C	Mx	-.000165	1
100	MP2A	X	2.31	3
101	MP2A	Z	-4.002	3
102	MP2A	Mx	.001	3
103	MP2B	X	2.174	3
104	MP2B	Z	-3.766	3
105	MP2B	Mx	-.001	3
106	MP2C	X	2.422	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
107	MP2C	Z	-4.194	3
108	MP2C	Mx	-.000828	3
109	MP3A	X	2.23	3
110	MP3A	Z	-3.863	3
111	MP3A	Mx	.001	3
112	MP3B	X	2.042	3
113	MP3B	Z	-3.537	3
114	MP3B	Mx	-.001	3
115	MP3C	X	2.384	3
116	MP3C	Z	-4.129	3
117	MP3C	Mx	-.000815	3
118	OVP2	X	3.582	1
119	OVP2	Z	-6.204	1
120	OVP2	Mx	0	1
121	LR1	X	.489	1
122	LR1	Z	-.846	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	7.445	.25
2	MP1A	Z	-4.298	.25
3	MP1A	Mx	-.004	.25
4	MP1A	X	7.445	5.75
5	MP1A	Z	-4.298	5.75
6	MP1A	Mx	-.004	5.75
7	MP1B	X	8.194	.25
8	MP1B	Z	-4.731	.25
9	MP1B	Mx	.000822	.25
10	MP1B	X	8.194	5.75
11	MP1B	Z	-4.731	5.75
12	MP1B	Mx	.000822	5.75
13	MP1C	X	7.615	.25
14	MP1C	Z	-4.396	.25
15	MP1C	Mx	.003	.25
16	MP1C	X	7.615	5.75
17	MP1C	Z	-4.396	5.75
18	MP1C	Mx	.003	5.75
19	MP5A	X	7.445	.25
20	MP5A	Z	-4.298	.25
21	MP5A	Mx	-.004	.25
22	MP5A	X	7.445	5.75
23	MP5A	Z	-4.298	5.75
24	MP5A	Mx	-.004	5.75
25	MP5B	X	8.194	.25
26	MP5B	Z	-4.731	.25
27	MP5B	Mx	.000822	.25
28	MP5B	X	8.194	5.75
29	MP5B	Z	-4.731	5.75
30	MP5B	Mx	.000822	5.75
31	MP5C	X	7.615	.25
32	MP5C	Z	-4.396	.25
33	MP5C	Mx	.003	.25
34	MP5C	X	7.615	5.75
35	MP5C	Z	-4.396	5.75
36	MP5C	Mx	.003	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
37	MP3A	X	7.893	.5
38	MP3A	Z	-4.557	.5
39	MP3A	Mx	-.000529	.5
40	MP3A	X	7.893	5.5
41	MP3A	Z	-4.557	5.5
42	MP3A	Mx	-.000529	5.5
43	MP3B	X	10.519	.5
44	MP3B	Z	-6.073	.5
45	MP3B	Mx	.01	.5
46	MP3B	X	10.519	5.5
47	MP3B	Z	-6.073	5.5
48	MP3B	Mx	.01	5.5
49	MP3C	X	8.488	.5
50	MP3C	Z	-4.901	.5
51	MP3C	Mx	-.000971	.5
52	MP3C	X	8.488	5.5
53	MP3C	Z	-4.901	5.5
54	MP3C	Mx	-.000971	5.5
55	MP3A	X	7.893	.5
56	MP3A	Z	-4.557	.5
57	MP3A	Mx	-.007	.5
58	MP3A	X	7.893	5.5
59	MP3A	Z	-4.557	5.5
60	MP3A	Mx	-.007	5.5
61	MP3B	X	10.519	.5
62	MP3B	Z	-6.073	.5
63	MP3B	Mx	-.008	.5
64	MP3B	X	10.519	5.5
65	MP3B	Z	-6.073	5.5
66	MP3B	Mx	-.008	5.5
67	MP3C	X	8.488	.5
68	MP3C	Z	-4.901	.5
69	MP3C	Mx	.008	.5
70	MP3C	X	8.488	5.5
71	MP3C	Z	-4.901	5.5
72	MP3C	Mx	.008	5.5
73	MP4A	X	3.662	2
74	MP4A	Z	-2.114	2
75	MP4A	Mx	-.002	2
76	MP4A	X	3.662	4
77	MP4A	Z	-2.114	4
78	MP4A	Mx	-.002	4
79	MP4B	X	4.772	2
80	MP4B	Z	-2.755	2
81	MP4B	Mx	.000478	2
82	MP4B	X	4.772	4
83	MP4B	Z	-2.755	4
84	MP4B	Mx	.000478	4
85	MP4C	X	3.914	2
86	MP4C	Z	-2.259	2
87	MP4C	Mx	.002	2
88	MP4C	X	3.914	4
89	MP4C	Z	-2.259	4
90	MP4C	Mx	.002	4
91	MP3A	X	.664	1
92	MP3A	Z	-.383	1
93	MP3A	Mx	.000332	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
94	MP3B	X	.855	1
95	MP3B	Z	-.494	1
96	MP3B	Mx	-8.6e-5	1
97	MP3C	X	.707	1
98	MP3C	Z	-.408	1
99	MP3C	Mx	-.000313	1
100	MP2A	X	3.278	3
101	MP2A	Z	-1.893	3
102	MP2A	Mx	.002	3
103	MP2B	X	4.32	3
104	MP2B	Z	-2.494	3
105	MP2B	Mx	-.000433	3
106	MP2C	X	3.515	3
107	MP2C	Z	-2.029	3
108	MP2C	Mx	-.002	3
109	MP3A	X	2.863	3
110	MP3A	Z	-1.653	3
111	MP3A	Mx	.001	3
112	MP3B	X	4.303	3
113	MP3B	Z	-2.484	3
114	MP3B	Mx	-.000431	3
115	MP3C	X	3.189	3
116	MP3C	Z	-1.841	3
117	MP3C	Mx	-.001	3
118	OVP2	X	5.944	1
119	OVP2	Z	-3.432	1
120	OVP2	Mx	0	1
121	LR1	X	.218	1
122	LR1	Z	-.126	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	8.297	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	-.004	.25
4	MP1A	X	8.297	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	-.004	5.75
7	MP1B	X	9.357	.25
8	MP1B	Z	0	.25
9	MP1B	Mx	-.002	.25
10	MP1B	X	9.357	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	-.002	5.75
13	MP1C	X	8.333	.25
14	MP1C	Z	0	.25
15	MP1C	Mx	.004	.25
16	MP1C	X	8.333	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	.004	5.75
19	MP5A	X	8.297	.25
20	MP5A	Z	0	.25
21	MP5A	Mx	-.004	.25
22	MP5A	X	8.297	5.75
23	MP5A	Z	0	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP5A	Mx	-.004	5.75
25	MP5B	X	9.357	.25
26	MP5B	Z	0	.25
27	MP5B	Mx	-.002	.25
28	MP5B	X	9.357	5.75
29	MP5B	Z	0	5.75
30	MP5B	Mx	-.002	5.75
31	MP5C	X	8.333	.25
32	MP5C	Z	0	.25
33	MP5C	Mx	.004	.25
34	MP5C	X	8.333	5.75
35	MP5C	Z	0	5.75
36	MP5C	Mx	.004	5.75
37	MP3A	X	8.061	.5
38	MP3A	Z	0	.5
39	MP3A	Mx	-.004	.5
40	MP3A	X	8.061	5.5
41	MP3A	Z	0	5.5
42	MP3A	Mx	-.004	5.5
43	MP3B	X	11.78	.5
44	MP3B	Z	0	.5
45	MP3B	Mx	.006	.5
46	MP3B	X	11.78	5.5
47	MP3B	Z	0	5.5
48	MP3B	Mx	.006	5.5
49	MP3C	X	8.188	.5
50	MP3C	Z	0	.5
51	MP3C	Mx	.003	.5
52	MP3C	X	8.188	5.5
53	MP3C	Z	0	5.5
54	MP3C	Mx	.003	5.5
55	MP3A	X	8.061	.5
56	MP3A	Z	0	.5
57	MP3A	Mx	-.004	.5
58	MP3A	X	8.061	5.5
59	MP3A	Z	0	5.5
60	MP3A	Mx	-.004	5.5
61	MP3B	X	11.78	.5
62	MP3B	Z	0	.5
63	MP3B	Mx	-.01	.5
64	MP3B	X	11.78	5.5
65	MP3B	Z	0	5.5
66	MP3B	Mx	-.01	5.5
67	MP3C	X	8.188	.5
68	MP3C	Z	0	.5
69	MP3C	Mx	.005	.5
70	MP3C	X	8.188	5.5
71	MP3C	Z	0	5.5
72	MP3C	Mx	.005	5.5
73	MP4A	X	3.783	2
74	MP4A	Z	0	2
75	MP4A	Mx	-.002	2
76	MP4A	X	3.783	4
77	MP4A	Z	0	4
78	MP4A	Mx	-.002	4
79	MP4B	X	5.356	2
80	MP4B	Z	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
81	MP4B	Mx	-.000916	2
82	MP4B	X	5.356	4
83	MP4B	Z	0	4
84	MP4B	Mx	-.000916	4
85	MP4C	X	3.837	2
86	MP4C	Z	0	2
87	MP4C	Mx	.002	2
88	MP4C	X	3.837	4
89	MP4C	Z	0	4
90	MP4C	Mx	.002	4
91	MP3A	X	.69	1
92	MP3A	Z	0	1
93	MP3A	Mx	.000345	1
94	MP3B	X	.961	1
95	MP3B	Z	0	1
96	MP3B	Mx	.000164	1
97	MP3C	X	.699	1
98	MP3C	Z	0	1
99	MP3C	Mx	-.000344	1
100	MP2A	X	3.368	3
101	MP2A	Z	0	3
102	MP2A	Mx	.002	3
103	MP2B	X	4.843	3
104	MP2B	Z	0	3
105	MP2B	Mx	.000828	3
106	MP2C	X	3.418	3
107	MP2C	Z	0	3
108	MP2C	Mx	-.002	3
109	MP3A	X	2.728	3
110	MP3A	Z	0	3
111	MP3A	Mx	.001	3
112	MP3B	X	4.768	3
113	MP3B	Z	0	3
114	MP3B	Mx	.000815	3
115	MP3C	X	2.798	3
116	MP3C	Z	0	3
117	MP3C	Mx	-.001	3
118	OVP2	X	8.186	1
119	OVP2	Z	0	1
120	OVP2	Mx	0	1
121	LR1	X	3.451	1
122	LR1	Z	0	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	7.445	.25
2	MP1A	Z	4.298	.25
3	MP1A	Mx	-.004	.25
4	MP1A	X	7.445	5.75
5	MP1A	Z	4.298	5.75
6	MP1A	Mx	-.004	5.75
7	MP1B	X	7.615	.25
8	MP1B	Z	4.396	.25
9	MP1B	Mx	-.003	.25
10	MP1B	X	7.615	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP1B	Z	4.396	5.75
12	MP1B	Mx	-.003	5.75
13	MP1C	X	7.307	.25
14	MP1C	Z	4.219	.25
15	MP1C	Mx	.004	.25
16	MP1C	X	7.307	5.75
17	MP1C	Z	4.219	5.75
18	MP1C	Mx	.004	5.75
19	MP5A	X	7.445	.25
20	MP5A	Z	4.298	.25
21	MP5A	Mx	-.004	.25
22	MP5A	X	7.445	5.75
23	MP5A	Z	4.298	5.75
24	MP5A	Mx	-.004	5.75
25	MP5B	X	7.615	.25
26	MP5B	Z	4.396	.25
27	MP5B	Mx	-.003	.25
28	MP5B	X	7.615	5.75
29	MP5B	Z	4.396	5.75
30	MP5B	Mx	-.003	5.75
31	MP5C	X	7.307	.25
32	MP5C	Z	4.219	.25
33	MP5C	Mx	.004	.25
34	MP5C	X	7.307	5.75
35	MP5C	Z	4.219	5.75
36	MP5C	Mx	.004	5.75
37	MP3A	X	7.893	.5
38	MP3A	Z	4.557	.5
39	MP3A	Mx	-.007	.5
40	MP3A	X	7.893	5.5
41	MP3A	Z	4.557	5.5
42	MP3A	Mx	-.007	5.5
43	MP3B	X	8.488	.5
44	MP3B	Z	4.901	.5
45	MP3B	Mx	.000971	.5
46	MP3B	X	8.488	5.5
47	MP3B	Z	4.901	5.5
48	MP3B	Mx	.000971	5.5
49	MP3C	X	7.408	.5
50	MP3C	Z	4.277	.5
51	MP3C	Mx	.006	.5
52	MP3C	X	7.408	5.5
53	MP3C	Z	4.277	5.5
54	MP3C	Mx	.006	5.5
55	MP3A	X	7.893	.5
56	MP3A	Z	4.557	.5
57	MP3A	Mx	-.000529	.5
58	MP3A	X	7.893	5.5
59	MP3A	Z	4.557	5.5
60	MP3A	Mx	-.000529	5.5
61	MP3B	X	8.488	.5
62	MP3B	Z	4.901	.5
63	MP3B	Mx	-.008	.5
64	MP3B	X	8.488	5.5
65	MP3B	Z	4.901	5.5
66	MP3B	Mx	-.008	5.5
67	MP3C	X	7.408	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
68	MP3C	Z	4.277	.5
69	MP3C	Mx	.002	.5
70	MP3C	X	7.408	5.5
71	MP3C	Z	4.277	5.5
72	MP3C	Mx	.002	5.5
73	MP4A	X	3.662	2
74	MP4A	Z	2.114	2
75	MP4A	Mx	-.002	2
76	MP4A	X	3.662	4
77	MP4A	Z	2.114	4
78	MP4A	Mx	-.002	4
79	MP4B	X	3.914	2
80	MP4B	Z	2.259	2
81	MP4B	Mx	-.002	2
82	MP4B	X	3.914	4
83	MP4B	Z	2.259	4
84	MP4B	Mx	-.002	4
85	MP4C	X	3.457	2
86	MP4C	Z	1.996	2
87	MP4C	Mx	.002	2
88	MP4C	X	3.457	4
89	MP4C	Z	1.996	4
90	MP4C	Mx	.002	4
91	MP3A	X	.664	1
92	MP3A	Z	.383	1
93	MP3A	Mx	.000332	1
94	MP3B	X	.707	1
95	MP3B	Z	.408	1
96	MP3B	Mx	.000313	1
97	MP3C	X	.628	1
98	MP3C	Z	.363	1
99	MP3C	Mx	-.000341	1
100	MP2A	X	3.278	3
101	MP2A	Z	1.893	3
102	MP2A	Mx	.002	3
103	MP2B	X	3.515	3
104	MP2B	Z	2.029	3
105	MP2B	Mx	.002	3
106	MP2C	X	3.086	3
107	MP2C	Z	1.782	3
108	MP2C	Mx	-.002	3
109	MP3A	X	2.863	3
110	MP3A	Z	1.653	3
111	MP3A	Mx	.001	3
112	MP3B	X	3.189	3
113	MP3B	Z	1.841	3
114	MP3B	Mx	.001	3
115	MP3C	X	2.597	3
116	MP3C	Z	1.499	3
117	MP3C	Mx	-.001	3
118	OVP2	X	8.494	1
119	OVP2	Z	4.904	1
120	OVP2	Mx	0	1
121	LR1	X	6.387	1
122	LR1	Z	3.688	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	4.599	.25
2	MP1A	Z	7.965	.25
3	MP1A	Mx	-.002	.25
4	MP1A	X	4.599	5.75
5	MP1A	Z	7.965	5.75
6	MP1A	Mx	-.002	5.75
7	MP1B	X	4.166	.25
8	MP1B	Z	7.216	.25
9	MP1B	Mx	-.004	.25
10	MP1B	X	4.166	5.75
11	MP1B	Z	7.216	5.75
12	MP1B	Mx	-.004	5.75
13	MP1C	X	4.501	.25
14	MP1C	Z	7.796	.25
15	MP1C	Mx	.003	.25
16	MP1C	X	4.501	5.75
17	MP1C	Z	7.796	5.75
18	MP1C	Mx	.003	5.75
19	MP5A	X	4.599	.25
20	MP5A	Z	7.965	.25
21	MP5A	Mx	-.002	.25
22	MP5A	X	4.599	5.75
23	MP5A	Z	7.965	5.75
24	MP5A	Mx	-.002	5.75
25	MP5B	X	4.166	.25
26	MP5B	Z	7.216	.25
27	MP5B	Mx	-.004	.25
28	MP5B	X	4.166	5.75
29	MP5B	Z	7.216	5.75
30	MP5B	Mx	-.004	5.75
31	MP5C	X	4.501	.25
32	MP5C	Z	7.796	.25
33	MP5C	Mx	.003	.25
34	MP5C	X	4.501	5.75
35	MP5C	Z	7.796	5.75
36	MP5C	Mx	.003	5.75
37	MP3A	X	5.61	.5
38	MP3A	Z	9.717	.5
39	MP3A	Mx	-.01	.5
40	MP3A	X	5.61	5.5
41	MP3A	Z	9.717	5.5
42	MP3A	Mx	-.01	5.5
43	MP3B	X	4.094	.5
44	MP3B	Z	7.091	.5
45	MP3B	Mx	-.003	.5
46	MP3B	X	4.094	5.5
47	MP3B	Z	7.091	5.5
48	MP3B	Mx	-.003	5.5
49	MP3C	X	5.266	.5
50	MP3C	Z	9.122	.5
51	MP3C	Mx	.009	.5
52	MP3C	X	5.266	5.5
53	MP3C	Z	9.122	5.5
54	MP3C	Mx	.009	5.5
55	MP3A	X	5.61	.5
56	MP3A	Z	9.717	.5
57	MP3A	Mx	.004	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3A	X	5.61	5.5
59	MP3A	Z	9.717	5.5
60	MP3A	Mx	.004	5.5
61	MP3B	X	4.094	.5
62	MP3B	Z	7.091	.5
63	MP3B	Mx	-.005	.5
64	MP3B	X	4.094	5.5
65	MP3B	Z	7.091	5.5
66	MP3B	Mx	-.005	5.5
67	MP3C	X	5.266	.5
68	MP3C	Z	9.122	.5
69	MP3C	Mx	-.003	.5
70	MP3C	X	5.266	5.5
71	MP3C	Z	9.122	5.5
72	MP3C	Mx	-.003	5.5
73	MP4A	X	2.559	2
74	MP4A	Z	4.433	2
75	MP4A	Mx	-.001	2
76	MP4A	X	2.559	4
77	MP4A	Z	4.433	4
78	MP4A	Mx	-.001	4
79	MP4B	X	1.918	2
80	MP4B	Z	3.323	2
81	MP4B	Mx	-.002	2
82	MP4B	X	1.918	4
83	MP4B	Z	3.323	4
84	MP4B	Mx	-.002	4
85	MP4C	X	2.414	2
86	MP4C	Z	4.181	2
87	MP4C	Mx	.002	2
88	MP4C	X	2.414	4
89	MP4C	Z	4.181	4
90	MP4C	Mx	.002	4
91	MP3A	X	.46	1
92	MP3A	Z	.797	1
93	MP3A	Mx	.00023	1
94	MP3B	X	.35	1
95	MP3B	Z	.605	1
96	MP3B	Mx	.000344	1
97	MP3C	X	.435	1
98	MP3C	Z	.753	1
99	MP3C	Mx	-.00028	1
100	MP2A	X	2.31	3
101	MP2A	Z	4.002	3
102	MP2A	Mx	.001	3
103	MP2B	X	1.709	3
104	MP2B	Z	2.96	3
105	MP2B	Mx	.002	3
106	MP2C	X	2.174	3
107	MP2C	Z	3.766	3
108	MP2C	Mx	-.001	3
109	MP3A	X	2.23	3
110	MP3A	Z	3.863	3
111	MP3A	Mx	.001	3
112	MP3B	X	1.399	3
113	MP3B	Z	2.423	3
114	MP3B	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
115	MP3C	X	2.042	3
116	MP3C	Z	3.537	3
117	MP3C	Mx	-.001	3
118	OVP2	X	5.054	1
119	OVP2	Z	8.754	1
120	OVP2	Mx	0	1
121	LR1	X	4.05	1
122	LR1	Z	7.016	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.25
2	MP1A	Z	9.498	.25
3	MP1A	Mx	0	.25
4	MP1A	X	0	5.75
5	MP1A	Z	9.498	5.75
6	MP1A	Mx	0	5.75
7	MP1B	X	0	.25
8	MP1B	Z	8.437	.25
9	MP1B	Mx	-.004	.25
10	MP1B	X	0	5.75
11	MP1B	Z	8.437	5.75
12	MP1B	Mx	-.004	5.75
13	MP1C	X	0	.25
14	MP1C	Z	9.462	.25
15	MP1C	Mx	.000822	.25
16	MP1C	X	0	5.75
17	MP1C	Z	9.462	5.75
18	MP1C	Mx	.000822	5.75
19	MP5A	X	0	.25
20	MP5A	Z	9.498	.25
21	MP5A	Mx	0	.25
22	MP5A	X	0	5.75
23	MP5A	Z	9.498	5.75
24	MP5A	Mx	0	5.75
25	MP5B	X	0	.25
26	MP5B	Z	8.437	.25
27	MP5B	Mx	-.004	.25
28	MP5B	X	0	5.75
29	MP5B	Z	8.437	5.75
30	MP5B	Mx	-.004	5.75
31	MP5C	X	0	.25
32	MP5C	Z	9.462	.25
33	MP5C	Mx	.000822	.25
34	MP5C	X	0	5.75
35	MP5C	Z	9.462	5.75
36	MP5C	Mx	.000822	5.75
37	MP3A	X	0	.5
38	MP3A	Z	12.273	.5
39	MP3A	Mx	-.009	.5
40	MP3A	X	0	5.5
41	MP3A	Z	12.273	5.5
42	MP3A	Mx	-.009	5.5
43	MP3B	X	0	.5
44	MP3B	Z	8.554	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
45	MP3B	Mx	-.006	.5
46	MP3B	X	0	5.5
47	MP3B	Z	8.554	5.5
48	MP3B	Mx	-.006	5.5
49	MP3C	X	0	.5
50	MP3C	Z	12.146	.5
51	MP3C	Mx	.01	.5
52	MP3C	X	0	5.5
53	MP3C	Z	12.146	5.5
54	MP3C	Mx	.01	5.5
55	MP3A	X	0	.5
56	MP3A	Z	12.273	.5
57	MP3A	Mx	.009	.5
58	MP3A	X	0	5.5
59	MP3A	Z	12.273	5.5
60	MP3A	Mx	.009	5.5
61	MP3B	X	0	.5
62	MP3B	Z	8.554	.5
63	MP3B	Mx	-.002	.5
64	MP3B	X	0	5.5
65	MP3B	Z	8.554	5.5
66	MP3B	Mx	-.002	5.5
67	MP3C	X	0	.5
68	MP3C	Z	12.146	.5
69	MP3C	Mx	-.008	.5
70	MP3C	X	0	5.5
71	MP3C	Z	12.146	5.5
72	MP3C	Mx	-.008	5.5
73	MP4A	X	0	2
74	MP4A	Z	5.564	2
75	MP4A	Mx	0	2
76	MP4A	X	0	4
77	MP4A	Z	5.564	4
78	MP4A	Mx	0	4
79	MP4B	X	0	2
80	MP4B	Z	3.991	2
81	MP4B	Mx	-.002	2
82	MP4B	X	0	4
83	MP4B	Z	3.991	4
84	MP4B	Mx	-.002	4
85	MP4C	X	0	2
86	MP4C	Z	5.51	2
87	MP4C	Mx	.000478	2
88	MP4C	X	0	4
89	MP4C	Z	5.51	4
90	MP4C	Mx	.000478	4
91	MP3A	X	0	1
92	MP3A	Z	.997	1
93	MP3A	Mx	0	1
94	MP3B	X	0	1
95	MP3B	Z	.726	1
96	MP3B	Mx	.000341	1
97	MP3C	X	0	1
98	MP3C	Z	.988	1
99	MP3C	Mx	-8.6e-5	1
100	MP2A	X	0	3
101	MP2A	Z	5.039	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
102	MP2A	Mx	0	3
103	MP2B	X	0	3
104	MP2B	Z	3.563	3
105	MP2B	Mx	.002	3
106	MP2C	X	0	3
107	MP2C	Z	4.988	3
108	MP2C	Mx	-.000433	3
109	MP3A	X	0	3
110	MP3A	Z	5.039	3
111	MP3A	Mx	0	3
112	MP3B	X	0	3
113	MP3B	Z	2.998	3
114	MP3B	Mx	.001	3
115	MP3C	X	0	3
116	MP3C	Z	4.969	3
117	MP3C	Mx	-.000431	3
118	OVP2	X	0	1
119	OVP2	Z	8.785	1
120	OVP2	Mx	0	1
121	LR1	X	0	1
122	LR1	Z	4.902	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-4.599	.25
2	MP1A	Z	7.965	.25
3	MP1A	Mx	.002	.25
4	MP1A	X	-4.599	5.75
5	MP1A	Z	7.965	5.75
6	MP1A	Mx	.002	5.75
7	MP1B	X	-4.501	.25
8	MP1B	Z	7.796	.25
9	MP1B	Mx	-.003	.25
10	MP1B	X	-4.501	5.75
11	MP1B	Z	7.796	5.75
12	MP1B	Mx	-.003	5.75
13	MP1C	X	-4.679	.25
14	MP1C	Z	8.104	.25
15	MP1C	Mx	-.002	.25
16	MP1C	X	-4.679	5.75
17	MP1C	Z	8.104	5.75
18	MP1C	Mx	-.002	5.75
19	MP5A	X	-4.599	.25
20	MP5A	Z	7.965	.25
21	MP5A	Mx	.002	.25
22	MP5A	X	-4.599	5.75
23	MP5A	Z	7.965	5.75
24	MP5A	Mx	.002	5.75
25	MP5B	X	-4.501	.25
26	MP5B	Z	7.796	.25
27	MP5B	Mx	-.003	.25
28	MP5B	X	-4.501	5.75
29	MP5B	Z	7.796	5.75
30	MP5B	Mx	-.003	5.75
31	MP5C	X	-4.679	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP5C	Z	8.104	.25
33	MP5C	Mx	-.002	.25
34	MP5C	X	-4.679	5.75
35	MP5C	Z	8.104	5.75
36	MP5C	Mx	-.002	5.75
37	MP3A	X	-5.61	.5
38	MP3A	Z	9.717	.5
39	MP3A	Mx	-.004	.5
40	MP3A	X	-5.61	5.5
41	MP3A	Z	9.717	5.5
42	MP3A	Mx	-.004	5.5
43	MP3B	X	-5.266	.5
44	MP3B	Z	9.122	.5
45	MP3B	Mx	-.009	.5
46	MP3B	X	-5.266	5.5
47	MP3B	Z	9.122	5.5
48	MP3B	Mx	-.009	5.5
49	MP3C	X	-5.89	.5
50	MP3C	Z	10.202	.5
51	MP3C	Mx	.006	.5
52	MP3C	X	-5.89	5.5
53	MP3C	Z	10.202	5.5
54	MP3C	Mx	.006	5.5
55	MP3A	X	-5.61	.5
56	MP3A	Z	9.717	.5
57	MP3A	Mx	.01	.5
58	MP3A	X	-5.61	5.5
59	MP3A	Z	9.717	5.5
60	MP3A	Mx	.01	5.5
61	MP3B	X	-5.266	.5
62	MP3B	Z	9.122	.5
63	MP3B	Mx	.003	.5
64	MP3B	X	-5.266	5.5
65	MP3B	Z	9.122	5.5
66	MP3B	Mx	.003	5.5
67	MP3C	X	-5.89	.5
68	MP3C	Z	10.202	.5
69	MP3C	Mx	-.01	.5
70	MP3C	X	-5.89	5.5
71	MP3C	Z	10.202	5.5
72	MP3C	Mx	-.01	5.5
73	MP4A	X	-2.559	2
74	MP4A	Z	4.433	2
75	MP4A	Mx	.001	2
76	MP4A	X	-2.559	4
77	MP4A	Z	4.433	4
78	MP4A	Mx	.001	4
79	MP4B	X	-2.414	2
80	MP4B	Z	4.181	2
81	MP4B	Mx	-.002	2
82	MP4B	X	-2.414	4
83	MP4B	Z	4.181	4
84	MP4B	Mx	-.002	4
85	MP4C	X	-2.678	2
86	MP4C	Z	4.638	2
87	MP4C	Mx	-.000916	2
88	MP4C	X	-2.678	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
89	MP4C	Z	4.638	4
90	MP4C	Mx	-.000916	4
91	MP3A	X	-.46	1
92	MP3A	Z	.797	1
93	MP3A	Mx	-.00023	1
94	MP3B	X	-.435	1
95	MP3B	Z	.753	1
96	MP3B	Mx	.000279	1
97	MP3C	X	-.481	1
98	MP3C	Z	.832	1
99	MP3C	Mx	.000165	1
100	MP2A	X	-2.31	3
101	MP2A	Z	4.002	3
102	MP2A	Mx	-.001	3
103	MP2B	X	-2.174	3
104	MP2B	Z	3.766	3
105	MP2B	Mx	.001	3
106	MP2C	X	-2.422	3
107	MP2C	Z	4.194	3
108	MP2C	Mx	.000828	3
109	MP3A	X	-2.23	3
110	MP3A	Z	3.863	3
111	MP3A	Mx	-.001	3
112	MP3B	X	-2.042	3
113	MP3B	Z	3.537	3
114	MP3B	Mx	.001	3
115	MP3C	X	-2.384	3
116	MP3C	Z	4.129	3
117	MP3C	Mx	.000815	3
118	OVP2	X	-3.582	1
119	OVP2	Z	6.204	1
120	OVP2	Mx	0	1
121	LR1	X	-.489	1
122	LR1	Z	.846	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-7.445	.25
2	MP1A	Z	4.298	.25
3	MP1A	Mx	.004	.25
4	MP1A	X	-7.445	5.75
5	MP1A	Z	4.298	5.75
6	MP1A	Mx	.004	5.75
7	MP1B	X	-8.194	.25
8	MP1B	Z	4.731	.25
9	MP1B	Mx	-.000822	.25
10	MP1B	X	-8.194	5.75
11	MP1B	Z	4.731	5.75
12	MP1B	Mx	-.000822	5.75
13	MP1C	X	-7.615	.25
14	MP1C	Z	4.396	.25
15	MP1C	Mx	-.003	.25
16	MP1C	X	-7.615	5.75
17	MP1C	Z	4.396	5.75
18	MP1C	Mx	-.003	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP5A	X	-7.445	.25
20	MP5A	Z	4.298	.25
21	MP5A	Mx	.004	.25
22	MP5A	X	-7.445	5.75
23	MP5A	Z	4.298	5.75
24	MP5A	Mx	.004	5.75
25	MP5B	X	-8.194	.25
26	MP5B	Z	4.731	.25
27	MP5B	Mx	-.000822	.25
28	MP5B	X	-8.194	5.75
29	MP5B	Z	4.731	5.75
30	MP5B	Mx	-.000822	5.75
31	MP5C	X	-7.615	.25
32	MP5C	Z	4.396	.25
33	MP5C	Mx	-.003	.25
34	MP5C	X	-7.615	5.75
35	MP5C	Z	4.396	5.75
36	MP5C	Mx	-.003	5.75
37	MP3A	X	-7.893	.5
38	MP3A	Z	4.557	.5
39	MP3A	Mx	.000529	.5
40	MP3A	X	-7.893	5.5
41	MP3A	Z	4.557	5.5
42	MP3A	Mx	.000529	5.5
43	MP3B	X	-10.519	.5
44	MP3B	Z	6.073	.5
45	MP3B	Mx	-.01	.5
46	MP3B	X	-10.519	5.5
47	MP3B	Z	6.073	5.5
48	MP3B	Mx	-.01	5.5
49	MP3C	X	-8.488	.5
50	MP3C	Z	4.901	.5
51	MP3C	Mx	.000971	.5
52	MP3C	X	-8.488	5.5
53	MP3C	Z	4.901	5.5
54	MP3C	Mx	.000971	5.5
55	MP3A	X	-7.893	.5
56	MP3A	Z	4.557	.5
57	MP3A	Mx	.007	.5
58	MP3A	X	-7.893	5.5
59	MP3A	Z	4.557	5.5
60	MP3A	Mx	.007	5.5
61	MP3B	X	-10.519	.5
62	MP3B	Z	6.073	.5
63	MP3B	Mx	.008	.5
64	MP3B	X	-10.519	5.5
65	MP3B	Z	6.073	5.5
66	MP3B	Mx	.008	5.5
67	MP3C	X	-8.488	.5
68	MP3C	Z	4.901	.5
69	MP3C	Mx	-.008	.5
70	MP3C	X	-8.488	5.5
71	MP3C	Z	4.901	5.5
72	MP3C	Mx	-.008	5.5
73	MP4A	X	-3.662	2
74	MP4A	Z	2.114	2
75	MP4A	Mx	.002	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
76	MP4A	X	-3.662	4
77	MP4A	Z	2.114	4
78	MP4A	Mx	.002	4
79	MP4B	X	-4.772	2
80	MP4B	Z	2.755	2
81	MP4B	Mx	-.000478	2
82	MP4B	X	-4.772	4
83	MP4B	Z	2.755	4
84	MP4B	Mx	-.000478	4
85	MP4C	X	-3.914	2
86	MP4C	Z	2.259	2
87	MP4C	Mx	-.002	2
88	MP4C	X	-3.914	4
89	MP4C	Z	2.259	4
90	MP4C	Mx	-.002	4
91	MP3A	X	-.664	1
92	MP3A	Z	.383	1
93	MP3A	Mx	-.000332	1
94	MP3B	X	-.855	1
95	MP3B	Z	.494	1
96	MP3B	Mx	8.6e-5	1
97	MP3C	X	-.707	1
98	MP3C	Z	.408	1
99	MP3C	Mx	.000313	1
100	MP2A	X	-3.278	3
101	MP2A	Z	1.893	3
102	MP2A	Mx	-.002	3
103	MP2B	X	-4.32	3
104	MP2B	Z	2.494	3
105	MP2B	Mx	.000433	3
106	MP2C	X	-3.515	3
107	MP2C	Z	2.029	3
108	MP2C	Mx	.002	3
109	MP3A	X	-2.863	3
110	MP3A	Z	1.653	3
111	MP3A	Mx	-.001	3
112	MP3B	X	-4.303	3
113	MP3B	Z	2.484	3
114	MP3B	Mx	.000431	3
115	MP3C	X	-3.189	3
116	MP3C	Z	1.841	3
117	MP3C	Mx	.001	3
118	OVP2	X	-5.944	1
119	OVP2	Z	3.432	1
120	OVP2	Mx	0	1
121	LR1	X	-.218	1
122	LR1	Z	.126	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-8.297	.25
2	MP1A	Z	0	.25
3	MP1A	Mx	.004	.25
4	MP1A	X	-8.297	5.75
5	MP1A	Z	0	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP1A	Mx	.004	5.75
7	MP1B	X	-9.357	.25
8	MP1B	Z	0	.25
9	MP1B	Mx	.002	.25
10	MP1B	X	-9.357	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	.002	5.75
13	MP1C	X	-8.333	.25
14	MP1C	Z	0	.25
15	MP1C	Mx	-.004	.25
16	MP1C	X	-8.333	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	-.004	5.75
19	MP5A	X	-8.297	.25
20	MP5A	Z	0	.25
21	MP5A	Mx	.004	.25
22	MP5A	X	-8.297	5.75
23	MP5A	Z	0	5.75
24	MP5A	Mx	.004	5.75
25	MP5B	X	-9.357	.25
26	MP5B	Z	0	.25
27	MP5B	Mx	.002	.25
28	MP5B	X	-9.357	5.75
29	MP5B	Z	0	5.75
30	MP5B	Mx	.002	5.75
31	MP5C	X	-8.333	.25
32	MP5C	Z	0	.25
33	MP5C	Mx	-.004	.25
34	MP5C	X	-8.333	5.75
35	MP5C	Z	0	5.75
36	MP5C	Mx	-.004	5.75
37	MP3A	X	-8.061	.5
38	MP3A	Z	0	.5
39	MP3A	Mx	.004	.5
40	MP3A	X	-8.061	5.5
41	MP3A	Z	0	5.5
42	MP3A	Mx	.004	5.5
43	MP3B	X	-11.78	.5
44	MP3B	Z	0	.5
45	MP3B	Mx	-.006	.5
46	MP3B	X	-11.78	5.5
47	MP3B	Z	0	5.5
48	MP3B	Mx	-.006	5.5
49	MP3C	X	-8.188	.5
50	MP3C	Z	0	.5
51	MP3C	Mx	-.003	.5
52	MP3C	X	-8.188	5.5
53	MP3C	Z	0	5.5
54	MP3C	Mx	-.003	5.5
55	MP3A	X	-8.061	.5
56	MP3A	Z	0	.5
57	MP3A	Mx	.004	.5
58	MP3A	X	-8.061	5.5
59	MP3A	Z	0	5.5
60	MP3A	Mx	.004	5.5
61	MP3B	X	-11.78	.5
62	MP3B	Z	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
63	MP3B	Mx	.01	.5
64	MP3B	X	-11.78	5.5
65	MP3B	Z	0	5.5
66	MP3B	Mx	.01	5.5
67	MP3C	X	-8.188	.5
68	MP3C	Z	0	.5
69	MP3C	Mx	-.005	.5
70	MP3C	X	-8.188	5.5
71	MP3C	Z	0	5.5
72	MP3C	Mx	-.005	5.5
73	MP4A	X	-3.783	2
74	MP4A	Z	0	2
75	MP4A	Mx	.002	2
76	MP4A	X	-3.783	4
77	MP4A	Z	0	4
78	MP4A	Mx	.002	4
79	MP4B	X	-5.356	2
80	MP4B	Z	0	2
81	MP4B	Mx	.000916	2
82	MP4B	X	-5.356	4
83	MP4B	Z	0	4
84	MP4B	Mx	.000916	4
85	MP4C	X	-3.837	2
86	MP4C	Z	0	2
87	MP4C	Mx	-.002	2
88	MP4C	X	-3.837	4
89	MP4C	Z	0	4
90	MP4C	Mx	-.002	4
91	MP3A	X	-.69	1
92	MP3A	Z	0	1
93	MP3A	Mx	-.000345	1
94	MP3B	X	-.961	1
95	MP3B	Z	0	1
96	MP3B	Mx	-.000164	1
97	MP3C	X	-.699	1
98	MP3C	Z	0	1
99	MP3C	Mx	.000344	1
100	MP2A	X	-3.368	3
101	MP2A	Z	0	3
102	MP2A	Mx	-.002	3
103	MP2B	X	-4.843	3
104	MP2B	Z	0	3
105	MP2B	Mx	-.000828	3
106	MP2C	X	-3.418	3
107	MP2C	Z	0	3
108	MP2C	Mx	.002	3
109	MP3A	X	-2.728	3
110	MP3A	Z	0	3
111	MP3A	Mx	-.001	3
112	MP3B	X	-4.768	3
113	MP3B	Z	0	3
114	MP3B	Mx	-.000815	3
115	MP3C	X	-2.798	3
116	MP3C	Z	0	3
117	MP3C	Mx	.001	3
118	OVP2	X	-8.186	1
119	OVP2	Z	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
120	OVP2	Mx	0	1
121	LR1	X	-3.451	1
122	LR1	Z	0	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-7.445	.25
2	MP1A	Z	-4.298	.25
3	MP1A	Mx	.004	.25
4	MP1A	X	-7.445	5.75
5	MP1A	Z	-4.298	5.75
6	MP1A	Mx	.004	5.75
7	MP1B	X	-7.615	.25
8	MP1B	Z	-4.396	.25
9	MP1B	Mx	.003	.25
10	MP1B	X	-7.615	5.75
11	MP1B	Z	-4.396	5.75
12	MP1B	Mx	.003	5.75
13	MP1C	X	-7.307	.25
14	MP1C	Z	-4.219	.25
15	MP1C	Mx	-.004	.25
16	MP1C	X	-7.307	5.75
17	MP1C	Z	-4.219	5.75
18	MP1C	Mx	-.004	5.75
19	MP5A	X	-7.445	.25
20	MP5A	Z	-4.298	.25
21	MP5A	Mx	.004	.25
22	MP5A	X	-7.445	5.75
23	MP5A	Z	-4.298	5.75
24	MP5A	Mx	.004	5.75
25	MP5B	X	-7.615	.25
26	MP5B	Z	-4.396	.25
27	MP5B	Mx	.003	.25
28	MP5B	X	-7.615	5.75
29	MP5B	Z	-4.396	5.75
30	MP5B	Mx	.003	5.75
31	MP5C	X	-7.307	.25
32	MP5C	Z	-4.219	.25
33	MP5C	Mx	-.004	.25
34	MP5C	X	-7.307	5.75
35	MP5C	Z	-4.219	5.75
36	MP5C	Mx	-.004	5.75
37	MP3A	X	-7.893	.5
38	MP3A	Z	-4.557	.5
39	MP3A	Mx	.007	.5
40	MP3A	X	-7.893	5.5
41	MP3A	Z	-4.557	5.5
42	MP3A	Mx	.007	5.5
43	MP3B	X	-8.488	.5
44	MP3B	Z	-4.901	.5
45	MP3B	Mx	-.000971	.5
46	MP3B	X	-8.488	5.5
47	MP3B	Z	-4.901	5.5
48	MP3B	Mx	-.000971	5.5
49	MP3C	X	-7.408	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
50	MP3C	Z	-4.277	.5
51	MP3C	Mx	-.006	.5
52	MP3C	X	-7.408	5.5
53	MP3C	Z	-4.277	5.5
54	MP3C	Mx	-.006	5.5
55	MP3A	X	-7.893	.5
56	MP3A	Z	-4.557	.5
57	MP3A	Mx	.000529	.5
58	MP3A	X	-7.893	5.5
59	MP3A	Z	-4.557	5.5
60	MP3A	Mx	.000529	5.5
61	MP3B	X	-8.488	.5
62	MP3B	Z	-4.901	.5
63	MP3B	Mx	.008	.5
64	MP3B	X	-8.488	5.5
65	MP3B	Z	-4.901	5.5
66	MP3B	Mx	.008	5.5
67	MP3C	X	-7.408	.5
68	MP3C	Z	-4.277	.5
69	MP3C	Mx	-.002	.5
70	MP3C	X	-7.408	5.5
71	MP3C	Z	-4.277	5.5
72	MP3C	Mx	-.002	5.5
73	MP4A	X	-3.662	2
74	MP4A	Z	-2.114	2
75	MP4A	Mx	.002	2
76	MP4A	X	-3.662	4
77	MP4A	Z	-2.114	4
78	MP4A	Mx	.002	4
79	MP4B	X	-3.914	2
80	MP4B	Z	-2.259	2
81	MP4B	Mx	.002	2
82	MP4B	X	-3.914	4
83	MP4B	Z	-2.259	4
84	MP4B	Mx	.002	4
85	MP4C	X	-3.457	2
86	MP4C	Z	-1.996	2
87	MP4C	Mx	-.002	2
88	MP4C	X	-3.457	4
89	MP4C	Z	-1.996	4
90	MP4C	Mx	-.002	4
91	MP3A	X	-.664	1
92	MP3A	Z	-.383	1
93	MP3A	Mx	-.000332	1
94	MP3B	X	-.707	1
95	MP3B	Z	-.408	1
96	MP3B	Mx	-.000313	1
97	MP3C	X	-.628	1
98	MP3C	Z	-.363	1
99	MP3C	Mx	.000341	1
100	MP2A	X	-3.278	3
101	MP2A	Z	-1.893	3
102	MP2A	Mx	-.002	3
103	MP2B	X	-3.515	3
104	MP2B	Z	-2.029	3
105	MP2B	Mx	-.002	3
106	MP2C	X	-3.086	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
107	MP2C	Z	-1.782	3
108	MP2C	Mx	.002	3
109	MP3A	X	-2.863	3
110	MP3A	Z	-1.653	3
111	MP3A	Mx	-.001	3
112	MP3B	X	-3.189	3
113	MP3B	Z	-1.841	3
114	MP3B	Mx	-.001	3
115	MP3C	X	-2.597	3
116	MP3C	Z	-1.499	3
117	MP3C	Mx	.001	3
118	OVP2	X	-8.494	1
119	OVP2	Z	-4.904	1
120	OVP2	Mx	0	1
121	LR1	X	-6.387	1
122	LR1	Z	-3.688	1
123	LR1	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-4.599	.25
2	MP1A	Z	-7.965	.25
3	MP1A	Mx	.002	.25
4	MP1A	X	-4.599	5.75
5	MP1A	Z	-7.965	5.75
6	MP1A	Mx	.002	5.75
7	MP1B	X	-4.166	.25
8	MP1B	Z	-7.216	.25
9	MP1B	Mx	.004	.25
10	MP1B	X	-4.166	5.75
11	MP1B	Z	-7.216	5.75
12	MP1B	Mx	.004	5.75
13	MP1C	X	-4.501	.25
14	MP1C	Z	-7.796	.25
15	MP1C	Mx	-.003	.25
16	MP1C	X	-4.501	5.75
17	MP1C	Z	-7.796	5.75
18	MP1C	Mx	-.003	5.75
19	MP5A	X	-4.599	.25
20	MP5A	Z	-7.965	.25
21	MP5A	Mx	.002	.25
22	MP5A	X	-4.599	5.75
23	MP5A	Z	-7.965	5.75
24	MP5A	Mx	.002	5.75
25	MP5B	X	-4.166	.25
26	MP5B	Z	-7.216	.25
27	MP5B	Mx	.004	.25
28	MP5B	X	-4.166	5.75
29	MP5B	Z	-7.216	5.75
30	MP5B	Mx	.004	5.75
31	MP5C	X	-4.501	.25
32	MP5C	Z	-7.796	.25
33	MP5C	Mx	-.003	.25
34	MP5C	X	-4.501	5.75
35	MP5C	Z	-7.796	5.75
36	MP5C	Mx	-.003	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
37	MP3A	X	-5.61	.5
38	MP3A	Z	-9.717	.5
39	MP3A	Mx	.01	.5
40	MP3A	X	-5.61	5.5
41	MP3A	Z	-9.717	5.5
42	MP3A	Mx	.01	5.5
43	MP3B	X	-4.094	.5
44	MP3B	Z	-7.091	.5
45	MP3B	Mx	.003	.5
46	MP3B	X	-4.094	5.5
47	MP3B	Z	-7.091	5.5
48	MP3B	Mx	.003	5.5
49	MP3C	X	-5.266	.5
50	MP3C	Z	-9.122	.5
51	MP3C	Mx	-.009	.5
52	MP3C	X	-5.266	5.5
53	MP3C	Z	-9.122	5.5
54	MP3C	Mx	-.009	5.5
55	MP3A	X	-5.61	.5
56	MP3A	Z	-9.717	.5
57	MP3A	Mx	-.004	.5
58	MP3A	X	-5.61	5.5
59	MP3A	Z	-9.717	5.5
60	MP3A	Mx	-.004	5.5
61	MP3B	X	-4.094	.5
62	MP3B	Z	-7.091	.5
63	MP3B	Mx	.005	.5
64	MP3B	X	-4.094	5.5
65	MP3B	Z	-7.091	5.5
66	MP3B	Mx	.005	5.5
67	MP3C	X	-5.266	.5
68	MP3C	Z	-9.122	.5
69	MP3C	Mx	.003	.5
70	MP3C	X	-5.266	5.5
71	MP3C	Z	-9.122	5.5
72	MP3C	Mx	.003	5.5
73	MP4A	X	-2.559	2
74	MP4A	Z	-4.433	2
75	MP4A	Mx	.001	2
76	MP4A	X	-2.559	4
77	MP4A	Z	-4.433	4
78	MP4A	Mx	.001	4
79	MP4B	X	-1.918	2
80	MP4B	Z	-3.323	2
81	MP4B	Mx	.002	2
82	MP4B	X	-1.918	4
83	MP4B	Z	-3.323	4
84	MP4B	Mx	.002	4
85	MP4C	X	-2.414	2
86	MP4C	Z	-4.181	2
87	MP4C	Mx	-.002	2
88	MP4C	X	-2.414	4
89	MP4C	Z	-4.181	4
90	MP4C	Mx	-.002	4
91	MP3A	X	-.46	1
92	MP3A	Z	-.797	1
93	MP3A	Mx	-.00023	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
94	MP3B	X	-.35	1
95	MP3B	Z	-.605	1
96	MP3B	Mx	-.000344	1
97	MP3C	X	-.435	1
98	MP3C	Z	-.753	1
99	MP3C	Mx	.00028	1
100	MP2A	X	-2.31	3
101	MP2A	Z	-4.002	3
102	MP2A	Mx	-.001	3
103	MP2B	X	-1.709	3
104	MP2B	Z	-2.96	3
105	MP2B	Mx	-.002	3
106	MP2C	X	-2.174	3
107	MP2C	Z	-3.766	3
108	MP2C	Mx	.001	3
109	MP3A	X	-2.23	3
110	MP3A	Z	-3.863	3
111	MP3A	Mx	-.001	3
112	MP3B	X	-1.399	3
113	MP3B	Z	-2.423	3
114	MP3B	Mx	-.001	3
115	MP3C	X	-2.042	3
116	MP3C	Z	-3.537	3
117	MP3C	Mx	.001	3
118	OVP2	X	-5.054	1
119	OVP2	Z	-8.754	1
120	OVP2	Mx	0	1
121	LR1	X	-4.05	1
122	LR1	Z	-7.016	1
123	LR1	Mx	0	1

