



May 30, 2025

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

**T-MOBILE SUB-PETITION FOR DECLATORY RULING:**  
**ELIGIBLE FACILITIES REQUEST FOR MODIFICATIONS**  
**THAT WILL NOT SUBSTANTIALLY CHANGE PHYSICAL DIMENSIONS**  
**OF AN EXISTING BASE STATION**

**I. INTRODUCTION:**

Pursuant to Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, codified at 47 U.S.C. § 1455(a) ("Section 6409(a)") and the October 21, 2014 Report and Order (FCC-14-153) issued by the Federal Communications Commission ("FCC") (the "FCC Order"), T-Mobile Northeast LLC ("T-Mobile") hereby petitions the Connecticut Siting Council (the "Council") for a declaratory ruling ("Sub-Petition") that the installation of replacement antennas and related telecommunications equipment at the existing wireless telecommunications base station at 746 Danbury Road, Ridgefield, Connecticut (the "Property") constitutes an Eligible Facilities Request ("EFR") under the FCC Order.

**II. BACKGROUND:**

On July 27, 2000, the Council approved T-Mobile's application for Tower Share (TS-VOICESTREAM-118-000712), and subsequently approved Exempt Modification Requests for both T-Mobile (EM-T-MOBILE-118-140715, dated 08/04/2014) and American Tower (EM-ATC-118-210630, dated 07/26/2021). The approved facility consists of a 99-foot flagpole tower within a fenced compound area. T-Mobile maintains two (2) antennas and (2) TMAs, located inside an RF transparent screening shroud 40-inches in diameter at the 85.5' on the tower. Ground Equipment associated with T-Mobile's antennas are located on a concrete pad, within the fenced compound. The tower is also shared by other providers with antennas at the 94-foot level. A copy of prior approvals by the Council are included in Exhibit A.

**III. REQUEST TO MODIFY:**

T-Mobile intends to remove the two (2) existing antennas and two (2) TMAs and install three (3) new model FVV-65A-R3 antennas and six (6) model TMAT19G21BL26-21 TMAs the 85.5-foot level. T-Mobile will also remove the three (3) antennas above its antennas at the 94-foot level. To accommodate T-Mobile's proposed modifications, and likely future modifications, the existing

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West Bridgewater, MA 02379  
781-713-4725

antenna screening shroud will be replaced with a larger (48" diameter) shroud. T-Mobile also intends to remove two (2) existing ground-mounted cabinets and install two (2) proposed ground-mounted cabinets. Construction Drawings for the proposed modifications are included in Exhibit B.

Additionally, according to the attached Structural Analysis ("SA") the existing tower, tower foundation and new antenna mounts can support T-Mobile's proposed modifications. A copy of the SA is included in Exhibit C.

#### **IV. DISCUSSION**

##### **A. The Proposed Modification Will Not Cause a Substantial Change to the Physical Dimensions of the Existing Base Station:**

Section 6409(a) provides, in relevant part, that "a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." Pursuant to the FCC Order, the proposed modification does not substantially change the physical dimensions of the base station should all the following criteria be satisfied

1. The proposed modified facility will not increase the height of the tower. T-Mobile does not intend to increase the height of the existing tower. T-Mobile's new antennas and TMAs will be located at the same heights and locations, generally, as its existing antennas.

2. The proposed facility modification will not protrude from the edge of the structure more than six (6) feet. T-Mobile's antennas and RRHs will be located inside a 48" diameter antenna screening shroud. Neither the new antennas nor the screening shroud would protrude more than six (6) feet from the face of the tower.

3. The proposed facility does not involve installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four (4) cabinets.

4. The proposed facility does not entail any excavation or deployment outside the current site of the base station. T-Mobile's proposed facility modifications will remain within the limits of the Property and the existing fenced compound.

5. The proposed facility does not defeat the existing concealment elements of the base station. Following T-Mobile's modifications, the shroud concealing the antennas will expand to 48-inch diameter. All antennas for all carriers will remain concealed within the top portion of the flagpole by the antenna shroud, and the tower will continue to appear to be a flagpole.

6. The proposed facility complies with conditions associated with the prior approval of construction or modification of the base station. T-Mobile's proposed facility modifications are consistent with the Siting Council's approvals in TS-VOICESTREAM-118-000712, EM-T-MOBILE-118-140715, and EM-ATC-118-210630.

B. FCC Compliance

The Power Density/RF Emissions Report for the proposed modified facility confirms that the modified tower site will operate well within the FCC safety standards for radio frequency emissions. A copy of this report is attached as Exhibit D.

C. Notice to the Town, Property Owner and Abutting Landowners

On November 25, 2024, a copy of this Sub-Petition was sent to the Town of Ridgefield's First Selectman, Rudy Marconi, and the Town's Building Official, Jason Celestino; and Keeler Property Holdings LLC, the owner of the Property. A copy of this Sub-Petition was also sent to the owners of land which abut the Property. Copies of the Letters to the Town, Property Owner, a sample abutter's letter and the list of those abutting landowners who were sent notice and a copy of this filing are included in Exhibit E.

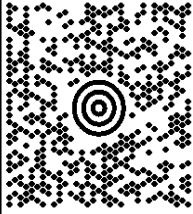
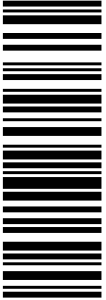
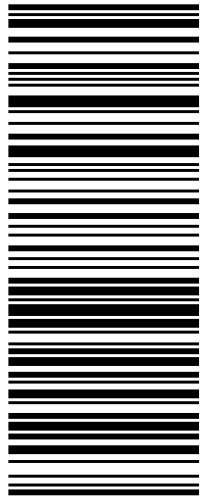

**V. CONCLUSION:**

Based on the information provided above, T-Mobile respectfully submits that the proposed modification of the existing base station at the Property constitutes an "eligible facilities request" under Section 6409(a) and the FCC Order.

Respectfully Submitted,



**Cullen Morgan**  
**Site Acquisition Consultant**  
**Centerline Communications, LLC (Agent to T-Mobile)**  
**Mobile: (941) 549-7263**  
**Email: [cmorgan@clinellc.com](mailto:cmorgan@clinellc.com)**

C/O CULLEN MORGAN 941-549-7263 CENTERLINE COMMUNICATIONS LLC 12579 SAGEWOOD DRIVE VENICE FL 34293		2 LBS	1 OF 1
SHIP TO: CONNECTICUT SITING COUNCIL 10 FRANKLIN SQUARE NEW BRITAIN CT 06051-2655			
	CT 067 9-06 		
UPS GROUND			
TRACKING #: 1Z 9Y4 503 03 1080 4162			
			
BILLING: P/P			
Reference # 1: CT11297C - CSC EFR Subpetition			
<div>CS 25.0.04.    MACNV50 22.0A 05/2025*</div> <div>TM</div>			

# **EXHIBIT A**

**Prior Council Approvals**



STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

Ten Franklin Square  
New Britain, Connecticut 06051  
Phone: (860) 827-2935  
Fax: (860) 827-2950

July 27, 2000

J. Brendan Sharkey, Esq.  
VoiceStream Wireless Corporation  
100 Filley Street  
Bloomfield, CT 06002

RE: TS-VOICESTREAM-118-000712 - Omnipoint Communications, Inc. request for an order to approve tower sharing at an existing telecommunications tower located at 746 Danbury Road, Ridgefield, Connecticut.

Dear Attorney Sharkey:

At a public meeting held July 25, 2000, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated July 12, 2000.

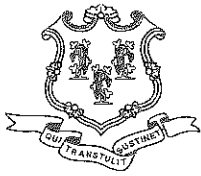
Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston  
Chairman

MAG/RKE/laf

c: Honorable Rudolph P. Marconi, First Selectman, Town of Ridgefield  
Ronald C. Clark, Nextel Communications



STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)

[www.ct.gov/csc](http://www.ct.gov/csc)

August 4, 2014

Jennifer Notaro  
Real Estate Consultant  
10 Industrial Ave, Suite 3  
Mahwah, NJ 07430

RE: **EM-T-MOBILE-118-140715** - T-Mobile Northeast LLC notice of intent to modify an existing telecommunications facility located at 746 Danbury Road, Ridgefield, Connecticut.

Dear Jennifer Notaro:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- Install coax in accordance with the structural analysis report prepared by ATC, stamped by Raphael I. Mohamed on June 30, 2014;
- Within 45 days following completion of the antenna installation, T-Mobile shall provide documentation certified by a professional engineer that its installation complied with the requirements of the structural analysis;
- Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by ATC shall be removed within 60 days of the date the antenna ceased to function;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.


The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated June 27, 2014. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site by any dimension, increase noise levels at the tower site



boundary by six decibels or more, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standards adopted by the Federal Communications Commission pursuant to Section 704 of the Telecommunications Act of 1996 and by the state Department of Energy and Environmental Protection pursuant to Connecticut General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below state and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,



Melanie A. Bachman  
Acting Executive Director

MAB/RM/lm

c: The Honorable Rudolph P. Marconi, First Selectman, Town of Ridgefield  
Betty Brosius, Town Planner, Town of Ridgefield  
American Tower Corporation





STATE OF CONNECTICUT  
*CONNECTICUT SITING COUNCIL*

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)

Web Site: [portal.ct.gov/csc](http://portal.ct.gov/csc)

**VIA ELECTRONIC MAIL**

July 26, 2021

Margie Weber  
Program Manager  
NB+C, LLC  
1777 Sentry Parkway West, VEVA 17, Suite 400  
Blue Bell, PA 19422

RE: **EM-ATC-118-210630** – American Tower Corporation (ATC) notice of intent to modify an existing telecommunications facility located at 746 Danbury Road, Ridgefield, Connecticut.

Dear Ms. Weber:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

1. Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
2. Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
3. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities;
4. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
5. Any nonfunctioning equipment at this facility owned and operated by ATC shall be removed within 60 days of the date the equipment ceased to function;
6. The validity of this action shall expire one year from the date of this letter; and
7. The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated June 24, 2021. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site by any dimension, increase noise levels at the tower site boundary by six decibels or more, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standards adopted by the Federal Communications

Commission pursuant to Section 704 of the Telecommunications Act of 1996 and by the state Department of Energy and Environmental Protection pursuant to Connecticut General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below state and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Sincerely,

*s/ Melanie A. Bachman*

Melanie A. Bachman  
Executive Director

MAB/FOC/emr

c: The Honorable Rudolph P. Marconi, First Selectman, Town of Ridgefield  
(selectman@ridgefieldct.org)

# **EXHIBIT B**

## **Construction Drawings**



ATC SITE NAME: RIDGEFIELD-DANBURY RD.  
ATC SITE NUMBER: 302471  
T-MOBILE SITE NAME: RIDGEFIELD/ RT 7  
T-MOBILE SITE NUMBER: CT11297C  
SITE ADDRESS: 746 DANBURY RD  
RIDGEFIELD, CT 06877  
SITE CLASS: STEALTH - CANISTER POLE

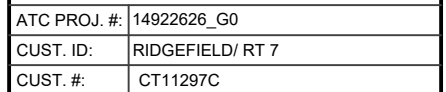
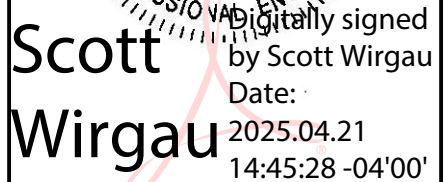


THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	VAR	04/21/25

ATC SITE NUMBER:  
**302471**  
ATC SITE NAME:  
**RIDGEFIELD-DANBURY RD.**  
T-MOBILE SITE NAME:  
**RIDGEFIELD/ RT 7**  
SITE ADDRESS:  
**746 DANBURY RD**  
**RIDGEFIELD, CT 06877**

SEAL:



G-001

0

[illegible]



GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, T-MOBILE "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
- A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)

B. AC/TELCO INTERFACE BOX (PPC)

C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)

D. TOWERS, MONOPOLES

E. TOWER LIGHTING

F. GENERATORS & LIQUID PROPANE TANK

G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING

H. ANTENNAS (INSTALLED BY OTHERS)

I. TRANSMISSION LINE

J. TRANSMISSION LINE JUMPERS

K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS

L. TRANSMISSION LINE GROUND KITS

M. HANGERS

N. HOISTING GRIPS

O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF T-MOBILE TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE T-MOBILE REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE T-MOBILE REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE T-MOBILE REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE T-MOBILE CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE T-MOBILE REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH T-MOBILE AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.

22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY T-MOBILE MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH T-MOBILE SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO T-MOBILE FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO T-MOBILE SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
27. CONTRACTOR SHALL NOTIFY T-MOBILE REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
28. WHEN THE PROJECT SCOPE REQUIRES THE USE OF THE SAFETY CLIMB, THE GENERAL CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS FREE OF OBSTRUCTIONS, NOT RUBBING ON OR TRAPPED BY ANY INSTALLED CUSTOMER EQUIPMENT, IS VISUALLY TAUT, MEETS MANUFACTURER INSTALLATION SPECIFICATIONS, AND IS FIRMLY SECURED AT ALL CABLE GUIDE LOCATIONS UPON PROJECT COMPLETION.
29. COMPLETION OF PROJECT SHALL NOT OBSTRUCT, TRAP, LOOSEN, OR OTHERWISE CAUSE FAILURE TO MEET MANUFACTURER INSTALLATION REQUIREMENTS FOR THE SAFETY CLIMB.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
31. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
32. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE T-MOBILE REP. ANY WORK FOUND BY THE T-MOBILE REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
33. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
34. T-MOBILE FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE T-MOBILE WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
35. T-MOBILE OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO T-MOBILE OR THEIR ARCHITECT/ENGINEER.

SPECIAL CONSTRUCTION

ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
- A. ANTENNA AND COAXIAL/HYBRID CABLES ARE FURNISHED BY T-MOBILE UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL.

B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND T-MOBILE SPECIFICATIONS.

C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.

D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.

E. INSTALL COAXIAL/HYBRID CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL/HYBRID CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
2. ANTENNA AND COAXIAL/HYBRID CABLE GROUNDING:
- A. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.

- B. ALL COAXIAL/HYBRID CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL/HYBRID CABLE (NOT WITHIN BENDS)

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.



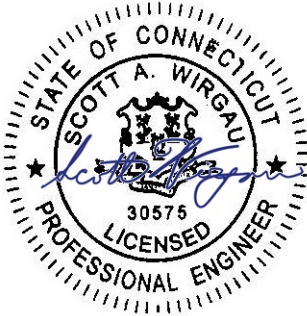
**AMERICAN TOWER®**  
**A.T. ENGINEERING SERVICES LLC**  
**1 FENTON MAIN**  
**SUITE 300**  
**CARY, NC 27511**  
**PHONE: (919) 468-0112**  
**PEC.0001553**

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	VAR	04/21/25

ATC SITE NUMBER:  
**302471**  
ATC SITE NAME:  
**RIDGEFIELD-DANBURY RD.**  
T-MOBILE SITE NAME:  
**RIDGEFIELD/ RT 7**  
SITE ADDRESS:  
746 DANBURY RD  
RIDGEFIELD, CT 06877

SEAL:



Digitally Signed: 2025-04-21



ATC PROJ. #:	14922626_G0
CUST. ID:	RIDGEFIELD/ RT 7
CUST. #:	CT11297C

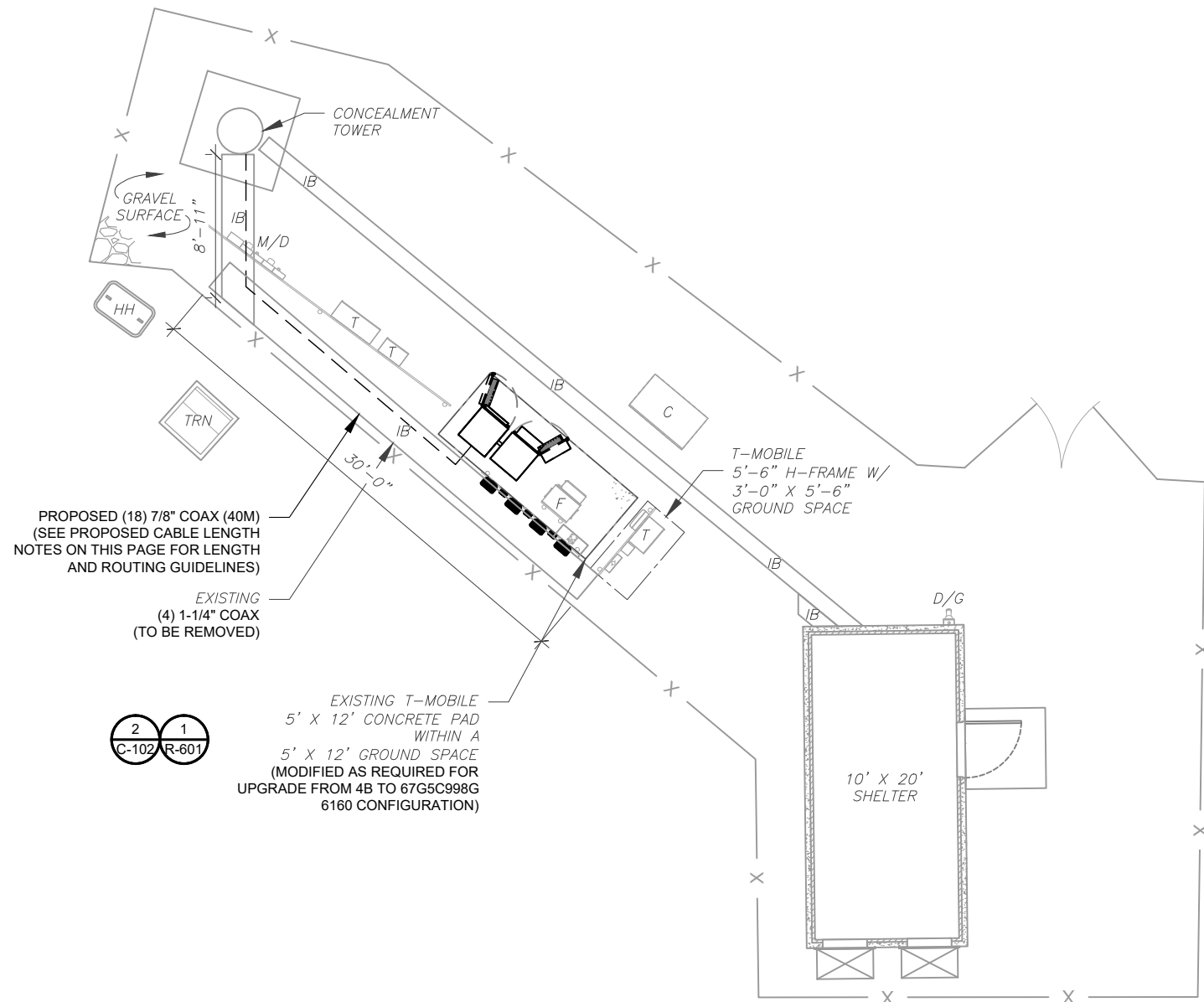
GENERAL NOTES

SHEET NUMBER: <b>G-002</b>	REVISION: <b>0</b>
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1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
3. NO ELECTRICAL SCOPE IS INCLUDED IN THIS PROJECT.

⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACLE
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
	CHAINLINK FENCE

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **131'**. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES), CDS DEFER TO GREATEST CABLE LENGTH.
2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.

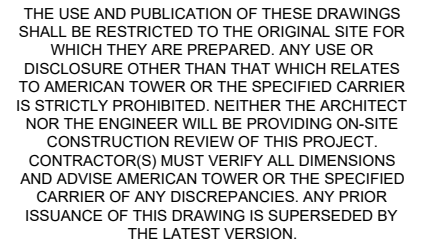


**1 DETAILED SITE PLAN**

GRAPHIC SCALE


10 0 5 1

(IN FEET)  
1 UNIT = 10 FEET



REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	VAR	04/21/25

SEAL:



30575

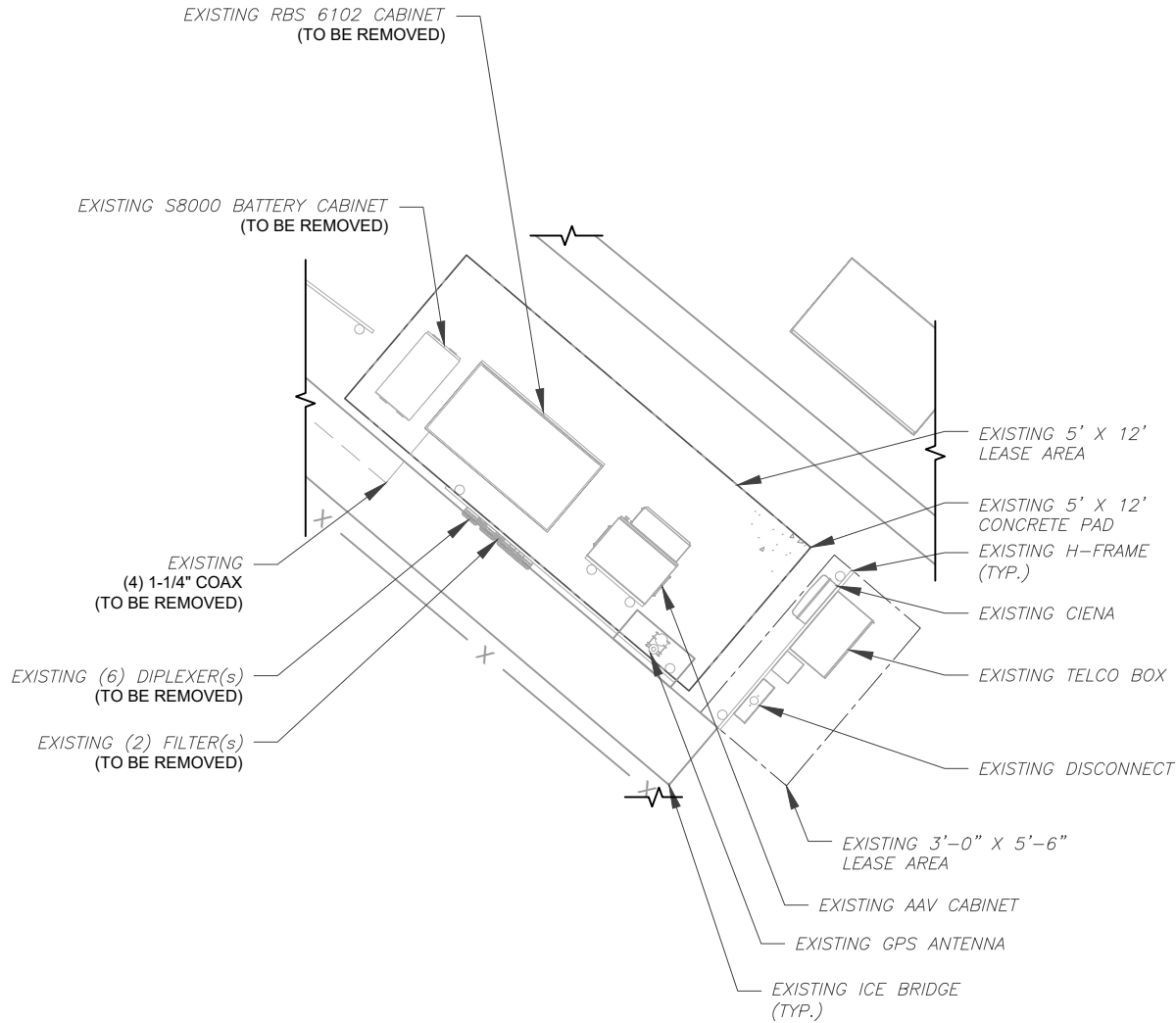
**T-Mobile**

ATC PROJ. #:	14922626_G0
CUST. ID:	RIDGEFIELD/ RT 7
CUST. #:	CT11297C

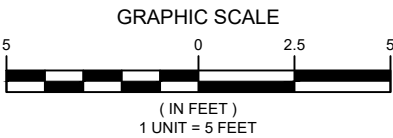
SHEET NUMBER: <b>C-101</b>	REVISION: <b>0</b>
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SITE PLAN NOTES:

