



10 INDUSTRIAL AVE,
SUITE 3
MAHWAH NJ 07430

PHONE: 201.684.0055
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June 21, 2018

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

Notice of Exempt Modification
60 Rice Lane, Beacon Falls, CT 06403
Latitude- 41.45580000
Longitude- -73.03930000

Dear Ms. Bachman,

T-Mobile currently maintains (9) existing antennas 142' level of the existing 160' monopole at 60 Rice Lane in Beacon Falls, CT. The tower is owned by SBA Communications. The property is owned by Charles Edwards. T-Mobile now intends to add (2) new 700/2100 MHz antennas. These antennas would be installed at the same 142' level of the tower. T-Mobile also intends to install (1) remote radio head and (1) hybrid cable.

This facility was approved by the Town of Beacon Falls on December 16, 1999. There were no conditions in the approval, therefore, the modification complies with the approval.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. 16-50j-72(b)(2). In accordance with R.C.S.A. 16-50j-73, a copy of this letter is being sent to Christopher Bielik, First Selectmen of the Town of Beacon Falls, Kevin McDuffie, Planning and Zoning Chairman of the Town of Beacon Falls, as well as the property owner, Charles Edwards, and tower owner, SBA Communications.

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

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

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

Sincerely,

Kyle Richers

Kyle Richers
Transcend Wireless
10 Industrial Ave., Suite 3
Mahwah, New Jersey 07430
908-447-4716
krichers@transcendwireless.com

cc: Christopher Bielik- as elected official
Kevin McDuffie- as zoning official
SBA Communications- as tower owner
Charles Edwards- as property owner

SBA PROPERTIES INC
 TAX DEPARTMENT
 8051 CONGRESS AVE
 BOCA RATON, FL 33487
 Census: 3411

Neighborhood Number
 5

Neighborhood Name
 East Side

TAXING DISTRICT INFORMATION

Jurisdiction Name BEACON FALLS
 Area 006
 Routing Number 017-002-0002

Transfer of Ownership

Valuation Record

Assessment Year	2011	2016							
Reason for Change	2011 Reval	2016 Reval							
2016 Market	L	0	0						
	I	250000	275000						
	T	250000	275000						
70% Assessed	L	0	0						
	I	175000	192500						
	T	175000	192500						

Site Description

Topography
 High

Public Utilities
 Sewer

Street or Road
 Unpaved

Neighborhood
 Static

Zoning:
 R-1

Legal Acres:
 0.0000

Land Size

Land Type	Rating, Soil ID - or - Actual Frontage	Acreage - or - Effective Frontage	Square Feet - or - Effective Depth	Influence Factor

Physical Characteristics

01

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	2000	2000	AV	0

Town of Beacon Falls

Geographic Information System (GIS)



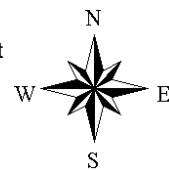
Date Printed: 5/31/2018



MAP DISCLAIMER - NOTICE OF LIABILITY

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

Approximate Scale: 1 inch = 400 feet





RADIO FREQUENCY EMISSIONS ANALYSIS REPORT EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CT11299D

Beacon Falls
60 Rice Lane
Beacon Falls, CT 6403

June 14, 2018

EBI Project Number: 6218004524

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	10.47 %



June 14, 2018

T-Mobile USA
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, CT 06002

Emissions Analysis for Site: **CT11299D – Beacon Falls**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **60 Rice Lane, Beacon Falls, CT**, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 600 MHz and 700 MHz Band are approximately $400 \mu\text{W}/\text{cm}^2$ and $467 \mu\text{W}/\text{cm}^2$ respectively. The general population exposure limit for the 1900 MHz (PCS) and 2100 MHz (AWS) bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.



Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at **60 Rice Lane, Beacon Falls, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas for broadcast and microwave backhaul, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

For all calculations, all equipment was calculated using the following assumptions:

- 1) 2 GSM channels (PCS Band - 1900 MHz) were considered for Sectors A, B & C of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 2) 2 UMTS channels (PCS Band - 1900 MHz) were considered for Sectors A, B & C of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 3) 2 UMTS channels (AWS Band – 2100 MHz) were considered for all sectors of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 4) 2 LTE channels (PCS Band - 1900 MHz) were considered for Sectors A, B & C of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 5) 2 LTE channels (AWS Band – 2100 MHz) were considered for all sectors of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 6) 2 LTE channels (700 MHz Band) were considered for all sectors of the proposed installation. These Channels have a transmit power of 30 Watts.



- 7) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 8) For the following calculations the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas for broadcast and microwave backhaul, was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 9) The antennas used in this modeling are the **Ericsson AIR21 B2P/B4A**, the **Ericsson AIR21 B2A/B4P**, the **Ericsson LNX-6515DS-A1M** and the **Ericsson AIR21 B4A / B12P** for this facility. This is based on feedback from the carrier with regard to anticipated antenna selection. All Antenna gain values, associated frequency bands and transmit power levels are shown in the Site Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas for broadcast and microwave backhaul, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 10) The antenna mounting height centerline of the proposed antennas is **142.9 feet** above ground level (AGL).
- 11) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.
- 12) All calculations were done with respect to uncontrolled / general population threshold limits.



T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C	Sector:	D
Antenna #:	1	Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	Ericsson AIR21 B2P/B4A	Make / Model:	Ericsson AIR21 B2P/B4A	Make / Model:	Ericsson AIR21 B2P/B4A	Make / Model:	Ericsson AIR32 B4A/B2P
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	142.9	Height (AGL):	142.9	Height (AGL):	142.9	Height (AGL):	142.9
Frequency Bands	2100 MHz (AWS)	Frequency Bands	2100 MHz (AWS)	Frequency Bands	2100 MHz (AWS)	Frequency Bands	2100 MHz (AWS)
Channel Count	2	Channel Count	2	Channel Count	2	Channel Count	2
Total TX Power(W):	120	Total TX Power(W):	120	Total TX Power(W):	120	Total TX Power(W):	120
ERP (W):	4,668.54	ERP (W):	4,668.54	ERP (W):	4,668.54	ERP (W):	4,668.54
Antenna A1 MPE%	0.90	Antenna B1 MPE%	0.90	Antenna C1 MPE%	0.90	Antenna D1 MPE%	0.90
Antenna #:	2	Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B4A/B12P
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 / 12.8 dBd
Height (AGL):	142.9	Height (AGL):	142.9	Height (AGL):	142.9	Height (AGL):	142.9
Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS)	Frequency Bands	2100 MHz (AWS) / 700 MHz
Channel Count	6	Channel Count	6	Channel Count	6	Channel Count	4
Total TX Power(W):	180	Total TX Power(W):	180	Total TX Power(W):	180	Total TX Power(W):	120
ERP (W):	7,002.81	ERP (W):	7,002.81	ERP (W):	7,002.81	ERP (W):	4,064.69
Antenna A2 MPE%	1.34	Antenna B2 MPE%	1.34	Antenna C2 MPE%	1.34	Antenna D2 MPE%	0.78
Antenna #:	3	Antenna #:	3	Antenna #:	3		
Make / Model:	Commscope LNX-6515DS-A1M	Make / Model:	Commscope LNX-6515DS-A1M	Make / Model:	Commscope LNX-6515DS-A1M		
Gain:	14.6 dBd	Gain:	14.6 dBd	Gain:	14.6 dBd		
Height (AGL):	142.9	Height (AGL):	142.9	Height (AGL):	142.9		
Frequency Bands	700 MHz	Frequency Bands	700 MHz	Frequency Bands	700 MHz		
Channel Count	2	Channel Count	2	Channel Count	2		
Total TX Power(W):	60	Total TX Power(W):	60	Total TX Power(W):	60		
ERP (W):	1,730.42	ERP (W):	1,730.42	ERP (W):	1,730.42		
Antenna A3 MPE%	0.71	Antenna B3 MPE%	0.71	Antenna C3 MPE%	0.71		

Site Composite MPE%	
Carrier	MPE%
T-Mobile (Sectors A, B & C)	2.95 %
AT&T	3.64%
Verizon Wireless	3.53%
Clearwire	0.08%
Sprint	0.02%
Beacon Hose Co.	0.25%
Site Total MPE %:	10.47 %

T-Mobile Sector A Total:	2.95 %
T-Mobile Sector B Total:	2.95 %
T-Mobile Sector C Total:	2.95 %
T-Mobile Sector D Total:	1.68 %
<hr/>	
Site Total:	10.47 %



T-Mobile Max Power Values (Sectors A, B & C)

T-Mobile Max Power Values (Sectors A, B & C)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
T-Mobile AWS - 2100 MHz LTE	2	2,334.27	142.9	8.96	AWS - 2100 MHz	1000	0.89%
T-Mobile AWS - 2100 MHz UMTS	2	1,167.14	142.9	4.48	AWS - 2100 MHz	1000	0.45%
T-Mobile PCS - 1900 MHz UMTS	2	1,167.14	142.9	4.48	PCS - 1900 MHz	1000	0.45%
T-Mobile PCS - 1900 MHz GSM	2	1,167.14	142.9	4.48	PCS - 1900 MHz	1000	0.45%
T-Mobile 700 MHz LTE	2	865.21	142.9	3.32	700 MHz	467	0.71%
						Total:	2.95%

Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general population exposure to RF Emissions.

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

T-Mobile Sector	Power Density Value (%)
Sector A:	2.95 %
Sector B:	2.95 %
Sector C:	2.95 %
Sector D:	1.68 %
T-Mobile Per Sector Maximum (Sectors A, B & C):	2.95 %
Site Total:	10.47 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **10.47%** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.



Tower Engineering Solutions

Phone (972) 483-0607, Fax (972) 975-9615
8445 Freeport Parkway, Suite 375, Irving, Texas 75063

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: T-Mobile

Carrier Site ID / Name: CT11299D / CTBeacon Falls/ Rt 8

Site Location: 60 Rice Lane

Beacon Falls, Connecticut

New Haven County

Latitude: 41.455689

Longitude: -73.039866

Analysis Result:

Max Structural Usage: 99.3% [Pass]

Max Foundation Usage: 66.0% [Pass]

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

Report Prepared By : Delu Zhou

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

Analysis Criteria

The rigorous analysis was performed in accordance with the requirements and stipulations of the ANSI/TIA/EIA 222-G. 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:	97.0 mph (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 3/4" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	ANSI/TIA/EIA 222-G / 2012 IBC / 2016 Connecticut State Building Code
Exposure Category:	B
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft.
Seismic Parameters:	$S_S = 0.192$, $S_1 = 0.064$

This structural analysis is based upon the tower being classified as a Structure Class 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
2	162.0	6	Decibel - DB846F65ZAXY - Panel		(18) 1 5/8" (1) 1 5/8" Fiber	Verizon
3		9	Andrew - SBNHH-1D65B - Panel			
4		3	Alcatel Lucent - RRH2x90-AWS - RRU			
5		1	Celwave - DB-T1-6Z-8AB-OZ - Dist. Box			
6	152.0	3	RFS - APXVSP18-C-A20 - Panel	Low Profile Platform	(3) 1-1/4" (1) 1-1/4"	Sprint
7		3	ALU - 1900MHz - RRU			
8		3	ALU - 800MHz - Filter			
9		3	ALU - 800 MHz - RRU			
10		4	RFS - ACU-A20-N - RET			
11	150.0	3	RFS - APXVTM14-C-120 - Panel	Platform w Handrail (Commscope MT-195-12) and V-Brace (VSR-MS-8)	(12) 1 5/8" (1) 1 5/8" Fiber (1) 1-1/4" Hybrid	T-Mobile
12		3	Alcatel Lucent - TD-RRH8x20-25 - RRU			
-	142.9	3	Ericsson - Air21 B2A B4P - Panel	Platform w Handrail (Commscope MT-195-12) and V-Brace (VSR-MS-8)	(12) 1 5/8" (1) 1 5/8" Fiber (1) 1-1/4" Hybrid	T-Mobile
-		3	Ericsson - Air21 B4A B2P - Panel			
-		3	Commscope - LNX-6515DS-A1M - Panel			
-		3	Ericsson - KRY 112 144 - TMA			
-		3	Ericsson - S11B12 - RRU			
21	133.0	3	Kathrein - 800 10121 - Panel	Low Profile Platform	(6) 1 1/4" (6) 1 5/8" (2) 3/8" Fiber (4) 3/4" DC inside 3" Conduit	AT&T
22		3	Kathrein - 800 10798 - Panel			
23		3	CCI - DTMABP7819VG12A - TMA/TTA			
24		3	Ericsson - RRUS 12 - RRU			
25		3	Ericsson - RRUS 11 - RRU			
26		3	Ericsson - RRU A2 - RRU			
27		3	Ericsson - RRUS 32 - RRU			
28		2	Raycap - DC6-48-60-18-8F - SP			
29	115.0	1	DB222 - Whip	(1) 3 ft. Standoff	(1) 7/8"	BFFD
30	40.0	1	GPS	Standoff	(1) 1/2"	Sprint

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
13	142.9	3	Ericsson - AIR 21 B2A/B4P - Panel	Platform w Handrail (Commscope MT-195-12) and V-Brace (VSR-MS-8)	(11) 1 5/8" (1) 1 5/8" Hybrid (2) 1-1/4" Hybrid	T-Mobile
14		3	Ericsson - AIR 21 B4A/B2P - Panel			
15		3	Andrew - LNX-6515DS-A1M - Panel			
16		1	Ericsson - AIR 21 B4A B12P - Panel			
17		1	Ericsson - AIR 32 B4A/B2P - Panel			
18		3	Ericsson - KRY 112 144/1 - TMA			
19		3	Ericsson - RUS01 B12 - RRU			
20		1	Ericsson - RRUS11B12 - RRU			

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 Plate	Reinforce Plate
Max. Usage:	83.4%	58.7%	59.3%	98.3%	99.3%
Pass/Fail	Pass	Pass	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	4188.0	36.5	79.8

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.

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by ANSI/TIA/EIA 222-G for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.6075 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 ANSI/TIA/EIA 222-G 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 analysis is based on the presumption that the tower members and components along with any existing reinforcement items have been correctly and properly designed, manufactured, installed and maintained.
3. All the existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion.
4. An initial tension of 10% of the break strength on all the existing guy wires was assumed in all the structural analyses of guyed towers unless different values were provided by the client. **TES** cannot take responsibility for the deviations in the analysis results because of differences in the initial tension forces of the existing guy wires.
5. Secondary component or connection secondary components, welds and bolts are assumed to be able to carry their intended original design loads. **TES** cannot take responsibility for verification of the adequacy on the connections, bolts and welds present in the structure.
6. 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 EIA/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.
7. 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.
8. 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.
9. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Usage Diagram - Max Ratio 83.42% at 16.3ft

Structure: CT02049-S-SBA
Site Name: Beacon Falls
Height: 160.00 (ft)
Base Elev: 0.000 (ft)

Code: EIA/TIA-222-G
Exposure: B
Gh: 1.1

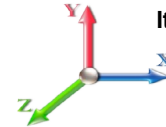
5/25/2018



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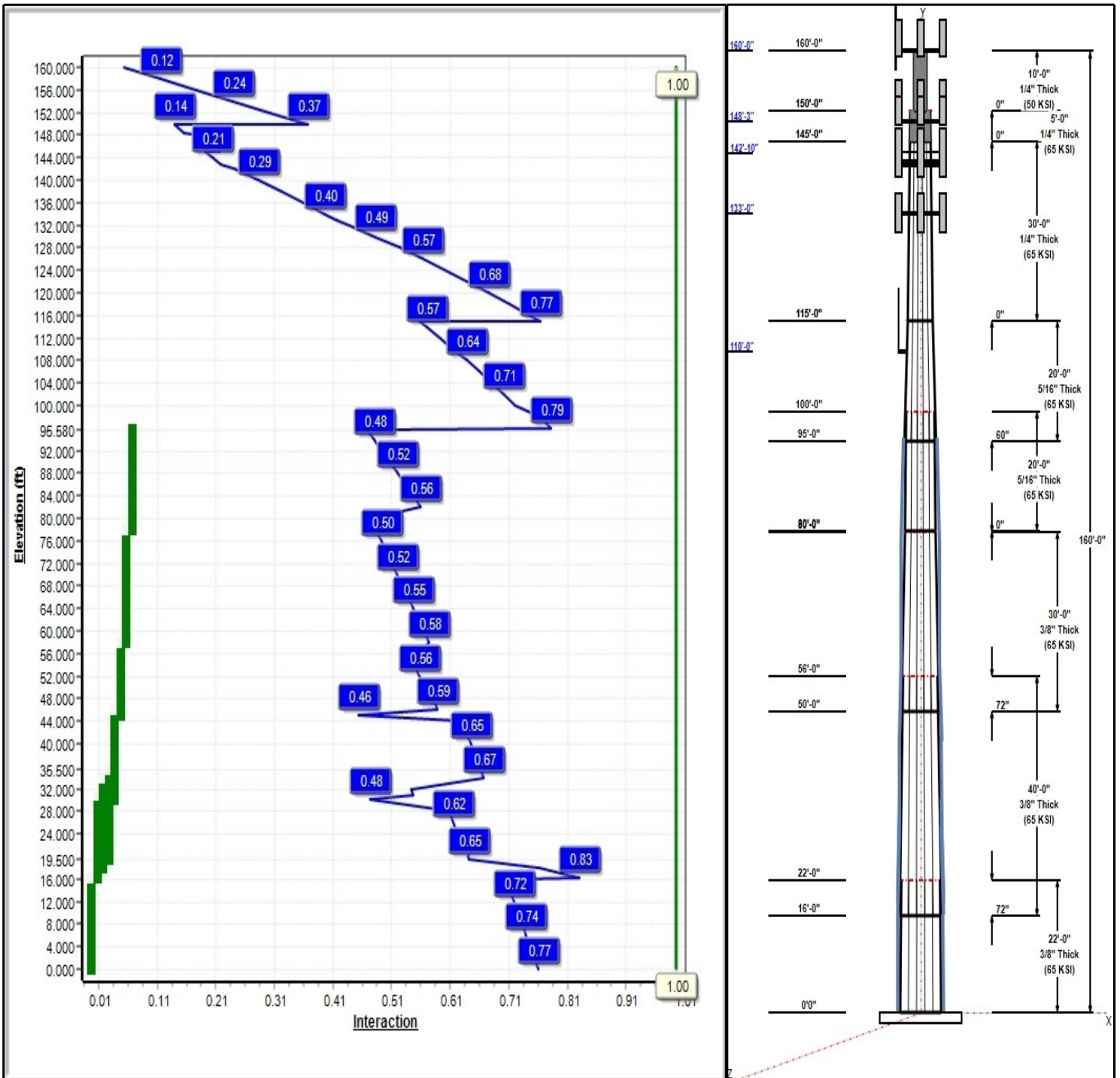
Dead Load Factor: 1.20
Wind Load Factor: 1.60

Load Case : 1.2D + 1.6W 97 mph Wind



Iterations: 28

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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

5/25/2018

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Shaft Properties

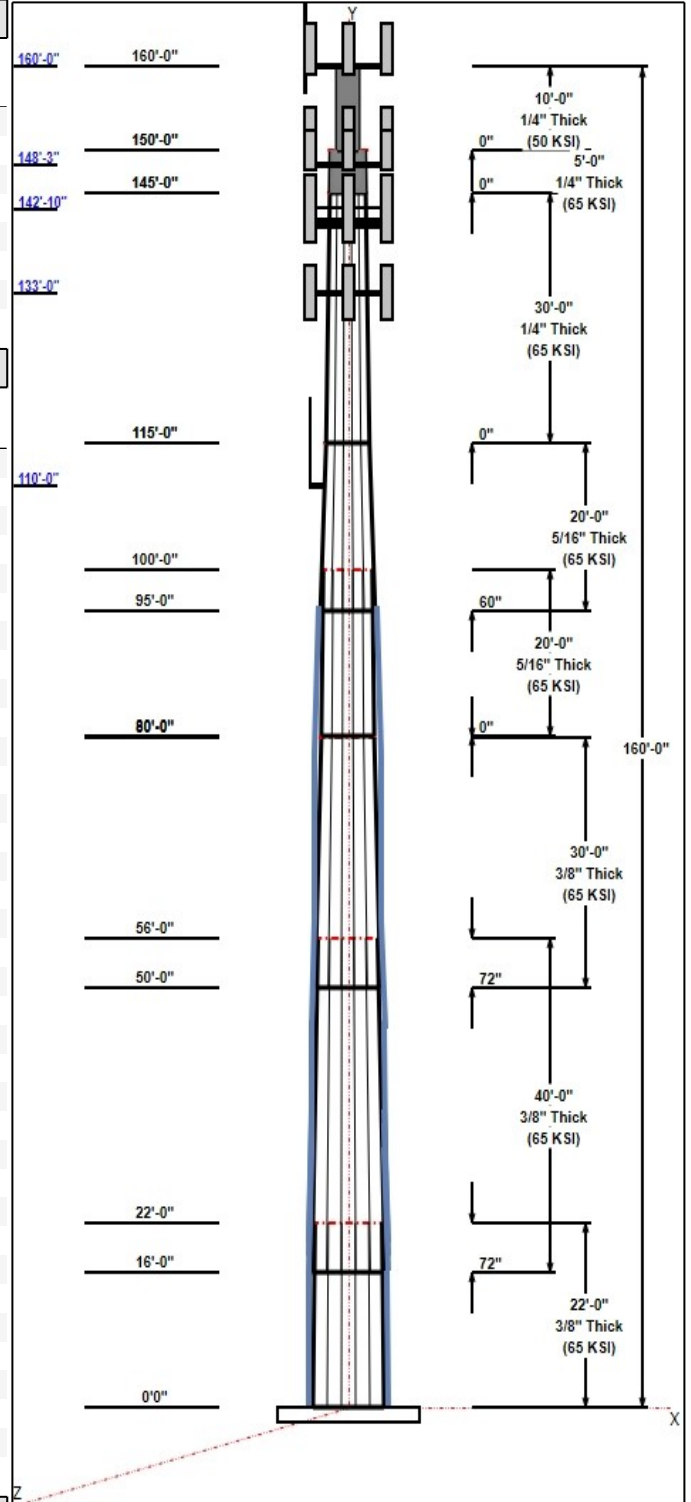
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	22.00	46.11	50.38	0.375		0.19400	65
2	40.00	40.26	48.02	0.375	Slip	0.19400	65
3	30.00	36.35	42.17	0.375	Slip	0.19400	65
4	20.00	32.48	36.35	0.313	Butt	0.19400	65
5	20.00	30.19	34.07	0.313	Slip	0.19400	65
6	30.00	24.38	30.19	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	162.00	1	DB222	BFFD
160.00	162.00	6	DB846F65ZAXY	Verizon
160.00	162.00	1	Low Profile Platform	Verizon
160.00	162.00	3	RRH2x90-AWS	Verizon
160.00	162.00	9	SBNHH-1D65B	Verizon
160.00	162.00	1	DB-T1-6Z-8AB-OZ	Verizon
160.00	162.00	1	6' Lightning rod	
148.30	152.00	3	APXVSP18-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
142.90	143.60	3	KRY 112 144/1	T-Mobile
142.90	142.90	1	Platform w/ HR & Bracing	T-Mobile
142.90	142.90	3	LNx-6515DS-A1M	T-Mobile
142.90	143.60	3	AIR 21 B2A/B4P	T-Mobile
142.90	143.60	3	AIR 21 B4A/B2P	T-Mobile
142.90	142.90	1	AIR 21 B4A B12P	T-Mobile
142.90	142.90	1	AIR 32 B4A/B2P	T-Mobile
142.90	142.90	3	Ericsson - RUS01 B12 -	T-Mobile
142.90	142.90	1	Ericsson - RRUS11B12 -	T-Mobile
133.00	133.00	3	RRUS 32	AT&T
133.00	133.00	2	DC6-48-60-18-8F	AT&T
133.00	133.00	3	800 10798	AT&T
133.00	133.00	3	DTMABP7819VG12A	AT&T
133.00	133.00	3	800 10121	AT&T
133.00	133.00	3	RRUS 11	AT&T
133.00	133.00	3	RRUS A2 Module	AT&T
133.00	133.00	1	Low Profile Platform	AT&T
133.00	133.00	3	RRUS 12	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



Structure: CT02049-S-SBA

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

Base Shape: 12 Sided
Taper: 0.00000

5/25/2018

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0.00	160.00	Outside	7/8" Coax	BFFD
0.00	148.30	Inside	1-1/4" Hybrid	Sprint
0.00	148.30	Inside	1-1/4" Hybrid	Sprint
0.00	142.90	Inside	1 5/8" Coax	T-Mobile
0.00	142.90	Outside	1 5/8" Hybrid	T-Mobile
0.00	142.90	Outside	1-1/4" Hybrid	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	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 + 1.6W 97 mph Wind	4188.0	36.5	49.4
0.9D + 1.6W 97 mph Wind	4141.2	36.5	37.1
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1024.3	8.4	79.8
1.2D + 1.0E	245.0	2.0	49.4
0.9D + 1.0E	242.1	2.0	37.1
1.0D + 1.0W 60 mph Wind	995.5	8.7	41.2

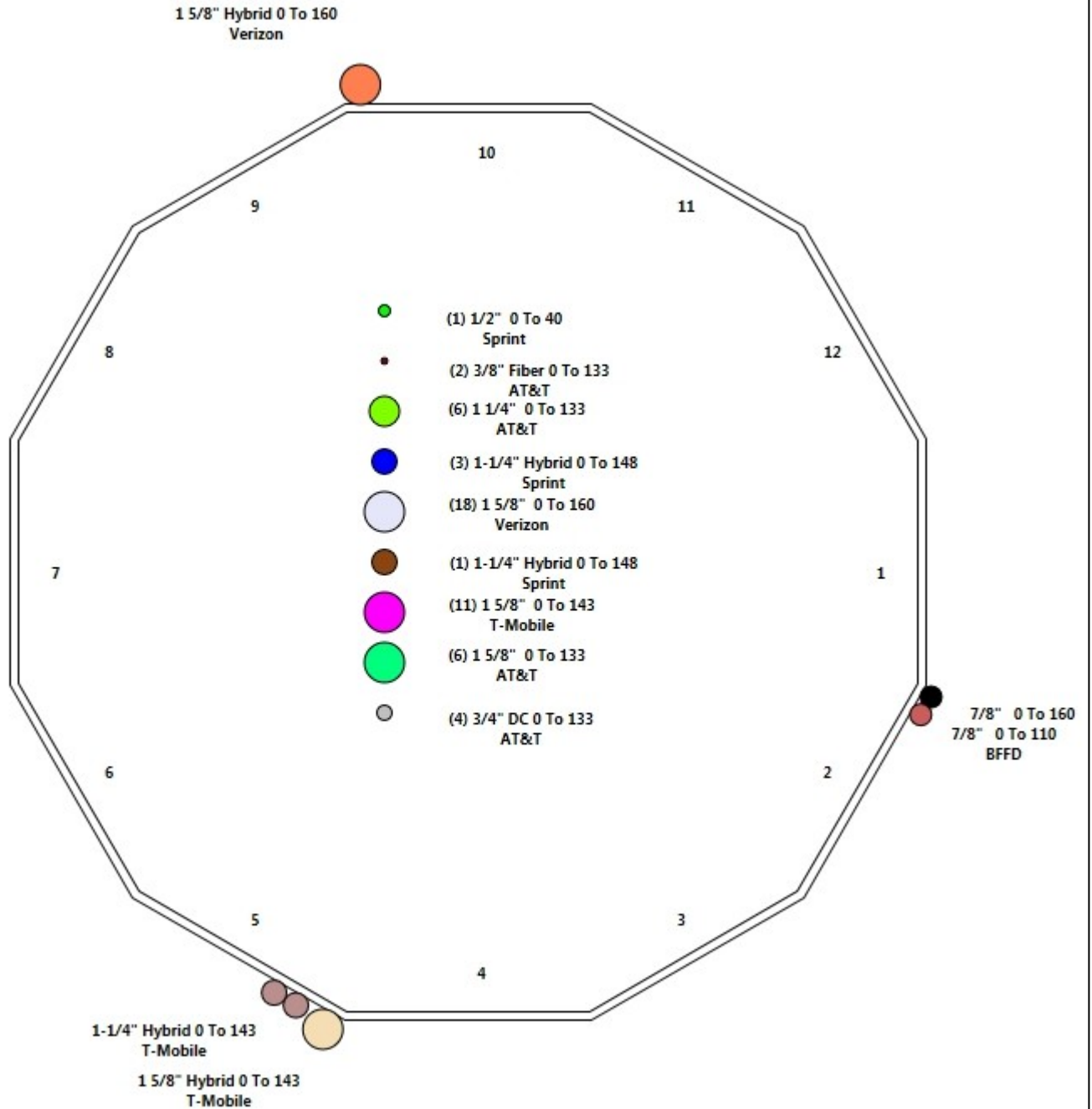
Structure: CT02049-S-SBA - Coax Line Placement

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

5/25/2018



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Shaft Properties

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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		Termination Connectors			
							Spacing (in)	Description	Spacing (in)	Lower Qty	Upper Qty	
0.00	16.25	3	PLT C10x30(1.5" Hole)	65	80	0.00	AJM20&sleeve	20.00	AJM20&sleeve	3.00		
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-G	5/25/2018
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



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Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
1	160.00	DB222	1	16.00	2.25	1.00	85.75	8.351	1.00	0.00	2.00
2	160.00	DB846F65ZAXY	6	21.00	7.05	0.93	219.92	8.290	0.93	0.00	2.00
3	160.00	Low Profile Platform	1	1200.00	22.00	1.00	2253.91	39.776	1.00	0.00	2.00
4	160.00	RRH2x90-AWS	3	44.00	2.66	0.67	105.12	3.959	0.67	0.00	2.00
5	160.00	SBNHH-1D65B	9	40.00	8.16	0.81	244.70	9.469	0.81	0.00	2.00
6	160.00	DB-T1-6Z-8AB-0Z	1	44.00	4.80	1.00	188.83	5.680	1.00	0.00	2.00
7	160.00	6' Lightning rod	1	6.50	0.38	1.00	43.04	1.475	1.00	0.00	2.00
8	148.30	APXVSP18-C-A20	3	57.00	8.02	0.83	229.65	10.810	0.83	0.00	3.70
9	148.30	APXVTM14-C-120	3	56.00	6.34	0.76	216.19	7.452	0.77	0.00	1.70
10	148.30	1900MHz RRH	3	44.00	3.80	0.67	153.04	5.188	0.67	0.00	3.70
11	148.30	800 MHz RRH	3	53.00	2.49	0.67	126.88	3.632	0.67	0.00	3.70
12	148.30	ALU 800MHz External Notch Filt	3	8.80	0.78	0.67	26.42	1.426	0.67	0.00	3.70
13	148.30	TD-RRH8x20-25	3	70.00	4.05	0.67	180.31	4.862	0.67	0.00	1.70
14	148.30	ACU-A20-N	4	1.00	0.14	0.67	5.29	0.436	0.67	0.00	3.70
15	148.30	Low Profile Platform	1	1200.00	17.50	1.00	2245.94	31.533	1.00	0.00	0.00
16	142.90	KRY 112 144/1	3	11.00	0.41	0.67	21.73	0.883	0.67	0.00	0.70
17	142.90	Platform w/ HR & Bracing	1	2246.00	51.70	1.00	5366.63	89.772	1.00	0.00	0.00
18	142.90	LNx-6515DS-A1M	3	50.30	11.47	0.80	281.03	14.721	0.80	0.00	0.00
19	142.90	AIR 21 B2A/B4P	3	83.00	6.89	0.83	250.91	7.182	0.83	0.00	0.70
20	142.90	AIR 21 B4A/B2P	3	91.50	6.89	0.83	259.41	7.182	0.83	0.00	0.70
21	142.90	AIR 21 B4A B12P	1	126.00	11.54	1.00	408.44	13.114	1.00	0.00	0.00
22	142.90	AIR 32 B4A/B2P	1	105.80	6.51	1.00	287.99	7.626	1.00	0.00	0.00
23	142.90	Ericsson - RUS01 B12 - RRU	3	51.00	2.52	0.67	136.99	3.517	0.67	0.00	0.00
24	142.90	Ericsson - RRUS11B12 - RRU	1	51.00	2.57	1.00	116.90	3.213	1.00	0.00	0.00
25	133.00	RRUS 32	3	77.00	2.65	0.67	124.72	2.222	0.67	0.00	0.00
26	133.00	DC6-48-60-18-8F	2	32.80	1.47	0.75	95.81	2.162	0.75	0.00	0.00
27	133.00	800 10798	3	81.40	8.62	0.75	511.19	11.539	0.76	0.00	0.00
28	133.00	DTMABP7819VG12A	3	19.00	1.14	0.67	43.95	1.900	0.67	0.00	0.00
29	133.00	800 10121	3	46.30	5.15	0.79	159.80	7.232	0.81	0.00	0.00
30	133.00	RRUS 11	3	50.70	2.52	0.67	138.59	3.163	0.67	0.00	0.00
31	133.00	RRUS A2 Module	3	21.20	1.86	0.67	56.88	2.822	0.67	0.00	0.00
32	133.00	Low Profile Platform	1	1350.00	22.00	1.00	2513.94	39.450	1.00	0.00	0.00
33	133.00	RRUS 12	3	58.00	2.81	0.67	143.86	3.479	0.67	0.00	0.00
34	110.00	DB222	1	16.00	2.65	1.00	83.19	9.571	1.00	0.00	5.29
35	110.00	3 ft Standoff	1	40.00	2.63	1.00	117.83	8.416	1.00	0.00	0.00
36	40.00	GPS	1	10.00	1.00	1.00	35.69	1.624	1.00	0.00	0.00
Totals:			91	9,886.50			26,982.75				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	160.00	(18) 1 5/8" Coax	0.00	Inside
0.00	160.00	(1) 1 5/8" Hybrid	2.00	Outside
0.00	160.00	(1) 7/8" Coax	0.00	Outside
0.00	148.30	(1) 1-1/4" Hybrid	0.00	Inside
0.00	148.30	(3) 1-1/4" Hybrid	0.00	Inside

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice		Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)		
0.00	142.90	(11) 1 5/8" Coax		0.00						
0.00	142.90	(1) 1 5/8" Hybrid		2.00						
0.00	142.90	(2) 1-1/4" Hybrid		0.00						
0.00	133.00	(6) 1 1/4" Coax		0.00						
0.00	133.00	(6) 1 5/8" Coax		0.00						
0.00	133.00	(4) 3/4" DC		0.00						
0.00	133.00	(2) 3/8" Fiber		0.00						
0.00	110.00	(1) 7/8" Coax		0.00						
0.00	98.00	(3) 1.25" Reinforcing plate		1.25						
0.00	40.00	(1) 1/2" Coax		0.00						
0.00	32.00	(3) 1.25" Reinforcing plate		2.50						

Shaft Section Properties

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)									Additional Reinforcing			
			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	0.3750	50.375	60.375	19265.6	33.85	134.33	65	68	0.0	26.46	9158.8	9158.8	
2.00		0.3750	49.987	59.906	18820.6	33.57	133.30	65	68	409.3	26.46	9024.4	9024.4	180.0
4.00		0.3750	49.599	59.438	18382.5	33.30	132.26	65	68	406.1	26.46	8891.0	8891.0	180.0
6.00		0.3750	49.211	58.969	17951.2	33.02	131.23	65	69	402.9	26.46	8758.6	8758.6	180.0
8.00		0.3750	48.823	58.501	17526.7	32.74	130.19	65	69	399.7	26.46	8627.2	8627.2	180.0
10.00		0.3750	48.435	58.032	17109.0	32.46	129.16	65	69	396.5	26.46	8496.8	8496.8	180.0
12.00		0.3750	48.047	57.564	16698.0	32.19	128.13	65	70	393.3	26.46	8367.4	8367.4	180.0
14.00		0.3750	47.659	57.095	16293.5	31.91	127.09	65	70	390.2	26.46	8238.9	8238.9	180.0
16.00	Bot - Section 2	0.3750	47.271	56.627	15895.7	31.63	126.06	65	70	387.0	26.46	8111.5	8111.5	180.0
16.25	RT1 RB2	0.3750	47.222	56.568	15846.5	31.60	125.93	65	70	97.1	13.47	4462.4	4462.4	11.5
18.00	RB3	0.3750	46.883	56.158	15504.4	31.36	125.02	65	71	676.7	25.47	9741.7	9758.1	151.8
19.50	RB4	0.3750	46.592	55.807	15215.2	31.15	124.25	65	71	576.1	31.47	9639.7	9639.7	160.7
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	RB5	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	RT2	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	RT3	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	RT4	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	RB6	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	RT5	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	RT6 RB7	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	RT7 RB8	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
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

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)
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	RT8	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				
142.90		0.2500	24.777	19.745	1516.1	24.41	99.11	65	78	60.7				
144.00		0.2500	24.564	19.573	1476.9	24.18	98.26	65	78	73.6				
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	8215.7			

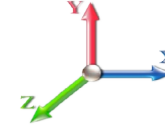
Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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	Page: 10
	Struct Class: II	



Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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	1.00	0.70	16.018	17.62	352.70	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.70	16.018	17.62	349.99	1.148 *	0.000	2.00	8.659	9.94	280.1	0.0	491.1
4.00		1.00	0.70	16.018	17.62	347.27	1.151 *	0.000	2.00	8.592	9.89	278.8	0.0	487.3
6.00		1.00	0.70	16.018	17.62	344.55	1.155 *	0.000	2.00	8.525	9.84	277.5	0.0	483.5
8.00		1.00	0.70	16.018	17.62	341.84	1.158 *	0.000	2.00	8.458	9.80	276.1	0.0	479.7
10.00		1.00	0.70	16.018	17.62	339.12	1.162 *	0.000	2.00	8.391	9.75	274.8	0.0	475.8
12.00		1.00	0.70	16.018	17.62	336.40	1.166 *	0.000	2.00	8.324	9.70	273.5	0.0	472.0
14.00		1.00	0.70	16.018	17.62	333.69	1.169 *	0.000	2.00	8.257	9.65	272.2	0.0	468.2
16.00	Bot - Section 2	1.00	0.70	16.018	17.62	330.97	1.173 *	0.000	2.00	8.190	9.61	270.9	0.0	464.4
16.25	RT1 RB2	1.00	0.70	16.018	17.62	330.63	1.175 *	0.000	0.25	1.035	1.22	34.3	0.0	116.5
18.00	RB3	1.00	0.70	16.018	17.62	328.25	1.177 *	0.000	1.75	7.217	8.50	239.5	0.0	812.0
19.50	RB4	1.00	0.70	16.018	17.62	326.22	1.181 *	0.000	1.50	6.145	7.25	204.5	0.0	691.3
20.00		1.00	0.70	16.018	17.62	325.54	1.183 *	0.000	0.50	2.040	2.41	68.0	0.0	229.5
22.00	Top - Section 1	1.00	0.70	16.018	17.62	322.82	1.185 *	0.000	2.00	8.118	9.62	271.2	0.0	913.2
24.00		1.00	0.70	16.018	17.62	325.36	1.181 *	0.000	2.00	8.052	9.51	268.1	0.0	456.5
26.00		1.00	0.70	16.018	17.62	322.64	1.185 *	0.000	2.00	7.985	9.46	266.8	0.0	452.6
28.00		1.00	0.70	16.018	17.62	319.92	1.189 *	0.000	2.00	7.918	9.42	265.5	0.0	448.8
30.00	RB5	1.00	0.70	16.031	17.63	317.34	1.194 *	0.000	2.00	7.851	9.37	264.4	0.0	445.0
31.00	RT2	1.00	0.71	16.182	17.80	317.46	1.197 *	0.000	1.00	3.900	4.67	132.9	0.0	221.1
32.00		1.00	0.71	16.330	17.96	317.54	1.199 *	0.000	1.00	3.883	4.66	133.8	0.0	220.1
34.00	RT3	1.00	0.73	16.615	18.28	317.53	1.040 *	0.000	2.00	7.717	8.03	234.7	0.0	437.3
35.50	RT4	1.00	0.74	16.821	18.50	317.41	1.043 *	0.000	1.50	5.744	5.99	177.3	0.0	325.5
36.00		1.00	0.74	16.889	18.58	317.35	1.044 *	0.000	0.50	1.906	1.99	59.2	0.0	108.0
38.00		1.00	0.75	17.152	18.87	317.00	1.046 *	0.000	2.00	7.583	7.93	239.5	0.0	429.7
40.00	Appurtenance(s)	1.00	0.76	17.405	19.15	316.49	1.049 *	0.000	2.00	7.516	7.89	241.6	0.0	425.8
42.00		1.00	0.77	17.649	19.41	315.86	1.052 *	0.000	2.00	7.449	7.84	243.5	0.0	422.0
44.00		1.00	0.78	17.885	19.67	315.09	1.056 *	0.000	2.00	7.382	7.79	245.3	0.0	418.2
45.16	RB6	1.00	0.79	18.019	19.82	314.59	1.058 *	0.000	1.16	4.251	4.50	142.6	0.0	240.8
46.00	RT5	1.00	0.79	18.114	19.93	314.21	1.060 *	0.000	0.84	3.064	3.25	103.5	0.0	173.6
48.00		1.00	0.80	18.335	20.17	313.22	1.062 *	0.000	2.00	7.248	7.70	248.4	0.0	410.5
50.00	Bot - Section 3	1.00	0.81	18.551	20.41	312.13	1.066 *	0.000	2.00	7.181	7.65	249.8	0.0	406.7
52.00		1.00	0.82	18.760	20.64	310.94	1.069 *	0.000	2.00	7.244	7.74	255.7	0.0	813.2
54.00		1.00	0.83	18.963	20.86	309.67	1.072 *	0.000	2.00	7.177	7.70	256.9	0.0	805.5
56.00	Top - Section 2	1.00	0.84	19.161	21.08	308.31	1.076 *	0.000	2.00	7.110	7.65	258.0	0.0	797.9
58.00	RT6 RB7	1.00	0.85	19.354	21.29	312.65	1.073 *	0.000	2.00	7.043	7.55	257.3	0.0	398.8
60.00		1.00	0.85	19.543	21.50	311.16	1.076 *	0.000	2.00	6.976	7.51	258.2	0.0	395.0
62.00		1.00	0.86	19.726	21.70	309.61	1.080 *	0.000	2.00	6.909	7.46	259.0	0.0	391.2
64.00		1.00	0.87	19.906	21.90	307.99	1.084 *	0.000	2.00	6.842	7.41	259.8	0.0	387.3
66.00		1.00	0.88	20.082	22.09	306.30	1.087 *	0.000	2.00	6.775	7.37	260.4	0.0	383.5
68.00		1.00	0.89	20.254	22.28	304.56	1.091 *	0.000	2.00	6.708	7.32	261.0	0.0	379.7
70.00		1.00	0.89	20.422	22.46	302.75	1.095 *	0.000	2.00	6.641	7.27	261.4	0.0	375.9
72.00		1.00	0.90	20.587	22.65	300.89	1.099 *	0.000	2.00	6.574	7.23	261.9	0.0	372.0
74.00		1.00	0.91	20.749	22.82	298.98	1.103 *	0.000	2.00	6.507	7.18	262.2	0.0	368.2
76.00		1.00	0.91	20.908	23.00	297.02	1.108 *	0.000	2.00	6.440	7.13	262.5	0.0	364.4
78.00	RT7 RB8	1.00	0.92	21.064	23.17	295.01	1.112 *	0.000	2.00	6.373	7.09	262.7	0.0	360.5
80.00	Top - Section 3	1.00	0.93	21.217	23.34	292.95	1.116 *	0.000	2.00	6.306	7.04	262.9	0.0	356.7
82.00		1.00	0.93	21.367	23.50	290.85	1.121 *	0.000	2.00	6.239	6.99	263.0	0.0	294.6

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00	1.00	0.94	21.514	23.67	288.70	1.125 *	0.000	2.00	6.172	6.95	263.0	0.0	291.4		
86.00	1.00	0.95	21.660	23.83	286.52	1.130 *	0.000	2.00	6.106	6.90	263.0	0.0	288.2		
88.00	1.00	0.95	21.802	23.98	284.29	1.135 *	0.000	2.00	6.039	6.85	262.9	0.0	285.0		
90.00	1.00	0.96	21.943	24.14	282.02	1.140 *	0.000	2.00	5.972	6.81	262.8	0.0	281.8		
92.00	1.00	0.96	22.081	24.29	279.72	1.145 *	0.000	2.00	5.905	6.76	262.6	0.0	278.7		
94.00	1.00	0.97	22.217	24.44	277.38	1.150 *	0.000	2.00	5.838	6.71	262.4	0.0	275.5		
95.00 Bot - Section 5	1.00	0.97	22.284	24.51	276.20	1.154 *	0.000	1.00	2.894	3.34	130.9	0.0	136.5		
95.58 RT8	1.00	0.98	22.323	24.56	275.51	1.156 *	0.000	0.58	1.702	1.97	77.3	0.0	159.1		
96.00	1.00	0.98	22.351	24.59	275.01	1.157 *	0.000	0.42	1.229	1.42	55.9	0.0	114.9		
98.00	1.00	0.98	22.483	24.73	272.60	1.160 *	0.000	2.00	5.812	6.74	266.8	0.0	543.3		
100.00 Top - Section 4	1.00	0.99	22.613	24.87	270.16	1.055 *	0.000	2.00	5.745	6.06	241.2	0.0	536.9		
102.00	1.00	0.99	22.742	25.02	272.91	1.052 *	0.000	2.00	5.678	5.97	239.1	0.0	267.8		
104.00	1.00	1.00	22.868	25.16	270.42	1.056 *	0.000	2.00	5.611	5.93	238.6	0.0	264.7		
106.00	1.00	1.00	22.993	25.29	267.90	1.061 *	0.000	2.00	5.544	5.88	238.0	0.0	261.5		
108.00	1.00	1.01	23.116	25.43	265.35	1.065 *	0.000	2.00	5.477	5.83	237.3	0.0	258.3		
110.00 Appurtenance(s)	1.00	1.02	23.238	25.56	262.78	1.070 *	0.000	2.00	5.410	5.79	236.7	0.0	255.1		
112.00	1.00	1.02	23.358	25.69	260.17	1.074 *	0.000	2.00	5.343	5.74	236.0	0.0	251.9		
114.00	1.00	1.03	23.476	25.82	257.54	1.079 *	0.000	2.00	5.276	5.69	235.2	0.0	248.7		
115.00 Top - Section 5	1.00	1.03	23.535	25.89	256.22	1.083 *	0.000	1.00	2.613	2.83	117.2	0.0	123.2		
116.00	1.00	1.03	23.593	25.95	254.89	1.085 *	0.000	1.00	2.596	2.82	117.0	0.0	98.1		
118.00	1.00	1.04	23.708	26.08	252.21	1.089 *	0.000	2.00	5.142	5.60	233.7	0.0	194.3		
120.00	1.00	1.04	23.823	26.20	249.50	1.094 *	0.000	2.00	5.075	5.55	232.8	0.0	191.7		
122.00	1.00	1.05	23.935	26.33	246.77	1.099 *	0.000	2.00	5.008	5.51	231.9	0.0	189.2		
124.00	1.00	1.05	24.047	26.45	244.01	1.105 *	0.000	2.00	4.941	5.46	231.0	0.0	186.6		
126.00	1.00	1.06	24.157	26.57	241.24	1.110 *	0.000	2.00	4.874	5.41	230.1	0.0	184.1		
128.00	1.00	1.06	24.266	26.69	238.43	1.116 *	0.000	2.00	4.807	5.37	229.1	0.0	181.5		
130.00	1.00	1.07	24.374	26.81	235.61	1.122 *	0.000	2.00	4.741	5.32	228.1	0.0	179.0		
132.00	1.00	1.07	24.480	26.93	232.77	1.128 *	0.000	2.00	4.674	5.27	227.1	0.0	176.4		
133.00 Appurtenance(s)	1.00	1.07	24.533	26.99	231.34	1.133 *	0.000	1.00	2.312	2.62	113.0	0.0	87.3		
134.00	1.00	1.07	24.586	27.04	229.90	1.136 *	0.000	1.00	2.295	2.61	112.8	0.0	86.6		
136.00	1.00	1.08	24.690	27.16	227.02	1.141 *	0.000	2.00	4.540	5.18	225.0	0.0	171.3		
138.00	1.00	1.08	24.793	27.27	224.11	1.147 *	0.000	2.00	4.473	5.13	223.9	0.0	168.8		
140.00	1.00	1.09	24.895	27.38	221.19	1.154 *	0.000	2.00	4.406	5.08	222.8	0.0	166.2		
142.00	1.00	1.09	24.996	27.50	218.24	1.161 *	0.000	2.00	4.339	5.04	221.6	0.0	163.7		
142.90 Appurtenance(s)	1.00	1.09	25.042	27.55	216.91	1.166 *	0.000	0.90	1.931	2.25	99.2	0.0	72.8		
144.00	1.00	1.10	25.096	27.61	215.28	1.000	0.000	1.10	2.341	2.34	103.4	0.0	88.3		
145.00 Top - Section 6	1.00	1.10	25.146	27.66	213.79	1.000	0.000	1.00	2.111	2.11	93.4	0.0	79.6		
146.00	1.00	1.10	25.196	27.72	205.10	0.600	0.000	1.00	2.023	1.21	53.8	0.0	77.1		
148.00	1.00	1.11	25.294	27.82	202.21	0.600	0.000	2.00	3.998	2.40	106.8	0.0	152.3		
148.30 Appurtenance(s)	1.00	1.11	25.308	27.84	201.77	0.600	0.000	0.30	0.594	0.36	15.9	0.0	22.6		
150.00 Top - Section 7	1.00	1.11	25.391	27.93	199.29	0.600	0.000	1.70	3.339	2.00	89.5	0.0	127.1		
152.00	1.00	1.11	25.487	28.04	136.50	0.645 *	0.000	2.00	2.667	1.72	77.2	0.0	101.0		
154.00	1.00	1.12	25.582	28.14	136.75	0.645 *	0.000	2.00	2.667	1.72	77.4	0.0	101.0		
156.00	1.00	1.12	25.677	28.24	137.00	0.645 *	0.000	2.00	2.667	1.72	77.7	0.0	101.0		
158.00	1.00	1.13	25.771	28.35	137.25	0.645 *	0.000	2.00	2.667	1.72	78.0	0.0	101.0		
160.00 Appurtenance(s)	1.00	1.13	25.863	28.45	137.50	0.645 *	0.000	2.00	2.667	1.72	78.3	0.0	101.0		
Totals:								160.00				18,859.1			28,543.3