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M33	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M35	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M6	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M6	Y	-250	%50

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-9.775	-9.775	0	%100
2	M2	Y	-9.775	-9.775	0	%100
3	M4	Y	-9.775	-9.775	0	%100
4	M5	Y	-9.775	-9.775	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	M6	Y	-7.404	-7.404	0	%100
6	M7	Y	-9.775	-9.775	0	%100
7	M8	Y	-9.775	-9.775	0	%100
8	M9	Y	-7.404	-7.404	0	%100
9	M11	Y	-7.404	-7.404	0	%100
10	M15	Y	-9.775	-9.775	0	%100
11	M16	Y	-9.775	-9.775	0	%100
12	M18	Y	-9.775	-9.775	0	%100
13	M19	Y	-9.775	-9.775	0	%100
14	M21	Y	-9.775	-9.775	0	%100
15	M22	Y	-9.775	-9.775	0	%100
16	M23	Y	-5.726	-5.726	0	%100
17	M24	Y	-5.726	-5.726	0	%100
18	M25	Y	-5.726	-5.726	0	%100
19	MP1A	Y	-5.077	-5.077	0	%100
20	MP2A	Y	-5.077	-5.077	0	%100
21	MP3A	Y	-5.077	-5.077	0	%100
22	MP4A	Y	-5.077	-5.077	0	%100
23	MP5A	Y	-5.077	-5.077	0	%100
24	MP1C	Y	-5.077	-5.077	0	%100
25	MP2C	Y	-5.077	-5.077	0	%100
26	MP3C	Y	-5.077	-5.077	0	%100
27	MP4C	Y	-5.077	-5.077	0	%100
28	MP5C	Y	-5.077	-5.077	0	%100
29	MP1B	Y	-5.077	-5.077	0	%100
30	MP2B	Y	-5.077	-5.077	0	%100
31	MP3B	Y	-5.077	-5.077	0	%100
32	MP4B	Y	-5.077	-5.077	0	%100
33	MP5B	Y	-5.077	-5.077	0	%100
34	OVP2	Y	-5.077	-5.077	0	%100
35	LR1	Y	-5.077	-5.077	0	%100
36	M62	Y	-11.34	-11.34	0	%100
37	M63	Y	-11.34	-11.34	0	%100
38	M64	Y	-11.34	-11.34	0	%100
39	M70	Y	-5.793	-5.793	0	%100
40	M76	Y	-5.793	-5.793	0	%100
41	M82	Y	-5.793	-5.793	0	%100
42	M85	Y	-7.751	-7.751	0	%100
43	M88	Y	-7.751	-7.751	0	%100
44	M91	Y	-7.751	-7.751	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-9.321	-9.321	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-9.937	-9.937	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	-14.137	-14.137	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	-9.321	-9.321	0	%100
13	M8	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
14	M8	Z	-9.937	-9.937	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	-3.534	-3.534	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-3.534	-3.534	0	%100
19	M15	X	0	0	0	%100
20	M15	Z	-8.42	-8.42	0	%100
21	M16	X	0	0	0	%100
22	M16	Z	-8.42	-8.42	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	-19.765	-19.765	0	%100
25	M19	X	0	0	0	%100
26	M19	Z	-2.384	-2.384	0	%100
27	M21	X	0	0	0	%100
28	M21	Z	-2.384	-2.384	0	%100
29	M22	X	0	0	0	%100
30	M22	Z	-19.765	-19.765	0	%100
31	M23	X	0	0	0	%100
32	M23	Z	-2.578	-2.578	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	-2.578	-2.578	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	-10.312	-10.312	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	-9.9	-9.9	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	-9.9	-9.9	0	%100
41	MP3A	X	0	0	0	%100
42	MP3A	Z	-9.9	-9.9	0	%100
43	MP4A	X	0	0	0	%100
44	MP4A	Z	-9.9	-9.9	0	%100
45	MP5A	X	0	0	0	%100
46	MP5A	Z	-9.9	-9.9	0	%100
47	MP1C	X	0	0	0	%100
48	MP1C	Z	-9.9	-9.9	0	%100
49	MP2C	X	0	0	0	%100
50	MP2C	Z	-9.9	-9.9	0	%100
51	MP3C	X	0	0	0	%100
52	MP3C	Z	-9.9	-9.9	0	%100
53	MP4C	X	0	0	0	%100
54	MP4C	Z	-9.9	-9.9	0	%100
55	MP5C	X	0	0	0	%100
56	MP5C	Z	-9.9	-9.9	0	%100
57	MP1B	X	0	0	0	%100
58	MP1B	Z	-9.9	-9.9	0	%100
59	MP2B	X	0	0	0	%100
60	MP2B	Z	-9.9	-9.9	0	%100
61	MP3B	X	0	0	0	%100
62	MP3B	Z	-9.9	-9.9	0	%100
63	MP4B	X	0	0	0	%100
64	MP4B	Z	-9.9	-9.9	0	%100
65	MP5B	X	0	0	0	%100
66	MP5B	Z	-9.9	-9.9	0	%100
67	OVP2	X	0	0	0	%100
68	OVP2	Z	-8.096	-8.096	0	%100
69	LR1	X	0	0	0	%100
70	LR1	Z	-9.9	-9.9	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
71	M62	X	0	0	0	%100
72	M62	Z	-28.76	-28.76	0	%100
73	M63	X	0	0	0	%100
74	M63	Z	-22.059	-22.059	0	%100
75	M64	X	0	0	0	%100
76	M64	Z	-22.059	-22.059	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	-11.985	-11.985	0	%100
79	M76	X	0	0	0	%100
80	M76	Z	-2.996	-2.996	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	-2.996	-2.996	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	-4.425	-4.425	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	-4.425	-4.425	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	-17.699	-17.699	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	6.214	6.214	0	%100
2	M1	Z	-10.763	-10.763	0	%100
3	M2	X	6.624	6.624	0	%100
4	M2	Z	-11.474	-11.474	0	%100
5	M4	X	1.554	1.554	0	%100
6	M4	Z	-2.691	-2.691	0	%100
7	M5	X	1.656	1.656	0	%100
8	M5	Z	-2.868	-2.868	0	%100
9	M6	X	5.301	5.301	0	%100
10	M6	Z	-9.182	-9.182	0	%100
11	M7	X	1.554	1.554	0	%100
12	M7	Z	-2.691	-2.691	0	%100
13	M8	X	1.656	1.656	0	%100
14	M8	Z	-2.868	-2.868	0	%100
15	M9	X	5.301	5.301	0	%100
16	M9	Z	-9.182	-9.182	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	.307	.307	0	%100
20	M15	Z	-.532	-.532	0	%100
21	M16	X	8.998	8.998	0	%100
22	M16	Z	-15.585	-15.585	0	%100
23	M18	X	8.998	8.998	0	%100
24	M18	Z	-15.585	-15.585	0	%100
25	M19	X	.307	.307	0	%100
26	M19	Z	-.532	-.532	0	%100
27	M21	X	5.98	5.98	0	%100
28	M21	Z	-10.357	-10.357	0	%100
29	M22	X	5.98	5.98	0	%100
30	M22	Z	-10.357	-10.357	0	%100
31	M23	X	3.867	3.867	0	%100
32	M23	Z	-6.698	-6.698	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	3.867	3.867	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
36	M25	Z	-6.698	-6.698	0	%100
37	MP1A	X	4.95	4.95	0	%100
38	MP1A	Z	-8.574	-8.574	0	%100
39	MP2A	X	4.95	4.95	0	%100
40	MP2A	Z	-8.574	-8.574	0	%100
41	MP3A	X	4.95	4.95	0	%100
42	MP3A	Z	-8.574	-8.574	0	%100
43	MP4A	X	4.95	4.95	0	%100
44	MP4A	Z	-8.574	-8.574	0	%100
45	MP5A	X	4.95	4.95	0	%100
46	MP5A	Z	-8.574	-8.574	0	%100
47	MP1C	X	4.95	4.95	0	%100
48	MP1C	Z	-8.574	-8.574	0	%100
49	MP2C	X	4.95	4.95	0	%100
50	MP2C	Z	-8.574	-8.574	0	%100
51	MP3C	X	4.95	4.95	0	%100
52	MP3C	Z	-8.574	-8.574	0	%100
53	MP4C	X	4.95	4.95	0	%100
54	MP4C	Z	-8.574	-8.574	0	%100
55	MP5C	X	4.95	4.95	0	%100
56	MP5C	Z	-8.574	-8.574	0	%100
57	MP1B	X	4.95	4.95	0	%100
58	MP1B	Z	-8.574	-8.574	0	%100
59	MP2B	X	4.95	4.95	0	%100
60	MP2B	Z	-8.574	-8.574	0	%100
61	MP3B	X	4.95	4.95	0	%100
62	MP3B	Z	-8.574	-8.574	0	%100
63	MP4B	X	4.95	4.95	0	%100
64	MP4B	Z	-8.574	-8.574	0	%100
65	MP5B	X	4.95	4.95	0	%100
66	MP5B	Z	-8.574	-8.574	0	%100
67	OVP2	X	4.048	4.048	0	%100
68	OVP2	Z	-7.011	-7.011	0	%100
69	LR1	X	4.95	4.95	0	%100
70	LR1	Z	-8.574	-8.574	0	%100
71	M62	X	13.263	13.263	0	%100
72	M62	Z	-22.972	-22.972	0	%100
73	M63	X	13.263	13.263	0	%100
74	M63	Z	-22.972	-22.972	0	%100
75	M64	X	9.913	9.913	0	%100
76	M64	Z	-17.169	-17.169	0	%100
77	M70	X	4.494	4.494	0	%100
78	M70	Z	-7.784	-7.784	0	%100
79	M76	X	4.494	4.494	0	%100
80	M76	Z	-7.784	-7.784	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	6.637	6.637	0	%100
84	M85	Z	-11.496	-11.496	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	6.637	6.637	0	%100
88	M91	Z	-11.496	-11.496	0	%100