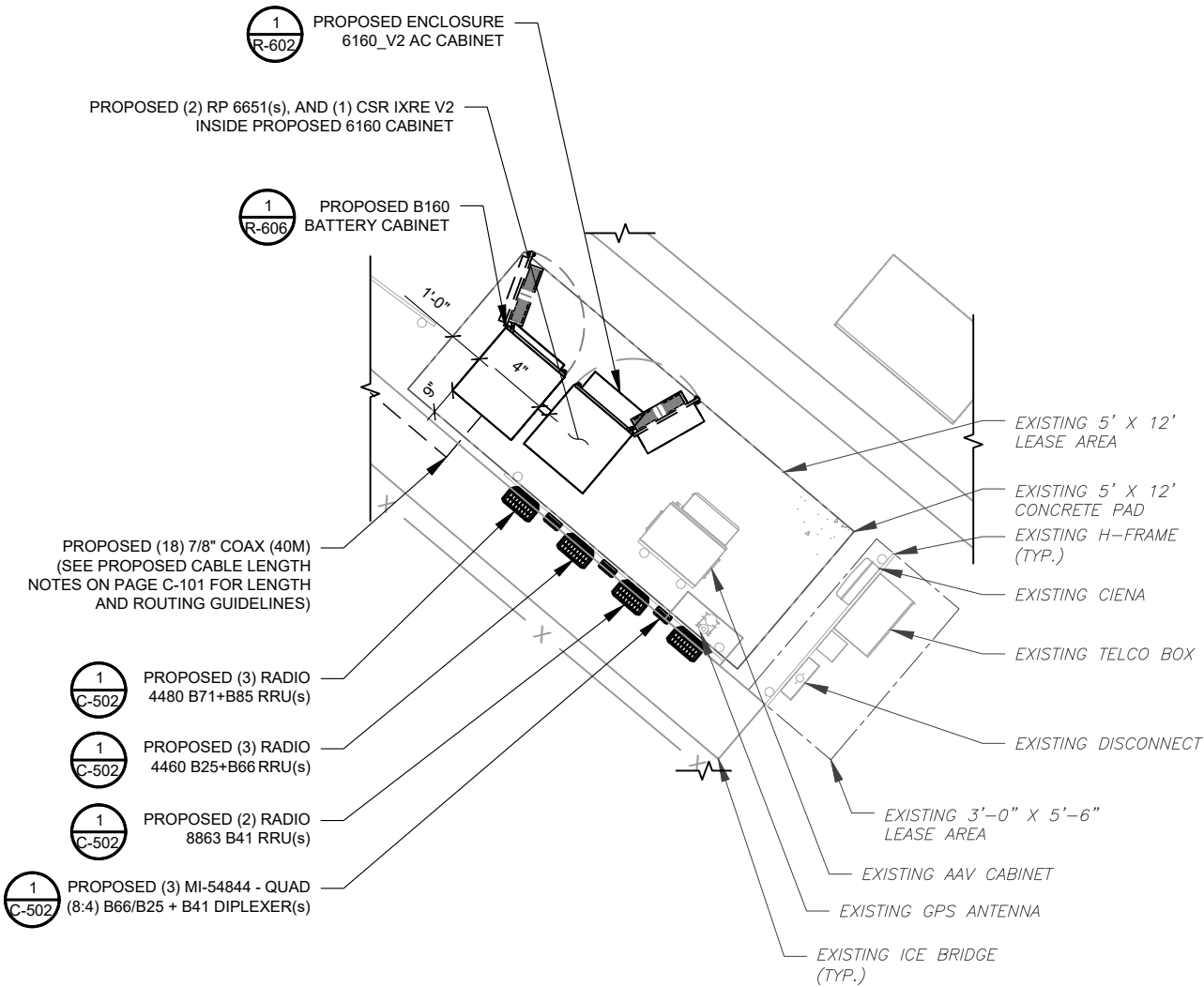
1. CONTRACTOR TO VERIFY THERE IS NO LIVE AAV FIBER RUNNING THROUGH EXISTING DEAD EQUIPMENT. IF SO, THIS WILL NEED TO BE RERUN THROUGH CONDUIT PRIOR TO REMOVING DEAD 2G (6201 CABS) EQUIPMENT.
2. ALL OPEN PORTS NEED TO BE SEALED / WEATHERPROOFED PROPERLY
3. ALL UNNEEDED / EXCESS EQUIPMENT AND GARBAGE TO BE REMOVED FROM EQUIPMENT AREA. DISPOSE OF MATERIALS PROPERLY OFF SITE.



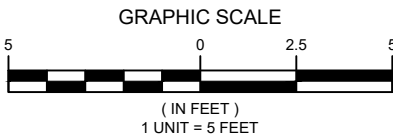
1 EXISTING GROUND EQUIPMENT LAYOUT



T-MOBILE CM APPROVAL REQUIRED BEFORE INSTALLING CABINETS.



2 PROPOSED GROUND EQUIPMENT LAYOUT



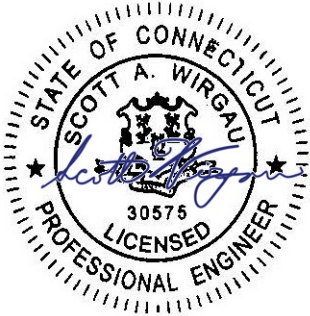
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SITE ADDRESS:  
746 DANBURY RD  
RIDGEFIELD, CT 06877

SEAL:



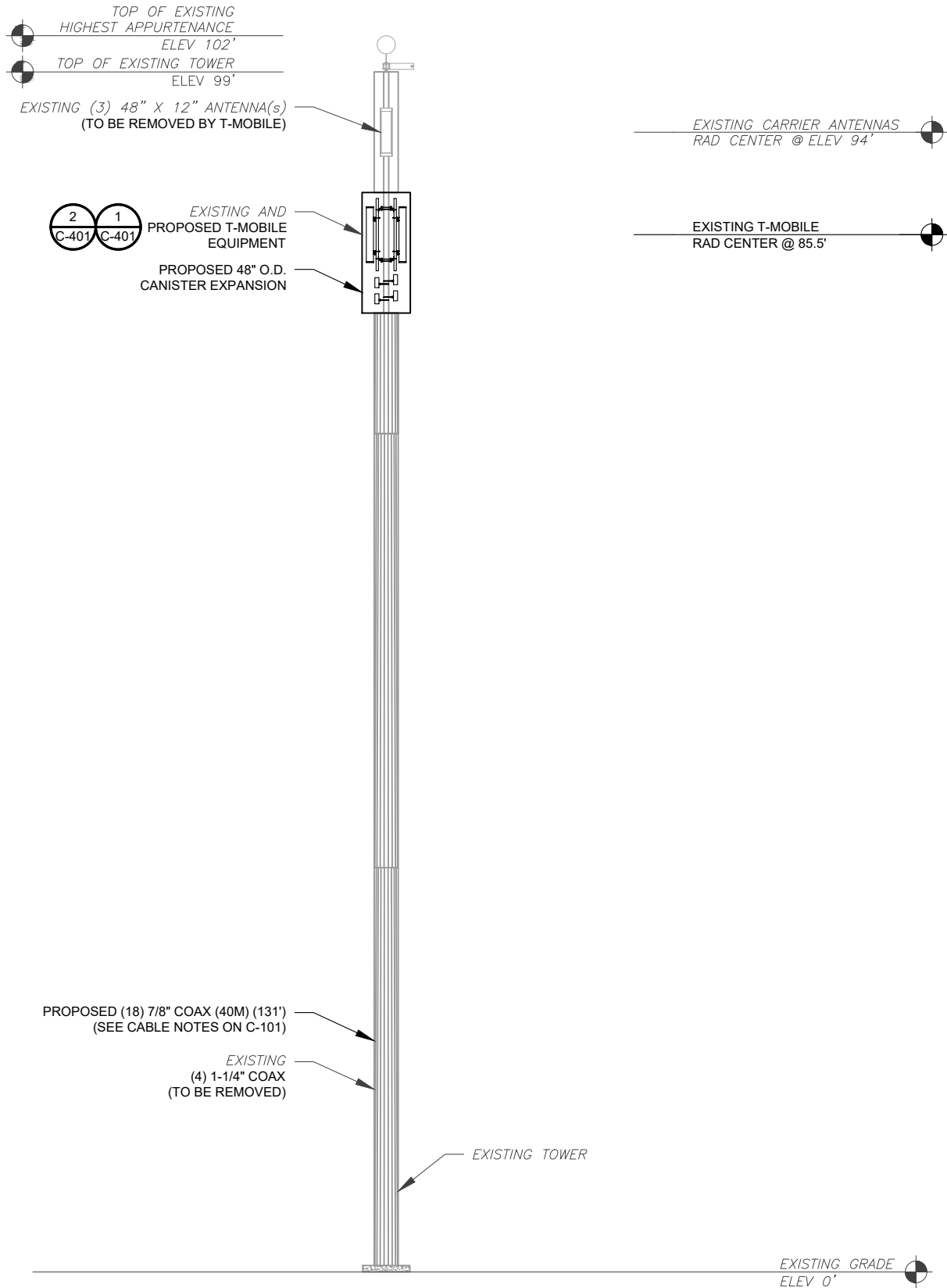
Digitally Signed: 2025-04-21

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ATC PROJ. #:	14922626_G0
CUST. ID:	RIDGEFIELD/ RT 7
CUST. #:	CT11297C

DETAILED EQUIPMENT  
PLAN

SHEET NUMBER:	REVISION:
<b>C-102</b>	<b>0</b>



1 TOWER ELEVATION  
SCALE: N.T.S.

ALL ELEVATIONS REFLECT ABOVE GROUND LEVEL (A.G.L.)

- TOWER NOTE:
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
  - WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
  - ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS.
  - ALL COAX LINES MUST BE TERMINATED AT 2' BELOW THE BASE OF THE BOTTOM CANISTER WITH ½" JUMPERS RUNNING UP TO CUSTOMER'S EQUIPMENT.
  - CONCEALMENT CANISTER CLOSURE MECHANISMS SHALL BE INSPECTED FOR PROPER SEAL AND COMPLETE CLOSURE WHENEVER OPENED/ CLOSED. STRIPPED CLOSURE MECHANISMS OR DAMAGE TO THE CONCEALMENT CANISTER PREVENTING PROPER REINSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ATC OSL (OPERATIONS SITE LEAD) OR ATC CM. CANISTERS WITH STRIPPED CLOSURES SHALL HAVE CLOSURE HARDWARE REPLACED OR BE REINSTALLED WITH WIND-BAND STRAPPING.
  - TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.



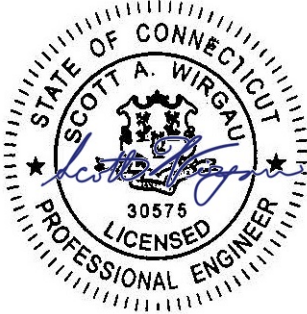
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T-MOBILE SITE NAME:  
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SITE ADDRESS:  
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RIDGEFIELD, CT 06877

SEAL:



Digitally Signed: 2025-04-21

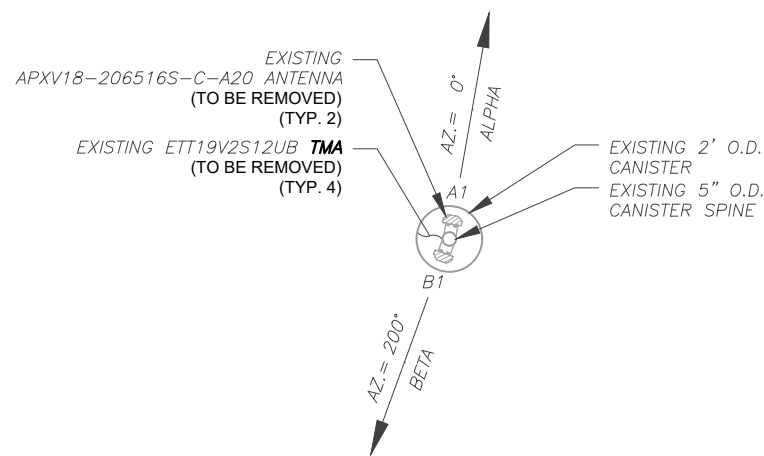


ATC PROJ. #:	14922626_G0
CUST. ID:	RIDGEFIELD/ RT 7
CUST. #:	CT11297C

TOWER ELEVATION

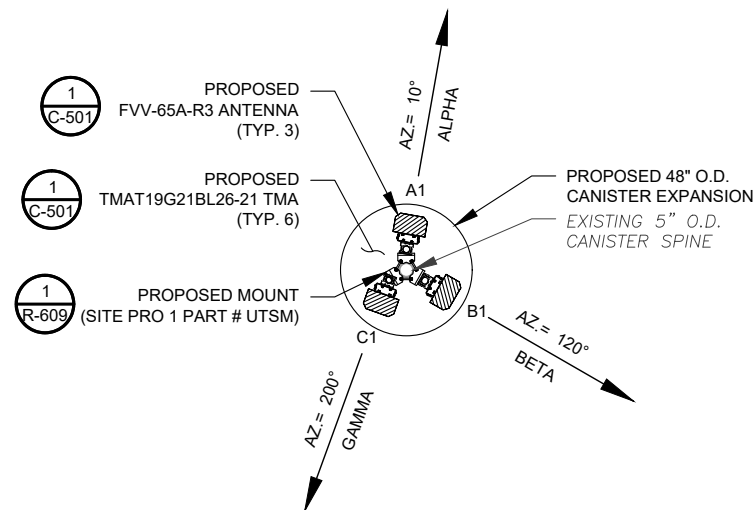
SHEET NUMBER: <b>C-201</b>	REVISION: <b>0</b>
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1 EXISTING ANTENNA PLAN

SCALE: N.T.S.



2 FINAL ANTENNA PLAN

SCALE: N.T.S.



EXISTING ANTENNA SCHEDULE									
LOCATION			ANTENNA SUMMARY					NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	85.5°	10°	A1	APXV18-206516S-C-A20	L2100, G1900, U2100, U1900	0° / 2°	RMV	(2) ETT19V2S12UB	RMV
BETA	85.5°	120°	B1	APXV18-206516S-C-A20	L2100, G1900, U2100, U1900	0° / 2°	RMV	(2) ETT19V2S12UB	RMV

EXISTING FIBER DISTRIBUTION / OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
—	—	— — — —	—
—	-	(4) 1-1/4" COAX	RMV

## NOTES

1. GC TO VERIFY THE FINAL RFDS MATCHES THE FINAL CONSTRUCTION DRAWINGS. GC TO NOTIFY ATC PM OF ANY DISCREPANCY PRIOR TO INSTALLING THE EQUIPMENT.
2. GC TO CAP ALL UNUSED PORTS.
3. GC TO CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

## STATUS ABBREVIATIONS

RMV: TO BE REMOVED  
 RMN: TO REMAIN  
 REL: TO BE RELOCATED  
 ADD: TO BE ADDED

### CABLE LENGTHS FOR JUMPERS

JUNCTION BOX TO RRU: 15'  
RRU TO ANTENNA: 10'

## FINAL ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY					NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	85.5'	10°	A1	FVV-65A-R3	N600, L700, L2100, L1900, N2500, N1900	0° / 2°	ADD	(2) TMAT19G21BL26-21	ADD
BETA	85.5'	120°	B1	FVV-65A-R3	N600, L700, L2100, L1900, N2500, N1900	0° / 2°	ADD	(2) TMAT19G21BL26-21	ADD
GAMMA	85.5'	200°	C1	FVV-65A-R3	N600, L700, L2100, L1900, N2500, N1900	0° / 2°	ADD	(2) TMAT19G21BL26-21	ADD

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
—	—	— — — —	—
-	-	(18) 7/8" COAX (40M)	ADD



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ATC SITE NUMBER:

302471

ATC SITE NAME:

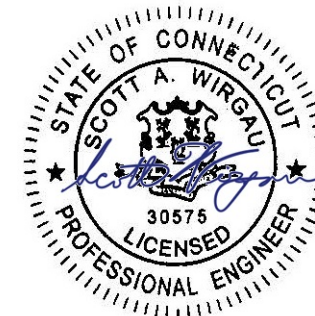
RIDGEFIELD-DANBURY RD.

T-MOBILE SITE NAME:

RIDGEFIELD/ RT 7

SITE ADDRESS:  
746 DANBURY RD  
RIDGEFIELD, CT 06877

SEAL:



Digitally Signed: 2025-04-21



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CUST. ID:	RIDGEFIELD/ RT 7
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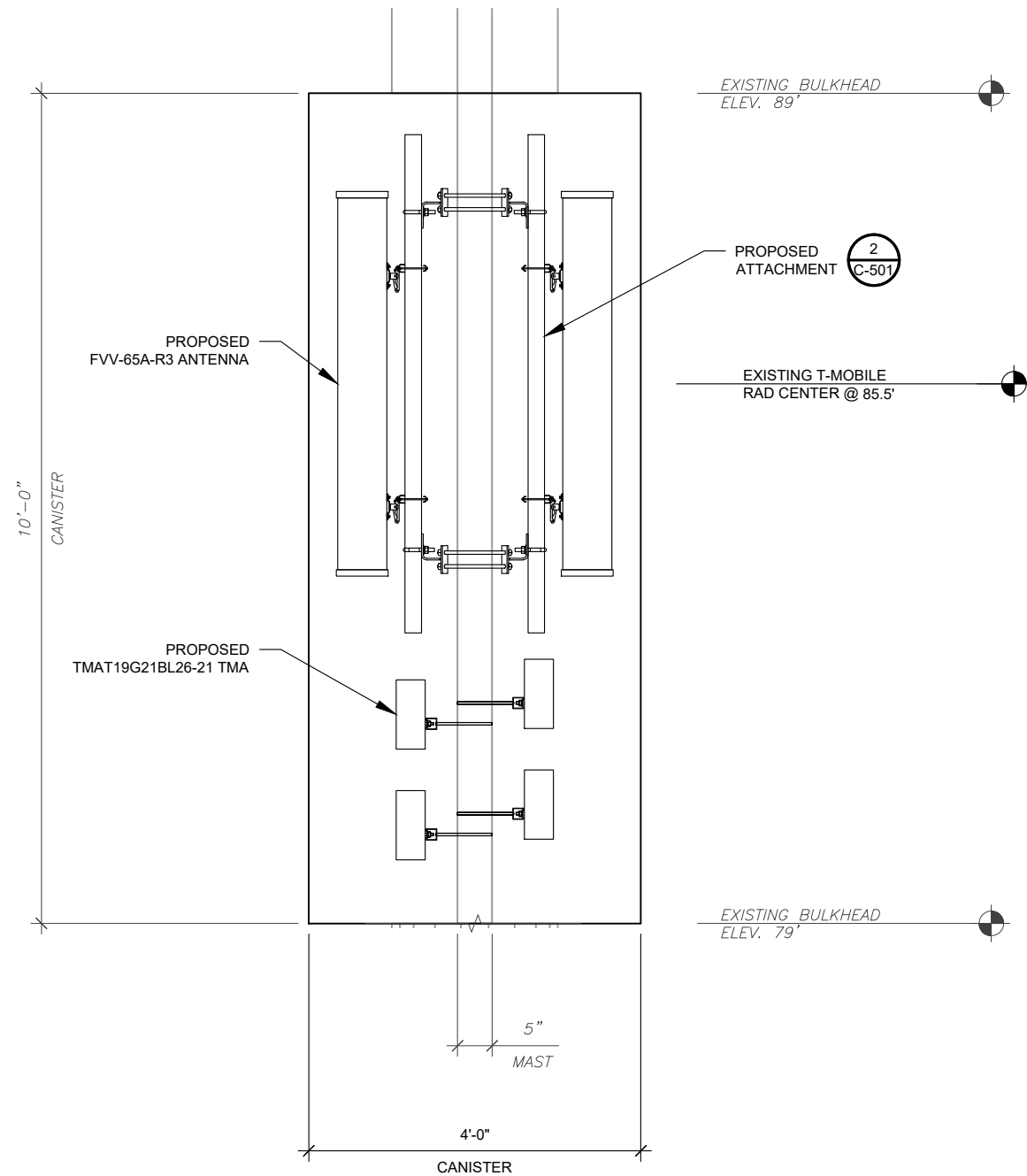
## ANTENNA INFORMATION & SCHEDULE

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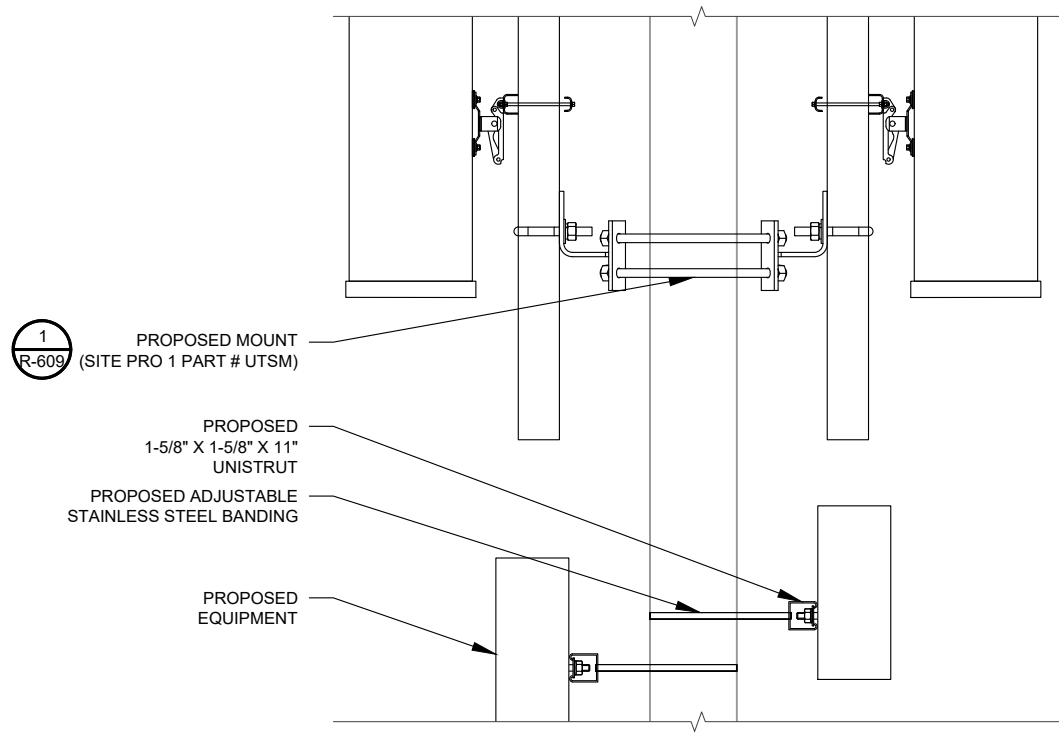
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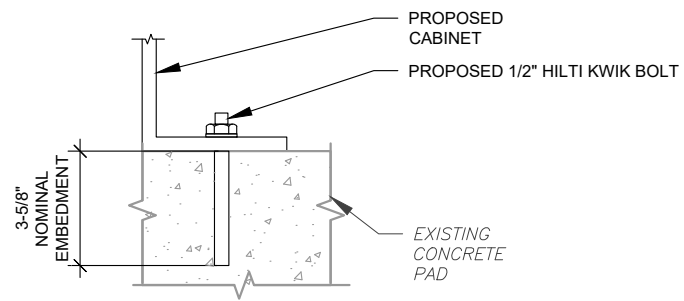
C



1 CANISTER CUT AWAY DETAIL  
SCALE: N.T.S.



2 EQUIPMENT MOUNTING DETAIL  
SCALE: N.T.S.



NOTE:  
INSTALL HILTI KWIK BOLT ANCHORS STRICTLY PER  
INSTALLATION INSTRUCTIONS INCLUDED WITH PRODUCT OR  
FOUND ONLINE AT WWW.US.HILTI.COM. PROPER  
INSTALLATION IS CRITICAL FOR FULL PERFORMANCE.

