



NSS **NORTHEAST**
SITE SOLUTIONS
Turnkey Wireless Development

Northeast Site Solutions
Denise Sabo
4 Angela's Way, Burlington CT 06013
203-435-3640
denise@northeastsitesolutions.com

May 2, 2022

Members of the Siting Council
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Exempt Modification Application
811 Stonington Road, Stonington, CT 06355
Latitude: 41.353333
Longitude: -71.886944
Site#: CT01493-S_CT11310A_SBA/T-Mobile

Dear Ms. Bachman:

T-Mobile is requesting to file an exempt modification for an existing tower located at 811 Stonington Road, Stonington, CT 06355. T-Mobile currently maintains three (3) antennas at the 134-foot level of the existing 150-foot tower. The property is owned by Phillip McClellan, and the tower is owned by SBA. T-Mobile now intends to replace (3) existing antennas with (3) new antennas. The new antennas would be installed at the 134-foot level of the tower. This modification includes B2, B5 hardware that is both 4G (LTE), and 5G capable.

T-Mobile Planned Modifications:

Remove: None

Remove and Replace:

(3) RFS APXVAR18-43-C-NA20 Antennas (Remove) – (3) COMMSCOPE FVV-65B-R3 Antennas (Replace)

Install New:

(3) COMMSCOPE ATSBT-TOP-FM Smart Bias Ts

(6) Coax 1-5/8"

Existing to Remain:

(12) Coax 1-5/8"

(3) RFS ATMAA1412D-A1A20 TMAs*

*Equipment listed for entitlement purposed only



This facility was approved by the Town of Stonington Planning & Zoning Commission on September 2, 1999. 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 Danielle Chesebrough, First Selectman and Keith Byrnes, Town Planner for the Town of Stonington, as well as the property owner and the tower owner.

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 modifications will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

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

Sincerely,

Denise Sabo
Mobile: 203-435-3640
Fax: 413-521-0558
Office: 4 Angela's Way, Burlington CT 06013
Email: denise@northeastsitesolutions.com



NSS **NORTHEAST**
SITE SOLUTIONS
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Attachments

Cc: Mayor Albert Nystrom
Town of Stonington
152 Elm Street
Stonington, CT 06378

Keith Byrnes, Town Planner
Town of Stonington
152 Elm Street
Stonington, CT 06378

Phillip McClellan, Property Owner
c/o SBA Towers Inc.
Boca Raton, FL 33487-1307

SBA – Tower Owner

Exhibit A

Original Facility Approval

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

September 7, 1999

Sprint Spectrum LP
9 Barnes Industrial Rd.
Wallingford, CT 06492

Dear Sir:

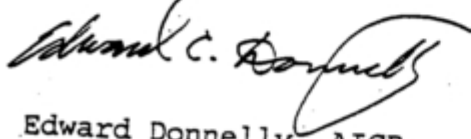
The Planning and Zoning Commission at their meeting of September 2, 1999 voted to APPROVE your application - #PZ9937SPA SPRINT SPECTRUM LP - Application for the construction of a 150 ft. monopole telecommunications tower. Property located at 49 Stonington Rd. Assessor's Map 75 Block 1 Lot 2A Zone GC-60. Your application was approved with the following stipulations:

- 1) General cleanup of debris and removal of any fuel tanks of any type from the site prior to any construction beginning on the property.
- 2) The corrections shall be made on the final site plan as noted in the Planning Director's memo dated 9/1/99
- 3) The illegal storage of vehicles and heavy equipment shall cease until site plan approval for the property is obtained from the Commission.

Please schedule an appointment with the Planning Office to review the final plans which have incorporated all the above stipulations and/or changes and have been listed on the site plan. Please bring to the Planning and Zoning Office for the Chairman's signature one (1) set of bluelines. If you require a signed copy of the site plan for your files, please provide the Planning office with the additional copy.

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

Sincerely,



Edward Donnelly, AICP
Planning Director

Exhibit B

Property Card



Town of Stonington, CT

Property Listing Report

Map Block Lot

75-1-2A

Building # 1

PID

4143

Account

00490300

Property Information

Property Location	811 STONINGTON RD
Owner	MCCLELLAN PHILLIP C
Co-Owner	
Mailing Address	C/O SBA TOWERS INC BOCA RATON FL 33487-1307
Land Use	430V TEL X STA M-00
Land Class	I
Zoning Code	RR-80
Census Tract	7052

Neighborhood	0035
Acreage	3.3
Utilities	
Lot Setting/Desc	
Book / Page	0589/1129
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

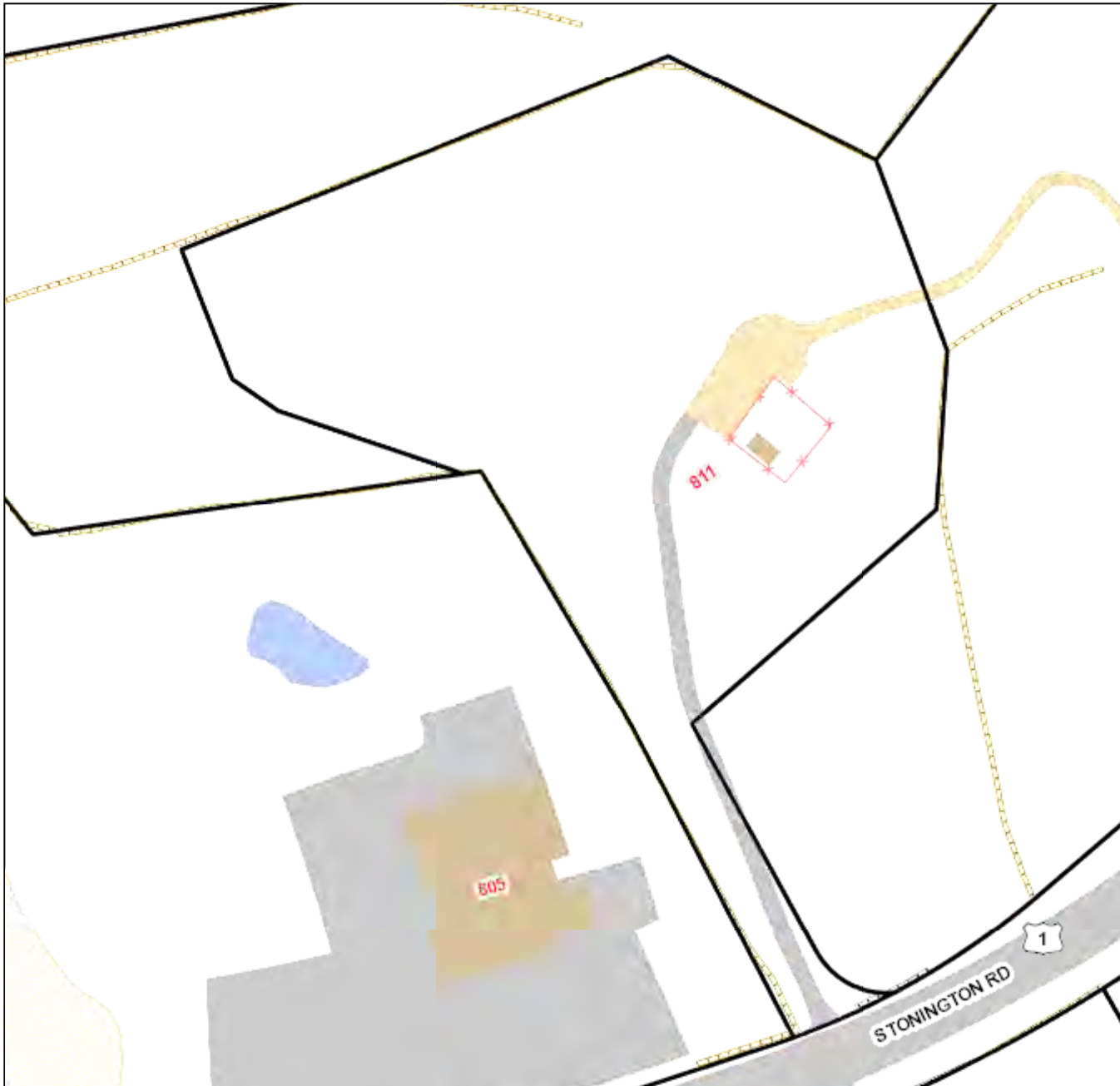


Town of Stonington

Geographic Information System (GIS)



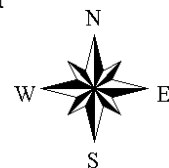
Date Printed: 11/19/2021



MAP DISCLAIMER - NOTICE OF LIABILITY

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

Approximate Scale: 1 inch = 100 feet





41°21'12.3"N 71°53'13.2"W



Imagery ©2021 Maxar Technologies, RIGIS, USDA Farm Service Agency, Map data ©2021 200 ft

Exhibit C

Construction Drawings

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).

SPECIAL CONSTRUCTION NOTE (CANISTER BUMP-OUT DESIGN SERVICES PROVIDED BY SBA COMMUNICATIONS):
SBA COMMUNICATIONS RESPONSIBLE FOR DESIGN-BUILD FOR ALL REQUIRED CANISTER MODIFICATIONS, ENGINEERING CONSTRUCTION CONTROL INSPECTIONS, AND FINAL ENGINEERING AFFIDAVIT (ALL PREVIOUS ITEMS TO BE DESIGN-BUILD PERFORMED BY SBA UNDER A SEPARATE BUILDING PERMIT). THE ENGINEER-OF-RECORD FOR THESE CONSTRUCTION DRAWINGS IS NOT RESPONSIBLE FOR CANISTER BUMP-OUT DESIGN SERVICES OR FOR FINAL ANTENNA FITMENT MODIFICATIONS DESIGNED BY OTHERS.

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
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.	12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR 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 ON-SITE 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 WORK THAT IS IN CONFLICT UNLESS 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.	

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



SBA STONINGTON

811 STONINGTON ROAD
STONINGTON, CT 06378
NEW LONDON COUNTY

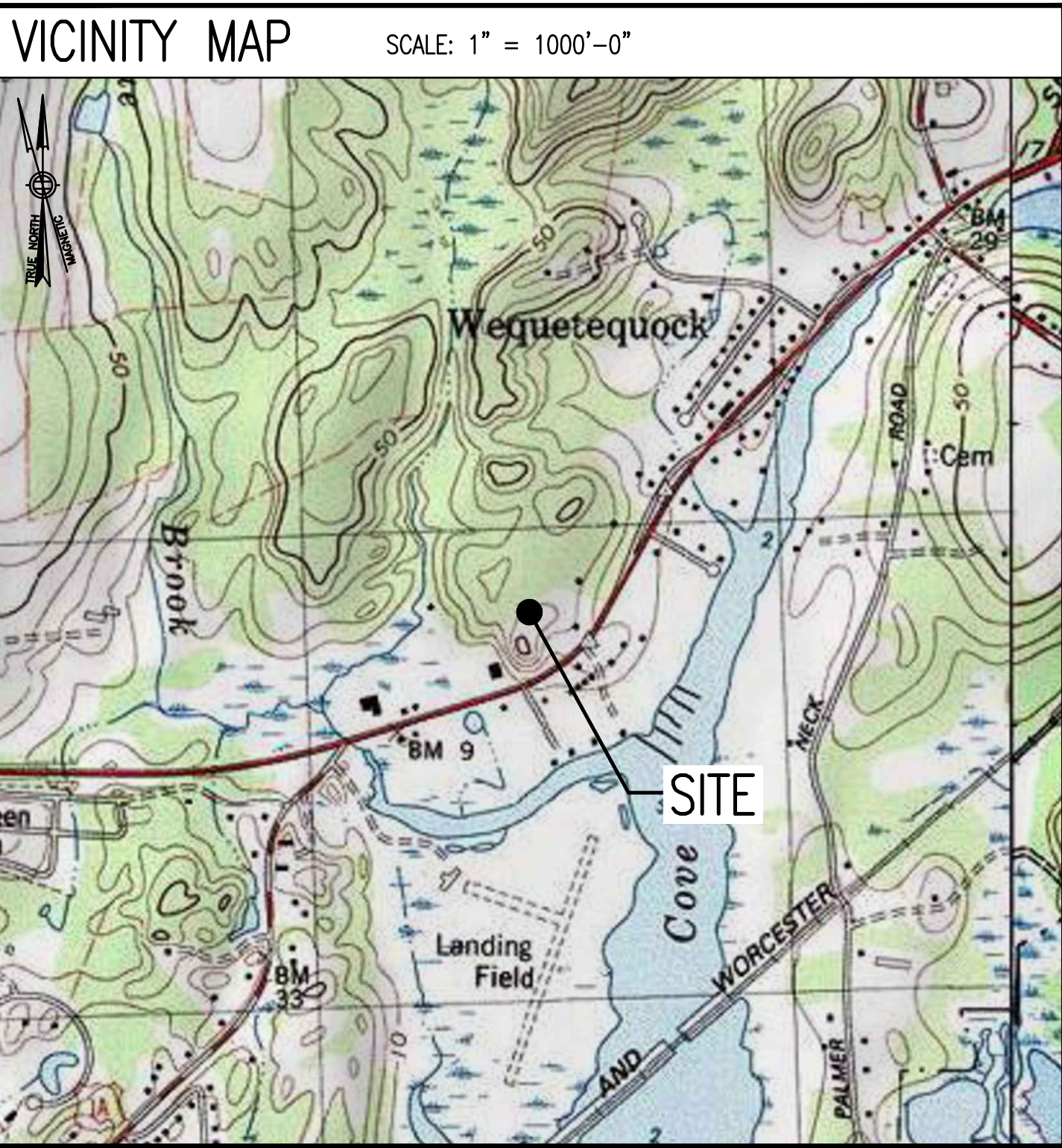
SITE NO.: CT11310A

SITE TYPE: 150'± FLAGPOLE

RF DESIGN GUIDELINE: 67G5C998G 6160

SCOPE OF WORK	
REMOVE:	
•	3 ANTENNAS
•	6 TMA'S
•	6 FILTERS
•	1 RBS 3106 CABINET
INSTALL:	
•	3 ANTENNAS
•	6 RADIOS
•	3 QUAD DIPLEXERS
•	3 SMART BIAS T'S
•	1 B160 BATTERY CABINET
•	1 6160 CABINET
•	1 RAC24 CABINET
•	1 SLACKBOX
•	6 COAX CABLES
•	1 150A-2P BREAKER
•	1 25A-1P BREAKER

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.



DIRECTIONS

TURN LEFT ONTO S WASHINGTON ST. TURN RIGHT ONTO MA-123 E. TURN LEFT TO MERGE ONTO I-495 NORTH TOWARD MANSFIELD/MARLBORO. MERGE ONTO I-495 NORTH. TAKE EXIT 33b to merge onto I-95 south. KEEP LEFT TO STAY ON I-95 SOUTH. KEEP RIGHT TO STAY ON I-95 SOUTH. TAKE EXIT 91 TOWARD STONINGTON. TURN LEFT ONTO TAUGWONK ROAD. CONTINUE ONTO CT-234 WEST. TURN LEFT ONTO NORTH MAIN STREET. TURN LEFT ONTO US-1 NORTH. SITE WILL BE ON THE LEFT.

SHEET INDEX		
SHT. NO.	DESCRIPTION	VER.
T-1	TITLE SHEET	0
GN-1	GENERAL NOTES	0
A-1	COMPOUND & EQUIPMENT PLAN	0
A-2	TOWER ELEVATIONS & ANTENNA PLAN	0
A-3	SITE DETAILS	0
A-4	ANTENNA & FEEDLINE CHARTS	0
E-1	ELECTRIC & GROUNDING DETAILS	0

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.

PROJECT SUMMARY	
SITE NUMBER:	CT11310A
SITE NAME:	SBA STONINGTON
SBA SITE NUMBER:	CT01493-S
SBA SITE NAME:	NORTH STONINGTON 2 CT
SITE ADDRESS:	811 STONINGTON ROAD STONINGTON, CT 06378
PROPERTY OWNER:	PHILLIP C. MCCLELLAN 11 VELVET LANE MYSTIC, CT 06355
TOWER OWNER:	SBA TOWERS, LLC 8501 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-226-9523
COUNTY:	NEW LONDON COUNTY
ZONING DISTRICT:	COMMERCIAL
STRUCTURE TYPE:	FLAGPOLE
STRUCTURE HEIGHT:	150'±
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: N.41.353459° N.41°21'12.45" LONGITUDE W.71.886843° W.71°53'12.63"

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).

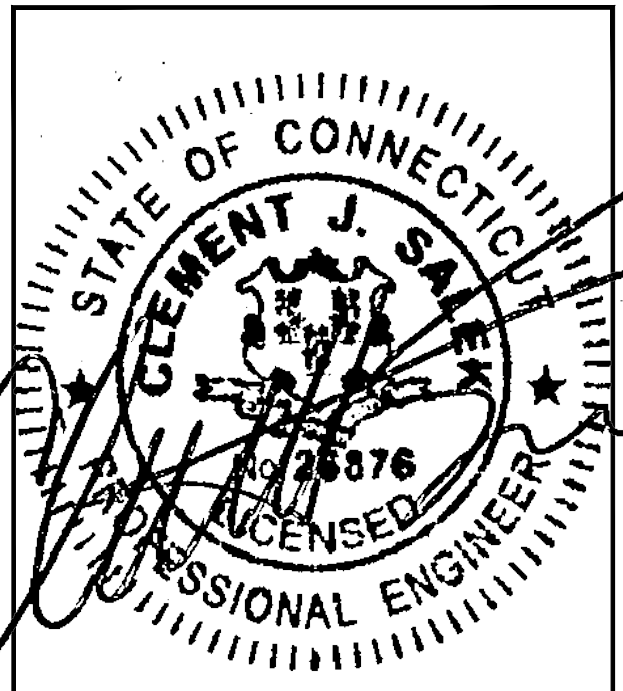
T-MOBILE NORTHEAST LLC

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



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
0	03/28/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11310A

SITE ADDRESS:
811 STONINGTON 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, UNO.
- 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 SUPPLIER'S 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:

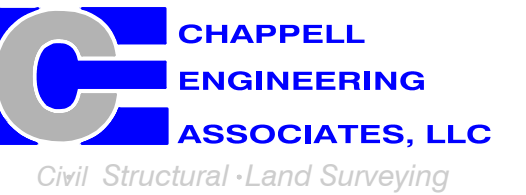
- WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TERCORDIA.
- SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLE TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TERCORDIA.
- 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**

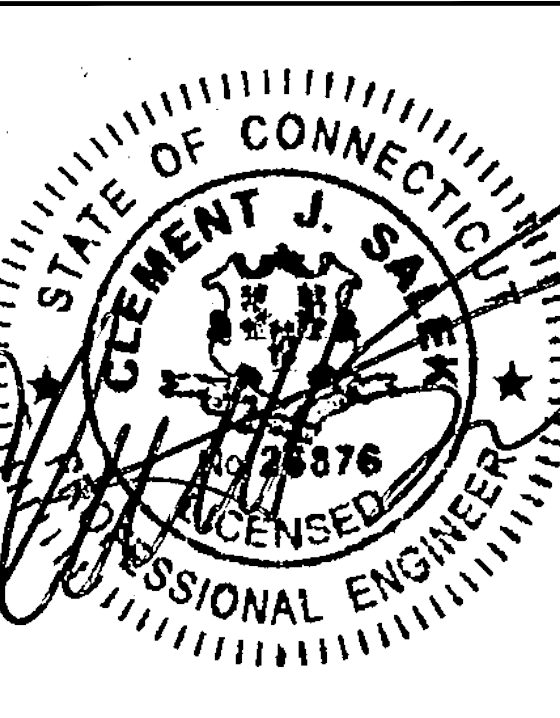
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SBA COMMUNICATIONS CORP.
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SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
0	03/28/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11310A

SITE ADDRESS:
811 STONINGTON ROAD
STONINGTON, CT 06379

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1

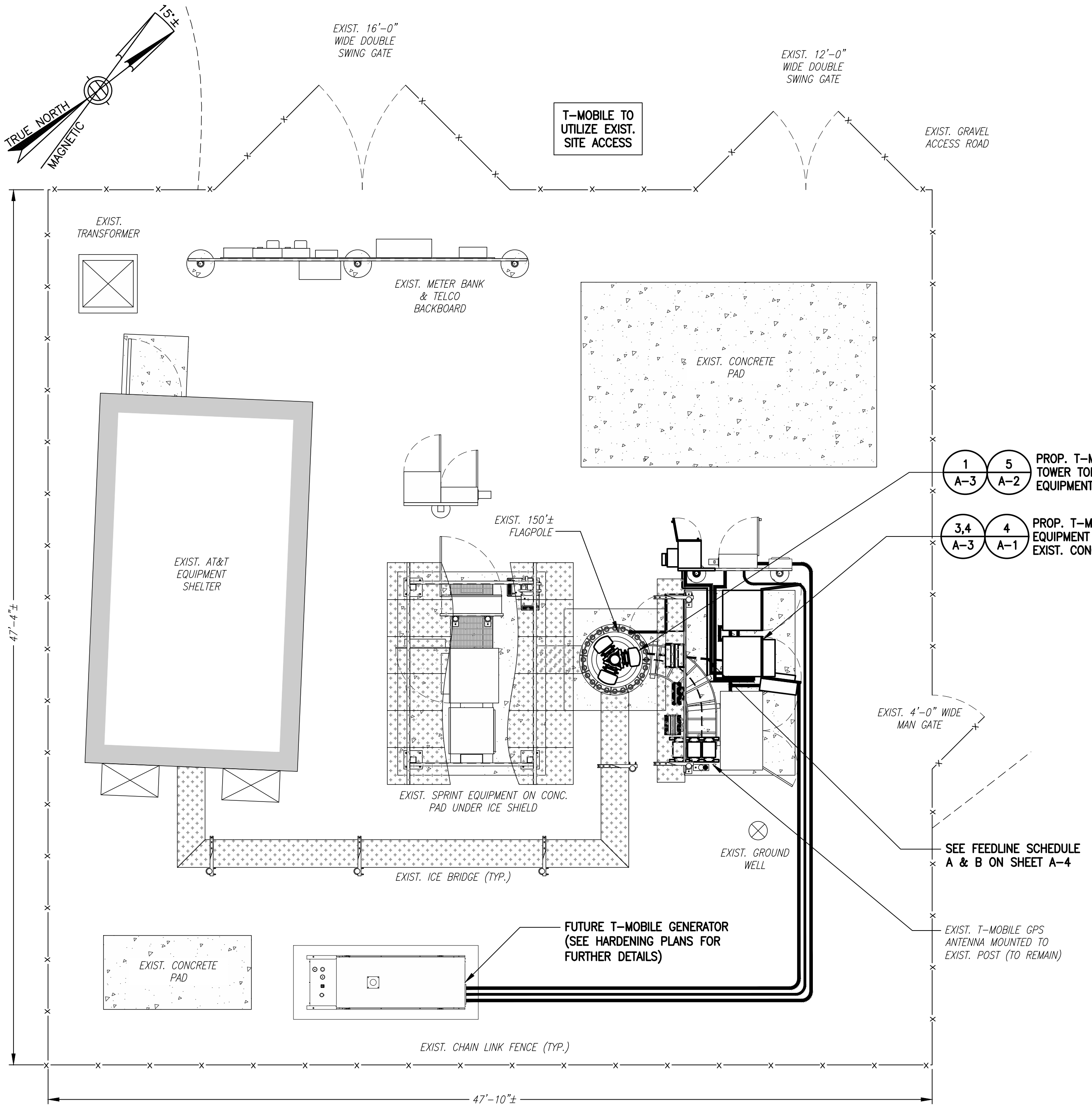
SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
 GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY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

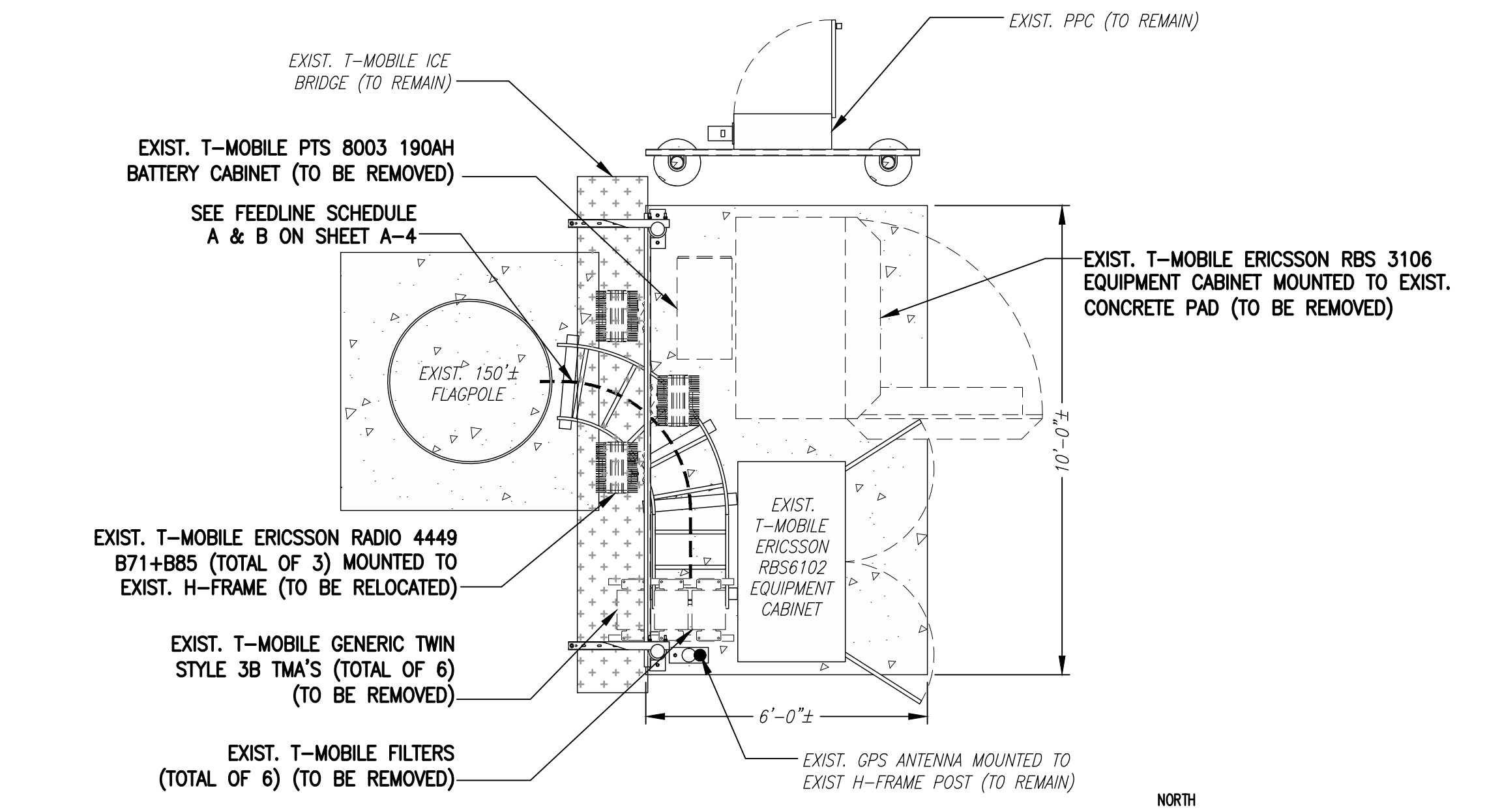
SPECIAL CONSTRUCTION NOTE (CANISTER BUMP-OUT DESIGN SERVICES PROVIDED BY SBA COMMUNICATIONS):
 SBA COMMUNICATIONS RESPONSIBLE FOR DESIGN-BUILD FOR ALL REQUIRED CANISTER MODIFICATIONS, ENGINEERING CONSTRUCTION CONTROL INSPECTIONS, AND FINAL ENGINEERING AFFIDAVIT (ALL PREVIOUS ITEMS TO BE DESIGN-BUILD PERFORMED BY SBA UNDER A SEPARATE BUILDING PERMIT). THE ENGINEER-OF-RECORD FOR THESE CONSTRUCTION DRAWINGS IS NOT RESPONSIBLE FOR CANISTER BUMP-OUT DESIGN SERVICES OR FOR FINAL ANTENNA FITMENT MODIFICATIONS DESIGNED BY OTHERS.



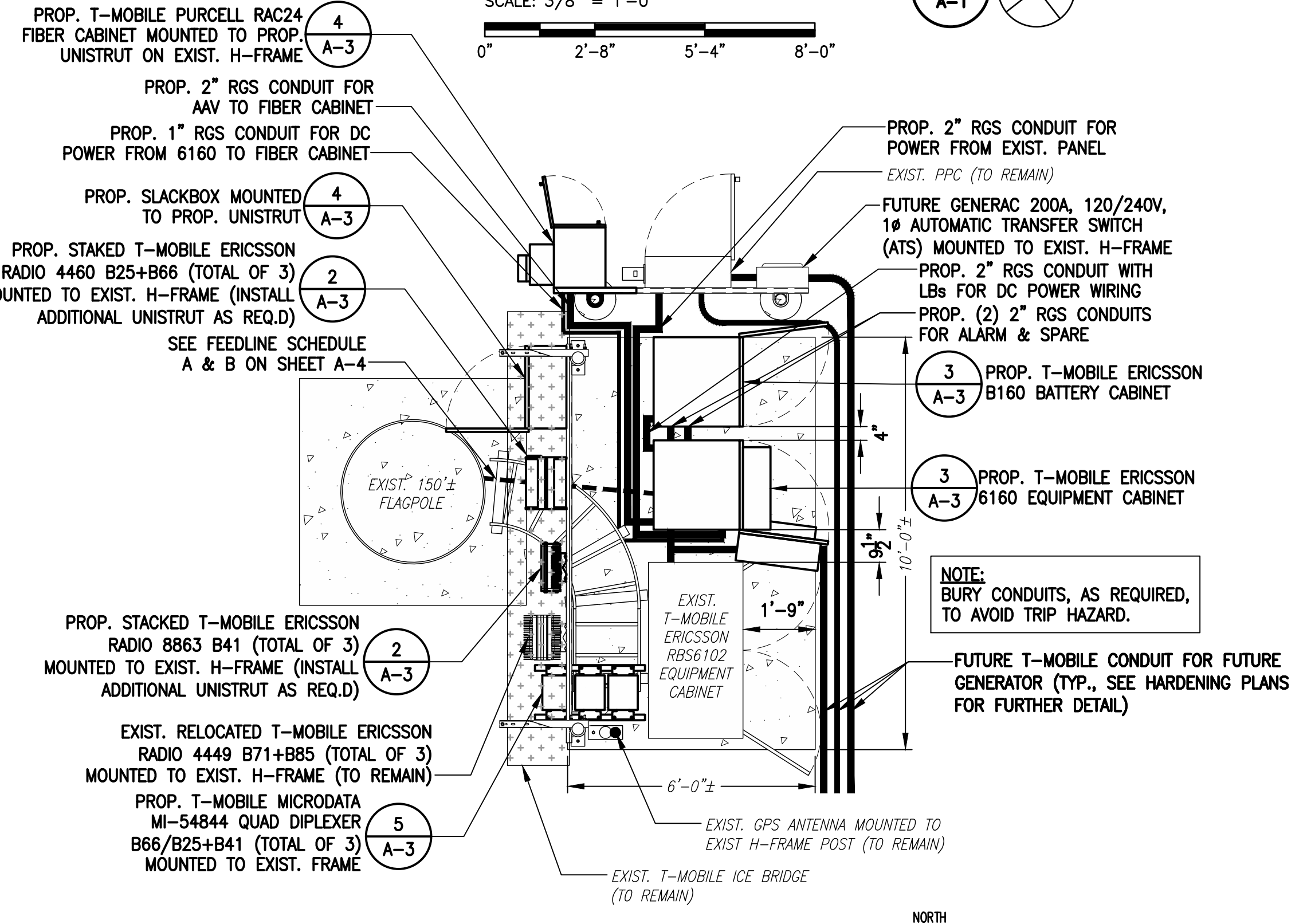
EXISTING EQUIPMENT PHOTO 2
 SCALE: N.T.S.



COMPOUND PLAN 1
 SCALE: 1/4" = 1'-0"



EXISTING EQUIPMENT PLAN 3
 SCALE: 3/8" = 1'-0"



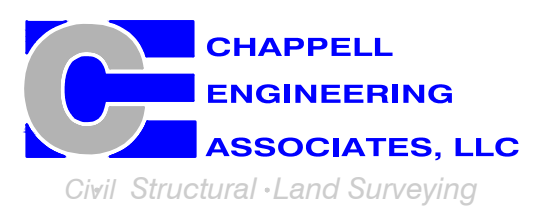
PROPOSED EQUIPMENT PLAN 4
 SCALE: 3/8" = 1'-0"

T-MOBILE NORTHEAST LLC

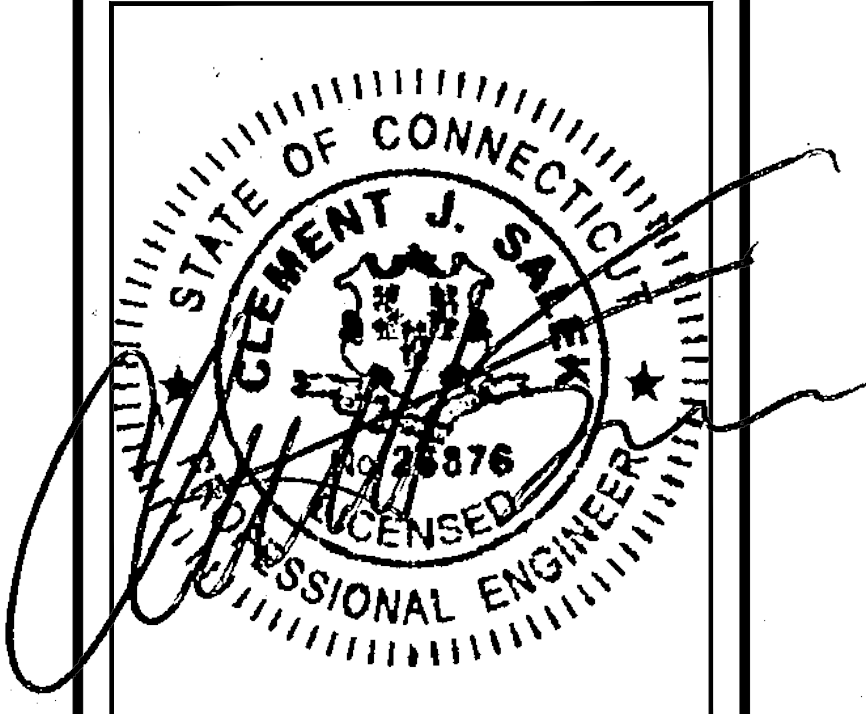
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SHEET TITLE
COMPOUND & EQUIPMENT PLANS

SHEET NUMBER
A-1

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SPECIAL CONSTRUCTION NOTE:
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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.

SPECIAL CONSTRUCTION NOTE (CANISTER BUMP-OUT DESIGN SERVICES PROVIDED BY SBA COMMUNICATIONS):
 SBA COMMUNICATIONS RESPONSIBLE FOR DESIGN-BUILD FOR ALL REQUIRED CANISTER MODIFICATIONS, ENGINEERING CONSTRUCTION CONTROL INSPECTIONS, AND FINAL ENGINEERING AFFIDAVIT (ALL PREVIOUS ITEMS TO BE DESIGN-BUILD PERFORMED BY SBA UNDER A SEPARATE BUILDING PERMIT). THE ENGINEER-OF-RECORD FOR THESE CONSTRUCTION DRAWINGS IS NOT RESPONSIBLE FOR CANISTER BUMP-OUT DESIGN SERVICES OR FOR FINAL ANTENNA FITMENT MODIFICATIONS DESIGNED BY OTHERS.

ANTENNA STATUS LEGEND:
 EMPTY - EMPTY PIPE
 (E) - EXISTING
 (P) - INSTALL
 (F) - FUTURE

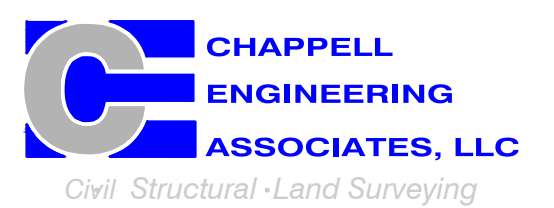
NOTE:
 VERIFY PROPOSED AZIMUTHS WITH RF ENGINEER PRIOR TO INSTALLATION.

