



Filed by:

G. Scott Shepherd, Sr. Property Specialist - SBA Communications
134 Flanders Rd., Suite 125, Westborough, MA 01581
508.251.0720 x 3807 - GShepherd@sbsite.com

February 2, 2022

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

Notice of Exempt Modification
86 Voluntown Road, Stonington, CT
41.405539
-71.845247
T-Mobile #: CT11343A_Anchor

Dear Ms. Bachman:

T-Mobile currently maintains nine (9) antennas at the 167-foot level of the existing 196-foot Monopole at 86 Voluntown Road in Stonington, CT. The Property is owned by Blackrock Properties II, LLC. The Tower is owned by SBA Towers, LLC. T-Mobile now intends to remove (6) 1900/2100 MHz antennas and replace with three (3) new 1900/2100 MHz antennas and three (3) new 2500MHz antennas. The total amount of antennas will remain at nine (9). T-Mobile also intends to install one (1) Generac 25kw generator on a raised platform and will sit fully within the leased area of the compound and will not require additional space.

- **The new antennas would be installed at the 167-foot level of the tower and support 5G services.**

Planned Modifications:

TOWER

Remove:

- N/A



Remove and Replace:

- (3) Ericsson AIR21 B2A/B4P L2100 antennas (remove) – (3) Ericsson AIR6449 B41 2500MHz antennas (replace)
- (3) Ericsson AIR21 B4A/B2P L1900 antennas (remove) – (3) Commscope VV-65A-R1 1900/2100 antennas (replace)
- (3) Ericsson 4449 B71+B12 RRUs (remove) – (3) Ericsson 4449 B71+B85 (replace)

Install New:

- (3) Ericsson 4460 B25+B66 RRUs
- (1) 1.9" Fiber

Existing Equipment to Remain:

- (3) RFS APXVAALL24_43-U-NA20 antennas
- (3) Ericsson 4449 B71+B85 RRUs
- (3) Ericsson KRY 112 144/1 TMAs
- SitePro PRK-125/VSR Low profile platform w/handrails & Reinforcement kit
- (8) 1-5/8" Coax
- (3) 1-5/8" Fiber

Entitlements:

- (1) 1-5/8" Fiber
- (1) 1-5/8" Coax

GROUND

Install New:

- (1) Generac 25kw diesel generator mounted to existing elevated steel platform
- (1) 2" RGS conduit for Power from existing PPC to Proposed equip. Cabinet
- (1) 2" RGS conduit for emergency power from proposed generator to proposed ATS
- (1) 1-1/2" RGS conduit for generator heater & Battery charger from existing PPC to Proposed generator
- (1) 2" RGS conduit for thernet cable for generator controls & alarms from exist. Equip. cabinet to proposed generator
- (1) 2" RGS conduit for AAV from exist. Fiber cabinet to proposed equip. cabinet
- T-Mobile Ericsson 6160 Equip. Cabinet mounted exist. Concrete pad
- (1) 1" RGS conduit for DC power from existing fiber cabinet to proposed equip. cabinet
- (2) 2" RGS conduit for alarm & Spare
- T-Mobile Ericsson 6160 equip. cabinet mounted to existing concrete pad
- Generac 200A, 120/240v Automatic transfer switch mounted to existing H-Frame (install add'l Unistrut, as required)
- (1) 2" RGS conduit for emergency power from proposed ATS to existing PPC
- T-Mobile Slackbox mounted to existing H-Frame
- (1) 2" RGS conduit w/LBs for DC Power wiring per Manuf. Req's



Remain:

- (1) 5'-6" x 10' concrete pad
- GPS antenna mounted existing Ice Shield post
- Cable Ice Bridge
- Ice Shield
- Caged Ladder
- Existing 10'-6" x 16'-6" elevated steel platform
- T-Mobile 200A PPC & Surge Protector mounted to existing H-Frame
- T-Mobile CIENA 3931 SDS mounted to existing H-Frame
- Emerson Nextend Compact 2416 Fiber Cabinet mounted to existing H-Frame

Remove:

- T-Mobile Battery cabinet mounted to existing equip. cabinet
- Ericsson RBS6131 Equip. Cabinet (and associated conduits)

Reason for Request / Change in Generator Size and Fuel

In an effort to further enhance network reliability, T-Mobile is proposing to install a diesel-based backup generator, the Generac RD025 25kw Diesel Generator. T-Mobile is currently in the middle of a National Hardening Project.

The proposed diesel generator measures 103.4" x 35" x 91.7" including tank. It will sit fully within the leased area of the compound and will not require additional space for the supplementary tank.

Generac's RD025 25kw Diesel Generator carries up to 98 hours of run time with 100% load, 125 hours of run time with a 75% load and 161 hours of run time with a 50% load. It can operate in temperatures of 122 degrees Fahrenheit.

Monitoring, Prevention and Containment Measures

It will be filled by a licensed fuel filling company. The Generac's RD025 25kw Diesel Generator is fuel efficient, rodent and corrosion resistant, and has a sound attenuated aluminum enclosure with a Rated Load Sound Output at 23ft. of -65dB. It further supports advanced, remote monitoring for diagnostics and control and is installed with a tank alarm system. The Sound Output from the Generac RD025kw meets/exceeds the allowable noise emissions levels for the Town of Stonington, CT, which is as follows:



(b) Motorized equipment or machinery with engines powered by electricity, gasoline or other fuel products, such as snow blowers, snow throwers, leaf blowers, leaf vacuums, lawn mowers, tractors, trimmers, chainsaws, wood chippers, log splitters, and generators, excluding motor vehicles, shall be operated at all times with a muffler in working order to abate the exhaust, combustion and explosive noises therefrom. In addition, with the exception of snow blowers and snow throwers, such equipment may not be operated in the following time periods such that the noise therefrom exceeds 45 dBA measured at the receptor's property line:

Mondays to Fridays: before 7:00 am, or
 after 7:00 pm

Saturdays, State or
Federal Holidays: before 8:00 am, or
 after 6:00 pm

Sundays: before 10:00 am, or
 after 4:00 pm

Noise Prohibited (measured in dBA):

The proposed modification will remain within the existing 38'-2" x 39'-1" fenced compound. The new generator and tank will be surrounded by the existing security fence and 12' wide double swing gate and will be placed on an elevated steel platform.

Additional safety specifications:

- Automatic Voltage Regulation with Over and Under Protection
- Overspeed Shutdown
- High Temperature Shutdown
- Meets ANSI/IEEE C62.41, SA CSA 22.2, SAE J1349, NFPA 37, 70 99

Revised Construction Drawings and Full Spec Sheets referencing the above are attached herewith.

The revised ground configuration continues to meet all requirements for a Notice of Exempt Modifications. The request remains technically, legally, environmentally, and economically feasible and meets public safety concerns per Connecticut General Statute Section 16-50aa.

There is no environmental impact associated with the revised ground configuration, including, but not limited to, visibility, wetlands and water resources, air quality or noise.



T-Mobile's revised ground configuration:

- Will not have any significant adverse visual impact on the surrounding areas
- Does not affect or alter the existing site with regard to wetlands, water resources or air quality
- The generator would only be used in cases of emergency and would provide backup time of approximately 60 hours in time of need.

The proposed work is not thought to have any substantial adverse environmental impact. Public Need for the additional coverage outweighs any minor environmental effects that would result from the construction, operation, and maintenance of the proposed collocation.

A Map of the Site Showing Nearest Wetlands, depicted in feet, is attached herewith. There were no wetlands identified in the immediate surrounding area.

This facility was originally approved prior to the Council's jurisdiction, through Special Use Permit granted on July 2, 1998 by the Town of Stonington's Planning and Zoning Commission. Under Case PZ9823SPA, a multi-tenant monopole telecommunication facility and placement of associated equipment was approved. There were no post construction stipulations set. Please see attached.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16.50j-72(b)(2). In accordance with R.C.S.A. § 16.50j-73, a copy of this letter is being sent to the Town of Stonington's First Selectman, Danielle Chesebrough, and Planning and Zoning Commission, Keith Brynes, as well as to the property owner, Blackrock Properties II, LLC. (Separate notice is not being sent to tower owner, as it belongs to SBA.)

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. §16.50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modification 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 telecommunication facility constitute an exempt modifications under R.C.S.A. § 16-50j-72(b)(2).



Sincerely,

G. Scott Shepherd
Sr. Property Specialist
SBA COMMUNICATIONS CORPORATION
134 Flanders Rd., Suite 125
Westborough, MA 01581
508.251.0720 x3804 + T
508.366.2610 + F
508.868.6000 + C
GShepherd@sbsite.com

Attachments

- cc: Danielle Chesebrough, First Selectman / with attachments
Town of Stonington, 152 Elm Street, Stonington, CT 06378
Keith Brynes, Planning and Zoning Commission / with attachments
Town of Stonington, 152 Elm Street, Stonington, CT 06378
Blackrock Properties II, LLC / with attachments
602 West Market Street, Germantown, OH 45327 (SBA Address on file)

Exhibit List

Exhibit 1	Check Copy	X
Exhibit 2	Notification Receipts	x
Exhibit 3	Property Card	x
Exhibit 4	Property Map	x
Exhibit 5	Original Zoning Approval	Town of Stonington P&Z Commission 7/2/98
Exhibit 6	Construction Drawings	Chappell dated 1/7/22
Exhibit 7	Structural Analysis	TES dated 1/14/22
Exhibit 8	Mount Analysis	TES 1/5/22
Exhibit 9	EME Report	Centerline 1/21/22
Exhibit 10	Generator Specs	x
Exhibit 11	Wetlands Map	x

EXHIBIT 1

Copy of check

EXHIBIT 2

Mailing Labels

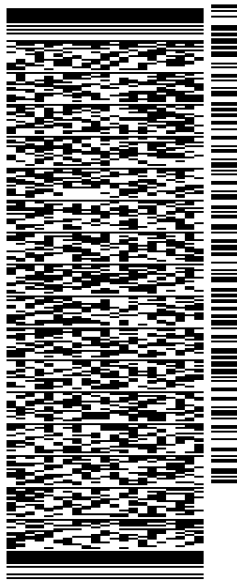
ORIGIN ID:BFBA (508) 614-0389
RICK WOODS
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 31 JAN 22
ACTWGT: 2.00 LB
CAD: 105843304/NET4460
BILL SENDER

TO MELANIE A. BACHMAN EXEC. DIR
CONNECTICUT SITING COUNCIL
TEN FRANKLIN SQUARE

NEW BRITAIN CT 06051

(508) 251-0720 X 3807 REF: 105692009-6089
INV. PO. DEPT:

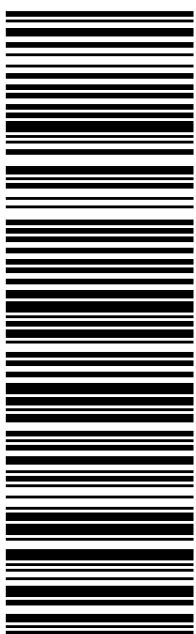


56D.J2027C/FE4A

TRK# 7759 1839 9979 TUE - 01 FEB 10:30A
0201 PRIORITY OVERNIGHT

EB BDLA

06051
CT:US BDL



After printing this label:

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FedEx Tracking

Track Another Shipment Help

775918399979



ADD NICKNAME

ON TIME

Scheduled delivery: Pending



PICKED UP
WESTBOROUGH, MA

GET STATUS UPDATES

FROM
SBA COMMUNICATIONS CORPORATION
 Rick Woods
 134 Flanders Rd
 Suite 125
 WESTBOROUGH, MA US 01581
 508-614-0389

TO
 Melanie A. Bachman Exec. Dir
 Connecticut Siting Council
 Ten Franklin Square
 NEW BRITAIN, CT US 06051
 508-251-0720

MANAGE DELIVERY

Travel History

Shipment Facts

Travel History

TIME ZONE
Local Scan Time

Wednesday, February 2, 2022

1:01 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
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Monday, January 31, 2022

4:56 PM	WESTBOROUGH, MA	Returning package to shipper Return tracking number 775918399979
4:23 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
2:29 PM		Shipment information sent to FedEx

Expand History

Shipment Facts

TRACKING NUMBER
775918399979

SERVICE
FedEx Priority Overnight

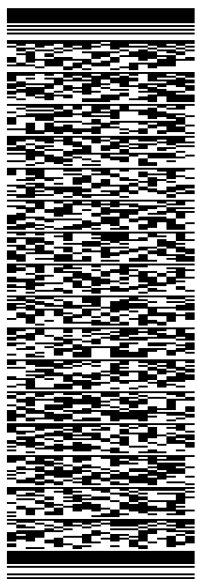
WEIGHT
2 lbs / 0.91 kgs

ORIGIN ID:BFBA (508) 614-0389
RICK WOODS
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 31 JAN 22
ACTWGT: 1.00 LB
CAD: 105843304/NET4460
BILL SENDER

TO DANIELLE CHESERBROUGH
TOWN OF STONINGTON
FIRST SELECTMAN
152 ELM ST
STONINGTON CT 06378
(508) 251-0720 X 3807
REF: 10-56-92009-6089
PO: DEPT:

56D.J2027C/FE4A

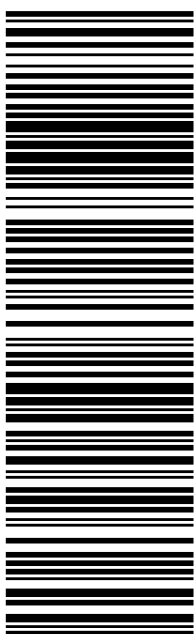


J221022010501uv

TRK# 7759 1844 7632
0201
TUE - 01 FEB 12:00P
PRIORITY OVERNIGHT

EB GONA

06378
CT:US BDL



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FedEx Tracking

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775918447632



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FROM
SBA COMMUNICATIONS CORPORATION
 Rick Woods
 134 Flanders Rd
 Suite 125
 WESTBOROUGH, MA US 01581
 508-614-0389

TO
 Danielle Chesebrough
 Town of Stonington
 First Selectman
 152 Elm St
 STONINGTON, CT US 06378
 508-251-0720

MANAGE DELIVERY

Travel History

Shipment Facts

Travel History

TIME ZONE
Local Scan Time

Wednesday, February 2, 2022

1:01 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
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Monday, January 31, 2022

4:57 PM	WESTBOROUGH, MA	Returning package to shipper Return tracking number 775918447632
4:23 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
2:31 PM		Shipment information sent to FedEx

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Shipment Facts

TRACKING NUMBER
775918447632

SERVICE
FedEx Priority Overnight

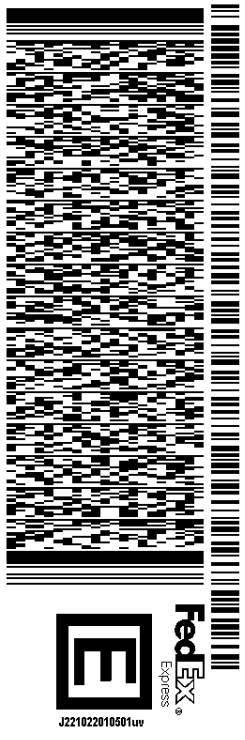
WEIGHT
0.5 lbs / 0.23 kgs

ORIGIN ID:BFBA (508) 614-0389
RICK WOODS
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 31 JAN 22
ACTWGT: 1.00 LB
CAD: 105843304/NET4460
BILL SENDER

TO
KIETH BRYNES
TOWN OF STONINGTON
PLANNING & ZONING COMMISSION
152 ELM ST
STONINGTON CT 06378
(508) 251-0720 X 3807
REF: 105692009-6089
PO: DEPT:

56D.J2027C/FE4A



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TUE - 01 FEB 12:00P
PRIORITY OVERNIGHT

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CT-US BDL
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SBA COMMUNICATIONS CORPORATION
 Rick Woods
 134 Flanders Rd
 Suite 125
 WESTBOROUGH, MA US 01581
 508-614-0389

TO
Kieth Brynes
 Town of Stonington
 Planning & Zoning Commission
 152 Elm St
 STONINGTON, CT US 06378
 508-251-0720

MANAGE DELIVERY

Travel History

Shipment Facts

Travel History

TIME ZONE
Local Scan Time

Wednesday, February 2, 2022

1:01 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
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Monday, January 31, 2022

4:57 PM	WESTBOROUGH, MA	Returning package to shipper Return tracking number 775918471420
4:23 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
2:32 PM		Shipment information sent to FedEx

Expand History

Shipment Facts

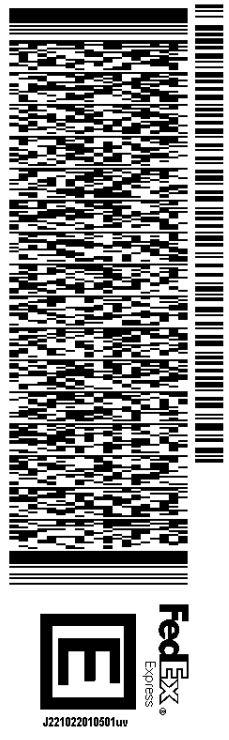
ORIGIN ID:BFBA (508) 614-0389
RICK WOODS
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 31 JAN 22
ACTWGT: 1.00 LB
CAD: 105843304/NET4460
BILL SENDER

TO
BLACKROCK PROPERTIES II, LLC
602 WEST MARKET ST

GERMANTOWN OH 45327
(508) 251-0720 X 3827 REF: 105692009-6089
INV# PO: DEPT:

56D.J2027C/FE4A



TRK# 7759 1849 6479
0201
TUE - 01 FEB 10:30A
PRIORITY OVERNIGHT

XN MWOA
OH-US DAY
45327

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FedEx Tracking

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ON TIME

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SBA COMMUNICATIONS CORPORATION
Rick Woods
134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO
Blackrock Properties II, LLC
602 West Market St
GERMANTOWN, OH US 45327
508-251-0720

MANAGE DELIVERY

Travel History

Shipment Facts

Travel History

TIME ZONE
Local Scan Time

Wednesday, February 2,
2022

1:01 PM WESTBOROUGH, MA Picked up
Tendered at FedEx Office

Monday, January 31, 2022

4:57 PM WESTBOROUGH, MA Returning package to shipper
Return tracking number 775918496479

4:23 PM WESTBOROUGH, MA Picked up
Tendered at FedEx Office

2:33 PM Shipment information sent to FedEx

Expand History

Shipment Facts

TRACKING NUMBER
775918496479

SERVICE
FedEx Priority Overnight

WEIGHT
0.5 lbs / 0.23 kgs

EXHIBIT 3

Property Card



Town of Stonington, CT

Property Listing Report

Map Block Lot

18-2-5

Building # 1

PID

2736

Account

00671600

Property Information

Property Location	86 VOLUNTOWN RD
Owner	BLACKROCK PROPERTIES II LLC
Co-Owner	
Mailing Address	PO BOX 1113 MIAMISBURG OH 45343-1113
Land Use	430V TEL X STA M-00
Land Class	I
Zoning Code	HI-60
Census Tract	7051

Neighborhood	3000
Acreage	0.46
Utilities	
Lot Setting/Desc	Suburban Level
Book / Page	0439/0311
Additional Info	

Primary Construction Details

Year Built	0
Building Desc.	TEL X STA M-00
Building Style	UNKNOWN
Building Grade	
Stories	
Occupancy	
Exterior Walls	
Exterior Walls 2	NA
Roof Style	
Roof Cover	
Interior Walls	
Interior Walls 2	NA
Interior Floors 1	
Interior Floors 2	

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

(*Industrial / Commercial Details)

Building Use	Vacant
Building Condition	
Sprinkler %	
Heat / AC	
Frame Type	
Baths / Plumbing	
Ceiling / Wall	
Rooms / Prtns	
Wall Height	
First Floor Use	
Foundation	

Photo



Sketch





Town of Stonington, CT

Property Listing Report

Map Block Lot **18-2-5**

Building # **1**

PID **2736**

Account **00671600**

Valuation Summary (Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	0	0
Extras	0	0
Improvements		
Outbuildings	117100	81900
Land	91900	64300
Total	209000	146200

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	0	0

Outbuilding and Extra Features

Type	Description
FENCE-8' CHAIN	230.00 L.F.
CELL EQ SHELTER	240.00 S.F.
CELL TOWER	1.00 UNIT
CELL EQ SHELTER	240.00 S.F.
PLATFORM	120.00 UNIT
PLATFORM	180.00 UNIT
PLATFORM	36.00 UNIT
PLATFORM	648.00 UNIT

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
BLACKROCK PROPERTIES II LLC	0439/0311	7/20/1999	0
BLACKROCK PROPERTIES II LLC	0421/0916	7/17/1998	35000
BLACKROCK PROPERTIES 11 LLC	0421/0427	7/9/1998	0
PRACHNIAK STANLEY & AMELIA &	0309/0175	2/22/1989	0
PRACHNIAK STANLEY & PAUL G HOLLAND	0245/0869	12/20/1983	0
OLIVERIO DANIEL & MICHAEL A	0202/0075	6/6/1974	0

EXHIBIT 4

Property Map

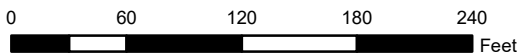
Town of Stonington, Connecticut - Assessment Parcel Map

Parcel: 18-2-5 Address: 86 VOLUNTOWN RD



Approximate Scale:

1 inch = 100 feet

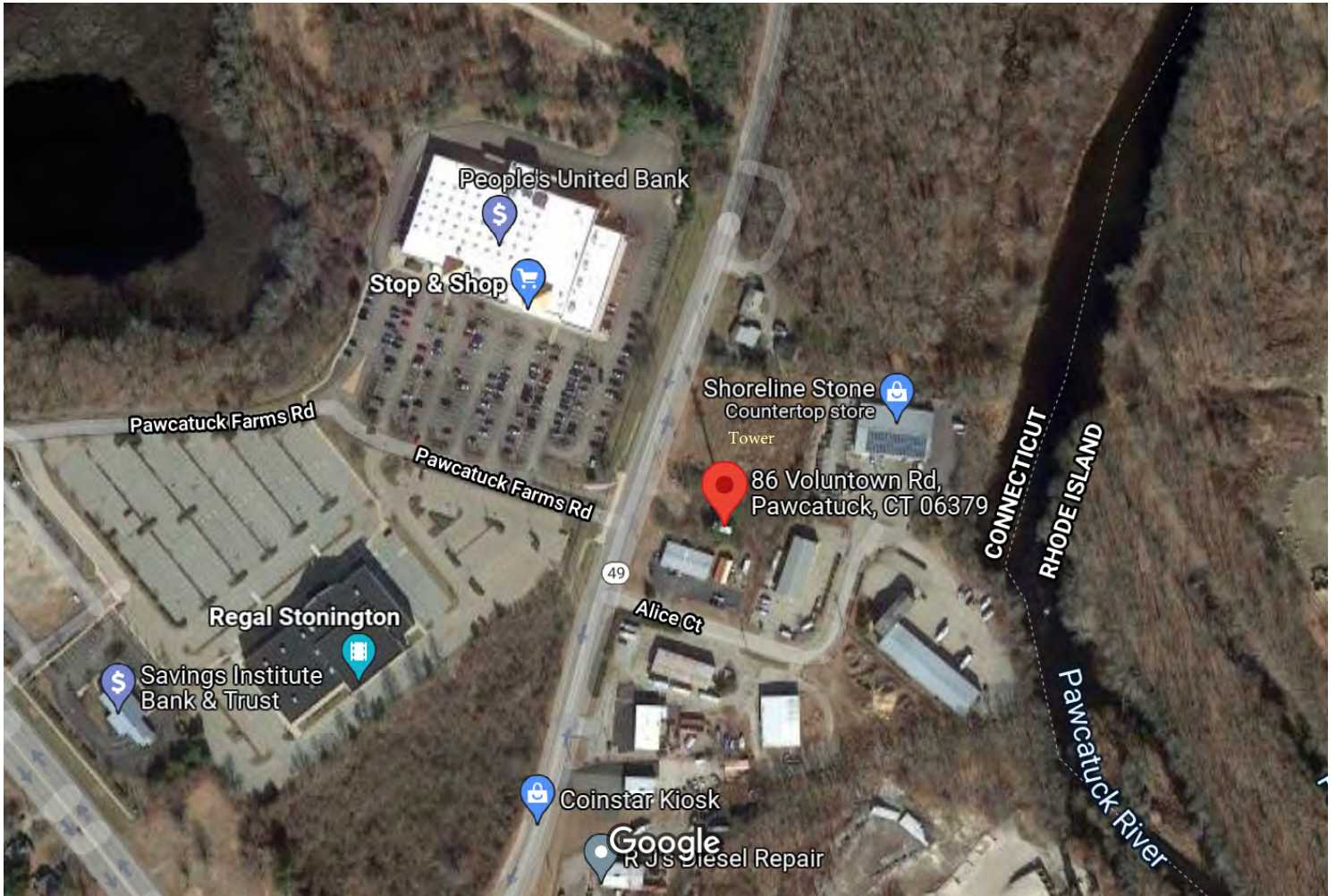


Revised To: October 2018

Map Produced: April 2019

Disclaimer: This map is for informational purposes only. All information is subject to verification by any user. The Town of Stonington and its mapping contractors assume no legal responsibility for the information contained herein.

Google Maps 86 Voluntown Rd



Imagery ©2022 Maxar Technologies, RIGIS, USDA Farm Service Agency, Map data ©2022 200 ft

EXHIBIT 5

Zoning Documents

SITE ID #~~877~~ 0595

SITE NAME: Stonington East / CT00595-5
Zoning

JOB COST #000595

ZONING/PERMITTING COMPLETION FORM

Zoning Classification for Site: HI

Special Relief (setback, height variance, special use permit, wetlands permit etc.):

Special Use Permit

* Date of Zoning Decision: 7/2/98

Summary of zoning conditions **(Include details of any conditions relative to time restrictions, expiration dates, renewal obligations, monetary obligations, performance obligation, inspection fees).**

See attached conditions.

Submitted by: Esther McNany

Title: Territory Manager

Territory Manager Approval:

* Attach a copy of the Zoning decision and forward to the Regional Compliance Manager as soon as possible, after the decision.

TOWN OF STONINGTON
The Planning and Zoning Commission
152 Elm Street, P.O. Box 352
Stonington, Connecticut 06378
(860) 535-5095

July 8, 1998

Scott Thomae
SBA, Inc.
125 Shaw Street #116
New London, CT 06320

Dear Sir:

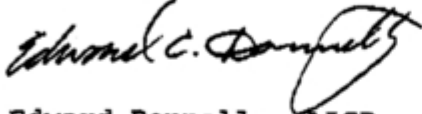
The Planning and Zoning Commission at their meeting of July 2, 1998 voted to APPROVE your application - #PZ9823SPA SBA, Inc. / SCOTT THOMAE - Application for Site Plan Approval for a multi-tenant monopole telecommunications facility and placement of associated equipment. Property located at 86 Voluntown Road, Stonington. Assessor's Map 18 Block 2 Lot 5 Zone HI. Groundwater Protection Permit Required. Your application was approved with the following stipulations:

1. Show the location of erosion & sedimentation devices on the plan.
2. Provide the geotechnical information to the Town Engineer which includes soil types and bearing capacity of the soils found on this site.
3. Clean up the lot: remove existing Russian Olive and other weedy vegetation, grade and bring in loam, apply an ecology grass seed mixture which will require mowing only once or twice a year. In addition to the planting around the tower enclosure, plant three deciduous trees in the front portion of the site in the locations indicated in the attached sketch plan and as follows: 1- Honey Locust (*Gleditsia triacanthos* var. *inermis* "Moraine or Shade Master") and 2 Winter King Hawthorn (*Crataegus viridis* "Winter King"), 2 inch caliper minimum at time of planting.

Please schedule an appointment with the Planning Office to review the final plans which have incorporated all the above stipulations and/or changes. Please bring to the Planning and Zoning Office for the Chairman's signature one (1) set of bluelines and one (1) set of mylars and one

If you have any questions, please feel free to contact the Planning Office.

Sincerely,

A handwritten signature in cursive script, appearing to read "Edward C. Donnelly".

Edward Donnelly, AICP
Planning Director

Enclosure

Stonington East/CT00595
Verizon Shelter Stacking

OFFICE OF THE BUILDING OFFICIAL



Town Of Stonington
152 Elm Street
Stonington, Connecticut 06378
(860) 535-5075 • Fax (860) 535 - 1023

Zoning

Date of Final Inspection: July 2, 2008

CERTIFICATE OF USE AND OCCUPANCY

This is to certify that the building located on:

86 Voluntown Road, Pawcatuck

constructed as install antennas on existing tower and place equipment shelter on raised steel platform within compound

for Blackrock Properties LLC, property owner;
Verizon-Celco Partnership - applicant

under Building Permit No. B-2007-448 dated 9/13/2007

conforms substantially to the requirements of the 1996 edition of the BOCA National Building Code, and the 1999 Connecticut Supplement, the State of Connecticut Public Health Code and is hereby approved for use and/or occupancy as indicated below:

Temporary Occupancy in accordance with Section 118.2

Permanent Occupancy in accordance with Section 118.0 X

Use Group (Article 3) U / Construction Type 5B

Any additional work, structural, plumbing, heating or electrical will require new permits and a new certificate of occupancy. The above captioned structure may not be occupied for a period of more than thirty days from time of completion of such new work without a new certificate of occupancy.

Wayne Jones
Building Official

7/10/08
Date

EXHIBIT 6

Construction Drawings

STONINGTON/I-95_1

86 VOLUNTOWN ROAD
STONINGTON, CT 06379
NEW LONDON COUNTY

SITE NO.: CT11343A

SITE TYPE: 196'± MONOPOLE

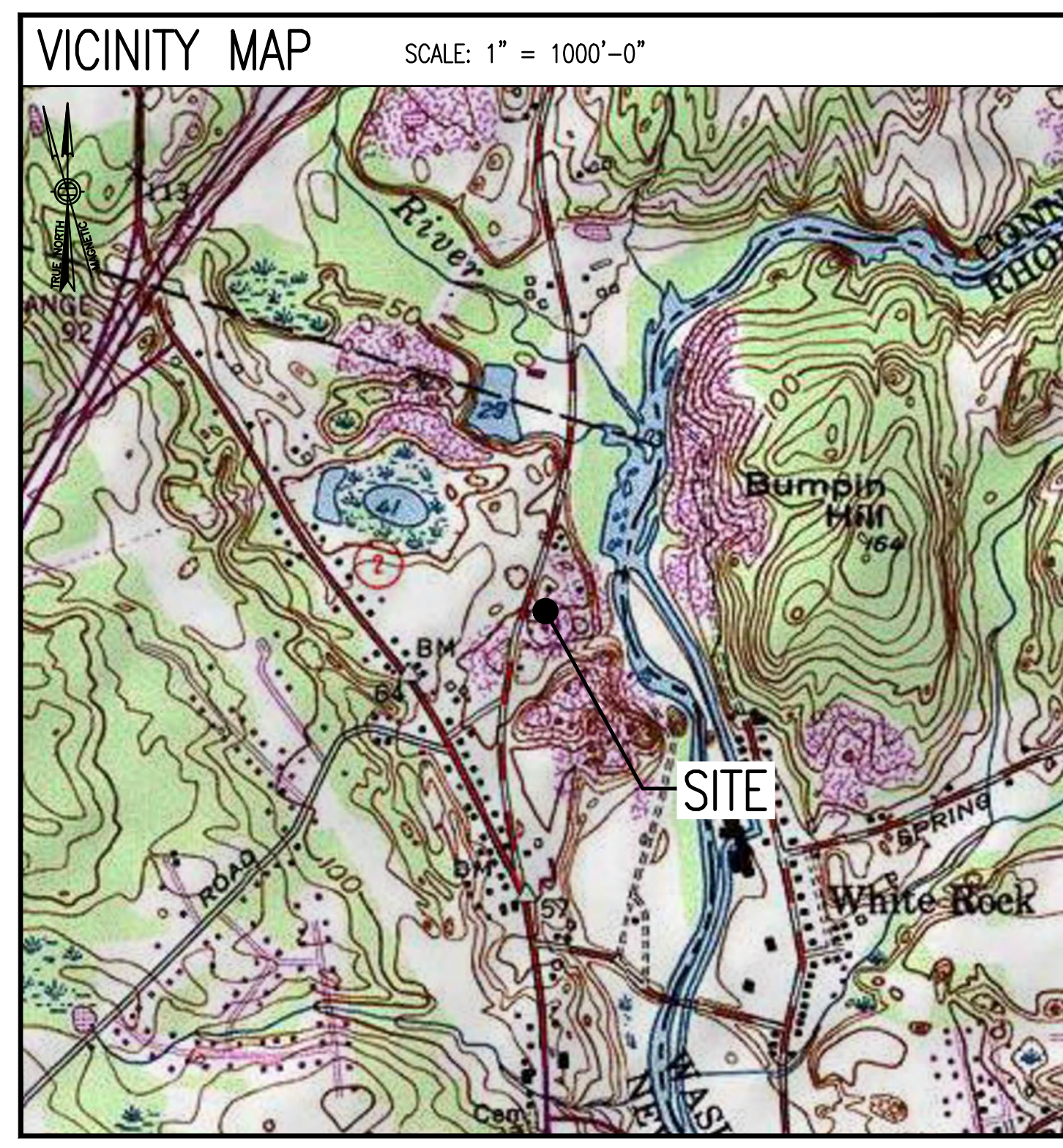
RF DESIGN GUIDELINE: 67D5A998E 6160 &
NATIONAL HARDENING PROJECT

APPROVALS			
PROJECT MANAGER:	DATE:	ZONING/SITE ACQ.:	DATE:
CONSTRUCTION:	DATE:	OPERATIONS:	DATE:
RF ENGINEERING:	DATE:	TOWER OWNER:	DATE:

T-MOBILE TECHNICIAN SITE SAFETY NOTES	
LOCATION	SPECIAL RESTRICTIONS
SECTOR A:	ACCESS BY CERTIFIED CLIMBER
SECTOR B:	ACCESS BY CERTIFIED CLIMBER
SECTOR C:	ACCESS BY CERTIFIED CLIMBER
SECTOR D:	ACCESS BY CERTIFIED CLIMBER
GPS/LMU:	UNRESTRICTED
RADIO CABINETS:	UNRESTRICTED
PPC DISCONNECT:	UNRESTRICTED
MAIN CIRCUIT D/C:	UNRESTRICTED
NIU/T DEMARC:	UNRESTRICTED
OTHER/SPECIAL:	NONE

GENERAL NOTES	
1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.	SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.	13. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE OMNIPOT REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.	14. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.	15. THE CONTRACTOR SHALL NOTIFY THE PROJECT OWNER'S REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE LESSEE/LICENSEE REPRESENTATIVE.
5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.	16. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.	17. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.	
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.	
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.	
10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.	
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.	
12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR	

AT LEAST 72 HOURS PRIOR TO DIGGING, THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT 811



DIRECTIONS

MERGE ONTO I-495 NORTH TOWARD MANSFIELD/MARLBORO. TAKE EXIT 33B FOR I-95 SOUTH TOWARD PROVIDENCE RI. KEEP RIGHT AT FORK TO STAY ON I-95 SOUTH. TAKE EXIT 92 FOR CT-49 TOWARD CT-2/PAWCATUCK/NORTH STONINGTON. CONTINUE ONTO STATE HIGHWAY 617. TURN LEFT ONTO CT-2 EAST. TURN LEFT ONTO CT-49 NORTH. SITE IS LOCATED ON THE RIGHT HAND SIDE.

SHEET INDEX		
SHEET NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	1
GN-1	GENERAL NOTES	1
A-1	COMPOUND & EQUIPMENT PLANS	1
A-2	TOWER ELEVATION & ANTENNA PLANS	1
A-3	SITE DETAILS	1
A-4	GENERATOR SPECIFICATIONS 1 OF 2	1
A-5	GENERATOR SPECIFICATIONS 2 OF 2	1
A-6	ANTENNA & FEEDLINE CHARTS	1
E-1	ELECTRIC & GROUNDING DETAILS 1 OF 2	1
E-2	ELECTRIC & GROUNDING DETAILS 2 OF 2	1

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE PROJECT OWNER'S REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SCOPE OF WORK	
REMOVE:	INSTALL:
<ul style="list-style-type: none"> 6 ANTENNAS 1 RBS6131 EQUIPMENT CABINET 9 COAX CABLES 1 HYBRID CABLE 	<ul style="list-style-type: none"> 6 ANTENNAS 3 RADIOS 1 6160 EQUIPMENT CABINET 1 B160 BATTERY CABINET 1 SLACKBOX 1 HYBRID CABLE 1 GENERATOR 1 AUTOMATIC TRANSFER SWITCH 1 125A-2P BREAKER 1 25A-1P BREAKER 2 20A-1P BREAKERS

SITE NOTES	
1.	THIS IS AN UNMANNED AND RESTRICTED ACCESS TELECOMMUNICATION FACILITY, AND IS NOT FOR HUMAN HABITATION. IT WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE. <ul style="list-style-type: none"> ADA COMPLIANCE NOT REQUIRED. POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED. NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.
2.	CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON JOB SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE ARCHITECT/ENGINEER PLACE THE RESPONSIBILITY ON THE CONTRACTOR TO CORRECT THE DISCREPANCIES AT THE CONTRACTOR'S EXPENSE.
3.	NEW CONSTRUCTION WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES. <ul style="list-style-type: none"> BUILDING CODE: 2018 CONNECTICUT STATE BUILDING CODE ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE STRUCTURAL CODE: TIA/EIA-222-G STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

PROJECT SUMMARY	
SITE NUMBER:	CT11343A
SITE NAME:	STONINGTON/I-95_1
SBA SITE NUMBER:	CT00595-S
SBA SITE NAME:	STONINGTON EAST
SITE ADDRESS:	86 VOLUNTOWN ROAD STONINGTON, CT 06379
PROPERTY OWNER:	BLACKROCK PROPERTIES II, LLC P.O. BOX 1113 MAMISBURG, OH 45343
TOWER OWNER:	SBA TOWERS, LLC 8501 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-226-9523
COUNTY:	NEW LONDON
ZONING DISTRICT:	HI-60 (COMMERCIAL)
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	196'±
APPLICANT:	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766
ARCHITECT:	CHAPPELL ENGINEERING ASSOCIATES, LLC. 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
STRUCTURAL ENGINEER:	CHAPPELL ENGINEERING ASSOCIATES, LLC. 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
SITE CONTROL POINT:	LATITUDE: 41.405571° N41°24'20.06" LONGITUDE: -71.845199° W71°50'42.72"

SPECIAL ZONING NOTE:
BASED ON INFORMATION PROVIDED BY T-MOBILE REGULATORY COMPLIANCE PROFESSIONALS AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN ELIGIBLE FACILITY UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409(A), AND IS SUBJECT TO AN ELIGIBLE FACILITY REQUEST, EXPEDITED REVIEW, AND LIMITED/PARTIAL ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW, OR ADMINISTRATIVE REVIEW).

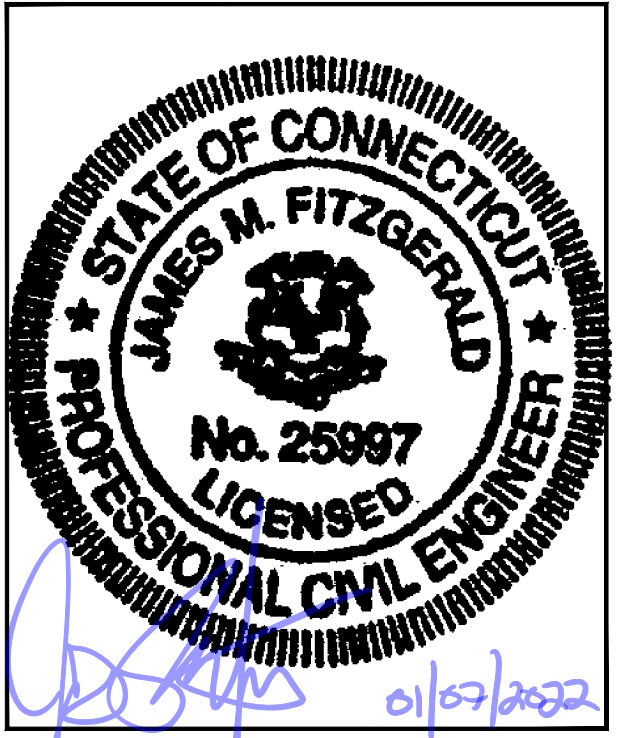
**T-MOBILE
NORTHEAST LLC**

15 COMMERCE WAY, SUITE B
NORTON, MA 02766
(508) 286-2700

SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
(508) 251-0720

CHAPPELL
ENGINEERING
ASSOCIATES, LLC
Civil Structural-Land Surveying

R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com



CHECKED BY: JMT
APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
1	01/07/22	ISSUED FOR CONSTRUCTION	CMC
0	12/14/21	ISSUED FOR REVIEW	CMC

SITE NUMBER:
CT11343A

SITE ADDRESS:
86 VOLUNTOWN ROAD
STONINGTON, CT 06379

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR – T–MOBILE
SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
OWNER – T–MOBILE
OEM – ORIGINAL EQUIPMENT MANUFACTURER
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL, STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER’S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER, T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTION.
- THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR’S EXPENSE TO THE SATISFACTION OF THE OWNER.
- SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.
- THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- SUBCONTRACTOR SHALL NOTIFY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS AND POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.
- CONSTRUCTION SHALL COMPLY WITH ALL T–MOBILE STANDARDS AND SPECIFICATIONS.
- SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- IF THE EXISTING CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

SITE WORK GENERAL NOTES:

- THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.
- ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING, OWNER AND/OR LOCAL UTILITIES.
- THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE T–MOBILE SPECIFICATION FOR SITE SIGNAGE.

CONCRETE AND REINFORCING STEEL NOTES:

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST–IN–PLACE CONCRETE.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (400PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE REQUIREMENTS
- REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS “B” AND ALL HOOKS SHALL BE STANDARD, UNDO.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
CONCRETE CAST AGAINST EARTH.....3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER:
#6 AND LARGER2 IN.
#5 AND SMALLER & WWF1½ IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
SLAB AND WALL¾ IN.
BEAMS AND COLUMNS½ IN.
- A CHAMFER ¾” SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER’S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER’S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.
- CONCRETE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
(A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.
(B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.
- AS AN ALTERNATIVE TO ITEM 7. TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.
- EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

- ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS AND T–MOBILE SPECIFICATIONS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM–A–36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) “MANUAL OF STEEL CONSTRUCTION”.
- ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC “MANUAL OF STEEL CONSTRUCTION”, 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.
- BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (¾”) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.
- NON–STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ¾” DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL
- ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

- EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
- COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
- AS AN ALTERNATE TO INSPECTION AND WRITTEN CERTIFICATION, THE “UNDISTURBED SOIL” BASE SHALL BE COMPACTED WITH “COMPACTION EQUIPMENT”, LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.
- COMPACTED SUBBASE SHALL BE UNIFORM AND LEVELED. PROVIDE 6” MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3” LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING #1 SIEVE.
- AS AN ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND–OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AND SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL–GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

- HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

CONSTRUCTION NOTES:

- FIELD VERIFICATION:
SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, T–MOBILE ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.
- COORDINATION OF WORK:
SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.
- CABLE LADDER RACK:
SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY AND/OR ICE BRIDGE, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

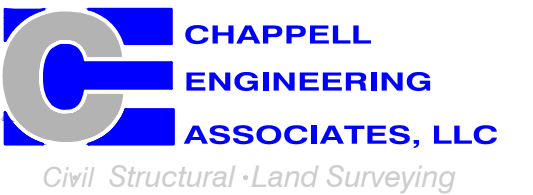
- WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
- SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLEING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER–STYLE CABLE TRAY RUNGS.
- EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA, AND MATCH INSTALLATION REQUIREMENTS.
- POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC AND OSHA.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID’S).
- PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP–STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY HARGER (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE AND NEC.
- NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE AND NEC.
- CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- WIREWAYS SHALL BE EPOXY–COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY–COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY–COATED, OR NON–CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.
- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

**T-MOBILE
NORTHEAST LLC**

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86 VOLUNTOWN ROAD
STONINGTON, CT 06379

SHEET TITLE

GENERAL NOTES

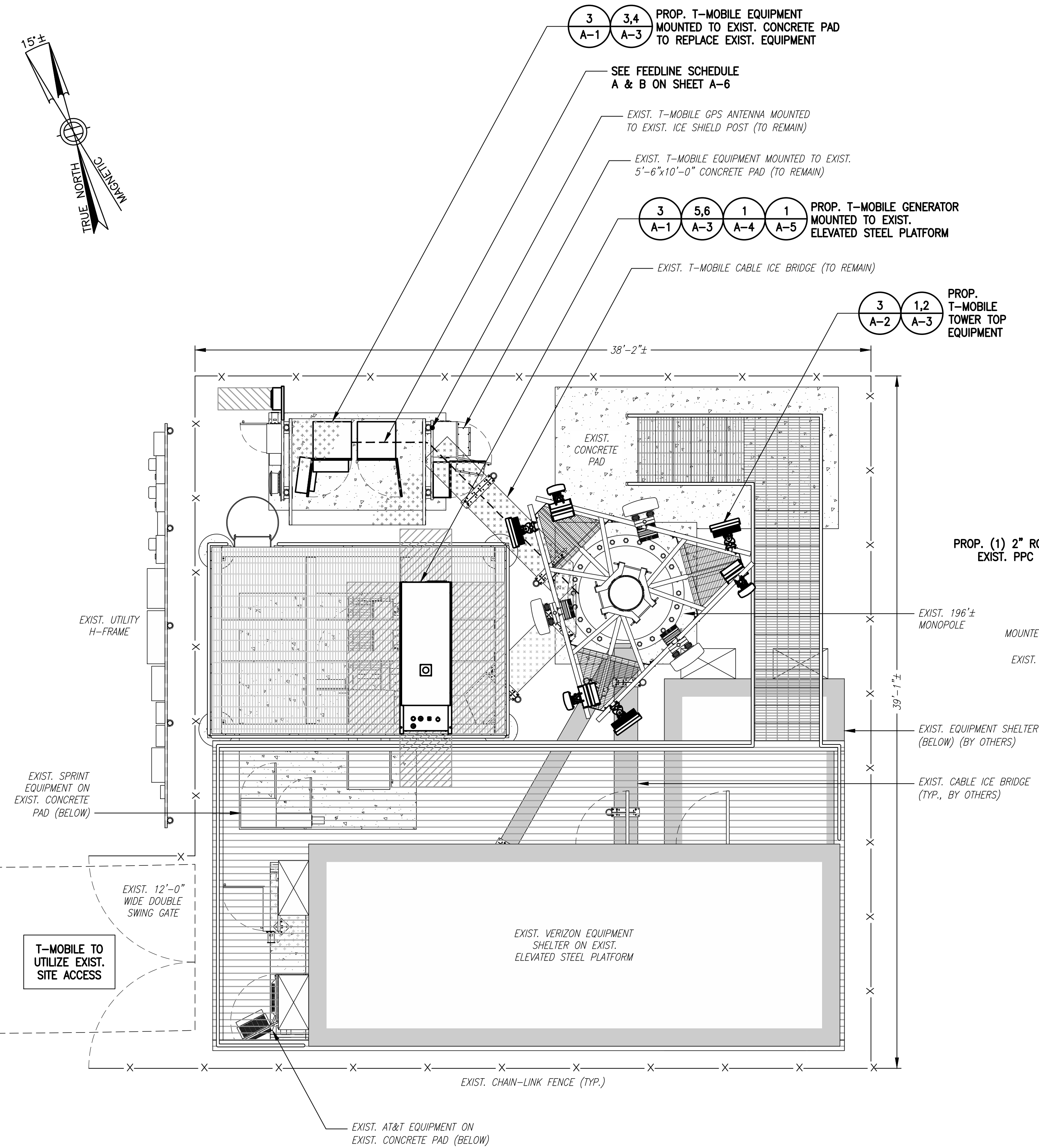
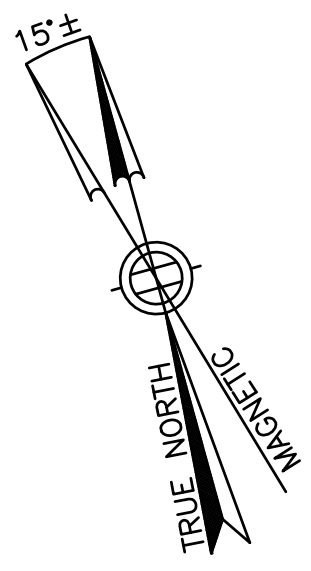
SHEET NUMBER

GN-1

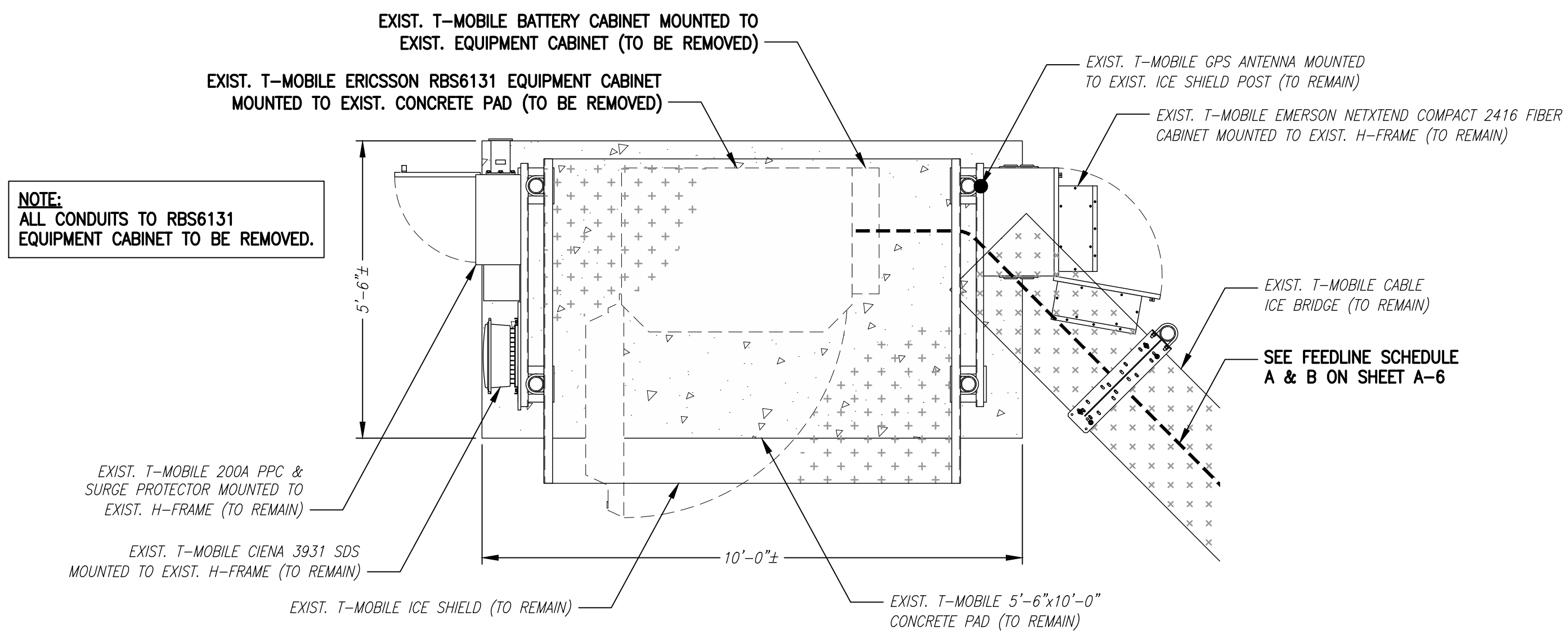
SPECIAL CONSTRUCTION WORK NOTE (HAND DUG UTILITY TRENCH EXCAVATION REQUIRED):
 EXISTING UNDERGROUND UTILITY LOCATIONS ARE UNKNOWN. GENERAL CONTRACTOR SHALL HAND-EXCAVATE TO REQUIRED SUB-GRADE DEPTH SUFFICIENT TEST HOLES OR AS DIRECTED/REQUIRED BY SBA REGIONAL SITE MANAGER SHALL HAND-EXCAVATE ALL PROPOSED UNDERGROUND UTILITY TRENCHES. GENERAL CONTRACTOR RESPONSIBLE FOR ANY REQUIRED SPECIAL TEMPORARY PROTECTION OF EXISTING UNDERGROUND UTILITIES, PHYSICAL DAMAGE REPAIR, AND SERVICE RESTORATION.

SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
 GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY SPECIAL SHIELDING OF TOWER TOP EQUIPMENT AND FOR ANY SPECIAL FEEDLINE BUNDLING OR RELOCATION.

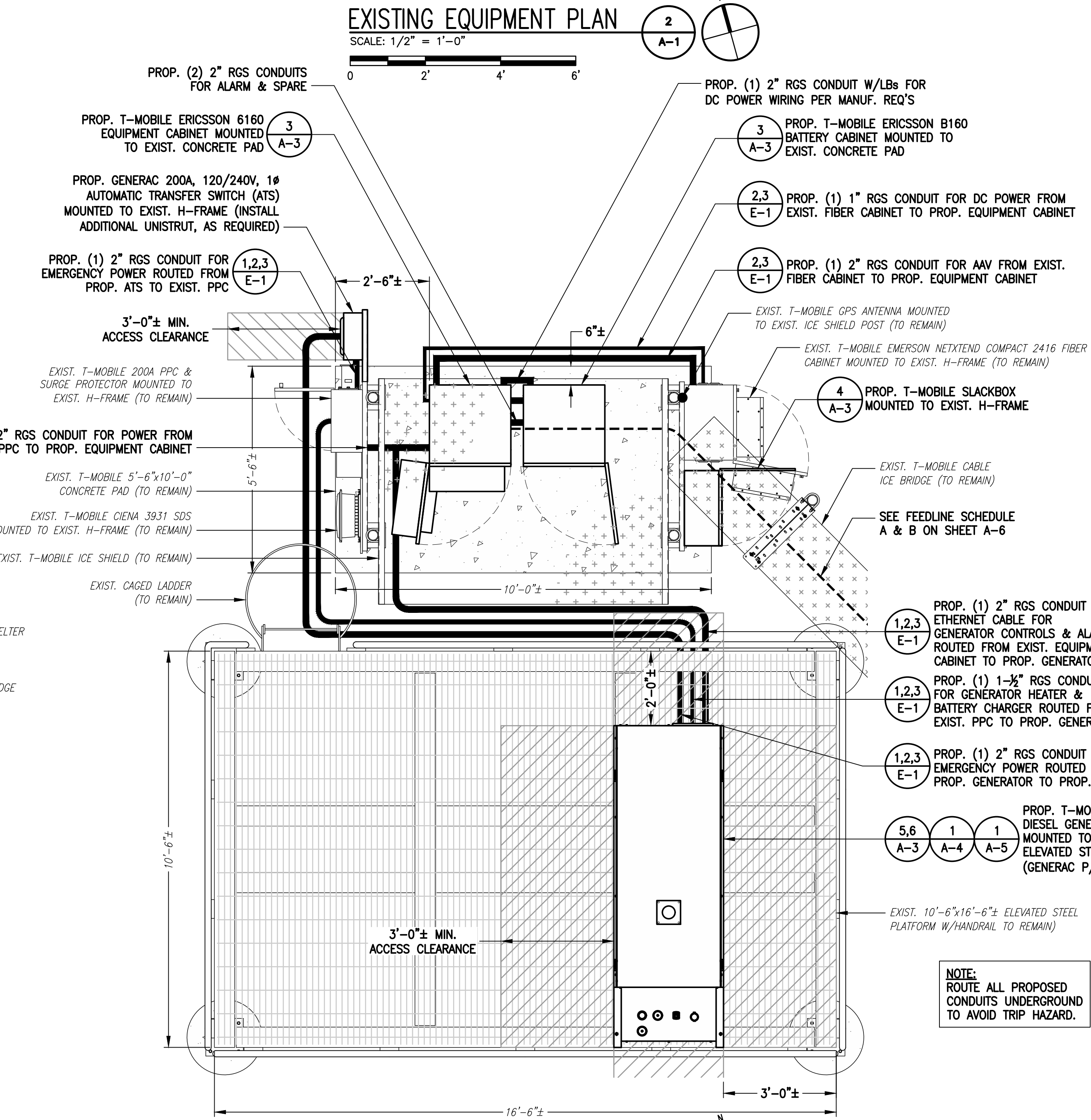
SPECIAL CONSTRUCTION NOTE:
 GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ANTENNA MOUNT STRUCTURAL AUGMENTS (STRUCTURAL MODIFICATIONS) AT T-MOBILE'S RAD/VERTICAL EQUIPMENT SPACE PER RECOMMENDATIONS FROM SBA-PROVIDED ANTENNA MOUNT STRUCTURAL ANALYSIS AND ANY SUPPLEMENTAL CONSTRUCTION DRAWINGS (PROVIDED BY OTHERS).



COMPOUND PLAN
 SCALE: 1/8" = 1'-0"
 1
 A-1



EXISTING EQUIPMENT PLAN
 SCALE: 1/2" = 1'-0"
 2
 A-1



PROPOSED EQUIPMENT PLAN
 SCALE: 1/2" = 1'-0"
 3
 A-1

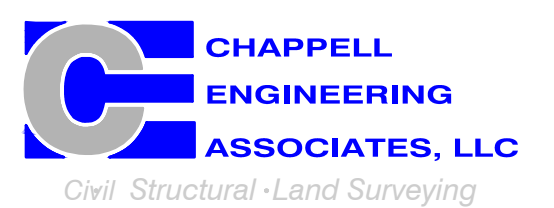
NOTE:
 ROUTE ALL PROPOSED CONDUITS UNDERGROUND TO AVOID TRIP HAZARD.

**T-MOBILE
 NORTHEAST LLC**

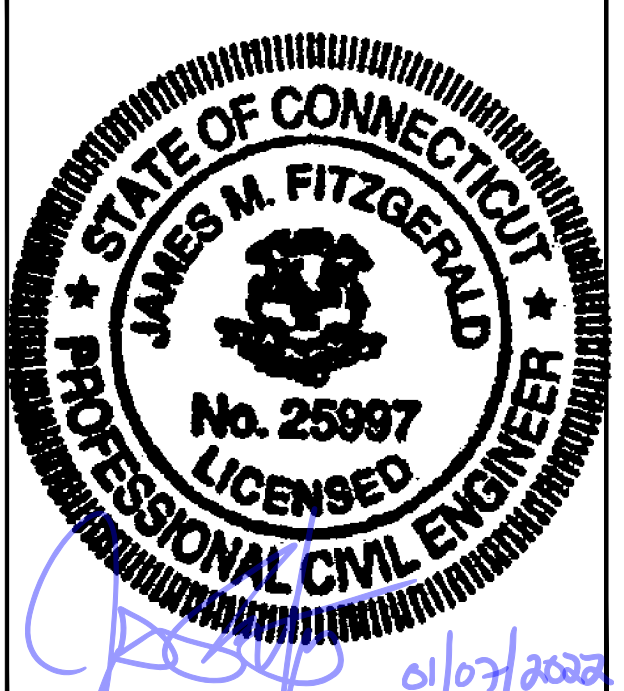
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SHEET TITLE
**COMPOUND &
 EQUIPMENT PLANS**

SHEET NUMBER
A-1

RAD CENTER NOTE:
 T-MOBILE RAD CENTER SHOWN IN RED TEXT BASED ON SBA-PROVIDED CO-LOCATION APPLICATION, EQUIPMENT DATABASE, AND STRUCTURAL ANALYSIS. THE SBA-PROVIDED ANTENNA RAD CENTER SHALL SUPERSEDE ANY CONFLICTING INFORMATION DERIVED FROM THE T-MOBILE RFDS.

TOP OF PROP. T-MOBILE ANTENNAS
 EL. = 171'± AGL (222'± AMSL)
 Ⓞ OF EXIST. (3) & PROP. (6) T-MOBILE ANTENNAS
 EL. = 167'± AGL (218'± AMSL)

EXIST. T-MOBILE LOW-PROFILE PLATFORM
 W/HANDRAIL KIT & BRACING (TO REMAIN)

Ⓞ EXIST. AT&T PANEL ANTENNAS
 EL. = 150'± AGL (201'± AMSL)

Ⓞ EXIST. VERIZON PANEL ANTENNAS
 EL. = 140'± AGL (191'± AMSL)

TOP OF EXIST. MONOPOLE
 EL. = 196'± AGL (247'± AMSL)
 Ⓞ EXIST. SPRINT ANTENNAS
 EL. = 195'± AGL (246'± AMSL)

ALL SECTORS
 PROP. T-MOBILE ERICSSON M-MIMO AIR6449 B41
 PANEL ANTENNAS MOUNTED TO PROP. PIPE MOUNTS ON
 PROP. ANTENNA MOUNT (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 EXIST. T-MOBILE RFS APXVAALL24_43-U-NA20 ANTENNAS
 MOUNTED TO EXIST. PIPE MOUNTS ON EXIST. LOW-PROFILE
 PLATFORM (1 PER SECTOR, TOTAL OF 3) (TO REMAIN)

ALL SECTORS
 PROP. T-MOBILE ERICSSON RADIO 4460 B25+B66 MOUNTED TO
 EXIST. PIPE MOUNTS ON EXIST. LOW-PROFILE PLATFORM BEHIND
 PROP. COMMSCOPE ANTENNAS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 PROP. T-MOBILE COMMSCOPE W-65A-R1 ANTENNAS
 MOUNTED TO EXIST. PIPE MOUNTS ON EXIST.
 LOW-PROFILE PLATFORM (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 EXIST. T-MOBILE ERICSSON RADIO 4449 B71+B85 MOUNTED TO
 EXIST. PIPE MOUNTS ON EXIST. LOW-PROFILE PLATFORM BEHIND
 EXIST. RFS ANTENNAS (1 PER SECTOR, TOTAL OF 3) (TO REMAIN)

SEE FEEDLINE SCHEDULE
 A & B ON SHEET A-6

EXIST. 196'± MONOPOLE

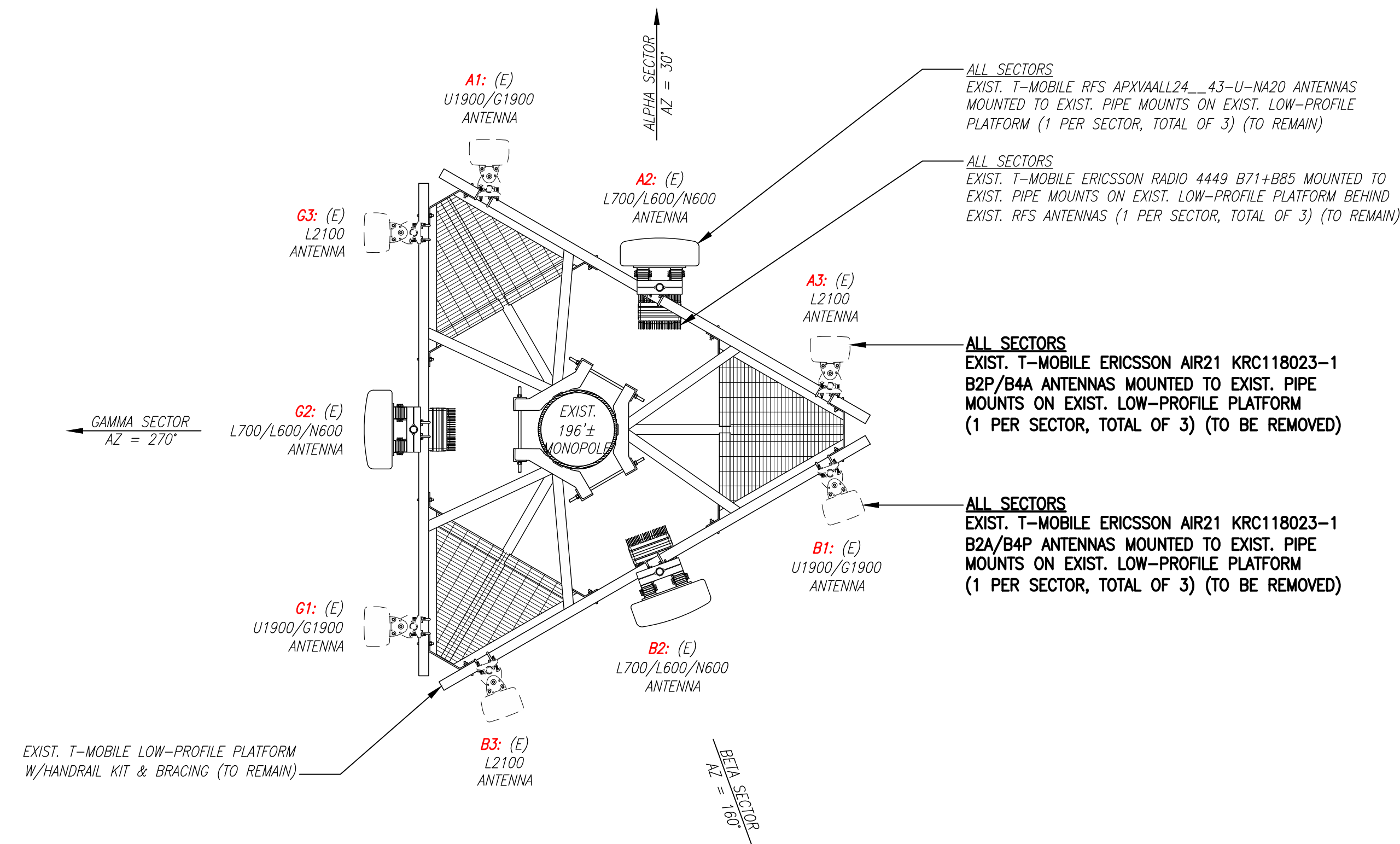
NOTE:
 GROUND EQUIPMENT NOT
 SHOWN, FOR CLARITY.