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

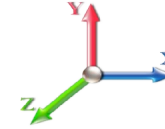
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 28

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa 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	SBNHH-1D65B	9	25.955	28.551	0.81	1.00	59.49	432.00	0.000	2.000	2717.42	0.00	5434.85
2	160.00	RRH2x90-AWS	3	25.955	28.551	0.67	1.00	5.35	158.40	0.000	2.000	244.24	0.00	488.48
3	160.00	6' Lightning rod	1	25.955	28.551	1.00	1.00	0.38	7.80	0.000	2.000	17.36	0.00	34.72
4	160.00	Low Profile Platform	1	25.955	28.551	1.00	1.00	22.00	1440.00	0.000	2.000	1004.99	0.00	2009.98
5	160.00	DB846F65ZAXY	6	25.955	28.551	0.93	1.00	39.34	151.20	0.000	2.000	1797.06	0.00	3594.12
6	160.00	DB222	1	25.955	28.551	1.00	1.00	2.25	19.20	0.000	2.000	102.78	0.00	205.57
7	160.00	DB-T1-6Z-8AB-0Z	1	25.955	28.551	1.00	1.00	4.80	52.80	0.000	2.000	219.27	0.00	438.54
8	148.30	APXVTM14-C-120	3	25.391	27.930	0.61	0.80	11.59	201.60	0.000	1.700	518.14	0.00	880.83
9	148.30	1900MHz RRH	3	25.487	28.036	0.54	0.80	6.11	158.40	0.000	3.700	274.10	0.00	1014.16
10	148.30	800 MHz RRH	3	25.487	28.036	0.54	0.80	4.00	190.80	0.000	3.700	179.61	0.00	664.54
11	148.30	APXVSPP18-C-A20	3	25.487	28.036	0.66	0.80	15.98	205.20	0.000	3.700	716.63	0.00	2651.55
12	148.30	ACU-A20-N	4	25.487	28.036	0.54	0.80	0.30	4.80	0.000	3.700	13.46	0.00	49.82
13	148.30	ALU 800MHz External	3	25.487	28.036	0.54	0.80	1.25	31.68	0.000	3.700	56.26	0.00	208.17
14	148.30	TD-RRH8x20-25	3	25.391	27.930	0.54	0.80	6.51	252.00	0.000	1.700	291.03	0.00	494.74
15	148.30	Low Profile Platform	1	25.308	27.839	1.00	1.00	17.50	1440.00	0.000	0.000	779.50	0.00	0.00
16	142.90	LNX-6515DS-A1M	3	25.042	27.546	0.64	0.80	22.02	181.08	0.000	0.000	970.59	0.00	0.00
17	142.90	Platform w/ HR & Bracing	1	25.042	27.546	1.00	1.00	51.70	2695.20	0.000	0.000	2278.58	0.00	0.00
18	142.90	Ericsson - RRUS11B12 -	1	25.042	27.546	1.00	1.00	2.57	61.20	0.000	0.000	113.27	0.00	0.00
19	142.90	Ericsson - RUS01 B12 -	3	25.042	27.546	0.54	0.80	4.05	183.60	0.000	0.000	178.59	0.00	0.00
20	142.90	AIR 21 B4A B12P	1	25.042	27.546	1.00	1.00	11.54	151.20	0.000	0.000	508.60	0.00	0.00
21	142.90	AIR 21 B4A/B2P	3	25.076	27.584	0.66	0.80	13.68	329.40	0.000	0.700	603.55	0.00	422.49
22	142.90	AIR 21 B2A/B4P	3	25.076	27.584	0.66	0.80	13.68	298.80	0.000	0.700	603.55	0.00	422.49
23	142.90	KRY 112 144/1	3	25.076	27.584	0.54	0.80	0.66	39.60	0.000	0.700	29.10	0.00	20.37
24	142.90	AIR 32 B4A/B2P	1	25.042	27.546	1.00	1.00	6.51	126.96	0.000	0.000	286.92	0.00	0.00
25	133.00	800 10121	3	24.533	26.986	0.63	0.80	9.76	166.68	0.000	0.000	421.61	0.00	0.00
26	133.00	RRUS 32	3	24.533	26.986	0.54	0.80	4.26	277.20	0.000	0.000	183.99	0.00	0.00
27	133.00	DC6-48-60-18-8F	2	24.533	26.986	0.68	0.90	1.98	78.72	0.000	0.000	85.69	0.00	0.00
28	133.00	RRUS 12	3	24.533	26.986	0.54	0.80	4.52	208.80	0.000	0.000	195.10	0.00	0.00
29	133.00	RRUS A2 Module	3	24.533	26.986	0.54	0.80	2.99	76.32	0.000	0.000	129.14	0.00	0.00
30	133.00	RRUS 11	3	24.533	26.986	0.54	0.80	4.05	182.52	0.000	0.000	174.96	0.00	0.00
31	133.00	Low Profile Platform	1	24.533	26.986	1.00	1.00	22.00	1620.00	0.000	0.000	949.92	0.00	0.00
32	133.00	800 10798	3	24.533	26.986	0.60	0.80	15.56	293.04	0.000	0.000	671.74	0.00	0.00
33	133.00	DTMABP7819VG12A	3	24.533	26.986	0.54	0.80	1.83	68.40	0.000	0.000	79.15	0.00	0.00
34	110.00	3 ft Standoff	1	23.238	25.561	1.00	1.00	2.63	48.00	0.000	0.000	107.56	0.00	0.00
35	110.00	DB222	1	23.552	25.907	1.00	1.00	2.65	19.20	0.000	5.292	109.85	0.00	581.27
36	40.00	GPS	1	17.405	19.145	1.00	1.00	1.00	12.00	0.000	0.000	30.63	0.00	0.00

Totals: 11,863.80

17,643.95

Total Applied Force Summary

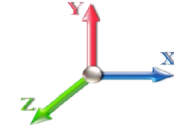
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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
2.00		280.11	614.04	0.00	0.00
4.00		278.79	610.21	0.00	0.00
6.00		277.47	606.39	0.00	0.00
8.00		276.15	602.56	0.00	0.00
10.00		274.83	598.73	0.00	0.00
12.00		273.50	594.91	0.00	0.00
14.00		272.18	591.08	0.00	0.00
16.00		270.86	587.26	0.00	0.00
16.25		34.30	131.84	0.00	0.00
18.00		239.53	919.53	0.00	0.00
19.50		204.52	783.50	0.00	0.00
20.00		68.01	260.21	0.00	0.00
22.00		271.22	1036.06	0.00	0.00
24.00		268.13	579.35	0.00	0.00
26.00		266.81	575.52	0.00	0.00
28.00		265.49	571.69	0.00	0.00
30.00		264.39	567.87	0.00	0.00
31.00		132.94	282.50	0.00	0.00
32.00		133.81	281.54	0.00	0.00
34.00		234.72	560.22	0.00	0.00
35.50		177.32	417.65	0.00	0.00
36.00		59.17	138.74	0.00	0.00
38.00		239.47	552.56	0.00	0.00
40.00	(1) attachments	272.20	560.74	0.00	0.00
42.00		243.51	544.53	0.00	0.00
44.00		245.29	540.70	0.00	0.00
45.16		142.65	311.85	0.00	0.00
46.00		103.53	225.02	0.00	0.00
48.00		248.44	533.05	0.00	0.00
50.00		249.82	529.22	0.00	0.00
52.00		255.66	935.68	0.00	0.00
54.00		256.88	928.03	0.00	0.00
56.00		258.00	920.38	0.00	0.00
58.00		257.35	521.31	0.00	0.00
60.00		258.24	517.49	0.00	0.00
62.00		259.04	513.66	0.00	0.00
64.00		259.76	509.84	0.00	0.00
66.00		260.40	506.01	0.00	0.00
68.00		260.96	502.18	0.00	0.00
70.00		261.45	498.36	0.00	0.00
72.00		261.86	494.53	0.00	0.00
74.00		262.21	490.70	0.00	0.00
76.00		262.49	486.88	0.00	0.00
78.00		262.71	483.05	0.00	0.00
80.00		262.86	479.23	0.00	0.00
82.00		262.96	417.10	0.00	0.00

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00		263.00	413.91	0.00	0.00
86.00		262.99	410.72	0.00	0.00
88.00		262.93	407.53	0.00	0.00
90.00		262.81	404.34	0.00	0.00
92.00		262.64	401.16	0.00	0.00
94.00		262.43	397.97	0.00	0.00
95.00		130.92	197.79	0.00	0.00
95.58		77.28	194.67	0.00	0.00
96.00		55.93	140.63	0.00	0.00
98.00		266.82	665.81	0.00	0.00
100.00		241.17	659.43	0.00	0.00
102.00		239.13	390.35	0.00	0.00
104.00		238.57	387.16	0.00	0.00
106.00		237.98	383.97	0.00	0.00
108.00		237.35	380.78	0.00	0.00
110.00	(2) attachments	454.09	444.80	0.00	581.27
112.00		235.97	373.16	0.00	0.00
114.00		235.23	369.97	0.00	0.00
115.00		117.18	183.79	0.00	0.00
116.00		116.99	158.73	0.00	0.00
118.00		233.65	315.54	0.00	0.00
120.00		232.81	312.99	0.00	0.00
122.00		231.94	310.44	0.00	0.00
124.00		231.04	307.89	0.00	0.00
126.00		230.10	305.33	0.00	0.00
128.00		229.14	302.78	0.00	0.00
130.00		228.15	300.23	0.00	0.00
132.00		227.12	297.68	0.00	0.00
133.00	(24) attachments	3004.35	3119.56	0.00	0.00
134.00		112.78	132.94	0.00	0.00
136.00		225.00	263.97	0.00	0.00
138.00		223.89	261.42	0.00	0.00
140.00		222.76	258.87	0.00	0.00
142.00		221.60	256.32	0.00	0.00
142.90	(19) attachments	5671.98	4181.55	0.00	865.34
144.00		103.41	120.19	0.00	0.00
145.00		93.42	108.59	0.00	0.00
146.00		53.83	106.05	0.00	0.00
148.00		106.78	210.23	0.00	0.00
148.30	(23) attachments	2844.60	2515.80	0.00	5963.81
150.00		89.53	168.63	0.00	0.00
152.00		77.15	149.84	0.00	0.00
154.00		77.44	149.84	0.00	0.00
156.00		77.73	149.84	0.00	0.00
158.00		78.01	149.84	0.00	0.00
160.00	(22) attachments	6181.42	2411.24	0.00	12206.26
	Totals:	36,503.07	49,447.78	0.00	19,616.68

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
2.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.148	16.018	0.00	2.64
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	16.018	0.00	1.25
2.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.148	16.018	0.00	2.64
2.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	16.018	0.00	4.58
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	16.018	0.00	1.25
2.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.149	1.148	16.018	0.00	0.00
2.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.149	1.148	16.018	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	16.018	0.00	2.64
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	16.018	0.00	1.25
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.151	16.018	0.00	2.64
4.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	16.018	0.00	4.58
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	16.018	0.00	1.25
4.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.151	16.018	0.00	0.00
4.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.150	1.151	16.018	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	16.018	0.00	2.64
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	16.018	0.00	1.25
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.152	1.155	16.018	0.00	2.64
6.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	16.018	0.00	4.58
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	16.018	0.00	1.25
6.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.152	1.155	16.018	0.00	0.00
6.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.152	1.155	16.018	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	16.018	0.00	2.64
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	16.018	0.00	1.25
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.158	16.018	0.00	2.64
8.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	16.018	0.00	4.58
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	16.018	0.00	1.25
8.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.158	16.018	0.00	0.00
8.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.153	1.158	16.018	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	16.018	0.00	2.64
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	16.018	0.00	1.25
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.162	16.018	0.00	2.64
10.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	16.018	0.00	4.58
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	16.018	0.00	1.25
10.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.154	1.162	16.018	0.00	0.00
10.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.154	1.162	16.018	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	16.018	0.00	2.64
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	16.018	0.00	1.25
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.155	1.166	16.018	0.00	2.64
12.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	16.018	0.00	4.58
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	16.018	0.00	1.25
12.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.155	1.166	16.018	0.00	0.00
12.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.155	1.166	16.018	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	16.018	0.00	2.64
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	16.018	0.00	1.25
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.169	16.018	0.00	2.64
14.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	16.018	0.00	4.58
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	16.018	0.00	1.25

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
14.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.156	1.169	16.018	0.00	0.00
14.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.156	1.169	16.018	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	16.018	0.00	2.64
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	16.018	0.00	1.25
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.173	16.018	0.00	2.64
16.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	16.018	0.00	4.58
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	16.018	0.00	1.25
16.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.158	1.173	16.018	0.00	0.00
16.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.158	1.173	16.018	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	16.018	0.00	0.33
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	16.018	0.00	0.16
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.158	1.175	16.018	0.00	0.33
16.25	1-1/4" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	16.018	0.00	0.57
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	16.018	0.00	0.16
16.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.158	1.175	16.018	0.00	0.00
16.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.158	1.175	16.018	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	16.018	0.00	2.31
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	16.018	0.00	1.09
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.159	1.177	16.018	0.00	2.31
18.00	1-1/4" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	16.018	0.00	4.01
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	16.018	0.00	1.09
18.00	1.25" Reinforcing	Yes	1.75	0.000	1.25	0.18	0.00	0.159	1.177	16.018	0.00	0.00
18.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.159	1.177	16.018	0.00	0.00
19.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.160	1.181	16.018	0.00	1.98
19.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	0.94
19.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.160	1.181	16.018	0.00	1.98
19.50	1-1/4" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	3.43
19.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	0.94
19.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.160	1.181	16.018	0.00	0.00
19.50	1.25" Reinforcing	Yes	1.50	0.000	2.50	0.31	0.00	0.160	1.181	16.018	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	16.018	0.00	0.66
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	16.018	0.00	0.31
20.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.161	1.183	16.018	0.00	0.66
20.00	1-1/4" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	16.018	0.00	1.14
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	16.018	0.00	0.31
20.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.161	1.183	16.018	0.00	0.00
20.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.161	1.183	16.018	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	16.018	0.00	2.64
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	1.25
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	16.018	0.00	2.64
22.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	4.58
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	1.25
22.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	16.018	0.00	0.00
22.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	16.018	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	16.018	0.00	2.64
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	1.25
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	16.018	0.00	2.64

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
24.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	4.58
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	1.25
24.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.160	1.181	16.018	0.00	0.00
24.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.160	1.181	16.018	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	16.018	0.00	2.64
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	1.25
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	16.018	0.00	2.64
26.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	4.58
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	1.25
26.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	16.018	0.00	0.00
26.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	16.018	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	16.018	0.00	2.64
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	16.018	0.00	1.25
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.189	16.018	0.00	2.64
28.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	16.018	0.00	4.58
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	16.018	0.00	1.25
28.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.163	1.189	16.018	0.00	0.00
28.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.163	1.189	16.018	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	16.031	0.00	2.64
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	16.031	0.00	1.25
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.165	1.194	16.031	0.00	2.64
30.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	16.031	0.00	4.58
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	16.031	0.00	1.25
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.165	1.194	16.031	0.00	0.00
30.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.165	1.194	16.031	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	16.182	0.00	1.32
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	16.182	0.00	0.62
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.197	16.182	0.00	1.32
31.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	16.182	0.00	2.29
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	16.182	0.00	0.62
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.197	16.182	0.00	0.00
31.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.197	16.182	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	16.330	0.00	1.32
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	16.330	0.00	0.62
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.199	16.330	0.00	1.32
32.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	16.330	0.00	2.29
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	16.330	0.00	0.62
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.199	16.330	0.00	0.00
32.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.199	16.330	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	16.615	0.00	2.64
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	16.615	0.00	1.25
34.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.040	16.615	0.00	2.64
34.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	16.615	0.00	4.58
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	16.615	0.00	1.25
34.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.113	1.040	16.615	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	16.821	0.00	1.98
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	16.821	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
35.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.114	1.043	16.821	0.00	1.98
35.50	1-1/4" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	16.821	0.00	3.43
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	16.821	0.00	0.94
35.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.114	1.043	16.821	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	16.889	0.00	0.66
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	16.889	0.00	0.31
36.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.044	16.889	0.00	0.66
36.00	1-1/4" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	16.889	0.00	1.14
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	16.889	0.00	0.31
36.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.115	1.044	16.889	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	17.152	0.00	2.64
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	17.152	0.00	1.25
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	17.152	0.00	2.64
38.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	17.152	0.00	4.58
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	17.152	0.00	1.25
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.115	1.046	17.152	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	17.405	0.00	2.64
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	17.405	0.00	1.25
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.049	17.405	0.00	2.64
40.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	17.405	0.00	4.58
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	17.405	0.00	1.25
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.116	1.049	17.405	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	17.649	0.00	2.64
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	17.649	0.00	1.25
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	17.649	0.00	2.64
42.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	17.649	0.00	4.58
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	17.649	0.00	1.25
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.117	1.052	17.649	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	17.885	0.00	2.64
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	17.885	0.00	1.25
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	17.885	0.00	2.64
44.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	17.885	0.00	4.58
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	17.885	0.00	1.25
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.119	1.056	17.885	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	18.019	0.00	1.53
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	18.019	0.00	0.72
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.19	0.00	0.119	1.058	18.019	0.00	1.53
45.16	1-1/4" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	18.019	0.00	2.66
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	18.019	0.00	0.72
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.12	0.00	0.119	1.058	18.019	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	18.114	0.00	1.11
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	18.114	0.00	0.52
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.14	0.00	0.120	1.060	18.114	0.00	1.11
46.00	1-1/4" Hybrid	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	18.114	0.00	1.92
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	18.114	0.00	0.52
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.09	0.00	0.120	1.060	18.114	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	18.335	0.00	2.64

Linear Appurtenance Segment Forces (Factored)

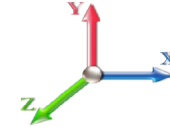
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	18.335	0.00	1.25
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	18.335	0.00	2.64
48.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	18.335	0.00	4.58
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	18.335	0.00	1.25
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.121	1.062	18.335	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	18.551	0.00	2.64
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	18.551	0.00	1.25
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	18.551	0.00	2.64
50.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	18.551	0.00	4.58
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	18.551	0.00	1.25
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.122	1.066	18.551	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	18.760	0.00	2.64
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	18.760	0.00	1.25
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.069	18.760	0.00	2.64
52.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	18.760	0.00	4.58
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	18.760	0.00	1.25
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.123	1.069	18.760	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	18.963	0.00	2.64
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	18.963	0.00	1.25
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.072	18.963	0.00	2.64
54.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	18.963	0.00	4.58
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	18.963	0.00	1.25
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.072	18.963	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	19.161	0.00	2.64
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.161	0.00	1.25
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	19.161	0.00	2.64
56.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.161	0.00	4.58
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.161	0.00	1.25
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	19.161	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	19.354	0.00	2.64
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	19.354	0.00	1.25
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.073	19.354	0.00	2.64
58.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	19.354	0.00	4.58
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	19.354	0.00	1.25
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.073	19.354	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	19.543	0.00	2.64
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.543	0.00	1.25
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	19.543	0.00	2.64
60.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.543	0.00	4.58
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.543	0.00	1.25
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	19.543	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	19.726	0.00	2.64
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	19.726	0.00	1.25
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	19.726	0.00	2.64
62.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	19.726	0.00	4.58
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	19.726	0.00	1.25
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.127	1.080	19.726	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

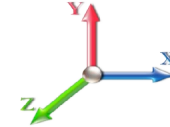
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	19.906	0.00	2.64
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	19.906	0.00	1.25
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	19.906	0.00	2.64
64.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	19.906	0.00	4.58
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	19.906	0.00	1.25
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.128	1.084	19.906	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	20.082	0.00	2.64
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	20.082	0.00	1.25
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	20.082	0.00	2.64
66.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	20.082	0.00	4.58
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	20.082	0.00	1.25
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.129	1.087	20.082	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	20.254	0.00	2.64
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	20.254	0.00	1.25
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.091	20.254	0.00	2.64
68.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	20.254	0.00	4.58
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	20.254	0.00	1.25
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.130	1.091	20.254	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	20.422	0.00	2.64
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	20.422	0.00	1.25
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.095	20.422	0.00	2.64
70.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	20.422	0.00	4.58
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	20.422	0.00	1.25
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.132	1.095	20.422	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	20.587	0.00	2.64
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	20.587	0.00	1.25
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	20.587	0.00	2.64
72.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	20.587	0.00	4.58
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	20.587	0.00	1.25
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.133	1.099	20.587	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	20.749	0.00	2.64
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	20.749	0.00	1.25
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	20.749	0.00	2.64
74.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	20.749	0.00	4.58
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	20.749	0.00	1.25
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.134	1.103	20.749	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	20.908	0.00	2.64
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	20.908	0.00	1.25
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	20.908	0.00	2.64
76.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	20.908	0.00	4.58
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	20.908	0.00	1.25
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.136	1.108	20.908	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	21.064	0.00	2.64
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	21.064	0.00	1.25
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.112	21.064	0.00	2.64
78.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	21.064	0.00	4.58
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	21.064	0.00	1.25

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.137	1.112	21.064	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	21.217	0.00	2.64
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	21.217	0.00	1.25
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	21.217	0.00	2.64
80.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	21.217	0.00	4.58
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	21.217	0.00	1.25
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.139	1.116	21.217	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	21.367	0.00	2.64
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	21.367	0.00	1.25
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.121	21.367	0.00	2.64
82.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	21.367	0.00	4.58
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	21.367	0.00	1.25
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.140	1.121	21.367	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	21.514	0.00	2.64
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	21.514	0.00	1.25
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.125	21.514	0.00	2.64
84.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	21.514	0.00	4.58
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	21.514	0.00	1.25
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.142	1.125	21.514	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	21.660	0.00	2.64
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	21.660	0.00	1.25
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.130	21.660	0.00	2.64
86.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	21.660	0.00	4.58
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	21.660	0.00	1.25
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.143	1.130	21.660	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	21.802	0.00	2.64
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	21.802	0.00	1.25
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.135	21.802	0.00	2.64
88.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	21.802	0.00	4.58
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	21.802	0.00	1.25
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.145	1.135	21.802	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	21.943	0.00	2.64
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	21.943	0.00	1.25
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.140	21.943	0.00	2.64
90.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	21.943	0.00	4.58
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	21.943	0.00	1.25
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.147	1.140	21.943	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	22.081	0.00	2.64
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	22.081	0.00	1.25
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.148	1.145	22.081	0.00	2.64
92.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	22.081	0.00	4.58
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	22.081	0.00	1.25
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.148	1.145	22.081	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	22.217	0.00	2.64
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	22.217	0.00	1.25
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.150	22.217	0.00	2.64
94.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	22.217	0.00	4.58

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	22.217	0.00	1.25
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.150	22.217	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	22.284	0.00	1.32
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	22.284	0.00	0.62
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.151	1.154	22.284	0.00	1.32
95.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	22.284	0.00	2.29
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	22.284	0.00	0.62
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.151	1.154	22.284	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	22.323	0.00	0.77
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	22.323	0.00	0.36
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.10	0.00	0.152	1.156	22.323	0.00	0.77
95.58	1-1/4" Hybrid	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	22.323	0.00	1.33
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	22.323	0.00	0.36
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.06	0.00	0.152	1.156	22.323	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	22.351	0.00	0.55
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	22.351	0.00	0.26
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.07	0.00	0.152	1.157	22.351	0.00	0.55
96.00	1-1/4" Hybrid	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	22.351	0.00	0.96
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	22.351	0.00	0.26
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.04	0.00	0.152	1.157	22.351	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	22.483	0.00	2.64
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	22.483	0.00	1.25
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	22.483	0.00	2.64
98.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	22.483	0.00	4.58
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	22.483	0.00	1.25
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.160	22.483	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	22.613	0.00	2.64
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	22.613	0.00	1.25
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.055	22.613	0.00	2.64
100.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	22.613	0.00	4.58
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	22.613	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	22.742	0.00	2.64
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	22.742	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	22.742	0.00	2.64
102.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	22.742	0.00	4.58
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	22.742	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	22.868	0.00	2.64
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	22.868	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	22.868	0.00	2.64
104.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	22.868	0.00	4.58
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	22.868	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	22.993	0.00	2.64
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	22.993	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	22.993	0.00	2.64
106.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	22.993	0.00	4.58
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	22.993	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	23.116	0.00	2.64

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	23.116	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	23.116	0.00	2.64
108.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	23.116	0.00	4.58
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	23.116	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	23.238	0.00	2.64
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	23.238	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	23.238	0.00	2.64
110.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	23.238	0.00	4.58
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	23.238	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	23.358	0.00	2.64
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	23.358	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	23.358	0.00	2.64
112.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	23.358	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	23.476	0.00	2.64
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	23.476	0.00	1.25
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	23.476	0.00	2.64
114.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	23.476	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	23.535	0.00	1.32
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	23.535	0.00	0.62
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.083	23.535	0.00	1.32
115.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	23.535	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	23.593	0.00	1.32
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	23.593	0.00	0.62
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.085	23.593	0.00	1.32
116.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	23.593	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	23.708	0.00	2.64
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	23.708	0.00	1.25
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.089	23.708	0.00	2.64
118.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	23.708	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	23.823	0.00	2.64
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	23.823	0.00	1.25
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.094	23.823	0.00	2.64
120.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	23.823	0.00	4.58
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	23.935	0.00	2.64
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	23.935	0.00	1.25
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	23.935	0.00	2.64
122.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	23.935	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	24.047	0.00	2.64
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	24.047	0.00	1.25
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.135	1.105	24.047	0.00	2.64
124.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	24.047	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	24.157	0.00	2.64
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	24.157	0.00	1.25
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.110	24.157	0.00	2.64
126.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	24.157	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	24.266	0.00	2.64
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	24.266	0.00	1.25

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	24.266	0.00	2.64
128.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	24.266	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	24.374	0.00	2.64
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	24.374	0.00	1.25
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.141	1.122	24.374	0.00	2.64
130.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	24.374	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	24.480	0.00	2.64
132.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	24.480	0.00	1.25
132.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.128	24.480	0.00	2.64
132.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	24.480	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	24.533	0.00	1.32
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	24.533	0.00	0.62
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.144	1.133	24.533	0.00	1.32
133.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	24.533	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	24.586	0.00	1.32
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	24.586	0.00	0.62
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.145	1.136	24.586	0.00	1.32
134.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	24.586	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	24.690	0.00	2.64
136.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	24.690	0.00	1.25
136.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.141	24.690	0.00	2.64
136.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	24.690	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	24.793	0.00	2.64
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	24.793	0.00	1.25
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.147	24.793	0.00	2.64
138.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	24.793	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	24.895	0.00	2.64
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	24.895	0.00	1.25
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.154	24.895	0.00	2.64
140.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	24.895	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	24.996	0.00	2.64
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	24.996	0.00	1.25
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.161	24.996	0.00	2.64
142.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	24.996	0.00	4.58
142.90	1 5/8" Hybrid	Yes	0.90	0.000	2.00	0.15	0.00	0.155	1.166	25.042	0.00	1.19
142.90	7/8" Coax	Yes	0.90	0.000	0.00	0.00	0.00	0.155	1.166	25.042	0.00	0.56
142.90	1 5/8" Hybrid	Yes	0.90	0.000	2.00	0.15	0.00	0.155	1.166	25.042	0.00	1.19
142.90	1-1/4" Hybrid	Yes	0.90	0.000	0.00	0.00	0.00	0.155	1.166	25.042	0.00	2.06
144.00	1 5/8" Hybrid	Yes	1.10	0.000	2.00	0.18	0.00	0.078	0.000	25.096	0.00	1.45
144.00	7/8" Coax	Yes	1.10	0.000	0.00	0.00	0.00	0.078	0.000	25.096	0.00	0.69
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.079	0.000	25.146	0.00	1.32
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	25.146	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	25.196	0.00	1.32
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	25.196	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	25.294	0.00	2.64
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	25.294	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	25.308	0.00	0.40

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
148.30	7/8" Coax	Yes	0.30	0.000	0.00	0.00	0.00	0.084	0.000	25.308	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	25.391	0.00	2.24
150.00	7/8" Coax	Yes	1.70	0.000	0.00	0.00	0.00	0.085	0.000	25.391	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	25.487	0.00	2.64
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	25.487	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	25.582	0.00	2.64
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	25.582	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	25.677	0.00	2.64
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	25.677	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	25.771	0.00	2.64
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	25.771	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	25.863	0.00	2.64
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	25.863	0.00	1.25
Totals:											0.0	895.5

Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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

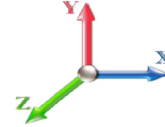


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Load Case: 1.2D + 1.6W 97 mph Wind

Iterations 28

Dead Load Factor 1.20
Wind Load Factor 1.60



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	-49.42	-36.54	0.00	-4188.0	0.00	4188.00	3683.82	1841.91	7606.69	3756.66	0.00	0.000	0.000	0.765
2.00	-48.75	-36.33	0.00	-4114.9	0.00	4114.93	3671.54	1835.77	7522.06	3714.86	0.02	-0.083	0.000	0.758
4.00	-48.09	-36.12	0.00	-4042.2	0.00	4042.27	3659.00	1829.50	7437.30	3673.00	0.07	-0.166	0.000	0.751
6.00	-47.43	-35.91	0.00	-3970.0	0.00	3970.03	3646.20	1823.10	7352.44	3631.09	0.16	-0.250	0.000	0.744
8.00	-46.78	-35.70	0.00	-3898.2	0.00	3898.21	3633.16	1816.58	7267.48	3589.13	0.28	-0.334	0.000	0.737
10.00	-46.13	-35.49	0.00	-3826.8	0.00	3826.82	3619.85	1809.93	7182.43	3547.13	0.44	-0.418	0.000	0.730
12.00	-45.49	-35.28	0.00	-3755.8	0.00	3755.85	3606.29	1803.15	7097.31	3505.10	0.63	-0.502	0.000	0.723
14.00	-44.85	-35.06	0.00	-3685.3	0.00	3685.30	3592.48	1796.24	7012.13	3463.03	0.86	-0.587	0.000	0.716
16.00	-44.23	-34.82	0.00	-3615.1	0.00	3615.17	3578.41	1789.21	6926.91	3420.94	1.13	-0.671	0.000	0.709
16.25	-44.07	-34.83	0.00	-3606.4	0.00	3606.46	3576.63	1788.32	6916.25	3415.68	1.16	-0.682	0.000	0.834
18.00	-43.11	-34.63	0.00	-3545.5	0.00	3545.52	3564.09	1782.04	6841.65	3378.83	1.43	-0.770	0.000	0.767
19.50	-42.30	-34.45	0.00	-3493.5	0.00	3493.57	3553.18	1776.59	6777.69	3347.24	1.68	-0.840	0.000	0.647
20.00	-42.01	-34.42	0.00	-3476.3	0.00	3476.34	3549.51	1774.75	6756.36	3336.71	1.77	-0.860	0.000	0.645
22.00	-40.93	-34.19	0.00	-3407.5	0.00	3407.51	3563.12	1781.56	6835.93	3376.01	2.15	-0.939	0.000	0.654
24.00	-40.31	-33.96	0.00	-3339.1	0.00	3339.14	3548.52	1774.26	6750.65	3333.89	2.56	-1.018	0.000	0.627
26.00	-39.70	-33.74	0.00	-3271.2	0.00	3271.22	3533.67	1766.84	6665.35	3291.77	3.00	-1.095	0.000	0.620
28.00	-39.08	-33.51	0.00	-3203.7	0.00	3203.74	3518.56	1759.28	6580.06	3249.64	3.48	-1.172	0.000	0.613
30.00	-38.49	-33.27	0.00	-3136.7	0.00	3136.71	3503.20	1751.60	6494.78	3207.53	3.99	-1.250	0.000	0.478
31.00	-38.19	-33.16	0.00	-3103.4	0.00	3103.44	3495.43	1747.71	6452.15	3186.48	4.25	-1.280	0.000	0.551
32.00	-37.88	-33.05	0.00	-3070.2	0.00	3070.28	3487.59	1743.79	6409.53	3165.43	4.52	-1.316	0.000	0.548
34.00	-37.29	-32.85	0.00	-3004.1	0.00	3004.18	3471.72	1735.86	6324.32	3123.35	5.09	-1.387	0.000	0.672
35.50	-36.85	-32.69	0.00	-2954.9	0.00	2954.91	3459.65	1729.82	6260.45	3091.80	5.54	-1.453	0.000	0.667
36.00	-36.68	-32.66	0.00	-2938.5	0.00	2938.56	3455.59	1727.80	6239.16	3081.29	5.69	-1.475	0.000	0.665
38.00	-36.09	-32.46	0.00	-2873.2	0.00	2873.24	3439.21	1719.61	6154.07	3039.26	6.33	-1.563	0.000	0.657
40.00	-35.48	-32.23	0.00	-2808.3	0.00	2808.31	3422.57	1711.29	6069.05	2997.28	7.00	-1.652	0.000	0.649
42.00	-34.90	-32.03	0.00	-2743.8	0.00	2743.85	3405.68	1702.84	5984.13	2955.34	7.71	-1.740	0.000	0.641
44.00	-34.33	-31.81	0.00	-2679.8	0.00	2679.80	3388.54	1694.27	5899.30	2913.44	8.46	-1.828	0.000	0.633
45.16	-34.00	-31.68	0.00	-2642.9	0.00	2642.91	3378.48	1689.24	5850.15	2889.17	8.91	-1.880	0.000	0.457
46.00	-33.74	-31.60	0.00	-2616.3	0.00	2616.30	3371.14	1685.57	5814.59	2871.61	9.24	-1.907	0.000	0.593
48.00	-33.17	-31.38	0.00	-2553.1	0.00	2553.10	3353.48	1676.74	5730.00	2829.83	10.06	-1.991	0.000	0.585
50.00	-32.61	-31.16	0.00	-2490.3	0.00	2490.34	3335.57	1667.79	5645.55	2788.13	10.91	-2.075	0.000	0.577
52.00	-31.64	-30.92	0.00	-2428.0	0.00	2428.03	3317.41	1658.70	5561.26	2746.50	11.80	-2.159	0.000	0.562
54.00	-30.68	-30.67	0.00	-2366.2	0.00	2366.20	3298.98	1649.49	5477.12	2704.94	12.72	-2.241	0.000	0.554
56.00	-29.72	-30.42	0.00	-2304.8	0.00	2304.86	3316.18	1658.09	5555.61	2743.71	13.68	-2.324	0.000	0.560
58.00	-29.17	-30.18	0.00	-2244.0	0.00	2244.03	3297.74	1648.87	5471.49	2702.16	14.67	-2.406	0.000	0.578
60.00	-28.62	-29.94	0.00	-2183.6	0.00	2183.67	3279.05	1639.52	5387.54	2660.71	15.70	-2.493	0.000	0.570
62.00	-28.07	-29.70	0.00	-2123.7	0.00	2123.79	3260.10	1630.05	5303.79	2619.34	16.76	-2.579	0.000	0.561
64.00	-27.53	-29.46	0.00	-2064.3	0.00	2064.38	3240.90	1620.45	5220.23	2578.08	17.86	-2.665	0.000	0.552
66.00	-26.99	-29.22	0.00	-2005.4	0.00	2005.46	3221.44	1610.72	5136.89	2536.92	18.99	-2.751	0.000	0.543
68.00	-26.46	-28.97	0.00	-1947.0	0.00	1947.02	3201.73	1600.86	5053.77	2495.87	20.16	-2.836	0.000	0.534
70.00	-25.93	-28.73	0.00	-1889.0	0.00	1889.08	3181.76	1590.88	4970.89	2454.94	21.37	-2.921	0.000	0.525
72.00	-25.41	-28.48	0.00	-1831.6	0.00	1831.63	3161.54	1580.77	4888.26	2414.13	22.61	-3.006	0.000	0.516
74.00	-24.89	-28.22	0.00	-1774.6	0.00	1774.68	3141.06	1570.53	4805.90	2373.45	23.89	-3.091	0.000	0.506
76.00	-24.38	-27.97	0.00	-1718.2	0.00	1718.23	3120.33	1560.16	4723.81	2332.91	25.20	-3.175	0.000	0.497
78.00	-23.87	-27.72	0.00	-1662.2	0.00	1662.29	3099.34	1549.67	4642.00	2292.51	26.55	-3.259	0.000	0.487
80.00	-23.37	-27.46	0.00	-1606.8	0.00	1606.85	3078.09	1539.05	4560.50	2252.26	27.93	-3.342	0.000	0.477
80.00	-23.37	-27.46	0.00	-1606.8	0.00	1606.85	2384.58	1192.29	3545.27	1750.88	27.93	-3.342	0.000	0.515
82.00	-22.93	-27.21	0.00	-1551.9	0.00	1551.93	2370.62	1185.31	3486.26	1721.73	29.35	-3.425	0.000	0.564

Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00	-22.49	-26.96	0.00	-1497.5	0.00	1497.52	2356.42	1178.21	3427.33	1692.63	30.80	-3.517	0.000	0.551
86.00	-22.05	-26.70	0.00	-1443.6	0.00	1443.60	2341.95	1170.98	3368.48	1663.57	32.29	-3.608	0.000	0.538
88.00	-21.62	-26.45	0.00	-1390.1	0.00	1390.19	2327.23	1163.62	3309.75	1634.56	33.82	-3.699	0.000	0.525
90.00	-21.19	-26.19	0.00	-1337.2	0.00	1337.29	2312.26	1156.13	3251.12	1605.61	35.39	-3.789	0.000	0.511
92.00	-20.77	-25.94	0.00	-1284.9	0.00	1284.91	2297.03	1148.52	3192.63	1576.72	37.00	-3.878	0.000	0.498
94.00	-20.36	-25.67	0.00	-1233.0	0.00	1233.03	2281.55	1140.77	3134.28	1547.90	38.64	-3.965	0.000	0.484
95.00	-20.16	-25.54	0.00	-1207.3	0.00	1207.36	2273.71	1136.85	3105.16	1533.52	39.47	-4.009	0.000	0.477
95.58	-19.96	-25.46	0.00	-1192.5	0.00	1192.55	2269.13	1134.57	3088.29	1525.19	39.96	-4.035	0.000	0.467
95.58	-19.96	-25.46	0.00	-1192.5	0.00	1192.55	2269.13	1134.57	3088.29	1525.19	39.96	-4.035	0.000	0.467
96.00	-19.79	-25.42	0.00	-1181.8	0.00	1181.86	2265.81	1132.90	3076.09	1519.16	40.32	-4.053	0.000	0.787
98.00	-19.08	-25.15	0.00	-1131.0	0.00	1131.02	2249.81	1124.91	3018.05	1490.50	42.05	-4.196	0.000	0.768
100.00	-18.38	-24.91	0.00	-1080.7	0.00	1080.71	2259.61	1129.81	3053.48	1508.00	43.83	-4.338	0.000	0.725
102.00	-17.95	-24.68	0.00	-1030.9	0.00	1030.90	2243.52	1121.76	2995.52	1479.37	45.68	-4.479	0.000	0.705
104.00	-17.53	-24.45	0.00	-981.53	0.00	981.53	2227.17	1113.59	2937.74	1450.84	47.58	-4.610	0.000	0.685
106.00	-17.11	-24.22	0.00	-932.62	0.00	932.62	2210.57	1105.28	2880.15	1422.40	49.54	-4.739	0.000	0.664
108.00	-16.70	-23.99	0.00	-884.18	0.00	884.18	2193.71	1096.86	2822.78	1394.06	51.55	-4.866	0.000	0.642
110.00	-16.24	-23.54	0.00	-835.61	0.00	835.61	2176.60	1088.30	2765.62	1365.84	53.61	-4.991	0.000	0.620
112.00	-15.84	-23.30	0.00	-788.54	0.00	788.54	2159.23	1079.61	2708.70	1337.73	55.73	-5.114	0.000	0.597
114.00	-15.46	-23.06	0.00	-741.93	0.00	741.93	2141.61	1070.80	2652.02	1309.73	57.90	-5.234	0.000	0.574
115.00	-15.26	-22.94	0.00	-718.87	0.00	718.87	2132.70	1066.35	2623.78	1295.79	59.00	-5.293	0.000	0.562
115.00	-15.26	-22.94	0.00	-718.87	0.00	718.87	1556.62	778.31	1923.08	949.74	59.00	-5.293	0.000	0.768
116.00	-15.08	-22.84	0.00	-695.93	0.00	695.93	1551.43	775.71	1904.13	940.38	60.11	-5.352	0.000	0.751
118.00	-14.73	-22.61	0.00	-650.26	0.00	650.26	1540.84	770.42	1866.26	921.68	62.38	-5.494	0.000	0.716
120.00	-14.39	-22.38	0.00	-605.04	0.00	605.04	1529.99	765.00	1828.43	902.99	64.71	-5.631	0.000	0.680
122.00	-14.05	-22.15	0.00	-560.28	0.00	560.28	1518.89	759.45	1790.65	884.33	67.09	-5.764	0.000	0.644
124.00	-13.72	-21.92	0.00	-515.97	0.00	515.97	1507.54	753.77	1752.93	865.70	69.53	-5.891	0.000	0.606
126.00	-13.39	-21.69	0.00	-472.13	0.00	472.13	1495.93	747.96	1715.28	847.11	72.02	-6.013	0.000	0.567
128.00	-13.08	-21.46	0.00	-428.75	0.00	428.75	1484.06	742.03	1677.72	828.56	74.56	-6.130	0.000	0.527
130.00	-12.76	-21.22	0.00	-385.84	0.00	385.84	1471.95	735.97	1640.26	810.06	77.15	-6.239	0.000	0.486
132.00	-12.46	-20.98	0.00	-343.40	0.00	343.40	1459.57	729.79	1602.91	791.62	79.78	-6.341	0.000	0.443
133.00	-9.68	-17.65	0.00	-322.43	0.00	322.43	1453.29	726.64	1584.28	782.42	81.11	-6.390	0.000	0.419
134.00	-9.54	-17.54	0.00	-304.77	0.00	304.77	1446.94	723.47	1565.68	773.23	82.45	-6.437	0.000	0.401
136.00	-9.28	-17.30	0.00	-269.70	0.00	269.70	1434.06	717.03	1528.59	754.91	85.16	-6.525	0.000	0.364
138.00	-9.02	-17.06	0.00	-235.10	0.00	235.10	1420.92	710.46	1491.65	736.67	87.91	-6.606	0.000	0.326
140.00	-8.77	-16.82	0.00	-200.99	0.00	200.99	1407.52	703.76	1454.87	718.50	90.69	-6.679	0.000	0.287
142.00	-8.53	-16.57	0.00	-167.35	0.00	167.35	1393.87	696.94	1418.26	700.42	93.49	-6.743	0.000	0.246
142.90	-5.04	-10.45	0.00	-151.57	0.00	151.57	1387.65	693.82	1401.84	692.32	94.77	-6.770	0.000	0.223
144.00	-4.93	-10.34	0.00	-140.07	0.00	140.07	1379.97	689.99	1381.83	682.44	96.33	-6.800	0.000	0.209
145.00	-4.83	-10.23	0.00	-129.74	0.00	129.74	1372.92	686.46	1363.70	673.48	97.75	-6.826	0.000	0.196
145.00	-4.83	-10.23	0.00	-129.74	0.00	129.74	931.20	465.60	925.89	604.09	97.75	-6.826	0.000	0.220
146.00	-4.72	-10.17	0.00	-119.50	0.00	119.50	925.24	462.62	912.49	594.77	99.18	-6.850	0.000	0.207
148.00	-4.52	-10.04	0.00	-99.16	0.00	99.16	913.32	456.66	885.99	576.36	102.05	-6.896	0.000	0.177
148.30	-2.36	-6.92	0.00	-90.19	0.00	90.19	911.53	455.77	882.04	573.63	102.48	-6.903	0.000	0.160
150.00	-2.20	-6.81	0.00	-78.43	0.00	78.43	901.40	450.70	859.86	558.24	104.94	-6.935	0.000	0.143
150.00	-2.20	-6.81	0.00	-78.43	0.00	78.43	556.65	278.33	359.38	213.69	104.94	-6.935	0.000	0.372
152.00	-2.06	-6.72	0.00	-64.81	0.00	64.81	556.65	278.33	359.38	213.69	107.85	-6.968	0.000	0.308
154.00	-1.91	-6.62	0.00	-51.38	0.00	51.38	556.65	278.33	359.38	213.69	110.78	-7.055	0.000	0.244
156.00	-1.76	-6.53	0.00	-38.13	0.00	38.13	556.65	278.33	359.38	213.69	113.74	-7.121	0.000	0.182
158.00	-1.62	-6.43	0.00	-25.08	0.00	25.08	556.65	278.33	359.38	213.69	116.73	-7.168	0.000	0.121
160.00	0.00	-6.18	0.00	-12.21	0.00	12.21	556.65	278.33	359.38	213.69	119.73	-7.195	0.000	0.058