**T-MOBILE
 NORTHEAST LLC**

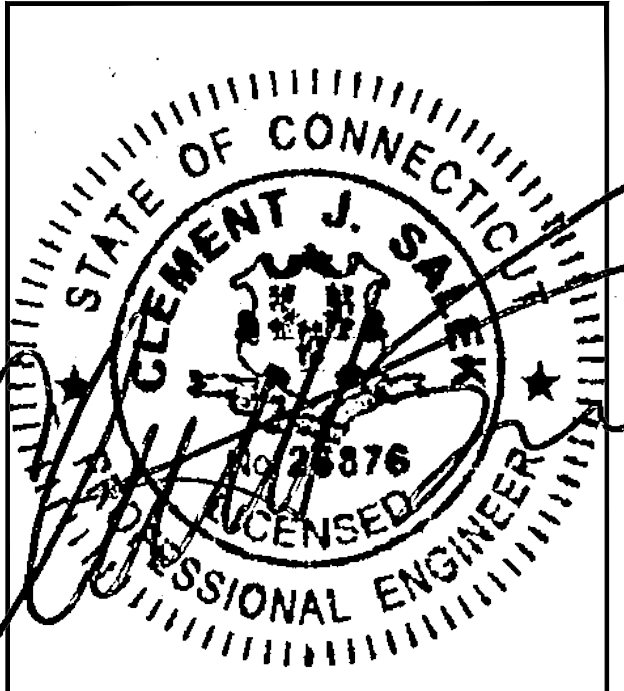
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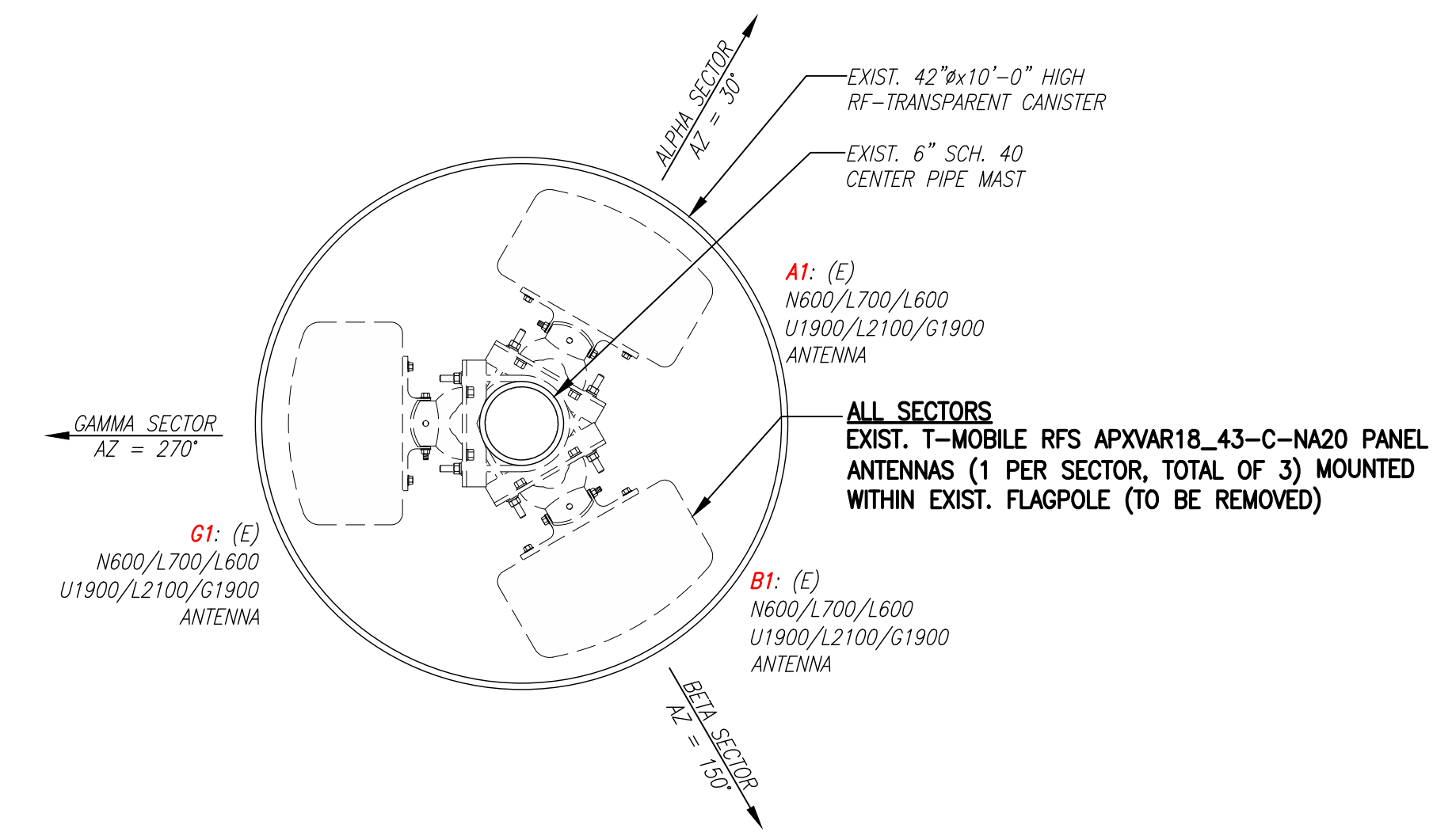
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SHEET TITLE
**TOWER ELEVATIONS &
 ANTENNA PLANS**

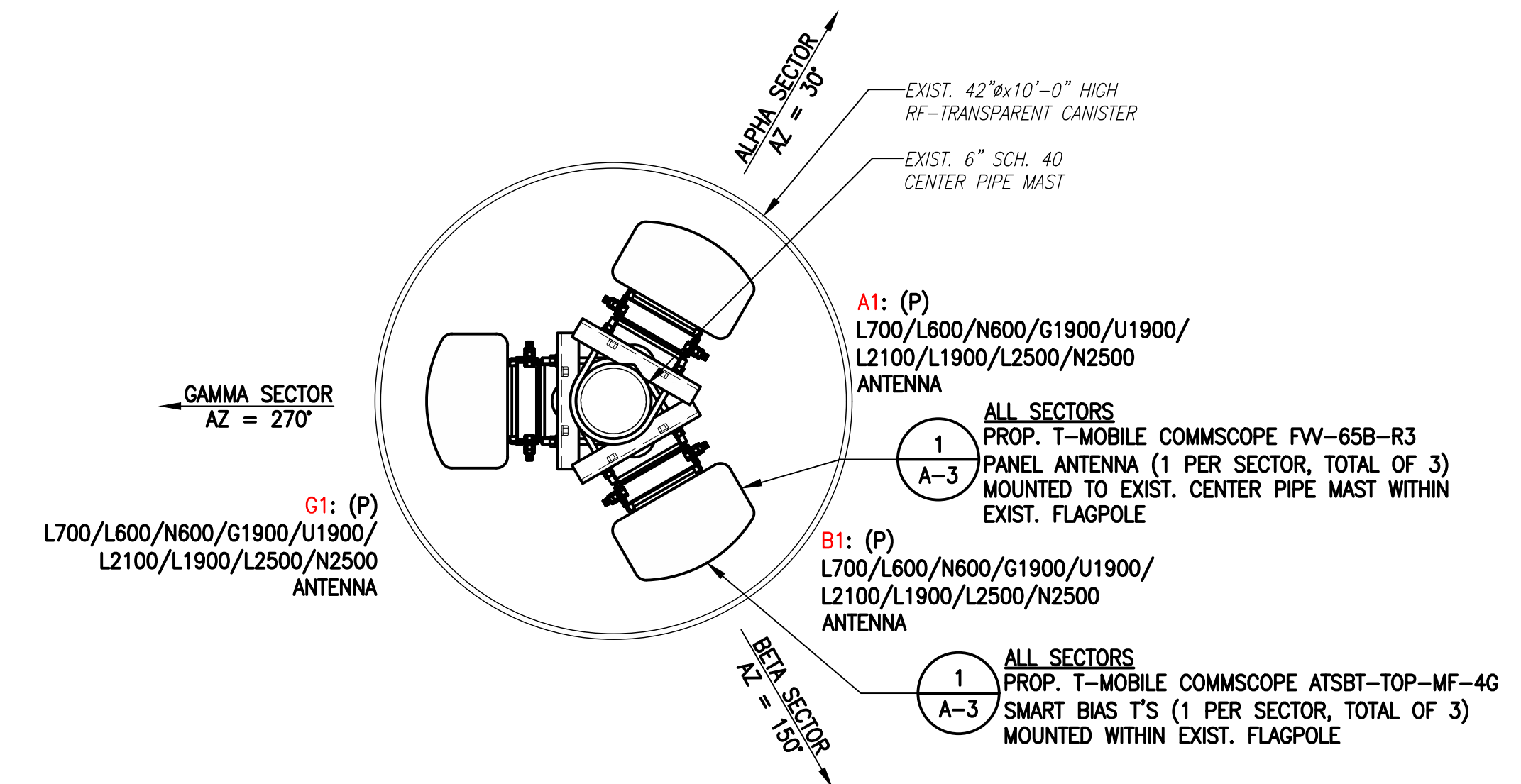
SHEET NUMBER
A-2



EXISTING ANTENNA PHOTO 3
 SCALE: N.T.S. A-2



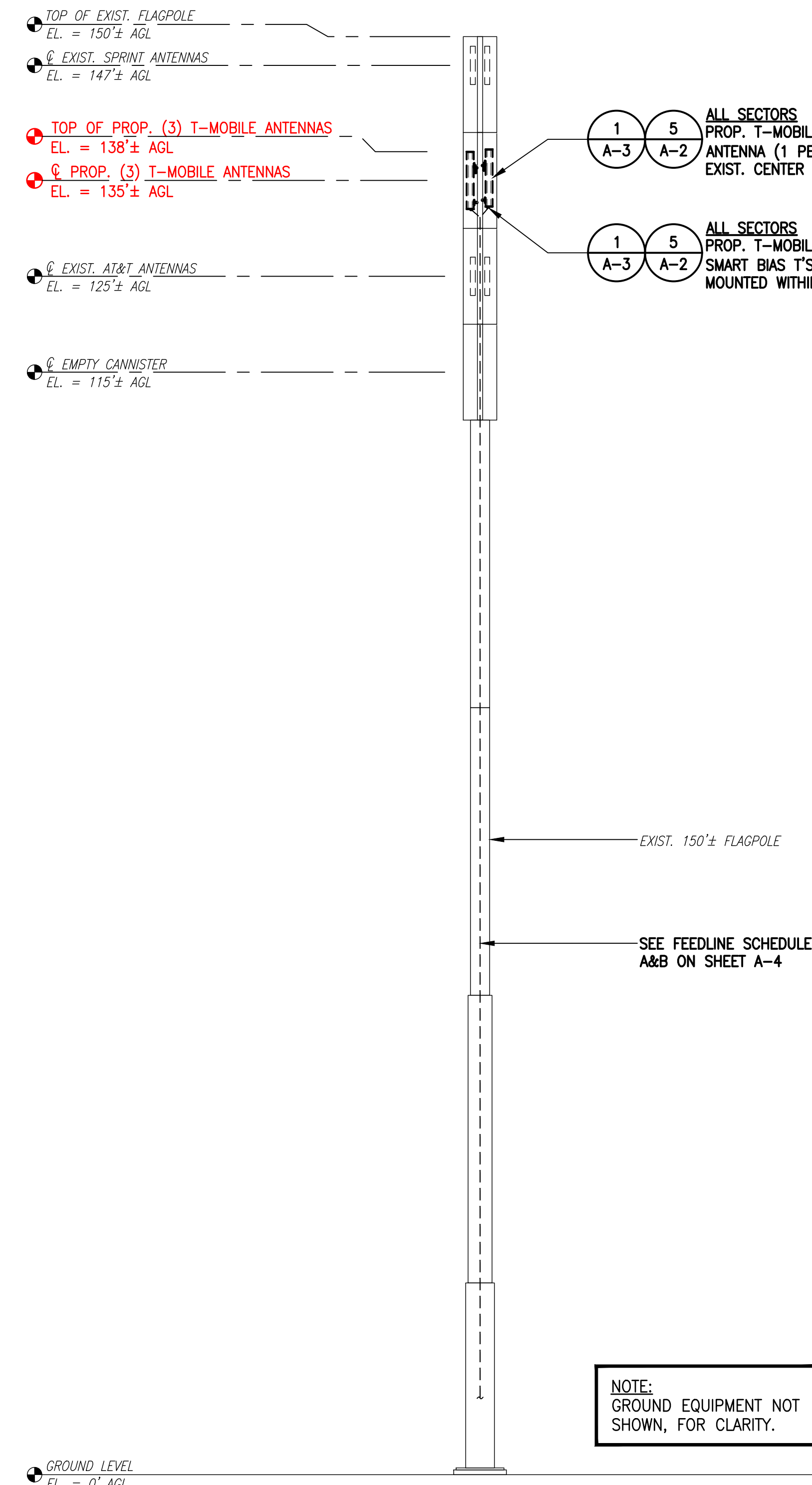
EXISTING ANTENNA PLAN 4
 SCALE: 1" = 1'-0" A-2



PROPOSED ANTENNA PLAN 5
 SCALE: 1" = 1'-0" A-2

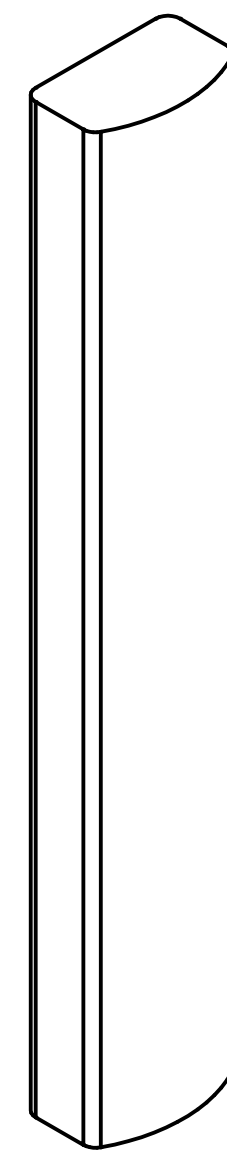


EXISTING TOWER PHOTO 1
 SCALE: N.T.S. A-2

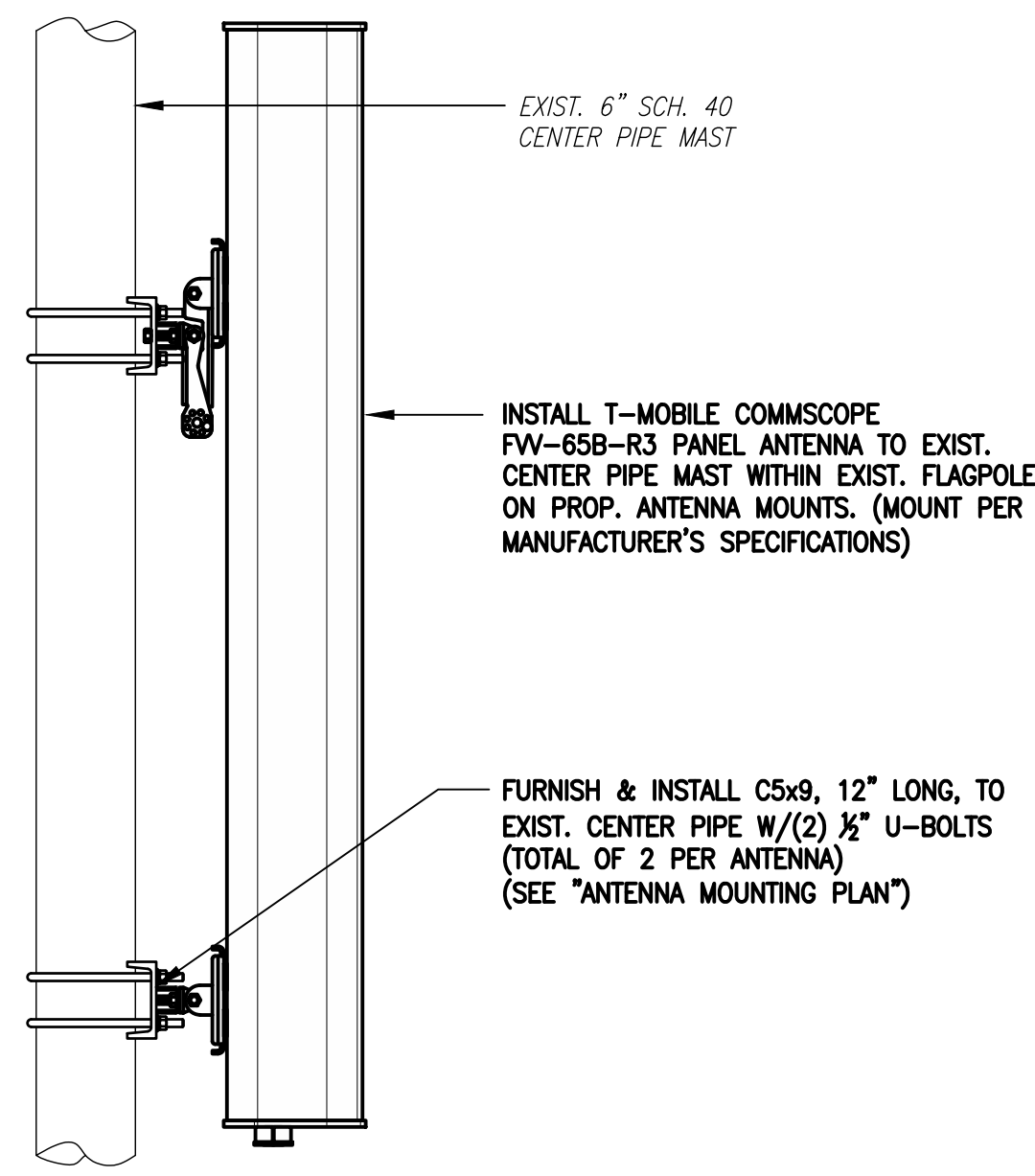


TOWER ELEVATION 2
 SCALE: 1" = 10'-0" A-2

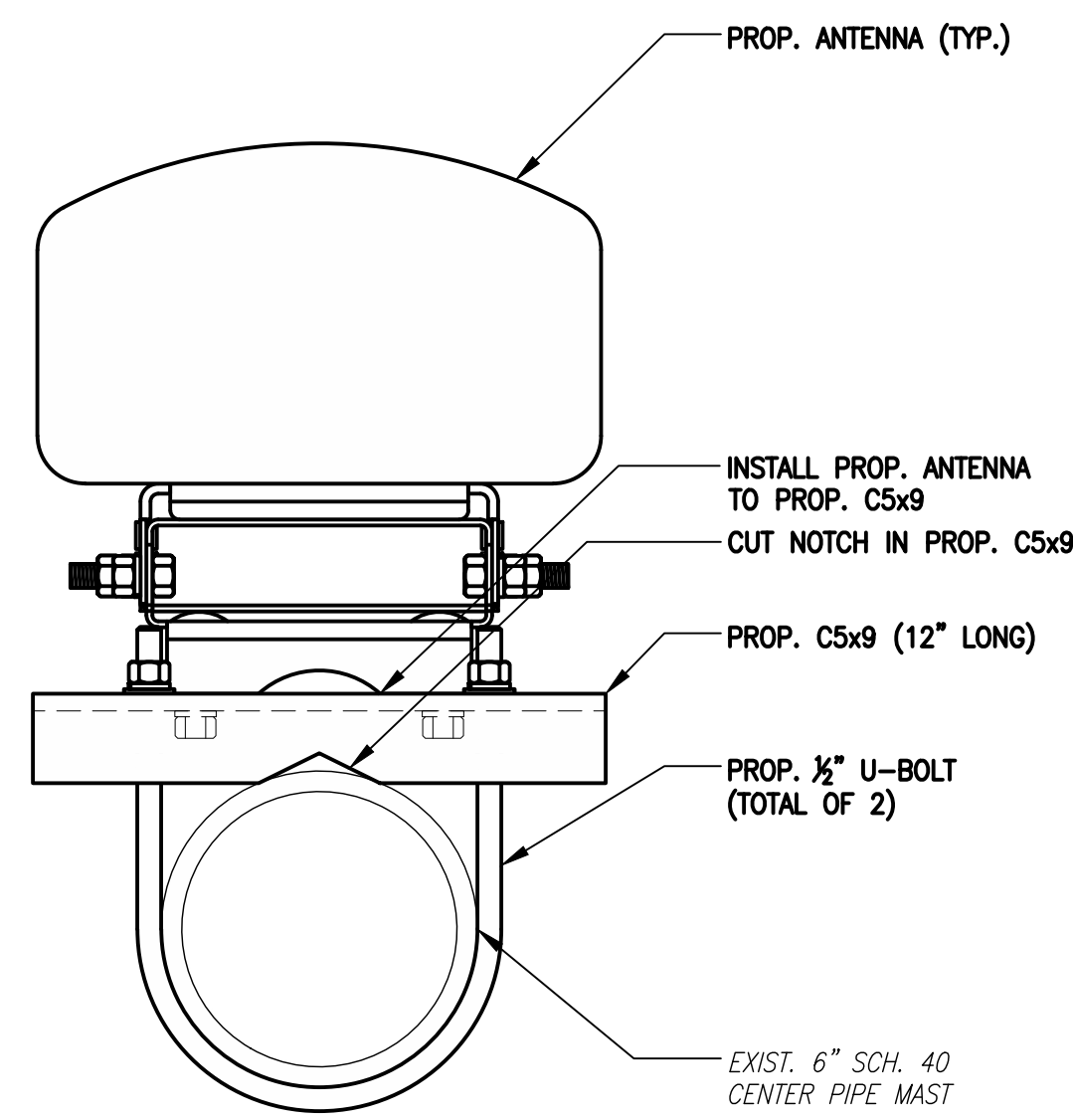




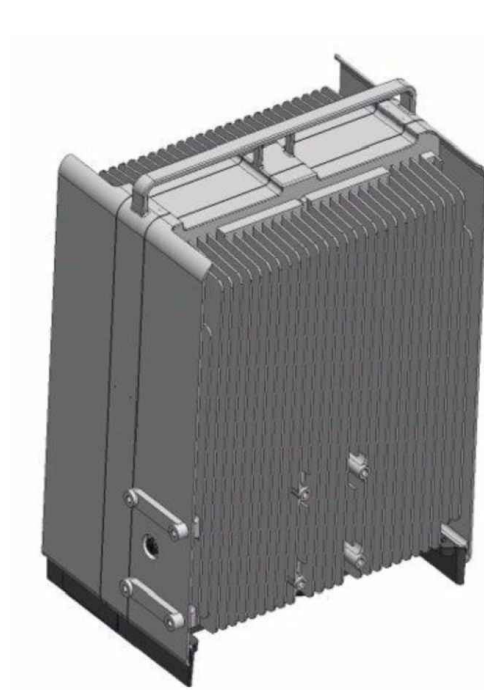
COMMSCOPE FW-65B-R3 ANTENNA
 DIMENSIONS: 72.0"H x 11.8"W x 7.1"D
 WEIGHT: 43.2 lbs
 QUANTITY: 1 PER SECTOR, TOTAL OF 3



ANTENNA MOUNTING SECTION
 SCALE: 1" = 1'-0"



ANTENNA MOUNTING PLAN
 SCALE: 3" = 1'-0"



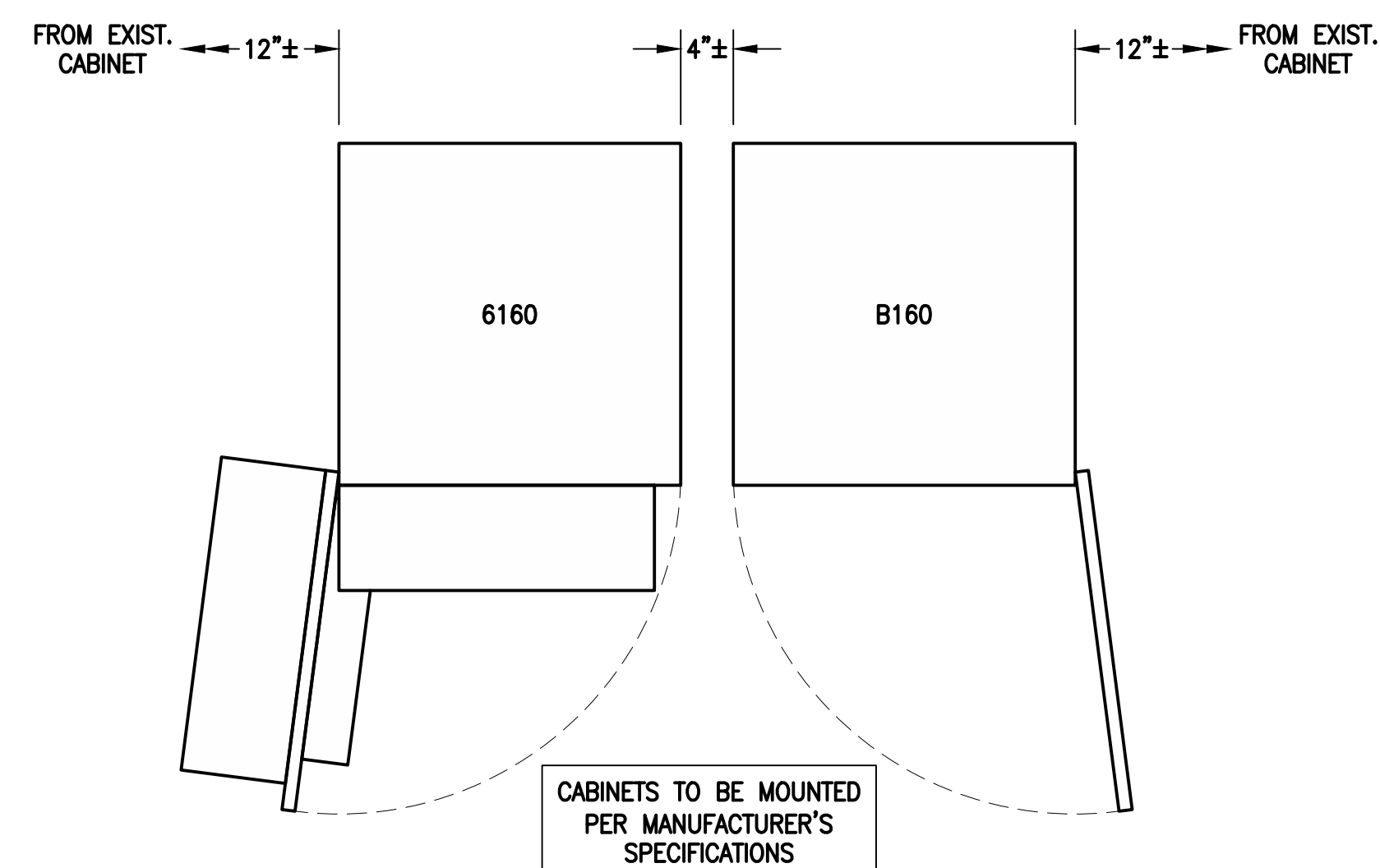
ERICSSON RADIO 4460 B25+B66
 DIMENSIONS: 17.0"H x 15.1"W x 11.9"D
 WEIGHT: 104.0 lbs
 QUANTITY: TOTAL OF 3



ERICSSON RADIO 8863 B41
 DIMENSIONS: 18.5"H x 14.5"W x 5.5"D
 WEIGHT: 51.0 lbs
 QUANTITY: TOTAL OF 3

RADIO DETAILS
 SCALE: N.T.S.

ANTENNA AND MOUNTING 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.



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



PURCELL SITE SUPPORT CABINET RAC24
 DIMENSIONS: 24.0"H x 15.7"W x 20.0"D
 QUANTITY: TOTAL OF 1

SSC DETAILS
 SCALE: N.T.S.



MICRODATA MI-54844 QUAD (8:4) B66/B25+B41 DIPLEXER
 DIMENSIONS: 4.3"H x 9.4"W x 3.5"D
 WEIGHT: 11.0 lbs
 QUANTITY: TOTAL OF 3

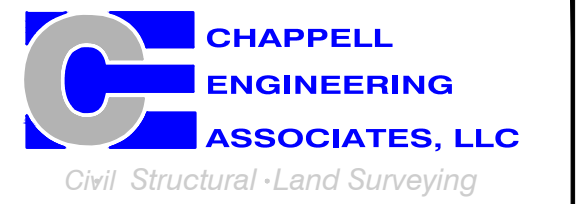
DIPLEXER DETAIL
 SCALE: N.T.S.

T-MOBILE NORTHEAST LLC

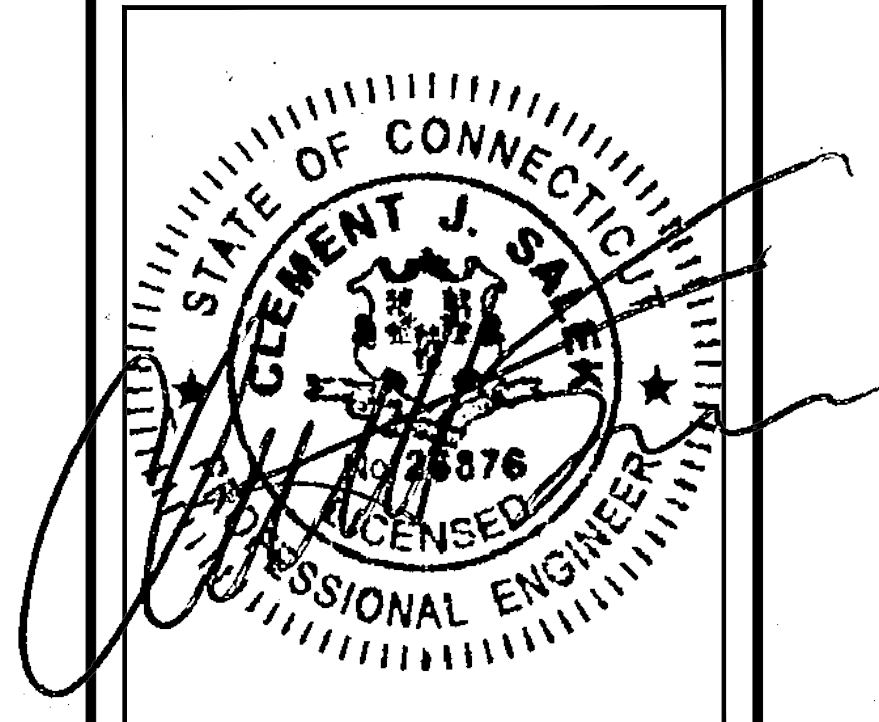
15 COMMERCE WAY, SUITE B
 NORTON, MA 02766
 (508) 286-2700



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



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
0	03/28/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11310A

SITE ADDRESS:
 811 STONINGTON ROAD
 STONINGTON, CT 06379

SHEET TITLE
SITE DETAILS

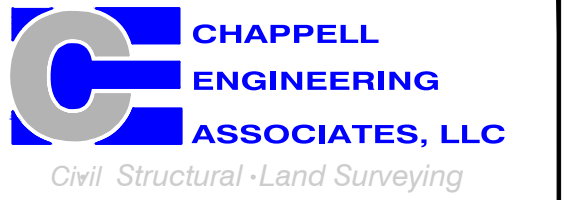
SHEET NUMBER
A-3

**T-MOBILE
NORTHEAST LLC**

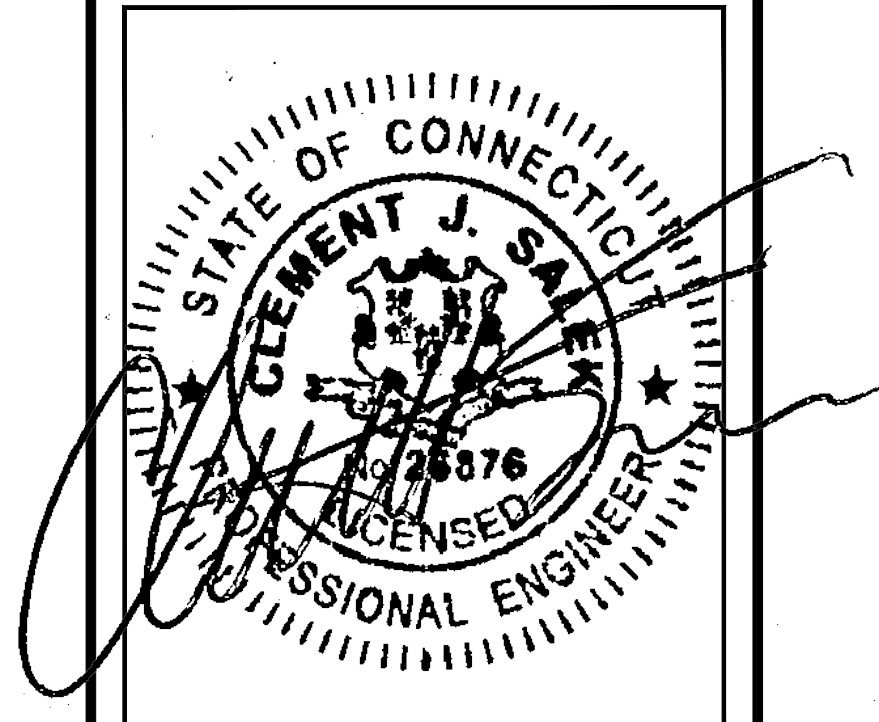
15 COMMERCE WAY, SUITE B
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SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
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SITE NUMBER:
CT11310A

SITE ADDRESS:
811 STONINGTON ROAD
STONINGTON, CT 06379

SHEET TITLE
**ANTENNA &
FEEDLINE CHARTS**

SHEET NUMBER
A-4

FINAL ANTENNA CONFIGURATION							
SECTOR	ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	TMA/RADIOS
ALPHA	COMMSCOPE FW-65B-R3	134'± AGL	30°	0°	0°	L700/L600/N600	ERICSSON RADIO 4449 B71+B85
					0°	G1900/U1900/L2100/L1900/L2500/N2500	COMMSCOPE ATSBT-TOP-MF-4G MICRODATA B66/B25+B41 DIPLEXER ERICSSON RADIO 4460 B25+B66
					0°		ERICSSON RADIO 8863 B41
BETA	COMMSCOPE FW-65B-R3	134'± AGL	150°	0°	0°	L700/L600/N600	ERICSSON RADIO 4449 B71+B85
					0°	G1900/U1900/L2100/L1900/L2500/N2500	COMMSCOPE ATSBT-TOP-MF-4G MICRODATA B66/B25+B41 DIPLEXER ERICSSON RADIO 4460 B25+B66
					0°		ERICSSON RADIO 8863 B41
GAMMA	COMMSCOPE FW-65B-R3	134'± AGL	270°	0°	0°	L700/L600/N600	ERICSSON RADIO 4449 B71+B85
					0°	G1900/U1900/L2100/L1900/L2500/N2500	COMMSCOPE ATSBT-TOP-MF-4G MICRODATA B66/B25+B41 DIPLEXER ERICSSON RADIO 4460 B25+B66
					0°		ERICSSON RADIO 8863 B41