GROUND LEVEL
 EL. = 0' AGL (51'± AMSL)

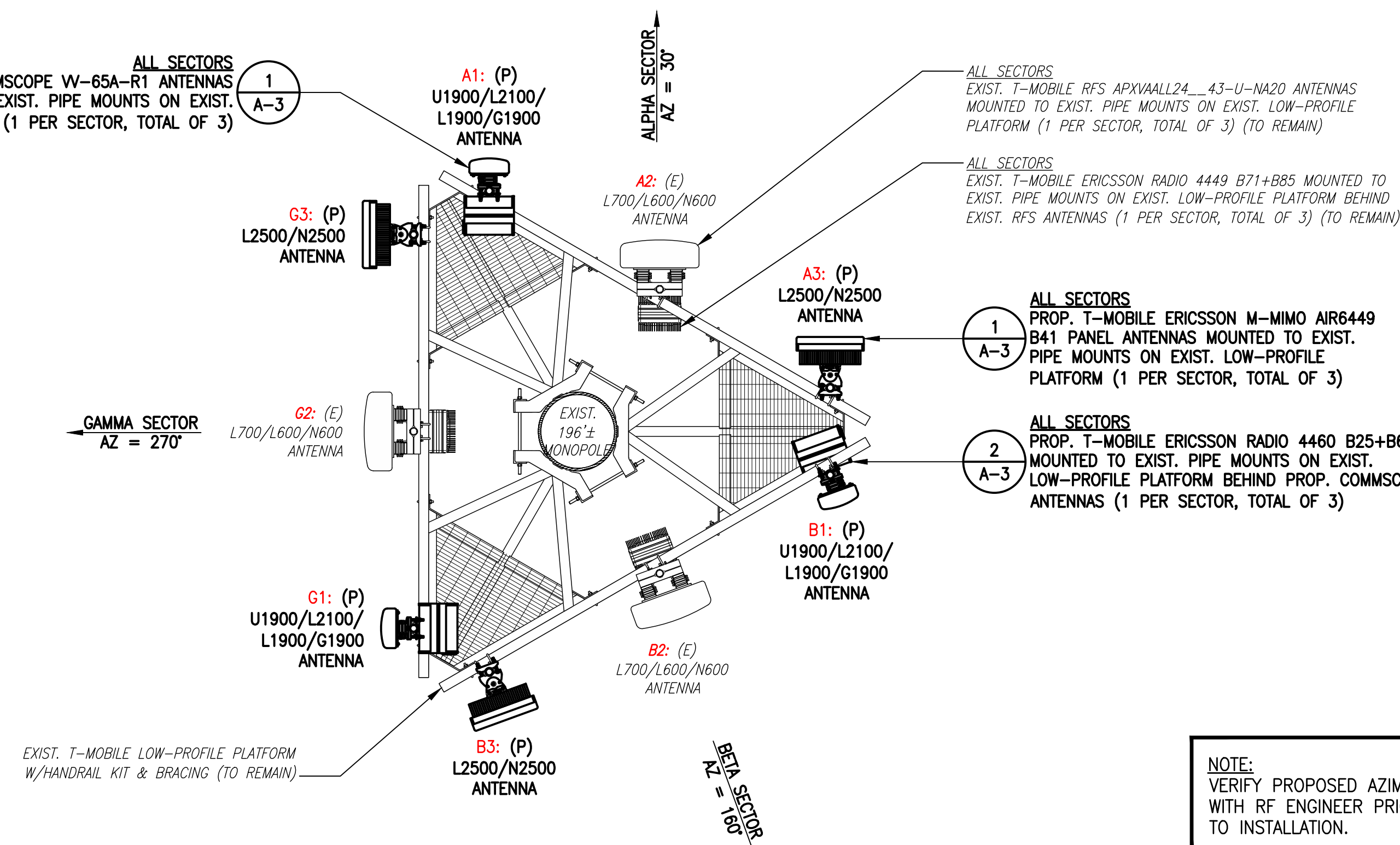
TOWER ELEVATION

SCALE: 1" = 10'-0"
 0 10' 20' 30'

1
 A-2



ALL SECTORS
 PROP. T-MOBILE COMMSCOPE W-65A-R1 ANTENNAS
 MOUNTED TO EXIST. PIPE MOUNTS ON EXIST.
 LOW-PROFILE PLATFORM (1 PER SECTOR, TOTAL OF 3)



ANTENNA STATUS LEGEND:

EMPTY - EMPTY PIPE
 (E) - EXISTING
 (P) - INSTALL
 (F) - FUTURE

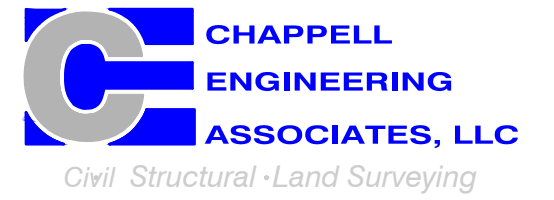
NOTE:
 VERIFY PROPOSED AZIMUTHS
 WITH RF ENGINEER PRIOR
 TO INSTALLATION.

**T-MOBILE
 NORTHEAST LLC**

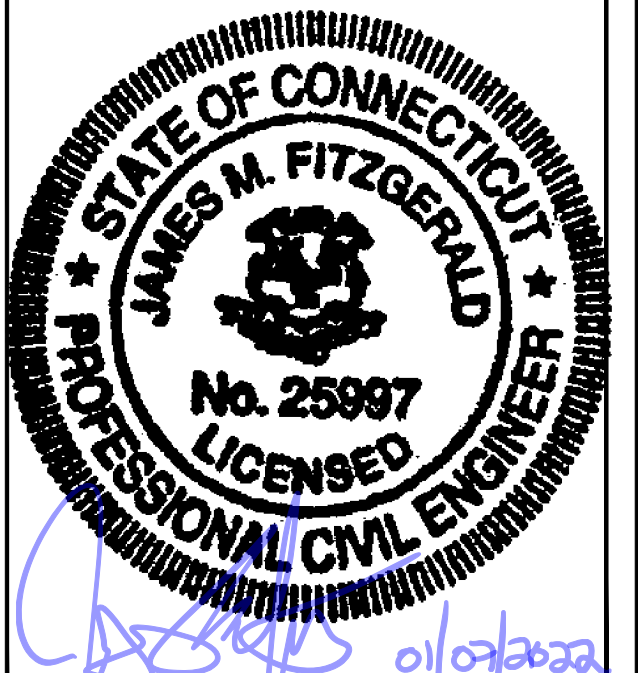
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SHEET TITLE
**TOWER ELEVATION &
 ANTENNA PLANS**

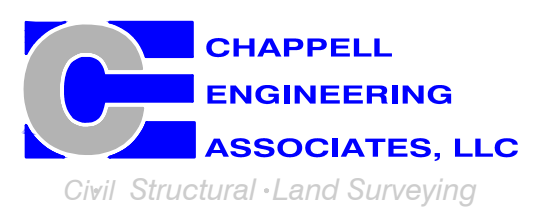
SHEET NUMBER
A-2

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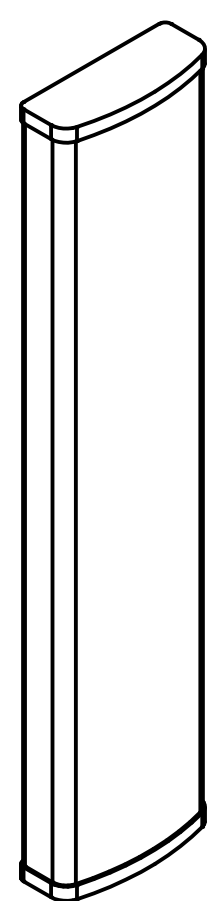
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SHEET TITLE
SITE DETAILS

SHEET NUMBER
A-3

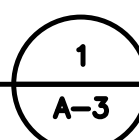


COMMSCOPE VV-65A-R1 ANTENNA
DIMENSIONS: 54.7"H x 12.1"W x 4.6"D
WEIGHT: 23.8 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3



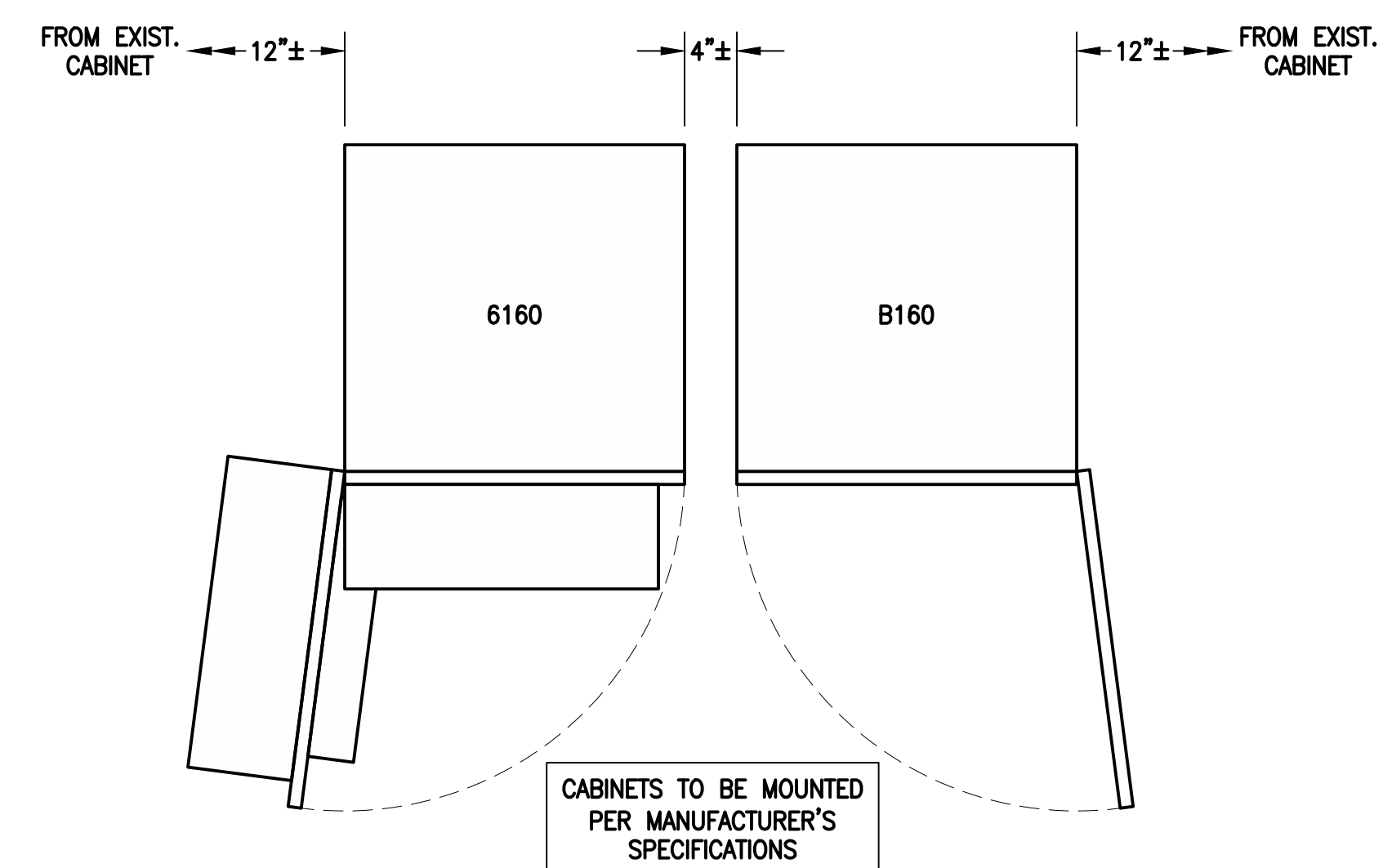
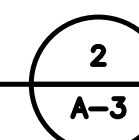
ERICSSON M-MIMO AIR6449 B41 ANTENNA
DIMENSIONS: 33.1"H x 20.5"W x 8.3"D
WEIGHT: 103.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

ANTENNA DETAILS
SCALE: N.T.S.



ERICSSON RADIO 4460 B25+B66
DIMENSIONS: 17.0"H x 15.1"W x 11.9"D
WEIGHT: 104.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

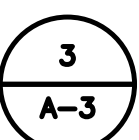
RADIO DETAILS
SCALE: N.T.S.



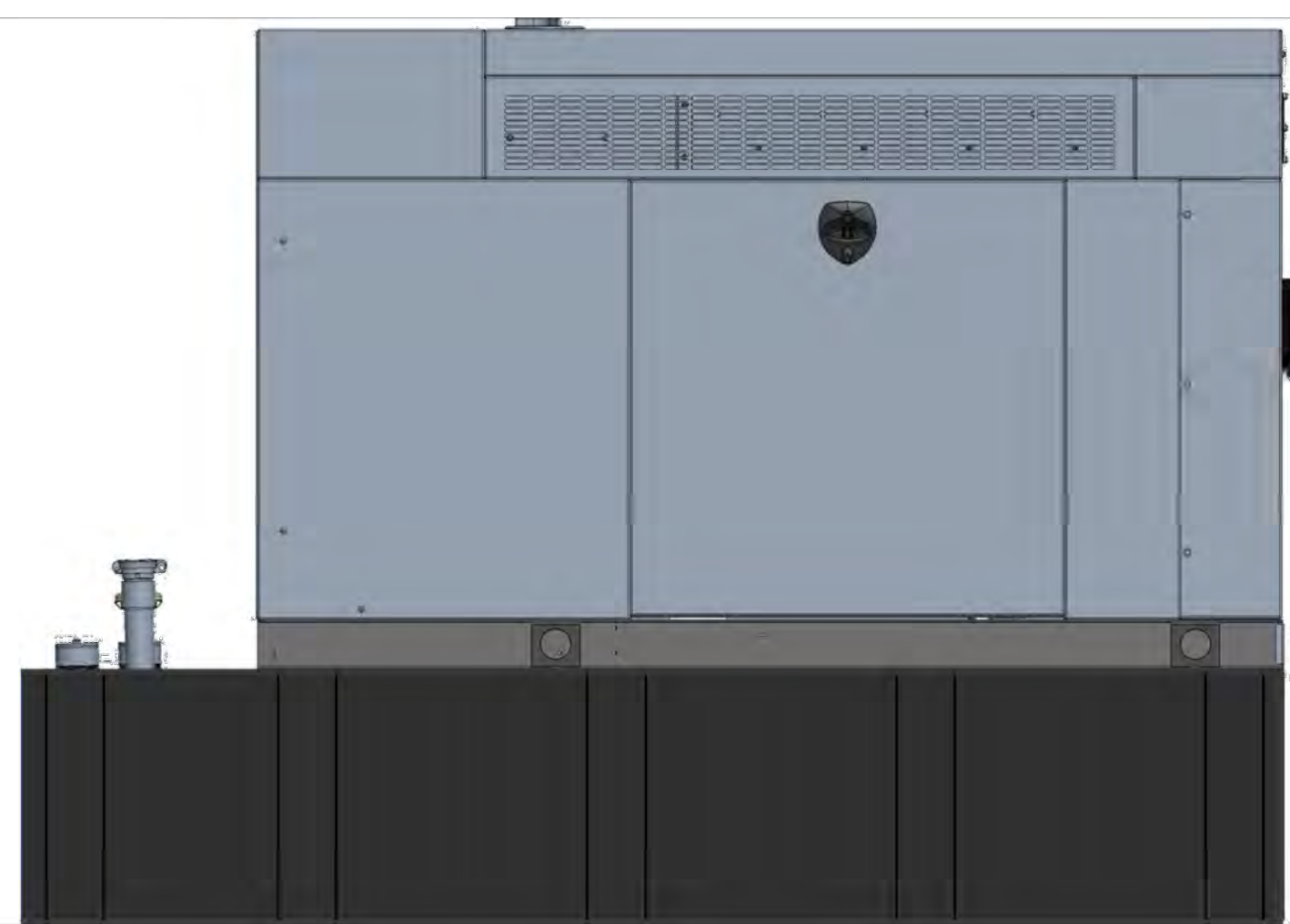
ERICSSON 6160 SITE SUPPORT CABINET
DIMENSIONS: 63.25"H x 26.0"W x 34.0"D
WEIGHT: 680.0 lbs
QUANTITY: TOTAL OF 1

ERICSSON B160 BATTERY CABINET
DIMENSIONS: 63.25"H x 26.0"W x 26.0"D
WEIGHT: 1771.0 lbs
QUANTITY: TOTAL OF 1

EQUIPMENT DETAIL
SCALE: N.T.S.

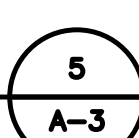


NOTE:
GENERATOR DIESEL TANK TO BE FILLED BY CONTRACTOR



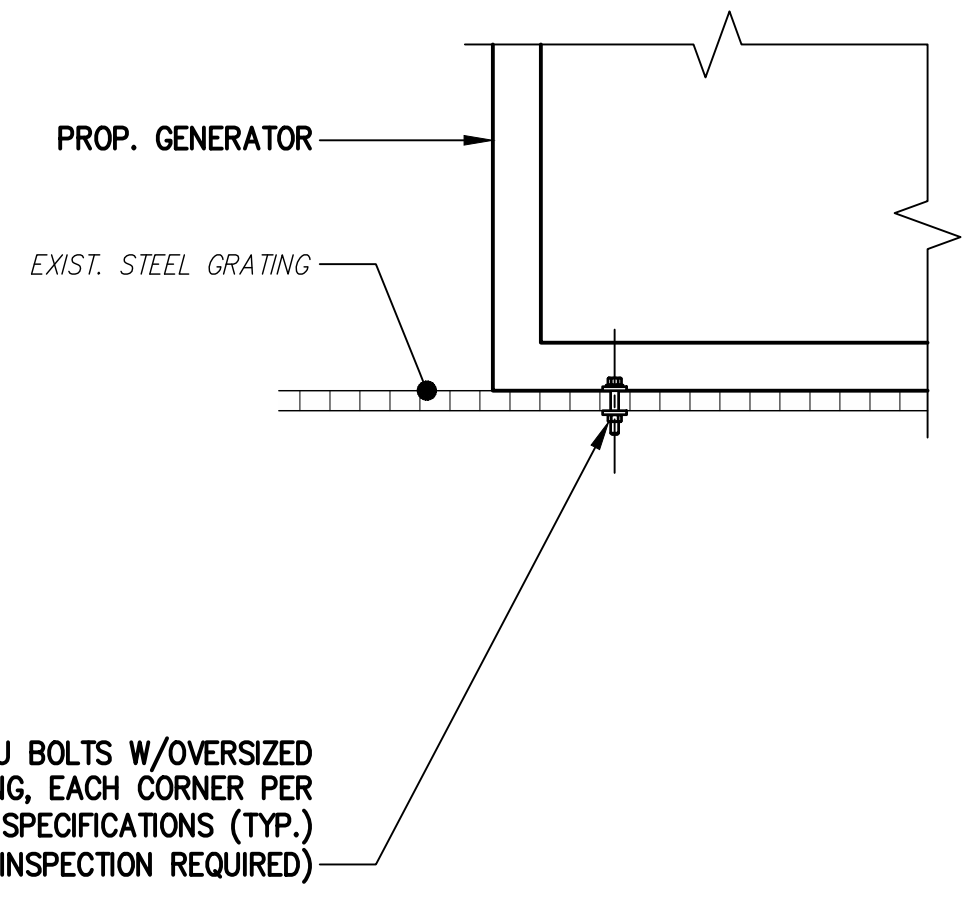
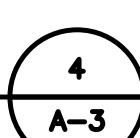
GENERAC RD025 25kW AC DIESEL GENERATOR
DIMENSIONS: 103.4"L x 35.0"W x 91.7"H
WEIGHT: 2,946 lbs
QUANTITY: TOTAL OF 1

GENERATOR DETAIL
SCALE: N.T.S.



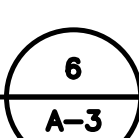
SLACKBOX - HOFFMAN 32FH91 NEMA 3R ENCLOSURE
DIMENSIONS: 24.0"H x 24.0"W x 12.0"D
QUANTITY: TOTAL OF 1

SSC DETAILS
SCALE: N.T.S.



PROP. 1/2" A325 THRU BOLTS W/OVERSIZED WASHER IN GRATING, EACH CORNER PER MANUFACTURER'S SPECIFICATIONS (TYP.) (SPECIAL INSPECTION REQUIRED)

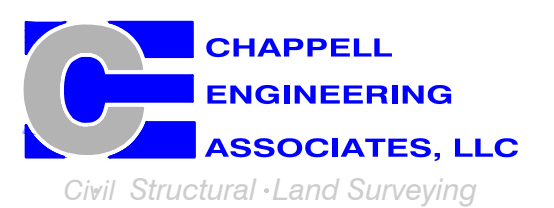
GENERATOR MOUNTING DETAIL
SCALE: N.T.S.



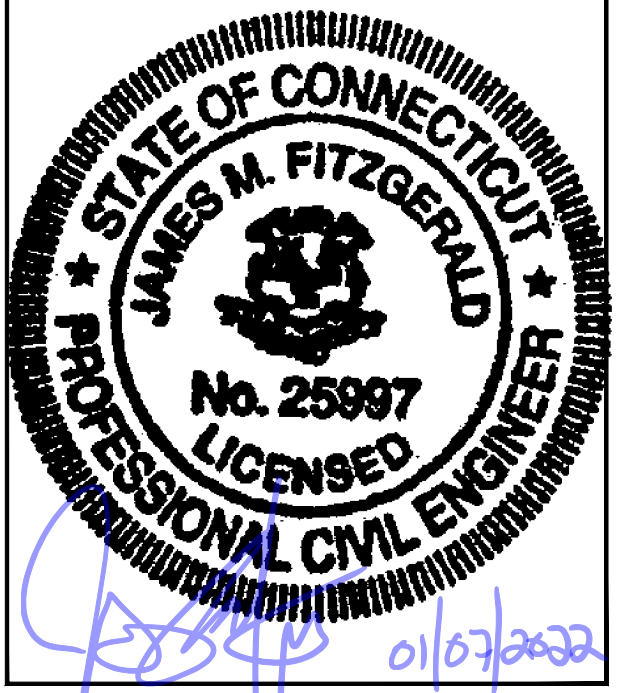
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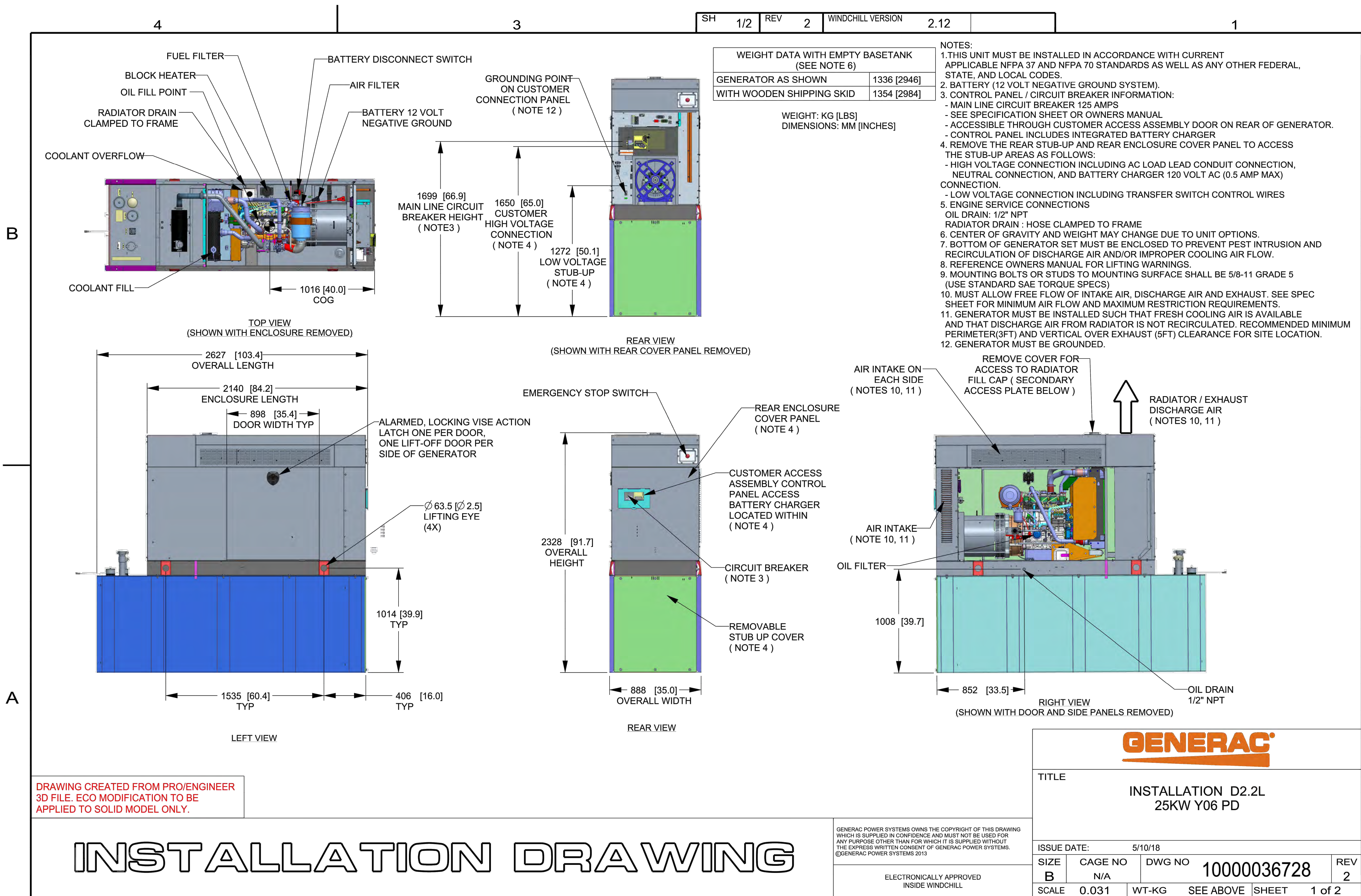
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0	12/14/21	ISSUED FOR REVIEW	CMC

SITE NUMBER:
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SITE ADDRESS:
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STONINGTON, CT 06379

SHEET TITLE
GENERATOR SPECIFICATIONS 1 OF 2

SHEET NUMBER
A-4



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ELECTRONICALLY APPROVED INSIDE WINDCHILL

GENERAC

TITLE
**INSTALLATION D2.2L
25KW Y06 PD**

ISSUE DATE: 5/10/18

SIZE	CAGE NO	DWG NO	REV
B	N/A	10000036728	2

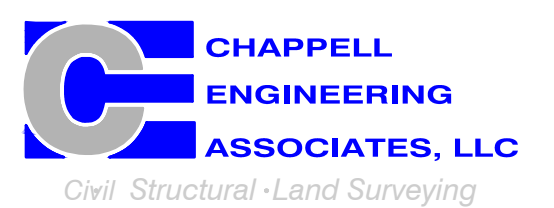
SCALE 0.031 WT-KG SEE ABOVE SHEET 1 of 2

T-MOBILE
NORTHEAST LLC

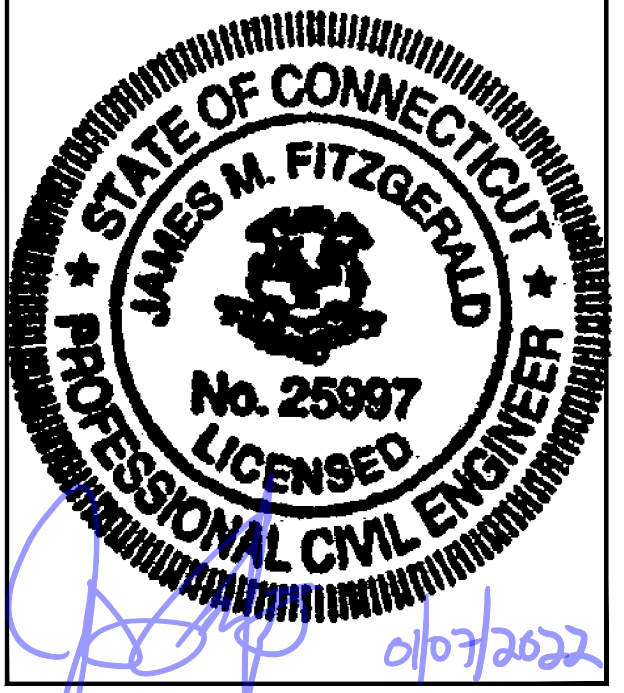
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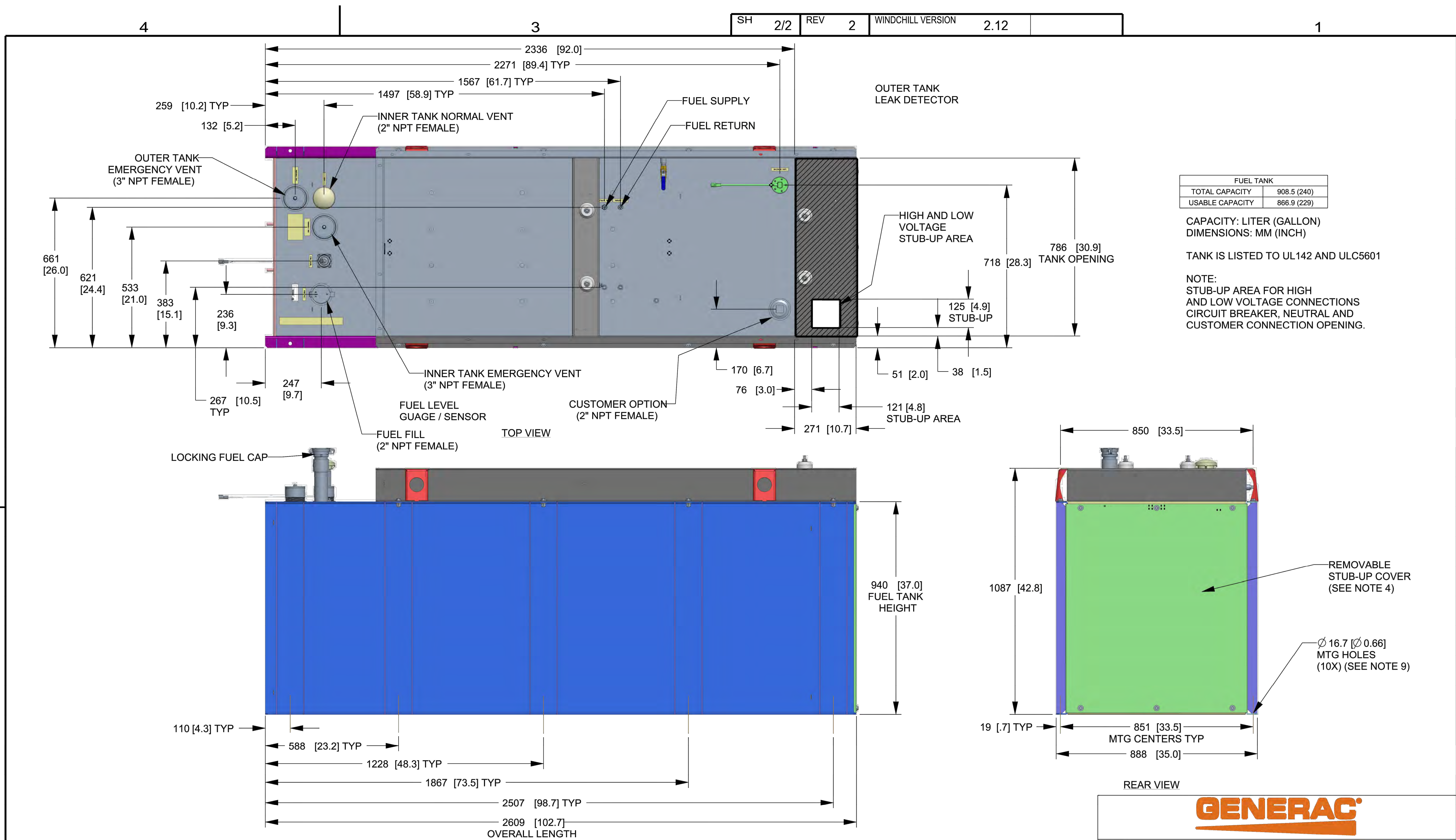
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0	12/14/21	ISSUED FOR REVIEW	CMC

SITE NUMBER:
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SITE ADDRESS:
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STONINGTON, CT 06379

SHEET TITLE
GENERATOR SPECIFICATIONS 2 OF 2

SHEET NUMBER
A-5



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GENERAC

TITLE
**INSTALLATION D2.2L
25KW Y06 PD**

ISSUE DATE: 5/10/18

SIZE B	CAGE NO N/A	DWG NO 10000036728	REV 2
SCALE 0.063	WT-KG SEE ABOVE	SHEET 2 of 2	

INSTALLATION DRAWING

FINAL ANTENNA CONFIGURATION								
SECTOR	ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	TMA/RADIOS	CABLES
ALPHA	A1 COMMSCOPE W-65A-R1	167'± AGL	0°	0°	2'	U1900/L2100/L1900/G1900	ERICSSON RADIO 4460 B25+B66	EXIST. (3) 1- ⁵ / ₈ " (6x12) HCS FIBER CABLES PROP. (1) 2" (6x24) HCS FIBER CABLE
	A2 <i>RFS</i> APXVAALL24_43-U-NA20	167'± AGL	0°	0°	2'	L700/L600/N600	ERICSSON RADIO 4449 B71+B85	
	A3 ERICSSON M-MIMO AIR6449 B41	167'± AGL	0°	0°	2'	L2500/N2500	-	
BETA	B1 COMMSCOPE W-65A-R1	167'± AGL	160°	0°	2'	U1900/L2100/L1900/G1900	ERICSSON RADIO 4460 B25+B66	
	B2 <i>RFS</i> APXVAALL24_43-U-NA20	167'± AGL	160°	0°	2'	L700/L600/N600	ERICSSON RADIO 4449 B71+B85	
	B3 ERICSSON M-MIMO AIR6449 B41	167'± AGL	160°	0°	2'	L2500/N2500	-	
GAMMA	G1 COMMSCOPE W-65A-R1	167'± AGL	270°	0°	2'	U1900/L2100/L1900/G1900	ERICSSON RADIO 4460 B25+B66	
	G2 <i>RFS</i> APXVAALL24_43-U-NA20	167'± AGL	270°	0°	2'	L700/L600/N600	ERICSSON RADIO 4449 B71+B85	
	G3 ERICSSON M-MIMO AIR6449 B41	167'± AGL	270°	0°	2'	L2500/N2500	-	

CABLE NOTE: EXISTING (9) 1-⁵/₈" COAX CABLES & (1) 1-³/₄" (9x18) HCS FIBER CABLE TO BE REMOVED. SEE FEEDLINE SCHEDULE A & B BELOW.

NOTE: RFDS REV5 - 10/04/21

FEEDLINE SCHEDULE		
SCHEDULE	FEEDLINES	LOCATION
A	EXISTING TO REMAIN: (1) 1/2" COAX FOR GPS ANTENNA (3) 1- ⁵ / ₈ " (6x12) HCS FIBER CABLES EXISTING TO BE REMOVED: (9) 1- ⁵ / ₈ " COAX CABLES (1) 1- ³ / ₄ " (9x18) HCS FIBER CABLE	ROUTED PER STRUCTURAL ANALYSIS
B	PROPOSED: (1) 2" (6x24) HCS FIBER CABLE	

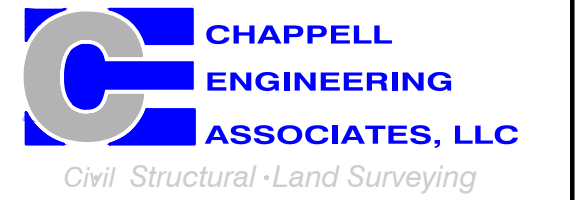
NOTE:
EXISTING T-MOBILE EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER.

T-MOBILE NORTHEAST LLC

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(508) 286-2700



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0	12/14/21	ISSUED FOR REVIEW	CMC

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SHEET TITLE
**ANTENNA &
FEEDLINE CHARTS**

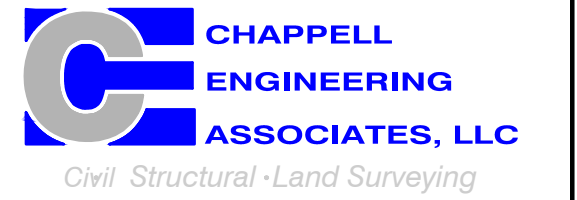
SHEET NUMBER
A-6

T-MOBILE NORTHEAST LLC

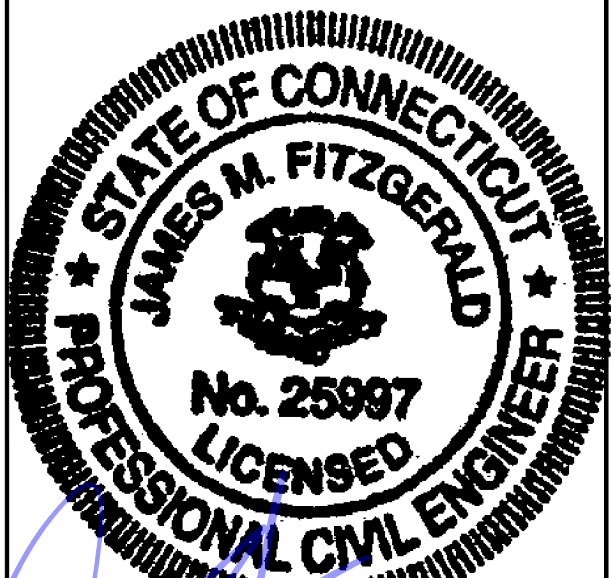
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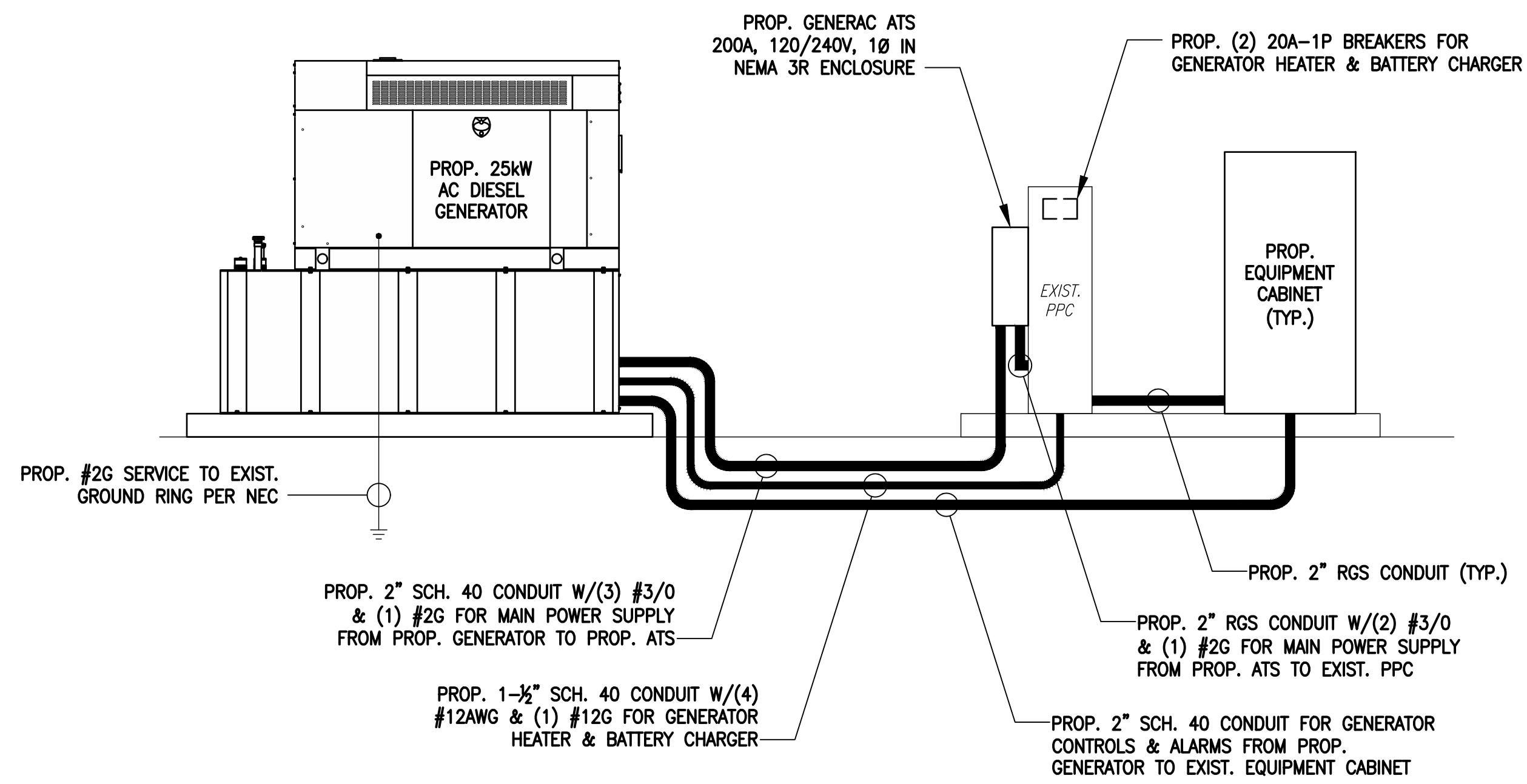
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**ELECTRIC & GROUNDING
DETAILS 1 OF 2**

SHEET NUMBER

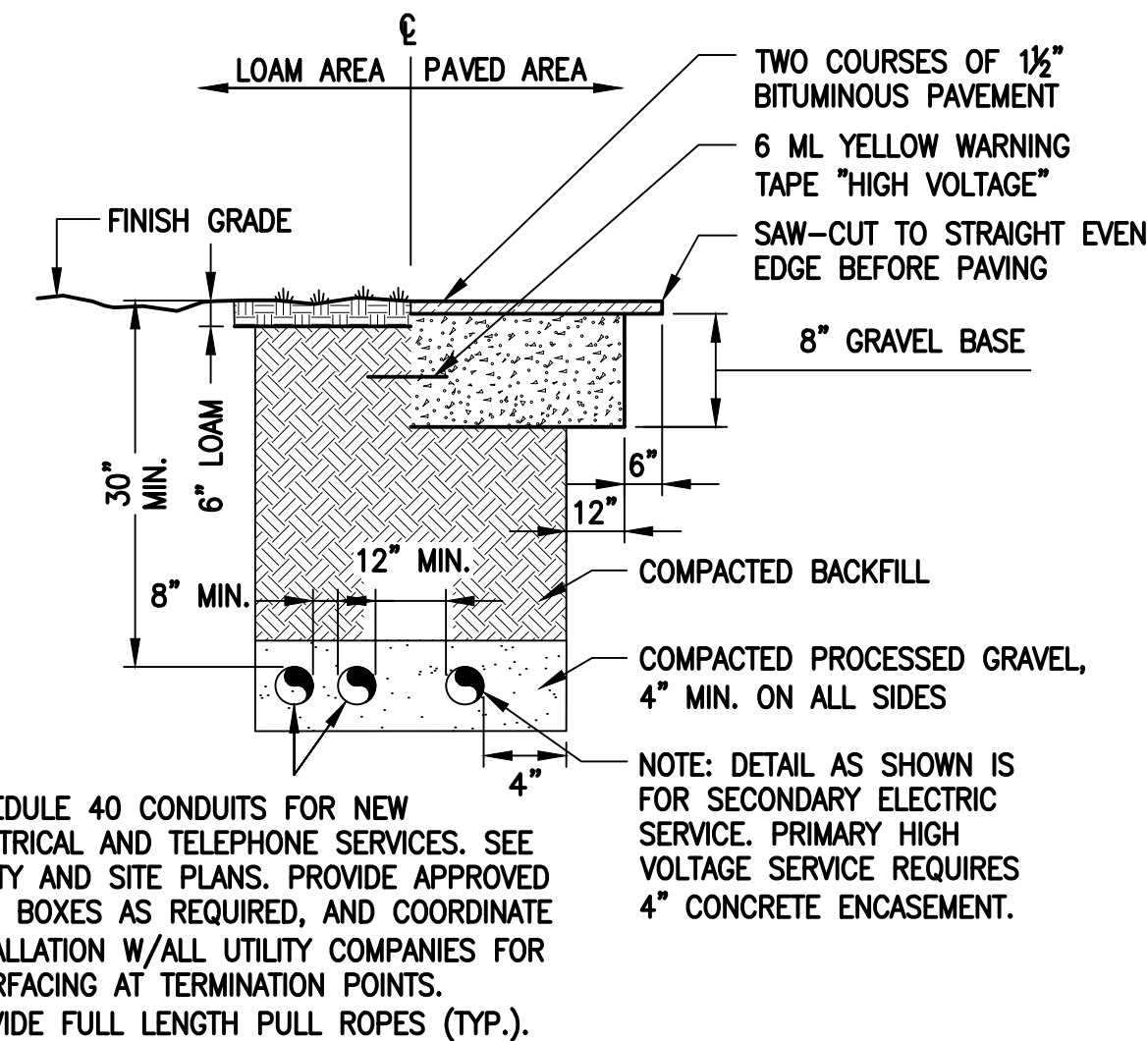
E-1

NOTE:
CUT BACK (E) MAIN POWER CONDUIT, AS
REQUIRED, & RECONNECT TO (P) ATS.



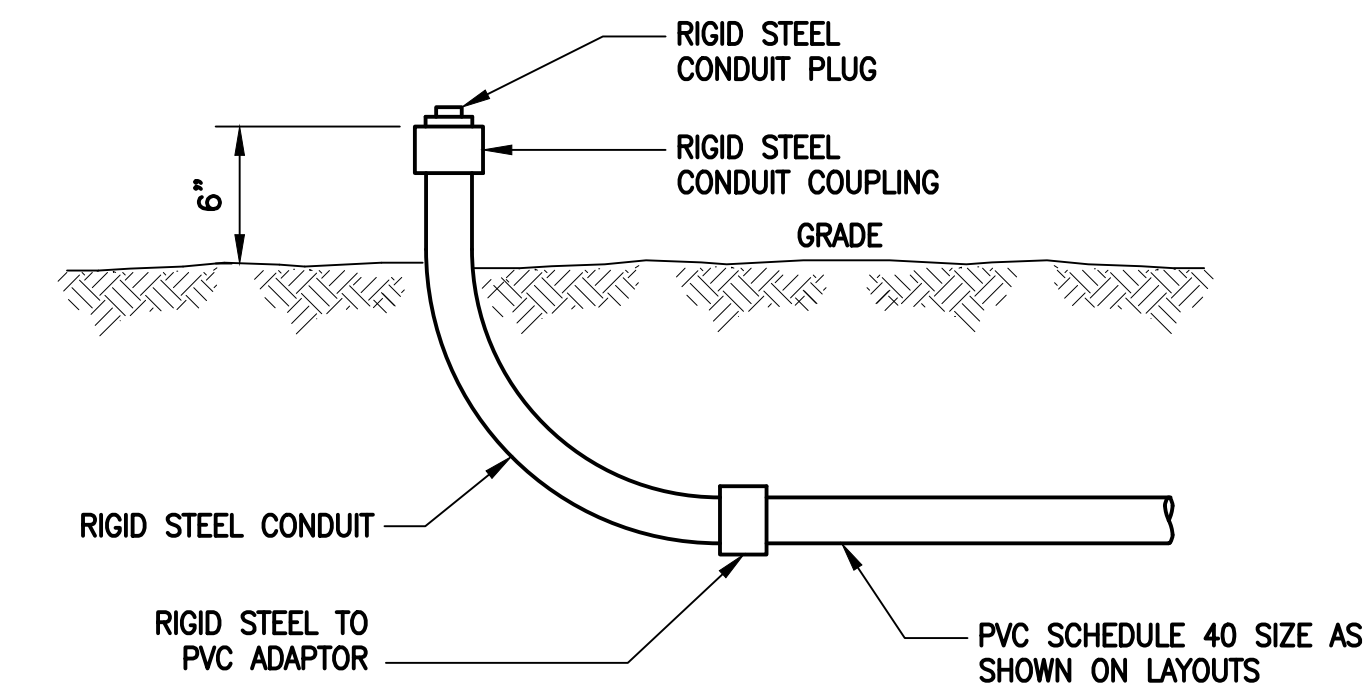
ONE-LINE POWER DIAGRAM
SCALE: NOT TO SCALE

1
E-1



BURIED CONDUIT DETAIL
SCALE: NOT TO SCALE

2
E-1

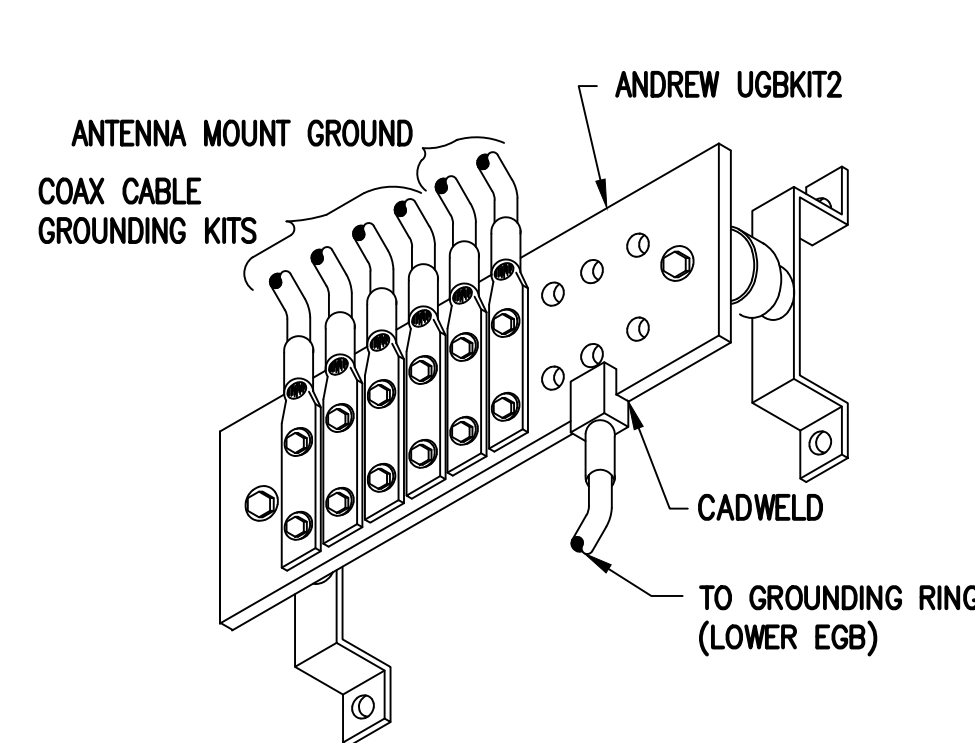


TYPICAL CONDUIT STUB-UP DETAIL
SCALE: NONE

3
E-1

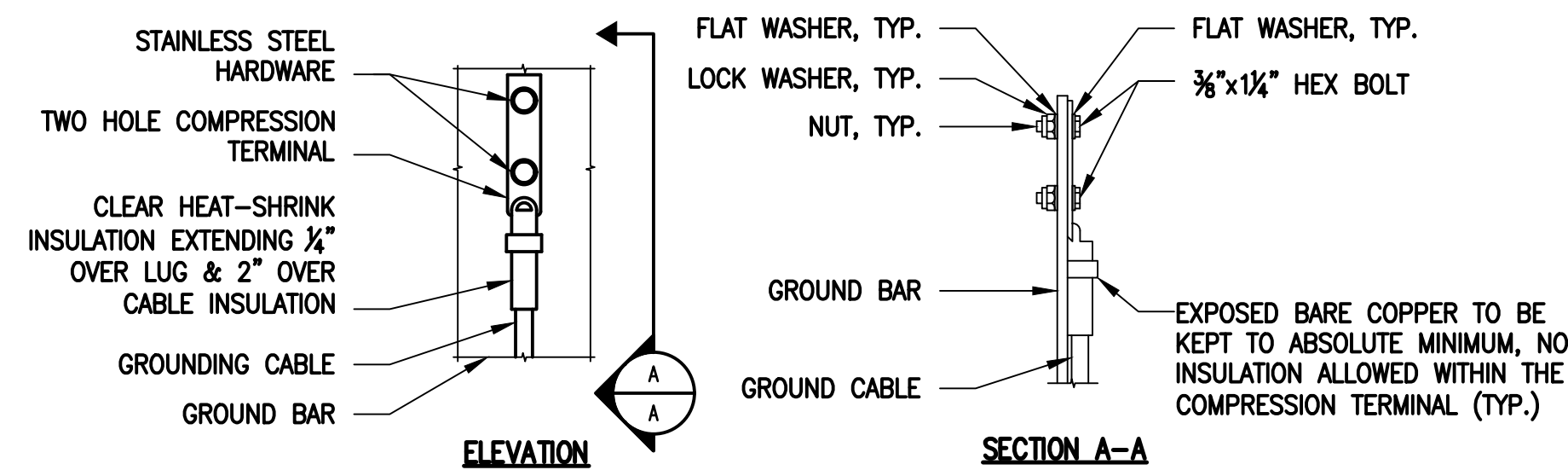
ELECTRICAL AND GROUNDING NOTES

- ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
- ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
- THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
- GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
- ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
- BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
- ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THININSULATION.
- RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
- RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
- WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.
- ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
- PPC SUPPLIED BY PROJECT OWNER.
- GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH "T-MOBILE BTS SITE GROUNDING STANDARDS".
- GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
- USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
- ALL GROUND CONNECTIONS TO BE BURNDY HYSGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
- CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
- CONTRACTOR SHALL PROVIDE AND INSTALL OMNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXIST. TOWER/ MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.
- CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS MINIMUM RESISTANCE REQUIRED.
- CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE-OUT.



GROUND BAR (EGB)
SCALE: NOT TO SCALE

4
E-1



NOTES:

- "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
- OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
- CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB AND MGB.

**TYPICAL GROUND BAR
CONNECTIONS DETAIL**
SCALE: NOT TO SCALE

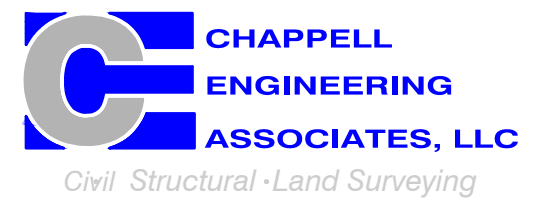
5
E-1

T-MOBILE
NORTHEAST LLC

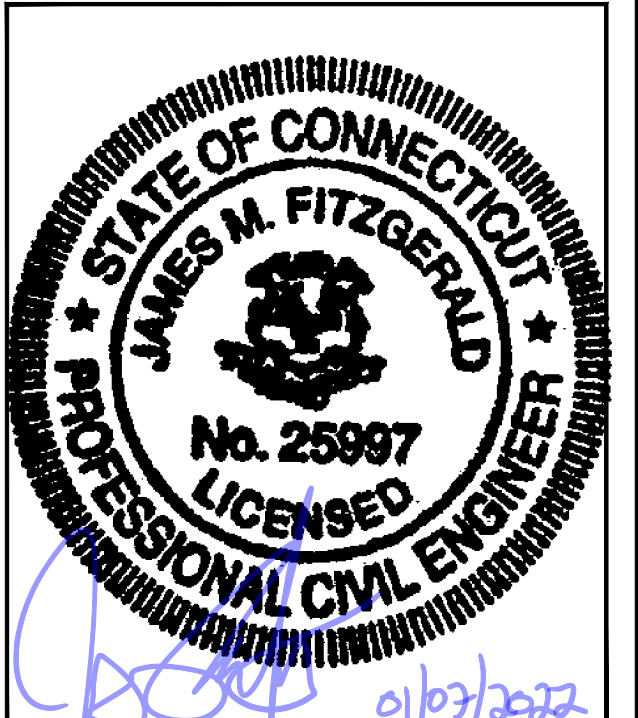
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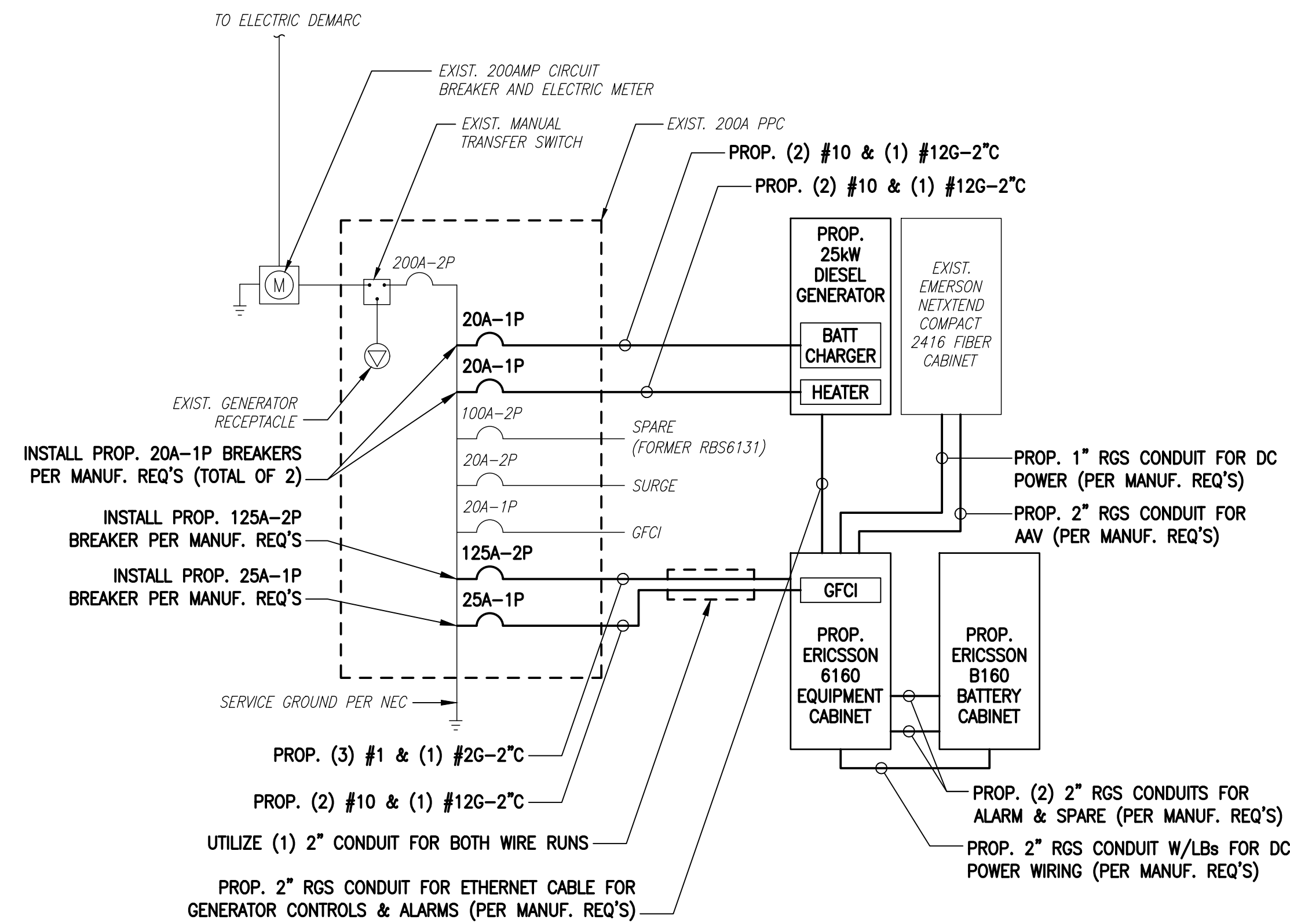
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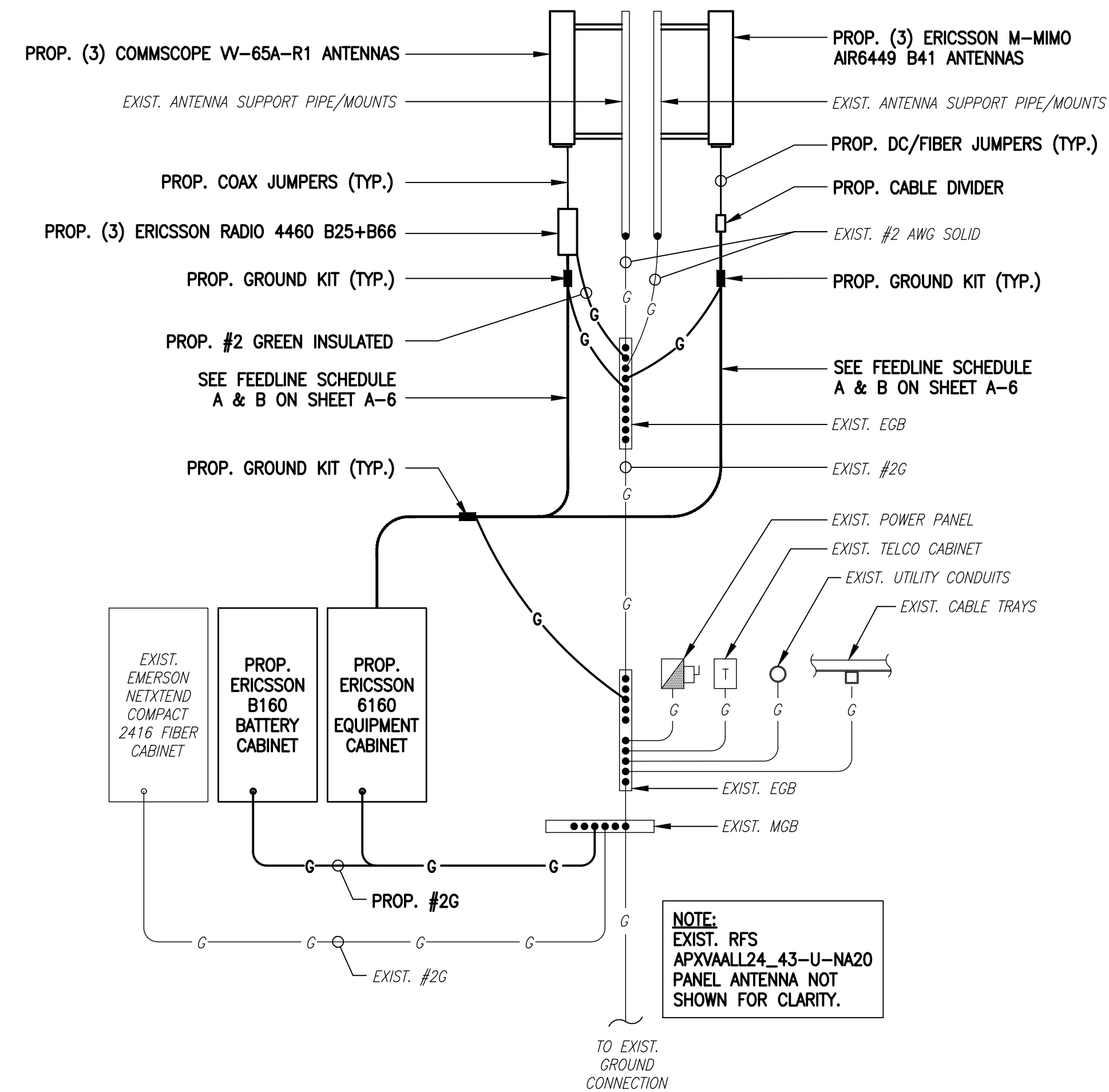
SITE ADDRESS:
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SHEET TITLE
**ELECTRIC & GROUNDING
DETAILS 2 OF 2**

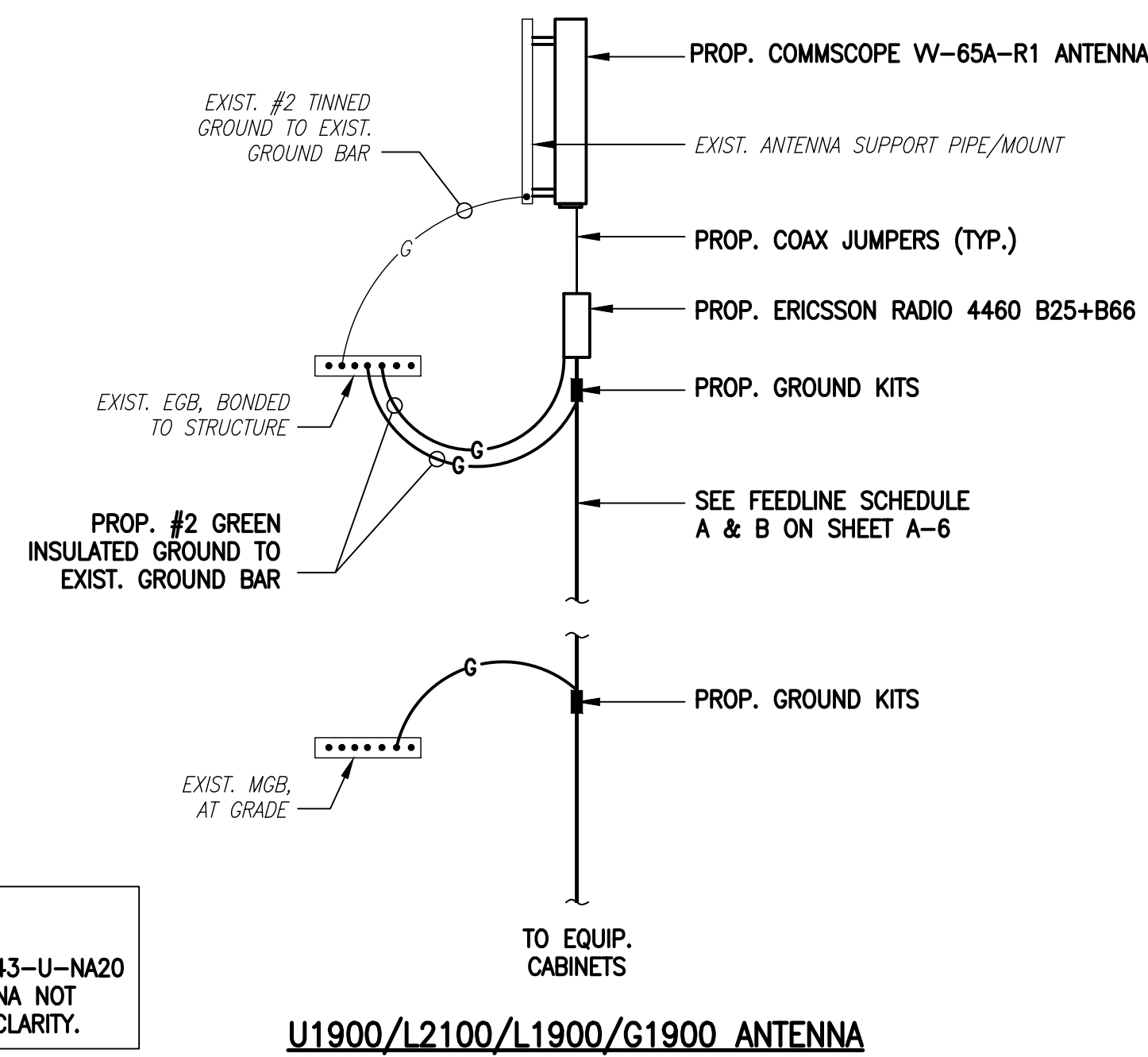
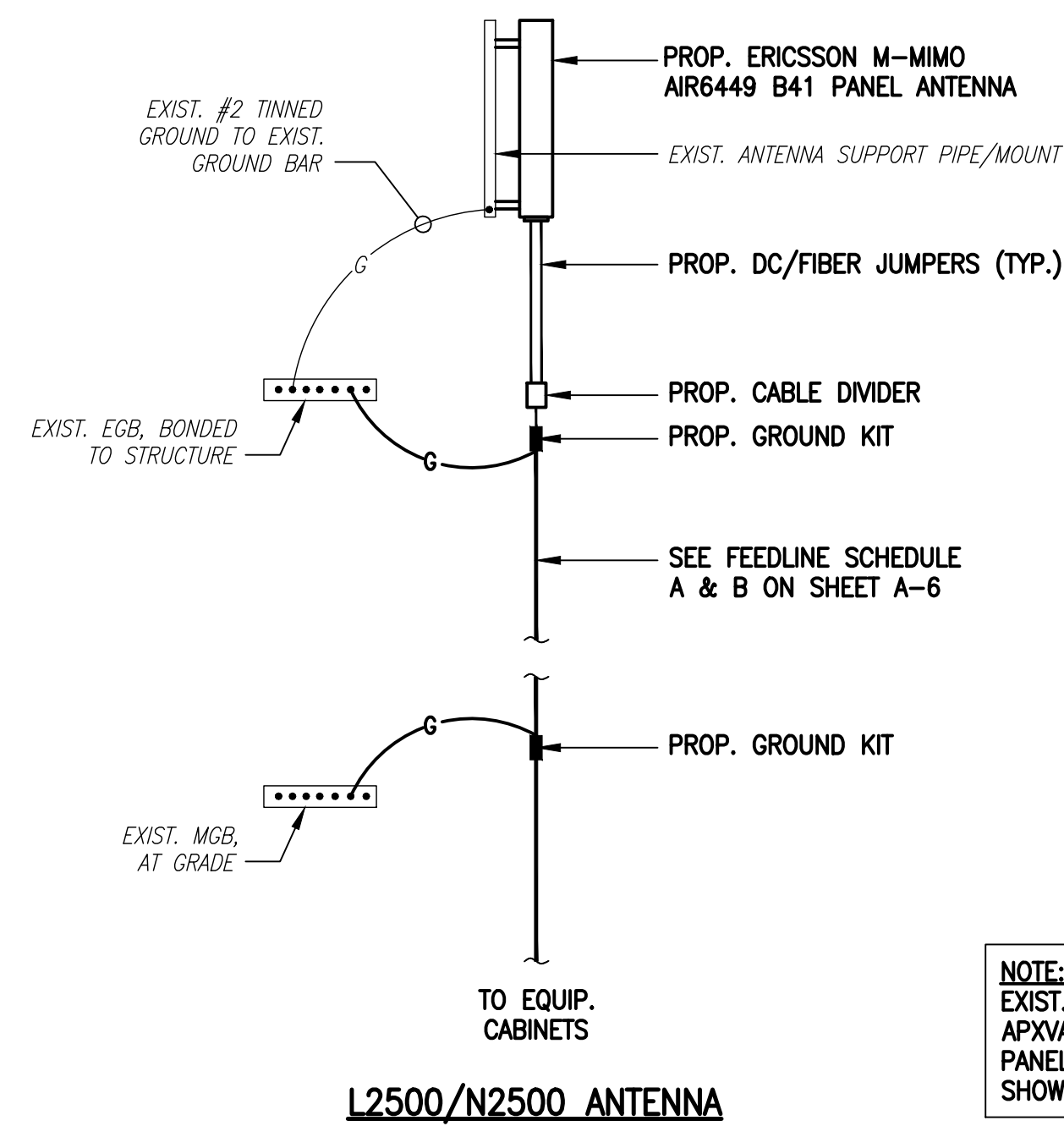
SHEET NUMBER
E-2



ONE LINE DIAGRAM
SCALE: NOT TO SCALE



GROUNDING RISER DIAGRAM
SCALE: NOT TO SCALE



NOTE:
EXIST. RFS APXVAALL24_43-U-NA20 PANEL ANTENNA NOT SHOWN FOR CLARITY.