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

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

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	8.073	8.073	0	%100
2	M1	Z	-4.661	-4.661	0	%100
3	M2	X	8.605	8.605	0	%100
4	M2	Z	-4.968	-4.968	0	%100
5	M4	X	8.073	8.073	0	%100
6	M4	Z	-4.661	-4.661	0	%100
7	M5	X	8.605	8.605	0	%100
8	M5	Z	-4.968	-4.968	0	%100
9	M6	X	3.061	3.061	0	%100
10	M6	Z	-1.767	-1.767	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	12.243	12.243	0	%100
16	M9	Z	-7.068	-7.068	0	%100
17	M11	X	3.061	3.061	0	%100
18	M11	Z	-1.767	-1.767	0	%100
19	M15	X	2.065	2.065	0	%100
20	M15	Z	-1.192	-1.192	0	%100
21	M16	X	17.117	17.117	0	%100
22	M16	Z	-9.883	-9.883	0	%100
23	M18	X	7.292	7.292	0	%100
24	M18	Z	-4.21	-4.21	0	%100
25	M19	X	7.292	7.292	0	%100
26	M19	Z	-4.21	-4.21	0	%100
27	M21	X	17.117	17.117	0	%100
28	M21	Z	-9.883	-9.883	0	%100
29	M22	X	2.065	2.065	0	%100
30	M22	Z	-1.192	-1.192	0	%100
31	M23	X	8.93	8.93	0	%100
32	M23	Z	-5.156	-5.156	0	%100
33	M24	X	2.233	2.233	0	%100
34	M24	Z	-1.289	-1.289	0	%100
35	M25	X	2.233	2.233	0	%100
36	M25	Z	-1.289	-1.289	0	%100
37	MP1A	X	8.574	8.574	0	%100
38	MP1A	Z	-4.95	-4.95	0	%100
39	MP2A	X	8.574	8.574	0	%100
40	MP2A	Z	-4.95	-4.95	0	%100
41	MP3A	X	8.574	8.574	0	%100
42	MP3A	Z	-4.95	-4.95	0	%100
43	MP4A	X	8.574	8.574	0	%100
44	MP4A	Z	-4.95	-4.95	0	%100
45	MP5A	X	8.574	8.574	0	%100
46	MP5A	Z	-4.95	-4.95	0	%100
47	MP1C	X	8.574	8.574	0	%100
48	MP1C	Z	-4.95	-4.95	0	%100
49	MP2C	X	8.574	8.574	0	%100
50	MP2C	Z	-4.95	-4.95	0	%100
51	MP3C	X	8.574	8.574	0	%100
52	MP3C	Z	-4.95	-4.95	0	%100
53	MP4C	X	8.574	8.574	0	%100
54	MP4C	Z	-4.95	-4.95	0	%100
55	MP5C	X	8.574	8.574	0	%100
56	MP5C	Z	-4.95	-4.95	0	%100
57	MP1B	X	8.574	8.574	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	MP1B	Z	-4.95	-4.95	0	%100
59	MP2B	X	8.574	8.574	0	%100
60	MP2B	Z	-4.95	-4.95	0	%100
61	MP3B	X	8.574	8.574	0	%100
62	MP3B	Z	-4.95	-4.95	0	%100
63	MP4B	X	8.574	8.574	0	%100
64	MP4B	Z	-4.95	-4.95	0	%100
65	MP5B	X	8.574	8.574	0	%100
66	MP5B	Z	-4.95	-4.95	0	%100
67	OVP2	X	7.011	7.011	0	%100
68	OVP2	Z	-4.048	-4.048	0	%100
69	LR1	X	8.574	8.574	0	%100
70	LR1	Z	-4.95	-4.95	0	%100
71	M62	X	19.104	19.104	0	%100
72	M62	Z	-11.029	-11.029	0	%100
73	M63	X	24.907	24.907	0	%100
74	M63	Z	-14.38	-14.38	0	%100
75	M64	X	19.104	19.104	0	%100
76	M64	Z	-11.029	-11.029	0	%100
77	M70	X	2.595	2.595	0	%100
78	M70	Z	-1.498	-1.498	0	%100
79	M76	X	10.379	10.379	0	%100
80	M76	Z	-5.992	-5.992	0	%100
81	M82	X	2.595	2.595	0	%100
82	M82	Z	-1.498	-1.498	0	%100
83	M85	X	15.328	15.328	0	%100
84	M85	Z	-8.85	-8.85	0	%100
85	M88	X	3.832	3.832	0	%100
86	M88	Z	-2.212	-2.212	0	%100
87	M91	X	3.832	3.832	0	%100
88	M91	Z	-2.212	-2.212	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.107	3.107	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	3.312	3.312	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	12.428	12.428	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	13.249	13.249	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	0	0	0	%100
11	M7	X	3.107	3.107	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	3.312	3.312	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	10.602	10.602	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	10.602	10.602	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	11.959	11.959	0	%100
20	M15	Z	0	0	0	%100
21	M16	X	11.959	11.959	0	%100
22	M16	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M18	X	.615	.615	0	%100
24	M18	Z	0	0	0	%100
25	M19	X	17.996	17.996	0	%100
26	M19	Z	0	0	0	%100
27	M21	X	17.996	17.996	0	%100
28	M21	Z	0	0	0	%100
29	M22	X	.615	.615	0	%100
30	M22	Z	0	0	0	%100
31	M23	X	7.734	7.734	0	%100
32	M23	Z	0	0	0	%100
33	M24	X	7.734	7.734	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	0	0	0	%100
37	MP1A	X	9.9	9.9	0	%100
38	MP1A	Z	0	0	0	%100
39	MP2A	X	9.9	9.9	0	%100
40	MP2A	Z	0	0	0	%100
41	MP3A	X	9.9	9.9	0	%100
42	MP3A	Z	0	0	0	%100
43	MP4A	X	9.9	9.9	0	%100
44	MP4A	Z	0	0	0	%100
45	MP5A	X	9.9	9.9	0	%100
46	MP5A	Z	0	0	0	%100
47	MP1C	X	9.9	9.9	0	%100
48	MP1C	Z	0	0	0	%100
49	MP2C	X	9.9	9.9	0	%100
50	MP2C	Z	0	0	0	%100
51	MP3C	X	9.9	9.9	0	%100
52	MP3C	Z	0	0	0	%100
53	MP4C	X	9.9	9.9	0	%100
54	MP4C	Z	0	0	0	%100
55	MP5C	X	9.9	9.9	0	%100
56	MP5C	Z	0	0	0	%100
57	MP1B	X	9.9	9.9	0	%100
58	MP1B	Z	0	0	0	%100
59	MP2B	X	9.9	9.9	0	%100
60	MP2B	Z	0	0	0	%100
61	MP3B	X	9.9	9.9	0	%100
62	MP3B	Z	0	0	0	%100
63	MP4B	X	9.9	9.9	0	%100
64	MP4B	Z	0	0	0	%100
65	MP5B	X	9.9	9.9	0	%100
66	MP5B	Z	0	0	0	%100
67	OVP2	X	8.096	8.096	0	%100
68	OVP2	Z	0	0	0	%100
69	LR1	X	9.9	9.9	0	%100
70	LR1	Z	0	0	0	%100
71	M62	X	19.825	19.825	0	%100
72	M62	Z	0	0	0	%100
73	M63	X	26.526	26.526	0	%100
74	M63	Z	0	0	0	%100
75	M64	X	26.526	26.526	0	%100
76	M64	Z	0	0	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	0	0	0	%100
79	M76	X	8.988	8.988	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
80	M76	Z	0	0	0	%100
81	M82	X	8.988	8.988	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	13.274	13.274	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	13.274	13.274	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	8.073	8.073	0	%100
6	M4	Z	4.661	4.661	0	%100
7	M5	X	8.605	8.605	0	%100
8	M5	Z	4.968	4.968	0	%100
9	M6	X	3.061	3.061	0	%100
10	M6	Z	1.767	1.767	0	%100
11	M7	X	8.073	8.073	0	%100
12	M7	Z	4.661	4.661	0	%100
13	M8	X	8.605	8.605	0	%100
14	M8	Z	4.968	4.968	0	%100
15	M9	X	3.061	3.061	0	%100
16	M9	Z	1.767	1.767	0	%100
17	M11	X	12.243	12.243	0	%100
18	M11	Z	7.068	7.068	0	%100
19	M15	X	17.117	17.117	0	%100
20	M15	Z	9.883	9.883	0	%100
21	M16	X	2.065	2.065	0	%100
22	M16	Z	1.192	1.192	0	%100
23	M18	X	2.065	2.065	0	%100
24	M18	Z	1.192	1.192	0	%100
25	M19	X	17.117	17.117	0	%100
26	M19	Z	9.883	9.883	0	%100
27	M21	X	7.292	7.292	0	%100
28	M21	Z	4.21	4.21	0	%100
29	M22	X	7.292	7.292	0	%100
30	M22	Z	4.21	4.21	0	%100
31	M23	X	2.233	2.233	0	%100
32	M23	Z	1.289	1.289	0	%100
33	M24	X	8.93	8.93	0	%100
34	M24	Z	5.156	5.156	0	%100
35	M25	X	2.233	2.233	0	%100
36	M25	Z	1.289	1.289	0	%100
37	MP1A	X	8.574	8.574	0	%100
38	MP1A	Z	4.95	4.95	0	%100
39	MP2A	X	8.574	8.574	0	%100
40	MP2A	Z	4.95	4.95	0	%100
41	MP3A	X	8.574	8.574	0	%100
42	MP3A	Z	4.95	4.95	0	%100
43	MP4A	X	8.574	8.574	0	%100
44	MP4A	Z	4.95	4.95	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	MP5A	X	8.574	8.574	0	%100
46	MP5A	Z	4.95	4.95	0	%100
47	MP1C	X	8.574	8.574	0	%100
48	MP1C	Z	4.95	4.95	0	%100
49	MP2C	X	8.574	8.574	0	%100
50	MP2C	Z	4.95	4.95	0	%100
51	MP3C	X	8.574	8.574	0	%100
52	MP3C	Z	4.95	4.95	0	%100
53	MP4C	X	8.574	8.574	0	%100
54	MP4C	Z	4.95	4.95	0	%100
55	MP5C	X	8.574	8.574	0	%100
56	MP5C	Z	4.95	4.95	0	%100
57	MP1B	X	8.574	8.574	0	%100
58	MP1B	Z	4.95	4.95	0	%100
59	MP2B	X	8.574	8.574	0	%100
60	MP2B	Z	4.95	4.95	0	%100
61	MP3B	X	8.574	8.574	0	%100
62	MP3B	Z	4.95	4.95	0	%100
63	MP4B	X	8.574	8.574	0	%100
64	MP4B	Z	4.95	4.95	0	%100
65	MP5B	X	8.574	8.574	0	%100
66	MP5B	Z	4.95	4.95	0	%100
67	OVP2	X	7.011	7.011	0	%100
68	OVP2	Z	4.048	4.048	0	%100
69	LR1	X	8.574	8.574	0	%100
70	LR1	Z	4.95	4.95	0	%100
71	M62	X	19.104	19.104	0	%100
72	M62	Z	11.029	11.029	0	%100
73	M63	X	19.104	19.104	0	%100
74	M63	Z	11.029	11.029	0	%100
75	M64	X	24.907	24.907	0	%100
76	M64	Z	14.38	14.38	0	%100
77	M70	X	2.595	2.595	0	%100
78	M70	Z	1.498	1.498	0	%100
79	M76	X	2.595	2.595	0	%100
80	M76	Z	1.498	1.498	0	%100
81	M82	X	10.379	10.379	0	%100
82	M82	Z	5.992	5.992	0	%100
83	M85	X	3.832	3.832	0	%100
84	M85	Z	2.212	2.212	0	%100
85	M88	X	15.328	15.328	0	%100
86	M88	Z	8.85	8.85	0	%100
87	M91	X	3.832	3.832	0	%100
88	M91	Z	2.212	2.212	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.554	1.554	0	%100
2	M1	Z	2.691	2.691	0	%100
3	M2	X	1.656	1.656	0	%100
4	M2	Z	2.868	2.868	0	%100
5	M4	X	1.554	1.554	0	%100
6	M4	Z	2.691	2.691	0	%100
7	M5	X	1.656	1.656	0	%100
8	M5	Z	2.868	2.868	0	%100
9	M6	X	5.301	5.301	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M6	Z	9.182	9.182	0	%100
11	M7	X	6.214	6.214	0	%100
12	M7	Z	10.763	10.763	0	%100
13	M8	X	6.624	6.624	0	%100
14	M8	Z	11.474	11.474	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	5.301	5.301	0	%100
18	M11	Z	9.182	9.182	0	%100
19	M15	X	8.998	8.998	0	%100
20	M15	Z	15.585	15.585	0	%100
21	M16	X	.307	.307	0	%100
22	M16	Z	.532	.532	0	%100
23	M18	X	5.98	5.98	0	%100
24	M18	Z	10.357	10.357	0	%100
25	M19	X	5.98	5.98	0	%100
26	M19	Z	10.357	10.357	0	%100
27	M21	X	.307	.307	0	%100
28	M21	Z	.532	.532	0	%100
29	M22	X	8.998	8.998	0	%100
30	M22	Z	15.585	15.585	0	%100
31	M23	X	0	0	0	%100
32	M23	Z	0	0	0	%100
33	M24	X	3.867	3.867	0	%100
34	M24	Z	6.698	6.698	0	%100
35	M25	X	3.867	3.867	0	%100
36	M25	Z	6.698	6.698	0	%100
37	MP1A	X	4.95	4.95	0	%100
38	MP1A	Z	8.574	8.574	0	%100
39	MP2A	X	4.95	4.95	0	%100
40	MP2A	Z	8.574	8.574	0	%100
41	MP3A	X	4.95	4.95	0	%100
42	MP3A	Z	8.574	8.574	0	%100
43	MP4A	X	4.95	4.95	0	%100
44	MP4A	Z	8.574	8.574	0	%100
45	MP5A	X	4.95	4.95	0	%100
46	MP5A	Z	8.574	8.574	0	%100
47	MP1C	X	4.95	4.95	0	%100
48	MP1C	Z	8.574	8.574	0	%100
49	MP2C	X	4.95	4.95	0	%100
50	MP2C	Z	8.574	8.574	0	%100
51	MP3C	X	4.95	4.95	0	%100
52	MP3C	Z	8.574	8.574	0	%100
53	MP4C	X	4.95	4.95	0	%100
54	MP4C	Z	8.574	8.574	0	%100
55	MP5C	X	4.95	4.95	0	%100
56	MP5C	Z	8.574	8.574	0	%100
57	MP1B	X	4.95	4.95	0	%100
58	MP1B	Z	8.574	8.574	0	%100
59	MP2B	X	4.95	4.95	0	%100
60	MP2B	Z	8.574	8.574	0	%100
61	MP3B	X	4.95	4.95	0	%100
62	MP3B	Z	8.574	8.574	0	%100
63	MP4B	X	4.95	4.95	0	%100
64	MP4B	Z	8.574	8.574	0	%100
65	MP5B	X	4.95	4.95	0	%100
66	MP5B	Z	8.574	8.574	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	OVP2	X	4.048	4.048	0	%100
68	OVP2	Z	7.011	7.011	0	%100
69	LR1	X	4.95	4.95	0	%100
70	LR1	Z	8.574	8.574	0	%100
71	M62	X	13.263	13.263	0	%100
72	M62	Z	22.972	22.972	0	%100
73	M63	X	9.913	9.913	0	%100
74	M63	Z	17.169	17.169	0	%100
75	M64	X	13.263	13.263	0	%100
76	M64	Z	22.972	22.972	0	%100
77	M70	X	4.494	4.494	0	%100
78	M70	Z	7.784	7.784	0	%100
79	M76	X	0	0	0	%100
80	M76	Z	0	0	0	%100
81	M82	X	4.494	4.494	0	%100
82	M82	Z	7.784	7.784	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	6.637	6.637	0	%100
86	M88	Z	11.496	11.496	0	%100
87	M91	X	6.637	6.637	0	%100
88	M91	Z	11.496	11.496	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	9.321	9.321	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	9.937	9.937	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	14.137	14.137	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	9.321	9.321	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	9.937	9.937	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	3.534	3.534	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	3.534	3.534	0	%100
19	M15	X	0	0	0	%100
20	M15	Z	8.42	8.42	0	%100
21	M16	X	0	0	0	%100
22	M16	Z	8.42	8.42	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	19.765	19.765	0	%100
25	M19	X	0	0	0	%100
26	M19	Z	2.384	2.384	0	%100
27	M21	X	0	0	0	%100
28	M21	Z	2.384	2.384	0	%100
29	M22	X	0	0	0	%100
30	M22	Z	19.765	19.765	0	%100
31	M23	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	M23	Z	2.578	2.578	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	2.578	2.578	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	10.312	10.312	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	9.9	9.9	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	9.9	9.9	0	%100
41	MP3A	X	0	0	0	%100
42	MP3A	Z	9.9	9.9	0	%100
43	MP4A	X	0	0	0	%100
44	MP4A	Z	9.9	9.9	0	%100
45	MP5A	X	0	0	0	%100
46	MP5A	Z	9.9	9.9	0	%100
47	MP1C	X	0	0	0	%100
48	MP1C	Z	9.9	9.9	0	%100
49	MP2C	X	0	0	0	%100
50	MP2C	Z	9.9	9.9	0	%100
51	MP3C	X	0	0	0	%100
52	MP3C	Z	9.9	9.9	0	%100
53	MP4C	X	0	0	0	%100
54	MP4C	Z	9.9	9.9	0	%100
55	MP5C	X	0	0	0	%100
56	MP5C	Z	9.9	9.9	0	%100
57	MP1B	X	0	0	0	%100
58	MP1B	Z	9.9	9.9	0	%100
59	MP2B	X	0	0	0	%100
60	MP2B	Z	9.9	9.9	0	%100
61	MP3B	X	0	0	0	%100
62	MP3B	Z	9.9	9.9	0	%100
63	MP4B	X	0	0	0	%100
64	MP4B	Z	9.9	9.9	0	%100
65	MP5B	X	0	0	0	%100
66	MP5B	Z	9.9	9.9	0	%100
67	OVP2	X	0	0	0	%100
68	OVP2	Z	8.096	8.096	0	%100
69	LR1	X	0	0	0	%100
70	LR1	Z	9.9	9.9	0	%100
71	M62	X	0	0	0	%100
72	M62	Z	28.76	28.76	0	%100
73	M63	X	0	0	0	%100
74	M63	Z	22.059	22.059	0	%100
75	M64	X	0	0	0	%100
76	M64	Z	22.059	22.059	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	11.985	11.985	0	%100
79	M76	X	0	0	0	%100
80	M76	Z	2.996	2.996	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	2.996	2.996	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	4.425	4.425	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	4.425	4.425	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	17.699	17.699	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-6.214	-6.214	0	%100
2	M1	Z	10.763	10.763	0	%100
3	M2	X	-6.624	-6.624	0	%100
4	M2	Z	11.474	11.474	0	%100
5	M4	X	-1.554	-1.554	0	%100
6	M4	Z	2.691	2.691	0	%100
7	M5	X	-1.656	-1.656	0	%100
8	M5	Z	2.868	2.868	0	%100
9	M6	X	-5.301	-5.301	0	%100
10	M6	Z	9.182	9.182	0	%100
11	M7	X	-1.554	-1.554	0	%100
12	M7	Z	2.691	2.691	0	%100
13	M8	X	-1.656	-1.656	0	%100
14	M8	Z	2.868	2.868	0	%100
15	M9	X	-5.301	-5.301	0	%100
16	M9	Z	9.182	9.182	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	-.307	-.307	0	%100
20	M15	Z	.532	.532	0	%100
21	M16	X	-8.998	-8.998	0	%100
22	M16	Z	15.585	15.585	0	%100
23	M18	X	-8.998	-8.998	0	%100
24	M18	Z	15.585	15.585	0	%100
25	M19	X	-.307	-.307	0	%100
26	M19	Z	.532	.532	0	%100
27	M21	X	-5.98	-5.98	0	%100
28	M21	Z	10.357	10.357	0	%100
29	M22	X	-5.98	-5.98	0	%100
30	M22	Z	10.357	10.357	0	%100
31	M23	X	-3.867	-3.867	0	%100
32	M23	Z	6.698	6.698	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	-3.867	-3.867	0	%100
36	M25	Z	6.698	6.698	0	%100
37	MP1A	X	-4.95	-4.95	0	%100
38	MP1A	Z	8.574	8.574	0	%100
39	MP2A	X	-4.95	-4.95	0	%100
40	MP2A	Z	8.574	8.574	0	%100
41	MP3A	X	-4.95	-4.95	0	%100
42	MP3A	Z	8.574	8.574	0	%100
43	MP4A	X	-4.95	-4.95	0	%100
44	MP4A	Z	8.574	8.574	0	%100
45	MP5A	X	-4.95	-4.95	0	%100
46	MP5A	Z	8.574	8.574	0	%100
47	MP1C	X	-4.95	-4.95	0	%100
48	MP1C	Z	8.574	8.574	0	%100
49	MP2C	X	-4.95	-4.95	0	%100
50	MP2C	Z	8.574	8.574	0	%100
51	MP3C	X	-4.95	-4.95	0	%100
52	MP3C	Z	8.574	8.574	0	%100
53	MP4C	X	-4.95	-4.95	0	%100
54	MP4C	Z	8.574	8.574	0	%100
55	MP5C	X	-4.95	-4.95	0	%100
56	MP5C	Z	8.574	8.574	0	%100
57	MP1B	X	-4.95	-4.95	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	MP1B	Z	8.574	8.574	0	%100
59	MP2B	X	-4.95	-4.95	0	%100
60	MP2B	Z	8.574	8.574	0	%100
61	MP3B	X	-4.95	-4.95	0	%100
62	MP3B	Z	8.574	8.574	0	%100
63	MP4B	X	-4.95	-4.95	0	%100
64	MP4B	Z	8.574	8.574	0	%100
65	MP5B	X	-4.95	-4.95	0	%100
66	MP5B	Z	8.574	8.574	0	%100
67	OVP2	X	-4.048	-4.048	0	%100
68	OVP2	Z	7.011	7.011	0	%100
69	LR1	X	-4.95	-4.95	0	%100
70	LR1	Z	8.574	8.574	0	%100
71	M62	X	-13.263	-13.263	0	%100
72	M62	Z	22.972	22.972	0	%100
73	M63	X	-13.263	-13.263	0	%100
74	M63	Z	22.972	22.972	0	%100
75	M64	X	-9.913	-9.913	0	%100
76	M64	Z	17.169	17.169	0	%100
77	M70	X	-4.494	-4.494	0	%100
78	M70	Z	7.784	7.784	0	%100
79	M76	X	-4.494	-4.494	0	%100
80	M76	Z	7.784	7.784	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	-6.637	-6.637	0	%100
84	M85	Z	11.496	11.496	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	-6.637	-6.637	0	%100
88	M91	Z	11.496	11.496	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-8.073	-8.073	0	%100
2	M1	Z	4.661	4.661	0	%100
3	M2	X	-8.605	-8.605	0	%100
4	M2	Z	4.968	4.968	0	%100
5	M4	X	-8.073	-8.073	0	%100
6	M4	Z	4.661	4.661	0	%100
7	M5	X	-8.605	-8.605	0	%100
8	M5	Z	4.968	4.968	0	%100
9	M6	X	-3.061	-3.061	0	%100
10	M6	Z	1.767	1.767	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	-12.243	-12.243	0	%100
16	M9	Z	7.068	7.068	0	%100
17	M11	X	-3.061	-3.061	0	%100
18	M11	Z	1.767	1.767	0	%100
19	M15	X	-2.065	-2.065	0	%100
20	M15	Z	1.192	1.192	0	%100
21	M16	X	-17.117	-17.117	0	%100
22	M16	Z	9.883	9.883	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M18	X	-7.292	-7.292	0	%100
24	M18	Z	4.21	4.21	0	%100
25	M19	X	-7.292	-7.292	0	%100
26	M19	Z	4.21	4.21	0	%100
27	M21	X	-17.117	-17.117	0	%100
28	M21	Z	9.883	9.883	0	%100
29	M22	X	-2.065	-2.065	0	%100
30	M22	Z	1.192	1.192	0	%100
31	M23	X	-8.93	-8.93	0	%100
32	M23	Z	5.156	5.156	0	%100
33	M24	X	-2.233	-2.233	0	%100
34	M24	Z	1.289	1.289	0	%100
35	M25	X	-2.233	-2.233	0	%100
36	M25	Z	1.289	1.289	0	%100
37	MP1A	X	-8.574	-8.574	0	%100
38	MP1A	Z	4.95	4.95	0	%100
39	MP2A	X	-8.574	-8.574	0	%100
40	MP2A	Z	4.95	4.95	0	%100
41	MP3A	X	-8.574	-8.574	0	%100
42	MP3A	Z	4.95	4.95	0	%100
43	MP4A	X	-8.574	-8.574	0	%100
44	MP4A	Z	4.95	4.95	0	%100
45	MP5A	X	-8.574	-8.574	0	%100
46	MP5A	Z	4.95	4.95	0	%100
47	MP1C	X	-8.574	-8.574	0	%100
48	MP1C	Z	4.95	4.95	0	%100
49	MP2C	X	-8.574	-8.574	0	%100
50	MP2C	Z	4.95	4.95	0	%100
51	MP3C	X	-8.574	-8.574	0	%100
52	MP3C	Z	4.95	4.95	0	%100
53	MP4C	X	-8.574	-8.574	0	%100
54	MP4C	Z	4.95	4.95	0	%100
55	MP5C	X	-8.574	-8.574	0	%100
56	MP5C	Z	4.95	4.95	0	%100
57	MP1B	X	-8.574	-8.574	0	%100
58	MP1B	Z	4.95	4.95	0	%100
59	MP2B	X	-8.574	-8.574	0	%100
60	MP2B	Z	4.95	4.95	0	%100
61	MP3B	X	-8.574	-8.574	0	%100
62	MP3B	Z	4.95	4.95	0	%100
63	MP4B	X	-8.574	-8.574	0	%100
64	MP4B	Z	4.95	4.95	0	%100
65	MP5B	X	-8.574	-8.574	0	%100
66	MP5B	Z	4.95	4.95	0	%100
67	OVP2	X	-7.011	-7.011	0	%100
68	OVP2	Z	4.048	4.048	0	%100
69	LR1	X	-8.574	-8.574	0	%100
70	LR1	Z	4.95	4.95	0	%100
71	M62	X	-19.104	-19.104	0	%100
72	M62	Z	11.029	11.029	0	%100
73	M63	X	-24.907	-24.907	0	%100
74	M63	Z	14.38	14.38	0	%100
75	M64	X	-19.104	-19.104	0	%100
76	M64	Z	11.029	11.029	0	%100
77	M70	X	-2.595	-2.595	0	%100
78	M70	Z	1.498	1.498	0	%100
79	M76	X	-10.379	-10.379	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
80	M76	Z	5.992	5.992	0	%100
81	M82	X	-2.595	-2.595	0	%100
82	M82	Z	1.498	1.498	0	%100
83	M85	X	-15.328	-15.328	0	%100
84	M85	Z	8.85	8.85	0	%100
85	M88	X	-3.832	-3.832	0	%100
86	M88	Z	2.212	2.212	0	%100
87	M91	X	-3.832	-3.832	0	%100
88	M91	Z	2.212	2.212	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.107	-3.107	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-3.312	-3.312	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	-12.428	-12.428	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	-13.249	-13.249	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	0	0	0	%100
11	M7	X	-3.107	-3.107	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	-3.312	-3.312	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	-10.602	-10.602	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	-10.602	-10.602	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	-11.959	-11.959	0	%100
20	M15	Z	0	0	0	%100
21	M16	X	-11.959	-11.959	0	%100
22	M16	Z	0	0	0	%100
23	M18	X	-.615	-.615	0	%100
24	M18	Z	0	0	0	%100
25	M19	X	-17.996	-17.996	0	%100
26	M19	Z	0	0	0	%100
27	M21	X	-17.996	-17.996	0	%100
28	M21	Z	0	0	0	%100
29	M22	X	-.615	-.615	0	%100
30	M22	Z	0	0	0	%100
31	M23	X	-7.734	-7.734	0	%100
32	M23	Z	0	0	0	%100
33	M24	X	-7.734	-7.734	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	0	0	0	%100
37	MP1A	X	-9.9	-9.9	0	%100
38	MP1A	Z	0	0	0	%100
39	MP2A	X	-9.9	-9.9	0	%100
40	MP2A	Z	0	0	0	%100
41	MP3A	X	-9.9	-9.9	0	%100
42	MP3A	Z	0	0	0	%100
43	MP4A	X	-9.9	-9.9	0	%100
44	MP4A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	MP5A	X	-9.9	-9.9	0	%100
46	MP5A	Z	0	0	0	%100
47	MP1C	X	-9.9	-9.9	0	%100
48	MP1C	Z	0	0	0	%100
49	MP2C	X	-9.9	-9.9	0	%100
50	MP2C	Z	0	0	0	%100
51	MP3C	X	-9.9	-9.9	0	%100
52	MP3C	Z	0	0	0	%100
53	MP4C	X	-9.9	-9.9	0	%100
54	MP4C	Z	0	0	0	%100
55	MP5C	X	-9.9	-9.9	0	%100
56	MP5C	Z	0	0	0	%100
57	MP1B	X	-9.9	-9.9	0	%100
58	MP1B	Z	0	0	0	%100
59	MP2B	X	-9.9	-9.9	0	%100
60	MP2B	Z	0	0	0	%100
61	MP3B	X	-9.9	-9.9	0	%100
62	MP3B	Z	0	0	0	%100
63	MP4B	X	-9.9	-9.9	0	%100
64	MP4B	Z	0	0	0	%100
65	MP5B	X	-9.9	-9.9	0	%100
66	MP5B	Z	0	0	0	%100
67	OVP2	X	-8.096	-8.096	0	%100
68	OVP2	Z	0	0	0	%100
69	LR1	X	-9.9	-9.9	0	%100
70	LR1	Z	0	0	0	%100
71	M62	X	-19.825	-19.825	0	%100
72	M62	Z	0	0	0	%100
73	M63	X	-26.526	-26.526	0	%100
74	M63	Z	0	0	0	%100
75	M64	X	-26.526	-26.526	0	%100
76	M64	Z	0	0	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	0	0	0	%100
79	M76	X	-8.988	-8.988	0	%100
80	M76	Z	0	0	0	%100
81	M82	X	-8.988	-8.988	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	-13.274	-13.274	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	-13.274	-13.274	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	-8.073	-8.073	0	%100
6	M4	Z	-4.661	-4.661	0	%100
7	M5	X	-8.605	-8.605	0	%100
8	M5	Z	-4.968	-4.968	0	%100
9	M6	X	-3.061	-3.061	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M6	Z	-1.767	-1.767	0	%100
11	M7	X	-8.073	-8.073	0	%100
12	M7	Z	-4.661	-4.661	0	%100
13	M8	X	-8.605	-8.605	0	%100
14	M8	Z	-4.968	-4.968	0	%100
15	M9	X	-3.061	-3.061	0	%100
16	M9	Z	-1.767	-1.767	0	%100
17	M11	X	-12.243	-12.243	0	%100
18	M11	Z	-7.068	-7.068	0	%100
19	M15	X	-17.117	-17.117	0	%100
20	M15	Z	-9.883	-9.883	0	%100
21	M16	X	-2.065	-2.065	0	%100
22	M16	Z	-1.192	-1.192	0	%100
23	M18	X	-2.065	-2.065	0	%100
24	M18	Z	-1.192	-1.192	0	%100
25	M19	X	-17.117	-17.117	0	%100
26	M19	Z	-9.883	-9.883	0	%100
27	M21	X	-7.292	-7.292	0	%100
28	M21	Z	-4.21	-4.21	0	%100
29	M22	X	-7.292	-7.292	0	%100
30	M22	Z	-4.21	-4.21	0	%100
31	M23	X	-2.233	-2.233	0	%100
32	M23	Z	-1.289	-1.289	0	%100
33	M24	X	-8.93	-8.93	0	%100
34	M24	Z	-5.156	-5.156	0	%100
35	M25	X	-2.233	-2.233	0	%100
36	M25	Z	-1.289	-1.289	0	%100
37	MP1A	X	-8.574	-8.574	0	%100
38	MP1A	Z	-4.95	-4.95	0	%100
39	MP2A	X	-8.574	-8.574	0	%100
40	MP2A	Z	-4.95	-4.95	0	%100
41	MP3A	X	-8.574	-8.574	0	%100
42	MP3A	Z	-4.95	-4.95	0	%100
43	MP4A	X	-8.574	-8.574	0	%100
44	MP4A	Z	-4.95	-4.95	0	%100
45	MP5A	X	-8.574	-8.574	0	%100
46	MP5A	Z	-4.95	-4.95	0	%100
47	MP1C	X	-8.574	-8.574	0	%100
48	MP1C	Z	-4.95	-4.95	0	%100
49	MP2C	X	-8.574	-8.574	0	%100
50	MP2C	Z	-4.95	-4.95	0	%100
51	MP3C	X	-8.574	-8.574	0	%100
52	MP3C	Z	-4.95	-4.95	0	%100
53	MP4C	X	-8.574	-8.574	0	%100
54	MP4C	Z	-4.95	-4.95	0	%100
55	MP5C	X	-8.574	-8.574	0	%100
56	MP5C	Z	-4.95	-4.95	0	%100
57	MP1B	X	-8.574	-8.574	0	%100
58	MP1B	Z	-4.95	-4.95	0	%100
59	MP2B	X	-8.574	-8.574	0	%100
60	MP2B	Z	-4.95	-4.95	0	%100
61	MP3B	X	-8.574	-8.574	0	%100
62	MP3B	Z	-4.95	-4.95	0	%100
63	MP4B	X	-8.574	-8.574	0	%100
64	MP4B	Z	-4.95	-4.95	0	%100
65	MP5B	X	-8.574	-8.574	0	%100
66	MP5B	Z	-4.95	-4.95	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	OVP2	X	-7.011	-7.011	0	%100
68	OVP2	Z	-4.048	-4.048	0	%100
69	LR1	X	-8.574	-8.574	0	%100
70	LR1	Z	-4.95	-4.95	0	%100
71	M62	X	-19.104	-19.104	0	%100
72	M62	Z	-11.029	-11.029	0	%100
73	M63	X	-19.104	-19.104	0	%100
74	M63	Z	-11.029	-11.029	0	%100
75	M64	X	-24.907	-24.907	0	%100
76	M64	Z	-14.38	-14.38	0	%100
77	M70	X	-2.595	-2.595	0	%100
78	M70	Z	-1.498	-1.498	0	%100
79	M76	X	-2.595	-2.595	0	%100
80	M76	Z	-1.498	-1.498	0	%100
81	M82	X	-10.379	-10.379	0	%100
82	M82	Z	-5.992	-5.992	0	%100
83	M85	X	-3.832	-3.832	0	%100
84	M85	Z	-2.212	-2.212	0	%100
85	M88	X	-15.328	-15.328	0	%100
86	M88	Z	-8.85	-8.85	0	%100
87	M91	X	-3.832	-3.832	0	%100
88	M91	Z	-2.212	-2.212	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.554	-1.554	0	%100
2	M1	Z	-2.691	-2.691	0	%100
3	M2	X	-1.656	-1.656	0	%100
4	M2	Z	-2.868	-2.868	0	%100
5	M4	X	-1.554	-1.554	0	%100
6	M4	Z	-2.691	-2.691	0	%100
7	M5	X	-1.656	-1.656	0	%100
8	M5	Z	-2.868	-2.868	0	%100
9	M6	X	-5.301	-5.301	0	%100
10	M6	Z	-9.182	-9.182	0	%100
11	M7	X	-6.214	-6.214	0	%100
12	M7	Z	-10.763	-10.763	0	%100
13	M8	X	-6.624	-6.624	0	%100
14	M8	Z	-11.474	-11.474	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	-5.301	-5.301	0	%100
18	M11	Z	-9.182	-9.182	0	%100
19	M15	X	-8.998	-8.998	0	%100
20	M15	Z	-15.585	-15.585	0	%100
21	M16	X	-.307	-.307	0	%100
22	M16	Z	-.532	-.532	0	%100
23	M18	X	-5.98	-5.98	0	%100
24	M18	Z	-10.357	-10.357	0	%100
25	M19	X	-5.98	-5.98	0	%100
26	M19	Z	-10.357	-10.357	0	%100
27	M21	X	-.307	-.307	0	%100
28	M21	Z	-.532	-.532	0	%100
29	M22	X	-8.998	-8.998	0	%100
30	M22	Z	-15.585	-15.585	0	%100
31	M23	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	M23	Z	0	0	0	%100
33	M24	X	-3.867	-3.867	0	%100
34	M24	Z	-6.698	-6.698	0	%100
35	M25	X	-3.867	-3.867	0	%100
36	M25	Z	-6.698	-6.698	0	%100
37	MP1A	X	-4.95	-4.95	0	%100
38	MP1A	Z	-8.574	-8.574	0	%100
39	MP2A	X	-4.95	-4.95	0	%100
40	MP2A	Z	-8.574	-8.574	0	%100
41	MP3A	X	-4.95	-4.95	0	%100
42	MP3A	Z	-8.574	-8.574	0	%100
43	MP4A	X	-4.95	-4.95	0	%100
44	MP4A	Z	-8.574	-8.574	0	%100
45	MP5A	X	-4.95	-4.95	0	%100
46	MP5A	Z	-8.574	-8.574	0	%100
47	MP1C	X	-4.95	-4.95	0	%100
48	MP1C	Z	-8.574	-8.574	0	%100
49	MP2C	X	-4.95	-4.95	0	%100
50	MP2C	Z	-8.574	-8.574	0	%100
51	MP3C	X	-4.95	-4.95	0	%100
52	MP3C	Z	-8.574	-8.574	0	%100
53	MP4C	X	-4.95	-4.95	0	%100
54	MP4C	Z	-8.574	-8.574	0	%100
55	MP5C	X	-4.95	-4.95	0	%100
56	MP5C	Z	-8.574	-8.574	0	%100
57	MP1B	X	-4.95	-4.95	0	%100
58	MP1B	Z	-8.574	-8.574	0	%100
59	MP2B	X	-4.95	-4.95	0	%100
60	MP2B	Z	-8.574	-8.574	0	%100
61	MP3B	X	-4.95	-4.95	0	%100
62	MP3B	Z	-8.574	-8.574	0	%100
63	MP4B	X	-4.95	-4.95	0	%100
64	MP4B	Z	-8.574	-8.574	0	%100
65	MP5B	X	-4.95	-4.95	0	%100
66	MP5B	Z	-8.574	-8.574	0	%100
67	OVP2	X	-4.048	-4.048	0	%100
68	OVP2	Z	-7.011	-7.011	0	%100
69	LR1	X	-4.95	-4.95	0	%100
70	LR1	Z	-8.574	-8.574	0	%100
71	M62	X	-13.263	-13.263	0	%100
72	M62	Z	-22.972	-22.972	0	%100
73	M63	X	-9.913	-9.913	0	%100
74	M63	Z	-17.169	-17.169	0	%100
75	M64	X	-13.263	-13.263	0	%100
76	M64	Z	-22.972	-22.972	0	%100
77	M70	X	-4.494	-4.494	0	%100
78	M70	Z	-7.784	-7.784	0	%100
79	M76	X	0	0	0	%100
80	M76	Z	0	0	0	%100
81	M82	X	-4.494	-4.494	0	%100
82	M82	Z	-7.784	-7.784	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	-6.637	-6.637	0	%100
86	M88	Z	-11.496	-11.496	0	%100
87	M91	X	-6.637	-6.637	0	%100
88	M91	Z	-11.496	-11.496	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-2.65	-2.65	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-2.896	-2.896	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	-4.748	-4.748	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	-2.65	-2.65	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	-2.896	-2.896	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	-1.187	-1.187	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-1.187	-1.187	0	%100
19	M15	X	0	0	0	%100
20	M15	Z	-2.107	-2.107	0	%100
21	M16	X	0	0	0	%100
22	M16	Z	-2.107	-2.107	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	-4.946	-4.946	0	%100
25	M19	X	0	0	0	%100
26	M19	Z	-.597	-.597	0	%100
27	M21	X	0	0	0	%100
28	M21	Z	-.597	-.597	0	%100
29	M22	X	0	0	0	%100
30	M22	Z	-4.946	-4.946	0	%100
31	M23	X	0	0	0	%100
32	M23	Z	-.764	-.764	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	-.764	-.764	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	-3.057	-3.057	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	-3.532	-3.532	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	-3.532	-3.532	0	%100
41	MP3A	X	0	0	0	%100
42	MP3A	Z	-3.532	-3.532	0	%100
43	MP4A	X	0	0	0	%100
44	MP4A	Z	-3.532	-3.532	0	%100
45	MP5A	X	0	0	0	%100
46	MP5A	Z	-3.532	-3.532	0	%100
47	MP1C	X	0	0	0	%100
48	MP1C	Z	-3.532	-3.532	0	%100
49	MP2C	X	0	0	0	%100
50	MP2C	Z	-3.532	-3.532	0	%100
51	MP3C	X	0	0	0	%100
52	MP3C	Z	-3.532	-3.532	0	%100
53	MP4C	X	0	0	0	%100
54	MP4C	Z	-3.532	-3.532	0	%100
55	MP5C	X	0	0	0	%100
56	MP5C	Z	-3.532	-3.532	0	%100
57	MP1B	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	MP1B	Z	-3.532	-3.532	0	%100
59	MP2B	X	0	0	0	%100
60	MP2B	Z	-3.532	-3.532	0	%100
61	MP3B	X	0	0	0	%100
62	MP3B	Z	-3.532	-3.532	0	%100
63	MP4B	X	0	0	0	%100
64	MP4B	Z	-3.532	-3.532	0	%100
65	MP5B	X	0	0	0	%100
66	MP5B	Z	-3.532	-3.532	0	%100
67	OVP2	X	0	0	0	%100
68	OVP2	Z	-2.894	-2.894	0	%100
69	LR1	X	0	0	0	%100
70	LR1	Z	-3.532	-3.532	0	%100
71	M62	X	0	0	0	%100
72	M62	Z	-6.604	-6.604	0	%100
73	M63	X	0	0	0	%100
74	M63	Z	-5.636	-5.636	0	%100
75	M64	X	0	0	0	%100
76	M64	Z	-5.636	-5.636	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	-3.906	-3.906	0	%100
79	M76	X	0	0	0	%100
80	M76	Z	-.976	-.976	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	-.976	-.976	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	-1.196	-1.196	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	-1.196	-1.196	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	-4.783	-4.783	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.767	1.767	0	%100
2	M1	Z	-3.06	-3.06	0	%100
3	M2	X	1.931	1.931	0	%100
4	M2	Z	-3.344	-3.344	0	%100
5	M4	X	.442	.442	0	%100
6	M4	Z	-.765	-.765	0	%100
7	M5	X	.483	.483	0	%100
8	M5	Z	-.836	-.836	0	%100
9	M6	X	1.78	1.78	0	%100
10	M6	Z	-3.084	-3.084	0	%100
11	M7	X	.442	.442	0	%100
12	M7	Z	-.765	-.765	0	%100
13	M8	X	.483	.483	0	%100
14	M8	Z	-.836	-.836	0	%100
15	M9	X	1.78	1.78	0	%100
16	M9	Z	-3.084	-3.084	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	.077	.077	0	%100
20	M15	Z	-.133	-.133	0	%100
21	M16	X	2.252	2.252	0	%100
22	M16	Z	-3.9	-3.9	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M18	X	2.252	2.252	0	%100
24	M18	Z	-3.9	-3.9	0	%100
25	M19	X	.077	.077	0	%100
26	M19	Z	-.133	-.133	0	%100
27	M21	X	1.496	1.496	0	%100
28	M21	Z	-2.592	-2.592	0	%100
29	M22	X	1.496	1.496	0	%100
30	M22	Z	-2.592	-2.592	0	%100
31	M23	X	1.147	1.147	0	%100
32	M23	Z	-1.986	-1.986	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	1.147	1.147	0	%100
36	M25	Z	-1.986	-1.986	0	%100
37	MP1A	X	1.766	1.766	0	%100
38	MP1A	Z	-3.058	-3.058	0	%100
39	MP2A	X	1.766	1.766	0	%100
40	MP2A	Z	-3.058	-3.058	0	%100
41	MP3A	X	1.766	1.766	0	%100
42	MP3A	Z	-3.058	-3.058	0	%100
43	MP4A	X	1.766	1.766	0	%100
44	MP4A	Z	-3.058	-3.058	0	%100
45	MP5A	X	1.766	1.766	0	%100
46	MP5A	Z	-3.058	-3.058	0	%100
47	MP1C	X	1.766	1.766	0	%100
48	MP1C	Z	-3.058	-3.058	0	%100
49	MP2C	X	1.766	1.766	0	%100
50	MP2C	Z	-3.058	-3.058	0	%100
51	MP3C	X	1.766	1.766	0	%100
52	MP3C	Z	-3.058	-3.058	0	%100
53	MP4C	X	1.766	1.766	0	%100
54	MP4C	Z	-3.058	-3.058	0	%100
55	MP5C	X	1.766	1.766	0	%100
56	MP5C	Z	-3.058	-3.058	0	%100
57	MP1B	X	1.766	1.766	0	%100
58	MP1B	Z	-3.058	-3.058	0	%100
59	MP2B	X	1.766	1.766	0	%100
60	MP2B	Z	-3.058	-3.058	0	%100
61	MP3B	X	1.766	1.766	0	%100
62	MP3B	Z	-3.058	-3.058	0	%100
63	MP4B	X	1.766	1.766	0	%100
64	MP4B	Z	-3.058	-3.058	0	%100
65	MP5B	X	1.766	1.766	0	%100
66	MP5B	Z	-3.058	-3.058	0	%100
67	OVP2	X	1.447	1.447	0	%100
68	OVP2	Z	-2.507	-2.507	0	%100
69	LR1	X	1.766	1.766	0	%100
70	LR1	Z	-3.058	-3.058	0	%100
71	M62	X	3.141	3.141	0	%100
72	M62	Z	-5.44	-5.44	0	%100
73	M63	X	3.141	3.141	0	%100
74	M63	Z	-5.44	-5.44	0	%100
75	M64	X	2.657	2.657	0	%100
76	M64	Z	-4.602	-4.602	0	%100
77	M70	X	1.465	1.465	0	%100
78	M70	Z	-2.537	-2.537	0	%100
79	M76	X	1.465	1.465	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
80	M76	Z	-2.537	-2.537	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	1.794	1.794	0	%100
84	M85	Z	-3.107	-3.107	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	1.794	1.794	0	%100
88	M91	Z	-3.107	-3.107	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.295	2.295	0	%100
2	M1	Z	-1.325	-1.325	0	%100
3	M2	X	2.508	2.508	0	%100
4	M2	Z	-1.448	-1.448	0	%100
5	M4	X	2.295	2.295	0	%100
6	M4	Z	-1.325	-1.325	0	%100
7	M5	X	2.508	2.508	0	%100
8	M5	Z	-1.448	-1.448	0	%100
9	M6	X	1.028	1.028	0	%100
10	M6	Z	-.593	-.593	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	4.112	4.112	0	%100
16	M9	Z	-2.374	-2.374	0	%100
17	M11	X	1.028	1.028	0	%100
18	M11	Z	-.593	-.593	0	%100
19	M15	X	.517	.517	0	%100
20	M15	Z	-.298	-.298	0	%100
21	M16	X	4.284	4.284	0	%100
22	M16	Z	-2.473	-2.473	0	%100
23	M18	X	1.825	1.825	0	%100
24	M18	Z	-1.054	-1.054	0	%100
25	M19	X	1.825	1.825	0	%100
26	M19	Z	-1.054	-1.054	0	%100
27	M21	X	4.284	4.284	0	%100
28	M21	Z	-2.473	-2.473	0	%100
29	M22	X	.517	.517	0	%100
30	M22	Z	-.298	-.298	0	%100
31	M23	X	2.648	2.648	0	%100
32	M23	Z	-1.529	-1.529	0	%100
33	M24	X	.662	.662	0	%100
34	M24	Z	-.382	-.382	0	%100
35	M25	X	.662	.662	0	%100
36	M25	Z	-.382	-.382	0	%100
37	MP1A	X	3.058	3.058	0	%100
38	MP1A	Z	-1.766	-1.766	0	%100
39	MP2A	X	3.058	3.058	0	%100
40	MP2A	Z	-1.766	-1.766	0	%100
41	MP3A	X	3.058	3.058	0	%100
42	MP3A	Z	-1.766	-1.766	0	%100
43	MP4A	X	3.058	3.058	0	%100
44	MP4A	Z	-1.766	-1.766	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	MP5A	X	3.058	3.058	0	%100
46	MP5A	Z	-1.766	-1.766	0	%100
47	MP1C	X	3.058	3.058	0	%100
48	MP1C	Z	-1.766	-1.766	0	%100
49	MP2C	X	3.058	3.058	0	%100
50	MP2C	Z	-1.766	-1.766	0	%100
51	MP3C	X	3.058	3.058	0	%100
52	MP3C	Z	-1.766	-1.766	0	%100
53	MP4C	X	3.058	3.058	0	%100
54	MP4C	Z	-1.766	-1.766	0	%100
55	MP5C	X	3.058	3.058	0	%100
56	MP5C	Z	-1.766	-1.766	0	%100
57	MP1B	X	3.058	3.058	0	%100
58	MP1B	Z	-1.766	-1.766	0	%100
59	MP2B	X	3.058	3.058	0	%100
60	MP2B	Z	-1.766	-1.766	0	%100
61	MP3B	X	3.058	3.058	0	%100
62	MP3B	Z	-1.766	-1.766	0	%100
63	MP4B	X	3.058	3.058	0	%100
64	MP4B	Z	-1.766	-1.766	0	%100
65	MP5B	X	3.058	3.058	0	%100
66	MP5B	Z	-1.766	-1.766	0	%100
67	OVP2	X	2.507	2.507	0	%100
68	OVP2	Z	-1.447	-1.447	0	%100
69	LR1	X	3.058	3.058	0	%100
70	LR1	Z	-1.766	-1.766	0	%100
71	M62	X	4.881	4.881	0	%100
72	M62	Z	-2.818	-2.818	0	%100
73	M63	X	5.719	5.719	0	%100
74	M63	Z	-3.302	-3.302	0	%100
75	M64	X	4.881	4.881	0	%100
76	M64	Z	-2.818	-2.818	0	%100
77	M70	X	.846	.846	0	%100
78	M70	Z	-.488	-.488	0	%100
79	M76	X	3.382	3.382	0	%100
80	M76	Z	-1.953	-1.953	0	%100
81	M82	X	.846	.846	0	%100
82	M82	Z	-.488	-.488	0	%100
83	M85	X	4.142	4.142	0	%100
84	M85	Z	-2.391	-2.391	0	%100
85	M88	X	1.036	1.036	0	%100
86	M88	Z	-.598	-.598	0	%100
87	M91	X	1.036	1.036	0	%100
88	M91	Z	-.598	-.598	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.883	.883	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	.965	.965	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	3.534	3.534	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	3.861	3.861	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M6	Z	0	0	0	%100
11	M7	X	.883	.883	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	.965	.965	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	3.561	3.561	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	3.561	3.561	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	2.993	2.993	0	%100
20	M15	Z	0	0	0	%100
21	M16	X	2.993	2.993	0	%100
22	M16	Z	0	0	0	%100
23	M18	X	.154	.154	0	%100
24	M18	Z	0	0	0	%100
25	M19	X	4.503	4.503	0	%100
26	M19	Z	0	0	0	%100
27	M21	X	4.503	4.503	0	%100
28	M21	Z	0	0	0	%100
29	M22	X	.154	.154	0	%100
30	M22	Z	0	0	0	%100
31	M23	X	2.293	2.293	0	%100
32	M23	Z	0	0	0	%100
33	M24	X	2.293	2.293	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	0	0	0	%100
37	MP1A	X	3.532	3.532	0	%100
38	MP1A	Z	0	0	0	%100
39	MP2A	X	3.532	3.532	0	%100
40	MP2A	Z	0	0	0	%100
41	MP3A	X	3.532	3.532	0	%100
42	MP3A	Z	0	0	0	%100
43	MP4A	X	3.532	3.532	0	%100
44	MP4A	Z	0	0	0	%100
45	MP5A	X	3.532	3.532	0	%100
46	MP5A	Z	0	0	0	%100
47	MP1C	X	3.532	3.532	0	%100
48	MP1C	Z	0	0	0	%100
49	MP2C	X	3.532	3.532	0	%100
50	MP2C	Z	0	0	0	%100
51	MP3C	X	3.532	3.532	0	%100
52	MP3C	Z	0	0	0	%100
53	MP4C	X	3.532	3.532	0	%100
54	MP4C	Z	0	0	0	%100
55	MP5C	X	3.532	3.532	0	%100
56	MP5C	Z	0	0	0	%100
57	MP1B	X	3.532	3.532	0	%100
58	MP1B	Z	0	0	0	%100
59	MP2B	X	3.532	3.532	0	%100
60	MP2B	Z	0	0	0	%100
61	MP3B	X	3.532	3.532	0	%100
62	MP3B	Z	0	0	0	%100
63	MP4B	X	3.532	3.532	0	%100
64	MP4B	Z	0	0	0	%100
65	MP5B	X	3.532	3.532	0	%100
66	MP5B	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	OVP2	X	2.894	2.894	0	%100
68	OVP2	Z	0	0	0	%100
69	LR1	X	3.532	3.532	0	%100
70	LR1	Z	0	0	0	%100
71	M62	X	5.314	5.314	0	%100
72	M62	Z	0	0	0	%100
73	M63	X	6.281	6.281	0	%100
74	M63	Z	0	0	0	%100
75	M64	X	6.281	6.281	0	%100
76	M64	Z	0	0	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	0	0	0	%100
79	M76	X	2.929	2.929	0	%100
80	M76	Z	0	0	0	%100
81	M82	X	2.929	2.929	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	3.587	3.587	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	3.587	3.587	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	2.295	2.295	0	%100
6	M4	Z	1.325	1.325	0	%100
7	M5	X	2.508	2.508	0	%100
8	M5	Z	1.448	1.448	0	%100
9	M6	X	1.028	1.028	0	%100
10	M6	Z	.593	.593	0	%100
11	M7	X	2.295	2.295	0	%100
12	M7	Z	1.325	1.325	0	%100
13	M8	X	2.508	2.508	0	%100
14	M8	Z	1.448	1.448	0	%100
15	M9	X	1.028	1.028	0	%100
16	M9	Z	.593	.593	0	%100
17	M11	X	4.112	4.112	0	%100
18	M11	Z	2.374	2.374	0	%100
19	M15	X	4.284	4.284	0	%100
20	M15	Z	2.473	2.473	0	%100
21	M16	X	.517	.517	0	%100
22	M16	Z	.298	.298	0	%100
23	M18	X	.517	.517	0	%100
24	M18	Z	.298	.298	0	%100
25	M19	X	4.284	4.284	0	%100
26	M19	Z	2.473	2.473	0	%100
27	M21	X	1.825	1.825	0	%100
28	M21	Z	1.054	1.054	0	%100
29	M22	X	1.825	1.825	0	%100
30	M22	Z	1.054	1.054	0	%100
31	M23	X	.662	.662	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	M23	Z	.382	.382	0	%100
33	M24	X	2.648	2.648	0	%100
34	M24	Z	1.529	1.529	0	%100
35	M25	X	.662	.662	0	%100
36	M25	Z	.382	.382	0	%100
37	MP1A	X	3.058	3.058	0	%100
38	MP1A	Z	1.766	1.766	0	%100
39	MP2A	X	3.058	3.058	0	%100
40	MP2A	Z	1.766	1.766	0	%100
41	MP3A	X	3.058	3.058	0	%100
42	MP3A	Z	1.766	1.766	0	%100
43	MP4A	X	3.058	3.058	0	%100
44	MP4A	Z	1.766	1.766	0	%100
45	MP5A	X	3.058	3.058	0	%100
46	MP5A	Z	1.766	1.766	0	%100
47	MP1C	X	3.058	3.058	0	%100
48	MP1C	Z	1.766	1.766	0	%100
49	MP2C	X	3.058	3.058	0	%100
50	MP2C	Z	1.766	1.766	0	%100
51	MP3C	X	3.058	3.058	0	%100
52	MP3C	Z	1.766	1.766	0	%100
53	MP4C	X	3.058	3.058	0	%100
54	MP4C	Z	1.766	1.766	0	%100
55	MP5C	X	3.058	3.058	0	%100
56	MP5C	Z	1.766	1.766	0	%100
57	MP1B	X	3.058	3.058	0	%100
58	MP1B	Z	1.766	1.766	0	%100
59	MP2B	X	3.058	3.058	0	%100
60	MP2B	Z	1.766	1.766	0	%100
61	MP3B	X	3.058	3.058	0	%100
62	MP3B	Z	1.766	1.766	0	%100
63	MP4B	X	3.058	3.058	0	%100
64	MP4B	Z	1.766	1.766	0	%100
65	MP5B	X	3.058	3.058	0	%100
66	MP5B	Z	1.766	1.766	0	%100
67	OVP2	X	2.507	2.507	0	%100
68	OVP2	Z	1.447	1.447	0	%100
69	LR1	X	3.058	3.058	0	%100
70	LR1	Z	1.766	1.766	0	%100
71	M62	X	4.881	4.881	0	%100
72	M62	Z	2.818	2.818	0	%100
73	M63	X	4.881	4.881	0	%100
74	M63	Z	2.818	2.818	0	%100
75	M64	X	5.719	5.719	0	%100
76	M64	Z	3.302	3.302	0	%100
77	M70	X	.846	.846	0	%100
78	M70	Z	.488	.488	0	%100
79	M76	X	.846	.846	0	%100
80	M76	Z	.488	.488	0	%100
81	M82	X	3.382	3.382	0	%100
82	M82	Z	1.953	1.953	0	%100
83	M85	X	1.036	1.036	0	%100
84	M85	Z	.598	.598	0	%100
85	M88	X	4.142	4.142	0	%100
86	M88	Z	2.391	2.391	0	%100
87	M91	X	1.036	1.036	0	%100
88	M91	Z	.598	.598	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.442	.442	0	%100
2	M1	Z	.765	.765	0	%100
3	M2	X	.483	.483	0	%100
4	M2	Z	.836	.836	0	%100
5	M4	X	.442	.442	0	%100
6	M4	Z	.765	.765	0	%100
7	M5	X	.483	.483	0	%100
8	M5	Z	.836	.836	0	%100
9	M6	X	1.78	1.78	0	%100
10	M6	Z	3.084	3.084	0	%100
11	M7	X	1.767	1.767	0	%100
12	M7	Z	3.06	3.06	0	%100
13	M8	X	1.931	1.931	0	%100
14	M8	Z	3.344	3.344	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	1.78	1.78	0	%100
18	M11	Z	3.084	3.084	0	%100
19	M15	X	2.252	2.252	0	%100
20	M15	Z	3.9	3.9	0	%100
21	M16	X	.077	.077	0	%100
22	M16	Z	.133	.133	0	%100
23	M18	X	1.496	1.496	0	%100
24	M18	Z	2.592	2.592	0	%100
25	M19	X	1.496	1.496	0	%100
26	M19	Z	2.592	2.592	0	%100
27	M21	X	.077	.077	0	%100
28	M21	Z	.133	.133	0	%100
29	M22	X	2.252	2.252	0	%100
30	M22	Z	3.9	3.9	0	%100
31	M23	X	0	0	0	%100
32	M23	Z	0	0	0	%100
33	M24	X	1.147	1.147	0	%100
34	M24	Z	1.986	1.986	0	%100
35	M25	X	1.147	1.147	0	%100
36	M25	Z	1.986	1.986	0	%100
37	MP1A	X	1.766	1.766	0	%100
38	MP1A	Z	3.058	3.058	0	%100
39	MP2A	X	1.766	1.766	0	%100
40	MP2A	Z	3.058	3.058	0	%100
41	MP3A	X	1.766	1.766	0	%100
42	MP3A	Z	3.058	3.058	0	%100
43	MP4A	X	1.766	1.766	0	%100
44	MP4A	Z	3.058	3.058	0	%100
45	MP5A	X	1.766	1.766	0	%100
46	MP5A	Z	3.058	3.058	0	%100
47	MP1C	X	1.766	1.766	0	%100
48	MP1C	Z	3.058	3.058	0	%100
49	MP2C	X	1.766	1.766	0	%100
50	MP2C	Z	3.058	3.058	0	%100
51	MP3C	X	1.766	1.766	0	%100
52	MP3C	Z	3.058	3.058	0	%100
53	MP4C	X	1.766	1.766	0	%100
54	MP4C	Z	3.058	3.058	0	%100
55	MP5C	X	1.766	1.766	0	%100
56	MP5C	Z	3.058	3.058	0	%100
57	MP1B	X	1.766	1.766	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	MP1B	Z	3.058	3.058	0	%100
59	MP2B	X	1.766	1.766	0	%100
60	MP2B	Z	3.058	3.058	0	%100
61	MP3B	X	1.766	1.766	0	%100
62	MP3B	Z	3.058	3.058	0	%100
63	MP4B	X	1.766	1.766	0	%100
64	MP4B	Z	3.058	3.058	0	%100
65	MP5B	X	1.766	1.766	0	%100
66	MP5B	Z	3.058	3.058	0	%100
67	OVP2	X	1.447	1.447	0	%100
68	OVP2	Z	2.507	2.507	0	%100
69	LR1	X	1.766	1.766	0	%100
70	LR1	Z	3.058	3.058	0	%100
71	M62	X	3.141	3.141	0	%100
72	M62	Z	5.44	5.44	0	%100
73	M63	X	2.657	2.657	0	%100
74	M63	Z	4.602	4.602	0	%100
75	M64	X	3.141	3.141	0	%100
76	M64	Z	5.44	5.44	0	%100
77	M70	X	1.465	1.465	0	%100
78	M70	Z	2.537	2.537	0	%100
79	M76	X	0	0	0	%100
80	M76	Z	0	0	0	%100
81	M82	X	1.465	1.465	0	%100
82	M82	Z	2.537	2.537	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	1.794	1.794	0	%100
86	M88	Z	3.107	3.107	0	%100
87	M91	X	1.794	1.794	0	%100
88	M91	Z	3.107	3.107	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	2.65	2.65	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	2.896	2.896	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	4.748	4.748	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	2.65	2.65	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	2.896	2.896	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	1.187	1.187	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	1.187	1.187	0	%100
19	M15	X	0	0	0	%100
20	M15	Z	2.107	2.107	0	%100
21	M16	X	0	0	0	%100
22	M16	Z	2.107	2.107	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M18	X	0	0	0	%100
24	M18	Z	4.946	4.946	0	%100
25	M19	X	0	0	0	%100
26	M19	Z	.597	.597	0	%100
27	M21	X	0	0	0	%100
28	M21	Z	.597	.597	0	%100
29	M22	X	0	0	0	%100
30	M22	Z	4.946	4.946	0	%100
31	M23	X	0	0	0	%100
32	M23	Z	.764	.764	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	.764	.764	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	3.057	3.057	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	3.532	3.532	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	3.532	3.532	0	%100
41	MP3A	X	0	0	0	%100
42	MP3A	Z	3.532	3.532	0	%100
43	MP4A	X	0	0	0	%100
44	MP4A	Z	3.532	3.532	0	%100
45	MP5A	X	0	0	0	%100
46	MP5A	Z	3.532	3.532	0	%100
47	MP1C	X	0	0	0	%100
48	MP1C	Z	3.532	3.532	0	%100
49	MP2C	X	0	0	0	%100
50	MP2C	Z	3.532	3.532	0	%100
51	MP3C	X	0	0	0	%100
52	MP3C	Z	3.532	3.532	0	%100
53	MP4C	X	0	0	0	%100
54	MP4C	Z	3.532	3.532	0	%100
55	MP5C	X	0	0	0	%100
56	MP5C	Z	3.532	3.532	0	%100
57	MP1B	X	0	0	0	%100
58	MP1B	Z	3.532	3.532	0	%100
59	MP2B	X	0	0	0	%100
60	MP2B	Z	3.532	3.532	0	%100
61	MP3B	X	0	0	0	%100
62	MP3B	Z	3.532	3.532	0	%100
63	MP4B	X	0	0	0	%100
64	MP4B	Z	3.532	3.532	0	%100
65	MP5B	X	0	0	0	%100
66	MP5B	Z	3.532	3.532	0	%100
67	OVP2	X	0	0	0	%100
68	OVP2	Z	2.894	2.894	0	%100
69	LR1	X	0	0	0	%100
70	LR1	Z	3.532	3.532	0	%100