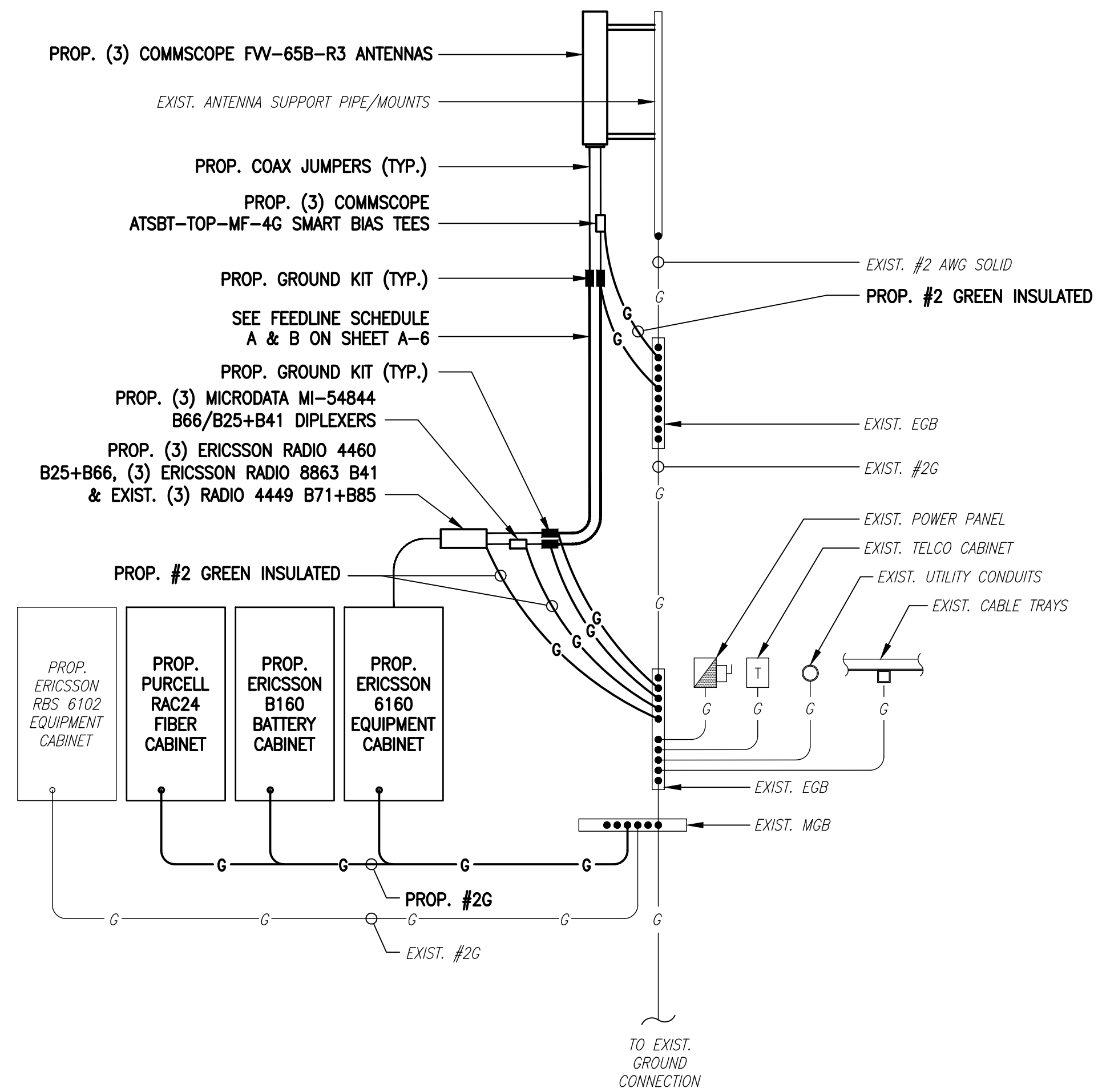
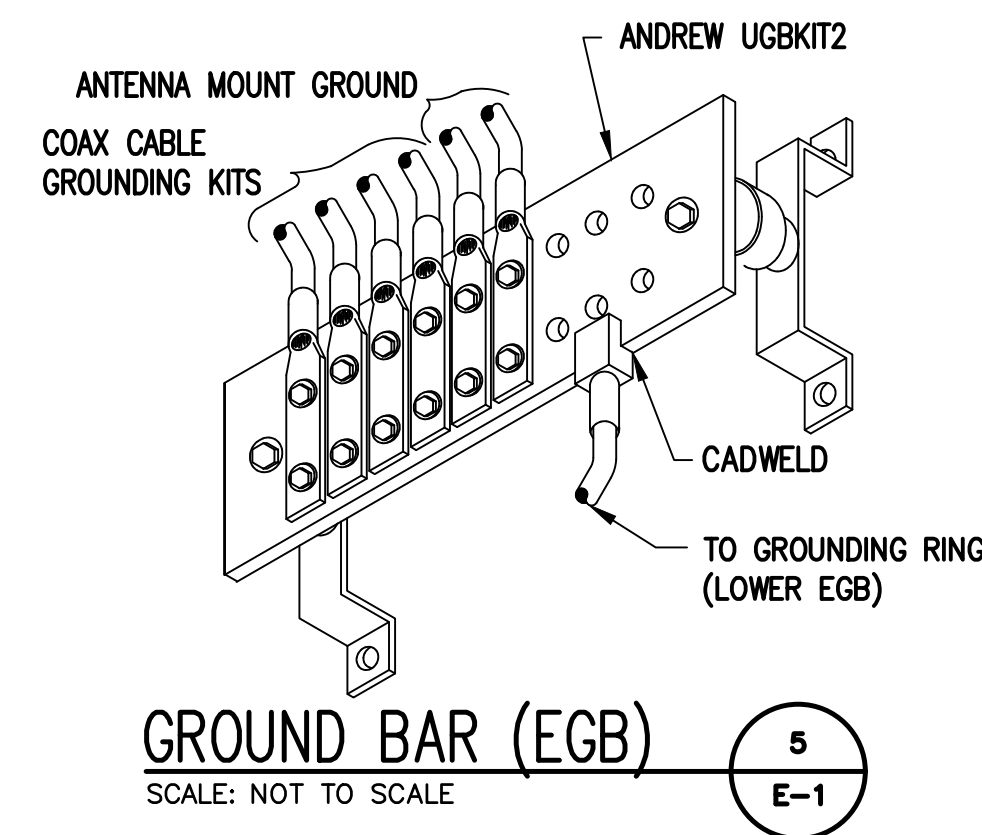
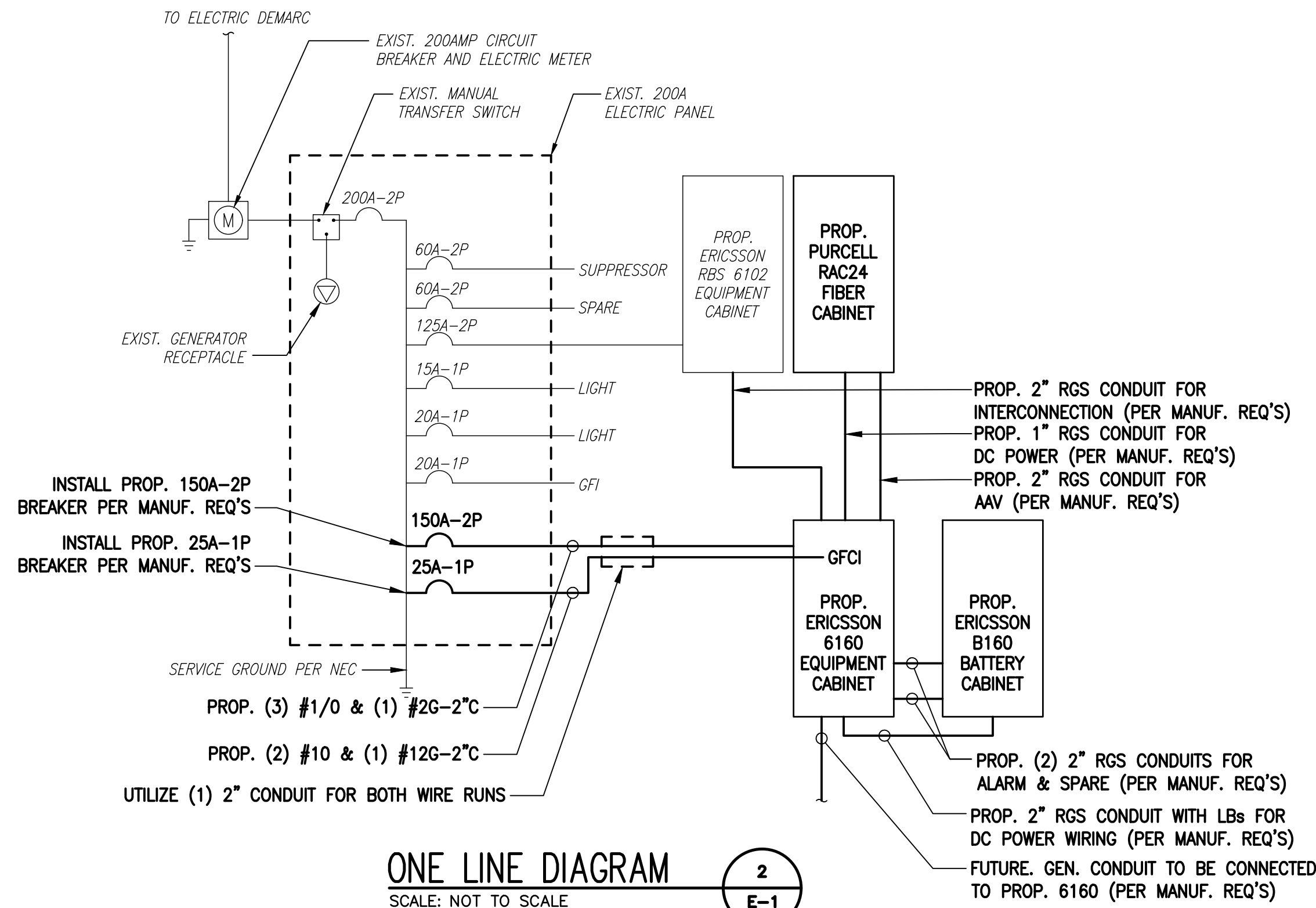
(12) 1-5/8" COAX CABLES
(6) 1-5/8" COAX CABLES

CABLE NOTE: SEE FEEDLINE SCHEDULE A & B BELOW.

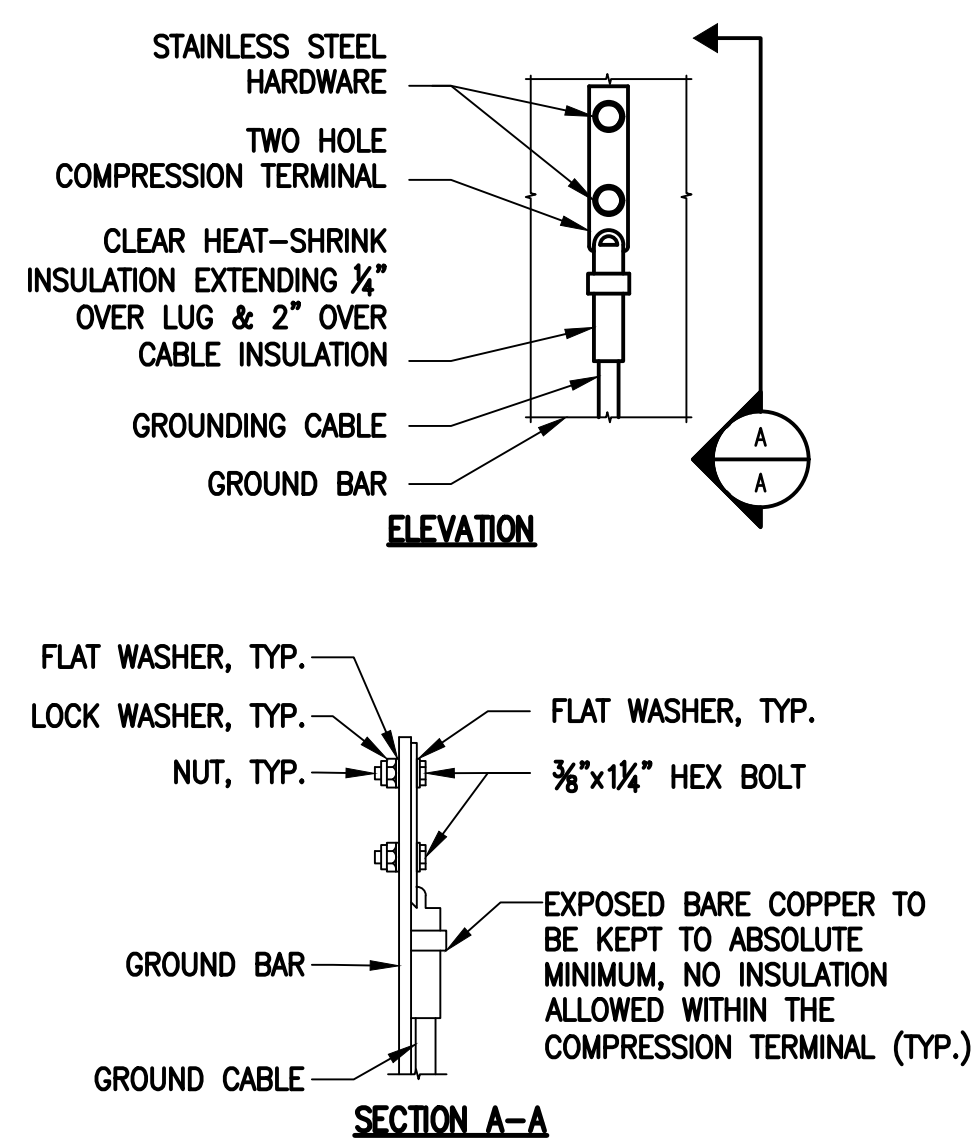
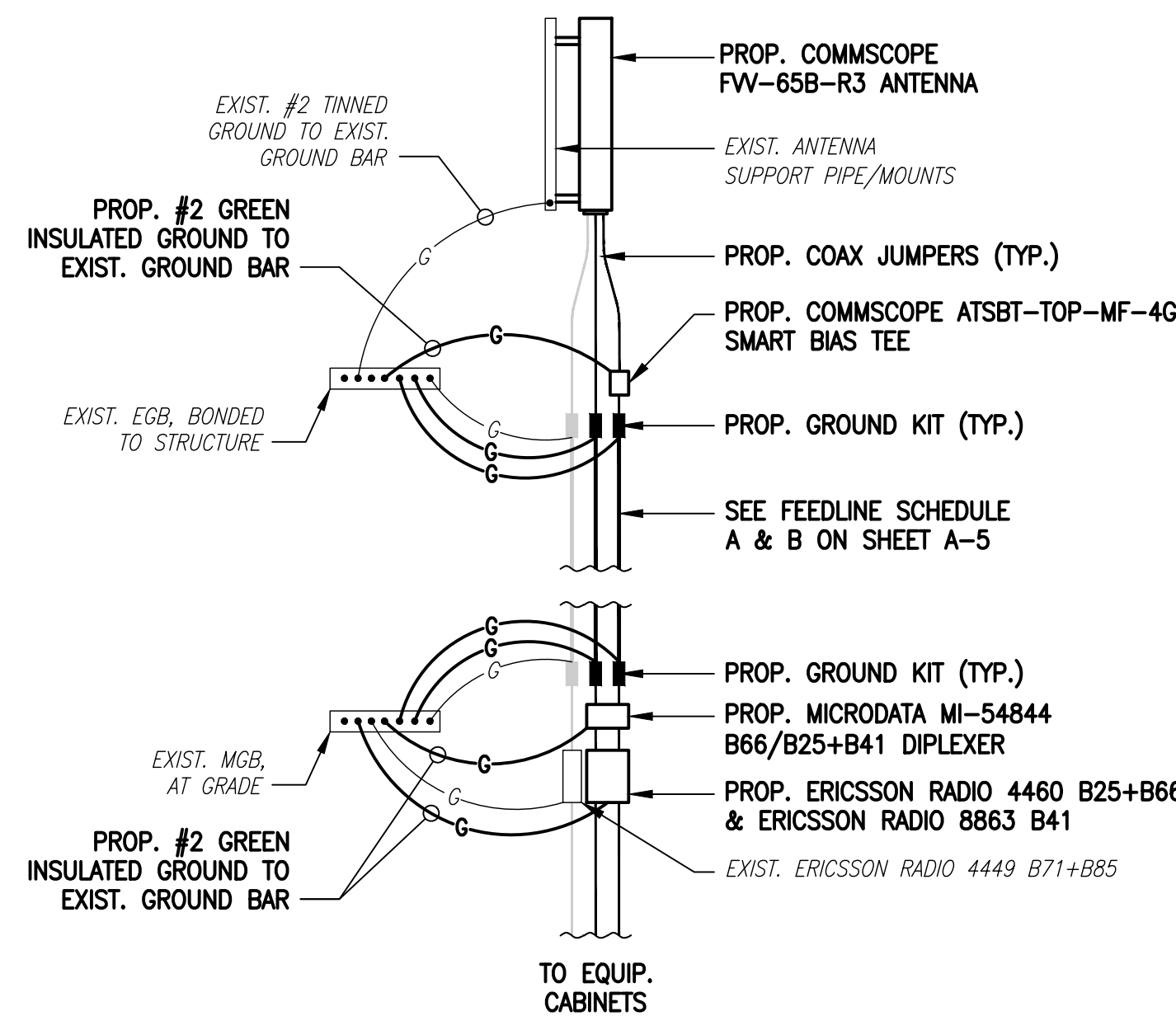
NOTE: RFDS REV4 - 03/02/22

FEEDLINE SCHEDULE		
SCHEDULE	FEEDLINES	LOCATION
A	EXISTING TO REMAIN: (1) 1/2" COAX CABLE FOR GPS ANTENNA (12) 1-5/8" COAX CABLES EXISTING TO BE REMOVED: NONE	ROUTED PER STRUCTURAL ANALYSIS
B	PROPOSED: (6) 1-5/8" COAX CABLES	

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



EXISTING POWER PANEL PHOTOS
SCALE: NOT TO SCALE



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

ELECTRICAL AND GROUNDING NOTES

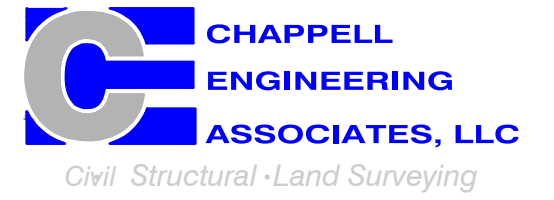
- ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
- ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
- THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED 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 HYDRON 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.

T-MOBILE NORTHEAST LLC

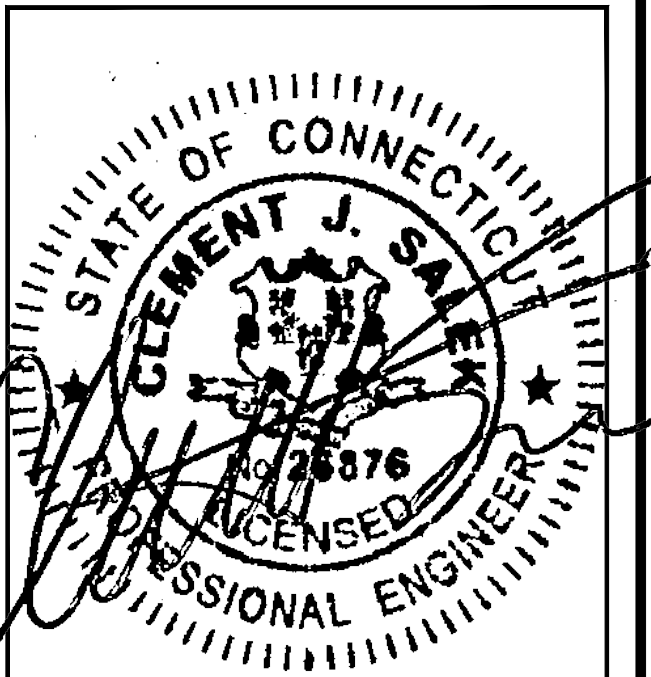
15 COMMERCE WAY, SUITE B
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CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
0	03/28/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11310A

SITE ADDRESS:
811 STONINGTON ROAD
STONINGTON, CT 06379

SHEET TITLE
ELECTRIC & GROUNDING DETAILS

SHEET NUMBER
E-1

Exhibit D

Structural Analysis Report



Tower Engineering Solutions

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

Structural Analysis Report

Existing 150 ft PIROD Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT01493-S

Customer Site Name: North Stonington 2 CT

Carrier Name: T-Mobile (App#: 192384, V1)

Carrier Site ID / Name: CT11310A / Stonington II

Site Location: 811 Stonington Road

Stonington, Connecticut

New London County

Latitude: 41.353417

Longitude: -71.887000

Analysis Result:

Max Structural Usage: 89.1% [Pass]

Max Foundation Usage: 83.0% [Pass]

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



Report Prepared By: Sital Shrestha



Tower Engineering Solutions

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

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

Report Prepared By: Sital Shrestha

Introduction

The purpose of this report is to summarize the analysis results on the 150 ft PIROD 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 PiROD, Drawing #20550-B dated 10/20/99
Foundation Drawing	Foundaiton Drawing prepared by PiROD, Drawing #20550-B dated 10/20/99
Geotechnical Report	Geotechnical Report prepared by FDH, Project #1207125EG1 dated 8/10/12
Modification Drawings	Modification Drawing prepared by FDH, Project #11-04387E S2 dated 8/19/11 TES, Project # 57603R1 Dated 03/01/2019 PCI for TES Project No. 94195, dated 08/19/2020

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:	129.0 mph (3-Sec. Gust) (Ultimate wind speed)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 3/4" 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:	$S_S = 0.183$, $S_1 = 0.052$

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	147.0	3	Commscope - DHHTT65B-3XR - Panel	Concealed inside 40" Canister from 140ft. to 150ft.	(12) 7/8" (3) 3/8" RET	Sprint Nextel
2		3	RFS - KIT-FD9R6004/1C-DL - Diplexers			
3		3	CCI - DPO-7126Y-0-T1 - Diplexer			
-	134.0	3	RFS APXVAR18_43-C-NA20 Panel	Concealed inside 40" Canister from 130ft. to 140ft.	(12) 1 5/8"	T-Mobile
-		3	RFS ATMAA1412D-A1A20 TMA			
7	128.0	3	Cci OPA65R-BU4BA Panel	Concealed inside 40" Canister from 120ft. to 130ft.	(12) 7/8"	AT&T
8		6	Cci TMABPD7823VG12A TMA			
9		6	Powerwave CM1007-DBPXC-xxx Diplexer			

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
4	134.0	3	Commscope FVV-65B-R3- Panel	Concealed inside 40" Canister from 130ft. to 140ft.	(18) 1 5/8"	T-Mobile
5		3	RFS ATMAA1412D-A1A20- TMA			
6		3	Commscope ATSBT-TOP-FM- BIAS-T			

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	Flanges
Max. Usage:	89.1%	54.8%	72.3%	87.5%
Pass/Fail	Pass	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	870.7	9.5	24.5

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 1.5509 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 89.05% at 122.0ft

Structure: CT01493-S-SBA
Site Name: North Stonington 2 CT
Height: 150.00 (ft)
Base Elev: 0.000 (ft)

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

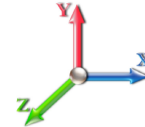
4/12/2022



Page: 1

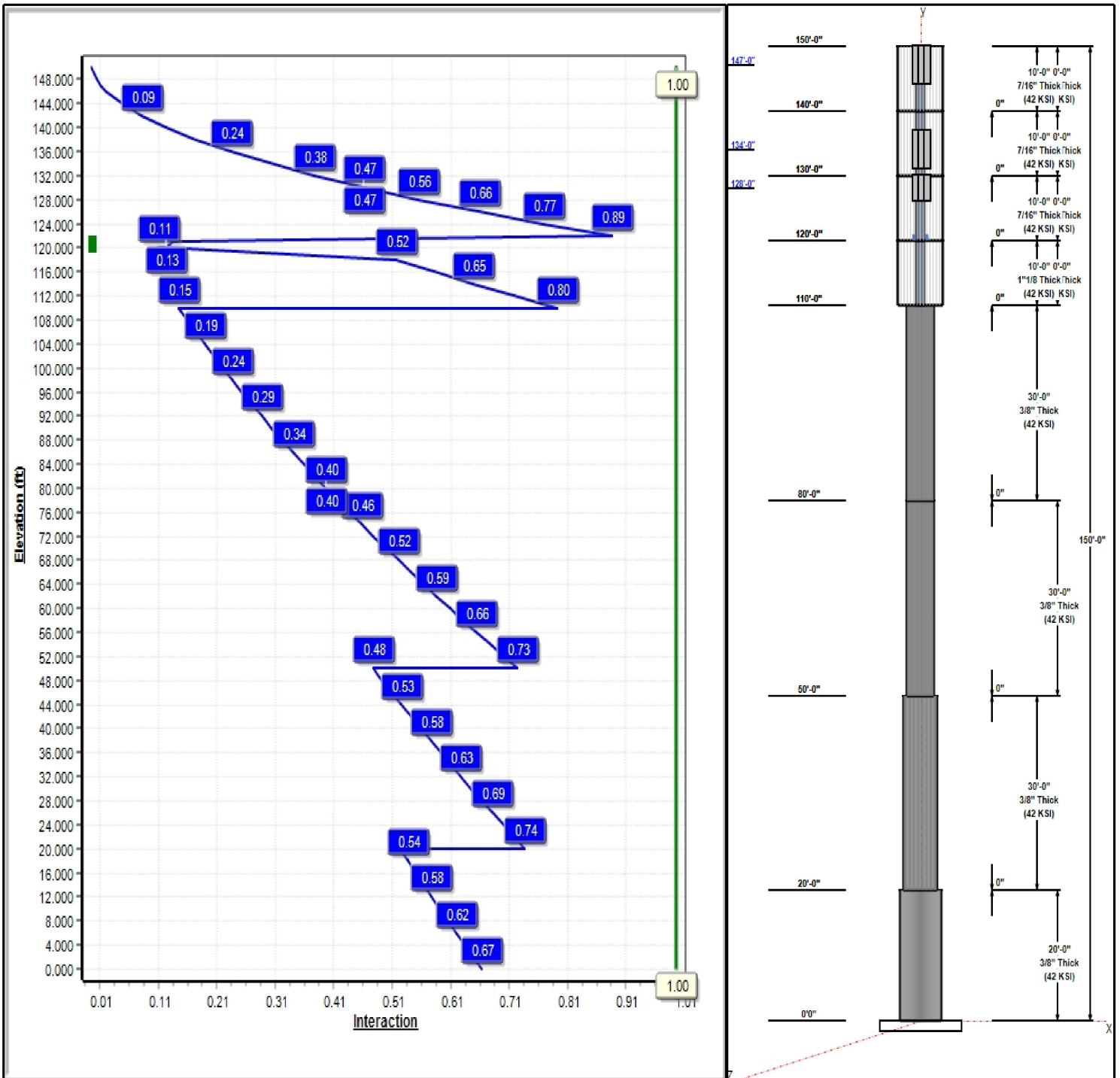
Dead Load Factor: 1.20
Wind Load Factor: 1.00

Load Case : 1.2D + 1.0W 129 mph Wind



Iterations: 38

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Structure: CT01493-S-SBA

Type: Stepped
Site Name: North Stonington 2 CT
Height: 150.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: Round
Taper: 0.00000

4/12/2022

Page: 2



Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	20.00	36.00	36.00	0.375		0.00000	42
2	30.00	30.00	30.00	0.375		0.00000	42
3	30.00	24.00	24.00	0.375		0.00000	42
4	30.00	24.00	24.00	0.375		0.00000	42
5	10.00	6.75	6.75	1.140		0.00000	42
6	10.00	6.63	6.63	0.432		0.00000	42
7	10.00	6.63	6.63	0.432		0.00000	42
8	10.00	6.63	6.63	0.432		0.00000	42

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
150.00	150.00	1	40" Canister Weight	
147.00	147.00	3	DHHTT65B-3XR	Sprint Nextel
147.00	147.00	3	KIT-FD9R6004/1C-DL	Sprint Nextel
147.00	147.00	3	DPO-7126Y-0-T1	Sprint Nextel
140.00	140.00	1	40" Canister Weight	
134.00	134.00	3	ATMAA1412D-A1A20	T-Mobile
134.00	134.00	3	Commscope FVV-65B-R3	T-Mobile
134.00	134.00	3	ATSBT-TOP-FM	T-Mobile
130.00	130.00	1	40" Canister Weight	
128.00	128.00	3	OPA65R-BU4BA	AT&T
128.00	128.00	6	TMABPD7823VG12A	AT&T
128.00	128.00	6	CM1007-DBPXBC-xxx	AT&T
120.00	120.00	1	40" Canister Weight	
110.00	110.00	1	40" Canister Weight	

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	147.00	Inside	3/8" RET	Sprint Nextel
0.00	147.00	Inside	7/8" Coax	Sprint Nextel
0.00	134.00	Inside	1 5/8" Coax	T-Mobile
110.00	130.00	Inside	Grout	
0.00	128.00	Inside	7/8" Coax	AT&T

Anchor Bolts

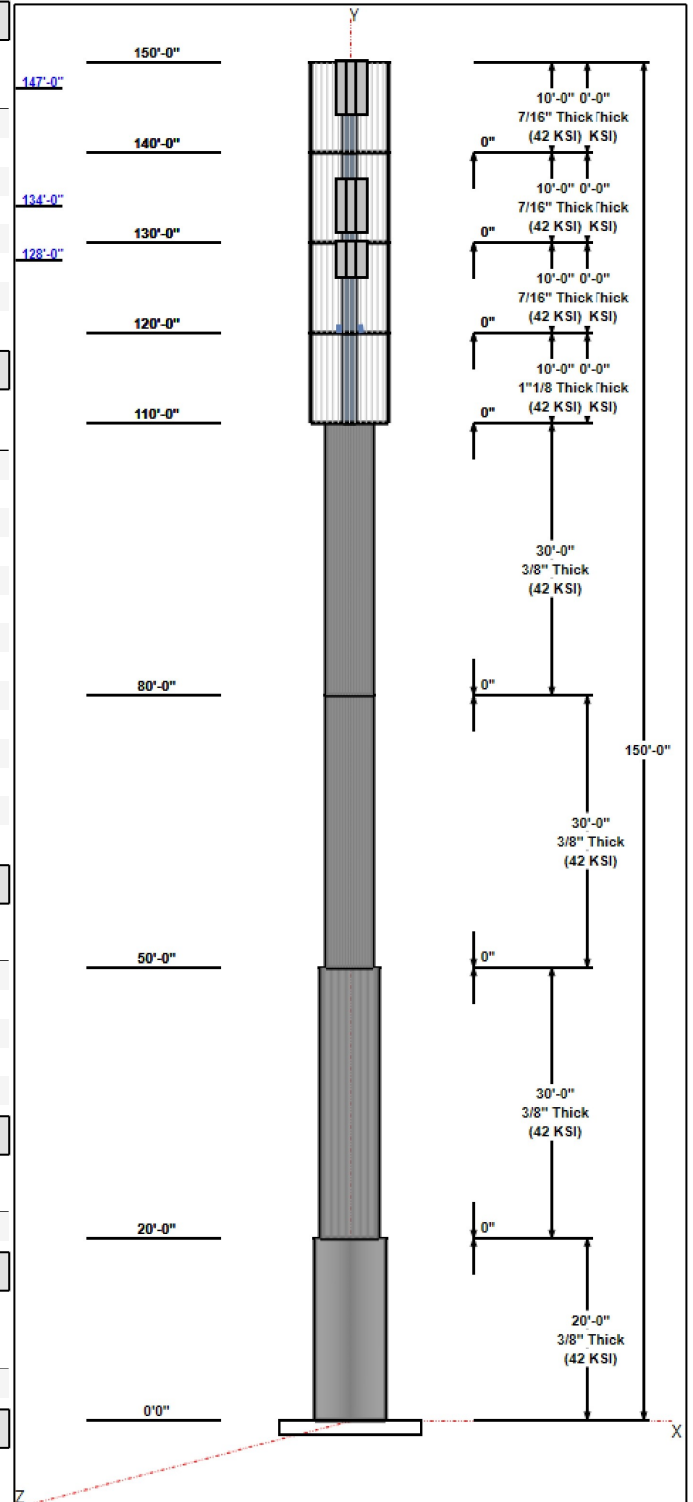
Qty	Specifications	Grade (ksi)	Arrangement
8	2.25" 18J	75.0	0

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
2.0000	50.0	60.0	0

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 129 mph Wind	870.7	9.5	24.5
0.9D + 1.0W 129 mph Wind	854.8	9.5	18.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind	457.1	4.5	31.1
1.2D + 1.0Ev + 1.0Eh	31.3	0.3	25.3
0.9D + 1.0Ev + 1.0Eh	30.7	0.3	19.1



Structure: CT01493-S-SBA

Type: Stepped
Site Name: North Stonington 2 CT
Height: 150.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: Round
Taper: 0.00000

4/12/2022

Page: 3



1.0D + 1.0W 60 mph Wind 158.3 1.7 20.4

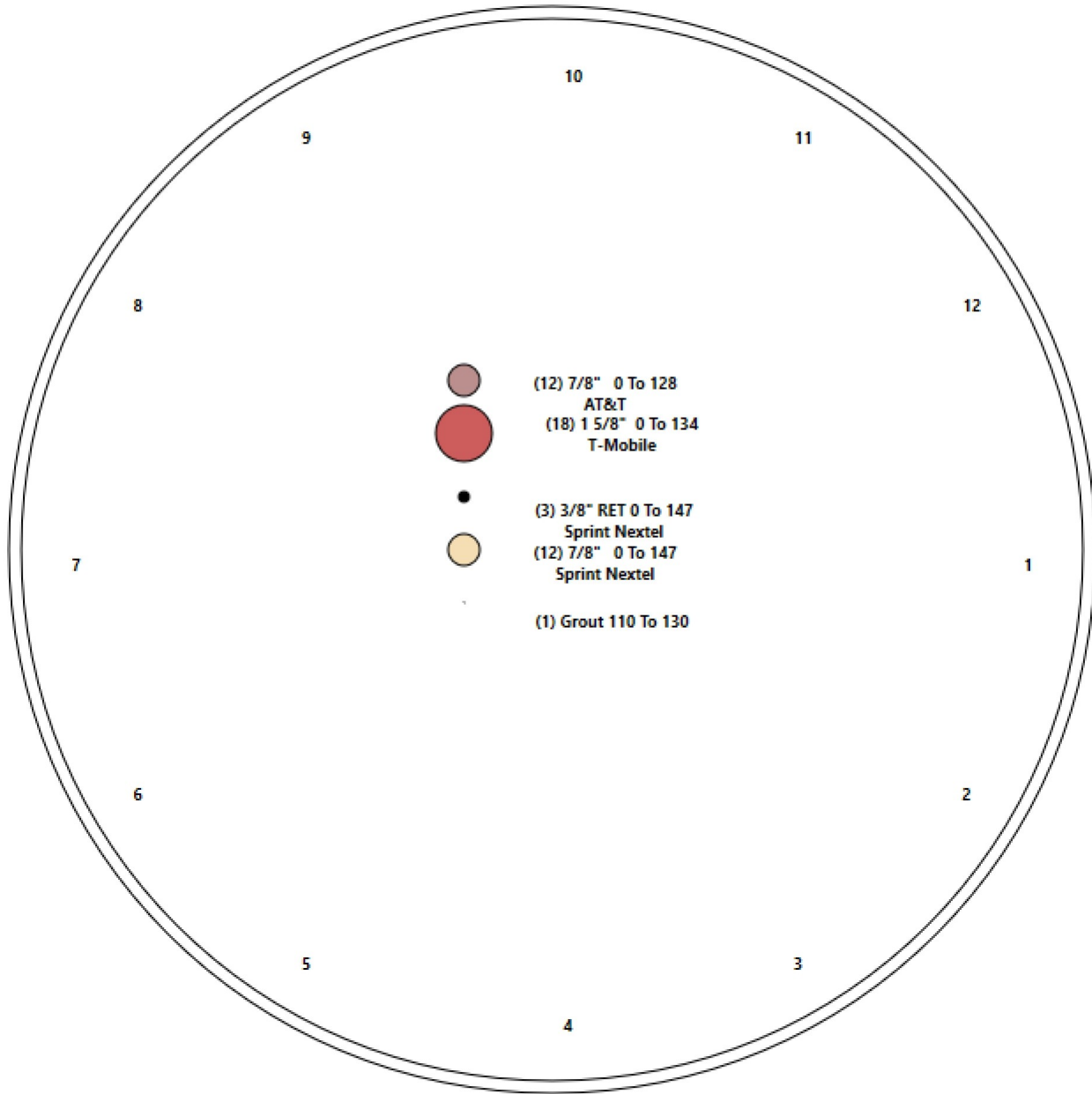
Structure: CT01493-S-SBA - Coax Line Placement

Type: Monopole
Site Name: North Stonington 2 CT
Height: 150.00 (ft)

4/12/2022



Page: 4



Shaft Properties

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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	R	20.000	0.3750	42		0.00	2,856
2	R	30.000	0.3750	42		0.00	3,563
3	R	30.000	0.3750	42		0.00	2,841
4	R	30.000	0.3750	42		0.00	2,841
5	R	10.000	1.1400	42		0.00	684
6	R	10.000	0.4320	42		0.00	286
7	R	10.000	0.4320	42		0.00	286
8	R	10.000	0.4320	42		0.00	286
Total Shaft Weight:							13,643

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	Canister Diam (in)
1	36.00	0.00	41.97	6663.29	0.00	96.00	36.00	20.00	41.97	6663.29	0.00	96.00	0.000000	0.00
2	30.00	20.00	34.90	3831.77	0.00	80.00	30.00	50.00	34.90	3831.77	0.00	80.00	0.000000	0.00
3	24.00	50.00	27.83	1943.30	0.00	64.00	24.00	80.00	27.83	1943.30	0.00	64.00	0.000000	0.00
4	24.00	80.00	27.83	1943.30	0.00	64.00	24.00	110.00	27.83	1943.30	0.00	64.00	0.000000	0.00
5	6.75	110.0	20.09	79.10	0.00	5.92	6.75	120.00	20.09	79.10	0.00	5.92	0.000000	40.00
6	6.63	120.0	8.40	40.33	0.00	15.34	6.63	130.00	8.40	40.33	0.00	15.34	0.000000	40.00
7	6.63	130.0	8.40	40.33	0.00	15.34	6.63	140.00	8.40	40.33	0.00	15.34	0.000000	40.00
8	6.63	140.0	8.40	40.33	0.00	15.34	6.63	150.00	8.40	40.33	0.00	15.34	0.000000	40.00