COAX CABLE CONNECTION AND GROUNDING DETAIL
SCALE: NOT TO SCALE

EXHIBIT 7

Structural Analysis



Tower Engineering Solutions

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

Structural Analysis Report

Existing 196 ft Valmont Monopole
Customer Name: SBA Communications Corp
Customer Site Number: CT00595-S
Customer Site Name: Stonington East
Carrier Name: T-Mobile (App#: 176588-2)
Carrier Site ID / Name: CT11343A / Stonington East
Site Location: 86 Voluntown Road
Stonington, Connecticut
New London County
Latitude: 41.405539
Longitude: -71.845247

Analysis Result:

Max Structural Usage: 99.3% [Pass]

Max Foundation Usage: 88.0% [Pass]

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

Report Prepared By : Changzhi Zang



Introduction

The purpose of this report is to summarize the analysis results on the 196 ft Valmont 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 Valmont, Order #17507-98 dated 6/23/96
Foundation Drawing	Foundation Drawing prepared by Valmont, Drawing #17507-S-01 dated 7/9/98
Geotechnical Report	Geotechnical Report prepared by SAGE, Project #G004 dated 6/10/98
Modification Drawings	N/A
Mount Analysis	Verizon MA by Maser Consulting, Project # 21777818A (Rev. 1), dated 10/15/2021 TMO MA by TES, Project #119406, dated 01/05/2022

Analysis Criteria

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

Wind Speed Used in the Analysis:	128.0 mph (3-Sec. Gust) (Ultimate wind speed)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1" radial ice concurrent
Service Load Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	C
Risk Category:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	$S_5 = 0.184$, $S_1 = 0.052$

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

Existing Antennas, Mounts and Transmission Lines

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

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	195.0	3	RFS - APXVSP18-C-A20 - Panel	Low Profile Platform	(4) 1 1/4"	Sprint Nextel
2		3	RFS - APXVTM14-C-120 - Panel			
3		3	Alcatel Lucent - 1900MHz RRH			
4		3	Alcatel Lucent - TD-RRH8x20-25			
5		3	Alcatel Lucent - 800MHz RRH			
6		3	Alcatel Lucent - 800MHz Filter			
7		4	RFS - ACU-A20-N - RET			
-	167.0	3	Ericsson - Air 21 B2A/B4P – Panel	Low profile platform w/ Handrails & Reinforcement Kit (Sitepro PRK-1245; Commscope VSR.MS-B; Sitepro HRK-12-U; Sitepro PRK-SFS-L + (3) Pipe 2.5STD x 8' mount pipes; New Sitepro1 SCX x -43 cross-over plate assemblies	(9) 1 5/8" (4) 1 5/8" Fiber	T-Mobile
-		3	Ericsson - Air 21 B4A/B2P – Panel			
-		3	RFS - APXVAARR24_43-U-NA20 – Panel			
-		3	Ericsson - KRY 112 144/1 – TMA			
-		3	Radio - 4449 B71+B12 - RRU			
14	150.0	3	Powerwave 7770	(1) Low Profile Platform (2) 2-1/2" std. Pipe Mast (1) SitePro1 HRK14 (Handrail Kit)	(12) 1 5/8" (1) 1/2" Fiber (1) 2" Conduit* (2) 3/4" DC	AT&T
15		2	Kathrein 800-10966			
16		1	Kathrein 800-10964			
17		3	Cci HPA65R-BU4A			
18		6	Powerwave LGP21401 TMA			
19		6	Powerwave LGP13519 Diplexer			
20		3	Ericsson 4449 B5/B12			
21		3	Ericsson RRUS 8843 B2 B66A			
22	2	Raycap DC6-48-60-18-8F				
23	141.5	3	Samsung MT6407-77A - Panel	Low Profile Platform Modified w/ SUPPORT RAIL KIT (PART #: VZWSMART-PLK1) & (3) JMA 91900314-02	(12) 1 5/8" ** (2) 1 5/8" Hybrid**	Verizon
24	140.0	6	JMA Wireless MX06FRO660-03 - Panel			
25		3	Samsung RF4439d 25A - RRU			
26		3	Samsung RF4440d 13a - RRU			
27	1	Raycap RVZDC-6627-PF-48 - COVP				
28	138.0	3	Samsung XXDWMM-12.5-65-8TCBRS - Panel			
29	125.0	3	JMA Wireless MX08FRO665-21 - Panel	Low-profile platform w/HRK [Commscope MC-PK8-DSH]	(1) 1.6" Hybrid	Dish Wireless
30		3	Fujitsu TA08025-B605 - RRU			
31		3	Fujitsu TA08025-B604 - RRU			
32		1	Raycap RDIDC-9181-PF-48 - OVP			

*(1) 2" conduit to house (2) 3/4" DC and (1) 1/2" Fiber.

** (12) 1 5/8" and (2) 1 5/8" Hybrid outside tower.

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
8	167.0	3	Commscope VV-65A-R1 – Panel	Low profile platform w/ Handrails & Reinforcement Kit (Sitepro PRK-1245; Commscope VSR.MS-B; Sitepro HRK-12-U; Sitepro PRK-SFS-L + (3) Pipe 2.5STD x 8' mount pipes; New Sitepro1 SCX x -43 cross-over plate assemblies	(8) 1 5/8" (3) 1 5/8" Fiber (1) 1.9" Fiber	T-Mobile
9		3	RFS APXVAALL24-43-U-NA20 – Panel			
10		3	Ericsson AIR6449 B41 – Panel			
11		3	Ericsson 4449 B71 + B85 – RRU			
12		3	Ericsson 4460 B25 + B66 – RRU			
13		3	Ericsson KRY 112 144/1 – TMA			

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
Max. Usage:	99.3%	81.3%	82.0%
Pass/Fail	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	7358.0	59.8	72.0

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

Service Load Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.6982 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

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

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC**. Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.
2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.
3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.
4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.
5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.
6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Usage Diagram - Max Ratio 99.34% at 0.0ft

Structure: CT00595-S-SBA
Site Name: Stonington East
Height: 196.00 (ft)
Base Elev: 0.000 (ft)

Code: EIA/TIA-222-H
Exposure: C
Gh: 1.1

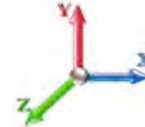
1/14/2022



Page: 1

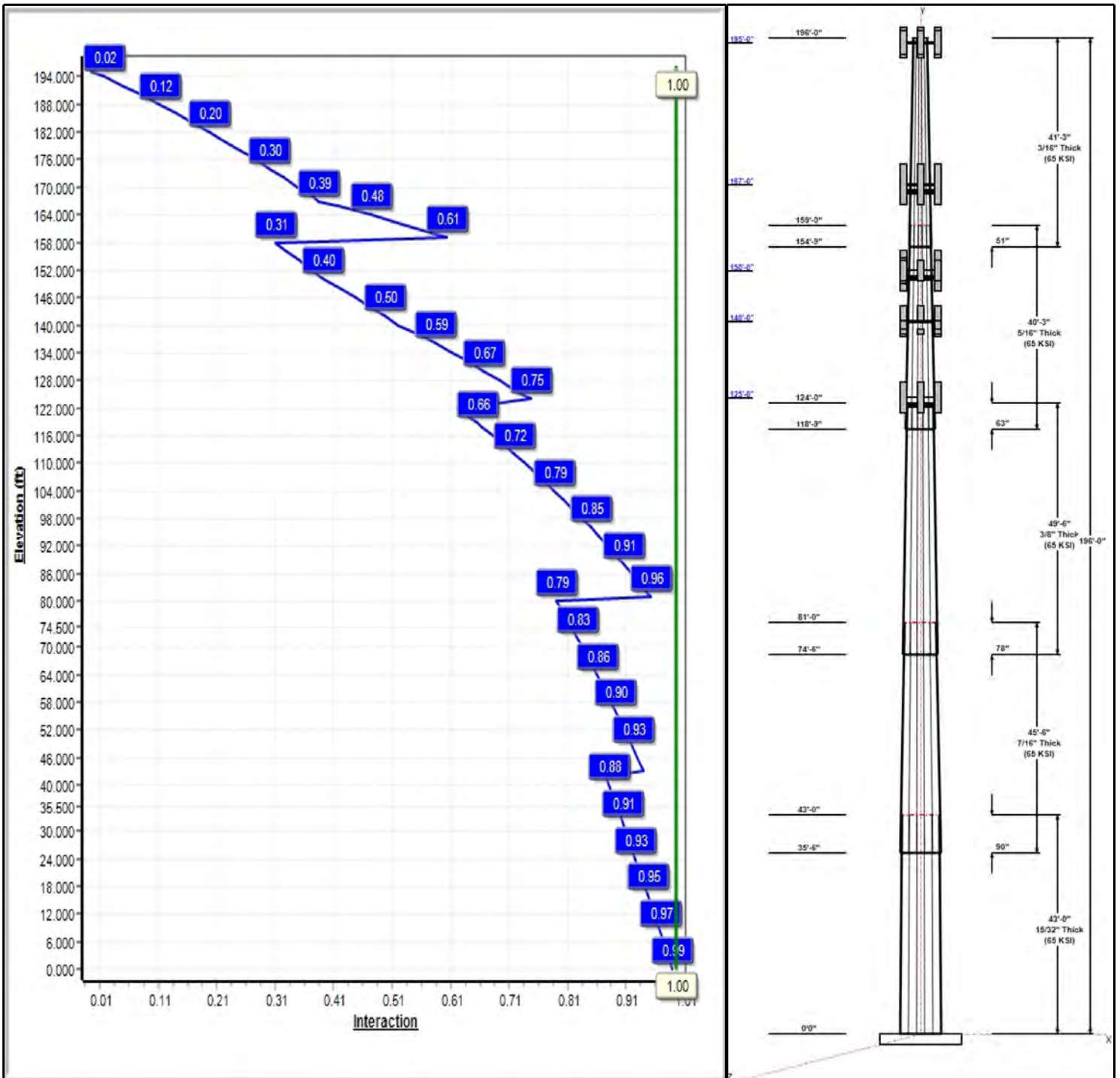
Dead Load Factor: 1.20
Wind Load Factor: 1.00

Load Case : 1.2D + 1.0W 128 mph Wind



Iterations: 32

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Structure: CT00595-S-SBA

Type: Tapered
Site Name: Stonington East
Height: 196.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 12 Sided
Taper: 0.25120

1/14/2022

Page: 2

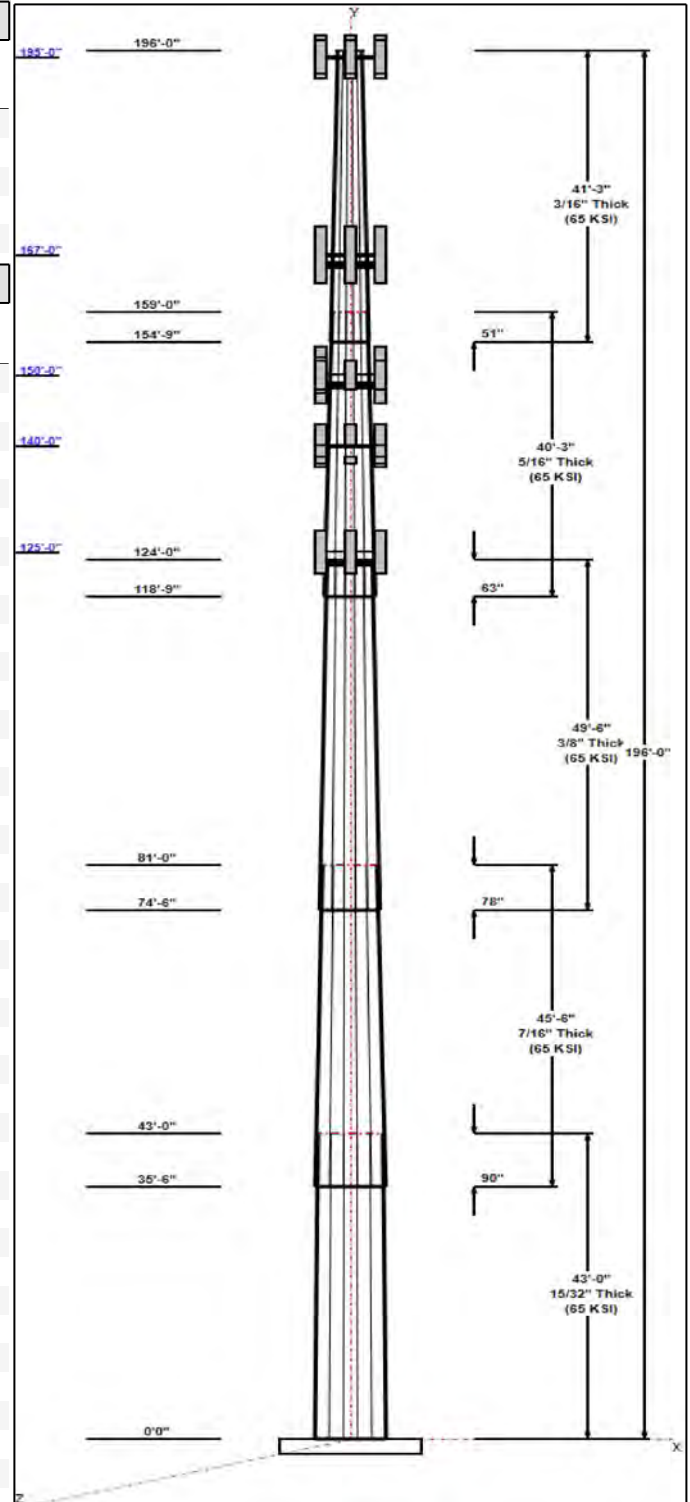


Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	43.00	53.20	64.00	0.469		0.25120	65
2	45.50	44.53	55.96	0.438	Slip	0.25120	65
3	49.50	34.48	46.91	0.375	Slip	0.25120	65
4	40.25	26.31	36.42	0.313	Slip	0.25120	65
5	41.25	17.39	27.75	0.188	Slip	0.25120	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
196.00	196.00	1	6' Lightning rod	
195.00	195.00	3	APXVSPP18-C-A20	Sprint Nextel
195.00	195.00	3	APXVTM14-C-120	Sprint Nextel
195.00	195.00	3	1900MHz RRH	Sprint Nextel
195.00	195.00	3	TD-RRH8x20-25	Sprint Nextel
195.00	195.00	3	800MHz RRH	Sprint Nextel
195.00	195.00	3	800MHz Filter	Sprint Nextel
195.00	195.00	4	ACU-A20-N	Sprint Nextel
195.00	195.00	1	Low Profile Platform	Sprint Nextel
167.00	167.00	3	RFS	T-Mobile
167.00	167.00	3	Ericsson AIR6449 B41	T-Mobile
167.00	167.00	3	Ericsson 4449 B71 + B85	T-Mobile
167.00	167.00	3	Ericsson 4460 B25 + B66	T-Mobile
167.00	167.00	1	PRK-1245 (kicker kit)	T-Mobile
167.00	167.00	1	(3) VSR-TS-B	T-Mobile
167.00	167.00	1	HRK12 (Handrail Kit)	T-Mobile
167.00	167.00	1	(3) SFS-H-L (V-Braces)	T-Mobile
167.00	167.00	3	KRY 112 144/1	T-Mobile
167.00	167.00	1	Low Profile	T-Mobile
167.00	167.00	3	Commscope VV-65A-R1	T-Mobile
150.00	150.00	2	800 10966	AT&T
150.00	150.00	1	80010964	AT&T
150.00	150.00	3	HPA65R-BU4A	AT&T
150.00	150.00	1	Handrail Kit	AT&T
150.00	150.00	2	mount pipe	AT&T
150.00	150.00	3	4449 B5/B12	AT&T
150.00	150.00	3	B2 B66A 8843	AT&T
150.00	150.00	3	7700.00	AT&T
150.00	150.00	6	LGP21401	AT&T
150.00	150.00	6	LGP13519	AT&T
150.00	150.00	2	DC6-48-60-18-8F	AT&T
150.00	150.00	1	Low Profile	AT&T
140.00	140.00	1	Low Profile Platform	Verizon
140.00	140.00	6	JMA Wireless	Verizon
140.00	141.50	3	Samsung MT6407-77A	Verizon
140.00	138.00	3	Samsung	Verizon
140.00	140.00	3	Samsung RF4439d 25A	Verizon
140.00	140.00	3	Samsung RF4440d 13a	Verizon
140.00	140.00	1	Raycap	Verizon
140.00	140.00	1	HRK12 (Handrail Kit)	Verizon
140.00	140.00	1	Mount Pipe	Verizon
125.00	125.00	3	JMA Wireless	Dish Wireless
125.00	125.00	3	Fujitsu TA08025-B605	Dish Wireless
125.00	125.00	3	Fujitsu TA08025-B604	Dish Wireless



Structure: CT00595-S-SBA

Type: Tapered	Base Shape: 12 Sided	1/14/2022
Site Name: Stonington East	Taper: 0.25120	
Height: 196.00 (ft)		
Base Elev: 0.00 (ft)		Page: 3



125.00	125.00	1	Raycap	Dish Wireless
125.00	125.00	1	Commscope MC-PK8-DSH	Dish Wireless
30.00	30.00	1	GPS	Sprint Nextel

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	195.00	Inside	1 1/4" Coax	Sprint Nextel
0.00	167.00	Inside	1 5/8" Coax	T-Mobile
0.00	167.00	Inside	1 5/8" Fiber	T-Mobile
0.00	167.00	Inside	1.9" Fiber	T-Mobile
0.00	150.00	Inside	1 5/8" Coax	AT&T
0.00	150.00	Inside	1/2" Fiber	AT&T
0.00	150.00	Inside	2" Conduit	AT&T
0.00	150.00	Inside	3/4" DC	AT&T
0.00	140.00	Outside	1 5/8" Coax	Verizon
0.00	140.00	Outside	1 5/8" Hybrid	Verizon
0.00	125.00	Outside	1.6" Hybrid	Dish Wireless

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
24	2.25" 18J	75.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
2.5000	78.8	60.0	Polygon

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 128 mph Wind	7358.0	59.8	72.2
0.9D + 1.0W 128 mph Wind	7263.3	59.8	54.2
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1577.0	12.3	98.9
1.0D + 1.0W 60 mph Wind	1437.8	11.8	60.2

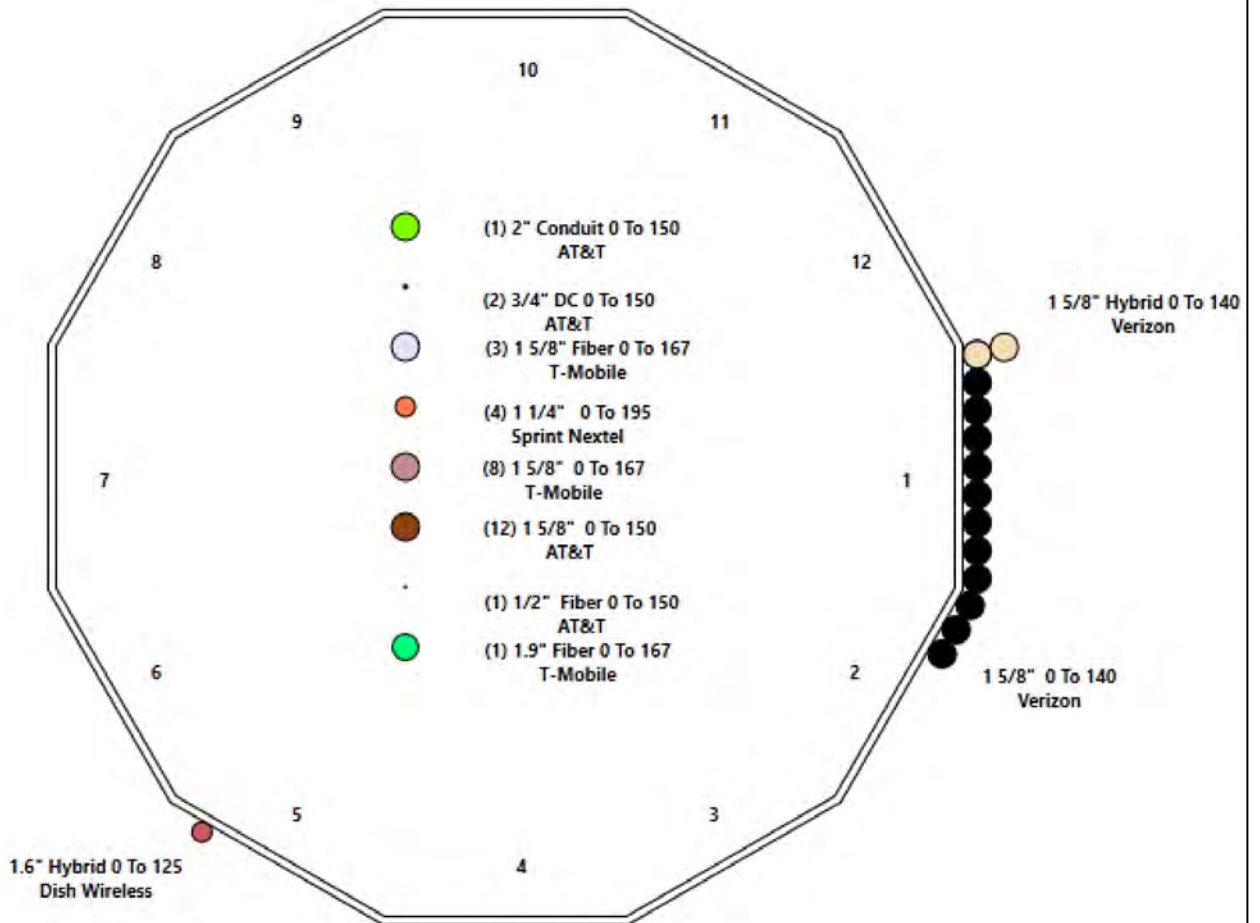
Structure: CT00595-S-SBA - Coax Line Placement

Type: Monopole
Site Name: Stonington East
Height: 196.00 (ft)

1/14/2022



Page: 4



Shaft Properties

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 5

Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	12	43.000	0.4688	65		0.00	12,838
2	12	45.500	0.4375	65	Slip	90.00	10,863
3	12	49.500	0.3750	65	Slip	78.00	8,200
4	12	40.250	0.3125	65	Slip	63.00	4,280
5	12	41.250	0.1875	65	Slip	51.00	1,897
Total Shaft Weight:							38,078

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	64.00	0.00	95.89	49402.09	34.44	136.53	53.20	43.00	79.59	28245.4	28.27	113.4	0.251199
2	55.96	35.50	78.21	30772.78	32.13	127.90	44.53	81.00	62.11	15411.7	25.13	101.7	0.251199
3	46.91	74.50	56.19	15532.14	31.38	125.10	34.48	124.00	41.18	6112.05	22.49	91.94	0.251199
4	36.42	118.7	36.33	6046.28	29.08	116.54	26.31	159.00	26.16	2256.60	20.42	84.19	0.251199
5	27.75	154.7	16.64	1613.96	37.52	148.01	17.39	196.00	10.39	392.30	22.71	92.75	0.251199

Load Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 6

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	196.00	6' Lightning rod	1	6.50	0.38	1.00	31.36	1.125	1.00	0.00	0.00
2	195.00	APXVSP18-C-A20	3	57.00	8.02	0.83	175.30	9.932	0.83	0.00	0.00
3	195.00	APXVTM14-C-120	3	56.00	6.34	0.79	158.87	7.086	0.79	0.00	0.00
4	195.00	1900MHz RRH	3	44.00	3.80	0.50	118.71	4.751	0.50	0.00	0.00
5	195.00	TD-RRH8x20-25	3	70.00	4.05	0.50	140.71	4.592	0.50	0.00	0.00
6	195.00	800MHz RRH	3	59.50	2.64	0.50	112.89	3.432	0.50	0.00	0.00
7	195.00	800MHz Filter	3	8.80	0.78	0.50	20.87	1.223	0.50	0.00	0.00
8	195.00	ACU-A20-N	4	1.00	0.14	0.50	3.94	0.343	0.50	0.00	0.00
9	195.00	Low Profile Platform	1	1500.00	22.00	1.00	2395.80	34.087	1.00	0.00	0.00
10	167.00	RFS APXVAALL24-43-U-NA20	3	122.80	20.24	0.73	399.36	21.505	0.73	0.00	0.00
11	167.00	Ericsson AIR6449 B41	3	103.00	5.65	0.71	195.40	6.290	0.71	0.00	0.00
12	167.00	Ericsson 4449 B71 + B85	3	73.20	1.97	0.50	112.11	2.354	0.50	0.00	0.00
13	167.00	Ericsson 4460 B25 + B66	3	104.00	2.14	0.50	192.06	2.845	0.50	0.00	0.00
14	167.00	PRK-1245 (kicker kit)	1	464.91	9.50	1.00	683.61	16.203	1.00	0.00	0.00
15	167.00	(3) VSR-TS-B	1	369.30	11.43	1.00	612.51	21.108	1.00	0.00	0.00
16	167.00	HRK12 (Handrail Kit)	1	261.72	6.75	1.00	471.02	11.195	1.00	0.00	0.00
17	167.00	(3) SFS-H-L (V-Braces)	1	230.00	6.70	1.00	446.39	11.428	1.00	0.00	0.00
18	167.00	KRY 112 144/1	3	11.00	0.41	0.50	18.27	0.730	0.50	0.00	0.00
19	167.00	Low Profile Platform-Round	1	1500.00	22.00	1.00	2382.03	33.901	1.00	0.00	0.00
20	167.00	Commscope VV-65A-R1	3	23.81	5.92	0.73	191.82	7.173	0.77	0.00	0.00
21	150.00	800 10966	2	125.70	17.36	0.72	352.82	18.548	0.72	0.00	0.00
22	150.00	80010964	1	94.80	10.00	0.71	240.37	10.850	0.71	0.00	0.00
23	150.00	HPA65R-BU4A	3	28.70	4.96	0.85	117.48	5.594	0.85	0.00	0.00
24	150.00	Handrail Kit	1	261.72	6.75	1.00	468.78	11.148	1.00	0.00	0.00
25	150.00	mount pipe	2	87.00	3.31	1.00	176.08	6.067	1.00	0.00	0.00
26	150.00	4449 B5/B12	3	71.00	1.97	0.50	106.59	2.335	0.50	0.00	0.00
27	150.00	B2 B66A 8843	3	70.00	1.64	0.50	100.66	1.984	0.50	0.00	0.00
28	150.00	7700.00	3	16.00	1.73	0.79	48.59	2.111	0.81	0.00	0.00
29	150.00	LGP21401	6	14.10	1.29	0.50	30.77	1.847	0.50	0.00	0.00
30	150.00	LGP13519	6	5.30	0.34	0.50	11.63	0.643	0.50	0.00	0.00
31	150.00	DC6-48-60-18-8F	2	31.80	1.47	0.50	73.02	1.937	0.50	0.00	0.00
32	150.00	Low Profile Platform-Round	1	1500.00	22.00	1.00	2372.61	33.774	1.00	0.00	0.00
33	140.00	Low Profile Platform	1	1500.00	22.00	1.00	2366.61	33.693	1.00	0.00	0.00
34	140.00	JMA Wireless MX06FRO660-03	6	60.00	9.87	0.87	228.97	10.764	0.87	0.00	0.00
35	140.00	Samsung MT6407-77A	3	79.40	4.69	0.70	153.03	5.310	0.75	0.00	1.50
36	140.00	Samsung	3	23.14	0.89	0.82	44.79	1.154	0.82	0.00	-2.00
37	140.00	Samsung RF4439d 25A	3	74.70	4.59	0.50	107.88	5.615	0.50	0.00	0.00
38	140.00	Samsung RF4440d 13a	3	70.33	4.14	0.50	101.57	5.064	0.50	0.00	0.00
39	140.00	Raycap RVZDC-6627-PF-48	1	32.00	4.06	1.00	107.43	4.604	1.00	0.00	0.00
40	140.00	HRK12 (Handrail Kit)	1	261.72	6.75	1.00	467.36	11.118	1.00	0.00	0.00
41	140.00	Mount Pipe	1	40.00	2.63	1.00	93.15	6.582	1.00	0.00	0.00
42	125.00	JMA Wireless MX08FRO665-21	3	64.50	12.49	0.74	254.91	13.449	0.74	0.00	0.00
43	125.00	Fujitsu TA08025-B605	3	75.00	1.96	0.50	109.24	2.327	0.50	0.00	0.00
44	125.00	Fujitsu TA08025-B604	3	63.90	1.96	0.50	97.04	2.327	0.50	0.00	0.00
45	125.00	Raycap RDIDC-9181-PF-48	1	21.90	2.01	0.50	56.76	2.382	0.50	0.00	0.00
46	125.00	Commscope MC-PK8-DSH	1	1727.00	37.59	1.00	2831.89	68.510	1.00	0.00	0.00
47	30.00	GPS	1	10.00	1.00	1.00	26.64	1.404	1.00	0.00	0.00
Totals:			114	14,860.31			28,136.54				

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		

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	195.00	(4) 1 1/4" Coax	0.00	Inside
0.00	167.00	(8) 1 5/8" Coax	0.00	Inside
0.00	167.00	(3) 1 5/8" Fiber	0.00	Inside
0.00	167.00	(1) 1.9" Fiber	0.00	Inside
0.00	150.00	(12) 1 5/8" Coax	0.00	Inside
0.00	150.00	(1) 1/2" Fiber	0.00	Inside
0.00	150.00	(1) 2" Conduit	0.00	Inside
0.00	150.00	(2) 3/4" DC	0.00	Inside
0.00	140.00	(12) 1 5/8" Coax	0.00	Outside
0.00	140.00	(2) 1 5/8" Hybrid	4.00	Outside
0.00	125.00	(1) 1.6" Hybrid	1.60	Outside

Shaft Section Properties

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 8

Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in ³)	Weight (lb)
0.00		0.4688	64.000	95.892	49402.1	34.44	136.53	67.2	1491.	0.0
2.00		0.4688	63.498	95.134	48239.3	34.15	135.46	67.5	1467.	650.0
4.00		0.4688	62.995	94.376	47095.0	33.87	134.39	67.8	1444.	644.9
6.00		0.4688	62.493	93.618	45968.8	33.58	133.32	68.1	1421.	639.7
8.00		0.4688	61.990	92.859	44860.8	33.29	132.25	68.4	1398.	634.5
10.00		0.4688	61.488	92.101	43770.7	33.00	131.17	68.7	1375.	629.4
12.00		0.4688	60.986	91.343	42698.5	32.72	130.10	69.0	1352.	624.2
14.00		0.4688	60.483	90.584	41643.9	32.43	129.03	69.3	1330.	619.1
16.00		0.4688	59.981	89.826	40606.7	32.14	127.96	69.7	1307.	613.9
18.00		0.4688	59.478	89.068	39587.0	31.86	126.89	70.0	1285.	608.7
20.00		0.4688	58.976	88.309	38584.5	31.57	125.82	70.3	1263.	603.6
22.00		0.4688	58.474	87.551	37599.0	31.28	124.74	70.6	1242.	598.4
24.00		0.4688	57.971	86.793	36630.5	30.99	123.67	70.9	1220.	593.3
26.00		0.4688	57.469	86.034	35678.7	30.71	122.60	71.2	1199.	588.1
28.00		0.4688	56.966	85.276	34743.6	30.42	121.53	71.5	1178.	582.9
30.00		0.4688	56.464	84.518	33825.0	30.13	120.46	71.9	1157.	577.8
32.00		0.4688	55.962	83.760	32922.7	29.85	119.38	72.2	1136.	572.6
34.00		0.4688	55.459	83.001	32036.6	29.56	118.31	72.5	1116.	567.5
35.50	Bot - Section 2	0.4688	55.082	82.433	31382.5	29.34	117.51	72.7	1100.	422.2
36.00		0.4688	54.957	82.243	31166.5	29.27	117.24	72.8	1095.	273.0
38.00		0.4688	54.454	81.485	30312.3	28.98	116.17	73.1	1075.	1085.8
40.00		0.4688	53.952	80.726	29473.9	28.70	115.10	73.4	1055.	1075.8
42.00		0.4688	53.450	79.968	28651.1	28.41	114.03	73.7	1035.	1065.8
43.00	Top - Section 1	0.4375	54.073	75.560	27745.2	30.97	123.60	0.0	0.0	529.2
44.00		0.4375	53.822	75.206	27357.2	30.82	123.02	71.1	981.9	256.5
46.00		0.4375	53.320	74.498	26592.1	30.51	121.87	71.4	963.5	509.4
48.00		0.4375	52.817	73.790	25841.3	30.20	120.73	71.8	945.2	504.6
50.00		0.4375	52.315	73.082	25104.9	29.90	119.58	72.1	927.1	499.8
52.00		0.4375	51.813	72.375	24382.6	29.59	118.43	72.4	909.1	495.0
54.00		0.4375	51.310	71.667	23674.2	29.28	117.28	72.8	891.3	490.1
56.00		0.4375	50.808	70.959	22979.7	28.97	116.13	73.1	873.8	485.3
58.00		0.4375	50.305	70.251	22299.0	28.67	114.98	73.4	856.3	480.5
60.00		0.4375	49.803	69.544	21631.8	28.36	113.84	73.8	839.1	475.7
62.00		0.4375	49.301	68.836	20978.0	28.05	112.69	74.1	822.0	470.9
64.00		0.4375	48.798	68.128	20337.6	27.74	111.54	74.5	805.1	466.1
66.00		0.4375	48.296	67.420	19710.3	27.44	110.39	74.8	788.4	461.2
68.00		0.4375	47.793	66.713	19096.1	27.13	109.24	75.1	771.9	456.4
70.00		0.4375	47.291	66.005	18494.7	26.82	108.09	75.5	755.5	451.6
72.00		0.4375	46.789	65.297	17906.1	26.51	106.95	75.8	739.3	446.8
74.00		0.4375	46.286	64.589	17330.2	26.20	105.80	76.1	723.3	442.0
74.50	Bot - Section 3	0.4375	46.161	64.413	17188.1	26.13	105.51	76.2	719.3	109.7
76.00		0.4375	45.784	63.882	16766.7	25.90	104.65	76.5	707.5	613.1
78.00		0.4375	45.281	63.174	16215.6	25.59	103.50	76.8	691.8	809.6
80.00		0.4375	44.779	62.466	15676.7	25.28	102.35	77.1	676.3	800.7
81.00	Top - Section 2	0.3750	45.278	54.220	13953.9	30.21	120.74	0.0	0.0	397.0
82.00		0.3750	45.027	53.917	13721.0	30.03	120.07	72.0	588.7	184.0
84.00		0.3750	44.524	53.310	13263.1	29.67	118.73	72.4	575.5	364.9
86.00		0.3750	44.022	52.704	12815.4	29.31	117.39	72.7	562.4	360.7
88.00		0.3750	43.519	52.097	12378.0	28.95	116.05	73.1	549.5	356.6
90.00		0.3750	43.017	51.490	11950.6	28.59	114.71	73.5	536.7	352.5

Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
92.00		0.3750	42.515	50.884	11533.1	28.23	113.37	73.9	524.1	348.4
94.00		0.3750	42.012	50.277	11125.5	27.88	112.03	74.3	511.6	344.2
96.00		0.3750	41.510	49.670	10727.6	27.52	110.69	74.7	499.3	340.1
98.00		0.3750	41.007	49.064	10339.4	27.16	109.35	75.1	487.1	336.0
100.00		0.3750	40.505	48.457	9960.6	26.80	108.01	75.5	475.1	331.8
102.00		0.3750	40.003	47.850	9591.1	26.44	106.67	75.9	463.2	327.7
104.00		0.3750	39.500	47.244	9230.9	26.08	105.33	76.3	451.5	323.6
106.00		0.3750	38.998	46.637	8879.9	25.72	103.99	76.7	439.9	319.5
108.00		0.3750	38.496	46.031	8537.9	25.36	102.65	77.1	428.5	315.3
110.00		0.3750	37.993	45.424	8204.7	25.00	101.31	77.4	417.2	311.2
112.00		0.3750	37.491	44.817	7880.4	24.64	99.98	77.8	406.1	307.1
114.00		0.3750	36.988	44.211	7564.7	24.29	98.64	78.2	395.1	302.9
116.00		0.3750	36.486	43.604	7257.5	23.93	97.30	78.6	384.3	298.8
118.00		0.3750	35.984	42.997	6958.8	23.57	95.96	79.0	373.6	294.7
118.75	Bot - Section 4	0.3750	35.795	42.770	6848.9	23.43	95.45	79.2	369.6	109.4
120.00		0.3750	35.481	42.391	6668.4	23.21	94.62	79.4	363.1	335.0
122.00		0.3750	34.979	41.784	6386.2	22.85	93.28	79.8	352.7	529.8
124.00	Top - Section 3	0.3125	35.101	35.006	5407.7	27.95	112.32	0.0	0.0	522.3
125.00		0.3125	34.850	34.753	5291.4	27.74	111.52	74.5	293.3	118.7
126.00		0.3125	34.599	34.501	5176.8	27.52	110.72	74.7	289.0	117.8
128.00		0.3125	34.097	33.995	4952.5	27.09	109.11	75.2	280.6	233.1
130.00		0.3125	33.594	33.490	4734.8	26.66	107.50	75.6	272.3	229.6
132.00		0.3125	33.092	32.984	4523.6	26.23	105.89	76.1	264.1	226.2
134.00		0.3125	32.589	32.479	4318.8	25.80	104.29	76.6	256.0	222.8
136.00		0.3125	32.087	31.973	4120.3	25.37	102.68	77.0	248.1	219.3
138.00		0.3125	31.585	31.467	3927.9	24.94	101.07	77.5	240.2	215.9
140.00		0.3125	31.082	30.962	3741.6	24.51	99.46	78.0	232.6	212.4
142.00		0.3125	30.580	30.456	3561.3	24.08	97.86	78.5	225.0	209.0
144.00		0.3125	30.077	29.951	3386.9	23.65	96.25	78.9	217.5	205.6
146.00		0.3125	29.575	29.445	3218.3	23.22	94.64	79.4	210.2	202.1
148.00		0.3125	29.073	28.940	3055.3	22.78	93.03	79.9	203.0	198.7
150.00		0.3125	28.570	28.434	2898.0	22.35	91.42	80.3	196.0	195.2
152.00		0.3125	28.068	27.929	2746.2	21.92	89.82	80.8	189.0	191.8
154.00		0.3125	27.565	27.423	2599.7	21.49	88.21	81.3	182.2	188.4
154.75	Bot - Section 5	0.3125	27.377	27.234	2546.2	21.33	87.61	81.5	179.7	69.7
156.00		0.3125	27.063	26.918	2458.6	21.06	86.60	81.7	175.5	185.5
158.00		0.3125	26.561	26.412	2322.6	20.63	84.99	81.9	168.9	292.4
159.00	Top - Section 4	0.1875	26.684	15.997	1433.6	35.99	142.32	0.0	0.0	144.1
160.00		0.1875	26.433	15.846	1393.2	35.63	140.98	65.9	101.8	54.2
162.00		0.1875	25.931	15.542	1314.7	34.91	138.30	66.6	97.9	106.8
164.00		0.1875	25.428	15.239	1239.2	34.20	135.62	67.4	94.1	104.7
166.00		0.1875	24.926	14.936	1166.7	33.48	132.94	68.2	90.4	102.7
167.00		0.1875	24.675	14.784	1131.5	33.12	131.60	68.6	88.6	50.6
168.00		0.1875	24.424	14.633	1097.1	32.76	130.26	69.0	86.8	50.0
170.00		0.1875	23.921	14.329	1030.2	32.04	127.58	69.8	83.2	98.6
172.00		0.1875	23.419	14.026	966.2	31.32	124.90	70.6	79.7	96.5
174.00		0.1875	22.916	13.723	904.9	30.61	122.22	71.3	76.3	94.4
176.00		0.1875	22.414	13.419	846.2	29.89	119.54	72.1	72.9	92.4
178.00		0.1875	21.912	13.116	790.1	29.17	116.86	72.9	69.7	90.3
180.00		0.1875	21.409	12.813	736.5	28.45	114.18	73.7	66.5	88.2
182.00		0.1875	20.907	12.509	685.4	27.73	111.50	74.5	63.3	86.2
184.00		0.1875	20.404	12.206	636.8	27.02	108.82	75.3	60.3	84.1
186.00		0.1875	19.902	11.903	590.5	26.30	106.14	76.0	57.3	82.0
188.00		0.1875	19.400	11.599	546.5	25.58	103.46	76.8	54.4	80.0
190.00		0.1875	18.897	11.296	504.7	24.86	100.79	77.6	51.6	77.9
192.00		0.1875	18.395	10.993	465.1	24.14	98.11	78.4	48.8	75.8
194.00		0.1875	17.892	10.689	427.7	23.43	95.43	79.2	46.2	73.8
195.00		0.1875	17.641	10.538	409.7	23.07	94.09	79.6	44.9	36.1
196.00		0.1875	17.390	10.386	392.3	22.71	92.75	79.9	43.6	35.6

Increment Length: 2 (ft)


Elev (ft)	Description	Thick (in)	Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in ³)	Weight (lb)
										38078.0

Wind Loading - Shaft

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 11

Load Case: 1.2D + 1.0W 128 mph Wind	Iterations 32
Dead Load Factor 1.20	
Wind Load Factor 1.00	

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		1.00	0.85	33.806	37.19	650.99	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	33.806	37.19	645.88	0.950	0.000	2.00	11.000	10.45	388.6	0.0	780.0
4.00		1.00	0.85	33.806	37.19	640.77	0.950	0.000	2.00	10.913	10.37	385.5	0.0	773.8
6.00		1.00	0.85	33.806	37.19	635.66	0.950	0.000	2.00	10.826	10.28	382.5	0.0	767.6
8.00		1.00	0.85	33.806	37.19	630.55	0.950	0.000	2.00	10.740	10.20	379.4	0.0	761.4
10.00		1.00	0.85	33.806	37.19	625.44	0.950	0.000	2.00	10.653	10.12	376.3	0.0	755.3
12.00		1.00	0.85	33.806	37.19	620.33	0.950	0.000	2.00	10.566	10.04	373.3	0.0	749.1
14.00		1.00	0.85	33.806	37.19	615.22	0.950	0.000	2.00	10.479	9.96	370.2	0.0	742.9
16.00		1.00	0.86	34.224	37.65	613.86	0.950	0.000	2.00	10.393	9.87	371.7	0.0	736.7
18.00		1.00	0.88	35.083	38.59	616.31	0.950	0.000	2.00	10.306	9.79	377.8	0.0	730.5
20.00		1.00	0.90	35.870	39.46	617.92	0.950	0.000	2.00	10.219	9.71	383.1	0.0	724.3
22.00		1.00	0.92	36.597	40.26	618.84	0.950	0.000	2.00	10.133	9.63	387.5	0.0	718.1
24.00		1.00	0.94	37.274	41.00	619.17	0.950	0.000	2.00	10.046	9.54	391.3	0.0	711.9
26.00		1.00	0.95	37.907	41.70	618.99	0.950	0.000	2.00	9.959	9.46	394.5	0.0	705.7
28.00		1.00	0.97	38.503	42.35	618.39	0.950	0.000	2.00	9.873	9.38	397.2	0.0	699.5
30.00	Appurtenance(s)	1.00	0.98	39.066	42.97	617.40	0.950	0.000	2.00	9.786	9.30	399.5	0.0	693.3
32.00		1.00	1.00	39.601	43.56	616.08	0.950	0.000	2.00	9.699	9.21	401.4	0.0	687.1
34.00		1.00	1.01	40.110	44.12	614.46	0.950	0.000	2.00	9.613	9.13	402.9	0.0	680.9
35.50	Bot - Section 2	1.00	1.02	40.476	44.52	613.06	0.950	0.000	1.50	7.153	6.79	302.5	0.0	506.6
36.00		1.00	1.02	40.595	44.65	612.56	0.950	0.000	0.50	2.411	2.29	102.3	0.0	327.6
38.00		1.00	1.03	41.060	45.17	610.43	0.950	0.000	2.00	9.590	9.11	411.5	0.0	1303.0
40.00		1.00	1.04	41.506	45.66	608.07	0.950	0.000	2.00	9.504	9.03	412.2	0.0	1291.0
42.00		1.00	1.05	41.934	46.13	605.51	0.952 *	0.000	2.00	9.417	8.97	413.6	0.0	1279.0
43.00	Top - Section 1	1.00	1.06	42.142	46.36	604.16	0.954 *	0.000	1.00	4.676	4.46	206.8	0.0	635.0
44.00		1.00	1.06	42.347	46.58	612.72	0.951 *	0.000	1.00	4.654	4.43	206.1	0.0	307.8
46.00		1.00	1.07	42.745	47.02	609.85	0.953 *	0.000	2.00	9.243	8.81	414.1	0.0	611.3
48.00		1.00	1.08	43.130	47.44	606.82	0.955 *	0.000	2.00	9.157	8.75	415.1	0.0	605.5
50.00		1.00	1.09	43.502	47.85	603.63	0.958 *	0.000	2.00	9.070	8.69	415.9	0.0	599.7
52.00		1.00	1.10	43.863	48.25	600.31	0.961 *	0.000	2.00	8.983	8.63	416.6	0.0	594.0
54.00		1.00	1.11	44.213	48.63	596.86	0.964 *	0.000	2.00	8.897	8.58	417.1	0.0	588.2
56.00		1.00	1.12	44.552	49.01	593.28	0.967 *	0.000	2.00	8.810	8.52	417.5	0.0	582.4
58.00		1.00	1.13	44.883	49.37	589.59	0.970 *	0.000	2.00	8.723	8.46	417.7	0.0	576.6
60.00		1.00	1.14	45.204	49.72	585.79	0.973 *	0.000	2.00	8.637	8.40	417.9	0.0	570.8
62.00		1.00	1.14	45.517	50.07	581.88	0.976 *	0.000	2.00	8.550	8.35	417.9	0.0	565.1
64.00		1.00	1.15	45.823	50.40	577.88	0.979 *	0.000	2.00	8.463	8.29	417.8	0.0	559.3
66.00		1.00	1.16	46.120	50.73	573.79	0.983 *	0.000	2.00	8.377	8.23	417.6	0.0	553.5
68.00		1.00	1.17	46.411	51.05	569.60	0.986 *	0.000	2.00	8.290	8.17	417.2	0.0	547.7
70.00		1.00	1.17	46.695	51.36	565.34	0.989 *	0.000	2.00	8.203	8.12	416.8	0.0	541.9
72.00		1.00	1.18	46.973	51.67	560.99	0.993 *	0.000	2.00	8.117	8.06	416.3	0.0	536.2
74.00		1.00	1.19	47.245	51.97	556.57	0.996 *	0.000	2.00	8.030	8.00	415.7	0.0	530.4
74.50	Bot - Section 3	1.00	1.19	47.312	52.04	555.46	0.999 *	0.000	0.50	1.994	1.99	103.6	0.0	131.7
76.00		1.00	1.19	47.511	52.26	552.08	1.000 *	0.000	1.50	6.046	6.05	316.1	0.0	735.7
78.00		1.00	1.20	47.771	52.55	547.52	1.004 *	0.000	2.00	7.986	8.01	421.1	0.0	971.5
80.00		1.00	1.21	48.027	52.83	542.89	1.007 *	0.000	2.00	7.899	7.96	420.4	0.0	960.8
81.00	Top - Section 2	1.00	1.21	48.152	52.97	540.55	1.010 *	0.000	1.00	3.917	3.96	209.6	0.0	476.4
82.00		1.00	1.21	48.277	53.10	547.31	1.006 *	0.000	1.00	3.895	3.92	208.2	0.0	220.8
84.00		1.00	1.22	48.522	53.37	542.58	1.009 *	0.000	2.00	7.726	7.80	416.2	0.0	437.8

Wind Loading - Shaft

Structure: CT00595-S-SBA

Code: EIA/TIA-222-H

1/14/2022

Site Name: Stonington East

Exposure: C

Height: 196.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: D - Stiff Soil

Gh: 1.1

Topography: 1

Struct Class: II

Page: 12



86.00	1.00	1.23	48.763	53.64	537.79	1.013 *	0.000	2.00	7.639	7.74	415.2	0.0	432.9
88.00	1.00	1.23	49.000	53.90	532.94	1.017 *	0.000	2.00	7.552	7.68	414.1	0.0	427.9
90.00	1.00	1.24	49.232	54.16	528.03	1.021 *	0.000	2.00	7.466	7.62	412.9	0.0	423.0
92.00	1.00	1.24	49.461	54.41	523.07	1.025 *	0.000	2.00	7.379	7.57	411.7	0.0	418.0
94.00	1.00	1.25	49.685	54.65	518.06	1.030 *	0.000	2.00	7.292	7.51	410.4	0.0	413.1
96.00	1.00	1.25	49.906	54.90	513.00	1.034 *	0.000	2.00	7.206	7.45	409.1	0.0	408.1
98.00	1.00	1.26	50.123	55.14	507.90	1.039 *	0.000	2.00	7.119	7.39	407.7	0.0	403.2
100.00	1.00	1.27	50.337	55.37	502.74	1.043 *	0.000	2.00	7.032	7.34	406.2	0.0	398.2
102.00	1.00	1.27	50.547	55.60	497.54	1.048 *	0.000	2.00	6.946	7.28	404.7	0.0	393.3
104.00	1.00	1.28	50.754	55.83	492.30	1.053 *	0.000	2.00	6.859	7.22	403.2	0.0	388.3
106.00	1.00	1.28	50.958	56.05	487.01	1.058 *	0.000	2.00	6.772	7.16	401.5	0.0	383.3
108.00	1.00	1.29	51.159	56.27	481.69	1.063 *	0.000	2.00	6.686	7.11	399.9	0.0	378.4
110.00	1.00	1.29	51.357	56.49	476.32	1.068 *	0.000	2.00	6.599	7.05	398.2	0.0	373.4
112.00	1.00	1.30	51.552	56.71	470.91	1.073 *	0.000	2.00	6.512	6.99	396.4	0.0	368.5
114.00	1.00	1.30	51.744	56.92	465.47	1.079 *	0.000	2.00	6.426	6.93	394.6	0.0	363.5
116.00	1.00	1.31	51.934	57.13	459.99	1.085 *	0.000	2.00	6.339	6.88	392.8	0.0	358.6
118.00	1.00	1.31	52.121	57.33	454.47	1.090 *	0.000	2.00	6.252	6.82	390.9	0.0	353.6
118.75 Bot - Section 4	1.00	1.31	52.191	57.41	452.39	1.095 *	0.000	0.75	2.322	2.54	145.9	0.0	131.3
120.00	1.00	1.32	52.306	57.54	448.92	1.098 *	0.000	1.25	3.911	4.29	247.0	0.0	402.0
122.00	1.00	1.32	52.489	57.74	443.33	1.103 *	0.000	2.00	6.187	6.82	393.8	0.0	635.8
124.00 Top - Section 3	1.00	1.32	52.669	57.94	437.71	1.109 *	0.000	2.00	6.100	6.76	391.9	0.0	626.7
125.00 Appurtenance(s)	1.00	1.33	52.758	58.03	442.83	1.106 *	0.000	1.00	3.017	3.34	193.6	0.0	142.4
126.00	1.00	1.33	52.846	58.13	440.01	0.982 *	0.000	1.00	2.996	2.94	171.0	0.0	141.4
128.00	1.00	1.33	53.022	58.32	434.34	0.986 *	0.000	2.00	5.927	5.84	340.7	0.0	279.7
130.00	1.00	1.34	53.195	58.51	428.64	0.990 *	0.000	2.00	5.840	5.78	338.4	0.0	275.6
132.00	1.00	1.34	53.366	58.70	422.91	0.995 *	0.000	2.00	5.753	5.73	336.1	0.0	271.4
134.00	1.00	1.35	53.536	58.89	417.15	1.000 *	0.000	2.00	5.667	5.67	333.8	0.0	267.3
136.00	1.00	1.35	53.703	59.07	411.36	1.006 *	0.000	2.00	5.580	5.61	331.4	0.0	263.2
138.00	1.00	1.35	53.868	59.25	405.54	1.011 *	0.000	2.00	5.493	5.55	329.0	0.0	259.0
140.00 Appurtenance(s)	1.00	1.36	54.032	59.43	399.69	1.016 *	0.000	2.00	5.406	5.50	326.6	0.0	254.9
142.00	1.00	1.36	54.193	59.61	393.82	0.950	0.000	2.00	5.320	5.05	301.3	0.0	250.8
144.00	1.00	1.37	54.353	59.79	387.92	0.950	0.000	2.00	5.233	4.97	297.2	0.0	246.7
146.00	1.00	1.37	54.511	59.96	382.00	0.950	0.000	2.00	5.146	4.89	293.2	0.0	242.5
148.00	1.00	1.37	54.667	60.13	376.05	0.950	0.000	2.00	5.060	4.81	289.0	0.0	238.4
150.00 Appurtenance(s)	1.00	1.38	54.822	60.30	370.07	0.950	0.000	2.00	4.973	4.72	284.9	0.0	234.3
152.00	1.00	1.38	54.975	60.47	364.07	0.950	0.000	2.00	4.886	4.64	280.7	0.0	230.1
154.00	1.00	1.39	55.127	60.64	358.05	0.950	0.000	2.00	4.800	4.56	276.5	0.0	226.0
154.75 Bot - Section 5	1.00	1.39	55.183	60.70	355.78	0.950	0.000	0.75	1.778	1.69	102.5	0.0	83.7
156.00	1.00	1.39	55.277	60.80	352.00	0.950	0.000	1.25	2.976	2.83	171.9	0.0	222.7
158.00	1.00	1.39	55.425	60.97	345.93	0.950	0.000	2.00	4.691	4.46	271.7	0.0	350.9
159.00 Top - Section 4	1.00	1.40	55.499	61.05	342.88	0.950	0.000	1.00	2.313	2.20	134.1	0.0	173.0
160.00	1.00	1.40	55.572	61.13	344.72	0.950	0.000	1.00	2.291	2.18	133.1	0.0	65.0
162.00	1.00	1.40	55.718	61.29	338.61	0.950	0.000	2.00	4.518	4.29	263.0	0.0	128.2
164.00	1.00	1.40	55.862	61.45	332.48	0.950	0.000	2.00	4.431	4.21	258.7	0.0	125.7
166.00	1.00	1.41	56.004	61.60	326.33	0.950	0.000	2.00	4.344	4.13	254.2	0.0	123.2
167.00 Appurtenance(s)	1.00	1.41	56.075	61.68	323.25	0.950	0.000	1.00	2.140	2.03	125.4	0.0	60.7
168.00	1.00	1.41	56.146	61.76	320.16	0.950	0.000	1.00	2.118	2.01	124.3	0.0	60.1
170.00	1.00	1.42	56.286	61.91	313.96	0.950	0.000	2.00	4.171	3.96	245.3	0.0	118.3
172.00	1.00	1.42	56.425	62.07	307.75	0.950	0.000	2.00	4.084	3.88	240.8	0.0	115.8
174.00	1.00	1.42	56.562	62.22	301.51	0.950	0.000	2.00	3.997	3.80	236.3	0.0	113.3
176.00	1.00	1.43	56.698	62.37	295.26	0.950	0.000	2.00	3.911	3.72	231.7	0.0	110.8
178.00	1.00	1.43	56.833	62.52	288.98	0.950	0.000	2.00	3.824	3.63	227.1	0.0	108.4
180.00	1.00	1.43	56.967	62.66	282.69	0.950	0.000	2.00	3.737	3.55	222.5	0.0	105.9
182.00	1.00	1.44	57.100	62.81	276.37	0.950	0.000	2.00	3.651	3.47	217.8	0.0	103.4
184.00	1.00	1.44	57.231	62.95	270.04	0.950	0.000	2.00	3.564	3.39	213.2	0.0	100.9
186.00	1.00	1.44	57.362	63.10	263.69	0.950	0.000	2.00	3.477	3.30	208.4	0.0	98.4
188.00	1.00	1.45	57.491	63.24	257.33	0.950	0.000	2.00	3.391	3.22	203.7	0.0	96.0

Wind Loading - Shaft

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 13



190.00	1.00	1.45	57.619	63.38	250.94	0.950	0.000	2.00	3.304	3.14	198.9	0.0	93.5	
192.00	1.00	1.45	57.747	63.52	244.54	0.950	0.000	2.00	3.217	3.06	194.1	0.0	91.0	
194.00	1.00	1.46	57.873	63.66	238.12	0.950	0.000	2.00	3.131	2.97	189.3	0.0	88.5	
195.00 Appurtenance(s)	1.00	1.46	57.935	63.73	234.91	0.950	0.000	1.00	1.533	1.46	92.8	0.0	43.3	
196.00 Appurtenance(s)	1.00	1.46	57.998	63.80	231.69	0.950	0.000	1.00	1.511	1.44	91.6	0.0	42.7	
Totals:								196.00				34,588.4	45,693.6	

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

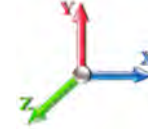


Page: 14

Load Case: 1.2D + 1.0W 128 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 32