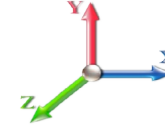
Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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	Page: 28
	Struct Class: II	



Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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	1.00	0.70	16.018	17.62	352.70	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.70	16.018	17.62	349.99	1.148 *	0.000	2.00	8.659	9.94	280.1	0.0	368.4
4.00		1.00	0.70	16.018	17.62	347.27	1.151 *	0.000	2.00	8.592	9.89	278.8	0.0	365.5
6.00		1.00	0.70	16.018	17.62	344.55	1.155 *	0.000	2.00	8.525	9.84	277.5	0.0	362.6
8.00		1.00	0.70	16.018	17.62	341.84	1.158 *	0.000	2.00	8.458	9.80	276.1	0.0	359.8
10.00		1.00	0.70	16.018	17.62	339.12	1.162 *	0.000	2.00	8.391	9.75	274.8	0.0	356.9
12.00		1.00	0.70	16.018	17.62	336.40	1.166 *	0.000	2.00	8.324	9.70	273.5	0.0	354.0
14.00		1.00	0.70	16.018	17.62	333.69	1.169 *	0.000	2.00	8.257	9.65	272.2	0.0	351.1
16.00	Bot - Section 2	1.00	0.70	16.018	17.62	330.97	1.173 *	0.000	2.00	8.190	9.61	270.9	0.0	348.3
16.25	RT1 RB2	1.00	0.70	16.018	17.62	330.63	1.175 *	0.000	0.25	1.035	1.22	34.3	0.0	87.4
18.00	RB3	1.00	0.70	16.018	17.62	328.25	1.177 *	0.000	1.75	7.217	8.50	239.5	0.0	609.0
19.50	RB4	1.00	0.70	16.018	17.62	326.22	1.181 *	0.000	1.50	6.145	7.25	204.5	0.0	518.5
20.00		1.00	0.70	16.018	17.62	325.54	1.183 *	0.000	0.50	2.040	2.41	68.0	0.0	172.1
22.00	Top - Section 1	1.00	0.70	16.018	17.62	322.82	1.185 *	0.000	2.00	8.118	9.62	271.2	0.0	684.9
24.00		1.00	0.70	16.018	17.62	325.36	1.181 *	0.000	2.00	8.052	9.51	268.1	0.0	342.3
26.00		1.00	0.70	16.018	17.62	322.64	1.185 *	0.000	2.00	7.985	9.46	266.8	0.0	339.5
28.00		1.00	0.70	16.018	17.62	319.92	1.189 *	0.000	2.00	7.918	9.42	265.5	0.0	336.6
30.00	RB5	1.00	0.70	16.031	17.63	317.34	1.194 *	0.000	2.00	7.851	9.37	264.4	0.0	333.7
31.00	RT2	1.00	0.71	16.182	17.80	317.46	1.197 *	0.000	1.00	3.900	4.67	132.9	0.0	165.8
32.00		1.00	0.71	16.330	17.96	317.54	1.199 *	0.000	1.00	3.883	4.66	133.8	0.0	165.1
34.00	RT3	1.00	0.73	16.615	18.28	317.53	1.040 *	0.000	2.00	7.717	8.03	234.7	0.0	328.0
35.50	RT4	1.00	0.74	16.821	18.50	317.41	1.043 *	0.000	1.50	5.744	5.99	177.3	0.0	244.1
36.00		1.00	0.74	16.889	18.58	317.35	1.044 *	0.000	0.50	1.906	1.99	59.2	0.0	81.0
38.00		1.00	0.75	17.152	18.87	317.00	1.046 *	0.000	2.00	7.583	7.93	239.5	0.0	322.3
40.00	Appurtenance(s)	1.00	0.76	17.405	19.15	316.49	1.049 *	0.000	2.00	7.516	7.89	241.6	0.0	319.4
42.00		1.00	0.77	17.649	19.41	315.86	1.052 *	0.000	2.00	7.449	7.84	243.5	0.0	316.5
44.00		1.00	0.78	17.885	19.67	315.09	1.056 *	0.000	2.00	7.382	7.79	245.3	0.0	313.6
45.16	RB6	1.00	0.79	18.019	19.82	314.59	1.058 *	0.000	1.16	4.251	4.50	142.6	0.0	180.6
46.00	RT5	1.00	0.79	18.114	19.93	314.21	1.060 *	0.000	0.84	3.064	3.25	103.5	0.0	130.2
48.00		1.00	0.80	18.335	20.17	313.22	1.062 *	0.000	2.00	7.248	7.70	248.4	0.0	307.9
50.00	Bot - Section 3	1.00	0.81	18.551	20.41	312.13	1.066 *	0.000	2.00	7.181	7.65	249.8	0.0	305.0
52.00		1.00	0.82	18.760	20.64	310.94	1.069 *	0.000	2.00	7.244	7.74	255.7	0.0	609.9
54.00		1.00	0.83	18.963	20.86	309.67	1.072 *	0.000	2.00	7.177	7.70	256.9	0.0	604.1
56.00	Top - Section 2	1.00	0.84	19.161	21.08	308.31	1.076 *	0.000	2.00	7.110	7.65	258.0	0.0	598.4
58.00	RT6 RB7	1.00	0.85	19.354	21.29	312.65	1.073 *	0.000	2.00	7.043	7.55	257.3	0.0	299.1
60.00		1.00	0.85	19.543	21.50	311.16	1.076 *	0.000	2.00	6.976	7.51	258.2	0.0	296.2
62.00		1.00	0.86	19.726	21.70	309.61	1.080 *	0.000	2.00	6.909	7.46	259.0	0.0	293.4
64.00		1.00	0.87	19.906	21.90	307.99	1.084 *	0.000	2.00	6.842	7.41	259.8	0.0	290.5
66.00		1.00	0.88	20.082	22.09	306.30	1.087 *	0.000	2.00	6.775	7.37	260.4	0.0	287.6
68.00		1.00	0.89	20.254	22.28	304.56	1.091 *	0.000	2.00	6.708	7.32	261.0	0.0	284.8
70.00		1.00	0.89	20.422	22.46	302.75	1.095 *	0.000	2.00	6.641	7.27	261.4	0.0	281.9
72.00		1.00	0.90	20.587	22.65	300.89	1.099 *	0.000	2.00	6.574	7.23	261.9	0.0	279.0
74.00		1.00	0.91	20.749	22.82	298.98	1.103 *	0.000	2.00	6.507	7.18	262.2	0.0	276.1
76.00		1.00	0.91	20.908	23.00	297.02	1.108 *	0.000	2.00	6.440	7.13	262.5	0.0	273.3
78.00	RT7 RB8	1.00	0.92	21.064	23.17	295.01	1.112 *	0.000	2.00	6.373	7.09	262.7	0.0	270.4
80.00	Top - Section 3	1.00	0.93	21.217	23.34	292.95	1.116 *	0.000	2.00	6.306	7.04	262.9	0.0	267.5
82.00		1.00	0.93	21.367	23.50	290.85	1.121 *	0.000	2.00	6.239	6.99	263.0	0.0	220.9

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00	1.00	0.94	21.514	23.67	288.70	1.125 *	0.000	2.00	6.172	6.95	263.0	0.0	218.6
86.00	1.00	0.95	21.660	23.83	286.52	1.130 *	0.000	2.00	6.106	6.90	263.0	0.0	216.2
88.00	1.00	0.95	21.802	23.98	284.29	1.135 *	0.000	2.00	6.039	6.85	262.9	0.0	213.8
90.00	1.00	0.96	21.943	24.14	282.02	1.140 *	0.000	2.00	5.972	6.81	262.8	0.0	211.4
92.00	1.00	0.96	22.081	24.29	279.72	1.145 *	0.000	2.00	5.905	6.76	262.6	0.0	209.0
94.00	1.00	0.97	22.217	24.44	277.38	1.150 *	0.000	2.00	5.838	6.71	262.4	0.0	206.6
95.00 Bot - Section 5	1.00	0.97	22.284	24.51	276.20	1.154 *	0.000	1.00	2.894	3.34	130.9	0.0	102.4
95.58 RT8	1.00	0.98	22.323	24.56	275.51	1.156 *	0.000	0.58	1.702	1.97	77.3	0.0	119.4
96.00	1.00	0.98	22.351	24.59	275.01	1.157 *	0.000	0.42	1.229	1.42	55.9	0.0	86.2
98.00	1.00	0.98	22.483	24.73	272.60	1.160 *	0.000	2.00	5.812	6.74	266.8	0.0	407.5
100.00 Top - Section 4	1.00	0.99	22.613	24.87	270.16	1.055 *	0.000	2.00	5.745	6.06	241.2	0.0	402.7
102.00	1.00	0.99	22.742	25.02	272.91	1.052 *	0.000	2.00	5.678	5.97	239.1	0.0	200.9
104.00	1.00	1.00	22.868	25.16	270.42	1.056 *	0.000	2.00	5.611	5.93	238.6	0.0	198.5
106.00	1.00	1.00	22.993	25.29	267.90	1.061 *	0.000	2.00	5.544	5.88	238.0	0.0	196.1
108.00	1.00	1.01	23.116	25.43	265.35	1.065 *	0.000	2.00	5.477	5.83	237.3	0.0	193.7
110.00 Appurtenance(s)	1.00	1.02	23.238	25.56	262.78	1.070 *	0.000	2.00	5.410	5.79	236.7	0.0	191.3
112.00	1.00	1.02	23.358	25.69	260.17	1.074 *	0.000	2.00	5.343	5.74	236.0	0.0	188.9
114.00	1.00	1.03	23.476	25.82	257.54	1.079 *	0.000	2.00	5.276	5.69	235.2	0.0	186.5
115.00 Top - Section 5	1.00	1.03	23.535	25.89	256.22	1.083 *	0.000	1.00	2.613	2.83	117.2	0.0	92.4
116.00	1.00	1.03	23.593	25.95	254.89	1.085 *	0.000	1.00	2.596	2.82	117.0	0.0	73.6
118.00	1.00	1.04	23.708	26.08	252.21	1.089 *	0.000	2.00	5.142	5.60	233.7	0.0	145.7
120.00	1.00	1.04	23.823	26.20	249.50	1.094 *	0.000	2.00	5.075	5.55	232.8	0.0	143.8
122.00	1.00	1.05	23.935	26.33	246.77	1.099 *	0.000	2.00	5.008	5.51	231.9	0.0	141.9
124.00	1.00	1.05	24.047	26.45	244.01	1.105 *	0.000	2.00	4.941	5.46	231.0	0.0	140.0
126.00	1.00	1.06	24.157	26.57	241.24	1.110 *	0.000	2.00	4.874	5.41	230.1	0.0	138.1
128.00	1.00	1.06	24.266	26.69	238.43	1.116 *	0.000	2.00	4.807	5.37	229.1	0.0	136.1
130.00	1.00	1.07	24.374	26.81	235.61	1.122 *	0.000	2.00	4.741	5.32	228.1	0.0	134.2
132.00	1.00	1.07	24.480	26.93	232.77	1.128 *	0.000	2.00	4.674	5.27	227.1	0.0	132.3
133.00 Appurtenance(s)	1.00	1.07	24.533	26.99	231.34	1.133 *	0.000	1.00	2.312	2.62	113.0	0.0	65.4
134.00	1.00	1.07	24.586	27.04	229.90	1.136 *	0.000	1.00	2.295	2.61	112.8	0.0	65.0
136.00	1.00	1.08	24.690	27.16	227.02	1.141 *	0.000	2.00	4.540	5.18	225.0	0.0	128.5
138.00	1.00	1.08	24.793	27.27	224.11	1.147 *	0.000	2.00	4.473	5.13	223.9	0.0	126.6
140.00	1.00	1.09	24.895	27.38	221.19	1.154 *	0.000	2.00	4.406	5.08	222.8	0.0	124.7
142.00	1.00	1.09	24.996	27.50	218.24	1.161 *	0.000	2.00	4.339	5.04	221.6	0.0	122.8
142.90 Appurtenance(s)	1.00	1.09	25.042	27.55	216.91	1.166 *	0.000	0.90	1.931	2.25	99.2	0.0	54.6
144.00	1.00	1.10	25.096	27.61	215.28	1.000	0.000	1.10	2.341	2.34	103.4	0.0	66.2
145.00 Top - Section 6	1.00	1.10	25.146	27.66	213.79	1.000	0.000	1.00	2.111	2.11	93.4	0.0	59.7
146.00	1.00	1.10	25.196	27.72	205.10	0.600	0.000	1.00	2.023	1.21	53.8	0.0	57.8
148.00	1.00	1.11	25.294	27.82	202.21	0.600	0.000	2.00	3.998	2.40	106.8	0.0	114.2
148.30 Appurtenance(s)	1.00	1.11	25.308	27.84	201.77	0.600	0.000	0.30	0.594	0.36	15.9	0.0	17.0
150.00 Top - Section 7	1.00	1.11	25.391	27.93	199.29	0.600	0.000	1.70	3.339	2.00	89.5	0.0	95.4
152.00	1.00	1.11	25.487	28.04	136.50	0.645 *	0.000	2.00	2.667	1.72	77.2	0.0	75.8
154.00	1.00	1.12	25.582	28.14	136.75	0.645 *	0.000	2.00	2.667	1.72	77.4	0.0	75.8
156.00	1.00	1.12	25.677	28.24	137.00	0.645 *	0.000	2.00	2.667	1.72	77.7	0.0	75.8
158.00	1.00	1.13	25.771	28.35	137.25	0.645 *	0.000	2.00	2.667	1.72	78.0	0.0	75.8
160.00 Appurtenance(s)	1.00	1.13	25.863	28.45	137.50	0.645 *	0.000	2.00	2.667	1.72	78.3	0.0	75.8

* Cf Adjusted by Linear Load Ra Effect

Totals:	160.00	18,859.1	21,407.5
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Discrete Appurtenance Forces

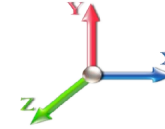
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 28

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa 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	SBNHH-1D65B	9	25.955	28.551	0.81	1.00	59.49	324.00	0.000	2.000	2717.42	0.00	5434.85
2	160.00	RRH2x90-AWS	3	25.955	28.551	0.67	1.00	5.35	118.80	0.000	2.000	244.24	0.00	488.48
3	160.00	6' Lightning rod	1	25.955	28.551	1.00	1.00	0.38	5.85	0.000	2.000	17.36	0.00	34.72
4	160.00	Low Profile Platform	1	25.955	28.551	1.00	1.00	22.00	1080.00	0.000	2.000	1004.99	0.00	2009.98
5	160.00	DB846F65ZAXY	6	25.955	28.551	0.93	1.00	39.34	113.40	0.000	2.000	1797.06	0.00	3594.12
6	160.00	DB222	1	25.955	28.551	1.00	1.00	2.25	14.40	0.000	2.000	102.78	0.00	205.57
7	160.00	DB-T1-6Z-8AB-0Z	1	25.955	28.551	1.00	1.00	4.80	39.60	0.000	2.000	219.27	0.00	438.54
8	148.30	APXVTM14-C-120	3	25.391	27.930	0.61	0.80	11.59	151.20	0.000	1.700	518.14	0.00	880.83
9	148.30	1900MHz RRH	3	25.487	28.036	0.54	0.80	6.11	118.80	0.000	3.700	274.10	0.00	1014.16
10	148.30	800 MHz RRH	3	25.487	28.036	0.54	0.80	4.00	143.10	0.000	3.700	179.61	0.00	664.54
11	148.30	APXVSPP18-C-A20	3	25.487	28.036	0.66	0.80	15.98	153.90	0.000	3.700	716.63	0.00	2651.55
12	148.30	ACU-A20-N	4	25.487	28.036	0.54	0.80	0.30	3.60	0.000	3.700	13.46	0.00	49.82
13	148.30	ALU 800MHz External	3	25.487	28.036	0.54	0.80	1.25	23.76	0.000	3.700	56.26	0.00	208.17
14	148.30	TD-RRH8x20-25	3	25.391	27.930	0.54	0.80	6.51	189.00	0.000	1.700	291.03	0.00	494.74
15	148.30	Low Profile Platform	1	25.308	27.839	1.00	1.00	17.50	1080.00	0.000	0.000	779.50	0.00	0.00
16	142.90	LNX-6515DS-A1M	3	25.042	27.546	0.64	0.80	22.02	135.81	0.000	0.000	970.59	0.00	0.00
17	142.90	Platform w/ HR & Bracing	1	25.042	27.546	1.00	1.00	51.70	2021.40	0.000	0.000	2278.58	0.00	0.00
18	142.90	Ericsson - RRUS11B12 -	1	25.042	27.546	1.00	1.00	2.57	45.90	0.000	0.000	113.27	0.00	0.00
19	142.90	Ericsson - RUS01 B12 -	3	25.042	27.546	0.54	0.80	4.05	137.70	0.000	0.000	178.59	0.00	0.00
20	142.90	AIR 21 B4A B12P	1	25.042	27.546	1.00	1.00	11.54	113.40	0.000	0.000	508.60	0.00	0.00
21	142.90	AIR 21 B4A/B2P	3	25.076	27.584	0.66	0.80	13.68	247.05	0.000	0.700	603.55	0.00	422.49
22	142.90	AIR 21 B2A/B4P	3	25.076	27.584	0.66	0.80	13.68	224.10	0.000	0.700	603.55	0.00	422.49
23	142.90	KRY 112 144/1	3	25.076	27.584	0.54	0.80	0.66	29.70	0.000	0.700	29.10	0.00	20.37
24	142.90	AIR 32 B4A/B2P	1	25.042	27.546	1.00	1.00	6.51	95.22	0.000	0.000	286.92	0.00	0.00
25	133.00	800 10121	3	24.533	26.986	0.63	0.80	9.76	125.01	0.000	0.000	421.61	0.00	0.00
26	133.00	RRUS 32	3	24.533	26.986	0.54	0.80	4.26	207.90	0.000	0.000	183.99	0.00	0.00
27	133.00	DC6-48-60-18-8F	2	24.533	26.986	0.68	0.90	1.98	59.04	0.000	0.000	85.69	0.00	0.00
28	133.00	RRUS 12	3	24.533	26.986	0.54	0.80	4.52	156.60	0.000	0.000	195.10	0.00	0.00
29	133.00	RRUS A2 Module	3	24.533	26.986	0.54	0.80	2.99	57.24	0.000	0.000	129.14	0.00	0.00
30	133.00	RRUS 11	3	24.533	26.986	0.54	0.80	4.05	136.89	0.000	0.000	174.96	0.00	0.00
31	133.00	Low Profile Platform	1	24.533	26.986	1.00	1.00	22.00	1215.00	0.000	0.000	949.92	0.00	0.00
32	133.00	800 10798	3	24.533	26.986	0.60	0.80	15.56	219.78	0.000	0.000	671.74	0.00	0.00
33	133.00	DTMABP7819VG12A	3	24.533	26.986	0.54	0.80	1.83	51.30	0.000	0.000	79.15	0.00	0.00
34	110.00	3 ft Standoff	1	23.238	25.561	1.00	1.00	2.63	36.00	0.000	0.000	107.56	0.00	0.00
35	110.00	DB222	1	23.552	25.907	1.00	1.00	2.65	14.40	0.000	5.292	109.85	0.00	581.27
36	40.00	GPS	1	17.405	19.145	1.00	1.00	1.00	9.00	0.000	0.000	30.63	0.00	0.00

Totals: 8,897.85

17,643.95

Total Applied Force Summary

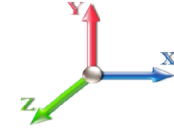
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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
2.00		280.11	460.53	0.00	0.00
4.00		278.79	457.66	0.00	0.00
6.00		277.47	454.79	0.00	0.00
8.00		276.15	451.92	0.00	0.00
10.00		274.83	449.05	0.00	0.00
12.00		273.50	446.18	0.00	0.00
14.00		272.18	443.31	0.00	0.00
16.00		270.86	440.44	0.00	0.00
16.25		34.30	98.88	0.00	0.00
18.00		239.53	689.64	0.00	0.00
19.50		204.52	587.63	0.00	0.00
20.00		68.01	195.16	0.00	0.00
22.00		271.22	777.05	0.00	0.00
24.00		268.13	434.51	0.00	0.00
26.00		266.81	431.64	0.00	0.00
28.00		265.49	428.77	0.00	0.00
30.00		264.39	425.90	0.00	0.00
31.00		132.94	211.87	0.00	0.00
32.00		133.81	211.16	0.00	0.00
34.00		234.72	420.16	0.00	0.00
35.50		177.32	313.24	0.00	0.00
36.00		59.17	104.05	0.00	0.00
38.00		239.47	414.42	0.00	0.00
40.00	(1) attachments	272.20	420.55	0.00	0.00
42.00		243.51	408.40	0.00	0.00
44.00		245.29	405.53	0.00	0.00
45.16		142.65	233.89	0.00	0.00
46.00		103.53	168.77	0.00	0.00
48.00		248.44	399.79	0.00	0.00
50.00		249.82	396.92	0.00	0.00
52.00		255.66	701.76	0.00	0.00
54.00		256.88	696.02	0.00	0.00
56.00		258.00	690.28	0.00	0.00
58.00		257.35	390.99	0.00	0.00
60.00		258.24	388.12	0.00	0.00
62.00		259.04	385.25	0.00	0.00
64.00		259.76	382.38	0.00	0.00
66.00		260.40	379.51	0.00	0.00
68.00		260.96	376.64	0.00	0.00
70.00		261.45	373.77	0.00	0.00
72.00		261.86	370.90	0.00	0.00
74.00		262.21	368.03	0.00	0.00
76.00		262.49	365.16	0.00	0.00
78.00		262.71	362.29	0.00	0.00
80.00		262.86	359.42	0.00	0.00
82.00		262.96	312.82	0.00	0.00

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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	Page: 32



84.00		263.00	310.43	0.00	0.00
86.00		262.99	308.04	0.00	0.00
88.00		262.93	305.65	0.00	0.00
90.00		262.81	303.26	0.00	0.00
92.00		262.64	300.87	0.00	0.00
94.00		262.43	298.48	0.00	0.00
95.00		130.92	148.34	0.00	0.00
95.58		77.28	146.00	0.00	0.00
96.00		55.93	105.47	0.00	0.00
98.00		266.82	499.36	0.00	0.00
100.00		241.17	494.58	0.00	0.00
102.00		239.13	292.76	0.00	0.00
104.00		238.57	290.37	0.00	0.00
106.00		237.98	287.98	0.00	0.00
108.00		237.35	285.59	0.00	0.00
110.00	(2) attachments	454.09	333.60	0.00	581.27
112.00		235.97	279.87	0.00	0.00
114.00		235.23	277.48	0.00	0.00
115.00		117.18	137.84	0.00	0.00
116.00		116.99	119.04	0.00	0.00
118.00		233.65	236.65	0.00	0.00
120.00		232.81	234.74	0.00	0.00
122.00		231.94	232.83	0.00	0.00
124.00		231.04	230.91	0.00	0.00
126.00		230.10	229.00	0.00	0.00
128.00		229.14	227.09	0.00	0.00
130.00		228.15	225.17	0.00	0.00
132.00		227.12	223.26	0.00	0.00
133.00	(24) attachments	3004.35	2339.67	0.00	0.00
134.00		112.78	99.71	0.00	0.00
136.00		225.00	197.98	0.00	0.00
138.00		223.89	196.07	0.00	0.00
140.00		222.76	194.15	0.00	0.00
142.00		221.60	192.24	0.00	0.00
142.90	(19) attachments	5671.98	3136.16	0.00	865.34
144.00		103.41	90.14	0.00	0.00
145.00		93.42	81.44	0.00	0.00
146.00		53.83	79.53	0.00	0.00
148.00		106.78	157.67	0.00	0.00
148.30	(23) attachments	2844.60	1886.85	0.00	5963.81
150.00		89.53	126.47	0.00	0.00
152.00		77.15	112.38	0.00	0.00
154.00		77.44	112.38	0.00	0.00
156.00		77.73	112.38	0.00	0.00
158.00		78.01	112.38	0.00	0.00
160.00	(22) attachments	6181.42	1808.43	0.00	12206.26
Totals:		36,503.07	37,085.83	0.00	19,616.68

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
2.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.148	16.018	0.00	1.98
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	16.018	0.00	0.94
2.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.148	16.018	0.00	1.98
2.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	16.018	0.00	3.43
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	16.018	0.00	0.94
2.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.149	1.148	16.018	0.00	0.00
2.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.149	1.148	16.018	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	16.018	0.00	1.98
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	16.018	0.00	0.94
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.151	16.018	0.00	1.98
4.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	16.018	0.00	3.43
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	16.018	0.00	0.94
4.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.151	16.018	0.00	0.00
4.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.150	1.151	16.018	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	16.018	0.00	1.98
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	16.018	0.00	0.94
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.152	1.155	16.018	0.00	1.98
6.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	16.018	0.00	3.43
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	16.018	0.00	0.94
6.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.152	1.155	16.018	0.00	0.00
6.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.152	1.155	16.018	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	16.018	0.00	1.98
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	16.018	0.00	0.94
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.158	16.018	0.00	1.98
8.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	16.018	0.00	3.43
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	16.018	0.00	0.94
8.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.158	16.018	0.00	0.00
8.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.153	1.158	16.018	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	16.018	0.00	1.98
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	16.018	0.00	0.94
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.162	16.018	0.00	1.98
10.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	16.018	0.00	3.43
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	16.018	0.00	0.94
10.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.154	1.162	16.018	0.00	0.00
10.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.154	1.162	16.018	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	16.018	0.00	1.98
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	16.018	0.00	0.94
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.155	1.166	16.018	0.00	1.98
12.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	16.018	0.00	3.43
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	16.018	0.00	0.94
12.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.155	1.166	16.018	0.00	0.00
12.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.155	1.166	16.018	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	16.018	0.00	1.98
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	16.018	0.00	0.94
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.169	16.018	0.00	1.98
14.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	16.018	0.00	3.43
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	16.018	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
14.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.156	1.169	16.018	0.00	0.00
14.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.156	1.169	16.018	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	16.018	0.00	1.98
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	16.018	0.00	0.94
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.173	16.018	0.00	1.98
16.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	16.018	0.00	3.43
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	16.018	0.00	0.94
16.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.158	1.173	16.018	0.00	0.00
16.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.158	1.173	16.018	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	16.018	0.00	0.25
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	16.018	0.00	0.12
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.158	1.175	16.018	0.00	0.25
16.25	1-1/4" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	16.018	0.00	0.43
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	16.018	0.00	0.12
16.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.158	1.175	16.018	0.00	0.00
16.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.158	1.175	16.018	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	16.018	0.00	1.73
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	16.018	0.00	0.82
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.159	1.177	16.018	0.00	1.73
18.00	1-1/4" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	16.018	0.00	3.01
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	16.018	0.00	0.82
18.00	1.25" Reinforcing	Yes	1.75	0.000	1.25	0.18	0.00	0.159	1.177	16.018	0.00	0.00
18.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.159	1.177	16.018	0.00	0.00
19.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.160	1.181	16.018	0.00	1.49
19.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	0.70
19.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.160	1.181	16.018	0.00	1.49
19.50	1-1/4" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	2.58
19.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	0.70
19.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.160	1.181	16.018	0.00	0.00
19.50	1.25" Reinforcing	Yes	1.50	0.000	2.50	0.31	0.00	0.160	1.181	16.018	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	16.018	0.00	0.50
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	16.018	0.00	0.23
20.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.161	1.183	16.018	0.00	0.50
20.00	1-1/4" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	16.018	0.00	0.86
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	16.018	0.00	0.23
20.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.161	1.183	16.018	0.00	0.00
20.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.161	1.183	16.018	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	16.018	0.00	1.98
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	0.94
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	16.018	0.00	1.98
22.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	3.43
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	0.94
22.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	16.018	0.00	0.00
22.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	16.018	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	16.018	0.00	1.98
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	0.94
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	16.018	0.00	1.98

Linear Appurtenance Segment Forces (Factored)

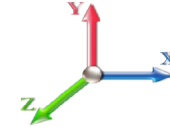
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
24.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	3.43
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	16.018	0.00	0.94
24.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.160	1.181	16.018	0.00	0.00
24.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.160	1.181	16.018	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	16.018	0.00	1.98
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	0.94
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	16.018	0.00	1.98
26.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	3.43
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	16.018	0.00	0.94
26.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	16.018	0.00	0.00
26.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	16.018	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	16.018	0.00	1.98
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	16.018	0.00	0.94
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.189	16.018	0.00	1.98
28.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	16.018	0.00	3.43
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	16.018	0.00	0.94
28.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.163	1.189	16.018	0.00	0.00
28.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.163	1.189	16.018	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	16.031	0.00	1.98
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	16.031	0.00	0.94
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.165	1.194	16.031	0.00	1.98
30.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	16.031	0.00	3.43
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	16.031	0.00	0.94
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.165	1.194	16.031	0.00	0.00
30.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.165	1.194	16.031	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	16.182	0.00	0.99
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	16.182	0.00	0.47
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.197	16.182	0.00	0.99
31.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	16.182	0.00	1.72
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	16.182	0.00	0.47
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.197	16.182	0.00	0.00
31.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.197	16.182	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	16.330	0.00	0.99
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	16.330	0.00	0.47
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.199	16.330	0.00	0.99
32.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	16.330	0.00	1.72
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	16.330	0.00	0.47
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.199	16.330	0.00	0.00
32.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.199	16.330	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	16.615	0.00	1.98
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	16.615	0.00	0.94
34.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.040	16.615	0.00	1.98
34.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	16.615	0.00	3.43
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	16.615	0.00	0.94
34.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.113	1.040	16.615	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	16.821	0.00	1.49
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	16.821	0.00	0.70

Linear Appurtenance Segment Forces (Factored)

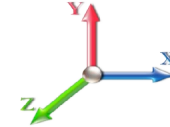
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
35.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.114	1.043	16.821	0.00	1.49
35.50	1-1/4" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	16.821	0.00	2.58
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	16.821	0.00	0.70
35.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.114	1.043	16.821	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	16.889	0.00	0.50
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	16.889	0.00	0.23
36.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.044	16.889	0.00	0.50
36.00	1-1/4" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	16.889	0.00	0.86
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	16.889	0.00	0.23
36.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.115	1.044	16.889	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	17.152	0.00	1.98
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	17.152	0.00	0.94
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	17.152	0.00	1.98
38.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	17.152	0.00	3.43
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	17.152	0.00	0.94
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.115	1.046	17.152	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	17.405	0.00	1.98
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	17.405	0.00	0.94
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.049	17.405	0.00	1.98
40.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	17.405	0.00	3.43
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	17.405	0.00	0.94
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.116	1.049	17.405	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	17.649	0.00	1.98
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	17.649	0.00	0.94
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	17.649	0.00	1.98
42.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	17.649	0.00	3.43
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	17.649	0.00	0.94
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.117	1.052	17.649	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	17.885	0.00	1.98
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	17.885	0.00	0.94
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	17.885	0.00	1.98
44.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	17.885	0.00	3.43
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	17.885	0.00	0.94
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.119	1.056	17.885	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	18.019	0.00	1.15
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	18.019	0.00	0.54
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.19	0.00	0.119	1.058	18.019	0.00	1.15
45.16	1-1/4" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	18.019	0.00	1.99
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	18.019	0.00	0.54
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.12	0.00	0.119	1.058	18.019	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	18.114	0.00	0.83
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	18.114	0.00	0.39
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.14	0.00	0.120	1.060	18.114	0.00	0.83
46.00	1-1/4" Hybrid	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	18.114	0.00	1.44
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	18.114	0.00	0.39
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.09	0.00	0.120	1.060	18.114	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	18.335	0.00	1.98

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	18.335	0.00	0.94
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	18.335	0.00	1.98
48.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	18.335	0.00	3.43
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	18.335	0.00	0.94
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.121	1.062	18.335	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	18.551	0.00	1.98
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	18.551	0.00	0.94
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	18.551	0.00	1.98
50.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	18.551	0.00	3.43
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	18.551	0.00	0.94
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.122	1.066	18.551	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	18.760	0.00	1.98
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	18.760	0.00	0.94
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.069	18.760	0.00	1.98
52.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	18.760	0.00	3.43
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	18.760	0.00	0.94
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.123	1.069	18.760	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	18.963	0.00	1.98
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	18.963	0.00	0.94
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.072	18.963	0.00	1.98
54.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	18.963	0.00	3.43
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	18.963	0.00	0.94
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.072	18.963	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	19.161	0.00	1.98
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.161	0.00	0.94
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	19.161	0.00	1.98
56.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.161	0.00	3.43
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.161	0.00	0.94
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	19.161	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	19.354	0.00	1.98
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	19.354	0.00	0.94
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.073	19.354	0.00	1.98
58.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	19.354	0.00	3.43
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	19.354	0.00	0.94
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.073	19.354	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	19.543	0.00	1.98
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.543	0.00	0.94
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	19.543	0.00	1.98
60.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.543	0.00	3.43
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	19.543	0.00	0.94
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	19.543	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	19.726	0.00	1.98
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	19.726	0.00	0.94
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	19.726	0.00	1.98
62.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	19.726	0.00	3.43
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	19.726	0.00	0.94
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.127	1.080	19.726	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	19.906	0.00	1.98
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	19.906	0.00	0.94
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	19.906	0.00	1.98
64.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	19.906	0.00	3.43
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	19.906	0.00	0.94
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.128	1.084	19.906	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	20.082	0.00	1.98
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	20.082	0.00	0.94
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	20.082	0.00	1.98
66.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	20.082	0.00	3.43
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	20.082	0.00	0.94
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.129	1.087	20.082	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	20.254	0.00	1.98
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	20.254	0.00	0.94
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.091	20.254	0.00	1.98
68.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	20.254	0.00	3.43
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	20.254	0.00	0.94
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.130	1.091	20.254	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	20.422	0.00	1.98
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	20.422	0.00	0.94
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.095	20.422	0.00	1.98
70.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	20.422	0.00	3.43
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	20.422	0.00	0.94
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.132	1.095	20.422	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	20.587	0.00	1.98
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	20.587	0.00	0.94
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	20.587	0.00	1.98
72.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	20.587	0.00	3.43
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	20.587	0.00	0.94
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.133	1.099	20.587	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	20.749	0.00	1.98
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	20.749	0.00	0.94
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	20.749	0.00	1.98
74.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	20.749	0.00	3.43
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	20.749	0.00	0.94
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.134	1.103	20.749	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	20.908	0.00	1.98
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	20.908	0.00	0.94
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	20.908	0.00	1.98
76.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	20.908	0.00	3.43
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	20.908	0.00	0.94
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.136	1.108	20.908	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	21.064	0.00	1.98
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	21.064	0.00	0.94
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.112	21.064	0.00	1.98
78.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	21.064	0.00	3.43
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	21.064	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.137	1.112	21.064	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	21.217	0.00	1.98
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	21.217	0.00	0.94
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	21.217	0.00	1.98
80.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	21.217	0.00	3.43
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	21.217	0.00	0.94
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.139	1.116	21.217	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	21.367	0.00	1.98
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	21.367	0.00	0.94
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.121	21.367	0.00	1.98
82.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	21.367	0.00	3.43
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	21.367	0.00	0.94
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.140	1.121	21.367	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	21.514	0.00	1.98
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	21.514	0.00	0.94
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.125	21.514	0.00	1.98
84.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	21.514	0.00	3.43
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	21.514	0.00	0.94
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.142	1.125	21.514	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	21.660	0.00	1.98
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	21.660	0.00	0.94
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.130	21.660	0.00	1.98
86.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	21.660	0.00	3.43
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	21.660	0.00	0.94
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.143	1.130	21.660	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	21.802	0.00	1.98
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	21.802	0.00	0.94
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.135	21.802	0.00	1.98
88.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	21.802	0.00	3.43
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	21.802	0.00	0.94
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.145	1.135	21.802	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	21.943	0.00	1.98
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	21.943	0.00	0.94
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.140	21.943	0.00	1.98
90.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	21.943	0.00	3.43
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	21.943	0.00	0.94
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.147	1.140	21.943	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	22.081	0.00	1.98
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	22.081	0.00	0.94
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.148	1.145	22.081	0.00	1.98
92.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	22.081	0.00	3.43
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	22.081	0.00	0.94
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.148	1.145	22.081	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	22.217	0.00	1.98
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	22.217	0.00	0.94
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.150	22.217	0.00	1.98
94.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	22.217	0.00	3.43

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	22.217	0.00	0.94
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.150	22.217	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	22.284	0.00	0.99
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	22.284	0.00	0.47
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.151	1.154	22.284	0.00	0.99
95.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	22.284	0.00	1.72
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	22.284	0.00	0.47
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.151	1.154	22.284	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	22.323	0.00	0.57
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	22.323	0.00	0.27
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.10	0.00	0.152	1.156	22.323	0.00	0.57
95.58	1-1/4" Hybrid	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	22.323	0.00	1.00
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	22.323	0.00	0.27
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.06	0.00	0.152	1.156	22.323	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	22.351	0.00	0.42
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	22.351	0.00	0.20
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.07	0.00	0.152	1.157	22.351	0.00	0.42
96.00	1-1/4" Hybrid	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	22.351	0.00	0.72
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	22.351	0.00	0.20
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.04	0.00	0.152	1.157	22.351	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	22.483	0.00	1.98
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	22.483	0.00	0.94
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	22.483	0.00	1.98
98.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	22.483	0.00	3.43
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	22.483	0.00	0.94
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.160	22.483	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	22.613	0.00	1.98
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	22.613	0.00	0.94
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.055	22.613	0.00	1.98
100.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	22.613	0.00	3.43
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	22.613	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	22.742	0.00	1.98
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	22.742	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	22.742	0.00	1.98
102.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	22.742	0.00	3.43
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	22.742	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	22.868	0.00	1.98
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	22.868	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	22.868	0.00	1.98
104.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	22.868	0.00	3.43
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	22.868	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	22.993	0.00	1.98
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	22.993	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	22.993	0.00	1.98
106.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	22.993	0.00	3.43
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	22.993	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	23.116	0.00	1.98

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	23.116	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	23.116	0.00	1.98
108.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	23.116	0.00	3.43
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	23.116	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	23.238	0.00	1.98
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	23.238	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	23.238	0.00	1.98
110.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	23.238	0.00	3.43
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	23.238	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	23.358	0.00	1.98
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	23.358	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	23.358	0.00	1.98
112.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	23.358	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	23.476	0.00	1.98
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	23.476	0.00	0.94
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	23.476	0.00	1.98
114.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	23.476	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	23.535	0.00	0.99
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	23.535	0.00	0.47
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.083	23.535	0.00	0.99
115.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	23.535	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	23.593	0.00	0.99
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	23.593	0.00	0.47
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.085	23.593	0.00	0.99
116.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	23.593	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	23.708	0.00	1.98
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	23.708	0.00	0.94
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.089	23.708	0.00	1.98
118.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	23.708	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	23.823	0.00	1.98
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	23.823	0.00	0.94
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.094	23.823	0.00	1.98
120.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	23.823	0.00	3.43
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	23.935	0.00	1.98
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	23.935	0.00	0.94
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	23.935	0.00	1.98
122.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	23.935	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	24.047	0.00	1.98
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	24.047	0.00	0.94
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.135	1.105	24.047	0.00	1.98
124.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	24.047	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	24.157	0.00	1.98
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	24.157	0.00	0.94
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.110	24.157	0.00	1.98
126.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	24.157	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	24.266	0.00	1.98
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	24.266	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	24.266	0.00	1.98
128.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	24.266	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	24.374	0.00	1.98
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	24.374	0.00	0.94
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.141	1.122	24.374	0.00	1.98
130.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	24.374	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	24.480	0.00	1.98
132.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	24.480	0.00	0.94
132.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.128	24.480	0.00	1.98
132.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	24.480	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	24.533	0.00	0.99
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	24.533	0.00	0.47
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.144	1.133	24.533	0.00	0.99
133.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	24.533	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	24.586	0.00	0.99
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	24.586	0.00	0.47
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.145	1.136	24.586	0.00	0.99
134.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	24.586	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	24.690	0.00	1.98
136.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	24.690	0.00	0.94
136.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.141	24.690	0.00	1.98
136.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	24.690	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	24.793	0.00	1.98
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	24.793	0.00	0.94
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.147	24.793	0.00	1.98
138.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	24.793	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	24.895	0.00	1.98
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	24.895	0.00	0.94
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.154	24.895	0.00	1.98
140.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	24.895	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	24.996	0.00	1.98
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	24.996	0.00	0.94
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.161	24.996	0.00	1.98
142.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	24.996	0.00	3.43
142.90	1 5/8" Hybrid	Yes	0.90	0.000	2.00	0.15	0.00	0.155	1.166	25.042	0.00	0.89
142.90	7/8" Coax	Yes	0.90	0.000	0.00	0.00	0.00	0.155	1.166	25.042	0.00	0.42
142.90	1 5/8" Hybrid	Yes	0.90	0.000	2.00	0.15	0.00	0.155	1.166	25.042	0.00	0.89
142.90	1-1/4" Hybrid	Yes	0.90	0.000	0.00	0.00	0.00	0.155	1.166	25.042	0.00	1.55
144.00	1 5/8" Hybrid	Yes	1.10	0.000	2.00	0.18	0.00	0.078	0.000	25.096	0.00	1.09
144.00	7/8" Coax	Yes	1.10	0.000	0.00	0.00	0.00	0.078	0.000	25.096	0.00	0.51
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.079	0.000	25.146	0.00	0.99
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	25.146	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	25.196	0.00	0.99
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	25.196	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	25.294	0.00	1.98
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	25.294	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	25.308	0.00	0.30

Linear Appurtenance Segment Forces (Factored)

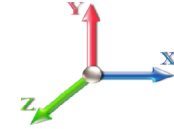
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
148.30	7/8" Coax	Yes	0.30	0.000	0.00	0.00	0.00	0.084	0.000	25.308	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	25.391	0.00	1.68
150.00	7/8" Coax	Yes	1.70	0.000	0.00	0.00	0.00	0.085	0.000	25.391	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	25.487	0.00	1.98
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	25.487	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	25.582	0.00	1.98
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	25.582	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	25.677	0.00	1.98
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	25.677	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	25.771	0.00	1.98
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	25.771	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	25.863	0.00	1.98
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	25.863	0.00	0.94
Totals:											0.0	671.6

Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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

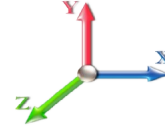


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Load Case: 0.9D + 1.6W 97 mph Wind

Iterations 28

Dead Load Factor 0.90
Wind Load Factor 1.60



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	-37.06	-36.53	0.00	-4141.2	0.00	4141.21	3683.82	1841.91	7606.69	3756.66	0.00	0.000	0.000	0.755
2.00	-36.55	-36.30	0.00	-4068.1	0.00	4068.15	3671.54	1835.77	7522.06	3714.86	0.02	-0.082	0.000	0.747
4.00	-36.04	-36.07	0.00	-3995.5	0.00	3995.55	3659.00	1829.50	7437.30	3673.00	0.07	-0.165	0.000	0.740
6.00	-35.53	-35.85	0.00	-3923.4	0.00	3923.40	3646.20	1823.10	7352.44	3631.09	0.16	-0.247	0.000	0.733
8.00	-35.03	-35.62	0.00	-3851.7	0.00	3851.71	3633.16	1816.58	7267.48	3589.13	0.28	-0.330	0.000	0.726
10.00	-34.53	-35.39	0.00	-3780.4	0.00	3780.47	3619.85	1809.93	7182.43	3547.13	0.44	-0.413	0.000	0.719
12.00	-34.04	-35.16	0.00	-3709.6	0.00	3709.69	3606.29	1803.15	7097.31	3505.10	0.63	-0.496	0.000	0.712
14.00	-33.54	-34.94	0.00	-3639.3	0.00	3639.37	3592.48	1796.24	7012.13	3463.03	0.85	-0.580	0.000	0.705
16.00	-33.08	-34.69	0.00	-3569.5	0.00	3569.50	3578.41	1789.21	6926.91	3420.94	1.11	-0.663	0.000	0.698
16.25	-32.95	-34.68	0.00	-3560.8	0.00	3560.83	3576.63	1788.32	6916.25	3415.68	1.15	-0.674	0.000	0.821
18.00	-32.22	-34.48	0.00	-3500.1	0.00	3500.14	3564.09	1782.04	6841.65	3378.83	1.41	-0.760	0.000	0.756
19.50	-31.61	-34.29	0.00	-3448.4	0.00	3448.42	3553.18	1776.59	6777.69	3347.24	1.66	-0.830	0.000	0.637
20.00	-31.38	-34.24	0.00	-3431.2	0.00	3431.28	3549.51	1774.75	6756.36	3336.71	1.75	-0.849	0.000	0.635
22.00	-30.56	-34.00	0.00	-3362.8	0.00	3362.80	3563.12	1781.56	6835.93	3376.01	2.12	-0.927	0.000	0.643
24.00	-30.09	-33.77	0.00	-3294.7	0.00	3294.79	3548.52	1774.26	6750.65	3333.89	2.53	-1.006	0.000	0.617
26.00	-29.62	-33.53	0.00	-3227.2	0.00	3227.26	3533.67	1766.84	6665.35	3291.77	2.97	-1.082	0.000	0.610
28.00	-29.15	-33.30	0.00	-3160.2	0.00	3160.20	3518.56	1759.28	6580.06	3249.64	3.44	-1.158	0.000	0.603
30.00	-28.70	-33.05	0.00	-3093.6	0.00	3093.61	3503.20	1751.60	6494.78	3207.53	3.94	-1.234	0.000	0.470
31.00	-28.47	-32.93	0.00	-3060.5	0.00	3060.56	3495.43	1747.71	6452.15	3186.48	4.20	-1.264	0.000	0.542
32.00	-28.23	-32.82	0.00	-3027.6	0.00	3027.63	3487.59	1743.79	6409.53	3165.43	4.47	-1.299	0.000	0.538
34.00	-27.78	-32.60	0.00	-2962.0	0.00	2962.00	3471.72	1735.86	6324.32	3123.35	5.03	-1.369	0.000	0.661
35.50	-27.45	-32.44	0.00	-2913.0	0.00	2913.09	3459.65	1729.82	6260.45	3091.80	5.47	-1.434	0.000	0.656
36.00	-27.31	-32.40	0.00	-2896.8	0.00	2896.87	3455.59	1727.80	6239.16	3081.29	5.62	-1.456	0.000	0.654
38.00	-26.86	-32.20	0.00	-2832.0	0.00	2832.06	3439.21	1719.61	6154.07	3039.26	6.25	-1.543	0.000	0.646
40.00	-26.39	-31.95	0.00	-2767.6	0.00	2767.67	3422.57	1711.29	6069.05	2997.28	6.91	-1.630	0.000	0.638
42.00	-25.95	-31.74	0.00	-2703.7	0.00	2703.77	3405.68	1702.84	5984.13	2955.34	7.62	-1.717	0.000	0.630
44.00	-25.51	-31.51	0.00	-2640.3	0.00	2640.30	3388.54	1694.27	5899.30	2913.44	8.35	-1.804	0.000	0.622
45.16	-25.26	-31.38	0.00	-2603.7	0.00	2603.75	3378.48	1689.24	5850.15	2889.17	8.80	-1.855	0.000	0.449
46.00	-25.06	-31.29	0.00	-2577.4	0.00	2577.40	3371.14	1685.57	5814.59	2871.61	9.13	-1.882	0.000	0.583
48.00	-24.63	-31.06	0.00	-2514.8	0.00	2514.82	3353.48	1676.74	5730.00	2829.83	9.93	-1.965	0.000	0.575
50.00	-24.20	-30.84	0.00	-2452.6	0.00	2452.69	3335.57	1667.79	5645.55	2788.13	10.78	-2.047	0.000	0.567
52.00	-23.46	-30.59	0.00	-2391.0	0.00	2391.02	3317.41	1658.70	5561.26	2746.50	11.65	-2.130	0.000	0.552
54.00	-22.73	-30.34	0.00	-2329.8	0.00	2329.84	3298.98	1649.49	5477.12	2704.94	12.56	-2.211	0.000	0.544
56.00	-22.01	-30.08	0.00	-2269.1	0.00	2269.17	3316.18	1658.09	5555.61	2743.71	13.50	-2.293	0.000	0.550
58.00	-21.59	-29.84	0.00	-2209.0	0.00	2209.00	3297.74	1648.87	5471.49	2702.16	14.48	-2.374	0.000	0.568
60.00	-21.16	-29.60	0.00	-2149.3	0.00	2149.32	3279.05	1639.52	5387.54	2660.71	15.49	-2.459	0.000	0.559
62.00	-20.75	-29.35	0.00	-2090.1	0.00	2090.12	3260.10	1630.05	5303.79	2619.34	16.54	-2.543	0.000	0.550
64.00	-20.33	-29.11	0.00	-2031.4	0.00	2031.41	3240.90	1620.45	5220.23	2578.08	17.63	-2.628	0.000	0.542
66.00	-19.92	-28.86	0.00	-1973.2	0.00	1973.20	3221.44	1610.72	5136.89	2536.92	18.75	-2.712	0.000	0.533
68.00	-19.52	-28.61	0.00	-1915.4	0.00	1915.48	3201.73	1600.86	5053.77	2495.87	19.90	-2.797	0.000	0.524
70.00	-19.12	-28.36	0.00	-1858.2	0.00	1858.26	3181.76	1590.88	4970.89	2454.94	21.09	-2.880	0.000	0.515
72.00	-18.72	-28.10	0.00	-1801.5	0.00	1801.55	3161.54	1580.77	4888.26	2414.13	22.31	-2.964	0.000	0.506
74.00	-18.33	-27.85	0.00	-1745.3	0.00	1745.34	3141.06	1570.53	4805.90	2373.45	23.57	-3.047	0.000	0.496
76.00	-17.94	-27.59	0.00	-1689.6	0.00	1689.64	3120.33	1560.16	4723.81	2332.91	24.87	-3.130	0.000	0.487
78.00	-17.55	-27.34	0.00	-1634.4	0.00	1634.46	3099.34	1549.67	4642.00	2292.51	26.19	-3.212	0.000	0.478
80.00	-17.17	-27.08	0.00	-1579.7	0.00	1579.78	3078.09	1539.05	4560.50	2252.26	27.56	-3.294	0.000	0.468
80.00	-17.17	-27.08	0.00	-1579.7	0.00	1579.78	2384.58	1192.29	3545.27	1750.88	27.56	-3.294	0.000	0.505
82.00	-16.83	-26.82	0.00	-1525.6	0.00	1525.63	2370.62	1185.31	3486.26	1721.73	28.95	-3.376	0.000	0.553

Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00	-16.49	-26.57	0.00	-1471.9	0.00	1471.98	2356.42	1178.21	3427.33	1692.63	30.39	-3.466	0.000	0.540
86.00	-16.16	-26.31	0.00	-1418.8	0.00	1418.85	2341.95	1170.98	3368.48	1663.57	31.86	-3.556	0.000	0.527
88.00	-15.83	-26.05	0.00	-1366.2	0.00	1366.23	2327.23	1163.62	3309.75	1634.56	33.37	-3.645	0.000	0.514
90.00	-15.51	-25.80	0.00	-1314.1	0.00	1314.12	2312.26	1156.13	3251.12	1605.61	34.91	-3.733	0.000	0.501
92.00	-15.19	-25.54	0.00	-1262.5	0.00	1262.53	2297.03	1148.52	3192.63	1576.72	36.49	-3.821	0.000	0.488
94.00	-14.88	-25.27	0.00	-1211.4	0.00	1211.45	2281.55	1140.77	3134.28	1547.90	38.11	-3.907	0.000	0.474
95.00	-14.72	-25.14	0.00	-1186.1	0.00	1186.18	2273.71	1136.85	3105.16	1533.52	38.93	-3.950	0.000	0.468
95.58	-14.57	-25.06	0.00	-1171.6	0.00	1171.60	2269.13	1134.57	3088.29	1525.19	39.41	-3.975	0.000	0.457
95.58	-14.57	-25.06	0.00	-1171.6	0.00	1171.60	2269.13	1134.57	3088.29	1525.19	39.41	-3.975	0.000	0.457
96.00	-14.44	-25.02	0.00	-1161.0	0.00	1161.07	2265.81	1132.90	3076.09	1519.16	39.77	-3.993	0.000	0.771
98.00	-13.90	-24.75	0.00	-1111.0	0.00	1111.04	2249.81	1124.91	3018.05	1490.50	41.47	-4.133	0.000	0.752
100.00	-13.36	-24.50	0.00	-1061.5	0.00	1061.55	2259.61	1129.81	3053.48	1508.00	43.23	-4.273	0.000	0.710
102.00	-13.03	-24.27	0.00	-1012.5	0.00	1012.54	2243.52	1121.76	2995.52	1479.37	45.05	-4.411	0.000	0.691
104.00	-12.71	-24.04	0.00	-963.99	0.00	963.99	2227.17	1113.59	2937.74	1450.84	46.92	-4.540	0.000	0.671
106.00	-12.39	-23.81	0.00	-915.91	0.00	915.91	2210.57	1105.28	2880.15	1422.40	48.85	-4.667	0.000	0.650
108.00	-12.07	-23.57	0.00	-868.29	0.00	868.29	2193.71	1096.86	2822.78	1394.06	50.83	-4.792	0.000	0.629
110.00	-11.73	-23.12	0.00	-820.56	0.00	820.56	2176.60	1088.30	2765.62	1365.84	52.86	-4.914	0.000	0.607
112.00	-11.42	-22.88	0.00	-774.32	0.00	774.32	2159.23	1079.61	2708.70	1337.73	54.94	-5.035	0.000	0.585
114.00	-11.13	-22.64	0.00	-728.56	0.00	728.56	2141.61	1070.80	2652.02	1309.73	57.07	-5.153	0.000	0.562
115.00	-10.98	-22.52	0.00	-705.92	0.00	705.92	2132.70	1066.35	2623.78	1295.79	58.16	-5.211	0.000	0.550
115.00	-10.98	-22.52	0.00	-705.92	0.00	705.92	1556.62	778.31	1923.08	949.74	58.16	-5.211	0.000	0.751
116.00	-10.84	-22.42	0.00	-683.39	0.00	683.39	1551.43	775.71	1904.13	940.38	59.26	-5.269	0.000	0.735
118.00	-10.57	-22.19	0.00	-638.56	0.00	638.56	1540.84	770.42	1866.26	921.68	61.49	-5.408	0.000	0.701
120.00	-10.31	-21.96	0.00	-594.19	0.00	594.19	1529.99	765.00	1828.43	902.99	63.78	-5.543	0.000	0.666
122.00	-10.05	-21.72	0.00	-550.28	0.00	550.28	1518.89	759.45	1790.65	884.33	66.13	-5.673	0.000	0.630
124.00	-9.80	-21.49	0.00	-506.83	0.00	506.83	1507.54	753.77	1752.93	865.70	68.53	-5.798	0.000	0.593
126.00	-9.55	-21.26	0.00	-463.85	0.00	463.85	1495.93	747.96	1715.28	847.11	70.98	-5.918	0.000	0.555
128.00	-9.31	-21.03	0.00	-421.33	0.00	421.33	1484.06	742.03	1677.72	828.56	73.48	-6.032	0.000	0.516
130.00	-9.07	-20.79	0.00	-379.28	0.00	379.28	1471.95	735.97	1640.26	810.06	76.03	-6.140	0.000	0.475
132.00	-8.84	-20.55	0.00	-337.69	0.00	337.69	1459.57	729.79	1602.91	791.62	78.62	-6.240	0.000	0.433
133.00	-8.83	-17.32	0.00	-317.14	0.00	317.14	1453.29	726.64	1584.28	782.42	79.93	-6.288	0.000	0.411
134.00	-6.73	-17.20	0.00	-299.82	0.00	299.82	1446.94	723.47	1565.68	773.23	81.25	-6.335	0.000	0.393
136.00	-6.53	-16.97	0.00	-265.42	0.00	265.42	1434.06	717.03	1528.59	754.91	83.92	-6.421	0.000	0.357
138.00	-6.34	-16.73	0.00	-231.49	0.00	231.49	1420.92	710.46	1491.65	736.67	86.62	-6.501	0.000	0.319
140.00	-6.15	-16.49	0.00	-198.03	0.00	198.03	1407.52	703.76	1454.87	718.50	89.35	-6.572	0.000	0.281
142.00	-5.97	-16.26	0.00	-165.04	0.00	165.04	1393.87	696.94	1418.26	700.42	92.11	-6.636	0.000	0.240
142.90	-3.51	-10.26	0.00	-149.54	0.00	149.54	1387.65	693.82	1401.84	692.32	93.37	-6.662	0.000	0.219
144.00	-3.43	-10.15	0.00	-138.26	0.00	138.26	1379.97	689.99	1381.83	682.44	94.90	-6.692	0.000	0.205
145.00	-3.35	-10.05	0.00	-128.11	0.00	128.11	1372.92	686.46	1363.70	673.48	96.30	-6.718	0.000	0.193
145.00	-3.35	-10.05	0.00	-128.11	0.00	128.11	931.20	465.60	925.89	604.09	96.30	-6.718	0.000	0.216
146.00	-3.27	-9.99	0.00	-118.06	0.00	118.06	925.24	462.62	912.49	594.77	97.71	-6.742	0.000	0.202
148.00	-3.13	-9.86	0.00	-98.08	0.00	98.08	913.32	456.66	885.99	576.36	100.54	-6.787	0.000	0.174
148.30	-1.59	-6.82	0.00	-89.16	0.00	89.16	911.53	455.77	882.04	573.63	100.96	-6.794	0.000	0.157
150.00	-1.47	-6.71	0.00	-77.57	0.00	77.57	901.40	450.70	859.86	558.24	103.38	-6.826	0.000	0.141
150.00	-1.47	-6.71	0.00	-77.57	0.00	77.57	556.65	278.33	359.38	213.69	103.38	-6.826	0.000	0.366
152.00	-1.36	-6.63	0.00	-64.14	0.00	64.14	556.65	278.33	359.38	213.69	106.24	-6.859	0.000	0.303
154.00	-1.25	-6.54	0.00	-50.89	0.00	50.89	556.65	278.33	359.38	213.69	109.13	-6.944	0.000	0.241
156.00	-1.14	-6.45	0.00	-37.82	0.00	37.82	556.65	278.33	359.38	213.69	112.04	-7.010	0.000	0.180
158.00	-1.03	-6.36	0.00	-24.92	0.00	24.92	556.65	278.33	359.38	213.69	114.98	-7.056	0.000	0.119
160.00	0.00	-6.18	0.00	-12.21	0.00	12.21	556.65	278.33	359.38	213.69	117.94	-7.084	0.000	0.058

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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

Dead Load Factor 1.20
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	1.00	0.70	4.256	4.68	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.70	4.256	4.68	0.00	1.377 *	1.133	2.00	9.036	12.44	58.3	146.4	637.6
4.00		1.00	0.70	4.256	4.68	0.00	1.381 *	1.215	2.00	8.996	12.43	58.2	156.0	643.3
6.00		1.00	0.70	4.256	4.68	0.00	1.385 *	1.265	2.00	8.946	12.39	58.0	161.4	644.9
8.00		1.00	0.70	4.256	4.68	0.00	1.390 *	1.302	2.00	8.892	12.36	57.9	164.9	644.6
10.00		1.00	0.70	4.256	4.68	0.00	1.394 *	1.331	2.00	8.834	12.32	57.7	167.4	643.3
12.00		1.00	0.70	4.256	4.68	0.00	1.399 *	1.356	2.00	8.776	12.27	57.5	169.3	641.3
14.00		1.00	0.70	4.256	4.68	0.00	1.403 *	1.377	2.00	8.716	12.23	57.3	170.6	638.8
16.00	Bot - Section 2	1.00	0.70	4.256	4.68	0.00	1.408 *	1.395	2.00	8.655	12.18	57.0	171.6	636.0
16.25	RT1 RB2	1.00	0.70	4.256	4.68	0.00	1.410 *	1.397	0.25	1.093	1.54	7.2	21.8	138.3
18.00	RB3	1.00	0.70	4.256	4.68	0.00	1.413 *	1.412	1.75	7.629	10.78	50.5	153.1	965.1
19.50	RB4	1.00	0.70	4.256	4.68	0.00	1.417 *	1.423	1.50	6.501	9.21	43.1	131.5	822.9
20.00		1.00	0.70	4.256	4.68	0.00	1.419 *	1.427	0.50	2.159	3.06	14.3	43.9	273.4
22.00	Top - Section 1	1.00	0.70	4.256	4.68	0.00	1.422 *	1.440	2.00	8.599	12.23	57.2	175.8	1089.0
24.00		1.00	0.70	4.256	4.68	0.00	1.418 *	1.453	2.00	8.536	12.10	56.6	176.0	632.4
26.00		1.00	0.70	4.256	4.68	0.00	1.422 *	1.465	2.00	8.473	12.05	56.4	176.0	628.6
28.00		1.00	0.70	4.256	4.68	0.00	1.427 *	1.476	2.00	8.409	12.00	56.2	175.9	624.7
30.00	RB5	1.00	0.70	4.260	4.69	0.00	1.432 *	1.486	2.00	8.346	11.95	56.0	175.7	620.7
31.00	RT2	1.00	0.71	4.300	4.73	0.00	1.436 *	1.491	1.00	4.149	5.96	28.2	87.8	308.8
32.00		1.00	0.71	4.339	4.77	0.00	1.439 *	1.495	1.00	4.133	5.95	28.4	87.7	307.8
34.00	RT3	1.00	0.73	4.415	4.86	0.00	1.248 *	1.504	2.00	8.218	10.26	49.8	175.0	612.3
35.50	RT4	1.00	0.74	4.469	4.92	0.00	1.251 *	1.511	1.50	6.121	7.66	37.7	131.0	456.5
36.00		1.00	0.74	4.487	4.94	0.00	1.253 *	1.513	0.50	2.032	2.55	12.6	43.6	151.7
38.00		1.00	0.75	4.557	5.01	0.00	1.255 *	1.521	2.00	8.090	10.16	50.9	174.0	603.7
40.00	Appurtenance(s)	1.00	0.76	4.625	5.09	0.00	1.259 *	1.529	2.00	8.026	10.11	51.4	173.5	599.3
42.00		1.00	0.77	4.689	5.16	0.00	1.263 *	1.537	2.00	7.961	10.05	51.9	172.8	594.8
44.00		1.00	0.78	4.752	5.23	0.00	1.267 *	1.544	2.00	7.897	10.00	52.3	172.1	590.3
45.16	RB6	1.00	0.79	4.788	5.27	0.00	1.270 *	1.548	1.16	4.550	5.78	30.4	99.6	340.4
46.00	RT5	1.00	0.79	4.813	5.29	0.00	1.272 *	1.551	0.84	3.281	4.17	22.1	72.0	245.6
48.00		1.00	0.80	4.872	5.36	0.00	1.275 *	1.557	2.00	7.767	9.90	53.1	170.6	581.2
50.00	Bot - Section 3	1.00	0.81	4.929	5.42	0.00	1.279 *	1.564	2.00	7.702	9.85	53.4	169.8	576.5
52.00		1.00	0.82	4.984	5.48	0.00	1.283 *	1.570	2.00	7.767	9.96	54.6	172.0	985.1
54.00		1.00	0.83	5.039	5.54	0.00	1.287 *	1.576	2.00	7.702	9.91	54.9	171.1	976.6
56.00	Top - Section 2	1.00	0.84	5.091	5.60	0.00	1.291 *	1.581	2.00	7.637	9.86	55.2	170.2	968.1
58.00	RT6 RB7	1.00	0.85	5.142	5.66	0.00	1.287 *	1.587	2.00	7.572	9.75	55.1	169.2	568.0
60.00		1.00	0.85	5.193	5.71	0.00	1.292 *	1.592	2.00	7.507	9.70	55.4	168.3	563.3
62.00		1.00	0.86	5.241	5.77	0.00	1.296 *	1.598	2.00	7.441	9.64	55.6	167.3	558.4
64.00		1.00	0.87	5.289	5.82	0.00	1.300 *	1.603	2.00	7.376	9.59	55.8	166.3	553.6
66.00		1.00	0.88	5.336	5.87	0.00	1.305 *	1.608	2.00	7.311	9.54	56.0	165.2	548.7
68.00		1.00	0.89	5.382	5.92	0.00	1.310 *	1.612	2.00	7.246	9.49	56.2	164.1	543.8
70.00		1.00	0.89	5.426	5.97	0.00	1.314 *	1.617	2.00	7.180	9.44	56.3	163.0	538.9
72.00		1.00	0.90	5.470	6.02	0.00	1.319 *	1.622	2.00	7.115	9.39	56.5	161.9	534.0
74.00		1.00	0.91	5.513	6.06	0.00	1.324 *	1.626	2.00	7.049	9.33	56.6	160.8	529.0
76.00		1.00	0.91	5.555	6.11	0.00	1.329 *	1.631	2.00	6.984	9.28	56.7	159.6	524.0
78.00	RT7 RB8	1.00	0.92	5.597	6.16	0.00	1.334 *	1.635	2.00	6.918	9.23	56.8	158.5	519.0
80.00	Top - Section 3	1.00	0.93	5.637	6.20	0.00	1.339 *	1.639	2.00	6.853	9.18	56.9	157.3	514.0
82.00		1.00	0.93	5.677	6.24	0.00	1.345 *	1.643	2.00	6.787	9.13	57.0	156.1	450.7

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00	1.00	0.94	5.716	6.29	0.00	1.350 *	1.647	2.00	6.721	9.08	57.1	154.9	446.3
86.00	1.00	0.95	5.755	6.33	0.00	1.356 *	1.651	2.00	6.656	9.02	57.1	153.6	441.8
88.00	1.00	0.95	5.793	6.37	0.00	1.362 *	1.655	2.00	6.590	8.97	57.2	152.4	437.4
90.00	1.00	0.96	5.830	6.41	0.00	1.367 *	1.658	2.00	6.524	8.92	57.2	151.1	432.9
92.00	1.00	0.96	5.867	6.45	0.00	1.373 *	1.662	2.00	6.459	8.87	57.2	149.8	428.5
94.00	1.00	0.97	5.903	6.49	0.00	1.380 *	1.666	2.00	6.393	8.82	57.3	148.5	424.0
95.00 Bot - Section 5	1.00	0.97	5.921	6.51	0.00	1.384 *	1.667	1.00	3.172	4.39	28.6	73.9	210.5
95.58 RT8	1.00	0.98	5.931	6.52	0.00	1.387 *	1.668	0.58	1.863	2.58	16.9	43.5	202.7
96.00	1.00	0.98	5.939	6.53	0.00	1.388 *	1.669	0.42	1.346	1.87	12.2	31.5	146.4
98.00	1.00	0.98	5.974	6.57	0.00	1.392 *	1.672	2.00	6.369	8.87	58.3	148.5	691.8
100.00 Top - Section 4	1.00	0.99	6.008	6.61	0.00	1.266 *	1.676	2.00	6.303	7.98	52.7	147.2	684.1
102.00	1.00	0.99	6.043	6.65	0.00	1.263 *	1.679	2.00	6.238	7.88	52.4	145.8	413.7
104.00	1.00	1.00	6.076	6.68	0.00	1.268 *	1.682	2.00	6.172	7.82	52.3	144.5	409.1
106.00	1.00	1.00	6.109	6.72	0.00	1.273 *	1.686	2.00	6.106	7.77	52.2	143.1	404.6
108.00	1.00	1.01	6.142	6.76	0.00	1.278 *	1.689	2.00	6.040	7.72	52.2	141.7	400.0
110.00 Appurtenance(s)	1.00	1.02	6.174	6.79	0.00	1.284 *	1.692	2.00	5.974	7.67	52.1	140.4	395.4
112.00	1.00	1.02	6.206	6.83	0.00	1.289 *	1.695	2.00	5.908	7.62	52.0	139.0	390.9
114.00	1.00	1.03	6.238	6.86	0.00	1.295 *	1.698	2.00	5.842	7.56	51.9	137.6	386.3
115.00 Top - Section 5	1.00	1.03	6.253	6.88	0.00	1.299 *	1.699	1.00	2.896	3.76	25.9	68.4	191.6
116.00	1.00	1.03	6.269	6.90	0.00	1.302 *	1.701	1.00	2.880	3.75	25.9	68.1	166.2
118.00	1.00	1.04	6.299	6.93	0.00	1.307 *	1.704	2.00	5.710	7.46	51.7	134.7	329.0
120.00	1.00	1.04	6.330	6.96	0.00	1.313 *	1.707	2.00	5.644	7.41	51.6	133.3	325.0
122.00	1.00	1.05	6.360	7.00	0.00	1.319 *	1.710	2.00	5.578	7.36	51.5	131.8	321.0
124.00	1.00	1.05	6.389	7.03	0.00	1.326 *	1.712	2.00	5.512	7.31	51.4	130.4	317.0
126.00	1.00	1.06	6.419	7.06	0.00	1.332 *	1.715	2.00	5.446	7.26	51.2	128.9	313.0
128.00	1.00	1.06	6.448	7.09	0.00	1.339 *	1.718	2.00	5.380	7.21	51.1	127.4	309.0
130.00	1.00	1.07	6.476	7.12	0.00	1.346 *	1.720	2.00	5.314	7.15	51.0	126.0	304.9
132.00	1.00	1.07	6.504	7.15	0.00	1.354 *	1.723	2.00	5.248	7.10	50.8	124.5	300.9
133.00 Appurtenance(s)	1.00	1.07	6.519	7.17	0.00	1.359 *	1.724	1.00	2.599	3.53	25.3	61.9	149.1
134.00	1.00	1.07	6.532	7.19	0.00	1.363 *	1.726	1.00	2.583	3.52	25.3	61.5	148.1
136.00	1.00	1.08	6.560	7.22	0.00	1.369 *	1.728	2.00	5.116	7.00	50.5	121.5	292.8
138.00	1.00	1.08	6.588	7.25	0.00	1.377 *	1.731	2.00	5.050	6.95	50.4	120.0	288.7
140.00	1.00	1.09	6.615	7.28	0.00	1.385 *	1.733	2.00	4.984	6.90	50.2	118.4	284.7
142.00	1.00	1.09	6.642	7.31	0.00	1.393 *	1.736	2.00	4.917	6.85	50.0	116.9	280.6
142.90 Appurtenance(s)	1.00	1.09	6.654	7.32	0.00	1.399 *	1.737	0.90	2.191	3.07	22.4	52.3	125.1
144.00	1.00	1.10	6.668	7.34	0.00	1.200	1.738	1.10	2.660	3.19	23.4	63.5	151.8
145.00 Top - Section 6	1.00	1.10	6.681	7.35	0.00	1.200	1.739	1.00	2.401	2.88	21.2	57.3	136.9
146.00	1.00	1.10	6.695	7.36	0.00	1.200	1.741	1.00	2.313	2.78	20.4	55.1	132.2
148.00	1.00	1.11	6.721	7.39	0.00	1.200	1.743	2.00	4.579	5.49	40.6	108.7	261.0
148.30 Appurtenance(s)	1.00	1.11	6.724	7.40	0.00	1.200	1.743	0.30	0.681	0.82	6.0	16.3	38.9
150.00 Top - Section 7	1.00	1.11	6.746	7.42	0.00	1.200	1.745	1.70	3.834	4.60	34.1	91.2	218.3
152.00	1.00	1.11	6.772	7.45	0.00	1.290 *	1.748	2.00	3.249	4.19	31.2	75.8	176.8
154.00	1.00	1.12	6.797	7.48	0.00	1.290 *	1.750	2.00	3.250	4.19	31.3	75.9	176.9
156.00	1.00	1.12	6.822	7.50	0.00	1.290 *	1.752	2.00	3.251	4.19	31.5	76.0	177.0
158.00	1.00	1.13	6.847	7.53	0.00	1.290 *	1.754	2.00	3.251	4.19	31.6	76.1	177.1
160.00 Appurtenance(s)	1.00	1.13	6.872	7.56	0.00	1.290 *	1.757	2.00	3.252	4.20	31.7	76.2	177.2

* Cf Adjusted by Linear Load Ra Effect

Totals:	160.00	4,193.4	40,385.9
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Discrete Appurtenance Forces

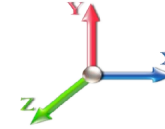
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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 27

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa 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	SBNHH-1D65B	9	6.896	7.586	0.81	1.00	69.03	2274.32	0.000	2.000	523.66	0.00	1047.32
2	160.00	RRH2x90-AWS	3	6.896	7.586	0.67	1.00	7.96	289.55	0.000	2.000	60.37	0.00	120.73
3	160.00	6' Lightning rod	1	6.896	7.586	1.00	1.00	1.47	39.04	0.000	2.000	11.19	0.00	22.37
4	160.00	Low Profile Platform	1	6.896	7.586	1.00	1.00	39.78	1893.91	0.000	2.000	301.74	0.00	603.49
5	160.00	DB846F65ZAXY	6	6.896	7.586	0.93	1.00	46.26	1344.74	0.000	2.000	350.91	0.00	701.81
6	160.00	DB222	1	6.896	7.586	1.00	1.00	8.35	69.05	0.000	2.000	63.35	0.00	126.70
7	160.00	DB-T1-6Z-8AB-0Z	1	6.896	7.586	1.00	1.00	5.68	197.63	0.000	2.000	43.09	0.00	86.17
8	148.30	APXVTM14-C-120	3	6.746	7.421	0.61	0.80	13.70	682.17	0.000	1.700	101.67	0.00	172.83
9	148.30	1900MHz RRH	3	6.772	7.449	0.54	0.80	8.34	391.92	0.000	3.700	62.15	0.00	229.95
10	148.30	800 MHz RRH	3	6.772	7.449	0.54	0.80	5.84	349.13	0.000	3.700	43.51	0.00	160.99
11	148.30	APXVSPP18-C-A20	3	6.772	7.449	0.66	0.80	21.53	574.66	0.000	3.700	160.42	0.00	593.54
12	148.30	ACU-A20-N	4	6.772	7.449	0.54	0.80	0.94	16.76	0.000	3.700	6.97	0.00	25.79
13	148.30	ALU 800MHz External	3	6.772	7.449	0.54	0.80	2.29	69.55	0.000	3.700	17.08	0.00	63.21
14	148.30	TD-RRH8x20-25	3	6.746	7.421	0.54	0.80	7.82	582.93	0.000	1.700	58.02	0.00	98.64
15	148.30	Low Profile Platform	1	6.724	7.397	1.00	1.00	31.53	1885.94	0.000	0.000	233.25	0.00	0.00
16	142.90	LNX-6515DS-A1M	3	6.654	7.319	0.64	0.80	28.26	677.38	0.000	0.000	206.87	0.00	0.00
17	142.90	Platform w/ HR & Bracing	1	6.654	7.319	1.00	1.00	89.77	4811.83	0.000	0.000	657.03	0.00	0.00
18	142.90	Ericsson - RRUS11B12 -	1	6.654	7.319	1.00	1.00	3.21	113.60	0.000	0.000	23.51	0.00	0.00
19	142.90	Ericsson - RUS01 B12 -	3	6.654	7.319	0.54	0.80	5.65	441.57	0.000	0.000	41.39	0.00	0.00
20	142.90	AIR 21 B4A B12P	1	6.654	7.319	1.00	1.00	13.11	433.64	0.000	0.000	95.98	0.00	0.00
21	142.90	AIR 21 B4A/B2P	3	6.663	7.329	0.67	0.80	14.37	833.14	0.000	0.700	105.36	0.00	73.75
22	142.90	AIR 21 B2A/B4P	3	6.663	7.329	0.67	0.80	14.37	802.54	0.000	0.700	105.36	0.00	73.75
23	142.90	KRY 112 144/1	3	6.663	7.329	0.54	0.80	1.42	62.49	0.000	0.700	10.40	0.00	7.28
24	142.90	AIR 32 B4A/B2P	1	6.654	7.319	1.00	1.00	7.63	309.15	0.000	0.000	55.81	0.00	0.00
25	133.00	800 10121	3	6.519	7.170	0.65	0.80	14.06	408.47	0.000	0.000	100.80	0.00	0.00
26	133.00	RRUS 32	3	6.519	7.170	0.54	0.80	3.57	420.36	0.000	0.000	25.62	0.00	0.00
27	133.00	DC6-48-60-18-8F	2	6.519	7.170	0.68	0.90	2.92	157.63	0.000	0.000	20.92	0.00	0.00
28	133.00	RRUS 12	3	6.519	7.170	0.54	0.80	5.59	466.39	0.000	0.000	40.11	0.00	0.00
29	133.00	RRUS A2 Module	3	6.519	7.170	0.54	0.80	4.54	152.76	0.000	0.000	32.54	0.00	0.00
30	133.00	RRUS 11	3	6.519	7.170	0.54	0.80	5.09	446.19	0.000	0.000	36.47	0.00	0.00
31	133.00	Low Profile Platform	1	6.519	7.170	1.00	1.00	39.45	2333.94	0.000	0.000	282.87	0.00	0.00
32	133.00	800 10798	3	6.519	7.170	0.60	0.80	20.94	1611.20	0.000	0.000	150.12	0.00	0.00
33	133.00	DTMABP7819VG12A	3	6.519	7.170	0.54	0.80	3.06	120.76	0.000	0.000	21.91	0.00	0.00
34	110.00	3 ft Standoff	1	6.174	6.792	1.00	1.00	8.42	102.83	0.000	0.000	57.16	0.00	0.00
35	110.00	DB222	1	6.258	6.884	1.00	1.00	9.57	66.49	0.000	5.292	65.88	0.00	348.62
36	40.00	GPS	1	4.625	5.087	1.00	1.00	1.62	29.69	0.000	0.000	8.26	0.00	0.00

Totals: 25,463.35

4,181.75

Total Applied Force Summary

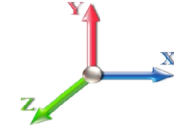
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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 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
2.00		58.25	814.88	0.00	0.00
4.00		58.17	825.93	0.00	0.00
6.00		58.03	830.87	0.00	0.00
8.00		57.85	833.15	0.00	0.00
10.00		57.66	833.90	0.00	0.00
12.00		57.46	833.65	0.00	0.00
14.00		57.25	832.68	0.00	0.00
16.00		57.04	831.19	0.00	0.00
16.25		7.22	162.69	0.00	0.00
18.00		50.46	1136.99	0.00	0.00
19.50		43.12	970.82	0.00	0.00
20.00		14.34	322.74	0.00	0.00
22.00		57.24	1287.53	0.00	0.00
24.00		56.65	831.91	0.00	0.00
26.00		56.42	828.98	0.00	0.00
28.00		56.19	825.87	0.00	0.00
30.00		56.01	822.62	0.00	0.00
31.00		28.18	409.99	0.00	0.00
32.00		28.38	409.14	0.00	0.00
34.00		49.81	800.64	0.00	0.00
35.50		37.66	598.03	0.00	0.00
36.00		12.57	198.87	0.00	0.00
38.00		50.91	793.09	0.00	0.00
40.00	(1) attachments	59.67	818.88	0.00	0.00
42.00		51.86	784.83	0.00	0.00
44.00		52.29	780.78	0.00	0.00
45.16		30.43	451.01	0.00	0.00
46.00		22.09	325.74	0.00	0.00
48.00		53.05	772.50	0.00	0.00
50.00		53.40	768.28	0.00	0.00
52.00		54.63	1177.27	0.00	0.00
54.00		54.94	1169.13	0.00	0.00
56.00		55.23	1160.95	0.00	0.00
58.00		55.14	761.31	0.00	0.00
60.00		55.38	756.88	0.00	0.00
62.00		55.60	752.40	0.00	0.00
64.00		55.81	747.89	0.00	0.00
66.00		56.00	743.35	0.00	0.00
68.00		56.17	738.77	0.00	0.00
70.00		56.33	734.17	0.00	0.00
72.00		56.47	729.53	0.00	0.00
74.00		56.60	724.87	0.00	0.00
76.00		56.72	720.18	0.00	0.00
78.00		56.83	715.47	0.00	0.00
80.00		56.92	710.73	0.00	0.00
82.00		57.00	647.67	0.00	0.00

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00		57.07	643.52	0.00	0.00
86.00		57.13	639.36	0.00	0.00
88.00		57.18	635.17	0.00	0.00
90.00		57.22	630.97	0.00	0.00
92.00		57.25	626.74	0.00	0.00
94.00		57.27	622.50	0.00	0.00
95.00		28.60	309.79	0.00	0.00
95.58		16.86	260.30	0.00	0.00
96.00		12.21	188.11	0.00	0.00
98.00		58.27	890.83	0.00	0.00
100.00		52.73	865.93	0.00	0.00
102.00		52.35	595.69	0.00	0.00
104.00		52.29	591.32	0.00	0.00
106.00		52.23	586.94	0.00	0.00
108.00		52.16	582.55	0.00	0.00
110.00	(2) attachments	175.12	747.46	0.00	348.62
112.00		52.00	562.33	0.00	0.00
114.00		51.91	557.87	0.00	0.00
115.00		25.88	277.42	0.00	0.00
116.00		25.86	252.03	0.00	0.00
118.00		51.70	500.85	0.00	0.00
120.00		51.59	496.99	0.00	0.00
122.00		51.48	493.12	0.00	0.00
124.00		51.36	489.25	0.00	0.00
126.00		51.23	485.36	0.00	0.00
128.00		51.10	481.46	0.00	0.00
130.00		50.96	477.55	0.00	0.00
132.00		50.82	473.63	0.00	0.00
133.00	(24) attachments	736.70	6353.21	0.00	0.00
134.00		25.29	220.23	0.00	0.00
136.00		50.53	437.15	0.00	0.00
138.00		50.37	433.21	0.00	0.00
140.00		50.21	429.25	0.00	0.00
142.00		50.05	425.29	0.00	0.00
142.90	(19) attachments	1324.15	8675.60	0.00	154.78
144.00		23.41	196.87	0.00	0.00
145.00		21.17	177.93	0.00	0.00
146.00		20.44	173.22	0.00	0.00
148.00		40.62	343.12	0.00	0.00
148.30	(23) attachments	689.11	4604.29	0.00	1344.94
150.00		34.14	280.37	0.00	0.00
152.00		31.22	249.87	0.00	0.00
154.00		31.35	250.03	0.00	0.00
156.00		31.47	250.19	0.00	0.00
158.00		31.59	250.34	0.00	0.00
160.00	(22) attachments	1386.01	6358.74	0.00	2708.59
Totals:		8,375.13	79,802.69	0.00	4,556.94

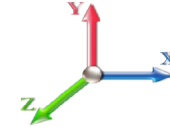
Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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

Dead Load Factor 1.20
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)
2.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.149	1.148	4.256	0.00	9.97
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	4.256	0.00	6.55
2.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.149	1.148	4.256	0.00	9.97
2.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	4.256	0.00	12.65
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	4.256	0.00	6.55
2.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.59	0.00	0.149	1.148	4.256	0.00	10.53
2.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.79	0.00	0.149	1.148	4.256	0.00	10.53
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.74	0.00	0.150	1.151	4.256	0.00	10.69
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	4.256	0.00	7.16
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.74	0.00	0.150	1.151	4.256	0.00	10.69
4.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	4.256	0.00	13.43
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	4.256	0.00	7.16
4.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.61	0.00	0.150	1.151	4.256	0.00	11.47
4.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.82	0.00	0.150	1.151	4.256	0.00	11.47
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.75	0.00	0.152	1.155	4.256	0.00	11.15
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	4.256	0.00	7.55
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.75	0.00	0.152	1.155	4.256	0.00	11.15
6.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	4.256	0.00	13.93
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	4.256	0.00	7.55
6.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.63	0.00	0.152	1.155	4.256	0.00	12.07
6.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.84	0.00	0.152	1.155	4.256	0.00	12.07
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.77	0.00	0.153	1.158	4.256	0.00	11.50
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	4.256	0.00	7.84
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.77	0.00	0.153	1.158	4.256	0.00	11.50
8.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	4.256	0.00	14.30
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	4.256	0.00	7.84
8.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.64	0.00	0.153	1.158	4.256	0.00	12.52
8.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.85	0.00	0.153	1.158	4.256	0.00	12.52
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.78	0.00	0.154	1.162	4.256	0.00	11.78
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	4.256	0.00	8.08
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.78	0.00	0.154	1.162	4.256	0.00	11.78
10.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	4.256	0.00	14.61
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	4.256	0.00	8.08
10.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.65	0.00	0.154	1.162	4.256	0.00	12.88
10.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.86	0.00	0.154	1.162	4.256	0.00	12.88
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.79	0.00	0.155	1.166	4.256	0.00	12.02
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	4.256	0.00	8.29
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.79	0.00	0.155	1.166	4.256	0.00	12.02
12.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	4.256	0.00	14.86
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	4.256	0.00	8.29
12.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.66	0.00	0.155	1.166	4.256	0.00	13.18
12.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.87	0.00	0.155	1.166	4.256	0.00	13.18
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.79	0.00	0.156	1.169	4.256	0.00	12.22
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	4.256	0.00	8.46
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.79	0.00	0.156	1.169	4.256	0.00	12.22
14.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	4.256	0.00	15.09
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	4.256	0.00	8.46

Linear Appurtenance Segment Forces (Factored)

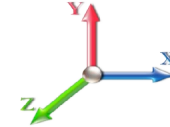
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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 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)
14.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.67	0.00	0.156	1.169	4.256	0.00	13.44
14.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.88	0.00	0.156	1.169	4.256	0.00	13.44
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.80	0.00	0.158	1.173	4.256	0.00	12.41
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	4.256	0.00	8.62
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.80	0.00	0.158	1.173	4.256	0.00	12.41
16.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	4.256	0.00	15.28
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	4.256	0.00	8.62
16.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.67	0.00	0.158	1.173	4.256	0.00	13.68
16.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.88	0.00	0.158	1.173	4.256	0.00	13.68
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.10	0.00	0.158	1.175	4.256	0.00	1.55
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	4.256	0.00	1.08
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.10	0.00	0.158	1.175	4.256	0.00	1.55
16.25	1-1/4" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	4.256	0.00	1.91
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	4.256	0.00	1.08
16.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.08	0.00	0.158	1.175	4.256	0.00	1.71
16.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.11	0.00	0.158	1.175	4.256	0.00	1.71
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.70	0.00	0.159	1.177	4.256	0.00	11.00
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	4.256	0.00	7.67
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.70	0.00	0.159	1.177	4.256	0.00	11.00
18.00	1-1/4" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	4.256	0.00	13.53
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	4.256	0.00	7.67
18.00	1.25" Reinforcing	Yes	1.75	0.000	1.25	0.59	0.00	0.159	1.177	4.256	0.00	12.15
18.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.78	0.00	0.159	1.177	4.256	0.00	12.15
19.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.61	0.00	0.160	1.181	4.256	0.00	9.51
19.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	4.256	0.00	6.64
19.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.61	0.00	0.160	1.181	4.256	0.00	9.51
19.50	1-1/4" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	4.256	0.00	11.69
19.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	4.256	0.00	6.64
19.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.51	0.00	0.160	1.181	4.256	0.00	10.52
19.50	1.25" Reinforcing	Yes	1.50	0.000	2.50	0.67	0.00	0.160	1.181	4.256	0.00	10.52
20.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.20	0.00	0.161	1.183	4.256	0.00	3.18
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	4.256	0.00	2.22
20.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.20	0.00	0.161	1.183	4.256	0.00	3.18
20.00	1-1/4" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	4.256	0.00	3.91
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	4.256	0.00	2.22
20.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.17	0.00	0.161	1.183	4.256	0.00	3.52
20.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.22	0.00	0.161	1.183	4.256	0.00	3.52
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.81	0.00	0.162	1.185	4.256	0.00	12.86
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.256	0.00	9.01
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.81	0.00	0.162	1.185	4.256	0.00	12.86
22.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.256	0.00	15.77
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.256	0.00	9.01
22.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.69	0.00	0.162	1.185	4.256	0.00	14.25
22.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.90	0.00	0.162	1.185	4.256	0.00	14.25
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.82	0.00	0.160	1.181	4.256	0.00	12.99
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	4.256	0.00	9.12
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.82	0.00	0.160	1.181	4.256	0.00	12.99

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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 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)
24.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	4.256	0.00	15.91
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	4.256	0.00	9.12
24.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.69	0.00	0.160	1.181	4.256	0.00	14.42
24.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.90	0.00	0.160	1.181	4.256	0.00	14.42
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.82	0.00	0.162	1.185	4.256	0.00	13.11
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.256	0.00	9.22
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.82	0.00	0.162	1.185	4.256	0.00	13.11
26.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.256	0.00	16.04
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	4.256	0.00	9.22
26.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.70	0.00	0.162	1.185	4.256	0.00	14.57
26.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.90	0.00	0.162	1.185	4.256	0.00	14.57
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.83	0.00	0.163	1.189	4.256	0.00	13.22
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	4.256	0.00	9.32
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.83	0.00	0.163	1.189	4.256	0.00	13.22
28.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	4.256	0.00	16.16
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	4.256	0.00	9.32
28.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.70	0.00	0.163	1.189	4.256	0.00	14.71
28.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.91	0.00	0.163	1.189	4.256	0.00	14.71
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.83	0.00	0.165	1.194	4.260	0.00	13.32
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	4.260	0.00	9.41
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.83	0.00	0.165	1.194	4.260	0.00	13.32
30.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	4.260	0.00	16.27
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	4.260	0.00	9.41
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.70	0.00	0.165	1.194	4.260	0.00	14.84
30.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.91	0.00	0.165	1.194	4.260	0.00	14.84
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.42	0.00	0.166	1.197	4.300	0.00	6.69
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	4.300	0.00	4.73
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.42	0.00	0.166	1.197	4.300	0.00	6.69
31.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	4.300	0.00	8.16
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	4.300	0.00	4.73
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.35	0.00	0.166	1.197	4.300	0.00	7.45
31.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.46	0.00	0.166	1.197	4.300	0.00	7.45
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.42	0.00	0.166	1.199	4.339	0.00	6.71
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	4.339	0.00	4.75
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.42	0.00	0.166	1.199	4.339	0.00	6.71
32.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	4.339	0.00	8.19
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	4.339	0.00	4.75
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.35	0.00	0.166	1.199	4.339	0.00	7.48
32.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.46	0.00	0.166	1.199	4.339	0.00	7.48
34.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.83	0.00	0.113	1.040	4.415	0.00	13.52
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	4.415	0.00	9.58
34.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.83	0.00	0.113	1.040	4.415	0.00	13.52
34.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	4.415	0.00	16.48
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	4.415	0.00	9.58
34.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.71	0.00	0.113	1.040	4.415	0.00	15.09
35.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.63	0.00	0.114	1.043	4.469	0.00	10.19
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	4.469	0.00	7.23

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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 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)
35.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.63	0.00	0.114	1.043	4.469	0.00	10.19
35.50	1-1/4" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	4.469	0.00	12.42
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	4.469	0.00	7.23
35.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.53	0.00	0.114	1.043	4.469	0.00	11.38
36.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.21	0.00	0.115	1.044	4.487	0.00	3.40
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	4.487	0.00	2.42
36.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.21	0.00	0.115	1.044	4.487	0.00	3.40
36.00	1-1/4" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	4.487	0.00	4.14
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	4.487	0.00	2.42
36.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.18	0.00	0.115	1.044	4.487	0.00	3.80
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.84	0.00	0.115	1.046	4.557	0.00	13.70
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	4.557	0.00	9.74
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.84	0.00	0.115	1.046	4.557	0.00	13.70
38.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	4.557	0.00	16.67
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	4.557	0.00	9.74
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.72	0.00	0.115	1.046	4.557	0.00	15.31
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.84	0.00	0.116	1.049	4.625	0.00	13.78
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	4.625	0.00	9.81
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.84	0.00	0.116	1.049	4.625	0.00	13.78
40.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	4.625	0.00	16.76
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	4.625	0.00	9.81
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.72	0.00	0.116	1.049	4.625	0.00	15.42
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.85	0.00	0.117	1.052	4.689	0.00	13.86
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	4.689	0.00	9.88
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.85	0.00	0.117	1.052	4.689	0.00	13.86
42.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	4.689	0.00	16.85
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	4.689	0.00	9.88
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.72	0.00	0.117	1.052	4.689	0.00	15.52
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.85	0.00	0.119	1.056	4.752	0.00	13.93
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	4.752	0.00	9.94
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.85	0.00	0.119	1.056	4.752	0.00	13.93
44.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	4.752	0.00	16.93
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	4.752	0.00	9.94
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.72	0.00	0.119	1.056	4.752	0.00	15.61
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.49	0.00	0.119	1.058	4.788	0.00	8.11
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	4.788	0.00	5.79
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.49	0.00	0.119	1.058	4.788	0.00	8.11
45.16	1-1/4" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	4.788	0.00	9.84
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	4.788	0.00	5.79
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.42	0.00	0.119	1.058	4.788	0.00	9.09
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.36	0.00	0.120	1.060	4.813	0.00	5.88
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	4.813	0.00	4.20
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.36	0.00	0.120	1.060	4.813	0.00	5.88
46.00	1-1/4" Hybrid	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	4.813	0.00	7.14
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	4.813	0.00	4.20
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.30	0.00	0.120	1.060	4.813	0.00	6.60
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.85	0.00	0.121	1.062	4.872	0.00	14.08

Linear Appurtenance Segment Forces (Factored)