71	M62	X	0	0	0	%100
72	M62	Z	6.604	6.604	0	%100
73	M63	X	0	0	0	%100
74	M63	Z	5.636	5.636	0	%100
75	M64	X	0	0	0	%100
76	M64	Z	5.636	5.636	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	3.906	3.906	0	%100
79	M76	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
80	M76	Z	.976	.976	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	.976	.976	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	1.196	1.196	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	1.196	1.196	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	4.783	4.783	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.767	-1.767	0	%100
2	M1	Z	3.06	3.06	0	%100
3	M2	X	-1.931	-1.931	0	%100
4	M2	Z	3.344	3.344	0	%100
5	M4	X	-.442	-.442	0	%100
6	M4	Z	.765	.765	0	%100
7	M5	X	-.483	-.483	0	%100
8	M5	Z	.836	.836	0	%100
9	M6	X	-1.78	-1.78	0	%100
10	M6	Z	3.084	3.084	0	%100
11	M7	X	-.442	-.442	0	%100
12	M7	Z	.765	.765	0	%100
13	M8	X	-.483	-.483	0	%100
14	M8	Z	.836	.836	0	%100
15	M9	X	-1.78	-1.78	0	%100
16	M9	Z	3.084	3.084	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	-.077	-.077	0	%100
20	M15	Z	.133	.133	0	%100
21	M16	X	-2.252	-2.252	0	%100
22	M16	Z	3.9	3.9	0	%100
23	M18	X	-2.252	-2.252	0	%100
24	M18	Z	3.9	3.9	0	%100
25	M19	X	-.077	-.077	0	%100
26	M19	Z	.133	.133	0	%100
27	M21	X	-1.496	-1.496	0	%100
28	M21	Z	2.592	2.592	0	%100
29	M22	X	-1.496	-1.496	0	%100
30	M22	Z	2.592	2.592	0	%100
31	M23	X	-1.147	-1.147	0	%100
32	M23	Z	1.986	1.986	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	-1.147	-1.147	0	%100
36	M25	Z	1.986	1.986	0	%100
37	MP1A	X	-1.766	-1.766	0	%100
38	MP1A	Z	3.058	3.058	0	%100
39	MP2A	X	-1.766	-1.766	0	%100
40	MP2A	Z	3.058	3.058	0	%100
41	MP3A	X	-1.766	-1.766	0	%100
42	MP3A	Z	3.058	3.058	0	%100
43	MP4A	X	-1.766	-1.766	0	%100
44	MP4A	Z	3.058	3.058	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	MP5A	X	-1.766	-1.766	0	%100
46	MP5A	Z	3.058	3.058	0	%100
47	MP1C	X	-1.766	-1.766	0	%100
48	MP1C	Z	3.058	3.058	0	%100
49	MP2C	X	-1.766	-1.766	0	%100
50	MP2C	Z	3.058	3.058	0	%100
51	MP3C	X	-1.766	-1.766	0	%100
52	MP3C	Z	3.058	3.058	0	%100
53	MP4C	X	-1.766	-1.766	0	%100
54	MP4C	Z	3.058	3.058	0	%100
55	MP5C	X	-1.766	-1.766	0	%100
56	MP5C	Z	3.058	3.058	0	%100
57	MP1B	X	-1.766	-1.766	0	%100
58	MP1B	Z	3.058	3.058	0	%100
59	MP2B	X	-1.766	-1.766	0	%100
60	MP2B	Z	3.058	3.058	0	%100
61	MP3B	X	-1.766	-1.766	0	%100
62	MP3B	Z	3.058	3.058	0	%100
63	MP4B	X	-1.766	-1.766	0	%100
64	MP4B	Z	3.058	3.058	0	%100
65	MP5B	X	-1.766	-1.766	0	%100
66	MP5B	Z	3.058	3.058	0	%100
67	OVP2	X	-1.447	-1.447	0	%100
68	OVP2	Z	2.507	2.507	0	%100
69	LR1	X	-1.766	-1.766	0	%100
70	LR1	Z	3.058	3.058	0	%100
71	M62	X	-3.141	-3.141	0	%100
72	M62	Z	5.44	5.44	0	%100
73	M63	X	-3.141	-3.141	0	%100
74	M63	Z	5.44	5.44	0	%100
75	M64	X	-2.657	-2.657	0	%100
76	M64	Z	4.602	4.602	0	%100
77	M70	X	-1.465	-1.465	0	%100
78	M70	Z	2.537	2.537	0	%100
79	M76	X	-1.465	-1.465	0	%100
80	M76	Z	2.537	2.537	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	-1.794	-1.794	0	%100
84	M85	Z	3.107	3.107	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	-1.794	-1.794	0	%100
88	M91	Z	3.107	3.107	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.295	-2.295	0	%100
2	M1	Z	1.325	1.325	0	%100
3	M2	X	-2.508	-2.508	0	%100
4	M2	Z	1.448	1.448	0	%100
5	M4	X	-2.295	-2.295	0	%100
6	M4	Z	1.325	1.325	0	%100
7	M5	X	-2.508	-2.508	0	%100
8	M5	Z	1.448	1.448	0	%100
9	M6	X	-1.028	-1.028	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M6	Z	.593	.593	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	-4.112	-4.112	0	%100
16	M9	Z	2.374	2.374	0	%100
17	M11	X	-1.028	-1.028	0	%100
18	M11	Z	.593	.593	0	%100
19	M15	X	-.517	-.517	0	%100
20	M15	Z	.298	.298	0	%100
21	M16	X	-4.284	-4.284	0	%100
22	M16	Z	2.473	2.473	0	%100
23	M18	X	-1.825	-1.825	0	%100
24	M18	Z	1.054	1.054	0	%100
25	M19	X	-1.825	-1.825	0	%100
26	M19	Z	1.054	1.054	0	%100
27	M21	X	-4.284	-4.284	0	%100
28	M21	Z	2.473	2.473	0	%100
29	M22	X	-.517	-.517	0	%100
30	M22	Z	.298	.298	0	%100
31	M23	X	-2.648	-2.648	0	%100
32	M23	Z	1.529	1.529	0	%100
33	M24	X	-.662	-.662	0	%100
34	M24	Z	.382	.382	0	%100
35	M25	X	-.662	-.662	0	%100
36	M25	Z	.382	.382	0	%100
37	MP1A	X	-3.058	-3.058	0	%100
38	MP1A	Z	1.766	1.766	0	%100
39	MP2A	X	-3.058	-3.058	0	%100
40	MP2A	Z	1.766	1.766	0	%100
41	MP3A	X	-3.058	-3.058	0	%100
42	MP3A	Z	1.766	1.766	0	%100
43	MP4A	X	-3.058	-3.058	0	%100
44	MP4A	Z	1.766	1.766	0	%100
45	MP5A	X	-3.058	-3.058	0	%100
46	MP5A	Z	1.766	1.766	0	%100
47	MP1C	X	-3.058	-3.058	0	%100
48	MP1C	Z	1.766	1.766	0	%100
49	MP2C	X	-3.058	-3.058	0	%100
50	MP2C	Z	1.766	1.766	0	%100
51	MP3C	X	-3.058	-3.058	0	%100
52	MP3C	Z	1.766	1.766	0	%100
53	MP4C	X	-3.058	-3.058	0	%100
54	MP4C	Z	1.766	1.766	0	%100
55	MP5C	X	-3.058	-3.058	0	%100
56	MP5C	Z	1.766	1.766	0	%100
57	MP1B	X	-3.058	-3.058	0	%100
58	MP1B	Z	1.766	1.766	0	%100
59	MP2B	X	-3.058	-3.058	0	%100
60	MP2B	Z	1.766	1.766	0	%100
61	MP3B	X	-3.058	-3.058	0	%100
62	MP3B	Z	1.766	1.766	0	%100
63	MP4B	X	-3.058	-3.058	0	%100
64	MP4B	Z	1.766	1.766	0	%100
65	MP5B	X	-3.058	-3.058	0	%100
66	MP5B	Z	1.766	1.766	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	OVP2	X	-2.507	-2.507	0	%100
68	OVP2	Z	1.447	1.447	0	%100
69	LR1	X	-3.058	-3.058	0	%100
70	LR1	Z	1.766	1.766	0	%100
71	M62	X	-4.881	-4.881	0	%100
72	M62	Z	2.818	2.818	0	%100
73	M63	X	-5.719	-5.719	0	%100
74	M63	Z	3.302	3.302	0	%100
75	M64	X	-4.881	-4.881	0	%100
76	M64	Z	2.818	2.818	0	%100
77	M70	X	-.846	-.846	0	%100
78	M70	Z	.488	.488	0	%100
79	M76	X	-3.382	-3.382	0	%100
80	M76	Z	1.953	1.953	0	%100
81	M82	X	-.846	-.846	0	%100
82	M82	Z	.488	.488	0	%100
83	M85	X	-4.142	-4.142	0	%100
84	M85	Z	2.391	2.391	0	%100
85	M88	X	-1.036	-1.036	0	%100
86	M88	Z	.598	.598	0	%100
87	M91	X	-1.036	-1.036	0	%100
88	M91	Z	.598	.598	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.883	-.883	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-.965	-.965	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	-3.534	-3.534	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	-3.861	-3.861	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	0	0	0	%100
11	M7	X	-.883	-.883	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	-.965	-.965	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	-3.561	-3.561	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	-3.561	-3.561	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	-2.993	-2.993	0	%100
20	M15	Z	0	0	0	%100
21	M16	X	-2.993	-2.993	0	%100
22	M16	Z	0	0	0	%100
23	M18	X	-.154	-.154	0	%100
24	M18	Z	0	0	0	%100
25	M19	X	-4.503	-4.503	0	%100
26	M19	Z	0	0	0	%100
27	M21	X	-4.503	-4.503	0	%100
28	M21	Z	0	0	0	%100
29	M22	X	-.154	-.154	0	%100
30	M22	Z	0	0	0	%100
31	M23	X	-2.293	-2.293	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	M23	Z	0	0	0	%100
33	M24	X	-2.293	-2.293	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	0	0	0	%100
37	MP1A	X	-3.532	-3.532	0	%100
38	MP1A	Z	0	0	0	%100
39	MP2A	X	-3.532	-3.532	0	%100
40	MP2A	Z	0	0	0	%100
41	MP3A	X	-3.532	-3.532	0	%100
42	MP3A	Z	0	0	0	%100
43	MP4A	X	-3.532	-3.532	0	%100
44	MP4A	Z	0	0	0	%100
45	MP5A	X	-3.532	-3.532	0	%100
46	MP5A	Z	0	0	0	%100
47	MP1C	X	-3.532	-3.532	0	%100
48	MP1C	Z	0	0	0	%100
49	MP2C	X	-3.532	-3.532	0	%100
50	MP2C	Z	0	0	0	%100
51	MP3C	X	-3.532	-3.532	0	%100
52	MP3C	Z	0	0	0	%100
53	MP4C	X	-3.532	-3.532	0	%100
54	MP4C	Z	0	0	0	%100
55	MP5C	X	-3.532	-3.532	0	%100
56	MP5C	Z	0	0	0	%100
57	MP1B	X	-3.532	-3.532	0	%100
58	MP1B	Z	0	0	0	%100
59	MP2B	X	-3.532	-3.532	0	%100
60	MP2B	Z	0	0	0	%100
61	MP3B	X	-3.532	-3.532	0	%100
62	MP3B	Z	0	0	0	%100
63	MP4B	X	-3.532	-3.532	0	%100
64	MP4B	Z	0	0	0	%100
65	MP5B	X	-3.532	-3.532	0	%100
66	MP5B	Z	0	0	0	%100
67	OVP2	X	-2.894	-2.894	0	%100
68	OVP2	Z	0	0	0	%100
69	LR1	X	-3.532	-3.532	0	%100
70	LR1	Z	0	0	0	%100
71	M62	X	-5.314	-5.314	0	%100
72	M62	Z	0	0	0	%100
73	M63	X	-6.281	-6.281	0	%100
74	M63	Z	0	0	0	%100
75	M64	X	-6.281	-6.281	0	%100
76	M64	Z	0	0	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	0	0	0	%100
79	M76	X	-2.929	-2.929	0	%100
80	M76	Z	0	0	0	%100
81	M82	X	-2.929	-2.929	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	-3.587	-3.587	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	-3.587	-3.587	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	-2.295	-2.295	0	%100
6	M4	Z	-1.325	-1.325	0	%100
7	M5	X	-2.508	-2.508	0	%100
8	M5	Z	-1.448	-1.448	0	%100
9	M6	X	-1.028	-1.028	0	%100
10	M6	Z	-.593	-.593	0	%100
11	M7	X	-2.295	-2.295	0	%100
12	M7	Z	-1.325	-1.325	0	%100
13	M8	X	-2.508	-2.508	0	%100
14	M8	Z	-1.448	-1.448	0	%100
15	M9	X	-1.028	-1.028	0	%100
16	M9	Z	-.593	-.593	0	%100
17	M11	X	-4.112	-4.112	0	%100
18	M11	Z	-2.374	-2.374	0	%100
19	M15	X	-4.284	-4.284	0	%100
20	M15	Z	-2.473	-2.473	0	%100
21	M16	X	-.517	-.517	0	%100
22	M16	Z	-.298	-.298	0	%100
23	M18	X	-.517	-.517	0	%100
24	M18	Z	-.298	-.298	0	%100
25	M19	X	-4.284	-4.284	0	%100
26	M19	Z	-2.473	-2.473	0	%100
27	M21	X	-1.825	-1.825	0	%100
28	M21	Z	-1.054	-1.054	0	%100
29	M22	X	-1.825	-1.825	0	%100
30	M22	Z	-1.054	-1.054	0	%100
31	M23	X	-.662	-.662	0	%100
32	M23	Z	-.382	-.382	0	%100
33	M24	X	-2.648	-2.648	0	%100
34	M24	Z	-1.529	-1.529	0	%100
35	M25	X	-.662	-.662	0	%100
36	M25	Z	-.382	-.382	0	%100
37	MP1A	X	-3.058	-3.058	0	%100
38	MP1A	Z	-1.766	-1.766	0	%100
39	MP2A	X	-3.058	-3.058	0	%100
40	MP2A	Z	-1.766	-1.766	0	%100
41	MP3A	X	-3.058	-3.058	0	%100
42	MP3A	Z	-1.766	-1.766	0	%100
43	MP4A	X	-3.058	-3.058	0	%100
44	MP4A	Z	-1.766	-1.766	0	%100
45	MP5A	X	-3.058	-3.058	0	%100
46	MP5A	Z	-1.766	-1.766	0	%100
47	MP1C	X	-3.058	-3.058	0	%100
48	MP1C	Z	-1.766	-1.766	0	%100
49	MP2C	X	-3.058	-3.058	0	%100
50	MP2C	Z	-1.766	-1.766	0	%100
51	MP3C	X	-3.058	-3.058	0	%100
52	MP3C	Z	-1.766	-1.766	0	%100
53	MP4C	X	-3.058	-3.058	0	%100
54	MP4C	Z	-1.766	-1.766	0	%100
55	MP5C	X	-3.058	-3.058	0	%100
56	MP5C	Z	-1.766	-1.766	0	%100
57	MP1B	X	-3.058	-3.058	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	MP1B	Z	-1.766	-1.766	0	%100
59	MP2B	X	-3.058	-3.058	0	%100
60	MP2B	Z	-1.766	-1.766	0	%100
61	MP3B	X	-3.058	-3.058	0	%100
62	MP3B	Z	-1.766	-1.766	0	%100
63	MP4B	X	-3.058	-3.058	0	%100
64	MP4B	Z	-1.766	-1.766	0	%100
65	MP5B	X	-3.058	-3.058	0	%100
66	MP5B	Z	-1.766	-1.766	0	%100
67	OVP2	X	-2.507	-2.507	0	%100
68	OVP2	Z	-1.447	-1.447	0	%100
69	LR1	X	-3.058	-3.058	0	%100
70	LR1	Z	-1.766	-1.766	0	%100
71	M62	X	-4.881	-4.881	0	%100
72	M62	Z	-2.818	-2.818	0	%100
73	M63	X	-4.881	-4.881	0	%100
74	M63	Z	-2.818	-2.818	0	%100
75	M64	X	-5.719	-5.719	0	%100
76	M64	Z	-3.302	-3.302	0	%100
77	M70	X	-.846	-.846	0	%100
78	M70	Z	-.488	-.488	0	%100
79	M76	X	-.846	-.846	0	%100
80	M76	Z	-.488	-.488	0	%100
81	M82	X	-3.382	-3.382	0	%100
82	M82	Z	-1.953	-1.953	0	%100
83	M85	X	-1.036	-1.036	0	%100
84	M85	Z	-.598	-.598	0	%100
85	M88	X	-4.142	-4.142	0	%100
86	M88	Z	-2.391	-2.391	0	%100
87	M91	X	-1.036	-1.036	0	%100
88	M91	Z	-.598	-.598	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.442	-.442	0	%100
2	M1	Z	-.765	-.765	0	%100
3	M2	X	-.483	-.483	0	%100
4	M2	Z	-.836	-.836	0	%100
5	M4	X	-.442	-.442	0	%100
6	M4	Z	-.765	-.765	0	%100
7	M5	X	-.483	-.483	0	%100
8	M5	Z	-.836	-.836	0	%100
9	M6	X	-1.78	-1.78	0	%100
10	M6	Z	-3.084	-3.084	0	%100
11	M7	X	-1.767	-1.767	0	%100
12	M7	Z	-3.06	-3.06	0	%100
13	M8	X	-1.931	-1.931	0	%100
14	M8	Z	-3.344	-3.344	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	-1.78	-1.78	0	%100
18	M11	Z	-3.084	-3.084	0	%100
19	M15	X	-2.252	-2.252	0	%100
20	M15	Z	-3.9	-3.9	0	%100
21	M16	X	-.077	-.077	0	%100
22	M16	Z	-.133	-.133	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M18	X	-1.496	-1.496	0	%100
24	M18	Z	-2.592	-2.592	0	%100
25	M19	X	-1.496	-1.496	0	%100
26	M19	Z	-2.592	-2.592	0	%100
27	M21	X	-.077	-.077	0	%100
28	M21	Z	-.133	-.133	0	%100
29	M22	X	-2.252	-2.252	0	%100
30	M22	Z	-3.9	-3.9	0	%100
31	M23	X	0	0	0	%100
32	M23	Z	0	0	0	%100
33	M24	X	-1.147	-1.147	0	%100
34	M24	Z	-1.986	-1.986	0	%100
35	M25	X	-1.147	-1.147	0	%100
36	M25	Z	-1.986	-1.986	0	%100
37	MP1A	X	-1.766	-1.766	0	%100
38	MP1A	Z	-3.058	-3.058	0	%100
39	MP2A	X	-1.766	-1.766	0	%100
40	MP2A	Z	-3.058	-3.058	0	%100
41	MP3A	X	-1.766	-1.766	0	%100
42	MP3A	Z	-3.058	-3.058	0	%100
43	MP4A	X	-1.766	-1.766	0	%100
44	MP4A	Z	-3.058	-3.058	0	%100
45	MP5A	X	-1.766	-1.766	0	%100
46	MP5A	Z	-3.058	-3.058	0	%100
47	MP1C	X	-1.766	-1.766	0	%100
48	MP1C	Z	-3.058	-3.058	0	%100
49	MP2C	X	-1.766	-1.766	0	%100
50	MP2C	Z	-3.058	-3.058	0	%100
51	MP3C	X	-1.766	-1.766	0	%100
52	MP3C	Z	-3.058	-3.058	0	%100
53	MP4C	X	-1.766	-1.766	0	%100
54	MP4C	Z	-3.058	-3.058	0	%100
55	MP5C	X	-1.766	-1.766	0	%100
56	MP5C	Z	-3.058	-3.058	0	%100
57	MP1B	X	-1.766	-1.766	0	%100
58	MP1B	Z	-3.058	-3.058	0	%100
59	MP2B	X	-1.766	-1.766	0	%100
60	MP2B	Z	-3.058	-3.058	0	%100
61	MP3B	X	-1.766	-1.766	0	%100
62	MP3B	Z	-3.058	-3.058	0	%100
63	MP4B	X	-1.766	-1.766	0	%100
64	MP4B	Z	-3.058	-3.058	0	%100
65	MP5B	X	-1.766	-1.766	0	%100
66	MP5B	Z	-3.058	-3.058	0	%100
67	OVP2	X	-1.447	-1.447	0	%100
68	OVP2	Z	-2.507	-2.507	0	%100
69	LR1	X	-1.766	-1.766	0	%100
70	LR1	Z	-3.058	-3.058	0	%100
71	M62	X	-3.141	-3.141	0	%100
72	M62	Z	-5.44	-5.44	0	%100
73	M63	X	-2.657	-2.657	0	%100
74	M63	Z	-4.602	-4.602	0	%100
75	M64	X	-3.141	-3.141	0	%100
76	M64	Z	-5.44	-5.44	0	%100
77	M70	X	-1.465	-1.465	0	%100
78	M70	Z	-2.537	-2.537	0	%100
79	M76	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
80	M76	Z	0	0	0	%100
81	M82	X	-1.465	-1.465	0	%100
82	M82	Z	-2.537	-2.537	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	-1.794	-1.794	0	%100
86	M88	Z	-3.107	-3.107	0	%100
87	M91	X	-1.794	-1.794	0	%100
88	M91	Z	-3.107	-3.107	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.603	-.603	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.642	-.642	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	-.914	-.914	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	-.603	-.603	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	-.642	-.642	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	-.228	-.228	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	-.228	-.228	0	%100
19	M15	X	0	0	0	%100
20	M15	Z	-.544	-.544	0	%100
21	M16	X	0	0	0	%100
22	M16	Z	-.544	-.544	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	-1.278	-1.278	0	%100
25	M19	X	0	0	0	%100
26	M19	Z	-.154	-.154	0	%100
27	M21	X	0	0	0	%100
28	M21	Z	-.154	-.154	0	%100
29	M22	X	0	0	0	%100
30	M22	Z	-1.278	-1.278	0	%100
31	M23	X	0	0	0	%100
32	M23	Z	-.167	-.167	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	-.167	-.167	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	-.667	-.667	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	-.64	-.64	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	-.64	-.64	0	%100
41	MP3A	X	0	0	0	%100
42	MP3A	Z	-.64	-.64	0	%100
43	MP4A	X	0	0	0	%100
44	MP4A	Z	-.64	-.64	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	MP5A	X	0	0	0	%100
46	MP5A	Z	-.64	-.64	0	%100
47	MP1C	X	0	0	0	%100
48	MP1C	Z	-.64	-.64	0	%100
49	MP2C	X	0	0	0	%100
50	MP2C	Z	-.64	-.64	0	%100
51	MP3C	X	0	0	0	%100
52	MP3C	Z	-.64	-.64	0	%100
53	MP4C	X	0	0	0	%100
54	MP4C	Z	-.64	-.64	0	%100
55	MP5C	X	0	0	0	%100
56	MP5C	Z	-.64	-.64	0	%100
57	MP1B	X	0	0	0	%100
58	MP1B	Z	-.64	-.64	0	%100
59	MP2B	X	0	0	0	%100
60	MP2B	Z	-.64	-.64	0	%100
61	MP3B	X	0	0	0	%100
62	MP3B	Z	-.64	-.64	0	%100
63	MP4B	X	0	0	0	%100
64	MP4B	Z	-.64	-.64	0	%100
65	MP5B	X	0	0	0	%100
66	MP5B	Z	-.64	-.64	0	%100
67	OVP2	X	0	0	0	%100
68	OVP2	Z	-.523	-.523	0	%100
69	LR1	X	0	0	0	%100
70	LR1	Z	-.64	-.64	0	%100
71	M62	X	0	0	0	%100
72	M62	Z	-1.859	-1.859	0	%100
73	M63	X	0	0	0	%100
74	M63	Z	-1.426	-1.426	0	%100
75	M64	X	0	0	0	%100
76	M64	Z	-1.426	-1.426	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	-.775	-.775	0	%100
79	M76	X	0	0	0	%100
80	M76	Z	-.194	-.194	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	-.194	-.194	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	-.286	-.286	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	-.286	-.286	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	-1.144	-1.144	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.402	.402	0	%100
2	M1	Z	-.696	-.696	0	%100
3	M2	X	.428	.428	0	%100
4	M2	Z	-.742	-.742	0	%100
5	M4	X	.1	.1	0	%100
6	M4	Z	-.174	-.174	0	%100
7	M5	X	.107	.107	0	%100
8	M5	Z	-.185	-.185	0	%100
9	M6	X	.343	.343	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M6	Z	-.593	-.593	0	%100
11	M7	X	.1	.1	0	%100
12	M7	Z	-.174	-.174	0	%100
13	M8	X	.107	.107	0	%100
14	M8	Z	-.185	-.185	0	%100
15	M9	X	.343	.343	0	%100
16	M9	Z	-.593	-.593	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	.02	.02	0	%100
20	M15	Z	-.034	-.034	0	%100
21	M16	X	.582	.582	0	%100
22	M16	Z	-1.007	-1.007	0	%100
23	M18	X	.582	.582	0	%100
24	M18	Z	-1.007	-1.007	0	%100
25	M19	X	.02	.02	0	%100
26	M19	Z	-.034	-.034	0	%100
27	M21	X	.387	.387	0	%100
28	M21	Z	-.669	-.669	0	%100
29	M22	X	.387	.387	0	%100
30	M22	Z	-.669	-.669	0	%100
31	M23	X	.25	.25	0	%100
32	M23	Z	-.433	-.433	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	.25	.25	0	%100
36	M25	Z	-.433	-.433	0	%100
37	MP1A	X	.32	.32	0	%100
38	MP1A	Z	-.554	-.554	0	%100
39	MP2A	X	.32	.32	0	%100
40	MP2A	Z	-.554	-.554	0	%100
41	MP3A	X	.32	.32	0	%100
42	MP3A	Z	-.554	-.554	0	%100
43	MP4A	X	.32	.32	0	%100
44	MP4A	Z	-.554	-.554	0	%100
45	MP5A	X	.32	.32	0	%100
46	MP5A	Z	-.554	-.554	0	%100
47	MP1C	X	.32	.32	0	%100
48	MP1C	Z	-.554	-.554	0	%100
49	MP2C	X	.32	.32	0	%100
50	MP2C	Z	-.554	-.554	0	%100
51	MP3C	X	.32	.32	0	%100
52	MP3C	Z	-.554	-.554	0	%100
53	MP4C	X	.32	.32	0	%100
54	MP4C	Z	-.554	-.554	0	%100
55	MP5C	X	.32	.32	0	%100
56	MP5C	Z	-.554	-.554	0	%100
57	MP1B	X	.32	.32	0	%100
58	MP1B	Z	-.554	-.554	0	%100
59	MP2B	X	.32	.32	0	%100
60	MP2B	Z	-.554	-.554	0	%100
61	MP3B	X	.32	.32	0	%100
62	MP3B	Z	-.554	-.554	0	%100
63	MP4B	X	.32	.32	0	%100
64	MP4B	Z	-.554	-.554	0	%100
65	MP5B	X	.32	.32	0	%100
66	MP5B	Z	-.554	-.554	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	OVP2	X	.262	.262	0	%100
68	OVP2	Z	-.453	-.453	0	%100
69	LR1	X	.32	.32	0	%100
70	LR1	Z	-.554	-.554	0	%100
71	M62	X	.857	.857	0	%100
72	M62	Z	-1.485	-1.485	0	%100
73	M63	X	.857	.857	0	%100
74	M63	Z	-1.485	-1.485	0	%100
75	M64	X	.641	.641	0	%100
76	M64	Z	-1.11	-1.11	0	%100
77	M70	X	.29	.29	0	%100
78	M70	Z	-.503	-.503	0	%100
79	M76	X	.29	.29	0	%100
80	M76	Z	-.503	-.503	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	.429	.429	0	%100
84	M85	Z	-.743	-.743	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	.429	.429	0	%100
88	M91	Z	-.743	-.743	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.522	.522	0	%100
2	M1	Z	-.301	-.301	0	%100
3	M2	X	.556	.556	0	%100
4	M2	Z	-.321	-.321	0	%100
5	M4	X	.522	.522	0	%100
6	M4	Z	-.301	-.301	0	%100
7	M5	X	.556	.556	0	%100
8	M5	Z	-.321	-.321	0	%100
9	M6	X	.198	.198	0	%100
10	M6	Z	-.114	-.114	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	.791	.791	0	%100
16	M9	Z	-.457	-.457	0	%100
17	M11	X	.198	.198	0	%100
18	M11	Z	-.114	-.114	0	%100
19	M15	X	.133	.133	0	%100
20	M15	Z	-.077	-.077	0	%100
21	M16	X	1.106	1.106	0	%100
22	M16	Z	-.639	-.639	0	%100
23	M18	X	.471	.471	0	%100
24	M18	Z	-.272	-.272	0	%100
25	M19	X	.471	.471	0	%100
26	M19	Z	-.272	-.272	0	%100
27	M21	X	1.106	1.106	0	%100
28	M21	Z	-.639	-.639	0	%100
29	M22	X	.133	.133	0	%100
30	M22	Z	-.077	-.077	0	%100
31	M23	X	.577	.577	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	M23	Z	-.333	-.333	0	%100
33	M24	X	.144	.144	0	%100
34	M24	Z	-.083	-.083	0	%100
35	M25	X	.144	.144	0	%100
36	M25	Z	-.083	-.083	0	%100
37	MP1A	X	.554	.554	0	%100
38	MP1A	Z	-.32	-.32	0	%100
39	MP2A	X	.554	.554	0	%100
40	MP2A	Z	-.32	-.32	0	%100
41	MP3A	X	.554	.554	0	%100
42	MP3A	Z	-.32	-.32	0	%100
43	MP4A	X	.554	.554	0	%100
44	MP4A	Z	-.32	-.32	0	%100
45	MP5A	X	.554	.554	0	%100
46	MP5A	Z	-.32	-.32	0	%100
47	MP1C	X	.554	.554	0	%100
48	MP1C	Z	-.32	-.32	0	%100
49	MP2C	X	.554	.554	0	%100
50	MP2C	Z	-.32	-.32	0	%100
51	MP3C	X	.554	.554	0	%100
52	MP3C	Z	-.32	-.32	0	%100
53	MP4C	X	.554	.554	0	%100
54	MP4C	Z	-.32	-.32	0	%100
55	MP5C	X	.554	.554	0	%100
56	MP5C	Z	-.32	-.32	0	%100
57	MP1B	X	.554	.554	0	%100
58	MP1B	Z	-.32	-.32	0	%100
59	MP2B	X	.554	.554	0	%100
60	MP2B	Z	-.32	-.32	0	%100
61	MP3B	X	.554	.554	0	%100
62	MP3B	Z	-.32	-.32	0	%100
63	MP4B	X	.554	.554	0	%100
64	MP4B	Z	-.32	-.32	0	%100
65	MP5B	X	.554	.554	0	%100
66	MP5B	Z	-.32	-.32	0	%100
67	OVP2	X	.453	.453	0	%100
68	OVP2	Z	-.262	-.262	0	%100
69	LR1	X	.554	.554	0	%100
70	LR1	Z	-.32	-.32	0	%100
71	M62	X	1.235	1.235	0	%100
72	M62	Z	-.713	-.713	0	%100
73	M63	X	1.61	1.61	0	%100
74	M63	Z	-.929	-.929	0	%100
75	M64	X	1.235	1.235	0	%100
76	M64	Z	-.713	-.713	0	%100
77	M70	X	.168	.168	0	%100
78	M70	Z	-.097	-.097	0	%100
79	M76	X	.671	.671	0	%100
80	M76	Z	-.387	-.387	0	%100
81	M82	X	.168	.168	0	%100
82	M82	Z	-.097	-.097	0	%100
83	M85	X	.991	.991	0	%100
84	M85	Z	-.572	-.572	0	%100
85	M88	X	.248	.248	0	%100
86	M88	Z	-.143	-.143	0	%100
87	M91	X	.248	.248	0	%100
88	M91	Z	-.143	-.143	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.201	.201	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	.214	.214	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	.803	.803	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	.856	.856	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	0	0	0	%100
11	M7	X	.201	.201	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	.214	.214	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	.685	.685	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	.685	.685	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	.773	.773	0	%100
20	M15	Z	0	0	0	%100
21	M16	X	.773	.773	0	%100
22	M16	Z	0	0	0	%100
23	M18	X	.04	.04	0	%100
24	M18	Z	0	0	0	%100
25	M19	X	1.163	1.163	0	%100
26	M19	Z	0	0	0	%100
27	M21	X	1.163	1.163	0	%100
28	M21	Z	0	0	0	%100
29	M22	X	.04	.04	0	%100
30	M22	Z	0	0	0	%100
31	M23	X	.5	.5	0	%100
32	M23	Z	0	0	0	%100
33	M24	X	.5	.5	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	0	0	0	%100
37	MP1A	X	.64	.64	0	%100
38	MP1A	Z	0	0	0	%100
39	MP2A	X	.64	.64	0	%100
40	MP2A	Z	0	0	0	%100
41	MP3A	X	.64	.64	0	%100
42	MP3A	Z	0	0	0	%100
43	MP4A	X	.64	.64	0	%100
44	MP4A	Z	0	0	0	%100
45	MP5A	X	.64	.64	0	%100
46	MP5A	Z	0	0	0	%100
47	MP1C	X	.64	.64	0	%100
48	MP1C	Z	0	0	0	%100
49	MP2C	X	.64	.64	0	%100
50	MP2C	Z	0	0	0	%100
51	MP3C	X	.64	.64	0	%100
52	MP3C	Z	0	0	0	%100
53	MP4C	X	.64	.64	0	%100
54	MP4C	Z	0	0	0	%100
55	MP5C	X	.64	.64	0	%100
56	MP5C	Z	0	0	0	%100
57	MP1B	X	.64	.64	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	MP1B	Z	0	0	0	%100
59	MP2B	X	.64	.64	0	%100
60	MP2B	Z	0	0	0	%100
61	MP3B	X	.64	.64	0	%100
62	MP3B	Z	0	0	0	%100
63	MP4B	X	.64	.64	0	%100
64	MP4B	Z	0	0	0	%100
65	MP5B	X	.64	.64	0	%100
66	MP5B	Z	0	0	0	%100
67	OVP2	X	.523	.523	0	%100
68	OVP2	Z	0	0	0	%100
69	LR1	X	.64	.64	0	%100
70	LR1	Z	0	0	0	%100
71	M62	X	1.281	1.281	0	%100
72	M62	Z	0	0	0	%100
73	M63	X	1.715	1.715	0	%100
74	M63	Z	0	0	0	%100
75	M64	X	1.715	1.715	0	%100
76	M64	Z	0	0	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	0	0	0	%100
79	M76	X	.581	.581	0	%100
80	M76	Z	0	0	0	%100
81	M82	X	.581	.581	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	.858	.858	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	.858	.858	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	.522	.522	0	%100
6	M4	Z	.301	.301	0	%100
7	M5	X	.556	.556	0	%100
8	M5	Z	.321	.321	0	%100
9	M6	X	.198	.198	0	%100
10	M6	Z	.114	.114	0	%100
11	M7	X	.522	.522	0	%100
12	M7	Z	.301	.301	0	%100
13	M8	X	.556	.556	0	%100
14	M8	Z	.321	.321	0	%100
15	M9	X	.198	.198	0	%100
16	M9	Z	.114	.114	0	%100
17	M11	X	.791	.791	0	%100
18	M11	Z	.457	.457	0	%100
19	M15	X	1.106	1.106	0	%100
20	M15	Z	.639	.639	0	%100
21	M16	X	.133	.133	0	%100
22	M16	Z	.077	.077	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M18	X	.133	.133	0	%100
24	M18	Z	.077	.077	0	%100
25	M19	X	1.106	1.106	0	%100
26	M19	Z	.639	.639	0	%100
27	M21	X	.471	.471	0	%100
28	M21	Z	.272	.272	0	%100
29	M22	X	.471	.471	0	%100
30	M22	Z	.272	.272	0	%100
31	M23	X	.144	.144	0	%100
32	M23	Z	.083	.083	0	%100
33	M24	X	.577	.577	0	%100
34	M24	Z	.333	.333	0	%100
35	M25	X	.144	.144	0	%100
36	M25	Z	.083	.083	0	%100
37	MP1A	X	.554	.554	0	%100
38	MP1A	Z	.32	.32	0	%100
39	MP2A	X	.554	.554	0	%100
40	MP2A	Z	.32	.32	0	%100
41	MP3A	X	.554	.554	0	%100
42	MP3A	Z	.32	.32	0	%100
43	MP4A	X	.554	.554	0	%100
44	MP4A	Z	.32	.32	0	%100
45	MP5A	X	.554	.554	0	%100
46	MP5A	Z	.32	.32	0	%100
47	MP1C	X	.554	.554	0	%100
48	MP1C	Z	.32	.32	0	%100
49	MP2C	X	.554	.554	0	%100
50	MP2C	Z	.32	.32	0	%100
51	MP3C	X	.554	.554	0	%100
52	MP3C	Z	.32	.32	0	%100
53	MP4C	X	.554	.554	0	%100
54	MP4C	Z	.32	.32	0	%100
55	MP5C	X	.554	.554	0	%100
56	MP5C	Z	.32	.32	0	%100
57	MP1B	X	.554	.554	0	%100
58	MP1B	Z	.32	.32	0	%100
59	MP2B	X	.554	.554	0	%100
60	MP2B	Z	.32	.32	0	%100
61	MP3B	X	.554	.554	0	%100
62	MP3B	Z	.32	.32	0	%100
63	MP4B	X	.554	.554	0	%100
64	MP4B	Z	.32	.32	0	%100
65	MP5B	X	.554	.554	0	%100
66	MP5B	Z	.32	.32	0	%100
67	OVP2	X	.453	.453	0	%100
68	OVP2	Z	.262	.262	0	%100
69	LR1	X	.554	.554	0	%100
70	LR1	Z	.32	.32	0	%100
71	M62	X	1.235	1.235	0	%100
72	M62	Z	.713	.713	0	%100
73	M63	X	1.235	1.235	0	%100
74	M63	Z	.713	.713	0	%100
75	M64	X	1.61	1.61	0	%100
76	M64	Z	.929	.929	0	%100
77	M70	X	.168	.168	0	%100
78	M70	Z	.097	.097	0	%100
79	M76	X	.168	.168	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
80	M76	Z	.097	.097	0	%100
81	M82	X	.671	.671	0	%100
82	M82	Z	.387	.387	0	%100
83	M85	X	.248	.248	0	%100
84	M85	Z	.143	.143	0	%100
85	M88	X	.991	.991	0	%100
86	M88	Z	.572	.572	0	%100
87	M91	X	.248	.248	0	%100
88	M91	Z	.143	.143	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.1	.1	0	%100
2	M1	Z	.174	.174	0	%100
3	M2	X	.107	.107	0	%100
4	M2	Z	.185	.185	0	%100
5	M4	X	.1	.1	0	%100
6	M4	Z	.174	.174	0	%100
7	M5	X	.107	.107	0	%100
8	M5	Z	.185	.185	0	%100
9	M6	X	.343	.343	0	%100
10	M6	Z	.593	.593	0	%100
11	M7	X	.402	.402	0	%100
12	M7	Z	.696	.696	0	%100
13	M8	X	.428	.428	0	%100
14	M8	Z	.742	.742	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	.343	.343	0	%100
18	M11	Z	.593	.593	0	%100
19	M15	X	.582	.582	0	%100
20	M15	Z	1.007	1.007	0	%100
21	M16	X	.02	.02	0	%100
22	M16	Z	.034	.034	0	%100
23	M18	X	.387	.387	0	%100
24	M18	Z	.669	.669	0	%100
25	M19	X	.387	.387	0	%100
26	M19	Z	.669	.669	0	%100
27	M21	X	.02	.02	0	%100
28	M21	Z	.034	.034	0	%100
29	M22	X	.582	.582	0	%100
30	M22	Z	1.007	1.007	0	%100
31	M23	X	0	0	0	%100
32	M23	Z	0	0	0	%100
33	M24	X	.25	.25	0	%100
34	M24	Z	.433	.433	0	%100
35	M25	X	.25	.25	0	%100
36	M25	Z	.433	.433	0	%100
37	MP1A	X	.32	.32	0	%100
38	MP1A	Z	.554	.554	0	%100
39	MP2A	X	.32	.32	0	%100
40	MP2A	Z	.554	.554	0	%100
41	MP3A	X	.32	.32	0	%100
42	MP3A	Z	.554	.554	0	%100
43	MP4A	X	.32	.32	0	%100
44	MP4A	Z	.554	.554	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	MP5A	X	.32	.32	0	%100
46	MP5A	Z	.554	.554	0	%100
47	MP1C	X	.32	.32	0	%100
48	MP1C	Z	.554	.554	0	%100
49	MP2C	X	.32	.32	0	%100
50	MP2C	Z	.554	.554	0	%100
51	MP3C	X	.32	.32	0	%100
52	MP3C	Z	.554	.554	0	%100
53	MP4C	X	.32	.32	0	%100
54	MP4C	Z	.554	.554	0	%100
55	MP5C	X	.32	.32	0	%100
56	MP5C	Z	.554	.554	0	%100
57	MP1B	X	.32	.32	0	%100
58	MP1B	Z	.554	.554	0	%100
59	MP2B	X	.32	.32	0	%100
60	MP2B	Z	.554	.554	0	%100
61	MP3B	X	.32	.32	0	%100
62	MP3B	Z	.554	.554	0	%100
63	MP4B	X	.32	.32	0	%100
64	MP4B	Z	.554	.554	0	%100
65	MP5B	X	.32	.32	0	%100
66	MP5B	Z	.554	.554	0	%100
67	OVP2	X	.262	.262	0	%100
68	OVP2	Z	.453	.453	0	%100
69	LR1	X	.32	.32	0	%100
70	LR1	Z	.554	.554	0	%100
71	M62	X	.857	.857	0	%100
72	M62	Z	1.485	1.485	0	%100
73	M63	X	.641	.641	0	%100
74	M63	Z	1.11	1.11	0	%100
75	M64	X	.857	.857	0	%100
76	M64	Z	1.485	1.485	0	%100
77	M70	X	.29	.29	0	%100
78	M70	Z	.503	.503	0	%100
79	M76	X	0	0	0	%100
80	M76	Z	0	0	0	%100
81	M82	X	.29	.29	0	%100
82	M82	Z	.503	.503	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	.429	.429	0	%100
86	M88	Z	.743	.743	0	%100
87	M91	X	.429	.429	0	%100
88	M91	Z	.743	.743	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.603	.603	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.642	.642	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M6	Z	.914	.914	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	.603	.603	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	.642	.642	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	.228	.228	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	.228	.228	0	%100
19	M15	X	0	0	0	%100
20	M15	Z	.544	.544	0	%100
21	M16	X	0	0	0	%100
22	M16	Z	.544	.544	0	%100
23	M18	X	0	0	0	%100
24	M18	Z	1.278	1.278	0	%100
25	M19	X	0	0	0	%100
26	M19	Z	.154	.154	0	%100
27	M21	X	0	0	0	%100
28	M21	Z	.154	.154	0	%100
29	M22	X	0	0	0	%100
30	M22	Z	1.278	1.278	0	%100
31	M23	X	0	0	0	%100
32	M23	Z	.167	.167	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	.167	.167	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	.667	.667	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	.64	.64	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	.64	.64	0	%100
41	MP3A	X	0	0	0	%100
42	MP3A	Z	.64	.64	0	%100
43	MP4A	X	0	0	0	%100
44	MP4A	Z	.64	.64	0	%100
45	MP5A	X	0	0	0	%100
46	MP5A	Z	.64	.64	0	%100
47	MP1C	X	0	0	0	%100
48	MP1C	Z	.64	.64	0	%100
49	MP2C	X	0	0	0	%100
50	MP2C	Z	.64	.64	0	%100
51	MP3C	X	0	0	0	%100
52	MP3C	Z	.64	.64	0	%100
53	MP4C	X	0	0	0	%100
54	MP4C	Z	.64	.64	0	%100
55	MP5C	X	0	0	0	%100
56	MP5C	Z	.64	.64	0	%100
57	MP1B	X	0	0	0	%100
58	MP1B	Z	.64	.64	0	%100
59	MP2B	X	0	0	0	%100
60	MP2B	Z	.64	.64	0	%100
61	MP3B	X	0	0	0	%100
62	MP3B	Z	.64	.64	0	%100
63	MP4B	X	0	0	0	%100
64	MP4B	Z	.64	.64	0	%100
65	MP5B	X	0	0	0	%100
66	MP5B	Z	.64	.64	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	OVP2	X	0	0	0	%100
68	OVP2	Z	.523	.523	0	%100
69	LR1	X	0	0	0	%100
70	LR1	Z	.64	.64	0	%100
71	M62	X	0	0	0	%100
72	M62	Z	1.859	1.859	0	%100
73	M63	X	0	0	0	%100
74	M63	Z	1.426	1.426	0	%100
75	M64	X	0	0	0	%100
76	M64	Z	1.426	1.426	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	.775	.775	0	%100
79	M76	X	0	0	0	%100
80	M76	Z	.194	.194	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	.194	.194	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	.286	.286	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	.286	.286	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	1.144	1.144	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.402	-.402	0	%100
2	M1	Z	.696	.696	0	%100
3	M2	X	-.428	-.428	0	%100
4	M2	Z	.742	.742	0	%100
5	M4	X	-.1	-.1	0	%100
6	M4	Z	.174	.174	0	%100
7	M5	X	-.107	-.107	0	%100
8	M5	Z	.185	.185	0	%100
9	M6	X	-.343	-.343	0	%100
10	M6	Z	.593	.593	0	%100
11	M7	X	-.1	-.1	0	%100
12	M7	Z	.174	.174	0	%100
13	M8	X	-.107	-.107	0	%100
14	M8	Z	.185	.185	0	%100
15	M9	X	-.343	-.343	0	%100
16	M9	Z	.593	.593	0	%100
17	M11	X	0	0	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	-.02	-.02	0	%100
20	M15	Z	.034	.034	0	%100
21	M16	X	-.582	-.582	0	%100
22	M16	Z	1.007	1.007	0	%100
23	M18	X	-.582	-.582	0	%100
24	M18	Z	1.007	1.007	0	%100
25	M19	X	-.02	-.02	0	%100
26	M19	Z	.034	.034	0	%100
27	M21	X	-.387	-.387	0	%100
28	M21	Z	.669	.669	0	%100
29	M22	X	-.387	-.387	0	%100
30	M22	Z	.669	.669	0	%100
31	M23	X	-.25	-.25	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	M23	Z	.433	.433	0	%100
33	M24	X	0	0	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	-.25	-.25	0	%100
36	M25	Z	.433	.433	0	%100
37	MP1A	X	-.32	-.32	0	%100
38	MP1A	Z	.554	.554	0	%100
39	MP2A	X	-.32	-.32	0	%100
40	MP2A	Z	.554	.554	0	%100
41	MP3A	X	-.32	-.32	0	%100
42	MP3A	Z	.554	.554	0	%100
43	MP4A	X	-.32	-.32	0	%100
44	MP4A	Z	.554	.554	0	%100
45	MP5A	X	-.32	-.32	0	%100
46	MP5A	Z	.554	.554	0	%100
47	MP1C	X	-.32	-.32	0	%100
48	MP1C	Z	.554	.554	0	%100
49	MP2C	X	-.32	-.32	0	%100
50	MP2C	Z	.554	.554	0	%100
51	MP3C	X	-.32	-.32	0	%100
52	MP3C	Z	.554	.554	0	%100
53	MP4C	X	-.32	-.32	0	%100
54	MP4C	Z	.554	.554	0	%100
55	MP5C	X	-.32	-.32	0	%100
56	MP5C	Z	.554	.554	0	%100
57	MP1B	X	-.32	-.32	0	%100
58	MP1B	Z	.554	.554	0	%100
59	MP2B	X	-.32	-.32	0	%100
60	MP2B	Z	.554	.554	0	%100
61	MP3B	X	-.32	-.32	0	%100
62	MP3B	Z	.554	.554	0	%100
63	MP4B	X	-.32	-.32	0	%100
64	MP4B	Z	.554	.554	0	%100
65	MP5B	X	-.32	-.32	0	%100
66	MP5B	Z	.554	.554	0	%100
67	OVP2	X	-.262	-.262	0	%100
68	OVP2	Z	.453	.453	0	%100
69	LR1	X	-.32	-.32	0	%100
70	LR1	Z	.554	.554	0	%100
71	M62	X	-.857	-.857	0	%100
72	M62	Z	1.485	1.485	0	%100
73	M63	X	-.857	-.857	0	%100
74	M63	Z	1.485	1.485	0	%100
75	M64	X	-.641	-.641	0	%100
76	M64	Z	1.11	1.11	0	%100
77	M70	X	-.29	-.29	0	%100
78	M70	Z	.503	.503	0	%100
79	M76	X	-.29	-.29	0	%100
80	M76	Z	.503	.503	0	%100
81	M82	X	0	0	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	-.429	-.429	0	%100
84	M85	Z	.743	.743	0	%100
85	M88	X	0	0	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	-.429	-.429	0	%100
88	M91	Z	.743	.743	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.522	-.522	0	%100
2	M1	Z	.301	.301	0	%100
3	M2	X	-.556	-.556	0	%100
4	M2	Z	.321	.321	0	%100
5	M4	X	-.522	-.522	0	%100
6	M4	Z	.301	.301	0	%100
7	M5	X	-.556	-.556	0	%100
8	M5	Z	.321	.321	0	%100
9	M6	X	-.198	-.198	0	%100
10	M6	Z	.114	.114	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	0	0	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	-.791	-.791	0	%100
16	M9	Z	.457	.457	0	%100
17	M11	X	-.198	-.198	0	%100
18	M11	Z	.114	.114	0	%100
19	M15	X	-.133	-.133	0	%100
20	M15	Z	.077	.077	0	%100
21	M16	X	-1.106	-1.106	0	%100
22	M16	Z	.639	.639	0	%100
23	M18	X	-.471	-.471	0	%100
24	M18	Z	.272	.272	0	%100
25	M19	X	-.471	-.471	0	%100
26	M19	Z	.272	.272	0	%100
27	M21	X	-1.106	-1.106	0	%100
28	M21	Z	.639	.639	0	%100
29	M22	X	-.133	-.133	0	%100
30	M22	Z	.077	.077	0	%100
31	M23	X	-.577	-.577	0	%100
32	M23	Z	.333	.333	0	%100
33	M24	X	-.144	-.144	0	%100
34	M24	Z	.083	.083	0	%100
35	M25	X	-.144	-.144	0	%100
36	M25	Z	.083	.083	0	%100
37	MP1A	X	-.554	-.554	0	%100
38	MP1A	Z	.32	.32	0	%100
39	MP2A	X	-.554	-.554	0	%100
40	MP2A	Z	.32	.32	0	%100
41	MP3A	X	-.554	-.554	0	%100
42	MP3A	Z	.32	.32	0	%100
43	MP4A	X	-.554	-.554	0	%100
44	MP4A	Z	.32	.32	0	%100
45	MP5A	X	-.554	-.554	0	%100
46	MP5A	Z	.32	.32	0	%100
47	MP1C	X	-.554	-.554	0	%100
48	MP1C	Z	.32	.32	0	%100
49	MP2C	X	-.554	-.554	0	%100
50	MP2C	Z	.32	.32	0	%100
51	MP3C	X	-.554	-.554	0	%100
52	MP3C	Z	.32	.32	0	%100
53	MP4C	X	-.554	-.554	0	%100
54	MP4C	Z	.32	.32	0	%100
55	MP5C	X	-.554	-.554	0	%100
56	MP5C	Z	.32	.32	0	%100
57	MP1B	X	-.554	-.554	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	MP1B	Z	.32	.32	0	%100
59	MP2B	X	-.554	-.554	0	%100
60	MP2B	Z	.32	.32	0	%100
61	MP3B	X	-.554	-.554	0	%100
62	MP3B	Z	.32	.32	0	%100
63	MP4B	X	-.554	-.554	0	%100
64	MP4B	Z	.32	.32	0	%100
65	MP5B	X	-.554	-.554	0	%100
66	MP5B	Z	.32	.32	0	%100
67	OVP2	X	-.453	-.453	0	%100
68	OVP2	Z	.262	.262	0	%100
69	LR1	X	-.554	-.554	0	%100
70	LR1	Z	.32	.32	0	%100
71	M62	X	-1.235	-1.235	0	%100
72	M62	Z	.713	.713	0	%100
73	M63	X	-1.61	-1.61	0	%100
74	M63	Z	.929	.929	0	%100
75	M64	X	-1.235	-1.235	0	%100
76	M64	Z	.713	.713	0	%100
77	M70	X	-.168	-.168	0	%100
78	M70	Z	.097	.097	0	%100
79	M76	X	-.671	-.671	0	%100
80	M76	Z	.387	.387	0	%100
81	M82	X	-.168	-.168	0	%100
82	M82	Z	.097	.097	0	%100
83	M85	X	-.991	-.991	0	%100
84	M85	Z	.572	.572	0	%100
85	M88	X	-.248	-.248	0	%100
86	M88	Z	.143	.143	0	%100
87	M91	X	-.248	-.248	0	%100
88	M91	Z	.143	.143	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.201	-.201	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-.214	-.214	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	-.803	-.803	0	%100
6	M4	Z	0	0	0	%100
7	M5	X	-.856	-.856	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	0	0	0	%100
11	M7	X	-.201	-.201	0	%100
12	M7	Z	0	0	0	%100
13	M8	X	-.214	-.214	0	%100
14	M8	Z	0	0	0	%100
15	M9	X	-.685	-.685	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	-.685	-.685	0	%100
18	M11	Z	0	0	0	%100
19	M15	X	-.773	-.773	0	%100
20	M15	Z	0	0	0	%100
21	M16	X	-.773	-.773	0	%100
22	M16	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M18	X	-.04	-.04	0	%100
24	M18	Z	0	0	0	%100
25	M19	X	-1.163	-1.163	0	%100
26	M19	Z	0	0	0	%100
27	M21	X	-1.163	-1.163	0	%100
28	M21	Z	0	0	0	%100
29	M22	X	-.04	-.04	0	%100
30	M22	Z	0	0	0	%100
31	M23	X	-.5	-.5	0	%100
32	M23	Z	0	0	0	%100
33	M24	X	-.5	-.5	0	%100
34	M24	Z	0	0	0	%100
35	M25	X	0	0	0	%100
36	M25	Z	0	0	0	%100
37	MP1A	X	-.64	-.64	0	%100
38	MP1A	Z	0	0	0	%100
39	MP2A	X	-.64	-.64	0	%100
40	MP2A	Z	0	0	0	%100
41	MP3A	X	-.64	-.64	0	%100
42	MP3A	Z	0	0	0	%100
43	MP4A	X	-.64	-.64	0	%100
44	MP4A	Z	0	0	0	%100
45	MP5A	X	-.64	-.64	0	%100
46	MP5A	Z	0	0	0	%100
47	MP1C	X	-.64	-.64	0	%100
48	MP1C	Z	0	0	0	%100
49	MP2C	X	-.64	-.64	0	%100
50	MP2C	Z	0	0	0	%100
51	MP3C	X	-.64	-.64	0	%100
52	MP3C	Z	0	0	0	%100
53	MP4C	X	-.64	-.64	0	%100
54	MP4C	Z	0	0	0	%100
55	MP5C	X	-.64	-.64	0	%100
56	MP5C	Z	0	0	0	%100
57	MP1B	X	-.64	-.64	0	%100
58	MP1B	Z	0	0	0	%100
59	MP2B	X	-.64	-.64	0	%100
60	MP2B	Z	0	0	0	%100
61	MP3B	X	-.64	-.64	0	%100
62	MP3B	Z	0	0	0	%100
63	MP4B	X	-.64	-.64	0	%100
64	MP4B	Z	0	0	0	%100
65	MP5B	X	-.64	-.64	0	%100
66	MP5B	Z	0	0	0	%100
67	OVP2	X	-.523	-.523	0	%100
68	OVP2	Z	0	0	0	%100
69	LR1	X	-.64	-.64	0	%100
70	LR1	Z	0	0	0	%100
71	M62	X	-1.281	-1.281	0	%100
72	M62	Z	0	0	0	%100
73	M63	X	-1.715	-1.715	0	%100
74	M63	Z	0	0	0	%100
75	M64	X	-1.715	-1.715	0	%100
76	M64	Z	0	0	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	0	0	0	%100
79	M76	X	-.581	-.581	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
80	M76	Z	0	0	0	%100
81	M82	X	-.581	-.581	0	%100
82	M82	Z	0	0	0	%100
83	M85	X	-.858	-.858	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	-.858	-.858	0	%100
86	M88	Z	0	0	0	%100
87	M91	X	0	0	0	%100
88	M91	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	-.522	-.522	0	%100
6	M4	Z	-.301	-.301	0	%100
7	M5	X	-.556	-.556	0	%100
8	M5	Z	-.321	-.321	0	%100
9	M6	X	-.198	-.198	0	%100
10	M6	Z	-.114	-.114	0	%100
11	M7	X	-.522	-.522	0	%100
12	M7	Z	-.301	-.301	0	%100
13	M8	X	-.556	-.556	0	%100
14	M8	Z	-.321	-.321	0	%100
15	M9	X	-.198	-.198	0	%100
16	M9	Z	-.114	-.114	0	%100
17	M11	X	-.791	-.791	0	%100
18	M11	Z	-.457	-.457	0	%100
19	M15	X	-1.106	-1.106	0	%100
20	M15	Z	-.639	-.639	0	%100
21	M16	X	-.133	-.133	0	%100
22	M16	Z	-.077	-.077	0	%100
23	M18	X	-.133	-.133	0	%100
24	M18	Z	-.077	-.077	0	%100
25	M19	X	-1.106	-1.106	0	%100
26	M19	Z	-.639	-.639	0	%100
27	M21	X	-.471	-.471	0	%100
28	M21	Z	-.272	-.272	0	%100
29	M22	X	-.471	-.471	0	%100
30	M22	Z	-.272	-.272	0	%100
31	M23	X	-.144	-.144	0	%100
32	M23	Z	-.083	-.083	0	%100
33	M24	X	-.577	-.577	0	%100
34	M24	Z	-.333	-.333	0	%100
35	M25	X	-.144	-.144	0	%100
36	M25	Z	-.083	-.083	0	%100
37	MP1A	X	-.554	-.554	0	%100
38	MP1A	Z	-.32	-.32	0	%100
39	MP2A	X	-.554	-.554	0	%100
40	MP2A	Z	-.32	-.32	0	%100
41	MP3A	X	-.554	-.554	0	%100
42	MP3A	Z	-.32	-.32	0	%100
43	MP4A	X	-.554	-.554	0	%100
44	MP4A	Z	-.32	-.32	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	MP5A	X	-.554	-.554	0	%100
46	MP5A	Z	-.32	-.32	0	%100
47	MP1C	X	-.554	-.554	0	%100
48	MP1C	Z	-.32	-.32	0	%100
49	MP2C	X	-.554	-.554	0	%100
50	MP2C	Z	-.32	-.32	0	%100
51	MP3C	X	-.554	-.554	0	%100
52	MP3C	Z	-.32	-.32	0	%100
53	MP4C	X	-.554	-.554	0	%100
54	MP4C	Z	-.32	-.32	0	%100
55	MP5C	X	-.554	-.554	0	%100
56	MP5C	Z	-.32	-.32	0	%100
57	MP1B	X	-.554	-.554	0	%100
58	MP1B	Z	-.32	-.32	0	%100
59	MP2B	X	-.554	-.554	0	%100
60	MP2B	Z	-.32	-.32	0	%100
61	MP3B	X	-.554	-.554	0	%100
62	MP3B	Z	-.32	-.32	0	%100
63	MP4B	X	-.554	-.554	0	%100
64	MP4B	Z	-.32	-.32	0	%100
65	MP5B	X	-.554	-.554	0	%100
66	MP5B	Z	-.32	-.32	0	%100
67	OVP2	X	-.453	-.453	0	%100
68	OVP2	Z	-.262	-.262	0	%100
69	LR1	X	-.554	-.554	0	%100
70	LR1	Z	-.32	-.32	0	%100
71	M62	X	-1.235	-1.235	0	%100
72	M62	Z	-.713	-.713	0	%100
73	M63	X	-1.235	-1.235	0	%100
74	M63	Z	-.713	-.713	0	%100
75	M64	X	-1.61	-1.61	0	%100
76	M64	Z	-.929	-.929	0	%100
77	M70	X	-.168	-.168	0	%100
78	M70	Z	-.097	-.097	0	%100
79	M76	X	-.168	-.168	0	%100
80	M76	Z	-.097	-.097	0	%100
81	M82	X	-.671	-.671	0	%100
82	M82	Z	-.387	-.387	0	%100
83	M85	X	-.248	-.248	0	%100
84	M85	Z	-.143	-.143	0	%100
85	M88	X	-.991	-.991	0	%100
86	M88	Z	-.572	-.572	0	%100
87	M91	X	-.248	-.248	0	%100
88	M91	Z	-.143	-.143	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.1	-.1	0	%100
2	M1	Z	-.174	-.174	0	%100
3	M2	X	-.107	-.107	0	%100
4	M2	Z	-.185	-.185	0	%100
5	M4	X	-.1	-.1	0	%100
6	M4	Z	-.174	-.174	0	%100
7	M5	X	-.107	-.107	0	%100
8	M5	Z	-.185	-.185	0	%100
9	M6	X	-.343	-.343	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M6	Z	-.593	-.593	0	%100
11	M7	X	-.402	-.402	0	%100
12	M7	Z	-.696	-.696	0	%100
13	M8	X	-.428	-.428	0	%100
14	M8	Z	-.742	-.742	0	%100
15	M9	X	0	0	0	%100
16	M9	Z	0	0	0	%100
17	M11	X	-.343	-.343	0	%100
18	M11	Z	-.593	-.593	0	%100
19	M15	X	-.582	-.582	0	%100
20	M15	Z	-1.007	-1.007	0	%100
21	M16	X	-.02	-.02	0	%100
22	M16	Z	-.034	-.034	0	%100
23	M18	X	-.387	-.387	0	%100
24	M18	Z	-.669	-.669	0	%100
25	M19	X	-.387	-.387	0	%100
26	M19	Z	-.669	-.669	0	%100
27	M21	X	-.02	-.02	0	%100
28	M21	Z	-.034	-.034	0	%100
29	M22	X	-.582	-.582	0	%100
30	M22	Z	-1.007	-1.007	0	%100
31	M23	X	0	0	0	%100
32	M23	Z	0	0	0	%100
33	M24	X	-.25	-.25	0	%100
34	M24	Z	-.433	-.433	0	%100
35	M25	X	-.25	-.25	0	%100
36	M25	Z	-.433	-.433	0	%100
37	MP1A	X	-.32	-.32	0	%100
38	MP1A	Z	-.554	-.554	0	%100
39	MP2A	X	-.32	-.32	0	%100
40	MP2A	Z	-.554	-.554	0	%100
41	MP3A	X	-.32	-.32	0	%100
42	MP3A	Z	-.554	-.554	0	%100
43	MP4A	X	-.32	-.32	0	%100
44	MP4A	Z	-.554	-.554	0	%100
45	MP5A	X	-.32	-.32	0	%100
46	MP5A	Z	-.554	-.554	0	%100
47	MP1C	X	-.32	-.32	0	%100
48	MP1C	Z	-.554	-.554	0	%100
49	MP2C	X	-.32	-.32	0	%100
50	MP2C	Z	-.554	-.554	0	%100
51	MP3C	X	-.32	-.32	0	%100
52	MP3C	Z	-.554	-.554	0	%100
53	MP4C	X	-.32	-.32	0	%100
54	MP4C	Z	-.554	-.554	0	%100
55	MP5C	X	-.32	-.32	0	%100
56	MP5C	Z	-.554	-.554	0	%100
57	MP1B	X	-.32	-.32	0	%100
58	MP1B	Z	-.554	-.554	0	%100
59	MP2B	X	-.32	-.32	0	%100
60	MP2B	Z	-.554	-.554	0	%100
61	MP3B	X	-.32	-.32	0	%100
62	MP3B	Z	-.554	-.554	0	%100
63	MP4B	X	-.32	-.32	0	%100
64	MP4B	Z	-.554	-.554	0	%100
65	MP5B	X	-.32	-.32	0	%100
66	MP5B	Z	-.554	-.554	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	OVP2	X	-.262	-.262	0	%100
68	OVP2	Z	-.453	-.453	0	%100
69	LR1	X	-.32	-.32	0	%100
70	LR1	Z	-.554	-.554	0	%100
71	M62	X	-.857	-.857	0	%100
72	M62	Z	-1.485	-1.485	0	%100
73	M63	X	-.641	-.641	0	%100
74	M63	Z	-1.11	-1.11	0	%100
75	M64	X	-.857	-.857	0	%100
76	M64	Z	-1.485	-1.485	0	%100
77	M70	X	-.29	-.29	0	%100
78	M70	Z	-.503	-.503	0	%100
79	M76	X	0	0	0	%100
80	M76	Z	0	0	0	%100
81	M82	X	-.29	-.29	0	%100
82	M82	Z	-.503	-.503	0	%100
83	M85	X	0	0	0	%100
84	M85	Z	0	0	0	%100
85	M88	X	-.429	-.429	0	%100
86	M88	Z	-.743	-.743	0	%100
87	M91	X	-.429	-.429	0	%100
88	M91	Z	-.743	-.743	0	%100