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	196.00	6' Lightning rod	1	57.998	63.798	1.00	1.00	0.38	7.80	0.000	0.000	24.24	0.00	0.00
2	195.00	APXVSPP18-C-A20	3	57.935	63.729	0.66	0.80	15.98	205.20	0.000	0.000	1018.12	0.00	0.00
3	195.00	APXVTM14-C-120	3	57.935	63.729	0.63	0.80	12.02	201.60	0.000	0.000	766.06	0.00	0.00
4	195.00	1900MHz RRH	3	57.935	63.729	0.40	0.80	4.56	158.40	0.000	0.000	290.60	0.00	0.00
5	195.00	TD-RRH8x20-25	3	57.935	63.729	0.40	0.80	4.86	252.00	0.000	0.000	309.72	0.00	0.00
6	195.00	800MHz RRH	3	57.935	63.729	0.40	0.80	3.17	214.20	0.000	0.000	201.89	0.00	0.00
7	195.00	800MHz Filter	3	57.935	63.729	0.40	0.80	0.94	31.68	0.000	0.000	59.65	0.00	0.00
8	195.00	ACU-A20-N	4	57.935	63.729	0.40	0.80	0.22	4.80	0.000	0.000	14.28	0.00	0.00
9	195.00	Low Profile Platform	1	57.935	63.729	1.00	1.00	22.00	1800.00	0.000	0.000	1402.04	0.00	0.00
10	167.00	(3) SFS-H-L (V-Braces)	1	56.075	61.683	1.00	1.00	6.70	276.00	0.000	0.000	413.27	0.00	0.00
11	167.00	HRK12 (Handrail Kit)	1	56.075	61.683	1.00	1.00	6.75	314.06	0.000	0.000	416.36	0.00	0.00
12	167.00	RFS	3	56.075	61.683	0.55	0.75	33.24	442.08	0.000	0.000	2050.60	0.00	0.00
13	167.00	(3) VSR-TS-B	1	56.075	61.683	1.00	1.00	11.43	443.16	0.000	0.000	705.03	0.00	0.00
14	167.00	PRK-1245 (kicker kit)	1	56.075	61.683	1.00	1.00	9.50	557.89	0.000	0.000	585.99	0.00	0.00
15	167.00	KRY 112 144/1	3	56.075	61.683	0.38	0.75	0.46	39.60	0.000	0.000	28.45	0.00	0.00
16	167.00	Ericsson AIR6449 B41	3	56.075	61.683	0.53	0.75	9.03	370.80	0.000	0.000	556.74	0.00	0.00
17	167.00	Ericsson 4449 B71 + B85	3	56.075	61.683	0.38	0.75	2.22	263.52	0.000	0.000	136.70	0.00	0.00
18	167.00	Ericsson 4460 B25 + B66	3	56.075	61.683	0.38	0.75	2.41	374.40	0.000	0.000	148.50	0.00	0.00
19	167.00	Low Profile	1	56.075	61.683	1.00	1.00	22.00	1800.00	0.000	0.000	1357.02	0.00	0.00
20	167.00	Commscope VV-65A-R1	3	56.075	61.683	0.55	0.75	9.75	85.72	0.000	0.000	601.42	0.00	0.00
21	150.00	Low Profile	1	54.822	60.304	1.00	1.00	22.00	1800.00	0.000	0.000	1326.69	0.00	0.00
22	150.00	DC6-48-60-18-8F	2	54.822	60.304	0.38	0.75	1.10	76.32	0.000	0.000	66.49	0.00	0.00
23	150.00	LGP13519	6	54.822	60.304	0.38	0.75	0.77	38.16	0.000	0.000	46.13	0.00	0.00
24	150.00	LGP21401	6	54.822	60.304	0.38	0.75	2.90	101.52	0.000	0.000	175.03	0.00	0.00
25	150.00	Handrail Kit	1	54.822	60.304	1.00	1.00	6.75	314.06	0.000	0.000	407.05	0.00	0.00
26	150.00	800 10966	2	54.822	60.304	0.54	0.75	18.75	301.68	0.000	0.000	1130.63	0.00	0.00
27	150.00	80010964	1	54.822	60.304	0.53	0.75	5.32	113.76	0.000	0.000	321.12	0.00	0.00
28	150.00	HPA65R-BU4A	3	54.822	60.304	0.64	0.75	9.49	103.32	0.000	0.000	572.05	0.00	0.00
29	150.00	7700.00	3	54.822	60.304	0.59	0.75	3.08	57.60	0.000	0.000	185.44	0.00	0.00
30	150.00	mount pipe	2	54.822	60.304	1.00	1.00	6.62	208.80	0.000	0.000	399.21	0.00	0.00
31	150.00	4449 B5/B12	3	54.822	60.304	0.38	0.75	2.22	255.60	0.000	0.000	133.65	0.00	0.00
32	150.00	B2 B66A 8843	3	54.822	60.304	0.38	0.75	1.84	252.00	0.000	0.000	111.26	0.00	0.00
33	140.00	Low Profile Platform	1	54.032	59.435	1.00	1.00	22.00	1800.00	0.000	0.000	1307.56	0.00	0.00
34	140.00	JMA Wireless	6	54.032	59.435	0.65	0.75	38.64	432.00	0.000	0.000	2296.62	0.00	0.00
35	140.00	Samsung MT6407-77A	3	54.153	59.568	0.52	0.75	7.39	285.84	0.000	1.500	440.02	0.00	660.02
36	140.00	Samsung	3	53.868	59.255	0.61	0.75	1.63	83.30	0.000	-2.000	96.82	0.00	-193.65
37	140.00	Samsung RF4440d 13a	3	54.032	59.435	0.38	0.75	4.66	253.19	0.000	0.000	276.82	0.00	0.00
38	140.00	Samsung RF4439d 25A	3	54.032	59.435	0.38	0.75	5.16	268.92	0.000	0.000	306.91	0.00	0.00
39	140.00	Raycap	1	54.032	59.435	0.75	0.75	3.04	38.40	0.000	0.000	180.98	0.00	0.00
40	140.00	HRK12 (Handrail Kit)	1	54.032	59.435	1.00	1.00	6.75	314.06	0.000	0.000	401.18	0.00	0.00
41	140.00	Mount Pipe	1	54.032	59.435	1.00	1.00	2.63	48.00	0.000	0.000	156.31	0.00	0.00
42	125.00	Commscope	1	52.758	58.033	1.00	1.00	37.59	2072.40	0.000	0.000	2181.48	0.00	0.00
43	125.00	Raycap	1	52.758	58.033	0.38	0.75	0.75	26.28	0.000	0.000	43.74	0.00	0.00
44	125.00	Fujitsu TA08025-B604	3	52.758	58.033	0.38	0.75	2.21	230.04	0.000	0.000	127.96	0.00	0.00
45	125.00	Fujitsu TA08025-B605	3	52.758	58.033	0.38	0.75	2.21	270.00	0.000	0.000	127.96	0.00	0.00
46	125.00	JMA Wireless	3	52.758	58.033	0.55	0.75	20.80	232.20	0.000	0.000	1206.86	0.00	0.00
47	30.00	GPS	1	39.066	42.973	1.00	1.00	1.00	12.00	0.000	0.000	42.97	0.00	0.00

Discrete Appurtenance Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 15

Totals: 17,832.37

25,155.67

Total Applied Force Summary

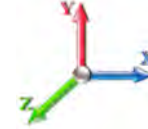
Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 16

Load Case: 1.2D + 1.0W 128 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 32

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		388.59	893.95	0.00	0.00
4.00		385.53	887.76	0.00	0.00
6.00		382.47	881.57	0.00	0.00
8.00		379.40	875.37	0.00	0.00
10.00		376.34	869.18	0.00	0.00
12.00		373.28	862.99	0.00	0.00
14.00		370.22	856.80	0.00	0.00
16.00		371.69	850.60	0.00	0.00
18.00		377.84	844.41	0.00	0.00
20.00		383.07	838.22	0.00	0.00
22.00		387.52	832.03	0.00	0.00
24.00		391.30	825.83	0.00	0.00
26.00		394.52	819.64	0.00	0.00
28.00		397.23	813.45	0.00	0.00
30.00	(1) attachments	442.48	819.25	0.00	0.00
32.00		401.39	801.06	0.00	0.00
34.00		402.91	794.87	0.00	0.00
35.50		302.53	592.09	0.00	0.00
36.00		102.28	356.09	0.00	0.00
38.00		411.49	1416.89	0.00	0.00
40.00		412.20	1404.92	0.00	0.00
42.00		413.56	1392.95	0.00	0.00
43.00		206.81	691.98	0.00	0.00
44.00		206.13	364.78	0.00	0.00
46.00		414.10	725.22	0.00	0.00
48.00		415.09	719.44	0.00	0.00
50.00		415.91	713.66	0.00	0.00
52.00		416.58	707.88	0.00	0.00
54.00		417.10	702.10	0.00	0.00
56.00		417.48	696.32	0.00	0.00
58.00		417.73	690.54	0.00	0.00
60.00		417.85	684.76	0.00	0.00
62.00		417.86	678.98	0.00	0.00
64.00		417.76	673.20	0.00	0.00
66.00		417.55	667.42	0.00	0.00
68.00		417.24	661.64	0.00	0.00
70.00		416.83	655.86	0.00	0.00
72.00		416.33	650.08	0.00	0.00
74.00		415.75	644.30	0.00	0.00
74.50		103.62	160.17	0.00	0.00
76.00		316.10	821.13	0.00	0.00
78.00		421.15	1085.45	0.00	0.00
80.00		420.38	1074.71	0.00	0.00
81.00		209.60	533.33	0.00	0.00
82.00		208.19	277.74	0.00	0.00
84.00		416.20	551.77	0.00	0.00

Total Applied Force Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 17

86.00		415.17	546.82	0.00	0.00
88.00		414.08	541.86	0.00	0.00
90.00		412.92	536.91	0.00	0.00
92.00		411.70	531.96	0.00	0.00
94.00		410.42	527.00	0.00	0.00
96.00		409.08	522.05	0.00	0.00
98.00		407.68	517.09	0.00	0.00
100.00		406.22	512.14	0.00	0.00
102.00		404.72	507.18	0.00	0.00
104.00		403.16	502.23	0.00	0.00
106.00		401.54	497.28	0.00	0.00
108.00		399.88	492.32	0.00	0.00
110.00		398.17	487.37	0.00	0.00
112.00		396.42	482.41	0.00	0.00
114.00		394.62	477.46	0.00	0.00
116.00		392.77	472.50	0.00	0.00
118.00		390.88	467.55	0.00	0.00
118.75		145.92	174.05	0.00	0.00
120.00		246.96	473.19	0.00	0.00
122.00		393.84	749.72	0.00	0.00
124.00		391.89	740.64	0.00	0.00
125.00	(11) attachments	3881.64	3030.31	0.00	0.00
126.00		171.03	197.16	0.00	0.00
128.00		340.68	391.22	0.00	0.00
130.00		338.42	387.09	0.00	0.00
132.00		336.13	382.96	0.00	0.00
134.00		333.80	378.83	0.00	0.00
136.00		331.43	374.71	0.00	0.00
138.00		329.04	370.58	0.00	0.00
140.00	(22) attachments	5789.83	3890.16	0.00	466.37
142.00		301.27	327.09	0.00	0.00
144.00		297.23	322.96	0.00	0.00
146.00		293.16	318.83	0.00	0.00
148.00		289.05	314.70	0.00	0.00
150.00	(33) attachments	5159.67	3933.40	0.00	0.00
152.00		280.71	270.32	0.00	0.00
154.00		276.49	266.20	0.00	0.00
154.75		102.50	98.76	0.00	0.00
156.00		171.90	247.77	0.00	0.00
158.00		271.70	391.06	0.00	0.00
159.00		134.14	193.05	0.00	0.00
160.00		133.06	85.10	0.00	0.00
162.00		263.04	168.34	0.00	0.00
164.00		258.66	165.87	0.00	0.00
166.00		254.24	163.39	0.00	0.00
167.00	(23) attachments	7125.47	5048.00	0.00	0.00
168.00		124.26	63.23	0.00	0.00
170.00		245.32	124.60	0.00	0.00
172.00		240.82	122.12	0.00	0.00
174.00		236.28	119.64	0.00	0.00
176.00		231.71	117.17	0.00	0.00
178.00		227.12	114.69	0.00	0.00
180.00		222.49	112.21	0.00	0.00
182.00		217.84	109.73	0.00	0.00
184.00		213.15	107.26	0.00	0.00
186.00		208.44	104.78	0.00	0.00
188.00		203.71	102.30	0.00	0.00

Total Applied Force Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 18

190.00	198.94	99.83	0.00	0.00
192.00	194.15	97.35	0.00	0.00
194.00	189.33	94.87	0.00	0.00
195.00 (23) attachments	4155.16	2914.39	0.00	0.00
196.00 (1) attachments	115.83	50.52	0.00	0.00
Totals:	59,744.09	72,294.62	0.00	466.37

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

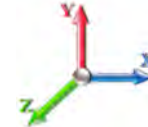


Page: 19

Load Case: 1.2D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 1.20
Wind Load Factor 1.00



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" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	33.806	0.00	29.95
2.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.085	0.000	33.806	0.00	5.28
2.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.085	0.000	33.806	0.00	2.40
4.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	33.806	0.00	29.95
4.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.086	0.000	33.806	0.00	5.28
4.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.086	0.000	33.806	0.00	2.40
6.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	33.806	0.00	29.95
6.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.086	0.000	33.806	0.00	5.28
6.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.086	0.000	33.806	0.00	2.40
8.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	33.806	0.00	29.95
8.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.087	0.000	33.806	0.00	5.28
8.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.087	0.000	33.806	0.00	2.40
10.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	33.806	0.00	29.95
10.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.088	0.000	33.806	0.00	5.28
10.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.088	0.000	33.806	0.00	2.40
12.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	33.806	0.00	29.95
12.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.088	0.000	33.806	0.00	5.28
12.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.088	0.000	33.806	0.00	2.40
14.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	33.806	0.00	29.95
14.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.089	0.000	33.806	0.00	5.28
14.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.089	0.000	33.806	0.00	2.40
16.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	34.224	0.00	29.95
16.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.090	0.000	34.224	0.00	5.28
16.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.090	0.000	34.224	0.00	2.40
18.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.083	0.00	29.95
18.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.091	0.000	35.083	0.00	5.28
18.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.091	0.000	35.083	0.00	2.40
20.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.870	0.00	29.95
20.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.091	0.000	35.870	0.00	5.28
20.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.091	0.000	35.870	0.00	2.40
22.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	36.597	0.00	29.95
22.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.092	0.000	36.597	0.00	5.28
22.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.092	0.000	36.597	0.00	2.40
24.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	37.274	0.00	29.95
24.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.093	0.000	37.274	0.00	5.28
24.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.093	0.000	37.274	0.00	2.40
26.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	37.907	0.00	29.95
26.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.094	0.000	37.907	0.00	5.28
26.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.094	0.000	37.907	0.00	2.40
28.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	38.503	0.00	29.95
28.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.095	0.000	38.503	0.00	5.28
28.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.095	0.000	38.503	0.00	2.40
30.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	39.066	0.00	29.95
30.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.095	0.000	39.066	0.00	5.28
30.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.095	0.000	39.066	0.00	2.40
32.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.096	0.000	39.601	0.00	29.95
32.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.096	0.000	39.601	0.00	5.28

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

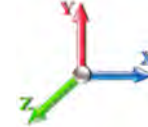


Page: 20

Load Case: 1.2D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 1.20
Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.096	0.000	39.601	0.00	2.40
34.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	40.110	0.00	29.95
34.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.097	0.000	40.110	0.00	5.28
34.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.097	0.000	40.110	0.00	2.40
35.50	1 5/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.098	0.000	40.476	0.00	22.46
35.50	1 5/8" Hybrid	Yes	1.50	0.000	4.00	0.50	0.00	0.098	0.000	40.476	0.00	3.96
35.50	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.098	0.000	40.476	0.00	1.80
36.00	1 5/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.098	0.000	40.595	0.00	7.49
36.00	1 5/8" Hybrid	Yes	0.50	0.000	4.00	0.17	0.00	0.098	0.000	40.595	0.00	1.32
36.00	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.098	0.000	40.595	0.00	0.60
38.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	41.060	0.00	29.95
38.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.099	0.000	41.060	0.00	5.28
38.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.099	0.000	41.060	0.00	2.40
40.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	41.506	0.00	29.95
40.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.100	0.000	41.506	0.00	5.28
40.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.100	0.000	41.506	0.00	2.40
42.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	41.934	0.00	29.95
42.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.101	1.002	41.934	0.00	5.28
42.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.101	1.002	41.934	0.00	2.40
43.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.101	1.004	42.142	0.00	14.98
43.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.101	1.004	42.142	0.00	2.64
43.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.101	1.004	42.142	0.00	1.20
44.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	42.347	0.00	14.98
44.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.100	1.001	42.347	0.00	2.64
44.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.100	1.001	42.347	0.00	1.20
46.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.003	42.745	0.00	29.95
46.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.101	1.003	42.745	0.00	5.28
46.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.101	1.003	42.745	0.00	2.40
48.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.006	43.130	0.00	29.95
48.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.102	1.006	43.130	0.00	5.28
48.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.102	1.006	43.130	0.00	2.40
50.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	43.502	0.00	29.95
50.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.103	1.009	43.502	0.00	5.28
50.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.103	1.009	43.502	0.00	2.40
52.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.012	43.863	0.00	29.95
52.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.104	1.012	43.863	0.00	5.28
52.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.104	1.012	43.863	0.00	2.40
54.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.105	1.015	44.213	0.00	29.95
54.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.105	1.015	44.213	0.00	5.28
54.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.105	1.015	44.213	0.00	2.40
56.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	44.552	0.00	29.95
56.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.106	1.018	44.552	0.00	5.28
56.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.106	1.018	44.552	0.00	2.40
58.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.107	1.021	44.883	0.00	29.95
58.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.107	1.021	44.883	0.00	5.28
58.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.107	1.021	44.883	0.00	2.40
60.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.108	1.024	45.204	0.00	29.95

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

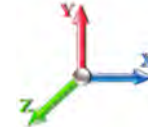


Page: 21

Load Case: 1.2D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 1.20
Wind Load Factor 1.00



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)
60.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.108	1.024	45.204	0.00	5.28
60.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.108	1.024	45.204	0.00	2.40
62.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.027	45.517	0.00	29.95
62.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.109	1.027	45.517	0.00	5.28
62.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.109	1.027	45.517	0.00	2.40
64.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	45.823	0.00	29.95
64.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.110	1.031	45.823	0.00	5.28
64.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.110	1.031	45.823	0.00	2.40
66.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	46.120	0.00	29.95
66.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.111	1.034	46.120	0.00	5.28
66.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.111	1.034	46.120	0.00	2.40
68.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.038	46.411	0.00	29.95
68.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.113	1.038	46.411	0.00	5.28
68.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.113	1.038	46.411	0.00	2.40
70.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.041	46.695	0.00	29.95
70.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.114	1.041	46.695	0.00	5.28
70.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.114	1.041	46.695	0.00	2.40
72.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.045	46.973	0.00	29.95
72.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.115	1.045	46.973	0.00	5.28
72.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.115	1.045	46.973	0.00	2.40
74.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	47.245	0.00	29.95
74.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.116	1.049	47.245	0.00	5.28
74.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.116	1.049	47.245	0.00	2.40
74.50	1 5/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.117	1.051	47.312	0.00	7.49
74.50	1 5/8" Hybrid	Yes	0.50	0.000	4.00	0.17	0.00	0.117	1.051	47.312	0.00	1.32
74.50	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.117	1.051	47.312	0.00	0.60
76.00	1 5/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.118	1.053	47.511	0.00	22.46
76.00	1 5/8" Hybrid	Yes	1.50	0.000	4.00	0.50	0.00	0.118	1.053	47.511	0.00	3.96
76.00	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.118	1.053	47.511	0.00	1.80
78.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	47.771	0.00	29.95
78.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.119	1.056	47.771	0.00	5.28
78.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.119	1.056	47.771	0.00	2.40
80.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.060	48.027	0.00	29.95
80.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.120	1.060	48.027	0.00	5.28
80.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.120	1.060	48.027	0.00	2.40
81.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.121	1.063	48.152	0.00	14.98
81.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.121	1.063	48.152	0.00	2.64
81.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.121	1.063	48.152	0.00	1.20
82.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.120	1.059	48.277	0.00	14.98
82.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.120	1.059	48.277	0.00	2.64
82.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.120	1.059	48.277	0.00	1.20
84.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	48.522	0.00	29.95
84.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.121	1.062	48.522	0.00	5.28
84.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.121	1.062	48.522	0.00	2.40
86.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.067	48.763	0.00	29.95
86.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.122	1.067	48.763	0.00	5.28
86.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.122	1.067	48.763	0.00	2.40

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

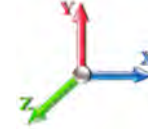


Page: 22

Load Case: 1.2D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 1.20
Wind Load Factor 1.00



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)
88.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.071	49.000	0.00	29.95
88.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.124	1.071	49.000	0.00	5.28
88.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.124	1.071	49.000	0.00	2.40
90.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	49.232	0.00	29.95
90.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.125	1.075	49.232	0.00	5.28
90.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.125	1.075	49.232	0.00	2.40
92.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	49.461	0.00	29.95
92.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.126	1.079	49.461	0.00	5.28
92.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.126	1.079	49.461	0.00	2.40
94.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	49.685	0.00	29.95
94.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.128	1.084	49.685	0.00	5.28
94.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.128	1.084	49.685	0.00	2.40
96.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	49.906	0.00	29.95
96.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.130	1.089	49.906	0.00	5.28
96.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.130	1.089	49.906	0.00	2.40
98.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.093	50.123	0.00	29.95
98.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.131	1.093	50.123	0.00	5.28
98.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.131	1.093	50.123	0.00	2.40
100.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.098	50.337	0.00	29.95
100.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.133	1.098	50.337	0.00	5.28
100.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.133	1.098	50.337	0.00	2.40
102.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	50.547	0.00	29.95
102.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.134	1.103	50.547	0.00	5.28
102.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.134	1.103	50.547	0.00	2.40
104.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	50.754	0.00	29.95
104.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.136	1.108	50.754	0.00	5.28
104.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.136	1.108	50.754	0.00	2.40
106.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.138	1.113	50.958	0.00	29.95
106.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.138	1.113	50.958	0.00	5.28
106.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.138	1.113	50.958	0.00	2.40
108.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.119	51.159	0.00	29.95
108.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.140	1.119	51.159	0.00	5.28
108.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.140	1.119	51.159	0.00	2.40
110.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.124	51.357	0.00	29.95
110.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.141	1.124	51.357	0.00	5.28
110.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.141	1.124	51.357	0.00	2.40
112.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	51.552	0.00	29.95
112.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.143	1.130	51.552	0.00	5.28
112.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.143	1.130	51.552	0.00	2.40
114.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	51.744	0.00	29.95
114.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.145	1.136	51.744	0.00	5.28
114.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.145	1.136	51.744	0.00	2.40
116.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.142	51.934	0.00	29.95
116.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.147	1.142	51.934	0.00	5.28
116.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.147	1.142	51.934	0.00	2.40
118.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	52.121	0.00	29.95
118.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.149	1.148	52.121	0.00	5.28

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 23

Load Case: 1.2D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 1.20
Wind Load Factor 1.00



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)
118.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.149	1.148	52.121	0.00	2.40
118.75	1 5/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.151	1.152	52.191	0.00	11.23
118.75	1 5/8" Hybrid	Yes	0.75	0.000	4.00	0.25	0.00	0.151	1.152	52.191	0.00	1.98
118.75	1.6" Hybrid	Yes	0.75	0.000	1.60	0.10	0.00	0.151	1.152	52.191	0.00	0.90
120.00	1 5/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.152	1.155	52.306	0.00	18.72
120.00	1 5/8" Hybrid	Yes	1.25	0.000	4.00	0.42	0.00	0.152	1.155	52.306	0.00	3.30
120.00	1.6" Hybrid	Yes	1.25	0.000	1.60	0.17	0.00	0.152	1.155	52.306	0.00	1.50
122.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	52.489	0.00	29.95
122.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.154	1.161	52.489	0.00	5.28
122.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.154	1.161	52.489	0.00	2.40
124.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.167	52.669	0.00	29.95
124.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.156	1.167	52.669	0.00	5.28
124.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.156	1.167	52.669	0.00	2.40
125.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.155	1.164	52.758	0.00	14.98
125.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.155	1.164	52.758	0.00	2.64
125.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.155	1.164	52.758	0.00	1.20
126.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.111	1.034	52.846	0.00	14.98
126.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.111	1.034	52.846	0.00	2.64
128.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.037	53.022	0.00	29.95
128.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.112	1.037	53.022	0.00	5.28
130.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	53.195	0.00	29.95
130.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.114	1.042	53.195	0.00	5.28
132.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	53.366	0.00	29.95
132.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.116	1.048	53.366	0.00	5.28
134.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.053	53.536	0.00	29.95
134.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.118	1.053	53.536	0.00	5.28
136.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.058	53.703	0.00	29.95
136.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.119	1.058	53.703	0.00	5.28
138.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.064	53.868	0.00	29.95
138.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.121	1.064	53.868	0.00	5.28
140.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	54.032	0.00	29.95
140.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.123	1.070	54.032	0.00	5.28
Totals:											0.0	2,616.2

Calculated Forces

Structure: CT00595-S-SBA
Site Name: Stonington East
Height: 196.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Topography: 1

Code: EIA/TIA-222-H 1/14/2022
Exposure: C
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II



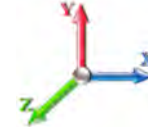
Page: 24

Load Case: 1.2D + 1.0W 128 mph Wind

Iterations 32

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	-72.25	-59.80	0.00	-7357.9	0.00	7357.96	5795.46	1682.91	8909.80	7510.36	0.00	0.000	0.000	0.993
2.00	-71.27	-59.52	0.00	-7238.3	0.00	7238.36	5776.44	1669.60	8769.44	7426.09	0.02	-0.084	0.000	0.988
4.00	-70.29	-59.23	0.00	-7119.3	0.00	7119.33	5757.00	1656.30	8630.20	7341.68	0.07	-0.169	0.000	0.983
6.00	-69.32	-58.95	0.00	-7000.8	0.00	7000.87	5737.14	1642.99	8492.07	7257.12	0.16	-0.254	0.000	0.978
8.00	-68.36	-58.67	0.00	-6882.9	0.00	6882.97	5716.84	1629.68	8355.05	7172.43	0.29	-0.340	0.000	0.973
10.00	-67.41	-58.39	0.00	-6765.6	0.00	6765.64	5696.12	1616.37	8219.15	7087.63	0.45	-0.427	0.000	0.968
12.00	-66.46	-58.11	0.00	-6648.8	0.00	6648.86	5674.97	1603.06	8084.36	7002.73	0.65	-0.514	0.000	0.962
14.00	-65.52	-57.83	0.00	-6532.6	0.00	6532.65	5653.40	1589.76	7950.69	6917.75	0.88	-0.602	0.000	0.957
16.00	-64.58	-57.55	0.00	-6416.9	0.00	6416.98	5631.39	1576.45	7818.13	6832.69	1.15	-0.690	0.000	0.952
18.00	-63.65	-57.26	0.00	-6301.8	0.00	6301.88	5608.96	1563.14	7686.69	6747.57	1.46	-0.779	0.000	0.947
20.00	-62.73	-56.97	0.00	-6187.3	0.00	6187.36	5586.10	1549.83	7556.36	6662.41	1.81	-0.869	0.000	0.941
22.00	-61.81	-56.66	0.00	-6073.4	0.00	6073.43	5562.81	1536.52	7427.15	6577.21	2.19	-0.959	0.000	0.936
24.00	-60.91	-56.35	0.00	-5960.1	0.00	5960.11	5539.10	1523.21	7299.05	6491.99	2.61	-1.050	0.000	0.930
26.00	-60.00	-56.04	0.00	-5847.4	0.00	5847.40	5514.96	1509.91	7172.06	6406.77	3.08	-1.142	0.000	0.925
28.00	-59.11	-55.72	0.00	-5735.3	0.00	5735.33	5490.39	1496.60	7046.19	6321.55	3.57	-1.234	0.000	0.919
30.00	-58.21	-55.36	0.00	-5623.8	0.00	5623.88	5465.39	1483.29	6921.43	6236.35	4.11	-1.327	0.000	0.914
32.00	-57.33	-55.03	0.00	-5513.1	0.00	5513.17	5439.96	1469.98	6797.79	6151.18	4.69	-1.421	0.000	0.908
34.00	-56.47	-54.69	0.00	-5403.1	0.00	5403.11	5414.11	1456.67	6675.26	6066.06	5.30	-1.515	0.000	0.903
35.50	-55.84	-54.42	0.00	-5321.0	0.00	5321.08	5394.44	1446.69	6584.09	6002.26	5.79	-1.587	0.000	0.898
36.00	-55.43	-54.36	0.00	-5293.8	0.00	5293.88	5387.83	1443.36	6553.84	5981.00	5.96	-1.611	0.000	0.897
38.00	-53.93	-54.00	0.00	-5185.1	0.00	5185.15	5361.12	1430.06	6433.54	5896.01	6.66	-1.707	0.000	0.891
40.00	-52.45	-53.63	0.00	-5077.1	0.00	5077.15	5333.99	1416.75	6314.36	5811.11	7.39	-1.803	0.000	0.885
42.00	-51.00	-53.24	0.00	-4969.8	0.00	4969.89	5306.43	1403.44	6196.29	5726.30	8.17	-1.900	0.000	0.879
43.00	-50.27	-53.05	0.00	-4916.6	0.00	4916.65	4823.70	1326.07	5927.09	5273.35	8.57	-1.949	0.000	0.944
44.00	-49.85	-52.90	0.00	-4863.6	0.00	4863.60	4812.47	1319.86	5871.70	5236.23	8.99	-1.998	0.000	0.941
46.00	-49.04	-52.55	0.00	-4757.8	0.00	4757.80	4789.68	1307.44	5761.71	5161.99	9.84	-2.098	0.000	0.934
48.00	-48.25	-52.19	0.00	-4652.7	0.00	4652.71	4766.46	1295.02	5652.75	5087.77	10.75	-2.199	0.000	0.926
50.00	-47.46	-51.83	0.00	-4548.3	0.00	4548.33	4742.82	1282.60	5544.84	5013.57	11.69	-2.300	0.000	0.919
52.00	-46.68	-51.47	0.00	-4444.6	0.00	4444.67	4718.75	1270.18	5437.96	4939.41	12.68	-2.402	0.000	0.911
54.00	-45.90	-51.10	0.00	-4341.7	0.00	4341.73	4694.25	1257.76	5332.12	4865.31	13.70	-2.505	0.000	0.904
56.00	-45.13	-50.74	0.00	-4239.5	0.00	4239.53	4669.32	1245.33	5227.33	4791.28	14.78	-2.608	0.000	0.896
58.00	-44.37	-50.37	0.00	-4138.0	0.00	4138.05	4643.97	1232.91	5123.57	4717.32	15.89	-2.712	0.000	0.888
60.00	-43.62	-50.00	0.00	-4037.3	0.00	4037.32	4618.19	1220.49	5020.86	4643.46	17.05	-2.816	0.000	0.881
62.00	-42.87	-49.63	0.00	-3937.3	0.00	3937.32	4591.98	1208.07	4919.18	4569.71	18.25	-2.921	0.000	0.873
64.00	-42.13	-49.25	0.00	-3838.0	0.00	3838.07	4565.34	1195.65	4818.55	4496.07	19.50	-3.026	0.000	0.865
66.00	-41.39	-48.88	0.00	-3739.5	0.00	3739.57	4538.28	1183.23	4718.95	4422.57	20.79	-3.132	0.000	0.856
68.00	-40.67	-48.50	0.00	-3641.8	0.00	3641.82	4510.78	1170.81	4620.40	4349.22	22.12	-3.239	0.000	0.848
70.00	-39.95	-48.12	0.00	-3544.8	0.00	3544.83	4482.87	1158.39	4522.88	4276.03	23.50	-3.346	0.000	0.840
72.00	-39.23	-47.74	0.00	-3448.5	0.00	3448.59	4454.52	1145.97	4426.41	4203.01	24.93	-3.453	0.000	0.831
74.00	-38.56	-47.33	0.00	-3353.1	0.00	3353.12	4425.74	1133.55	4330.97	4130.17	26.40	-3.561	0.000	0.822
74.50	-38.36	-47.25	0.00	-3329.4	0.00	3329.45	4418.48	1130.44	4307.27	4111.99	26.77	-3.589	0.000	0.820
76.00	-37.48	-46.95	0.00	-3258.5	0.00	3258.58	4396.54	1121.12	4236.58	4057.54	27.91	-3.671	0.000	0.813
78.00	-36.34	-46.53	0.00	-3164.6	0.00	3164.68	4366.91	1108.70	4143.22	3985.11	29.47	-3.780	0.000	0.804
80.00	-35.23	-46.09	0.00	-3071.6	0.00	3071.63	4336.86	1096.28	4050.91	3912.92	31.08	-3.889	0.000	0.795
81.00	-34.67	-45.87	0.00	-3025.5	0.00	3025.54	3502.12	951.57	3560.67	3204.59	31.90	-3.944	0.000	0.956
82.00	-34.33	-45.70	0.00	-2979.6	0.00	2979.67	3492.03	946.24	3520.94	3177.33	32.73	-4.000	0.000	0.950
84.00	-33.71	-45.32	0.00	-2888.2	0.00	2888.27	3471.52	935.60	3442.15	3122.83	34.43	-4.121	0.000	0.937
86.00	-33.10	-44.93	0.00	-2797.6	0.00	2797.64	3450.59	924.95	3364.26	3068.38	36.18	-4.243	0.000	0.924

Calculated Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 25

88.00	-32.50	-44.55	0.00	-2707.7	0.00	2707.77	3429.23	914.30	3287.26	3013.99	37.99	-4.366	0.000	0.910
90.00	-31.90	-44.17	0.00	-2618.6	0.00	2618.67	3407.44	903.66	3211.15	2959.67	39.84	-4.488	0.000	0.897
92.00	-31.31	-43.78	0.00	-2530.3	0.00	2530.34	3385.23	893.01	3135.93	2905.43	41.75	-4.611	0.000	0.883
94.00	-30.73	-43.39	0.00	-2442.7	0.00	2442.78	3362.58	882.36	3061.60	2851.28	43.70	-4.733	0.000	0.868
96.00	-30.15	-43.01	0.00	-2356.0	0.00	2356.00	3339.51	871.72	2988.16	2797.25	45.71	-4.856	0.000	0.854
98.00	-29.58	-42.62	0.00	-2269.9	0.00	2269.98	3316.01	861.07	2915.61	2743.33	47.77	-4.979	0.000	0.839
100.00	-29.01	-42.23	0.00	-2184.7	0.00	2184.74	3292.09	850.42	2843.96	2689.56	49.88	-5.101	0.000	0.824
102.00	-28.45	-41.85	0.00	-2100.2	0.00	2100.28	3267.73	839.78	2773.20	2635.93	52.04	-5.224	0.000	0.808
104.00	-27.90	-41.46	0.00	-2016.5	0.00	2016.59	3242.95	829.13	2703.33	2582.46	54.25	-5.346	0.000	0.792
106.00	-27.36	-41.07	0.00	-1933.6	0.00	1933.68	3217.75	818.48	2634.35	2529.17	56.51	-5.468	0.000	0.776
108.00	-26.82	-40.68	0.00	-1851.5	0.00	1851.54	3192.11	807.84	2566.26	2476.07	58.83	-5.589	0.000	0.759
110.00	-26.29	-40.29	0.00	-1770.1	0.00	1770.19	3166.05	797.19	2499.06	2423.18	61.19	-5.710	0.000	0.741
112.00	-25.77	-39.90	0.00	-1689.6	0.00	1689.61	3139.56	786.54	2432.76	2370.49	63.61	-5.830	0.000	0.724
114.00	-25.25	-39.51	0.00	-1609.8	0.00	1609.81	3112.64	775.90	2367.34	2318.04	66.07	-5.949	0.000	0.705
116.00	-24.74	-39.12	0.00	-1530.7	0.00	1530.78	3085.29	765.25	2302.82	2265.83	68.58	-6.067	0.000	0.686
118.00	-24.26	-38.72	0.00	-1452.5	0.00	1452.54	3057.52	754.60	2239.19	2213.87	71.15	-6.184	0.000	0.667
118.75	-24.07	-38.58	0.00	-1423.5	0.00	1423.50	3046.99	750.61	2215.56	2194.45	72.12	-6.228	0.000	0.659
120.00	-23.56	-38.32	0.00	-1375.2	0.00	1375.28	3029.32	743.96	2176.45	2162.18	73.76	-6.300	0.000	0.646
122.00	-22.79	-37.89	0.00	-1298.6	0.00	1298.64	3000.69	733.31	2114.60	2110.77	76.42	-6.415	0.000	0.626
124.00	-22.04	-37.45	0.00	-1222.8	0.00	1222.86	2938.57	714.36	2071.07	2066.86	79.12	-6.527	0.000	0.751
125.00	-19.44	-33.27	0.00	-1185.4	0.00	1185.41	2329.03	609.92	1755.44	1638.08	80.49	-6.583	0.000	0.735
126.00	-19.21	-33.11	0.00	-1152.1	0.00	1152.14	2319.39	605.49	1730.00	1619.32	81.88	-6.646	0.000	0.723
128.00	-18.79	-32.76	0.00	-1085.9	0.00	1085.93	2299.78	596.62	1679.67	1581.89	84.68	-6.769	0.000	0.698
130.00	-18.38	-32.42	0.00	-1020.4	0.00	1020.40	2279.74	587.74	1630.09	1544.58	87.54	-6.890	0.000	0.672
132.00	-17.97	-32.08	0.00	-955.56	0.00	955.56	2259.27	578.87	1581.25	1507.39	90.44	-7.009	0.000	0.645
134.00	-17.57	-31.73	0.00	-891.41	0.00	891.41	2238.38	570.00	1533.15	1470.34	93.40	-7.125	0.000	0.617
136.00	-17.18	-31.39	0.00	-827.94	0.00	827.94	2217.06	561.13	1485.79	1433.45	96.40	-7.238	0.000	0.588
138.00	-16.80	-31.05	0.00	-765.16	0.00	765.16	2195.31	552.25	1439.18	1396.73	99.45	-7.348	0.000	0.559
140.00	-13.64	-24.83	0.00	-702.59	0.00	702.59	2173.13	543.38	1393.31	1360.19	102.54	-7.454	0.000	0.525
142.00	-13.31	-24.51	0.00	-652.93	0.00	652.93	2150.53	534.51	1348.18	1323.84	105.68	-7.557	0.000	0.502
144.00	-12.99	-24.20	0.00	-603.90	0.00	603.90	2127.50	525.64	1303.79	1287.70	108.86	-7.658	0.000	0.477
146.00	-12.67	-23.89	0.00	-555.51	0.00	555.51	2104.04	516.77	1260.15	1251.78	112.08	-7.755	0.000	0.452
148.00	-12.36	-23.58	0.00	-507.73	0.00	507.73	2080.15	507.89	1217.25	1216.10	115.34	-7.849	0.000	0.426
150.00	-9.15	-17.94	0.00	-460.58	0.00	460.58	2055.84	499.02	1175.10	1180.67	118.63	-7.939	0.000	0.396
152.00	-8.89	-17.64	0.00	-424.69	0.00	424.69	2031.10	490.15	1133.68	1145.49	121.97	-8.026	0.000	0.376
154.00	-8.65	-17.34	0.00	-389.42	0.00	389.42	2005.93	481.28	1093.01	1110.59	125.34	-8.111	0.000	0.356
154.75	-8.56	-17.23	0.00	-376.41	0.00	376.41	1996.38	477.95	1077.95	1097.58	126.61	-8.142	0.000	0.349
156.00	-8.32	-17.03	0.00	-354.88	0.00	354.88	1980.33	472.40	1053.09	1075.98	128.74	-8.193	0.000	0.335
158.00	-7.95	-16.71	0.00	-320.82	0.00	320.82	1946.84	463.53	1013.90	1037.68	132.18	-8.271	0.000	0.315
159.00	-7.77	-16.56	0.00	-304.10	0.00	304.10	942.51	280.76	619.93	509.56	133.91	-8.310	0.000	0.609
160.00	-7.68	-16.43	0.00	-287.55	0.00	287.55	939.15	278.09	608.23	502.90	135.65	-8.347	0.000	0.583
162.00	-7.52	-16.15	0.00	-254.70	0.00	254.70	932.13	272.77	585.17	489.52	139.16	-8.458	0.000	0.532
164.00	-7.37	-15.89	0.00	-222.39	0.00	222.39	924.68	267.45	562.55	476.06	142.71	-8.561	0.000	0.479
166.00	-7.23	-15.62	0.00	-190.61	0.00	190.61	916.80	262.12	540.38	462.54	146.31	-8.656	0.000	0.424
167.00	-3.31	-7.82	0.00	-175.00	0.00	175.00	912.70	259.46	529.46	455.76	148.12	-8.700	0.000	0.388
168.00	-3.26	-7.69	0.00	-167.18	0.00	167.18	908.49	256.80	518.65	448.97	149.94	-8.743	0.000	0.377
170.00	-3.16	-7.43	0.00	-151.80	0.00	151.80	899.76	251.48	497.37	435.36	153.60	-8.826	0.000	0.353
172.00	-3.07	-7.18	0.00	-136.94	0.00	136.94	890.60	246.15	476.54	421.74	157.30	-8.906	0.000	0.329
174.00	-2.98	-6.93	0.00	-122.59	0.00	122.59	881.01	240.83	456.15	408.10	161.04	-8.982	0.000	0.305
176.00	-2.89	-6.69	0.00	-108.73	0.00	108.73	870.99	235.51	436.21	394.47	164.80	-9.055	0.000	0.280
178.00	-2.80	-6.45	0.00	-95.36	0.00	95.36	860.55	230.18	416.71	380.86	168.59	-9.123	0.000	0.254
180.00	-2.72	-6.21	0.00	-82.46	0.00	82.46	849.68	224.86	397.66	367.28	172.41	-9.187	0.000	0.228
182.00	-2.64	-5.98	0.00	-70.04	0.00	70.04	838.38	219.54	379.06	353.74	176.26	-9.246	0.000	0.202
184.00	-2.57	-5.76	0.00	-58.07	0.00	58.07	826.65	214.21	360.90	340.26	180.13	-9.300	0.000	0.174
186.00	-2.49	-5.54	0.00	-46.56	0.00	46.56	814.50	208.89	343.18	326.85	184.01	-9.346	0.000	0.146
188.00	-2.42	-5.32	0.00	-35.48	0.00	35.48	801.91	203.57	325.91	313.52	187.92	-9.386	0.000	0.117
190.00	-2.35	-5.11	0.00	-24.84	0.00	24.84	788.90	198.24	309.09	300.29	191.84	-9.417	0.000	0.086

Calculated Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 26



192.00	-2.29	-4.90	0.00	-14.63	0.00	14.63	775.47	192.92	292.71	287.17	195.78	-9.439	0.000	0.055
194.00	-2.22	-4.70	0.00	-4.82	0.00	4.82	761.60	187.60	276.78	274.17	199.72	-9.451	0.000	0.021
195.00	-0.03	-0.12	0.00	-0.12	0.00	0.12	754.51	184.94	268.98	267.73	201.69	-9.453	0.000	0.000
196.00	0.00	-0.12	0.00	0.00	0.00	0.00	747.31	182.27	261.30	261.31	203.66	-9.453	0.000	0.000

Wind Loading - Shaft

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

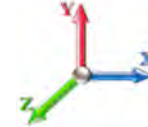


Page: 27

Load Case: 0.9D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 0.90
Wind Load Factor 1.00



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		1.00	0.85	33.806	37.19	650.99	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	33.806	37.19	645.88	0.950	0.000	2.00	11.000	10.45	388.6	0.0	585.0
4.00		1.00	0.85	33.806	37.19	640.77	0.950	0.000	2.00	10.913	10.37	385.5	0.0	580.4
6.00		1.00	0.85	33.806	37.19	635.66	0.950	0.000	2.00	10.826	10.28	382.5	0.0	575.7
8.00		1.00	0.85	33.806	37.19	630.55	0.950	0.000	2.00	10.740	10.20	379.4	0.0	571.1
10.00		1.00	0.85	33.806	37.19	625.44	0.950	0.000	2.00	10.653	10.12	376.3	0.0	566.4
12.00		1.00	0.85	33.806	37.19	620.33	0.950	0.000	2.00	10.566	10.04	373.3	0.0	561.8
14.00		1.00	0.85	33.806	37.19	615.22	0.950	0.000	2.00	10.479	9.96	370.2	0.0	557.2
16.00		1.00	0.86	34.224	37.65	613.86	0.950	0.000	2.00	10.393	9.87	371.7	0.0	552.5
18.00		1.00	0.88	35.083	38.59	616.31	0.950	0.000	2.00	10.306	9.79	377.8	0.0	547.9
20.00		1.00	0.90	35.870	39.46	617.92	0.950	0.000	2.00	10.219	9.71	383.1	0.0	543.2
22.00		1.00	0.92	36.597	40.26	618.84	0.950	0.000	2.00	10.133	9.63	387.5	0.0	538.6
24.00		1.00	0.94	37.274	41.00	619.17	0.950	0.000	2.00	10.046	9.54	391.3	0.0	533.9
26.00		1.00	0.95	37.907	41.70	618.99	0.950	0.000	2.00	9.959	9.46	394.5	0.0	529.3
28.00		1.00	0.97	38.503	42.35	618.39	0.950	0.000	2.00	9.873	9.38	397.2	0.0	524.6
30.00	Appurtenance(s)	1.00	0.98	39.066	42.97	617.40	0.950	0.000	2.00	9.786	9.30	399.5	0.0	520.0
32.00		1.00	1.00	39.601	43.56	616.08	0.950	0.000	2.00	9.699	9.21	401.4	0.0	515.3
34.00		1.00	1.01	40.110	44.12	614.46	0.950	0.000	2.00	9.613	9.13	402.9	0.0	510.7
35.50	Bot - Section 2	1.00	1.02	40.476	44.52	613.06	0.950	0.000	1.50	7.153	6.79	302.5	0.0	380.0
36.00		1.00	1.02	40.595	44.65	612.56	0.950	0.000	0.50	2.411	2.29	102.3	0.0	245.7
38.00		1.00	1.03	41.060	45.17	610.43	0.950	0.000	2.00	9.590	9.11	411.5	0.0	977.2
40.00		1.00	1.04	41.506	45.66	608.07	0.950	0.000	2.00	9.504	9.03	412.2	0.0	968.2
42.00		1.00	1.05	41.934	46.13	605.51	0.952 *	0.000	2.00	9.417	8.97	413.6	0.0	959.3
43.00	Top - Section 1	1.00	1.06	42.142	46.36	604.16	0.954 *	0.000	1.00	4.676	4.46	206.8	0.0	476.3
44.00		1.00	1.06	42.347	46.58	612.72	0.951 *	0.000	1.00	4.654	4.43	206.1	0.0	230.9
46.00		1.00	1.07	42.745	47.02	609.85	0.953 *	0.000	2.00	9.243	8.81	414.1	0.0	458.5
48.00		1.00	1.08	43.130	47.44	606.82	0.955 *	0.000	2.00	9.157	8.75	415.1	0.0	454.1
50.00		1.00	1.09	43.502	47.85	603.63	0.958 *	0.000	2.00	9.070	8.69	415.9	0.0	449.8
52.00		1.00	1.10	43.863	48.25	600.31	0.961 *	0.000	2.00	8.983	8.63	416.6	0.0	445.5
54.00		1.00	1.11	44.213	48.63	596.86	0.964 *	0.000	2.00	8.897	8.58	417.1	0.0	441.1
56.00		1.00	1.12	44.552	49.01	593.28	0.967 *	0.000	2.00	8.810	8.52	417.5	0.0	436.8
58.00		1.00	1.13	44.883	49.37	589.59	0.970 *	0.000	2.00	8.723	8.46	417.7	0.0	432.5
60.00		1.00	1.14	45.204	49.72	585.79	0.973 *	0.000	2.00	8.637	8.40	417.9	0.0	428.1
62.00		1.00	1.14	45.517	50.07	581.88	0.976 *	0.000	2.00	8.550	8.35	417.9	0.0	423.8
64.00		1.00	1.15	45.823	50.40	577.88	0.979 *	0.000	2.00	8.463	8.29	417.8	0.0	419.5
66.00		1.00	1.16	46.120	50.73	573.79	0.983 *	0.000	2.00	8.377	8.23	417.6	0.0	415.1
68.00		1.00	1.17	46.411	51.05	569.60	0.986 *	0.000	2.00	8.290	8.17	417.2	0.0	410.8
70.00		1.00	1.17	46.695	51.36	565.34	0.989 *	0.000	2.00	8.203	8.12	416.8	0.0	406.4
72.00		1.00	1.18	46.973	51.67	560.99	0.993 *	0.000	2.00	8.117	8.06	416.3	0.0	402.1
74.00		1.00	1.19	47.245	51.97	556.57	0.996 *	0.000	2.00	8.030	8.00	415.7	0.0	397.8
74.50	Bot - Section 3	1.00	1.19	47.312	52.04	555.46	0.999 *	0.000	0.50	1.994	1.99	103.6	0.0	98.8
76.00		1.00	1.19	47.511	52.26	552.08	1.000 *	0.000	1.50	6.046	6.05	316.1	0.0	551.8
78.00		1.00	1.20	47.771	52.55	547.52	1.004 *	0.000	2.00	7.986	8.01	421.1	0.0	728.6
80.00		1.00	1.21	48.027	52.83	542.89	1.007 *	0.000	2.00	7.899	7.96	420.4	0.0	720.6
81.00	Top - Section 2	1.00	1.21	48.152	52.97	540.55	1.010 *	0.000	1.00	3.917	3.96	209.6	0.0	357.3
82.00		1.00	1.21	48.277	53.10	547.31	1.006 *	0.000	1.00	3.895	3.92	208.2	0.0	165.6
84.00		1.00	1.22	48.522	53.37	542.58	1.009 *	0.000	2.00	7.726	7.80	416.2	0.0	328.4

Wind Loading - Shaft

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 28

86.00	1.00	1.23	48.763	53.64	537.79	1.013 *	0.000	2.00	7.639	7.74	415.2	0.0	324.7
88.00	1.00	1.23	49.000	53.90	532.94	1.017 *	0.000	2.00	7.552	7.68	414.1	0.0	321.0
90.00	1.00	1.24	49.232	54.16	528.03	1.021 *	0.000	2.00	7.466	7.62	412.9	0.0	317.2
92.00	1.00	1.24	49.461	54.41	523.07	1.025 *	0.000	2.00	7.379	7.57	411.7	0.0	313.5
94.00	1.00	1.25	49.685	54.65	518.06	1.030 *	0.000	2.00	7.292	7.51	410.4	0.0	309.8
96.00	1.00	1.25	49.906	54.90	513.00	1.034 *	0.000	2.00	7.206	7.45	409.1	0.0	306.1
98.00	1.00	1.26	50.123	55.14	507.90	1.039 *	0.000	2.00	7.119	7.39	407.7	0.0	302.4
100.00	1.00	1.27	50.337	55.37	502.74	1.043 *	0.000	2.00	7.032	7.34	406.2	0.0	298.7
102.00	1.00	1.27	50.547	55.60	497.54	1.048 *	0.000	2.00	6.946	7.28	404.7	0.0	294.9
104.00	1.00	1.28	50.754	55.83	492.30	1.053 *	0.000	2.00	6.859	7.22	403.2	0.0	291.2
106.00	1.00	1.28	50.958	56.05	487.01	1.058 *	0.000	2.00	6.772	7.16	401.5	0.0	287.5
108.00	1.00	1.29	51.159	56.27	481.69	1.063 *	0.000	2.00	6.686	7.11	399.9	0.0	283.8
110.00	1.00	1.29	51.357	56.49	476.32	1.068 *	0.000	2.00	6.599	7.05	398.2	0.0	280.1
112.00	1.00	1.30	51.552	56.71	470.91	1.073 *	0.000	2.00	6.512	6.99	396.4	0.0	276.4
114.00	1.00	1.30	51.744	56.92	465.47	1.079 *	0.000	2.00	6.426	6.93	394.6	0.0	272.6
116.00	1.00	1.31	51.934	57.13	459.99	1.085 *	0.000	2.00	6.339	6.88	392.8	0.0	268.9
118.00	1.00	1.31	52.121	57.33	454.47	1.090 *	0.000	2.00	6.252	6.82	390.9	0.0	265.2
118.75 Bot - Section 4	1.00	1.31	52.191	57.41	452.39	1.095 *	0.000	0.75	2.322	2.54	145.9	0.0	98.5
120.00	1.00	1.32	52.306	57.54	448.92	1.098 *	0.000	1.25	3.911	4.29	247.0	0.0	301.5
122.00	1.00	1.32	52.489	57.74	443.33	1.103 *	0.000	2.00	6.187	6.82	393.8	0.0	476.8
124.00 Top - Section 3	1.00	1.32	52.669	57.94	437.71	1.109 *	0.000	2.00	6.100	6.76	391.9	0.0	470.0
125.00 Appurtenance(s)	1.00	1.33	52.758	58.03	442.83	1.106 *	0.000	1.00	3.017	3.34	193.6	0.0	106.8
126.00	1.00	1.33	52.846	58.13	440.01	0.982 *	0.000	1.00	2.996	2.94	171.0	0.0	106.0
128.00	1.00	1.33	53.022	58.32	434.34	0.986 *	0.000	2.00	5.927	5.84	340.7	0.0	209.8
130.00	1.00	1.34	53.195	58.51	428.64	0.990 *	0.000	2.00	5.840	5.78	338.4	0.0	206.7
132.00	1.00	1.34	53.366	58.70	422.91	0.995 *	0.000	2.00	5.753	5.73	336.1	0.0	203.6
134.00	1.00	1.35	53.536	58.89	417.15	1.000 *	0.000	2.00	5.667	5.67	333.8	0.0	200.5
136.00	1.00	1.35	53.703	59.07	411.36	1.006 *	0.000	2.00	5.580	5.61	331.4	0.0	197.4
138.00	1.00	1.35	53.868	59.25	405.54	1.011 *	0.000	2.00	5.493	5.55	329.0	0.0	194.3
140.00 Appurtenance(s)	1.00	1.36	54.032	59.43	399.69	1.016 *	0.000	2.00	5.406	5.50	326.6	0.0	191.2
142.00	1.00	1.36	54.193	59.61	393.82	0.950	0.000	2.00	5.320	5.05	301.3	0.0	188.1
144.00	1.00	1.37	54.353	59.79	387.92	0.950	0.000	2.00	5.233	4.97	297.2	0.0	185.0
146.00	1.00	1.37	54.511	59.96	382.00	0.950	0.000	2.00	5.146	4.89	293.2	0.0	181.9
148.00	1.00	1.37	54.667	60.13	376.05	0.950	0.000	2.00	5.060	4.81	289.0	0.0	178.8
150.00 Appurtenance(s)	1.00	1.38	54.822	60.30	370.07	0.950	0.000	2.00	4.973	4.72	284.9	0.0	175.7
152.00	1.00	1.38	54.975	60.47	364.07	0.950	0.000	2.00	4.886	4.64	280.7	0.0	172.6
154.00	1.00	1.39	55.127	60.64	358.05	0.950	0.000	2.00	4.800	4.56	276.5	0.0	169.5
154.75 Bot - Section 5	1.00	1.39	55.183	60.70	355.78	0.950	0.000	0.75	1.778	1.69	102.5	0.0	62.8
156.00	1.00	1.39	55.277	60.80	352.00	0.950	0.000	1.25	2.976	2.83	171.9	0.0	167.0
158.00	1.00	1.39	55.425	60.97	345.93	0.950	0.000	2.00	4.691	4.46	271.7	0.0	263.2
159.00 Top - Section 4	1.00	1.40	55.499	61.05	342.88	0.950	0.000	1.00	2.313	2.20	134.1	0.0	129.7
160.00	1.00	1.40	55.572	61.13	344.72	0.950	0.000	1.00	2.291	2.18	133.1	0.0	48.8
162.00	1.00	1.40	55.718	61.29	338.61	0.950	0.000	2.00	4.518	4.29	263.0	0.0	96.1
164.00	1.00	1.40	55.862	61.45	332.48	0.950	0.000	2.00	4.431	4.21	258.7	0.0	94.3
166.00	1.00	1.41	56.004	61.60	326.33	0.950	0.000	2.00	4.344	4.13	254.2	0.0	92.4
167.00 Appurtenance(s)	1.00	1.41	56.075	61.68	323.25	0.950	0.000	1.00	2.140	2.03	125.4	0.0	45.5
168.00	1.00	1.41	56.146	61.76	320.16	0.950	0.000	1.00	2.118	2.01	124.3	0.0	45.0
170.00	1.00	1.42	56.286	61.91	313.96	0.950	0.000	2.00	4.171	3.96	245.3	0.0	88.7
172.00	1.00	1.42	56.425	62.07	307.75	0.950	0.000	2.00	4.084	3.88	240.8	0.0	86.8
174.00	1.00	1.42	56.562	62.22	301.51	0.950	0.000	2.00	3.997	3.80	236.3	0.0	85.0
176.00	1.00	1.43	56.698	62.37	295.26	0.950	0.000	2.00	3.911	3.72	231.7	0.0	83.1
178.00	1.00	1.43	56.833	62.52	288.98	0.950	0.000	2.00	3.824	3.63	227.1	0.0	81.3
180.00	1.00	1.43	56.967	62.66	282.69	0.950	0.000	2.00	3.737	3.55	222.5	0.0	79.4
182.00	1.00	1.44	57.100	62.81	276.37	0.950	0.000	2.00	3.651	3.47	217.8	0.0	77.5
184.00	1.00	1.44	57.231	62.95	270.04	0.950	0.000	2.00	3.564	3.39	213.2	0.0	75.7
186.00	1.00	1.44	57.362	63.10	263.69	0.950	0.000	2.00	3.477	3.30	208.4	0.0	73.8
188.00	1.00	1.45	57.491	63.24	257.33	0.950	0.000	2.00	3.391	3.22	203.7	0.0	72.0

Wind Loading - Shaft

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022	
Site Name: Stonington East	Exposure: C		
Height: 196.00 (ft)	Crest Height: 0.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 29



190.00	1.00	1.45	57.619	63.38	250.94	0.950	0.000	2.00	3.304	3.14	198.9	0.0	70.1
192.00	1.00	1.45	57.747	63.52	244.54	0.950	0.000	2.00	3.217	3.06	194.1	0.0	68.3
194.00	1.00	1.46	57.873	63.66	238.12	0.950	0.000	2.00	3.131	2.97	189.3	0.0	66.4
195.00 Appurtenance(s)	1.00	1.46	57.935	63.73	234.91	0.950	0.000	1.00	1.533	1.46	92.8	0.0	32.5
196.00 Appurtenance(s)	1.00	1.46	57.998	63.80	231.69	0.950	0.000	1.00	1.511	1.44	91.6	0.0	32.0
Totals:								196.00			34,588.4		34,270.2

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 30

Load Case: 0.9D + 1.0W 128 mph Wind	Iterations 32
Dead Load Factor 0.90	
Wind Load Factor 1.00	

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	196.00	6' Lightning rod	1	57.998	63.798	1.00	1.00	0.38	5.85	0.000	0.000	24.24	0.00	0.00
2	195.00	APXVSP18-C-A20	3	57.935	63.729	0.66	0.80	15.98	153.90	0.000	0.000	1018.12	0.00	0.00
3	195.00	APXVTM14-C-120	3	57.935	63.729	0.63	0.80	12.02	151.20	0.000	0.000	766.06	0.00	0.00
4	195.00	1900MHz RRH	3	57.935	63.729	0.40	0.80	4.56	118.80	0.000	0.000	290.60	0.00	0.00
5	195.00	TD-RRH8x20-25	3	57.935	63.729	0.40	0.80	4.86	189.00	0.000	0.000	309.72	0.00	0.00
6	195.00	800MHz RRH	3	57.935	63.729	0.40	0.80	3.17	160.65	0.000	0.000	201.89	0.00	0.00
7	195.00	800MHz Filter	3	57.935	63.729	0.40	0.80	0.94	23.76	0.000	0.000	59.65	0.00	0.00
8	195.00	ACU-A20-N	4	57.935	63.729	0.40	0.80	0.22	3.60	0.000	0.000	14.28	0.00	0.00
9	195.00	Low Profile Platform	1	57.935	63.729	1.00	1.00	22.00	1350.00	0.000	0.000	1402.04	0.00	0.00
10	167.00	(3) SFS-H-L (V-Braces)	1	56.075	61.683	1.00	1.00	6.70	207.00	0.000	0.000	413.27	0.00	0.00
11	167.00	HRK12 (Handrail Kit)	1	56.075	61.683	1.00	1.00	6.75	235.55	0.000	0.000	416.36	0.00	0.00
12	167.00	RFS	3	56.075	61.683	0.55	0.75	33.24	331.56	0.000	0.000	2050.60	0.00	0.00
13	167.00	(3) VSR-TS-B	1	56.075	61.683	1.00	1.00	11.43	332.37	0.000	0.000	705.03	0.00	0.00
14	167.00	PRK-1245 (kicker kit)	1	56.075	61.683	1.00	1.00	9.50	418.42	0.000	0.000	585.99	0.00	0.00
15	167.00	KRY 112 144/1	3	56.075	61.683	0.38	0.75	0.46	29.70	0.000	0.000	28.45	0.00	0.00
16	167.00	Ericsson AIR6449 B41	3	56.075	61.683	0.53	0.75	9.03	278.10	0.000	0.000	556.74	0.00	0.00
17	167.00	Ericsson 4449 B71 + B85	3	56.075	61.683	0.38	0.75	2.22	197.64	0.000	0.000	136.70	0.00	0.00
18	167.00	Ericsson 4460 B25 + B66	3	56.075	61.683	0.38	0.75	2.41	280.80	0.000	0.000	148.50	0.00	0.00
19	167.00	Low Profile	1	56.075	61.683	1.00	1.00	22.00	1350.00	0.000	0.000	1357.02	0.00	0.00
20	167.00	Commscope VV-65A-R1	3	56.075	61.683	0.55	0.75	9.75	64.29	0.000	0.000	601.42	0.00	0.00
21	150.00	Low Profile	1	54.822	60.304	1.00	1.00	22.00	1350.00	0.000	0.000	1326.69	0.00	0.00
22	150.00	DC6-48-60-18-8F	2	54.822	60.304	0.38	0.75	1.10	57.24	0.000	0.000	66.49	0.00	0.00
23	150.00	LGP13519	6	54.822	60.304	0.38	0.75	0.77	28.62	0.000	0.000	46.13	0.00	0.00
24	150.00	LGP21401	6	54.822	60.304	0.38	0.75	2.90	76.14	0.000	0.000	175.03	0.00	0.00
25	150.00	Handrail Kit	1	54.822	60.304	1.00	1.00	6.75	235.55	0.000	0.000	407.05	0.00	0.00
26	150.00	800 10966	2	54.822	60.304	0.54	0.75	18.75	226.26	0.000	0.000	1130.63	0.00	0.00
27	150.00	80010964	1	54.822	60.304	0.53	0.75	5.32	85.32	0.000	0.000	321.12	0.00	0.00
28	150.00	HPA65R-BU4A	3	54.822	60.304	0.64	0.75	9.49	77.49	0.000	0.000	572.05	0.00	0.00
29	150.00	7700.00	3	54.822	60.304	0.59	0.75	3.08	43.20	0.000	0.000	185.44	0.00	0.00
30	150.00	mount pipe	2	54.822	60.304	1.00	1.00	6.62	156.60	0.000	0.000	399.21	0.00	0.00
31	150.00	4449 B5/B12	3	54.822	60.304	0.38	0.75	2.22	191.70	0.000	0.000	133.65	0.00	0.00
32	150.00	B2 B66A 8843	3	54.822	60.304	0.38	0.75	1.84	189.00	0.000	0.000	111.26	0.00	0.00
33	140.00	Low Profile Platform	1	54.032	59.435	1.00	1.00	22.00	1350.00	0.000	0.000	1307.56	0.00	0.00
34	140.00	JMA Wireless	6	54.032	59.435	0.65	0.75	38.64	324.00	0.000	0.000	2296.62	0.00	0.00
35	140.00	Samsung MT6407-77A	3	54.153	59.568	0.52	0.75	7.39	214.38	0.000	1.500	440.02	0.00	660.02
36	140.00	Samsung	3	53.868	59.255	0.61	0.75	1.63	62.48	0.000	-2.000	96.82	0.00	-193.65
37	140.00	Samsung RF4440d 13a	3	54.032	59.435	0.38	0.75	4.66	189.89	0.000	0.000	276.82	0.00	0.00
38	140.00	Samsung RF4439d 25A	3	54.032	59.435	0.38	0.75	5.16	201.69	0.000	0.000	306.91	0.00	0.00
39	140.00	Raycap	1	54.032	59.435	0.75	0.75	3.04	28.80	0.000	0.000	180.98	0.00	0.00
40	140.00	HRK12 (Handrail Kit)	1	54.032	59.435	1.00	1.00	6.75	235.55	0.000	0.000	401.18	0.00	0.00
41	140.00	Mount Pipe	1	54.032	59.435	1.00	1.00	2.63	36.00	0.000	0.000	156.31	0.00	0.00
42	125.00	Commscope	1	52.758	58.033	1.00	1.00	37.59	1554.30	0.000	0.000	2181.48	0.00	0.00
43	125.00	Raycap	1	52.758	58.033	0.38	0.75	0.75	19.71	0.000	0.000	43.74	0.00	0.00
44	125.00	Fujitsu TA08025-B604	3	52.758	58.033	0.38	0.75	2.21	172.53	0.000	0.000	127.96	0.00	0.00
45	125.00	Fujitsu TA08025-B605	3	52.758	58.033	0.38	0.75	2.21	202.50	0.000	0.000	127.96	0.00	0.00
46	125.00	JMA Wireless	3	52.758	58.033	0.55	0.75	20.80	174.15	0.000	0.000	1206.86	0.00	0.00
47	30.00	GPS	1	39.066	42.973	1.00	1.00	1.00	9.00	0.000	0.000	42.97	0.00	0.00

Discrete Appurtenance Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 31

Totals: 13,374.28

25,155.67

Total Applied Force Summary

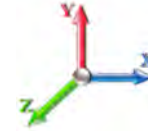
Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 32

Load Case: 0.9D + 1.0W 128 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 32