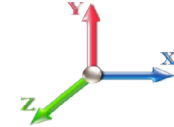
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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 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)
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	4.872	0.00	10.07
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.85	0.00	0.121	1.062	4.872	0.00	14.08
48.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	4.872	0.00	17.08
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	4.872	0.00	10.07
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.73	0.00	0.121	1.062	4.872	0.00	15.79
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.85	0.00	0.122	1.066	4.929	0.00	14.15
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	4.929	0.00	10.13
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.85	0.00	0.122	1.066	4.929	0.00	14.15
50.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	4.929	0.00	17.16
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	4.929	0.00	10.13
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.73	0.00	0.122	1.066	4.929	0.00	15.88
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.86	0.00	0.123	1.069	4.984	0.00	14.21
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	4.984	0.00	10.19
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.86	0.00	0.123	1.069	4.984	0.00	14.21
52.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	4.984	0.00	17.23
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	4.984	0.00	10.19
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.73	0.00	0.123	1.069	4.984	0.00	15.96
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.86	0.00	0.124	1.072	5.039	0.00	14.28
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	5.039	0.00	10.24
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.86	0.00	0.124	1.072	5.039	0.00	14.28
54.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	5.039	0.00	17.30
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	5.039	0.00	10.24
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.73	0.00	0.124	1.072	5.039	0.00	16.04
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.86	0.00	0.125	1.076	5.091	0.00	14.34
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	5.091	0.00	10.30
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.86	0.00	0.125	1.076	5.091	0.00	14.34
56.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	5.091	0.00	17.36
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	5.091	0.00	10.30
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.74	0.00	0.125	1.076	5.091	0.00	16.12
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.86	0.00	0.124	1.073	5.142	0.00	14.40
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	5.142	0.00	10.35
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.86	0.00	0.124	1.073	5.142	0.00	14.40
58.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	5.142	0.00	17.43
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	5.142	0.00	10.35
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.74	0.00	0.124	1.073	5.142	0.00	16.19
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.86	0.00	0.125	1.076	5.193	0.00	14.46
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	5.193	0.00	10.40
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.86	0.00	0.125	1.076	5.193	0.00	14.46
60.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	5.193	0.00	17.49
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	5.193	0.00	10.40
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.74	0.00	0.125	1.076	5.193	0.00	16.27
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.127	1.080	5.241	0.00	14.51
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	5.241	0.00	10.45
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.127	1.080	5.241	0.00	14.51
62.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	5.241	0.00	17.55
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	5.241	0.00	10.45
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.74	0.00	0.127	1.080	5.241	0.00	16.34

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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 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)
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.128	1.084	5.289	0.00	14.57
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	5.289	0.00	10.50
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.128	1.084	5.289	0.00	14.57
64.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	5.289	0.00	17.61
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	5.289	0.00	10.50
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.74	0.00	0.128	1.084	5.289	0.00	16.41
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.129	1.087	5.336	0.00	14.62
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	5.336	0.00	10.54
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.129	1.087	5.336	0.00	14.62
66.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	5.336	0.00	17.67
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	5.336	0.00	10.54
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.74	0.00	0.129	1.087	5.336	0.00	16.48
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.130	1.091	5.382	0.00	14.68
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	5.382	0.00	10.59
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.130	1.091	5.382	0.00	14.68
68.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	5.382	0.00	17.72
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	5.382	0.00	10.59
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.75	0.00	0.130	1.091	5.382	0.00	16.54
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.132	1.095	5.426	0.00	14.73
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	5.426	0.00	10.64
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.132	1.095	5.426	0.00	14.73
70.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	5.426	0.00	17.78
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	5.426	0.00	10.64
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.75	0.00	0.132	1.095	5.426	0.00	16.61
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.133	1.099	5.470	0.00	14.78
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	5.470	0.00	10.68
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.87	0.00	0.133	1.099	5.470	0.00	14.78
72.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	5.470	0.00	17.83
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	5.470	0.00	10.68
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.75	0.00	0.133	1.099	5.470	0.00	16.67
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.134	1.103	5.513	0.00	14.83
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	5.513	0.00	10.72
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.134	1.103	5.513	0.00	14.83
74.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	5.513	0.00	17.89
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	5.513	0.00	10.72
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.75	0.00	0.134	1.103	5.513	0.00	16.73
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.136	1.108	5.555	0.00	14.88
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	5.555	0.00	10.77
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.136	1.108	5.555	0.00	14.88
76.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	5.555	0.00	17.94
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	5.555	0.00	10.77
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.75	0.00	0.136	1.108	5.555	0.00	16.79
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.137	1.112	5.597	0.00	14.92
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	5.597	0.00	10.81
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.137	1.112	5.597	0.00	14.92
78.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	5.597	0.00	17.99
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	5.597	0.00	10.81

Linear Appurtenance Segment Forces (Factored)

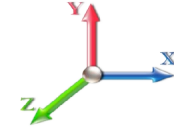
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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 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)
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.75	0.00	0.137	1.112	5.597	0.00	16.85
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.139	1.116	5.637	0.00	14.97
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	5.637	0.00	10.85
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.139	1.116	5.637	0.00	14.97
80.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	5.637	0.00	18.04
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	5.637	0.00	10.85
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.75	0.00	0.139	1.116	5.637	0.00	16.91
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.140	1.121	5.677	0.00	15.01
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	5.677	0.00	10.89
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.140	1.121	5.677	0.00	15.01
82.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	5.677	0.00	18.09
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	5.677	0.00	10.89
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.76	0.00	0.140	1.121	5.677	0.00	16.96
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.142	1.125	5.716	0.00	15.06
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	5.716	0.00	10.92
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.142	1.125	5.716	0.00	15.06
84.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	5.716	0.00	18.13
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	5.716	0.00	10.92
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.76	0.00	0.142	1.125	5.716	0.00	17.02
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.143	1.130	5.755	0.00	15.10
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	5.755	0.00	10.96
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.143	1.130	5.755	0.00	15.10
86.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	5.755	0.00	18.18
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	5.755	0.00	10.96
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.76	0.00	0.143	1.130	5.755	0.00	17.07
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.145	1.135	5.793	0.00	15.14
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	5.793	0.00	11.00
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.88	0.00	0.145	1.135	5.793	0.00	15.14
88.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	5.793	0.00	18.22
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	5.793	0.00	11.00
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.76	0.00	0.145	1.135	5.793	0.00	17.12
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.147	1.140	5.830	0.00	15.19
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	5.830	0.00	11.04
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.147	1.140	5.830	0.00	15.19
90.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	5.830	0.00	18.27
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	5.830	0.00	11.04
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.76	0.00	0.147	1.140	5.830	0.00	17.18
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.148	1.145	5.867	0.00	15.23
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	5.867	0.00	11.07
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.148	1.145	5.867	0.00	15.23
92.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	5.867	0.00	18.31
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	5.867	0.00	11.07
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.76	0.00	0.148	1.145	5.867	0.00	17.23
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.150	1.150	5.903	0.00	15.27
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	5.903	0.00	11.11
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.150	1.150	5.903	0.00	15.27
94.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	5.903	0.00	18.36

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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 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)
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	5.903	0.00	11.11
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.76	0.00	0.150	1.150	5.903	0.00	17.28
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.44	0.00	0.151	1.154	5.921	0.00	7.64
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	5.921	0.00	5.56
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.44	0.00	0.151	1.154	5.921	0.00	7.64
95.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	5.921	0.00	9.19
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	5.921	0.00	5.56
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.38	0.00	0.151	1.154	5.921	0.00	8.65
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.26	0.00	0.152	1.156	5.931	0.00	4.44
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	5.931	0.00	3.23
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.26	0.00	0.152	1.156	5.931	0.00	4.44
95.58	1-1/4" Hybrid	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	5.931	0.00	5.33
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	5.931	0.00	3.23
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.22	0.00	0.152	1.156	5.931	0.00	5.02
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.19	0.00	0.152	1.157	5.939	0.00	3.21
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	5.939	0.00	2.34
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.19	0.00	0.152	1.157	5.939	0.00	3.21
96.00	1-1/4" Hybrid	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	5.939	0.00	3.86
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	5.939	0.00	2.34
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.16	0.00	0.152	1.157	5.939	0.00	3.64
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.153	1.160	5.974	0.00	15.35
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	5.974	0.00	11.18
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.153	1.160	5.974	0.00	15.35
98.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	5.974	0.00	18.44
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	5.974	0.00	11.18
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.77	0.00	0.153	1.160	5.974	0.00	17.37
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.118	1.055	6.008	0.00	15.38
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	6.008	0.00	11.21
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.118	1.055	6.008	0.00	15.38
100.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	6.008	0.00	18.48
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	6.008	0.00	11.21
102.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.117	1.052	6.043	0.00	15.42
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	6.043	0.00	11.24
102.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.117	1.052	6.043	0.00	15.42
102.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	6.043	0.00	18.52
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	6.043	0.00	11.24
104.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.119	1.056	6.076	0.00	15.46
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	6.076	0.00	11.28
104.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.89	0.00	0.119	1.056	6.076	0.00	15.46
104.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	6.076	0.00	18.56
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	6.076	0.00	11.28
106.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.120	1.061	6.109	0.00	15.49
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	6.109	0.00	11.31
106.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.120	1.061	6.109	0.00	15.49
106.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	6.109	0.00	18.60
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	6.109	0.00	11.31
108.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.122	1.065	6.142	0.00	15.53

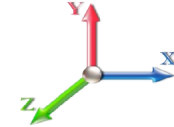
Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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

Dead Load Factor 1.20
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)
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	6.142	0.00	11.34
108.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.122	1.065	6.142	0.00	15.53
108.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	6.142	0.00	18.64
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	6.142	0.00	11.34
110.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.123	1.070	6.174	0.00	15.57
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	6.174	0.00	11.37
110.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.123	1.070	6.174	0.00	15.57
110.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	6.174	0.00	18.68
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	6.174	0.00	11.37
112.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.125	1.074	6.206	0.00	15.60
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	6.206	0.00	11.40
112.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.125	1.074	6.206	0.00	15.60
112.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	6.206	0.00	18.71
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.126	1.079	6.238	0.00	15.63
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	6.238	0.00	11.43
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.126	1.079	6.238	0.00	15.63
114.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	6.238	0.00	18.75
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.45	0.00	0.128	1.083	6.253	0.00	7.83
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	6.253	0.00	5.72
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.45	0.00	0.128	1.083	6.253	0.00	7.83
115.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	6.253	0.00	9.38
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.45	0.00	0.128	1.085	6.269	0.00	7.83
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	6.269	0.00	5.73
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.45	0.00	0.128	1.085	6.269	0.00	7.83
116.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	6.269	0.00	9.39
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.130	1.089	6.299	0.00	15.70
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	6.299	0.00	11.49
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.130	1.089	6.299	0.00	15.70
118.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	6.299	0.00	18.82
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.131	1.094	6.330	0.00	15.73
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	6.330	0.00	11.52
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.131	1.094	6.330	0.00	15.73
120.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	6.330	0.00	18.86
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.133	1.099	6.360	0.00	15.77
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	6.360	0.00	11.55
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.133	1.099	6.360	0.00	15.77
122.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	6.360	0.00	18.89
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.135	1.105	6.389	0.00	15.80
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	6.389	0.00	11.57
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.90	0.00	0.135	1.105	6.389	0.00	15.80
124.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	6.389	0.00	18.92
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.137	1.110	6.419	0.00	15.83
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	6.419	0.00	11.60
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.137	1.110	6.419	0.00	15.83
126.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	6.419	0.00	18.96
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.139	1.116	6.448	0.00	15.86
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	6.448	0.00	11.63

Linear Appurtenance Segment Forces (Factored)

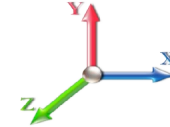
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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 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)
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.139	1.116	6.448	0.00	15.86
128.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	6.448	0.00	18.99
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.141	1.122	6.476	0.00	15.89
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	6.476	0.00	11.66
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.141	1.122	6.476	0.00	15.89
130.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	6.476	0.00	19.02
132.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.143	1.128	6.504	0.00	15.92
132.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	6.504	0.00	11.68
132.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.143	1.128	6.504	0.00	15.92
132.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	6.504	0.00	19.06
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.45	0.00	0.144	1.133	6.519	0.00	7.97
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	6.519	0.00	5.85
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.45	0.00	0.144	1.133	6.519	0.00	7.97
133.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	6.519	0.00	9.54
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.45	0.00	0.145	1.136	6.532	0.00	7.98
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	6.532	0.00	5.85
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.45	0.00	0.145	1.136	6.532	0.00	7.98
134.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	6.532	0.00	9.54
136.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.147	1.141	6.560	0.00	15.98
136.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	6.560	0.00	11.74
136.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.147	1.141	6.560	0.00	15.98
136.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	6.560	0.00	19.12
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.149	1.147	6.588	0.00	16.01
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	6.588	0.00	11.76
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.149	1.147	6.588	0.00	16.01
138.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	6.588	0.00	19.15
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.151	1.154	6.615	0.00	16.04
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	6.615	0.00	11.79
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.151	1.154	6.615	0.00	16.04
140.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	6.615	0.00	19.18
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.154	1.161	6.642	0.00	16.07
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	6.642	0.00	11.81
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.154	1.161	6.642	0.00	16.07
142.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	6.642	0.00	19.21
142.90	1 5/8" Hybrid	Yes	0.90	0.000	2.00	0.41	0.00	0.155	1.166	6.654	0.00	7.24
142.90	7/8" Coax	Yes	0.90	0.000	0.00	0.00	0.00	0.155	1.166	6.654	0.00	5.32
142.90	1 5/8" Hybrid	Yes	0.90	0.000	2.00	0.41	0.00	0.155	1.166	6.654	0.00	7.24
142.90	1-1/4" Hybrid	Yes	0.90	0.000	0.00	0.00	0.00	0.155	1.166	6.654	0.00	8.65
144.00	1 5/8" Hybrid	Yes	1.10	0.000	2.00	0.50	0.00	0.078	0.000	6.668	0.00	8.85
144.00	7/8" Coax	Yes	1.10	0.000	0.00	0.00	0.00	0.078	0.000	6.668	0.00	6.51
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.46	0.00	0.079	0.000	6.681	0.00	8.06
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	6.681	0.00	5.92
146.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.46	0.00	0.082	0.000	6.695	0.00	8.06
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	6.695	0.00	5.93
148.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.91	0.00	0.083	0.000	6.721	0.00	16.15
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.721	0.00	11.89
148.30	1 5/8" Hybrid	Yes	0.30	0.000	2.00	0.14	0.00	0.084	0.000	6.724	0.00	2.42

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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 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)
148.30	7/8" Coax	Yes	0.30	0.000	0.00	0.00	0.00	0.084	0.000	6.724	0.00	1.78
150.00	1 5/8" Hybrid	Yes	1.70	0.000	2.00	0.78	0.00	0.085	0.000	6.746	0.00	13.75
150.00	7/8" Coax	Yes	1.70	0.000	0.00	0.00	0.00	0.085	0.000	6.746	0.00	10.12
152.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.92	0.00	0.125	1.075	6.772	0.00	16.21
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.772	0.00	11.93
154.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.92	0.00	0.125	1.075	6.797	0.00	16.23
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.797	0.00	11.96
156.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.92	0.00	0.125	1.075	6.822	0.00	16.26
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.822	0.00	11.98
158.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.92	0.00	0.125	1.075	6.847	0.00	16.29
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.847	0.00	12.00
160.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.92	0.00	0.125	1.075	6.872	0.00	16.31
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.872	0.00	12.03
Totals:											0.0	5,808.2

Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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

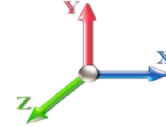


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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 27

Dead Load Factor 1.20
Wind Load 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	-79.80	-8.39	0.00	-1024.2	0.00	1024.28	3683.82	1841.91	7606.69	3756.66	0.00	0.000	0.000	0.200
2.00	-78.98	-8.36	0.00	-1007.5	0.00	1007.50	3671.54	1835.77	7522.06	3714.86	0.00	-0.020	0.000	0.198
4.00	-78.15	-8.33	0.00	-990.78	0.00	990.78	3659.00	1829.50	7437.30	3673.00	0.02	-0.041	0.000	0.197
6.00	-77.32	-8.30	0.00	-974.13	0.00	974.13	3646.20	1823.10	7352.44	3631.09	0.04	-0.061	0.000	0.195
8.00	-76.48	-8.27	0.00	-957.54	0.00	957.54	3633.16	1816.58	7267.48	3589.13	0.07	-0.082	0.000	0.193
10.00	-75.65	-8.23	0.00	-941.01	0.00	941.01	3619.85	1809.93	7182.43	3547.13	0.11	-0.102	0.000	0.192
12.00	-74.81	-8.20	0.00	-924.54	0.00	924.54	3606.29	1803.15	7097.31	3505.10	0.16	-0.123	0.000	0.190
14.00	-73.98	-8.17	0.00	-908.14	0.00	908.14	3592.48	1796.24	7012.13	3463.03	0.21	-0.144	0.000	0.188
16.00	-73.14	-8.12	0.00	-891.80	0.00	891.80	3578.41	1789.21	6926.91	3420.94	0.28	-0.165	0.000	0.187
16.25	-72.98	-8.13	0.00	-889.77	0.00	889.77	3576.63	1788.32	6916.25	3415.68	0.29	-0.168	0.000	0.220
18.00	-71.84	-8.10	0.00	-875.54	0.00	875.54	3564.09	1782.04	6841.65	3378.83	0.35	-0.189	0.000	0.201
19.50	-70.87	-8.07	0.00	-863.38	0.00	863.38	3553.18	1776.59	6777.69	3347.24	0.41	-0.206	0.000	0.171
20.00	-70.54	-8.07	0.00	-859.35	0.00	859.35	3549.51	1774.75	6756.36	3336.71	0.43	-0.211	0.000	0.170
22.00	-69.25	-8.03	0.00	-843.21	0.00	843.21	3563.12	1781.56	6835.93	3376.01	0.53	-0.231	0.000	0.172
24.00	-68.42	-7.99	0.00	-827.15	0.00	827.15	3548.52	1774.26	6750.65	3333.89	0.63	-0.251	0.000	0.166
26.00	-67.59	-7.96	0.00	-811.16	0.00	811.16	3533.67	1766.84	6665.35	3291.77	0.74	-0.270	0.000	0.164
28.00	-66.76	-7.92	0.00	-795.25	0.00	795.25	3518.56	1759.28	6580.06	3249.64	0.85	-0.289	0.000	0.162
30.00	-65.93	-7.87	0.00	-779.41	0.00	779.41	3503.20	1751.60	6494.78	3207.53	0.98	-0.308	0.000	0.127
31.00	-65.52	-7.85	0.00	-771.54	0.00	771.54	3495.43	1747.71	6452.15	3186.48	1.05	-0.316	0.000	0.146
32.00	-65.11	-7.84	0.00	-763.68	0.00	763.68	3487.59	1743.79	6409.53	3165.43	1.11	-0.325	0.000	0.145
34.00	-64.31	-7.80	0.00	-748.01	0.00	748.01	3471.72	1735.86	6324.32	3123.35	1.25	-0.342	0.000	0.178
35.50	-63.71	-7.77	0.00	-736.31	0.00	736.31	3459.65	1729.82	6260.45	3091.80	1.36	-0.359	0.000	0.177
36.00	-63.51	-7.77	0.00	-732.42	0.00	732.42	3455.59	1727.80	6239.16	3081.29	1.40	-0.364	0.000	0.177
38.00	-62.71	-7.74	0.00	-716.87	0.00	716.87	3439.21	1719.61	6154.07	3039.26	1.56	-0.386	0.000	0.175
40.00	-61.89	-7.70	0.00	-701.39	0.00	701.39	3422.57	1711.29	6069.05	2997.28	1.72	-0.408	0.000	0.173
42.00	-61.11	-7.67	0.00	-685.99	0.00	685.99	3405.68	1702.84	5984.13	2955.34	1.90	-0.430	0.000	0.171
44.00	-60.32	-7.63	0.00	-670.65	0.00	670.65	3388.54	1694.27	5899.30	2913.44	2.09	-0.452	0.000	0.169
45.16	-59.87	-7.60	0.00	-661.81	0.00	661.81	3378.48	1689.24	5850.15	2889.17	2.20	-0.465	0.000	0.122
46.00	-59.54	-7.59	0.00	-655.42	0.00	655.42	3371.14	1685.57	5814.59	2871.61	2.28	-0.472	0.000	0.158
48.00	-58.77	-7.55	0.00	-640.24	0.00	640.24	3353.48	1676.74	5730.00	2829.83	2.48	-0.493	0.000	0.157
50.00	-58.00	-7.52	0.00	-625.13	0.00	625.13	3335.57	1667.79	5645.55	2788.13	2.69	-0.514	0.000	0.155
52.00	-56.82	-7.47	0.00	-610.10	0.00	610.10	3317.41	1658.70	5561.26	2746.50	2.91	-0.535	0.000	0.151
54.00	-55.65	-7.43	0.00	-595.15	0.00	595.15	3298.98	1649.49	5477.12	2704.94	3.14	-0.556	0.000	0.149
56.00	-54.48	-7.38	0.00	-580.30	0.00	580.30	3316.18	1658.09	5555.61	2743.71	3.38	-0.577	0.000	0.150
58.00	-53.72	-7.34	0.00	-565.55	0.00	565.55	3297.74	1648.87	5471.49	2702.16	3.62	-0.598	0.000	0.156
60.00	-52.96	-7.29	0.00	-550.88	0.00	550.88	3279.05	1639.52	5387.54	2660.71	3.88	-0.619	0.000	0.153
62.00	-52.21	-7.25	0.00	-536.29	0.00	536.29	3260.10	1630.05	5303.79	2619.34	4.14	-0.641	0.000	0.151
64.00	-51.46	-7.20	0.00	-521.80	0.00	521.80	3240.90	1620.45	5220.23	2578.08	4.42	-0.663	0.000	0.149
66.00	-50.71	-7.16	0.00	-507.39	0.00	507.39	3221.44	1610.72	5136.89	2536.92	4.70	-0.684	0.000	0.147
68.00	-49.97	-7.11	0.00	-493.07	0.00	493.07	3201.73	1600.86	5053.77	2495.87	4.99	-0.706	0.000	0.145
70.00	-49.24	-7.06	0.00	-478.85	0.00	478.85	3181.76	1590.88	4970.89	2454.94	5.29	-0.728	0.000	0.142
72.00	-48.50	-7.02	0.00	-464.72	0.00	464.72	3161.54	1580.77	4888.26	2414.13	5.60	-0.749	0.000	0.140
74.00	-47.78	-6.97	0.00	-450.69	0.00	450.69	3141.06	1570.53	4805.90	2373.45	5.92	-0.771	0.000	0.138
76.00	-47.06	-6.92	0.00	-436.75	0.00	436.75	3120.33	1560.16	4723.81	2332.91	6.25	-0.792	0.000	0.135
78.00	-46.34	-6.87	0.00	-422.91	0.00	422.91	3099.34	1549.67	4642.00	2292.51	6.58	-0.813	0.000	0.133
80.00	-45.63	-6.82	0.00	-409.17	0.00	409.17	3078.09	1539.05	4560.50	2252.26	6.93	-0.835	0.000	0.130
80.00	-45.63	-6.82	0.00	-409.17	0.00	409.17	2384.58	1192.29	3545.27	1750.88	6.93	-0.835	0.000	0.140
82.00	-44.98	-6.77	0.00	-395.54	0.00	395.54	2370.62	1185.31	3486.26	1721.73	7.28	-0.856	0.000	0.154

Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00	-44.33	-6.72	0.00	-381.99	0.00	381.99	2356.42	1178.21	3427.33	1692.63	7.65	-0.879	0.000	0.151
86.00	-43.69	-6.67	0.00	-368.55	0.00	368.55	2341.95	1170.98	3368.48	1663.57	8.02	-0.903	0.000	0.147
88.00	-43.05	-6.62	0.00	-355.21	0.00	355.21	2327.23	1163.62	3309.75	1634.56	8.40	-0.926	0.000	0.144
90.00	-42.42	-6.57	0.00	-341.96	0.00	341.96	2312.26	1156.13	3251.12	1605.61	8.80	-0.949	0.000	0.141
92.00	-41.79	-6.52	0.00	-328.82	0.00	328.82	2297.03	1148.52	3192.63	1576.72	9.20	-0.971	0.000	0.137
94.00	-41.17	-6.46	0.00	-315.78	0.00	315.78	2281.55	1140.77	3134.28	1547.90	9.61	-0.994	0.000	0.134
95.00	-40.86	-6.44	0.00	-309.31	0.00	309.31	2273.71	1136.85	3105.16	1533.52	9.82	-1.005	0.000	0.132
95.58	-40.60	-6.42	0.00	-305.58	0.00	305.58	2269.13	1134.57	3088.29	1525.19	9.94	-1.012	0.000	0.129
95.58	-40.60	-6.42	0.00	-305.58	0.00	305.58	2269.13	1134.57	3088.29	1525.19	9.94	-1.012	0.000	0.129
96.00	-40.41	-6.42	0.00	-302.88	0.00	302.88	2265.81	1132.90	3076.09	1519.16	10.03	-1.016	0.000	0.217
98.00	-39.51	-6.37	0.00	-290.05	0.00	290.05	2249.81	1124.91	3018.05	1490.50	10.46	-1.053	0.000	0.212
100.00	-38.65	-6.33	0.00	-277.31	0.00	277.31	2259.61	1129.81	3053.48	1508.00	10.91	-1.089	0.000	0.201
102.00	-38.05	-6.28	0.00	-264.66	0.00	264.66	2243.52	1121.76	2995.52	1479.37	11.38	-1.125	0.000	0.196
104.00	-37.45	-6.24	0.00	-252.09	0.00	252.09	2227.17	1113.59	2937.74	1450.84	11.86	-1.159	0.000	0.191
106.00	-36.86	-6.20	0.00	-239.60	0.00	239.60	2210.57	1105.28	2880.15	1422.40	12.35	-1.192	0.000	0.185
108.00	-36.28	-6.16	0.00	-227.20	0.00	227.20	2193.71	1096.86	2822.78	1394.06	12.86	-1.225	0.000	0.180
110.00	-35.53	-5.98	0.00	-214.54	0.00	214.54	2176.60	1088.30	2765.62	1365.84	13.38	-1.257	0.000	0.173
112.00	-34.97	-5.94	0.00	-202.58	0.00	202.58	2159.23	1079.61	2708.70	1337.73	13.91	-1.289	0.000	0.168
114.00	-34.41	-5.89	0.00	-190.70	0.00	190.70	2141.61	1070.80	2652.02	1309.73	14.46	-1.319	0.000	0.162
115.00	-34.13	-5.86	0.00	-184.81	0.00	184.81	2132.70	1066.35	2623.78	1295.79	14.73	-1.335	0.000	0.159
115.00	-34.13	-5.86	0.00	-184.81	0.00	184.81	1556.62	778.31	1923.08	949.74	14.73	-1.335	0.000	0.217
116.00	-33.88	-5.85	0.00	-178.95	0.00	178.95	1551.43	775.71	1904.13	940.38	15.02	-1.350	0.000	0.212
118.00	-33.37	-5.81	0.00	-167.25	0.00	167.25	1540.84	770.42	1866.26	921.68	15.59	-1.386	0.000	0.203
120.00	-32.87	-5.76	0.00	-155.64	0.00	155.64	1529.99	765.00	1828.43	902.99	16.18	-1.422	0.000	0.194
122.00	-32.38	-5.72	0.00	-144.12	0.00	144.12	1518.89	759.45	1790.65	884.33	16.78	-1.456	0.000	0.184
124.00	-31.89	-5.67	0.00	-132.68	0.00	132.68	1507.54	753.77	1752.93	865.70	17.40	-1.489	0.000	0.174
126.00	-31.40	-5.62	0.00	-121.34	0.00	121.34	1495.93	747.96	1715.28	847.11	18.03	-1.520	0.000	0.164
128.00	-30.92	-5.58	0.00	-110.09	0.00	110.09	1484.06	742.03	1677.72	828.56	18.67	-1.550	0.000	0.154
130.00	-30.44	-5.53	0.00	-98.94	0.00	98.94	1471.95	735.97	1640.26	810.06	19.33	-1.578	0.000	0.143
132.00	-29.97	-5.47	0.00	-87.89	0.00	87.89	1459.57	729.79	1602.91	791.62	19.99	-1.604	0.000	0.132
133.00	-23.64	-4.56	0.00	-82.42	0.00	82.42	1453.29	726.64	1584.28	782.42	20.33	-1.616	0.000	0.122
134.00	-23.42	-4.54	0.00	-77.86	0.00	77.86	1446.94	723.47	1565.68	773.23	20.67	-1.628	0.000	0.117
136.00	-22.98	-4.48	0.00	-68.79	0.00	68.79	1434.06	717.03	1528.59	754.91	21.36	-1.651	0.000	0.107
138.00	-22.54	-4.43	0.00	-59.82	0.00	59.82	1420.92	710.46	1491.65	736.67	22.05	-1.672	0.000	0.097
140.00	-22.12	-4.37	0.00	-50.96	0.00	50.96	1407.52	703.76	1454.87	718.50	22.76	-1.690	0.000	0.087
142.00	-21.69	-4.31	0.00	-42.22	0.00	42.22	1393.87	696.94	1418.26	700.42	23.47	-1.706	0.000	0.076
142.90	-13.06	-2.73	0.00	-38.18	0.00	38.18	1387.65	693.82	1401.84	692.32	23.79	-1.713	0.000	0.065
144.00	-12.86	-2.71	0.00	-35.18	0.00	35.18	1379.97	689.99	1381.83	682.44	24.19	-1.721	0.000	0.061
145.00	-12.69	-2.68	0.00	-32.47	0.00	32.47	1372.92	686.46	1363.70	673.48	24.55	-1.727	0.000	0.057
145.00	-12.69	-2.68	0.00	-32.47	0.00	32.47	931.20	465.60	925.89	604.09	24.55	-1.727	0.000	0.067
146.00	-12.51	-2.66	0.00	-29.79	0.00	29.79	925.24	462.62	912.49	594.77	24.91	-1.733	0.000	0.064
148.00	-12.17	-2.61	0.00	-24.48	0.00	24.48	913.32	456.66	885.99	576.36	25.64	-1.745	0.000	0.056
148.30	-7.59	-1.78	0.00	-22.35	0.00	22.35	911.53	455.77	882.04	573.63	25.75	-1.746	0.000	0.047
150.00	-7.31	-1.74	0.00	-19.33	0.00	19.33	901.40	450.70	859.86	558.24	26.37	-1.754	0.000	0.043
150.00	-7.31	-1.74	0.00	-19.33	0.00	19.33	556.65	278.33	359.38	213.69	26.37	-1.754	0.000	0.104
152.00	-7.06	-1.70	0.00	-15.86	0.00	15.86	556.65	278.33	359.38	213.69	27.11	-1.762	0.000	0.087
154.00	-6.81	-1.66	0.00	-12.46	0.00	12.46	556.65	278.33	359.38	213.69	27.85	-1.783	0.000	0.071
156.00	-6.56	-1.63	0.00	-9.13	0.00	9.13	556.65	278.33	359.38	213.69	28.60	-1.799	0.000	0.055
158.00	-6.31	-1.59	0.00	-5.88	0.00	5.88	556.65	278.33	359.38	213.69	29.36	-1.811	0.000	0.039
160.00	0.00	-1.39	0.00	-2.71	0.00	2.71	556.65	278.33	359.38	213.69	30.12	-1.817	0.000	0.013

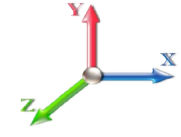
Seismic Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.0E					Iterations 25
Gust Response Factor	1.10			Sds	0.20
Dead Load Factor	1.20	Seismic Load Factor	1.00	Sd1	0.10
Wind Load Factor	0.00	Structure Frequency	0.28	SA	0.03
				Seismic Importance Factor	1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00	RB1	0.00	0.00	0.00	0.00	0.00	
2.00		409.29	0.00	0.01	0.01	4.82	
4.00		406.10	0.00	0.03	0.01	7.88	
6.00		402.91	0.00	0.04	0.02	9.98	
8.00		399.73	0.00	0.04	0.02	11.45	
10.00		396.54	0.01	0.05	0.03	12.51	
12.00		393.35	0.01	0.06	0.03	13.27	
14.00		390.16	0.01	0.06	0.04	13.81	
16.00	Bot - Section 2	386.97	0.02	0.06	0.04	14.19	
16.25	RT1 RB2	97.07	0.02	0.06	0.04	3.57	
18.00	RB3	676.67	0.02	0.07	0.04	25.47	
19.50	RB4	576.11	0.03	0.07	0.04	22.02	
20.00		191.24	0.03	0.07	0.04	7.34	
22.00	Top - Section 1	760.98	0.04	0.07	0.04	29.69	
24.00		380.38	0.04	0.07	0.04	15.03	
26.00		377.19	0.05	0.07	0.04	15.07	
28.00		374.00	0.06	0.07	0.04	15.09	
30.00	RB5	370.82	0.07	0.07	0.04	15.09	
31.00	RT2	184.21	0.07	0.07	0.04	7.53	
32.00		183.42	0.08	0.07	0.04	7.53	
34.00	RT3	364.44	0.09	0.07	0.04	15.11	
35.50	RT4	271.24	0.09	0.07	0.04	11.32	
36.00		90.01	0.10	0.07	0.04	3.77	
38.00		358.06	0.11	0.07	0.04	15.12	
40.00	Appurtenance(s)	364.87	0.12	0.07	0.03	15.55	
42.00		351.69	0.13	0.07	0.03	15.13	
44.00		348.50	0.14	0.07	0.03	15.13	
45.16	RB6	200.67	0.15	0.07	0.03	8.75	
46.00	RT5	144.64	0.16	0.07	0.03	6.33	
48.00		342.12	0.17	0.07	0.03	15.06	
50.00	Bot - Section 3	338.93	0.18	0.06	0.03	14.99	
52.00		677.65	0.20	0.06	0.02	30.00	
54.00		671.27	0.22	0.06	0.02	29.65	
56.00	Top - Section 2	664.89	0.23	0.06	0.02	29.14	
58.00	RT6 RB7	332.34	0.25	0.06	0.02	14.37	
60.00		329.15	0.27	0.05	0.02	13.92	
62.00		325.96	0.28	0.05	0.01	13.35	
64.00		322.78	0.30	0.04	0.01	12.64	
66.00		319.59	0.32	0.04	0.01	11.76	
68.00		316.40	0.34	0.04	0.01	10.71	
70.00		313.21	0.36	0.03	0.01	9.47	
72.00		310.02	0.38	0.02	0.01	8.04	
74.00		306.83	0.40	0.02	0.01	6.42	
76.00		303.64	0.43	0.01	0.01	4.63	
78.00	RT7 RB8	300.46	0.45	0.00	0.01	2.71	
80.00	Top - Section 3	297.27	0.47	-0.01	0.01	0.69	

Seismic Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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82.00		245.49	0.50	-0.01	0.01	-1.13
84.00		242.84	0.52	-0.02	0.01	-2.81
86.00		240.18	0.55	-0.03	0.01	-4.41
88.00		237.52	0.57	-0.04	0.01	-5.88
90.00		234.87	0.60	-0.05	0.01	-7.19
92.00		232.21	0.62	-0.06	0.02	-8.30
94.00		229.55	0.65	-0.07	0.02	-9.20
95.00	Bot - Section 5	113.78	0.67	-0.08	0.02	-4.77
95.58	RT8	132.62	0.67	-0.08	0.03	-5.69
96.00		95.75	0.68	-0.08	0.03	-4.17
98.00		452.75	0.71	-0.09	0.03	-20.93
100.00	Top - Section 4	447.44	0.74	-0.10	0.04	-21.48
102.00		223.20	0.77	-0.11	0.05	-10.92
104.00		220.55	0.80	-0.11	0.05	-10.80
106.00		217.89	0.83	-0.12	0.06	-10.51
108.00		215.23	0.86	-0.12	0.07	-10.05
110.00	Appurtenance(s)	268.57	0.89	-0.12	0.08	-11.93
112.00		209.92	0.93	-0.12	0.10	-8.68
114.00		207.26	0.96	-0.12	0.11	-7.78
115.00	Top - Section 5	102.63	0.98	-0.12	0.12	-3.63
116.00		81.75	0.99	-0.11	0.13	-2.70
118.00		161.90	1.03	-0.10	0.15	-4.49
120.00		159.77	1.06	-0.09	0.17	-3.47
122.00		157.65	1.10	-0.07	0.19	-2.36
124.00		155.52	1.14	-0.05	0.21	-1.17
126.00		153.40	1.17	-0.02	0.23	0.09
128.00		151.27	1.21	0.01	0.26	1.44
130.00		149.15	1.25	0.05	0.29	2.85
132.00		147.02	1.29	0.10	0.32	4.33
133.00	Appurtenance(s)	2549.1	1.31	0.13	0.34	89.05
134.00		72.18	1.33	0.16	0.36	2.93
136.00		142.77	1.37	0.22	0.40	7.48
138.00		140.64	1.41	0.30	0.44	9.14
140.00		138.52	1.45	0.38	0.48	10.86
142.00		136.39	1.49	0.47	0.53	12.62
142.90	Appurtenance(s)	3449.8	1.51	0.52	0.55	341.99
144.00		73.58	1.53	0.58	0.58	7.90
145.00	Top - Section 6	66.34	1.55	0.64	0.61	7.64
146.00		64.22	1.57	0.70	0.63	7.91
148.00		126.88	1.62	0.83	0.69	17.71
148.30	Appurtenance(s)	2089.2	1.62	0.85	0.70	297.00
150.00	Top - Section 7	105.95	1.66	0.98	0.76	16.62
152.00		84.18	1.71	1.14	0.82	14.73
154.00		84.18	1.75	1.32	0.90	16.33
156.00		84.18	1.80	1.52	0.97	17.99
158.00		84.18	1.84	1.74	1.05	19.72
160.00	Appurtenance(s)	1968.6	1.89	1.98	1.14	503.31
Totals:		33,672.6				1,810.3
						Total Wind: 36,503.1

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

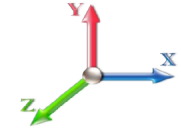
Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 1.2D + 1.0E						Iterations 25
Gust Response Factor	1.10		Sds	0.20		Ss 0.19
Dead Load Factor	1.20	Seismic Load Factor	1.00	Sd1	0.10	S1 0.06
Wind Load Factor	0.00	Structure Frequency	0.28	SA	0.03	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	-49.45	-2.00	0.00	-244.98	0.00	244.98	3683.82	1841.91	7606.69	3756.66		0.00	0.00	0.054
2.00	-48.83	-1.99	0.00	-240.99	0.00	240.99	3671.54	1835.77	7522.06	3714.86		0.00	0.00	0.053
4.00	-48.22	-1.99	0.00	-237.00	0.00	237.00	3659.00	1829.50	7437.30	3673.00		0.00	-0.01	0.053
6.00	-47.62	-1.98	0.00	-233.02	0.00	233.02	3646.20	1823.10	7352.44	3631.09		0.01	-0.01	0.052
8.00	-47.01	-1.98	0.00	-229.05	0.00	229.05	3633.16	1816.58	7267.48	3589.13		0.02	-0.02	0.052
10.00	-46.41	-1.97	0.00	-225.10	0.00	225.10	3619.85	1809.93	7182.43	3547.13		0.03	-0.02	0.051
12.00	-45.82	-1.96	0.00	-221.16	0.00	221.16	3606.29	1803.15	7097.31	3505.10		0.04	-0.03	0.051
14.00	-45.23	-1.95	0.00	-217.25	0.00	217.25	3592.48	1796.24	7012.13	3463.03		0.05	-0.03	0.050
16.00	-44.64	-1.94	0.00	-213.35	0.00	213.35	3578.41	1789.21	6926.91	3420.94		0.07	-0.04	0.050
16.25	-44.51	-1.93	0.00	-212.87	0.00	212.87	3576.63	1788.32	6916.25	3415.68		0.07	-0.04	0.050
18.00	-43.59	-1.91	0.00	-209.48	0.00	209.48	3564.09	1782.04	6841.65	3378.83		0.08	-0.05	0.053
19.50	-42.81	-1.89	0.00	-206.61	0.00	206.61	3553.18	1776.59	6777.69	3347.24		0.10	-0.05	0.045
20.00	-42.55	-1.89	0.00	-205.67	0.00	205.67	3549.51	1774.75	6756.36	3336.71		0.10	-0.05	0.045
22.00	-41.51	-1.86	0.00	-201.90	0.00	201.90	3563.12	1781.56	6835.93	3376.01		0.13	-0.06	0.046
24.00	-40.93	-1.85	0.00	-198.18	0.00	198.18	3548.52	1774.26	6750.65	3333.89		0.15	-0.06	0.044
26.00	-40.35	-1.83	0.00	-194.49	0.00	194.49	3533.67	1766.84	6665.35	3291.77		0.18	-0.06	0.044
28.00	-39.78	-1.82	0.00	-190.82	0.00	190.82	3518.56	1759.28	6580.06	3249.64		0.20	-0.07	0.043
30.00	-39.21	-1.81	0.00	-187.18	0.00	187.18	3503.20	1751.60	6494.78	3207.53		0.23	-0.07	0.034
31.00	-38.93	-1.80	0.00	-185.37	0.00	185.37	3495.43	1747.71	6452.15	3186.48		0.25	-0.08	0.039
32.00	-38.65	-1.80	0.00	-183.57	0.00	183.57	3487.59	1743.79	6409.53	3165.43		0.27	-0.08	0.039
34.00	-38.09	-1.78	0.00	-179.98	0.00	179.98	3471.72	1735.86	6324.32	3123.35		0.30	-0.08	0.047
35.50	-37.67	-1.77	0.00	-177.30	0.00	177.30	3459.65	1729.82	6260.45	3091.80		0.33	-0.09	0.047
36.00	-37.53	-1.77	0.00	-176.42	0.00	176.42	3455.59	1727.80	6239.16	3081.29		0.34	-0.09	0.047
38.00	-36.98	-1.76	0.00	-172.88	0.00	172.88	3439.21	1719.61	6154.07	3039.26		0.37	-0.09	0.047
40.00	-36.42	-1.74	0.00	-169.36	0.00	169.36	3422.57	1711.29	6069.05	2997.28		0.41	-0.10	0.046
42.00	-35.88	-1.73	0.00	-165.87	0.00	165.87	3405.68	1702.84	5984.13	2955.34		0.45	-0.10	0.046
44.00	-35.33	-1.72	0.00	-162.41	0.00	162.41	3388.54	1694.27	5899.30	2913.44		0.50	-0.11	0.045
45.16	-35.02	-1.71	0.00	-160.41	0.00	160.41	3378.48	1689.24	5850.15	2889.17		0.53	-0.11	0.033
46.00	-34.80	-1.71	0.00	-158.98	0.00	158.98	3371.14	1685.57	5814.59	2871.61		0.55	-0.11	0.042
48.00	-34.26	-1.69	0.00	-155.57	0.00	155.57	3353.48	1676.74	5730.00	2829.83		0.59	-0.12	0.042
50.00	-33.74	-1.68	0.00	-152.18	0.00	152.18	3335.57	1667.79	5645.55	2788.13		0.65	-0.12	0.041
52.00	-32.80	-1.65	0.00	-148.82	0.00	148.82	3317.41	1658.70	5561.26	2746.50		0.70	-0.13	0.040
54.00	-31.87	-1.62	0.00	-145.52	0.00	145.52	3298.98	1649.49	5477.12	2704.94		0.75	-0.13	0.040
56.00	-30.95	-1.59	0.00	-142.28	0.00	142.28	3316.18	1658.09	5555.61	2743.71		0.81	-0.14	0.040
58.00	-30.43	-1.58	0.00	-139.09	0.00	139.09	3297.74	1648.87	5471.49	2702.16		0.87	-0.14	0.042
60.00	-29.91	-1.57	0.00	-135.93	0.00	135.93	3279.05	1639.52	5387.54	2660.71		0.93	-0.15	0.041
62.00	-29.40	-1.56	0.00	-132.80	0.00	132.80	3260.10	1630.05	5303.79	2619.34		0.99	-0.15	0.041
64.00	-28.89	-1.54	0.00	-129.68	0.00	129.68	3240.90	1620.45	5220.23	2578.08		1.06	-0.16	0.040
66.00	-28.38	-1.53	0.00	-126.60	0.00	126.60	3221.44	1610.72	5136.89	2536.92		1.13	-0.17	0.040
68.00	-27.88	-1.52	0.00	-123.53	0.00	123.53	3201.73	1600.86	5053.77	2495.87		1.20	-0.17	0.040
70.00	-27.38	-1.52	0.00	-120.48	0.00	120.48	3181.76	1590.88	4970.89	2454.94		1.27	-0.18	0.039
72.00	-26.89	-1.51	0.00	-117.45	0.00	117.45	3161.54	1580.77	4888.26	2414.13		1.35	-0.18	0.039
74.00	-26.40	-1.50	0.00	-114.43	0.00	114.43	3141.06	1570.53	4805.90	2373.45		1.42	-0.19	0.038
76.00	-25.91	-1.50	0.00	-111.42	0.00	111.42	3120.33	1560.16	4723.81	2332.91		1.50	-0.19	0.038
78.00	-25.43	-1.50	0.00	-108.42	0.00	108.42	3099.34	1549.67	4642.00	2292.51		1.59	-0.20	0.037
80.00	-24.95	-1.50	0.00	-105.43	0.00	105.43	3078.09	1539.05	4560.50	2252.26		1.67	-0.20	0.036
80.00	-24.95	-1.50	0.00	-105.43	0.00	105.43	2384.58	1192.29	3545.27	1750.88		1.67	-0.20	0.039

Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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82.00	-24.53	-1.50	0.00	-102.43	0.00	102.43	2370.62	1185.31	3486.26	1721.73	1.76	-0.21	0.043
84.00	-24.11	-1.50	0.00	-99.43	0.00	99.43	2356.42	1178.21	3427.33	1692.63	1.85	-0.22	0.043
86.00	-23.70	-1.50	0.00	-96.43	0.00	96.43	2341.95	1170.98	3368.48	1663.57	1.94	-0.22	0.042
88.00	-23.30	-1.50	0.00	-93.43	0.00	93.43	2327.23	1163.62	3309.75	1634.56	2.03	-0.23	0.041
90.00	-22.89	-1.50	0.00	-90.43	0.00	90.43	2312.26	1156.13	3251.12	1605.61	2.13	-0.23	0.040
92.00	-22.49	-1.50	0.00	-87.42	0.00	87.42	2297.03	1148.52	3192.63	1576.72	2.23	-0.24	0.040
94.00	-22.09	-1.50	0.00	-84.42	0.00	84.42	2281.55	1140.77	3134.28	1547.90	2.33	-0.25	0.039
95.00	-21.89	-1.50	0.00	-82.91	0.00	82.91	2273.71	1136.85	3105.16	1533.52	2.38	-0.25	0.038
95.58	-21.70	-1.50	0.00	-82.04	0.00	82.04	2269.13	1134.57	3088.29	1525.19	2.41	-0.25	0.038
95.58	-21.70	-1.50	0.00	-82.04	0.00	82.04	2269.13	1134.57	3088.29	1525.19	2.41	-0.25	0.038
96.00	-21.56	-1.50	0.00	-81.41	0.00	81.41	2265.81	1132.90	3076.09	1519.16	2.43	-0.25	0.063
98.00	-20.89	-1.51	0.00	-78.40	0.00	78.40	2249.81	1124.91	3018.05	1490.50	2.54	-0.26	0.062
100.00	-20.23	-1.51	0.00	-75.39	0.00	75.39	2259.61	1129.81	3053.48	1508.00	2.65	-0.27	0.059
102.00	-19.84	-1.51	0.00	-72.38	0.00	72.38	2243.52	1121.76	2995.52	1479.37	2.77	-0.28	0.058
104.00	-19.46	-1.51	0.00	-69.37	0.00	69.37	2227.17	1113.59	2937.74	1450.84	2.89	-0.29	0.057
106.00	-19.07	-1.51	0.00	-66.35	0.00	66.35	2210.57	1105.28	2880.15	1422.40	3.01	-0.30	0.055
108.00	-18.69	-1.51	0.00	-63.33	0.00	63.33	2193.71	1096.86	2822.78	1394.06	3.14	-0.31	0.054
110.00	-18.25	-1.51	0.00	-60.31	0.00	60.31	2176.60	1088.30	2765.62	1365.84	3.27	-0.32	0.053
112.00	-17.87	-1.51	0.00	-57.29	0.00	57.29	2159.23	1079.61	2708.70	1337.73	3.40	-0.33	0.051
114.00	-17.50	-1.51	0.00	-54.26	0.00	54.26	2141.61	1070.80	2652.02	1309.73	3.54	-0.33	0.050
115.00	-17.32	-1.51	0.00	-52.75	0.00	52.75	2132.70	1066.35	2623.78	1295.79	3.61	-0.34	0.049
115.00	-17.32	-1.51	0.00	-52.75	0.00	52.75	1556.62	778.31	1923.08	949.74	3.61	-0.34	0.067
116.00	-17.16	-1.51	0.00	-51.24	0.00	51.24	1551.43	775.71	1904.13	940.38	3.68	-0.34	0.066
118.00	-16.84	-1.51	0.00	-48.21	0.00	48.21	1540.84	770.42	1866.26	921.68	3.83	-0.35	0.063
120.00	-16.53	-1.52	0.00	-45.19	0.00	45.19	1529.99	765.00	1828.43	902.99	3.98	-0.36	0.061
122.00	-16.22	-1.52	0.00	-42.16	0.00	42.16	1518.89	759.45	1790.65	884.33	4.14	-0.37	0.058
124.00	-15.91	-1.52	0.00	-39.12	0.00	39.12	1507.54	753.77	1752.93	865.70	4.29	-0.38	0.056
126.00	-15.61	-1.52	0.00	-36.09	0.00	36.09	1495.93	747.96	1715.28	847.11	4.46	-0.39	0.053
128.00	-15.30	-1.52	0.00	-33.06	0.00	33.06	1484.06	742.03	1677.72	828.56	4.62	-0.40	0.050
130.00	-15.00	-1.51	0.00	-30.03	0.00	30.03	1471.95	735.97	1640.26	810.06	4.79	-0.41	0.047
132.00	-14.70	-1.51	0.00	-27.00	0.00	27.00	1459.57	729.79	1602.91	791.62	4.97	-0.42	0.044
133.00	-11.59	-1.40	0.00	-25.49	0.00	25.49	1453.29	726.64	1584.28	782.42	5.06	-0.42	0.041
134.00	-11.45	-1.39	0.00	-24.09	0.00	24.09	1446.94	723.47	1565.68	773.23	5.15	-0.43	0.039
136.00	-11.19	-1.39	0.00	-21.31	0.00	21.31	1434.06	717.03	1528.59	754.91	5.33	-0.43	0.036
138.00	-10.93	-1.38	0.00	-18.53	0.00	18.53	1420.92	710.46	1491.65	736.67	5.51	-0.44	0.033
140.00	-10.67	-1.36	0.00	-15.78	0.00	15.78	1407.52	703.76	1454.87	718.50	5.69	-0.45	0.030
142.00	-10.41	-1.35	0.00	-13.05	0.00	13.05	1393.87	696.94	1418.26	700.42	5.88	-0.45	0.026
142.90	-6.23	-0.98	0.00	-11.84	0.00	11.84	1387.65	693.82	1401.84	692.32	5.97	-0.45	0.022
144.00	-6.11	-0.97	0.00	-10.77	0.00	10.77	1379.97	689.99	1381.83	682.44	6.07	-0.45	0.020
145.00	-6.00	-0.96	0.00	-9.80	0.00	9.80	1372.92	686.46	1363.70	673.48	6.17	-0.46	0.019
145.00	-6.00	-0.96	0.00	-9.80	0.00	9.80	931.20	465.60	925.89	604.09	6.17	-0.46	0.023
146.00	-5.90	-0.95	0.00	-8.84	0.00	8.84	925.24	462.62	912.49	594.77	6.26	-0.46	0.021
148.00	-5.69	-0.93	0.00	-6.94	0.00	6.94	913.32	456.66	885.99	576.36	6.45	-0.46	0.018
148.30	-3.17	-0.61	0.00	-6.66	0.00	6.66	911.53	455.77	882.04	573.63	6.48	-0.46	0.015
150.00	-3.01	-0.60	0.00	-5.62	0.00	5.62	901.40	450.70	859.86	558.24	6.65	-0.46	0.013
150.00	-3.01	-0.60	0.00	-5.62	0.00	5.62	556.65	278.33	359.38	213.69	6.65	-0.46	0.032
152.00	-2.86	-0.58	0.00	-4.42	0.00	4.42	556.65	278.33	359.38	213.69	6.84	-0.47	0.026
154.00	-2.71	-0.56	0.00	-3.26	0.00	3.26	556.65	278.33	359.38	213.69	7.04	-0.47	0.020
156.00	-2.56	-0.54	0.00	-2.14	0.00	2.14	556.65	278.33	359.38	213.69	7.24	-0.48	0.015
158.00	-2.41	-0.52	0.00	-1.05	0.00	1.05	556.65	278.33	359.38	213.69	7.44	-0.48	0.009
160.00	0.00	-0.50	0.00	0.00	0.00	0.00	556.65	278.33	359.38	213.69	7.64	-0.48	0.000

Seismic Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 0.9D + 1.0E

Iterations 25

Gust Response Factor 1.10	Sds 0.20	Ss 0.19	
Dead Load Factor 0.90	Seismic Load Factor 1.00	Sd1 0.10	
Wind Load Factor 0.00	Structure Frequency 0.28	SA 0.03	

Seismic Importance Factor 1.00

Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00	RB1	0.00	0.00	0.00	0.00	0.00	
2.00		409.29	0.00	0.01	0.01	4.82	
4.00		406.10	0.00	0.03	0.01	7.88	
6.00		402.91	0.00	0.04	0.02	9.98	
8.00		399.73	0.00	0.04	0.02	11.45	
10.00		396.54	0.01	0.05	0.03	12.51	
12.00		393.35	0.01	0.06	0.03	13.27	
14.00		390.16	0.01	0.06	0.04	13.81	
16.00	Bot - Section 2	386.97	0.02	0.06	0.04	14.19	
16.25	RT1 RB2	97.07	0.02	0.06	0.04	3.57	
18.00	RB3	676.67	0.02	0.07	0.04	25.47	
19.50	RB4	576.11	0.03	0.07	0.04	22.02	
20.00		191.24	0.03	0.07	0.04	7.34	
22.00	Top - Section 1	760.98	0.04	0.07	0.04	29.69	
24.00		380.38	0.04	0.07	0.04	15.03	
26.00		377.19	0.05	0.07	0.04	15.07	
28.00		374.00	0.06	0.07	0.04	15.09	
30.00	RB5	370.82	0.07	0.07	0.04	15.09	
31.00	RT2	184.21	0.07	0.07	0.04	7.53	
32.00		183.42	0.08	0.07	0.04	7.53	
34.00	RT3	364.44	0.09	0.07	0.04	15.11	
35.50	RT4	271.24	0.09	0.07	0.04	11.32	
36.00		90.01	0.10	0.07	0.04	3.77	
38.00		358.06	0.11	0.07	0.04	15.12	
40.00	Appurtenance(s)	364.87	0.12	0.07	0.03	15.55	
42.00		351.69	0.13	0.07	0.03	15.13	
44.00		348.50	0.14	0.07	0.03	15.13	
45.16	RB6	200.67	0.15	0.07	0.03	8.75	
46.00	RT5	144.64	0.16	0.07	0.03	6.33	
48.00		342.12	0.17	0.07	0.03	15.06	
50.00	Bot - Section 3	338.93	0.18	0.06	0.03	14.99	
52.00		677.65	0.20	0.06	0.02	30.00	
54.00		671.27	0.22	0.06	0.02	29.65	
56.00	Top - Section 2	664.89	0.23	0.06	0.02	29.14	
58.00	RT6 RB7	332.34	0.25	0.06	0.02	14.37	
60.00		329.15	0.27	0.05	0.02	13.92	
62.00		325.96	0.28	0.05	0.01	13.35	
64.00		322.78	0.30	0.04	0.01	12.64	
66.00		319.59	0.32	0.04	0.01	11.76	
68.00		316.40	0.34	0.04	0.01	10.71	
70.00		313.21	0.36	0.03	0.01	9.47	
72.00		310.02	0.38	0.02	0.01	8.04	
74.00		306.83	0.40	0.02	0.01	6.42	
76.00		303.64	0.43	0.01	0.01	4.63	
78.00	RT7 RB8	300.46	0.45	0.00	0.01	2.71	
80.00	Top - Section 3	297.27	0.47	-0.01	0.01	0.69	

Seismic Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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82.00		245.49	0.50	-0.01	0.01	-1.13
84.00		242.84	0.52	-0.02	0.01	-2.81
86.00		240.18	0.55	-0.03	0.01	-4.41
88.00		237.52	0.57	-0.04	0.01	-5.88
90.00		234.87	0.60	-0.05	0.01	-7.19
92.00		232.21	0.62	-0.06	0.02	-8.30
94.00		229.55	0.65	-0.07	0.02	-9.20
95.00	Bot - Section 5	113.78	0.67	-0.08	0.02	-4.77
95.58	RT8	132.62	0.67	-0.08	0.03	-5.69
96.00		95.75	0.68	-0.08	0.03	-4.17
98.00		452.75	0.71	-0.09	0.03	-20.93
100.00	Top - Section 4	447.44	0.74	-0.10	0.04	-21.48
102.00		223.20	0.77	-0.11	0.05	-10.92
104.00		220.55	0.80	-0.11	0.05	-10.80
106.00		217.89	0.83	-0.12	0.06	-10.51
108.00		215.23	0.86	-0.12	0.07	-10.05
110.00	Appurtenance(s)	268.57	0.89	-0.12	0.08	-11.93
112.00		209.92	0.93	-0.12	0.10	-8.68
114.00		207.26	0.96	-0.12	0.11	-7.78
115.00	Top - Section 5	102.63	0.98	-0.12	0.12	-3.63
116.00		81.75	0.99	-0.11	0.13	-2.70
118.00		161.90	1.03	-0.10	0.15	-4.49
120.00		159.77	1.06	-0.09	0.17	-3.47
122.00		157.65	1.10	-0.07	0.19	-2.36
124.00		155.52	1.14	-0.05	0.21	-1.17
126.00		153.40	1.17	-0.02	0.23	0.09
128.00		151.27	1.21	0.01	0.26	1.44
130.00		149.15	1.25	0.05	0.29	2.85
132.00		147.02	1.29	0.10	0.32	4.33
133.00	Appurtenance(s)	2549.1	1.31	0.13	0.34	89.05
134.00		72.18	1.33	0.16	0.36	2.93
136.00		142.77	1.37	0.22	0.40	7.48
138.00		140.64	1.41	0.30	0.44	9.14
140.00		138.52	1.45	0.38	0.48	10.86
142.00		136.39	1.49	0.47	0.53	12.62
142.90	Appurtenance(s)	3449.8	1.51	0.52	0.55	341.99
144.00		73.58	1.53	0.58	0.58	7.90
145.00	Top - Section 6	66.34	1.55	0.64	0.61	7.64
146.00		64.22	1.57	0.70	0.63	7.91
148.00		126.88	1.62	0.83	0.69	17.71
148.30	Appurtenance(s)	2089.2	1.62	0.85	0.70	297.00
150.00	Top - Section 7	105.95	1.66	0.98	0.76	16.62
152.00		84.18	1.71	1.14	0.82	14.73
154.00		84.18	1.75	1.32	0.90	16.33
156.00		84.18	1.80	1.52	0.97	17.99
158.00		84.18	1.84	1.74	1.05	19.72
160.00	Appurtenance(s)	1968.6	1.89	1.98	1.14	503.31
Totals:		33,672.6				1,810.3
						Total Wind: 36,503.1

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

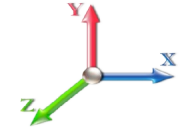
Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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Load Case: 0.9D + 1.0E								Iterations 25
Gust Response Factor	1.10					Sds	0.20	Ss 0.19
Dead Load Factor	0.90	Seismic Load Factor	1.00	Sd1	0.10	S1	0.06	
Wind Load Factor	0.00	Structure Frequency	0.28	SA	0.03	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	-37.09	-1.99	0.00	-242.07	0.00	242.07	3683.82	1841.91	7606.69	3756.66	0.00	0.00	0.00	0.051
2.00	-36.63	-1.99	0.00	-238.08	0.00	238.08	3671.54	1835.77	7522.06	3714.86	0.00	0.00	0.00	0.050
4.00	-36.17	-1.99	0.00	-234.10	0.00	234.10	3659.00	1829.50	7437.30	3673.00	0.00	0.00	-0.01	0.050
6.00	-35.71	-1.98	0.00	-230.12	0.00	230.12	3646.20	1823.10	7352.44	3631.09	0.01	0.01	-0.01	0.049
8.00	-35.26	-1.97	0.00	-226.16	0.00	226.16	3633.16	1816.58	7267.48	3589.13	0.02	0.02	-0.02	0.049
10.00	-34.81	-1.96	0.00	-222.21	0.00	222.21	3619.85	1809.93	7182.43	3547.13	0.03	0.03	-0.02	0.048
12.00	-34.36	-1.95	0.00	-218.29	0.00	218.29	3606.29	1803.15	7097.31	3505.10	0.04	0.04	-0.03	0.048
14.00	-33.92	-1.94	0.00	-214.38	0.00	214.38	3592.48	1796.24	7012.13	3463.03	0.05	0.05	-0.03	0.048
16.00	-33.48	-1.93	0.00	-210.50	0.00	210.50	3578.41	1789.21	6926.91	3420.94	0.07	0.07	-0.04	0.047
16.25	-33.38	-1.93	0.00	-210.02	0.00	210.02	3576.63	1788.32	6916.25	3415.68	0.07	0.07	-0.04	0.056
18.00	-32.69	-1.90	0.00	-206.65	0.00	206.65	3564.09	1782.04	6841.65	3378.83	0.08	0.08	-0.04	0.051
19.50	-32.10	-1.88	0.00	-203.80	0.00	203.80	3553.18	1776.59	6777.69	3347.24	0.10	0.10	-0.05	0.043
20.00	-31.91	-1.88	0.00	-202.85	0.00	202.85	3549.51	1774.75	6756.36	3336.71	0.10	0.10	-0.05	0.043
22.00	-31.13	-1.85	0.00	-199.10	0.00	199.10	3563.12	1781.56	6835.93	3376.01	0.12	0.12	-0.05	0.043
24.00	-30.70	-1.83	0.00	-195.41	0.00	195.41	3548.52	1774.26	6750.65	3333.89	0.15	0.15	-0.06	0.042
26.00	-30.27	-1.82	0.00	-191.74	0.00	191.74	3533.67	1766.84	6665.35	3291.77	0.17	0.17	-0.06	0.041
28.00	-29.84	-1.81	0.00	-188.09	0.00	188.09	3518.56	1759.28	6580.06	3249.64	0.20	0.20	-0.07	0.041
30.00	-29.41	-1.79	0.00	-184.48	0.00	184.48	3503.20	1751.60	6494.78	3207.53	0.23	0.23	-0.07	0.032
31.00	-29.20	-1.79	0.00	-182.68	0.00	182.68	3495.43	1747.71	6452.15	3186.48	0.25	0.25	-0.07	0.037
32.00	-28.99	-1.78	0.00	-180.89	0.00	180.89	3487.59	1743.79	6409.53	3165.43	0.26	0.26	-0.08	0.037
34.00	-28.57	-1.77	0.00	-177.33	0.00	177.33	3471.72	1735.86	6324.32	3123.35	0.30	0.30	-0.08	0.045
35.50	-28.25	-1.76	0.00	-174.68	0.00	174.68	3459.65	1729.82	6260.45	3091.80	0.32	0.32	-0.08	0.045
36.00	-28.15	-1.76	0.00	-173.80	0.00	173.80	3455.59	1727.80	6239.16	3081.29	0.33	0.33	-0.09	0.045
38.00	-27.74	-1.74	0.00	-170.29	0.00	170.29	3439.21	1719.61	6154.07	3039.26	0.37	0.37	-0.09	0.044
40.00	-27.31	-1.73	0.00	-166.81	0.00	166.81	3422.57	1711.29	6069.05	2997.28	0.41	0.41	-0.10	0.044
42.00	-26.91	-1.71	0.00	-163.35	0.00	163.35	3405.68	1702.84	5984.13	2955.34	0.45	0.45	-0.10	0.043
44.00	-26.50	-1.70	0.00	-159.92	0.00	159.92	3388.54	1694.27	5899.30	2913.44	0.49	0.49	-0.11	0.043
45.16	-26.27	-1.69	0.00	-157.95	0.00	157.95	3378.48	1689.24	5850.15	2889.17	0.52	0.52	-0.11	0.031
46.00	-26.10	-1.69	0.00	-156.53	0.00	156.53	3371.14	1685.57	5814.59	2871.61	0.54	0.54	-0.11	0.040
48.00	-25.70	-1.67	0.00	-153.15	0.00	153.15	3353.48	1676.74	5730.00	2829.83	0.59	0.59	-0.12	0.040
50.00	-25.30	-1.66	0.00	-149.80	0.00	149.80	3335.57	1667.79	5645.55	2788.13	0.64	0.64	-0.12	0.039
52.00	-24.60	-1.63	0.00	-146.48	0.00	146.48	3317.41	1658.70	5561.26	2746.50	0.69	0.69	-0.13	0.038
54.00	-23.90	-1.60	0.00	-143.22	0.00	143.22	3298.98	1649.49	5477.12	2704.94	0.74	0.74	-0.13	0.038
56.00	-23.21	-1.57	0.00	-140.02	0.00	140.02	3316.18	1658.09	5555.61	2743.71	0.80	0.80	-0.14	0.038
58.00	-22.82	-1.56	0.00	-136.87	0.00	136.87	3297.74	1648.87	5471.49	2702.16	0.86	0.86	-0.14	0.040
60.00	-22.43	-1.55	0.00	-133.75	0.00	133.75	3279.05	1639.52	5387.54	2660.71	0.92	0.92	-0.15	0.039
62.00	-22.05	-1.53	0.00	-130.66	0.00	130.66	3260.10	1630.05	5303.79	2619.34	0.98	0.98	-0.15	0.039
64.00	-21.67	-1.52	0.00	-127.59	0.00	127.59	3240.90	1620.45	5220.23	2578.08	1.05	1.05	-0.16	0.038
66.00	-21.29	-1.51	0.00	-124.54	0.00	124.54	3221.44	1610.72	5136.89	2536.92	1.11	1.11	-0.16	0.038
68.00	-20.91	-1.50	0.00	-121.52	0.00	121.52	3201.73	1600.86	5053.77	2495.87	1.18	1.18	-0.17	0.037
70.00	-20.53	-1.49	0.00	-118.51	0.00	118.51	3181.76	1590.88	4970.89	2454.94	1.25	1.25	-0.17	0.037
72.00	-20.16	-1.49	0.00	-115.52	0.00	115.52	3161.54	1580.77	4888.26	2414.13	1.33	1.33	-0.18	0.037
74.00	-19.80	-1.48	0.00	-112.55	0.00	112.55	3141.06	1570.53	4805.90	2373.45	1.40	1.40	-0.18	0.036
76.00	-19.43	-1.48	0.00	-109.59	0.00	109.59	3120.33	1560.16	4723.81	2332.91	1.48	1.48	-0.19	0.036
78.00	-19.07	-1.47	0.00	-106.63	0.00	106.63	3099.34	1549.67	4642.00	2292.51	1.56	1.56	-0.20	0.035
80.00	-18.71	-1.47	0.00	-103.69	0.00	103.69	3078.09	1539.05	4560.50	2252.26	1.65	1.65	-0.20	0.035
80.00	-18.71	-1.47	0.00	-103.69	0.00	103.69	2384.58	1192.29	3545.27	1750.88	1.65	1.65	-0.20	0.037

Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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82.00	-18.40	-1.48	0.00	-100.74	0.00	100.74	2370.62	1185.31	3486.26	1721.73	1.73	-0.21	0.041
84.00	-18.08	-1.48	0.00	-97.79	0.00	97.79	2356.42	1178.21	3427.33	1692.63	1.82	-0.21	0.040
86.00	-17.78	-1.48	0.00	-94.83	0.00	94.83	2341.95	1170.98	3368.48	1663.57	1.91	-0.22	0.040
88.00	-17.47	-1.48	0.00	-91.88	0.00	91.88	2327.23	1163.62	3309.75	1634.56	2.00	-0.22	0.039
90.00	-17.17	-1.48	0.00	-88.93	0.00	88.93	2312.26	1156.13	3251.12	1605.61	2.10	-0.23	0.038
92.00	-16.87	-1.48	0.00	-85.97	0.00	85.97	2297.03	1148.52	3192.63	1576.72	2.19	-0.24	0.037
94.00	-16.57	-1.48	0.00	-83.01	0.00	83.01	2281.55	1140.77	3134.28	1547.90	2.29	-0.24	0.037
95.00	-16.42	-1.48	0.00	-81.53	0.00	81.53	2273.71	1136.85	3105.16	1533.52	2.35	-0.24	0.036
95.58	-16.27	-1.48	0.00	-80.68	0.00	80.68	2269.13	1134.57	3088.29	1525.19	2.38	-0.25	0.036
95.58	-16.27	-1.48	0.00	-80.68	0.00	80.68	2269.13	1134.57	3088.29	1525.19	2.38	-0.25	0.036
96.00	-16.17	-1.48	0.00	-80.06	0.00	80.06	2265.81	1132.90	3076.09	1519.16	2.40	-0.25	0.060
98.00	-15.67	-1.48	0.00	-77.10	0.00	77.10	2249.81	1124.91	3018.05	1490.50	2.50	-0.26	0.059
100.00	-15.17	-1.48	0.00	-74.14	0.00	74.14	2259.61	1129.81	3053.48	1508.00	2.61	-0.27	0.056
102.00	-14.88	-1.48	0.00	-71.18	0.00	71.18	2243.52	1121.76	2995.52	1479.37	2.73	-0.28	0.055
104.00	-14.59	-1.48	0.00	-68.21	0.00	68.21	2227.17	1113.59	2937.74	1450.84	2.84	-0.29	0.054
106.00	-14.30	-1.48	0.00	-65.25	0.00	65.25	2210.57	1105.28	2880.15	1422.40	2.97	-0.29	0.052
108.00	-14.02	-1.48	0.00	-62.28	0.00	62.28	2193.71	1096.86	2822.78	1394.06	3.09	-0.30	0.051
110.00	-13.68	-1.48	0.00	-59.32	0.00	59.32	2176.60	1088.30	2765.62	1365.84	3.22	-0.31	0.050
112.00	-13.40	-1.48	0.00	-56.35	0.00	56.35	2159.23	1079.61	2708.70	1337.73	3.35	-0.32	0.048
114.00	-13.12	-1.48	0.00	-53.38	0.00	53.38	2141.61	1070.80	2652.02	1309.73	3.49	-0.33	0.047
115.00	-12.99	-1.48	0.00	-51.89	0.00	51.89	2132.70	1066.35	2623.78	1295.79	3.56	-0.33	0.046
115.00	-12.99	-1.48	0.00	-51.89	0.00	51.89	1556.62	778.31	1923.08	949.74	3.56	-0.33	0.063
116.00	-12.87	-1.49	0.00	-50.41	0.00	50.41	1551.43	775.71	1904.13	940.38	3.63	-0.34	0.062
118.00	-12.63	-1.49	0.00	-47.44	0.00	47.44	1540.84	770.42	1866.26	921.68	3.77	-0.35	0.060
120.00	-12.40	-1.49	0.00	-44.46	0.00	44.46	1529.99	765.00	1828.43	902.99	3.92	-0.36	0.057
122.00	-12.16	-1.49	0.00	-41.49	0.00	41.49	1518.89	759.45	1790.65	884.33	4.07	-0.37	0.055
124.00	-11.93	-1.49	0.00	-38.51	0.00	38.51	1507.54	753.77	1752.93	865.70	4.23	-0.38	0.052
126.00	-11.70	-1.49	0.00	-35.54	0.00	35.54	1495.93	747.96	1715.28	847.11	4.39	-0.39	0.050
128.00	-11.47	-1.49	0.00	-32.56	0.00	32.56	1484.06	742.03	1677.72	828.56	4.56	-0.40	0.047
130.00	-11.25	-1.48	0.00	-29.58	0.00	29.58	1471.95	735.97	1640.26	810.06	4.72	-0.40	0.044
132.00	-11.03	-1.48	0.00	-26.62	0.00	26.62	1459.57	729.79	1602.91	791.62	4.89	-0.41	0.041
133.00	-8.69	-1.37	0.00	-25.14	0.00	25.14	1453.29	726.64	1584.28	782.42	4.98	-0.42	0.038
134.00	-8.59	-1.37	0.00	-23.76	0.00	23.76	1446.94	723.47	1565.68	773.23	5.07	-0.42	0.037
136.00	-8.39	-1.36	0.00	-21.02	0.00	21.02	1434.06	717.03	1528.59	754.91	5.25	-0.43	0.034
138.00	-8.19	-1.35	0.00	-18.29	0.00	18.29	1420.92	710.46	1491.65	736.67	5.43	-0.43	0.031
140.00	-8.00	-1.34	0.00	-15.58	0.00	15.58	1407.52	703.76	1454.87	718.50	5.61	-0.44	0.027
142.00	-7.81	-1.33	0.00	-12.90	0.00	12.90	1393.87	696.94	1418.26	700.42	5.79	-0.44	0.024
142.90	-4.67	-0.96	0.00	-11.70	0.00	11.70	1387.65	693.82	1401.84	692.32	5.88	-0.45	0.020
144.00	-4.58	-0.95	0.00	-10.64	0.00	10.64	1379.97	689.99	1381.83	682.44	5.98	-0.45	0.019
145.00	-4.50	-0.95	0.00	-9.69	0.00	9.69	1372.92	686.46	1363.70	673.48	6.07	-0.45	0.018
145.00	-4.50	-0.95	0.00	-9.69	0.00	9.69	931.20	465.60	925.89	604.09	6.07	-0.45	0.021
146.00	-4.42	-0.94	0.00	-8.74	0.00	8.74	925.24	462.62	912.49	594.77	6.17	-0.45	0.019
148.00	-4.26	-0.92	0.00	-6.87	0.00	6.87	913.32	456.66	885.99	576.36	6.36	-0.45	0.017
148.30	-2.38	-0.61	0.00	-6.59	0.00	6.59	911.53	455.77	882.04	573.63	6.39	-0.46	0.014
150.00	-2.25	-0.59	0.00	-5.56	0.00	5.56	901.40	450.70	859.86	558.24	6.55	-0.46	0.012
150.00	-2.25	-0.59	0.00	-5.56	0.00	5.56	556.65	278.33	359.38	213.69	6.55	-0.46	0.030
152.00	-2.14	-0.57	0.00	-4.38	0.00	4.38	556.65	278.33	359.38	213.69	6.74	-0.46	0.024
154.00	-2.03	-0.56	0.00	-3.23	0.00	3.23	556.65	278.33	359.38	213.69	6.94	-0.47	0.019
156.00	-1.92	-0.54	0.00	-2.11	0.00	2.11	556.65	278.33	359.38	213.69	7.13	-0.47	0.013
158.00	-1.80	-0.52	0.00	-1.04	0.00	1.04	556.65	278.33	359.38	213.69	7.33	-0.47	0.008
160.00	0.00	-0.50	0.00	0.00	0.00	0.00	556.65	278.33	359.38	213.69	7.53	-0.47	0.000

Wind Loading - Shaft

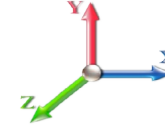
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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	1.00	0.70	6.129	6.74	218.17	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.70	6.129	6.74	216.49	1.148 *	0.000	2.00	8.659	9.94	67.0	0.0	409.3
4.00		1.00	0.70	6.129	6.74	214.81	1.151 *	0.000	2.00	8.592	9.89	66.7	0.0	406.1
6.00		1.00	0.70	6.129	6.74	213.13	1.155 *	0.000	2.00	8.525	9.84	66.4	0.0	402.9
8.00		1.00	0.70	6.129	6.74	211.45	1.158 *	0.000	2.00	8.458	9.80	66.0	0.0	399.7
10.00		1.00	0.70	6.129	6.74	209.77	1.162 *	0.000	2.00	8.391	9.75	65.7	0.0	396.5
12.00		1.00	0.70	6.129	6.74	208.09	1.166 *	0.000	2.00	8.324	9.70	65.4	0.0	393.3
14.00		1.00	0.70	6.129	6.74	206.40	1.169 *	0.000	2.00	8.257	9.65	65.1	0.0	390.2
16.00	Bot - Section 2	1.00	0.70	6.129	6.74	204.72	1.173 *	0.000	2.00	8.190	9.61	64.8	0.0	387.0
16.25	RT1 RB2	1.00	0.70	6.129	6.74	204.51	1.175 *	0.000	0.25	1.035	1.22	8.2	0.0	97.1
18.00	RB3	1.00	0.70	6.129	6.74	203.04	1.177 *	0.000	1.75	7.217	8.50	57.3	0.0	676.7
19.50	RB4	1.00	0.70	6.129	6.74	201.78	1.181 *	0.000	1.50	6.145	7.25	48.9	0.0	576.1
20.00		1.00	0.70	6.129	6.74	201.36	1.183 *	0.000	0.50	2.040	2.41	16.3	0.0	191.2
22.00	Top - Section 1	1.00	0.70	6.129	6.74	199.68	1.185 *	0.000	2.00	8.118	9.62	64.9	0.0	761.0
24.00		1.00	0.70	6.129	6.74	201.25	1.181 *	0.000	2.00	8.052	9.51	64.1	0.0	380.4
26.00		1.00	0.70	6.129	6.74	199.57	1.185 *	0.000	2.00	7.985	9.46	63.8	0.0	377.2
28.00		1.00	0.70	6.129	6.74	197.89	1.189 *	0.000	2.00	7.918	9.42	63.5	0.0	374.0
30.00	RB5	1.00	0.70	6.134	6.75	196.29	1.194 *	0.000	2.00	7.851	9.37	63.2	0.0	370.8
31.00	RT2	1.00	0.71	6.192	6.81	196.37	1.197 *	0.000	1.00	3.900	4.67	31.8	0.0	184.2
32.00		1.00	0.71	6.248	6.87	196.41	1.199 *	0.000	1.00	3.883	4.66	32.0	0.0	183.4
34.00	RT3	1.00	0.73	6.357	6.99	196.41	1.040 *	0.000	2.00	7.717	8.03	56.1	0.0	364.4
35.50	RT4	1.00	0.74	6.436	7.08	196.34	1.043 *	0.000	1.50	5.744	5.99	42.4	0.0	271.2
36.00		1.00	0.74	6.462	7.11	196.30	1.044 *	0.000	0.50	1.906	1.99	14.1	0.0	90.0
38.00		1.00	0.75	6.562	7.22	196.08	1.046 *	0.000	2.00	7.583	7.93	57.3	0.0	358.1
40.00	Appurtenance(s)	1.00	0.76	6.659	7.33	195.77	1.049 *	0.000	2.00	7.516	7.89	57.8	0.0	354.9
42.00		1.00	0.77	6.753	7.43	195.38	1.052 *	0.000	2.00	7.449	7.84	58.2	0.0	351.7
44.00		1.00	0.78	6.843	7.53	194.90	1.056 *	0.000	2.00	7.382	7.79	58.7	0.0	348.5
45.16	RB6	1.00	0.79	6.894	7.58	194.59	1.058 *	0.000	1.16	4.251	4.50	34.1	0.0	200.7
46.00	RT5	1.00	0.79	6.931	7.62	194.36	1.060 *	0.000	0.84	3.064	3.25	24.8	0.0	144.6
48.00		1.00	0.80	7.015	7.72	193.74	1.062 *	0.000	2.00	7.248	7.70	59.4	0.0	342.1
50.00	Bot - Section 3	1.00	0.81	7.098	7.81	193.07	1.066 *	0.000	2.00	7.181	7.65	59.7	0.0	338.9
52.00		1.00	0.82	7.178	7.90	192.34	1.069 *	0.000	2.00	7.244	7.74	61.1	0.0	677.6
54.00		1.00	0.83	7.255	7.98	191.55	1.072 *	0.000	2.00	7.177	7.70	61.4	0.0	671.3
56.00	Top - Section 2	1.00	0.84	7.331	8.06	190.71	1.076 *	0.000	2.00	7.110	7.65	61.7	0.0	664.9
58.00	RT6 RB7	1.00	0.85	7.405	8.15	193.39	1.073 *	0.000	2.00	7.043	7.55	61.5	0.0	332.3
60.00		1.00	0.85	7.477	8.22	192.47	1.076 *	0.000	2.00	6.976	7.51	61.8	0.0	329.2
62.00		1.00	0.86	7.548	8.30	191.51	1.080 *	0.000	2.00	6.909	7.46	61.9	0.0	326.0
64.00		1.00	0.87	7.616	8.38	190.51	1.084 *	0.000	2.00	6.842	7.41	62.1	0.0	322.8
66.00		1.00	0.88	7.684	8.45	189.47	1.087 *	0.000	2.00	6.775	7.37	62.3	0.0	319.6
68.00		1.00	0.89	7.749	8.52	188.39	1.091 *	0.000	2.00	6.708	7.32	62.4	0.0	316.4
70.00		1.00	0.89	7.814	8.60	187.27	1.095 *	0.000	2.00	6.641	7.27	62.5	0.0	313.2
72.00		1.00	0.90	7.877	8.66	186.12	1.099 *	0.000	2.00	6.574	7.23	62.6	0.0	310.0
74.00		1.00	0.91	7.939	8.73	184.94	1.103 *	0.000	2.00	6.507	7.18	62.7	0.0	306.8
76.00		1.00	0.91	8.000	8.80	183.72	1.108 *	0.000	2.00	6.440	7.13	62.8	0.0	303.6
78.00	RT7 RB8	1.00	0.92	8.059	8.87	182.48	1.112 *	0.000	2.00	6.373	7.09	62.8	0.0	300.5
80.00	Top - Section 3	1.00	0.93	8.118	8.93	181.21	1.116 *	0.000	2.00	6.306	7.04	62.9	0.0	297.3
82.00		1.00	0.93	8.175	8.99	179.91	1.121 *	0.000	2.00	6.239	6.99	62.9	0.0	245.5

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00	1.00	0.94	8.232	9.05	178.58	1.125 *	0.000	2.00	6.172	6.95	62.9	0.0	242.8
86.00	1.00	0.95	8.287	9.12	177.23	1.130 *	0.000	2.00	6.106	6.90	62.9	0.0	240.2
88.00	1.00	0.95	8.342	9.18	175.85	1.135 *	0.000	2.00	6.039	6.85	62.9	0.0	237.5
90.00	1.00	0.96	8.396	9.24	174.45	1.140 *	0.000	2.00	5.972	6.81	62.8	0.0	234.9
92.00	1.00	0.96	8.448	9.29	173.02	1.145 *	0.000	2.00	5.905	6.76	62.8	0.0	232.2
94.00	1.00	0.97	8.501	9.35	171.58	1.150 *	0.000	2.00	5.838	6.71	62.8	0.0	229.6
95.00 Bot - Section 5	1.00	0.97	8.526	9.38	170.85	1.154 *	0.000	1.00	2.894	3.34	31.3	0.0	113.8
95.58 RT8	1.00	0.98	8.541	9.40	170.42	1.156 *	0.000	0.58	1.702	1.97	18.5	0.0	132.6
96.00	1.00	0.98	8.552	9.41	170.11	1.157 *	0.000	0.42	1.229	1.42	13.4	0.0	95.8
98.00	1.00	0.98	8.602	9.46	168.62	1.160 *	0.000	2.00	5.812	6.74	63.8	0.0	452.8
100.00 Top - Section 4	1.00	0.99	8.652	9.52	167.11	1.055 *	0.000	2.00	5.745	6.06	57.7	0.0	447.4
102.00	1.00	0.99	8.701	9.57	168.81	1.052 *	0.000	2.00	5.678	5.97	57.2	0.0	223.2
104.00	1.00	1.00	8.750	9.62	167.27	1.056 *	0.000	2.00	5.611	5.93	57.1	0.0	220.5
106.00	1.00	1.00	8.797	9.68	165.71	1.061 *	0.000	2.00	5.544	5.88	56.9	0.0	217.9
108.00	1.00	1.01	8.845	9.73	164.14	1.065 *	0.000	2.00	5.477	5.83	56.8	0.0	215.2
110.00 Appurtenance(s)	1.00	1.02	8.891	9.78	162.54	1.070 *	0.000	2.00	5.410	5.79	56.6	0.0	212.6
112.00	1.00	1.02	8.937	9.83	160.93	1.074 *	0.000	2.00	5.343	5.74	56.4	0.0	209.9
114.00	1.00	1.03	8.982	9.88	159.31	1.079 *	0.000	2.00	5.276	5.69	56.3	0.0	207.3
115.00 Top - Section 5	1.00	1.03	9.005	9.91	158.49	1.083 *	0.000	1.00	2.613	2.83	28.0	0.0	102.6
116.00	1.00	1.03	9.027	9.93	157.66	1.085 *	0.000	1.00	2.596	2.82	28.0	0.0	81.7
118.00	1.00	1.04	9.071	9.98	156.00	1.089 *	0.000	2.00	5.142	5.60	55.9	0.0	161.9
120.00	1.00	1.04	9.115	10.03	154.33	1.094 *	0.000	2.00	5.075	5.55	55.7	0.0	159.8
122.00	1.00	1.05	9.158	10.07	152.64	1.099 *	0.000	2.00	5.008	5.51	55.5	0.0	157.6
124.00	1.00	1.05	9.201	10.12	150.94	1.105 *	0.000	2.00	4.941	5.46	55.2	0.0	155.5
126.00	1.00	1.06	9.243	10.17	149.22	1.110 *	0.000	2.00	4.874	5.41	55.0	0.0	153.4
128.00	1.00	1.06	9.284	10.21	147.49	1.116 *	0.000	2.00	4.807	5.37	54.8	0.0	151.3
130.00	1.00	1.07	9.326	10.26	145.74	1.122 *	0.000	2.00	4.741	5.32	54.6	0.0	149.1
132.00	1.00	1.07	9.366	10.30	143.98	1.128 *	0.000	2.00	4.674	5.27	54.3	0.0	147.0
133.00 Appurtenance(s)	1.00	1.07	9.387	10.33	143.10	1.133 *	0.000	1.00	2.312	2.62	27.0	0.0	72.7
134.00	1.00	1.07	9.407	10.35	142.21	1.136 *	0.000	1.00	2.295	2.61	27.0	0.0	72.2
136.00	1.00	1.08	9.447	10.39	140.42	1.141 *	0.000	2.00	4.540	5.18	53.8	0.0	142.8
138.00	1.00	1.08	9.486	10.43	138.63	1.147 *	0.000	2.00	4.473	5.13	53.5	0.0	140.6
140.00	1.00	1.09	9.525	10.48	136.82	1.154 *	0.000	2.00	4.406	5.08	53.3	0.0	138.5
142.00	1.00	1.09	9.564	10.52	134.99	1.161 *	0.000	2.00	4.339	5.04	53.0	0.0	136.4
142.90 Appurtenance(s)	1.00	1.09	9.581	10.54	134.17	1.166 *	0.000	0.90	1.931	2.25	23.7	0.0	60.7
144.00	1.00	1.10	9.602	10.56	133.16	1.000	0.000	1.10	2.341	2.34	24.7	0.0	73.6
145.00 Top - Section 6	1.00	1.10	9.621	10.58	132.24	1.000	0.000	1.00	2.111	2.11	22.3	0.0	66.3
146.00	1.00	1.10	9.640	10.60	126.87	0.600	0.000	1.00	2.023	1.21	12.9	0.0	64.2
148.00	1.00	1.11	9.678	10.65	125.08	0.600	0.000	2.00	3.998	2.40	25.5	0.0	126.9
148.30 Appurtenance(s)	1.00	1.11	9.683	10.65	124.81	0.600	0.000	0.30	0.594	0.36	3.8	0.0	18.9
150.00 Top - Section 7	1.00	1.11	9.715	10.69	123.27	0.600	0.000	1.70	3.339	2.00	21.4	0.0	105.9
152.00	1.00	1.11	9.752	10.73	84.43	0.645 *	0.000	2.00	2.667	1.72	18.5	0.0	84.2
154.00	1.00	1.12	9.788	10.77	84.59	0.645 *	0.000	2.00	2.667	1.72	18.5	0.0	84.2
156.00	1.00	1.12	9.824	10.81	84.74	0.645 *	0.000	2.00	2.667	1.72	18.6	0.0	84.2
158.00	1.00	1.13	9.860	10.85	84.90	0.645 *	0.000	2.00	2.667	1.72	18.7	0.0	84.2
160.00 Appurtenance(s)	1.00	1.13	9.896	10.89	85.05	0.645 *	0.000	2.00	2.667	1.72	18.7	0.0	84.2

* Cf Adjusted by Linear Load Ra Effect

Totals:	160.00	4,509.8	23,786.1
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Discrete Appurtenance Forces

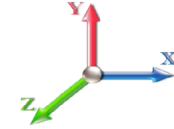
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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)	CaAa 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	SBNHH-1D65B	9	9.931	10.924	0.81	1.00	59.49	360.00	0.000	2.000	649.83	0.00	1299.65
2	160.00	RRH2x90-AWS	3	9.931	10.924	0.67	1.00	5.35	132.00	0.000	2.000	58.41	0.00	116.81
3	160.00	6' Lightning rod	1	9.931	10.924	1.00	1.00	0.38	6.50	0.000	2.000	4.15	0.00	8.30
4	160.00	Low Profile Platform	1	9.931	10.924	1.00	1.00	22.00	1200.00	0.000	2.000	240.33	0.00	480.65
5	160.00	DB846F65ZAXY	6	9.931	10.924	0.93	1.00	39.34	126.00	0.000	2.000	429.74	0.00	859.47
6	160.00	DB222	1	9.931	10.924	1.00	1.00	2.25	16.00	0.000	2.000	24.58	0.00	49.16
7	160.00	DB-T1-6Z-8AB-0Z	1	9.931	10.924	1.00	1.00	4.80	44.00	0.000	2.000	52.43	0.00	104.87
8	148.30	APXVTM14-C-120	3	9.715	10.686	0.61	0.80	11.59	168.00	0.000	1.700	123.90	0.00	210.64
9	148.30	1900MHz RRH	3	9.752	10.727	0.54	0.80	6.11	132.00	0.000	3.700	65.55	0.00	242.52
10	148.30	800 MHz RRH	3	9.752	10.727	0.54	0.80	4.00	159.00	0.000	3.700	42.95	0.00	158.91
11	148.30	APXVSPP18-C-A20	3	9.752	10.727	0.66	0.80	15.98	171.00	0.000	3.700	171.37	0.00	634.07
12	148.30	ACU-A20-N	4	9.752	10.727	0.54	0.80	0.30	4.00	0.000	3.700	3.22	0.00	11.91
13	148.30	ALU 800MHz External	3	9.752	10.727	0.54	0.80	1.25	26.40	0.000	3.700	13.45	0.00	49.78
14	148.30	TD-RRH8x20-25	3	9.715	10.686	0.54	0.80	6.51	210.00	0.000	1.700	69.59	0.00	118.31
15	148.30	Low Profile Platform	1	9.683	10.652	1.00	1.00	17.50	1200.00	0.000	0.000	186.40	0.00	0.00
16	142.90	LNX-6515DS-A1M	3	9.581	10.539	0.64	0.80	22.02	150.90	0.000	0.000	232.10	0.00	0.00
17	142.90	Platform w/ HR & Bracing	1	9.581	10.539	1.00	1.00	51.70	2246.00	0.000	0.000	544.88	0.00	0.00
18	142.90	Ericsson - RRUS11B12 -	1	9.581	10.539	1.00	1.00	2.57	51.00	0.000	0.000	27.09	0.00	0.00
19	142.90	Ericsson - RUS01 B12 -	3	9.581	10.539	0.54	0.80	4.05	153.00	0.000	0.000	42.71	0.00	0.00
20	142.90	AIR 21 B4A B12P	1	9.581	10.539	1.00	1.00	11.54	126.00	0.000	0.000	121.62	0.00	0.00
21	142.90	AIR 21 B4A/B2P	3	9.595	10.554	0.66	0.80	13.68	274.50	0.000	0.700	144.33	0.00	101.03
22	142.90	AIR 21 B2A/B4P	3	9.595	10.554	0.66	0.80	13.68	249.00	0.000	0.700	144.33	0.00	101.03
23	142.90	KRY 112 144/1	3	9.595	10.554	0.54	0.80	0.66	33.00	0.000	0.700	6.96	0.00	4.87
24	142.90	AIR 32 B4A/B2P	1	9.581	10.539	1.00	1.00	6.51	105.80	0.000	0.000	68.61	0.00	0.00
25	133.00	800 10121	3	9.387	10.325	0.63	0.80	9.76	138.90	0.000	0.000	100.82	0.00	0.00
26	133.00	RRUS 32	3	9.387	10.325	0.54	0.80	4.26	231.00	0.000	0.000	44.00	0.00	0.00
27	133.00	DC6-48-60-18-8F	2	9.387	10.325	0.68	0.90	1.98	65.60	0.000	0.000	20.49	0.00	0.00
28	133.00	RRUS 12	3	9.387	10.325	0.54	0.80	4.52	174.00	0.000	0.000	46.65	0.00	0.00
29	133.00	RRUS A2 Module	3	9.387	10.325	0.54	0.80	2.99	63.60	0.000	0.000	30.88	0.00	0.00
30	133.00	RRUS 11	3	9.387	10.325	0.54	0.80	4.05	152.10	0.000	0.000	41.84	0.00	0.00
31	133.00	Low Profile Platform	1	9.387	10.325	1.00	1.00	22.00	1350.00	0.000	0.000	227.16	0.00	0.00
32	133.00	800 10798	3	9.387	10.325	0.60	0.80	15.56	244.20	0.000	0.000	160.63	0.00	0.00
33	133.00	DTMABP7819VG12A	3	9.387	10.325	0.54	0.80	1.83	57.00	0.000	0.000	18.93	0.00	0.00
34	110.00	3 ft Standoff	1	8.891	9.780	1.00	1.00	2.63	40.00	0.000	0.000	25.72	0.00	0.00
35	110.00	DB222	1	9.011	9.912	1.00	1.00	2.65	16.00	0.000	5.292	26.27	0.00	139.00
36	40.00	GPS	1	6.659	7.325	1.00	1.00	1.00	10.00	0.000	0.000	7.33	0.00	0.00