Member Distributed Loads (BLC 81 : BLC 39 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M5	Y	-12.039	-12.039	1.366	2.908
2	M6	Y	-.181	-3.719	1.45	3.48
3	M6	Y	-3.719	-4.005	3.48	5.51
4	M6	Y	-4.005	-3.401	5.51	7.54
5	M6	Y	-3.401	-4.241	7.54	9.57
6	M6	Y	-4.241	-2.816	9.57	11.6
7	M15	Y	-1.121	-5.337	.6	1.8
8	M15	Y	-5.337	-9.553	1.8	3
9	M16	Y	.043	-4.792	.6	1.8
10	M16	Y	-4.792	-9.797	1.8	3
11	M8	Y	-12.03	-12.03	1.366	2.909
12	M9	Y	-.181	-3.719	1.45	3.48
13	M9	Y	-3.719	-4.005	3.48	5.51
14	M9	Y	-4.005	-3.401	5.51	7.54
15	M9	Y	-3.401	-4.241	7.54	9.57
16	M9	Y	-4.241	-2.817	9.57	11.6
17	M18	Y	-1.132	-5.337	.6	1.8
18	M18	Y	-5.337	-9.541	1.8	3
19	M19	Y	.043	-4.792	.6	1.8
20	M19	Y	-4.792	-9.797	1.8	3
21	M2	Y	-12.039	-12.039	1.366	2.908
22	M11	Y	-.181	-3.719	1.45	3.48
23	M11	Y	-3.719	-4.005	3.48	5.51
24	M11	Y	-4.005	-3.401	5.51	7.54
25	M11	Y	-3.401	-4.241	7.54	9.57
26	M11	Y	-4.241	-2.816	9.57	11.6
27	M21	Y	-1.121	-5.337	.6	1.8
28	M21	Y	-5.337	-9.553	1.8	3
29	M22	Y	.043	-4.792	.6	1.8
30	M22	Y	-4.792	-9.797	1.8	3