3 CABINET ATTACHMENT DETAIL  
SCALE: N.T.S.



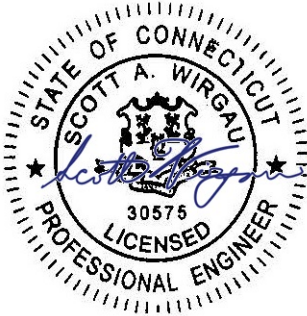
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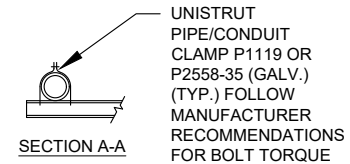
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ATC PROJ. #:	14922626_G0
CUST. ID:	RIDGEFIELD/ RT 7
CUST. #:	CT11297C

CONSTRUCTION  
DETAILS

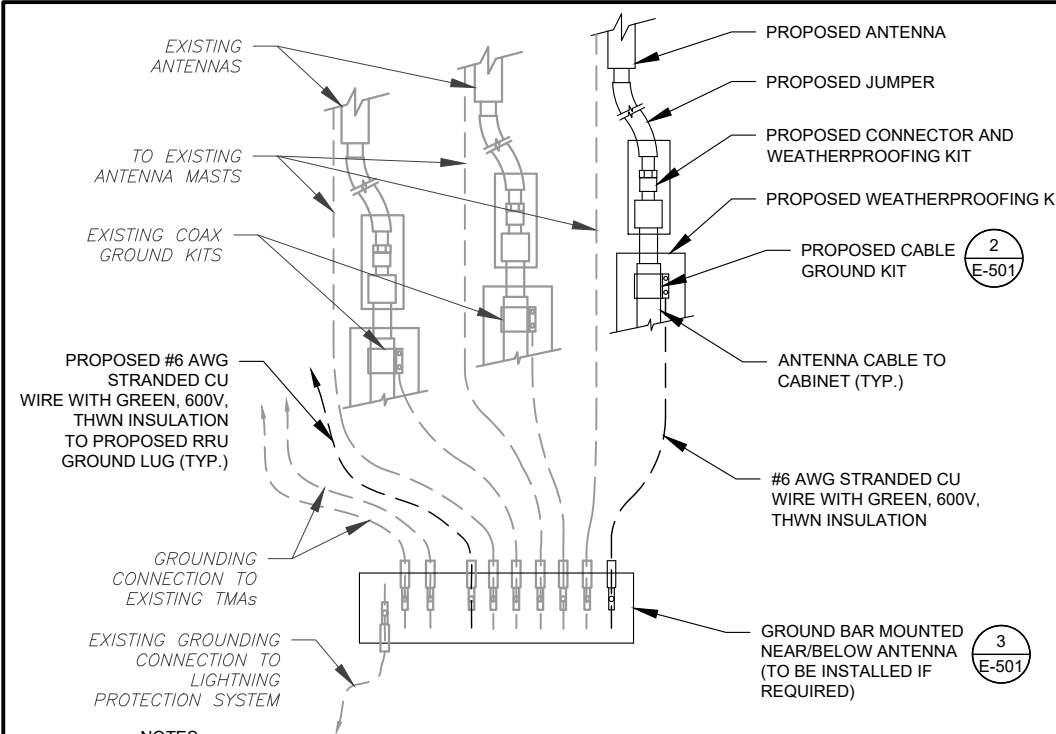
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<b>C-501</b>	<b>0</b>



SCALE: N.T.S.



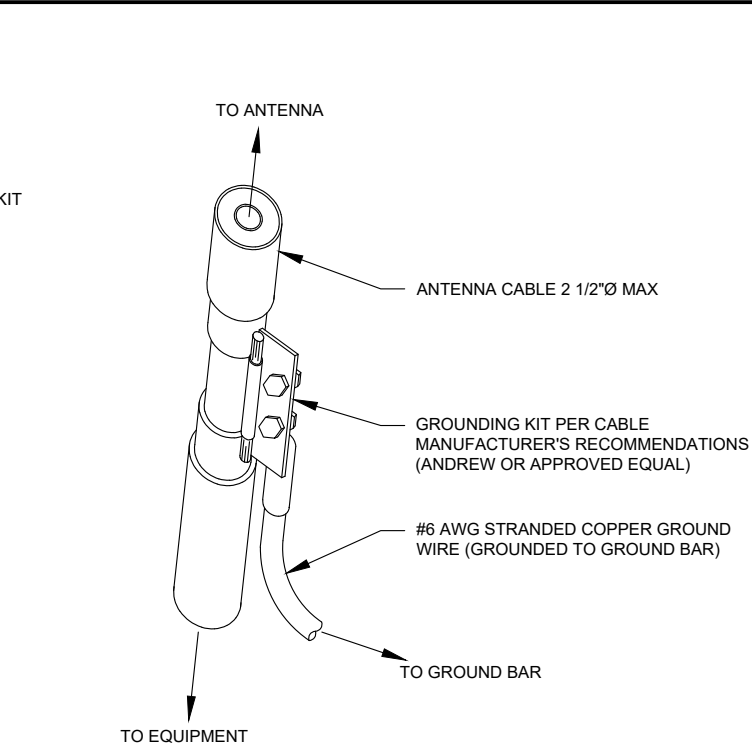
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NOTES:

- THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
- SITE GROUNDING SHALL COMPLY WITH T-MOBILE GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH T-MOBILE GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

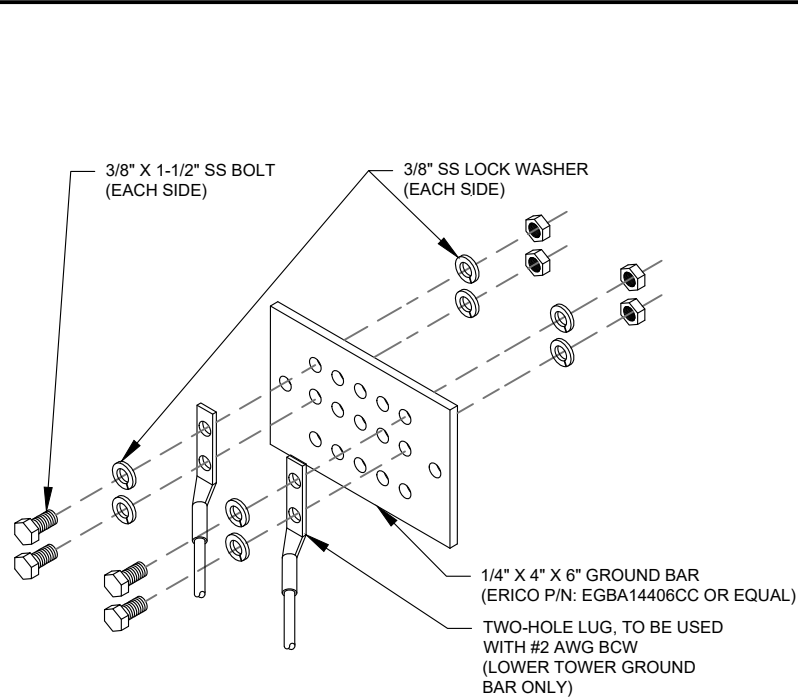
1 TYPICAL ANTENNA GROUNDING DIAGRAM  
SCALE: N.T.S.



GROUND KIT NOTES:

- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

2 CABLE GROUND KIT CONNECTION DETAIL  
SCALE: N.T.S.



GROUND BAR NOTES:

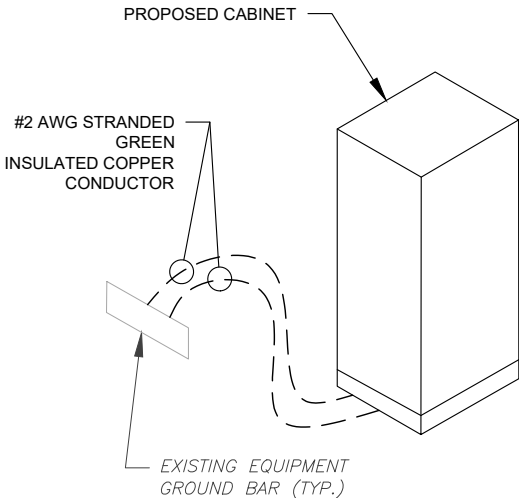
- GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
- GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

3 TOWER GROUND BAR DETAIL  
SCALE: N.T.S.

ELECTRICAL NOTES:

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE T-MOBILE REPRESENTATIVE AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.
- ATC HAS NOT VERIFIED ANY EXISTING T-MOBILE GROUND EQUIPMENT OR ELECTRICAL LOADING. PROPOSED WORK BASED ON INSTALLATION CONFIGURATION PROVIDED BY T-MOBILE. CONTRACTOR TO VERIFY EXISTING T-MOBILE PANEL HAS SUFFICIENT SPACE FOR PROPOSED BREAKER. PROPOSED CABLE AND CONDUIT SHALL BE MINIMUM SIZE PER BELOW IN CHART.
- FOR SPECIFIC CABINET / ANCILLARY EQUIPMENT WIRING REQUIREMENTS, THE T-MOBILE CONTRACTOR SHOULD REFERENCE DESIGN DOCUMENTS PROVIDED BY T-MOBILE FOR THIS CURRENT PROJECT CONFIGURATION, IN ACCORDANCE WITH LOCAL JURISDICTION REQUIREMENTS & NEC STANDARDS & PRACTICES.

VOLTS	OCPD SIZE	WIRE SIZE	GROUND	CONDUIT
120/240V OR 120/208V	80A/2P	3-#3 AWG	#8 AWG	1-1/4"
	100/2P	3-#2 AWG	#8 AWG	1-1/4"
	125A/2P	3-#3/0 AWG	#6 AWG	2"
	150A/2P	3-#3/0 AWG	#6 AWG	2"
	200A/2P	3-#3/0 AWG	#6 AWG	2"
240V OR 208V	80A/2P	2-#3 AWG	#8 AWG	1-1/4"
	100/2P	2-#2 AWG	#8 AWG	1-1/4"
	125A/2P	2-#3/0 AWG	#6 AWG	2"
	150A/2P	2-#3/0 AWG	#6 AWG	2"
	200A/2P	2-#3/0 AWG	#6 AWG	2"



5 CABINET GROUNDING DETAIL  
SCALE: N.T.S.

6 ELECTRICAL NOTES

STANDARD CONDUIT USE TABLE			
CONDUIT TYPE	USE CASE	LOCATION	USE CASE EXAMPLE
RMC (METALLIC)	AC, DC COMM	ABOVE GROUND	ABOVE GROUND PPC TO SSC
PVC	AC POWER	UNDERGROUND	UNDERGROUND PPC TO SSC OR BACKHAUL TRANSPORT HUB TO SSC
LFMC	AC, DC, COMM	MAX 6' PER CONDUIT RUN, ABOVE GROUND ONLY	TIGHT LOCATIONS BETWEEN HUB AND CONDUIT BUT NOT TO BE USED WHERE IT CAN BE STEPPED ON
EMT	INDOOR AC, DC COMM	INDOOR NOT EXPOSED TO THE OUTDOOR ENVIRONMENT (MUST BE DRY)	CIRCUIT PANEL TO JUNCTION BOX
LFNC	GROUND WIRE	CONCEALING AND PROTECTING BTCW RISERS ONLY	GROUND RING TO MGB OR SSC

EXCEPTION CONDUIT USE TABLE			
CONDUIT TYPE	USE CASE	LOCATION	USE CASE EXAMPLE
EMT (NOT PREFERRED)	OUTDOOR DC, COMM	OUTDOOR WHEN USED WITH WATERTIGHT HUBS ONLY	BETWEEN EQUIPMENT AND BATTERY CABINET OR EQUIPMENT TO EQUIPMENT CABINETS FOR INTER CABINET CONNECTION
RMC NONMETALLIC (ALUMINUM)	OUTDOOR/INDOOR PER NEC GUIDLINES	ABOVE GROUND	MAT BE USED AS A LOWER COST ALTERNATIVE TO METALLIC RMC, MUST MEET OR EXCEED FEDERAL SPEC: WW-C-540C, UL-6A, ANSI C80.5, NEC 344.10 (A) ALLOWS THE USE OF EITHER ALUMINUM OR GALVANIZED FITTINGS

4 CONDUIT USE TABLES

**AMERICAN TOWER®**  
**A.T. ENGINEERING SERVICES LLC**  
1 FENTON MAIN  
SUITE 300  
CARY, NC 27511  
PHONE: (919) 468-0112  
PEC.0001553

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	VAR	04/21/25
1			
2			
3			
4			
5			

ATC SITE NUMBER:  
**302471**

ATC SITE NAME:  
**RIDGEFIELD-DANBURY RD.**

T-MOBILE SITE NAME:  
**RIDGEFIELD/ RT 7**

SITE ADDRESS:  
746 DANBURY RD  
RIDGEFIELD, CT 06877

SEAL:

Digitally Signed: 2025-04-21

ATC PROJ. #: 14922626\_G0

CUST. ID: RIDGEFIELD/ RT 7

CUST. #: CT11297C

GROUNDING DETAILS

SHEET NUMBER: <b>E-501</b>	REVISION: <b>0</b>
-------------------------------	-----------------------

Existing RAN Equipment		
Template: 4B		
Enclosure	1	2
Enclosure Type	RBS 6102	S8000 Outdoor
Radio	RUS01 B2 (x4) RUS01 B4 (x4)	
Baseband	BB 5216 L2100 DUG20 DUW30 (x2)	
Transport System	CSR 7705 SAR M	

Proposed RAN Equipment		
Template: 67G5C998G 6160		
Enclosure	1	2
Enclosure Type	Enclosure 6160_v2 AC	B160
Baseband	RP 6651 N2500 RP 6651 N600 N1900 L700 L1900 L2100	
Transport System	CSR IXRe V2 (Gen2)	
Hybrid Cable System	Hybrid Trunk 6/24 4AWG 10m (x2)	

RAN Scope of Work:

Will need to confirm with Fit Analysis. Swap (2) existing antennas with (2) FVV65AR3. Swap (4) Existing TMAs with (4) new TMAs. Will remove (4) existing 1-1/4" Coax and propose (12) 7/8" Coax. RRUs will be on ground, 4460/4480/8863 on Rack behind cabinet. Remove existing cabinet and add 6160 and B160.

1 CABINET CONFIGURATION

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:

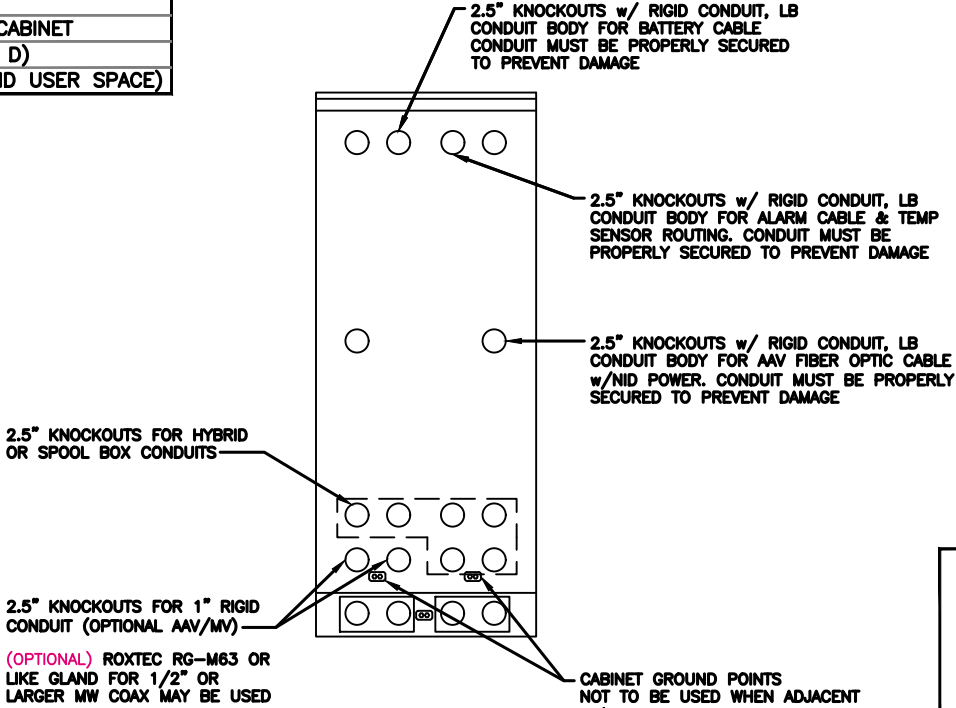
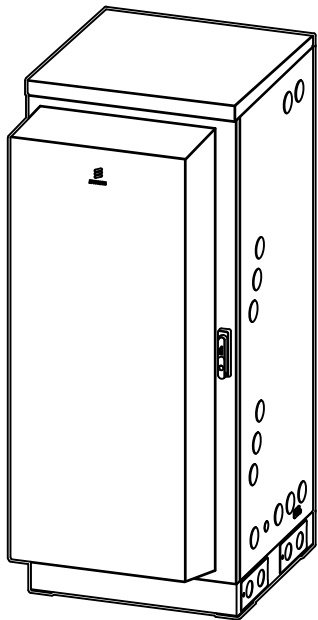
R-601

REVISION:

0



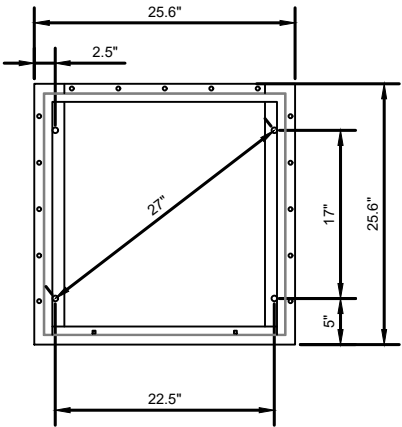
MANUFACTURER:	ERICSSON
MODEL:	UT_E6160_AC_V2 – SITE SUPPORT CABINET
DIMENSIONS:	63" x 25.6" x 33.46" (H x W x D)
WEIGHT:	434.31 LBS (EMPTY POWER RACK AND USER SPACE)



REAR VIEW

NOTE:

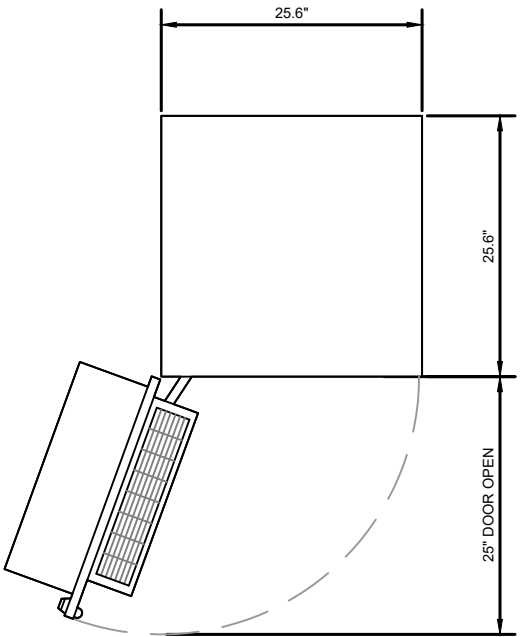
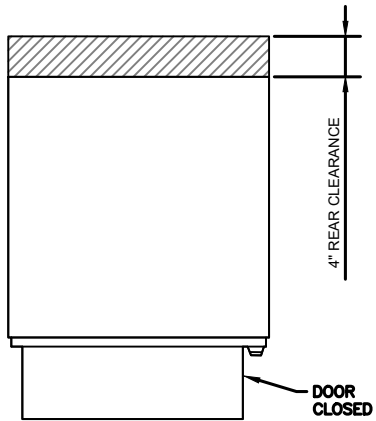
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL THROUGH KNOCKOUTS
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND OR CABLING



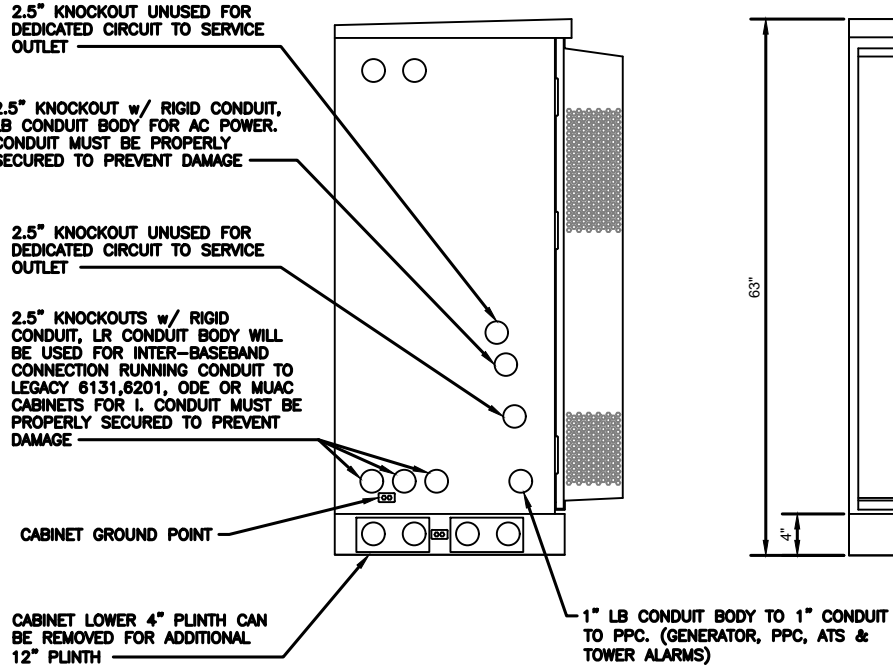
BOLT DOWN PATTERN

GROUNDING NOTE:

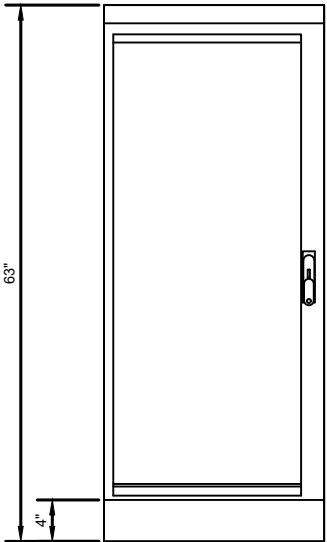
"CABINET GROUNDING TO USE A SINGLE, #2 BTCW CONDUCTOR, W/ 2-HOLE, 1" C-C, LONG BARREL, WINDOW LUG, IN 3/4" LFNC TO GROUND RING. PLINTH GROUNDING IS NOT REQUIRED."