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Fu (ksi)	Offset (in)	Intermediate Connectors Description	Spacing (in)	Termination Connectors Description	Spacing (in)	Lower Qty	Upper Qty
120.0	121.0	3	PLT 5/8"x6"STFNR	36	48	0.00	5/8" Hollo Bolt	3.00	5/8" Hollo Bolt	3.00	2	2

Load Summary

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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	150.00	40" Canister Weight	1	107.49	0.00	1.00	111.24	0.000	1.00	0.00	0.00
2	147.00	DHHTT65B-3XR	3	45.40	0.00	0.00	136.62	8.714	0.00	0.00	0.00
3	147.00	KIT-FD9R6004/1C-DL	3	3.10	0.00	0.00	7.11	0.000	0.00	0.00	0.00
4	147.00	DPO-7126Y-0-T1	3	12.60	0.00	0.00	21.62	0.000	0.00	0.00	0.00
5	140.00	40" Canister Weight	1	214.97	0.00	1.00	222.42	0.000	1.00	0.00	0.00
6	134.00	ATMAA1412D-A1A20	3	13.00	0.00	0.00	26.14	0.000	0.00	0.00	0.00
7	134.00	Commscope FVV-65B-R3	3	45.60	0.00	0.00	149.62	9.741	0.00	0.00	0.00
8	134.00	ATSBT-TOP-FM	3	1.80	0.00	0.00	4.69	0.000	0.00	0.00	0.00
9	130.00	40" Canister Weight	1	214.97	0.00	1.00	222.37	0.000	1.00	0.00	0.00
10	128.00	OPA65R-BU4BA	3	43.00	0.00	0.00	112.90	0.000	0.00	0.00	0.00
11	128.00	TMABPD7823VG12A	6	26.00	0.00	0.00	49.71	0.000	0.00	0.00	0.00
12	128.00	CM1007-DBPXBC-xxx	6	6.50	0.00	0.00	12.49	0.000	0.00	0.00	0.00
13	120.00	40" Canister Weight	1	214.97	0.00	1.00	222.31	0.000	1.00	0.00	0.00
14	110.00	40" Canister Weight	1	107.49	0.00	1.00	111.13	0.000	1.00	0.00	0.00
Totals:			38	1,548.39			2,638.73				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	147.00	(3) 3/8" RET	0.00	Inside
0.00	147.00	(12) 7/8" Coax	0.00	Inside
0.00	134.00	(18) 1 5/8" Coax	0.00	Inside
110.0	130.00	(1) Grout	0.00	Inside
0.00	128.00	(12) 7/8" Coax	0.00	Inside

Shaft Section Properties

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 7

Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing			
											Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
0.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	0.0				
2.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
4.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
6.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
8.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
10.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
12.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
14.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
16.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
18.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
20.00	Top - Section 1	0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
20.00	Bot - Section 2	0.3750	30.000	34.901	3831.8	0.00	96.00	42	42					
22.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
24.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
26.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
28.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
30.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
32.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
34.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
36.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
38.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
40.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
42.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
44.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
46.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
48.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
50.00	Top - Section 2	0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
50.00	Bot - Section 3	0.3750	24.000	27.833	1943.3	0.00	80.00	42	42					
52.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
54.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
56.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
58.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
60.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
62.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
64.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
66.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
68.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
70.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
72.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
74.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
76.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
78.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
80.00	Top - Section 3	0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
80.00	Bot - Section 4	0.3750	24.000	27.833	1943.3	0.00	64.00	42	42					
82.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
84.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
86.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
88.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
90.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
92.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				

Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing			
											Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
94.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
96.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
98.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
100.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
102.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
104.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
106.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
108.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
110.00	Top - Section 4	0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
110.00	Bot - Section 5	1.1400	6.750	20.092	79.1	0.00	21.05	42	42					
112.00		1.1400	6.750	20.092	79.1	0.00	5.92	42	42	136.7				
114.00		1.1400	6.750	20.092	79.1	0.00	5.92	42	42	136.7				
116.00		1.1400	6.750	20.092	79.1	0.00	5.92	42	42	136.7				
118.00		1.1400	6.750	20.092	79.1	0.00	5.92	42	42	136.7				
120.00	Top - Section 5 RB1	1.1400	6.750	20.092	79.1	0.00	5.92	42	42	136.7	11.25	245.7	245.7	76.6
120.00	Bot - Section 6	0.4320	6.625	8.405	40.3	0.00	15.63	42	42					
121.00	RT1	0.4320	6.625	8.405	40.3	0.00	15.34	42	42	28.6	11.25	241.2	241.2	38.3
122.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	28.6				
124.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
126.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
128.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
130.00	Top - Section 6	0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
130.00	Bot - Section 7	0.4320	6.625	8.405	40.3	0.00	15.34	42	42					
132.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
134.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
136.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
138.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
140.00	Top - Section 7	0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
140.00	Bot - Section 8	0.4320	6.625	8.405	40.3	0.00	15.34	42	42					
142.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
144.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
146.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
147.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	28.6				
148.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	28.6				
150.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
Total Weight										13643.3				
											114.8			

Wind Loading - Shaft

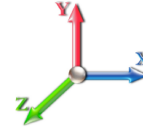
Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0W 129 mph Wind

Iterations 38

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	36.157	39.77	356.53	0.450	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	342.8
4.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	342.8
6.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	342.8
8.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	342.8
10.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	342.8
12.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	342.8
14.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	342.8
16.00		1.00	0.86	36.603	40.26	358.72	0.450	0.000	2.00	6.000	2.70	108.7	0.0	342.8
18.00		1.00	0.88	37.522	41.27	363.20	0.450	0.000	2.00	6.000	2.70	111.4	0.0	342.8
20.00	Top - Section 1	1.00	0.90	38.364	42.20	367.25	0.450	0.000	2.00	6.000	2.70	113.9	0.0	342.8
22.00		1.00	0.92	39.141	43.06	309.13	0.450	0.000	2.00	5.000	2.25	96.9	0.0	285.0
24.00		1.00	0.94	39.865	43.85	311.97	0.450	0.000	2.00	5.000	2.25	98.7	0.0	285.0
26.00		1.00	0.95	40.542	44.60	314.61	0.450	0.000	2.00	5.000	2.25	100.3	0.0	285.0
28.00		1.00	0.97	41.180	45.30	317.08	0.450	0.000	2.00	5.000	2.25	101.9	0.0	285.0
30.00		1.00	0.98	41.782	45.96	319.39	0.450	0.000	2.00	5.000	2.25	103.4	0.0	285.0
32.00		1.00	1.00	42.354	46.59	321.56	0.450	0.000	2.00	5.000	2.25	104.8	0.0	285.0
34.00		1.00	1.01	42.898	47.19	323.62	0.450	0.000	2.00	5.000	2.25	106.2	0.0	285.0
36.00		1.00	1.02	43.417	47.76	325.57	0.450	0.000	2.00	5.000	2.25	107.5	0.0	285.0
38.00		1.00	1.03	43.914	48.31	327.43	0.450	0.000	2.00	5.000	2.25	108.7	0.0	285.0
40.00		1.00	1.04	44.391	48.83	329.21	0.450	0.000	2.00	5.000	2.25	109.9	0.0	285.0
42.00		1.00	1.05	44.849	49.33	330.90	0.450	0.000	2.00	5.000	2.25	111.0	0.0	285.0
44.00		1.00	1.06	45.291	49.82	332.53	0.450	0.000	2.00	5.000	2.25	112.1	0.0	285.0
46.00		1.00	1.07	45.717	50.29	334.08	0.450	0.000	2.00	5.000	2.25	113.1	0.0	285.0
48.00		1.00	1.08	46.128	50.74	335.58	0.450	0.000	2.00	5.000	2.25	114.2	0.0	285.0
50.00	Top - Section 2	1.00	1.09	46.526	51.18	337.03	0.450	0.000	2.00	5.000	2.25	115.2	0.0	285.0
52.00		1.00	1.10	46.912	51.60	270.74	0.450	0.000	2.00	4.000	1.80	92.9	0.0	227.3
54.00		1.00	1.11	47.286	52.01	271.82	0.450	0.000	2.00	4.000	1.80	93.6	0.0	227.3
56.00		1.00	1.12	47.650	52.41	272.86	0.450	0.000	2.00	4.000	1.80	94.3	0.0	227.3
58.00		1.00	1.13	48.003	52.80	273.87	0.450	0.000	2.00	4.000	1.80	95.0	0.0	227.3
60.00		1.00	1.14	48.347	53.18	274.85	0.450	0.000	2.00	4.000	1.80	95.7	0.0	227.3
62.00		1.00	1.14	48.682	53.55	275.80	0.450	0.000	2.00	4.000	1.80	96.4	0.0	227.3
64.00		1.00	1.15	49.008	53.91	276.72	0.450	0.000	2.00	4.000	1.80	97.0	0.0	227.3
66.00		1.00	1.16	49.327	54.26	277.62	0.450	0.000	2.00	4.000	1.80	97.7	0.0	227.3
68.00		1.00	1.17	49.638	54.60	278.49	0.450	0.000	2.00	4.000	1.80	98.3	0.0	227.3
70.00		1.00	1.17	49.941	54.94	279.34	0.450	0.000	2.00	4.000	1.80	98.9	0.0	227.3
72.00		1.00	1.18	50.238	55.26	280.17	0.450	0.000	2.00	4.000	1.80	99.5	0.0	227.3
74.00		1.00	1.19	50.529	55.58	280.98	0.450	0.000	2.00	4.000	1.80	100.0	0.0	227.3
76.00		1.00	1.19	50.814	55.89	281.77	0.450	0.000	2.00	4.000	1.80	100.6	0.0	227.3
78.00		1.00	1.20	51.092	56.20	282.54	0.450	0.000	2.00	4.000	1.80	101.2	0.0	227.3
80.00	Top - Section 3	1.00	1.21	51.365	56.50	283.30	0.450	0.000	2.00	4.000	1.80	101.7	0.0	227.3
82.00		1.00	1.21	51.633	56.80	284.04	0.450	0.000	2.00	4.000	1.80	102.2	0.0	227.3
84.00		1.00	1.22	51.896	57.09	284.76	0.450	0.000	2.00	4.000	1.80	102.8	0.0	227.3
86.00		1.00	1.23	52.153	57.37	285.46	0.450	0.000	2.00	4.000	1.80	103.3	0.0	227.3
88.00		1.00	1.23	52.406	57.65	286.16	0.450	0.000	2.00	4.000	1.80	103.8	0.0	227.3
90.00		1.00	1.24	52.655	57.92	286.83	0.450	0.000	2.00	4.000	1.80	104.3	0.0	227.3
92.00		1.00	1.24	52.899	58.19	287.50	0.450	0.000	2.00	4.000	1.80	104.7	0.0	227.3

Wind Loading - Shaft

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 10

94.00	1.00	1.25	53.139	58.45	288.15	0.450	0.000	2.00	4.000	1.80	105.2	0.0	227.3
96.00	1.00	1.25	53.375	58.71	288.79	0.450	0.000	2.00	4.000	1.80	105.7	0.0	227.3
98.00	1.00	1.26	53.607	58.97	289.42	0.450	0.000	2.00	4.000	1.80	106.1	0.0	227.3
100.00	1.00	1.27	53.836	59.22	290.03	0.450	0.000	2.00	4.000	1.80	106.6	0.0	227.3
102.00	1.00	1.27	54.061	59.47	290.64	0.450	0.000	2.00	4.000	1.80	107.0	0.0	227.3
104.00	1.00	1.28	54.282	59.71	291.23	0.450	0.000	2.00	4.000	1.80	107.5	0.0	227.3
106.00	1.00	1.28	54.500	59.95	291.82	0.450	0.000	2.00	4.000	1.80	107.9	0.0	227.3
108.00	1.00	1.29	54.715	60.19	292.39	0.450	0.000	2.00	4.000	1.80	108.3	0.0	227.3
110.00 Top - Section 4	1.00	1.29	54.927	60.42	292.96	0.450	0.000	2.00	4.000	1.80	108.8	0.0	227.3
112.00	1.00	1.30	55.136	60.65	489.19	0.450	0.000	2.00	6.667	3.00	181.9	0.0	189.7
114.00	1.00	1.30	55.342	60.88	490.10	0.450	0.000	2.00	6.667	3.00	182.6	0.0	189.7
116.00	1.00	1.31	55.545	61.10	491.00	0.450	0.000	2.00	6.667	3.00	183.3	0.0	189.7
118.00	1.00	1.31	55.745	61.32	491.88	0.450	0.000	2.00	6.667	3.00	184.0	0.0	189.7
120.00 Top - Section 5 RB1	1.00	1.32	55.942	61.54	492.75	0.450	0.000	2.00	6.667	3.00	184.6	0.0	189.7
121.00 RT1	1.00	1.32	56.040	61.64	493.18	0.450	0.000	1.00	3.333	1.50	92.5	0.0	47.1
122.00	1.00	1.32	56.137	61.75	493.61	0.450	0.000	1.00	3.333	1.50	92.6	0.0	47.1
124.00	1.00	1.32	56.330	61.96	494.46	0.450	0.000	2.00	6.667	3.00	185.9	0.0	94.2
126.00	1.00	1.33	56.520	62.17	495.29	0.450	0.000	2.00	6.667	3.00	186.5	0.0	94.2
128.00 Appurtenance(s)	1.00	1.33	56.708	62.38	496.11	0.450	0.000	2.00	6.667	3.00	187.1	0.0	94.2
130.00 Top - Section 6	1.00	1.34	56.893	62.58	496.92	0.450	0.000	2.00	6.667	3.00	187.7	0.0	94.2
132.00	1.00	1.34	57.076	62.78	497.72	0.450	0.000	2.00	6.667	3.00	188.4	0.0	94.2
134.00 Appurtenance(s)	1.00	1.35	57.257	62.98	498.51	0.450	0.000	2.00	6.667	3.00	188.9	0.0	94.2
136.00	1.00	1.35	57.436	63.18	499.29	0.450	0.000	2.00	6.667	3.00	189.5	0.0	94.2
138.00	1.00	1.35	57.613	63.37	500.06	0.450	0.000	2.00	6.667	3.00	190.1	0.0	94.2
140.00 Top - Section 7	1.00	1.36	57.788	63.57	500.81	0.450	0.000	2.00	6.667	3.00	190.7	0.0	94.2
142.00	1.00	1.36	57.961	63.76	501.56	0.450	0.000	2.00	6.667	3.00	191.3	0.0	94.2
144.00	1.00	1.37	58.131	63.94	502.30	0.450	0.000	2.00	6.667	3.00	191.8	0.0	94.2
146.00	1.00	1.37	58.301	64.13	503.03	0.450	0.000	2.00	6.667	3.00	192.4	0.0	94.2
147.00 Appurtenance(s)	1.00	1.37	58.384	64.22	503.39	0.450	0.000	1.00	3.333	1.50	96.3	0.0	47.1
148.00	1.00	1.37	58.468	64.31	503.75	0.450	0.000	1.00	3.333	1.50	96.5	0.0	47.1
150.00 Appurtenance(s)	1.00	1.38	58.633	64.50	504.46	0.450	0.000	2.00	6.667	3.00	193.5	0.0	94.2
Totals:								150.00			9,494.9		16,883.9

Discrete Appurtenance Forces

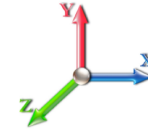
Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 11

Load Case: 1.2D + 1.0W 129 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 38

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	150.00	40" Canister Weight	1	58.633	64.497	1.00	1.00	0.00	128.99	0.000	0.000	0.00	0.00	0.00
2	147.00	DPO-7126Y-0-T1	3	58.384	64.223	0.00	1.00	0.00	45.36	0.000	0.000	0.00	0.00	0.00
3	147.00	KIT-FD9R6004/1C-DL	3	58.384	64.223	0.00	1.00	0.00	11.16	0.000	0.000	0.00	0.00	0.00
4	147.00	DHHTT65B-3XR	3	58.384	64.223	0.00	1.00	0.00	163.44	0.000	0.000	0.00	0.00	0.00
5	140.00	40" Canister Weight	1	57.788	63.566	1.00	1.00	0.00	257.96	0.000	0.000	0.00	0.00	0.00
6	134.00	Commscope FVV-65B-R3	3	57.257	62.983	0.00	1.00	0.00	164.16	0.000	0.000	0.00	0.00	0.00
7	134.00	ATSBT-TOP-FM	3	57.257	62.983	0.00	1.00	0.00	6.48	0.000	0.000	0.00	0.00	0.00
8	134.00	ATMAA1412D-A1A20	3	57.257	62.983	0.00	1.00	0.00	46.80	0.000	0.000	0.00	0.00	0.00
9	130.00	40" Canister Weight	1	56.893	62.582	1.00	1.00	0.00	257.96	0.000	0.000	0.00	0.00	0.00
10	128.00	CM1007-DBPXBC-xxx	6	56.708	62.379	0.00	1.00	0.00	46.80	0.000	0.000	0.00	0.00	0.00
11	128.00	TMABPD7823VG12A	6	56.708	62.379	0.00	1.00	0.00	187.20	0.000	0.000	0.00	0.00	0.00
12	128.00	OPA65R-BU4BA	3	56.708	62.379	0.00	1.00	0.00	154.80	0.000	0.000	0.00	0.00	0.00
13	120.00	40" Canister Weight	1	55.942	61.537	1.00	1.00	0.00	257.96	0.000	0.000	0.00	0.00	0.00
14	110.00	40" Canister Weight	1	54.927	60.420	1.00	1.00	0.00	128.99	0.000	0.000	0.00	0.00	0.00
Totals:									1,858.07			0.00		

Total Applied Force Summary

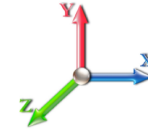
Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 12

Load Case: 1.2D + 1.0W 129 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 38

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		107.39	418.06	0.00	0.00
4.00		107.39	418.06	0.00	0.00
6.00		107.39	418.06	0.00	0.00
8.00		107.39	418.06	0.00	0.00
10.00		107.39	418.06	0.00	0.00
12.00		107.39	418.06	0.00	0.00
14.00		107.39	418.06	0.00	0.00
16.00		108.71	418.06	0.00	0.00
18.00		111.44	418.06	0.00	0.00
20.00		113.94	418.06	0.00	0.00
22.00		96.87	360.34	0.00	0.00
24.00		98.67	360.34	0.00	0.00
26.00		100.34	360.34	0.00	0.00
28.00		101.92	360.34	0.00	0.00
30.00		103.41	360.34	0.00	0.00
32.00		104.83	360.34	0.00	0.00
34.00		106.17	360.34	0.00	0.00
36.00		107.46	360.34	0.00	0.00
38.00		108.69	360.34	0.00	0.00
40.00		109.87	360.34	0.00	0.00
42.00		111.00	360.34	0.00	0.00
44.00		112.09	360.34	0.00	0.00
46.00		113.15	360.34	0.00	0.00
48.00		114.17	360.34	0.00	0.00
50.00		115.15	360.34	0.00	0.00
52.00		92.89	302.61	0.00	0.00
54.00		93.63	302.61	0.00	0.00
56.00		94.35	302.61	0.00	0.00
58.00		95.05	302.61	0.00	0.00
60.00		95.73	302.61	0.00	0.00
62.00		96.39	302.61	0.00	0.00
64.00		97.04	302.61	0.00	0.00
66.00		97.67	302.61	0.00	0.00
68.00		98.28	302.61	0.00	0.00
70.00		98.88	302.61	0.00	0.00
72.00		99.47	302.61	0.00	0.00
74.00		100.05	302.61	0.00	0.00
76.00		100.61	302.61	0.00	0.00
78.00		101.16	302.61	0.00	0.00
80.00		101.70	302.61	0.00	0.00
82.00		102.23	302.61	0.00	0.00
84.00		102.75	302.61	0.00	0.00
86.00		103.26	302.61	0.00	0.00
88.00		103.76	302.61	0.00	0.00
90.00		104.26	302.61	0.00	0.00
92.00		104.74	302.61	0.00	0.00

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

94.00		105.22	302.61	0.00	0.00
96.00		105.68	302.61	0.00	0.00
98.00		106.14	302.61	0.00	0.00
100.00		106.60	302.61	0.00	0.00
102.00		107.04	302.61	0.00	0.00
104.00		107.48	302.61	0.00	0.00
106.00		107.91	302.61	0.00	0.00
108.00		108.34	302.61	0.00	0.00
110.00	(1) attachments	108.76	431.60	0.00	0.00
112.00		181.95	330.15	0.00	0.00
114.00		182.63	330.15	0.00	0.00
116.00		183.30	330.15	0.00	0.00
118.00		183.96	330.15	0.00	0.00
120.00	(1) attachments	184.61	588.12	0.00	0.00
121.00		92.47	117.36	0.00	0.00
122.00		92.63	117.36	0.00	0.00
124.00		185.89	234.71	0.00	0.00
126.00		186.52	234.71	0.00	0.00
128.00	(15) attachments	187.14	623.51	0.00	0.00
130.00	(1) attachments	187.75	477.70	0.00	0.00
132.00		188.35	154.58	0.00	0.00
134.00	(9) attachments	188.95	372.02	0.00	0.00
136.00		189.54	109.65	0.00	0.00
138.00		190.12	109.65	0.00	0.00
140.00	(1) attachments	190.70	367.61	0.00	0.00
142.00		191.27	109.65	0.00	0.00
144.00		191.83	109.65	0.00	0.00
146.00		192.39	109.65	0.00	0.00
147.00	(9) attachments	96.33	274.78	0.00	0.00
148.00		96.47	47.12	0.00	0.00
150.00	(1) attachments	193.49	223.23	0.00	0.00
	Totals:	9,494.91	24,494.70	0.00	0.00

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

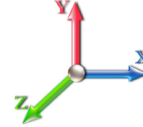


Page: 14

Load Case: 1.2D + 1.0W 129 mph Wind

Iterations 38

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	-24.49	-9.51	0.00	-870.66	0.00	870.66	1490.10	475.94	99948.2	1339.68	0.00	0.000	0.000	0.667
2.00	-24.06	-9.43	0.00	-851.64	0.00	851.64	1490.10	475.94	99948.2	1339.68	0.02	-0.074	0.000	0.652
4.00	-23.63	-9.35	0.00	-832.77	0.00	832.77	1490.10	475.94	99948.2	1339.68	0.06	-0.145	0.000	0.638
6.00	-23.20	-9.27	0.00	-814.06	0.00	814.06	1490.10	475.94	99948.2	1339.68	0.14	-0.216	0.000	0.624
8.00	-22.77	-9.19	0.00	-795.51	0.00	795.51	1490.10	475.94	99948.2	1339.68	0.24	-0.284	0.000	0.609
10.00	-22.34	-9.11	0.00	-777.13	0.00	777.13	1490.10	475.94	99948.2	1339.68	0.38	-0.352	0.000	0.595
12.00	-21.92	-9.02	0.00	-758.91	0.00	758.91	1490.10	475.94	99948.2	1339.68	0.54	-0.417	0.000	0.582
14.00	-21.49	-8.94	0.00	-740.87	0.00	740.87	1490.10	475.94	99948.2	1339.68	0.73	-0.481	0.000	0.568
16.00	-21.06	-8.85	0.00	-723.00	0.00	723.00	1490.10	475.94	99948.2	1339.68	0.94	-0.544	0.000	0.554
18.00	-20.64	-8.75	0.00	-705.31	0.00	705.31	1490.10	475.94	99948.2	1339.68	1.18	-0.605	0.000	0.541
20.00	-20.21	-8.65	0.00	-687.80	0.00	687.80	1490.10	475.94	99948.2	1339.68	1.45	-0.664	0.000	0.527
20.00	-20.21	-8.65	0.00	-687.80	0.00	687.80	1311.06	395.78	69116.5	948.43	1.45	-0.664	0.000	0.741
22.00	-19.84	-8.58	0.00	-670.49	0.00	670.49	1311.06	395.78	69116.5	948.43	1.74	-0.722	0.000	0.723
24.00	-19.47	-8.51	0.00	-653.34	0.00	653.34	1311.06	395.78	69116.5	948.43	2.06	-0.821	0.000	0.704
26.00	-19.09	-8.44	0.00	-636.32	0.00	636.32	1311.06	395.78	69116.5	948.43	2.43	-0.916	0.000	0.686
28.00	-18.72	-8.36	0.00	-619.45	0.00	619.45	1311.06	395.78	69116.5	948.43	2.83	-1.010	0.000	0.668
30.00	-18.35	-8.28	0.00	-602.73	0.00	602.73	1311.06	395.78	69116.5	948.43	3.27	-1.100	0.000	0.650
32.00	-17.98	-8.19	0.00	-586.18	0.00	586.18	1311.06	395.78	69116.5	948.43	3.75	-1.189	0.000	0.632
34.00	-17.61	-8.10	0.00	-569.80	0.00	569.80	1311.06	395.78	69116.5	948.43	4.27	-1.274	0.000	0.615
36.00	-17.24	-8.01	0.00	-553.59	0.00	553.59	1311.06	395.78	69116.5	948.43	4.82	-1.358	0.000	0.597
38.00	-16.87	-7.92	0.00	-537.57	0.00	537.57	1311.06	395.78	69116.5	948.43	5.41	-1.439	0.000	0.580
40.00	-16.50	-7.82	0.00	-521.73	0.00	521.73	1311.06	395.78	69116.5	948.43	6.03	-1.517	0.000	0.563
42.00	-16.14	-7.72	0.00	-506.09	0.00	506.09	1311.06	395.78	69116.5	948.43	6.68	-1.594	0.000	0.546
44.00	-15.77	-7.62	0.00	-490.64	0.00	490.64	1311.06	395.78	69116.5	948.43	7.36	-1.668	0.000	0.530
46.00	-15.40	-7.52	0.00	-475.40	0.00	475.40	1311.06	395.78	69116.5	948.43	8.08	-1.739	0.000	0.513
48.00	-15.04	-7.41	0.00	-460.37	0.00	460.37	1311.06	395.78	69116.5	948.43	8.82	-1.809	0.000	0.497
50.00	-14.67	-7.30	0.00	-445.56	0.00	445.56	1311.06	395.78	69116.5	948.43	9.59	-1.876	0.000	0.481
50.00	-14.67	-7.30	0.00	-445.56	0.00	445.56	1052.07	315.62	43955.0	624.04	9.59	-1.876	0.000	0.728
52.00	-14.36	-7.22	0.00	-430.96	0.00	430.96	1052.07	315.62	43955.0	624.04	10.39	-1.941	0.000	0.705
54.00	-14.05	-7.14	0.00	-416.52	0.00	416.52	1052.07	315.62	43955.0	624.04	11.23	-2.065	0.000	0.681
56.00	-13.73	-7.07	0.00	-402.24	0.00	402.24	1052.07	315.62	43955.0	624.04	12.12	-2.185	0.000	0.658
58.00	-13.42	-6.99	0.00	-388.10	0.00	388.10	1052.07	315.62	43955.0	624.04	13.06	-2.301	0.000	0.635
60.00	-13.11	-6.90	0.00	-374.13	0.00	374.13	1052.07	315.62	43955.0	624.04	14.05	-2.413	0.000	0.612
62.00	-12.80	-6.82	0.00	-360.32	0.00	360.32	1052.07	315.62	43955.0	624.04	15.08	-2.520	0.000	0.590
64.00	-12.49	-6.73	0.00	-346.68	0.00	346.68	1052.07	315.62	43955.0	624.04	16.16	-2.624	0.000	0.568
66.00	-12.18	-6.64	0.00	-333.22	0.00	333.22	1052.07	315.62	43955.0	624.04	17.28	-2.723	0.000	0.546
68.00	-11.87	-6.55	0.00	-319.94	0.00	319.94	1052.07	315.62	43955.0	624.04	18.44	-2.819	0.000	0.524
70.00	-11.57	-6.45	0.00	-306.85	0.00	306.85	1052.07	315.62	43955.0	624.04	19.64	-2.911	0.000	0.503
72.00	-11.26	-6.35	0.00	-293.95	0.00	293.95	1052.07	315.62	43955.0	624.04	20.88	-2.998	0.000	0.482
74.00	-10.95	-6.25	0.00	-281.25	0.00	281.25	1052.07	315.62	43955.0	624.04	22.15	-3.083	0.000	0.461
76.00	-10.65	-6.15	0.00	-268.75	0.00	268.75	1052.07	315.62	43955.0	624.04	23.46	-3.163	0.000	0.441
78.00	-10.34	-6.05	0.00	-256.45	0.00	256.45	1052.07	315.62	43955.0	624.04	24.80	-3.240	0.000	0.421
80.00	-10.04	-5.94	0.00	-244.36	0.00	244.36	1052.07	315.62	43955.0	624.04	26.17	-3.313	0.000	0.401
80.00	-10.04	-5.94	0.00	-244.36	0.00	244.36	1052.07	315.62	43955.0	624.04	26.17	-3.313	0.000	0.401
82.00	-9.74	-5.83	0.00	-232.48	0.00	232.48	1052.07	315.62	43955.0	624.04	27.58	-3.383	0.000	0.382
84.00	-9.43	-5.72	0.00	-220.82	0.00	220.82	1052.07	315.62	43955.0	624.04	29.01	-3.450	0.000	0.363
86.00	-9.13	-5.61	0.00	-209.38	0.00	209.38	1052.07	315.62	43955.0	624.04	30.46	-3.513	0.000	0.345
88.00	-8.83	-5.50	0.00	-198.16	0.00	198.16	1052.07	315.62	43955.0	624.04	31.95	-3.572	0.000	0.326

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

90.00	-8.53	-5.38	0.00	-187.17	0.00	187.17	1052.07	315.62	43955.0	624.04	33.45	-3.629	0.000	0.308
92.00	-8.23	-5.26	0.00	-176.41	0.00	176.41	1052.07	315.62	43955.0	624.04	34.99	-3.682	0.000	0.291
94.00	-7.93	-5.15	0.00	-165.88	0.00	165.88	1052.07	315.62	43955.0	624.04	36.54	-3.732	0.000	0.274
96.00	-7.63	-5.03	0.00	-155.59	0.00	155.59	1052.07	315.62	43955.0	624.04	38.11	-3.779	0.000	0.257
98.00	-7.33	-4.91	0.00	-145.53	0.00	145.53	1052.07	315.62	43955.0	624.04	39.70	-3.823	0.000	0.240
100.00	-7.04	-4.79	0.00	-135.72	0.00	135.72	1052.07	315.62	43955.0	624.04	41.31	-3.864	0.000	0.224
102.00	-6.74	-4.66	0.00	-126.15	0.00	126.15	1052.07	315.62	43955.0	624.04	42.94	-3.903	0.000	0.209
104.00	-6.44	-4.54	0.00	-116.82	0.00	116.82	1052.07	315.62	43955.0	624.04	44.58	-3.938	0.000	0.194
106.00	-6.14	-4.41	0.00	-107.75	0.00	107.75	1052.07	315.62	43955.0	624.04	46.23	-3.971	0.000	0.179
108.00	-5.85	-4.29	0.00	-98.92	0.00	98.92	1052.07	315.62	43955.0	624.04	47.90	-4.001	0.000	0.164
110.00	-5.42	-4.15	0.00	-90.35	0.00	90.35	1052.07	315.62	43955.0	624.04	49.58	-4.029	0.000	0.150
110.00	-5.42	-4.15	0.00	-90.35	0.00	90.35	759.47	227.84	14937.6	114.57	49.58	-4.029	0.000	0.796
112.00	-5.09	-3.97	0.00	-82.05	0.00	82.05	759.47	227.84	14937.6	114.57	51.27	-4.054	0.000	0.723
114.00	-4.73	-3.81	0.00	-74.10	0.00	74.10	759.47	227.84	14937.6	114.57	53.09	-4.616	0.000	0.653
116.00	-4.39	-3.64	0.00	-66.48	0.00	66.48	759.47	227.84	14937.6	114.57	55.13	-5.122	0.000	0.586
118.00	-4.05	-3.45	0.00	-59.21	0.00	59.21	759.47	227.84	14937.6	114.57	57.37	-5.574	0.000	0.522
120.00	-3.48	-3.22	0.00	-52.31	0.00	52.31	759.47	227.84	14937.6	114.57	59.79	-5.975	0.000	0.114
120.00	-3.48	-3.22	0.00	-52.31	0.00	52.31	317.71	95.31	3734.62	52.28	59.79	-5.975	0.000	0.128
121.00	-3.37	-3.12	0.00	-49.09	0.00	49.09	317.71	95.31	3734.62	52.28	61.04	-6.019	0.000	0.140
121.00	-3.37	-3.12	0.00	-49.09	0.00	49.09	317.71	95.31	3734.62	52.28	61.04	-6.019	0.000	0.140
122.00	-3.24	-3.04	0.00	-45.97	0.00	45.97	317.71	95.31	3734.62	52.28	62.30	-6.067	0.000	0.891
124.00	-3.00	-2.85	0.00	-39.90	0.00	39.90	317.71	95.31	3734.62	52.28	64.97	-6.673	0.000	0.774
126.00	-2.77	-2.66	0.00	-34.19	0.00	34.19	317.71	95.31	3734.62	52.28	67.87	-7.196	0.000	0.663
128.00	-2.16	-2.41	0.00	-28.86	0.00	28.86	317.71	95.31	3734.62	52.28	70.97	-7.640	0.000	0.559
130.00	-1.70	-2.17	0.00	-24.03	0.00	24.03	317.71	95.31	3734.62	52.28	74.24	-8.014	0.000	0.466
130.00	-1.70	-2.17	0.00	-24.03	0.00	24.03	317.71	95.31	3734.62	52.28	74.24	-8.014	0.000	0.466
132.00	-1.56	-1.97	0.00	-19.69	0.00	19.69	317.71	95.31	3734.62	52.28	77.66	-8.322	0.000	0.382
134.00	-1.21	-1.73	0.00	-15.74	0.00	15.74	317.71	95.31	3734.62	52.28	81.18	-8.572	0.000	0.305
136.00	-1.13	-1.53	0.00	-12.27	0.00	12.27	317.71	95.31	3734.62	52.28	84.80	-8.770	0.000	0.239
138.00	-1.05	-1.33	0.00	-9.21	0.00	9.21	317.71	95.31	3734.62	52.28	88.50	-8.921	0.000	0.180
140.00	-0.71	-1.09	0.00	-6.54	0.00	6.54	317.71	95.31	3734.62	52.28	92.24	-9.032	0.000	0.127
140.00	-0.71	-1.09	0.00	-6.54	0.00	6.54	317.71	95.31	3734.62	52.28	92.24	-9.032	0.000	0.127
142.00	-0.63	-0.88	0.00	-4.37	0.00	4.37	317.71	95.31	3734.62	52.28	96.03	-9.109	0.000	0.086
144.00	-0.55	-0.68	0.00	-2.60	0.00	2.60	317.71	95.31	3734.62	52.28	99.84	-9.158	0.000	0.052
146.00	-0.48	-0.47	0.00	-1.25	0.00	1.25	317.71	95.31	3734.62	52.28	103.66	-9.186	0.000	0.025
147.00	-0.22	-0.33	0.00	-0.78	0.00	0.78	317.71	95.31	3734.62	52.28	105.58	-9.193	0.000	0.016
148.00	-0.19	-0.23	0.00	-0.45	0.00	0.45	317.71	95.31	3734.62	52.28	107.50	-9.197	0.000	0.009
150.00	0.00	-0.19	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	111.33	-9.200	0.000	0.000

Wind Loading - Shaft

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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 129 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 38