Member Distributed Loads (BLC 82 : BLC 40 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M5	Y	-23.464	-23.464	1.366	2.908
2	M6	Y	-5.489	-8.265	2.9	4.93
3	M6	Y	-8.265	-6.629	4.93	6.96
4	M6	Y	-6.629	-7.805	6.96	8.99
5	M6	Y	-7.805	-7.248	8.99	11.02
6	M6	Y	-7.248	-.353	11.02	13.05
7	M15	Y	.083	-9.339	.6	1.8
8	M15	Y	-9.339	-19.095	1.8	3
9	M16	Y	-2.185	-10.402	.6	1.8
10	M16	Y	-10.402	-18.618	1.8	3
11	M2	Y	-23.447	-23.447	1.366	2.909
12	M11	Y	-.353	-7.248	1.45	3.48
13	M11	Y	-7.248	-7.805	3.48	5.51
14	M11	Y	-7.805	-6.629	5.51	7.54
15	M11	Y	-6.629	-8.265	7.54	9.57
16	M11	Y	-8.265	-5.489	9.57	11.6
17	M21	Y	-2.185	-10.402	.6	1.8
18	M21	Y	-10.402	-18.618	1.8	3
19	M22	Y	.083	-9.339	.6	1.8
20	M22	Y	-9.339	-19.095	1.8	3
21	M8	Y	-23.464	-23.464	1.366	2.908
22	M9	Y	-5.489	-8.265	2.9	4.93
23	M9	Y	-8.265	-6.629	4.93	6.96
24	M9	Y	-6.629	-7.805	6.96	8.99
25	M9	Y	-7.805	-7.248	8.99	11.02
26	M9	Y	-7.248	-.353	11.02	13.05
27	M18	Y	.083	-9.339	.6	1.8
28	M18	Y	-9.339	-19.095	1.8	3
29	M19	Y	-2.185	-10.402	.6	1.8
30	M19	Y	-10.402	-18.618	1.8	3

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N107	N113	N114	N108B	Y	Two Way	-.005
2	N115	N116	N110	N109A	Y	Two Way	-.005
3	N112	N111	N117	N118	Y	Two Way	-.005

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N107	N108B	N114	N113	Y	Two Way	-.01
2	N118	N112	N111	N117	Y	Two Way	-.01
3	N110	N116	N115	N109A	Y	Two Way	-.01

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc.....		LC	phi*Pn...	phi*Pn...	phi*Mn...	phi*Mn.....		Eqn
1	M1	HSS4X4X4	.674	.835	9	.288	.835	z	8	10457...	106155	12.311	12.311	2...	H3-6
2	M2	HSS4X4X4	.520	.982	9	.287	0	z	8	10264...	106155	12.311	12.311	1...	H3-6
3	M4	HSS4X4X4	.604	.835	5	.421	1.49	y	41	10457...	106155	12.311	12.311	2...	H3-6
4	M5	HSS4X4X4	.520	.982	42	.421	.982	y	41	10264...	106155	12.311	12.311	1...	H3-6
5	M6	PIPE_3.5	.638	7.25	2	.434	7.25		1	33421...	78750	7.954	7.954	1...	H3-6
6	M7	HSS4X4X4	.699	.835	1	.338	.835	z	12	10457...	106155	12.311	12.311	2...	H3-6
7	M8	HSS4X4X4	.521	.982	1	.279	.982	y	1	10264...	106155	12.311	12.311	1...	H3-6
8	M9	PIPE_3.5	.579	7.25	8	.419	7.25		9	33421...	78750	7.954	7.954	1...	H3-6