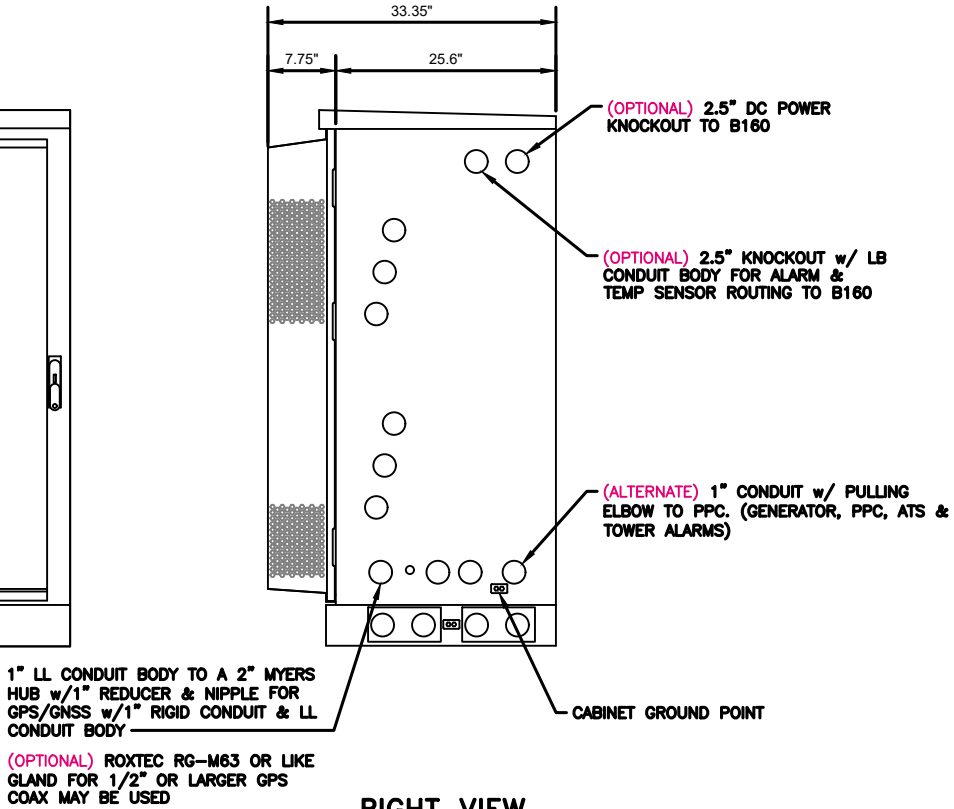
PLAN VIEW



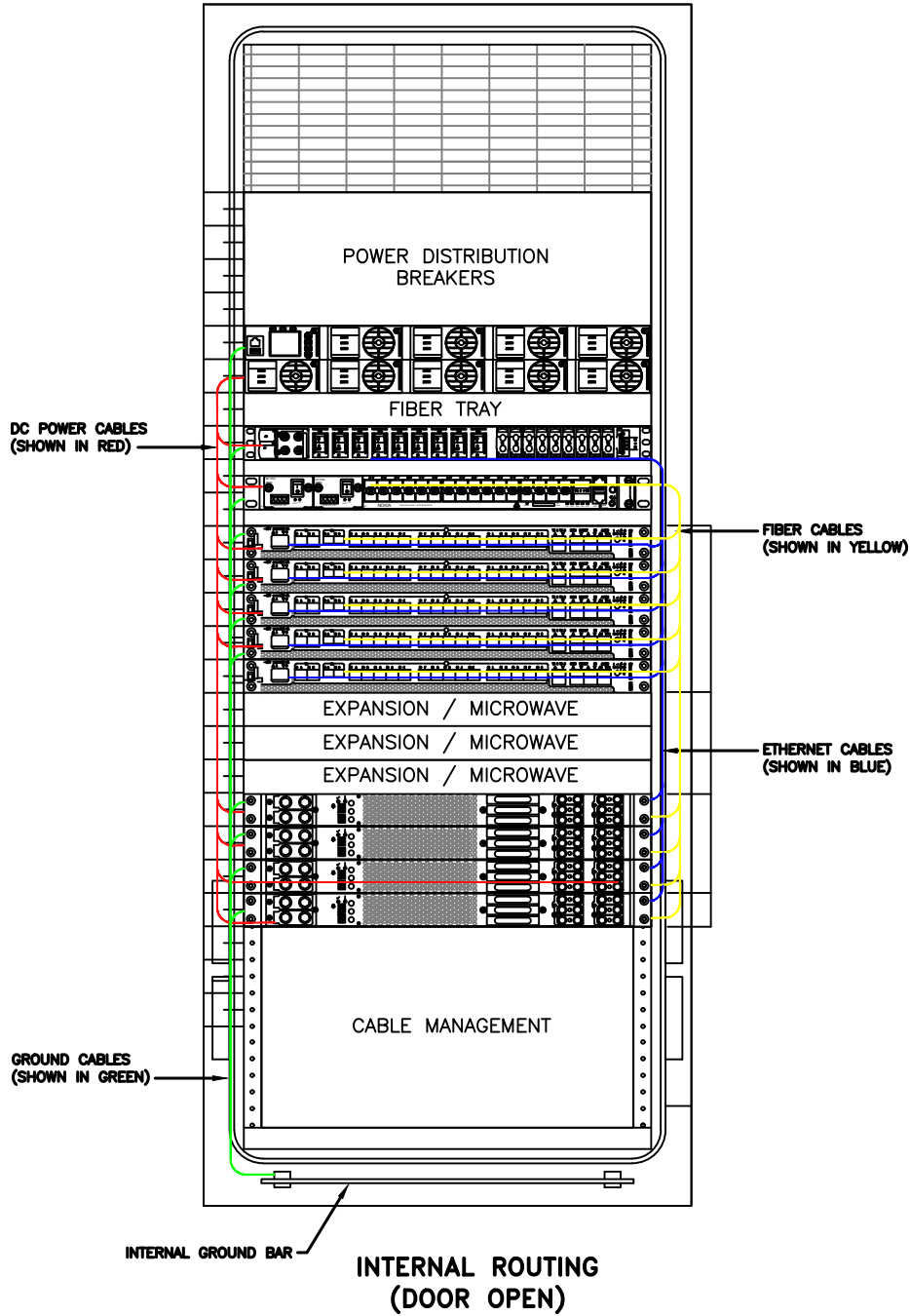
LEFT VIEW



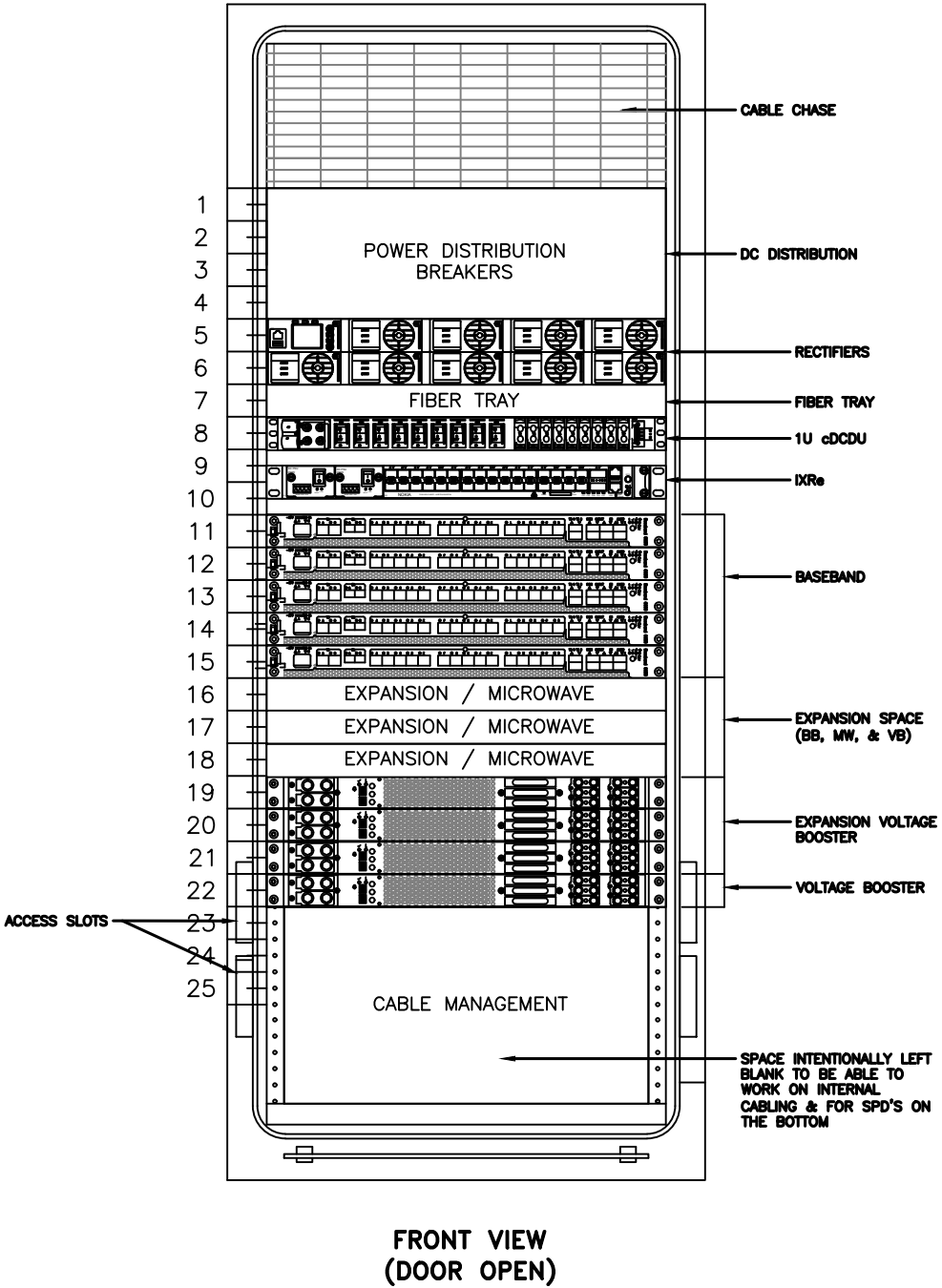
FRONT VIEW



RIGHT VIEW



RACK ASSIGNMENTS	
RU SLOTS	DESCRIPTION
1	POWER DISTRIBUTION BREAKERS
2	
3	
4	RECTIFIER SHELF
5	
6	FIBER TRAY
7	cDCDU
8	BACKHAUL ROUTER
9	
10	1ST BASEBAND
11	2ND BASEBAND
12	3RD BASEBAND
13	4TH BASEBAND
14	5TH BASEBAND
15	EXPANSION - MICROWAVE
16	
17	EXPANSION / PSU
18	
19	VOLTAGE BOOSTER
20	
21	OPEN SPACE FOR SPD ACCESS
22	
23	
24	
25	

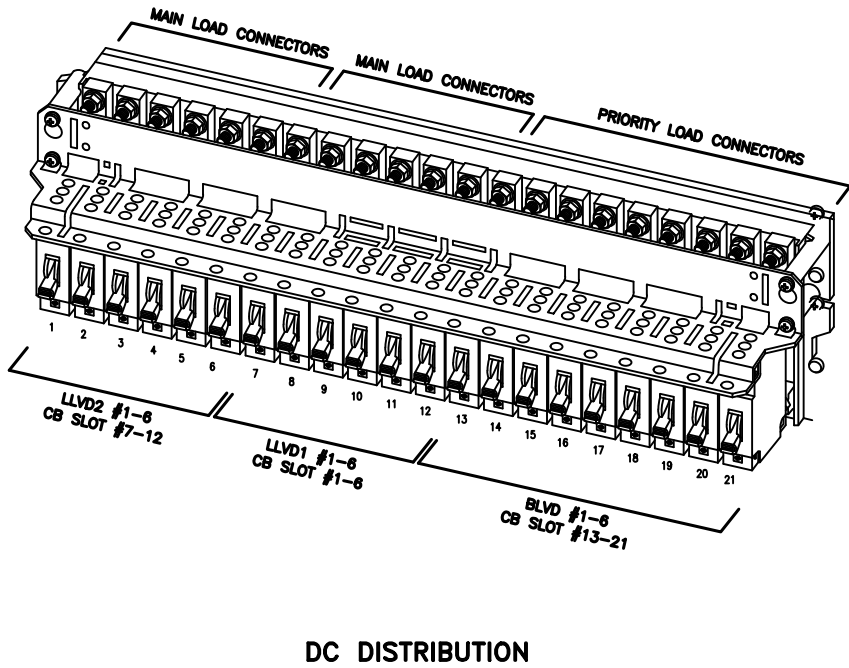
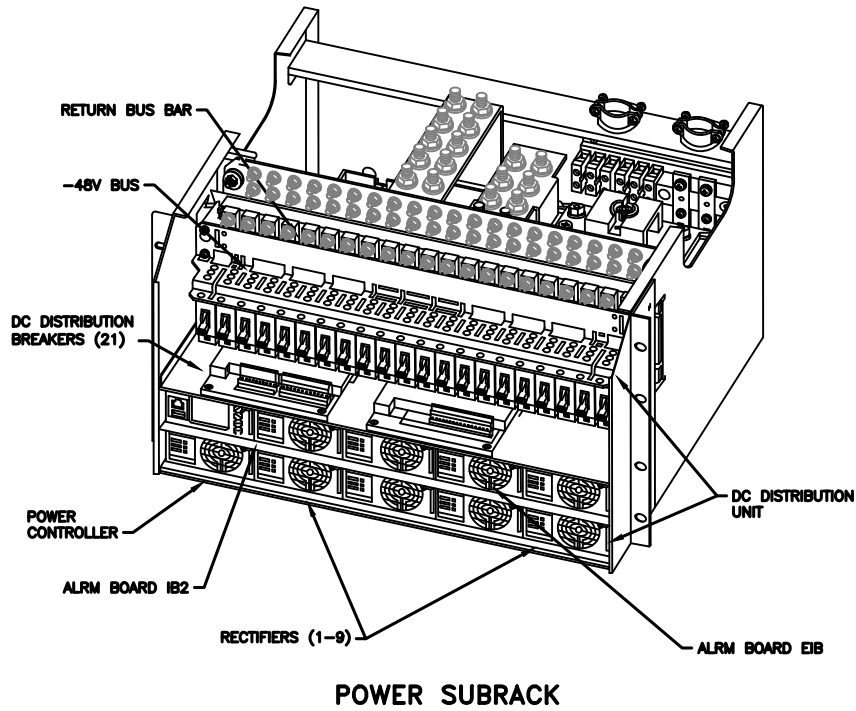


FRONT VIEW (DOOR OPEN)

NOTE:  
THIS IS FOR REFERENCE ONLY, CHECK FOR SPECIFIC DETAIL  
IN T-MOBILE CABINET SPECIFIC INSTALLATION GUIDES

CR SLOT	CBT#	3 Sector B12/71-Radio 4449 B25/66-Radio 4415 B25-Radio 4424 B41-Air 6449 or 6419		3 Sector B12/71-Radio 4480 B25/66-Radio 4460 B41-Air 6419 or Radio 88635		4 Sector B12/71-Radio 4480 B25/66-Radio 4460 B41-Air 6419 or Radio 88635		6 Sector B12/71-Radio 4480 B25/66-Radio 4460 B41-Air 6419 or Radio 8863 (Escalator Only)	
		1	2	3	4	5	6	7	8
1	LVD1 47.0V	IXRe PS-2*	-	-	-	IXRe PS-2*	-	B25/66 DC-2ε	IXRe PS-2*
2		B25DC-2α	-	-	-	B25/66 DC-1τ	-	B25/66 DC-1τ	OR Voltage Booster-7 B25/66 DC 1τ, B25/66 DC-2ε and ζ
3		B25DC-2β	-	-	B41δ	Voltage Booster-6 B41δ	B25/66 DC-2ζ	B41α	-
4		B25DC-2γ	B41α	-	B41α	B12/71 ε	B41α	B41β	OR Voltage Booster-4 B41α, β and γ
5	LVD2 45.1V	Voltage Booster-4 B41α, β and γ	B41β	Voltage Booster-4 B41α, β and γ	B41γ	Voltage Booster-4 B41α, β and γ	B41γ	B41γ	OR Voltage Booster-4 B41α, β and γ
6		B12/71DC-1α	B12/71α	Voltage Booster-3 B12/71α, β and γ	B12/71β	Voltage Booster-3 B12/71α, β and γ	B12/71α	B12/71α	OR Voltage Booster-3 B12/71α, β and γ
7		B12/71DC-1β	B12/71β	-	B12/71γ	-	B12/71β	B12/71β	OR -
8		B12/71DC-1γ	B12/71γ	-	B12/71ε	-	B12/71γ	B12/71γ	OR -
9	BLVD 43.2V	B12/71DC-2α	-	-	B25/66 DC-1δ	Voltage Booster-5 B25/66 DC-1 δ B25/66 DC-2δ	B25/66 DC-1δ	B25/66 DC-2δ	OR Voltage Booster-5 B25/66 DC-1δ and ε B25/66 DC-2δ
10		B12/71DC-2β	-	-	B25/66 DC-2ε	-	B25/66 DC-1ε	B25/66 DC-1ε	OR -
11		B12/71DC-2γ	-	-	IXRe PS-1	IXRe PS-1	IXRe PS-1	IXRe PS-1	OR -
12		IXRe PS-1	IXRe PS-1	IXRe PS-1	IXRe PS-1	IXRe PS-1	IXRe PS-1	IXRe PS-1	OR -
13	BLVD 43.2V	B25/66 α	B25/66 DC-1α	Voltage Booster-1 B25/66 DC-1α and β B25/66 DC-2 α	B25/66 DC-1α	Voltage Booster-1 B25/66 DC-1α and β B25/66 DC-2 α	B25/66 DC-1α	B25/66 DC-1α	OR Voltage Booster-1 B25/66 DC-1α and β B25/66 DC-2 α
14		B25/66 β	B25/66 DC-2 α	-	B25/66 DC-2 α	-	B25/66 DC-2 α	B25/66 DC-2 α	OR -
15		B25/66 γ	B25/66 DC-1β	-	B25/66 DC-1β	-	B25/66 DC-1β	B25/66 DC-1β	OR -
16		B25 DC-1α	B25/66 DC-2 β	-	B25/66 DC-2 β	-	B25/66 DC-2 β	B25/66 DC-2 β	OR -
17	BLVD 43.2V	B25 DC-1β	B25/66 DC-1γ	Voltage Booster-2 B25/66 DC-1γ B25/66 DC-2β and γ	B25/66 DC-1γ	Voltage Booster-2 B25/66 DC-1γ B25/66 DC-2β and γ	B25/66 DC-1γ	B25/66 DC-1γ	OR Voltage Booster-2 B25/66 DC-1γ B25/66 DC-2β and γ
18		B25 DC-1γ	B25/66 DC-2γ	-	B25/66 DC-2γ	-	B25/66 DC-2γ	B25/66 DC-2γ	OR -
19		DCDU (FP/BBε, IXRe PS-2, AAV, & Miv)	DCDU (FP/BBε, IXRe PS-2, AAV, & Miv)	DCDU (FP/BBε, IXRe PS-2, AAV, & Miv)	DCDU (FP/BBε, IXRe PS-2, AAV, & Miv)	DCDU (FP/BBε, IXRe PS-2, AAV, & Miv)	DCDU (FP/BBε, IXRe PS-2, AAV, & Miv)	DCDU (FP/BBε, IXRe PS-2, AAV, & Miv)	OR -
20		Primary AAV	Primary AAV	Primary AAV	Primary AAV	Primary AAV	Primary AAV	Primary AAV	OR -
21									

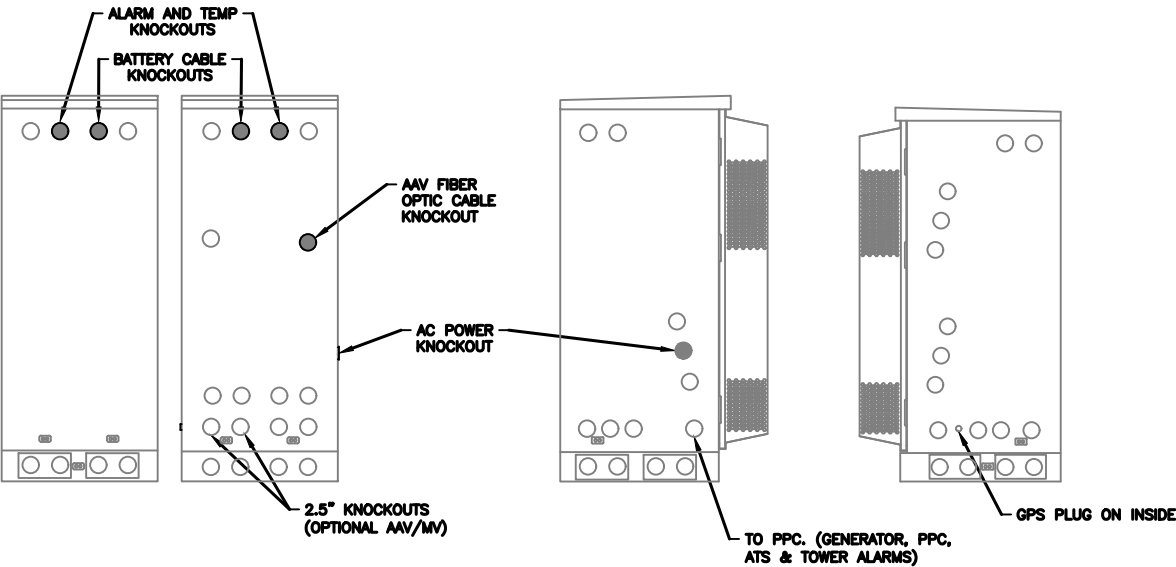
See Breaker Tables for breaker sizes.  
α = Alpha, β = Beta, γ = Gamma, δ = Delta, ε = Epsilon, ζ = Zeta



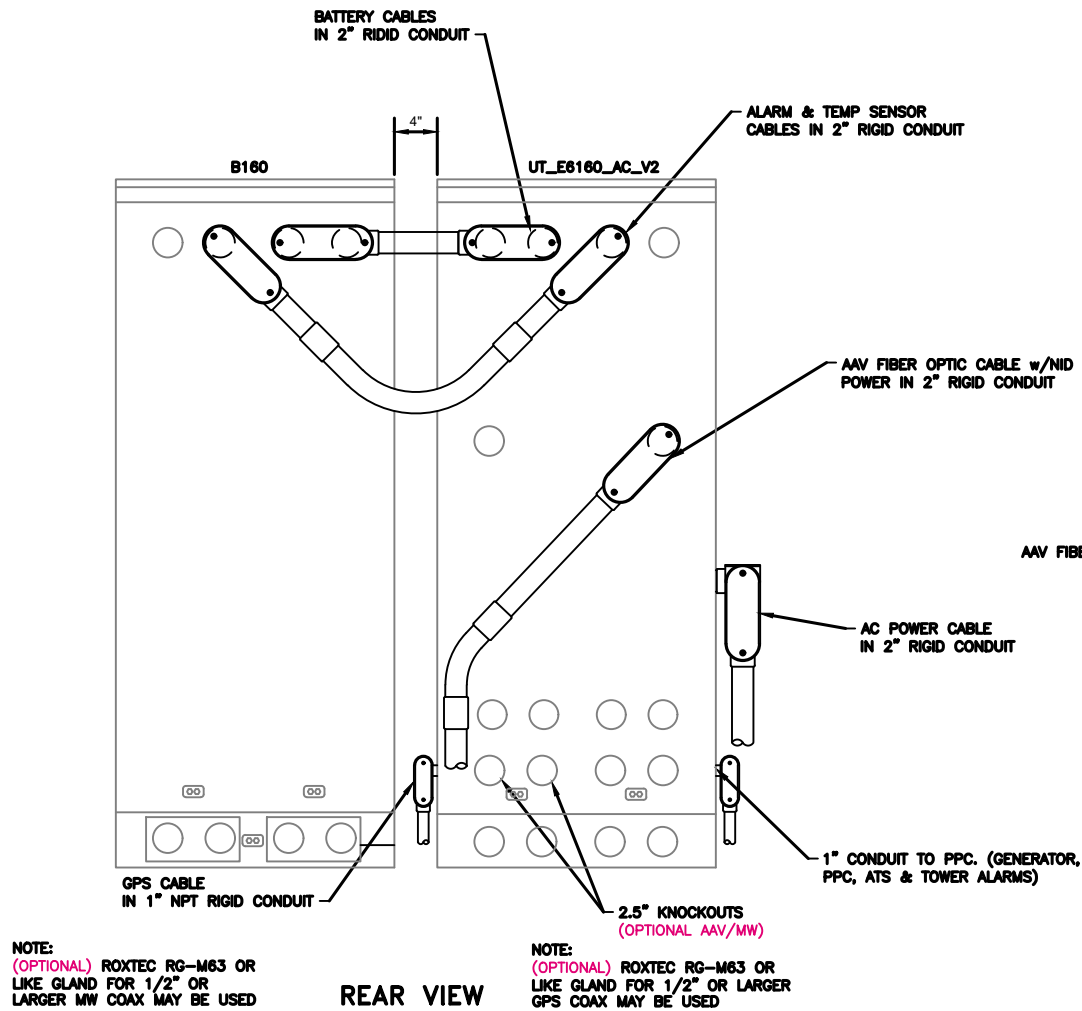


NOTE:

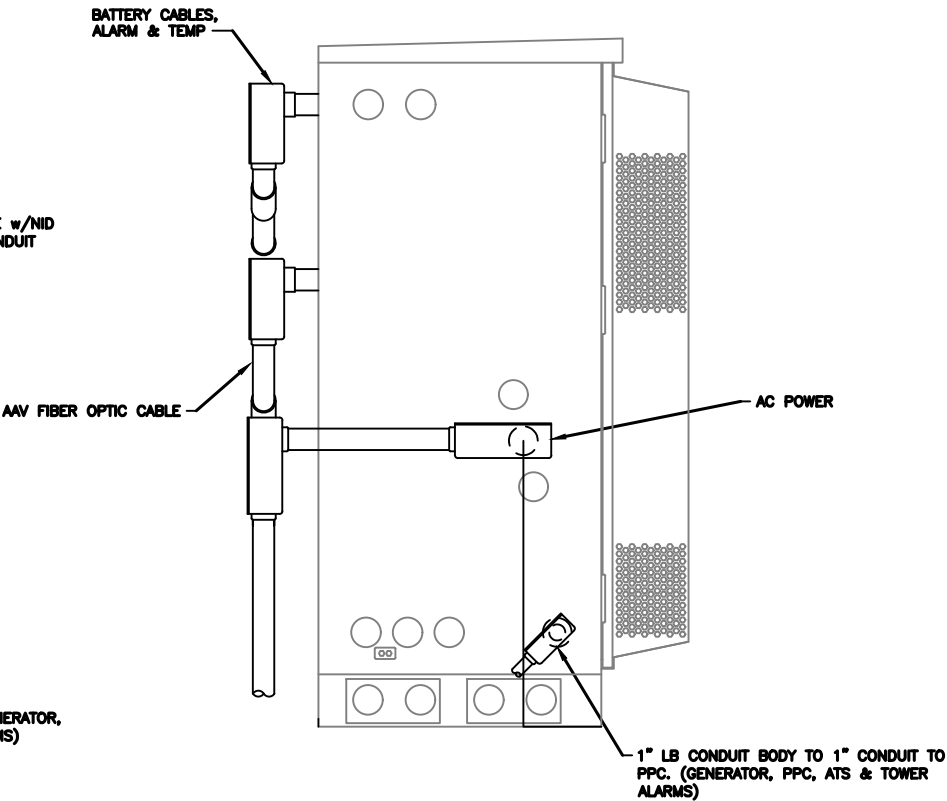
- 1. ALL CONDUIT AND FITTING ENTRANCES INTO CABINETS AND ENCLOSURES MUST UTILIZE MYERS OR EQUIVALENT HUBS TO PREVENT WATER ENTRY/SEEPAGE INTO CABINETS AND ENCLOSURES.
- 2. (LIQUIDFLEX) FLEXIBLE METALLIC CONDUIT (LFMC) & ASSOCIATED FITTINGS CAN BE USED AS NEEDED BUT ONLY FOR TIGHT CONDUIT BENDS AND RUNS SUBJECT TO UL AND NEC LIMITATIONS. 6' MAX PER CONDUIT RUN.
- 3. "DOOR HEX HOOD CLEARANCE MUST BE CONSIDERED WHEN INSTALLING AC POWER CONDUIT BODY TO MYERS HUB BY KEEPING THE CONDUIT BODY AS CLOSE TO THE CABINET AS POSSIBLE.
- 4. PULLING ELBOWS MAY BE USED IN LIEU OF A CONDUIT BODIES WHEN CLEARANCE IS LIMITED.
- 5. ALL EXTERNAL ALARM CONDUITS ARE TOO TERMINATE AT THE PPC WITH A SINGLE 1" ALARM CONDUIT TO THE UT\_E6160\_AC\_V2.