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	36.157	39.77	356.53	0.450	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	257.1
4.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	257.1
6.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	257.1
8.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	257.1
10.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	257.1
12.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	257.1
14.00		1.00	0.85	36.157	39.77	356.53	0.450	0.000	2.00	6.000	2.70	107.4	0.0	257.1
16.00		1.00	0.86	36.603	40.26	358.72	0.450	0.000	2.00	6.000	2.70	108.7	0.0	257.1
18.00		1.00	0.88	37.522	41.27	363.20	0.450	0.000	2.00	6.000	2.70	111.4	0.0	257.1
20.00	Top - Section 1	1.00	0.90	38.364	42.20	367.25	0.450	0.000	2.00	6.000	2.70	113.9	0.0	257.1
22.00		1.00	0.92	39.141	43.06	309.13	0.450	0.000	2.00	5.000	2.25	96.9	0.0	213.8
24.00		1.00	0.94	39.865	43.85	311.97	0.450	0.000	2.00	5.000	2.25	98.7	0.0	213.8
26.00		1.00	0.95	40.542	44.60	314.61	0.450	0.000	2.00	5.000	2.25	100.3	0.0	213.8
28.00		1.00	0.97	41.180	45.30	317.08	0.450	0.000	2.00	5.000	2.25	101.9	0.0	213.8
30.00		1.00	0.98	41.782	45.96	319.39	0.450	0.000	2.00	5.000	2.25	103.4	0.0	213.8
32.00		1.00	1.00	42.354	46.59	321.56	0.450	0.000	2.00	5.000	2.25	104.8	0.0	213.8
34.00		1.00	1.01	42.898	47.19	323.62	0.450	0.000	2.00	5.000	2.25	106.2	0.0	213.8
36.00		1.00	1.02	43.417	47.76	325.57	0.450	0.000	2.00	5.000	2.25	107.5	0.0	213.8
38.00		1.00	1.03	43.914	48.31	327.43	0.450	0.000	2.00	5.000	2.25	108.7	0.0	213.8
40.00		1.00	1.04	44.391	48.83	329.21	0.450	0.000	2.00	5.000	2.25	109.9	0.0	213.8
42.00		1.00	1.05	44.849	49.33	330.90	0.450	0.000	2.00	5.000	2.25	111.0	0.0	213.8
44.00		1.00	1.06	45.291	49.82	332.53	0.450	0.000	2.00	5.000	2.25	112.1	0.0	213.8
46.00		1.00	1.07	45.717	50.29	334.08	0.450	0.000	2.00	5.000	2.25	113.1	0.0	213.8
48.00		1.00	1.08	46.128	50.74	335.58	0.450	0.000	2.00	5.000	2.25	114.2	0.0	213.8
50.00	Top - Section 2	1.00	1.09	46.526	51.18	337.03	0.450	0.000	2.00	5.000	2.25	115.2	0.0	213.8
52.00		1.00	1.10	46.912	51.60	270.74	0.450	0.000	2.00	4.000	1.80	92.9	0.0	170.5
54.00		1.00	1.11	47.286	52.01	271.82	0.450	0.000	2.00	4.000	1.80	93.6	0.0	170.5
56.00		1.00	1.12	47.650	52.41	272.86	0.450	0.000	2.00	4.000	1.80	94.3	0.0	170.5
58.00		1.00	1.13	48.003	52.80	273.87	0.450	0.000	2.00	4.000	1.80	95.0	0.0	170.5
60.00		1.00	1.14	48.347	53.18	274.85	0.450	0.000	2.00	4.000	1.80	95.7	0.0	170.5
62.00		1.00	1.14	48.682	53.55	275.80	0.450	0.000	2.00	4.000	1.80	96.4	0.0	170.5
64.00		1.00	1.15	49.008	53.91	276.72	0.450	0.000	2.00	4.000	1.80	97.0	0.0	170.5
66.00		1.00	1.16	49.327	54.26	277.62	0.450	0.000	2.00	4.000	1.80	97.7	0.0	170.5
68.00		1.00	1.17	49.638	54.60	278.49	0.450	0.000	2.00	4.000	1.80	98.3	0.0	170.5
70.00		1.00	1.17	49.941	54.94	279.34	0.450	0.000	2.00	4.000	1.80	98.9	0.0	170.5
72.00		1.00	1.18	50.238	55.26	280.17	0.450	0.000	2.00	4.000	1.80	99.5	0.0	170.5
74.00		1.00	1.19	50.529	55.58	280.98	0.450	0.000	2.00	4.000	1.80	100.0	0.0	170.5
76.00		1.00	1.19	50.814	55.89	281.77	0.450	0.000	2.00	4.000	1.80	100.6	0.0	170.5
78.00		1.00	1.20	51.092	56.20	282.54	0.450	0.000	2.00	4.000	1.80	101.2	0.0	170.5
80.00	Top - Section 3	1.00	1.21	51.365	56.50	283.30	0.450	0.000	2.00	4.000	1.80	101.7	0.0	170.5
82.00		1.00	1.21	51.633	56.80	284.04	0.450	0.000	2.00	4.000	1.80	102.2	0.0	170.5
84.00		1.00	1.22	51.896	57.09	284.76	0.450	0.000	2.00	4.000	1.80	102.8	0.0	170.5
86.00		1.00	1.23	52.153	57.37	285.46	0.450	0.000	2.00	4.000	1.80	103.3	0.0	170.5
88.00		1.00	1.23	52.406	57.65	286.16	0.450	0.000	2.00	4.000	1.80	103.8	0.0	170.5
90.00		1.00	1.24	52.655	57.92	286.83	0.450	0.000	2.00	4.000	1.80	104.3	0.0	170.5
92.00		1.00	1.24	52.899	58.19	287.50	0.450	0.000	2.00	4.000	1.80	104.7	0.0	170.5

Wind Loading - Shaft

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Page: 17
	Struct Class: II	



94.00	1.00	1.25	53.139	58.45	288.15	0.450	0.000	2.00	4.000	1.80	105.2	0.0	170.5
96.00	1.00	1.25	53.375	58.71	288.79	0.450	0.000	2.00	4.000	1.80	105.7	0.0	170.5
98.00	1.00	1.26	53.607	58.97	289.42	0.450	0.000	2.00	4.000	1.80	106.1	0.0	170.5
100.00	1.00	1.27	53.836	59.22	290.03	0.450	0.000	2.00	4.000	1.80	106.6	0.0	170.5
102.00	1.00	1.27	54.061	59.47	290.64	0.450	0.000	2.00	4.000	1.80	107.0	0.0	170.5
104.00	1.00	1.28	54.282	59.71	291.23	0.450	0.000	2.00	4.000	1.80	107.5	0.0	170.5
106.00	1.00	1.28	54.500	59.95	291.82	0.450	0.000	2.00	4.000	1.80	107.9	0.0	170.5
108.00	1.00	1.29	54.715	60.19	292.39	0.450	0.000	2.00	4.000	1.80	108.3	0.0	170.5
110.00 Top - Section 4	1.00	1.29	54.927	60.42	292.96	0.450	0.000	2.00	4.000	1.80	108.8	0.0	170.5
112.00	1.00	1.30	55.136	60.65	489.19	0.450	0.000	2.00	6.667	3.00	181.9	0.0	142.3
114.00	1.00	1.30	55.342	60.88	490.10	0.450	0.000	2.00	6.667	3.00	182.6	0.0	142.3
116.00	1.00	1.31	55.545	61.10	491.00	0.450	0.000	2.00	6.667	3.00	183.3	0.0	142.3
118.00	1.00	1.31	55.745	61.32	491.88	0.450	0.000	2.00	6.667	3.00	184.0	0.0	142.3
120.00 Top - Section 5 RB1	1.00	1.32	55.942	61.54	492.75	0.450	0.000	2.00	6.667	3.00	184.6	0.0	142.3
121.00 RT1	1.00	1.32	56.040	61.64	493.18	0.450	0.000	1.00	3.333	1.50	92.5	0.0	35.3
122.00	1.00	1.32	56.137	61.75	493.61	0.450	0.000	1.00	3.333	1.50	92.6	0.0	35.3
124.00	1.00	1.32	56.330	61.96	494.46	0.450	0.000	2.00	6.667	3.00	185.9	0.0	70.7
126.00	1.00	1.33	56.520	62.17	495.29	0.450	0.000	2.00	6.667	3.00	186.5	0.0	70.7
128.00 Appurtenance(s)	1.00	1.33	56.708	62.38	496.11	0.450	0.000	2.00	6.667	3.00	187.1	0.0	70.7
130.00 Top - Section 6	1.00	1.34	56.893	62.58	496.92	0.450	0.000	2.00	6.667	3.00	187.7	0.0	70.7
132.00	1.00	1.34	57.076	62.78	497.72	0.450	0.000	2.00	6.667	3.00	188.4	0.0	70.7
134.00 Appurtenance(s)	1.00	1.35	57.257	62.98	498.51	0.450	0.000	2.00	6.667	3.00	188.9	0.0	70.7
136.00	1.00	1.35	57.436	63.18	499.29	0.450	0.000	2.00	6.667	3.00	189.5	0.0	70.7
138.00	1.00	1.35	57.613	63.37	500.06	0.450	0.000	2.00	6.667	3.00	190.1	0.0	70.7
140.00 Top - Section 7	1.00	1.36	57.788	63.57	500.81	0.450	0.000	2.00	6.667	3.00	190.7	0.0	70.7
142.00	1.00	1.36	57.961	63.76	501.56	0.450	0.000	2.00	6.667	3.00	191.3	0.0	70.7
144.00	1.00	1.37	58.131	63.94	502.30	0.450	0.000	2.00	6.667	3.00	191.8	0.0	70.7
146.00	1.00	1.37	58.301	64.13	503.03	0.450	0.000	2.00	6.667	3.00	192.4	0.0	70.7
147.00 Appurtenance(s)	1.00	1.37	58.384	64.22	503.39	0.450	0.000	1.00	3.333	1.50	96.3	0.0	35.3
148.00	1.00	1.37	58.468	64.31	503.75	0.450	0.000	1.00	3.333	1.50	96.5	0.0	35.3
150.00 Appurtenance(s)	1.00	1.38	58.633	64.50	504.46	0.450	0.000	2.00	6.667	3.00	193.5	0.0	70.7
Totals:								150.00			9,494.9		12,662.9

Discrete Appurtenance Forces

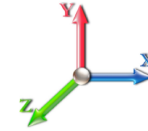
Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 18

Load Case: 0.9D + 1.0W 129 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 38

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	150.00	40" Canister Weight	1	58.633	64.497	1.00	1.00	0.00	96.74	0.000	0.000	0.00	0.00	0.00
2	147.00	DPO-7126Y-0-T1	3	58.384	64.223	0.00	1.00	0.00	34.02	0.000	0.000	0.00	0.00	0.00
3	147.00	KIT-FD9R6004/1C-DL	3	58.384	64.223	0.00	1.00	0.00	8.37	0.000	0.000	0.00	0.00	0.00
4	147.00	DHHTT65B-3XR	3	58.384	64.223	0.00	1.00	0.00	122.58	0.000	0.000	0.00	0.00	0.00
5	140.00	40" Canister Weight	1	57.788	63.566	1.00	1.00	0.00	193.47	0.000	0.000	0.00	0.00	0.00
6	134.00	Commscope FVV-65B-R3	3	57.257	62.983	0.00	1.00	0.00	123.12	0.000	0.000	0.00	0.00	0.00
7	134.00	ATSBT-TOP-FM	3	57.257	62.983	0.00	1.00	0.00	4.86	0.000	0.000	0.00	0.00	0.00
8	134.00	ATMAA1412D-A1A20	3	57.257	62.983	0.00	1.00	0.00	35.10	0.000	0.000	0.00	0.00	0.00
9	130.00	40" Canister Weight	1	56.893	62.582	1.00	1.00	0.00	193.47	0.000	0.000	0.00	0.00	0.00
10	128.00	CM1007-DBPXBC-xxx	6	56.708	62.379	0.00	1.00	0.00	35.10	0.000	0.000	0.00	0.00	0.00
11	128.00	TMABPD7823VG12A	6	56.708	62.379	0.00	1.00	0.00	140.40	0.000	0.000	0.00	0.00	0.00
12	128.00	OPA65R-BU4BA	3	56.708	62.379	0.00	1.00	0.00	116.10	0.000	0.000	0.00	0.00	0.00
13	120.00	40" Canister Weight	1	55.942	61.537	1.00	1.00	0.00	193.47	0.000	0.000	0.00	0.00	0.00
14	110.00	40" Canister Weight	1	54.927	60.420	1.00	1.00	0.00	96.74	0.000	0.000	0.00	0.00	0.00
Totals:									1,393.55			0.00		

Total Applied Force Summary

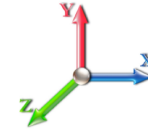
Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 19

Load Case: 0.9D + 1.0W 129 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 38

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		107.39	313.55	0.00	0.00
4.00		107.39	313.55	0.00	0.00
6.00		107.39	313.55	0.00	0.00
8.00		107.39	313.55	0.00	0.00
10.00		107.39	313.55	0.00	0.00
12.00		107.39	313.55	0.00	0.00
14.00		107.39	313.55	0.00	0.00
16.00		108.71	313.55	0.00	0.00
18.00		111.44	313.55	0.00	0.00
20.00		113.94	313.55	0.00	0.00
22.00		96.87	270.25	0.00	0.00
24.00		98.67	270.25	0.00	0.00
26.00		100.34	270.25	0.00	0.00
28.00		101.92	270.25	0.00	0.00
30.00		103.41	270.25	0.00	0.00
32.00		104.83	270.25	0.00	0.00
34.00		106.17	270.25	0.00	0.00
36.00		107.46	270.25	0.00	0.00
38.00		108.69	270.25	0.00	0.00
40.00		109.87	270.25	0.00	0.00
42.00		111.00	270.25	0.00	0.00
44.00		112.09	270.25	0.00	0.00
46.00		113.15	270.25	0.00	0.00
48.00		114.17	270.25	0.00	0.00
50.00		115.15	270.25	0.00	0.00
52.00		92.89	226.96	0.00	0.00
54.00		93.63	226.96	0.00	0.00
56.00		94.35	226.96	0.00	0.00
58.00		95.05	226.96	0.00	0.00
60.00		95.73	226.96	0.00	0.00
62.00		96.39	226.96	0.00	0.00
64.00		97.04	226.96	0.00	0.00
66.00		97.67	226.96	0.00	0.00
68.00		98.28	226.96	0.00	0.00
70.00		98.88	226.96	0.00	0.00
72.00		99.47	226.96	0.00	0.00
74.00		100.05	226.96	0.00	0.00
76.00		100.61	226.96	0.00	0.00
78.00		101.16	226.96	0.00	0.00
80.00		101.70	226.96	0.00	0.00
82.00		102.23	226.96	0.00	0.00
84.00		102.75	226.96	0.00	0.00
86.00		103.26	226.96	0.00	0.00
88.00		103.76	226.96	0.00	0.00
90.00		104.26	226.96	0.00	0.00
92.00		104.74	226.96	0.00	0.00

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

94.00		105.22	226.96	0.00	0.00
96.00		105.68	226.96	0.00	0.00
98.00		106.14	226.96	0.00	0.00
100.00		106.60	226.96	0.00	0.00
102.00		107.04	226.96	0.00	0.00
104.00		107.48	226.96	0.00	0.00
106.00		107.91	226.96	0.00	0.00
108.00		108.34	226.96	0.00	0.00
110.00	(1) attachments	108.76	323.70	0.00	0.00
112.00		181.95	247.62	0.00	0.00
114.00		182.63	247.62	0.00	0.00
116.00		183.30	247.62	0.00	0.00
118.00		183.96	247.62	0.00	0.00
120.00	(1) attachments	184.61	441.09	0.00	0.00
121.00		92.47	88.02	0.00	0.00
122.00		92.63	88.02	0.00	0.00
124.00		185.89	176.03	0.00	0.00
126.00		186.52	176.03	0.00	0.00
128.00	(15) attachments	187.14	467.63	0.00	0.00
130.00	(1) attachments	187.75	358.28	0.00	0.00
132.00		188.35	115.93	0.00	0.00
134.00	(9) attachments	188.95	279.01	0.00	0.00
136.00		189.54	82.24	0.00	0.00
138.00		190.12	82.24	0.00	0.00
140.00	(1) attachments	190.70	275.71	0.00	0.00
142.00		191.27	82.24	0.00	0.00
144.00		191.83	82.24	0.00	0.00
146.00		192.39	82.24	0.00	0.00
147.00	(9) attachments	96.33	206.09	0.00	0.00
148.00		96.47	35.34	0.00	0.00
150.00	(1) attachments	193.49	167.42	0.00	0.00
	Totals:	9,494.91	18,371.03	0.00	0.00

Calculated Forces

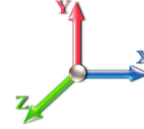
Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 129 mph Wind

Iterations 38

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	-18.36	-9.51	0.00	-854.84	0.00	854.84	1490.10	475.94	99948.2	1339.68	0.00	0.000	0.000	0.651
2.00	-18.04	-9.42	0.00	-835.83	0.00	835.83	1490.10	475.94	99948.2	1339.68	0.02	-0.072	0.000	0.636
4.00	-17.71	-9.33	0.00	-816.98	0.00	816.98	1490.10	475.94	99948.2	1339.68	0.06	-0.143	0.000	0.622
6.00	-17.39	-9.25	0.00	-798.31	0.00	798.31	1490.10	475.94	99948.2	1339.68	0.14	-0.212	0.000	0.608
8.00	-17.07	-9.16	0.00	-779.82	0.00	779.82	1490.10	475.94	99948.2	1339.68	0.24	-0.279	0.000	0.594
10.00	-16.74	-9.07	0.00	-761.50	0.00	761.50	1490.10	475.94	99948.2	1339.68	0.37	-0.345	0.000	0.580
12.00	-16.42	-8.98	0.00	-743.37	0.00	743.37	1490.10	475.94	99948.2	1339.68	0.53	-0.409	0.000	0.566
14.00	-16.10	-8.88	0.00	-725.41	0.00	725.41	1490.10	475.94	99948.2	1339.68	0.71	-0.472	0.000	0.553
16.00	-15.78	-8.79	0.00	-707.64	0.00	707.64	1490.10	475.94	99948.2	1339.68	0.92	-0.533	0.000	0.539
18.00	-15.46	-8.69	0.00	-690.07	0.00	690.07	1490.10	475.94	99948.2	1339.68	1.16	-0.593	0.000	0.526
20.00	-15.13	-8.59	0.00	-672.68	0.00	672.68	1490.10	475.94	99948.2	1339.68	1.42	-0.651	0.000	0.513
20.00	-15.13	-8.59	0.00	-672.68	0.00	672.68	1311.06	395.78	69116.5	948.43	1.42	-0.651	0.000	0.721
22.00	-14.85	-8.51	0.00	-655.50	0.00	655.50	1311.06	395.78	69116.5	948.43	1.71	-0.708	0.000	0.703
24.00	-14.57	-8.43	0.00	-638.49	0.00	638.49	1311.06	395.78	69116.5	948.43	2.02	-0.804	0.000	0.685
26.00	-14.29	-8.35	0.00	-621.63	0.00	621.63	1311.06	395.78	69116.5	948.43	2.38	-0.897	0.000	0.667
28.00	-14.01	-8.27	0.00	-604.93	0.00	604.93	1311.06	395.78	69116.5	948.43	2.78	-0.988	0.000	0.649
30.00	-13.73	-8.18	0.00	-588.40	0.00	588.40	1311.06	395.78	69116.5	948.43	3.21	-1.077	0.000	0.631
32.00	-13.45	-8.09	0.00	-572.04	0.00	572.04	1311.06	395.78	69116.5	948.43	3.68	-1.163	0.000	0.614
34.00	-13.17	-7.99	0.00	-555.87	0.00	555.87	1311.06	395.78	69116.5	948.43	4.18	-1.247	0.000	0.597
36.00	-12.89	-7.90	0.00	-539.88	0.00	539.88	1311.06	395.78	69116.5	948.43	4.72	-1.328	0.000	0.579
38.00	-12.61	-7.80	0.00	-524.08	0.00	524.08	1311.06	395.78	69116.5	948.43	5.30	-1.407	0.000	0.563
40.00	-12.33	-7.70	0.00	-508.48	0.00	508.48	1311.06	395.78	69116.5	948.43	5.90	-1.484	0.000	0.546
42.00	-12.06	-7.60	0.00	-493.08	0.00	493.08	1311.06	395.78	69116.5	948.43	6.54	-1.558	0.000	0.529
44.00	-11.78	-7.49	0.00	-477.88	0.00	477.88	1311.06	395.78	69116.5	948.43	7.21	-1.630	0.000	0.513
46.00	-11.50	-7.39	0.00	-462.89	0.00	462.89	1311.06	395.78	69116.5	948.43	7.91	-1.700	0.000	0.497
48.00	-11.23	-7.28	0.00	-448.12	0.00	448.12	1311.06	395.78	69116.5	948.43	8.63	-1.768	0.000	0.481
50.00	-10.95	-7.17	0.00	-433.57	0.00	433.57	1311.06	395.78	69116.5	948.43	9.39	-1.833	0.000	0.466
50.00	-10.95	-7.17	0.00	-433.57	0.00	433.57	1052.07	315.62	43955.0	624.04	9.39	-1.833	0.000	0.706
52.00	-10.72	-7.08	0.00	-419.24	0.00	419.24	1052.07	315.62	43955.0	624.04	10.17	-1.897	0.000	0.683
54.00	-10.48	-7.00	0.00	-405.07	0.00	405.07	1052.07	315.62	43955.0	624.04	10.99	-2.017	0.000	0.660
56.00	-10.24	-6.92	0.00	-391.07	0.00	391.07	1052.07	315.62	43955.0	624.04	11.86	-2.134	0.000	0.637
58.00	-10.01	-6.84	0.00	-377.23	0.00	377.23	1052.07	315.62	43955.0	624.04	12.78	-2.246	0.000	0.614
60.00	-9.77	-6.75	0.00	-363.55	0.00	363.55	1052.07	315.62	43955.0	624.04	13.74	-2.355	0.000	0.592
62.00	-9.54	-6.66	0.00	-350.05	0.00	350.05	1052.07	315.62	43955.0	624.04	14.75	-2.459	0.000	0.570
64.00	-9.30	-6.57	0.00	-336.73	0.00	336.73	1052.07	315.62	43955.0	624.04	15.80	-2.560	0.000	0.549
66.00	-9.07	-6.48	0.00	-323.59	0.00	323.59	1052.07	315.62	43955.0	624.04	16.89	-2.656	0.000	0.528
68.00	-8.84	-6.38	0.00	-310.64	0.00	310.64	1052.07	315.62	43955.0	624.04	18.02	-2.749	0.000	0.507
70.00	-8.61	-6.29	0.00	-297.87	0.00	297.87	1052.07	315.62	43955.0	624.04	19.19	-2.838	0.000	0.486
72.00	-8.38	-6.19	0.00	-285.30	0.00	285.30	1052.07	315.62	43955.0	624.04	20.40	-2.924	0.000	0.466
74.00	-8.15	-6.09	0.00	-272.92	0.00	272.92	1052.07	315.62	43955.0	624.04	21.64	-3.006	0.000	0.445
76.00	-7.92	-5.99	0.00	-260.75	0.00	260.75	1052.07	315.62	43955.0	624.04	22.92	-3.084	0.000	0.426
78.00	-7.69	-5.88	0.00	-248.78	0.00	248.78	1052.07	315.62	43955.0	624.04	24.23	-3.158	0.000	0.406
80.00	-7.46	-5.78	0.00	-237.02	0.00	237.02	1052.07	315.62	43955.0	624.04	25.56	-3.229	0.000	0.387
80.00	-7.46	-5.78	0.00	-237.02	0.00	237.02	1052.07	315.62	43955.0	624.04	25.56	-3.229	0.000	0.387
82.00	-7.23	-5.67	0.00	-225.47	0.00	225.47	1052.07	315.62	43955.0	624.04	26.93	-3.297	0.000	0.368
84.00	-7.01	-5.56	0.00	-214.13	0.00	214.13	1052.07	315.62	43955.0	624.04	28.32	-3.361	0.000	0.350
86.00	-6.78	-5.45	0.00	-203.00	0.00	203.00	1052.07	315.62	43955.0	624.04	29.74	-3.423	0.000	0.332
88.00	-6.55	-5.34	0.00	-192.10	0.00	192.10	1052.07	315.62	43955.0	624.04	31.19	-3.480	0.000	0.314

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

90.00	-6.33	-5.23	0.00	-181.42	0.00	181.42	1052.07	315.62	43955.0	624.04	32.66	-3.535	0.000	0.297
92.00	-6.11	-5.12	0.00	-170.96	0.00	170.96	1052.07	315.62	43955.0	624.04	34.15	-3.587	0.000	0.280
94.00	-5.88	-5.00	0.00	-160.73	0.00	160.73	1052.07	315.62	43955.0	624.04	35.66	-3.635	0.000	0.263
96.00	-5.66	-4.89	0.00	-150.72	0.00	150.72	1052.07	315.62	43955.0	624.04	37.19	-3.681	0.000	0.247
98.00	-5.43	-4.77	0.00	-140.95	0.00	140.95	1052.07	315.62	43955.0	624.04	38.74	-3.723	0.000	0.231
100.00	-5.21	-4.65	0.00	-131.41	0.00	131.41	1052.07	315.62	43955.0	624.04	40.31	-3.763	0.000	0.216
102.00	-4.99	-4.53	0.00	-122.11	0.00	122.11	1052.07	315.62	43955.0	624.04	41.89	-3.800	0.000	0.201
104.00	-4.77	-4.41	0.00	-113.04	0.00	113.04	1052.07	315.62	43955.0	624.04	43.49	-3.835	0.000	0.186
106.00	-4.55	-4.29	0.00	-104.22	0.00	104.22	1052.07	315.62	43955.0	624.04	45.10	-3.867	0.000	0.172
108.00	-4.33	-4.17	0.00	-95.63	0.00	95.63	1052.07	315.62	43955.0	624.04	46.73	-3.896	0.000	0.158
110.00	-4.01	-4.04	0.00	-87.29	0.00	87.29	1052.07	315.62	43955.0	624.04	48.37	-3.923	0.000	0.144
110.00	-4.01	-4.04	0.00	-87.29	0.00	87.29	759.47	227.84	14937.6	114.57	48.37	-3.923	0.000	0.767
112.00	-3.75	-3.86	0.00	-79.20	0.00	79.20	759.47	227.84	14937.6	114.57	50.01	-3.947	0.000	0.697
114.00	-3.49	-3.69	0.00	-71.48	0.00	71.48	759.47	227.84	14937.6	114.57	51.78	-4.489	0.000	0.629
116.00	-3.23	-3.52	0.00	-64.09	0.00	64.09	759.47	227.84	14937.6	114.57	53.76	-4.977	0.000	0.564
118.00	-2.97	-3.33	0.00	-57.06	0.00	57.06	759.47	227.84	14937.6	114.57	55.94	-5.412	0.000	0.502
120.00	-2.54	-3.12	0.00	-50.39	0.00	50.39	759.47	227.84	14937.6	114.57	58.28	-5.799	0.000	0.109
120.00	-2.54	-3.12	0.00	-50.39	0.00	50.39	317.71	95.31	3734.62	52.28	58.28	-5.799	0.000	0.123
121.00	-2.46	-3.02	0.00	-47.27	0.00	47.27	317.71	95.31	3734.62	52.28	59.50	-5.842	0.000	0.134
121.00	-2.46	-3.02	0.00	-47.27	0.00	47.27	317.71	95.31	3734.62	52.28	59.50	-5.842	0.000	0.134
122.00	-2.37	-2.93	0.00	-44.26	0.00	44.26	317.71	95.31	3734.62	52.28	60.73	-5.888	0.000	0.855
124.00	-2.19	-2.75	0.00	-38.40	0.00	38.40	317.71	95.31	3734.62	52.28	63.31	-6.471	0.000	0.742
126.00	-2.01	-2.56	0.00	-32.91	0.00	32.91	317.71	95.31	3734.62	52.28	66.13	-6.974	0.000	0.637
128.00	-1.56	-2.32	0.00	-27.80	0.00	27.80	317.71	95.31	3734.62	52.28	69.13	-7.402	0.000	0.537
130.00	-1.21	-2.10	0.00	-23.15	0.00	23.15	317.71	95.31	3734.62	52.28	72.30	-7.762	0.000	0.447
130.00	-1.21	-2.10	0.00	-23.15	0.00	23.15	317.71	95.31	3734.62	52.28	72.30	-7.762	0.000	0.447
132.00	-1.12	-1.90	0.00	-18.96	0.00	18.96	317.71	95.31	3734.62	52.28	75.61	-8.059	0.000	0.367
134.00	-0.86	-1.68	0.00	-15.16	0.00	15.16	317.71	95.31	3734.62	52.28	79.02	-8.300	0.000	0.293
136.00	-0.80	-1.48	0.00	-11.81	0.00	11.81	317.71	95.31	3734.62	52.28	82.53	-8.490	0.000	0.229
138.00	-0.75	-1.28	0.00	-8.85	0.00	8.85	317.71	95.31	3734.62	52.28	86.11	-8.636	0.000	0.172
140.00	-0.50	-1.05	0.00	-6.29	0.00	6.29	317.71	95.31	3734.62	52.28	89.73	-8.742	0.000	0.122
140.00	-0.50	-1.05	0.00	-6.29	0.00	6.29	317.71	95.31	3734.62	52.28	89.73	-8.742	0.000	0.122
142.00	-0.45	-0.85	0.00	-4.19	0.00	4.19	317.71	95.31	3734.62	52.28	93.40	-8.816	0.000	0.082
144.00	-0.40	-0.65	0.00	-2.49	0.00	2.49	317.71	95.31	3734.62	52.28	97.09	-8.864	0.000	0.049
146.00	-0.34	-0.44	0.00	-1.20	0.00	1.20	317.71	95.31	3734.62	52.28	100.79	-8.890	0.000	0.024
147.00	-0.16	-0.32	0.00	-0.75	0.00	0.75	317.71	95.31	3734.62	52.28	102.65	-8.896	0.000	0.015
148.00	-0.14	-0.22	0.00	-0.43	0.00	0.43	317.71	95.31	3734.62	52.28	104.50	-8.901	0.000	0.009
150.00	0.00	-0.19	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	108.22	-8.904	0.000	0.000

Wind Loading - Shaft

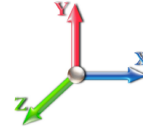
Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Page: 23
	Struct Class: II	



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

Iterations 38

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	5.432	5.98	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	5.432	5.98	0.00	1.200	0.567	2.00	6.189	7.43	44.4	50.6	393.4
4.00		1.00	0.85	5.432	5.98	0.00	1.200	0.607	2.00	6.202	7.44	44.5	54.3	397.1
6.00		1.00	0.85	5.432	5.98	0.00	1.200	0.632	2.00	6.211	7.45	44.5	56.6	399.4
8.00		1.00	0.85	5.432	5.98	0.00	1.200	0.651	2.00	6.217	7.46	44.6	58.3	401.0
10.00		1.00	0.85	5.432	5.98	0.00	1.200	0.666	2.00	6.222	7.47	44.6	59.6	402.4
12.00		1.00	0.85	5.432	5.98	0.00	1.200	0.678	2.00	6.226	7.47	44.6	60.7	403.5
14.00		1.00	0.85	5.432	5.98	0.00	1.200	0.688	2.00	6.229	7.48	44.7	61.7	404.5
16.00		1.00	0.86	5.499	6.05	0.00	1.200	0.698	2.00	6.233	7.48	45.2	62.6	405.3
18.00		1.00	0.88	5.637	6.20	0.00	1.200	0.706	2.00	6.235	7.48	46.4	63.3	406.1
20.00	Top - Section 1	1.00	0.90	5.763	6.34	0.00	1.200	0.713	2.00	6.238	7.49	47.5	64.0	406.7
22.00		1.00	0.92	5.880	6.47	0.00	1.200	0.720	2.00	5.240	6.29	40.7	54.1	339.1
24.00		1.00	0.94	5.989	6.59	0.00	1.200	0.726	2.00	5.242	6.29	41.4	54.5	339.6
26.00		1.00	0.95	6.091	6.70	0.00	1.200	0.732	2.00	5.244	6.29	42.2	55.0	340.0
28.00		1.00	0.97	6.186	6.81	0.00	1.200	0.738	2.00	5.246	6.30	42.8	55.4	340.4
30.00		1.00	0.98	6.277	6.90	0.00	1.200	0.743	2.00	5.248	6.30	43.5	55.8	340.8
32.00		1.00	1.00	6.363	7.00	0.00	1.200	0.748	2.00	5.249	6.30	44.1	56.2	341.2
34.00		1.00	1.01	6.445	7.09	0.00	1.200	0.752	2.00	5.251	6.30	44.7	56.5	341.6
36.00		1.00	1.02	6.523	7.17	0.00	1.200	0.757	2.00	5.252	6.30	45.2	56.9	341.9
38.00		1.00	1.03	6.597	7.26	0.00	1.200	0.761	2.00	5.254	6.30	45.8	57.2	342.2
40.00		1.00	1.04	6.669	7.34	0.00	1.200	0.765	2.00	5.255	6.31	46.3	57.5	342.5
42.00		1.00	1.05	6.738	7.41	0.00	1.200	0.768	2.00	5.256	6.31	46.7	57.8	342.8
44.00		1.00	1.06	6.804	7.48	0.00	1.200	0.772	2.00	5.257	6.31	47.2	58.0	343.1
46.00		1.00	1.07	6.868	7.55	0.00	1.200	0.775	2.00	5.258	6.31	47.7	58.3	343.3
48.00		1.00	1.08	6.930	7.62	0.00	1.200	0.779	2.00	5.260	6.31	48.1	58.6	343.6
50.00	Top - Section 2	1.00	1.09	6.990	7.69	0.00	1.200	0.782	2.00	5.261	6.31	48.5	58.8	343.8
52.00		1.00	1.10	7.048	7.75	0.00	1.200	0.785	2.00	4.262	5.11	39.6	47.5	274.8
54.00		1.00	1.11	7.104	7.81	0.00	1.200	0.788	2.00	4.263	5.12	40.0	47.7	275.0
56.00		1.00	1.12	7.158	7.87	0.00	1.200	0.791	2.00	4.264	5.12	40.3	47.9	275.2
58.00		1.00	1.13	7.212	7.93	0.00	1.200	0.794	2.00	4.265	5.12	40.6	48.1	275.4
60.00		1.00	1.14	7.263	7.99	0.00	1.200	0.796	2.00	4.265	5.12	40.9	48.2	275.5
62.00		1.00	1.14	7.314	8.04	0.00	1.200	0.799	2.00	4.266	5.12	41.2	48.4	275.7
64.00		1.00	1.15	7.363	8.10	0.00	1.200	0.801	2.00	4.267	5.12	41.5	48.6	275.9
66.00		1.00	1.16	7.410	8.15	0.00	1.200	0.804	2.00	4.268	5.12	41.7	48.7	276.0
68.00		1.00	1.17	7.457	8.20	0.00	1.200	0.806	2.00	4.269	5.12	42.0	48.9	276.2
70.00		1.00	1.17	7.503	8.25	0.00	1.200	0.809	2.00	4.270	5.12	42.3	49.0	276.3
72.00		1.00	1.18	7.547	8.30	0.00	1.200	0.811	2.00	4.270	5.12	42.5	49.2	276.5
74.00		1.00	1.19	7.591	8.35	0.00	1.200	0.813	2.00	4.271	5.13	42.8	49.3	276.6
76.00		1.00	1.19	7.634	8.40	0.00	1.200	0.815	2.00	4.272	5.13	43.0	49.4	276.7
78.00		1.00	1.20	7.676	8.44	0.00	1.200	0.817	2.00	4.272	5.13	43.3	49.6	276.9
80.00	Top - Section 3	1.00	1.21	7.717	8.49	0.00	1.200	0.819	2.00	4.273	5.13	43.5	49.7	277.0
82.00		1.00	1.21	7.757	8.53	0.00	1.200	0.821	2.00	4.274	5.13	43.8	49.8	277.1
84.00		1.00	1.22	7.796	8.58	0.00	1.200	0.823	2.00	4.274	5.13	44.0	49.9	277.2
86.00		1.00	1.23	7.835	8.62	0.00	1.200	0.825	2.00	4.275	5.13	44.2	50.1	277.4
88.00		1.00	1.23	7.873	8.66	0.00	1.200	0.827	2.00	4.276	5.13	44.4	50.2	277.5
90.00		1.00	1.24	7.910	8.70	0.00	1.200	0.829	2.00	4.276	5.13	44.7	50.3	277.6
92.00		1.00	1.24	7.947	8.74	0.00	1.200	0.831	2.00	4.277	5.13	44.9	50.4	277.7