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc.....		LC	phi*Pn...	phi*Pn...	phi*Mn...	phi*Mn.....	Eqn
9	M11	PIPE_3.5	.586	7.25	6	.405	7.25		5	33421...	78750	7.954	7.954	1... H3-6
10	M15	L4x4x3	.397	0	9	.020	3	z	9	21228...	47460....	2.508	4.046	1... H2-1
11	M16	L4x4x3	.388	0	11	.019	3	y	5	21228...	47460....	1.986	4.046	1... H2-1
12	M18	L4x4x3	.367	0	5	.019	3	z	5	21228...	47460....	2.508	4.046	1... H2-1
13	M19	L4x4x3	.425	0	7	.020	3	y	1	21228...	47460....	1.986	4.046	1... H2-1
14	M21	L4x4x3	.400	0	1	.020	3	z	1	21228...	47460....	2.508	4.046	1... H2-1
15	M22	L4x4x3	.419	0	3	.020	3	y	9	21228...	47460....	1.986	4.046	1... H2-1
16	M23	L2x2x2	.034	.794	9	.036	0	z	42	12145...	15908.4	.403	.835	1... H2-1
17	M24	L2x2x2	.032	.794	5	.049	0	z	38	12145...	15908.4	.403	.835	1... H2-1
18	M25	L2x2x2	.034	.794	1	.021	0	z	4	12145...	15908.4	.403	.835	1... H2-1
19	MP1A	PIPE_2.0	.352	4	47	.095	4		44	20866...	32130	1.872	1.872	2... H1-1b
20	MP2A	PIPE_2.0	.424	4	47	.101	4		8	20866...	32130	1.872	1.872	2... H1-1b
21	MP3A	PIPE_2.5	.716	4.302	1	.127	4.302		10	33961...	50715	3.596	3.596	2... H1-1b
22	MP4A	PIPE_2.0	.356	4	2	.097	1.938		6	20866...	32130	1.872	1.872	2... H1-1b
23	MP5A	PIPE_2.0	.237	4.063	3	.075	1.063		6	20866...	32130	1.872	1.872	1... H1-1b
24	MP1C	PIPE_2.0	.246	4	7	.065	1.063		4	20866...	32130	1.872	1.872	1... H1-1b
25	MP2C	PIPE_2.0	.375	4	8	.094	4		4	20866...	32130	1.872	1.872	1... H1-1b
26	MP3C	PIPE_2.5	.663	4.302	9	.140	4.302		7	33961...	50715	3.596	3.596	2... H1-1b
27	MP4C	PIPE_2.0	.321	4	10	.094	4		2	20866...	32130	1.872	1.872	2... H1-1b
28	MP5C	PIPE_2.0	.234	4.063	11	.075	4.063		2	20866...	32130	1.872	1.872	2... H1-1b
29	MP1B	PIPE_2.0	.244	4	3	.066	4		1	20866...	32130	1.872	1.872	2... H1-1b
30	MP2B	PIPE_2.0	.363	4	4	.094	4		12	20866...	32130	1.872	1.872	2... H1-1b
31	MP3B	PIPE_2.5	.645	4.302	5	.141	4.302		2	33961...	50715	3.596	3.596	2... H1-1b
32	MP4B	PIPE_2.0	.329	4	6	.095	4		10	20866...	32130	1.872	1.872	1... H1-1b
33	MP5B	PIPE_2.0	.239	4.063	7	.075	1.063		10	20866...	32130	1.872	1.872	1... H1-1b
34	OVP2	PIPE_2.0	.093	2	12	.018	2		12	28843...	32130	1.872	1.872	2... H1-1b
35	LR1	PIPE_2.0	.336	5	12	.018	5		12	20866...	32130	1.872	1.872	1... H1-1b
36	M62	LL3x3x3x6	.135	0	19	.006	0	z	11	46259...	70632	6.362	3.751	1 H1-1b*
37	M63	LL3x3x3x6	.134	0	15	.007	0	z	7	46259...	70632	6.362	3.751	1 H1-1b*
38	M64	LL3x3x3x6	.133	0	23	.007	5.518	z	3	46259...	70632	6.362	3.751	1 H1-1b*
39	M70	PIPE_2.5	.241	7.25	12	.103	7.099		6	10819...	50715	3.596	3.596	1... H1-1b
40	M76	PIPE_2.5	.240	7.099	10	.102	7.099		2	10819...	50715	3.596	3.596	2... H1-1b
41	M82	PIPE_2.5	.248	7.099	6	.102	7.099		10	10819...	50715	3.596	3.596	2... H1-1b
42	M85	L3X3X4	.369	0	6	.115	0	z	42	32804...	46656	1.688	3.756	2... H2-1
43	M88	L3X3X4	.367	0	1	.139	0	z	38	32804...	46656	1.688	3.756	2... H2-1
44	M91	L3X3X4	.372	0	9	.092	0	z	10	32804...	46656	1.688	3.756	2... H2-1

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N35	max	1748.713	10	490.316	1	2685.117	1	1.786	19	4.774	11	3.615	40
2		min	-1759.693	4	-2933.289	19	-4521.253	7	-.273	1	-4.758	5	-2.176	10
3	N37	max	2077.061	9	431.065	9	2965.117	1	2.095	12	5.457	7	1.036	7
4		min	-3654.864	3	-2928.922	15	-2024.995	7	-2.739	6	-5.422	1	-2.242	1
5	N39	max	3728.198	10	254.164	5	2610.595	12	1.756	3	5.442	3	2.052	1
6		min	-2125.564	4	-2984.612	23	-1694.14	6	-2.487	9	-5.415	9	-.843	7
7	N121	max	51.306	10	5673.395	19	2603.815	19	0	51	.001	47	0	47
8		min	-51.302	4	714.392	1	401.259	1	0	1	-.001	5	0	5
9	N122	max	2238.952	15	5633.46	15	-215.174	9	0	7	.001	7	0	1
10		min	372.469	9	776.309	9	-1292.362	15	0	1	-.001	1	0	7
11	N123	max	-423.476	5	5581.708	23	-244.418	5	0	9	.001	3	0	9
12		min	-2217.835	23	902.297	5	-1280.616	23	0	3	-.001	9	0	3
13	Totals:	max	6693.816	10	8037.191	15	7260.585	1						
14		min	-6693.808	4	3627.133	9	-7260.611	7						

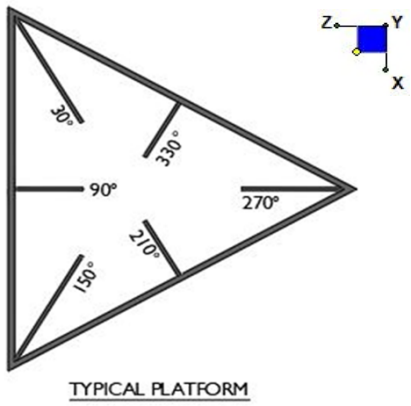
Client:	Verizon Wireless	Date:	4/14/2021
Site Name:	Bethany West CT		
Project No.	21777109A		
Title:	Antenna Mount Analysis	Page:	1

Version 3.1

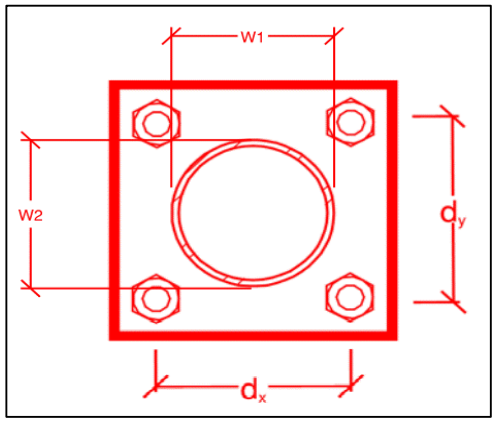
I. Mount-to-Tower Connection Check (Lower Standoff)

RISA Model Data

Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N35	90
N37	210
N39	330



TYPICAL PLATFORM



Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:	Rect

Unique Weld Check

Weld Pattern:	(2) Horizontal Welds
L1 (in):	4
L2 (in):	8

Weld Size (1/16 in):	4
Phi*Rn (kip/in):	5.57
Required Weld Strength (kip/in):	3.42
Weld Capacity:	**61.4%**

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

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

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

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the drawings
- Provide "as built drawings" showing contractor's name, preparer's signature, and date. Any deviations from the drawings (proposed modification) must be shown.
- Notation that all hardware was properly installed, and the existing hardware was inspected for any issues.
- Verification that loading is as communicated in the modification drawings. NOTE If loading is different than what is conveyed in the modification drawing contact Maser Consulting Connecticut immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded **to** https://pmi.vzwsmart.com as depicted on the drawings

Photo Requirements:

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

- *Photos taken at Mount Elevation*
    - Photos showing each individual sector before and also after installation of modifications. Each entire sector must be in one photo to show in the inter-connection of members.

        These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
    - Close-up photos of each installed modification per the modification drawings; pictures should also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
    - Photos showing the measurements of the installed modification member sizes (i.e. lengths, widths, depths, diameters, thicknesses)
    - Photos showing the elevation or distances of the installed modifications from the appropriate reference locations shown in the modification drawings
    - Photos showing the installed modifications onto the tower with tape drop measurements (if applicable) (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, a tape drop measurement shall be provided before the elevation change
    - Photos showing the safety climb wire rope above and below the mount prior to modification.
    - Photos showing the climbing facility and safety climb if present.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by Maser Consulting Connecticut.
    - If the drawings are as specified on the drawings

        The contractor should provide the packing list or the materials utilized to perform the mount modification
    - If an equivalent is utilized

        It is required that the Maser Consulting Connecticut certification of such is included in the contractor submission package. There may be an additional charge for this certification if the equivalent submission doesn't meet specifications as prescribed in the drawings.
- The contractor must certify that the materials meet these specifications by one of these methods.

☐ The Material utilized was as specified on the Maser Consulting Connecticut Mount Modification Drawings and included in the Material certification folder is a packing list or invoice for these materials

☐ The material utilized was an "equivalent" and included as part of the contractor submission is the Maser Consulting Connecticut certification, invoices, or specifications validating accepted status

Certifying Individual: Company _____
Name _____
Signature _____

Antenna & equipment placement and Geometry Confirmation:

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

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

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

Certifying Individual: Company _____

Name _____

Signature _____

Special Instructions / Validation as required from the MA or Mod Drawings:

Issue:

Contractor to ensure proposed and existing mount connections do not nor will not interfere with safety climb wire rope. Contractor to install safety climb wire rope guides as necessary. Contractor to remove and replace grating as necessary for installation of proposed Kicker Kit.

Response:

Schedule A – Photo & Document File Structure

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

Structure: 469129-VZW - BETHANY WEST CT

Sector: **A**

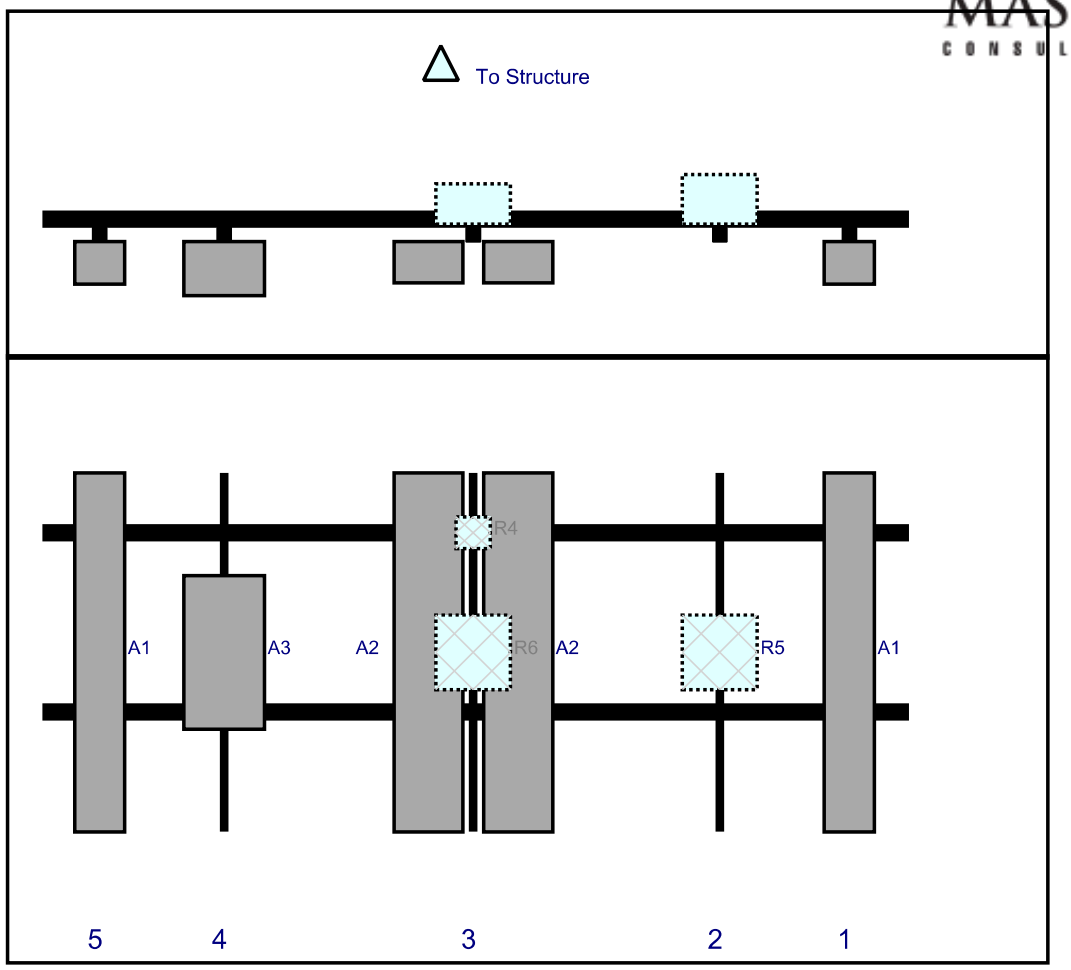
Structure Type: Self Support

Mount Elev: 161.00

4/15/2021

Plan View

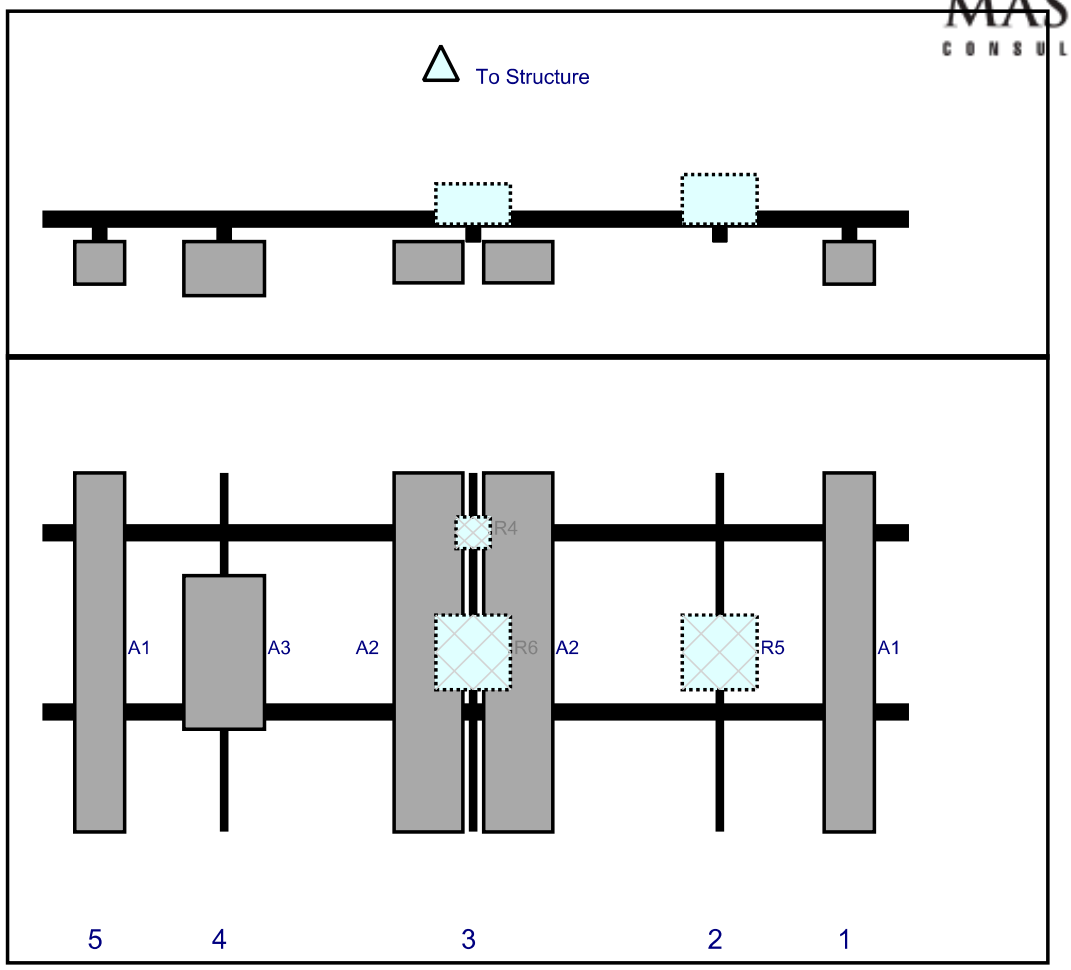
Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	DB846F65ZAXY	72	10	162	1	a	Front	36	0	Retained	02/21/2021
R5	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	136	2	a	Behind	36	0	Added	
A2	JAHH-65B-R3B	72	13.8	86.5	3	a	Front	36	-9	Added	
A2	JAHH-65B-R3B	72	13.8	86.5	3	b	Front	36	9	Added	
R4	CBC78T-DS-43	6.4	6.9	86.5	3	a	Behind	12	0	Added	
R6	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	86.5	3	a	Behind	36	0	Added	
A3	MT6407-77A	30.8	16.1	36.5	4	a	Front	36	0	Added	
A1	DB846F65ZAXY	72	10	11.5	5	a	Front	36	0	Retained	02/21/2021

Plan View

Front View
Looking at Structure



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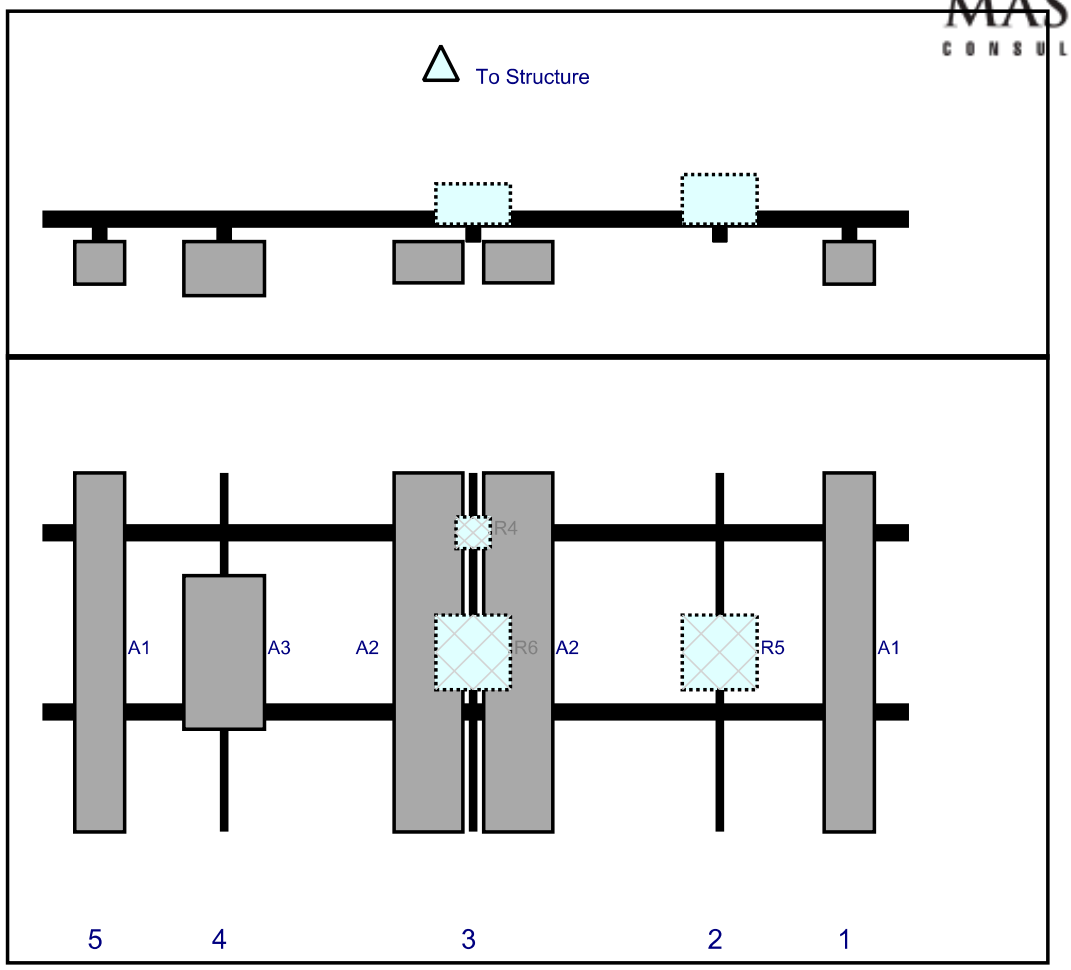
A2	JAHH-65B-R3B	72	13.8	86.5	3	b	Front	36	9	Added	
R4	CBC78T-DS-43	6.4	6.9	86.5	3	a	Behind	12	0	Added	
R6	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	86.5	3	a	Behind	36	0	Added	
A3	MT6407-77A	30.8	16.1	36.5	4	a	Front	36	0	Added	
A1	DB846F65ZAXY	72	10	11.5	5	a	Front	36	0	Retained	02/21/2021

Plan View

Front View
Looking at Structure



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Maser Consulting Connecticut

Subject	TIA-222-H Usage	
Site Information	*Site ID:*	*469129-VZW / BETHANY WEST CT*
	Site Name:	*BETHANY WEST CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*60 Rice Lane* *Beacon Falls, Connecticut 06403* *New Haven County*
	Latitude:	*41.455689°*
	Longitude:	*-73.039731°*
Structure Information	*Tower Type:*	*161-Ft Monopole*
	Mount Type:	*14.50-Ft Platform*

To Whom It May Concern,

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

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

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

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

Sincerely,

Digitally signed by Justin Linette
Date: 2021.04.15 14:28:10-04'00'

Justin Linette, PE
Technical Specialist

PROJECT NOTES

1. SEE MODIFICATION NOTES
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
6. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
8. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
10. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
11. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).

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MOUNT MODIFICATION DRAWINGS
EXISTING 14.50' PLATFORM

SITE NAME: BETHANY WEST CT
SITE NUMBER: 469129

60 RICE LN.
BEACON FALLS, CT 06403
NEW HAVEN COUNTY

PROJECT INFORMATION

SITE INFORMATION

LATITUDE: 41.455689° N
LONGITUDE: 73.039731° W
JURISDICTION: NEW HAVEN COUNTY

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS
ADDRESS: 118 FLANDERS ROAD, THIRD FLOOR
CITY, STATE, ZIP: WESTBOROUGH, MA 01581
CONTACT: ANDREW CANDIELLO
EMAIL: ANDREW.CANDIELLO@VERIZONWIRELESS.COM

PROJECT MANAGER

COMPANY: MASER CONSULTING CONNECTICUT
CONTACT: PETER ALBANO
PHONE: (856) 797-0412
E-MAIL: PETER.ALBANO@COLLIERSENGINEERING.COM

SHEET INDEX

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10054208
VZW LOCATION CODE (PSLC): 469129
FUZE ID: 16244612

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

REFERENCED DOCUMENTS

FAILING MOUNT ANALYSIS REPORT
SMART TOOL PROJECT #: 10037950
MASER CONSULTING PROJECT #: 21777109A
ANALYSIS DATE: 3/12/2021

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SCALE :	JOB NUMBER :
AS SHOWN	21777109A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
0	4/15/2021	ISSUED FOR CONSTRUCTION	MSG	JPL

Justin P. Linette
CONNECTICUT PROFESSIONAL ENGINEER
LICENSE NUMBER: 31965
MASER CONSULTING

Digitally signed by Justin Peter Linette
Date: 2021.04.15 15:52:41 -04'00'

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

SITE NAME:

BETHANY WEST CT
469129

60 RICE LN.
BEACON FALLS, CT 06403
NEW HAVEN COUNTY

MT. LAUREL OFFICE
2000 Midlantic Drive
Suite 100
Mount Laurel, NJ 08054

Phone: 856.797.0412
Fax: 856.722.1120

SHEET TITLE :
TITLE SHEET

SHEET NUMBER :
T-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
15	VZWSMART	VZWSMART-MSK1	CROSSOVER PLATE	
3		VZWSMART-MSK2	CROSSOVER PLATE	
3		VZWSMART-PLK3	SUPPORT RAIL CORNER BRACKET	
1		VZWSMART-PLK5	KICKER KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2
1		VZWSMART-PLK7	MONOPOLE COLLAR MOUNT ASSEMBLY	

OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
3	-	-	54" LONG, 3X3X1/4	GALVANIZED; CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2
3	-	-	174" LONG, P2.5 STD	GALVANIZED
1	-	-	36" LONG, P2.0 STD	GALVANIZED
3	-	-	84" LONG, P2.5 STD	GALVANIZED
1	SITE PRO 1	SQCXK-4	CROSSOVER PLATE KIT W/ SQUARE U-BOLTS AND STD. U-BOLTS	

NOTE: ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM
METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM
PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM
SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM
SITE PRO 1	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM

NOTE: WHEN SPECIFIED, VZWSMART KITS SHALL BE REQUIRED AND WILL BE VERIFIED DURING THE DESKTOP PMI

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-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
0	4/15/2021	ISSUED FOR CONSTRUCTION	MSG	JPL

Justin P. Linette
CONNECTICUT PROFESSIONAL ENGINEER
LICENSE NUMBER 31961
MASER CONSULTING
Digitally signed by Justin Peter Linette
Date: 2021.04.15 15:53:30 -04'00'

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

SITE NAME:
BETHANY WEST CT
469129
60 RICE LN.
BEACON FALLS, CT 06403
NEW HAVEN COUNTY

MT. LAUREL OFFICE
2000 Midlantic Drive
Suite 100
Mount Laurel, NJ 08054
Phone: 856.797.0412
Fax: 856.722.1120

SHEET TITLE: BILL OF MATERIALS

SHEET NUMBER: S-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

GENERAL NOTES

1. THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H. MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
2. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES. ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK, ORDERING MATERIAL, AND PREPARING OF SHOP DRAWINGS. ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
4. IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
6. 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/TIA-322 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-322 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.
7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
8. WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 30-MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.
9. ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSI/TIA-322.
10. CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOFABRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
11. CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
12. DO NOT SCALE DRAWINGS.
13. DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
14. ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO ALTERED SIZE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
15. THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

DESIGN LOADS

WIND LOADS

a. BASIC WIND SPEED (3 SECOND GUST), V = 118 MPH

b. EXPOSURE CATEGORY B

c. TOPOGRAPHIC CATEGORY 1

d. MEAN BASE ELEVATION (AMSL) = 625.27'

ICE LOADS

a. ICE WIND SPEED (3 SECOND GUST), V = 50 MPH

b. ICE THICKNESS = 1.00 IN

SEISMIC LOADS

a. SEISMIC DESIGN CATEGORY B

b. SHORT TERM MCER GROUND MOTION, S_S = .198

c. LONG TERM MCER GROUND MOTION, S_1 = .054

STRUCTURAL STEEL

1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
   a. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
   b. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
   c. AISC CODE OF STANDARD PRACTICE
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE

3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
   a. SUBMIT SHOP DRAWINGS TO PETER.ALBANO@COLLIERSENGINEERING.COM
   b. PROVIDE MASER CONSULTING PROJECT # AND MASER CONSULTING PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
7. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
8. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
9. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
10. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
11. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
12. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
13. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
14. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINGA OR ZINC COTE), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

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Justin P. Linette
CONNECTICUT PROFESSIONAL ENGINEER
LICENSE NUMBER 31961
MASER CONSULTING
Digitally signed by Justin Peter Linette
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469129

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NEW HAVEN COUNTY

MT. LAUREL OFFICE
2000 Midlantic Drive
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Mount Laurel, NJ 08054
Phone: 856.797.0412
Fax: 856.722.1120

SHEET TITLE:
MODIFICATION NOTES

SHEET NUMBER:
S-2

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

MODIFICATION INSPECTION NOTES

MI CHECKLIST	
CONSTRUCTION/ INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY EOR)	REPORT ITEM
PRE-CONSTRUCTION	
X	MI CHECKLIST DRAWING
X	EOR APPROVED SHOP DRAWINGS
NA	FABRICATION INSPECTION
NA	FABRICATOR CERTIFIED WELD INSPECTION
X	MATERIAL TEST REPORT (MTR)
NA	FABRICATOR NDE INSPECTION
X	PACKING SLIPS
ADDITIONAL TESTING AND INSPECTIONS:	
CONSTRUCTION	
X	CONSTRUCTION INSPECTIONS
NA	CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS
X	ON SITE COLD GALVANIZING VERIFICATION
X	GC AS-BUILT DOCUMENTS
ADDITIONAL TESTING AND INSPECTIONS:	
POST-CONSTRUCTION	
X	MI INSPECTOR REDLINE OR RECORD DRAWING(S)
X	VZW PMI DOCUMENTS
X	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTE: X DENOTES A DOCUMENT REQUIRED FOR THE MI REPORT
NA DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE MI REPORT

THE MODIFICATION INSPECTION (MI) IS A VISUAL INSPECTION OF MODIFICATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS, AS DESIGNED BY THE ENGINEER OF RECORD (EOR).

THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, NOR DOES THE MI INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES.

TO ENSURE THAT THE REQUIREMENTS OF THE MI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PURCHASE ORDER (PO) IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY.

MI INSPECTOR

THE MI INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO FOR THE MI TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS

THE MI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GC INSPECTION AND TEST REPORTS, REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE MI REPORT TO EOR.

GENERAL CONTRACTOR

THE GC IS REQUIRED TO CONTACT THE MI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE MI INSPECTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE MI INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS
- BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS

THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MI CHECKLIST.

RECOMMENDATIONS

THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING AN MI REPORT:

- IT IS SUGGESTED THAT THE GC PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFERABLY 10, TO THE MI INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR THE MI TO BE CONDUCTED.
- THE GC AND MI INSPECTOR COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE SIMULTANEOUSLY FOR ANY GUY WIRE TENSIONING OR RE-TENSIONING OPERATIONS.
- IT MAY BE BENEFICIAL TO INSTALL ALL MODIFICATIONS PRIOR TO CONDUCTING THE FOUNDATION INSPECTIONS TO ALLOW THE FOUNDATION AND MI INSPECTION(S) TO COMMENCE WITH ONE SITE VISIT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE DURING THE MI TO HAVE ANY DEFICIENCIES CORRECTED DURING THE INITIAL MI. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MI CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES ARE AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE.

CORRECTION OF FAILING MI'S

IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI ("FAILED MI"), THE GC SHALL WORK WITH THE OWNER TO COORDINATE A REMEDIATION PLAN:

- CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.

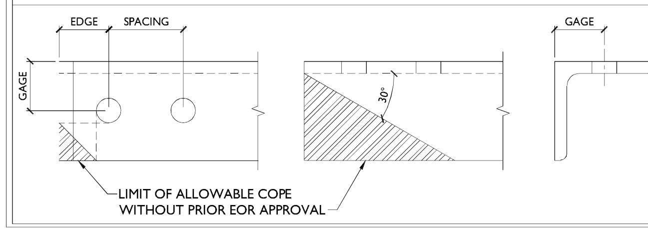
REQUIRED PHOTOS

BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE MI REPORT:

- PRE-CONSTRUCTION GENERAL SITE CONDITION
- PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
  - RAW MATERIALS
  - PHOTOS OF ALL CRITICAL DETAILS
  - FOUNDATION MODIFICATIONS
  - WELD PREPARATION
  - BOLT INSTALLATION
  - FINAL INSTALLED CONDITION
  - SURFACE COATING REPAIR
- POST CONSTRUCTION PHOTOGRAPHS
  - FINAL INFIELD CONDITION

PHOTOS OF ELEVATED MODIFICATIONS TAKEN ONLY FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.

ALLOWABLE COPING

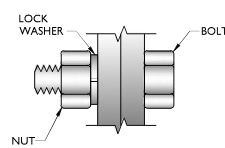


BOLT SCHEDULE (IN.)

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 11/16	7/8	1 1/2
5/8	11/16	11/16 x 7/8	1 1/8	1 7/8
3/4	13/16	13/16 x 1	1 1/4	2 1/4
7/8	15/16	15/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)

LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



TYP. BOLT ASSEMBLY

NOTES:

1. ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
2. THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENTS.
3. SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS
4. MATCH EXISTING GAGES WHEN APPLICABLE, UNLESS MINIMUM EDGE DISTANCES ARE COMPROMISED.