Totals: 9,886.50

4,219.25

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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
2.00		66.98	511.70	0.00	0.00
4.00		66.67	508.51	0.00	0.00
6.00		66.35	505.32	0.00	0.00
8.00		66.04	502.13	0.00	0.00
10.00		65.72	498.95	0.00	0.00
12.00		65.40	495.76	0.00	0.00
14.00		65.09	492.57	0.00	0.00
16.00		64.77	489.38	0.00	0.00
16.25		8.20	109.87	0.00	0.00
18.00		57.28	766.27	0.00	0.00
19.50		48.91	652.92	0.00	0.00
20.00		16.26	216.84	0.00	0.00
22.00		64.86	863.38	0.00	0.00
24.00		64.12	482.79	0.00	0.00
26.00		63.80	479.60	0.00	0.00
28.00		63.49	476.41	0.00	0.00
30.00		63.22	473.22	0.00	0.00
31.00		31.79	235.42	0.00	0.00
32.00		32.00	234.62	0.00	0.00
34.00		56.13	466.85	0.00	0.00
35.50		42.40	348.04	0.00	0.00
36.00		14.15	115.62	0.00	0.00
38.00		57.27	460.47	0.00	0.00
40.00	(1) attachments	65.09	467.28	0.00	0.00
42.00		58.23	453.77	0.00	0.00
44.00		58.66	450.58	0.00	0.00
45.16		34.11	259.88	0.00	0.00
46.00		24.76	187.52	0.00	0.00
48.00		59.41	444.21	0.00	0.00
50.00		59.74	441.02	0.00	0.00
52.00		61.14	779.74	0.00	0.00
54.00		61.43	773.36	0.00	0.00
56.00		61.70	766.98	0.00	0.00
58.00		61.54	434.43	0.00	0.00
60.00		61.75	431.24	0.00	0.00
62.00		61.95	428.05	0.00	0.00
64.00		62.12	424.86	0.00	0.00
66.00		62.27	421.67	0.00	0.00
68.00		62.40	418.49	0.00	0.00
70.00		62.52	415.30	0.00	0.00
72.00		62.62	412.11	0.00	0.00
74.00		62.70	408.92	0.00	0.00
76.00		62.77	405.73	0.00	0.00
78.00		62.82	402.54	0.00	0.00
80.00		62.86	399.36	0.00	0.00
82.00		62.88	347.58	0.00	0.00

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00		62.89	344.92	0.00	0.00
86.00		62.89	342.27	0.00	0.00
88.00		62.87	339.61	0.00	0.00
90.00		62.85	336.95	0.00	0.00
92.00		62.81	334.30	0.00	0.00
94.00		62.76	331.64	0.00	0.00
95.00		31.31	164.82	0.00	0.00
95.58		18.48	162.22	0.00	0.00
96.00		13.38	117.19	0.00	0.00
98.00		63.80	554.84	0.00	0.00
100.00		57.67	549.53	0.00	0.00
102.00		57.18	325.29	0.00	0.00
104.00		57.05	322.63	0.00	0.00
106.00		56.91	319.98	0.00	0.00
108.00		56.76	317.32	0.00	0.00
110.00	(2) attachments	108.59	370.66	0.00	139.00
112.00		56.43	310.97	0.00	0.00
114.00		56.25	308.31	0.00	0.00
115.00		28.02	153.16	0.00	0.00
116.00		27.98	132.27	0.00	0.00
118.00		55.87	262.95	0.00	0.00
120.00		55.67	260.82	0.00	0.00
122.00		55.46	258.70	0.00	0.00
124.00		55.25	256.57	0.00	0.00
126.00		55.03	254.45	0.00	0.00
128.00		54.79	252.32	0.00	0.00
130.00		54.56	250.19	0.00	0.00
132.00		54.31	248.07	0.00	0.00
133.00	(24) attachments	718.44	2599.64	0.00	0.00
134.00		26.97	110.79	0.00	0.00
136.00		53.80	219.98	0.00	0.00
138.00		53.54	217.85	0.00	0.00
140.00		53.27	215.73	0.00	0.00
142.00		52.99	213.60	0.00	0.00
142.90	(19) attachments	1356.36	3484.63	0.00	206.93
144.00		24.73	100.16	0.00	0.00
145.00		22.34	90.49	0.00	0.00
146.00		12.87	88.37	0.00	0.00
148.00		25.54	175.19	0.00	0.00
148.30	(23) attachments	680.24	2096.50	0.00	1426.14
150.00		21.41	140.53	0.00	0.00
152.00		18.45	124.86	0.00	0.00
154.00		18.52	124.86	0.00	0.00
156.00		18.59	124.86	0.00	0.00
158.00		18.66	124.86	0.00	0.00
160.00	(22) attachments	1478.18	2009.36	0.00	2918.92
Totals:		8,729.08	41,206.48	0.00	4,690.99

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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)
2.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.148	6.129	0.00	2.20
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	6.129	0.00	1.04
2.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.148	6.129	0.00	2.20
2.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	6.129	0.00	3.82
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	6.129	0.00	1.04
2.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.149	1.148	6.129	0.00	0.00
2.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.149	1.148	6.129	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	6.129	0.00	2.20
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	6.129	0.00	1.04
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.151	6.129	0.00	2.20
4.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	6.129	0.00	3.82
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.151	6.129	0.00	1.04
4.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.151	6.129	0.00	0.00
4.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.150	1.151	6.129	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	6.129	0.00	2.20
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	6.129	0.00	1.04
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.152	1.155	6.129	0.00	2.20
6.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	6.129	0.00	3.82
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.152	1.155	6.129	0.00	1.04
6.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.152	1.155	6.129	0.00	0.00
6.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.152	1.155	6.129	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	6.129	0.00	2.20
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	6.129	0.00	1.04
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.158	6.129	0.00	2.20
8.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	6.129	0.00	3.82
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.158	6.129	0.00	1.04
8.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.158	6.129	0.00	0.00
8.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.153	1.158	6.129	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	6.129	0.00	2.20
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	6.129	0.00	1.04
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.162	6.129	0.00	2.20
10.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	6.129	0.00	3.82
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.162	6.129	0.00	1.04
10.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.154	1.162	6.129	0.00	0.00
10.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.154	1.162	6.129	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	6.129	0.00	2.20
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	6.129	0.00	1.04
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.155	1.166	6.129	0.00	2.20
12.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	6.129	0.00	3.82
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.155	1.166	6.129	0.00	1.04
12.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.155	1.166	6.129	0.00	0.00
12.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.155	1.166	6.129	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	6.129	0.00	2.20
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	6.129	0.00	1.04
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.169	6.129	0.00	2.20
14.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	6.129	0.00	3.82
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.169	6.129	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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)
14.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.156	1.169	6.129	0.00	0.00
14.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.156	1.169	6.129	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	6.129	0.00	2.20
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	6.129	0.00	1.04
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.173	6.129	0.00	2.20
16.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	6.129	0.00	3.82
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.158	1.173	6.129	0.00	1.04
16.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.158	1.173	6.129	0.00	0.00
16.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.158	1.173	6.129	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	6.129	0.00	0.28
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	6.129	0.00	0.13
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.158	1.175	6.129	0.00	0.28
16.25	1-1/4" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	6.129	0.00	0.48
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.158	1.175	6.129	0.00	0.13
16.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.158	1.175	6.129	0.00	0.00
16.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.158	1.175	6.129	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	6.129	0.00	1.93
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	6.129	0.00	0.91
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.159	1.177	6.129	0.00	1.93
18.00	1-1/4" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	6.129	0.00	3.34
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.159	1.177	6.129	0.00	0.91
18.00	1.25" Reinforcing	Yes	1.75	0.000	1.25	0.18	0.00	0.159	1.177	6.129	0.00	0.00
18.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.159	1.177	6.129	0.00	0.00
19.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.160	1.181	6.129	0.00	1.65
19.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	6.129	0.00	0.78
19.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.160	1.181	6.129	0.00	1.65
19.50	1-1/4" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	6.129	0.00	2.86
19.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.160	1.181	6.129	0.00	0.78
19.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.160	1.181	6.129	0.00	0.00
19.50	1.25" Reinforcing	Yes	1.50	0.000	2.50	0.31	0.00	0.160	1.181	6.129	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	6.129	0.00	0.55
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	6.129	0.00	0.26
20.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.161	1.183	6.129	0.00	0.55
20.00	1-1/4" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	6.129	0.00	0.95
20.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.161	1.183	6.129	0.00	0.26
20.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.161	1.183	6.129	0.00	0.00
20.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.161	1.183	6.129	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	6.129	0.00	2.20
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	6.129	0.00	1.04
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	6.129	0.00	2.20
22.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	6.129	0.00	3.82
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	6.129	0.00	1.04
22.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	6.129	0.00	0.00
22.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	6.129	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	6.129	0.00	2.20
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	6.129	0.00	1.04
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	6.129	0.00	2.20

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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)
24.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	6.129	0.00	3.82
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.160	1.181	6.129	0.00	1.04
24.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.160	1.181	6.129	0.00	0.00
24.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.160	1.181	6.129	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	6.129	0.00	2.20
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	6.129	0.00	1.04
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.162	1.185	6.129	0.00	2.20
26.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	6.129	0.00	3.82
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.162	1.185	6.129	0.00	1.04
26.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.162	1.185	6.129	0.00	0.00
26.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.162	1.185	6.129	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	6.129	0.00	2.20
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	6.129	0.00	1.04
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.189	6.129	0.00	2.20
28.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	6.129	0.00	3.82
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.163	1.189	6.129	0.00	1.04
28.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.163	1.189	6.129	0.00	0.00
28.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.163	1.189	6.129	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	6.134	0.00	2.20
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	6.134	0.00	1.04
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.165	1.194	6.134	0.00	2.20
30.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	6.134	0.00	3.82
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.165	1.194	6.134	0.00	1.04
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.165	1.194	6.134	0.00	0.00
30.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.165	1.194	6.134	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	6.192	0.00	1.10
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	6.192	0.00	0.52
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.197	6.192	0.00	1.10
31.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	6.192	0.00	1.91
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.197	6.192	0.00	0.52
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.197	6.192	0.00	0.00
31.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.197	6.192	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	6.248	0.00	1.10
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	6.248	0.00	0.52
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.166	1.199	6.248	0.00	1.10
32.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	6.248	0.00	1.91
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.166	1.199	6.248	0.00	0.52
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.166	1.199	6.248	0.00	0.00
32.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.166	1.199	6.248	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	6.357	0.00	2.20
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	6.357	0.00	1.04
34.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.040	6.357	0.00	2.20
34.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	6.357	0.00	3.82
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.040	6.357	0.00	1.04
34.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.113	1.040	6.357	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	6.436	0.00	1.65
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	6.436	0.00	0.78

Linear Appurtenance Segment Forces (Factored)

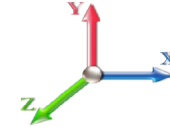
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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)
35.50	1 5/8" Hybrid	Yes	1.50	0.000	2.00	0.25	0.00	0.114	1.043	6.436	0.00	1.65
35.50	1-1/4" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	6.436	0.00	2.86
35.50	7/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.114	1.043	6.436	0.00	0.78
35.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.114	1.043	6.436	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	6.462	0.00	0.55
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	6.462	0.00	0.26
36.00	1 5/8" Hybrid	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.044	6.462	0.00	0.55
36.00	1-1/4" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	6.462	0.00	0.95
36.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.044	6.462	0.00	0.26
36.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.115	1.044	6.462	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	6.562	0.00	2.20
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	6.562	0.00	1.04
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	6.562	0.00	2.20
38.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	6.562	0.00	3.82
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	6.562	0.00	1.04
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.115	1.046	6.562	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	6.659	0.00	2.20
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	6.659	0.00	1.04
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.049	6.659	0.00	2.20
40.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	6.659	0.00	3.82
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	6.659	0.00	1.04
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.116	1.049	6.659	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	6.753	0.00	2.20
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	6.753	0.00	1.04
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.052	6.753	0.00	2.20
42.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	6.753	0.00	3.82
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	6.753	0.00	1.04
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.117	1.052	6.753	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	6.843	0.00	2.20
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	6.843	0.00	1.04
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.056	6.843	0.00	2.20
44.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	6.843	0.00	3.82
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	6.843	0.00	1.04
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.119	1.056	6.843	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	6.894	0.00	1.28
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	6.894	0.00	0.60
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.19	0.00	0.119	1.058	6.894	0.00	1.28
45.16	1-1/4" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	6.894	0.00	2.21
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.119	1.058	6.894	0.00	0.60
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.12	0.00	0.119	1.058	6.894	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	6.931	0.00	0.92
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	6.931	0.00	0.44
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.14	0.00	0.120	1.060	6.931	0.00	0.92
46.00	1-1/4" Hybrid	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	6.931	0.00	1.60
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.120	1.060	6.931	0.00	0.44
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.09	0.00	0.120	1.060	6.931	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	7.015	0.00	2.20

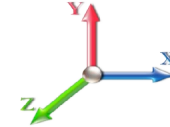
Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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)
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	7.015	0.00	1.04
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	7.015	0.00	2.20
48.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	7.015	0.00	3.82
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	7.015	0.00	1.04
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.121	1.062	7.015	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	7.098	0.00	2.20
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	7.098	0.00	1.04
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	7.098	0.00	2.20
50.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	7.098	0.00	3.82
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	7.098	0.00	1.04
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.122	1.066	7.098	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	7.178	0.00	2.20
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	7.178	0.00	1.04
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.069	7.178	0.00	2.20
52.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	7.178	0.00	3.82
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.069	7.178	0.00	1.04
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.123	1.069	7.178	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	7.255	0.00	2.20
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	7.255	0.00	1.04
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.072	7.255	0.00	2.20
54.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	7.255	0.00	3.82
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.072	7.255	0.00	1.04
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.072	7.255	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	7.331	0.00	2.20
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	7.331	0.00	1.04
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	7.331	0.00	2.20
56.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	7.331	0.00	3.82
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	7.331	0.00	1.04
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	7.331	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	7.405	0.00	2.20
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	7.405	0.00	1.04
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.124	1.073	7.405	0.00	2.20
58.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	7.405	0.00	3.82
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.073	7.405	0.00	1.04
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.124	1.073	7.405	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	7.477	0.00	2.20
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	7.477	0.00	1.04
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.076	7.477	0.00	2.20
60.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	7.477	0.00	3.82
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.076	7.477	0.00	1.04
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.125	1.076	7.477	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	7.548	0.00	2.20
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	7.548	0.00	1.04
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	7.548	0.00	2.20
62.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	7.548	0.00	3.82
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	7.548	0.00	1.04
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.127	1.080	7.548	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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)
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	7.616	0.00	2.20
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	7.616	0.00	1.04
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.084	7.616	0.00	2.20
64.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	7.616	0.00	3.82
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	7.616	0.00	1.04
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.128	1.084	7.616	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	7.684	0.00	2.20
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	7.684	0.00	1.04
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	7.684	0.00	2.20
66.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	7.684	0.00	3.82
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	7.684	0.00	1.04
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.129	1.087	7.684	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	7.749	0.00	2.20
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	7.749	0.00	1.04
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.091	7.749	0.00	2.20
68.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	7.749	0.00	3.82
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.091	7.749	0.00	1.04
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.130	1.091	7.749	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	7.814	0.00	2.20
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	7.814	0.00	1.04
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.095	7.814	0.00	2.20
70.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	7.814	0.00	3.82
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.095	7.814	0.00	1.04
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.132	1.095	7.814	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	7.877	0.00	2.20
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	7.877	0.00	1.04
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	7.877	0.00	2.20
72.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	7.877	0.00	3.82
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	7.877	0.00	1.04
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.133	1.099	7.877	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	7.939	0.00	2.20
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	7.939	0.00	1.04
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	7.939	0.00	2.20
74.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	7.939	0.00	3.82
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	7.939	0.00	1.04
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.134	1.103	7.939	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	8.000	0.00	2.20
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	8.000	0.00	1.04
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	8.000	0.00	2.20
76.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	8.000	0.00	3.82
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	8.000	0.00	1.04
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.136	1.108	8.000	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	8.059	0.00	2.20
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	8.059	0.00	1.04
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.112	8.059	0.00	2.20
78.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	8.059	0.00	3.82
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.112	8.059	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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)
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.137	1.112	8.059	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	8.118	0.00	2.20
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	8.118	0.00	1.04
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	8.118	0.00	2.20
80.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	8.118	0.00	3.82
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	8.118	0.00	1.04
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.139	1.116	8.118	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	8.175	0.00	2.20
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	8.175	0.00	1.04
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.121	8.175	0.00	2.20
82.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	8.175	0.00	3.82
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.121	8.175	0.00	1.04
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.140	1.121	8.175	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	8.232	0.00	2.20
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	8.232	0.00	1.04
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.125	8.232	0.00	2.20
84.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	8.232	0.00	3.82
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.125	8.232	0.00	1.04
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.142	1.125	8.232	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	8.287	0.00	2.20
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	8.287	0.00	1.04
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.130	8.287	0.00	2.20
86.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	8.287	0.00	3.82
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	8.287	0.00	1.04
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.143	1.130	8.287	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	8.342	0.00	2.20
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	8.342	0.00	1.04
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.135	8.342	0.00	2.20
88.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	8.342	0.00	3.82
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.135	8.342	0.00	1.04
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.145	1.135	8.342	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	8.396	0.00	2.20
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	8.396	0.00	1.04
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.140	8.396	0.00	2.20
90.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	8.396	0.00	3.82
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.140	8.396	0.00	1.04
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.147	1.140	8.396	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	8.448	0.00	2.20
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	8.448	0.00	1.04
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.148	1.145	8.448	0.00	2.20
92.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	8.448	0.00	3.82
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.148	1.145	8.448	0.00	1.04
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.148	1.145	8.448	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	8.501	0.00	2.20
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	8.501	0.00	1.04
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.150	1.150	8.501	0.00	2.20
94.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	8.501	0.00	3.82

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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)
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.150	1.150	8.501	0.00	1.04
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.150	1.150	8.501	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	8.526	0.00	1.10
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	8.526	0.00	0.52
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.151	1.154	8.526	0.00	1.10
95.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	8.526	0.00	1.91
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.151	1.154	8.526	0.00	0.52
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.151	1.154	8.526	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	8.541	0.00	0.64
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	8.541	0.00	0.30
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.10	0.00	0.152	1.156	8.541	0.00	0.64
95.58	1-1/4" Hybrid	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	8.541	0.00	1.11
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.152	1.156	8.541	0.00	0.30
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.06	0.00	0.152	1.156	8.541	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	8.552	0.00	0.46
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	8.552	0.00	0.22
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.07	0.00	0.152	1.157	8.552	0.00	0.46
96.00	1-1/4" Hybrid	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	8.552	0.00	0.80
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.152	1.157	8.552	0.00	0.22
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.04	0.00	0.152	1.157	8.552	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	8.602	0.00	2.20
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	8.602	0.00	1.04
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	8.602	0.00	2.20
98.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	8.602	0.00	3.82
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.153	1.160	8.602	0.00	1.04
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.153	1.160	8.602	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	8.652	0.00	2.20
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	8.652	0.00	1.04
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.055	8.652	0.00	2.20
100.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	8.652	0.00	3.82
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.055	8.652	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	8.701	0.00	2.20
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	8.701	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	8.701	0.00	2.20
102.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	8.701	0.00	3.82
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.052	8.701	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	8.750	0.00	2.20
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	8.750	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	8.750	0.00	2.20
104.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	8.750	0.00	3.82
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	8.750	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	8.797	0.00	2.20
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	8.797	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	8.797	0.00	2.20
106.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	8.797	0.00	3.82
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.061	8.797	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	8.845	0.00	2.20

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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)
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	8.845	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	8.845	0.00	2.20
108.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	8.845	0.00	3.82
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.065	8.845	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	8.891	0.00	2.20
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	8.891	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	8.891	0.00	2.20
110.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	8.891	0.00	3.82
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	8.891	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	8.937	0.00	2.20
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	8.937	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	8.937	0.00	2.20
112.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	8.937	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	8.982	0.00	2.20
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	8.982	0.00	1.04
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	8.982	0.00	2.20
114.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	8.982	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	9.005	0.00	1.10
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	9.005	0.00	0.52
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.083	9.005	0.00	1.10
115.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.083	9.005	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	9.027	0.00	1.10
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	9.027	0.00	0.52
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.128	1.085	9.027	0.00	1.10
116.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.128	1.085	9.027	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	9.071	0.00	2.20
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	9.071	0.00	1.04
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.130	1.089	9.071	0.00	2.20
118.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	9.071	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	9.115	0.00	2.20
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	9.115	0.00	1.04
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.094	9.115	0.00	2.20
120.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.094	9.115	0.00	3.82
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	9.158	0.00	2.20
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	9.158	0.00	1.04
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.133	1.099	9.158	0.00	2.20
122.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.099	9.158	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	9.201	0.00	2.20
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	9.201	0.00	1.04
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.135	1.105	9.201	0.00	2.20
124.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.135	1.105	9.201	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	9.243	0.00	2.20
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	9.243	0.00	1.04
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.137	1.110	9.243	0.00	2.20
126.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.137	1.110	9.243	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	9.284	0.00	2.20
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	9.284	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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)
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.116	9.284	0.00	2.20
128.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.116	9.284	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	9.326	0.00	2.20
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	9.326	0.00	1.04
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.141	1.122	9.326	0.00	2.20
130.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.122	9.326	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	9.366	0.00	2.20
132.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	9.366	0.00	1.04
132.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.143	1.128	9.366	0.00	2.20
132.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.128	9.366	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	9.387	0.00	1.10
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	9.387	0.00	0.52
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.144	1.133	9.387	0.00	1.10
133.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.144	1.133	9.387	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	9.407	0.00	1.10
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	9.407	0.00	0.52
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.145	1.136	9.407	0.00	1.10
134.00	1-1/4" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.145	1.136	9.407	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	9.447	0.00	2.20
136.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	9.447	0.00	1.04
136.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.147	1.141	9.447	0.00	2.20
136.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.141	9.447	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	9.486	0.00	2.20
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	9.486	0.00	1.04
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.147	9.486	0.00	2.20
138.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.147	9.486	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	9.525	0.00	2.20
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	9.525	0.00	1.04
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.154	9.525	0.00	2.20
140.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.154	9.525	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	9.564	0.00	2.20
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	9.564	0.00	1.04
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.154	1.161	9.564	0.00	2.20
142.00	1-1/4" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	9.564	0.00	3.82
142.90	1 5/8" Hybrid	Yes	0.90	0.000	2.00	0.15	0.00	0.155	1.166	9.581	0.00	0.99
142.90	7/8" Coax	Yes	0.90	0.000	0.00	0.00	0.00	0.155	1.166	9.581	0.00	0.47
142.90	1 5/8" Hybrid	Yes	0.90	0.000	2.00	0.15	0.00	0.155	1.166	9.581	0.00	0.99
142.90	1-1/4" Hybrid	Yes	0.90	0.000	0.00	0.00	0.00	0.155	1.166	9.581	0.00	1.72
144.00	1 5/8" Hybrid	Yes	1.10	0.000	2.00	0.18	0.00	0.078	0.000	9.602	0.00	1.21
144.00	7/8" Coax	Yes	1.10	0.000	0.00	0.00	0.00	0.078	0.000	9.602	0.00	0.57
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.079	0.000	9.621	0.00	1.10
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	9.621	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	9.640	0.00	1.10
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	9.640	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	9.678	0.00	2.20
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	9.678	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	9.683	0.00	0.33

Linear Appurtenance Segment Forces (Factored)

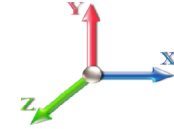
Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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)
148.30	7/8" Coax	Yes	0.30	0.000	0.00	0.00	0.00	0.084	0.000	9.683	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	9.715	0.00	1.87
150.00	7/8" Coax	Yes	1.70	0.000	0.00	0.00	0.00	0.085	0.000	9.715	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	9.752	0.00	2.20
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	9.752	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	9.788	0.00	2.20
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	9.788	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	9.824	0.00	2.20
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	9.824	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	9.860	0.00	2.20
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	9.860	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	9.896	0.00	2.20
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	9.896	0.00	1.04
Totals:											0.0	746.2

Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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

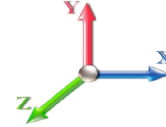


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Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00
Wind Load 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	-41.20	-8.73	0.00	-995.50	0.00	995.50	3683.82	1841.91	7606.69	3756.66	0.00	0.000	0.000	0.187
2.00	-40.69	-8.68	0.00	-978.04	0.00	978.04	3671.54	1835.77	7522.06	3714.86	0.00	-0.020	0.000	0.186
4.00	-40.18	-8.63	0.00	-960.67	0.00	960.67	3659.00	1829.50	7437.30	3673.00	0.02	-0.040	0.000	0.184
6.00	-39.67	-8.57	0.00	-943.42	0.00	943.42	3646.20	1823.10	7352.44	3631.09	0.04	-0.059	0.000	0.182
8.00	-39.17	-8.52	0.00	-926.27	0.00	926.27	3633.16	1816.58	7267.48	3589.13	0.07	-0.079	0.000	0.180
10.00	-38.66	-8.47	0.00	-909.23	0.00	909.23	3619.85	1809.93	7182.43	3547.13	0.10	-0.099	0.000	0.179
12.00	-38.17	-8.42	0.00	-892.29	0.00	892.29	3606.29	1803.15	7097.31	3505.10	0.15	-0.119	0.000	0.177
14.00	-37.67	-8.36	0.00	-875.46	0.00	875.46	3592.48	1796.24	7012.13	3463.03	0.20	-0.139	0.000	0.175
16.00	-37.18	-8.30	0.00	-858.73	0.00	858.73	3578.41	1789.21	6926.91	3420.94	0.27	-0.159	0.000	0.173
16.25	-37.07	-8.30	0.00	-856.66	0.00	856.66	3576.63	1788.32	6916.25	3415.68	0.28	-0.162	0.000	0.204
18.00	-36.30	-8.26	0.00	-842.12	0.00	842.12	3564.09	1782.04	6841.65	3378.83	0.34	-0.183	0.000	0.187
19.50	-35.64	-8.21	0.00	-829.74	0.00	829.74	3553.18	1776.59	6777.69	3347.24	0.40	-0.200	0.000	0.158
20.00	-35.43	-8.20	0.00	-825.64	0.00	825.64	3549.51	1774.75	6756.36	3336.71	0.42	-0.204	0.000	0.158
22.00	-34.56	-8.14	0.00	-809.23	0.00	809.23	3563.12	1781.56	6835.93	3376.01	0.51	-0.223	0.000	0.160
24.00	-34.07	-8.09	0.00	-792.95	0.00	792.95	3548.52	1774.26	6750.65	3333.89	0.61	-0.242	0.000	0.153
26.00	-33.59	-8.03	0.00	-776.77	0.00	776.77	3533.67	1766.84	6665.35	3291.77	0.71	-0.260	0.000	0.152
28.00	-33.11	-7.98	0.00	-760.70	0.00	760.70	3518.56	1759.28	6580.06	3249.64	0.83	-0.279	0.000	0.150
30.00	-32.64	-7.92	0.00	-744.74	0.00	744.74	3503.20	1751.60	6494.78	3207.53	0.95	-0.297	0.000	0.117
31.00	-32.40	-7.89	0.00	-736.82	0.00	736.82	3495.43	1747.71	6452.15	3186.48	1.01	-0.304	0.000	0.135
32.00	-32.17	-7.87	0.00	-728.93	0.00	728.93	3487.59	1743.79	6409.53	3165.43	1.07	-0.313	0.000	0.134
34.00	-31.70	-7.82	0.00	-713.19	0.00	713.19	3471.72	1735.86	6324.32	3123.35	1.21	-0.329	0.000	0.164
35.50	-31.35	-7.78	0.00	-701.47	0.00	701.47	3459.65	1729.82	6260.45	3091.80	1.32	-0.345	0.000	0.163
36.00	-31.23	-7.77	0.00	-697.58	0.00	697.58	3455.59	1727.80	6239.16	3081.29	1.35	-0.350	0.000	0.162
38.00	-30.77	-7.72	0.00	-682.04	0.00	682.04	3439.21	1719.61	6154.07	3039.26	1.50	-0.371	0.000	0.160
40.00	-30.30	-7.66	0.00	-666.60	0.00	666.60	3422.57	1711.29	6069.05	2997.28	1.66	-0.392	0.000	0.159
42.00	-29.84	-7.61	0.00	-651.27	0.00	651.27	3405.68	1702.84	5984.13	2955.34	1.83	-0.413	0.000	0.157
44.00	-29.39	-7.56	0.00	-636.04	0.00	636.04	3388.54	1694.27	5899.30	2913.44	2.01	-0.434	0.000	0.155
45.16	-29.13	-7.53	0.00	-627.28	0.00	627.28	3378.48	1689.24	5850.15	2889.17	2.12	-0.446	0.000	0.112
46.00	-28.94	-7.51	0.00	-620.95	0.00	620.95	3371.14	1685.57	5814.59	2871.61	2.20	-0.453	0.000	0.145
48.00	-28.49	-7.46	0.00	-605.93	0.00	605.93	3353.48	1676.74	5730.00	2829.83	2.39	-0.473	0.000	0.143
50.00	-28.05	-7.40	0.00	-591.02	0.00	591.02	3335.57	1667.79	5645.55	2788.13	2.59	-0.493	0.000	0.141
52.00	-27.27	-7.34	0.00	-576.22	0.00	576.22	3317.41	1658.70	5561.26	2746.50	2.80	-0.513	0.000	0.137
54.00	-26.49	-7.28	0.00	-561.53	0.00	561.53	3298.98	1649.49	5477.12	2704.94	3.02	-0.532	0.000	0.135
56.00	-25.73	-7.22	0.00	-546.96	0.00	546.96	3316.18	1658.09	5555.61	2743.71	3.25	-0.552	0.000	0.136
58.00	-25.29	-7.17	0.00	-532.51	0.00	532.51	3297.74	1648.87	5471.49	2702.16	3.49	-0.571	0.000	0.141
60.00	-24.86	-7.11	0.00	-518.18	0.00	518.18	3279.05	1639.52	5387.54	2660.71	3.73	-0.592	0.000	0.139
62.00	-24.43	-7.05	0.00	-503.96	0.00	503.96	3260.10	1630.05	5303.79	2619.34	3.98	-0.612	0.000	0.137
64.00	-24.00	-6.99	0.00	-489.85	0.00	489.85	3240.90	1620.45	5220.23	2578.08	4.24	-0.633	0.000	0.135
66.00	-23.58	-6.94	0.00	-475.87	0.00	475.87	3221.44	1610.72	5136.89	2536.92	4.51	-0.653	0.000	0.132
68.00	-23.16	-6.88	0.00	-462.00	0.00	462.00	3201.73	1600.86	5053.77	2495.87	4.79	-0.673	0.000	0.130
70.00	-22.74	-6.82	0.00	-448.24	0.00	448.24	3181.76	1590.88	4970.89	2454.94	5.08	-0.694	0.000	0.128
72.00	-22.33	-6.76	0.00	-434.61	0.00	434.61	3161.54	1580.77	4888.26	2414.13	5.37	-0.714	0.000	0.126
74.00	-21.92	-6.70	0.00	-421.10	0.00	421.10	3141.06	1570.53	4805.90	2373.45	5.67	-0.734	0.000	0.124
76.00	-21.51	-6.64	0.00	-407.70	0.00	407.70	3120.33	1560.16	4723.81	2332.91	5.99	-0.754	0.000	0.121
78.00	-21.10	-6.58	0.00	-394.43	0.00	394.43	3099.34	1549.67	4642.00	2292.51	6.31	-0.774	0.000	0.119
80.00	-20.70	-6.51	0.00	-381.28	0.00	381.28	3078.09	1539.05	4560.50	2252.26	6.63	-0.793	0.000	0.117
80.00	-20.70	-6.51	0.00	-381.28	0.00	381.28	2384.58	1192.29	3545.27	1750.88	6.63	-0.793	0.000	0.126
82.00	-20.35	-6.45	0.00	-368.25	0.00	368.25	2370.62	1185.31	3486.26	1721.73	6.97	-0.813	0.000	0.138

Calculated Forces

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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84.00	-20.01	-6.39	0.00	-355.34	0.00	355.34	2356.42	1178.21	3427.33	1692.63	7.32	-0.835	0.000	0.135
86.00	-19.66	-6.33	0.00	-342.55	0.00	342.55	2341.95	1170.98	3368.48	1663.57	7.67	-0.857	0.000	0.131
88.00	-19.32	-6.27	0.00	-329.89	0.00	329.89	2327.23	1163.62	3309.75	1634.56	8.03	-0.878	0.000	0.128
90.00	-18.99	-6.21	0.00	-317.34	0.00	317.34	2312.26	1156.13	3251.12	1605.61	8.41	-0.899	0.000	0.125
92.00	-18.65	-6.15	0.00	-304.92	0.00	304.92	2297.03	1148.52	3192.63	1576.72	8.79	-0.921	0.000	0.122
94.00	-18.32	-6.09	0.00	-292.62	0.00	292.62	2281.55	1140.77	3134.28	1547.90	9.18	-0.941	0.000	0.118
95.00	-18.15	-6.06	0.00	-286.53	0.00	286.53	2273.71	1136.85	3105.16	1533.52	9.38	-0.952	0.000	0.117
95.58	-17.99	-6.04	0.00	-283.02	0.00	283.02	2269.13	1134.57	3088.29	1525.19	9.49	-0.958	0.000	0.114
95.58	-17.99	-6.04	0.00	-283.02	0.00	283.02	2269.13	1134.57	3088.29	1525.19	9.49	-0.958	0.000	0.114
96.00	-17.87	-6.03	0.00	-280.48	0.00	280.48	2265.81	1132.90	3076.09	1519.16	9.58	-0.962	0.000	0.193
98.00	-17.31	-5.96	0.00	-268.43	0.00	268.43	2249.81	1124.91	3018.05	1490.50	9.99	-0.996	0.000	0.188
100.00	-16.76	-5.91	0.00	-256.50	0.00	256.50	2259.61	1129.81	3053.48	1508.00	10.41	-1.030	0.000	0.178
102.00	-16.43	-5.85	0.00	-244.69	0.00	244.69	2243.52	1121.76	2995.52	1479.37	10.85	-1.063	0.000	0.173
104.00	-16.11	-5.80	0.00	-232.99	0.00	232.99	2227.17	1113.59	2937.74	1450.84	11.30	-1.094	0.000	0.168
106.00	-15.79	-5.74	0.00	-221.39	0.00	221.39	2210.57	1105.28	2880.15	1422.40	11.77	-1.125	0.000	0.163
108.00	-15.47	-5.69	0.00	-209.90	0.00	209.90	2193.71	1096.86	2822.78	1394.06	12.25	-1.155	0.000	0.158
110.00	-15.10	-5.58	0.00	-198.39	0.00	198.39	2176.60	1088.30	2765.62	1365.84	12.74	-1.185	0.000	0.152
112.00	-14.78	-5.52	0.00	-187.23	0.00	187.23	2159.23	1079.61	2708.70	1337.73	13.24	-1.214	0.000	0.147
114.00	-14.48	-5.47	0.00	-176.18	0.00	176.18	2141.61	1070.80	2652.02	1309.73	13.75	-1.242	0.000	0.141
115.00	-14.32	-5.44	0.00	-170.71	0.00	170.71	2132.70	1066.35	2623.78	1295.79	14.02	-1.257	0.000	0.138
115.00	-14.32	-5.44	0.00	-170.71	0.00	170.71	1556.62	778.31	1923.08	949.74	14.02	-1.257	0.000	0.189
116.00	-14.19	-5.41	0.00	-165.27	0.00	165.27	1551.43	775.71	1904.13	940.38	14.28	-1.271	0.000	0.185
118.00	-13.92	-5.36	0.00	-154.44	0.00	154.44	1540.84	770.42	1866.26	921.68	14.82	-1.304	0.000	0.177
120.00	-13.66	-5.31	0.00	-143.72	0.00	143.72	1529.99	765.00	1828.43	902.99	15.37	-1.337	0.000	0.168
122.00	-13.40	-5.25	0.00	-133.11	0.00	133.11	1518.89	759.45	1790.65	884.33	15.94	-1.368	0.000	0.159
124.00	-13.14	-5.20	0.00	-122.60	0.00	122.60	1507.54	753.77	1752.93	865.70	16.52	-1.399	0.000	0.150
126.00	-12.89	-5.14	0.00	-112.20	0.00	112.20	1495.93	747.96	1715.28	847.11	17.11	-1.428	0.000	0.141
128.00	-12.63	-5.09	0.00	-101.92	0.00	101.92	1484.06	742.03	1677.72	828.56	17.72	-1.455	0.000	0.132
130.00	-12.38	-5.03	0.00	-91.74	0.00	91.74	1471.95	735.97	1640.26	810.06	18.33	-1.481	0.000	0.122
132.00	-12.14	-4.98	0.00	-81.68	0.00	81.68	1459.57	729.79	1602.91	791.62	18.96	-1.506	0.000	0.112
133.00	-9.55	-4.19	0.00	-76.70	0.00	76.70	1453.29	726.64	1584.28	782.42	19.28	-1.517	0.000	0.105
134.00	-9.44	-4.16	0.00	-72.51	0.00	72.51	1446.94	723.47	1565.68	773.23	19.59	-1.528	0.000	0.100
136.00	-9.22	-4.11	0.00	-64.18	0.00	64.18	1434.06	717.03	1528.59	754.91	20.24	-1.549	0.000	0.091
138.00	-9.01	-4.05	0.00	-55.97	0.00	55.97	1420.92	710.46	1491.65	736.67	20.89	-1.568	0.000	0.082
140.00	-8.79	-3.99	0.00	-47.87	0.00	47.87	1407.52	703.76	1454.87	718.50	21.55	-1.586	0.000	0.073
142.00	-8.58	-3.94	0.00	-39.88	0.00	39.88	1393.87	696.94	1418.26	700.42	22.22	-1.601	0.000	0.063
142.90	-5.13	-2.48	0.00	-36.13	0.00	36.13	1387.65	693.82	1401.84	692.32	22.52	-1.608	0.000	0.056
144.00	-5.03	-2.46	0.00	-33.40	0.00	33.40	1379.97	689.99	1381.83	682.44	22.90	-1.615	0.000	0.053
145.00	-4.94	-2.43	0.00	-30.94	0.00	30.94	1372.92	686.46	1363.70	673.48	23.23	-1.621	0.000	0.050
145.00	-4.94	-2.43	0.00	-30.94	0.00	30.94	931.20	465.60	925.89	604.09	23.23	-1.621	0.000	0.057
146.00	-4.85	-2.42	0.00	-28.51	0.00	28.51	925.24	462.62	912.49	594.77	23.57	-1.627	0.000	0.053
148.00	-4.68	-2.39	0.00	-23.67	0.00	23.67	913.32	456.66	885.99	576.36	24.26	-1.638	0.000	0.046
148.30	-2.60	-1.65	0.00	-21.53	0.00	21.53	911.53	455.77	882.04	573.63	24.36	-1.639	0.000	0.040
150.00	-2.46	-1.62	0.00	-18.73	0.00	18.73	901.40	450.70	859.86	558.24	24.95	-1.647	0.000	0.036
150.00	-2.46	-1.62	0.00	-18.73	0.00	18.73	556.65	278.33	359.38	213.69	24.95	-1.647	0.000	0.092
152.00	-2.34	-1.60	0.00	-15.48	0.00	15.48	556.65	278.33	359.38	213.69	25.64	-1.655	0.000	0.077
154.00	-2.21	-1.58	0.00	-12.27	0.00	12.27	556.65	278.33	359.38	213.69	26.34	-1.676	0.000	0.061
156.00	-2.09	-1.56	0.00	-9.11	0.00	9.11	556.65	278.33	359.38	213.69	27.04	-1.691	0.000	0.046
158.00	-1.96	-1.54	0.00	-5.99	0.00	5.99	556.65	278.33	359.38	213.69	27.75	-1.703	0.000	0.032
160.00	0.00	-1.48	0.00	-2.92	0.00	2.92	556.65	278.33	359.38	213.69	28.47	-1.709	0.000	0.014

Final Analysis Summary

Structure: CT02049-S-SBA	Code: EIA/TIA-222-G	5/25/2018
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



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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 + 1.6W 97 mph Wind	36.5	0.00	49.42	0.00	0.00	4188.00
0.9D + 1.6W 97 mph Wind	36.5	0.00	37.06	0.00	0.00	4141.21
1.2D + 1.0Di + 1.0Wi 50 mph Wind	8.4	0.00	79.80	0.00	0.00	1024.28
1.2D + 1.0E	2.0	0.00	49.45	0.00	0.00	244.98
0.9D + 1.0E	2.0	0.00	37.09	0.00	0.00	242.07
1.0D + 1.0W 60 mph Wind	8.7	0.00	41.20	0.00	0.00	995.50

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 + 1.6W 97 mph Wind	-44.07	-34.83	0.00	-3606.4	0.00	-3606.4	3576.63	1788.3	6916.25	3415.68	16.25	0.834
0.9D + 1.6W 97 mph Wind	-32.95	-34.68	0.00	-3560.8	0.00	-3560.8	3576.63	1788.3	6916.25	3415.68	16.25	0.821
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-72.98	-8.13	0.00	-889.77	0.00	-889.77	3576.63	1788.3	6916.25	3415.68	16.25	0.220
1.2D + 1.0E	-17.32	-1.51	0.00	-52.75	0.00	-52.75	2132.70	1066.3	2623.78	1295.79	115.00	0.067
0.9D + 1.0E	-12.99	-1.48	0.00	-51.89	0.00	-51.89	2132.70	1066.3	2623.78	1295.79	115.00	0.063
1.0D + 1.0W 60 mph Wind	-37.07	-8.30	0.00	-856.66	0.00	-856.66	3576.63	1788.3	6916.25	3415.68	16.25	0.204

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors			Lower Termination				Upper Termination				Max Member			
			VQ/I (lb/in)	Vu (kips)	phi Vn (kips)	MQ/I (kips)	phi Vn (kips)	Num Req'd	Num Actual	MQ/I (kips)	phi Vn (kips)	Num Req'd	Num Actual	Pu (kips)	phi Pn (kips)	phi Tn (kips)	Ratio
0.0	16.3	(3) PLT-C10x30(1.5" Hole)	-318.5	-6.37	37.1	409.8	37.1	12	0	395.7	37.1			409.81	505.1	468.64	0.874
16.3	31.0	(3) PLT-C10x15.3(1.5" Hole)	-318.5	-6.37	37.1	246.1	37.1			141.7	37.1	4	0	246.14	257.8	247.80	0.993
18.0	34.0	(2) LNP-LP6X100-G-20TT	202.9	4.87	25.3	246.2	25.3	10	10	206.1	25.3	9	10	246.18	297.8	292.50	0.842
19.5	35.5	(1) LNP-LP6X100-G-20TT	-202.9	-4.87	25.3	244.6	25.3	10	10	205.3	25.3	9	10	244.62	297.8	292.50	0.836
30.0	46.0	(3) PLT-6"X1-1/4"(1.25" Hole)	308.5	5.55	37.1	226.8	37.1	7	8	223.7	37.1	7	8	322.84	413.6	356.25	0.906
45.2	58.0	(3) PLT-7" x 1.25"(1.25"Hole)	-358.3	-4.30	37.1	262.1	37.1	8	13	311.1	37.1			340.50	498.6	431.25	0.790
58.0	78.0	(3) PLT-5.5"x1 1/4"(1.25"hol)	-348.7	-6.28	37.1	265.5	37.1			233.4	37.1			265.55	379.1	318.75	0.833
78.0	95.6	(3) PLT-5.5"x1 1/4"(1.25"hol)	-392.6	-7.07	37.1	233.4	37.1			220.7	37.1	6	10	252.93	379.1	318.75	0.793



Monopole Mat Foundation Design

Date
5/25/2018

Customer Name:	T-Mobile	EIA/TIA Standard:	EIA-222-G
Site Name:		Structure Height (Ft.):	160
Site Number:	CT02049-S-SBA	Engineer Name:	D. Zhou
Engr. Number:	52938	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations

Structure Type:

Monopole

Analysis or Design?

Analysis

Base Reactions (Factored):

Axial Load (Kips):	49.4	Shear Force (Kips):	36.5
Uplift Force (Kips):	0.0	Moment (Kips-ft):	4188.0

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
Control Value for Cell D18:	0	Control Value for Cell F18:	0

Material Properties and Rebar 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
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Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	26	Qty. of Rebar in Pad (W):	26
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Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

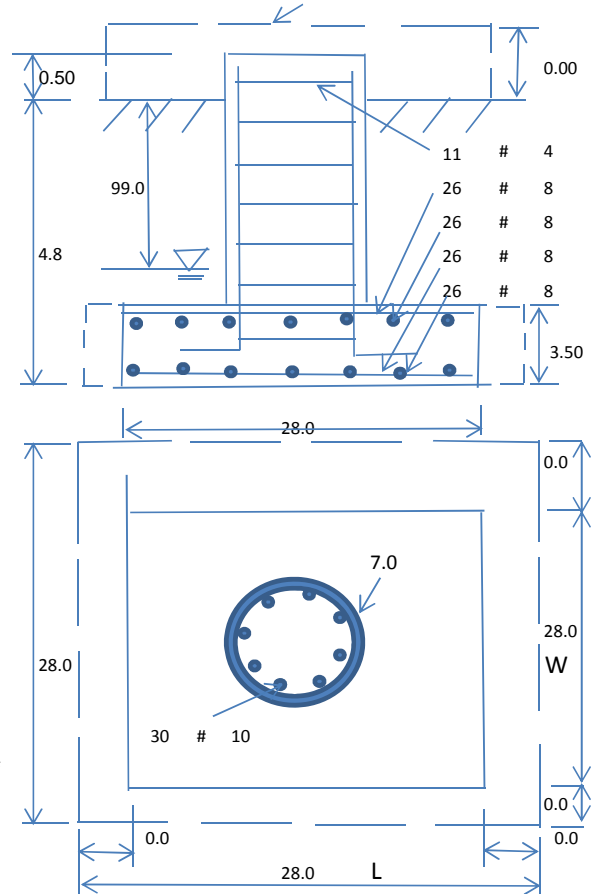
Soil Unit Weight (pcf):	115.0	Soil Buoyant Weight:	50.0	Pcf	
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad: 30
Ultimate Bearing Pressure (psf):	6000	Ultimate Skin Friction:	0	Psf	Angle from Bottm of Pad: 25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	No		Angle from Bottm of Pad: 25
Consider soil hori. force for O.T.M.:	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.):	931.89	Total Dry Soil Weight (Kips):	107.17
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	107.17	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	2811.35	Total Dry Concrete Weight (Kips):	421.70
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	421.70	Total Vertical Load on Base (Kips):	578.29

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	2242	<	Allowable Factored Soil Bearing (psf):	4500	0.50	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	7355.6	>	Design Factored Momont (kips-ft):	4380	0.60	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.68					OK!



Check the capacities of Reinforcing Concrete:

Strength reduction factor (Flexure and axial tension):	0.90	Strength reduction factor (Shear):	0.75	
Strength reduction factor (Axial compression):	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):	6439.6	> Design Factored Moment (Mu, Kips-Ft):	4251.9	0.66	OK!
Calculated Shear Capacity (Kips):	724.1	> Design Factored Shear (Kips):	36.5	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):	49.4	0.01	OK!
Moment & Axial Strength Combination(Pu/Pn+Mu/Mn):	0.67	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):	252.0	0.24	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	1062.8	> One-Way Factored Shear (W-D., Kips)	252.0	0.24	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	1237.3	> One-Way Factored Shear (C-C, Kips):	427.7	0.35	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-Direct. K-Ft):	918.7	0.26	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	3492.1	> Moment at Bottom (W-Direct. K-Ft):	918.7	0.26	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	4918.4	> Moment at Bottom (C-C Dir. K-Ft):	1299.3	0.26	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0016	OK! Upper Steel Reinf. Ratio (W-Direct.):	0.0016		
Upper Steel Pad Moment Capacity (L-Direction. Kips-ft):	3492.1	> Moment at the top (L-Dir Kips-Ft):	514.3	0.15	OK!
Upper Steel Pad Moment Capacity (W-Direction. Kips-ft):	3492.1	> Moment at the top (W-Dir Kips-Ft):	514.3	0.15	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	4918.4	> Moment at the top (C-C Direc. K-Ft):	574.7	0.12	OK!