CONDUIT LOCATIONS

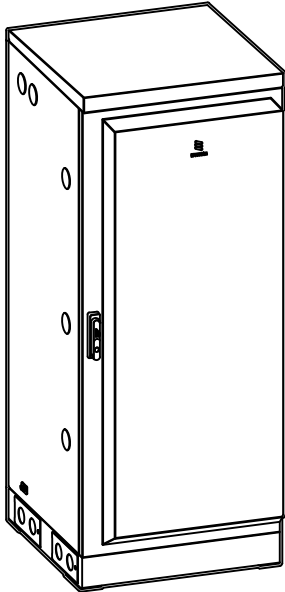


REAR VIEW



SIDE VIEW

MANUFACTURER:	ERICSSON
MODEL:	B160 BATTERY CABINET
DIMENSIONS:	63" x 25.6" x 29.5" (H x W x D)
WEIGHT:	295 LBS (WITHOUT BATTERIES)



2.5" KNOCKOUTS w/ RIGID CONDUIT, LB CONDUIT BODY FOR ALARM CABLE & TEMP SENSOR ROUTING. CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE

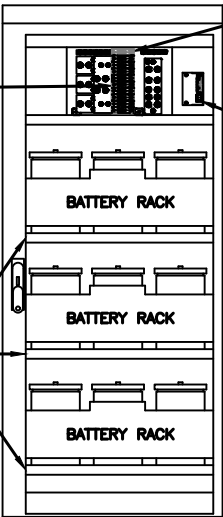
CABINET GROUND POINTS

REAR VIEW

2.5" KNOCKOUTS w/ RIGID CONDUIT, LB CONDUIT BODY FOR BATTERY CABLE CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE

3 x 300A BREAKERS

BATTERY VIBRATION MOUNTS



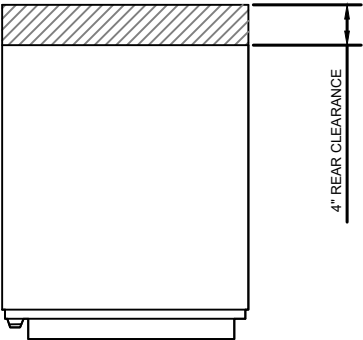
25A AUX BREAKERS, FANS, LIGHTS, ETC.

ALARM BOX, PRELABLED

3X BATTERY SHELVES, UP TO 200A HR, w/ PREINSTALLED HEATERS

FRONT VIEW (DOOR OPEN)

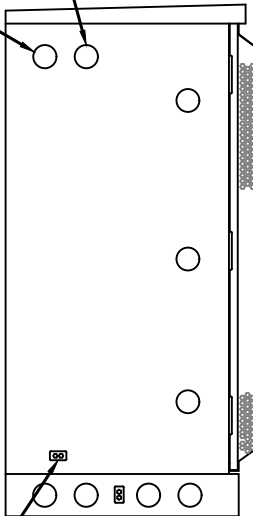
- NOTE:
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL THROUGH KNOCKOUTS
  - CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND OR CABLING



4" REAR CLEARANCE

(OPTIONAL) 2.5" KNOCKOUTS FOR ALARM & TEMP SENSOR ROUTING TO 6160

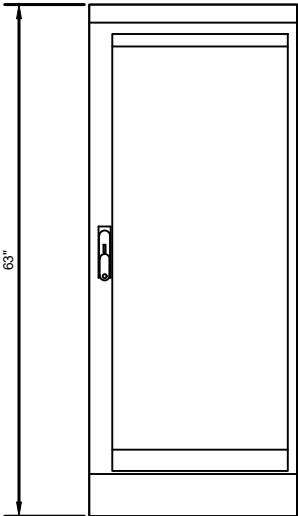
(OPTIONAL) 2.5" DC POWER KNOCKOUTS TO 6160



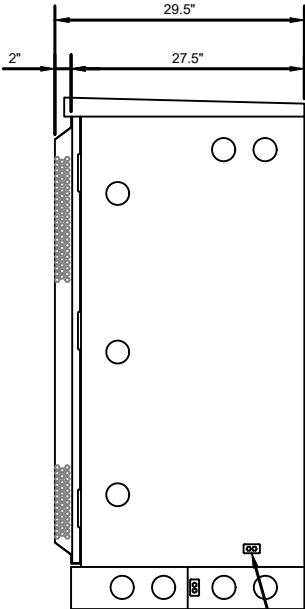
CABINET GROUND POINT

LEFT VIEW

GROUNDING NOTE:  
"CABINET GROUNDING TO USE A SINGLE, #2 BTCW CONDUCTOR, W/ 2-HOLE, 1" C-C, LONG BARREL, WINDOW LUG, IN 3/4" LFNC TO GROUND RING. PLINTH GROUNDING IS NOT REQUIRED."

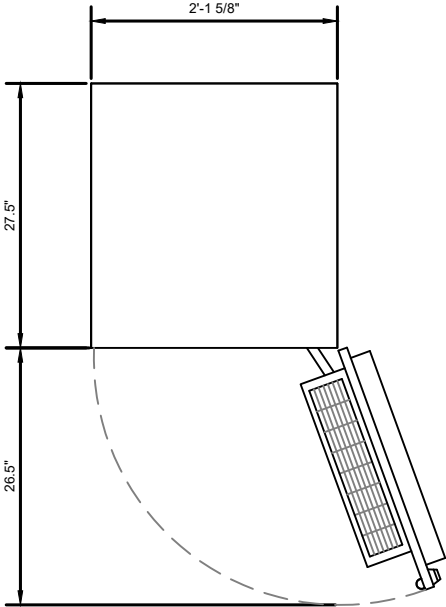


FRONT VIEW



CABINET GROUND POINT

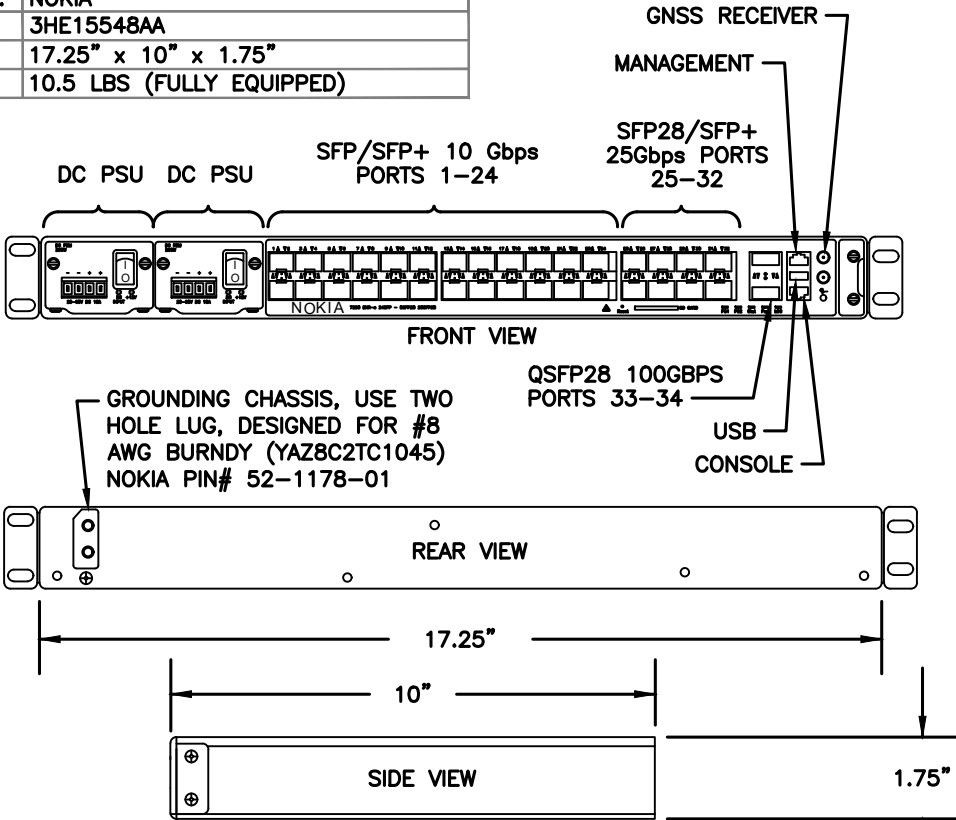
RIGHT VIEW



PLAN VIEW

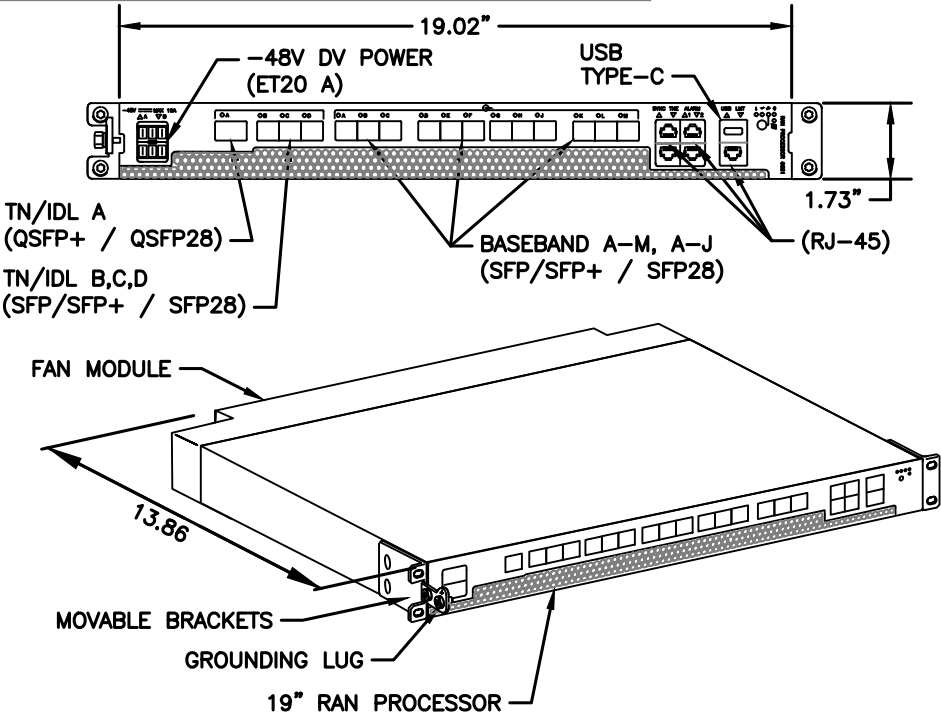
B160 ERICSSON SITE SUPPORT BATTERY CABINET

MANUFACTURER:	NOKIA
MODEL:	3HE15548AA
DIMENSIONS:	17.25" x 10" x 1.75"
WEIGHT:	10.5 LBS (FULLY EQUIPPED)



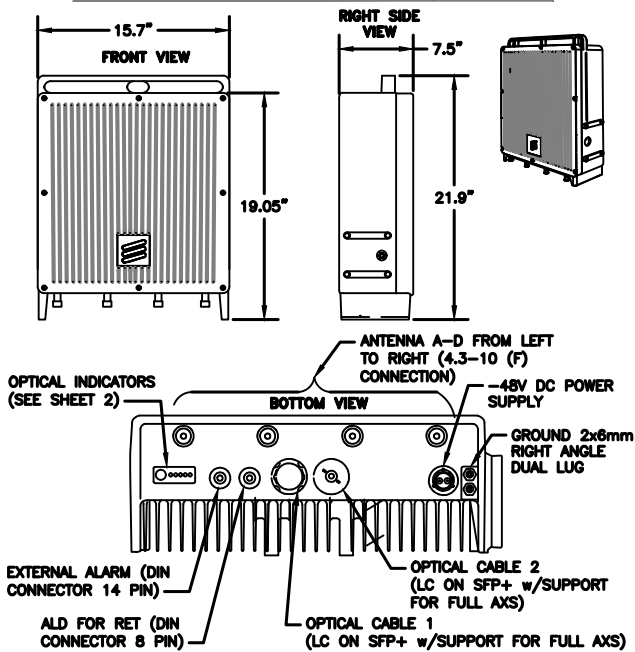
1 34097 - NOKIA 7250 IXR-e ROUTER w/ GNSS  
SCALE: N.T.S.

MANUFACTURER:	ERICSSON
MODEL:	6651 RAN PROCESSOR (KDU1370093/11)
DIMENSIONS:	1.73" X 19.02" X 13.86" (H" X W" X D")
WEIGHT:	16.98 LBS



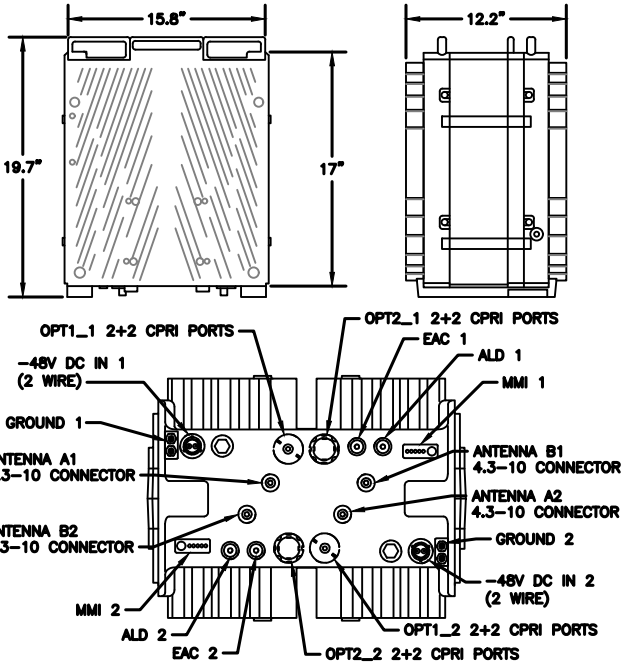
2 34553 - ERICSSON 6651 RAN PROCESSOR  
SCALE: N.T.S.

MANUFACTURER:	ERICSSON
MODEL:	4480 RADIO (KRC 161 922/1)
DIMENSIONS:	21.9" x 15.7" x 7.5" (H x W x D)
MODEL BAND:	B71, B85 FOR NR AND LTE
WEIGHT:	81 LBS
BRACKET WEIGHT:	3.75 LBS (MULTI ERS #109 1973/2)



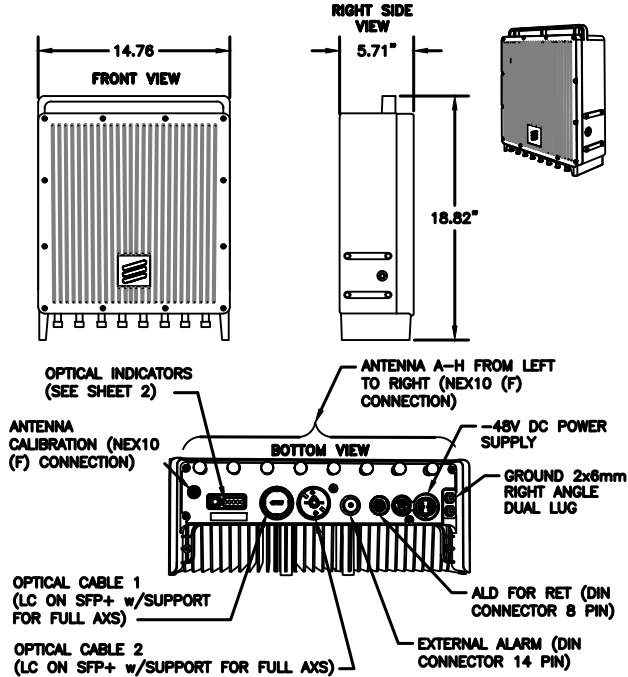
3 34372 - ERICSSON 4480 RADIO  
SCALE: N.T.S.

MANUFACTURER:	ERICSSON
MODEL:	4460 RADIO B2/25 B66 (KRC 161 912/3)
DIMENSIONS:	19.7" x 15.8" x 12.2" (H" x W" x D")
WEIGHT:	109 LBS
BRACKET WEIGHT:	4.8 LBS (ERS HEAVY #SXX1255993/1)



4 34373 - ERICSSON 4460 RADIO B2/25 B66  
SCALE: N.T.S.

MANUFACTURER:	ERICSSON
MODEL:	8863 RADIO
DIMENSIONS:	18.82" x 14.76" x 5.71" (H x W x D)
MODEL BAND:	B41 FOR NR AND LTE
WEIGHT B41:	50.93 LBS



5 34376 - ERICSSON 8863 RADIO  
SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:

R-607

REVISION:

0

FVV-65A-R3



6-port sector antenna, 2x 617-894 and 4x 1695-2690 MHz, 65° HPBW,  
3x RET, 600 MHz-Ready Antenna Technology

General Specifications

Antenna Type	Sector
Band	Multi-band
Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	Fiberglass, UV resistant
Radiator Material	Copper   Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female   8-pin DIN Male
RET Interface, quantity	1 female   1 male
Input Voltage	10-30 Vdc
Internal RET	High band (2)   Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	10 W
Protocol	9GPP/4G 2.0 (Single RET)

Dimensions

Width	300 mm   11.811 in
Depth	181 mm   7.126 in

Page 1 of 4

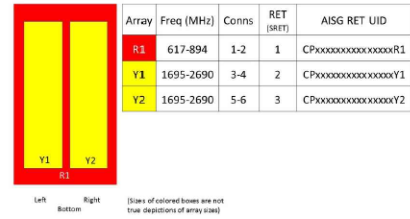
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COMMSCOPE®

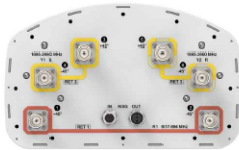
FVV-65A-R3

Length	1413 mm   55.63 in
Net Weight, without mounting kit	15.7 kg   34.613 lb

Array Layout



Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 - 2690 MHz   617 - 894 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Page 2 of 4

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COMMSCOPE®

FVV-65A-R3

Electrical Specifications

Frequency Band, MHz	617-698	698-894	1695-1880	1850-1990	1920-2200	2300-2500	2500-2690
Gain, dBi	13.2	14.1	16.5	17	17.3	17.8	17.8
Beamwidth, Horizontal, degrees	75	74	69	66	67	64	60
Beamwidth, Vertical, degrees	19.2	15.4	7.6	7.1	6.8	5.9	5.5
Beam Tilt, degrees	2-18	2-18	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	23	23	16	16	17	19	18
Front-to-Back Ratio at 180°, dB	28	32	32	32	31	31	31
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	28	28	28	28	28	28	28
VSWR / Return loss, dB	1.5/140	1.5/140	1.5/140	1.5/140	1.5/140	1.5/140	1.5/140
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	200	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	617-698	698-894	1695-1880	1850-1990	1920-2200	2300-2500	2500-2690
Gain by all Beam Tilts, average, dBi	13	13.4	16.1	16.6	16.8	17.4	17.4
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.7	±0.7	±0.5	±0.5	±0.4	±0.5
Gain by Beam Tilt, average, dBi	21°/13.1 30°/13.1 38°/12.8	21°/13.7 30°/13.4 38°/12.9	21°/16.1 30°/16.2 38°/13.6	21°/16.3 30°/16.7 38°/13.6	21°/16.5 30°/16.9 38°/13.6	21°/17.2 30°/17.7 38°/17.1	21°/17.2 30°/17.7 38°/17.2
Beamwidth, Horizontal Tolerance, degrees	±3.2	±5.1	±4.8	±3.9	±4.9	±5.7	±6.7
Beamwidth, Vertical Tolerance, degrees	±1.4	±1.9	±0.5	±0.3	±0.4	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	15	20	14	16	17	16	16
Front-to-Back Total Power at 180° ± 30°, dB	20	23	27	27	26	24	24
CPR at Boresight, dB	15	16	21	20	21	22	22
CPR at Sector, dB	10	10	12	12	9	5	4

Mechanical Specifications

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COMMSCOPE®

FVV-65A-R3

Wind Loading @ Velocity, frontal	203 dN @ 150 km/h (45.6 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	167 dN @ 150 km/h (37.5 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	392 dN @ 150 km/h (88.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	208 dN @ 150 km/h (46.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h   149.75 mph

Packaging and Weights

Width, packed	441 mm   17.362 in
Depth, packed	337 mm   13.268 in
Length, packed	1558 mm   61.339 in
Weight, gross	26.6 kg   58.643 lb

Regulatory Compliance/Certifications

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



Included Products

BSA/MNT-3	- Wide Profile Antenna Down tilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.
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\* Footnotes

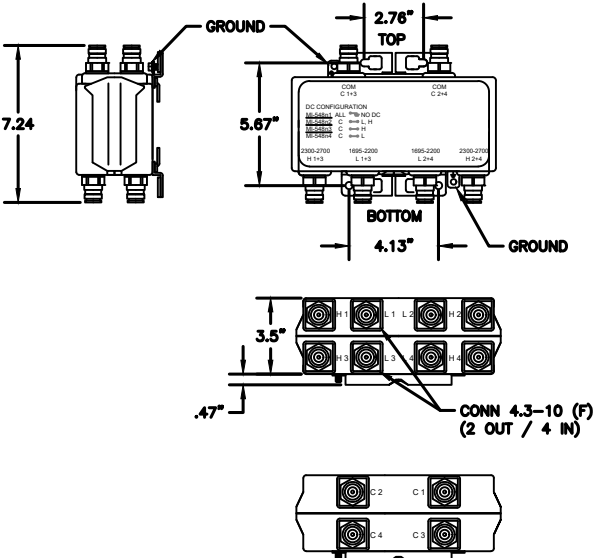
Performance Note	Severe environmental conditions may degrade optimum performance.
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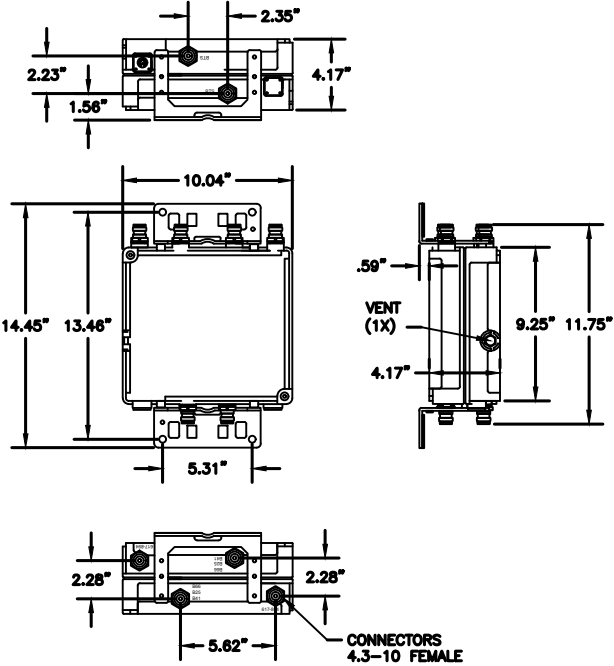
MANUFACTURER:	MICRODATA
MODEL:	MI-54844 QUAD DIPLEXER
DIMENSIONS (SINGLE UNIT):	9.41" x 4.33" x 1.91 (H x W x D)
WEIGHT (SINGLE UNIT):	5.73 LBS



2 34546 - MI-54844 QUAD DIPLEXER

SCALE: N.T.S.