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		388.59	670.47	0.00	0.00
4.00		385.53	665.82	0.00	0.00
6.00		382.47	661.18	0.00	0.00
8.00		379.40	656.53	0.00	0.00
10.00		376.34	651.89	0.00	0.00
12.00		373.28	647.24	0.00	0.00
14.00		370.22	642.60	0.00	0.00
16.00		371.69	637.95	0.00	0.00
18.00		377.84	633.31	0.00	0.00
20.00		383.07	628.66	0.00	0.00
22.00		387.52	624.02	0.00	0.00
24.00		391.30	619.37	0.00	0.00
26.00		394.52	614.73	0.00	0.00
28.00		397.23	610.08	0.00	0.00
30.00	(1) attachments	442.48	614.44	0.00	0.00
32.00		401.39	600.80	0.00	0.00
34.00		402.91	596.15	0.00	0.00
35.50		302.53	444.07	0.00	0.00
36.00		102.28	267.07	0.00	0.00
38.00		411.49	1062.67	0.00	0.00
40.00		412.20	1053.69	0.00	0.00
42.00		413.56	1044.71	0.00	0.00
43.00		206.81	518.99	0.00	0.00
44.00		206.13	273.58	0.00	0.00
46.00		414.10	543.91	0.00	0.00
48.00		415.09	539.58	0.00	0.00
50.00		415.91	535.24	0.00	0.00
52.00		416.58	530.91	0.00	0.00
54.00		417.10	526.57	0.00	0.00
56.00		417.48	522.24	0.00	0.00
58.00		417.73	517.90	0.00	0.00
60.00		417.85	513.57	0.00	0.00
62.00		417.86	509.23	0.00	0.00
64.00		417.76	504.90	0.00	0.00
66.00		417.55	500.56	0.00	0.00
68.00		417.24	496.23	0.00	0.00
70.00		416.83	491.89	0.00	0.00
72.00		416.33	487.56	0.00	0.00
74.00		415.75	483.22	0.00	0.00
74.50		103.62	120.13	0.00	0.00
76.00		316.10	615.85	0.00	0.00
78.00		421.15	814.08	0.00	0.00
80.00		420.38	806.03	0.00	0.00
81.00		209.60	400.00	0.00	0.00
82.00		208.19	208.31	0.00	0.00
84.00		416.20	413.83	0.00	0.00

Total Applied Force Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 33

86.00		415.17	410.11	0.00	0.00
88.00		414.08	406.40	0.00	0.00
90.00		412.92	402.68	0.00	0.00
92.00		411.70	398.97	0.00	0.00
94.00		410.42	395.25	0.00	0.00
96.00		409.08	391.53	0.00	0.00
98.00		407.68	387.82	0.00	0.00
100.00		406.22	384.10	0.00	0.00
102.00		404.72	380.39	0.00	0.00
104.00		403.16	376.67	0.00	0.00
106.00		401.54	372.96	0.00	0.00
108.00		399.88	369.24	0.00	0.00
110.00		398.17	365.53	0.00	0.00
112.00		396.42	361.81	0.00	0.00
114.00		394.62	358.09	0.00	0.00
116.00		392.77	354.38	0.00	0.00
118.00		390.88	350.66	0.00	0.00
118.75		145.92	130.54	0.00	0.00
120.00		246.96	354.89	0.00	0.00
122.00		393.84	562.29	0.00	0.00
124.00		391.89	555.48	0.00	0.00
125.00	(11) attachments	3881.64	2272.73	0.00	0.00
126.00		171.03	147.87	0.00	0.00
128.00		340.68	293.41	0.00	0.00
130.00		338.42	290.32	0.00	0.00
132.00		336.13	287.22	0.00	0.00
134.00		333.80	284.13	0.00	0.00
136.00		331.43	281.03	0.00	0.00
138.00		329.04	277.93	0.00	0.00
140.00	(22) attachments	5789.83	2917.62	0.00	466.37
142.00		301.27	245.32	0.00	0.00
144.00		297.23	242.22	0.00	0.00
146.00		293.16	239.12	0.00	0.00
148.00		289.05	236.03	0.00	0.00
150.00	(33) attachments	5159.67	2950.05	0.00	0.00
152.00		280.71	202.74	0.00	0.00
154.00		276.49	199.65	0.00	0.00
154.75		102.50	74.07	0.00	0.00
156.00		171.90	185.83	0.00	0.00
158.00		271.70	293.30	0.00	0.00
159.00		134.14	144.79	0.00	0.00
160.00		133.06	63.83	0.00	0.00
162.00		263.04	126.26	0.00	0.00
164.00		258.66	124.40	0.00	0.00
166.00		254.24	122.54	0.00	0.00
167.00	(23) attachments	7125.47	3786.00	0.00	0.00
168.00		124.26	47.42	0.00	0.00
170.00		245.32	93.45	0.00	0.00
172.00		240.82	91.59	0.00	0.00
174.00		236.28	89.73	0.00	0.00
176.00		231.71	87.87	0.00	0.00
178.00		227.12	86.02	0.00	0.00
180.00		222.49	84.16	0.00	0.00
182.00		217.84	82.30	0.00	0.00
184.00		213.15	80.44	0.00	0.00
186.00		208.44	78.58	0.00	0.00
188.00		203.71	76.73	0.00	0.00

Total Applied Force Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 34

190.00	198.94	74.87	0.00	0.00
192.00	194.15	73.01	0.00	0.00
194.00	189.33	71.15	0.00	0.00
195.00	(23) attachments 4155.16	2185.79	0.00	0.00
196.00	(1) attachments 115.83	37.89	0.00	0.00
Totals:		59,744.09	54,220.97	0.00
				466.37

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

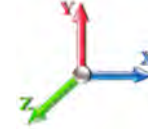


Page: 35

Load Case: 0.9D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 0.90
Wind Load Factor 1.00



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" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	33.806	0.00	22.46
2.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.085	0.000	33.806	0.00	3.96
2.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.085	0.000	33.806	0.00	1.80
4.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	33.806	0.00	22.46
4.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.086	0.000	33.806	0.00	3.96
4.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.086	0.000	33.806	0.00	1.80
6.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	33.806	0.00	22.46
6.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.086	0.000	33.806	0.00	3.96
6.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.086	0.000	33.806	0.00	1.80
8.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	33.806	0.00	22.46
8.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.087	0.000	33.806	0.00	3.96
8.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.087	0.000	33.806	0.00	1.80
10.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	33.806	0.00	22.46
10.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.088	0.000	33.806	0.00	3.96
10.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.088	0.000	33.806	0.00	1.80
12.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	33.806	0.00	22.46
12.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.088	0.000	33.806	0.00	3.96
12.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.088	0.000	33.806	0.00	1.80
14.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	33.806	0.00	22.46
14.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.089	0.000	33.806	0.00	3.96
14.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.089	0.000	33.806	0.00	1.80
16.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	34.224	0.00	22.46
16.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.090	0.000	34.224	0.00	3.96
16.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.090	0.000	34.224	0.00	1.80
18.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.083	0.00	22.46
18.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.091	0.000	35.083	0.00	3.96
18.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.091	0.000	35.083	0.00	1.80
20.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.870	0.00	22.46
20.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.091	0.000	35.870	0.00	3.96
20.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.091	0.000	35.870	0.00	1.80
22.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	36.597	0.00	22.46
22.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.092	0.000	36.597	0.00	3.96
22.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.092	0.000	36.597	0.00	1.80
24.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	37.274	0.00	22.46
24.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.093	0.000	37.274	0.00	3.96
24.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.093	0.000	37.274	0.00	1.80
26.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	37.907	0.00	22.46
26.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.094	0.000	37.907	0.00	3.96
26.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.094	0.000	37.907	0.00	1.80
28.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	38.503	0.00	22.46
28.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.095	0.000	38.503	0.00	3.96
28.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.095	0.000	38.503	0.00	1.80
30.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	39.066	0.00	22.46
30.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.095	0.000	39.066	0.00	3.96
30.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.095	0.000	39.066	0.00	1.80
32.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.096	0.000	39.601	0.00	22.46
32.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.096	0.000	39.601	0.00	3.96

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

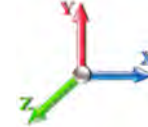


Page: 36

Load Case: 0.9D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 0.90
Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.096	0.000	39.601	0.00	1.80
34.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	40.110	0.00	22.46
34.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.097	0.000	40.110	0.00	3.96
34.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.097	0.000	40.110	0.00	1.80
35.50	1 5/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.098	0.000	40.476	0.00	16.85
35.50	1 5/8" Hybrid	Yes	1.50	0.000	4.00	0.50	0.00	0.098	0.000	40.476	0.00	2.97
35.50	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.098	0.000	40.476	0.00	1.35
36.00	1 5/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.098	0.000	40.595	0.00	5.62
36.00	1 5/8" Hybrid	Yes	0.50	0.000	4.00	0.17	0.00	0.098	0.000	40.595	0.00	0.99
36.00	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.098	0.000	40.595	0.00	0.45
38.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	41.060	0.00	22.46
38.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.099	0.000	41.060	0.00	3.96
38.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.099	0.000	41.060	0.00	1.80
40.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	41.506	0.00	22.46
40.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.100	0.000	41.506	0.00	3.96
40.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.100	0.000	41.506	0.00	1.80
42.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	41.934	0.00	22.46
42.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.101	1.002	41.934	0.00	3.96
42.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.101	1.002	41.934	0.00	1.80
43.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.101	1.004	42.142	0.00	11.23
43.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.101	1.004	42.142	0.00	1.98
43.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.101	1.004	42.142	0.00	0.90
44.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	42.347	0.00	11.23
44.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.100	1.001	42.347	0.00	1.98
44.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.100	1.001	42.347	0.00	0.90
46.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.003	42.745	0.00	22.46
46.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.101	1.003	42.745	0.00	3.96
46.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.101	1.003	42.745	0.00	1.80
48.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.006	43.130	0.00	22.46
48.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.102	1.006	43.130	0.00	3.96
48.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.102	1.006	43.130	0.00	1.80
50.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	43.502	0.00	22.46
50.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.103	1.009	43.502	0.00	3.96
50.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.103	1.009	43.502	0.00	1.80
52.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.012	43.863	0.00	22.46
52.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.104	1.012	43.863	0.00	3.96
52.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.104	1.012	43.863	0.00	1.80
54.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.105	1.015	44.213	0.00	22.46
54.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.105	1.015	44.213	0.00	3.96
54.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.105	1.015	44.213	0.00	1.80
56.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	44.552	0.00	22.46
56.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.106	1.018	44.552	0.00	3.96
56.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.106	1.018	44.552	0.00	1.80
58.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.107	1.021	44.883	0.00	22.46
58.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.107	1.021	44.883	0.00	3.96
58.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.107	1.021	44.883	0.00	1.80
60.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.108	1.024	45.204	0.00	22.46

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



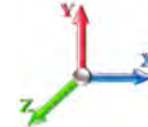
Page: 37

Load Case: 0.9D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 0.90

Wind Load Factor 1.00



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)
60.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.108	1.024	45.204	0.00	3.96
60.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.108	1.024	45.204	0.00	1.80
62.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.027	45.517	0.00	22.46
62.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.109	1.027	45.517	0.00	3.96
62.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.109	1.027	45.517	0.00	1.80
64.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	45.823	0.00	22.46
64.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.110	1.031	45.823	0.00	3.96
64.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.110	1.031	45.823	0.00	1.80
66.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	46.120	0.00	22.46
66.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.111	1.034	46.120	0.00	3.96
66.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.111	1.034	46.120	0.00	1.80
68.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.038	46.411	0.00	22.46
68.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.113	1.038	46.411	0.00	3.96
68.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.113	1.038	46.411	0.00	1.80
70.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.041	46.695	0.00	22.46
70.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.114	1.041	46.695	0.00	3.96
70.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.114	1.041	46.695	0.00	1.80
72.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.045	46.973	0.00	22.46
72.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.115	1.045	46.973	0.00	3.96
72.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.115	1.045	46.973	0.00	1.80
74.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	47.245	0.00	22.46
74.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.116	1.049	47.245	0.00	3.96
74.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.116	1.049	47.245	0.00	1.80
74.50	1 5/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.117	1.051	47.312	0.00	5.62
74.50	1 5/8" Hybrid	Yes	0.50	0.000	4.00	0.17	0.00	0.117	1.051	47.312	0.00	0.99
74.50	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.117	1.051	47.312	0.00	0.45
76.00	1 5/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.118	1.053	47.511	0.00	16.85
76.00	1 5/8" Hybrid	Yes	1.50	0.000	4.00	0.50	0.00	0.118	1.053	47.511	0.00	2.97
76.00	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.118	1.053	47.511	0.00	1.35
78.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	47.771	0.00	22.46
78.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.119	1.056	47.771	0.00	3.96
78.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.119	1.056	47.771	0.00	1.80
80.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.060	48.027	0.00	22.46
80.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.120	1.060	48.027	0.00	3.96
80.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.120	1.060	48.027	0.00	1.80
81.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.121	1.063	48.152	0.00	11.23
81.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.121	1.063	48.152	0.00	1.98
81.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.121	1.063	48.152	0.00	0.90
82.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.120	1.059	48.277	0.00	11.23
82.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.120	1.059	48.277	0.00	1.98
82.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.120	1.059	48.277	0.00	0.90
84.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	48.522	0.00	22.46
84.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.121	1.062	48.522	0.00	3.96
84.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.121	1.062	48.522	0.00	1.80
86.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.067	48.763	0.00	22.46
86.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.122	1.067	48.763	0.00	3.96
86.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.122	1.067	48.763	0.00	1.80

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 38

Load Case: 0.9D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 0.90
Wind Load Factor 1.00



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)
88.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.071	49.000	0.00	22.46
88.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.124	1.071	49.000	0.00	3.96
88.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.124	1.071	49.000	0.00	1.80
90.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	49.232	0.00	22.46
90.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.125	1.075	49.232	0.00	3.96
90.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.125	1.075	49.232	0.00	1.80
92.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	49.461	0.00	22.46
92.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.126	1.079	49.461	0.00	3.96
92.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.126	1.079	49.461	0.00	1.80
94.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	49.685	0.00	22.46
94.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.128	1.084	49.685	0.00	3.96
94.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.128	1.084	49.685	0.00	1.80
96.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	49.906	0.00	22.46
96.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.130	1.089	49.906	0.00	3.96
96.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.130	1.089	49.906	0.00	1.80
98.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.093	50.123	0.00	22.46
98.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.131	1.093	50.123	0.00	3.96
98.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.131	1.093	50.123	0.00	1.80
100.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.098	50.337	0.00	22.46
100.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.133	1.098	50.337	0.00	3.96
100.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.133	1.098	50.337	0.00	1.80
102.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	50.547	0.00	22.46
102.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.134	1.103	50.547	0.00	3.96
102.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.134	1.103	50.547	0.00	1.80
104.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	50.754	0.00	22.46
104.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.136	1.108	50.754	0.00	3.96
104.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.136	1.108	50.754	0.00	1.80
106.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.138	1.113	50.958	0.00	22.46
106.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.138	1.113	50.958	0.00	3.96
106.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.138	1.113	50.958	0.00	1.80
108.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.119	51.159	0.00	22.46
108.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.140	1.119	51.159	0.00	3.96
108.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.140	1.119	51.159	0.00	1.80
110.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.124	51.357	0.00	22.46
110.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.141	1.124	51.357	0.00	3.96
110.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.141	1.124	51.357	0.00	1.80
112.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	51.552	0.00	22.46
112.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.143	1.130	51.552	0.00	3.96
112.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.143	1.130	51.552	0.00	1.80
114.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	51.744	0.00	22.46
114.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.145	1.136	51.744	0.00	3.96
114.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.145	1.136	51.744	0.00	1.80
116.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.142	51.934	0.00	22.46
116.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.147	1.142	51.934	0.00	3.96
116.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.147	1.142	51.934	0.00	1.80
118.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	52.121	0.00	22.46
118.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.149	1.148	52.121	0.00	3.96

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 39

Load Case: 0.9D + 1.0W 128 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 32

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)
118.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.149	1.148	52.121	0.00	1.80
118.75	1 5/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.151	1.152	52.191	0.00	8.42
118.75	1 5/8" Hybrid	Yes	0.75	0.000	4.00	0.25	0.00	0.151	1.152	52.191	0.00	1.49
118.75	1.6" Hybrid	Yes	0.75	0.000	1.60	0.10	0.00	0.151	1.152	52.191	0.00	0.68
120.00	1 5/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.152	1.155	52.306	0.00	14.04
120.00	1 5/8" Hybrid	Yes	1.25	0.000	4.00	0.42	0.00	0.152	1.155	52.306	0.00	2.48
120.00	1.6" Hybrid	Yes	1.25	0.000	1.60	0.17	0.00	0.152	1.155	52.306	0.00	1.13
122.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	52.489	0.00	22.46
122.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.154	1.161	52.489	0.00	3.96
122.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.154	1.161	52.489	0.00	1.80
124.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.167	52.669	0.00	22.46
124.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.156	1.167	52.669	0.00	3.96
124.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.156	1.167	52.669	0.00	1.80
125.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.155	1.164	52.758	0.00	11.23
125.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.155	1.164	52.758	0.00	1.98
125.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.155	1.164	52.758	0.00	0.90
126.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.111	1.034	52.846	0.00	11.23
126.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.111	1.034	52.846	0.00	1.98
128.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.037	53.022	0.00	22.46
128.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.112	1.037	53.022	0.00	3.96
130.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	53.195	0.00	22.46
130.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.114	1.042	53.195	0.00	3.96
132.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	53.366	0.00	22.46
132.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.116	1.048	53.366	0.00	3.96
134.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.053	53.536	0.00	22.46
134.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.118	1.053	53.536	0.00	3.96
136.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.058	53.703	0.00	22.46
136.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.119	1.058	53.703	0.00	3.96
138.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.064	53.868	0.00	22.46
138.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.121	1.064	53.868	0.00	3.96
140.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	54.032	0.00	22.46
140.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.123	1.070	54.032	0.00	3.96
Totals:											0.0	1,962.2

Calculated Forces

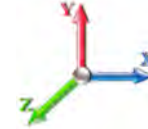
Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 128 mph Wind

Iterations 32

Dead Load Factor 0.90
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	-54.17	-59.79	0.00	-7263.3	0.00	7263.32	5795.46	1682.91	8909.80	7510.36	0.00	0.000	0.000	0.978
2.00	-53.42	-59.47	0.00	-7143.7	0.00	7143.75	5776.44	1669.60	8769.44	7426.09	0.02	-0.083	0.000	0.972
4.00	-52.67	-59.16	0.00	-7024.8	0.00	7024.80	5757.00	1656.30	8630.20	7341.68	0.07	-0.167	0.000	0.967
6.00	-51.92	-58.86	0.00	-6906.4	0.00	6906.48	5737.14	1642.99	8492.07	7257.12	0.16	-0.251	0.000	0.962
8.00	-51.18	-58.55	0.00	-6788.7	0.00	6788.77	5716.84	1629.68	8355.05	7172.43	0.28	-0.335	0.000	0.957
10.00	-50.44	-58.24	0.00	-6671.6	0.00	6671.67	5696.12	1616.37	8219.15	7087.63	0.44	-0.421	0.000	0.951
12.00	-49.71	-57.94	0.00	-6555.1	0.00	6555.19	5674.97	1603.06	8084.36	7002.73	0.64	-0.507	0.000	0.946
14.00	-48.98	-57.64	0.00	-6439.3	0.00	6439.31	5653.40	1589.76	7950.69	6917.75	0.87	-0.593	0.000	0.941
16.00	-48.26	-57.33	0.00	-6324.0	0.00	6324.04	5631.39	1576.45	7818.13	6832.69	1.14	-0.681	0.000	0.935
18.00	-47.55	-57.02	0.00	-6209.3	0.00	6209.37	5608.96	1563.14	7686.69	6747.57	1.44	-0.768	0.000	0.930
20.00	-46.84	-56.70	0.00	-6095.3	0.00	6095.34	5586.10	1549.83	7556.36	6662.41	1.78	-0.857	0.000	0.925
22.00	-46.13	-56.38	0.00	-5981.9	0.00	5981.94	5562.81	1536.52	7427.15	6577.21	2.16	-0.946	0.000	0.919
24.00	-45.43	-56.05	0.00	-5869.1	0.00	5869.19	5539.10	1523.21	7299.05	6491.99	2.58	-1.036	0.000	0.914
26.00	-44.74	-55.71	0.00	-5757.1	0.00	5757.10	5514.96	1509.91	7172.06	6406.77	3.03	-1.126	0.000	0.908
28.00	-44.05	-55.37	0.00	-5645.6	0.00	5645.68	5490.39	1496.60	7046.19	6321.55	3.52	-1.217	0.000	0.902
30.00	-43.35	-54.98	0.00	-5534.9	0.00	5534.94	5465.39	1483.29	6921.43	6236.35	4.05	-1.308	0.000	0.897
32.00	-42.67	-54.64	0.00	-5424.9	0.00	5424.98	5439.96	1469.98	6797.79	6151.18	4.62	-1.401	0.000	0.891
34.00	-42.01	-54.28	0.00	-5315.7	0.00	5315.70	5414.11	1456.67	6675.26	6066.06	5.23	-1.493	0.000	0.885
35.50	-41.53	-54.00	0.00	-5234.2	0.00	5234.28	5394.44	1446.69	6584.09	6002.26	5.71	-1.564	0.000	0.881
36.00	-41.21	-53.93	0.00	-5207.2	0.00	5207.29	5387.83	1443.36	6553.84	5981.00	5.88	-1.587	0.000	0.880
38.00	-40.07	-53.56	0.00	-5099.4	0.00	5099.42	5361.12	1430.06	6433.54	5896.01	6.56	-1.681	0.000	0.874
40.00	-38.94	-53.18	0.00	-4992.3	0.00	4992.31	5333.99	1416.75	6314.36	5811.11	7.29	-1.776	0.000	0.868
42.00	-37.85	-52.78	0.00	-4885.9	0.00	4885.96	5306.43	1403.44	6196.29	5726.30	8.05	-1.871	0.000	0.862
43.00	-37.29	-52.59	0.00	-4833.1	0.00	4833.18	4823.70	1326.07	5927.09	5273.35	8.45	-1.920	0.000	0.926
44.00	-36.96	-52.42	0.00	-4780.6	0.00	4780.60	4812.47	1319.86	5871.70	5236.23	8.86	-1.968	0.000	0.922
46.00	-36.34	-52.05	0.00	-4675.7	0.00	4675.76	4789.68	1307.44	5761.71	5161.99	9.70	-2.066	0.000	0.915
48.00	-35.72	-51.67	0.00	-4571.6	0.00	4571.67	4766.46	1295.02	5652.75	5087.77	10.59	-2.165	0.000	0.908
50.00	-35.12	-51.30	0.00	-4468.3	0.00	4468.32	4742.82	1282.60	5544.84	5013.57	11.52	-2.265	0.000	0.900
52.00	-34.51	-50.92	0.00	-4365.7	0.00	4365.72	4718.75	1270.18	5437.96	4939.41	12.49	-2.365	0.000	0.893
54.00	-33.92	-50.54	0.00	-4263.8	0.00	4263.88	4694.25	1257.76	5332.12	4865.31	13.50	-2.466	0.000	0.885
56.00	-33.32	-50.16	0.00	-4162.8	0.00	4162.80	4669.32	1245.33	5227.33	4791.28	14.56	-2.567	0.000	0.878
58.00	-32.74	-49.78	0.00	-4062.4	0.00	4062.47	4643.97	1232.91	5123.57	4717.32	15.66	-2.669	0.000	0.870
60.00	-32.16	-49.40	0.00	-3962.9	0.00	3962.91	4618.19	1220.49	5020.86	4643.46	16.80	-2.771	0.000	0.862
62.00	-31.58	-49.01	0.00	-3864.1	0.00	3864.12	4591.98	1208.07	4919.18	4569.71	17.98	-2.874	0.000	0.854
64.00	-31.01	-48.62	0.00	-3766.1	0.00	3766.10	4565.34	1195.65	4818.55	4496.07	19.20	-2.978	0.000	0.846
66.00	-30.44	-48.24	0.00	-3668.8	0.00	3668.86	4538.28	1183.23	4718.95	4422.57	20.47	-3.082	0.000	0.838
68.00	-29.88	-47.85	0.00	-3572.3	0.00	3572.39	4510.78	1170.81	4620.40	4349.22	21.79	-3.186	0.000	0.830
70.00	-29.33	-47.46	0.00	-3476.7	0.00	3476.70	4482.87	1158.39	4522.88	4276.03	23.14	-3.291	0.000	0.821
72.00	-28.78	-47.07	0.00	-3381.7	0.00	3381.78	4454.52	1145.97	4426.41	4203.01	24.55	-3.397	0.000	0.813
74.00	-28.27	-46.65	0.00	-3287.6	0.00	3287.65	4425.74	1133.55	4330.97	4130.17	25.99	-3.503	0.000	0.804
74.50	-28.11	-46.57	0.00	-3264.3	0.00	3264.33	4418.48	1130.44	4307.27	4111.99	26.36	-3.530	0.000	0.802
76.00	-27.44	-46.26	0.00	-3194.4	0.00	3194.47	4396.54	1121.12	4236.58	4057.54	27.48	-3.610	0.000	0.795
78.00	-26.57	-45.84	0.00	-3101.9	0.00	3101.95	4366.91	1108.70	4143.22	3985.11	29.02	-3.717	0.000	0.786
80.00	-25.73	-45.40	0.00	-3010.2	0.00	3010.28	4336.86	1096.28	4050.91	3912.92	30.60	-3.824	0.000	0.777
81.00	-25.30	-45.19	0.00	-2964.8	0.00	2964.88	3502.12	951.57	3560.67	3204.59	31.40	-3.878	0.000	0.935
82.00	-25.04	-45.01	0.00	-2919.6	0.00	2919.69	3492.03	946.24	3520.94	3177.33	32.22	-3.932	0.000	0.928
84.00	-24.56	-44.61	0.00	-2829.6	0.00	2829.67	3471.52	935.60	3442.15	3122.83	33.89	-4.052	0.000	0.915
86.00	-24.09	-44.22	0.00	-2740.4	0.00	2740.45	3450.59	924.95	3364.26	3068.38	35.61	-4.171	0.000	0.902

Calculated Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 42



192.00	-1.55	-4.77	0.00	-14.24	0.00	14.24	775.47	192.92	292.71	287.17	192.15	-9.247	0.000	0.052
194.00	-1.51	-4.57	0.00	-4.69	0.00	4.69	761.60	187.60	276.78	274.17	196.01	-9.259	0.000	0.020
195.00	-0.02	-0.12	0.00	-0.12	0.00	0.12	754.51	184.94	268.98	267.73	197.95	-9.261	0.000	0.000
196.00	0.00	-0.12	0.00	0.00	0.00	0.00	747.31	182.27	261.30	261.31	199.88	-9.261	0.000	0.000

Wind Loading - Shaft

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

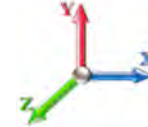


Page: 43

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

Iterations 30

Dead Load Factor 1.20
Wind Load Factor 1.00



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		1.00	0.85	5.158	5.67	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	5.158	5.67	0.00	1.200	0.756	2.00	11.251	13.50	76.6	125.8	905.8
4.00		1.00	0.85	5.158	5.67	0.00	1.200	0.810	2.00	11.183	13.42	76.1	133.9	907.7
6.00		1.00	0.85	5.158	5.67	0.00	1.200	0.843	2.00	11.107	13.33	75.6	138.4	906.1
8.00		1.00	0.85	5.158	5.67	0.00	1.200	0.868	2.00	11.029	13.23	75.1	141.4	902.8
10.00		1.00	0.85	5.158	5.67	0.00	1.200	0.887	2.00	10.949	13.14	74.6	143.5	898.7
12.00		1.00	0.85	5.158	5.67	0.00	1.200	0.904	2.00	10.867	13.04	74.0	145.0	894.0
14.00		1.00	0.85	5.158	5.67	0.00	1.200	0.918	2.00	10.785	12.94	73.4	146.0	888.9
16.00		1.00	0.86	5.222	5.74	0.00	1.200	0.930	2.00	10.703	12.84	73.8	146.8	883.5
18.00		1.00	0.88	5.353	5.89	0.00	1.200	0.941	2.00	10.620	12.74	75.0	147.4	877.8
20.00		1.00	0.90	5.473	6.02	0.00	1.200	0.951	2.00	10.536	12.64	76.1	147.7	872.0
22.00		1.00	0.92	5.584	6.14	0.00	1.200	0.960	2.00	10.453	12.54	77.1	147.9	866.0
24.00		1.00	0.94	5.688	6.26	0.00	1.200	0.969	2.00	10.369	12.44	77.8	147.9	859.9
26.00		1.00	0.95	5.784	6.36	0.00	1.200	0.976	2.00	10.285	12.34	78.5	147.9	853.6
28.00		1.00	0.97	5.875	6.46	0.00	1.200	0.984	2.00	10.201	12.24	79.1	147.7	847.2
30.00	Appurtenance(s)	1.00	0.98	5.961	6.56	0.00	1.200	0.991	2.00	10.116	12.14	79.6	147.5	840.8
32.00		1.00	1.00	6.043	6.65	0.00	1.200	0.997	2.00	10.032	12.04	80.0	147.1	834.3
34.00		1.00	1.01	6.120	6.73	0.00	1.200	1.003	2.00	9.947	11.94	80.4	146.7	827.7
35.50	Bot - Section 2	1.00	1.02	6.176	6.79	0.00	1.200	1.007	1.50	7.404	8.89	60.4	109.8	616.4
36.00		1.00	1.02	6.194	6.81	0.00	1.200	1.009	0.50	2.495	2.99	20.4	37.1	364.8
38.00		1.00	1.03	6.265	6.89	0.00	1.200	1.014	2.00	9.928	11.91	82.1	148.1	1451.0
40.00		1.00	1.04	6.333	6.97	0.00	1.200	1.019	2.00	9.843	11.81	82.3	147.5	1438.5
42.00		1.00	1.05	6.399	7.04	0.00	1.203 *	1.024	2.00	9.758	11.74	82.6	146.9	1425.9
43.00	Top - Section 1	1.00	1.06	6.430	7.07	0.00	1.205 *	1.027	1.00	4.847	5.84	41.3	73.3	708.3
44.00		1.00	1.06	6.462	7.11	0.00	1.201 *	1.029	1.00	4.826	5.80	41.2	73.1	381.0
46.00		1.00	1.07	6.522	7.17	0.00	1.203 *	1.034	2.00	9.588	11.54	82.8	145.6	756.9
48.00		1.00	1.08	6.581	7.24	0.00	1.207 *	1.038	2.00	9.503	11.47	83.0	144.9	750.4
50.00		1.00	1.09	6.638	7.30	0.00	1.210 *	1.042	2.00	9.418	11.40	83.2	144.1	743.8
52.00		1.00	1.10	6.693	7.36	0.00	1.214 *	1.047	2.00	9.332	11.33	83.4	143.3	737.3
54.00		1.00	1.11	6.746	7.42	0.00	1.218 *	1.050	2.00	9.247	11.26	83.6	142.5	730.7
56.00		1.00	1.12	6.798	7.48	0.00	1.221 *	1.054	2.00	9.161	11.19	83.7	141.7	724.1
58.00		1.00	1.13	6.849	7.53	0.00	1.225 *	1.058	2.00	9.076	11.12	83.8	140.8	717.4
60.00		1.00	1.14	6.898	7.59	0.00	1.229 *	1.062	2.00	8.991	11.05	83.8	139.9	710.7
62.00		1.00	1.14	6.945	7.64	0.00	1.233 *	1.065	2.00	8.905	10.98	83.9	139.0	704.0
64.00		1.00	1.15	6.992	7.69	0.00	1.237 *	1.068	2.00	8.819	10.91	83.9	138.0	697.3
66.00		1.00	1.16	7.037	7.74	0.00	1.241 *	1.072	2.00	8.734	10.84	83.9	137.1	690.6
68.00		1.00	1.17	7.082	7.79	0.00	1.245 *	1.075	2.00	8.648	10.77	83.9	136.1	683.8
70.00		1.00	1.17	7.125	7.84	0.00	1.250 *	1.078	2.00	8.563	10.70	83.9	135.1	677.0
72.00		1.00	1.18	7.168	7.88	0.00	1.254 *	1.081	2.00	8.477	10.63	83.8	134.1	670.2
74.00		1.00	1.19	7.209	7.93	0.00	1.258 *	1.084	2.00	8.391	10.56	83.7	133.0	663.4
74.50	Bot - Section 3	1.00	1.19	7.219	7.94	0.00	1.261 *	1.085	0.50	2.084	2.63	20.9	33.2	164.9
76.00		1.00	1.19	7.250	7.97	0.00	1.264 *	1.087	1.50	6.318	7.98	63.7	100.6	836.3
78.00		1.00	1.20	7.289	8.02	0.00	1.268 *	1.090	2.00	8.349	10.58	84.9	133.0	1104.6
80.00		1.00	1.21	7.328	8.06	0.00	1.272 *	1.093	2.00	8.263	10.51	84.8	132.0	1092.8
81.00	Top - Section 2	1.00	1.21	7.347	8.08	0.00	1.276 *	1.094	1.00	4.099	5.23	42.3	65.7	542.1
82.00		1.00	1.21	7.366	8.10	0.00	1.271 *	1.095	1.00	4.078	5.18	42.0	65.4	286.2
84.00		1.00	1.22	7.404	8.14	0.00	1.275 *	1.098	2.00	8.092	10.32	84.0	129.8	567.6

Wind Loading - Shaft

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 44

86.00	1.00	1.23	7.441	8.18	0.00	1.280 *	1.101	2.00	8.006	10.25	83.9	128.6	561.5
88.00	1.00	1.23	7.477	8.22	0.00	1.285 *	1.103	2.00	7.920	10.18	83.7	127.5	555.4
90.00	1.00	1.24	7.512	8.26	0.00	1.290 *	1.106	2.00	7.834	10.11	83.5	126.4	549.3
92.00	1.00	1.24	7.547	8.30	0.00	1.295 *	1.108	2.00	7.748	10.04	83.3	125.2	543.2
94.00	1.00	1.25	7.581	8.34	0.00	1.301 *	1.110	2.00	7.663	9.97	83.1	124.0	537.1
96.00	1.00	1.25	7.615	8.38	0.00	1.306 *	1.113	2.00	7.577	9.90	82.9	122.9	531.0
98.00	1.00	1.26	7.648	8.41	0.00	1.312 *	1.115	2.00	7.491	9.83	82.7	121.7	524.8
100.00	1.00	1.27	7.681	8.45	0.00	1.318 *	1.117	2.00	7.405	9.76	82.4	120.5	518.7
102.00	1.00	1.27	7.713	8.48	0.00	1.324 *	1.119	2.00	7.319	9.69	82.2	119.2	512.5
104.00	1.00	1.28	7.744	8.52	0.00	1.330 *	1.122	2.00	7.233	9.62	81.9	118.0	506.3
106.00	1.00	1.28	7.776	8.55	0.00	1.336 *	1.124	2.00	7.147	9.55	81.7	116.8	500.1
108.00	1.00	1.29	7.806	8.59	0.00	1.343 *	1.126	2.00	7.061	9.48	81.4	115.5	493.9
110.00	1.00	1.29	7.836	8.62	0.00	1.349 *	1.128	2.00	6.975	9.41	81.1	114.3	487.7
112.00	1.00	1.30	7.866	8.65	0.00	1.356 *	1.130	2.00	6.889	9.34	80.8	113.0	481.5
114.00	1.00	1.30	7.896	8.69	0.00	1.363 *	1.132	2.00	6.803	9.27	80.5	111.8	475.3
116.00	1.00	1.31	7.925	8.72	0.00	1.370 *	1.134	2.00	6.717	9.20	80.2	110.5	469.1
118.00	1.00	1.31	7.953	8.75	0.00	1.377 *	1.136	2.00	6.631	9.13	79.9	109.2	462.8
118.75 Bot - Section 4	1.00	1.31	7.964	8.76	0.00	1.383 *	1.137	0.75	2.464	3.41	29.8	40.8	172.1
120.00	1.00	1.32	7.981	8.78	0.00	1.386 *	1.138	1.25	4.148	5.75	50.5	68.6	470.6
122.00	1.00	1.32	8.009	8.81	0.00	1.393 *	1.140	2.00	6.567	9.15	80.6	108.5	744.3
124.00 Top - Section 3	1.00	1.32	8.037	8.84	0.00	1.401 *	1.142	2.00	6.480	9.08	80.2	107.2	733.9
125.00 Appurtenance(s)	1.00	1.33	8.050	8.86	0.00	1.397 *	1.142	1.00	3.208	4.48	39.7	53.3	195.7
126.00	1.00	1.33	8.064	8.87	0.00	1.241 *	1.143	1.00	3.186	3.95	35.1	52.9	194.3
128.00	1.00	1.33	8.090	8.90	0.00	1.245 *	1.145	2.00	6.308	7.85	69.9	104.5	384.2
130.00	1.00	1.34	8.117	8.93	0.00	1.251 *	1.147	2.00	6.222	7.78	69.5	103.2	378.8
132.00	1.00	1.34	8.143	8.96	0.00	1.257 *	1.149	2.00	6.136	7.71	69.1	101.9	373.3
134.00	1.00	1.35	8.169	8.99	0.00	1.264 *	1.150	2.00	6.050	7.64	68.7	100.5	367.8
136.00	1.00	1.35	8.194	9.01	0.00	1.270 *	1.152	2.00	5.964	7.57	68.3	99.2	362.4
138.00	1.00	1.35	8.220	9.04	0.00	1.277 *	1.154	2.00	5.878	7.51	67.9	97.8	356.9
140.00 Appurtenance(s)	1.00	1.36	8.245	9.07	0.00	1.284 *	1.155	2.00	5.792	7.44	67.4	96.5	351.4
142.00	1.00	1.36	8.269	9.10	0.00	1.200	1.157	2.00	5.705	6.85	62.3	95.1	345.9
144.00	1.00	1.37	8.294	9.12	0.00	1.200	1.159	2.00	5.619	6.74	61.5	93.7	340.4
146.00	1.00	1.37	8.318	9.15	0.00	1.200	1.160	2.00	5.533	6.64	60.8	92.3	334.9
148.00	1.00	1.37	8.342	9.18	0.00	1.200	1.162	2.00	5.447	6.54	60.0	91.0	329.4
150.00 Appurtenance(s)	1.00	1.38	8.365	9.20	0.00	1.200	1.163	2.00	5.361	6.43	59.2	89.6	323.9
152.00	1.00	1.38	8.389	9.23	0.00	1.200	1.165	2.00	5.275	6.33	58.4	88.2	318.3
154.00	1.00	1.39	8.412	9.25	0.00	1.200	1.167	2.00	5.188	6.23	57.6	86.8	312.8
154.75 Bot - Section 5	1.00	1.39	8.420	9.26	0.00	1.200	1.167	0.75	1.923	2.31	21.4	32.3	116.0
156.00	1.00	1.39	8.435	9.28	0.00	1.200	1.168	1.25	3.219	3.86	35.8	54.1	276.7
158.00	1.00	1.39	8.457	9.30	0.00	1.200	1.170	2.00	5.081	6.10	56.7	85.1	436.0
159.00 Top - Section 4	1.00	1.40	8.468	9.32	0.00	1.200	1.170	1.00	2.508	3.01	28.0	42.2	215.2
160.00	1.00	1.40	8.480	9.33	0.00	1.200	1.171	1.00	2.486	2.98	27.8	41.8	106.9
162.00	1.00	1.40	8.502	9.35	0.00	1.200	1.172	2.00	4.908	5.89	55.1	82.3	210.4
164.00	1.00	1.40	8.524	9.38	0.00	1.200	1.174	2.00	4.822	5.79	54.3	80.8	206.5
166.00	1.00	1.41	8.546	9.40	0.00	1.200	1.175	2.00	4.736	5.68	53.4	79.4	202.6
167.00 Appurtenance(s)	1.00	1.41	8.556	9.41	0.00	1.200	1.176	1.00	2.336	2.80	26.4	39.4	100.0
168.00	1.00	1.41	8.567	9.42	0.00	1.200	1.177	1.00	2.314	2.78	26.2	39.0	99.1
170.00	1.00	1.42	8.589	9.45	0.00	1.200	1.178	2.00	4.564	5.48	51.7	76.5	194.8
172.00	1.00	1.42	8.610	9.47	0.00	1.200	1.180	2.00	4.477	5.37	50.9	75.1	190.9
174.00	1.00	1.42	8.631	9.49	0.00	1.200	1.181	2.00	4.391	5.27	50.0	73.7	187.0
176.00	1.00	1.43	8.651	9.52	0.00	1.200	1.182	2.00	4.305	5.17	49.2	72.2	183.0
178.00	1.00	1.43	8.672	9.54	0.00	1.200	1.184	2.00	4.219	5.06	48.3	70.7	179.1
180.00	1.00	1.43	8.693	9.56	0.00	1.200	1.185	2.00	4.132	4.96	47.4	69.3	175.2
182.00	1.00	1.44	8.713	9.58	0.00	1.200	1.186	2.00	4.046	4.86	46.5	67.8	171.2
184.00	1.00	1.44	8.733	9.61	0.00	1.200	1.187	2.00	3.960	4.75	45.6	66.4	167.3
186.00	1.00	1.44	8.753	9.63	0.00	1.200	1.189	2.00	3.874	4.65	44.8	64.9	163.3
188.00	1.00	1.45	8.772	9.65	0.00	1.200	1.190	2.00	3.787	4.54	43.9	63.4	159.4

Wind Loading - Shaft

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 45



190.00	1.00	1.45	8.792	9.67	0.00	1.200	1.191	2.00	3.701	4.44	43.0	61.9	155.4	
192.00	1.00	1.45	8.811	9.69	0.00	1.200	1.193	2.00	3.615	4.34	42.0	60.4	151.5	
194.00	1.00	1.46	8.831	9.71	0.00	1.200	1.194	2.00	3.529	4.23	41.1	59.0	147.5	
195.00 Appurtenance(s)	1.00	1.46	8.840	9.72	0.00	1.200	1.194	1.00	1.732	2.08	20.2	29.1	72.4	
196.00 Appurtenance(s)	1.00	1.46	8.850	9.73	0.00	1.200	1.195	1.00	1.710	2.05	20.0	28.7	71.4	
Totals:								196.00				7,031.5	56,945.3	

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

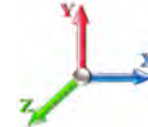
Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 46

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	196.00	6' Lightning rod	1	8.850	9.735	1.00	1.00	1.12	27.36	0.000	0.000	10.95	0.00	0.00
2	195.00	APXVSP18-C-A20	3	8.840	9.724	0.66	0.80	19.78	411.59	0.000	0.000	192.39	0.00	0.00
3	195.00	APXVTM14-C-120	3	8.840	9.724	0.63	0.80	13.44	510.21	0.000	0.000	130.65	0.00	0.00
4	195.00	1900MHz RRH	3	8.840	9.724	0.40	0.80	5.70	288.93	0.000	0.000	55.44	0.00	0.00
5	195.00	TD-RRH8x20-25	3	8.840	9.724	0.40	0.80	5.51	464.14	0.000	0.000	53.59	0.00	0.00
6	195.00	800MHz RRH	3	8.840	9.724	0.40	0.80	4.12	307.16	0.000	0.000	40.05	0.00	0.00
7	195.00	800MHz Filter	3	8.840	9.724	0.40	0.80	1.47	52.90	0.000	0.000	14.27	0.00	0.00
8	195.00	ACU-A20-N	4	8.840	9.724	0.40	0.80	0.55	11.36	0.000	0.000	5.34	0.00	0.00
9	195.00	Low Profile Platform	1	8.840	9.724	1.00	1.00	34.09	2395.80	0.000	0.000	331.47	0.00	0.00
10	167.00	(3) SFS-H-L (V-Braces)	1	8.556	9.412	1.00	1.00	11.43	391.39	0.000	0.000	107.56	0.00	0.00
11	167.00	HRK12 (Handrail Kit)	1	8.556	9.412	1.00	1.00	11.20	785.08	0.000	0.000	105.37	0.00	0.00
12	167.00	RFS	3	8.556	9.412	0.55	0.75	35.32	1271.77	0.000	0.000	332.45	0.00	0.00
13	167.00	(3) VSR-TS-B	1	8.556	9.412	1.00	1.00	21.11	605.67	0.000	0.000	198.67	0.00	0.00
14	167.00	PRK-1245 (kicker kit)	1	8.556	9.412	1.00	1.00	16.20	681.50	0.000	0.000	152.51	0.00	0.00
15	167.00	KRY 112 144/1	3	8.556	9.412	0.38	0.75	0.82	54.98	0.000	0.000	7.73	0.00	0.00
16	167.00	Ericsson AIR6449 B41	3	8.556	9.412	0.53	0.75	10.05	552.90	0.000	0.000	94.58	0.00	0.00
17	167.00	Ericsson 4449 B71 + B85	3	8.556	9.412	0.38	0.75	2.65	205.05	0.000	0.000	24.92	0.00	0.00
18	167.00	Ericsson 4460 B25 + B66	3	8.556	9.412	0.38	0.75	3.20	572.58	0.000	0.000	30.12	0.00	0.00
19	167.00	Low Profile	1	8.556	9.412	1.00	1.00	33.90	2382.03	0.000	0.000	319.08	0.00	0.00
20	167.00	Commscope VV-65A-R1	3	8.556	9.412	0.58	0.75	12.49	453.87	0.000	0.000	117.58	0.00	0.00
21	150.00	Low Profile	1	8.365	9.202	1.00	1.00	33.77	2372.61	0.000	0.000	310.78	0.00	0.00
22	150.00	DC6-48-60-18-8F	2	8.365	9.202	0.38	0.75	1.45	123.35	0.000	0.000	13.36	0.00	0.00
23	150.00	LGP13519	6	8.365	9.202	0.38	0.75	1.45	59.95	0.000	0.000	13.31	0.00	0.00
24	150.00	LGP21401	6	8.365	9.202	0.38	0.75	4.16	158.93	0.000	0.000	38.24	0.00	0.00
25	150.00	Handrail Kit	1	8.365	9.202	1.00	1.00	11.15	782.85	0.000	0.000	102.58	0.00	0.00
26	150.00	800 10966	2	8.365	9.202	0.54	0.75	20.03	755.92	0.000	0.000	184.32	0.00	0.00
27	150.00	80010964	1	8.365	9.202	0.53	0.75	5.78	259.33	0.000	0.000	53.17	0.00	0.00
28	150.00	HPA65R-BU4A	3	8.365	9.202	0.64	0.75	10.70	369.67	0.000	0.000	98.45	0.00	0.00
29	150.00	7700.00	3	8.365	9.202	0.61	0.75	3.85	155.37	0.000	0.000	35.40	0.00	0.00
30	150.00	mount pipe	2	8.365	9.202	1.00	1.00	12.13	324.95	0.000	0.000	111.66	0.00	0.00
31	150.00	4449 B5/B12	3	8.365	9.202	0.38	0.75	2.63	321.56	0.000	0.000	24.17	0.00	0.00
32	150.00	B2 B66A 8843	3	8.365	9.202	0.38	0.75	2.23	310.07	0.000	0.000	20.54	0.00	0.00
33	140.00	Low Profile Platform	1	8.245	9.069	1.00	1.00	33.69	2366.61	0.000	0.000	305.57	0.00	0.00
34	140.00	JMA Wireless	6	8.245	9.069	0.65	0.75	42.14	1445.80	0.000	0.000	382.18	0.00	0.00
35	140.00	Samsung MT6407-77A	3	8.263	9.089	0.56	0.75	8.96	506.71	0.000	1.500	81.45	0.00	122.18
36	140.00	Samsung	3	8.220	9.042	0.61	0.75	2.12	148.26	0.000	-2.000	19.15	0.00	-38.30
37	140.00	Samsung RF4440d 13a	3	8.245	9.069	0.38	0.75	5.70	343.99	0.000	0.000	51.67	0.00	0.00
38	140.00	Samsung RF4439d 25A	3	8.245	9.069	0.38	0.75	6.32	378.66	0.000	0.000	57.28	0.00	0.00
39	140.00	Raycap	1	8.245	9.069	0.75	0.75	3.45	88.63	0.000	0.000	31.32	0.00	0.00
40	140.00	HRK12 (Handrail Kit)	1	8.245	9.069	1.00	1.00	11.12	781.42	0.000	0.000	100.83	0.00	0.00
41	140.00	Mount Pipe	1	8.245	9.069	1.00	1.00	6.58	78.15	0.000	0.000	59.69	0.00	0.00
42	125.00	Commscope	1	8.050	8.855	1.00	1.00	68.51	2804.29	0.000	0.000	606.67	0.00	0.00
43	125.00	Raycap	1	8.050	8.855	0.38	0.75	0.89	48.44	0.000	0.000	7.91	0.00	0.00
44	125.00	Fujitsu TA08025-B604	3	8.050	8.855	0.38	0.75	2.62	293.17	0.000	0.000	23.18	0.00	0.00
45	125.00	Fujitsu TA08025-B605	3	8.050	8.855	0.38	0.75	2.62	334.92	0.000	0.000	23.18	0.00	0.00
46	125.00	JMA Wireless	3	8.050	8.855	0.55	0.75	22.39	601.83	0.000	0.000	198.29	0.00	0.00
47	30.00	GPS	1	5.961	6.557	1.00	1.00	1.40	20.64	0.000	0.000	9.21	0.00	0.00

Discrete Appurtenance Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 47

Totals: 28,662.37

5,288.30

Total Applied Force Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

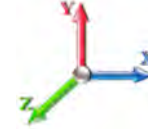


Page: 48

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 30

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		76.61	1068.08	0.00	0.00
4.00		76.15	1073.07	0.00	0.00
6.00		75.63	1073.32	0.00	0.00
8.00		75.10	1071.53	0.00	0.00
10.00		74.55	1068.56	0.00	0.00
12.00		74.00	1064.82	0.00	0.00
14.00		73.44	1060.55	0.00	0.00
16.00		73.78	1055.87	0.00	0.00
18.00		75.04	1050.87	0.00	0.00
20.00		76.12	1045.61	0.00	0.00
22.00		77.05	1040.15	0.00	0.00
24.00		77.84	1034.51	0.00	0.00
26.00		78.53	1028.72	0.00	0.00
28.00		79.11	1022.80	0.00	0.00
30.00	(1) attachments	88.81	1037.41	0.00	0.00
32.00		80.01	1010.63	0.00	0.00
34.00		80.36	1004.41	0.00	0.00
35.50		60.36	749.19	0.00	0.00
36.00		20.40	409.02	0.00	0.00
38.00		82.11	1628.44	0.00	0.00
40.00		82.29	1616.23	0.00	0.00
42.00		82.60	1603.96	0.00	0.00
43.00		41.32	797.40	0.00	0.00
44.00		41.19	470.11	0.00	0.00
46.00		82.79	935.47	0.00	0.00
48.00		83.03	929.24	0.00	0.00
50.00		83.24	922.97	0.00	0.00
52.00		83.41	916.65	0.00	0.00
54.00		83.56	910.30	0.00	0.00
56.00		83.68	903.91	0.00	0.00
58.00		83.77	897.48	0.00	0.00
60.00		83.84	891.03	0.00	0.00
62.00		83.88	884.54	0.00	0.00
64.00		83.91	878.03	0.00	0.00
66.00		83.91	871.49	0.00	0.00
68.00		83.90	864.92	0.00	0.00
70.00		83.86	858.33	0.00	0.00
72.00		83.81	851.72	0.00	0.00
74.00		83.74	845.09	0.00	0.00
74.50		20.88	210.31	0.00	0.00
76.00		63.66	972.65	0.00	0.00
78.00		84.87	1286.59	0.00	0.00
80.00		84.76	1274.94	0.00	0.00
81.00		42.28	633.22	0.00	0.00
82.00		42.01	377.40	0.00	0.00
84.00		84.02	750.13	0.00	0.00

Total Applied Force Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 49

86.00	83.86	744.22	0.00	0.00
88.00	83.70	738.29	0.00	0.00
90.00	83.52	732.34	0.00	0.00
92.00	83.32	726.38	0.00	0.00
94.00	83.12	720.40	0.00	0.00
96.00	82.91	714.41	0.00	0.00
98.00	82.68	708.41	0.00	0.00
100.00	82.44	702.39	0.00	0.00
102.00	82.20	696.36	0.00	0.00
104.00	81.94	690.32	0.00	0.00
106.00	81.68	684.26	0.00	0.00
108.00	81.40	678.20	0.00	0.00
110.00	81.12	672.12	0.00	0.00
112.00	80.83	666.03	0.00	0.00
114.00	80.53	659.93	0.00	0.00
116.00	80.22	653.83	0.00	0.00
118.00	79.90	647.71	0.00	0.00
118.75	29.85	241.45	0.00	0.00
120.00	50.49	586.20	0.00	0.00
122.00	80.57	929.37	0.00	0.00
124.00	80.25	919.09	0.00	0.00
125.00	(11) attachments	898.92	4370.97	0.00
126.00		35.06	282.55	0.00
128.00		69.89	560.79	0.00
130.00		69.50	555.43	0.00
132.00		69.10	550.06	0.00
134.00		68.69	544.69	0.00
136.00		68.28	539.31	0.00
138.00		67.86	533.92	0.00
140.00	(22) attachments	1156.57	6666.75	0.00
142.00		62.28	422.19	0.00
144.00		61.52	416.69	0.00
146.00		60.75	411.18	0.00
148.00		59.98	405.67	0.00
150.00	(33) attachments	1065.19	6394.71	0.00
152.00		58.41	358.51	0.00
154.00		57.61	352.98	0.00
154.75		21.38	131.11	0.00
156.00		35.84	301.84	0.00
158.00		56.72	476.17	0.00
159.00		28.04	235.25	0.00
160.00		27.83	126.95	0.00
162.00		55.08	250.62	0.00
164.00		54.26	246.72	0.00
166.00		53.42	242.81	0.00
167.00	(23) attachments	1516.96	8076.95	0.00
168.00		26.17	102.22	0.00
170.00		51.74	201.14	0.00
172.00		50.88	197.22	0.00
174.00		50.03	193.30	0.00
176.00		49.16	189.37	0.00
178.00		48.29	185.44	0.00
180.00		47.42	181.50	0.00
182.00		46.53	177.56	0.00
184.00		45.65	173.61	0.00
186.00		44.75	169.66	0.00
188.00		43.86	165.71	0.00

Total Applied Force Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 50

190.00	42.95	161.75	0.00	0.00
192.00	42.04	157.79	0.00	0.00
194.00	41.13	153.82	0.00	0.00
195.00 (23) attachments	843.41	4517.71	0.00	0.00
196.00 (1) attachments	30.93	98.80	0.00	0.00
Totals:	12,319.76	98,944.76	0.00	83.88

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



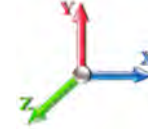
Page: 51

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

Iterations 30

Dead Load Factor 1.20

Wind Load Factor 1.00



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" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	5.158	0.00	67.12
2.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.92	0.00	0.085	0.000	5.158	0.00	12.71
2.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.52	0.00	0.085	0.000	5.158	0.00	6.10
4.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	5.158	0.00	69.34
4.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.94	0.00	0.086	0.000	5.158	0.00	13.26
4.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.54	0.00	0.086	0.000	5.158	0.00	6.44
6.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	5.158	0.00	70.71
6.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.95	0.00	0.086	0.000	5.158	0.00	13.60
6.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.55	0.00	0.086	0.000	5.158	0.00	6.66
8.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	5.158	0.00	71.72
8.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.96	0.00	0.087	0.000	5.158	0.00	13.86
8.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.56	0.00	0.087	0.000	5.158	0.00	6.83
10.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	5.158	0.00	72.53
10.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.96	0.00	0.088	0.000	5.158	0.00	14.06
10.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.56	0.00	0.088	0.000	5.158	0.00	6.96
12.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	5.158	0.00	73.20
12.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.97	0.00	0.088	0.000	5.158	0.00	14.23
12.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.57	0.00	0.088	0.000	5.158	0.00	7.07
14.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	5.158	0.00	73.79
14.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.97	0.00	0.089	0.000	5.158	0.00	14.38
14.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.57	0.00	0.089	0.000	5.158	0.00	7.17
16.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	5.222	0.00	74.30
16.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.98	0.00	0.090	0.000	5.222	0.00	14.52
16.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.58	0.00	0.090	0.000	5.222	0.00	7.26
18.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	5.353	0.00	74.76
18.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.98	0.00	0.091	0.000	5.353	0.00	14.64
18.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.58	0.00	0.091	0.000	5.353	0.00	7.33
20.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	5.473	0.00	75.17
20.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.98	0.00	0.091	0.000	5.473	0.00	14.74
20.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.58	0.00	0.091	0.000	5.473	0.00	7.41
22.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	5.584	0.00	75.55
22.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.99	0.00	0.092	0.000	5.584	0.00	14.84
22.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.59	0.00	0.092	0.000	5.584	0.00	7.47
24.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	5.688	0.00	75.90
24.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.99	0.00	0.093	0.000	5.688	0.00	14.94
24.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.59	0.00	0.093	0.000	5.688	0.00	7.53
26.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	5.784	0.00	76.22
26.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.99	0.00	0.094	0.000	5.784	0.00	15.02
26.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.59	0.00	0.094	0.000	5.784	0.00	7.59
28.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	5.875	0.00	76.53
28.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.99	0.00	0.095	0.000	5.875	0.00	15.10
28.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.59	0.00	0.095	0.000	5.875	0.00	7.64
30.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	5.961	0.00	76.81
30.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.00	0.00	0.095	0.000	5.961	0.00	15.18
30.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.60	0.00	0.095	0.000	5.961	0.00	7.69
32.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.096	0.000	6.043	0.00	77.08
32.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.00	0.00	0.096	0.000	6.043	0.00	15.25

Linear Appurtenance Segment Forces (Factored)

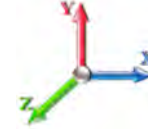
Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 52

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.60	0.00	0.096	0.000	6.043	0.00	7.74
34.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	6.120	0.00	77.33
34.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.00	0.00	0.097	0.000	6.120	0.00	15.31
34.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.60	0.00	0.097	0.000	6.120	0.00	7.78
35.50	1 5/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.098	0.000	6.176	0.00	58.14
35.50	1 5/8" Hybrid	Yes	1.50	0.000	4.00	0.75	0.00	0.098	0.000	6.176	0.00	11.52
35.50	1.6" Hybrid	Yes	1.50	0.000	1.60	0.45	0.00	0.098	0.000	6.176	0.00	5.86
36.00	1 5/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.098	0.000	6.194	0.00	19.39
36.00	1 5/8" Hybrid	Yes	0.50	0.000	4.00	0.25	0.00	0.098	0.000	6.194	0.00	3.84
36.00	1.6" Hybrid	Yes	0.50	0.000	1.60	0.15	0.00	0.098	0.000	6.194	0.00	1.96
38.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	6.265	0.00	77.80
38.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.00	0.00	0.099	0.000	6.265	0.00	15.44
38.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.60	0.00	0.099	0.000	6.265	0.00	7.86
40.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	6.333	0.00	78.02
40.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.01	0.00	0.100	0.000	6.333	0.00	15.50
40.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.61	0.00	0.100	0.000	6.333	0.00	7.90
42.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	6.399	0.00	78.23
42.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.01	0.00	0.101	1.002	6.399	0.00	15.55
42.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.61	0.00	0.101	1.002	6.399	0.00	7.94
43.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.101	1.004	6.430	0.00	39.17
43.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.50	0.00	0.101	1.004	6.430	0.00	7.79
43.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.30	0.00	0.101	1.004	6.430	0.00	3.98
44.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	6.462	0.00	39.22
44.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.50	0.00	0.100	1.001	6.462	0.00	7.80
44.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.30	0.00	0.100	1.001	6.462	0.00	3.99
46.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.003	6.522	0.00	78.62
46.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.01	0.00	0.101	1.003	6.522	0.00	15.66
46.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.61	0.00	0.101	1.003	6.522	0.00	8.01
48.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.006	6.581	0.00	78.81
48.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.01	0.00	0.102	1.006	6.581	0.00	15.71
48.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.61	0.00	0.102	1.006	6.581	0.00	8.04
50.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	6.638	0.00	78.99
50.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.01	0.00	0.103	1.009	6.638	0.00	15.76
50.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.61	0.00	0.103	1.009	6.638	0.00	8.08
52.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.012	6.693	0.00	79.16
52.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.02	0.00	0.104	1.012	6.693	0.00	15.80
52.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.62	0.00	0.104	1.012	6.693	0.00	8.11
54.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.105	1.015	6.746	0.00	79.33
54.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.02	0.00	0.105	1.015	6.746	0.00	15.85
54.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.62	0.00	0.105	1.015	6.746	0.00	8.14
56.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	6.798	0.00	79.49
56.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.02	0.00	0.106	1.018	6.798	0.00	15.89
56.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.62	0.00	0.106	1.018	6.798	0.00	8.17
58.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.107	1.021	6.849	0.00	79.64
58.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.02	0.00	0.107	1.021	6.849	0.00	15.93
58.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.62	0.00	0.107	1.021	6.849	0.00	8.20
60.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.108	1.024	6.898	0.00	79.80

Linear Appurtenance Segment Forces (Factored)

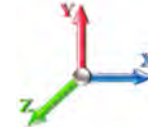
Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 53

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

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)
60.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.02	0.00	0.108	1.024	6.898	0.00	15.97
60.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.62	0.00	0.108	1.024	6.898	0.00	8.22
62.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.027	6.945	0.00	79.94
62.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.02	0.00	0.109	1.027	6.945	0.00	16.01
62.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.62	0.00	0.109	1.027	6.945	0.00	8.25
64.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	6.992	0.00	80.08
64.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.02	0.00	0.110	1.031	6.992	0.00	16.05
64.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.62	0.00	0.110	1.031	6.992	0.00	8.28
66.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	7.037	0.00	80.22
66.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.02	0.00	0.111	1.034	7.037	0.00	16.09
66.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.62	0.00	0.111	1.034	7.037	0.00	8.30
68.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.038	7.082	0.00	80.36
68.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.02	0.00	0.113	1.038	7.082	0.00	16.13
68.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.62	0.00	0.113	1.038	7.082	0.00	8.33
70.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.041	7.125	0.00	80.49
70.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.03	0.00	0.114	1.041	7.125	0.00	16.16
70.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.63	0.00	0.114	1.041	7.125	0.00	8.35
72.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.045	7.168	0.00	80.62
72.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.03	0.00	0.115	1.045	7.168	0.00	16.20
72.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.63	0.00	0.115	1.045	7.168	0.00	8.37
74.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	7.209	0.00	80.74
74.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.03	0.00	0.116	1.049	7.209	0.00	16.23
74.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.63	0.00	0.116	1.049	7.209	0.00	8.40
74.50	1 5/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.117	1.051	7.219	0.00	20.19
74.50	1 5/8" Hybrid	Yes	0.50	0.000	4.00	0.26	0.00	0.117	1.051	7.219	0.00	4.06
74.50	1.6" Hybrid	Yes	0.50	0.000	1.60	0.16	0.00	0.117	1.051	7.219	0.00	2.10
76.00	1 5/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.118	1.053	7.250	0.00	60.65
76.00	1 5/8" Hybrid	Yes	1.50	0.000	4.00	0.77	0.00	0.118	1.053	7.250	0.00	12.20
76.00	1.6" Hybrid	Yes	1.50	0.000	1.60	0.47	0.00	0.118	1.053	7.250	0.00	6.31
78.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	7.289	0.00	80.99
78.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.03	0.00	0.119	1.056	7.289	0.00	16.30
78.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.63	0.00	0.119	1.056	7.289	0.00	8.44
80.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.060	7.328	0.00	81.10
80.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.03	0.00	0.120	1.060	7.328	0.00	16.33
80.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.63	0.00	0.120	1.060	7.328	0.00	8.46
81.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.121	1.063	7.347	0.00	40.58
81.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.52	0.00	0.121	1.063	7.347	0.00	8.17
81.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.32	0.00	0.121	1.063	7.347	0.00	4.24
82.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.120	1.059	7.366	0.00	40.61
82.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.52	0.00	0.120	1.059	7.366	0.00	8.18
82.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.32	0.00	0.120	1.059	7.366	0.00	4.24
84.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	7.404	0.00	81.33
84.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.03	0.00	0.121	1.062	7.404	0.00	16.39
84.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.63	0.00	0.121	1.062	7.404	0.00	8.51
86.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.067	7.441	0.00	81.44
86.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.03	0.00	0.122	1.067	7.441	0.00	16.42
86.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.63	0.00	0.122	1.067	7.441	0.00	8.53

Linear Appurtenance Segment Forces (Factored)

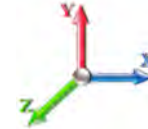
Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 54

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

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)
88.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.071	7.477	0.00	81.55
88.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.03	0.00	0.124	1.071	7.477	0.00	16.45
88.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.63	0.00	0.124	1.071	7.477	0.00	8.55
90.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	7.512	0.00	81.65
90.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.125	1.075	7.512	0.00	16.48
90.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.125	1.075	7.512	0.00	8.57
92.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	7.547	0.00	81.75
92.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.126	1.079	7.547	0.00	16.51
92.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.126	1.079	7.547	0.00	8.58
94.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	7.581	0.00	81.86
94.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.128	1.084	7.581	0.00	16.54
94.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.128	1.084	7.581	0.00	8.60
96.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	7.615	0.00	81.95
96.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.130	1.089	7.615	0.00	16.56
96.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.130	1.089	7.615	0.00	8.62
98.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.093	7.648	0.00	82.05
98.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.131	1.093	7.648	0.00	16.59
98.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.131	1.093	7.648	0.00	8.64
100.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.098	7.681	0.00	82.15
100.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.133	1.098	7.681	0.00	16.62
100.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.133	1.098	7.681	0.00	8.66
102.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	7.713	0.00	82.24
102.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.134	1.103	7.713	0.00	16.64
102.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.134	1.103	7.713	0.00	8.68
104.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	7.744	0.00	82.33
104.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.136	1.108	7.744	0.00	16.67
104.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.136	1.108	7.744	0.00	8.69
106.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.138	1.113	7.776	0.00	82.42
106.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.138	1.113	7.776	0.00	16.69
106.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.138	1.113	7.776	0.00	8.71
108.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.119	7.806	0.00	82.51
108.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.140	1.119	7.806	0.00	16.72
108.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.140	1.119	7.806	0.00	8.73
110.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.124	7.836	0.00	82.60
110.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.141	1.124	7.836	0.00	16.74
110.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.141	1.124	7.836	0.00	8.74
112.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	7.866	0.00	82.69
112.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.143	1.130	7.866	0.00	16.77
112.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.143	1.130	7.866	0.00	8.76
114.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	7.896	0.00	82.77
114.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.145	1.136	7.896	0.00	16.79
114.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.145	1.136	7.896	0.00	8.78
116.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.142	7.925	0.00	82.86
116.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.04	0.00	0.147	1.142	7.925	0.00	16.81
116.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.64	0.00	0.147	1.142	7.925	0.00	8.79
118.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	7.953	0.00	82.94
118.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.05	0.00	0.149	1.148	7.953	0.00	16.84