WIRELESS COMMUNICATIONS FACILITY

BEACON FALLS

SITE ID: CT11299D

60 RICE LANE

BEACON FALLS, CT 06403

GENERAL NOTES

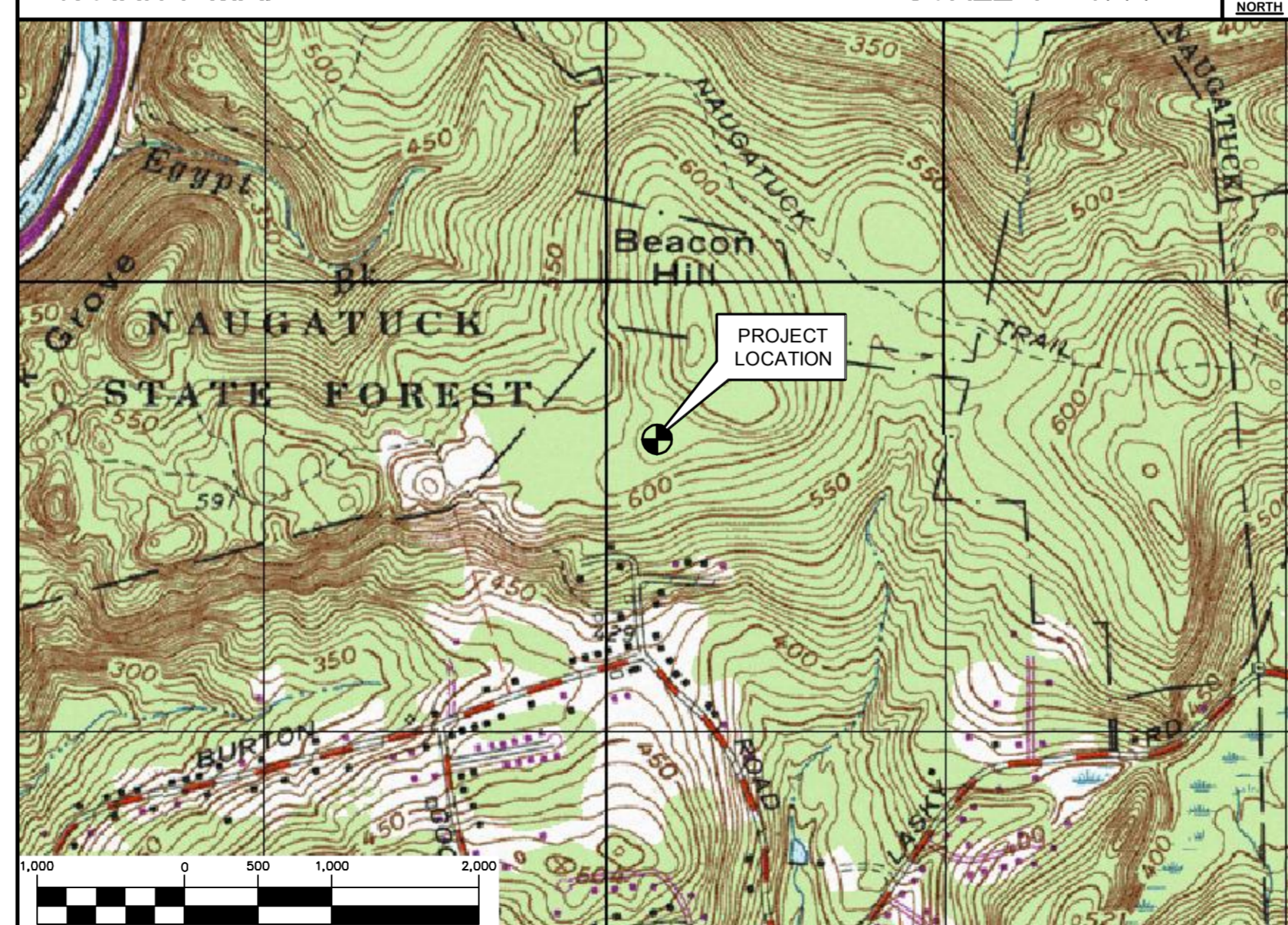
- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2016 CONNECTICUT SUPPLEMENT, INCLUDING THE TIA/EIA-222 REVISION "G" "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES." 2016 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE AND LOCAL CODES.
- CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
- CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
- CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, PLUMBING, ELECTRICAL AND HVAC. PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
- CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
- LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY.
- DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
- ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR.'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
- ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSED" ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE T-MOBILE CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO "EXTRA" WILL BE ALLOWED FOR MISSED ITEMS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
- CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
- COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.
- CONTRACTOR SHALL COMPLY WITH OWNERS ENVIRONMENTAL ENGINEER ON ALL METHODS AND PROVISIONS FOR ALL EXCAVATION ACTIVITIES INCLUDING SOIL DISPOSAL. ALL BACKFILL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.

SITE DIRECTIONS

FROM:	TO:
35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002	60 RICE LANE BEACON FALLS, CT 06403
1. HEAD NORTHWEST ON W NEWBERRY RD TOWARD GRIFFIN RD S.	0.90 MI.
2. TURN RIGHT ONTO WOODLAND AVE.	2.50 MI.
3. TURN RIGHT ONTO WINTONBURY AVE.	0.20 MI.
4. TURN LEFT ONTO CT-189 S.	1.00 MI.
5. TURN RIGHT ONTO CT-218 W.	2.70 MI.
6. CONTINUE ONTO N MAIN ST.	3.50 MI.
7. TURN RIGHT ON THE I-84 W RAMP TO WATERBURY.	0.20 MI.
8. MERGE ONTO I-84.	18.70 MI.
9. TAKE EXIT 26 FOR CT-70 TOWARD CHESHIRE/PROSPECT.	0.30 MI.
10. TURN LEFT ONTO CT-70 E/STATE HWY 801.	2.50 MI.
11. TURN RIGHT ONTO CT-68 W.	2.20 MI.
12. TURN LEFT ONTO COOK RD.	2.50 MI.
13. TURN LEFT ONTO CT-69 S.	0.50 MI.
14. TURN RIGHT AT THE 1ST CROSS STREET ONTO CT-42 W.	1.20 MI.
15. TURN LEFT ONTO CT-42 W/CT-63 S.	0.10 MI.
16. TURN RIGHT ONTO CT-42 W/STATE HWY 703.	0.10 MI.
17. TURN RIGHT ONTO CT-42 W.	2.70 MI.
18. TURN RIGHT ONTO BURTON RD.	0.50 MI.
19. CONTINUE STRAIGHT ONTO RICE LANE.	0.10 MI.

VICINITY MAP

SCALE: 1" = 1000'



T-MOBILE RF CONFIGURATION

4SEC-702Cu_1DP_2xAIR

PROJECT SUMMARY

- THE PROPOSED SCOPE OF WORK CONSISTS OF THE INSTALLATION OF A FOURTH SECTOR AT THE UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING THE FOLLOWING:
 - THE INSTALLATION OF TWO (2) NEW T-MOBILE PANEL ANTENNAS.
 - THE INSTALLATION OF ONE (1) NEW T-MOBILE REMOTE RADIO UNIT.
 - THE INSTALLATION OF ONE (1) NEW HYBRID CABLE SYSTEM (HCS) ROUTED FROM EXISTING T-MOBILE EQUIPMENT AT GRADE AND THROUGH THE TOWER INTERIOR TO THE ANTENNAS.

PROJECT INFORMATION

SITE NAME:	BEACON FALLS
SITE ID:	CT11299D
SITE ADDRESS:	60 RICE LANE BEACON FALLS, CT 06403
APPLICANT:	T-MOBILE NORTHEAST, LLC 35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002
CONTACT PERSON:	DAN REID (PROJECT MANAGER) TRANSCEND WIRELESS, LLC (203) 592-8291
ENGINEER:	CENITEK ENGINEERING, INC. 63-2 NORTH BRANFORD RD. BRANFORD, CT 06405
PROJECT COORDINATES:	LATITUDE: 41°-27'-20.49" N LONGITUDE: 73°-02'-23.11" W GROUND ELEVATION: 620'± AMSL
	SITE COORDINATES AND GROUND ELEVATION REFERENCED FROM GOOGLE EARTH PRO.

SHEET INDEX

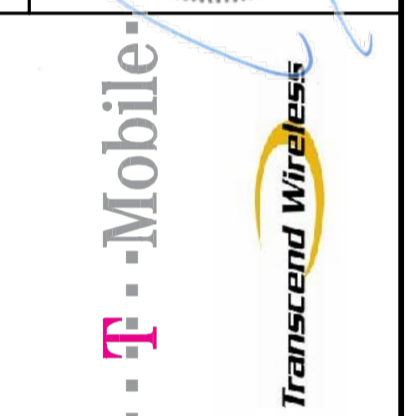
SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
N-1	DESIGN BASIS AND STRUCTURAL SPECIFICATIONS	0
C-1	SITE LOCATION PLAN	0
C-2	COMPOUND PLAN AND ANTENNA MOUNTING CONFIG.	0
C-3	ELEVATIONS	0
C-4	TYPICAL DETAILS	0

DATE: 04/09/18
SCALE: AS NOTED
JOB NO. 18065.00

TITLE SHEET

T-1

Sheet No. 1 of 6



T-MOBILE
WIRELESS COMMUNICATIONS FACILITY
CT11299D
60 RICE LANE
BEACON FALLS, CT 06403

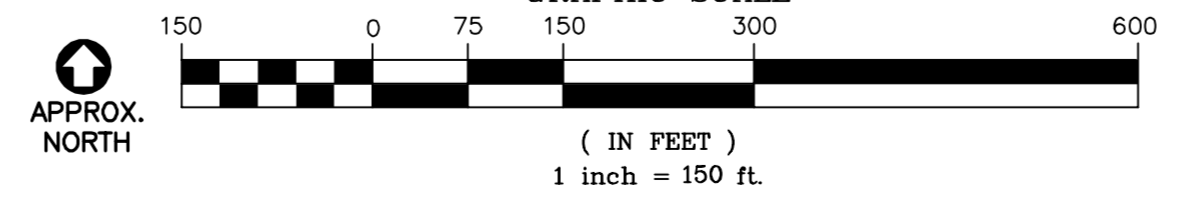
REV.	DATE	BY	CHK'D BY	DESCRIPTION
0	06/21/18			CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION

SUBJECT PROPERTY:
 60 RICE LANE
 BEACON FALLS, CT 06403

MAP: 017
 BLOCK: 002
 LOT: 0002

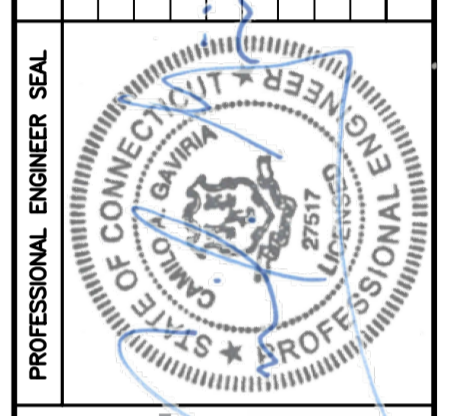


1 SITE LOCATION PLAN
 C-1 SCALE: 1" = 150'



APPROX. NORTH

REV.	DATE	BY	DESCRIPTION
0	06/21/18	LGI	CAG CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION



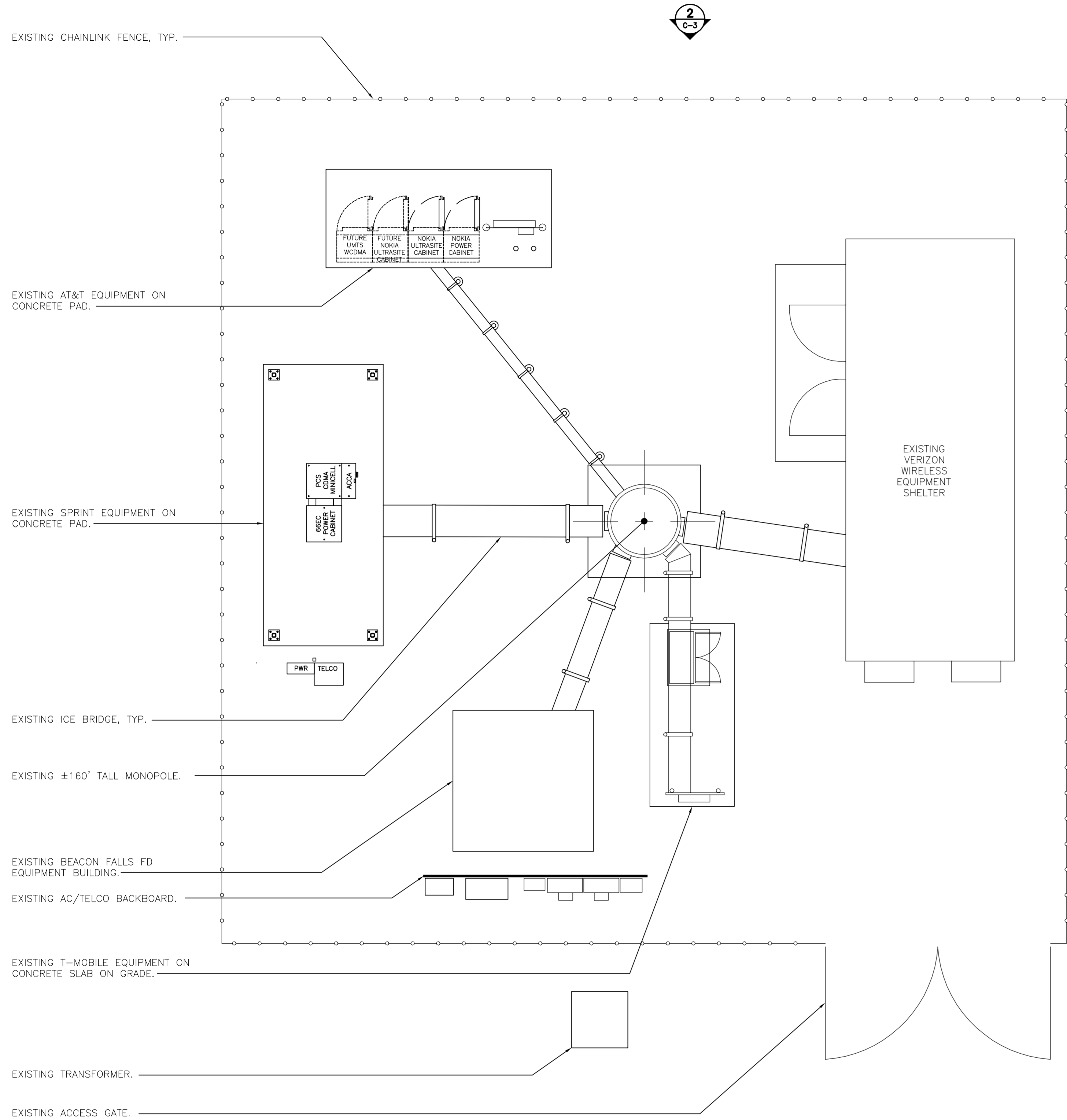
CEN TEK engineering
 Centered on Solutions
 (203) 488-0380
 (203) 488-3387 Fax
 62 North Branford Road
 Branford, CT 06405
 www.CenTekEng.com

T-MOBILE
 WIRELESS COMMUNICATIONS FACILITY
CT11299D
 60 RICE LANE
 BEACON FALLS, CT 06403

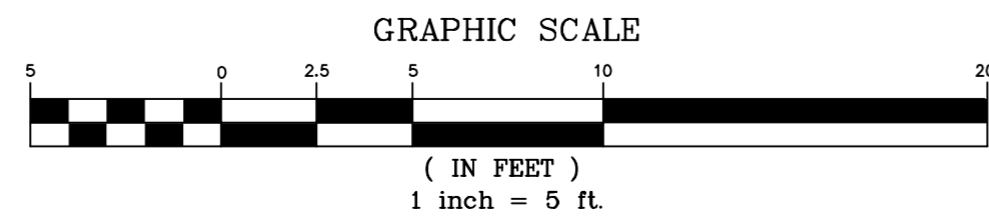
DATE: 04/09/18
 SCALE: AS NOTED
 JOB NO. 18065.00

SITE LOCATION PLAN

C-1
 Sheet No. 3 of 6



1
C-2 **COMPOUND PLAN**
SCALE: 1" = 5'-0"



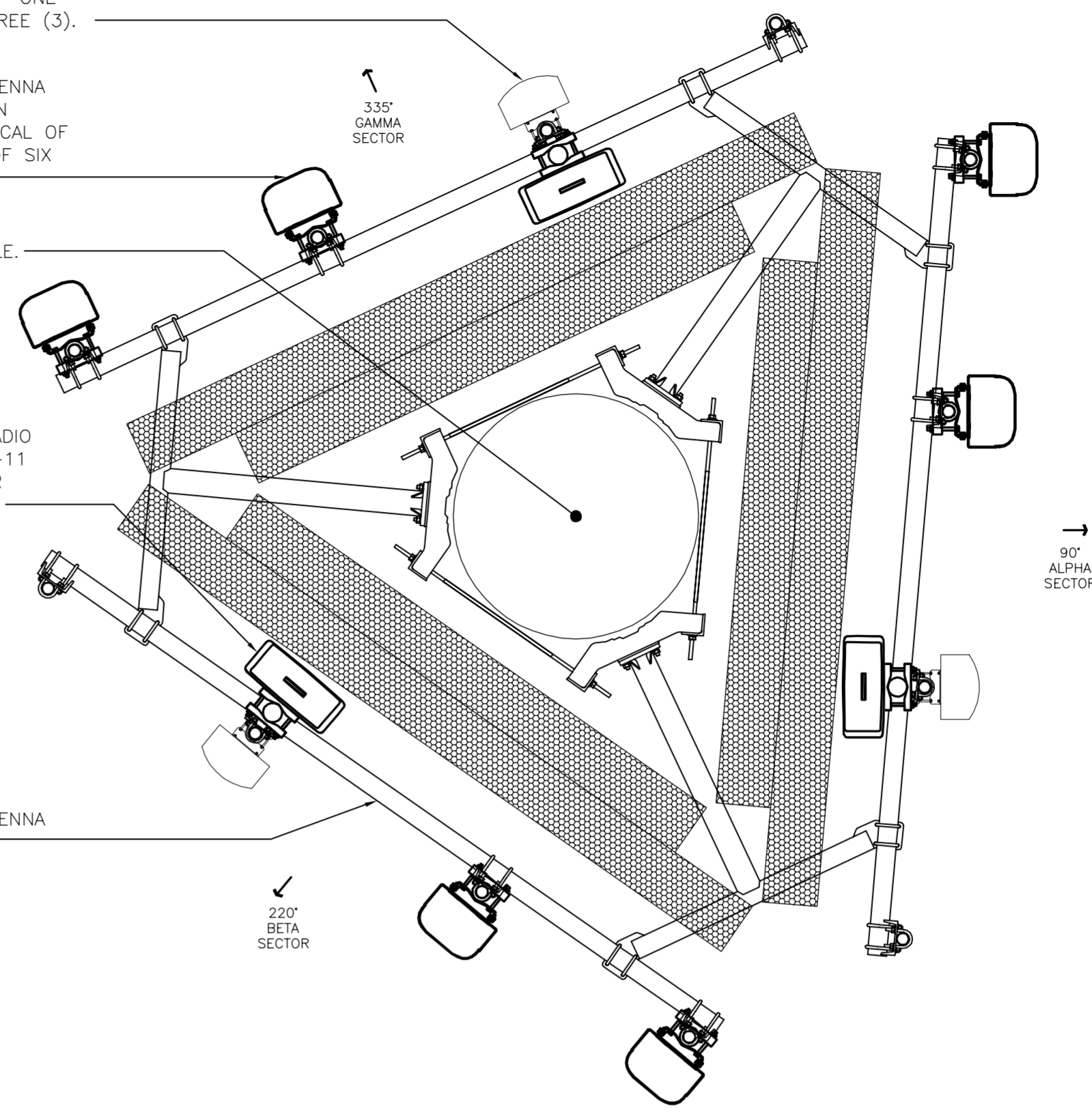
EXISTING T-MOBILE PANEL ANTENNA POSITION 3. (P/N: ANDREW LNX-6515DS-A1M), TYPICAL OF ONE (1) PER SECTOR TOTAL OF THREE (3).

EXISTING T-MOBILE PANEL ANTENNA POSITION 1&2. (P/N: ERICSSON KRC118023-1_B2P_B4A), TYPICAL OF TWO (2) PER SECTOR TOTAL OF SIX (6).

EXISTING ±160' TALL MONOPOLE.

EXISTING T-MOBILE REMOTE RADIO UNITS. (P/N: ERICSSON RRUS-11 B12) TYPICAL OF ONE (1) PER SECTOR TOTAL OF THREE (3).

EXISTING T-MOBILE PANEL ANTENNA TOWER MOUNT, TYP.



2
C-2 **EXISTING ANTENNA CONFIGURATION PLAN**
SCALE: 1/2" = 1'-0"



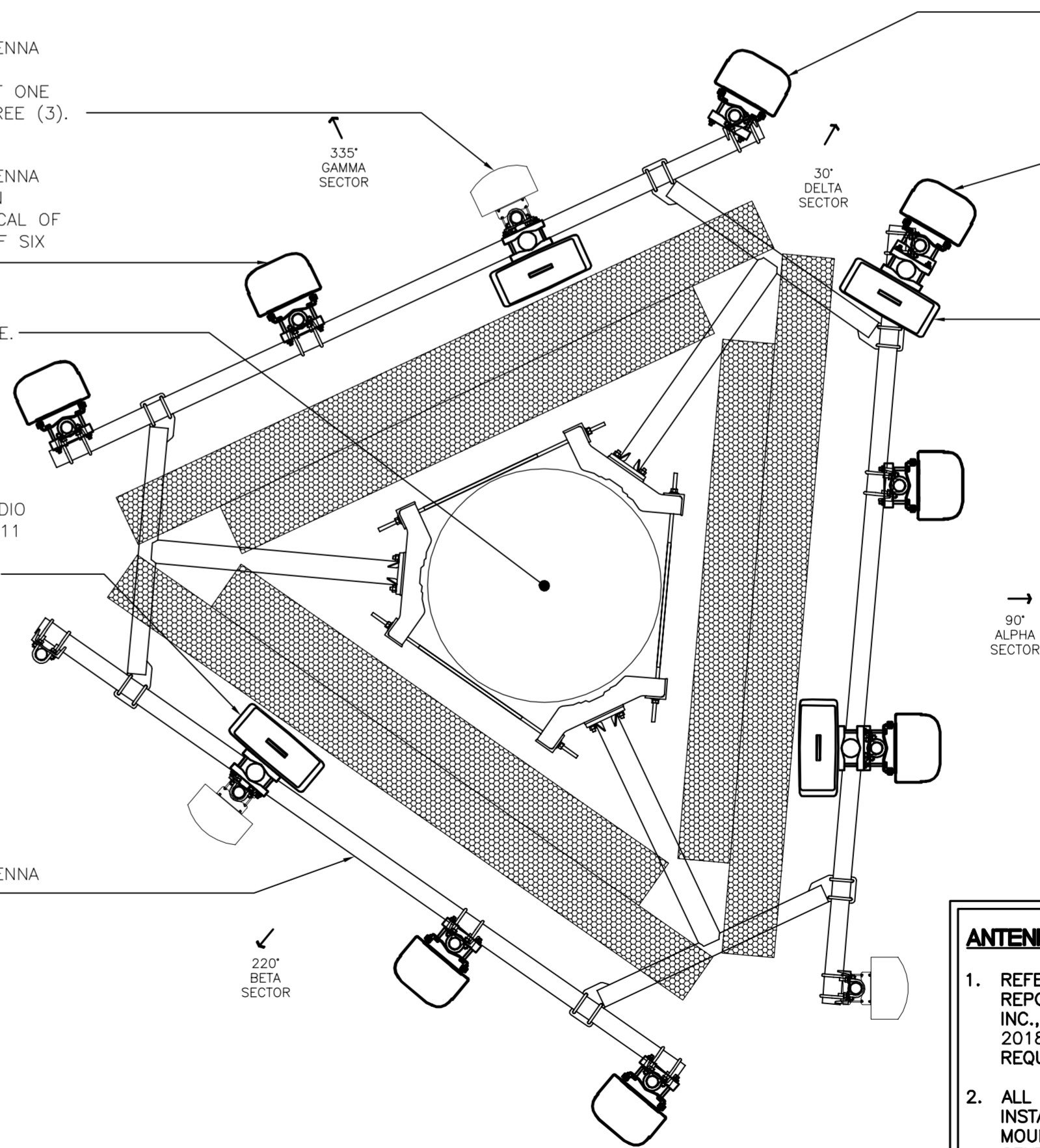
EXISTING T-MOBILE PANEL ANTENNA POSITION 3. (P/N: ANDREW LNX-6515DS-A1M), TYPICAL OF ONE (1) PER SECTOR TOTAL OF THREE (3).

EXISTING T-MOBILE PANEL ANTENNA POSITION 1&2. (P/N: ERICSSON KRC118023-1_B2P_B4A), TYPICAL OF TWO (2) PER SECTOR TOTAL OF SIX (6).

EXISTING ±160' TALL MONOPOLE.

EXISTING T-MOBILE REMOTE RADIO UNITS. (P/N: ERICSSON RRUS-11 B12) TYPICAL OF ONE (1) PER SECTOR TOTAL OF THREE (3).

EXISTING T-MOBILE PANEL ANTENNA TOWER MOUNT, TYP.

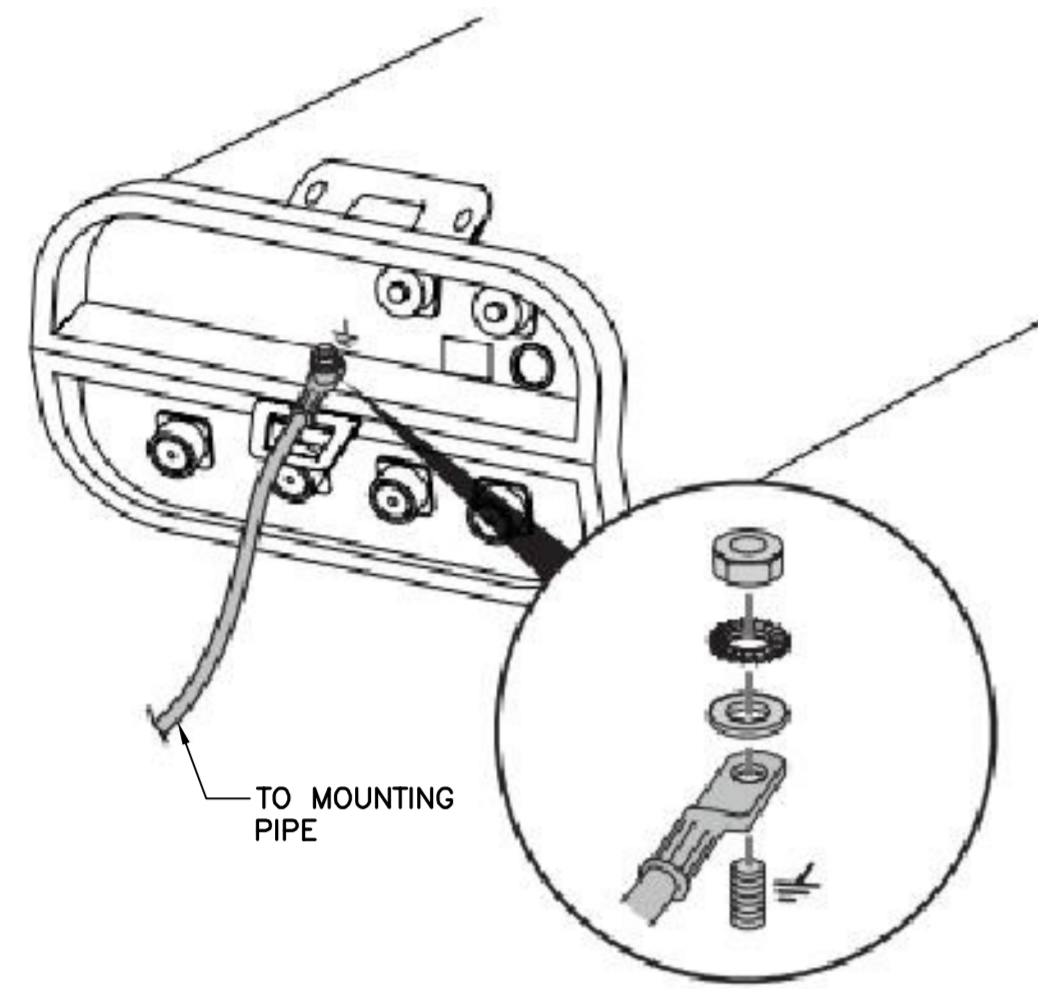


- ANTENNA MOUNT STRUCTURAL NOTES:**
1. REFER TO ANTENNA MOUNT ANALYSIS REPORT PREPARED BY CENTEK ENGINEERING, INC., PROJ. NO. 18065.00, DATED APRIL 12, 2018 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
 2. ALL ANTENNAS AND APPURTENANCES TO BE INSTALLED IN ACCORDANCE WITH ANTENNA MOUNT ANALYSIS REPORT PROVIDED BY CENTEK ENGINEERING, INC. AND FINAL T-MOBILE RF DATA SHEET.

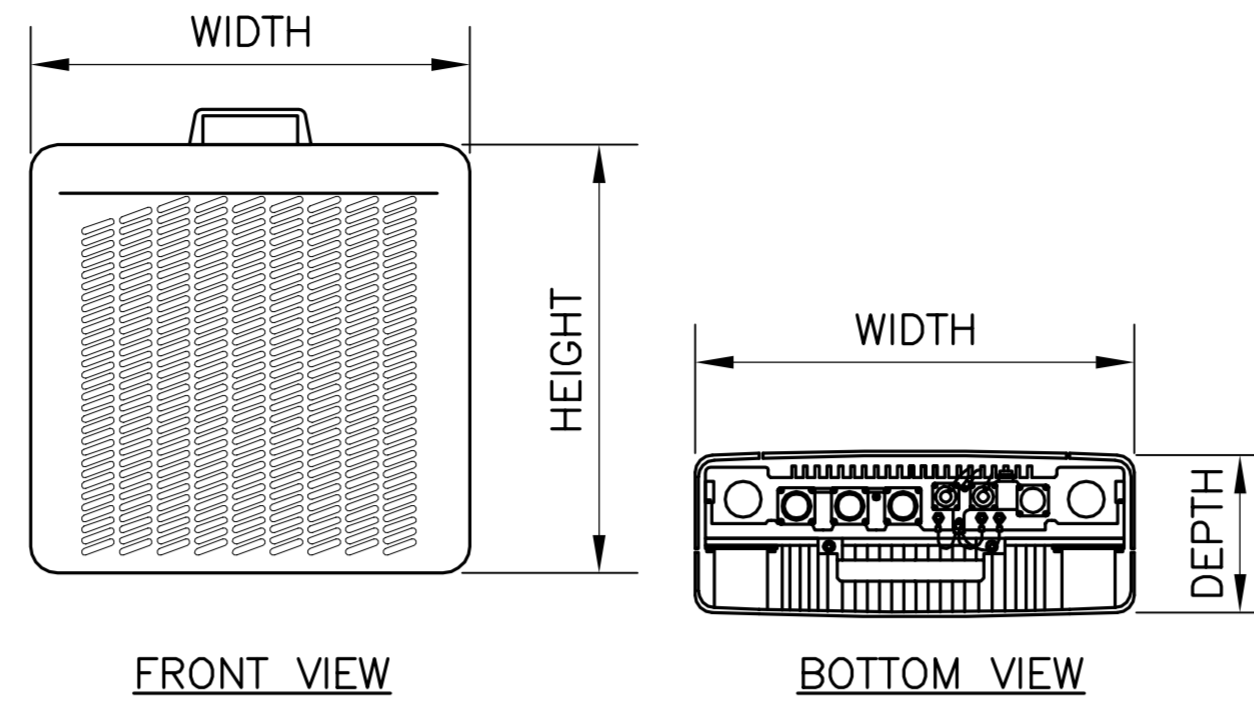
3
C-2 **PROPOSED ANTENNA CONFIGURATION PLAN**
SCALE: 1/4" = 1'-0"



PROFESSIONAL ENGINEER SEAL	CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION
	CAG
	LGI
0	06/21/18
REV.	DATE
	DRAWN BY CHK'D BY DESCRIPTION
T-MOBILE WIRELESS COMMUNICATIONS FACILITY CT11299D 60 RICE LANE BEACON FALLS, CT 06403	
DATE:	04/09/18
SCALE:	AS NOTED
JOB NO.	18065.00
COMPOUND PLAN, EQUIP. LAYOUT AND ANTENNA MOUNTING CONFIG.	
C-2	
Sheet No. 4 of 6	



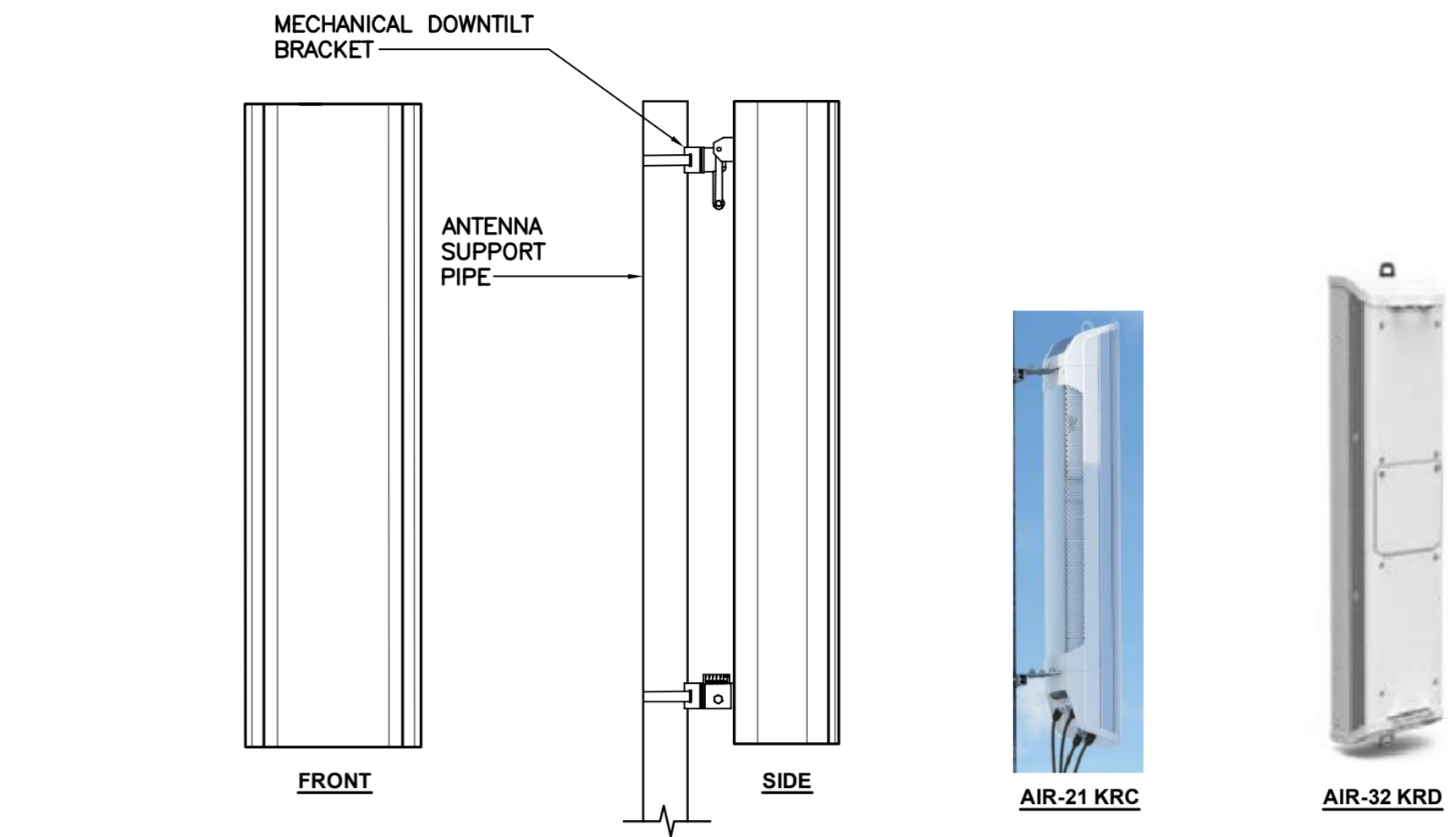
3 TYPICAL ANTENNA GROUNDING DETAIL
C-4 SCALE: NONE



RRH (REMOTE RADIO HEAD)		
EQUIPMENT	WEIGHT	CLEARANCES
MAKE: ERICSSON MODEL: RRU 11 B12	50.0 LBS	ABOVE: 12" MIN. BELOW: 12" MIN. FRONT: 36" MIN.

NOTES:
1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH T-MOBILE CONSTRUCTION MANAGER PRIOR TO ORDERING.

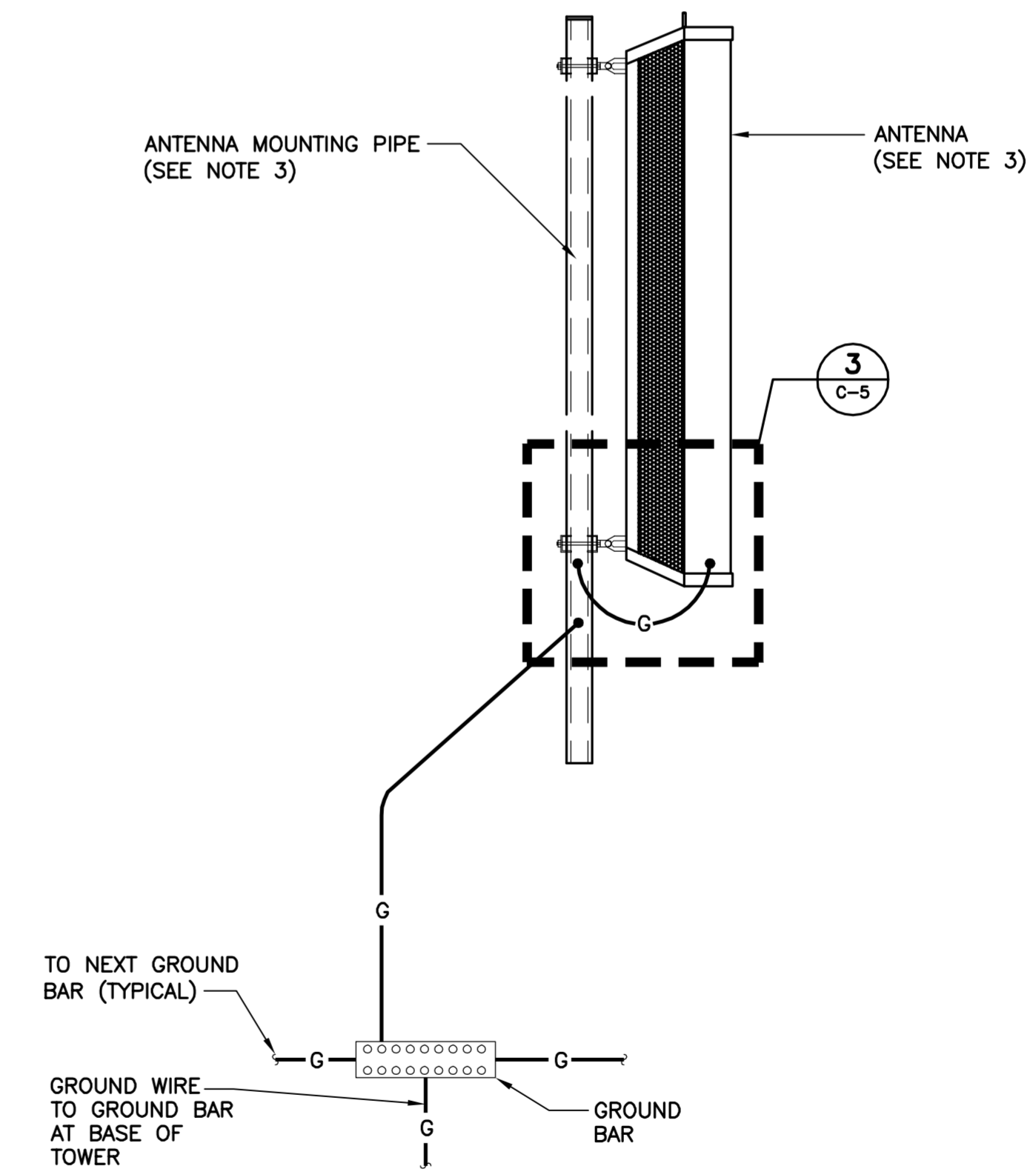
2 REMOTE RADIO HEAD (RRH) DETAIL
C-4 SCALE: NTS



ALPHA/BETA/GAMMA/DELTA ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: ERICSSON MODEL: KRD901146-1_B66A_B2A	56.6"H x 12.9"W x 8.7"D	132.2-LBS
MAKE: ERICSSON MODEL: KRC118023-1_B2A_B4P	56.0"H x 12.1"W x 7.9"D	91.5-LBS

1 PROPOSED ANTENNA DETAIL
C-4 SCALE: NTS

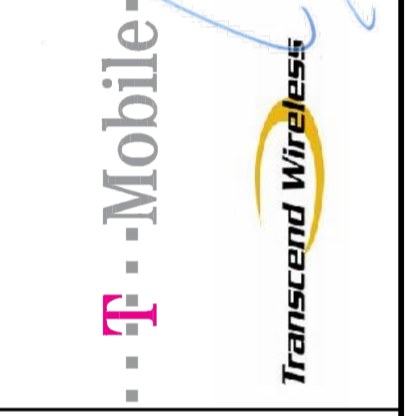
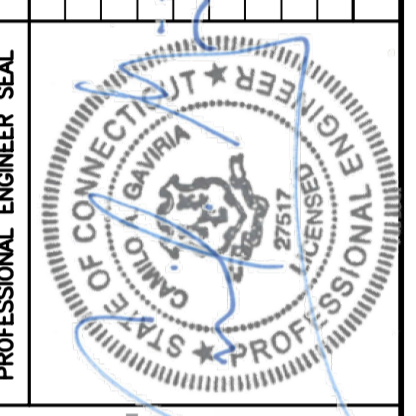
NOTES:
1. INSTALL ANTENNA TO PIPE MAST USING MANUFACTURERS SUPPLIED BRACKETS AND MOUNTING HARDWARE
2. SET MECHANICAL DOWNTILT TO VALUE SPECIFIED IN LATEST RFDS



4 TYPICAL ANTENNA GROUNDING DETAIL
C-4 SCALE: NONE

NOTES:
1. BOND COAXIAL CABLE GROUND KITS TO EACH OWNER'S GROUND BAR ALONG ENTIRE COAX RUN FROM ANTENNA TO SHELTER.
2. BOND ALL EQUIPMENT TO GROUND PER NEC AND MANUFACTURERS SPECIFICATIONS.
3. DETAIL IS TYPICAL FOR ALL ANTENNA SECTORS, INCLUDING GPS ANTENNA.

REV.	DATE	BY	CHK'D BY	DESCRIPTION
0	06/21/18	LGI		CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION



CEN TEK engineering
Centered on Solutions
(203) 498-0390
(203) 498-3397 Fax
652 North Branford Road
Branford, CT 06405
www.CenTekEng.com

T-MOBILE
WIRELESS COMMUNICATIONS FACILITY
CT11299D
60 RICE LANE
BEACON FALLS, CT 06403

DATE: 04/09/18
SCALE: AS NOTED
JOB NO. 18065.00
EQUIPMENT DETAILS
C-4
Sheet No. 6 of 6

Kyle Richers

From: UPS Quantum View <pkginfo@ups.com>
Sent: Monday, June 25, 2018 1:03 PM
To: krichers@transcendwireless.com
Subject: UPS Delivery Notification, Reference Number 1: CT11299D first selectmen



Your package has been delivered.

Delivery Date: Monday, 06/25/2018
Delivery Time: 12:57 PM

At the request of TRANSCEND WIRELESS this notice alerts you that the status of the shipment listed below has changed.

Shipment Detail

Tracking Number: [1ZV257424291222278](#)
Christopher J. Bielik
Town of Beacon Falls
10 MAPLE AVE
BEACON FALLS, CT 06403
US

Ship To:

UPS Service: UPS GROUND

Number of Packages: 1

Weight: 1.0 LBS

Delivery Location: OFFICE
BALSYS

Signature Required: A signature is required for package delivery

Reference Number 1: CT11299D first selectmen



[Download the UPS mobile app](#)

Kyle Richers

From: UPS Quantum View <pkginfo@ups.com>
Sent: Monday, June 25, 2018 7:19 PM
To: krichers@transcendwireless.com
Subject: UPS Delivery Notification, Reference Number 1: CT11299D property owner



Your package has been delivered.

Delivery Date: Monday, 06/25/2018
Delivery Time: 07:13 PM



[Set Delivery Instructions](#)

[Track Package Status](#)

[View Delivery Planner](#)

At the request of TRANSCEND WIRELESS this notice alerts you that the status of the shipment listed below has changed.

Shipment Detail

Tracking Number:	1ZV257424292104242
Ship To:	Charles Edwards 30 LORRAINE DR BEACON FALLS, CT 06403 US
UPS Service:	UPS GROUND
Number of Packages:	1
Package Weight:	1.0 LBS
Delivery Location:	RESIDENTIAL
Signed by:	EDWARDS

Kyle Richers

From: UPS Quantum View <pkginfo@ups.com>
Sent: Tuesday, June 26, 2018 12:38 PM
To: krichers@transcendwireless.com
Subject: UPS Delivery Notification, Reference Number 1: CT11299D tower owner



Your package has been delivered.

Delivery Date: Tuesday, 06/26/2018
Delivery Time: 12:30 PM

At the request of TRANSCEND WIRELESS this notice alerts you that the status of the shipment listed below has changed.

Shipment Detail

Tracking Number:	1ZV257424293806250
Ship To:	SBA Properties Inc. 8051 CONGRESS AVE BOCA RATON, FL 33487 US
UPS Service:	UPS GROUND
Number of Packages:	1
Weight:	1.0 LBS
Delivery Location:	OFFICE PIO
Signature Required:	A signature is required for package delivery
Reference Number 1:	CT11299D tower owner



[Download the UPS mobile app](#)

Kyle Richers

From: UPS Quantum View <pkginfo@ups.com>
Sent: Tuesday, June 26, 2018 2:58 PM
To: krichers@transcendwireless.com
Subject: UPS Delivery Notification, Reference Number 1: CT11299D zoning



Your package has been delivered.

Delivery Date: Tuesday, 06/26/2018
Delivery Time: 02:54 PM

At the request of TRANSCEND WIRELESS this notice alerts you that the status of the shipment listed below has changed.

Shipment Detail

Tracking Number:	1ZV257424291312260
Ship To:	Kevin McDuffie Town of Beacon Falls 10 MAPLE AVE BEACON FALLS, CT 06403 US
UPS Service:	UPS GROUND
Number of Packages:	1
Weight:	1.0 LBS
Delivery Location:	OFFICE SHATTERDON
Signature Required:	A signature is required for package delivery
Reference Number 1:	CT11299D zoning



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