Wind Loading - Shaft

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 24

94.00	1.00	1.25	7.983	8.78	0.00	1.200	0.833	2.00	4.278	5.13	45.1	50.5	277.8		
96.00	1.00	1.25	8.019	8.82	0.00	1.200	0.835	2.00	4.278	5.13	45.3	50.6	277.9		
98.00	1.00	1.26	8.054	8.86	0.00	1.200	0.836	2.00	4.279	5.13	45.5	50.7	278.0		
100.00	1.00	1.27	8.088	8.90	0.00	1.200	0.838	2.00	4.279	5.14	45.7	50.9	278.2		
102.00	1.00	1.27	8.122	8.93	0.00	1.200	0.840	2.00	4.280	5.14	45.9	51.0	278.3		
104.00	1.00	1.28	8.155	8.97	0.00	1.200	0.841	2.00	4.280	5.14	46.1	51.1	278.4		
106.00	1.00	1.28	8.188	9.01	0.00	1.200	0.843	2.00	4.281	5.14	46.3	51.2	278.5		
108.00	1.00	1.29	8.220	9.04	0.00	1.200	0.844	2.00	4.281	5.14	46.5	51.3	278.6		
110.00 Top - Section 4	1.00	1.29	8.252	9.08	0.00	1.200	0.846	2.00	4.282	5.14	46.6	51.4	278.7		
112.00	1.00	1.30	8.283	9.11	0.00	1.200	0.847	2.00	6.667	8.00	72.9	98.2	287.9		
114.00	1.00	1.30	8.314	9.15	0.00	1.200	0.849	2.00	6.667	8.00	73.2	98.2	287.9		
116.00	1.00	1.31	8.345	9.18	0.00	1.200	0.850	2.00	6.667	8.00	73.4	98.2	287.9		
118.00	1.00	1.31	8.375	9.21	0.00	1.200	0.852	2.00	6.667	8.00	73.7	98.3	288.0		
120.00 Top - Section 5 RB1	1.00	1.32	8.404	9.24	0.00	1.200	0.853	2.00	6.667	8.00	74.0	98.3	288.0		
121.00 RT1	1.00	1.32	8.419	9.26	0.00	1.200	0.854	1.00	3.333	4.00	37.0	49.0	96.1		
122.00	1.00	1.32	8.434	9.28	0.00	1.200	0.855	1.00	3.333	4.00	37.1	49.0	96.2		
124.00	1.00	1.32	8.463	9.31	0.00	1.200	0.856	2.00	6.667	8.00	74.5	98.1	192.3		
126.00	1.00	1.33	8.491	9.34	0.00	1.200	0.858	2.00	6.667	8.00	74.7	98.1	192.4		
128.00 Appurtenance(s)	1.00	1.33	8.519	9.37	0.00	1.200	0.859	2.00	6.667	8.00	75.0	98.2	192.4		
130.00 Top - Section 6	1.00	1.34	8.547	9.40	0.00	1.200	0.860	2.00	6.667	8.00	75.2	98.2	192.4		
132.00	1.00	1.34	8.575	9.43	0.00	1.200	0.862	2.00	6.667	8.00	75.5	98.2	192.4		
134.00 Appurtenance(s)	1.00	1.35	8.602	9.46	0.00	1.200	0.863	2.00	6.667	8.00	75.7	98.2	192.5		
136.00	1.00	1.35	8.629	9.49	0.00	1.200	0.864	2.00	6.667	8.00	75.9	98.3	192.5		
138.00	1.00	1.35	8.655	9.52	0.00	1.200	0.865	2.00	6.667	8.00	76.2	98.3	192.5		
140.00 Top - Section 7	1.00	1.36	8.682	9.55	0.00	1.200	0.867	2.00	6.667	8.00	76.4	98.3	192.6		
142.00	1.00	1.36	8.707	9.58	0.00	1.200	0.868	2.00	6.667	8.00	76.6	98.3	192.6		
144.00	1.00	1.37	8.733	9.61	0.00	1.200	0.869	2.00	6.667	8.00	76.9	98.4	192.6		
146.00	1.00	1.37	8.759	9.63	0.00	1.200	0.870	2.00	6.667	8.00	77.1	98.4	192.6		
147.00 Appurtenance(s)	1.00	1.37	8.771	9.65	0.00	1.200	0.871	1.00	3.333	4.00	38.6	49.2	96.3		
148.00	1.00	1.37	8.784	9.66	0.00	1.200	0.871	1.00	3.333	4.00	38.6	49.2	96.3		
150.00 Appurtenance(s)	1.00	1.38	8.809	9.69	0.00	1.200	0.873	2.00	6.667	8.00	77.5	98.4	192.7		
Totals:								150.00				3,935.5			21,780.7

Discrete Appurtenance Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



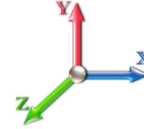
Page: 25

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

Iterations 38

Dead Load Factor 1.20

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	150.00	40" Canister Weight	1	8.809	9.689	1.00	1.00	0.00	186.85	0.000	0.000	0.00	0.00	0.00
2	147.00	DPO-7126Y-0-T1	3	8.771	9.648	0.00	1.00	0.00	57.12	0.000	0.000	0.00	0.00	0.00
3	147.00	KIT-FD9R6004/1C-DL	3	8.771	9.648	0.00	1.00	0.00	16.28	0.000	0.000	0.00	0.00	0.00
4	147.00	DHHTT65B-3XR	3	8.771	9.648	0.00	1.00	26.14	437.09	0.000	0.000	252.24	0.00	0.00
5	140.00	40" Canister Weight	1	8.682	9.550	1.00	1.00	0.00	427.00	0.000	0.000	0.00	0.00	0.00
6	134.00	Commscope FVV-65B-R3	3	8.602	9.462	0.00	1.00	29.22	476.21	0.000	0.000	276.50	0.00	0.00
7	134.00	ATSBT-TOP-FM	3	8.602	9.462	0.00	1.00	0.00	10.04	0.000	0.000	0.00	0.00	0.00
8	134.00	ATMAA1412D-A1A20	3	8.602	9.462	0.00	1.00	0.00	63.42	0.000	0.000	0.00	0.00	0.00
9	130.00	40" Canister Weight	1	8.547	9.402	1.00	1.00	0.00	426.95	0.000	0.000	0.00	0.00	0.00
10	128.00	CM1007-DBPXBC-xxx	6	8.519	9.371	0.00	1.00	0.00	62.35	0.000	0.000	0.00	0.00	0.00
11	128.00	TMABPD7823VG12A	6	8.519	9.371	0.00	1.00	0.00	363.64	0.000	0.000	0.00	0.00	0.00
12	128.00	OPA65R-BU4BA	3	8.519	9.371	0.00	1.00	0.00	358.21	0.000	0.000	0.00	0.00	0.00
13	120.00	40" Canister Weight	1	8.404	9.245	1.00	1.00	0.00	426.89	0.000	0.000	0.00	0.00	0.00
14	110.00	40" Canister Weight	1	8.252	9.077	1.00	1.00	0.00	240.12	0.000	0.000	0.00	0.00	0.00
Totals:									3,552.16			528.74		

Total Applied Force Summary

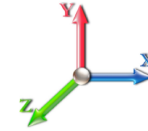
Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 26

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 38

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		44.37	468.69	0.00	0.00
4.00		44.47	472.39	0.00	0.00
6.00		44.53	474.68	0.00	0.00
8.00		44.58	476.36	0.00	0.00
10.00		44.61	477.70	0.00	0.00
12.00		44.64	478.81	0.00	0.00
14.00		44.67	479.77	0.00	0.00
16.00		45.24	480.62	0.00	0.00
18.00		46.40	481.38	0.00	0.00
20.00		47.46	482.06	0.00	0.00
22.00		40.67	414.40	0.00	0.00
24.00		41.44	414.88	0.00	0.00
26.00		42.16	415.33	0.00	0.00
28.00		42.84	415.75	0.00	0.00
30.00		43.48	416.14	0.00	0.00
32.00		44.09	416.51	0.00	0.00
34.00		44.67	416.86	0.00	0.00
36.00		45.22	417.19	0.00	0.00
38.00		45.75	417.51	0.00	0.00
40.00		46.26	417.81	0.00	0.00
42.00		46.75	418.10	0.00	0.00
44.00		47.22	418.38	0.00	0.00
46.00		47.67	418.64	0.00	0.00
48.00		48.11	418.90	0.00	0.00
50.00		48.54	419.14	0.00	0.00
52.00		39.65	350.14	0.00	0.00
54.00		39.97	350.33	0.00	0.00
56.00		40.29	350.51	0.00	0.00
58.00		40.59	350.68	0.00	0.00
60.00		40.89	350.85	0.00	0.00
62.00		41.19	351.02	0.00	0.00
64.00		41.47	351.17	0.00	0.00
66.00		41.75	351.33	0.00	0.00
68.00		42.02	351.48	0.00	0.00
70.00		42.28	351.63	0.00	0.00
72.00		42.54	351.77	0.00	0.00
74.00		42.80	351.91	0.00	0.00
76.00		43.04	352.04	0.00	0.00
78.00		43.29	352.18	0.00	0.00
80.00		43.53	352.31	0.00	0.00
82.00		43.76	352.43	0.00	0.00
84.00		43.99	352.56	0.00	0.00
86.00		44.21	352.68	0.00	0.00
88.00		44.44	352.80	0.00	0.00
90.00		44.65	352.92	0.00	0.00
92.00		44.87	353.03	0.00	0.00

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

94.00		45.08	353.14	0.00	0.00
96.00		45.28	353.25	0.00	0.00
98.00		45.49	353.36	0.00	0.00
100.00		45.69	353.47	0.00	0.00
102.00		45.88	353.57	0.00	0.00
104.00		46.08	353.67	0.00	0.00
106.00		46.27	353.77	0.00	0.00
108.00		46.46	353.87	0.00	0.00
110.00	(1) attachments	46.64	594.08	0.00	0.00
112.00		72.89	428.33	0.00	0.00
114.00		73.16	428.37	0.00	0.00
116.00		73.43	428.40	0.00	0.00
118.00		73.70	428.43	0.00	0.00
120.00	(1) attachments	73.96	855.34	0.00	0.00
121.00		37.04	166.38	0.00	0.00
122.00		37.11	166.39	0.00	0.00
124.00		74.47	332.81	0.00	0.00
126.00		74.72	332.84	0.00	0.00
128.00	(15) attachments	74.97	1117.06	0.00	0.00
130.00	(1) attachments	75.21	744.86	0.00	0.00
132.00		75.46	252.78	0.00	0.00
134.00	(9) attachments	352.20	802.48	0.00	0.00
136.00		75.93	207.91	0.00	0.00
138.00		76.17	207.93	0.00	0.00
140.00	(1) attachments	76.40	634.96	0.00	0.00
142.00		76.63	207.98	0.00	0.00
144.00		76.85	208.01	0.00	0.00
146.00		77.08	208.03	0.00	0.00
147.00	(9) attachments	290.83	614.51	0.00	0.00
148.00		38.65	96.32	0.00	0.00
150.00	(1) attachments	77.52	379.52	0.00	0.00
	Totals:	4,464.26	31,085.63	0.00	0.00

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

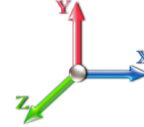


Page: 28

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

Iterations 38

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	-31.08	-4.47	0.00	-457.08	0.00	457.08	1490.10	475.94	99948.2	1339.68	0.00	0.000	0.000	0.362
2.00	-30.61	-4.45	0.00	-448.13	0.00	448.13	1490.10	475.94	99948.2	1339.68	0.01	-0.039	0.000	0.355
4.00	-30.14	-4.43	0.00	-439.23	0.00	439.23	1490.10	475.94	99948.2	1339.68	0.03	-0.077	0.000	0.348
6.00	-29.66	-4.40	0.00	-430.37	0.00	430.37	1490.10	475.94	99948.2	1339.68	0.07	-0.114	0.000	0.341
8.00	-29.18	-4.37	0.00	-421.58	0.00	421.58	1490.10	475.94	99948.2	1339.68	0.13	-0.150	0.000	0.334
10.00	-28.70	-4.34	0.00	-412.83	0.00	412.83	1490.10	475.94	99948.2	1339.68	0.20	-0.186	0.000	0.328
12.00	-28.22	-4.31	0.00	-404.15	0.00	404.15	1490.10	475.94	99948.2	1339.68	0.28	-0.221	0.000	0.321
14.00	-27.74	-4.28	0.00	-395.52	0.00	395.52	1490.10	475.94	99948.2	1339.68	0.38	-0.255	0.000	0.314
16.00	-27.25	-4.25	0.00	-386.95	0.00	386.95	1490.10	475.94	99948.2	1339.68	0.50	-0.288	0.000	0.307
18.00	-26.77	-4.22	0.00	-378.45	0.00	378.45	1490.10	475.94	99948.2	1339.68	0.63	-0.321	0.000	0.301
20.00	-26.29	-4.18	0.00	-370.01	0.00	370.01	1490.10	475.94	99948.2	1339.68	0.77	-0.353	0.000	0.294
20.00	-26.29	-4.18	0.00	-370.01	0.00	370.01	1311.06	395.78	69116.5	948.43	0.77	-0.353	0.000	0.410
22.00	-25.87	-4.16	0.00	-361.65	0.00	361.65	1311.06	395.78	69116.5	948.43	0.92	-0.384	0.000	0.401
24.00	-25.45	-4.14	0.00	-353.33	0.00	353.33	1311.06	395.78	69116.5	948.43	1.09	-0.437	0.000	0.392
26.00	-25.03	-4.11	0.00	-345.06	0.00	345.06	1311.06	395.78	69116.5	948.43	1.29	-0.489	0.000	0.383
28.00	-24.61	-4.09	0.00	-336.83	0.00	336.83	1311.06	395.78	69116.5	948.43	1.50	-0.540	0.000	0.374
30.00	-24.19	-4.06	0.00	-328.65	0.00	328.65	1311.06	395.78	69116.5	948.43	1.74	-0.589	0.000	0.365
32.00	-23.78	-4.03	0.00	-320.53	0.00	320.53	1311.06	395.78	69116.5	948.43	2.00	-0.637	0.000	0.356
34.00	-23.36	-4.00	0.00	-312.46	0.00	312.46	1311.06	395.78	69116.5	948.43	2.27	-0.684	0.000	0.347
36.00	-22.94	-3.97	0.00	-304.46	0.00	304.46	1311.06	395.78	69116.5	948.43	2.57	-0.730	0.000	0.339
38.00	-22.52	-3.94	0.00	-296.52	0.00	296.52	1311.06	395.78	69116.5	948.43	2.89	-0.775	0.000	0.330
40.00	-22.10	-3.90	0.00	-288.65	0.00	288.65	1311.06	395.78	69116.5	948.43	3.22	-0.818	0.000	0.321
42.00	-21.68	-3.86	0.00	-280.85	0.00	280.85	1311.06	395.78	69116.5	948.43	3.57	-0.860	0.000	0.313
44.00	-21.26	-3.82	0.00	-273.12	0.00	273.12	1311.06	395.78	69116.5	948.43	3.94	-0.901	0.000	0.304
46.00	-20.84	-3.78	0.00	-265.47	0.00	265.47	1311.06	395.78	69116.5	948.43	4.33	-0.941	0.000	0.296
48.00	-20.41	-3.74	0.00	-257.90	0.00	257.90	1311.06	395.78	69116.5	948.43	4.73	-0.980	0.000	0.288
50.00	-19.99	-3.70	0.00	-250.41	0.00	250.41	1311.06	395.78	69116.5	948.43	5.15	-1.018	0.000	0.279
50.00	-19.99	-3.70	0.00	-250.41	0.00	250.41	1052.07	315.62	43955.0	624.04	5.15	-1.018	0.000	0.420
52.00	-19.64	-3.67	0.00	-243.01	0.00	243.01	1052.07	315.62	43955.0	624.04	5.58	-1.055	0.000	0.408
54.00	-19.29	-3.65	0.00	-235.67	0.00	235.67	1052.07	315.62	43955.0	624.04	6.04	-1.125	0.000	0.396
56.00	-18.93	-3.62	0.00	-228.37	0.00	228.37	1052.07	315.62	43955.0	624.04	6.52	-1.193	0.000	0.384
58.00	-18.58	-3.60	0.00	-221.12	0.00	221.12	1052.07	315.62	43955.0	624.04	7.04	-1.259	0.000	0.372
60.00	-18.23	-3.57	0.00	-213.93	0.00	213.93	1052.07	315.62	43955.0	624.04	7.58	-1.322	0.000	0.360
62.00	-17.87	-3.54	0.00	-206.79	0.00	206.79	1052.07	315.62	43955.0	624.04	8.15	-1.384	0.000	0.348
64.00	-17.52	-3.51	0.00	-199.71	0.00	199.71	1052.07	315.62	43955.0	624.04	8.74	-1.443	0.000	0.337
66.00	-17.17	-3.47	0.00	-192.70	0.00	192.70	1052.07	315.62	43955.0	624.04	9.35	-1.501	0.000	0.325
68.00	-16.81	-3.44	0.00	-185.76	0.00	185.76	1052.07	315.62	43955.0	624.04	9.99	-1.556	0.000	0.314
70.00	-16.46	-3.40	0.00	-178.89	0.00	178.89	1052.07	315.62	43955.0	624.04	10.66	-1.610	0.000	0.302
72.00	-16.10	-3.36	0.00	-172.09	0.00	172.09	1052.07	315.62	43955.0	624.04	11.34	-1.661	0.000	0.291
74.00	-15.75	-3.32	0.00	-165.37	0.00	165.37	1052.07	315.62	43955.0	624.04	12.05	-1.710	0.000	0.280
76.00	-15.40	-3.28	0.00	-158.73	0.00	158.73	1052.07	315.62	43955.0	624.04	12.78	-1.758	0.000	0.269
78.00	-15.05	-3.24	0.00	-152.17	0.00	152.17	1052.07	315.62	43955.0	624.04	13.52	-1.803	0.000	0.258
80.00	-14.69	-3.19	0.00	-145.69	0.00	145.69	1052.07	315.62	43955.0	624.04	14.29	-1.847	0.000	0.248
80.00	-14.69	-3.19	0.00	-145.69	0.00	145.69	1052.07	315.62	43955.0	624.04	14.29	-1.847	0.000	0.248
82.00	-14.34	-3.15	0.00	-139.31	0.00	139.31	1052.07	315.62	43955.0	624.04	15.07	-1.889	0.000	0.237
84.00	-13.99	-3.10	0.00	-133.01	0.00	133.01	1052.07	315.62	43955.0	624.04	15.87	-1.929	0.000	0.227
86.00	-13.63	-3.06	0.00	-126.80	0.00	126.80	1052.07	315.62	43955.0	624.04	16.68	-1.967	0.000	0.216
88.00	-13.28	-3.01	0.00	-120.69	0.00	120.69	1052.07	315.62	43955.0	624.04	17.52	-2.003	0.000	0.206

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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



90.00	-12.93	-2.96	0.00	-114.68	0.00	114.68	1052.07	315.62	43955.0	624.04	18.36	-2.037	0.000	0.196
92.00	-12.57	-2.91	0.00	-108.77	0.00	108.77	1052.07	315.62	43955.0	624.04	19.22	-2.070	0.000	0.186
94.00	-12.22	-2.86	0.00	-102.95	0.00	102.95	1052.07	315.62	43955.0	624.04	20.10	-2.101	0.000	0.177
96.00	-11.87	-2.80	0.00	-97.24	0.00	97.24	1052.07	315.62	43955.0	624.04	20.98	-2.130	0.000	0.167
98.00	-11.52	-2.75	0.00	-91.64	0.00	91.64	1052.07	315.62	43955.0	624.04	21.88	-2.158	0.000	0.158
100.00	-11.16	-2.70	0.00	-86.14	0.00	86.14	1052.07	315.62	43955.0	624.04	22.79	-2.184	0.000	0.149
102.00	-10.81	-2.64	0.00	-80.75	0.00	80.75	1052.07	315.62	43955.0	624.04	23.71	-2.208	0.000	0.140
104.00	-10.46	-2.58	0.00	-75.47	0.00	75.47	1052.07	315.62	43955.0	624.04	24.64	-2.231	0.000	0.131
106.00	-10.11	-2.53	0.00	-70.30	0.00	70.30	1052.07	315.62	43955.0	624.04	25.58	-2.253	0.000	0.122
108.00	-9.75	-2.47	0.00	-65.24	0.00	65.24	1052.07	315.62	43955.0	624.04	26.53	-2.272	0.000	0.114
110.00	-9.16	-2.40	0.00	-60.30	0.00	60.30	1052.07	315.62	43955.0	624.04	27.48	-2.291	0.000	0.105
110.00	-9.16	-2.40	0.00	-60.30	0.00	60.30	759.47	227.84	14937.6	114.57	27.48	-2.291	0.000	0.538
112.00	-8.73	-2.34	0.00	-55.49	0.00	55.49	759.47	227.84	14937.6	114.57	28.44	-2.308	0.000	0.496
114.00	-8.29	-2.31	0.00	-50.80	0.00	50.80	759.47	227.84	14937.6	114.57	29.49	-2.690	0.000	0.454
116.00	-7.85	-2.26	0.00	-46.19	0.00	46.19	759.47	227.84	14937.6	114.57	30.69	-3.039	0.000	0.414
118.00	-7.42	-2.20	0.00	-41.68	0.00	41.68	759.47	227.84	14937.6	114.57	32.03	-3.355	0.000	0.374
120.00	-6.56	-2.09	0.00	-37.29	0.00	37.29	759.47	227.84	14937.6	114.57	33.50	-3.639	0.000	0.085
120.00	-6.56	-2.09	0.00	-37.29	0.00	37.29	317.71	95.31	3734.62	52.28	33.50	-3.639	0.000	0.095
121.00	-6.40	-2.05	0.00	-35.20	0.00	35.20	317.71	95.31	3734.62	52.28	34.26	-3.671	0.000	0.106
121.00	-6.40	-2.05	0.00	-35.20	0.00	35.20	317.71	95.31	3734.62	52.28	34.26	-3.671	0.000	0.106
122.00	-6.22	-2.02	0.00	-33.15	0.00	33.15	317.71	95.31	3734.62	52.28	35.04	-3.705	0.000	0.654
124.00	-5.88	-1.97	0.00	-29.10	0.00	29.10	317.71	95.31	3734.62	52.28	36.68	-4.144	0.000	0.576
126.00	-5.55	-1.90	0.00	-25.16	0.00	25.16	317.71	95.31	3734.62	52.28	38.50	-4.527	0.000	0.499
128.00	-4.43	-1.76	0.00	-21.35	0.00	21.35	317.71	95.31	3734.62	52.28	40.46	-4.856	0.000	0.423
130.00	-3.69	-1.64	0.00	-17.83	0.00	17.83	317.71	95.31	3734.62	52.28	42.55	-5.132	0.000	0.353
130.00	-3.69	-1.64	0.00	-17.83	0.00	17.83	317.71	95.31	3734.62	52.28	42.55	-5.132	0.000	0.353
132.00	-3.44	-1.55	0.00	-14.56	0.00	14.56	317.71	95.31	3734.62	52.28	44.75	-5.360	0.000	0.290
134.00	-2.67	-1.13	0.00	-11.45	0.00	11.45	317.71	95.31	3734.62	52.28	47.03	-5.544	0.000	0.228
136.00	-2.47	-1.04	0.00	-9.19	0.00	9.19	317.71	95.31	3734.62	52.28	49.38	-5.690	0.000	0.184
138.00	-2.26	-0.95	0.00	-7.10	0.00	7.10	317.71	95.31	3734.62	52.28	51.79	-5.805	0.000	0.143
140.00	-1.64	-0.81	0.00	-5.20	0.00	5.20	317.71	95.31	3734.62	52.28	54.23	-5.891	0.000	0.105
140.00	-1.64	-0.81	0.00	-5.20	0.00	5.20	317.71	95.31	3734.62	52.28	54.23	-5.891	0.000	0.105
142.00	-1.44	-0.71	0.00	-3.58	0.00	3.58	317.71	95.31	3734.62	52.28	56.71	-5.953	0.000	0.073
144.00	-1.24	-0.62	0.00	-2.15	0.00	2.15	317.71	95.31	3734.62	52.28	59.21	-5.994	0.000	0.045
146.00	-1.04	-0.52	0.00	-0.92	0.00	0.92	317.71	95.31	3734.62	52.28	61.72	-6.015	0.000	0.021
147.00	-0.46	-0.17	0.00	-0.40	0.00	0.40	317.71	95.31	3734.62	52.28	62.98	-6.020	0.000	0.009
148.00	-0.37	-0.12	0.00	-0.23	0.00	0.23	317.71	95.31	3734.62	52.28	64.24	-6.022	0.000	0.006
150.00	0.00	-0.08	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	66.76	-6.024	0.000	0.000

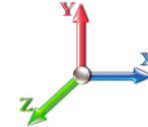
Seismic Segment Forces (Factored)

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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: 1.2D + 1.0Ev + 1.0Eh				Iterations 32
Gust Response Factor	1.10	Sds	0.20	Ss 0.18
Dead Load Factor	1.20	Seismic Load Factor	1.00	S1 0.05
Wind Load Factor	0.00	Structure Frequency (f1)	0.32	SA 0.03
				Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	
2.00		360.94	1.00	14.09	0.00	
4.00		360.94	3.00	14.09	0.01	
6.00		360.94	5.00	14.09	0.02	
8.00		360.94	7.00	14.09	0.04	
10.00		360.94	9.00	14.09	0.07	
12.00		360.94	11.00	14.09	0.11	
14.00		360.94	13.00	14.09	0.15	
16.00		360.94	15.00	14.09	0.21	
18.00		360.94	17.00	14.09	0.26	
20.00	Top - Section 1	360.94	19.00	14.09	0.33	
22.00		312.83	21.00	12.21	0.30	
24.00		312.83	23.00	12.21	0.36	
26.00		312.83	25.00	12.21	0.43	
28.00		312.83	27.00	12.21	0.50	
30.00		312.83	29.00	12.21	0.58	
32.00		312.83	31.00	12.21	0.66	
34.00		312.83	33.00	12.21	0.75	
36.00		312.83	35.00	12.21	0.84	
38.00		312.83	37.00	12.21	0.94	
40.00		312.83	39.00	12.21	1.04	
42.00		312.83	41.00	12.21	1.15	
44.00		312.83	43.00	12.21	1.27	
46.00		312.83	45.00	12.21	1.39	
48.00		312.83	47.00	12.21	1.52	
50.00	Top - Section 2	312.83	49.00	12.21	1.65	
52.00		264.73	51.00	10.33	1.28	
54.00		264.73	53.00	10.33	1.38	
56.00		264.73	55.00	10.33	1.49	
58.00		264.73	57.00	10.33	1.60	
60.00		264.73	59.00	10.33	1.71	
62.00		264.73	61.00	10.33	1.83	
64.00		264.73	63.00	10.33	1.95	
66.00		264.73	65.00	10.33	2.08	
68.00		264.73	67.00	10.33	2.20	
70.00		264.73	69.00	10.33	2.34	
72.00		264.73	71.00	10.33	2.48	
74.00		264.73	73.00	10.33	2.62	
76.00		264.73	75.00	10.33	2.76	
78.00		264.73	77.00	10.33	2.91	
80.00	Top - Section 3	264.73	79.00	10.33	3.07	
82.00		264.73	81.00	10.33	3.22	
84.00		264.73	83.00	10.33	3.38	
86.00		264.73	85.00	10.33	3.55	
88.00		264.73	87.00	10.33	3.72	
90.00		264.73	89.00	10.33	3.89	

Seismic Segment Forces (Factored)

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

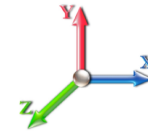
92.00		264.73	91.00	10.33	4.07
94.00		264.73	93.00	10.33	4.25
96.00		264.73	95.00	10.33	4.43
98.00		264.73	97.00	10.33	4.62
100.00		264.73	99.00	10.33	4.81
102.00		264.73	101.00	10.33	5.01
104.00		264.73	103.00	10.33	5.21
106.00		264.73	105.00	10.33	5.42
108.00		264.73	107.00	10.33	5.62
110.00	Top - Section 4	372.22	109.00	14.53	11.54
112.00		277.21	111.00	10.82	6.64
114.00		277.21	113.00	10.82	6.88
116.00		277.21	115.00	10.82	7.12
118.00		277.21	117.00	10.82	7.37
120.00	Top - Section 5 RB1	492.18	119.00	19.21	24.04
121.00	RT1	98.84	120.50	3.86	0.99
122.00		98.84	121.50	3.86	1.01
124.00		197.67	123.00	7.72	4.14
126.00		197.67	125.00	7.72	4.28
128.00	Appurtenance(s)	521.67	127.00	20.37	30.76
130.00	Top - Section 6	397.67	129.00	15.52	18.44
132.00		117.54	131.00	4.59	1.66
134.00	Appurtenance(s)	298.74	133.00	11.66	11.06
136.00		72.61	135.00	2.83	0.67
138.00		72.61	137.00	2.83	0.69
140.00	Top - Section 7	287.58	139.00	11.23	11.20
142.00		72.61	141.00	2.83	0.73
144.00		72.61	143.00	2.83	0.76
146.00		72.61	145.00	2.83	0.78
147.00	Appurtenance(s)	219.60	146.50	8.57	7.25
148.00		28.60	147.50	1.12	0.12
150.00	Appurtenance(s)	164.69	149.00	6.43	4.22
Totals:		20,944.4	817.7	269.8	
					Total Wind: 9,494.9

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0Ev + 1.0Eh		Iterations 32
Gust Response Factor 1.10	Sds 0.20	Ss 0.18
Dead Load Factor 1.20	Seismic Load Factor 1.00	S1 0.05
Wind Load Factor 0.00	Structure Frequency (f1) 0.32	SA 0.03
	Seismic Importance Factor 1.00	



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-25.31	-0.27	0.00	-31.29	0.00	31.29	1490.10	475.94	99948.2	1339.68	0.00	0.00	0.00	0.040
2.00	-24.88	-0.27	0.00	-30.75	0.00	30.75	1490.10	475.94	99948.2	1339.68	0.00	0.00	0.00	0.040
4.00	-24.45	-0.27	0.00	-30.21	0.00	30.21	1490.10	475.94	99948.2	1339.68	0.00	-0.01	0.039	0.039
6.00	-24.02	-0.27	0.00	-29.66	0.00	29.66	1490.10	475.94	99948.2	1339.68	0.00	-0.01	0.038	0.038
8.00	-23.58	-0.27	0.00	-29.12	0.00	29.12	1490.10	475.94	99948.2	1339.68	0.01	-0.01	0.038	0.038
10.00	-23.15	-0.27	0.00	-28.57	0.00	28.57	1490.10	475.94	99948.2	1339.68	0.01	-0.01	0.037	0.037
12.00	-22.72	-0.28	0.00	-28.02	0.00	28.02	1490.10	475.94	99948.2	1339.68	0.02	-0.02	0.036	0.036
14.00	-22.29	-0.28	0.00	-27.47	0.00	27.47	1490.10	475.94	99948.2	1339.68	0.03	-0.02	0.035	0.035
16.00	-21.86	-0.28	0.00	-26.92	0.00	26.92	1490.10	475.94	99948.2	1339.68	0.03	-0.02	0.035	0.035
18.00	-21.42	-0.28	0.00	-26.37	0.00	26.37	1490.10	475.94	99948.2	1339.68	0.04	-0.02	0.034	0.034
20.00	-20.99	-0.28	0.00	-25.82	0.00	25.82	1490.10	475.94	99948.2	1339.68	0.05	-0.02	0.033	0.033
20.00	-20.99	-0.28	0.00	-25.82	0.00	25.82	1311.06	395.78	69116.5	948.43	0.05	-0.02	0.043	0.043
22.00	-20.62	-0.28	0.00	-25.26	0.00	25.26	1311.06	395.78	69116.5	948.43	0.06	-0.03	0.042	0.042
24.00	-20.25	-0.28	0.00	-24.71	0.00	24.71	1311.06	395.78	69116.5	948.43	0.08	-0.03	0.041	0.041
26.00	-19.87	-0.28	0.00	-24.15	0.00	24.15	1311.06	395.78	69116.5	948.43	0.09	-0.03	0.041	0.041
28.00	-19.50	-0.28	0.00	-23.59	0.00	23.59	1311.06	395.78	69116.5	948.43	0.10	-0.04	0.040	0.040
30.00	-19.13	-0.28	0.00	-23.03	0.00	23.03	1311.06	395.78	69116.5	948.43	0.12	-0.04	0.039	0.039
32.00	-18.76	-0.28	0.00	-22.47	0.00	22.47	1311.06	395.78	69116.5	948.43	0.14	-0.04	0.038	0.038
34.00	-18.38	-0.28	0.00	-21.91	0.00	21.91	1311.06	395.78	69116.5	948.43	0.16	-0.05	0.037	0.037
36.00	-18.01	-0.28	0.00	-21.36	0.00	21.36	1311.06	395.78	69116.5	948.43	0.18	-0.05	0.036	0.036
38.00	-17.64	-0.28	0.00	-20.80	0.00	20.80	1311.06	395.78	69116.5	948.43	0.20	-0.05	0.035	0.035
40.00	-17.27	-0.28	0.00	-20.24	0.00	20.24	1311.06	395.78	69116.5	948.43	0.22	-0.06	0.035	0.035
42.00	-16.89	-0.28	0.00	-19.68	0.00	19.68	1311.06	395.78	69116.5	948.43	0.25	-0.06	0.034	0.034
44.00	-16.52	-0.28	0.00	-19.12	0.00	19.12	1311.06	395.78	69116.5	948.43	0.27	-0.06	0.033	0.033
46.00	-16.15	-0.28	0.00	-18.57	0.00	18.57	1311.06	395.78	69116.5	948.43	0.30	-0.07	0.032	0.032
48.00	-15.77	-0.28	0.00	-18.02	0.00	18.02	1311.06	395.78	69116.5	948.43	0.33	-0.07	0.031	0.031
50.00	-15.40	-0.27	0.00	-17.47	0.00	17.47	1311.06	395.78	69116.5	948.43	0.36	-0.07	0.030	0.030
50.00	-15.40	-0.27	0.00	-17.47	0.00	17.47	1052.07	315.62	43955.0	624.04	0.36	-0.07	0.043	0.043
52.00	-15.09	-0.27	0.00	-16.92	0.00	16.92	1052.07	315.62	43955.0	624.04	0.39	-0.07	0.041	0.041
54.00	-14.78	-0.27	0.00	-16.37	0.00	16.37	1052.07	315.62	43955.0	624.04	0.42	-0.08	0.040	0.040
56.00	-14.46	-0.27	0.00	-15.83	0.00	15.83	1052.07	315.62	43955.0	624.04	0.45	-0.08	0.039	0.039
58.00	-14.15	-0.27	0.00	-15.28	0.00	15.28	1052.07	315.62	43955.0	624.04	0.49	-0.09	0.038	0.038
60.00	-13.84	-0.27	0.00	-14.74	0.00	14.74	1052.07	315.62	43955.0	624.04	0.53	-0.09	0.037	0.037
62.00	-13.52	-0.27	0.00	-14.20	0.00	14.20	1052.07	315.62	43955.0	624.04	0.57	-0.10	0.036	0.036
64.00	-13.21	-0.27	0.00	-13.67	0.00	13.67	1052.07	315.62	43955.0	624.04	0.61	-0.10	0.034	0.034
66.00	-12.90	-0.26	0.00	-13.13	0.00	13.13	1052.07	315.62	43955.0	624.04	0.65	-0.10	0.033	0.033
68.00	-12.59	-0.26	0.00	-12.60	0.00	12.60	1052.07	315.62	43955.0	624.04	0.70	-0.11	0.032	0.032
70.00	-12.27	-0.26	0.00	-12.08	0.00	12.08	1052.07	315.62	43955.0	624.04	0.74	-0.11	0.031	0.031
72.00	-11.96	-0.26	0.00	-11.56	0.00	11.56	1052.07	315.62	43955.0	624.04	0.79	-0.12	0.030	0.030
74.00	-11.65	-0.26	0.00	-11.04	0.00	11.04	1052.07	315.62	43955.0	624.04	0.84	-0.12	0.029	0.029
76.00	-11.33	-0.25	0.00	-10.53	0.00	10.53	1052.07	315.62	43955.0	624.04	0.89	-0.12	0.028	0.028
78.00	-11.02	-0.25	0.00	-10.02	0.00	10.02	1052.07	315.62	43955.0	624.04	0.94	-0.12	0.027	0.027
80.00	-10.71	-0.25	0.00	-9.52	0.00	9.52	1052.07	315.62	43955.0	624.04	0.99	-0.13	0.025	0.025
80.00	-10.71	-0.25	0.00	-9.52	0.00	9.52	1052.07	315.62	43955.0	624.04	0.99	-0.13	0.025	0.025
82.00	-10.39	-0.24	0.00	-9.03	0.00	9.03	1052.07	315.62	43955.0	624.04	1.05	-0.13	0.024	0.024
84.00	-10.08	-0.24	0.00	-8.54	0.00	8.54	1052.07	315.62	43955.0	624.04	1.10	-0.13	0.023	0.023
86.00	-9.77	-0.24	0.00	-8.06	0.00	8.06	1052.07	315.62	43955.0	624.04	1.16	-0.14	0.022	0.022