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SHEET TITLE: MODIFICATION NOTES

SHEET NUMBER: S-3

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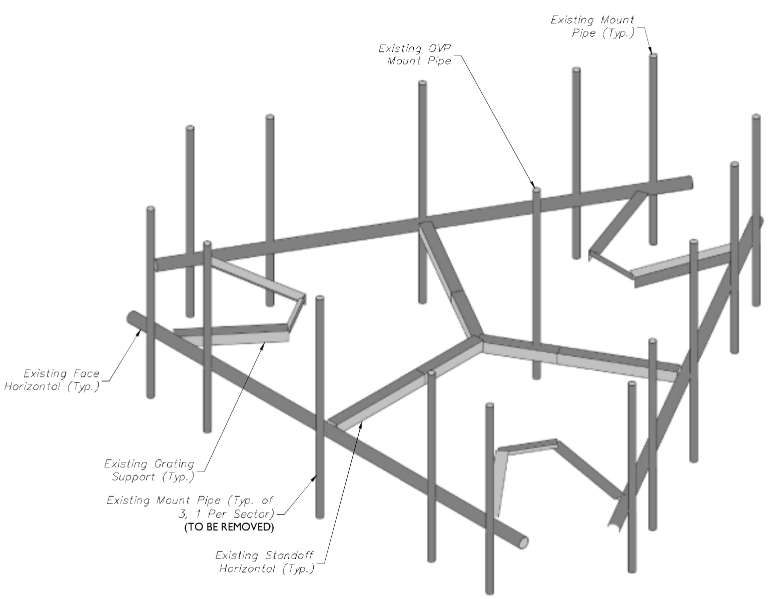
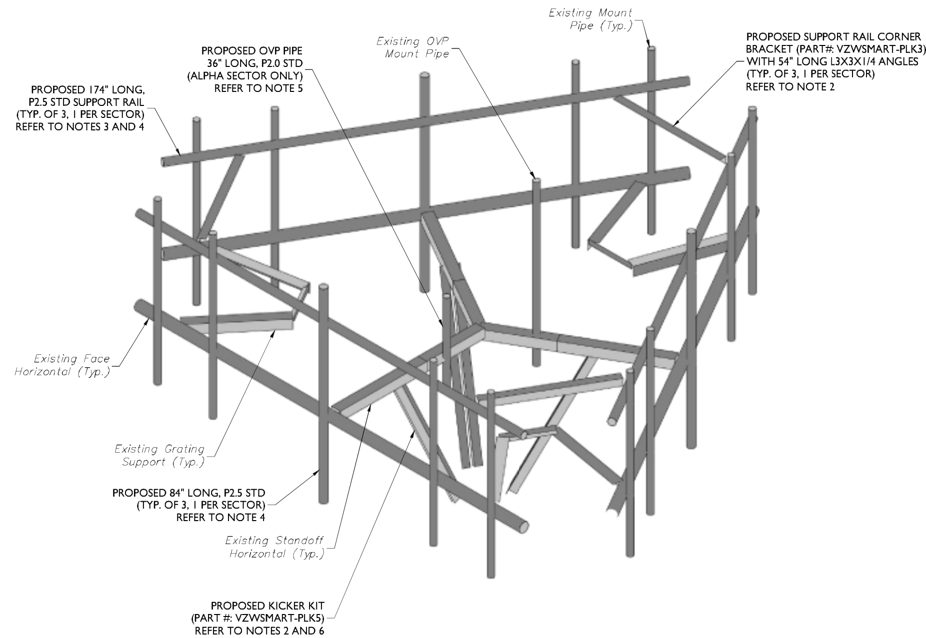


1 EXISTING PLATFORM ISOMETRIC VIEW

SCALE : N.T.S.



2 PROPOSED PLATFORM ISOMETRIC VIEW

SCALE : N.T.S.

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY LEVEL-UP TOWERS ON 2/21/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (161'-0") ARE IN GOOD CONDITION. MASER DOES NOT WARRANT THIS INFORMATION.
2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

MODIFICATION NOTES:

1. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
2. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
3. RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
4. CONNECT NEW SUPPORT RAIL AND EXISTING FACE HORIZONTALTO ALL EXISTING AND PROPOSED VERTICAL MOUNT PIPES WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1 TO TOP SUPPORT RAIL AND PART #: VZWSMART-MSK2 FOR BOTTOM FACE HORIZONTAL).
5. CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO 1 - SQCX4-K).
6. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7).

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MT. LAUREL OFFICE
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SHEET TITLE: MODIFICATION DETAILS

SHEET NUMBER: S-4

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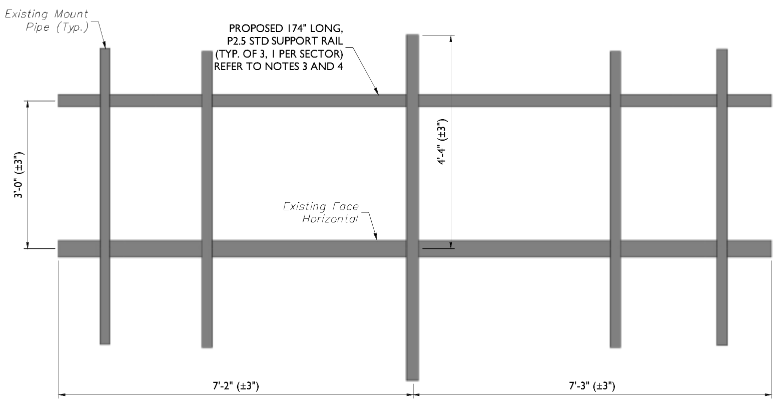

1 PROPOSED FRONT ELEVATION (TYP. ALL SECTORS)

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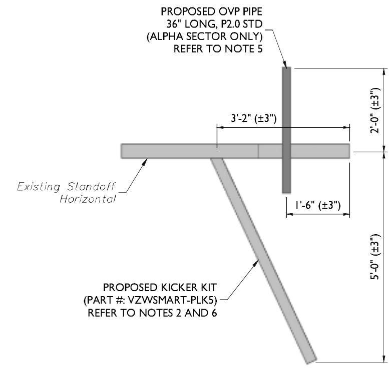

2 PROPOSED SIDE ELEVATION (TYP. ALL SECTORS)

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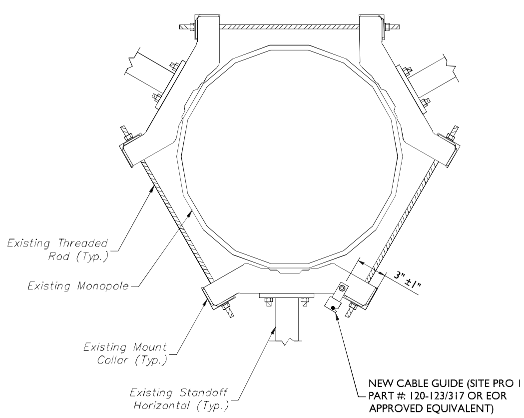
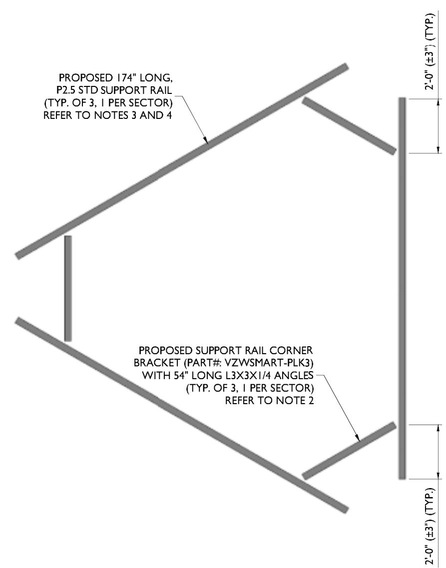


3 PROPOSED CABLE GUIDE COLLAR ATTACHMENT - PLAN VIEW

SCALE : N.T.S.



4 PROPOSED SIDE ELEVATION

SCALE : N.T.S.

MODIFICATION NOTES:

1. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
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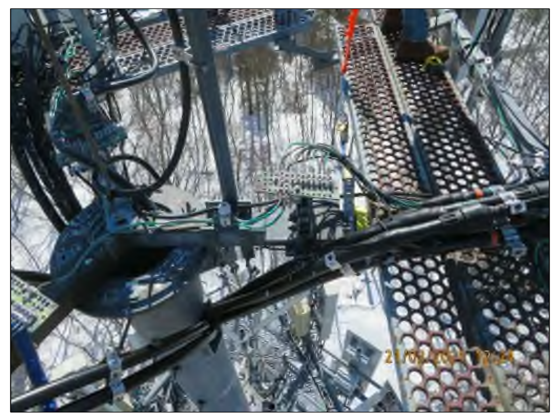
MOUNT PHOTO 1

MOUNT PHOTO 2

MOUNT PHOTO 3



MOUNT PHOTO 4

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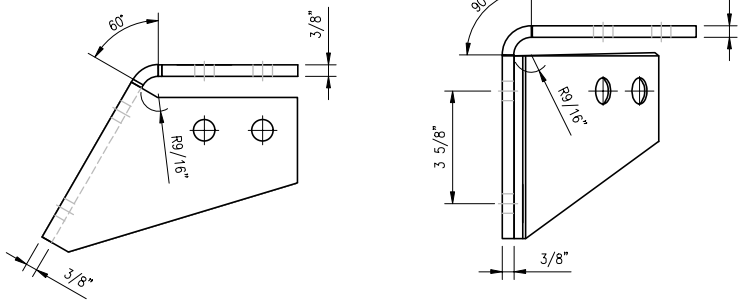
MOUNT PHOTOS

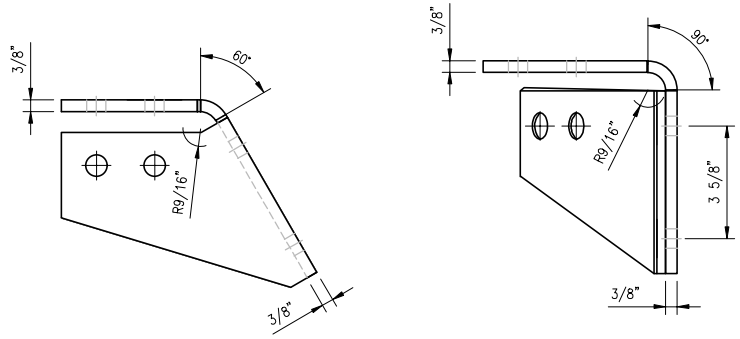
SHEET NUMBER:
S-6

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



TOP VIEW SIDE VIEW

CBP-L



TOP VIEW SIDE VIEW

CBP-R

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

VZWSMART-PLK3 (SUPPORT RAIL CORNER BRACKET)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	CBP-L	CORNER BENT PLATE BRACKET	PLK3-F1	9
2	1	CBP-R	CORNER BENT PLATE BRACKET	PLK3-F1	9
3	4	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
4	8	---	BOLT 5/8" X 2" A325	---	3
5	16	FW-625	5/8" HDG USS FLAT WASHER	---	1
6	16	LW-625	5/8" HDG LOCK WASHER	---	0
7	16	NUT-625	5/8" HDG HEX NUT	---	2
				GALVANIZED WT	30

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DRAWN BY: H.R | CHECKED BY: HMA

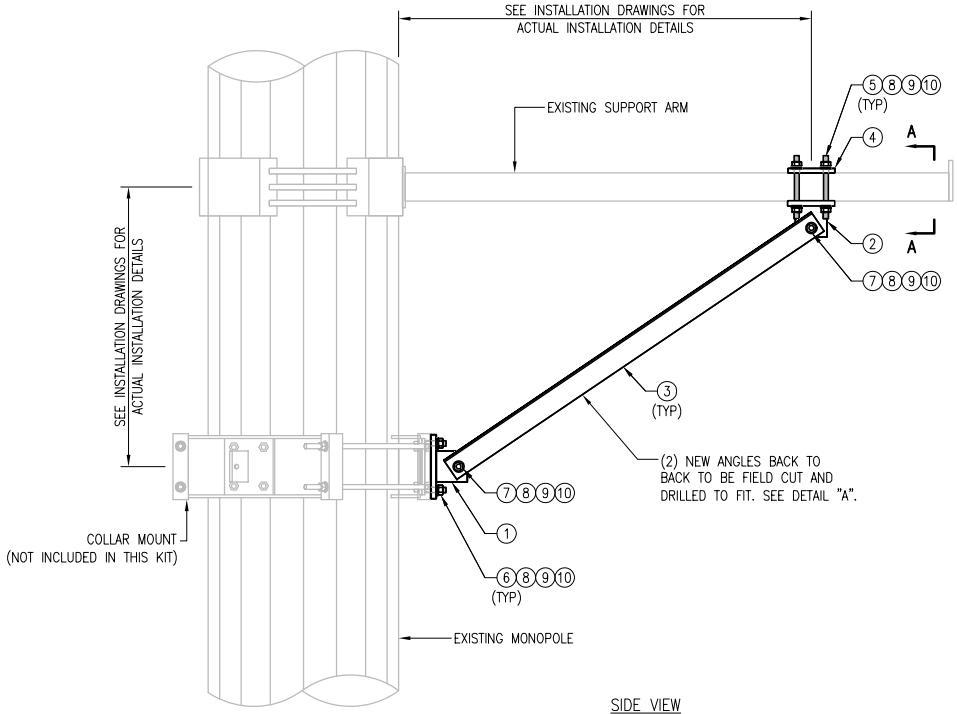
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

SHEET TITLE:
VZWSMART-PLK3
SUPPORT RAIL CORNER BRACKET

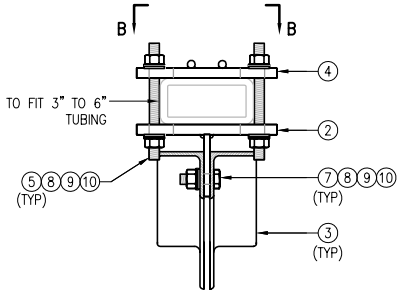
SHEET NUMBER: VZWSMART-PLK3

REV #: 0

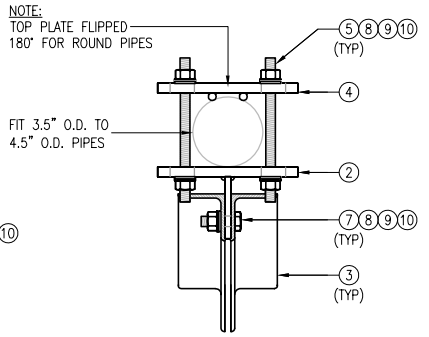
NOTE:
THE LOCATION OF KICKER AND EXISTING ANTENNA MOUNT SHOWN ON THE DRAWING IS FOR REPRESENTATION PURPOSE ONLY. SEE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION OF DETAILS.



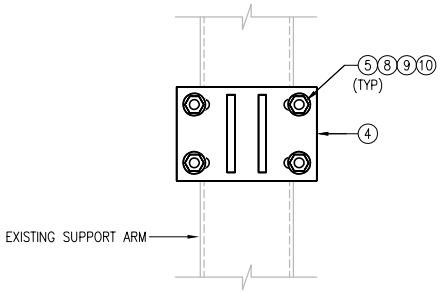
SIDE VIEW
KICKER KIT



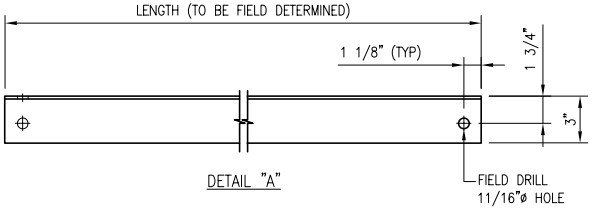
SECTION "A-A"
RECT. HSS MOUNTING



SECTION "A-A"
ROUND PIPE MOUNTING



SECTION "B-B"



DETAIL "A"

NOTES:
1. ALL HOLES ARE 11/16" DIA. U.N.O
2. HOT-DIPPED GALVANIZED PER ASTM A123.
3. FIT UP TO 6" SQ. TUBING OR 4 1/2" O.D. PIPE

VZWSMART-PLK5 (KICKER KIT)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	BRKW-XXX	BRACKET WELDMENT A36	PLK5-F3	43.8
2	3	BRKW-XXXX	BRACKET WELDMENT A36	PLK5-F2	35.7
3	6	L331875-8	L 3" X 3" X 3/16" X 8'-0" A36	PLK5-F4	182.9
4	3	PL-KI	PL 5/8" X 6" X 9" A36	PLK5-F1	29.0
5	12	---	THREADED ROD 5/8" DIA. X 1'-0" F1554-36 HDG	---	--
6	6	---	BOLT 5/8" X 2" A325	---	--
7	12	---	BOLT 5/8" X 2 1/2" A325	---	--
8	42	FW-625	5/8" HDG USS FLAT WASHER	---	3
9	42	LW-625	5/8" HDG LOCK WASHER	---	1
10	42	NUT-625	5/8" HDG HEX NUT	---	5
				GALVANIZED WT	291

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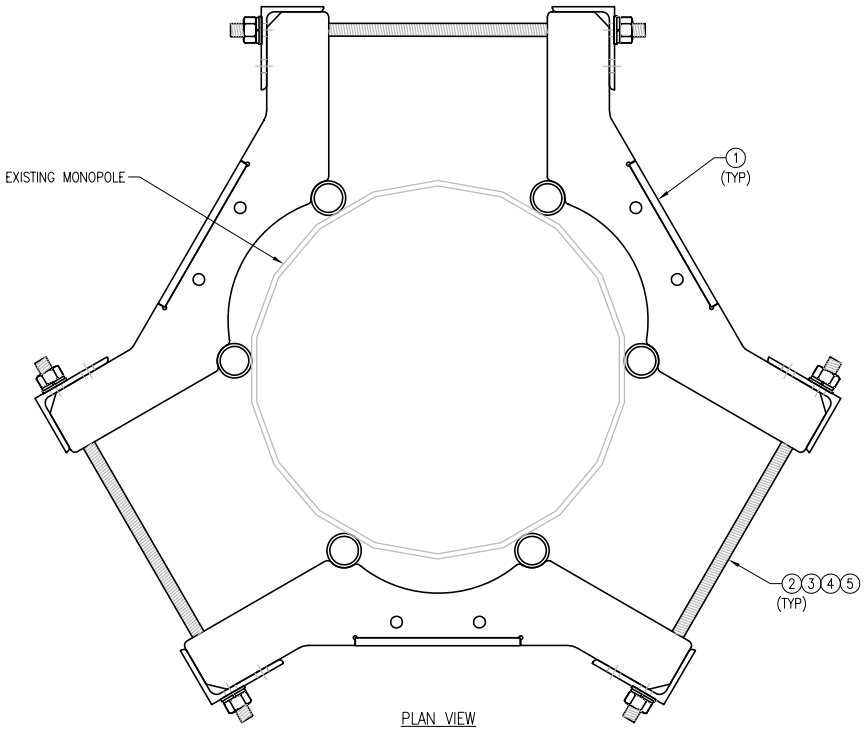
DRAWN BY: MN | CHECKED BY: HMA/KW

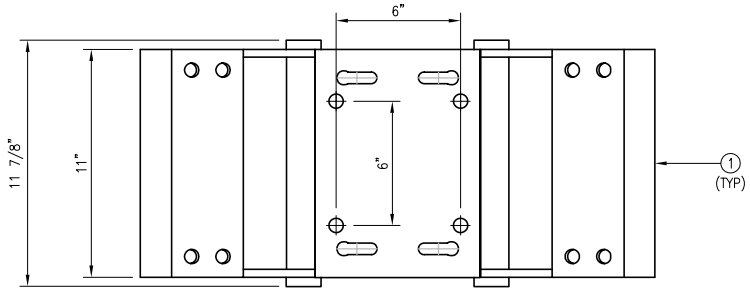
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	MN	05/08/20

SHEET TITLE:
VZWSMART-PLK5
KICKER KIT

SHEET NUMBER: VZWSMART-PLK5
REV #: 0



PLAN VIEW
MONOPOLE COLLAR MOUNT ASSEMBLY



FRONT VIEW

NOTES:
1. FIT 12" TO 45" DIA MONOPOLE.
2. HOT-DIPPED GALVANIZED PER ASTM A123.

VZWSMART-PLK7 (MONOPOLE COLLAR MOUNT ASSEMBLY)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	CM-1245	COLLAR MOUNT ASSEMBLY	PLK7-F1	147
2	6	---	THREADED ROD 5/8" X 4'-0" A193-B7	---	
3	12	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	12	LW-625	5/8" HDG LOCK WASHER	---	0
5	12	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	150

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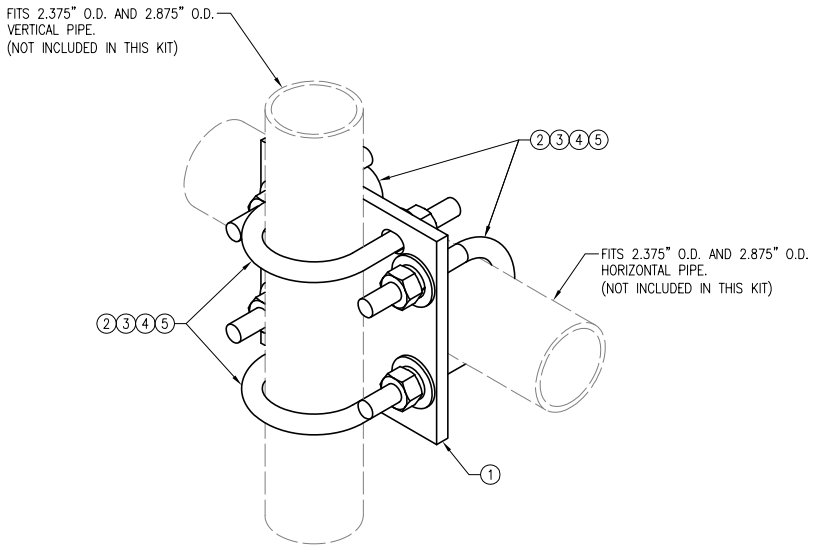
DRAWN BY: BT | CHECKED BY: HMA/KW

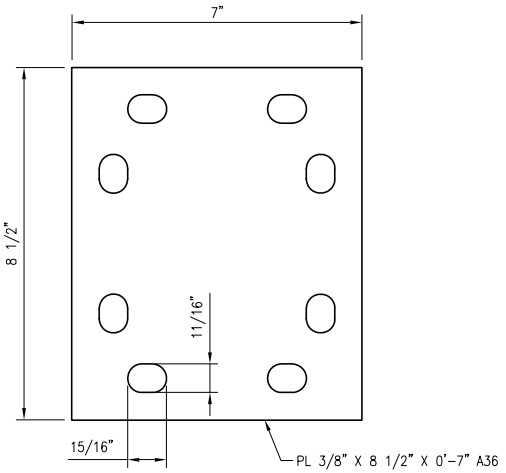
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	BT	05/11/20

SHEET TITLE:
VZWSMART-PLK7
MONOPOLE COLLAR
MOUNT ASSEMBLY

SHEET NUMBER: VZWSMART-PLK7

REV #: 0





PL375-857

VZWSMART-MSK1 (CROSSOVER PLATE)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PL375-857	PL 3/8" X 8 1/2" X 0'-7" A36	MSK1-F1	6
2	4	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
3	8	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	8	LW-625	5/8" HDG LOCK WASHER	---	0
5	8	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	14

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

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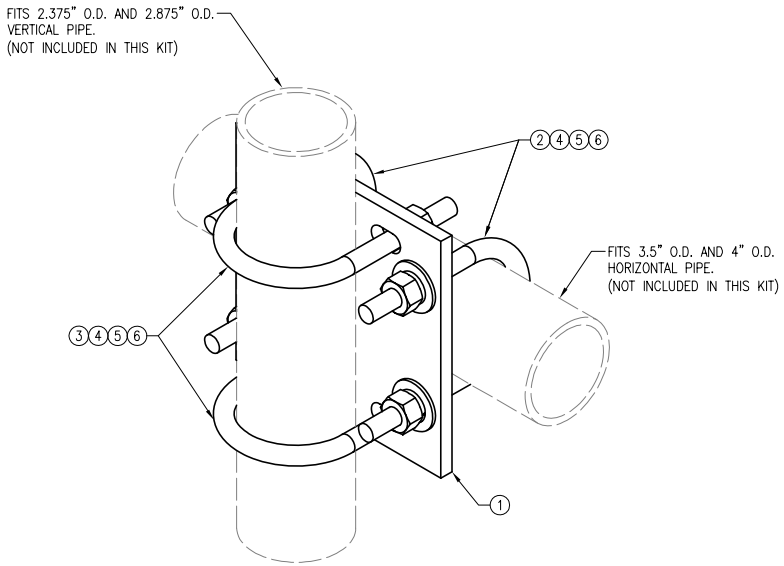
DRAWN BY: H.R	CHECKED BY: HMA

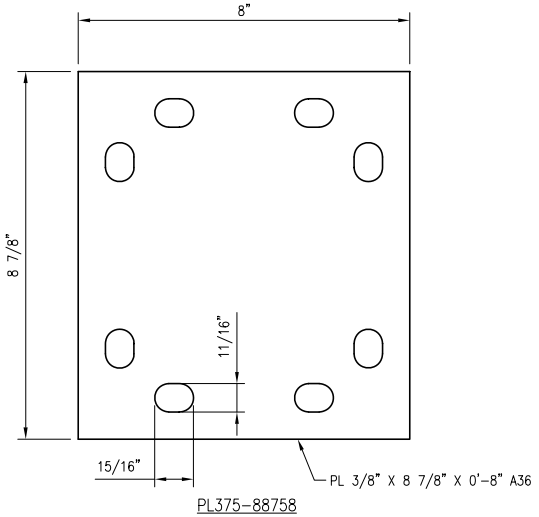
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

SHEET TITLE:

VZWSMART-MSK1
CROSSOVER PLATE

SHEET NUMBER:	REV #:
VZWSMART-MSK1	0





PL375-88758

VZWSMART-MSK2 (CROSSOVER PLATE)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PL375-88758	PL 3/8" X 8 3/4" X 0'-8" A36	MSK2-F1	8
2	2	MS02-625-4125-600	RU-BOLT 5/8" X 4 1/8" I.W. X 6" I.L. A36 (OR EQUIV.)	RBC-1	3
3	2	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	3
4	8	FW-625	5/8" HDG USS FLAT WASHER	---	1
5	8	LW-625	5/8" HDG LOCK WASHER	---	0
6	8	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	15

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

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DRAWN BY: H.R | CHECKED BY: HMA

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

SHEET TITLE:
VZWSMART-MSK2
CROSSOVER PLATE

SHEET NUMBER: VZWSMART-MSK2

REV #: 0

ATTACHMENT 5

Town of Beacon Falls, Connecticut - Assessment Parcel Map

Parcel: 017-002-0002 **Address:** 60 RICE LN

N

Approximate Scale: 1 inch = 450 feet

0 130 260 390 520 Feet

Map Produced May 2021

Tax ID 017-002-0002 Printed 03/30/2020 Card No. 1 of 1

EDWARDS CHARLES
30 LORRAINE DRIVE
BEACON FALLS, CT 06403
Census: 3411

Neighborhood Number
5
Neighborhood Name
East Side
TAXING DISTRICT INFORMATION

Jurisdiction Name	BEACON FALLS
Area	006
Routing Number	017-002-0002

Site Description

Topography
High
Public Utilities
Sewer
Street or Road
Unpaved
Neighborhood
Static
Zoning:
R-1
Legal Acres:
49.7600

Transfer of Ownership

Owner	Consideration	Transfer Date	Deed Type	Deed Book/Page
EDWARDS	0	08/29/2002		131 14 &30
NA	0	05/25/1999		112 411

Valuation Record

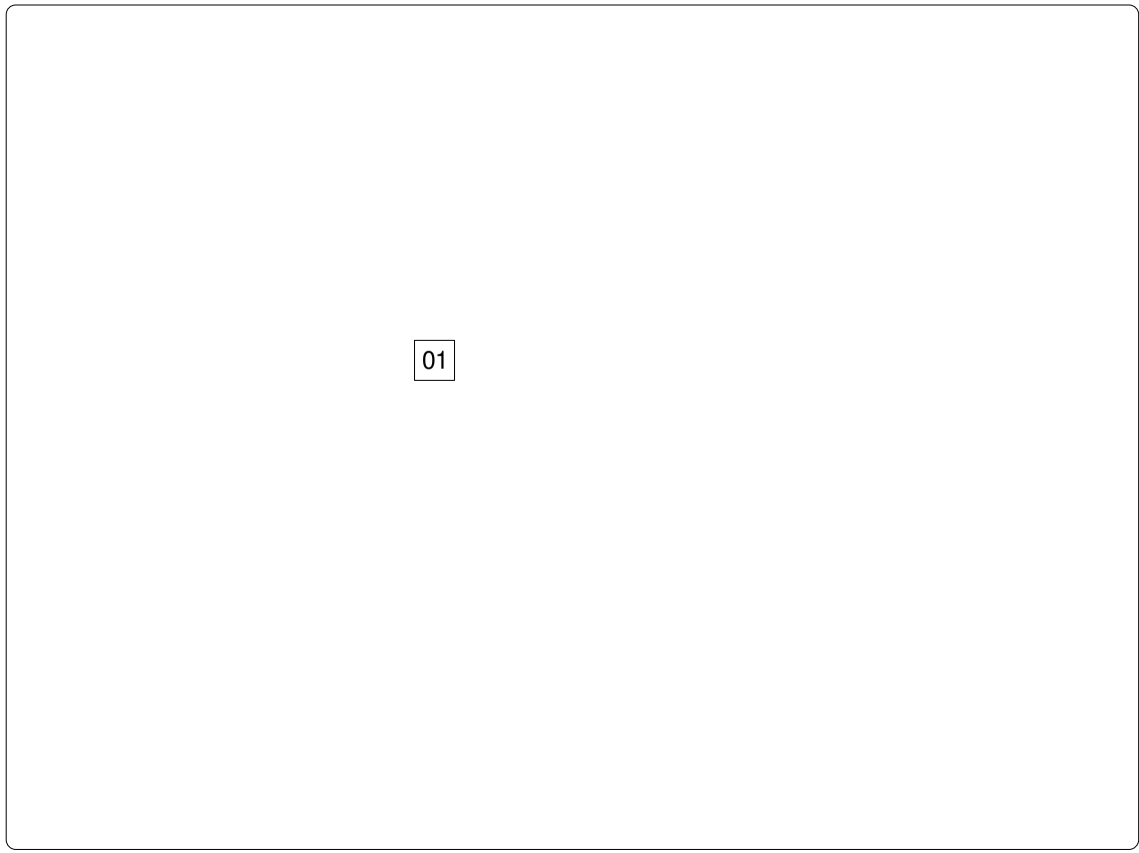
Assessment Year		2006	2007	2011	2016				
Reason for Change		2006 Reval	2007	2011 Reval	2016 Reval				
2016 Market	L	348520	348520	259360	202480				
	I	0	0	0	0				
	T	348520	348520	259360	202480				
70% Assessed	L	78170	78170	48160	81070				
	I	0	0	0	0				
	T	78170	78170	48160	81070				

Land Size

Land Type	Rating, Soil ID - or - Actual Frontage	Acreage - or - Effective Frontage	Square Feet - or - Effective Depth	Influence Factor
Primary Commercial		0.5200		U 100%
Res Excess Acres		49.2400		
PA490 Forest		49.2400		

Tax ID 017-002-0002 Printed 03/30/2020

Physical Characteristics



Special Features

Description

Summary of Improvements

ID	USE	Story Height	Const Type	Grade	Year Cons	Eff Year	Cond	Size or Area
01	TOWERMON	0.00		AVG	2011	2011	AV	160

ATTACHMENT 6

UNITED STATES POSTAL SERVICE®

BETHANY WEST

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	3	3	neopost 06/23/2021 US POSTAGE $002.89⁰ ZIP 06103 041L122036037
	Postmaster, per *(name of receiving employee)* V.P.		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Gerard Smith, First Selectman Town of Beacon Falls 10 Maple Avenue Beacon Falls, CT 06403				
2.	Keith Rosenfeld, Town Planner Town of Beacon Falls 10 Maple Avenue Beacon Falls, CT 06403		OLD STATE HOUSE STATION 06103 JUN 23 2021 USPS		
3.	Edward Charles 30 Lorraine Drive Beacon Falls, CT 06403				
4.					
5.					
6.					