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



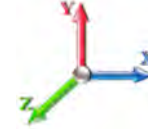
Page: 55

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

Iterations 30

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
118.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.65	0.00	0.149	1.148	7.953	0.00	8.81
118.75	1 5/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.151	1.152	7.964	0.00	31.11
118.75	1 5/8" Hybrid	Yes	0.75	0.000	4.00	0.39	0.00	0.151	1.152	7.964	0.00	6.32
118.75	1.6" Hybrid	Yes	0.75	0.000	1.60	0.24	0.00	0.151	1.152	7.964	0.00	3.30
120.00	1 5/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.152	1.155	7.981	0.00	51.89
120.00	1 5/8" Hybrid	Yes	1.25	0.000	4.00	0.65	0.00	0.152	1.155	7.981	0.00	10.54
120.00	1.6" Hybrid	Yes	1.25	0.000	1.60	0.40	0.00	0.152	1.155	7.981	0.00	5.51
122.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	8.009	0.00	83.10
122.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.05	0.00	0.154	1.161	8.009	0.00	16.88
122.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.65	0.00	0.154	1.161	8.009	0.00	8.84
124.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.167	8.037	0.00	83.18
124.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.05	0.00	0.156	1.167	8.037	0.00	16.90
124.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.65	0.00	0.156	1.167	8.037	0.00	8.85
125.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.155	1.164	8.050	0.00	41.61
125.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.52	0.00	0.155	1.164	8.050	0.00	8.46
125.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.32	0.00	0.155	1.164	8.050	0.00	4.43
126.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.111	1.034	8.064	0.00	41.63
126.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.52	0.00	0.111	1.034	8.064	0.00	8.46
128.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.037	8.090	0.00	83.33
128.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.05	0.00	0.112	1.037	8.090	0.00	16.95
130.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	8.117	0.00	83.41
130.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.05	0.00	0.114	1.042	8.117	0.00	16.97
132.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	8.143	0.00	83.48
132.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.05	0.00	0.116	1.048	8.143	0.00	16.99
134.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.053	8.169	0.00	83.56
134.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.05	0.00	0.118	1.053	8.169	0.00	17.01
136.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.058	8.194	0.00	83.63
136.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.05	0.00	0.119	1.058	8.194	0.00	17.03
138.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.064	8.220	0.00	83.70
138.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.05	0.00	0.121	1.064	8.220	0.00	17.05
140.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	8.245	0.00	83.77
140.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	1.05	0.00	0.123	1.070	8.245	0.00	17.07
Totals:											0.0	7,184.7

Calculated Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 58



192.00	-4.73	-1.09	0.00	-3.25	0.00	3.25	775.47	192.92	292.71	287.17	42.92	-2.077	0.000	0.017
194.00	-4.58	-1.04	0.00	-1.08	0.00	1.08	761.60	187.60	276.78	274.17	43.79	-2.080	0.000	0.010
195.00	-0.10	-0.03	0.00	-0.03	0.00	0.03	754.51	184.94	268.98	267.73	44.23	-2.080	0.000	0.000
196.00	0.00	-0.03	0.00	0.00	0.00	0.00	747.31	182.27	261.30	261.31	44.66	-2.080	0.000	0.000

Wind Loading - Shaft

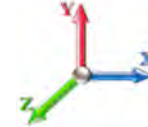
Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 29

Dead Load Factor 1.00
Wind Load Factor 1.00



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		1.00	0.85	6.646	7.31	305.15	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	6.646	7.31	302.76	0.950	0.000	2.00	11.000	10.45	76.4	0.0	650.0
4.00		1.00	0.85	6.646	7.31	300.36	0.950	0.000	2.00	10.913	10.37	75.8	0.0	644.9
6.00		1.00	0.85	6.646	7.31	297.96	0.950	0.000	2.00	10.826	10.28	75.2	0.0	639.7
8.00		1.00	0.85	6.646	7.31	295.57	0.950	0.000	2.00	10.740	10.20	74.6	0.0	634.5
10.00		1.00	0.85	6.646	7.31	293.17	0.950	0.000	2.00	10.653	10.12	74.0	0.0	629.4
12.00		1.00	0.85	6.646	7.31	290.78	0.950	0.000	2.00	10.566	10.04	73.4	0.0	624.2
14.00		1.00	0.85	6.646	7.31	288.38	0.950	0.000	2.00	10.479	9.96	72.8	0.0	619.1
16.00		1.00	0.86	6.728	7.40	287.75	0.950	0.000	2.00	10.393	9.87	73.1	0.0	613.9
18.00		1.00	0.88	6.897	7.59	288.90	0.950	0.000	2.00	10.306	9.79	74.3	0.0	608.7
20.00		1.00	0.90	7.052	7.76	289.65	0.950	0.000	2.00	10.219	9.71	75.3	0.0	603.6
22.00		1.00	0.92	7.195	7.91	290.08	0.950	0.000	2.00	10.133	9.63	76.2	0.0	598.4
24.00		1.00	0.94	7.328	8.06	290.23	0.950	0.000	2.00	10.046	9.54	76.9	0.0	593.3
26.00		1.00	0.95	7.452	8.20	290.15	0.950	0.000	2.00	9.959	9.46	77.6	0.0	588.1
28.00		1.00	0.97	7.570	8.33	289.87	0.950	0.000	2.00	9.873	9.38	78.1	0.0	582.9
30.00	Appurtenance(s)	1.00	0.98	7.680	8.45	289.41	0.950	0.000	2.00	9.786	9.30	78.5	0.0	577.8
32.00		1.00	1.00	7.785	8.56	288.79	0.950	0.000	2.00	9.699	9.21	78.9	0.0	572.6
34.00		1.00	1.01	7.885	8.67	288.03	0.950	0.000	2.00	9.613	9.13	79.2	0.0	567.5
35.50	Bot - Section 2	1.00	1.02	7.957	8.75	287.37	0.950	0.000	1.50	7.153	6.79	59.5	0.0	422.2
36.00		1.00	1.02	7.981	8.78	287.14	0.950	0.000	0.50	2.411	2.29	20.1	0.0	273.0
38.00		1.00	1.03	8.072	8.88	286.14	0.950	0.000	2.00	9.590	9.11	80.9	0.0	1085.8
40.00		1.00	1.04	8.160	8.98	285.03	0.950	0.000	2.00	9.504	9.03	81.0	0.0	1075.8
42.00		1.00	1.05	8.244	9.07	283.83	0.952 *	0.000	2.00	9.417	8.97	81.3	0.0	1065.8
43.00	Top - Section 1	1.00	1.06	8.285	9.11	283.20	0.954 *	0.000	1.00	4.676	4.46	40.7	0.0	529.2
44.00		1.00	1.06	8.325	9.16	287.21	0.951 *	0.000	1.00	4.654	4.43	40.5	0.0	256.5
46.00		1.00	1.07	8.404	9.24	285.87	0.953 *	0.000	2.00	9.243	8.81	81.4	0.0	509.4
48.00		1.00	1.08	8.479	9.33	284.45	0.955 *	0.000	2.00	9.157	8.75	81.6	0.0	504.6
50.00		1.00	1.09	8.552	9.41	282.95	0.958 *	0.000	2.00	9.070	8.69	81.8	0.0	499.8
52.00		1.00	1.10	8.623	9.49	281.40	0.961 *	0.000	2.00	8.983	8.63	81.9	0.0	495.0
54.00		1.00	1.11	8.692	9.56	279.78	0.964 *	0.000	2.00	8.897	8.58	82.0	0.0	490.1
56.00		1.00	1.12	8.759	9.63	278.10	0.967 *	0.000	2.00	8.810	8.52	82.1	0.0	485.3
58.00		1.00	1.13	8.824	9.71	276.37	0.970 *	0.000	2.00	8.723	8.46	82.1	0.0	480.5
60.00		1.00	1.14	8.887	9.78	274.59	0.973 *	0.000	2.00	8.637	8.40	82.1	0.0	475.7
62.00		1.00	1.14	8.949	9.84	272.76	0.976 *	0.000	2.00	8.550	8.35	82.2	0.0	470.9
64.00		1.00	1.15	9.009	9.91	270.88	0.979 *	0.000	2.00	8.463	8.29	82.1	0.0	466.1
66.00		1.00	1.16	9.067	9.97	268.96	0.983 *	0.000	2.00	8.377	8.23	82.1	0.0	461.2
68.00		1.00	1.17	9.124	10.04	267.00	0.986 *	0.000	2.00	8.290	8.17	82.0	0.0	456.4
70.00		1.00	1.17	9.180	10.10	265.00	0.989 *	0.000	2.00	8.203	8.12	81.9	0.0	451.6
72.00		1.00	1.18	9.235	10.16	262.97	0.993 *	0.000	2.00	8.117	8.06	81.9	0.0	446.8
74.00		1.00	1.19	9.288	10.22	260.89	0.996 *	0.000	2.00	8.030	8.00	81.7	0.0	442.0
74.50	Bot - Section 3	1.00	1.19	9.301	10.23	260.37	0.999 *	0.000	0.50	1.994	1.99	20.4	0.0	109.7
76.00		1.00	1.19	9.340	10.27	258.79	1.000 *	0.000	1.50	6.046	6.05	62.1	0.0	613.1
78.00		1.00	1.20	9.392	10.33	256.65	1.004 *	0.000	2.00	7.986	8.01	82.8	0.0	809.6
80.00		1.00	1.21	9.442	10.39	254.48	1.007 *	0.000	2.00	7.899	7.96	82.6	0.0	800.7
81.00	Top - Section 2	1.00	1.21	9.467	10.41	253.38	1.010 *	0.000	1.00	3.917	3.96	41.2	0.0	397.0
82.00		1.00	1.21	9.491	10.44	256.55	1.006 *	0.000	1.00	3.895	3.92	40.9	0.0	184.0
84.00		1.00	1.22	9.539	10.49	254.33	1.009 *	0.000	2.00	7.726	7.80	81.8	0.0	364.9

Wind Loading - Shaft

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 61



190.00	1.00	1.45	11.328	12.46	117.63	0.950	0.000	2.00	3.304	3.14	39.1	0.0	77.9
192.00	1.00	1.45	11.353	12.49	114.63	0.950	0.000	2.00	3.217	3.06	38.2	0.0	75.8
194.00	1.00	1.46	11.378	12.52	111.62	0.950	0.000	2.00	3.131	2.97	37.2	0.0	73.8
195.00 Appurtenance(s)	1.00	1.46	11.390	12.53	110.11	0.950	0.000	1.00	1.533	1.46	18.2	0.0	36.1
196.00 Appurtenance(s)	1.00	1.46	11.402	12.54	108.60	0.950	0.000	1.00	1.511	1.44	18.0	0.0	35.6
								Totals:	196.00		6,800.0		38,078.0

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

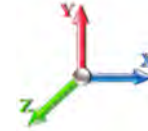
Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 62

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 29

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	196.00	6' Lightning rod	1	11.402	12.542	1.00	1.00	0.38	6.50	0.000	0.000	4.77	0.00	0.00
2	195.00	APXVSP18-C-A20	3	11.390	12.529	0.66	0.80	15.98	171.00	0.000	0.000	200.16	0.00	0.00
3	195.00	APXVTM14-C-120	3	11.390	12.529	0.63	0.80	12.02	168.00	0.000	0.000	150.61	0.00	0.00
4	195.00	1900MHz RRH	3	11.390	12.529	0.40	0.80	4.56	132.00	0.000	0.000	57.13	0.00	0.00
5	195.00	TD-RRH8x20-25	3	11.390	12.529	0.40	0.80	4.86	210.00	0.000	0.000	60.89	0.00	0.00
6	195.00	800MHz RRH	3	11.390	12.529	0.40	0.80	3.17	178.50	0.000	0.000	39.69	0.00	0.00
7	195.00	800MHz Filter	3	11.390	12.529	0.40	0.80	0.94	26.40	0.000	0.000	11.73	0.00	0.00
8	195.00	ACU-A20-N	4	11.390	12.529	0.40	0.80	0.22	4.00	0.000	0.000	2.81	0.00	0.00
9	195.00	Low Profile Platform	1	11.390	12.529	1.00	1.00	22.00	1500.00	0.000	0.000	275.64	0.00	0.00
10	167.00	(3) SFS-H-L (V-Braces)	1	11.024	12.127	1.00	1.00	6.70	230.00	0.000	0.000	81.25	0.00	0.00
11	167.00	HRK12 (Handrail Kit)	1	11.024	12.127	1.00	1.00	6.75	261.72	0.000	0.000	81.86	0.00	0.00
12	167.00	RFS	3	11.024	12.127	0.55	0.75	33.24	368.40	0.000	0.000	403.14	0.00	0.00
13	167.00	(3) VSR-TS-B	1	11.024	12.127	1.00	1.00	11.43	369.30	0.000	0.000	138.61	0.00	0.00
14	167.00	PRK-1245 (kicker kit)	1	11.024	12.127	1.00	1.00	9.50	464.91	0.000	0.000	115.20	0.00	0.00
15	167.00	KRY 112 144/1	3	11.024	12.127	0.38	0.75	0.46	33.00	0.000	0.000	5.59	0.00	0.00
16	167.00	Ericsson AIR6449 B41	3	11.024	12.127	0.53	0.75	9.03	309.00	0.000	0.000	109.45	0.00	0.00
17	167.00	Ericsson 4449 B71 + B85	3	11.024	12.127	0.38	0.75	2.22	219.60	0.000	0.000	26.88	0.00	0.00
18	167.00	Ericsson 4460 B25 + B66	3	11.024	12.127	0.38	0.75	2.41	312.00	0.000	0.000	29.19	0.00	0.00
19	167.00	Low Profile	1	11.024	12.127	1.00	1.00	22.00	1500.00	0.000	0.000	266.79	0.00	0.00
20	167.00	Commscope VV-65A-R1	3	11.024	12.127	0.55	0.75	9.75	71.43	0.000	0.000	118.24	0.00	0.00
21	150.00	Low Profile	1	10.778	11.856	1.00	1.00	22.00	1500.00	0.000	0.000	260.82	0.00	0.00
22	150.00	DC6-48-60-18-8F	2	10.778	11.856	0.38	0.75	1.10	63.60	0.000	0.000	13.07	0.00	0.00
23	150.00	LGP13519	6	10.778	11.856	0.38	0.75	0.77	31.80	0.000	0.000	9.07	0.00	0.00
24	150.00	LGP21401	6	10.778	11.856	0.38	0.75	2.90	84.60	0.000	0.000	34.41	0.00	0.00
25	150.00	Handrail Kit	1	10.778	11.856	1.00	1.00	6.75	261.72	0.000	0.000	80.03	0.00	0.00
26	150.00	800 10966	2	10.778	11.856	0.54	0.75	18.75	251.40	0.000	0.000	222.28	0.00	0.00
27	150.00	80010964	1	10.778	11.856	0.53	0.75	5.32	94.80	0.000	0.000	63.13	0.00	0.00
28	150.00	HPA65R-BU4A	3	10.778	11.856	0.64	0.75	9.49	86.10	0.000	0.000	112.46	0.00	0.00
29	150.00	7700.00	3	10.778	11.856	0.59	0.75	3.08	48.00	0.000	0.000	36.46	0.00	0.00
30	150.00	mount pipe	2	10.778	11.856	1.00	1.00	6.62	174.00	0.000	0.000	78.48	0.00	0.00
31	150.00	4449 B5/B12	3	10.778	11.856	0.38	0.75	2.22	213.00	0.000	0.000	26.28	0.00	0.00
32	150.00	B2 B66A 8843	3	10.778	11.856	0.38	0.75	1.84	210.00	0.000	0.000	21.87	0.00	0.00
33	140.00	Low Profile Platform	1	10.622	11.685	1.00	1.00	22.00	1500.00	0.000	0.000	257.06	0.00	0.00
34	140.00	JMA Wireless	6	10.622	11.685	0.65	0.75	38.64	360.00	0.000	0.000	451.51	0.00	0.00
35	140.00	Samsung MT6407-77A	3	10.646	11.711	0.52	0.75	7.39	238.20	0.000	1.500	86.51	0.00	129.76
36	140.00	Samsung	3	10.590	11.649	0.61	0.75	1.63	69.42	0.000	-2.000	19.04	0.00	-38.07
37	140.00	Samsung RF4440d 13a	3	10.622	11.685	0.38	0.75	4.66	210.99	0.000	0.000	54.42	0.00	0.00
38	140.00	Samsung RF4439d 25A	3	10.622	11.685	0.38	0.75	5.16	224.10	0.000	0.000	60.34	0.00	0.00
39	140.00	Raycap	1	10.622	11.685	0.75	0.75	3.04	32.00	0.000	0.000	35.58	0.00	0.00
40	140.00	HRK12 (Handrail Kit)	1	10.622	11.685	1.00	1.00	6.75	261.72	0.000	0.000	78.87	0.00	0.00
41	140.00	Mount Pipe	1	10.622	11.685	1.00	1.00	2.63	40.00	0.000	0.000	30.73	0.00	0.00
42	125.00	Commscope	1	10.372	11.409	1.00	1.00	37.59	1727.00	0.000	0.000	428.87	0.00	0.00
43	125.00	Raycap	1	10.372	11.409	0.38	0.75	0.75	21.90	0.000	0.000	8.60	0.00	0.00
44	125.00	Fujitsu TA08025-B604	3	10.372	11.409	0.38	0.75	2.21	191.70	0.000	0.000	25.16	0.00	0.00
45	125.00	Fujitsu TA08025-B605	3	10.372	11.409	0.38	0.75	2.21	225.00	0.000	0.000	25.16	0.00	0.00
46	125.00	JMA Wireless	3	10.372	11.409	0.55	0.75	20.80	193.50	0.000	0.000	237.26	0.00	0.00
47	30.00	GPS	1	7.680	8.448	1.00	1.00	1.00	10.00	0.000	0.000	8.45	0.00	0.00

Discrete Appurtenance Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 63

Totals: 14,860.31

4,945.54

Total Applied Force Summary

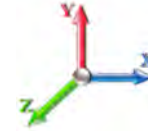
Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 64

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 29

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		76.40	744.96	0.00	0.00
4.00		75.79	739.80	0.00	0.00
6.00		75.19	734.64	0.00	0.00
8.00		74.59	729.48	0.00	0.00
10.00		73.99	724.32	0.00	0.00
12.00		73.39	719.16	0.00	0.00
14.00		72.78	714.00	0.00	0.00
16.00		73.07	708.84	0.00	0.00
18.00		74.28	703.68	0.00	0.00
20.00		75.31	698.51	0.00	0.00
22.00		76.18	693.35	0.00	0.00
24.00		76.93	688.19	0.00	0.00
26.00		77.56	683.03	0.00	0.00
28.00		78.10	677.87	0.00	0.00
30.00	(1) attachments	86.99	682.71	0.00	0.00
32.00		78.91	667.55	0.00	0.00
34.00		79.21	662.39	0.00	0.00
35.50		59.48	493.41	0.00	0.00
36.00		20.11	296.74	0.00	0.00
38.00		80.90	1180.74	0.00	0.00
40.00		81.04	1170.77	0.00	0.00
42.00		81.30	1160.79	0.00	0.00
43.00		40.66	576.65	0.00	0.00
44.00		40.52	303.98	0.00	0.00
46.00		81.41	604.35	0.00	0.00
48.00		81.61	599.53	0.00	0.00
50.00		81.77	594.72	0.00	0.00
52.00		81.90	589.90	0.00	0.00
54.00		82.00	585.08	0.00	0.00
56.00		82.08	580.27	0.00	0.00
58.00		82.12	575.45	0.00	0.00
60.00		82.15	570.63	0.00	0.00
62.00		82.15	565.82	0.00	0.00
64.00		82.13	561.00	0.00	0.00
66.00		82.09	556.18	0.00	0.00
68.00		82.03	551.37	0.00	0.00
70.00		81.95	546.55	0.00	0.00
72.00		81.85	541.73	0.00	0.00
74.00		81.73	536.92	0.00	0.00
74.50		20.37	133.48	0.00	0.00
76.00		62.14	684.27	0.00	0.00
78.00		82.80	904.54	0.00	0.00
80.00		82.65	895.59	0.00	0.00
81.00		41.21	444.44	0.00	0.00
82.00		40.93	231.45	0.00	0.00
84.00		81.82	459.81	0.00	0.00

Total Applied Force Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 65

86.00		81.62	455.68	0.00	0.00
88.00		81.41	451.55	0.00	0.00
90.00		81.18	447.42	0.00	0.00
92.00		80.94	443.30	0.00	0.00
94.00		80.69	439.17	0.00	0.00
96.00		80.42	435.04	0.00	0.00
98.00		80.15	430.91	0.00	0.00
100.00		79.86	426.78	0.00	0.00
102.00		79.57	422.65	0.00	0.00
104.00		79.26	418.52	0.00	0.00
106.00		78.94	414.40	0.00	0.00
108.00		78.62	410.27	0.00	0.00
110.00		78.28	406.14	0.00	0.00
112.00		77.93	402.01	0.00	0.00
114.00		77.58	397.88	0.00	0.00
116.00		77.22	393.75	0.00	0.00
118.00		76.85	389.62	0.00	0.00
118.75		28.69	145.04	0.00	0.00
120.00		48.55	394.32	0.00	0.00
122.00		77.43	624.77	0.00	0.00
124.00		77.05	617.20	0.00	0.00
125.00	(11) attachments	763.12	2525.26	0.00	0.00
126.00		33.62	164.30	0.00	0.00
128.00		66.98	326.02	0.00	0.00
130.00		66.53	322.58	0.00	0.00
132.00		66.08	319.14	0.00	0.00
134.00		65.62	315.69	0.00	0.00
136.00		65.16	312.25	0.00	0.00
138.00		64.69	308.81	0.00	0.00
140.00	(22) attachments	1138.27	3241.80	0.00	91.69
142.00		59.23	272.57	0.00	0.00
144.00		58.44	269.13	0.00	0.00
146.00		57.63	265.69	0.00	0.00
148.00		56.83	262.25	0.00	0.00
150.00	(33) attachments	1014.38	3277.83	0.00	0.00
152.00		55.19	225.27	0.00	0.00
154.00		54.36	221.83	0.00	0.00
154.75		20.15	82.30	0.00	0.00
156.00		33.79	206.47	0.00	0.00
158.00		53.41	325.89	0.00	0.00
159.00		26.37	160.88	0.00	0.00
160.00		26.16	70.92	0.00	0.00
162.00		51.71	140.29	0.00	0.00
164.00		50.85	138.22	0.00	0.00
166.00		49.98	136.16	0.00	0.00
167.00	(23) attachments	1400.85	4206.67	0.00	0.00
168.00		24.43	52.69	0.00	0.00
170.00		48.23	103.83	0.00	0.00
172.00		47.34	101.77	0.00	0.00
174.00		46.45	99.70	0.00	0.00
176.00		45.55	97.64	0.00	0.00
178.00		44.65	95.57	0.00	0.00
180.00		43.74	93.51	0.00	0.00
182.00		42.83	91.44	0.00	0.00
184.00		41.91	89.38	0.00	0.00
186.00		40.98	87.32	0.00	0.00
188.00		40.05	85.25	0.00	0.00

Total Applied Force Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 66

190.00	39.11	83.19	0.00	0.00
192.00	38.17	81.12	0.00	0.00
194.00	37.22	79.06	0.00	0.00
195.00 (23) attachments	816.89	2428.66	0.00	0.00
196.00 (1) attachments	22.77	42.10	0.00	0.00
Totals:	11,745.54	60,245.52	0.00	91.69

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

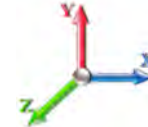


Page: 67

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 29

Dead Load Factor 1.00
Wind Load Factor 1.00



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" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	6.646	0.00	24.96
2.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.085	0.000	6.646	0.00	4.40
2.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.085	0.000	6.646	0.00	2.00
4.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	6.646	0.00	24.96
4.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.086	0.000	6.646	0.00	4.40
4.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.086	0.000	6.646	0.00	2.00
6.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	6.646	0.00	24.96
6.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.086	0.000	6.646	0.00	4.40
6.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.086	0.000	6.646	0.00	2.00
8.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	6.646	0.00	24.96
8.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.087	0.000	6.646	0.00	4.40
8.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.087	0.000	6.646	0.00	2.00
10.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	6.646	0.00	24.96
10.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.088	0.000	6.646	0.00	4.40
10.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.088	0.000	6.646	0.00	2.00
12.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	6.646	0.00	24.96
12.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.088	0.000	6.646	0.00	4.40
12.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.088	0.000	6.646	0.00	2.00
14.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	6.646	0.00	24.96
14.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.089	0.000	6.646	0.00	4.40
14.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.089	0.000	6.646	0.00	2.00
16.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	6.728	0.00	24.96
16.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.090	0.000	6.728	0.00	4.40
16.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.090	0.000	6.728	0.00	2.00
18.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	6.897	0.00	24.96
18.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.091	0.000	6.897	0.00	4.40
18.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.091	0.000	6.897	0.00	2.00
20.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	7.052	0.00	24.96
20.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.091	0.000	7.052	0.00	4.40
20.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.091	0.000	7.052	0.00	2.00
22.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	7.195	0.00	24.96
22.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.092	0.000	7.195	0.00	4.40
22.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.092	0.000	7.195	0.00	2.00
24.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	7.328	0.00	24.96
24.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.093	0.000	7.328	0.00	4.40
24.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.093	0.000	7.328	0.00	2.00
26.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	7.452	0.00	24.96
26.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.094	0.000	7.452	0.00	4.40
26.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.094	0.000	7.452	0.00	2.00
28.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	7.570	0.00	24.96
28.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.095	0.000	7.570	0.00	4.40
28.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.095	0.000	7.570	0.00	2.00
30.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	7.680	0.00	24.96
30.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.095	0.000	7.680	0.00	4.40
30.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.095	0.000	7.680	0.00	2.00
32.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.096	0.000	7.785	0.00	24.96
32.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.096	0.000	7.785	0.00	4.40

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

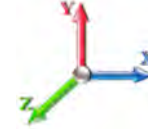


Page: 68

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 29

Dead Load Factor 1.00
Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.096	0.000	7.785	0.00	2.00
34.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	7.885	0.00	24.96
34.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.097	0.000	7.885	0.00	4.40
34.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.097	0.000	7.885	0.00	2.00
35.50	1 5/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.098	0.000	7.957	0.00	18.72
35.50	1 5/8" Hybrid	Yes	1.50	0.000	4.00	0.50	0.00	0.098	0.000	7.957	0.00	3.30
35.50	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.098	0.000	7.957	0.00	1.50
36.00	1 5/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.098	0.000	7.981	0.00	6.24
36.00	1 5/8" Hybrid	Yes	0.50	0.000	4.00	0.17	0.00	0.098	0.000	7.981	0.00	1.10
36.00	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.098	0.000	7.981	0.00	0.50
38.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	8.072	0.00	24.96
38.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.099	0.000	8.072	0.00	4.40
38.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.099	0.000	8.072	0.00	2.00
40.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	8.160	0.00	24.96
40.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.100	0.000	8.160	0.00	4.40
40.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.100	0.000	8.160	0.00	2.00
42.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	8.244	0.00	24.96
42.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.101	1.002	8.244	0.00	4.40
42.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.101	1.002	8.244	0.00	2.00
43.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.101	1.004	8.285	0.00	12.48
43.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.101	1.004	8.285	0.00	2.20
43.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.101	1.004	8.285	0.00	1.00
44.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	8.325	0.00	12.48
44.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.100	1.001	8.325	0.00	2.20
44.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.100	1.001	8.325	0.00	1.00
46.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.003	8.404	0.00	24.96
46.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.101	1.003	8.404	0.00	4.40
46.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.101	1.003	8.404	0.00	2.00
48.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.006	8.479	0.00	24.96
48.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.102	1.006	8.479	0.00	4.40
48.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.102	1.006	8.479	0.00	2.00
50.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	8.552	0.00	24.96
50.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.103	1.009	8.552	0.00	4.40
50.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.103	1.009	8.552	0.00	2.00
52.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.012	8.623	0.00	24.96
52.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.104	1.012	8.623	0.00	4.40
52.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.104	1.012	8.623	0.00	2.00
54.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.105	1.015	8.692	0.00	24.96
54.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.105	1.015	8.692	0.00	4.40
54.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.105	1.015	8.692	0.00	2.00
56.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	8.759	0.00	24.96
56.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.106	1.018	8.759	0.00	4.40
56.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.106	1.018	8.759	0.00	2.00
58.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.107	1.021	8.824	0.00	24.96
58.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.107	1.021	8.824	0.00	4.40
58.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.107	1.021	8.824	0.00	2.00
60.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.108	1.024	8.887	0.00	24.96

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

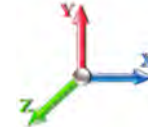


Page: 69

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 29

Dead Load Factor 1.00
Wind Load Factor 1.00



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)
60.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.108	1.024	8.887	0.00	4.40
60.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.108	1.024	8.887	0.00	2.00
62.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.027	8.949	0.00	24.96
62.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.109	1.027	8.949	0.00	4.40
62.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.109	1.027	8.949	0.00	2.00
64.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	9.009	0.00	24.96
64.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.110	1.031	9.009	0.00	4.40
64.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.110	1.031	9.009	0.00	2.00
66.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	9.067	0.00	24.96
66.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.111	1.034	9.067	0.00	4.40
66.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.111	1.034	9.067	0.00	2.00
68.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.038	9.124	0.00	24.96
68.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.113	1.038	9.124	0.00	4.40
68.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.113	1.038	9.124	0.00	2.00
70.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.041	9.180	0.00	24.96
70.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.114	1.041	9.180	0.00	4.40
70.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.114	1.041	9.180	0.00	2.00
72.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.045	9.235	0.00	24.96
72.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.115	1.045	9.235	0.00	4.40
72.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.115	1.045	9.235	0.00	2.00
74.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.049	9.288	0.00	24.96
74.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.116	1.049	9.288	0.00	4.40
74.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.116	1.049	9.288	0.00	2.00
74.50	1 5/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.117	1.051	9.301	0.00	6.24
74.50	1 5/8" Hybrid	Yes	0.50	0.000	4.00	0.17	0.00	0.117	1.051	9.301	0.00	1.10
74.50	1.6" Hybrid	Yes	0.50	0.000	1.60	0.07	0.00	0.117	1.051	9.301	0.00	0.50
76.00	1 5/8" Coax	Yes	1.50	0.000	0.00	0.00	0.00	0.118	1.053	9.340	0.00	18.72
76.00	1 5/8" Hybrid	Yes	1.50	0.000	4.00	0.50	0.00	0.118	1.053	9.340	0.00	3.30
76.00	1.6" Hybrid	Yes	1.50	0.000	1.60	0.20	0.00	0.118	1.053	9.340	0.00	1.50
78.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.056	9.392	0.00	24.96
78.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.119	1.056	9.392	0.00	4.40
78.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.119	1.056	9.392	0.00	2.00
80.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.120	1.060	9.442	0.00	24.96
80.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.120	1.060	9.442	0.00	4.40
80.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.120	1.060	9.442	0.00	2.00
81.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.121	1.063	9.467	0.00	12.48
81.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.121	1.063	9.467	0.00	2.20
81.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.121	1.063	9.467	0.00	1.00
82.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.120	1.059	9.491	0.00	12.48
82.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.120	1.059	9.491	0.00	2.20
82.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.120	1.059	9.491	0.00	1.00
84.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	9.539	0.00	24.96
84.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.121	1.062	9.539	0.00	4.40
84.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.121	1.062	9.539	0.00	2.00
86.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.067	9.587	0.00	24.96
86.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.122	1.067	9.587	0.00	4.40
86.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.122	1.067	9.587	0.00	2.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

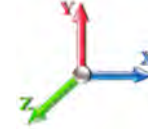


Page: 70

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 29

Dead Load Factor 1.00
Wind Load Factor 1.00



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)
88.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.124	1.071	9.633	0.00	24.96
88.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.124	1.071	9.633	0.00	4.40
88.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.124	1.071	9.633	0.00	2.00
90.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	9.679	0.00	24.96
90.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.125	1.075	9.679	0.00	4.40
90.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.125	1.075	9.679	0.00	2.00
92.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	9.724	0.00	24.96
92.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.126	1.079	9.724	0.00	4.40
92.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.126	1.079	9.724	0.00	2.00
94.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.084	9.768	0.00	24.96
94.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.128	1.084	9.768	0.00	4.40
94.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.128	1.084	9.768	0.00	2.00
96.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.130	1.089	9.811	0.00	24.96
96.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.130	1.089	9.811	0.00	4.40
96.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.130	1.089	9.811	0.00	2.00
98.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.093	9.854	0.00	24.96
98.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.131	1.093	9.854	0.00	4.40
98.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.131	1.093	9.854	0.00	2.00
100.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.133	1.098	9.896	0.00	24.96
100.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.133	1.098	9.896	0.00	4.40
100.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.133	1.098	9.896	0.00	2.00
102.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	9.937	0.00	24.96
102.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.134	1.103	9.937	0.00	4.40
102.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.134	1.103	9.937	0.00	2.00
104.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	9.978	0.00	24.96
104.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.136	1.108	9.978	0.00	4.40
104.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.136	1.108	9.978	0.00	2.00
106.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.138	1.113	10.018	0.00	24.96
106.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.138	1.113	10.018	0.00	4.40
106.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.138	1.113	10.018	0.00	2.00
108.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.119	10.058	0.00	24.96
108.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.140	1.119	10.058	0.00	4.40
108.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.140	1.119	10.058	0.00	2.00
110.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.141	1.124	10.097	0.00	24.96
110.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.141	1.124	10.097	0.00	4.40
110.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.141	1.124	10.097	0.00	2.00
112.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.143	1.130	10.135	0.00	24.96
112.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.143	1.130	10.135	0.00	4.40
112.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.143	1.130	10.135	0.00	2.00
114.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	10.173	0.00	24.96
114.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.145	1.136	10.173	0.00	4.40
114.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.145	1.136	10.173	0.00	2.00
116.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.147	1.142	10.210	0.00	24.96
116.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.147	1.142	10.210	0.00	4.40
116.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.147	1.142	10.210	0.00	2.00
118.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.148	10.247	0.00	24.96
118.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.149	1.148	10.247	0.00	4.40

Linear Appurtenance Segment Forces (Factored)

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 71

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 29

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)
118.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.149	1.148	10.247	0.00	2.00
118.75	1 5/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.151	1.152	10.261	0.00	9.36
118.75	1 5/8" Hybrid	Yes	0.75	0.000	4.00	0.25	0.00	0.151	1.152	10.261	0.00	1.65
118.75	1.6" Hybrid	Yes	0.75	0.000	1.60	0.10	0.00	0.151	1.152	10.261	0.00	0.75
120.00	1 5/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.152	1.155	10.283	0.00	15.60
120.00	1 5/8" Hybrid	Yes	1.25	0.000	4.00	0.42	0.00	0.152	1.155	10.283	0.00	2.75
120.00	1.6" Hybrid	Yes	1.25	0.000	1.60	0.17	0.00	0.152	1.155	10.283	0.00	1.25
122.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.154	1.161	10.319	0.00	24.96
122.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.154	1.161	10.319	0.00	4.40
122.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.154	1.161	10.319	0.00	2.00
124.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.156	1.167	10.355	0.00	24.96
124.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.156	1.167	10.355	0.00	4.40
124.00	1.6" Hybrid	Yes	2.00	0.000	1.60	0.27	0.00	0.156	1.167	10.355	0.00	2.00
125.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.155	1.164	10.372	0.00	12.48
125.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.155	1.164	10.372	0.00	2.20
125.00	1.6" Hybrid	Yes	1.00	0.000	1.60	0.13	0.00	0.155	1.164	10.372	0.00	1.00
126.00	1 5/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.111	1.034	10.389	0.00	12.48
126.00	1 5/8" Hybrid	Yes	1.00	0.000	4.00	0.33	0.00	0.111	1.034	10.389	0.00	2.20
128.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.037	10.424	0.00	24.96
128.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.112	1.037	10.424	0.00	4.40
130.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	10.458	0.00	24.96
130.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.114	1.042	10.458	0.00	4.40
132.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	10.492	0.00	24.96
132.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.116	1.048	10.492	0.00	4.40
134.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.053	10.525	0.00	24.96
134.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.118	1.053	10.525	0.00	4.40
136.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.058	10.558	0.00	24.96
136.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.119	1.058	10.558	0.00	4.40
138.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.064	10.590	0.00	24.96
138.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.121	1.064	10.590	0.00	4.40
140.00	1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	10.622	0.00	24.96
140.00	1 5/8" Hybrid	Yes	2.00	0.000	4.00	0.67	0.00	0.123	1.070	10.622	0.00	4.40
Totals:											0.0	2,180.2

Calculated Forces

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 74



192.00	-2.52	-0.96	0.00	-2.86	0.00	2.86	775.47	192.92	292.71	287.17	38.30	-1.843	0.000	0.013
194.00	-2.44	-0.92	0.00	-0.94	0.00	0.94	761.60	187.60	276.78	274.17	39.07	-1.845	0.000	0.007
195.00	-0.04	-0.02	0.00	-0.02	0.00	0.02	754.51	184.94	268.98	267.73	39.46	-1.845	0.000	0.000
196.00	0.00	-0.02	0.00	0.00	0.00	0.00	747.31	182.27	261.30	261.31	39.85	-1.845	0.000	0.000

Final Analysis Summary

Structure: CT00595-S-SBA	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 75

Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.0W 128 mph Wind	59.8	0.00	72.25	0.00	0.00	7357.96
0.9D + 1.0W 128 mph Wind	59.8	0.00	54.17	0.00	0.00	7263.32
1.2D + 1.0Di + 1.0Wi 50 mph Wind	12.3	0.00	98.94	0.00	0.00	1577.01
1.0D + 1.0W 60 mph Wind	11.8	0.00	60.24	0.00	0.00	1437.77

Max Stresses

Load Case	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Elev (ft)	Stress Ratio
1.2D + 1.0W 128 mph Wind	-72.25	-59.80	0.00	-7357.9	0.00	-7357.9	5795.46	1682.9	8909.80	7510.36	0.00	0.993
0.9D + 1.0W 128 mph Wind	-54.17	-59.79	0.00	-7263.3	0.00	-7263.3	5795.46	1682.9	8909.80	7510.36	0.00	0.978
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-98.94	-12.33	0.00	-1577.0	0.00	-1577.0	5795.46	1682.9	8909.80	7510.36	0.00	0.227
1.0D + 1.0W 60 mph Wind	-60.24	-11.75	0.00	-1437.7	0.00	-1437.7	5795.46	1682.9	8909.80	7510.36	0.00	0.202

Base Plate Summary

Structure: CT00595-S-SB	Code: EIA/TIA-222-H	1/14/2022
Site Name: Stonington East	Exposure: C	
Height: 196.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 76

Reactions	Base Plate	Anchor Bolts
Original Design	Yield (ksi): 60.00	Bolt Circle: 72.76
Moment (kip-ft): 5768.00	Width (in): 78.76	Number Bolts: 24.00
Axial (kip): 59.50	Style: Polygon	Bolt Type: 2.25" 18J
Shear (kip): 46.30	Polygon Sides: 12.00	Bolt Diameter (in): 2.25
Analysis (1.2D + 1.0W)	Clip Length (in): 0.00	Yield (ksi): 75.00
Moment (kip-ft): 7357.96	Effective Len (in): 13.07	Ultimate (ksi): 100.00
Axial (kip): 72.25	Moment (kip-in): 903.92	Arrangement: Radial
Shear (kip): 59.80	Allow Stress (ksi): 81.00	Cluster Dist (in): 0.00
	Applied Stress (ksi): 66.42	Start Angle (deg): 0.00
	Stress Ratio: 0.82	Compression
		Force (kip): 206.38
		Allowable (kip): 268.39
		Ratio: 0.77
		Tension
		Force (kip): 198.13
		Allowable (kip): 243.75
		Ratio: 0.81



Monopole Mat Foundation Design

Date

1/14/2022

Customer Name:	T-Mobile	TIA Standard:	EIA-222-H
Site Name:		Structure Height (Ft.):	196
Site Number:	CT00595-S-SBA	Engineer Name:	J. Tibbetts
Engr. Number:	121993	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations
Monopole
Analysis

Structure Type:

Analysis or Design?

Base Reactions (Factored):

Axial Load (Kips):	72.2	Shear Force (Kips):	59.8
Uplift Force (Kips):	0.0	Moment (Kips-ft):	7358.0

Allowable overstress %: 5.0%

Foundation Geometries:

Diameter of Pier (ft.):	8.0	Mods required -Yes/No ?:	No
Pier Height A. G. (ft.):	0.50	Depth of Base BG (ft.):	9.0
Length of Pad (ft.):	25	Thickness of Pad (ft.):	3.50
		Width of Pad (ft.):	25

Final Length of pad (ft)	25.0	Final width of pad (ft):	25.0
--------------------------	------	--------------------------	------

Material Properties and Rebar Info:

Concrete Strength (psi):	4000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	11	Tie / Stirrup Size #:	5	
Qty. of Vertical Rebars:	42	Tie Spacing (in):	12.0	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	11	
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):	32	Qty. of Rebar in Pad (W):	32
---------------------------	----	---------------------------	----

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	32	Qty. of Rebar in Pad (W):	32
---------------------------	----	---------------------------	----

Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

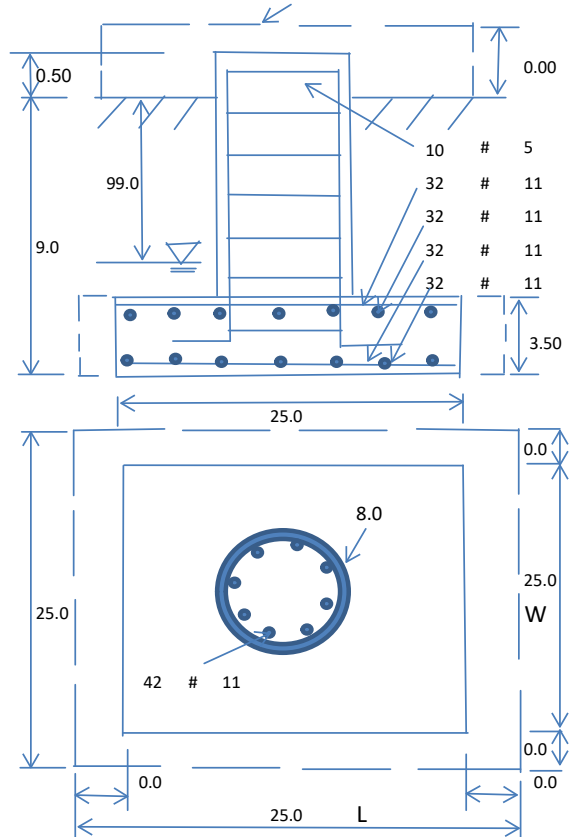
Soil Unit Weight (pcf):	110.0	Soil Buoyant Weight:	50.0	Pcf	Angle from Top of Pad:	30
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Bottm of Pad:	25
Ultimate Bearing Pressure (psf):	16000	Ultimate Skin Friction:	0	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	No		Reduction factor on the maximum soil bearing pressure:	1.00
Consider soil hor. resist. for OTM.:	No					

Foundation Analysis and Design:

Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75
Total Dry Soil Volume (cu. Ft.):	3161.04	Total Dry Soil Weight (Kips):	347.71
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	347.71	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	2489.09	Total Dry Concrete Weight (Kips):	373.36
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	373.36	Total Vertical Load on Base (Kips):	793.28

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	6361	<	Allowable Factored Soil Bearing (psf):	12000	0.53	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	9014.6	>	Design Factored Momont (kips-ft):	7926	0.88	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.14					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):	1.56	Tie / Stirrup Area (sq. in./each):	0.31		
Calculated Moment Capacity (Mn,Kips-Ft):	12376.5	> Design Factored Moment (Mu, Kips-F	7716.8	0.62	OK!
Calculated Shear Capacity (Kips):	924.8	> Design Factored Shear (Kips):	59.8	0.06	OK!
Calculated Tension Capacity (Tn, Kips):	3538.1	> Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	12681.4	> Design Factored Axial Load (Pu Kips):	72.2	0.01	OK!
Moment & Axial Strength Combination:	0.62	OK! Check Tie Spacing (Design/Required):	1		OK!
Pier Reinforcement Ratio:	0.009	Reinforcement Ratio is satisfied per ACI			

(2).Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):	1090.4	> One-Way Factored Shear (L-D. Kips):	436.5	0.40	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	1090.4	> One-Way Factored Shear (W-D., Kips)	436.5	0.40	OK!
One-Way Design Shear Capacity (Corner-Corner, Kips):	914.6	> One-Way Factored Shear (C-C, Kips):	429.9	0.47	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0043	OK! Lower Steel Pad Reinf. Ratio (W-Direc	0.0043		
Lower Steel Pad Moment Capacity (L-Direction, Kips-ft):	8276.7	> Moment at Bottom (L-Dir. K-Ft):	2263.1	0.27	OK!
Lower Steel Pad Moment Capacity (W-Direction, Kips-ft):	8276.7	> Moment at Bottom (W-Dir. K-Ft):	2263.1	0.27	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	11568.6	> Moment at Bottom (C-C Dir. K-Ft):	3200.5	0.28	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0043	OK! Upper Steel Reinf. Ratio (W-Dir.):	0.0043		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	8276.7	> Moment at the top (L-Dir K-Ft):	1076.8	0.13	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	8276.7	> Moment at the top (W-Dir K-Ft):	1076.8	0.13	OK!
Upper Steel Pad Moment Capacity (Corner-Corner, K-ft):	11568.6	> Moment at the top (C-C Dir. K-Ft):	1016.9	0.09	OK!

(3).Check Punching Shear Capacity due to Moment in the Pier:

Moment transferred by punching shear:	2943.2	k-ft.	Max. factored shear stress $v_{u,CD}$:	5.8	Psi
Max. factored shear stress $v_{u,AB}$:	12.7	Psi	Factored shear Strength ϕv_n :	189.7	Psi
Max. factored shear stress v_u :	12.7	Psi	Check Usage of Punching Shear Capacity:	0.07	OK!

(4).Check Bending Capacity of the Pad Within the Effective Slab Width:

Overturning moment to be transferred by flexure:	2207.4	k-ft.	Effective Width for resisting OT moment:	18.5	ft.
Calculated number of Rebar in Effective width:	24		Actual number of Rebar in Effective width:	13	
Steel Pad Moment Capacity (L-Direc. Kips-ft):	3422.8	k-ft.	Check Usage of the Flexure Capacity:	0.64	OK!

EXHIBIT 8

Mount Analysis



Tower Engineering Solutions

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

Antenna Mount Analysis Report

Existing 196-Ft Monopole Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT00595-S-SBA / Stonington East

Customer Site Name: Stonington East

Carrier Name: T-Mobile (App#: 176588-2)

Carrier Site ID / Name: CT11343A / Stonington East

Site Location: 86 Voluntown Road

Stonington, Connecticut

New London County

Latitude: 41.405539

Longitude: -71.845247

Analysis Result:

Max Structural Usage: 69.8 % [Pass]

Report Prepared By: Sandesh Khawas Bhujel



Introduction

The purpose of this report is to summarize the analysis results on the (1) Low profile platform w/handrails & reinforcement kit at 167.00' elevation to support the proposed antenna configuration. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Mount Drawings	Mount Mapping by ETS, dated 12/16/2021
Antenna Loading	SBA Application #: 176588, v2, dated 1/4/2022

Analysis Criteria

Basic Wind Speed Used in the Analysis: $V_{ULT} = 136$ mph (3-Sec. Gust) / Equivalent to
 $V_{ASD} = 105$ mph (3-Sec. Gust)

Basic Wind Speed with Ice: 50 mph (3-Sec. Gust) with 1" radial ice concurrent

Operational Wind Speed: 60 mph +0" Radial ice
Standard/Codes: ANSI/TIA/EIA 222-G / 2015 IBC

Exposure Category: C

Structure Class: II

Topographic Category: 1

Crest Height (Ft): 0

The site is a Risk Category II structure per IBC Table 1604.5. This site does not support emergency communication equipment for first responders such as fire departments, police, hospitals, ambulance services or any of the facilities listed for Risk Categories III and IV. The scope of work detailed in this structural analysis does not include items that are a part of emergency service as the 911 or essential facility service of an emergency response system.

Mount Information

(1) Low profile platform w/handrails & reinforcement kit at 167.00' elevation

Final Antenna Configuration

3	Commscope VV-65A-R1
3	RFS APXVAALL24-43-U-NA20
3	Ericsson AIR6449 B41
3	Ericsson KRY 112 144/1
3	Ericsson 4449 B71 + B85
3	Ericsson 4460 B25 + B66

In addition to the proposed equipment loading, a 500 lb serviceability load was also considered in this analysis in accordance with TIA requirements.

Analysis Results

Our calculations have determined that under design wind load the existing mounts will be structurally adequate to support the proposed antenna configuration. The maximum structural usage is 69.8%, which occurs in the mount pipe. The proposed equipment must be installed as stipulated in the Final Antenna Configuration section of this report. The analysis results are void if the proposed equipment is not installed in accordance with this report.

Attachments

1. Mount Photos
2. Antenna Placement Diagram
3. Mount Mapping Information
4. Analysis Calculations

Standard Conditions

1. The loading configuration as analyzed in this report is as provided from the customer. Any deviation from this design shall be communicated to TES to verify deviation will not adversely impact the analysis.
2. The analysis is based on the presumption that the antenna mount 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. The mount analysis is not a condition assessment of the mount.
4. The mount analysis was performed in accordance with the loading provided, and if applicable the modification required to support the additional loading.
5. If the mount is modified, installation must adhere to the configuration communicated in the modification drawings.
6. The modification drawings are not intended to convey means or methods. These are the responsibility of the installing contractor.
7. Rigging plan review is available if the contractor requires for a construction class IV or other if required. Review fee would apply.
8. The mount modification package was created based upon information provided for the mount loading. The underlying tower is assumed to provide support and sufficient rigidity to support the mount loads as a tower analysis was not part of the mount analysis.
9. TES is not responsible for modifications to climbing facilities unless communicated to TES in writing.



Sector: **A**

1/5/2022

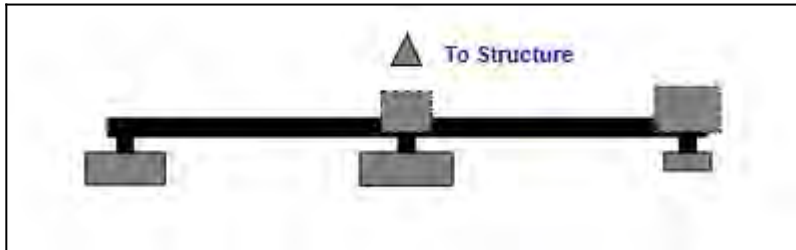
Structure Type: Monopole

Mount Elev: 167.00

Page: 1

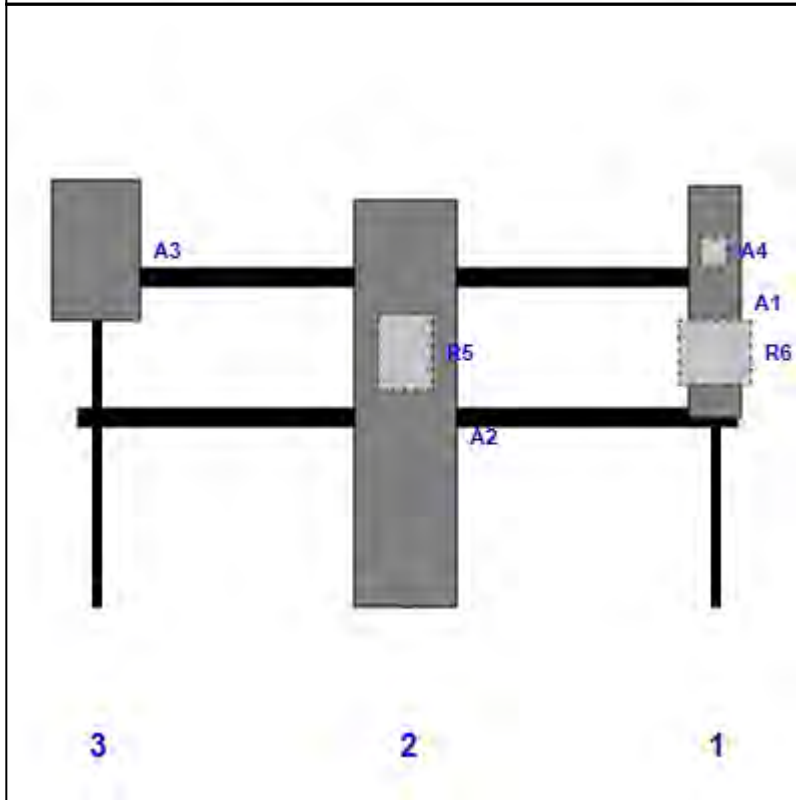


Plan View



Front View

Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A1	VV-65A-R1	54.72	12.08	151.00	1	a	Front	24.00			
A4	KRY 112 144/1	6.90	6.10	151.00	1	a	Behind	12.00			
R6	4460 B25 + B66	15.10	17.00	151.00	1	a	Behind	36.00			
A2	APXVAALL24-43-U-NA20	95.90	24.00	78.00	2	a	Front	48.00			
R5	4449 B71 + B85	17.90	13.10	78.00	2	a	Behind	36.00			
A3	AIR6449 B41	33.10	20.50	5.00	3	a	Front	12.00			

Structure: CT00595-S-SBA - Stonington East

Sector: **B**

1/5/2022

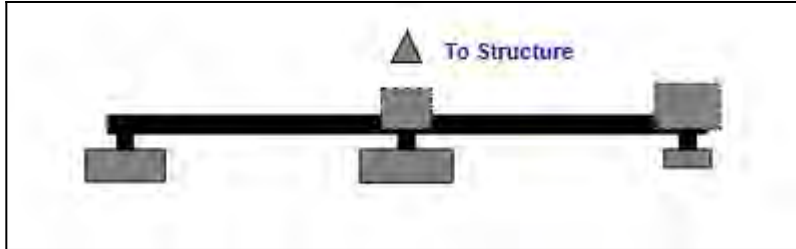
Structure Type: Monopole

Mount Elev: 167.00

Page: 2

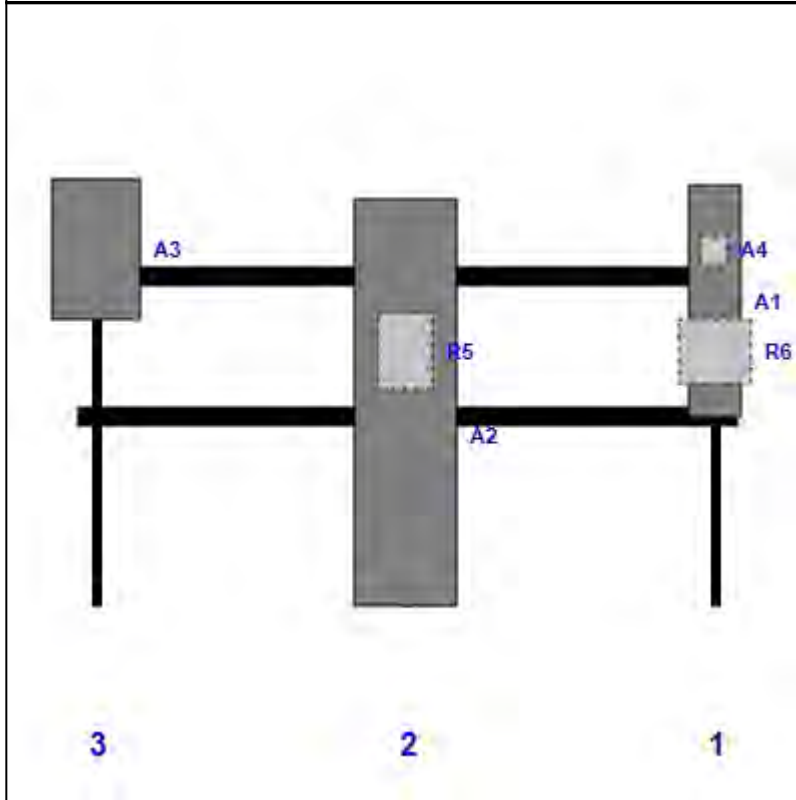


Plan View



Front View

Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A1	VV-65A-R1	54.72	12.08	151.00	1	a	Front	24.00			
A4	KRY 112 144/1	6.90	6.10	151.00	1	a	Behind	12.00			
R6	4460 B25 + B66	15.10	17.00	151.00	1	a	Behind	36.00			
A2	APXVAALL24-43-U-NA20	95.90	24.00	78.00	2	a	Front	48.00			
R5	4449 B71 + B85	17.90	13.10	78.00	2	a	Behind	36.00			
A3	AIR6449 B41	33.10	20.50	5.00	3	a	Front	12.00			

Sector: C

1/5/2022

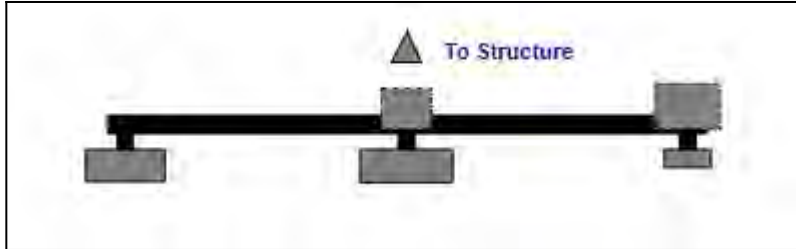
Structure Type: Monopole

Mount Elev: 167.00

Page: 3

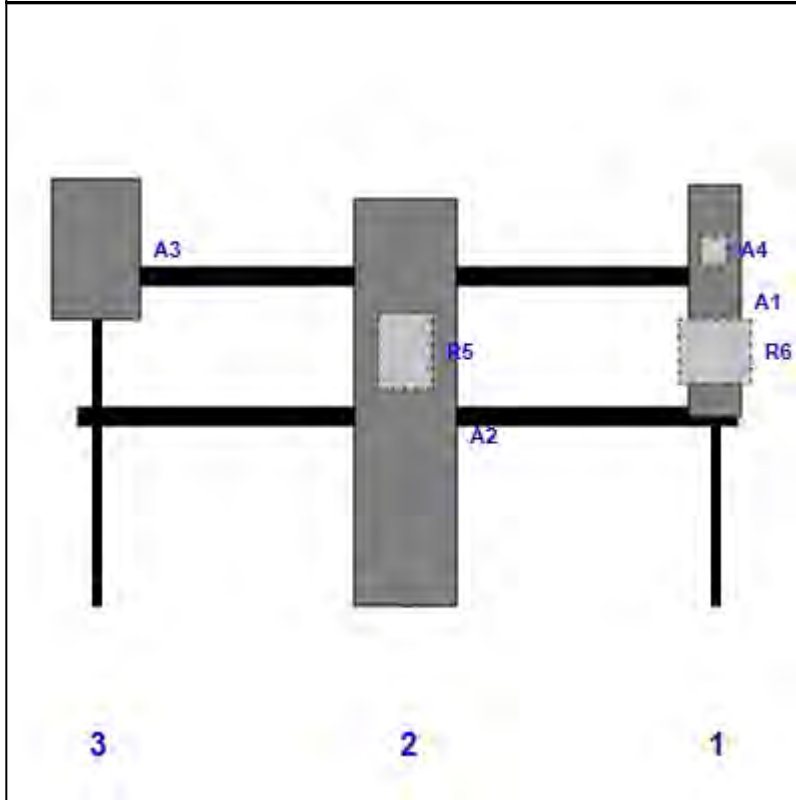


Plan View



Front View

Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A1	VV-65A-R1	54.72	12.08	151.00	1	a	Front	24.00			
A4	KRY 112 144/1	6.90	6.10	151.00	1	a	Behind	12.00			
R6	4460 B25 + B66	15.10	17.00	151.00	1	a	Behind	36.00			
A2	APXVAALL24-43-U-NA20	95.90	24.00	78.00	2	a	Front	48.00			
R5	4449 B71 + B85	17.90	13.10	78.00	2	a	Behind	36.00			
A3	AIR6449 B41	33.10	20.50	5.00	3	a	Front	12.00			

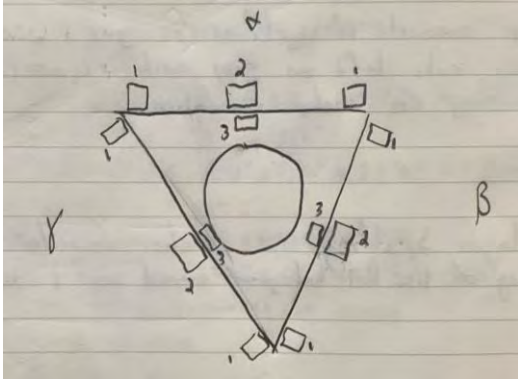


Antenna Mount Mapping Form (PATENT PENDING)

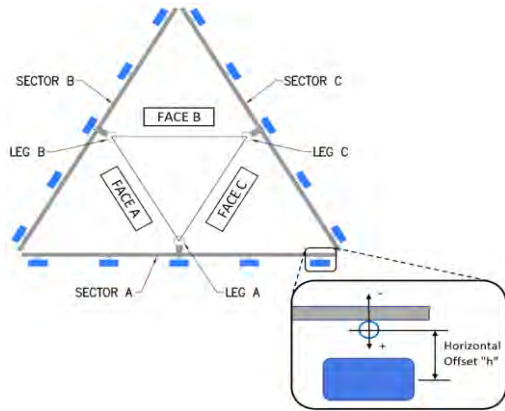
FCC #
1051828

Tower Owner:	SBA	Mapping Date:	12/16/2021
Site Name:	Stonington East	Tower Type:	Monopole
Site Number or ID:	CT00595-S	Tower Height (Ft.):	198
Mapping Contractor:	ETS	Mount Elevation (Ft.):	165

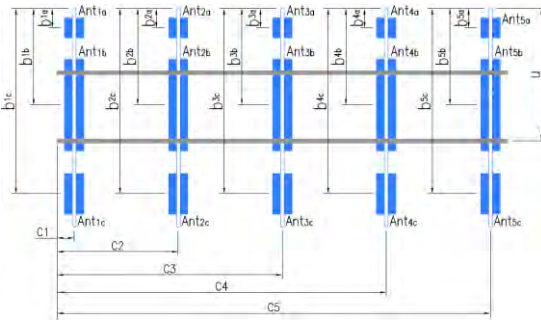
This antenna mapping form is the property of TES and under PATENT PENDING. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.



Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2.4"Øx0.153"x66"	38.00	3.50	C1	2.4"Øx0.153"x66"	38.00	3.50
A2	2.4"Øx0.153"x96.5"	51.25	75.50	C2	2.4"Øx0.153"x96.5"	51.25	75.50
A3	2.4"Øx0.153"x66"	38.00	146.50	C3	2.4"Øx0.153"x66"	38.00	146.50
A4				C4			
A5				C5			
A6				C6			
B1	2.4"Øx0.153"x66"	38.00	3.50	D1			
B2	2.4"Øx0.153"x96.5"	51.25	75.50	D2			
B3	2.4"Øx0.153"x66"	38.00	146.50	D3			
B4				D4			
B5				D5			
B6				D6			
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :							0.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :							
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :							
Please enter additional information or comments below.							
Coax: (9) FH 1-5/8, (3) Hybrid 1-1/2", (1) Hybrid 1 1/4"							
Tower Face Width at Mount Elev. (ft.):							
Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):						25.19	
For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.							