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

88.00	-9.46	-0.23	0.00	-7.59	0.00	7.59	1052.07	315.62	43955.0	624.04	1.21	-0.14	0.021
90.00	-9.14	-0.23	0.00	-7.13	0.00	7.13	1052.07	315.62	43955.0	624.04	1.27	-0.14	0.020
92.00	-8.83	-0.22	0.00	-6.67	0.00	6.67	1052.07	315.62	43955.0	624.04	1.33	-0.14	0.019
94.00	-8.52	-0.22	0.00	-6.23	0.00	6.23	1052.07	315.62	43955.0	624.04	1.39	-0.14	0.018
96.00	-8.20	-0.21	0.00	-5.79	0.00	5.79	1052.07	315.62	43955.0	624.04	1.45	-0.15	0.017
98.00	-7.89	-0.21	0.00	-5.37	0.00	5.37	1052.07	315.62	43955.0	624.04	1.51	-0.15	0.016
100.00	-7.58	-0.20	0.00	-4.95	0.00	4.95	1052.07	315.62	43955.0	624.04	1.58	-0.15	0.015
102.00	-7.27	-0.20	0.00	-4.55	0.00	4.55	1052.07	315.62	43955.0	624.04	1.64	-0.15	0.014
104.00	-6.95	-0.19	0.00	-4.15	0.00	4.15	1052.07	315.62	43955.0	624.04	1.70	-0.15	0.013
106.00	-6.64	-0.18	0.00	-3.77	0.00	3.77	1052.07	315.62	43955.0	624.04	1.76	-0.15	0.012
108.00	-6.33	-0.18	0.00	-3.40	0.00	3.40	1052.07	315.62	43955.0	624.04	1.83	-0.15	0.011
110.00	-5.88	-0.17	0.00	-3.04	0.00	3.04	1052.07	315.62	43955.0	624.04	1.89	-0.15	0.010
110.00	-5.88	-0.17	0.00	-3.04	0.00	3.04	759.47	227.84	14937.6	114.57	1.89	-0.15	0.034
112.00	-5.54	-0.16	0.00	-2.71	0.00	2.71	759.47	227.84	14937.6	114.57	1.96	-0.16	0.031
114.00	-5.20	-0.15	0.00	-2.39	0.00	2.39	759.47	227.84	14937.6	114.57	2.03	-0.17	0.028
116.00	-4.86	-0.15	0.00	-2.09	0.00	2.09	759.47	227.84	14937.6	114.57	2.10	-0.19	0.025
118.00	-4.52	-0.14	0.00	-1.79	0.00	1.79	759.47	227.84	14937.6	114.57	2.19	-0.20	0.022
120.00	-3.91	-0.11	0.00	-1.52	0.00	1.52	759.47	227.84	14937.6	114.57	2.27	-0.22	0.007
120.00	-3.91	-0.11	0.00	-1.52	0.00	1.52	317.71	95.31	3734.62	52.28	2.27	-0.22	0.007
121.00	-3.79	-0.11	0.00	-1.40	0.00	1.40	317.71	95.31	3734.62	52.28	2.32	-0.22	0.009
121.00	-3.79	-0.11	0.00	-1.40	0.00	1.40	317.71	95.31	3734.62	52.28	2.32	-0.22	0.009
122.00	-3.67	-0.11	0.00	-1.29	0.00	1.29	317.71	95.31	3734.62	52.28	2.36	-0.22	0.036
124.00	-3.42	-0.11	0.00	-1.07	0.00	1.07	317.71	95.31	3734.62	52.28	2.46	-0.23	0.031
126.00	-3.18	-0.10	0.00	-0.86	0.00	0.86	317.71	95.31	3734.62	52.28	2.56	-0.25	0.026
128.00	-2.54	-0.07	0.00	-0.65	0.00	0.65	317.71	95.31	3734.62	52.28	2.67	-0.26	0.020
130.00	-2.05	-0.05	0.00	-0.51	0.00	0.51	317.71	95.31	3734.62	52.28	2.78	-0.27	0.016
130.00	-2.05	-0.05	0.00	-0.51	0.00	0.51	317.71	95.31	3734.62	52.28	2.78	-0.27	0.016
132.00	-1.89	-0.05	0.00	-0.42	0.00	0.42	317.71	95.31	3734.62	52.28	2.89	-0.27	0.014
134.00	-1.50	-0.03	0.00	-0.33	0.00	0.33	317.71	95.31	3734.62	52.28	3.01	-0.28	0.011
136.00	-1.39	-0.03	0.00	-0.26	0.00	0.26	317.71	95.31	3734.62	52.28	3.12	-0.28	0.009
138.00	-1.28	-0.03	0.00	-0.19	0.00	0.19	317.71	95.31	3734.62	52.28	3.24	-0.29	0.008
140.00	-0.90	-0.02	0.00	-0.13	0.00	0.13	317.71	95.31	3734.62	52.28	3.36	-0.29	0.005
140.00	-0.90	-0.02	0.00	-0.13	0.00	0.13	317.71	95.31	3734.62	52.28	3.36	-0.29	0.005
142.00	-0.79	-0.02	0.00	-0.10	0.00	0.10	317.71	95.31	3734.62	52.28	3.48	-0.29	0.004
144.00	-0.67	-0.02	0.00	-0.06	0.00	0.06	317.71	95.31	3734.62	52.28	3.61	-0.29	0.003
146.00	-0.56	-0.01	0.00	-0.03	0.00	0.03	317.71	95.31	3734.62	52.28	3.73	-0.29	0.002
147.00	-0.28	-0.01	0.00	-0.02	0.00	0.02	317.71	95.31	3734.62	52.28	3.79	-0.29	0.001
148.00	-0.23	-0.01	0.00	-0.01	0.00	0.01	317.71	95.31	3734.62	52.28	3.85	-0.29	0.001
150.00	0.00	0.00	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	3.97	-0.29	0.000

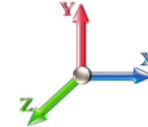
Seismic Segment Forces (Factored)

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 34

Load Case: 0.9D + 1.0Ev + 1.0Eh				Iterations 32
Gust Response Factor	1.10	Sds	0.20	Ss 0.18
Dead Load Factor	0.90	Seismic Load Factor	1.00	S1 0.05
Wind Load Factor	0.00	Structure Frequency (f1)	0.32	SA 0.03
				Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	
2.00		342.11	1.00	13.36	0.00	
4.00		342.11	3.00	13.36	0.01	
6.00		342.11	5.00	13.36	0.02	
8.00		342.11	7.00	13.36	0.05	
10.00		342.11	9.00	13.36	0.08	
12.00		342.11	11.00	13.36	0.12	
14.00		342.11	13.00	13.36	0.16	
16.00		342.11	15.00	13.36	0.21	
18.00		342.11	17.00	13.36	0.28	
20.00	Top - Section 1	342.11	19.00	13.36	0.34	
22.00		294.01	21.00	11.48	0.31	
24.00		294.01	23.00	11.48	0.37	
26.00		294.01	25.00	11.48	0.44	
28.00		294.01	27.00	11.48	0.51	
30.00		294.01	29.00	11.48	0.59	
32.00		294.01	31.00	11.48	0.68	
34.00		294.01	33.00	11.48	0.77	
36.00		294.01	35.00	11.48	0.86	
38.00		294.01	37.00	11.48	0.97	
40.00		294.01	39.00	11.48	1.07	
42.00		294.01	41.00	11.48	1.19	
44.00		294.01	43.00	11.48	1.30	
46.00		294.01	45.00	11.48	1.43	
48.00		294.01	47.00	11.48	1.56	
50.00	Top - Section 2	294.01	49.00	11.48	1.69	
52.00		245.90	51.00	9.60	1.28	
54.00		245.90	53.00	9.60	1.39	
56.00		245.90	55.00	9.60	1.49	
58.00		245.90	57.00	9.60	1.60	
60.00		245.90	59.00	9.60	1.72	
62.00		245.90	61.00	9.60	1.84	
64.00		245.90	63.00	9.60	1.96	
66.00		245.90	65.00	9.60	2.08	
68.00		245.90	67.00	9.60	2.21	
70.00		245.90	69.00	9.60	2.35	
72.00		245.90	71.00	9.60	2.49	
74.00		245.90	73.00	9.60	2.63	
76.00		245.90	75.00	9.60	2.77	
78.00		245.90	77.00	9.60	2.92	
80.00	Top - Section 3	245.90	79.00	9.60	3.08	
82.00		245.90	81.00	9.60	3.24	
84.00		245.90	83.00	9.60	3.40	
86.00		245.90	85.00	9.60	3.56	
88.00		245.90	87.00	9.60	3.73	
90.00		245.90	89.00	9.60	3.91	

Seismic Segment Forces (Factored)

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

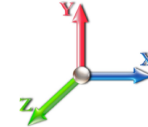
92.00		245.90	91.00	9.60	4.08
94.00		245.90	93.00	9.60	4.27
96.00		245.90	95.00	9.60	4.45
98.00		245.90	97.00	9.60	4.64
100.00		245.90	99.00	9.60	4.83
102.00		245.90	101.00	9.60	5.03
104.00		245.90	103.00	9.60	5.23
106.00		245.90	105.00	9.60	5.44
108.00		245.90	107.00	9.60	5.65
110.00	Top - Section 4	353.39	109.00	13.80	12.10
112.00		242.09	111.00	9.45	5.89
114.00		242.09	113.00	9.45	6.10
116.00		242.09	115.00	9.45	6.32
118.00		242.09	117.00	9.45	6.54
120.00	Top - Section 5 RB1	457.06	119.00	17.84	24.13
121.00	RT1	81.28	120.50	3.17	0.78
122.00		81.28	121.50	3.17	0.80
124.00		162.55	123.00	6.35	3.26
126.00		162.55	125.00	6.35	3.37
128.00	Appurtenance(s)	486.55	127.00	19.00	31.14
130.00	Top - Section 6	366.29	129.00	14.30	18.21
132.00		102.45	131.00	4.00	1.47
134.00	Appurtenance(s)	283.65	133.00	11.07	11.61
136.00		68.76	135.00	2.68	0.70
138.00		68.76	137.00	2.68	0.72
140.00	Top - Section 7	283.73	139.00	11.08	12.69
142.00		68.76	141.00	2.68	0.77
144.00		68.76	143.00	2.68	0.79
146.00		68.76	145.00	2.68	0.81
147.00	Appurtenance(s)	217.68	146.50	8.50	8.29
148.00		28.60	147.50	1.12	0.15
150.00	Appurtenance(s)	164.69	149.00	6.43	4.91
	Totals:	19,506.2	761.5	269.8	
					Total Wind: 9,494.9

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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 + 1.0Ev + 1.0Eh	Iterations 32
Gust Response Factor 1.10	Sds 0.20
Dead Load Factor 0.90	Ss 0.18
Seismic Load Factor 1.00	S1 0.05
Wind Load Factor 0.00	SA 0.03
Structure Frequency (f1) 0.32	Seismic Importance Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-19.13	-0.27	0.00	-30.75	0.00	30.75	1490.10	475.94	99948.2	1339.68	0.00	0.00	0.00	0.036
2.00	-18.81	-0.27	0.00	-30.21	0.00	30.21	1490.10	475.94	99948.2	1339.68	0.00	0.00	0.00	0.035
4.00	-18.48	-0.27	0.00	-29.67	0.00	29.67	1490.10	475.94	99948.2	1339.68	0.00	-0.01	0.00	0.035
6.00	-18.15	-0.27	0.00	-29.13	0.00	29.13	1490.10	475.94	99948.2	1339.68	0.00	-0.01	0.00	0.034
8.00	-17.82	-0.27	0.00	-28.59	0.00	28.59	1490.10	475.94	99948.2	1339.68	0.01	-0.01	0.00	0.033
10.00	-17.50	-0.27	0.00	-28.04	0.00	28.04	1490.10	475.94	99948.2	1339.68	0.01	-0.01	0.00	0.033
12.00	-17.17	-0.27	0.00	-27.49	0.00	27.49	1490.10	475.94	99948.2	1339.68	0.02	-0.01	0.00	0.032
14.00	-16.84	-0.27	0.00	-26.95	0.00	26.95	1490.10	475.94	99948.2	1339.68	0.03	-0.02	0.00	0.031
16.00	-16.52	-0.27	0.00	-26.40	0.00	26.40	1490.10	475.94	99948.2	1339.68	0.03	-0.02	0.00	0.031
18.00	-16.19	-0.27	0.00	-25.85	0.00	25.85	1490.10	475.94	99948.2	1339.68	0.04	-0.02	0.00	0.030
20.00	-15.86	-0.27	0.00	-25.30	0.00	25.30	1490.10	475.94	99948.2	1339.68	0.05	-0.02	0.00	0.030
20.00	-15.86	-0.27	0.00	-25.30	0.00	25.30	1311.06	395.78	69116.5	948.43	0.05	-0.02	0.00	0.039
22.00	-15.58	-0.27	0.00	-24.75	0.00	24.75	1311.06	395.78	69116.5	948.43	0.06	-0.03	0.00	0.038
24.00	-15.30	-0.28	0.00	-24.20	0.00	24.20	1311.06	395.78	69116.5	948.43	0.07	-0.03	0.00	0.037
26.00	-15.02	-0.28	0.00	-23.65	0.00	23.65	1311.06	395.78	69116.5	948.43	0.09	-0.03	0.00	0.036
28.00	-14.74	-0.28	0.00	-23.10	0.00	23.10	1311.06	395.78	69116.5	948.43	0.10	-0.04	0.00	0.036
30.00	-14.45	-0.28	0.00	-22.55	0.00	22.55	1311.06	395.78	69116.5	948.43	0.12	-0.04	0.00	0.035
32.00	-14.17	-0.28	0.00	-22.00	0.00	22.00	1311.06	395.78	69116.5	948.43	0.14	-0.04	0.00	0.034
34.00	-13.89	-0.28	0.00	-21.45	0.00	21.45	1311.06	395.78	69116.5	948.43	0.15	-0.05	0.00	0.033
36.00	-13.61	-0.28	0.00	-20.89	0.00	20.89	1311.06	395.78	69116.5	948.43	0.17	-0.05	0.00	0.032
38.00	-13.33	-0.27	0.00	-20.34	0.00	20.34	1311.06	395.78	69116.5	948.43	0.20	-0.05	0.00	0.032
40.00	-13.05	-0.27	0.00	-19.79	0.00	19.79	1311.06	395.78	69116.5	948.43	0.22	-0.06	0.00	0.031
42.00	-12.76	-0.27	0.00	-19.25	0.00	19.25	1311.06	395.78	69116.5	948.43	0.24	-0.06	0.00	0.030
44.00	-12.48	-0.27	0.00	-18.70	0.00	18.70	1311.06	395.78	69116.5	948.43	0.27	-0.06	0.00	0.029
46.00	-12.20	-0.27	0.00	-18.16	0.00	18.16	1311.06	395.78	69116.5	948.43	0.29	-0.06	0.00	0.028
48.00	-11.92	-0.27	0.00	-17.61	0.00	17.61	1311.06	395.78	69116.5	948.43	0.32	-0.07	0.00	0.028
50.00	-11.64	-0.27	0.00	-17.07	0.00	17.07	1311.06	395.78	69116.5	948.43	0.35	-0.07	0.00	0.027
50.00	-11.64	-0.27	0.00	-17.07	0.00	17.07	1052.07	315.62	43955.0	624.04	0.35	-0.07	0.00	0.038
52.00	-11.40	-0.27	0.00	-16.54	0.00	16.54	1052.07	315.62	43955.0	624.04	0.38	-0.07	0.00	0.037
54.00	-11.16	-0.27	0.00	-16.00	0.00	16.00	1052.07	315.62	43955.0	624.04	0.41	-0.08	0.00	0.036
56.00	-10.93	-0.27	0.00	-15.47	0.00	15.47	1052.07	315.62	43955.0	624.04	0.44	-0.08	0.00	0.035
58.00	-10.69	-0.26	0.00	-14.94	0.00	14.94	1052.07	315.62	43955.0	624.04	0.48	-0.09	0.00	0.034
60.00	-10.45	-0.26	0.00	-14.41	0.00	14.41	1052.07	315.62	43955.0	624.04	0.52	-0.09	0.00	0.033
62.00	-10.22	-0.26	0.00	-13.88	0.00	13.88	1052.07	315.62	43955.0	624.04	0.56	-0.09	0.00	0.032
64.00	-9.98	-0.26	0.00	-13.36	0.00	13.36	1052.07	315.62	43955.0	624.04	0.60	-0.10	0.00	0.031
66.00	-9.74	-0.26	0.00	-12.84	0.00	12.84	1052.07	315.62	43955.0	624.04	0.64	-0.10	0.00	0.030
68.00	-9.51	-0.26	0.00	-12.32	0.00	12.32	1052.07	315.62	43955.0	624.04	0.68	-0.11	0.00	0.029
70.00	-9.27	-0.25	0.00	-11.81	0.00	11.81	1052.07	315.62	43955.0	624.04	0.73	-0.11	0.00	0.028
72.00	-9.03	-0.25	0.00	-11.30	0.00	11.30	1052.07	315.62	43955.0	624.04	0.77	-0.11	0.00	0.027
74.00	-8.80	-0.25	0.00	-10.80	0.00	10.80	1052.07	315.62	43955.0	624.04	0.82	-0.12	0.00	0.026
76.00	-8.56	-0.25	0.00	-10.30	0.00	10.30	1052.07	315.62	43955.0	624.04	0.87	-0.12	0.00	0.025
78.00	-8.33	-0.24	0.00	-9.81	0.00	9.81	1052.07	315.62	43955.0	624.04	0.92	-0.12	0.00	0.024
80.00	-8.09	-0.24	0.00	-9.32	0.00	9.32	1052.07	315.62	43955.0	624.04	0.97	-0.12	0.00	0.023
80.00	-8.09	-0.24	0.00	-9.32	0.00	9.32	1052.07	315.62	43955.0	624.04	0.97	-0.12	0.00	0.023
82.00	-7.85	-0.24	0.00	-8.84	0.00	8.84	1052.07	315.62	43955.0	624.04	1.02	-0.13	0.00	0.022
84.00	-7.62	-0.23	0.00	-8.37	0.00	8.37	1052.07	315.62	43955.0	624.04	1.08	-0.13	0.00	0.021
86.00	-7.38	-0.23	0.00	-7.90	0.00	7.90	1052.07	315.62	43955.0	624.04	1.13	-0.13	0.00	0.020

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

88.00	-7.14	-0.23	0.00	-7.44	0.00	7.44	1052.07	315.62	43955.0	624.04	1.19	-0.13	0.019
90.00	-6.91	-0.22	0.00	-6.99	0.00	6.99	1052.07	315.62	43955.0	624.04	1.25	-0.14	0.018
92.00	-6.67	-0.22	0.00	-6.55	0.00	6.55	1052.07	315.62	43955.0	624.04	1.30	-0.14	0.017
94.00	-6.43	-0.21	0.00	-6.12	0.00	6.12	1052.07	315.62	43955.0	624.04	1.36	-0.14	0.016
96.00	-6.20	-0.21	0.00	-5.69	0.00	5.69	1052.07	315.62	43955.0	624.04	1.42	-0.14	0.015
98.00	-5.96	-0.20	0.00	-5.28	0.00	5.28	1052.07	315.62	43955.0	624.04	1.48	-0.14	0.014
100.00	-5.72	-0.20	0.00	-4.87	0.00	4.87	1052.07	315.62	43955.0	624.04	1.54	-0.15	0.013
102.00	-5.49	-0.19	0.00	-4.48	0.00	4.48	1052.07	315.62	43955.0	624.04	1.60	-0.15	0.012
104.00	-5.25	-0.19	0.00	-4.10	0.00	4.10	1052.07	315.62	43955.0	624.04	1.67	-0.15	0.012
106.00	-5.01	-0.18	0.00	-3.73	0.00	3.73	1052.07	315.62	43955.0	624.04	1.73	-0.15	0.011
108.00	-4.78	-0.17	0.00	-3.37	0.00	3.37	1052.07	315.62	43955.0	624.04	1.79	-0.15	0.010
110.00	-4.44	-0.16	0.00	-3.02	0.00	3.02	1052.07	315.62	43955.0	624.04	1.85	-0.15	0.009
110.00	-4.44	-0.16	0.00	-3.02	0.00	3.02	759.47	227.84	14937.6	114.57	1.85	-0.15	0.032
112.00	-4.18	-0.15	0.00	-2.70	0.00	2.70	759.47	227.84	14937.6	114.57	1.92	-0.15	0.029
114.00	-3.93	-0.15	0.00	-2.39	0.00	2.39	759.47	227.84	14937.6	114.57	1.98	-0.17	0.026
116.00	-3.67	-0.14	0.00	-2.09	0.00	2.09	759.47	227.84	14937.6	114.57	2.06	-0.19	0.023
118.00	-3.41	-0.14	0.00	-1.81	0.00	1.81	759.47	227.84	14937.6	114.57	2.14	-0.20	0.020
120.00	-2.95	-0.11	0.00	-1.53	0.00	1.53	759.47	227.84	14937.6	114.57	2.23	-0.21	0.006
120.00	-2.95	-0.11	0.00	-1.53	0.00	1.53	317.71	95.31	3734.62	52.28	2.23	-0.21	0.006
121.00	-2.86	-0.11	0.00	-1.42	0.00	1.42	317.71	95.31	3734.62	52.28	2.27	-0.21	0.008
121.00	-2.86	-0.11	0.00	-1.42	0.00	1.42	317.71	95.31	3734.62	52.28	2.27	-0.21	0.008
122.00	-2.77	-0.11	0.00	-1.31	0.00	1.31	317.71	95.31	3734.62	52.28	2.32	-0.22	0.034
124.00	-2.59	-0.11	0.00	-1.09	0.00	1.09	317.71	95.31	3734.62	52.28	2.41	-0.23	0.029
126.00	-2.41	-0.10	0.00	-0.88	0.00	0.88	317.71	95.31	3734.62	52.28	2.51	-0.25	0.024
128.00	-1.92	-0.07	0.00	-0.68	0.00	0.68	317.71	95.31	3734.62	52.28	2.62	-0.26	0.019
130.00	-1.55	-0.05	0.00	-0.54	0.00	0.54	317.71	95.31	3734.62	52.28	2.73	-0.27	0.015
130.00	-1.55	-0.05	0.00	-0.54	0.00	0.54	317.71	95.31	3734.62	52.28	2.73	-0.27	0.015
132.00	-1.43	-0.05	0.00	-0.44	0.00	0.44	317.71	95.31	3734.62	52.28	2.84	-0.27	0.013
134.00	-1.14	-0.04	0.00	-0.34	0.00	0.34	317.71	95.31	3734.62	52.28	2.95	-0.28	0.010
136.00	-1.05	-0.03	0.00	-0.27	0.00	0.27	317.71	95.31	3734.62	52.28	3.07	-0.28	0.009
138.00	-0.97	-0.03	0.00	-0.21	0.00	0.21	317.71	95.31	3734.62	52.28	3.19	-0.29	0.007
140.00	-0.68	-0.02	0.00	-0.14	0.00	0.14	317.71	95.31	3734.62	52.28	3.31	-0.29	0.005
140.00	-0.68	-0.02	0.00	-0.14	0.00	0.14	317.71	95.31	3734.62	52.28	3.31	-0.29	0.005
142.00	-0.59	-0.02	0.00	-0.10	0.00	0.10	317.71	95.31	3734.62	52.28	3.43	-0.29	0.004
144.00	-0.51	-0.02	0.00	-0.07	0.00	0.07	317.71	95.31	3734.62	52.28	3.55	-0.29	0.003
146.00	-0.42	-0.02	0.00	-0.03	0.00	0.03	317.71	95.31	3734.62	52.28	3.68	-0.29	0.002
147.00	-0.21	-0.01	0.00	-0.02	0.00	0.02	317.71	95.31	3734.62	52.28	3.74	-0.29	0.001
148.00	-0.17	-0.01	0.00	-0.01	0.00	0.01	317.71	95.31	3734.62	52.28	3.80	-0.29	0.001
150.00	0.00	0.00	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	3.92	-0.29	0.000

Wind Loading - Shaft

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

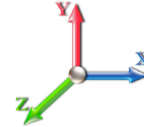


Page: 38

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 35

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	6.649	7.31	165.83	0.450	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	6.649	7.31	165.83	0.450	0.000	2.00	6.000	2.70	19.7	0.0	285.6
4.00		1.00	0.85	6.649	7.31	165.83	0.450	0.000	2.00	6.000	2.70	19.7	0.0	285.6
6.00		1.00	0.85	6.649	7.31	165.83	0.450	0.000	2.00	6.000	2.70	19.7	0.0	285.6
8.00		1.00	0.85	6.649	7.31	165.83	0.450	0.000	2.00	6.000	2.70	19.7	0.0	285.6
10.00		1.00	0.85	6.649	7.31	165.83	0.450	0.000	2.00	6.000	2.70	19.7	0.0	285.6
12.00		1.00	0.85	6.649	7.31	165.83	0.450	0.000	2.00	6.000	2.70	19.7	0.0	285.6
14.00		1.00	0.85	6.649	7.31	165.83	0.450	0.000	2.00	6.000	2.70	19.7	0.0	285.6
16.00		1.00	0.86	6.731	7.40	166.85	0.450	0.000	2.00	6.000	2.70	20.0	0.0	285.6
18.00		1.00	0.88	6.900	7.59	168.93	0.450	0.000	2.00	6.000	2.70	20.5	0.0	285.6
20.00	Top - Section 1	1.00	0.90	7.054	7.76	170.81	0.450	0.000	2.00	6.000	2.70	21.0	0.0	285.6
22.00		1.00	0.92	7.197	7.92	143.78	0.450	0.000	2.00	5.000	2.25	17.8	0.0	237.5
24.00		1.00	0.94	7.330	8.06	145.10	0.450	0.000	2.00	5.000	2.25	18.1	0.0	237.5
26.00		1.00	0.95	7.455	8.20	146.33	0.450	0.000	2.00	5.000	2.25	18.5	0.0	237.5
28.00		1.00	0.97	7.572	8.33	147.48	0.450	0.000	2.00	5.000	2.25	18.7	0.0	237.5
30.00		1.00	0.98	7.683	8.45	148.55	0.450	0.000	2.00	5.000	2.25	19.0	0.0	237.5
32.00		1.00	1.00	7.788	8.57	149.56	0.450	0.000	2.00	5.000	2.25	19.3	0.0	237.5
34.00		1.00	1.01	7.888	8.68	150.52	0.450	0.000	2.00	5.000	2.25	19.5	0.0	237.5
36.00		1.00	1.02	7.984	8.78	151.43	0.450	0.000	2.00	5.000	2.25	19.8	0.0	237.5
38.00		1.00	1.03	8.075	8.88	152.29	0.450	0.000	2.00	5.000	2.25	20.0	0.0	237.5
40.00		1.00	1.04	8.163	8.98	153.12	0.450	0.000	2.00	5.000	2.25	20.2	0.0	237.5
42.00		1.00	1.05	8.247	9.07	153.91	0.450	0.000	2.00	5.000	2.25	20.4	0.0	237.5
44.00		1.00	1.06	8.328	9.16	154.66	0.450	0.000	2.00	5.000	2.25	20.6	0.0	237.5
46.00		1.00	1.07	8.407	9.25	155.39	0.450	0.000	2.00	5.000	2.25	20.8	0.0	237.5
48.00		1.00	1.08	8.482	9.33	156.09	0.450	0.000	2.00	5.000	2.25	21.0	0.0	237.5
50.00	Top - Section 2	1.00	1.09	8.555	9.41	156.76	0.450	0.000	2.00	5.000	2.25	21.2	0.0	237.5
52.00		1.00	1.10	8.626	9.49	125.93	0.450	0.000	2.00	4.000	1.80	17.1	0.0	189.4
54.00		1.00	1.11	8.695	9.56	126.43	0.450	0.000	2.00	4.000	1.80	17.2	0.0	189.4
56.00		1.00	1.12	8.762	9.64	126.91	0.450	0.000	2.00	4.000	1.80	17.3	0.0	189.4
58.00		1.00	1.13	8.827	9.71	127.38	0.450	0.000	2.00	4.000	1.80	17.5	0.0	189.4
60.00		1.00	1.14	8.890	9.78	127.84	0.450	0.000	2.00	4.000	1.80	17.6	0.0	189.4
62.00		1.00	1.14	8.952	9.85	128.28	0.450	0.000	2.00	4.000	1.80	17.7	0.0	189.4
64.00		1.00	1.15	9.012	9.91	128.71	0.450	0.000	2.00	4.000	1.80	17.8	0.0	189.4
66.00		1.00	1.16	9.070	9.98	129.13	0.450	0.000	2.00	4.000	1.80	18.0	0.0	189.4
68.00		1.00	1.17	9.128	10.04	129.53	0.450	0.000	2.00	4.000	1.80	18.1	0.0	189.4
70.00		1.00	1.17	9.183	10.10	129.93	0.450	0.000	2.00	4.000	1.80	18.2	0.0	189.4
72.00		1.00	1.18	9.238	10.16	130.31	0.450	0.000	2.00	4.000	1.80	18.3	0.0	189.4
74.00		1.00	1.19	9.291	10.22	130.69	0.450	0.000	2.00	4.000	1.80	18.4	0.0	189.4
76.00		1.00	1.19	9.344	10.28	131.06	0.450	0.000	2.00	4.000	1.80	18.5	0.0	189.4
78.00		1.00	1.20	9.395	10.33	131.42	0.450	0.000	2.00	4.000	1.80	18.6	0.0	189.4
80.00	Top - Section 3	1.00	1.21	9.445	10.39	131.77	0.450	0.000	2.00	4.000	1.80	18.7	0.0	189.4
82.00		1.00	1.21	9.494	10.44	132.11	0.450	0.000	2.00	4.000	1.80	18.8	0.0	189.4
84.00		1.00	1.22	9.543	10.50	132.45	0.450	0.000	2.00	4.000	1.80	18.9	0.0	189.4
86.00		1.00	1.23	9.590	10.55	132.77	0.450	0.000	2.00	4.000	1.80	19.0	0.0	189.4
88.00		1.00	1.23	9.637	10.60	133.10	0.450	0.000	2.00	4.000	1.80	19.1	0.0	189.4
90.00		1.00	1.24	9.682	10.65	133.41	0.450	0.000	2.00	4.000	1.80	19.2	0.0	189.4
92.00		1.00	1.24	9.727	10.70	133.72	0.450	0.000	2.00	4.000	1.80	19.3	0.0	189.4

Wind Loading - Shaft

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Page: 39
	Struct Class: II	



94.00	1.00	1.25	9.771	10.75	134.02	0.450	0.000	2.00	4.000	1.80	19.3	0.0	189.4		
96.00	1.00	1.25	9.815	10.80	134.32	0.450	0.000	2.00	4.000	1.80	19.4	0.0	189.4		
98.00	1.00	1.26	9.857	10.84	134.61	0.450	0.000	2.00	4.000	1.80	19.5	0.0	189.4		
100.00	1.00	1.27	9.900	10.89	134.90	0.450	0.000	2.00	4.000	1.80	19.6	0.0	189.4		
102.00	1.00	1.27	9.941	10.93	135.18	0.450	0.000	2.00	4.000	1.80	19.7	0.0	189.4		
104.00	1.00	1.28	9.982	10.98	135.46	0.450	0.000	2.00	4.000	1.80	19.8	0.0	189.4		
106.00	1.00	1.28	10.022	11.02	135.73	0.450	0.000	2.00	4.000	1.80	19.8	0.0	189.4		
108.00	1.00	1.29	10.061	11.07	136.00	0.450	0.000	2.00	4.000	1.80	19.9	0.0	189.4		
110.00 Top - Section 4	1.00	1.29	10.100	11.11	136.26	0.450	0.000	2.00	4.000	1.80	20.0	0.0	189.4		
112.00	1.00	1.30	10.139	11.15	227.53	0.450	0.000	2.00	6.667	3.00	33.5	0.0	158.1		
114.00	1.00	1.30	10.176	11.19	227.95	0.450	0.000	2.00	6.667	3.00	33.6	0.0	158.1		
116.00	1.00	1.31	10.214	11.24	228.37	0.450	0.000	2.00	6.667	3.00	33.7	0.0	158.1		
118.00	1.00	1.31	10.251	11.28	228.78	0.450	0.000	2.00	6.667	3.00	33.8	0.0	158.1		
120.00 Top - Section 5 RB1	1.00	1.32	10.287	11.32	229.19	0.450	0.000	2.00	6.667	3.00	33.9	0.0	158.1		
121.00 RT1	1.00	1.32	10.305	11.34	229.39	0.450	0.000	1.00	3.333	1.50	17.0	0.0	39.3		
122.00	1.00	1.32	10.323	11.36	229.59	0.450	0.000	1.00	3.333	1.50	17.0	0.0	39.3		
124.00	1.00	1.32	10.358	11.39	229.98	0.450	0.000	2.00	6.667	3.00	34.2	0.0	78.5		
126.00	1.00	1.33	10.393	11.43	230.37	0.450	0.000	2.00	6.667	3.00	34.3	0.0	78.5		
128.00 Appurtenance(s)	1.00	1.33	10.428	11.47	230.75	0.450	0.000	2.00	6.667	3.00	34.4	0.0	78.5		
130.00 Top - Section 6	1.00	1.34	10.462	11.51	231.13	0.450	0.000	2.00	6.667	3.00	34.5	0.0	78.5		
132.00	1.00	1.34	10.495	11.54	231.50	0.450	0.000	2.00	6.667	3.00	34.6	0.0	78.5		
134.00 Appurtenance(s)	1.00	1.35	10.529	11.58	231.87	0.450	0.000	2.00	6.667	3.00	34.7	0.0	78.5		
136.00	1.00	1.35	10.562	11.62	232.23	0.450	0.000	2.00	6.667	3.00	34.9	0.0	78.5		
138.00	1.00	1.35	10.594	11.65	232.58	0.450	0.000	2.00	6.667	3.00	35.0	0.0	78.5		
140.00 Top - Section 7	1.00	1.36	10.626	11.69	232.94	0.450	0.000	2.00	6.667	3.00	35.1	0.0	78.5		
142.00	1.00	1.36	10.658	11.72	233.28	0.450	0.000	2.00	6.667	3.00	35.2	0.0	78.5		
144.00	1.00	1.37	10.689	11.76	233.63	0.450	0.000	2.00	6.667	3.00	35.3	0.0	78.5		
146.00	1.00	1.37	10.720	11.79	233.97	0.450	0.000	2.00	6.667	3.00	35.4	0.0	78.5		
147.00 Appurtenance(s)	1.00	1.37	10.736	11.81	234.14	0.450	0.000	1.00	3.333	1.50	17.7	0.0	39.3		
148.00	1.00	1.37	10.751	11.83	234.30	0.450	0.000	1.00	3.333	1.50	17.7	0.0	39.3		
150.00 Appurtenance(s)	1.00	1.38	10.782	11.86	234.63	0.450	0.000	2.00	6.667	3.00	35.6	0.0	78.5		
Totals:								150.00				1,746.0			14,069.9

Discrete Appurtenance Forces

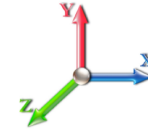
Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 40

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 35

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	150.00	40" Canister Weight	1	10.782	11.860	1.00	1.00	0.00	107.49	0.000	0.000	0.00	0.00	0.00
2	147.00	DPO-7126Y-0-T1	3	10.736	11.809	0.00	1.00	0.00	37.80	0.000	0.000	0.00	0.00	0.00
3	147.00	KIT-FD9R6004/1C-DL	3	10.736	11.809	0.00	1.00	0.00	9.30	0.000	0.000	0.00	0.00	0.00
4	147.00	DHHTT65B-3XR	3	10.736	11.809	0.00	1.00	0.00	136.20	0.000	0.000	0.00	0.00	0.00
5	140.00	40" Canister Weight	1	10.626	11.689	1.00	1.00	0.00	214.97	0.000	0.000	0.00	0.00	0.00
6	134.00	Commscope FVV-65B-R3	3	10.529	11.582	0.00	1.00	0.00	136.80	0.000	0.000	0.00	0.00	0.00
7	134.00	ATSBT-TOP-FM	3	10.529	11.582	0.00	1.00	0.00	5.40	0.000	0.000	0.00	0.00	0.00
8	134.00	ATMAA1412D-A1A20	3	10.529	11.582	0.00	1.00	0.00	39.00	0.000	0.000	0.00	0.00	0.00
9	130.00	40" Canister Weight	1	10.462	11.508	1.00	1.00	0.00	214.97	0.000	0.000	0.00	0.00	0.00
10	128.00	CM1007-DBPXBC-xxx	6	10.428	11.470	0.00	1.00	0.00	39.00	0.000	0.000	0.00	0.00	0.00
11	128.00	TMABPD7823VG12A	6	10.428	11.470	0.00	1.00	0.00	156.00	0.000	0.000	0.00	0.00	0.00
12	128.00	OPA65R-BU4BA	3	10.428	11.470	0.00	1.00	0.00	129.00	0.000	0.000	0.00	0.00	0.00
13	120.00	40" Canister Weight	1	10.287	11.316	1.00	1.00	0.00	214.97	0.000	0.000	0.00	0.00	0.00
14	110.00	40" Canister Weight	1	10.100	11.110	1.00	1.00	0.00	107.49	0.000	0.000	0.00	0.00	0.00
Totals:									1,548.39			0.00		

Total Applied Force Summary

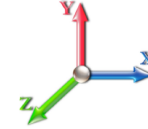
Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 41