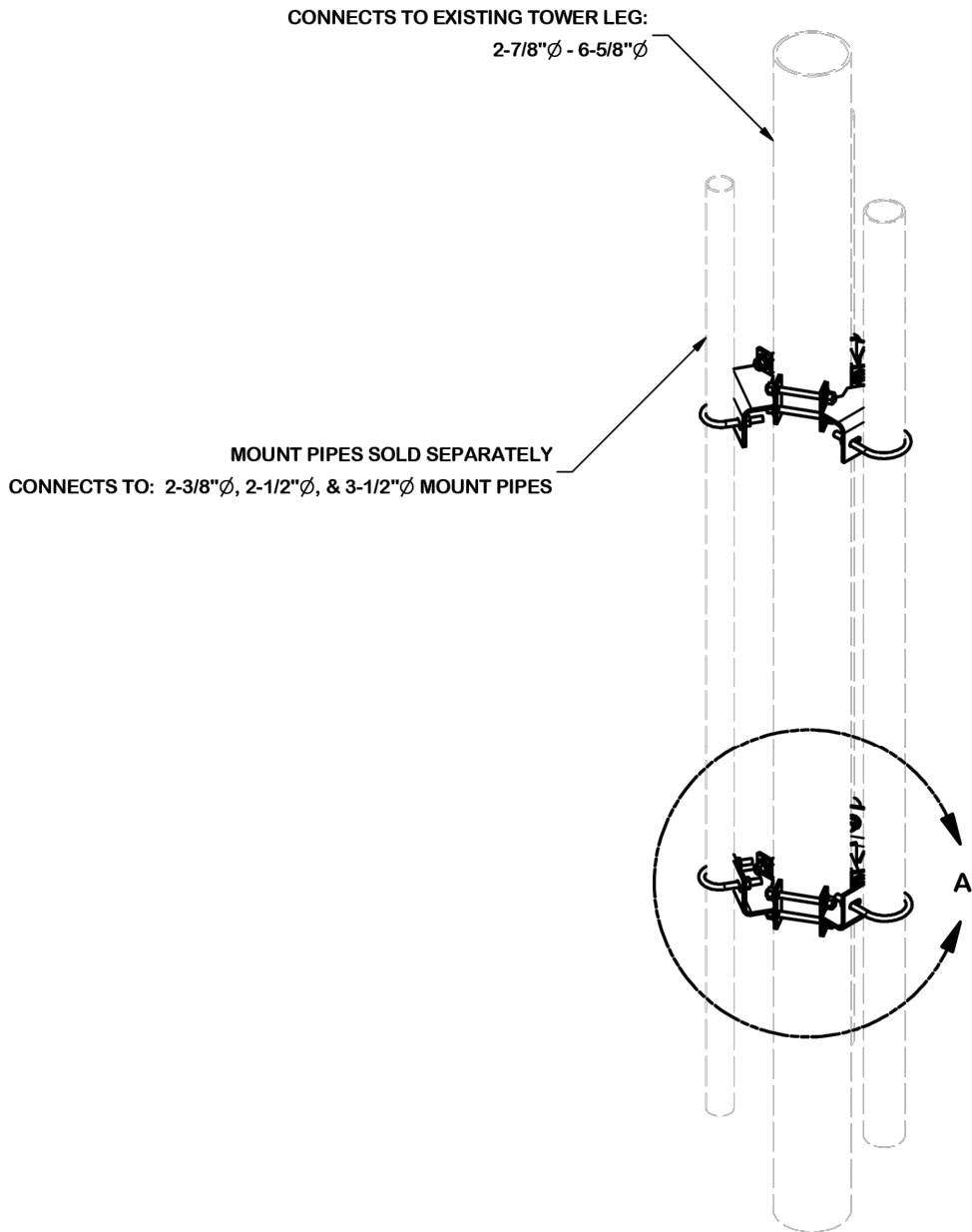
MANUFACTURER:	COMMSCOPE
MODEL:	TMAT19G21BL26-21 (TWIN TMA DIPLEXED)
DIMENSIONS:	10.04" x 14.45" x 4.76" (H x W x D)
WEIGHT:	18.7 LBS



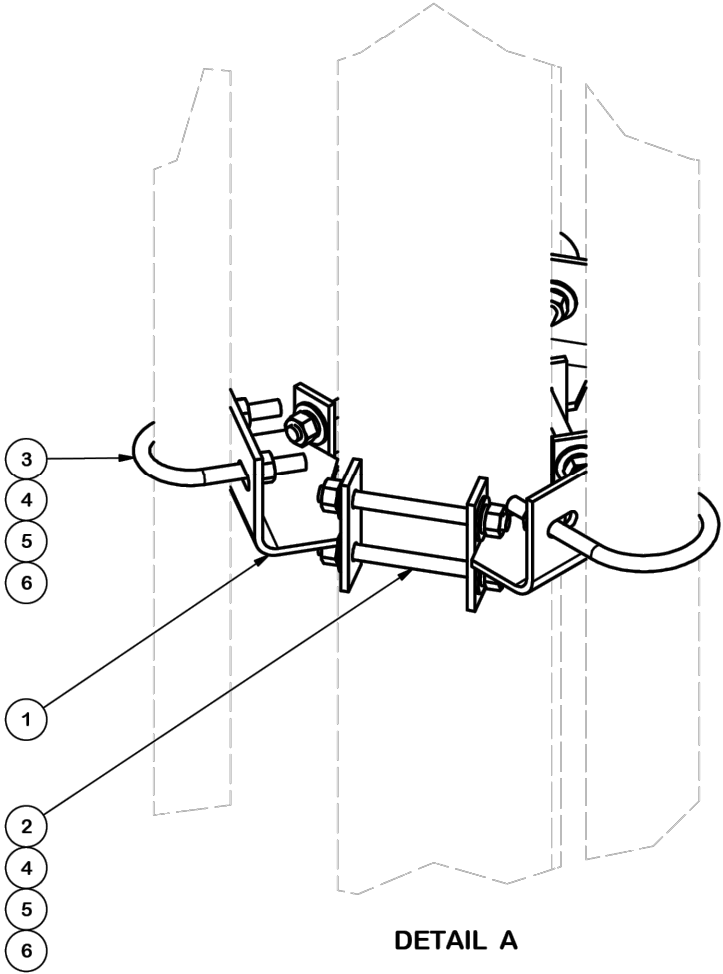
3 34615 - COMMSCOPE TRI-BAND TMA

SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.



PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	6	X-UTSM	X-UTSM		3.76	22.58
2	12	G12R-6	1/2" x 6" THREADED ROD (HDG.)		0.40	4.79
3	6	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.63	1.25
3	6	X-UB1300	1/2" X 3" X 5" X 2" U-BOLT (HDG.)		0.70	1.39
3	6	X-UB1358	1/2" X 3-5/8" X 5-1/2" X 3" U-BOLT (HDG.)		0.77	1.54
4	36	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	1.23
5	36	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.50
6	36	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	2.58
TOTAL WT. #						48.15



TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:  
SAWED, SHEARED AND GAS CUT EDGES (± 0.030")  
DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES  
LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES  
BENDS ARE ± 1/2 DEGREE  
ALL OTHER MACHINING (± 0.030")  
ALL OTHER ASSEMBLY (± 0.060")

PROPRIETARY NOTE:  
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION

UNIVERSAL TRI-SECTOR MOUNT KIT

CPD NO.	DRAWN BY	ENG. APPROVAL
	CSL3 4/10/2017	3RD PARTY
CLASS	DRAWING USAGE	CHECKED BY
01	SHOP	BMC 4/27/2017



A valmont COMPANY

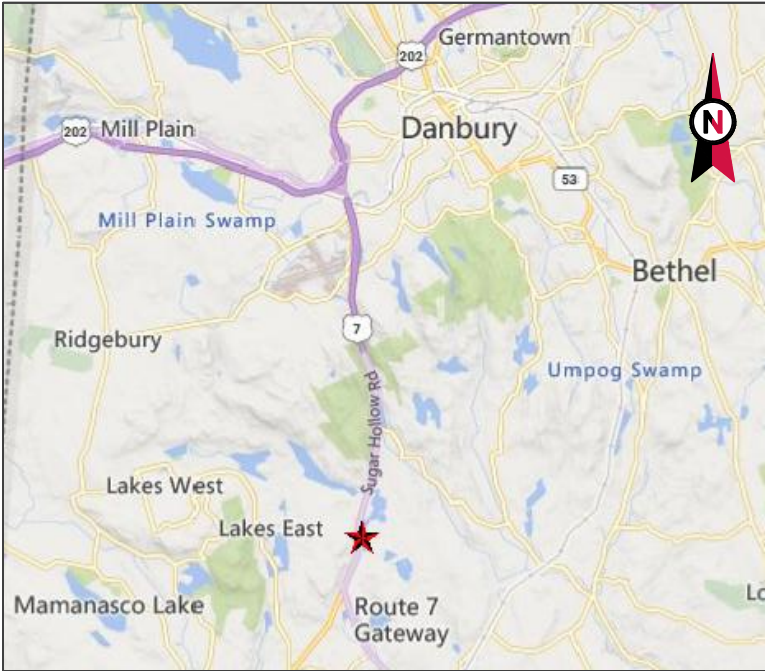
Locations:  
New York, NY  
Atlanta, GA  
Los Angeles, CA  
Plymouth, IN  
Salem, OR  
Dallas, TX

Engineering  
Support Team:  
1-888-753-7446

PART NO.	UTSM
DWG. NO.	UTSM

PAGE  
1 OF 1



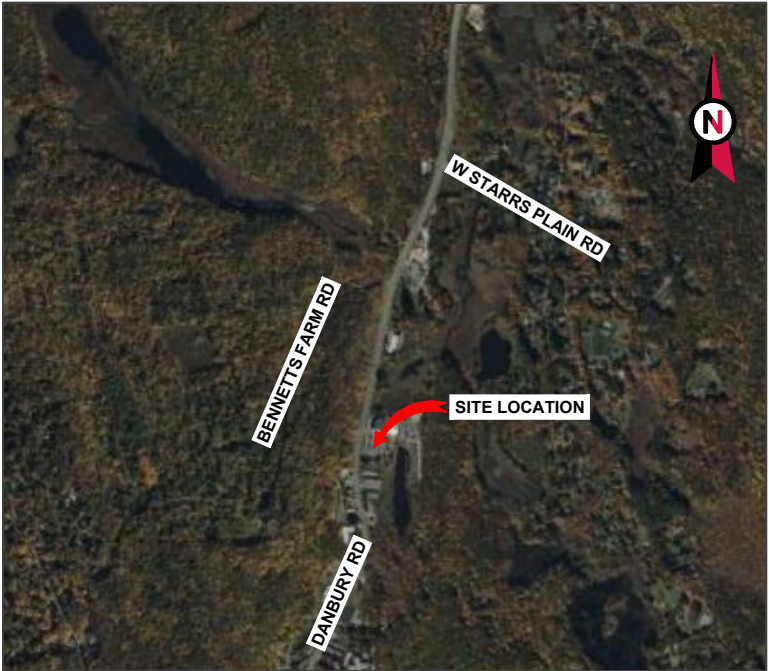


VICINITY MAP




AMERICAN TOWER®

SITE NAME: RIDGEFIELD-DANBURY RD.  
SITE NUMBER: 302471  
ATC PROJECT NUMBER: 14922626\_C6\_05  
SITE ADDRESS: 746 DANBURY ROAD  
RIDGEFIELD, CT 06877



LOCATION MAP

99 FT CONCEALMENT CANISTER POLE MODIFICATIONS

PROJECT TEAM	PROJECT INFORMATION	SHEET	SHEET TITLE	REV.
<div><u>TOWER OWNER</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801</div> <div><u>ENGINEERED BY</u> ATC TOWER SERVICES 1 FENTON MAIN STREET, SUITE 300 CARY, NC 27511</div> <div><u>CARRIER INFORMATION</u> CARRIER: T-MOBILE CARRIER SITE NAME: RIDGEFIELD/ RT 7 CARRIER SITE NUMBER: CT11297C</div>	1. THE PROJECT DEPICTED IN THESE PLANS IS BASED ON THE RECOMMENDATIONS MADE BY ATC ENGINEERING, DERIVED FROM THE RESULTS OF THE STRUCTURAL ANALYSIS COMPLETED UNDER ENGINEERING PROJECT NUMBER 14922626_C3_03 DATED 03/04/25. SATISFACTORY COMPLETION OF THE WORK INDICATED IN THESE PLANS WILL RESULT IN THE STRUCTURE MEETING THE REQUIREMENTS OF THE SPECIFICATIONS UNDER WHICH THE STRUCTURAL WAS COMPLETED. 2. SEE SHEET S-201 FOR MODIFICATION SCOPE OF WORK (SOW) AND ANY ADDITIONAL WORK TO BE COMPLETED.	G-001	COVER	0
		G-002	IBC GENERAL NOTES	0
		G-003	SPECIAL INSPECTION CHECKLIST	0
		G-004	BILL OF MATERIALS	0
		S-201	MODIFICATION PROFILE	0
		S-501	CONCEALMENT CANISTER INSTALLATION DETAILS (1 OF 2)	0
		S-502	CONCEALMENT CANISTER INSTALLATION DETAILS (2 OF 2)	0
		S-503	CONCEALMENT CANISTER SHROUD INSTALLATION DETAILS	0
		S-504	CONCEALMENT CANISTER MESH INSTALLATION DETAILS	0
		Z-501	5.000" SPINE CLAMP WELDMENT FABRICATION DETAILS	0
<div> Know what's below. Call before you dig.</div>	THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.6100 (B)(7).	Z-502	SPOKE ARM FABRICATION DETAILS	0
		Z-503	48" RING WELDMENT FABRICATION DETAILS	0
	ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.			
	1. ANSI/TIA/EIA: STRUCTURAL STANDARDS (222-1 EDITION) 2. INTERNATIONAL BUILDING CODE (2021 IBC) 3. CONNECTICUT STATE BUILDING CODE (2022)			
	PROJECT LOCATION GEOGRAPHIC COORDINATES LATITUDE: 41.32997662 LONGITUDE: -73.47233185			



**AMERICAN TOWER®**  
**A.T. ENGINEERING SERVICES, PLLC**  
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SUITE 300  
CARY, NC 27511  
PHONE: (919) 468-0112  
COA: PEC.0001553

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REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	TMR	03/28/25

ATC SITE NUMBER:  
302471  
ATC SITE NAME:  
RIDGEFIELD-DANBURY RD.  
CONNECTICUT  
SITE ADDRESS:  
746 DANBURY ROAD  
RIDGEFIELD, CT 06877



DRAWN BY:	TMR
APPROVED BY:	CLJ
DATE DRAWN:	03/28/25
ATC JOB NO:	14922626_C6_05

COVER	
SHEET NUMBER: G-001	REVISION: 0

GENERAL

1. ALL WORK TO BE COMPLETED PER APPLICABLE LOCAL, STATE, FEDERAL CODES AND ORDINANCES AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS FOR WIRELESS TOWER SITES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND ABIDING BY ALL REQUIRED PERMITS.
2. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER AND FOUNDATION CONSTRUCTION.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY INSTALLATION INTERFERENCES. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL FOLLOW SIMILAR DETAILS FOR THIS JOB.
4. ANY SUBSTITUTIONS SHALL CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
5. ANY MANUFACTURED DESIGN ELEMENTS SHALL CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS AND SHOULD BE SIMILAR TO THOSE SHOWN. THESE DESIGN ELEMENTS MUST BE STAMPED BY AN ENGINEER PROFESSIONALLY REGISTERED IN THE STATE OF THE PROJECT, AND SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.
6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL CODES AND OSHA SAFETY REGULATIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY, PER ANSI/TIA-322 AND ANSI/ASSE A10.48, TO PROVIDE A COMPLETE AND STABLE STRUCTURE AS SHOWN ON THESE DRAWINGS.
8. CONTRACTOR'S PROPOSED INSTALLATION SHALL NOT INTERFERE, NOR DENY ACCESS TO, ANY EXISTING OPERATIONAL AND SAFETY EQUIPMENT.

STRUCTURAL STEEL

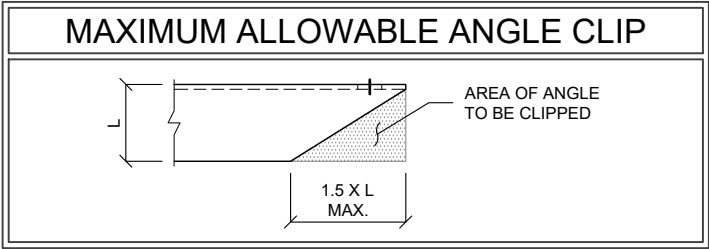
1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
- a. ALL W-SHAPES: ASTM A572, GRADE 50, UNLESS NOTED OTHERWISE.

b. ALL OTHER ROLLED SHAPES: ASTM A36, UNLESS NOTED OTHERWISE.

c. HSS SECTION (SQUARE, RECTANGULAR, AND ROUND): ASTM A500, GRADE B, UNLESS NOTED OTHERWISE.

d. ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS: ASTM A3125 GRADE A325, TYPE SC OR N, UNLESS NOTED OTHERWISE.

e. ALL ANCHOR RODS: ASTM F1554, GRADE 36, UNLESS NOTED OTHERWISE.
2. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
3. ALL U-BOLTS SHALL BE ASTM A36 OR EQUIVALENT, WITH LOCKING DEVICE, UNLESS NOTED OTHERWISE.
4. FIELD CUT EDGES, EXCEPT DRILLED HOLES, SHALL BE GROUND SMOOTH.
5. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES & GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
6. ALL STRUCTURAL STEEL EMBEDDED IN THE CONCRETE SHALL BE APPLIED WITH (2) BRUSHED COATS OF POLYGUARD CA-9 MASTIC OR EQUIVALENT. REFER TO THE MANUFACTURER SPECIFICATIONS FOR SURFACE PREPARATION AND APPLICATION. APPLICATION OF POLYGUARD 400 WRAP IS NOT ESSENTIAL.
7. CONTRACTOR SHALL PERFORM WORK ON ONLY ONE (1) TOWER FACE AND REPLACE/REINFORCE ONE (1) BOLT/MEMBER AT A TIME.
8. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.



TOLERANCES

1. TOLERANCES ON ALL INSTALLATIONS ARE ±1", UNLESS NOTED OTHERWISE.
2. TOLERANCES ON FABRICATION DIMENSIONS ARE ±0.030" FOR MACHINING AND ±0.060" FOR STRUCTURAL, UNLESS NOTED OTHERWISE.

WELDING

1. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
2. ALL WELDS SHALL BE INSPECTED VISUALLY. IF DIRECTED BY ENGINEER OF RECORD, 25% OF WELDS SHALL BE INSPECTED WITH EITHER ULTRASONIC OR MAGNETIC PARTICLE METHODS. (100% IF REJECTABLE DEFECTS ARE FOUND) TO MEET THE ACCEPTABLE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY. 100% OF ALL FULL PENETRATION WELDS SHALL BE INSPECTED WITH EITHER ULTRASONIC OR MAGNETIC PARTICLE METHODS.
3. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
4. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER AND/OR BASE METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
5. IN CASES WHERE BASE METAL GRADE IS UNKNOWN, ALL WELDING ON LATTICE TOWERS SHALL BE DONE WITH E70XX ELECTRODES; ALL WELDING ON POLE STRUCTURES SHALL BE DONE WITH E80XX ELECTRODES, UNLESS NOTED OTHERWISE.
6. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING 1/2" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.

PAINT

1. AS REQUIRED, CLEAN AND PAINT PROPOSED STEEL ACCORDING TO FAA ADVISORY CIRCULAR AC 70/7460-1L.

BOLT TIGHTENING PROCEDURE

1. STRUCTURAL CONNECTIONS TO BE ASSEMBLED AND INSPECTED IN ACCORDANCE WITH RCSC SPECIFICATIONS.
2. ALL BOLTS WHOSE AXES ARE INSTALLED VERTICALLY, UNLESS OTHERWISE NOTED, SHALL BE INSTALLED AND TIGHTENED PER SECTION 8.2.1 THROUGH 8.2.4 OF THE RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS" PER THE FOLLOWING GUIDELINES:

FOR A325 BOLTS 1" DIAMETER AND LESS:

- a. DIRECT TENSION INDICATING (DTI) SQUIRTER WASHERS: WASHERS SHALL BE INSTALLED AND ORIENTED / TIGHTENED PER MANUFACTURER SPECIFICATIONS TO ACHIEVE DESIRED LEVEL OF BOLT PRE-TENSION.

FOR A325 BOLTS EXCEEDING 1" DIAMETER AND ALL OTHER HIGH STRENGTH BOLTS, ONE OF THE FOLLOWING METHODS SHALL BE USED:

- a. DIRECT TENSION INDICATING (DTI) SQUIRTER WASHERS: WASHERS SHALL BE INSTALLED AND ORIENTED / TIGHTENED PER MANUFACTURER SPECIFICATIONS TO ACHIEVE DESIRED LEVEL OF BOLT PRE-TENSION.
- b. RCSC "TURN-OF-THE-NUT" METHOD: PRIOR TO APPLICATION OF TURN-OF-NUT PRETENSIONING, ALL BOLTS IN THE CONNECTION SHALL BE BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN RCSC SECTION 8.1, AND MATCH-MARKING OF THE NUTS AND PROTRUDING END OF THE BOLTS MUST BE IMPLEMENTED FOR ALL BOLTS IN THE CONNECTION.