		Enter antenna model. If not labeled, enter "Unknown".					Mounting Locations [Units are inches and degrees]			Photos of antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ,..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Ant _{1a}	Unknown Panel	11.50	7.25	55.25		166.5	20.00	15.00	0.00	350
Ant _{1b}										
Ant _{1c}										
Ant _{2a}	Ericsson	13.25	11.00	16.00		167	27.25	-12.00		351
Ant _{2b}	Unknown Panel	24.00	8.75	96.00		166.5	33.25	12.00	0.00	351
Ant _{2c}										
Ant _{3a}	Unknown Panel	11.50	7.25	55.25		166.5	20.00	15.00	0.00	353
Ant _{3b}										
Ant _{3c}										
Ant _{4a}										
Ant _{4b}										
Ant _{4c}										
Ant _{5a}										
Ant _{5b}										
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										



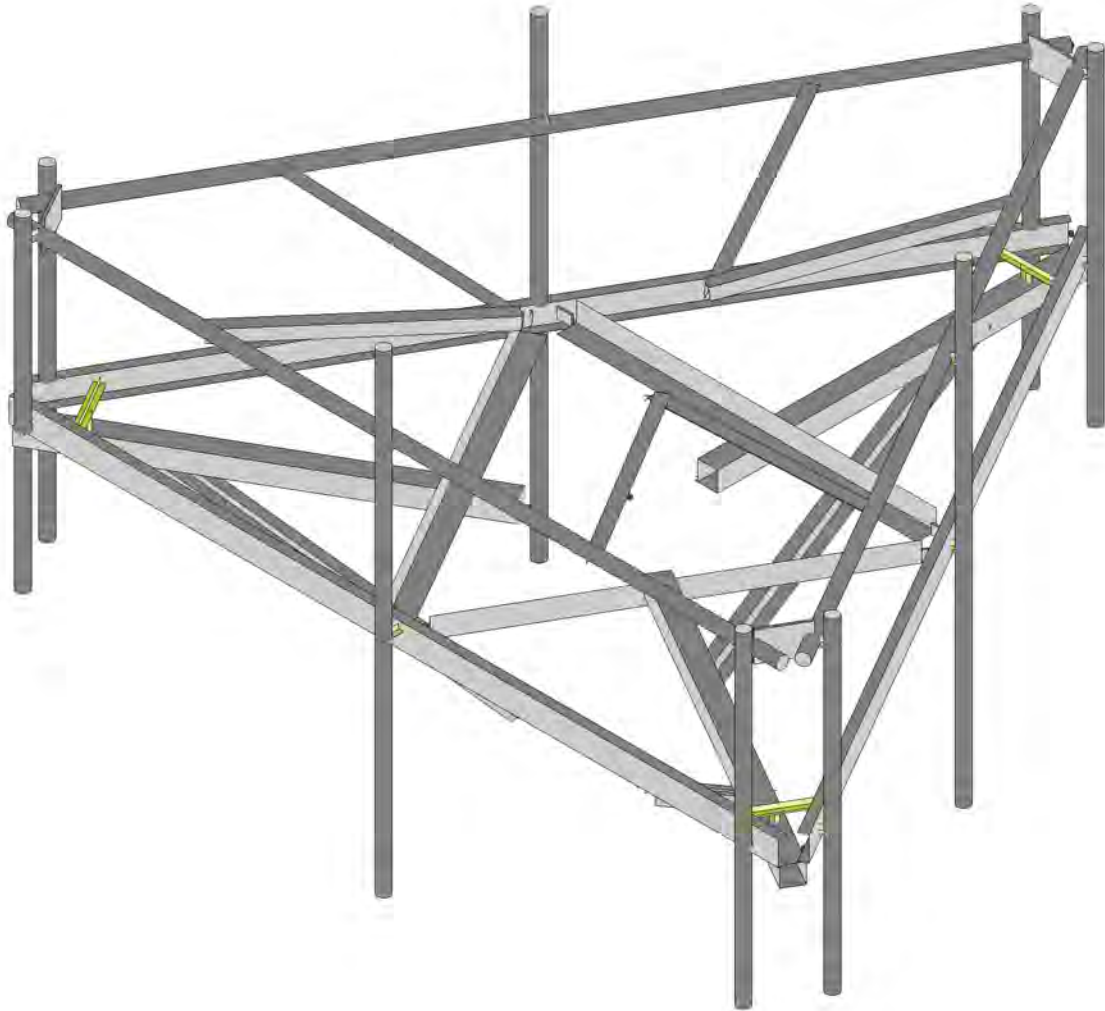
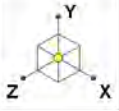
Antenna Layout (Looking Out From Tower)

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #
1		
2		
3		
4		
5		
6		
7		
8		

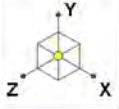
Observed Obstructions to Tower Lighting System			
If the tower lighting system is being obstructed by the carrier's equipment (for example: a light nested by the antennas), please provide photos and fill in the information below.			Photo #
Description of Obstruction:			
Type of Light:	Photo #	Additional Comments:	
Lighting Technology:	Photo #		
Elevation (AGL) at base of light (Ft.):	Photo #		
Is a service loop available?	Photo #		
Is beacon installed on an extension?	Photo #		

Mapping Notes
<ol style="list-style-type: none"> 1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.) 2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness. 3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab. 4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type. 5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required. 6. Please measure and report the size and length of all existing antenna mounting pipes. 7. Please measure and report the antenna information for all sectors. 8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.

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

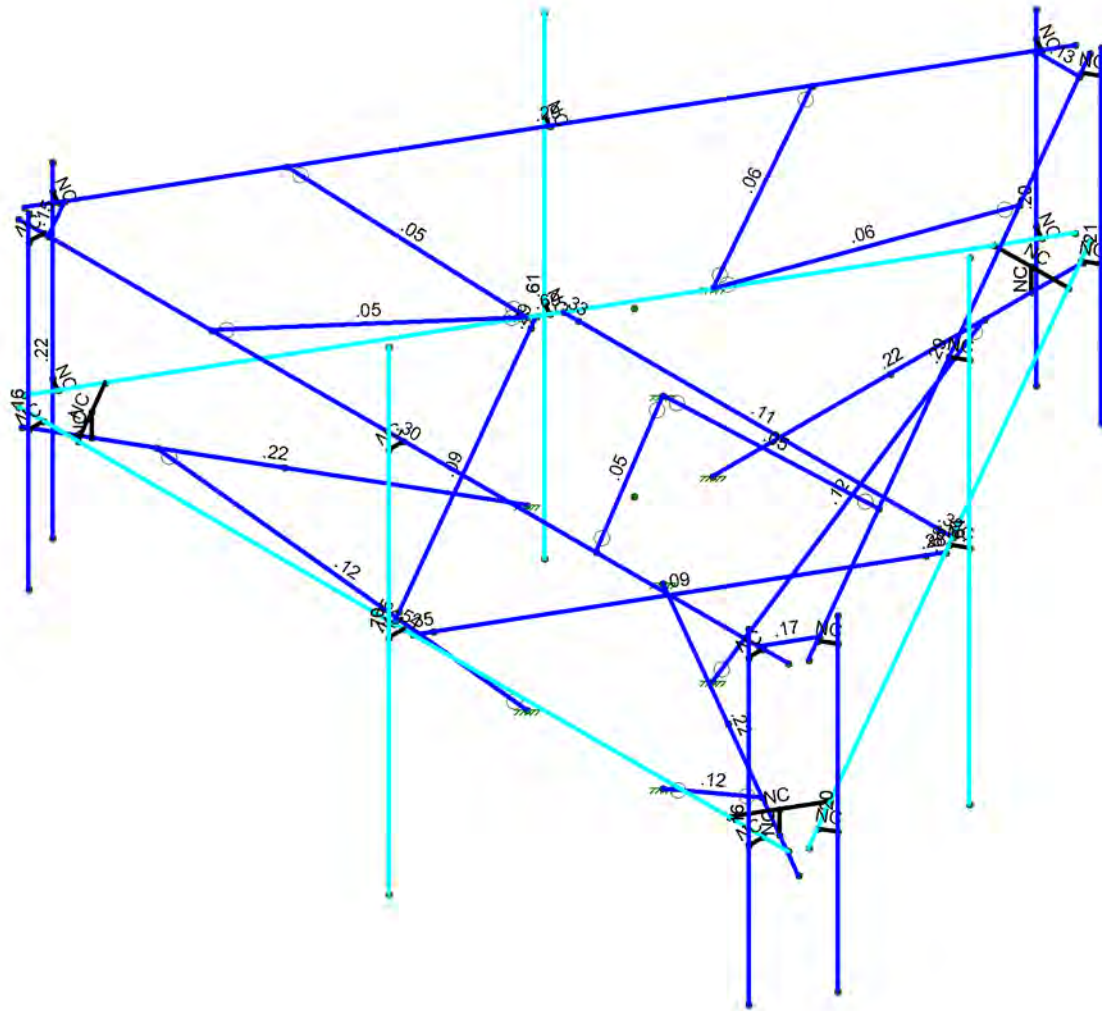


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TES Project No. 119406		CT00595-S-SBA_119406_G_RISA_...



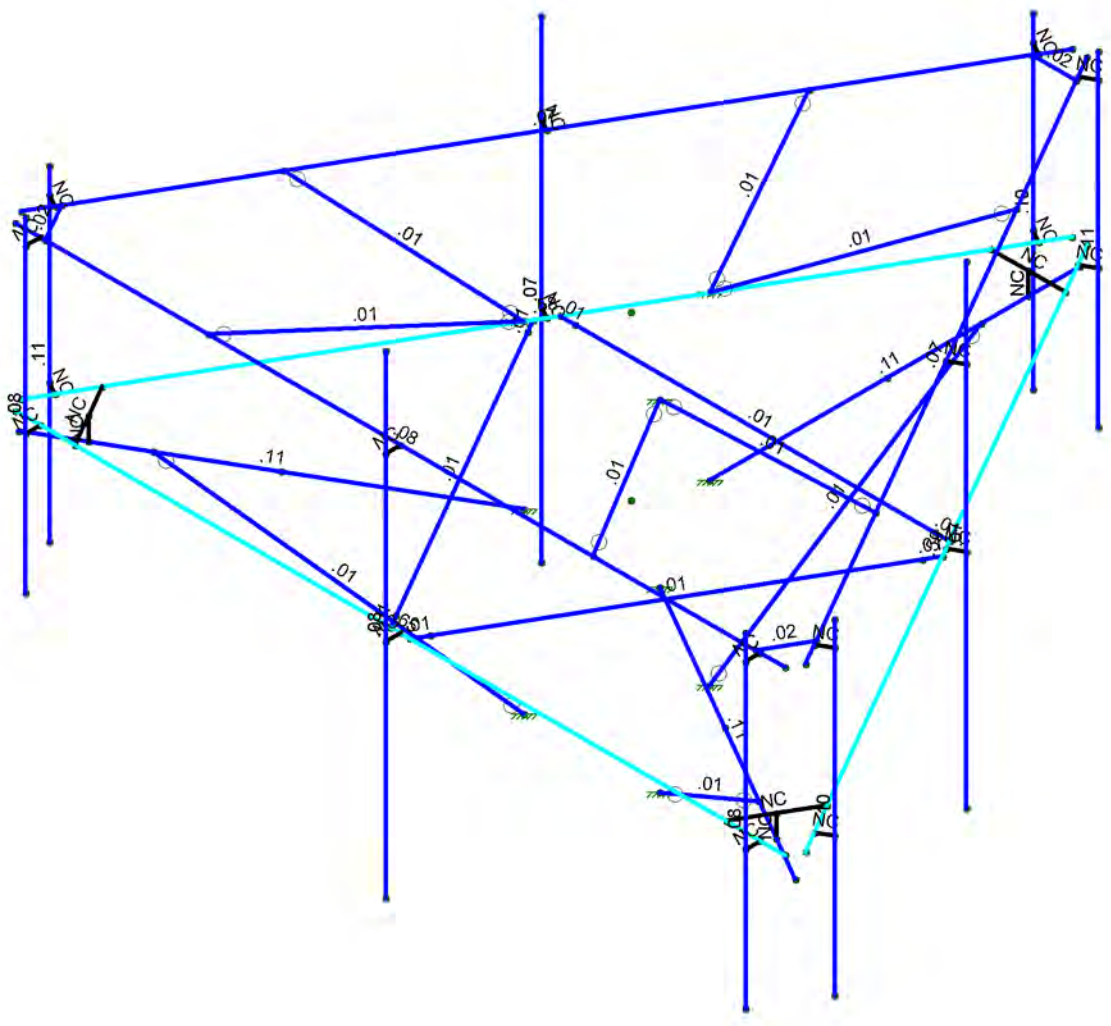
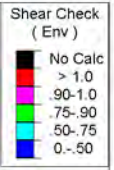
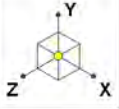
Code Check (Env)

Black	No Calc
Red	> 1.0
Magenta	90-1.0
Green	.75-90
Cyan	.50-.75
Blue	0-.50



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.6W (Front)

Tower Engineering Solutio...	CT00595-S-SBA_MT_LO_Loads Only_G	SK - 2
		Jan 5, 2022 at 1:29 PM
TES Project No. 119406		CT00595-S-SBA_119406_G_RISA_...



Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.6W (Front)

Tower Engineering Solutio...		SK - 3
	CT00595-S-SBA_MT_LO_Loads Only_G	Jan 5, 2022 at 1:30 PM
TES Project No. 119406		CT00595-S-SBA_119406_G_RISA_...



6 UjW@ UX'7 UjYg

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Antenna D	None					27		
2	Antenna Di	None					27		
3	Antenna W Front	None					27		
4	Antenna Wi Front	None					27		
5	Antenna W Side	None					27		
6	Antenna Wi Side	None					27		
7	Service Lm1	None					1		
8	Service Lm2	None					1		
9	Structure D	None		-1				3	
10	Structure Di	None						39	3
11	Structure W Front	None						39	
12	Structure Wi Front	None						39	
13	Structure W Side	None						39	
14	Structure Wi Side	None						39	
15	BLC 9 Transient Area..	None						64	
16	BLC 10 Transient Are..	None						64	

@ UX'7 ca VjbUjc bg

	Description	Sol.	PD.	SR.	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	
1	1.2D+1.6...	Yes	Y		1	1.2	9	1.2	3	1.6	11	1.6									
2	1.2D+1.6...	Yes	Y		1	1.2	9	1.2	3	-1.6	11	-1.6									
3	1.2D+1.6...	Yes	Y		1	1.2	9	1.2	5	1.6	13	1.6									
4	1.2D+1.6...	Yes	Y		1	1.2	9	1.2	5	-1.6	13	-1.6									
5	1.2D+1.0...	Yes	Y		1	1.2	9	1.2	2	1	10	1	4	1	12	1					
6	1.2D+1.0...	Yes	Y		1	1.2	9	1.2	2	1	10	1	4	-1	12	-1					
7	1.2D+1.0...	Yes	Y		1	1.2	9	1.2	2	1	10	1	6	1	14	1					
8	1.2D+1.0...	Yes	Y		1	1.2	9	1.2	2	1	10	1	6	-1	14	-1					
9	1.2D+1.5L...	Yes	Y		1	1.2	9	1.2	7	1.5	3	.16	11	.16							
10	1.2D+1.5L...	Yes	Y		1	1.2	9	1.2	8	1.5	3	.16	11	.16							
11	1.4D	Yes	Y		1	1.4	9	1.4													

>cjbh7 ccfXjbUjYg'UbX'HYa dYfUi fYg

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-6.5	0	3.897	0	
2	N2	6.5	0	3.897	0	
3	N3	6.624901	0	3.680665	0	
4	N4	0.124901	0	-7.577665	0	
5	N5	-0.124901	0	-7.577665	0	
6	N6	-6.624901	0	3.680665	0	
7	N7	0	0	0	0	
8	N14	-5.81245	0	3.35582	0	
9	N17A	-5.81245	-.375	3.35582	0	
10	N18A	-6.56245	-.375	3.788833	0	
11	N19	-1.149792	-.375	0.663833	0	
12	N21	-.165	0	3.897	0	



>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
13	N22	.165	0	3.897	0	
14	N23	3.457401	0	-1.805606	0	
15	N24	3.292401	0	-2.091394	0	
16	N25	-3.292401	0	-2.091394	0	
17	N26A	-3.457401	0	-1.805606	0	
18	N27A	-3.3324	0	-1.589098	0	
19	N28	-.29	0	3.680494	0	
20	N78	5.81245	0	3.35582	0	
21	N79	5.81245	-.375	3.35582	0	
22	N80	6.56245	-.375	3.788833	0	
23	N81	1.149792	-.375	0.663833	0	
24	N84	3.374901	0	-1.9485	0	
25	N91	0.290001	0	3.680492	0	
26	N92	3.332401	0	-1.589099	0	
27	N142	-2e-14	0	-6.71164	0	
28	N143	-2e-14	-.375	-6.71164	0	
29	N144	-3e-14	-.375	-7.577665	0	
30	N145	0	-.375	-1.327665	0	
31	N155	3.042399	0	-2.091394	0	
32	N156	-3.042401	0	-2.091394	0	
33	N59	-5.5	0	3.897	0	
34	N60	-6.124901	0	2.81464	0	
35	N63	6.124901	0	2.81464	0	
36	N64	5.5	0	3.897	0	
37	N67	-0.624901	0	-6.71164	0	
38	N68	0.624901	0	-6.71164	0	
39	N154	0	-.375	-4.327665	0	
40	N155A	0	-3.375	-1.327665	0	
41	N156A	-3.747868	-.375	2.163833	0	
42	N157	-1.149792	-3.375	0.663833	0	
43	N158	3.747868	-.375	2.163833	0	
44	N159	1.149792	-3.375	0.663833	0	
45	N57	-6.5	2.75	3.897	0	
46	N58	6.5	2.75	3.897	0	
47	N59A	6.624901	2.75	3.680665	0	
48	N60A	0.124901	2.75	-7.577665	0	
49	N61	-0.124901	2.75	-7.577665	0	
50	N62	-6.624901	2.75	3.680665	0	
51	N63A	-6	2.75	3.897	0	
52	N64A	6	2.75	3.897	0	
53	N65	6.374901	2.75	3.247652	0	
54	N66	0.374901	2.75	-7.144652	0	
55	N67A	-0.374901	2.75	-7.144652	0	
56	N68A	-6.374901	2.75	3.247652	0	
57	N72	-3.25	2.75	3.897	0	
58	N73	0	2.75	3.897	0	
59	N74	3.25	2.75	3.897	0	
60	N75	4.999901	2.75	0.866083	0	
61	N76	3.374901	2.75	-1.9485	0	
62	N77	1.749901	2.75	-4.763083	0	
63	N78A	-1.749901	2.75	-4.763083	0	
64	N79A	-3.374901	2.75	-1.9485	0	



>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
65	N80A	-4.999901	2.75	0.866083	0	
66	N81A	-5.119075	-.375	2.955499	0	
67	N82A	5.119075	-.375	2.955499	0	
68	N83A	-2e-14	-.375	-5.910998	0	
69	N81B	0	2.75	0	0	
70	N82B	-1.149792	2.375	0.663833	0	
71	N83B	1.149792	2.375	0.663833	0	
72	N84A	0	2.375	-1.327665	0	
73	N73A	-6.083333	2.75	3.897	0	
74	N74A	6.083333	2.75	3.897	0	
75	N75A	0	0	3.897	0	
76	N76A	-6.083333	0	3.897	0	
77	N77A	6.083333	0	3.897	0	
78	N78B	0	2.75	4.147	0	
79	N79B	-6.083333	2.75	4.147	0	
80	N80B	6.083333	2.75	4.147	0	
81	N81C	0	0	4.147	0	
82	N82	-6.083333	0	4.147	0	
83	N83	6.083333	0	4.147	0	
84	N84B	-6.083333	3.166667	4.147	0	
85	N85	6.083333	3.166667	4.147	0	
86	N86	-6.083333	-2.333333	4.147	0	
87	N87	6.083333	-2.333333	4.147	0	
88	N88	0	4.25	4.147	0	
89	N89	0	-3.75	4.147	0	
90	N91A	6.416568	2.75	3.319821	0	
91	N92A	0.333234	2.75	-7.216821	0	
92	N94	6.416568	0	3.319821	0	
93	N95	0.333234	0	-7.216821	0	
94	N96	3.591407	2.75	-2.0735	0	
95	N97	6.633074	2.75	3.194821	0	
96	N98	0.549741	2.75	-7.341821	0	
97	N99	3.591407	0	-2.0735	0	
98	N100	6.633074	0	3.194821	0	
99	N101	0.549741	0	-7.341821	0	
100	N102	6.633074	3.166667	3.194821	0	
101	N103	0.549741	3.166667	-7.341821	0	
102	N104	6.633074	-2.333333	3.194821	0	
103	N105	0.549741	-2.333333	-7.341821	0	
104	N106	3.591407	4.25	-2.0735	0	
105	N107	3.591407	-3.75	-2.0735	0	
106	N109	-0.333234	2.75	-7.216821	0	
107	N110	-6.416568	2.75	3.319821	0	
108	N111	-3.374901	0	-1.9485	0	
109	N112	-0.333234	0	-7.216821	0	
110	N113	-6.416568	0	3.319821	0	
111	N114	-3.591407	2.75	-2.0735	0	
112	N115	-0.549741	2.75	-7.341821	0	
113	N116	-6.633074	2.75	3.194821	0	
114	N117	-3.591407	0	-2.0735	0	
115	N118	-0.549741	0	-7.341821	0	
116	N119	-6.633074	0	3.194821	0	



>c]bh7 ccfX]bUHyg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
117	N120	-0.549741	3.166667	-7.341821	0	
118	N121	-6.633074	3.166667	3.194821	0	
119	N122	-0.549741	-2.333333	-7.341821	0	
120	N123	-6.633074	-2.333333	3.194821	0	
121	N124	-3.591407	4.25	-2.0735	0	
122	N125	-3.591407	-3.75	-2.0735	0	

<chFc`YX'GhYY'GYW]cb'GYlg

	Label	Shape	Type	Design List	Material	Design Rul...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Front Face Horizontal	C5X6.7	Beam	Channel	A36 Gr.36	Typical	1.97	.47	7.48	.055
2	Standoff Arm	HSS4X4X3	Beam	SquareTube	A500 Gr.B Rect	Typical	2.58	6.21	6.21	10
3	Corner Brace	PL3/8x6	Beam	RECT	A36 Gr.36	Typical	2.25	.026	6.75	.101
4	Connection PL	PL3/8x2	Beam	RECT	A36 Gr.36	Typical	.75	.009	.25	.031
5	Inner Horizontal	L4X4X4	Beam	Single Angle	A36 Gr.36	Typical	1.93	3	3	.044
6	End Connection	L3X3X6	Beam	Single Angle	A36 Gr.36	Typical	2.11	1.75	1.75	.101
7	Kikcer	LL3x3x3x0	Beam	Single Angle	A36 Gr.36	Typical	2.18	3.35	1.9	.027
8	Mount Pipe	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
9	Plate	PL1/2x6	Beam	Pipe	A53 Gr.B	Typical	3	.063	9	.237
10	V Brace	L2.5x2.5x4	Beam	Pipe	A53 Gr.B	Typical	1.19	.692	.692	.026
11	Support Rail	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25

<chFc`YX'GhYY'DfcdYf]Yg

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt	
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
3	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3

A Ya VYf'DfJa Ufmi8 UU

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
1	M15	N18A	N19			Standoff Arm	Beam	SquareTube	A500 Gr...	Typical
2	M38A	N80	N81			Standoff Arm	Beam	SquareTube	A500 Gr...	Typical
3	MP5B	N144	N145			Standoff Arm	Beam	SquareTube	A500 Gr...	Typical
4	M13	N14	N17A			RIGID	None	None	RIGID	Typical
5	M39	N78	N79			RIGID	None	None	RIGID	Typical
6	M71	N142	N143			RIGID	None	None	RIGID	Typical
7	M18	N28	N27A			Inner Horizontal	Beam	Single Angle	A36 Gr.36	Typical
8	M44	N92	N91			Inner Horizontal	Beam	Single Angle	A36 Gr.36	Typical
9	M76	N156	N155			Inner Horizontal	Beam	Single Angle	A36 Gr.36	Typical
10	M1	N1	N2		180	Front Face Horizontal	Beam	Channel	A36 Gr.36	Typical
11	M2	N3	N4		180	Front Face Horizontal	Beam	Channel	A36 Gr.36	Typical
12	M3	N5	N6		180	Front Face Horizontal	Beam	Channel	A36 Gr.36	Typical
13	M16	N21	N28			Connection PL	Beam	RECT	A36 Gr.36	Typical
14	M17	N27A	N26A			Connection PL	Beam	RECT	A36 Gr.36	Typical



A Ya Vyf Df ja Ufm8 UUf7 cbHbi YXL

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
15	M42	N23	N92			Connection PL	Beam	RECT	A36 Gr.36	Typical
16	M43	N91	N22			Connection PL	Beam	RECT	A36 Gr.36	Typical
17	M74	N25	N156			Connection PL	Beam	RECT	A36 Gr.36	Typical
18	M75	N155	N24			Connection PL	Beam	RECT	A36 Gr.36	Typical
19	M88	N155A	N83A			Kikcer	Beam	Single Angle	A36 Gr.36	Typical
20	M89	N157	N81A			Kikcer	Beam	Single Angle	A36 Gr.36	Typical
21	M90	N159	N82A			Kikcer	Beam	Single Angle	A36 Gr.36	Typical
22	M40A	N57	N58		180	Support Rail	Beam	Pipe	A53 Gr.B	Typical
23	M41A	N59A	N60A		180	Support Rail	Beam	Pipe	A53 Gr.B	Typical
24	M42A	N61	N62		180	Support Rail	Beam	Pipe	A53 Gr.B	Typical
25	M43A	N63A	N68A			Plate	Beam	Pipe	A53 Gr.B	Typical
26	M44A	N66	N67A			Plate	Beam	Pipe	A53 Gr.B	Typical
27	M45	N65	N64A			Plate	Beam	Pipe	A53 Gr.B	Typical
28	M46	N72	N82B		180	V Brace	Beam	Pipe	A53 Gr.B	Typical
29	M47	N82B	N80A		180	V Brace	Beam	Pipe	A53 Gr.B	Typical
30	M48	N78A	N84A		180	V Brace	Beam	Pipe	A53 Gr.B	Typical
31	M49	N84A	N77		180	V Brace	Beam	Pipe	A53 Gr.B	Typical
32	M50	N75	N83B		180	V Brace	Beam	Pipe	A53 Gr.B	Typical
33	M51	N83B	N74		180	V Brace	Beam	Pipe	A53 Gr.B	Typical
34	M34	N59	N60			RIGID	None	None	RIGID	Typical
35	M35	N68	N67			RIGID	None	None	RIGID	Typical
36	M36	N63	N64			RIGID	None	None	RIGID	Typical
37	M37	N73A	N79B			RIGID	None	None	RIGID	Typical
38	M38	N73	N78B			RIGID	None	None	RIGID	Typical
39	M39A	N74A	N80B			RIGID	None	None	RIGID	Typical
40	M40	N77A	N83			RIGID	None	None	RIGID	Typical
41	M41	N75A	N81C			RIGID	None	None	RIGID	Typical
42	M42B	N76A	N82			RIGID	None	None	RIGID	Typical
43	MP3A	N84B	N86			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
44	MP2A	N88	N89			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
45	MP1A	N85	N87			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
46	M46A	N91A	N97			RIGID	None	None	RIGID	Typical
47	M47A	N76	N96			RIGID	None	None	RIGID	Typical
48	M48A	N92A	N98			RIGID	None	None	RIGID	Typical
49	M49A	N95	N101			RIGID	None	None	RIGID	Typical
50	M50A	N84	N99			RIGID	None	None	RIGID	Typical
51	M51A	N94	N100			RIGID	None	None	RIGID	Typical
52	MP3C	N102	N104			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
53	MP2C	N106	N107			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
54	MP1C	N103	N105			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
55	M55	N109	N115			RIGID	None	None	RIGID	Typical
56	M56	N79A	N114			RIGID	None	None	RIGID	Typical
57	M57	N110	N116			RIGID	None	None	RIGID	Typical
58	M58	N113	N119			RIGID	None	None	RIGID	Typical
59	M59	N111	N117			RIGID	None	None	RIGID	Typical
60	M60	N112	N118			RIGID	None	None	RIGID	Typical
61	MP3B	N120	N122			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
62	MP2B	N124	N125			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
63	MP1B	N121	N123			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 119406
 Model Name : CT00595-S-SBA_MT_LO_Loads Only_G

Jan 5, 2022
 1:31 PM
 Checked By: _____

A Ya Vyf 5 Xj Ub WX 8 UH

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M15						Yes				None
2	M38A						Yes				None
3	MP5B						Yes				None
4	M13						Yes	** NA **			None
5	M39						Yes	** NA **			None
6	M71						Yes	** NA **			None
7	M18						Yes				None
8	M44						Yes				None
9	M76						Yes				None
10	M1						Yes				None
11	M2						Yes				None
12	M3						Yes				None
13	M16						Yes				None
14	M17						Yes				None
15	M42						Yes				None
16	M43						Yes				None
17	M74						Yes				None
18	M75						Yes				None
19	M88	BenPIN	BenPIN				Yes				None
20	M89	BenPIN	BenPIN				Yes				None
21	M90	BenPIN	BenPIN				Yes				None
22	M40A						Yes				None
23	M41A						Yes				None
24	M42A						Yes				None
25	M43A						Yes				None
26	M44A						Yes				None
27	M45						Yes				None
28	M46	BenPIN	BenPIN				Yes	Default			None
29	M47	BenPIN	BenPIN				Yes	Default			None
30	M48	BenPIN	BenPIN				Yes	Default			None
31	M49	BenPIN	BenPIN				Yes	Default			None
32	M50	BenPIN	BenPIN				Yes	Default			None
33	M51	BenPIN	BenPIN				Yes	Default			None
34	M34						Yes	** NA **			None
35	M35						Yes	** NA **			None
36	M36						Yes	** NA **			None
37	M37						Yes	** NA **			None
38	M38						Yes	** NA **			None
39	M39A						Yes	** NA **			None
40	M40						Yes	** NA **			None
41	M41						Yes	** NA **			None
42	M42B						Yes	** NA **			None
43	MP3A						Yes				None
44	MP2A						Yes				None
45	MP1A						Yes				None
46	M46A						Yes	** NA **			None
47	M47A						Yes	** NA **			None
48	M48A						Yes	** NA **			None
49	M49A						Yes	** NA **			None
50	M50A						Yes	** NA **			None
51	M51A						Yes	** NA **			None



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 119406
 Model Name : CT00595-S-SBA_MT_LO_Loads Only_G

Jan 5, 2022
 1:31 PM
 Checked By: _____

A Ya Vyf 5 Xj Ub WX 8 UHf7 cbhbi YXL

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
52	MP3C						Yes				None
53	MP2C						Yes				None
54	MP1C						Yes				None
55	M55						Yes	** NA **			None
56	M56						Yes	** NA **			None
57	M57						Yes	** NA **			None
58	M58						Yes	** NA **			None
59	M59						Yes	** NA **			None
60	M60						Yes	** NA **			None
61	MP3B						Yes				None
62	MP2B						Yes				None
63	MP1B						Yes				None

< chFc ``YX'GhYY '8 Yg]] b'DUfUa YhYfg

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M15	Standoff Arm	6.25			Lbyy						Lateral
2	M38A	Standoff Arm	6.25			Lbyy						Lateral
3	MP5B	Standoff Arm	6.25			Lbyy						Lateral
4	M18	Inner Horizo...	6.085			Lbyy						Lateral
5	M44	Inner Horizo...	6.085			Lbyy						Lateral
6	M76	Inner Horizo...	6.085			Lbyy						Lateral
7	M1	Front Face ...	13			Lbyy						Lateral
8	M2	Front Face ...	13			Lbyy						Lateral
9	M3	Front Face ...	13			Lbyy						Lateral
10	M16	Connection ...	.25			Lbyy						Lateral
11	M17	Connection ...	.25			Lbyy						Lateral
12	M42	Connection ...	.25			Lbyy						Lateral
13	M43	Connection ...	.25			Lbyy						Lateral
14	M74	Connection ...	.25			Lbyy						Lateral
15	M75	Connection ...	.25			Lbyy						Lateral
16	M88	Kikcer	5.478			Lbyy						Lateral
17	M89	Kikcer	5.478			Lbyy						Lateral
18	M90	Kikcer	5.478			Lbyy						Lateral
19	M40A	Support Rail	13			Lbyy						Lateral
20	M41A	Support Rail	13			Lbyy						Lateral
21	M42A	Support Rail	13			Lbyy						Lateral
22	M43A	Plate	.75			Lbyy						Lateral
23	M44A	Plate	.75			Lbyy						Lateral
24	M45	Plate	.75			Lbyy						Lateral
25	M46	V Brace	3.874			Lbyy						Lateral
26	M47	V Brace	3.874			Lbyy						Lateral
27	M48	V Brace	3.874			Lbyy						Lateral
28	M49	V Brace	3.874			Lbyy						Lateral
29	M50	V Brace	3.874			Lbyy						Lateral
30	M51	V Brace	3.874			Lbyy						Lateral
31	MP3A	Mount Pipe	5.5			Lbyy						Lateral
32	MP2A	Mount Pipe	8			Lbyy						Lateral
33	MP1A	Mount Pipe	5.5			Lbyy						Lateral
34	MP3C	Mount Pipe	5.5			Lbyy						Lateral
35	MP2C	Mount Pipe	8			Lbyy						Lateral



<chFc`YX'GhY'8 Yg]] b'DU'Ua YhYfg'f7 cb]bi YXL

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
36	MP1C	Mount Pipe	5.5			Lbyy						Lateral
37	MP3B	Mount Pipe	5.5			Lbyy						Lateral
38	MP2B	Mount Pipe	8			Lbyy						Lateral
39	MP1B	Mount Pipe	5.5			Lbyy						Lateral

>c]bh6 ci bXUf m7 cbX]h]cbg

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	N19	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N145	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N81	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N154						
5	N155A	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	N156A						
7	N157	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
8	N158						
9	N159	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
10	N82B	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
11	N83B	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
12	N84A	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

9bj YcdY>c]bhFYUM]cbg

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N19	max	5131.097	4	285.91	3	2015.166	3	.112	4	1.456	3	.139	4
2		min	-3213.008	3	-184.405	4	-3158.373	4	-.216	7	-1.471	4	-.386	7
3	N145	max	756.408	4	333.638	2	6816.788	1	.456	6	2.616	3	.165	3
4		min	-755.747	3	-232.007	1	-4563.459	2	-.234	1	-2.616	4	-.16	4
5	N81	max	3109.682	4	280.725	4	2001.444	4	.062	3	1.54	3	.377	8
6		min	-5028.34	3	-179.298	3	-3141.946	3	-.228	8	-1.527	4	-.161	3
7	N155A	max	86.282	4	3412.061	5	-284.606	2	0	11	0	3	0	4
8		min	-86.169	3	178.042	2	-5060.631	5	0	1	0	4	0	3
9	N157	max	-419.087	3	3382.659	8	2517.05	8	0	4	0	3	0	3
10		min	-4336.879	8	293.283	3	204.382	3	0	3	0	4	0	4
11	N159	max	4335.575	7	3381.699	7	2516.363	7	0	3	0	3	0	3
12		min	423.667	4	296.734	4	206.997	4	0	4	0	4	0	4
13	N82B	max	861.881	4	110.015	3	687.043	1	0	4	0	3	0	6
14		min	-851.767	3	-72.831	4	-691.899	2	0	3	0	4	0	1
15	N83B	max	859.001	4	110.262	4	674.067	1	0	3	0	3	0	1
16		min	-867.433	3	-73.016	3	-682.478	2	0	4	0	4	0	6
17	N84A	max	523.398	4	115.841	2	952.256	1	0	2	0	10	0	9
18		min	-525.183	3	-78.33	1	-937.268	2	-.001	5	0	9	0	10
19	Totals:	max	9824.199	4	10502.102	5	10120.512	1						
20		min	-9824.199	3	2944.185	2	-10120.512	2						

9bj YcdYA Ya VYf'GYW]cb': cfWg

	Member	Sec	Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
1	M15	1	max	0	11	.016	3	.006	2	0	11	0	11	0	11
2			min	0	1	-.001	6	-.045	3	0	1	0	1	0	1



9bj YcdYA Ya Vyf GYWjcb: cfWkg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
3		2	max	4056.466	3	-471.495	3	228.165	4	.077	2	.63	4	.666	4
4			min	-3576.862	4	-3173.225	8	-241.983	3	-.082	1	-.631	3	-.863	3
5		3	max	3730.108	3	224.379	4	205.832	2	.077	2	.925	4	.456	4
6			min	-5962.826	4	-248.516	3	-205.023	1	-.082	1	-.944	3	-.463	3
7		4	max	3760.119	3	202.166	4	256.683	2	.077	2	1.211	4	.149	8
8			min	-5992.836	4	-268.839	3	-257.51	1	-.082	1	-1.214	3	-.057	3
9		5	max	3790.129	3	184.462	4	308.663	2	.077	2	1.471	4	.443	7
10			min	-6022.847	4	-286.542	3	-309.49	1	-.082	1	-1.456	3	-.177	4
11	M38A	1	max	0	11	.015	4	.043	3	0	11	0	11	0	11
12			min	0	1	-.001	6	-.003	1	0	1	0	1	0	1
13		2	max	3965.396	4	-470.016	4	280.716	4	.107	1	.598	2	.649	3
14			min	-3485.034	3	-3173.463	7	-266.128	3	-.113	2	-.605	1	-.845	4
15		3	max	3633.765	4	219.124	3	267.51	1	.107	1	.891	4	.446	3
16			min	-5865.622	3	-243.428	4	-265.448	2	-.113	2	-.879	3	-.453	4
17		4	max	3663.775	4	197.072	3	319.759	1	.107	1	1.223	4	.149	7
18			min	-5895.632	3	-263.629	4	-316.89	2	-.113	2	-1.222	3	-.056	4
19		5	max	3693.786	4	179.368	3	371.739	1	.107	1	1.527	4	.441	8
20			min	-5925.643	3	-281.333	4	-368.87	2	-.113	2	-1.54	3	-.17	3
21	MP5B	1	max	0	11	0	11	0	11	0	11	0	11	0	11
22			min	0	1	0	1	0	1	0	1	0	1	0	1
23		2	max	4748.264	2	-401.578	2	453.441	4	.159	4	.41	3	.822	1
24			min	-4286.702	1	-3191.346	5	-452.828	3	-.165	3	-.413	4	-1.015	2
25		3	max	4563.459	2	273.494	1	612.153	4	.16	4	.479	4	.547	1
26			min	-6816.788	1	-295.228	2	-611.503	3	-.165	3	-.482	3	-.554	2
27		4	max	4563.459	2	249.647	1	683.761	4	.16	4	1.493	4	.153	5
28			min	-6816.788	1	-316.791	2	-683.11	3	-.165	3	-1.495	3	-.074	2
29		5	max	4563.459	2	231.943	1	753.068	4	.16	4	2.616	4	.456	6
30			min	-6816.788	1	-334.495	2	-752.416	3	-.165	3	-2.616	3	-.234	1
31	M13	1	max	3119.435	8	2941.449	4	2219.916	3	.596	2	1.359	8	2.278	8
32			min	459.615	3	-3368.69	3	-2002.778	4	-.593	1	-.258	3	-.218	3
33		2	max	3119.435	8	2941.449	4	2219.916	3	.596	2	1.334	8	2.245	8
34			min	459.615	3	-3368.69	3	-2002.778	4	-.593	1	-.05	3	.098	3
35		3	max	3119.435	8	2941.449	4	2219.916	3	.596	2	1.309	8	2.217	6
36			min	459.615	3	-3368.69	3	-2002.778	4	-.593	1	.158	3	.378	1
37		4	max	3119.435	8	2941.449	4	2219.916	3	.596	2	1.308	5	2.236	7
38			min	459.615	3	-3368.69	3	-2002.778	4	-.593	1	.252	2	.433	4
39		5	max	3119.435	8	2941.449	4	2219.916	3	.596	2	1.356	7	2.337	7
40			min	459.615	3	-3368.69	3	-2002.778	4	-.593	1	.124	4	.157	4
41	M39	1	max	3119.663	7	3269.856	4	2208.918	4	.709	1	1.33	7	.218	4
42			min	457.88	4	-2843.104	3	-1989.374	3	-.702	2	-.226	4	-2.293	7
43		2	max	3119.663	7	3269.856	4	2208.918	4	.709	1	1.306	7	-.088	4
44			min	457.88	4	-2843.104	3	-1989.374	3	-.702	2	-.019	4	-2.261	7
45		3	max	3119.663	7	3269.856	4	2208.918	4	.709	1	1.282	7	-.395	4
46			min	457.88	4	-2843.104	3	-1989.374	3	-.702	2	.188	4	-2.229	7
47		4	max	3119.663	7	3269.856	4	2208.918	4	.709	1	1.295	5	-.467	3
48			min	457.88	4	-2843.104	3	-1989.374	3	-.702	2	.2	2	-2.242	8
49		5	max	3119.663	7	3269.856	4	2208.918	4	.709	1	1.341	8	-.201	3
50			min	457.88	4	-2843.104	3	-1989.374	3	-.702	2	.086	3	-2.341	8
51	M71	1	max	3137.688	5	384.17	4	4289.164	1	.735	4	.485	2	.03	1
52			min	392.101	2	-383.424	3	-4749.141	2	-.731	3	-2.694	5	-.023	2
53		2	max	3137.688	5	384.17	4	4289.164	1	.735	4	.04	2	.057	3
54			min	392.101	2	-383.424	3	-4749.141	2	-.731	3	-2.637	5	-.051	4



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 119406
 Model Name : CT00595-S-SBA_MT_LO_Loads Only_G

Jan 5, 2022
 1:31 PM
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9bj YcdYA Ya VYf GYV]cb: cfWkg fT cb]bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
55		3	max	3137.688	5	384.17	4	4289.164	1	.735	4	-.405	2	.093	3
56			min	392.101	2	-383.424	3	-4749.141	2	-.731	3	-2.579	5	-.087	4
57		4	max	3137.688	5	384.17	4	4289.164	1	.735	4	-.491	1	.129	3
58			min	392.101	2	-383.424	3	-4749.141	2	-.731	3	-2.59	6	-.123	4
59		5	max	3137.688	5	384.17	4	4289.164	1	.735	4	-.089	1	.165	3
60			min	392.101	2	-383.424	3	-4749.141	2	-.731	3	-2.726	6	-.159	4
61	M18	1	max	1419.137	3	89.132	5	105.407	4	0	2	.104	2	.123	1
62			min	-1407.296	4	-14.894	2	-105.532	3	0	1	-.127	1	-.101	2
63		2	max	1389.92	3	51.203	1	54.801	4	0	2	.105	2	.055	4
64			min	-1378.079	4	-26.889	2	-54.926	3	0	1	-.089	1	-.072	3
65		3	max	1360.702	3	39.202	1	4.195	4	0	2	.145	4	.057	4
66			min	-1348.861	4	-38.889	2	-4.32	3	0	1	-.116	3	-.087	3
67		4	max	1331.485	3	27.201	1	46.286	3	0	2	.14	4	.021	2
68			min	-1319.644	4	-50.89	2	-46.411	4	0	1	-.123	3	-.038	1
69		5	max	1302.268	3	15.207	1	96.892	3	0	2	.067	4	.086	3
70			min	-1290.427	4	-88.916	6	-97.017	4	0	1	-.089	3	-.065	4
71	M44	1	max	1307.038	4	89.23	6	97.106	3	0	3	.064	3	.084	4
72			min	-1295.491	3	-15.749	1	-96.966	4	0	4	-.087	4	-.062	3
73		2	max	1336.255	4	51.534	2	46.5	3	0	3	.138	3	.02	2
74			min	-1324.708	3	-27.743	1	-46.36	4	0	4	-.122	4	-.038	1
75		3	max	1365.472	4	39.533	2	4.246	4	0	3	.144	3	.057	3
76			min	-1353.925	3	-39.744	1	-4.106	3	0	4	-.115	4	-.087	4
77		4	max	1394.69	4	27.533	2	54.852	4	0	3	.106	2	.055	3
78			min	-1383.143	3	-51.745	1	-54.712	3	0	4	-.09	1	-.072	4
79		5	max	1423.907	4	15.538	2	105.458	4	0	3	.106	2	.125	1
80			min	-1412.36	3	-89.033	5	-105.318	3	0	4	-.129	1	-.104	2
81	M76	1	max	1505.117	2	90.325	7	135.117	1	0	4	.091	4	.105	3
82			min	-1495.343	1	-21.902	4	-135.112	2	0	3	-.113	3	-.083	4
83		2	max	1505.117	2	57.944	3	67.642	1	0	4	.13	1	.071	1
84			min	-1495.343	1	-33.896	4	-67.637	2	0	3	-.113	2	-.088	2
85		3	max	1505.117	2	45.943	3	1.958	3	0	4	.173	1	.1	1
86			min	-1495.343	1	-45.897	4	-1.948	4	0	3	-.144	2	-.13	2
87		4	max	1505.117	2	33.942	3	67.312	2	0	4	.131	1	.07	1
88			min	-1495.343	1	-57.898	4	-67.307	1	0	3	-.115	2	-.087	2
89		5	max	1505.117	2	21.949	3	134.787	2	0	4	.093	3	.106	4
90			min	-1495.343	1	-90.119	8	-134.782	1	0	3	-.115	4	-.085	3
91	M1	1	max	0	11	0	11	0	11	0	11	0	11	0	11
92			min	0	1	0	1	0	1	0	1	0	1	0	1
93		2	max	1753.186	2	-68.97	3	33.979	3	.003	2	.095	3	.404	3
94			min	-2057.97	1	-793.855	8	-34.524	4	-.003	1	-.095	4	-.515	4
95		3	max	1313.484	2	594.998	7	1132.297	4	.173	1	.07	4	2.082	7
96			min	-1618.115	1	-612.977	8	-1133.298	3	-.135	2	-.073	3	.501	9
97		4	max	1755.402	2	775.468	7	38.114	3	.003	1	.091	4	.365	4
98			min	-2065.259	1	69.541	4	-38.06	4	-.003	2	-.091	3	-.459	3
99		5	max	0	11	0	11	0	11	0	11	0	11	0	11
100			min	0	1	0	1	0	1	0	1	0	1	0	1
101	M2	1	max	0	11	0	10	0	5	0	11	0	11	0	11
102			min	0	1	-.009	4	-.021	3	0	1	0	1	0	1
103		2	max	2196.373	3	-65.945	1	60.17	1	.003	3	.089	3	.423	4
104			min	-2496.405	4	-794.904	6	-60.398	2	-.003	4	-.089	4	-.539	3
105		3	max	1387.957	3	603.534	5	1129.396	2	.152	4	.107	4	2.074	5
106			min	-1674.603	4	-619.36	7	-1130.37	1	-.115	3	-.107	3	.474	10



9bj YcdYA Ya Vyf GYWjcb : cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
107		4	max	2004.204	1	780.323	5	74.72	4	.003	2	.019	3	.463	2
108			min	-2311.278	2	57.628	2	-74.643	3	-.002	1	-.019	4	-.56	1
109		5	max	0	11	.009	2	.031	4	0	11	0	11	0	11
110			min	0	1	0	8	-.002	2	0	1	0	1	0	1
111	M3	1	max	0	11	0	7	.005	2	0	11	0	11	0	11
112			min	0	1	-.01	2	-.028	3	0	1	0	1	0	1
113		2	max	1974.022	1	-52.245	2	73.485	4	.002	1	.018	4	.503	2
114			min	-2276.648	2	-799.703	5	-74.011	3	-.002	2	-.018	3	-.617	1
115		3	max	1428.766	4	600.854	8	1134.844	1	.114	4	.112	3	2.078	6
116			min	-1719.963	3	-622.499	5	-1134.43	2	-.151	3	-.111	4	.465	9
117		4	max	2234.588	4	777.57	6	61.884	2	.003	3	.093	4	.387	3
118			min	-2539.316	3	61.872	1	-62.113	1	-.003	4	-.093	3	-.485	4
119		5	max	0	11	.008	3	.02	4	0	11	0	11	0	11
120			min	0	1	0	6	0	5	0	1	0	1	0	1
121	M16	1	max	1421.538	3	93.087	5	112.006	4	0	2	.05	3	.192	1
122			min	-1409.697	4	-15.414	2	-107.127	3	0	1	-.052	4	-.149	2
123		2	max	1420.938	3	92.086	5	110.966	4	0	2	.044	3	.188	1
124			min	-1409.097	4	-15.605	2	-106.087	3	0	1	-.045	4	-.148	2
125		3	max	1420.337	3	91.085	5	109.927	4	0	2	.037	3	.184	1
126			min	-1408.497	4	-15.797	2	-105.048	3	0	1	-.038	4	-.147	2
127		4	max	1419.737	3	90.085	5	108.887	4	0	2	.031	3	.181	1
128			min	-1407.896	4	-15.988	2	-104.008	3	0	1	-.031	4	-.146	2
129		5	max	1419.137	3	89.084	5	107.848	4	0	2	.024	3	.177	1
130			min	-1407.296	4	-16.179	2	-102.969	3	0	1	-.024	4	-.145	2
131	M17	1	max	1302.268	3	15.082	1	98.091	3	0	2	.02	1	.124	3
132			min	-1290.427	4	-88.916	6	-95.761	4	0	1	-.02	2	-.093	4
133		2	max	1301.667	3	14.891	1	99.13	3	0	2	.023	1	.127	3
134			min	-1289.826	4	-89.917	6	-96.801	4	0	1	-.023	2	-.093	4
135		3	max	1301.067	3	14.7	1	100.17	3	0	2	.025	1	.13	3
136			min	-1289.226	4	-90.918	6	-97.841	4	0	1	-.025	2	-.093	4
137		4	max	1300.467	3	14.508	1	101.209	3	0	2	.027	1	.133	3
138			min	-1288.626	4	-91.919	6	-98.88	4	0	1	-.028	2	-.093	4
139		5	max	1299.867	3	14.317	1	102.249	3	0	2	.029	1	.135	3
140			min	-1288.026	4	-92.92	6	-99.92	4	0	1	-.03	2	-.093	4
141	M42	1	max	1304.637	4	93.234	6	100.068	3	0	3	.029	1	.132	4
142			min	-1293.09	3	-14.877	1	-102.268	4	0	4	-.029	2	-.089	3
143		2	max	1305.237	4	92.233	6	99.029	3	0	3	.026	1	.129	4
144			min	-1293.69	3	-15.068	1	-101.229	4	0	4	-.027	2	-.089	3
145		3	max	1305.837	4	91.232	6	97.989	3	0	3	.024	1	.126	4
146			min	-1294.29	3	-15.26	1	-100.189	4	0	4	-.025	2	-.089	3
147		4	max	1306.437	4	90.231	6	96.95	3	0	3	.022	1	.124	4
148			min	-1294.89	3	-15.451	1	-99.149	4	0	4	-.022	2	-.089	3
149		5	max	1307.038	4	89.23	6	95.91	3	0	3	.019	1	.121	4
150			min	-1295.491	3	-15.643	1	-98.11	4	0	4	-.02	2	-.089	3
151	M43	1	max	1423.907	4	16.844	2	102.895	4	0	3	.024	4	.18	1
152			min	-1412.36	3	-88.984	5	-107.751	3	0	4	-.024	3	-.148	2
153		2	max	1424.507	4	16.653	2	103.934	4	0	3	.03	4	.184	1
154			min	-1412.96	3	-89.985	5	-108.791	3	0	4	-.031	3	-.149	2
155		3	max	1425.107	4	16.461	2	104.974	4	0	3	.037	4	.188	1
156			min	-1413.561	3	-90.986	5	-109.83	3	0	4	-.037	3	-.15	2
157		4	max	1425.708	4	16.27	2	106.014	4	0	3	.044	4	.192	1
158			min	-1414.161	3	-91.987	5	-110.87	3	0	4	-.044	3	-.151	2



9bj YcdYA Ya VYf GYVjcb: cfWg f7 cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
159	5	max	1426.308	4	16.078	2	107.053	4	0	3	.05	4	.196	1	
160		min	-1414.761	3	-92.988	5	-111.909	3	0	4	-.051	3	-.152	2	
161	M74	1	max	1505.117	2	94.325	7	141.596	1	0	.046	2	.172	3	
162		min	-1495.343	1	-21.139	4	-139.637	2	0	3	-.047	1	-.129	4	
163		2	max	1505.117	2	93.324	7	140.21	1	0	.038	2	.167	3	
164		min	-1495.343	1	-21.33	4	-138.251	2	0	3	-.038	1	-.128	4	
165		3	max	1505.117	2	92.323	7	138.824	1	0	.029	2	.163	3	
166		min	-1495.343	1	-21.522	4	-136.864	2	0	3	-.03	1	-.126	4	
167		4	max	1505.117	2	91.323	7	137.437	1	0	.021	2	.159	3	
168		min	-1495.343	1	-21.713	4	-135.478	2	0	3	-.021	1	-.125	4	
169		5	max	1505.117	2	90.322	7	136.051	1	0	.012	2	.154	3	
170		min	-1495.343	1	-21.905	4	-134.092	2	0	3	-.013	1	-.124	4	
171	M75	1	max	1505.117	2	21.942	3	133.913	2	0	.011	2	.156	4	
172		min	-1495.343	1	-90.115	8	-135.563	1	0	3	-.012	1	-.125	3	
173		2	max	1505.117	2	21.75	3	135.299	2	0	.02	2	.16	4	
174		min	-1495.343	1	-91.116	8	-136.949	1	0	3	-.02	1	-.127	3	
175		3	max	1505.117	2	21.559	3	136.685	2	0	.028	2	.165	4	
176		min	-1495.343	1	-92.117	8	-138.335	1	0	3	-.029	1	-.128	3	
177		4	max	1505.117	2	21.367	3	138.071	2	0	.037	2	.169	4	
178		min	-1495.343	1	-93.118	8	-139.721	1	0	3	-.037	1	-.129	3	
179		5	max	1505.117	2	21.176	3	139.457	2	0	.045	2	.173	4	
180		min	-1495.343	1	-94.119	8	-141.107	1	0	3	-.046	1	-.131	3	
181	M88	1	max	6102.885	5	85.369	5	91.116	4	0	0	11	0	11	
182		min	335.637	2	-6.929	2	-91.116	3	0	4	0	1	0	1	
183		2	max	6083.148	5	42.685	5	45.558	4	0	.094	4	.007	2	
184		min	308.084	2	-3.464	2	-45.558	3	0	4	-.094	3	-.088	5	
185		3	max	6063.411	5	0	11	0	11	0	.125	4	.009	2	
186		min	280.532	2	0	1	0	1	0	4	-.125	3	-.117	5	
187		4	max	6043.674	5	3.464	2	45.558	3	0	.094	4	.007	2	
188		min	252.98	2	-42.685	5	-45.558	4	0	4	-.094	3	-.088	5	
189		5	max	6023.938	5	6.929	2	91.116	3	0	0	11	0	11	
190		min	225.428	2	-85.369	5	-91.116	4	0	4	0	1	0	1	
191	M89	1	max	6048.077	8	86.044	8	71.672	2	.001	3	0	11	0	11
192		min	549.795	3	-9.383	3	-71.672	1	-.001	4	0	1	0	1	
193		2	max	6028.856	8	43.022	8	35.836	2	.001	3	.074	2	.01	3
194		min	520.368	3	-4.691	3	-35.836	1	-.001	4	-.074	1	-.088	8	
195		3	max	6009.635	8	0	11	0	11	.001	3	.098	2	.013	3
196		min	490.941	3	0	1	0	1	-.001	4	-.098	1	-.118	8	
197		4	max	5990.414	8	4.691	3	35.836	1	.001	3	.074	2	.01	3
198		min	461.514	3	-43.022	8	-35.836	2	-.001	4	-.074	1	-.088	8	
199		5	max	5971.193	8	9.383	3	71.672	1	.001	3	0	11	0	11
200		min	432.088	3	-86.044	8	-71.672	2	-.001	4	0	1	0	1	
201	M90	1	max	6046.32	7	86.044	7	71.672	1	0	3	0	11	0	11
202		min	556.098	4	-9.383	4	-71.672	2	0	4	0	1	0	1	
203		2	max	6027.098	7	43.022	7	35.836	1	0	.074	1	.01	4	
204		min	526.671	4	-4.691	4	-35.836	2	0	4	-.074	2	-.088	7	
205		3	max	6007.877	7	0	11	0	11	0	.098	1	.013	4	
206		min	497.244	4	0	1	0	1	0	4	-.098	2	-.118	7	
207		4	max	5988.656	7	4.691	4	35.836	2	0	.074	1	.01	4	
208		min	467.817	4	-43.022	7	-35.836	1	0	4	-.074	2	-.088	7	
209		5	max	5969.435	7	9.383	4	71.672	2	0	3	0	11	0	11
210		min	438.391	4	-86.044	7	-71.672	1	0	4	0	1	0	1	



9bj YcdYA Ya Vyf GYVjcb: cfWkg f7 cbh7bi YXL

Member	Sec	Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
211	M40A	1	max	0	11	0	11	0	11	0	11	0	11
212			min	0	1	0	1	0	1	0	1	0	1
213		2	max	482.684	2	63.513	3	306.001	2	.068	1	.479	1
214			min	-443.73	1	-96.566	4	-295.175	1	-.076	2	-.486	2
215		3	max	482.684	2	67.902	2	254.645	2	.019	4	.428	2
216			min	-443.73	1	-62.041	4	-243.819	1	-.076	2	-.4	1
217		4	max	476.73	2	98.439	3	294.503	1	.076	2	.474	1
218			min	-432.185	1	-67.443	4	-305.831	2	-.07	1	-.483	2
219		5	max	0	11	0	11	0	11	0	11	0	11
220			min	0	1	0	1	0	1	0	1	0	1
221	M41A	1	max	0	11	0	7	0	1	0	11	0	11
222			min	0	1	-.004	1	0	3	0	1	0	1
223		2	max	485.814	3	77.605	1	291.662	4	.054	4	.459	4
224			min	-444.508	4	-98.62	2	-286.644	3	-.061	3	-.462	3
225		3	max	463.577	3	33.857	1	218.54	3	.054	4	.331	3
226			min	-422.27	4	-54.173	7	-208.826	4	-.061	3	-.304	4
227		4	max	343.54	3	107.136	4	240.189	1	.041	3	.418	2
228			min	-299.589	4	-96.062	3	-242.158	2	-.036	4	-.425	1
229		5	max	0	11	.004	2	.009	3	0	11	0	11
230			min	0	1	0	8	-.006	2	0	1	0	1
231	M42A	1	max	0	11	0	7	.006	2	0	11	0	11
232			min	0	1	-.004	2	-.009	3	0	1	0	1
233		2	max	332.276	1	94.834	4	247.985	2	.038	3	.425	2
234			min	-292.369	2	-108.377	3	-242.954	1	-.045	4	-.428	1
235		3	max	441.128	4	48.752	8	207.912	3	.06	4	.332	4
236			min	-394.826	3	-52.377	5	-218.087	4	-.055	3	-.304	3
237		4	max	463.365	4	102.565	2	279.274	4	.06	4	.452	3
238			min	-417.064	3	-84.707	1	-281.216	3	-.055	3	-.459	4
239		5	max	0	11	.004	1	0	11	0	11	0	11
240			min	0	1	0	8	0	1	0	1	0	1
241	M43A	1	max	128.032	4	278.849	2	159.717	1	.011	2	.121	2
242			min	-171.213	3	-262.555	1	-155.358	2	-.011	1	-.124	1
243		2	max	133.432	4	276.553	2	162.835	1	.011	2	.092	2
244			min	-176.614	3	-264.852	1	-158.476	2	-.011	1	-.094	1
245		3	max	138.833	4	274.257	2	165.953	1	.011	2	.1	4
246			min	-182.014	3	-267.148	1	-161.594	2	-.011	1	-.101	3
247		4	max	144.233	4	271.96	2	169.071	1	.011	2	.119	4
248			min	-187.415	3	-269.444	1	-164.712	2	-.011	1	-.119	3
249		5	max	149.634	4	269.664	2	172.189	1	.011	2	.136	4
250			min	-192.815	3	-271.74	1	-167.83	2	-.011	1	-.136	3
251	M44A	1	max	167.417	1	393.245	3	102.398	3	.009	4	.101	2
252			min	-210.707	2	-390.956	4	-97.844	4	-.009	3	-.102	1
253		2	max	167.417	1	390.948	3	102.398	3	.009	4	.11	2
254			min	-210.707	2	-393.252	4	-97.844	4	-.009	3	-.109	1
255		3	max	167.417	1	388.652	3	102.398	3	.009	4	.116	2
256			min	-210.707	2	-395.548	4	-97.844	4	-.009	3	-.115	1
257		4	max	167.417	1	386.356	3	102.398	3	.009	4	.12	2
258			min	-210.707	2	-397.845	4	-97.844	4	-.009	3	-.118	1
259		5	max	167.417	1	384.059	3	102.398	3	.009	4	.122	2
260			min	-210.707	2	-400.141	4	-97.844	4	-.009	3	-.119	1
261	M45	1	max	98.515	3	327.913	1	147.277	4	.008	3	.156	3
262			min	-141.298	4	-311.951	2	-143.007	3	-.007	4	-.159	4



9bj YcdYA Ya VYf GYWJcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
263		2	max	93.114	3	325.617	1	156.631	4	.008	3	.128	3	.071	3
264			min	-135.897	4	-314.247	2	-152.361	3	-.007	4	-.131	4	-.082	4
265		3	max	87.714	3	323.321	1	165.985	4	.008	3	.099	3	.104	2
266			min	-130.497	4	-316.544	2	-161.715	3	-.007	4	-.1	4	-.116	1
267		4	max	86.969	2	321.024	1	175.339	4	.008	3	.084	2	.163	2
268			min	-130.021	1	-318.84	2	-171.069	3	-.007	4	-.084	1	-.177	1
269		5	max	92.369	2	318.728	1	184.693	4	.008	3	.105	2	.223	2
270			min	-135.421	1	-321.136	2	-180.423	3	-.007	4	-.104	1	-.237	1
271	M46	1	max	700.069	1	-6.966	1	37.835	3	.001	6	0	11	0	11
272			min	-707.338	2	-36.019	6	-37.835	4	0	1	0	1	0	1
273		2	max	712.866	1	-3.483	1	18.917	3	.001	6	.016	3	.024	7
274			min	-719.224	2	-18.009	6	-18.917	4	0	1	-.025	4	-.013	4
275		3	max	725.663	1	0	11	0	11	.001	6	.021	3	.031	7
276			min	-731.11	2	0	1	0	1	0	1	-.034	4	-.018	4
277		4	max	738.46	1	18.009	6	18.917	4	.001	6	.016	3	.024	7
278			min	-742.996	2	3.483	1	-18.917	3	0	1	-.025	4	-.013	4
279		5	max	751.257	1	36.019	6	37.835	4	.001	6	0	11	0	11
280			min	-754.882	2	6.966	1	-37.835	3	0	1	0	1	0	1
281	M47	1	max	645.193	3	-8.796	3	53.546	1	0	3	0	11	0	11
282			min	-652.479	4	-35.467	8	-53.546	2	-.001	8	0	1	0	1
283		2	max	641.802	3	-4.398	3	26.773	1	0	3	.023	1	.032	1
284			min	-650	4	-17.733	8	-26.773	2	-.001	8	-.032	2	-.023	2
285		3	max	638.412	3	0	11	0	11	0	3	.03	1	.043	1
286			min	-647.521	4	0	1	0	1	-.001	8	-.043	2	-.03	2
287		4	max	635.021	3	17.733	8	26.773	2	0	3	.023	1	.032	1
288			min	-645.041	4	4.398	3	-26.773	1	-.001	8	-.032	2	-.023	2
289		5	max	631.631	3	35.467	8	53.546	2	0	3	0	11	0	11
290			min	-642.562	4	8.796	3	-53.546	1	-.001	8	0	1	0	1
291	M48	1	max	482.685	2	-7.227	2	42.684	4	.001	5	0	11	0	11
292			min	-488.834	1	-35.94	5	-42.684	3	0	2	0	1	0	1
293		2	max	494.141	2	-3.614	2	21.342	4	.001	5	.016	4	.028	4
294			min	-499.379	1	-17.97	5	-21.342	3	0	2	-.026	3	-.018	3
295		3	max	505.597	2	0	11	0	11	.001	5	.021	4	.037	4
296			min	-509.923	1	0	1	0	1	0	2	-.034	3	-.024	3
297		4	max	517.053	2	17.97	5	21.342	3	.001	5	.016	4	.028	4
298			min	-520.468	1	3.614	2	-21.342	4	0	2	-.026	3	-.018	3
299		5	max	528.508	2	35.94	5	42.684	3	.001	5	0	11	0	11
300			min	-531.013	1	7.227	2	-42.684	4	0	2	0	1	0	1
301	M49	1	max	519.805	2	-7.227	2	42.684	3	0	2	0	11	0	11
302			min	-527.229	1	-35.94	5	-42.684	4	-.001	5	0	1	0	1
303		2	max	508.349	2	-3.614	2	21.342	3	0	2	.016	3	.028	3
304			min	-516.684	1	-17.97	5	-21.342	4	-.001	5	-.026	4	-.018	4
305		3	max	496.893	2	0	11	0	11	0	2	.021	3	.037	3
306			min	-506.14	1	0	1	0	1	-.001	5	-.034	4	-.024	4
307		4	max	485.438	2	17.97	5	21.342	4	0	2	.016	3	.028	3
308			min	-495.595	1	3.614	2	-21.342	3	-.001	5	-.026	4	-.018	4
309		5	max	473.982	2	35.94	5	42.684	4	0	2	0	11	0	11
310			min	-485.05	1	7.227	2	-42.684	3	-.001	5	0	1	0	1
311	M50	1	max	645.38	4	-8.796	4	53.546	1	.001	7	0	11	0	11
312			min	-651.828	3	-35.467	7	-53.546	2	0	4	0	1	0	1
313		2	max	648.77	4	-4.398	4	26.773	1	.001	7	.023	1	.032	1
314			min	-654.308	3	-17.733	7	-26.773	2	0	4	-.032	2	-.023	2