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 35

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		19.75	348.39	0.00	0.00
4.00		19.75	348.39	0.00	0.00
6.00		19.75	348.39	0.00	0.00
8.00		19.75	348.39	0.00	0.00
10.00		19.75	348.39	0.00	0.00
12.00		19.75	348.39	0.00	0.00
14.00		19.75	348.39	0.00	0.00
16.00		19.99	348.39	0.00	0.00
18.00		20.49	348.39	0.00	0.00
20.00		20.95	348.39	0.00	0.00
22.00		17.81	300.28	0.00	0.00
24.00		18.14	300.28	0.00	0.00
26.00		18.45	300.28	0.00	0.00
28.00		18.74	300.28	0.00	0.00
30.00		19.02	300.28	0.00	0.00
32.00		19.28	300.28	0.00	0.00
34.00		19.52	300.28	0.00	0.00
36.00		19.76	300.28	0.00	0.00
38.00		19.99	300.28	0.00	0.00
40.00		20.20	300.28	0.00	0.00
42.00		20.41	300.28	0.00	0.00
44.00		20.61	300.28	0.00	0.00
46.00		20.81	300.28	0.00	0.00
48.00		20.99	300.28	0.00	0.00
50.00		21.17	300.28	0.00	0.00
52.00		17.08	252.18	0.00	0.00
54.00		17.22	252.18	0.00	0.00
56.00		17.35	252.18	0.00	0.00
58.00		17.48	252.18	0.00	0.00
60.00		17.60	252.18	0.00	0.00
62.00		17.72	252.18	0.00	0.00
64.00		17.84	252.18	0.00	0.00
66.00		17.96	252.18	0.00	0.00
68.00		18.07	252.18	0.00	0.00
70.00		18.18	252.18	0.00	0.00
72.00		18.29	252.18	0.00	0.00
74.00		18.40	252.18	0.00	0.00
76.00		18.50	252.18	0.00	0.00
78.00		18.60	252.18	0.00	0.00
80.00		18.70	252.18	0.00	0.00
82.00		18.80	252.18	0.00	0.00
84.00		18.89	252.18	0.00	0.00
86.00		18.99	252.18	0.00	0.00
88.00		19.08	252.18	0.00	0.00
90.00		19.17	252.18	0.00	0.00
92.00		19.26	252.18	0.00	0.00

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

94.00		19.35	252.18	0.00	0.00
96.00		19.43	252.18	0.00	0.00
98.00		19.52	252.18	0.00	0.00
100.00		19.60	252.18	0.00	0.00
102.00		19.68	252.18	0.00	0.00
104.00		19.76	252.18	0.00	0.00
106.00		19.84	252.18	0.00	0.00
108.00		19.92	252.18	0.00	0.00
110.00	(1) attachments	20.00	359.67	0.00	0.00
112.00		33.46	275.13	0.00	0.00
114.00		33.58	275.13	0.00	0.00
116.00		33.71	275.13	0.00	0.00
118.00		33.83	275.13	0.00	0.00
120.00	(1) attachments	33.95	490.10	0.00	0.00
121.00		17.00	97.80	0.00	0.00
122.00		17.03	97.80	0.00	0.00
124.00		34.18	195.59	0.00	0.00
126.00		34.30	195.59	0.00	0.00
128.00	(15) attachments	34.41	519.59	0.00	0.00
130.00	(1) attachments	34.52	398.08	0.00	0.00
132.00		34.63	128.81	0.00	0.00
134.00	(9) attachments	34.74	310.01	0.00	0.00
136.00		34.85	91.37	0.00	0.00
138.00		34.96	91.37	0.00	0.00
140.00	(1) attachments	35.07	306.34	0.00	0.00
142.00		35.17	91.37	0.00	0.00
144.00		35.28	91.37	0.00	0.00
146.00		35.38	91.37	0.00	0.00
147.00	(9) attachments	17.71	228.99	0.00	0.00
148.00		17.74	39.27	0.00	0.00
150.00	(1) attachments	35.58	186.02	0.00	0.00
	Totals:	1,745.95	20,412.25	0.00	0.00

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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 35

Dead Load Factor 1.00
Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-20.41	-1.75	0.00	-158.29	0.00	158.29	1490.10	475.94	99948.2	1339.68	0.00	0.000	0.000	0.132
2.00	-20.06	-1.73	0.00	-154.79	0.00	154.79	1490.10	475.94	99948.2	1339.68	0.00	-0.013	0.000	0.129
4.00	-19.71	-1.72	0.00	-151.32	0.00	151.32	1490.10	475.94	99948.2	1339.68	0.01	-0.026	0.000	0.126
6.00	-19.37	-1.70	0.00	-147.89	0.00	147.89	1490.10	475.94	99948.2	1339.68	0.03	-0.039	0.000	0.123
8.00	-19.02	-1.69	0.00	-144.49	0.00	144.49	1490.10	475.94	99948.2	1339.68	0.04	-0.052	0.000	0.121
10.00	-18.67	-1.67	0.00	-141.12	0.00	141.12	1490.10	475.94	99948.2	1339.68	0.07	-0.064	0.000	0.118
12.00	-18.32	-1.65	0.00	-137.78	0.00	137.78	1490.10	475.94	99948.2	1339.68	0.10	-0.076	0.000	0.115
14.00	-17.97	-1.64	0.00	-134.47	0.00	134.47	1490.10	475.94	99948.2	1339.68	0.13	-0.087	0.000	0.112
16.00	-17.62	-1.62	0.00	-131.20	0.00	131.20	1490.10	475.94	99948.2	1339.68	0.17	-0.099	0.000	0.110
18.00	-17.27	-1.60	0.00	-127.96	0.00	127.96	1490.10	475.94	99948.2	1339.68	0.21	-0.110	0.000	0.107
20.00	-16.92	-1.58	0.00	-124.76	0.00	124.76	1490.10	475.94	99948.2	1339.68	0.26	-0.121	0.000	0.104
20.00	-16.92	-1.58	0.00	-124.76	0.00	124.76	1311.06	395.78	69116.5	948.43	0.26	-0.121	0.000	0.144
22.00	-16.62	-1.57	0.00	-121.59	0.00	121.59	1311.06	395.78	69116.5	948.43	0.32	-0.131	0.000	0.141
24.00	-16.32	-1.55	0.00	-118.46	0.00	118.46	1311.06	395.78	69116.5	948.43	0.37	-0.149	0.000	0.137
26.00	-16.02	-1.54	0.00	-115.35	0.00	115.35	1311.06	395.78	69116.5	948.43	0.44	-0.166	0.000	0.134
28.00	-15.72	-1.53	0.00	-112.27	0.00	112.27	1311.06	395.78	69116.5	948.43	0.51	-0.183	0.000	0.130
30.00	-15.42	-1.51	0.00	-109.22	0.00	109.22	1311.06	395.78	69116.5	948.43	0.59	-0.200	0.000	0.127
32.00	-15.12	-1.49	0.00	-106.20	0.00	106.20	1311.06	395.78	69116.5	948.43	0.68	-0.216	0.000	0.124
34.00	-14.82	-1.48	0.00	-103.21	0.00	103.21	1311.06	395.78	69116.5	948.43	0.78	-0.231	0.000	0.120
36.00	-14.52	-1.46	0.00	-100.26	0.00	100.26	1311.06	395.78	69116.5	948.43	0.88	-0.246	0.000	0.117
38.00	-14.22	-1.44	0.00	-97.34	0.00	97.34	1311.06	395.78	69116.5	948.43	0.98	-0.261	0.000	0.113
40.00	-13.92	-1.42	0.00	-94.46	0.00	94.46	1311.06	395.78	69116.5	948.43	1.09	-0.275	0.000	0.110
42.00	-13.62	-1.40	0.00	-91.61	0.00	91.61	1311.06	395.78	69116.5	948.43	1.21	-0.289	0.000	0.107
44.00	-13.32	-1.39	0.00	-88.80	0.00	88.80	1311.06	395.78	69116.5	948.43	1.34	-0.302	0.000	0.104
46.00	-13.02	-1.37	0.00	-86.03	0.00	86.03	1311.06	395.78	69116.5	948.43	1.47	-0.315	0.000	0.101
48.00	-12.72	-1.35	0.00	-83.30	0.00	83.30	1311.06	395.78	69116.5	948.43	1.60	-0.328	0.000	0.098
50.00	-12.42	-1.33	0.00	-80.61	0.00	80.61	1311.06	395.78	69116.5	948.43	1.74	-0.340	0.000	0.094
50.00	-12.42	-1.33	0.00	-80.61	0.00	80.61	1052.07	315.62	43955.0	624.04	1.74	-0.340	0.000	0.141
52.00	-12.16	-1.31	0.00	-77.95	0.00	77.95	1052.07	315.62	43955.0	624.04	1.89	-0.352	0.000	0.136
54.00	-11.91	-1.30	0.00	-75.33	0.00	75.33	1052.07	315.62	43955.0	624.04	2.04	-0.374	0.000	0.132
56.00	-11.66	-1.28	0.00	-72.74	0.00	72.74	1052.07	315.62	43955.0	624.04	2.20	-0.396	0.000	0.128
58.00	-11.41	-1.27	0.00	-70.18	0.00	70.18	1052.07	315.62	43955.0	624.04	2.37	-0.417	0.000	0.123
60.00	-11.15	-1.25	0.00	-67.64	0.00	67.64	1052.07	315.62	43955.0	624.04	2.55	-0.437	0.000	0.119
62.00	-10.90	-1.24	0.00	-65.14	0.00	65.14	1052.07	315.62	43955.0	624.04	2.74	-0.457	0.000	0.115
64.00	-10.65	-1.22	0.00	-62.67	0.00	62.67	1052.07	315.62	43955.0	624.04	2.93	-0.475	0.000	0.111
66.00	-10.40	-1.20	0.00	-60.23	0.00	60.23	1052.07	315.62	43955.0	624.04	3.13	-0.493	0.000	0.106
68.00	-10.14	-1.18	0.00	-57.83	0.00	57.83	1052.07	315.62	43955.0	624.04	3.34	-0.511	0.000	0.102
70.00	-9.89	-1.17	0.00	-55.46	0.00	55.46	1052.07	315.62	43955.0	624.04	3.56	-0.527	0.000	0.098
72.00	-9.64	-1.15	0.00	-53.13	0.00	53.13	1052.07	315.62	43955.0	624.04	3.79	-0.543	0.000	0.094
74.00	-9.39	-1.13	0.00	-50.83	0.00	50.83	1052.07	315.62	43955.0	624.04	4.02	-0.558	0.000	0.090
76.00	-9.14	-1.11	0.00	-48.57	0.00	48.57	1052.07	315.62	43955.0	624.04	4.25	-0.573	0.000	0.087
78.00	-8.88	-1.09	0.00	-46.35	0.00	46.35	1052.07	315.62	43955.0	624.04	4.50	-0.587	0.000	0.083
80.00	-8.63	-1.07	0.00	-44.16	0.00	44.16	1052.07	315.62	43955.0	624.04	4.75	-0.600	0.000	0.079
80.00	-8.63	-1.07	0.00	-44.16	0.00	44.16	1052.07	315.62	43955.0	624.04	4.75	-0.600	0.000	0.079
82.00	-8.38	-1.05	0.00	-42.01	0.00	42.01	1052.07	315.62	43955.0	624.04	5.00	-0.613	0.000	0.075
84.00	-8.13	-1.03	0.00	-39.91	0.00	39.91	1052.07	315.62	43955.0	624.04	5.26	-0.625	0.000	0.072
86.00	-7.87	-1.01	0.00	-37.84	0.00	37.84	1052.07	315.62	43955.0	624.04	5.52	-0.636	0.000	0.068
88.00	-7.62	-0.99	0.00	-35.81	0.00	35.81	1052.07	315.62	43955.0	624.04	5.79	-0.647	0.000	0.065

Calculated Forces

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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

90.00	-7.37	-0.97	0.00	-33.83	0.00	33.83	1052.07	315.62	43955.0	624.04	6.06	-0.657	0.000	0.061
92.00	-7.12	-0.95	0.00	-31.88	0.00	31.88	1052.07	315.62	43955.0	624.04	6.34	-0.667	0.000	0.058
94.00	-6.87	-0.93	0.00	-29.98	0.00	29.98	1052.07	315.62	43955.0	624.04	6.62	-0.676	0.000	0.055
96.00	-6.61	-0.91	0.00	-28.12	0.00	28.12	1052.07	315.62	43955.0	624.04	6.91	-0.684	0.000	0.051
98.00	-6.36	-0.89	0.00	-26.31	0.00	26.31	1052.07	315.62	43955.0	624.04	7.20	-0.692	0.000	0.048
100.00	-6.11	-0.86	0.00	-24.53	0.00	24.53	1052.07	315.62	43955.0	624.04	7.49	-0.700	0.000	0.045
102.00	-5.86	-0.84	0.00	-22.80	0.00	22.80	1052.07	315.62	43955.0	624.04	7.78	-0.706	0.000	0.042
104.00	-5.61	-0.82	0.00	-21.12	0.00	21.12	1052.07	315.62	43955.0	624.04	8.08	-0.713	0.000	0.039
106.00	-5.35	-0.80	0.00	-19.48	0.00	19.48	1052.07	315.62	43955.0	624.04	8.38	-0.719	0.000	0.036
108.00	-5.10	-0.78	0.00	-17.88	0.00	17.88	1052.07	315.62	43955.0	624.04	8.68	-0.724	0.000	0.034
110.00	-4.74	-0.75	0.00	-16.33	0.00	16.33	1052.07	315.62	43955.0	624.04	8.99	-0.729	0.000	0.031
110.00	-4.74	-0.75	0.00	-16.33	0.00	16.33	759.47	227.84	14937.6	114.57	8.99	-0.729	0.000	0.149
112.00	-4.47	-0.72	0.00	-14.83	0.00	14.83	759.47	227.84	14937.6	114.57	9.29	-0.734	0.000	0.135
114.00	-4.19	-0.69	0.00	-13.39	0.00	13.39	759.47	227.84	14937.6	114.57	9.62	-0.835	0.000	0.122
116.00	-3.92	-0.66	0.00	-12.01	0.00	12.01	759.47	227.84	14937.6	114.57	9.99	-0.927	0.000	0.110
118.00	-3.64	-0.62	0.00	-10.70	0.00	10.70	759.47	227.84	14937.6	114.57	10.40	-1.008	0.000	0.098
120.00	-3.15	-0.58	0.00	-9.46	0.00	9.46	759.47	227.84	14937.6	114.57	10.84	-1.081	0.000	0.023
120.00	-3.15	-0.58	0.00	-9.46	0.00	9.46	317.71	95.31	3734.62	52.28	10.84	-1.081	0.000	0.025
121.00	-3.05	-0.56	0.00	-8.87	0.00	8.87	317.71	95.31	3734.62	52.28	11.06	-1.089	0.000	0.028
121.00	-3.05	-0.56	0.00	-8.87	0.00	8.87	317.71	95.31	3734.62	52.28	11.06	-1.089	0.000	0.028
122.00	-2.95	-0.55	0.00	-8.31	0.00	8.31	317.71	95.31	3734.62	52.28	11.29	-1.098	0.000	0.168
124.00	-2.76	-0.51	0.00	-7.21	0.00	7.21	317.71	95.31	3734.62	52.28	11.77	-1.207	0.000	0.147
126.00	-2.56	-0.48	0.00	-6.18	0.00	6.18	317.71	95.31	3734.62	52.28	12.30	-1.302	0.000	0.126
128.00	-2.04	-0.44	0.00	-5.22	0.00	5.22	317.71	95.31	3734.62	52.28	12.86	-1.382	0.000	0.106
130.00	-1.65	-0.39	0.00	-4.35	0.00	4.35	317.71	95.31	3734.62	52.28	13.46	-1.450	0.000	0.088
130.00	-1.65	-0.39	0.00	-4.35	0.00	4.35	317.71	95.31	3734.62	52.28	13.46	-1.450	0.000	0.088
132.00	-1.52	-0.36	0.00	-3.57	0.00	3.57	317.71	95.31	3734.62	52.28	14.08	-1.506	0.000	0.073
134.00	-1.21	-0.31	0.00	-2.85	0.00	2.85	317.71	95.31	3734.62	52.28	14.72	-1.551	0.000	0.058
136.00	-1.12	-0.28	0.00	-2.22	0.00	2.22	317.71	95.31	3734.62	52.28	15.37	-1.587	0.000	0.046
138.00	-1.03	-0.24	0.00	-1.67	0.00	1.67	317.71	95.31	3734.62	52.28	16.04	-1.614	0.000	0.035
140.00	-0.72	-0.20	0.00	-1.18	0.00	1.18	317.71	95.31	3734.62	52.28	16.73	-1.634	0.000	0.025
140.00	-0.72	-0.20	0.00	-1.18	0.00	1.18	317.71	95.31	3734.62	52.28	16.73	-1.634	0.000	0.025
142.00	-0.63	-0.16	0.00	-0.79	0.00	0.79	317.71	95.31	3734.62	52.28	17.41	-1.648	0.000	0.017
144.00	-0.54	-0.12	0.00	-0.47	0.00	0.47	317.71	95.31	3734.62	52.28	18.11	-1.657	0.000	0.011
146.00	-0.45	-0.08	0.00	-0.23	0.00	0.23	317.71	95.31	3734.62	52.28	18.80	-1.662	0.000	0.006
147.00	-0.22	-0.06	0.00	-0.14	0.00	0.14	317.71	95.31	3734.62	52.28	19.15	-1.663	0.000	0.003
148.00	-0.18	-0.04	0.00	-0.08	0.00	0.08	317.71	95.31	3734.62	52.28	19.50	-1.664	0.000	0.002
150.00	0.00	-0.04	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	20.19	-1.665	0.000	0.000

Final Analysis Summary

Structure: CT01493-S-SBA	Code: TIA-222-H	4/12/2022
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (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



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 129 mph Wind	9.5	0.00	24.49	0.00	0.00	870.66
0.9D + 1.0W 129 mph Wind	9.5	0.00	18.36	0.00	0.00	854.84
1.2D + 1.0Di + 1.0Wi 50 mph Wind	4.5	0.00	31.08	0.00	0.00	457.08
1.2D + 1.0Ev + 1.0Eh	0.3	0.00	25.31	0.00	0.00	31.29
0.9D + 1.0Ev + 1.0Eh	0.3	0.00	19.13	0.00	0.00	30.75
1.0D + 1.0W 60 mph Wind	1.7	0.00	20.41	0.00	0.00	158.29

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 129 mph Wind	-3.24	-3.04	0.00	-45.97	0.00	-45.97	317.71	95.31	3734.62	52.28	122.00	0.891
0.9D + 1.0W 129 mph Wind	-2.37	-2.93	0.00	-44.26	0.00	-44.26	317.71	95.31	3734.62	52.28	122.00	0.855
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-6.22	-2.02	0.00	-33.15	0.00	-33.15	317.71	95.31	3734.62	52.28	122.00	0.654
1.2D + 1.0Ev + 1.0Eh	-20.99	-0.28	0.00	-25.82	0.00	-25.82	1490.10	475.94	99948.2	1339.68	20.00	0.043
0.9D + 1.0Ev + 1.0Eh	-15.86	-0.27	0.00	-25.30	0.00	-25.30	1490.10	475.94	99948.2	1339.68	20.00	0.039
1.0D + 1.0W 60 mph Wind	-2.95	-0.55	0.00	-8.31	0.00	-8.31	317.71	95.31	3734.62	52.28	122.00	0.168

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors			Lower Termination				Upper Termination				Max Member			
			VQ/I (lb/in)	Vu (kips)	phi Vn (kips)	MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Pu (kips)	phi Pn (kips)	phi Tn (kips)	Ratio
120.0	121.0	(3) PLT-5/8"x6"STFNR	262.4	0.79	25.3	46.2	25.3	2	2	49.5	25.3	2	2	49.53	121.1	121.50	0.409



Monopole Mat Foundation Design

Date

4/12/2022

Customer Name:	T-Mobile	EIA/TIA Standard:	TIA-222-H
Site Name:		Structure Height (Ft.):	150
Site Number:	CT01493-S-SBA	Engineer Name:	J. Tibbetts
Engr. Number:		Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations
Monopole
Analysis

Structure Type:

Analysis or Design?

Base Reactions (Factored):

Axial Load (Kips):	24.5	Shear Force (Kips):	9.5
Uplift Force (Kips):	0.0	Moment (Kips-ft):	870.7

Allowable overstress %: 5.0%

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	4.5	Depth of Base BG (ft.):	5.0
Pier Height A. G. (ft.):	0.50	Thickness of Pad (ft):	2.50
Length of Pad (ft.):	13.5	Width of Pad (ft.):	13.5
Final Length of pad (ft)	13.5	Final width of pad (ft):	13.5

Material Properties and Rebar Info:

Concrete Strength (psi):	3000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	7	Tie / Stirrup Size #:	5	
Qty. of Vertical Rebars:	24	Tie Spacing (in):	12.0	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	8	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf

Rebar at the bottom of the concrete pad:

Qty. of Rebar in Pad (L):	17	Qty. of Rebar in Pad (W):	17
---------------------------	----	---------------------------	----

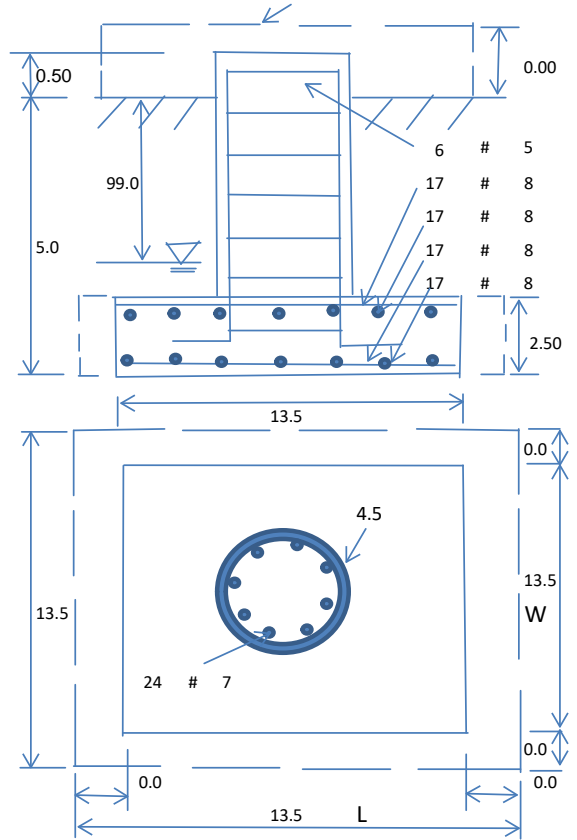
Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	17	Qty. of Rebar in Pad (W):	17
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Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

Soil Unit Weight (pcf):	135.0	Soil Buoyant Weight:	50.0	Pcf		
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	30000	Ultimate Skin Friction:	225	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	Yes	Consider Friction for bearing (Y/N):	No		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	Yes	Reduction factor on the maximum soil bearing pressure:	1.00			



Foundation Analysis and Design:

Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75
Total Dry Soil Volume (cu. Ft.):	415.86	Total Dry Soil Weight (Kips):	56.14
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	56.14	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	503.34	Total Dry Concrete Weight (Kips):	75.50
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	75.50	Total Vertical Load on Base (Kips):	156.14

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	4651	<	Allowable Factored Soil Bearing (psf):	22500	0.21	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	1042.0	>	Design Factored Momont (kips-ft):	868	0.83	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.20					OK!

Load/
Capacity
Ratio

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):	0.60	Tie / Stirrup Area (sq. in./each):	0.31		
Calculated Moment Capacity (Mn,Kips-Ft):	1475.8	> Design Factored Moment (Mu, Kips-F	899.2	0.61	OK!
Calculated Shear Capacity (Kips):	322.1	> Design Factored Shear (Kips):	9.5	0.03	OK!
Calculated Tension Capacity (Tn, Kips):	777.6	> Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	3017.7	> Design Factored Axial Load (Pu Kips):	24.5	0.01	OK!
Moment & Axial Strength Combination:	0.61	OK! Check Tie Spacing (Design/Required):		1	OK!
Pier Reinforcement Ratio:	0.006	Reinforcement Ratio is satisfied per ACI			

(2).Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):	352.7	> One-Way Factored Shear (L-D. Kips):	70.0	0.20	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	352.7	> One-Way Factored Shear (W-D., Kips)	70.0	0.20	OK!
One-Way Design Shear Capacity (Corner-Corner, Kips):	265.8	> One-Way Factored Shear (C-C, Kips):	71.8	0.27	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0031	OK! Lower Steel Pad Reinf. Ratio (W-Direc	0.0031		
Lower Steel Pad Moment Capacity (L-Direction, Kips-ft):	1542.6	> Moment at Bottom (L-Dir. K-Ft):	219.6	0.14	OK!
Lower Steel Pad Moment Capacity (W-Direction, Kips-ft):	1542.6	> Moment at Bottom (W-Dir. K-Ft):	219.6	0.14	OK!
Lower Steel Pad Moment Capacity (Corner-Corner, K-ft):	2155.8	> Moment at Bottom (C-C Dir. K-Ft):	310.5	0.14	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0031	OK! Upper Steel Reinf. Ratio (W-Dir.):	0.0031		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	1542.6	> Moment at the top (L-Dir K-Ft):	90.2	0.06	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	1542.6	> Moment at the top (W-Dir K-Ft):	90.2	0.06	OK!
Upper Steel Pad Moment Capacity (Corner-Corner, K-ft):	2155.8	> Moment at the top (C-C Dir. K-Ft):	92.2	0.04	OK!

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

Moment transferred by punching shear:	348.3	k-ft.	Max. factored shear stress $v_{u,CD}$:	2.3	Psi
Max. factored shear stress $v_{u,AB}$:	7.8	Psi	Factored shear Strength ϕv_n :	164.3	Psi
Max. factored shear stress v_u :	7.8	Psi	Check Usage of Punching Shear Capacity:	0.05	OK!

Exhibit E

Power Density/RF Emissions Report

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

T-Mobile Existing Facility

Site ID: CT11310A

SBA Stonington
811 Stonington Road
Stonington, Connecticut 06379

April 28, 2022

EBI Project Number: 6222002870

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	13.42%

April 28, 2022

T-Mobile

Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, Connecticut 06002

Emissions Analysis for Site: CT11310A - SBA Stonington

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **811 Stonington Road in Stonington, Connecticut** for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

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

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

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 600 MHz and 700 MHz frequency bands are approximately $400 \mu\text{W}/\text{cm}^2$ and $467 \mu\text{W}/\text{cm}^2$, respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 11 GHz frequency bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at 811 Stonington Road in Stonington, Connecticut using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was focused at the base of the tower. For this report, the sample point is the top of a 6-foot person standing at the base of the tower.

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

- 1) 2 LTE channels (600 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 2) 1 NR channel (600 MHz Band) was considered for each sector of the proposed installation. This Channel has a transmit power of 80 Watts.
- 3) 2 LTE channels (700 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 4) 4 GSM channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 5) 2 UMTS channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 6) 2 LTE channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

- 7) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 8) 2 LTE BRS channels (2500 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.
- 9) 2 NR BRS channels (2500 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.
- 10) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 11) For the following calculations, the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 12) The antennas used in this modeling are the Commscope FVV-65B-R3 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 1900 MHz / 2100 MHz / 2500 MHz / 2500 MHz channel(s) in Sector A, the Commscope FVV-65B-R3 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 1900 MHz / 2100 MHz / 2500 MHz / 2500 MHz channel(s) in Sector B, the Commscope FVV-65B-R3 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 1900 MHz / 2100 MHz / 2500 MHz / 2500 MHz channel(s) in Sector C. This is based on feedback from the carrier with regard to anticipated antenna selection. All Antenna gain values and associated transmit power levels are shown in the Site Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 13) The antenna mounting height centerline of the proposed antennas is 134 feet above ground level (AGL).

- 14) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.
- 15) All calculations were done with respect to uncontrolled / general population threshold limits.

T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	I	Antenna #:	I	Antenna #:	I
Make / Model:	Commscope FVV-65B-R3	Make / Model:	Commscope FVV-65B-R3	Make / Model:	Commscope FVV-65B-R3
Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz / 2500 MHz / 2500 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz / 2500 MHz / 2500 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz / 2500 MHz / 2500 MHz
Gain:	11.48 dBd / 11.48 dBd / 11.9 dBd / 15.17 dBd / 15.17 dBd / 16.12 dBd / 16.36 dBd / 16.36 dBd	Gain:	11.48 dBd / 11.48 dBd / 11.9 dBd / 15.17 dBd / 15.17 dBd / 16.12 dBd / 16.36 dBd / 16.36 dBd	Gain:	11.48 dBd / 11.48 dBd / 11.9 dBd / 15.17 dBd / 15.17 dBd / 16.12 dBd / 16.36 dBd / 16.36 dBd
Height (AGL):	134 feet	Height (AGL):	134 feet	Height (AGL):	134 feet
Channel Count:	19	Channel Count:	19	Channel Count:	19
Total TX Power (W):	780.00 Watts	Total TX Power (W):	780.00 Watts	Total TX Power (W):	780.00 Watts
ERP (W):	24,594.65	ERP (W):	24,594.65	ERP (W):	24,594.65
Antenna AI MPE %:	6.28%	Antenna BI MPE %:	6.28%	Antenna CI MPE %:	6.28%

Site Composite MPE %	
Carrier	MPE %
T-Mobile (Max at Sector A):	6.28%
Sprint	2.72%
Metro PCS	0.4%
AT&T	4.02%
Site Total MPE % :	13.42%

T-Mobile MPE % Per Sector	
T-Mobile Sector A Total:	6.28%
T-Mobile Sector B Total:	6.28%
T-Mobile Sector C Total:	6.28%
Site Total MPE % :	13.42%

T-Mobile Maximum MPE Power Values (Sector A)							
T-Mobile Frequency Band / Technology (Sector A)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
T-Mobile 600 MHz LTE	2	421.81	134.0	1.85	600 MHz LTE	400	0.46%
T-Mobile 600 MHz NR	1	1124.84	134.0	2.47	600 MHz NR	400	0.62%
T-Mobile 700 MHz LTE	2	464.64	134.0	2.04	700 MHz LTE	467	0.44%
T-Mobile 1900 MHz GSM	4	986.55	134.0	8.66	1900 MHz GSM	1000	0.87%
T-Mobile 1900 MHz UMTS	2	986.55	134.0	4.33	1900 MHz UMTS	1000	0.43%
T-Mobile 1900 MHz LTE	2	1973.11	134.0	8.66	1900 MHz LTE	1000	0.87%
T-Mobile 2100 MHz LTE	2	2455.56	134.0	10.78	2100 MHz LTE	1000	1.08%
T-Mobile 2500 MHz LTE	2	1730.06	134.0	7.59	2500 MHz LTE	1000	0.76%
T-Mobile 2500 MHz NR	2	1730.06	134.0	7.59	2500 MHz NR	1000	0.76%
						Total:	6.28%

• NOTE: Totals may vary by approximately 0.01% due to summation of remainders in calculations.

Summary

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

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


T-Mobile Sector	Power Density Value (%)
Sector A:	6.28%
Sector B:	6.28%
Sector C:	6.28%
T-Mobile Maximum MPE % (Sector A):	6.28%
Site Total:	13.42%
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **13.42%** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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

Exhibit F

Recipient Mailings



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Expected Delivery Date: 05/03/22
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R005

SHIP TO: KRI PELLETIER
 SBA COMMUNICATIONS CORPORATION
 13 FLANDERS RD
 STE 125
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1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.
2. Place your label so it does not wrap around the edge of the package.
3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING # :
9405 5036 9930 0238 3407 17

Trans. #: 562603051	Priority Mail® Postage: \$8.95
Print Date: 05/02/2022	Total: \$8.95
Ship Date: 05/02/2022	
Expected Delivery Date: 05/03/2022	

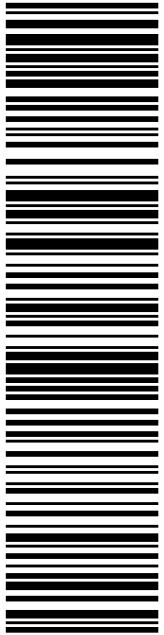
From: DEBORAH CHASE Ref#: SBCT-310A
 NORTHEAST SITE SOLUTIONS
 420 MAIN ST
 STE 1
 STURBRIDGE MA 01566-1359

To: KRI PELLETIER
 SBA COMMUNICATIONS CORPORATION
 13 FLANDERS RD
 STE 125
 WESTBOROUGH MA 01581

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C001

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Click-N-Ship® Label Record

USPS TRACKING # :
9405 5036 9930 0238 3407 24

Trans. #: 562603051	Priority Mail® Postage: \$8.95
Print Date: 05/02/2022	Total: \$8.95
Ship Date: 05/02/2022	
Expected Delivery Date: 05/05/2022	

From: DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

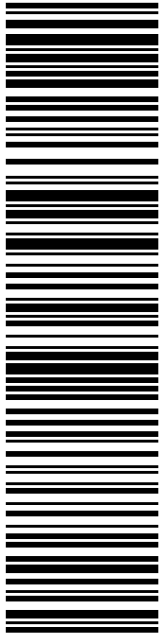
Ref#: SBCT-310A

To: KEITH BYRNES
TOWN PLANNER- STONINGTON
152 ELM ST
STONINGTON CT 06378-1139

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Electronic Rate Approved #038555749

SHIP TO: DANIELLE CHESEBROUGH
FIRST SELECTMAN- TOWN OF STONINGTON
152 ELM ST
STONINGTON CT 06378-1139

C001

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DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

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Click-N-Ship® Label Record

USPS TRACKING # :
9405 5036 9930 0238 3407 31

Trans. #: 562603051	Priority Mail® Postage: \$8.95
Print Date: 05/02/2022	Total: \$8.95
Ship Date: 05/02/2022	
Expected Delivery Date: 05/05/2022	

From: DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359


Ref#: SBCT-310A

To: DANIELLE CHESEBROUGH
FIRST SELECTMAN- TOWN OF STONINGTON
152 ELM ST
STONINGTON CT 06378-1139

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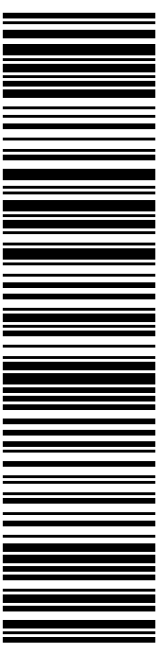
05/02/2022 Mailed from 01566

PRIORITY MAIL 2-DAY™

Expected Delivery Date: 05/05/22
 Ref#: SBCT-310
0006

SHIP TO: PHILLIP MCCLELLAN
 C/O SBA TOWERS INC.
 8051 CONGRESS AVE
 BOCA RATON FL 33487-1307

USPS TRACKING #



9405 5036 9930 0238 3407 48

Electronic Rate Approved #038555749



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- Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING # :	
9405 5036 9930 0238 3407 48	
Trans. #:	562603051
Print Date:	05/02/2022
Ship Date:	05/02/2022
Expected Delivery Date:	05/05/2022
Priority Mail® Postage:	\$8.95
Total:	\$8.95
From:	DEBORAH CHASE NORTHEAST SITE SOLUTIONS 420 MAIN ST STE 1 STURBRIDGE MA 01566-1359
To:	PHILLIP MCCLELLAN C/O SBA TOWERS INC. 8051 CONGRESS AVE BOCA RATON FL 33487-1307
	Ref#: SBCT-310
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CE11310A SBA TMO



FARMINGTON
210 MAIN ST
FARMINGTON, CT 06032-9998
(800)275-8777

05/02/2022 04:23 PM

Product	Qty	Unit Price	Price
Prepaid Mail Westborough, MA 01581 Weight: 0 lb 1.90 oz Acceptance Date: Mon 05/02/2022 Tracking #: 9405 5036 9930 0238 3407 17	1		\$0.00
Prepaid Mail Stonington, CT 06378 Weight: 0 lb 5.30 oz Acceptance Date: Mon 05/02/2022 Tracking #: 9405 5036 9930 0238 3407 24	1		\$0.00
Prepaid Mail Stonington, CT 06378 Weight: 0 lb 5.30 oz Acceptance Date: Mon 05/02/2022 Tracking #: 9405 5036 9930 0238 3407 31	1		\$0.00
Grand Total:			\$0.00

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 eligible to receive a second set
 of 4 free test kits.
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CT11310A SBA TMO



FARMINGTON
210 MAIN ST
FARMINGTON, CT 06032-9998
(800)275-8777

05/04/2022 09:54 AM

Product	Qty	Unit Price	Price
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Prepaid Mail	1		\$0.00
Farmington, CT 06032			
Weight: 0 lb 13.10 oz			
Acceptance Date:			
Wed 05/04/2022			
Tracking #:			
9405 5036 9930 0238 4439 44			

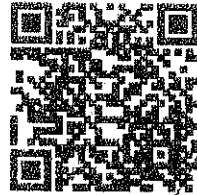
Grand Total:			\$0.00
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 Every household in the U.S. is now eligible to receive a second set of 4 free test kits.
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 Receipt #: 840-50600020-1-4706280-1
 Clerk: 9