SUBSEQUENTLY, ALL BOLTS SHALL BE ROTATED BEYOND SNUG TIGHT CONDITION USING THE CHART BELOW:

BOLT LENGTHS UP TO AND INCLUDING FOUR DIAMETERS

1/2"	BOLTS UP TO AND INCLUDING 2.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
5/8"	BOLTS UP TO AND INCLUDING 2.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
3/4"	BOLTS UP TO AND INCLUDING 3.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
7/8"	BOLTS UP TO AND INCLUDING 3.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1"	BOLTS UP TO AND INCLUDING 4.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS UP TO AND INCLUDING 4.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS UP TO AND INCLUDING 5.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-3/8"	BOLTS UP TO AND INCLUDING 5.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS UP TO AND INCLUDING 6.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT

BOLT LENGTHS OVER FOUR DIAMETERS BUT NOT EXCEEDING EIGHT DIAMETERS

1/2"	BOLTS 2.25 TO 4.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
5/8"	BOLTS 2.75 TO 5.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
3/4"	BOLTS 3.25 TO 6.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
7/8"	BOLTS 3.75 TO 7.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1"	BOLTS 4.25 TO 8.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS 4.75 TO 9.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS 5.25 TO 10.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-3/8"	BOLTS 5.75 TO 11.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS 6.25 TO 12.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT

3. ALL OTHER BOLTED CONNECTIONS SHALL BE BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8.1 OF THE SPECIFICATION.

BOLT TIGHTENING PROCEDURE (CONT'D)

4. ALL BOLT HOLES SHALL BE ALIGNED TO PERMIT INSERTION OF THE BOLTS WITHOUT UNDUE DAMAGE TO THE THREADS. BOLTS SHALL BE PLACED IN ALL HOLES WITH WASHERS POSITIONED AS REQUIRED AND NUTS THREADED TO COMPLETE THE ASSEMBLY. COMPACTING THE JOINT TO THE SNUG-TIGHT CONDITION SHALL PROGRESS SYSTEMATICALLY FROM THE MOST RIGID PART OF THE JOINT. THE SNUG-TIGHTENED CONDITION IS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.

APPLICABLE CODES AND STANDARDS


1. ANSI/TIA: STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES, 222-I EDITION.
2. 2022 CONNECTICUT STATE BUILDING CODE.
3. 2021 INTERNATIONAL BUILDING CODE.
4. ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE. REFERENCE LATEST APPROPRIATE EDITION TO MATCH LOCAL AND/OR INTERNATIONAL BUILDING CODE(S) LISTED ABOVE.
5. CRSI: CONCRETE REINFORCING STEEL INSTITUTE, MANUAL OF STANDARD PRACTICE, LATEST EDITION.
6. AISC: AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
7. AWS: AMERICAN WELDING SOCIETY D1.1, STRUCTURAL WELDING CODE, LATEST EDITION.

SPECIAL INSPECTION

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH IBC 2021, SECTION 1704 AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:

a) STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELD ONLY).

b) HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 EXTENSION FLANGE BOLTS TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD).
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER IN ACCORDANCE WITH IBC 2021, SECTION 1704, UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT THE SPECIAL INSPECTIONS.



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**SUITE 300**  
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**PHONE: (919) 468-0112**  
**COA: PEC.0001553**

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REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	TMR	03/28/25
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ATC SITE NUMBER:  
**302471**  
ATC SITE NAME:  
**RIDGEFIELD-DANBURY RD.**  
**CONNECTICUT**

SITE ADDRESS:  
746 DANBURY ROAD  
RIDGEFIELD, CT 06877



Digitally Signed: 2025-04-03

DRAWN BY:	TMR
APPROVED BY:	CLJ
DATE DRAWN:	03/28/25
ATC JOB NO:	14922626_C6_05

IBC GENERAL NOTES

SHEET NUMBER:

G-002

REVISION:

0



MODIFICATION INSPECTION NOTES

THE SPECIAL INSPECTION (SI) PROCEDURE IS INTENDED TO CONFIRM THAT CONSTRUCTION AND INSTALLATION MEETS ENGINEERING DESIGN, ATC PROCEDURES AND ATC STANDARD SPECIFICATIONS FOR WIRELESS TOWER SITES.

TO ENSURE THAT THE REQUIREMENTS OF THE SI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR AND THE INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PO IS RECEIVED FROM AMERICAN TOWER CORPORATION (ATC). IT IS EXPECTED THAT EACH PARTY WILL PROACTIVELY REACH OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT YOUR AMERICAN TOWER POINT OF CONTACT.

SPECIAL INSPECTOR

THE SPECIAL INSPECTOR IS REQUIRED TO CONTACT THE GENERAL CONTRACTOR AS SOON AS RECEIVING A PO FROM ATC. UPON RECEIVING A PO FROM ATC THE SPECIAL INSPECTOR AT A MINIMUM MUST:

- REVIEW THE REQUIREMENTS OF THE SI CHECKLIST.
- WORK WITH THE GENERAL CONTRACTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS.
- ANY CONCERNS WITH THE SCOPE OF WORK OR PROJECT COMMITMENT MUST BE RELAYED TO THE ATC POINT OF CONTACT IMMEDIATELY.

THE SPECIAL INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GENERAL CONTRACTOR INSPECTION AND TEST REPORTS, REVIEWING THESE DOCUMENTS FOR ADHERENCE TO CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE SI REPORT TO AMERICAN TOWER CORPORATION.


GENERAL CONTRACTOR

THE GENERAL CONTRACTOR IS REQUIRED TO CONTACT THE SI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE SI CHECKLIST.
- WORK WITH THE SI TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS.
- BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS.

THE GENERAL CONTRACTOR SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE SI CHECKLIST.

SPECIAL INSPECTION CHECKLIST								
INSPECTION DOCUMENT	DESCRIPTION	INSPECTION TESTING REQUIRED	RESPONSIBILITY	SI REVIEW REQUIRED			INSPECTION FREQUENCY	
				PRE CX	DURING CX	POST CX	PERIODIC	CONTINUOUS
SPECIAL INSPECTION FIELD WORK & REPORT	DOCUMENTATION AND SITE VISIT CONDUCTED BY AN ATC APPROVED SPECIAL INSPECTOR AS REQUIRED BY ATC AND OTHER AUTHORITIES HAVING JURISDICTION. INSPECTION PARAMETERS TO FOLLOW ATC'S STANDARD SPECIFICATION FOR WIRELESS TOWER SITES.	✓	SI			✓		
ENGINEERING ASSEMBLY DRAWINGS	GC SHALL SUBMIT DRAWINGS TO SI FOR INCLUSION IN SI REPORT	✓	GC	✓				
FABRICATED MATERIAL VERIFICATION & INSPECTION	MTR AND OR MILL CERTIFICATIONS FOR SUPPLIED MATERIALS GC SHALL SUPPLY SI WITH REPORTS TO BE INCLUDED IN SI REPORT WHEN REQUIRED BY ATC	✓	SI	✓				
CERTIFIED WELD INSPECTION	INSPECTION AND REPORT OF STRUCTURAL WELDING PERFORMED DURING PROJECT COMPLETED BY A CWI AND INCLUDED WITHIN SI REPORT		GC / TA					
FOUNDATION INSPECTION & VERIFICATION	VISUAL OBSERVATION AND APPROVAL OF FOUNDATION EXCAVATION, REBAR PLACEMENT, CASING/SHORING/FORMING PLACEMENT, AND ANCHOR TEMPLATE AND ANCHOR PLACEMENT - TO BE SI APPROVED PRIOR TO CONCRETE POUR AND DOCUMENTED IN THE SI REPORT		SI					
ANCHOR, ROCK ANCHOR OR HELICAL PULL-OUT TEST	PULL TESTING OF INSTALLED ANCHORS TO BE COMPLETED AND DOCUMENTED IN SI REPORT		GC / TA					
CONCRETE INSPECTION & VERIFICATION	CONCRETE MIX DESIGN, SLUMP TEST, COMPRESSIVE TESTING, AND SAMPLE GATHERING TECHNIQUES ARE TO BE PROVIDED FOR INCLUSION IN THE SI REPORT. SI SHALL VERIFY CONCRETE PLACEMENT AS REQUIRED BY THE DESIGN DOCUMENTS (INSPECTION FREQUENCY IS MARKED CONTINUOUS)		GC / TA					
DYWIDAG PLACEMENT/ANCHOR BOLT EMBEDMENT - EPOXY/GROUT INSTALL	ANCHOR/BAR EMBEDMENT, HOLE SIZE, EPOXY/GROUT TYPE, INSTALLATION TEMPERATURE AND INSTALLATION SHALL BE VERIFIED BY THE SI AND INCLUDED IN THE SI REPORT		GC / SI					
BASE PLATE GROUT INSPECTION & VERIFICATION	BASE PLATE GROUTING TYPE AND PLACEMENT SHALL BE CONFIRMED BY THE SI AND INCLUDED IN THE SI REPORT		GC / SI					
EARTHWORK INSPECTION & VERIFICATION	EXCAVATION, FILL, SLOPE, GRADE AND OTHER EARTHWORK REQUIREMENTS PER PLANS SHALL BE VERIFIED BY THE SI AND INCLUDED IN THE SI REPORT		GC / TA					
COMPACTION VERIFICATION	CONTRACTOR SHALL PROVIDE AN INDEPENDENT THIRD PARTY CERTIFIED INSPECTION WHICH PROVIDES TEST RESULTS FOR COMPACTION TEST OF SOILS IN PLACE TO ASTM STANDARDS.		GC / TA					
GROUND TESTING & VERIFICATION	GC SHALL PROVIDE DOCUMENTATION SHOWING THAT THE GROUNDING SYSTEM SHALL HAVE A MEASURED RESISTANCE TO THE GROUND OF NOT MORE THAN THE RECOMMENDED 10 OHMS. PER THE ATC CONSTRUCTION SPECIFICATION UNDER SECTION 2.15 THIS DOCUMENTATION MUST BE AN INDEPENDENT CERTIFICATION.		GC					
STEEL CONSTRUCTION INSPECTION & VERIFICATION	VISUAL OBSERVATION AND APPROVAL OF STEEL CONSTRUCTION TO BE PERFORMED BY THE SI. INSPECTION TO INCLUDE VERIFICATION OF NEW CONSTRUCTION OR MODIFICATION OF EXISTING CONSTRUCTION PER ENGINEERED PLANS. DETAILED VERIFICATION SHALL BE INCLUDED IN SI REPORT.	✓	SI			✓	✓	
ON-SITE COLD GALVANIZING VERIFICATION	SI SHALL VERIFY WITH GC ALL COLD GALVANIZATION TYPE AND APPLICATION AND INCLUDE SUMMARY IN SI REPORT	✓	GC			✓	✓	
GUY WIRE TENSIONING & TOWER ALIGNMENT REPORT	GC SHALL PROVIDE SI EVIDENCE OF PROPER GUY TENSIONING AND TOWER PLUMB PER PLANS. SI SHALL VERIFY AND INCLUDE PLUMB AND TENSION REPORTING IN SI REPORT.		GC					
GC AS-BUILT DRAWINGS WITH CONSTRUCTION RED-LINES	GC SHALL SUBMIT "AS-BUILT" DRAWINGS INDICATING ANY APPROVED CHANGES TO ENGINEERED PLANS TO SI FOR APPROVAL/REVIEW AND INCLUSION IN SI REPORT	✓	GC			✓		
SI AS-BUILT DRAWINGS WITH INSPECTION RED-LINES (AS REQUIRED)	SI SHALL SUBMIT "AS-BUILT" DRAWINGS INDICATING ANY APPROVED CHANGES TO ENGINEERED PLANS WITHIN SI REPORT	✓	SI			✓		
TIA INSPECTION	SI SHALL COMPLETE TIA INSPECTION AND PROVIDE SEPARATE TIA INSPECTION DOCUMENTATION TO ATC CM		SI					
PHOTOGRAPHS	PHOTOGRAPHIC EVIDENCE OF SPECIAL INSPECTION, ON SITE REMEDIATION, AND ITEMS FAILING INSPECTION & REQUIRING FOLLOW UP TO BE INCLUDED WITHIN THE SI REPORT. COMPLETE PHOTO LOG IS TO BE SUBMITTED WITHIN SI REPORT.	✓	GC / SI			✓		
NOTE: SPECIAL INSPECTIONS ARE INTENDED TO BE A COLLABORATIVE EFFORT BETWEEN GC AND SI. WHENEVER POSSIBLE GC IS TO PROVIDE SI WITH PHOTOGRAPHIC OR OTHER ACCEPTABLE EVIDENCE OF PROPER INSTALLATION IF PERIODIC INSPECTION FREQUENCY IS ACCEPTABLE. THE GC AND SI SHALL WORK TO COMPILE EVIDENCE OF PROPER CONSTRUCTION AND LIMIT THE NUMBER OF SI SITE VISITS REQUIRED.								
TABLE KEY: SI - ATC APPROVED SPECIAL INSPECTOR      CX - CONSTRUCTION GC - GENERAL CONTRACTOR                      CM - CONSTRUCTION MANAGER TA - 3RD PARTY TESTING AGENCY              ATC - AMERICAN TOWER CORPORATION								



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RIDGEFIELD, CT 06877

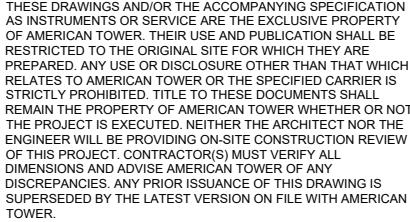


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SPECIAL INSPECTION CHECKLIST	
SHEET NUMBER: G-003	REVISION: 0



[illegible]

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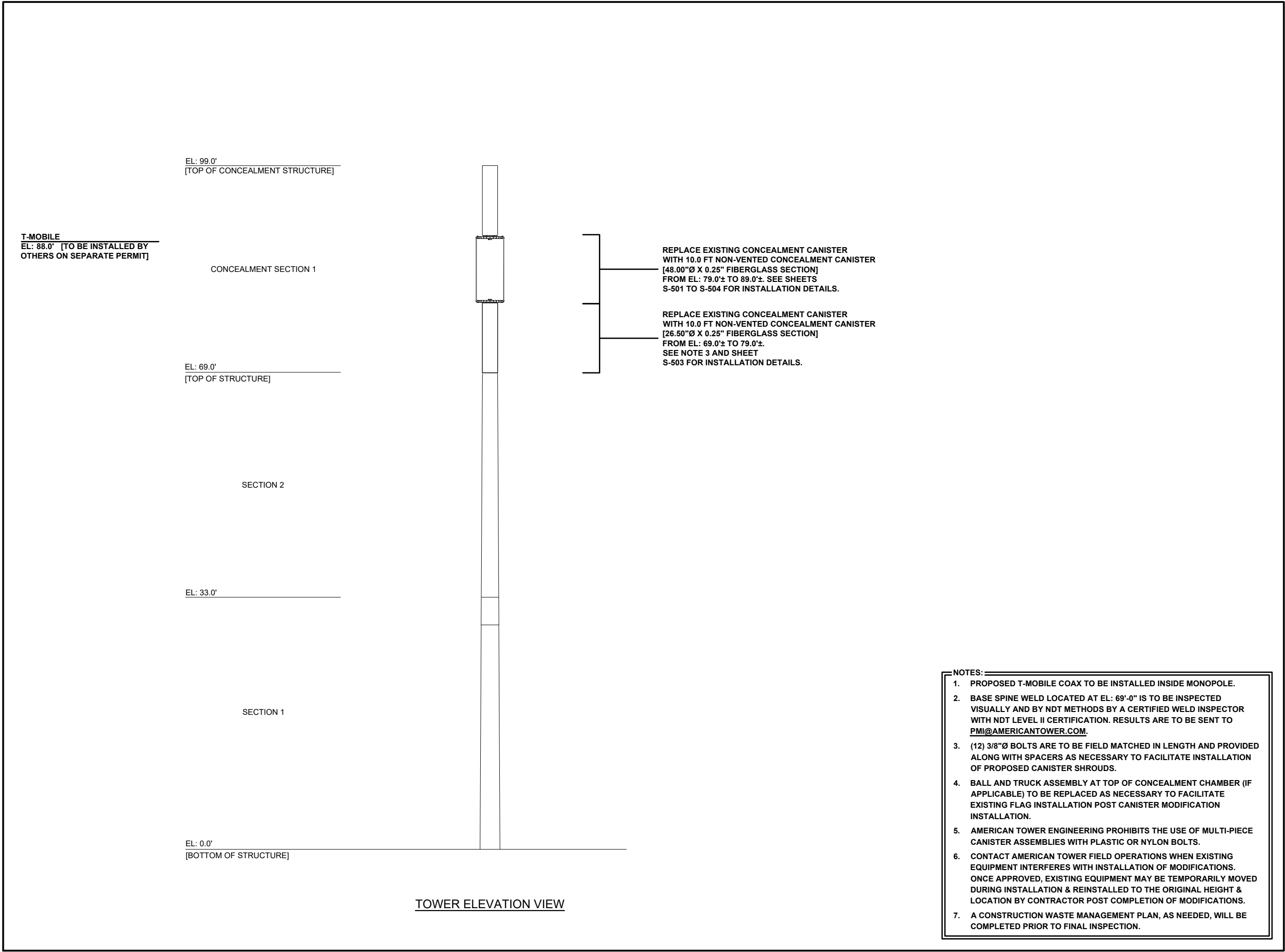
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## BILL OF MATERIALS

SHEET NUMBER: <b>G-004</b>	REVISION: <b>0</b>
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MODIFICATION PROFILE

SHEET NUMBER:	REVISION:
S-201	0

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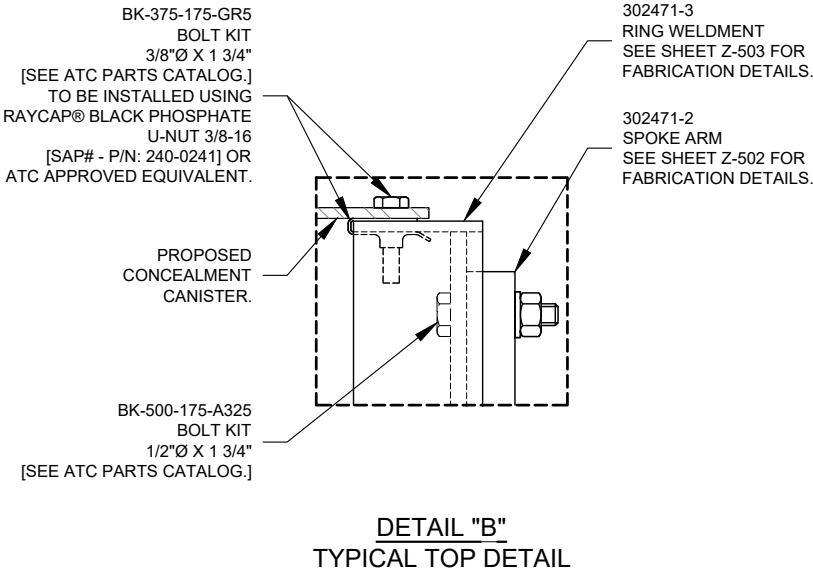
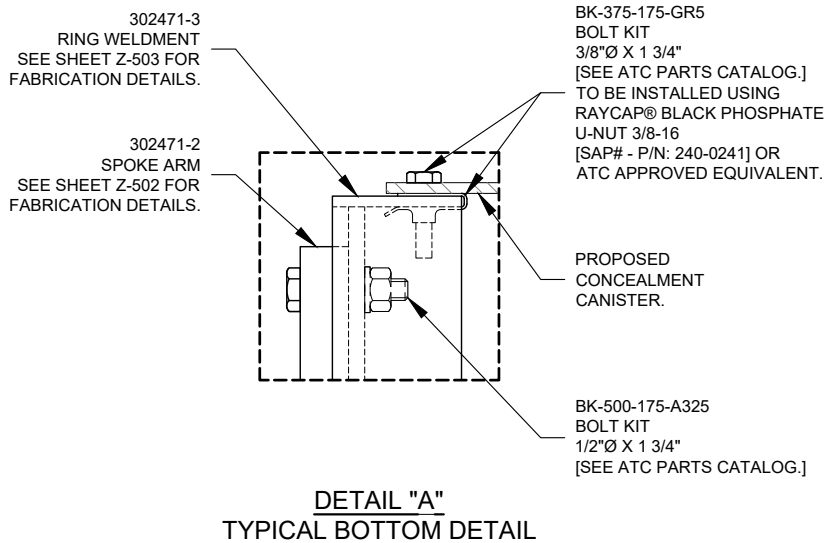
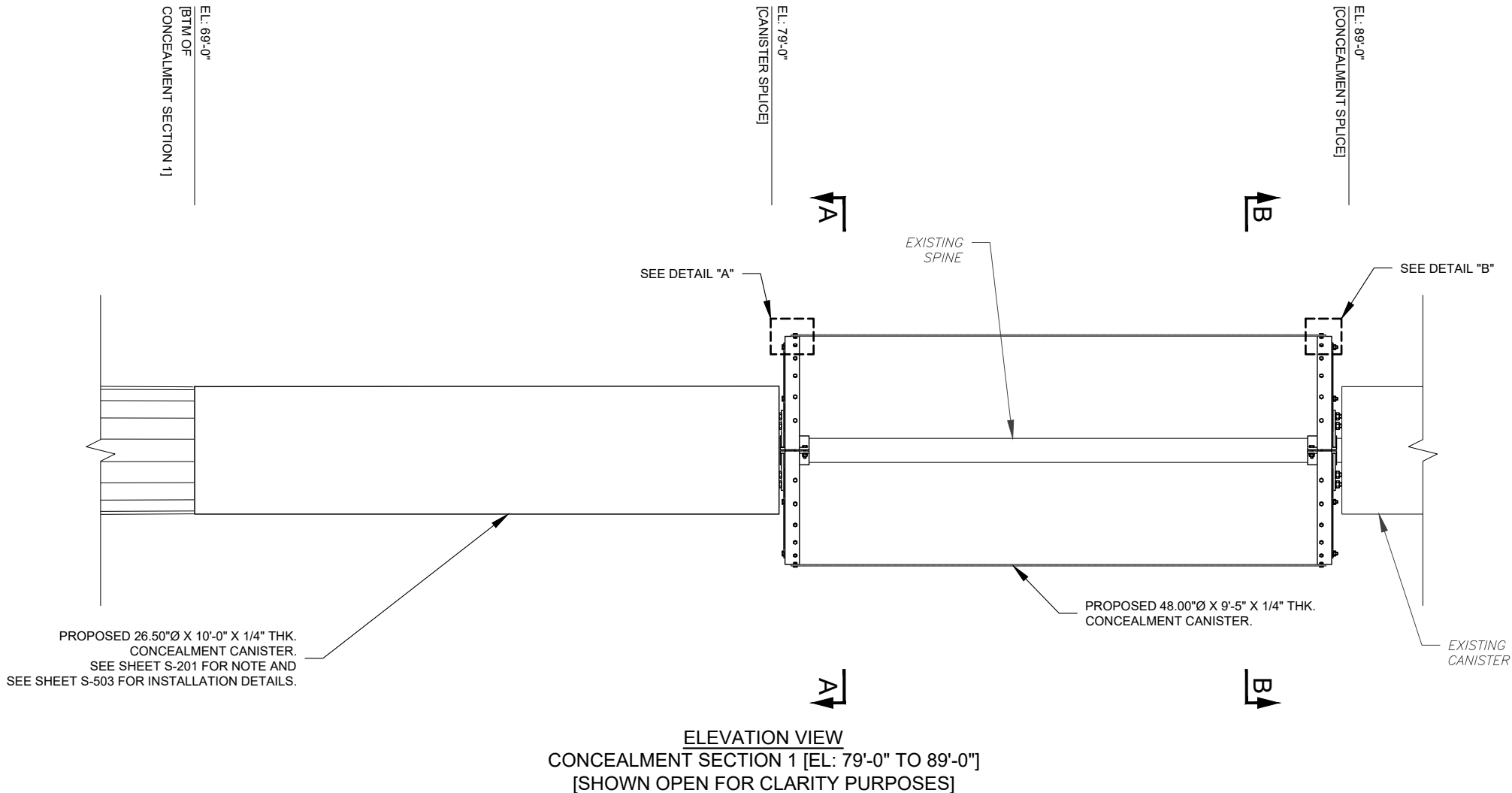