9bj YcdYA Ya VYf GYVJcb: cfWVg fT cbhji YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
315		3	max	652.161	4	0	11	0	11	.001	7	.03	1	.043	1
316			min	-656.787	3	0	1	0	1	0	4	-.043	2	-.03	2
317		4	max	655.552	4	17.733	7	26.773	2	.001	7	.023	1	.032	1
318			min	-659.266	3	4.398	4	-26.773	1	0	4	-.032	2	-.023	2
319		5	max	658.942	4	35.467	7	53.546	2	.001	7	0	11	0	11
320			min	-661.746	3	8.796	4	-53.546	1	0	4	0	1	0	1
321	M51	1	max	735.078	1	-6.966	1	37.835	4	0	1	0	11	0	11
322			min	-743.019	2	-36.019	6	-37.835	3	-.001	6	0	1	0	1
323		2	max	722.281	1	-3.483	1	18.917	4	0	1	.016	4	.024	8
324			min	-731.134	2	-18.009	6	-18.917	3	-.001	6	-.025	3	-.013	3
325		3	max	709.484	1	0	11	0	11	0	1	.021	4	.031	8
326			min	-719.248	2	0	1	0	1	-.001	6	-.034	3	-.018	3
327		4	max	696.687	1	18.009	6	18.917	3	0	1	.016	4	.024	8
328			min	-707.362	2	3.483	1	-18.917	4	-.001	6	-.025	3	-.013	3
329		5	max	683.89	1	36.019	6	37.835	3	0	1	0	11	0	11
330			min	-695.476	2	6.966	1	-37.835	4	-.001	6	0	1	0	1
331	M34	1	max	645.109	4	-106.989	1	1884.671	1	1.393	8	.122	2	.822	8
332			min	-753.768	3	-1518.041	6	-1658.424	2	-.166	3	-.151	1	-.098	3
333		2	max	645.109	4	-106.99	1	1884.671	1	1.393	8	.437	1	1.281	8
334			min	-753.768	3	-1518.044	6	-1658.424	2	-.166	3	-.396	2	.007	3
335		3	max	909.086	4	1649.631	8	2475.173	4	1.393	8	1.277	3	1.778	8
336			min	-992.009	3	-1093.21	9	-2707.738	3	-.759	2	-1.162	4	.112	3
337		4	max	909.086	4	1649.624	8	2475.173	4	.179	1	.431	3	1.263	8
338			min	-992.009	3	123.392	3	-2707.738	3	-1.263	6	-.389	4	-.042	3
339		5	max	909.086	4	1649.62	8	2475.173	4	.179	1	.385	4	.747	8
340			min	-992.009	3	123.391	3	-2707.738	3	-1.263	6	-.415	3	-.084	1
341	M35	1	max	1108.409	1	-185.7	4	2237.845	1	.263	2	.24	2	.764	5
342			min	-1201.151	2	-1637.786	5	-2474.326	2	-1.285	5	-.208	1	-.152	2
343		2	max	1108.409	1	-185.701	4	2237.845	1	.263	2	.491	1	1.275	5
344			min	-1201.151	2	-1637.791	5	-2474.326	2	-1.285	5	-.534	2	-.092	2
345		3	max	1109.914	1	660.398	4	2237.845	1	1.409	5	1.19	1	1.787	5
346			min	-1205.083	2	-1637.797	5	-2474.326	2	-1.225	8	-1.307	2	-.032	2
347		4	max	1109.914	1	1503.435	8	2273.939	2	1.409	5	.489	1	1.301	5
348			min	-1205.083	2	152.92	3	-2048.857	1	-.222	2	-.531	2	-.072	2
349		5	max	1109.914	1	1503.43	8	2273.939	2	1.409	5	.179	2	.833	5
350			min	-1205.083	2	152.918	3	-2048.857	1	-.222	2	-.151	1	-.135	2
351	M36	1	max	1047.494	3	-145.612	4	2457.713	4	1.388	6	.26	3	.819	7
352			min	-1132.097	4	-1510.528	7	-2238.688	3	-.162	1	-.288	4	-.083	4
353		2	max	1047.494	3	-145.613	4	2457.713	4	1.388	6	.48	4	1.291	7
354			min	-1132.097	4	-1510.532	7	-2238.688	3	-.162	1	-.44	3	-.037	4
355		3	max	1047.494	3	1656.024	6	2457.713	4	1.388	6	1.248	4	1.763	7
356			min	-1132.097	4	-668.809	3	-2238.688	3	-.236	9	-1.139	3	.095	4
357		4	max	746.437	3	1656.016	6	1816.068	2	.175	4	.464	4	1.255	7
358			min	-854.103	4	86.853	1	-2054.974	1	-1.265	7	-.418	3	-.003	4
359		5	max	746.437	3	1656.013	6	1816.068	2	.175	4	.289	2	.752	7
360			min	-854.103	4	86.852	1	-2054.974	1	-1.265	7	-.321	1	-.1	4
361	M37	1	max	269.035	1	240.676	1	145.08	5	.126	3	.12	2	.058	4
362			min	-299.858	2	-318.614	2	-50.742	2	-.24	8	-.131	1	-.074	3
363		2	max	269.035	1	240.676	1	145.08	5	.126	3	.117	2	.056	4
364			min	-299.858	2	-318.614	2	-50.742	2	-.24	8	-.124	1	-.068	3
365		3	max	269.035	1	240.676	1	145.08	5	.126	3	.114	2	.072	2
366			min	-299.858	2	-318.614	2	-50.742	2	-.24	8	-.117	1	-.077	1



9bj YcdYA Ya VYf GYVjcb: cfWVg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
367		4	max	269.035	1	240.676	1	145.08	5	.126	3	.11	2	.092	2
368			min	-299.858	2	-318.614	2	-50.742	2	-.24	8	-.11	1	-.092	1
369		5	max	269.035	1	240.676	1	145.08	5	.126	3	.107	2	.112	2
370			min	-299.858	2	-318.614	2	-50.742	2	-.24	8	-.104	1	-.107	1
371	M38	1	max	488.697	1	97.416	1	124.769	3	.367	3	.067	4	.151	2
372			min	-506.962	2	-132.252	2	-119.121	4	-.374	4	-.068	3	-.138	1
373		2	max	488.697	1	97.416	1	124.769	3	.367	3	.059	4	.16	2
374			min	-506.962	2	-132.252	2	-119.121	4	-.374	4	-.06	3	-.144	1
375		3	max	488.697	1	97.416	1	124.769	3	.367	3	.052	4	.168	2
376			min	-506.962	2	-132.252	2	-119.121	4	-.374	4	-.053	3	-.151	1
377		4	max	488.697	1	97.416	1	124.769	3	.367	3	.044	4	.176	2
378			min	-506.962	2	-132.252	2	-119.121	4	-.374	4	-.045	3	-.157	1
379		5	max	488.697	1	97.416	1	124.769	3	.367	3	.037	4	.185	2
380			min	-506.962	2	-132.252	2	-119.121	4	-.374	4	-.037	3	-.163	1
381	M39A	1	max	149.796	1	303.984	1	53.514	2	.252	3	.112	1	.115	2
382			min	-188.675	2	-365.832	2	-133.723	5	-.158	4	-.103	2	-.131	1
383		2	max	149.796	1	303.984	1	53.514	2	.252	3	.105	1	.137	2
384			min	-188.675	2	-365.832	2	-133.723	5	-.158	4	-.1	2	-.15	1
385		3	max	149.796	1	303.984	1	53.514	2	.252	3	.098	1	.16	2
386			min	-188.675	2	-365.832	2	-133.723	5	-.158	4	-.096	2	-.169	1
387		4	max	149.796	1	303.984	1	53.514	2	.252	3	.091	1	.183	2
388			min	-188.675	2	-365.832	2	-133.723	5	-.158	4	-.093	2	-.188	1
389		5	max	149.796	1	303.984	1	53.514	2	.252	3	.085	1	.206	2
390			min	-188.675	2	-365.832	2	-133.723	5	-.158	4	-.09	2	-.207	1
391	M40	1	max	518.631	1	812.191	6	431.58	3	.18	3	.103	2	.021	6
392			min	-479.753	2	-115.971	1	-373.952	4	-.116	4	-.112	1	-.007	1
393		2	max	518.631	1	812.191	6	431.58	3	.18	3	.1	2	0	1
394			min	-479.753	2	-115.971	1	-373.952	4	-.116	4	-.105	1	-.03	8
395		3	max	518.631	1	812.191	6	431.58	3	.18	3	.096	2	.007	1
396			min	-479.753	2	-115.971	1	-373.952	4	-.116	4	-.098	1	-.081	6
397		4	max	518.631	1	812.191	6	431.58	3	.18	3	.093	2	.014	1
398			min	-479.753	2	-115.971	1	-373.952	4	-.116	4	-.092	1	-.132	6
399		5	max	518.631	1	812.191	6	431.58	3	.18	3	.09	2	.022	1
400			min	-479.753	2	-115.971	1	-373.952	4	-.116	4	-.085	1	-.182	6
401	M41	1	max	1115.442	1	1184.363	6	687.908	3	.1	4	.136	4	.342	1
402			min	-1097.183	2	178.918	1	-693.557	4	-.109	3	-.135	3	-.267	2
403		2	max	1115.442	1	1184.363	6	687.908	3	.1	4	.093	4	.331	1
404			min	-1097.183	2	178.918	1	-693.557	4	-.109	3	-.092	3	-.293	2
405		3	max	1115.442	1	1184.363	6	687.908	3	.1	4	.05	4	.32	1
406			min	-1097.183	2	178.918	1	-693.557	4	-.109	3	-.049	3	-.318	2
407		4	max	1115.442	1	1184.363	6	687.908	3	.1	4	.006	4	.309	1
408			min	-1097.183	2	178.918	1	-693.557	4	-.109	3	-.006	3	-.343	2
409		5	max	1115.442	1	1184.363	6	687.908	3	.1	4	.037	3	.298	1
410			min	-1097.183	2	178.918	1	-693.557	4	-.109	3	-.037	4	-.369	2
411	M42B	1	max	193.78	1	656.491	6	217.996	3	.179	3	.131	1	.034	2
412			min	-162.96	2	-95.635	1	-281.152	4	-.251	4	-.12	2	-.026	1
413		2	max	193.78	1	656.491	6	217.996	3	.179	3	.124	1	.005	2
414			min	-162.96	2	-95.635	1	-281.152	4	-.251	4	-.116	2	-.026	5
415		3	max	193.78	1	656.491	6	217.996	3	.179	3	.117	1	-.005	4
416			min	-162.96	2	-95.635	1	-281.152	4	-.251	4	-.113	2	-.063	7
417		4	max	193.78	1	656.491	6	217.996	3	.179	3	.11	1	-.008	1
418			min	-162.96	2	-95.635	1	-281.152	4	-.251	4	-.11	2	-.103	6



9bj YcdYA Ya VYf GYVjcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
419		5	max	193.78	1	656.491	6	217.996	3	.179	3	.104	1	-.002	1
420			min	-162.96	2	-95.635	1	-281.152	4	-.251	4	-.107	2	-.144	6
421	MP3A	1	max	171.315	8	80.487	4	188.121	1	0	11	0	11	0	11
422			min	61.8	1	-80.523	3	-188.091	2	0	1	0	1	0	1
423		2	max	411.986	6	153.677	8	88.77	2	.104	1	.124	2	.089	8
424			min	-173.805	1	-73.238	3	-59.845	1	-.107	2	-.092	1	-.028	3
425		3	max	607.706	6	237.867	4	149.842	1	.104	1	.123	6	.147	3
426			min	-106.278	1	-175.325	3	-120.917	2	-.107	2	-.018	1	-.194	4
427		4	max	-5.727	10	21.735	3	21.75	2	0	11	.015	1	.015	3
428			min	-24.404	5	-21.734	4	-21.747	1	0	1	-.015	2	-.015	4
429		5	max	0	11	.015	7	.043	6	0	11	0	11	0	11
430			min	0	1	-.006	4	-.019	1	0	1	0	1	0	1
431	MP2A	1	max	0	11	.148	8	.298	1	0	11	0	11	0	11
432			min	0	1	-.129	7	-.298	2	0	1	0	1	0	1
433		2	max	494.484	6	203.428	4	216.266	1	.037	3	.298	1	.111	4
434			min	-18.64	1	-197.753	3	-198.407	2	-.037	4	-.268	2	-.107	3
435		3	max	739.03	6	340.233	4	378.943	1	.037	3	.894	1	.425	3
436			min	79.69	1	-334.559	3	-361.083	2	-.037	4	-.827	2	-.433	4
437		4	max	-23.066	10	89.486	3	165.538	2	0	11	.034	1	.033	3
438			min	-110.403	5	-89.486	4	-165.482	1	0	1	-.034	2	-.033	4
439		5	max	0	11	.255	8	1.23	5	0	11	0	11	0	11
440			min	0	1	-.246	7	-.731	2	0	1	0	1	0	1
441	MP1A	1	max	115.601	8	91.532	4	205.962	1	0	11	0	11	0	11
442			min	14.286	1	-91.522	3	-205.957	2	0	1	0	1	0	1
443		2	max	398.66	2	118.18	4	104.507	1	.09	2	.081	6	.018	4
444			min	-271.128	1	-175.621	3	-67.653	2	-.085	1	-.043	1	-.086	7
445		3	max	404.387	2	139.908	4	126.234	1	.09	2	.159	5	.199	3
446			min	-265.401	1	-197.348	3	-89.381	2	-.085	1	-.031	2	-.159	4
447		4	max	-5.727	10	21.737	3	21.755	2	0	11	.015	1	.015	3
448			min	-24.404	5	-21.74	4	-21.743	1	0	1	-.015	2	-.015	4
449		5	max	0	11	.01	3	.172	6	0	11	0	11	0	11
450			min	0	1	-.054	8	-.015	1	0	1	0	1	0	1
451	M46A	1	max	204.803	4	199.86	2	139.513	6	.179	1	.146	3	.011	3
452			min	-234.045	3	-275.615	1	-21.093	3	-.278	2	-.158	4	-.025	4
453		2	max	204.803	4	199.86	2	139.513	6	.179	1	.145	3	.023	3
454			min	-234.045	3	-275.615	1	-21.093	3	-.278	2	-.153	4	-.032	4
455		3	max	204.803	4	199.86	2	139.513	6	.179	1	.144	3	.035	3
456			min	-234.045	3	-275.615	1	-21.093	3	-.278	2	-.148	4	-.039	4
457		4	max	204.803	4	199.86	2	139.513	6	.179	1	.142	3	.047	3
458			min	-234.045	3	-275.615	1	-21.093	3	-.278	2	-.143	4	-.046	4
459		5	max	204.803	4	199.86	2	139.513	6	.179	1	.141	3	.059	3
460			min	-234.045	3	-275.615	1	-21.093	3	-.278	2	-.138	4	-.053	4
461	M47A	1	max	373.204	4	78.034	4	126.503	1	.425	1	.048	2	.103	3
462			min	-391.342	3	-110.559	3	-121.429	2	-.432	2	-.05	1	-.09	4
463		2	max	373.204	4	78.034	4	126.503	1	.425	1	.041	2	.11	3
464			min	-391.342	3	-110.559	3	-121.429	2	-.432	2	-.042	1	-.095	4
465		3	max	373.204	4	78.034	4	126.503	1	.425	1	.033	2	.117	3
466			min	-391.342	3	-110.559	3	-121.429	2	-.432	2	-.034	1	-.1	4
467		4	max	373.204	4	78.034	4	126.503	1	.425	1	.026	2	.124	3
468			min	-391.342	3	-110.559	3	-121.429	2	-.432	2	-.026	1	-.105	4
469		5	max	373.204	4	78.034	4	126.503	1	.425	1	.018	2	.131	3
470			min	-391.342	3	-110.559	3	-121.429	2	-.432	2	-.018	1	-.11	4



9bj YcdYA Ya VYf GYWjcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
471	M48A	1	max	92.676	4	304.966	4	65.163	3	.319	4	.134	2	.114	3
472			min	-131.815	3	-366.76	3	-138.716	8	-.224	3	-.125	1	-.131	4
473		2	max	92.676	4	304.966	4	65.163	3	.319	4	.131	2	.137	3
474			min	-131.815	3	-366.76	3	-138.716	8	-.224	3	-.126	1	-.15	4
475		3	max	92.676	4	304.966	4	65.163	3	.319	4	.129	2	.16	3
476			min	-131.815	3	-366.76	3	-138.716	8	-.224	3	-.127	1	-.169	4
477		4	max	92.676	4	304.966	4	65.163	3	.319	4	.127	2	.183	3
478			min	-131.815	3	-366.76	3	-138.716	8	-.224	3	-.128	1	-.188	4
479		5	max	92.676	4	304.966	4	65.163	3	.319	4	.125	2	.206	3
480			min	-131.815	3	-366.76	3	-138.716	8	-.224	3	-.129	1	-.207	4
481	M49A	1	max	423.668	4	813.876	7	423.579	4	.278	4	.105	3	.026	3
482			min	-384.553	3	-117.037	4	-360.068	3	-.216	3	-.115	4	-.017	4
483		2	max	423.668	4	813.876	7	423.579	4	.278	4	.083	3	-.008	10
484			min	-384.553	3	-117.037	4	-360.068	3	-.216	3	-.089	4	-.03	8
485		3	max	423.668	4	813.876	7	423.579	4	.278	4	.078	1	-.002	4
486			min	-384.553	3	-117.037	4	-360.068	3	-.216	3	-.08	2	-.079	7
487		4	max	423.668	4	813.876	7	423.579	4	.278	4	.104	1	.005	4
488			min	-384.553	3	-117.037	4	-360.068	3	-.216	3	-.102	2	-.13	7
489		5	max	423.668	4	813.876	7	423.579	4	.278	4	.129	1	.012	4
490			min	-384.553	3	-117.037	4	-360.068	3	-.216	3	-.125	2	-.181	7
491	M50A	1	max	844.673	4	1179.828	7	746.644	1	.112	2	.171	2	.27	4
492			min	-826.533	3	196.204	4	-755.723	2	-.122	1	-.168	1	-.195	3
493		2	max	844.673	4	1179.828	7	746.644	1	.112	2	.124	2	.257	4
494			min	-826.533	3	196.204	4	-755.723	2	-.122	1	-.122	1	-.219	3
495		3	max	844.673	4	1179.828	7	746.644	1	.112	2	.079	3	.245	4
496			min	-826.533	3	196.204	4	-755.723	2	-.122	1	-.08	4	-.243	3
497		4	max	844.673	4	1179.828	7	746.644	1	.112	2	.041	3	.233	4
498			min	-826.533	3	196.204	4	-755.723	2	-.122	1	-.042	4	-.267	3
499		5	max	844.673	4	1179.828	7	746.644	1	.112	2	.018	1	.221	4
500			min	-826.533	3	196.204	4	-755.723	2	-.122	1	-.018	2	-.291	3
501	M51A	1	max	149.422	4	642.219	5	265.39	1	.27	1	.107	4	.019	3
502			min	-120.178	3	-53.52	2	-328.004	2	-.339	2	-.095	3	-.011	4
503		2	max	149.422	4	642.219	5	265.39	1	.27	1	.115	4	-.002	3
504			min	-120.178	3	-53.52	2	-328.004	2	-.339	2	-.107	3	-.024	8
505		3	max	149.422	4	642.219	5	265.39	1	.27	1	.123	4	-.004	2
506			min	-120.178	3	-53.52	2	-328.004	2	-.339	2	-.118	3	-.063	5
507		4	max	149.422	4	642.219	5	265.39	1	.27	1	.13	4	0	2
508			min	-120.178	3	-53.52	2	-328.004	2	-.339	2	-.13	3	-.104	5
509		5	max	149.422	4	642.219	5	265.39	1	.27	1	.138	4	.003	2
510			min	-120.178	3	-53.52	2	-328.004	2	-.339	2	-.141	3	-.144	5
511	MP3C	1	max	171.315	8	161.21	4	107.421	1	0	11	0	11	0	11
512			min	61.8	1	-161.166	3	-107.405	2	0	1	0	1	0	1
513		2	max	397.659	5	93.427	1	81.428	1	.138	4	.082	2	.046	4
514			min	-132.391	2	-98.724	2	-162.488	6	-.141	3	-.064	1	-.108	7
515		3	max	593.379	5	148.508	4	210.415	1	.138	4	.144	1	.131	2
516			min	-64.864	2	-153.097	3	-277.905	2	-.141	3	-.218	2	-.172	1
517		4	max	-5.727	10	21.742	3	21.736	2	0	11	.015	1	.015	3
518			min	-24.404	5	-21.739	4	-21.738	1	0	1	-.015	2	-.015	4
519		5	max	0	11	.027	7	.008	2	0	11	0	11	0	11
520			min	0	1	-.012	4	-.028	5	0	1	0	1	0	1
521	MP2C	1	max	0	11	.239	4	.15	1	0	11	0	11	0	11
522			min	0	1	-.239	3	-.172	6	0	1	0	1	0	1



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 119406
 Model Name : CT00595-S-SBA_MT_LO_Loads Only_G

Jan 5, 2022
 1:31 PM
 Checked By: _____

9bj YcdYA Ya Vyf GYVjcb: cfWVg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
523		2	max	489.93	7	235.895	4	219.689	1	.018	1	.194	3	.132	1
524			min	2.198	4	-221.935	3	-233.822	2	-.018	2	-.207	4	-.159	2
525		3	max	734.476	7	392.104	4	362.962	1	.018	1	.513	1	.721	3
526			min	100.528	4	-378.144	3	-377.096	2	-.018	2	-.553	2	-.776	4
527		4	max	-23.066	10	146.547	3	108.498	2	0	11	.033	1	.034	3
528			min	-110.403	5	-146.499	4	-108.525	1	0	1	-.033	2	-.034	4
529		5	max	0	11	1.034	8	.324	1	0	11	0	11	0	11
530			min	0	1	-.583	3	-.625	6	0	1	0	1	0	1
531	MP1C	1	max	115.601	8	177.362	4	120.137	1	0	11	0	11	0	11
532			min	14.286	1	-177.363	3	-120.149	2	0	1	0	1	0	1
533		2	max	399.671	3	202.29	4	152.6	4	.129	1	.026	2	.09	4
534			min	-271.997	4	-142.074	3	-121.742	3	-.125	2	-.111	5	-.1	3
535		3	max	405.398	3	224.018	4	165.603	1	.129	1	.184	4	.11	3
536			min	-266.27	4	-163.801	3	-135.724	2	-.125	2	-.193	3	-.203	8
537		4	max	-5.727	10	21.765	3	21.749	2	0	11	.015	1	.015	3
538			min	-24.404	5	-21.753	4	-21.752	1	0	1	-.015	2	-.015	4
539		5	max	0	11	.183	7	.021	2	0	11	0	11	0	11
540			min	0	1	-.025	4	-.064	5	0	1	0	1	0	1
541	M55	1	max	188.704	3	297.417	3	145.754	7	.18	4	.114	1	.042	1
542			min	-219.923	4	-374.765	4	-35.246	4	-.28	3	-.125	2	-.057	2
543		2	max	188.704	3	297.417	3	145.754	7	.18	4	.115	1	.059	4
544			min	-219.923	4	-374.765	4	-35.246	4	-.28	3	-.123	2	-.068	3
545		3	max	188.704	3	297.417	3	145.754	7	.18	4	.116	1	.082	4
546			min	-219.923	4	-374.765	4	-35.246	4	-.28	3	-.12	2	-.087	3
547		4	max	188.704	3	297.417	3	145.754	7	.18	4	.117	1	.105	4
548			min	-219.923	4	-374.765	4	-35.246	4	-.28	3	-.117	2	-.105	3
549		5	max	188.704	3	297.417	3	145.754	7	.18	4	.118	1	.129	4
550			min	-219.923	4	-374.765	4	-35.246	4	-.28	3	-.114	2	-.124	3
551	M56	1	max	372.956	3	71.656	3	113.668	2	.439	2	.047	1	.105	4
552			min	-391.145	4	-104.329	4	-107.564	1	-.446	1	-.048	2	-.093	3
553		2	max	372.956	3	71.656	3	113.668	2	.439	2	.04	1	.112	4
554			min	-391.145	4	-104.329	4	-107.564	1	-.446	1	-.041	2	-.097	3
555		3	max	372.956	3	71.656	3	113.668	2	.439	2	.033	1	.118	4
556			min	-391.145	4	-104.329	4	-107.564	1	-.446	1	-.034	2	-.102	3
557		4	max	372.956	3	71.656	3	113.668	2	.439	2	.027	1	.125	4
558			min	-391.145	4	-104.329	4	-107.564	1	-.446	1	-.027	2	-.106	3
559		5	max	372.956	3	71.656	3	113.668	2	.439	2	.02	1	.131	4
560			min	-391.145	4	-104.329	4	-107.564	1	-.446	1	-.02	2	-.11	3
561	M57	1	max	117.788	3	181.02	3	46.792	1	.327	2	.152	3	.067	4
562			min	-155.187	4	-244.411	4	-133.311	6	-.234	1	-.143	4	-.084	3
563		2	max	117.788	3	181.02	3	46.792	1	.327	2	.148	3	.083	4
564			min	-155.187	4	-244.411	4	-133.311	6	-.234	1	-.142	4	-.095	3
565		3	max	117.788	3	181.02	3	46.792	1	.327	2	.143	3	.098	4
566			min	-155.187	4	-244.411	4	-133.311	6	-.234	1	-.141	4	-.106	3
567		4	max	117.788	3	181.02	3	46.792	1	.327	2	.139	3	.113	4
568			min	-155.187	4	-244.411	4	-133.311	6	-.234	1	-.14	4	-.117	3
569		5	max	117.788	3	181.02	3	46.792	1	.327	2	.135	3	.128	4
570			min	-155.187	4	-244.411	4	-133.311	6	-.234	1	-.139	4	-.129	3
571	M58	1	max	398.605	3	785.19	8	495.682	2	.276	2	.075	1	.02	5
572			min	-361.217	4	7.999	3	-438.234	1	-.215	1	-.085	2	-.008	2
573		2	max	398.605	3	785.19	8	495.682	2	.276	2	.086	4	.003	3
574			min	-361.217	4	7.999	3	-438.234	1	-.215	1	-.092	3	-.031	8



9bj YcdYA Ya VYf GYWJcb: cfWkg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
575		3	max	398.605	3	785.19	8	495.682	2	.276	2	.104	4	.002	3
576			min	-361.217	4	7.999	3	-438.234	1	-.215	1	-.106	3	-.08	8
577		4	max	398.605	3	785.19	8	495.682	2	.276	2	.121	4	.002	3
578			min	-361.217	4	7.999	3	-438.234	1	-.215	1	-.12	3	-.129	8
579		5	max	398.605	3	785.19	8	495.682	2	.276	2	.139	4	.001	3
580			min	-361.217	4	7.999	3	-438.234	1	-.215	1	-.135	3	-.178	8
581	M59	1	max	844.903	3	1178.775	8	763.429	2	.101	3	.171	1	.271	3
582			min	-826.716	4	202.523	3	-765.636	1	-.113	4	-.171	2	-.197	4
583		2	max	844.903	3	1178.775	8	763.429	2	.101	3	.124	1	.259	3
584			min	-826.716	4	202.523	3	-765.636	1	-.113	4	-.124	2	-.221	4
585		3	max	844.903	3	1178.775	8	763.429	2	.101	3	.083	3	.246	3
586			min	-826.716	4	202.523	3	-765.636	1	-.113	4	-.08	4	-.244	4
587		4	max	844.903	3	1178.775	8	763.429	2	.101	3	.044	3	.233	3
588			min	-826.716	4	202.523	3	-765.636	1	-.113	4	-.043	4	-.268	4
589		5	max	844.903	3	1178.775	8	763.429	2	.101	3	.02	2	.221	3
590			min	-826.716	4	202.523	3	-765.636	1	-.113	4	-.02	1	-.291	4
591	M60	1	max	165.545	3	666.04	8	237.582	4	.283	4	.106	3	.037	4
592			min	-134.301	4	-152.13	3	-302.797	3	-.354	3	-.095	4	-.029	3
593		2	max	165.545	3	666.04	8	237.582	4	.283	4	.087	3	.004	4
594			min	-134.301	4	-152.13	3	-302.797	3	-.354	3	-.08	4	-.026	7
595		3	max	165.545	3	666.04	8	237.582	4	.283	4	.087	2	-.01	3
596			min	-134.301	4	-152.13	3	-302.797	3	-.354	3	-.083	1	-.062	8
597		4	max	165.545	3	666.04	8	237.582	4	.283	4	.101	2	0	3
598			min	-134.301	4	-152.13	3	-302.797	3	-.354	3	-.1	1	-.104	8
599		5	max	165.545	3	666.04	8	237.582	4	.283	4	.114	2	.009	3
600			min	-134.301	4	-152.13	3	-302.797	3	-.354	3	-.118	1	-.146	8
601	MP3B	1	max	171.315	8	161.244	4	107.413	1	0	11	0	11	0	11
602			min	61.8	1	-161.252	3	-107.459	2	0	1	0	1	0	1
603		2	max	441.843	4	24.754	2	178.578	3	.114	2	.047	2	.129	4
604			min	-230.363	3	-114.981	7	-139.396	4	-.118	1	-.114	5	-.121	3
605		3	max	617.238	8	194.097	4	231.208	1	.114	2	.236	3	.172	7
606			min	-162.837	3	-249.959	3	-192.898	2	-.118	1	-.234	4	-.046	2
607		4	max	-5.727	10	21.747	3	21.74	2	0	11	.015	1	.015	3
608			min	-24.404	5	-21.75	4	-21.741	1	0	1	-.015	2	-.015	4
609		5	max	0	11	.019	3	.012	2	0	11	0	11	0	11
610			min	0	1	-.044	8	-.015	5	0	1	0	1	0	1
611	MP2B	1	max	0	11	.238	4	.167	5	0	11	0	11	0	11
612			min	0	1	-.239	3	-.158	6	0	1	0	1	0	1
613		2	max	488.875	8	220.497	4	235.835	1	.02	2	.196	4	.163	2
614			min	8.562	3	-240.091	3	-240.187	2	-.02	1	-.216	3	-.14	1
615		3	max	733.421	8	376.705	4	379.108	1	.02	2	.537	1	.779	3
616			min	106.892	3	-396.3	3	-383.46	2	-.02	1	-.564	2	-.716	4
617		4	max	-23.066	10	146.502	3	108.495	2	0	11	.033	1	.034	3
618			min	-110.403	5	-146.55	4	-108.522	1	0	1	-.033	2	-.034	4
619		5	max	0	11	.579	4	.327	1	0	11	0	11	0	11
620			min	0	1	-1.036	7	-.619	6	0	1	0	1	0	1
621	MP1B	1	max	115.601	8	177.345	4	120.143	1	0	11	0	11	0	11
622			min	14.286	1	-177.354	3	-120.137	2	0	1	0	1	0	1
623		2	max	339.338	8	80.107	4	165.154	1	.139	4	.069	2	.103	8
624			min	-147.981	3	-84.916	3	-232.339	2	-.135	3	-.052	1	-.006	3
625		3	max	363.743	8	101.835	4	186.882	1	.139	4	.19	1	.146	1
626			min	-142.254	3	-106.644	3	-254.067	2	-.135	3	-.265	2	-.092	2




9bj YcdYA Ya VYf'GYW]cb': cfWg'f7 cb]bi YXL

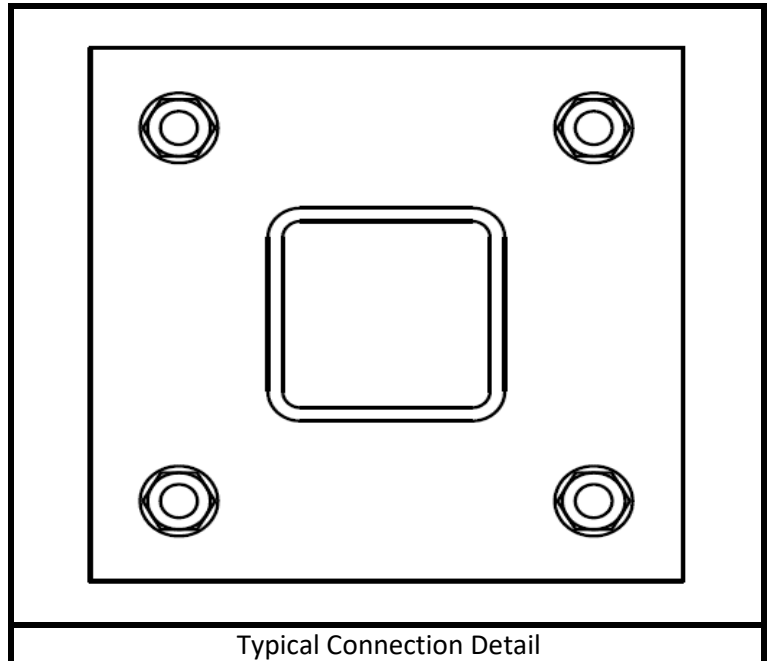
Member	Sec	Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
627	4	max	-5.727	10	21.735	3	21.738	2	0	11	.015	1	.015	3
628		min	-24.404	5	-21.744	4	-21.746	1	0	1	-.015	2	-.015	4
629	5	max	0	11	.007	3	.01	2	0	11	0	11	0	11
630		min	0	1	-.116	8	-.122	5	0	1	0	1	0	1

9bj YcdY5-G7 '% h fl * \$!%\$L '@: 8 'GhY'7 cXY7\ YWg

Member	Shape	Code Check	Loc...L...	Shear Check	Loc..... L...	phi*Pn...	phi*Pn...	phi*Mn...	phi*Mn.....	Eqn	
1	M1	C5X6.7	.543	1.083 2	.647	6.5 z 1	4363.0...	63828	1.604	7.675	1...H1-1a
2	M2	C5X6.7	.679	1.083 3	.589	6.5 z 4	4363.0...	63828	1.604	9.119	2...H1-1a
3	M3	C5X6.7	.690	11.... 4	.584	6.5 z 3	4363.0...	63828	1.604	8.795	1...H1-1a
4	MP1B	PIPE_2.0	.216	3.151 2	.109	3.151 4	22356...	32130	1.872	1.872	2...H1-1b
5	M38A	HSS4X4X3	.217	.911 5	.108	1.628 y 6	91274...	106812	12.662	12.662	3...H1-1b
6	MP5B	HSS4X4X3	.221	6.25 4	.108	1.628 y 5	91274...	106812	12.662	12.662	3...H1-1b
7	MP1C	PIPE_2.0	.215	3.151 4	.108	3.151 1	22356...	32130	1.872	1.872	2...H1-1b
8	M15	HSS4X4X3	.218	.911 7	.107	1.628 y 8	91274...	106812	12.662	12.662	3...H1-1b
9	MP3C	PIPE_2.0	.200	3.151 2	.104	3.151 3	22356...	32130	1.872	1.872	2...H1-1b
10	MP3B	PIPE_2.0	.201	3.151 3	.097	3.151 1	22356...	32130	1.872	1.872	1...H1-1b
11	MP3A	PIPE_2.0	.158	3.151 4	.082	3.151 1	22356...	32130	1.872	1.872	2...H1-1b
12	MP1A	PIPE_2.0	.163	3.151 3	.082	3.151 1	22356...	32130	1.872	1.872	2...H1-1b
13	M40A	PIPE_2.0	.304	3.25 2	.078	3.25 2	5820.4...	32130	1.872	1.872	1...H1-1b
14	MP2A	PIPE_2.0	.698	4.25 2	.076	4.25 2	14916...	32130	1.872	1.872	2...H1-1b
15	MP2B	PIPE_2.0	.608	4.25 4	.070	4.25 3	14916...	32130	1.872	1.872	2...H1-1b
16	MP2C	PIPE_2.0	.609	4.25 3	.068	4.25 4	14916...	32130	1.872	1.872	2...H1-1b
17	M41A	PIPE_2.0	.291	3.25 3	.068	3.25 3	5820.4...	32130	1.872	1.872	1...H1-1b
18	M42A	PIPE_2.0	.287	9.75 4	.067	9.75 4	5820.4...	32130	1.872	1.872	1...H1-1b
19	M44A	PL1/2x6	.131	.742 2	.023	.75 y 4	77578...	94500	.984	11.813	1...H1-1b
20	M43A	PL1/2x6	.153	.75 3	.022	0 y 2	77578...	94500	.984	11.813	1...H1-1b
21	M45	PL1/2x6	.170	0 4	.018	0 y 1	77578...	94500	.984	11.813	1...H1-1b
22	M17	PL3/8x2	.286	.25 2	.010	.25 y 6	23337...	24300	.19	1.012	1...H1-1b
23	M43	PL3/8x2	.349	.25 3	.010	.25 y 5	23337...	24300	.19	1.012	1...H1-1b
24	M75	PL3/8x2	.323	.25 2	.010	.25 y 8	23337...	24300	.19	1.012	1...H1-1b
25	M16	PL3/8x2	.352	0 4	.010	0 y 5	23337...	24300	.19	1.012	1...H1-1b
26	M74	PL3/8x2	.326	0 2	.010	0 z 1	23337...	24300	.19	1.012	1...H1-1b
27	M42	PL3/8x2	.282	0 2	.010	0 y 6	23337...	24300	.19	1.012	1...H1-1b
28	M47	L2.5x2.5x4	.054	1.937 2	.009	0 y 8	23287...	37485	1.083	2.359	1...H2-1
29	M50	L2.5x2.5x4	.054	1.937 2	.009	0 y 7	23287...	37485	1.083	2.359	1...H2-1
30	M51	L2.5x2.5x4	.048	1.856 1	.009	0 y 6	23287...	37485	1.083	2.359	1...H2-1
31	M46	L2.5x2.5x4	.048	2.018 1	.009	0 y 6	23287...	37485	1.083	2.359	1...H2-1
32	M49	L2.5x2.5x4	.062	1.896 4	.009	0 y 5	23287...	37485	1.083	2.359	1...H2-1
33	M48	L2.5x2.5x4	.062	1.977 3	.009	3.874 y 5	23287...	37485	1.083	2.359	1...H2-1
34	M76	L4X4X4	.108	3.042 2	.007	0 z 1	37553...	62532	3.138	5.968	1...H2-1
35	M44	L4X4X4	.088	2.725 4	.007	6.085 z 3	37553...	62532	3.138	6.045	1...H2-1
36	M88	LL3x3x3x0	.124	0 5	.007	5.478 z 4	49392...	70632	4.823	3.751	1 H1-1b*
37	M18	L4X4X4	.088	3.359 3	.007	0 z 3	37553...	62532	3.138	6.05	1...H2-1
38	M89	LL3x3x3x0	.122	0 8	.006	0 y 4	49392...	70632	4.823	3.751	1...H1-1b*
39	M90	LL3x3x3x0	.122	0 7	.006	5.478 y 3	49392...	70632	4.823	3.751	1...H1-1b*

	Standoff Arm Flange Connection Check		Date	
			1/5/2022	
	Customer:	SBA	TIA Standard:	ANSI/TIA-222-G
	Carrier:	T-Mobile	Mount Elev. [ft]:	167
	Site Name:	Stonington East	Engineer Name:	Sandesh Khawas Bhujel
Site Number:	CT00595-S-03	Project #:	119406	
<p><i>NOTE: The calculations shown below are for a single representative load combination for example purposes. The results for all load combinations are presented in the Results Summary Table.</i></p>				


RISA Member Label =	M38A	
I or J End?	J	
Load Combination # =	3	
Plate Width, Wp =	8.5	[In]
Plate Height, Hp =	8.5	[In]
Plate Thickness, tp =	0.75	[In]
Plate Fy =	36	[KSI]
Bolt Diameter, db =	1	[In]
Bolt Fu =	120	[KSI]
Bolt Horizontal Spacing, Sbh =	6	[In]
Bolt Vertical Spacing, Sbv =	6	[In]
Standoff Member Shape =	Rect Tube	
Member Width, Wm =	4	[In]
Member Depth, Dm =	4	[In]
Member Thickness, tm =	0.1875	[In]
Standoff Weld Size =	0.1875	[In]
# Standoff Welds =	2	
Length of Stiffener, Ls =		[In]
Width of Stiffener, Ws =		[In]
Width of Notch, Wn =		[In]
Stiffener Dim 1, ds1 =		[In]
Stiffener Dim 2, ds2 =		[In]
Stiffener Fy =		[KSI]
Stiffener Weld Size =		[In]
# Stiffener Welds =		



NOTES
Standoff and Stiffener welds are assumed 0.1875 in.

Capacity Checks:

Max Bolt Shear =	0.048	[Kips]
Bolt Shear Capacity =	35.34	[Kips]
Max Bolt Shear Usage =	0.1%	PASS
Max Bolt Tension =	2.51	[Kips]
Bolt Tension Capacity =	54.52	[Kips]
Max Bolt Tension Usage =	4.6%	PASS
Max Bolt Interaction =	4.6%	PASS
Max Plate Bending Moment =	4.74	[Kip-In]
Length of Yield Line =	6.29	[In]
Plate Moment Capacity =	28.64	[Kip-In]
Max Plate Usage =	13.9%	PASS
Max Weld Usage =	15.9%	PASS

	Standoff Arm Flange Connection Check			Date
				1/5/2022
	Customer:	SBA	TIA Standard:	ANSI/TIA-222-G
	Carrier:	T-Mobile	Mount Elev. [ft]:	167
	Site Name:	Stonington East	Engineer Name:	Sandesh Khawas Bhujel
Site Number:	CT00595-S-03	Project #:	119406	

Results Summary Table

Member Label	Member End	Load Combo #	Max Bolt Shear [K]	Max Bolt Tension [K]	Bolt Shear Check	Bolt Tension Check	Bolt Interaction Check	Plate Bending Check	Weld Check
M15	J	1	0.1440	0.3089	0.4%	0.6%	0.7%	1.7%	5.0%
M15	J	2	0.1291	1.5509	0.4%	2.8%	2.9%	8.9%	9.3%
M15	J	3	0.0927	0.3371	0.3%	0.6%	0.7%	1.9%	9.3%
M15	J	4	0.0747	2.4786	0.2%	4.5%	4.5%	13.7%	13.7%
M15	J	5	0.0727	1.3590	0.2%	2.5%	2.5%	7.5%	6.9%
M15	J	6	0.0477	1.6522	0.1%	3.0%	3.0%	9.2%	10.3%
M15	J	7	0.0575	1.3169	0.2%	2.4%	2.4%	7.3%	6.2%
M15	J	8	0.0460	1.7607	0.1%	3.2%	3.2%	9.8%	10.9%
M15	J	9	0.0488	0.4927	0.1%	0.9%	0.9%	2.8%	3.0%
M15	J	10	0.0294	0.2293	0.1%	0.4%	0.4%	1.3%	1.1%
M15	J	11	0.0151	0.4116	0.0%	0.8%	0.8%	2.4%	2.6%
M38A	J	1	0.1749	0.5129	0.5%	0.9%	1.0%	2.8%	9.5%
M38A	J	2	0.1656	1.7745	0.5%	3.3%	3.3%	10.1%	11.3%
M38A	J	3	0.0476	2.5114	0.1%	4.6%	4.6%	13.9%	15.9%
M38A	J	4	0.0682	0.4323	0.2%	0.8%	0.8%	2.4%	14.1%
M38A	J	5	0.0640	1.4115	0.2%	2.6%	2.6%	7.8%	8.9%
M38A	J	6	0.0654	1.6484	0.2%	3.0%	3.0%	9.1%	8.2%
M38A	J	7	0.0396	1.7455	0.1%	3.2%	3.2%	9.7%	8.5%
M38A	J	8	0.0630	1.3598	0.2%	2.5%	2.5%	7.5%	8.6%
M38A	J	9	0.0293	0.2545	0.1%	0.5%	0.5%	1.4%	1.7%
M38A	J	10	0.0519	0.5150	0.1%	0.9%	1.0%	2.9%	3.0%
M38A	J	11	0.0151	0.4116	0.0%	0.8%	0.8%	2.4%	2.6%
MP5B	I	1	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%
MP5B	I	2	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%
MP5B	I	3	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%
MP5B	I	4	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%
MP5B	I	5	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%
MP5B	I	6	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%
MP5B	I	7	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%
MP5B	I	8	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%
MP5B	I	9	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%
MP5B	I	10	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%
MP5B	I	11	0.0000	0.0000	0.0%	0.0%	0.0%	0.0%	0.0%

EXHIBIT 9

EME Report



Radio Frequency Emissions Analysis Report

January 21, 2022

Centerline Communications on behalf of T-Mobile
Centerline Communications Project Number: N/A

Site Name: Stonington/I-95_1
Site Address: 86 Voluntown Road, Stonington, CT 06379

Site Compliance Summary

Compliance Status:	Compliant
Carrier MPE%	1.53696000%
of FCC General Population Allowable Limit:	
Composite MPE%	1.53698900%
of FCC General Population Allowable Limit:	



January 21, 2022

T-Mobile

Attn: John Benedetto, RF Manager
5050 Cochituate Road Suite 550 - 13&14
Framingham, MA 01701

Emissions Analysis for Site:

Centerline Communications, LLC ("Centerline") was directed to analyze the proposed T-Mobile facility to be located near , for the purpose of determining whether the emissions from the proposed facility 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.

Population 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 (LTE) band is $400 \mu\text{W}/\text{cm}^2$; 700 MHz (LTE) band is $467 \mu\text{W}/\text{cm}^2$, 1900 MHz (PCS), 2100 (AWS), and 5 GHz (B46) bands is $1000 \mu\text{W}/\text{cm}^2$.

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, 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 performed for the proposed facility using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing focused omnidirectional 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, was focused at the base of the tower. This is a very conservative estimate since the gain reduction in actual applications is typically greater than 10 dB in the direction of ground immediately surrounding the facility. Real world emissions values from this facility are expected to be lower than values listed in this report at ground level. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

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. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

For each sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

RRH #	Frequency Band	Technology	Channel Count	Transmit Power per Channel (W)
1	1900	UMTS	1	40
1	1900	GSM	1	15
1	1900	LTE	2	140
1	2100	LTE	2	140
2	700	LTE	4	40
2	600	LTE	2	40
2	600	NR	2	30
3	2500	LTE	1	30
3	2500	NR	1	30
3	2500	LTE	1	90
3	2500	NR	1	90

Table 1: Channel Data Table



The following antennas listed in Table 2 were used in the modeling for transmission in the 700 MHz (LTE), 1900 MHz (PCS), 2100 MHz (AWS), and 5 GHz (Band 46) frequency bands. This is based on information from the carrier with regard to anticipated antenna selection.

Sector	Antenna Number	Make / Model	Centerline (ft)
A	1	COMMSCOPE VV-65A-R1B	167
A	1	COMMSCOPE VV-65A-R1B	167
A	1	COMMSCOPE VV-65A-R1B	167
A	1	COMMSCOPE VV-65A-R1B	167
A	2	RFS APXVAALL24 43-U-NA20	167
A	2	RFS APXVAALL24 43-U-NA20	167
A	2	RFS APXVAALL24 43-U-NA20	167
A	3	ERICSSON AIR6449 LTE BrM	167
A	3	ERICSSON AIR6449 NR BrM	167
A	3	ERICSSON AIR6449 LTE TB 2500	167
A	3	ERICSSON AIR6449 NR TB 2500	167
B	4	COMMSCOPE VV-65A-R1B	167
B	4	COMMSCOPE VV-65A-R1B	167
B	4	COMMSCOPE VV-65A-R1B	167
B	4	COMMSCOPE VV-65A-R1B	167
B	5	RFS APXVAALL24 43-U-NA20	167
B	5	RFS APXVAALL24 43-U-NA20	167
B	5	RFS APXVAALL24 43-U-NA20	167
B	6	ERICSSON AIR6449 LTE BrM	167
B	6	ERICSSON AIR6449 NR BrM	167
B	6	ERICSSON AIR6449 LTE TB 2500	167
B	6	ERICSSON AIR6449 NR TB 2500	167
C	7	COMMSCOPE VV-65A-R1B	167
C	7	COMMSCOPE VV-65A-R1B	167
C	7	COMMSCOPE VV-65A-R1B	167
C	7	COMMSCOPE VV-65A-R1B	167
C	8	RFS APXVAALL24 43-U-NA20	167
C	8	RFS APXVAALL24 43-U-NA20	167
C	8	RFS APXVAALL24 43-U-NA20	167
C	9	ERICSSON AIR6449 LTE BrM	167
C	9	ERICSSON AIR6449 NR BrM	167
C	9	ERICSSON AIR6449 LTE TB 2500	167
C	9	ERICSSON AIR6449 NR TB 2500	167

Table 2: Antenna Data

All calculations were done with respect to uncontrolled / general population threshold limits.



Results

Per the calculations completed for the proposed T-Mobile configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

ID	Make / Model	Frequency Band	Gain (dBd)	Centerline (ft)	Channel Count	TX Power (W)	ERP (W)	MPE %
T-Mobile 1	COMMSCOPE VV-65A-R1B	1900	15.25	167.0	1	40	1339.8618	0.000000000
T-Mobile 1	COMMSCOPE VV-65A-R1B	1900	15.25	167.0	1	15	502.4482	0.000000000
T-Mobile 1	COMMSCOPE VV-65A-R1B	1900	15.25	167.0	2	140	9379.0323	0.000000000
T-Mobile 1	COMMSCOPE VV-65A-R1B	2100	15.87	167.0	2	140	10818.2754	0.000000000
T-Mobile 2	RFS APXVAALL24 43-U-NA20	700	13.65	167.0	4	40	3707.8314	0.000000000
T-Mobile 2	RFS APXVAALL24 43-U-NA20	600	12.95	167.0	2	40	1577.9382	0.000000000
T-Mobile 2	RFS APXVAALL24 43-U-NA20	600	12.95	167.0	2	30	1183.4536	0.000000000
T-Mobile 3	ERICSSON AIR6449 LTE BrM	2500	15.15	167.0	1	30	982.0221	0.000000000
T-Mobile 3	ERICSSON AIR6449 NR BrM	2500	15.15	167.0	1	30	982.0221	0.000000000
T-Mobile 3	ERICSSON SON_AIR6449 LTE TB	2500	22.35	167.0	1	90	15461.1755	0.003390000
T-Mobile 3	ERICSSON SON_AIR6449 NR TB	2500	22.35	167.0	1	90	15461.1755	0.003390000
T-Mobile 4	COMMSCOPE VV-65A-R1B	1900	15.25	167.0	1	40	1339.8618	0.000000000
T-Mobile 4	COMMSCOPE VV-65A-R1B	1900	15.25	167.0	1	15	502.4482	0.000000000
T-Mobile 4	COMMSCOPE VV-65A-R1B	1900	15.25	167.0	2	140	9379.0323	0.000001000
T-Mobile 4	COMMSCOPE VV-65A-R1B	2100	15.87	167.0	2	140	10818.2754	0.000001000
T-Mobile 5	RFS APXVAALL24 43-U-NA20	700	13.65	167.0	4	40	3707.8314	0.000001000
T-Mobile 5	RFS APXVAALL24 43-U-NA20	600	12.95	167.0	2	40	1577.9382	0.000000000
T-Mobile 5	RFS APXVAALL24 43-U-NA20	600	12.95	167.0	2	30	1183.4536	0.000000000
T-Mobile 6	ERICSSON AIR6449 LTE BrM	2500	15.15	167.0	1	30	982.0221	0.000000000
T-Mobile 6	ERICSSON AIR6449 NR BrM	2500	15.15	167.0	1	30	982.0221	0.000000000
T-Mobile 6	ERICSSON SON_AIR6449 LTE TB	2500	22.35	167.0	1	90	15461.1755	0.188025000
T-Mobile 6	ERICSSON SON_AIR6449 NR TB	2500	22.35	167.0	1	90	15461.1755	0.188025000
T-Mobile 7	COMMSCOPE VV-65A-R1B	1900	15.25	167.0	1	40	1339.8618	0.000001000
T-Mobile 7	COMMSCOPE VV-65A-R1B	1900	15.25	167.0	1	15	502.4482	0.000000000
T-Mobile 7	COMMSCOPE VV-65A-R1B	1900	15.25	167.0	2	140	9379.0323	0.000005000
T-Mobile 7	COMMSCOPE VV-65A-R1B	2100	15.87	167.0	2	140	10818.2754	0.000005000
T-Mobile 8	RFS APXVAALL24 43-U-NA20	700	13.65	167.0	4	40	3707.8314	0.000004000
T-Mobile 8	RFS APXVAALL24 43-U-NA20	600	12.95	167.0	2	40	1577.9382	0.000003000
T-Mobile 8	RFS APXVAALL24 43-U-NA20	600	12.95	167.0	2	30	1183.4536	0.000002000



T-Mobile 9	ERICSSON AIR6449 LTE BrM	2500	15.15	167.0	1	30	982.0221	0.000000000
T-Mobile 9	ERICSSON AIR6449 NR BrM	2500	15.15	167.0	1	30	982.0221	0.000000000
T-Mobile 9	ERICSSON SON_AIR6449 LTE TB	2500	22.35	167.0	1	90	15461.1755	0.577052000
T-Mobile 9	ERICSSON SON_AIR6449 NR TB	2500	22.35	167.0	1	90	15461.1755	0.577052000
T-Mobile MPE%								1.53696000 %

Table 3: T-Mobile Antenna Inventory & Power Level



FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 4* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated AT&T sector(s).

Frequency Band	Centerline Technology (ft.)	# of Channels	ERP W (Per Channel)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	MPE %	
1900	U	167.0	1	1339.861757	0.0000000	1000	0.00000000
1900	G	167.0	1	502.4481587	0.0000000	1000	0.00000000
1900	L	167.0	2	4689.516148	0.0000000	1000	0.00000000
2100	L	167.0	2	5409.137679	0.0000000	1000	0.00000000
700	L	167.0	4	926.95786	0.0000000	467	0.00000000
600	L	167.0	2	788.9690944	0.0000000	400	0.00000000
600	N	167.0	2	591.7268208	0.0000000	400	0.00000000
2500	L	167.0	1	982.0220846	0.0000000	1000	0.00000000
2500	N	167.0	1	982.0220846	0.0000000	1000	0.00000000
2500	L	167.0	1	15461.17548	0.0339010	1000	0.00339000
2500	N	167.0	1	15461.17548	0.0339010	1000	0.00339000
Alpha MPE%						0.00678000	
1900	U	167.0	1	1339.861757	0.0000020	1000	0.00000000
1900	G	167.0	1	502.4481587	0.0000010	1000	0.00000000
1900	L	167.0	2	4689.516148	0.0000110	1000	0.00000100
2100	L	167.0	2	5409.137679	0.0000070	1000	0.00000100
700	L	167.0	4	926.95786	0.0000040	467	0.00000100
600	L	167.0	2	788.9690944	0.0000020	400	0.00000000
600	N	167.0	2	591.7268208	0.0000010	400	0.00000000
2500	L	167.0	1	982.0220846	0.0000010	1000	0.00000000
2500	N	167.0	1	982.0220846	0.0000010	1000	0.00000000
2500	L	167.0	1	15461.17548	1.8802470	1000	0.18802500
2500	N	167.0	1	15461.17548	1.8802470	1000	0.18802500
Beta MPE%						0.37605300	
1900	U	167.0	1	1339.861757	0.0000070	1000	0.00000100
1900	G	167.0	1	502.4481587	0.0000030	1000	0.00000000
1900	L	167.0	2	4689.516148	0.0000470	1000	0.00000500
2100	L	167.0	2	5409.137679	0.0000470	1000	0.00000500
700	L	167.0	4	926.95786	0.0000190	467	0.00000400
600	L	167.0	2	788.9690944	0.0000130	400	0.00000300
600	N	167.0	2	591.7268208	0.0000100	400	0.00000200



2500	L	167.0	1	982.0220846	0.0000040	1000	0.00000000
2500	N	167.0	1	982.0220846	0.0000040	1000	0.00000000
2500	L	167.0	1	15461.17548	5.7705190	1000	0.57705200
2500	N	167.0	1	15461.17548	5.7705190	1000	0.57705200
Gamma MPE%							1.15412400
T-Mobile MPE%							1.53696000 %

Table 4: T-Mobile Maximum Sector MPE Power Values



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:

Carrier	Predicted MPE %
T-Mobile	1.53696000%
Sprint	0.00000200%
AT&T	0.00001500%
Verizon	0.00001300%
Composite	1.53698900%

Table 5: Total Predicted MPE(%) by Carrier

Compliance Status:

The anticipated composite MPE value for this site assuming all carriers present is **1.53698900%** of the allowable FCC established general population limit sampled at the ground level.

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.

Katrina Styx
RF Compliance Consultant
Centerline Communications, LLC
750 West Center St. Suite 301
West Bridgewater, MA 02379

A handwritten signature in black ink, appearing to read 'Katrina Styx', is positioned below the contact information.

EXHIBIT 10

Generator Specifications
Generac RD025 25KW

RD025 | 2.2L | 25 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

Standby Power Rating

25 kW, 31.25 kVA, 60 Hz



Image used for illustration purposes only




Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.


 UL2200, UL508, UL489, UL142


 CSA 22.2

 BS5514 and DIN 6271

 SAE J1349

 NFPA 37, 70, 99

 ISO 3046, 8528, 9001

 NEMA ICS1, ICS10, MG1, 250, ICS6, AB1

 ANSI/IEEE C62.41

Powering Ahead

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

Standard Features

ENGINE SYSTEM

- Cold Weather Kit
- Oil Drain Extension
- Heavy Duty Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil & Coolant
- Critical Exhaust Silencer

GENERATOR SET

- Sound Attenuated Aluminum Enclosure
- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Wrapped Exhaust Piping
- Standard Factory Testing
- 5 Year Limited Warranty
- Ready to Accept Full Load in <10 Seconds
- E-Stop

Electrical System

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor
- Smart Battery Charger

ALTERNATOR SYSTEM

- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Sealed Bearings
- Low Temperature Rise (>120°C)
- Low THD (<5%)

Cooling System

- Closed Coolant Recovery System
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension
- Can Operate at up to 122°F (50°C) Ambient Temperature

Fuel System

- Fuel Lockoff Solenoid
- Primary Fuel Filter
- Stainless Steel Fuel Lines

TANKS

- 24 Hour Run Time Tank
- UL142 Listed Tank

CONTROL SYSTEM



Evolution™ Controller

- Two-Line Plain Text LCD Display
- Programmable Start Delay Between 10-30 seconds
- 10 second Engine Start Sequence
- 5 second Engine Warm Up
- 1 minute Engine Cool-Down
- Starter Lock-Out
- Smart Battery Charger
- Automatic Voltage Regulation with Over and Under Protection
- Automatic Low Oil Pressure Shutdown
- Overspeed Shutdown
- High Temperature Shutdown
- Overcrank Protection
- Safety Fused
- Failure to Transfer Protection
- Low Battery Protection
- 50 Even Run Log
- Future Set Capable Exerciser
- Incorrect Wiring Protection
- Internal Fault Protection
- Common External Fault Capability
- Governor Failure Protection

Optional Shipped Loose and Field Install Kits

ENGINE SYSTEM

- Base Plug Kit

GENERATOR SET

- Paint Kit
- Scheduled Maintenance Kit

CONTROL SYSTEM

- Mobile Link™ and Adapter Kit

TANKS

- Spill Box
- 90% Fuel Alarm
- Tank Risers
- Spill Box Drainback Kit
- Vent Extension Support Kit
- 5 Day Run Time Tank

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Perkins
EPA Emission Compliance	Tier 4 Interim
Cylinder #	4
Type	In-Line
Displacement - in ³ (L)	2.22 (135)
Bore - in (mm)	3.3 (84.0)
Stroke - in (mm)	3.9 (100.0)
Compression Ratio	23.3:1
Intake Air Method	Turbocharged/Aftercooled
Piston Type	Aluminum
Crankshaft Type	Forged Steel
Engine Block Type	Cast Iron

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	±0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow Cartridge
Crankcase Capacity with Filters- qt (L)	11.2 (10.6)

Cooling System

Cooling System Type	Closed Recovery
Fan Type	Pusher
Fan Speed- rpm	1,980
Fan Diameter - in (mm)	18.0 (457.2)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specification	ASTM
Fuel Pump Type	Mechanical Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Lin (mm/in)	7.94/0.31 (ID)
Fuel Return Line (mm/in)	4.76/.19 (ID)
Fuel Filtering (microns)	25

Engine Electrical System

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	Generac
Poles	4
Field Type	Rotating
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Direct
Bearings	Single Sealed
Coupling	Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Full Digital
Number of Sensed Phases	2
Regulation Accuracy (Steady State)	±1%

RD025 | 2.2L | 25 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

		Standby
Single-Phase 120/480 VAC @0.1pf	25 kW	Amps: 104
Three-Phase 120/208 VAC @0.8pf	25 kW	Amps: 87
Three-Phase 120/240 VAC @0.8pf	25 kW	Amps: 75
Three-Phase 277/480 VAC @0.8pf	25 kW	Amps: 37

MOTOR STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip at 30%

120/240 V, Single-Phase at 0.4pf	168
120/208 V, Three-Phase at 0.4pf	144
120/240 V, Three-Phase at 0.4pf	125
120/240 V, Three-Phase at 0.4pf	64

FUEL CONSUMPTION RATES*

Percent Load	Diesel gal/hr (L/hr)
25%	0.97 (3.67)
50%	1.37 (5.19)
75%	1.97 (7.46)
100%	2.77 (10.49)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Air Flow (Radiator and Alternator)	ft ³ /min (m ³ /min)	2800 (79)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (MJ/hr)	128,638 (135.7)
Max. Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No. 0199270SSD	
Maximum Radiator Backpressure	in H ₂ O (kPa)	0.50 (0.12)

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power ft ³ /min (m ³ /min)	88 (2.5)

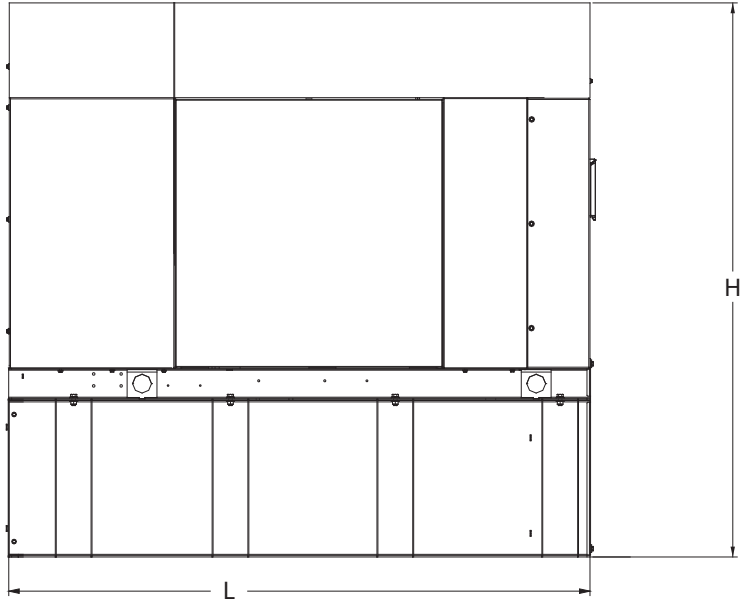
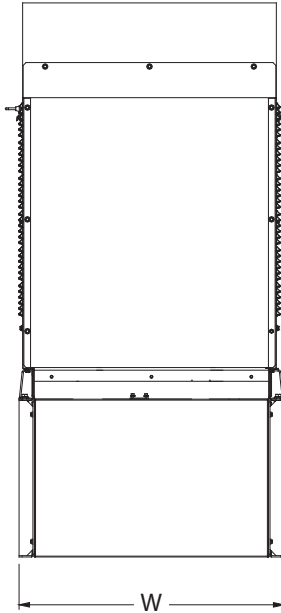
ENGINE

EXHAUST

ENGINE			EXHAUST		
		Standby			Standby
Rated Engine Speed	rpm	1,800	Exhaust Flow (Rated Output)	ft ³ /min (m ³ /min)	296.6 (8.4)
			Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	930 (499)

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards. Standby - See Bulletin 0187500SSB

DIMENSIONS AND WEIGHTS*



Weights and Dimensions

Unit Weight - lbs	Unit Weight with Skid - lbs	Dimensions (L x W x H) in
2,811	2,849	84.2 x 35.0 x 91.7

25kW Fuel Consumption

Fuel Tank Gross Total Capacity	240
Fuel Tank Gross Usable Capacity	229
Fuel Tank Net Usable Capacity (Run Hours Based on Net Usable Capacity)	206
Run Hours 100% Load	98
Run Hours 75% Load	125
Run Hours 50% Load	161

**with fuel tank
103.4" 35" x 91.7"**

Sound Emission Data

Rated Load Sound Output at 23ft - dB(A)	65
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* All measurements are approximate and for estimation purposes only. Drawing is for illustration purposes only, not to scale.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

EXHIBIT 11

Wetlands Map



National Wetlands Inventory

surface waters and wetlands

ABOUT

GET DATA

PRINT

FIND LOCATION

BASEMAPS >

MAP LAYERS >

- Wetlands 1 2
- Riparian 1 2
- Riparian Mapping Areas 1 2
- Data Source 1 2
 - Source Type
 - Image Scale
 - Image Year
- Areas of Interest 2
- FWS Managed Lands 1 2
- Historic Wetland Data 1 2

Map navigation controls: + (Zoom In), - (Zoom Out), Refresh, Home

Measure tool popup:
Measure
Feet
Measurement Result
511.2 Feet

1:9,028
41.402 | -71.856

LEGEND