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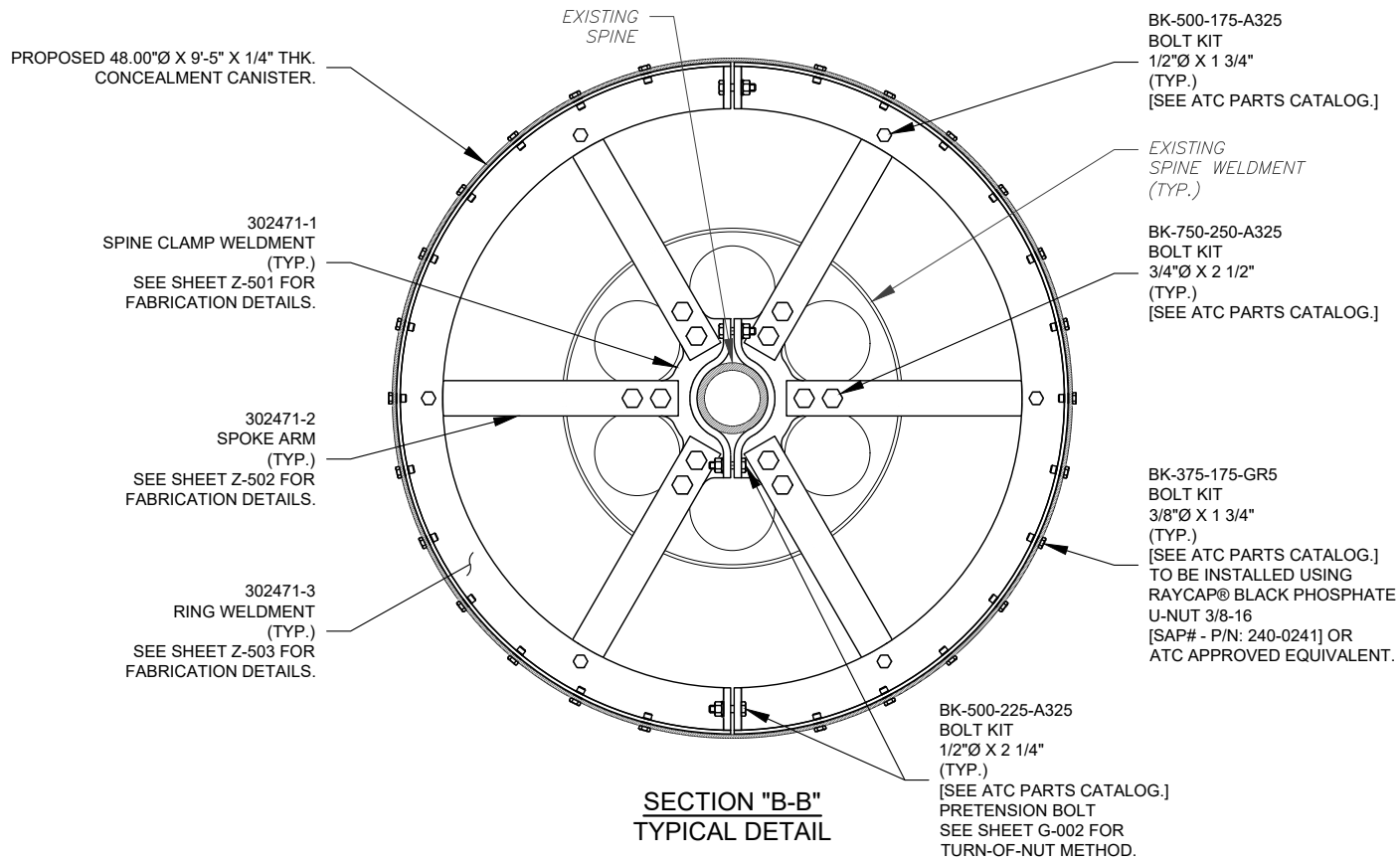
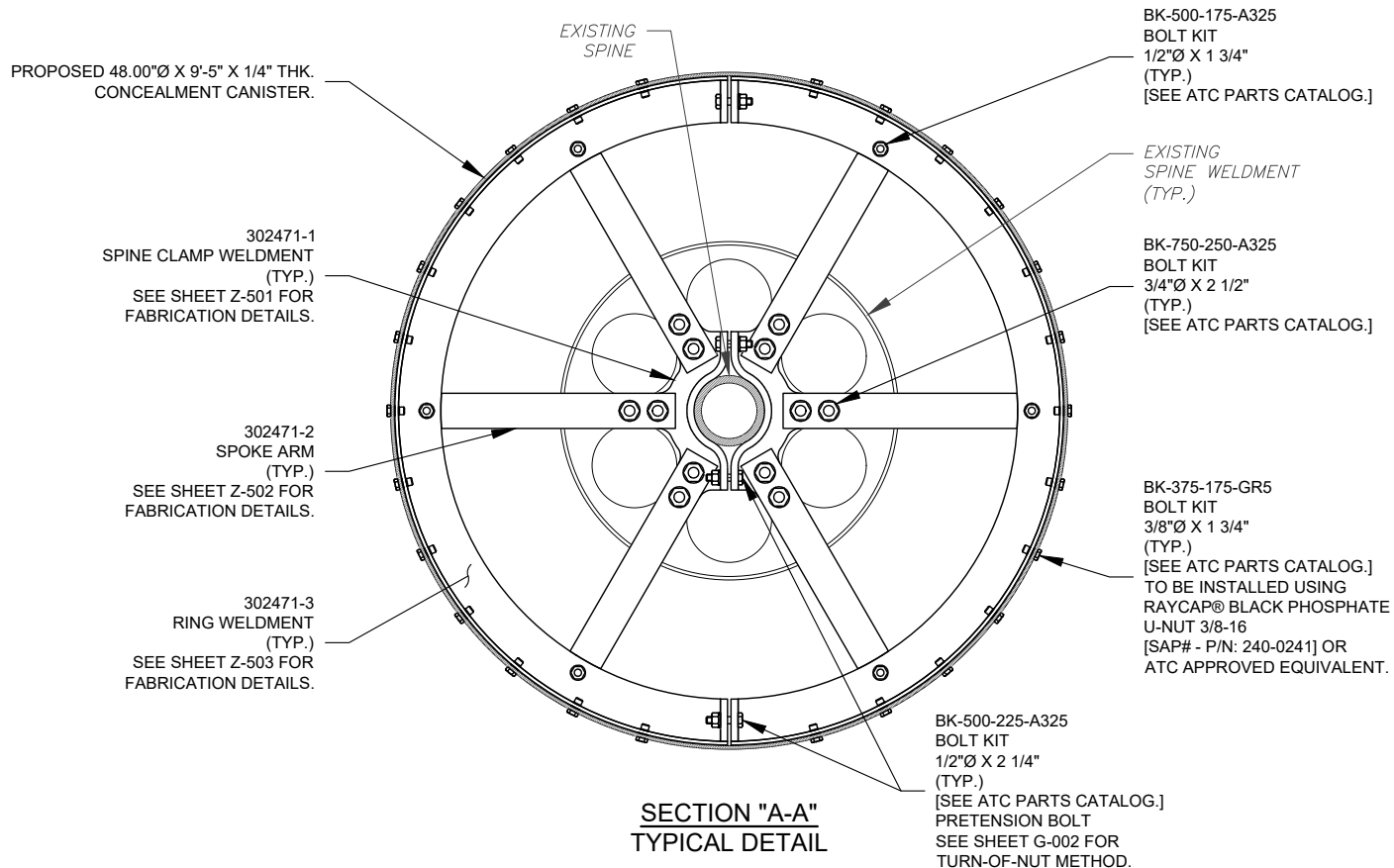
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**CONCEALMENT CANISTER  
INSTALLATION DETAILS  
(1 OF 2)**

SHEET NUMBER:	REVISION:
<b>S-501</b>	<b>0</b>



- NOTES:
- EXISTING RING TABS TO BE REMOVED ON SPINE WELDMENTS AS NECESSARY TO INSTALL PROPOSED CANISTER SHROUD WELDMENTS.
  - SEE SHEET S-502 FOR SECTIONS "A-A" TO "B-B".





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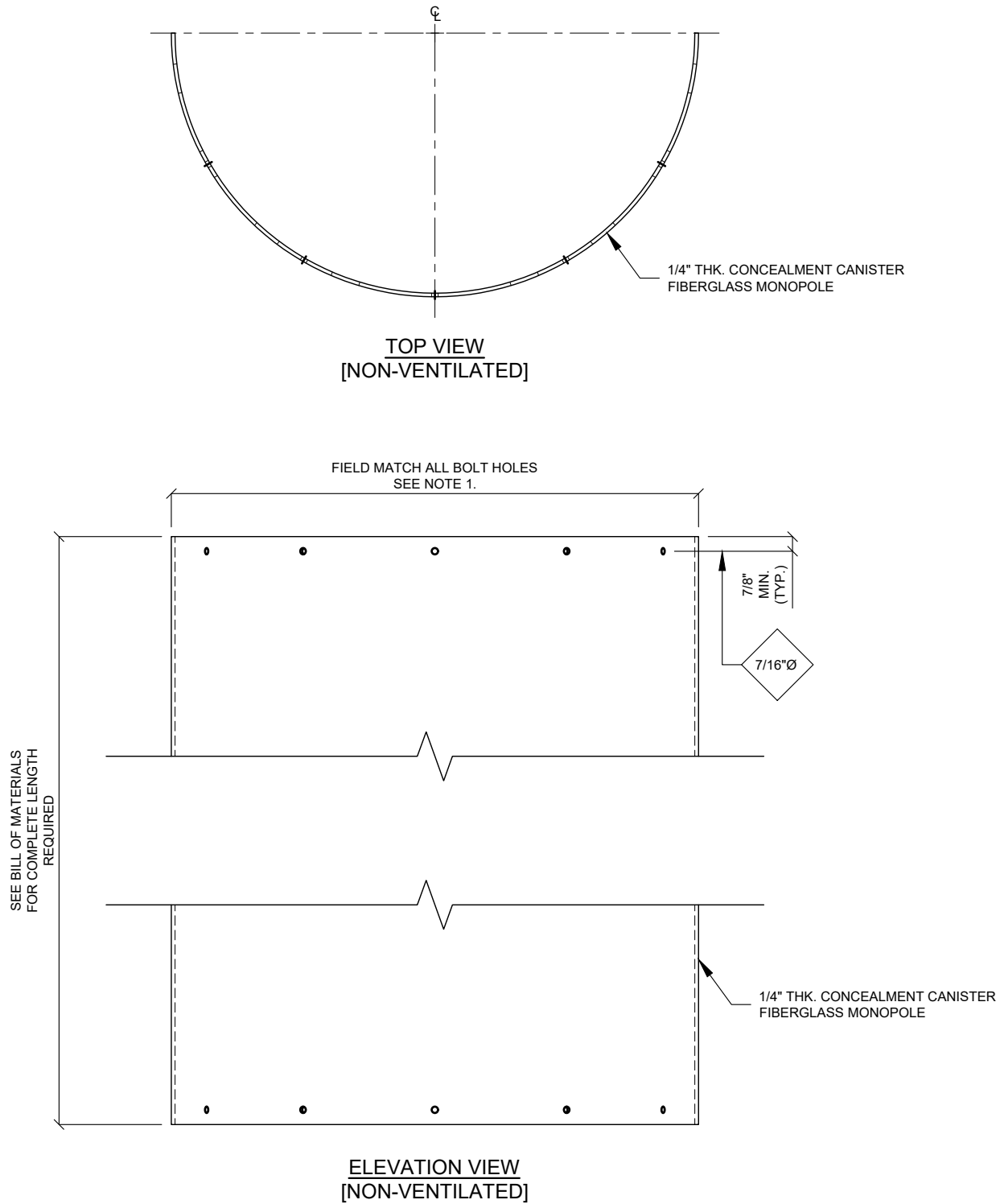


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CONCEALMENT CANISTER  
INSTALLATION DETAILS  
(2 OF 2)

SHEET NUMBER:	REVISION:
S-502	0



- NOTES:
- CANISTER BOLT HOLES TO BE FIELD DRILLED. QUANTITY WILL VARY AND IS TO BASED ON EXTERIOR HOLE COUNT OF PROPOSED FLANGE, CLAMP AND CAP WELDMENTS AS APPLICABLE.
  - ATC'S SPIRAL WRAP CANISTER REINFORCEMENT TO BE INSTALLED ON ALL CANISTERS ONCE INSTALLATION IS COMPLETE.
  - EXISTING CANISTERS TO BE REMOVED AND DISPOSED OF OFFSITE IN ACCORDANCE WITH ATC STANDARDS.



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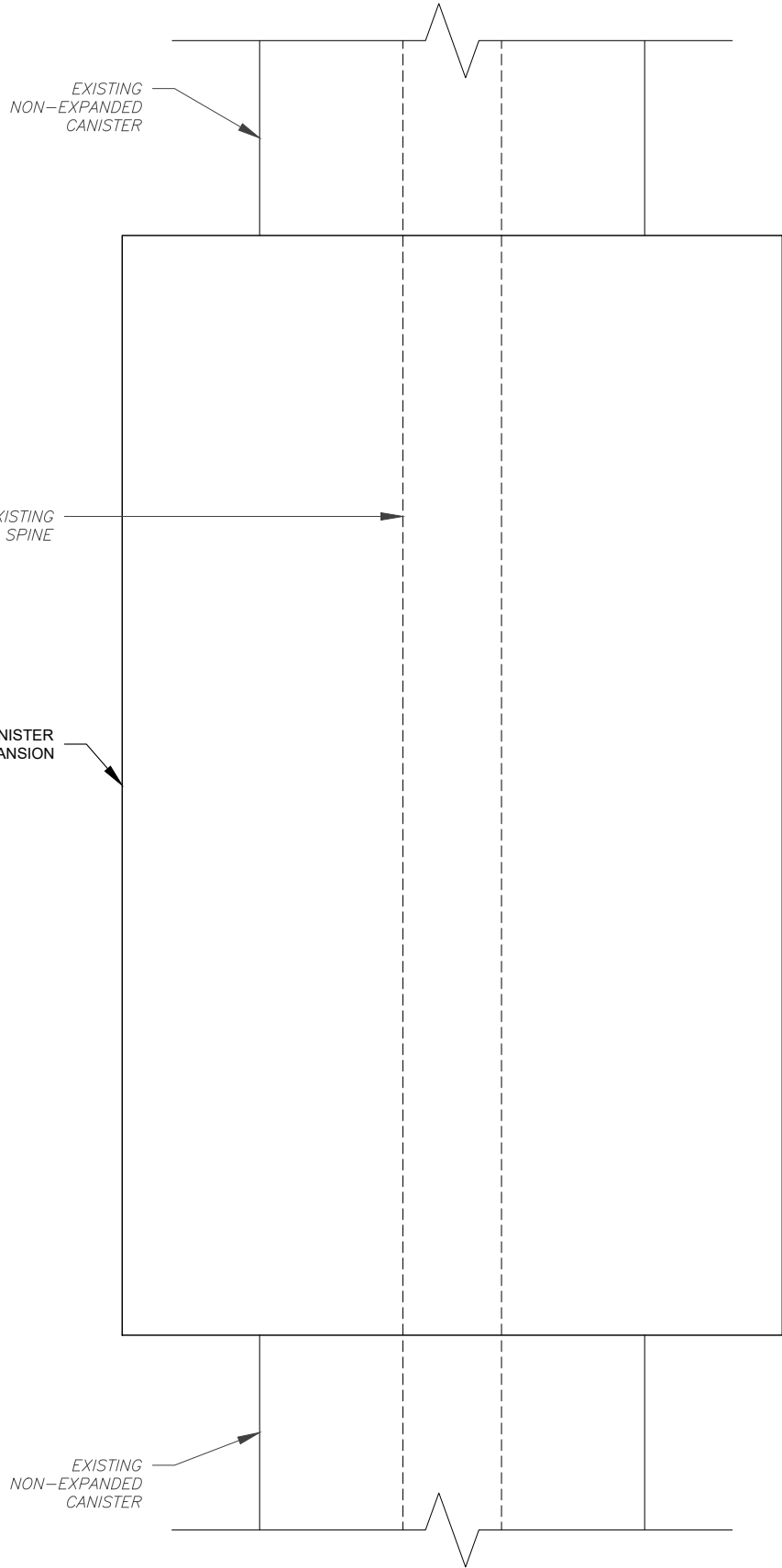
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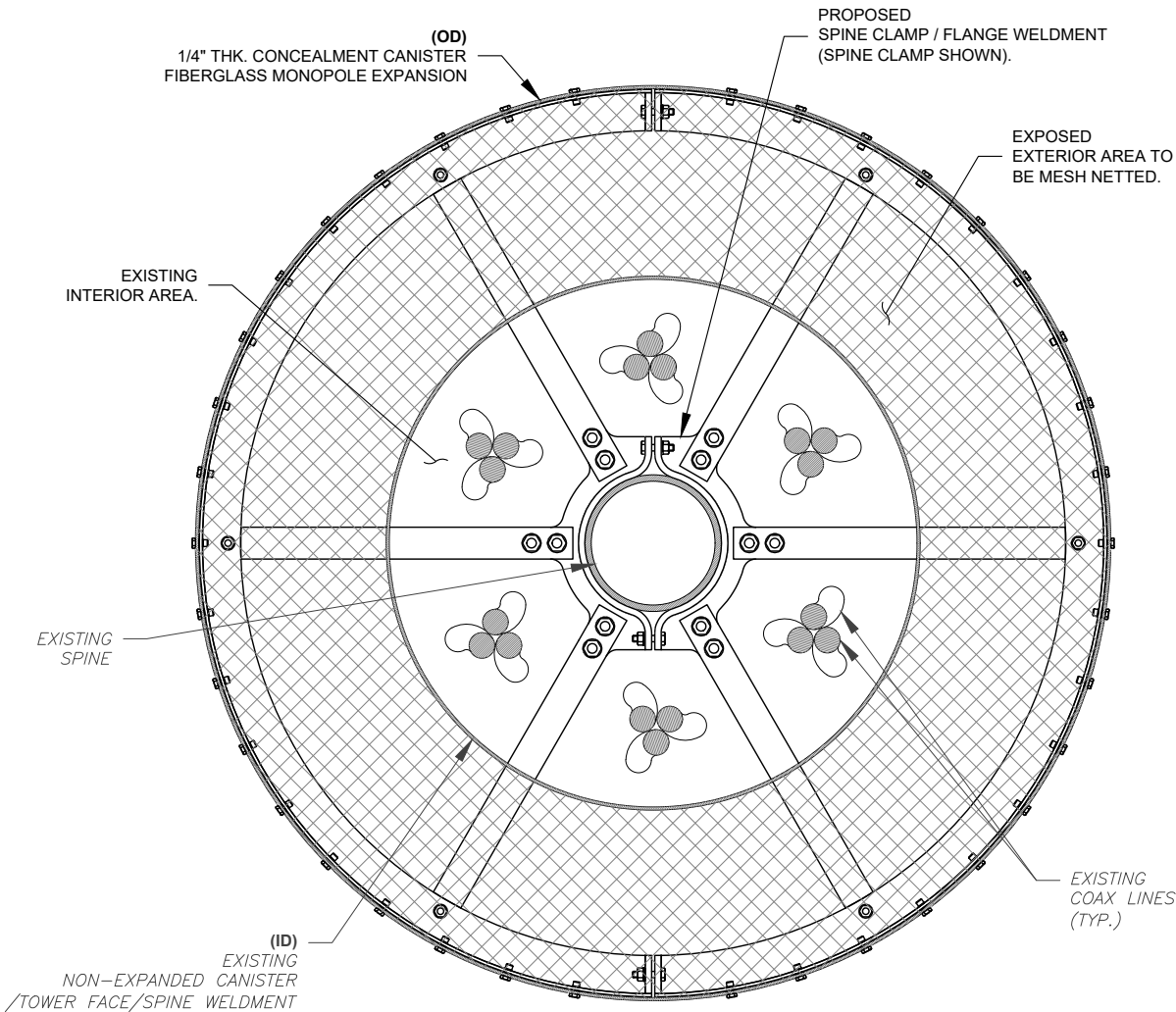
CONCEALMENT  
CANISTER SHROUD  
INSTALLATION DETAILS

SHEET NUMBER:	REVISION:
S-503	0






ELEVATION VIEW  
CANISTER MESH INSTALLATION



TOP & BOTTOM VIEWS  
CANISTER MESH INSTALLATION

MESH SIZE		
ELEVATION	ID	OD
79'-0"	5.00"	48.00"
89'-0"	5.00"	48.00"

- NOTES:
- CANISTER MESH / NETTING IS TO BE INSTALLED ON TOP OF AND THE UNDERSIDE OF ANY CANISTERS WITH EXPOSED AIRSPACE POST INSTALLATION.
  - SECTION CUT SHOWN IS REPRESENTATIVE AND MAY NOT REFLECT FINAL LAYOUT OF PROPOSED CANISTER MODIFICATION.



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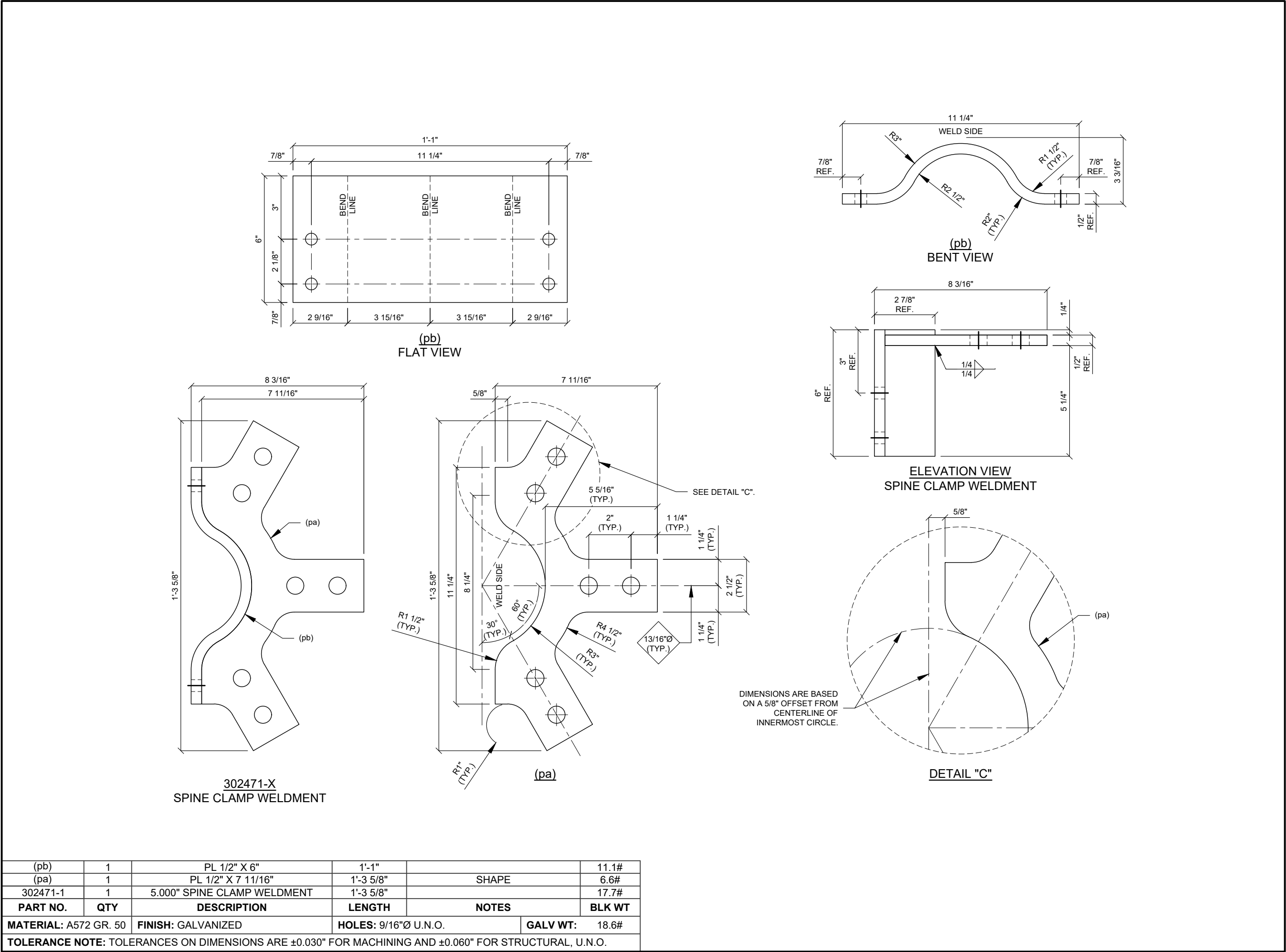



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CONCEALMENT  
CANISTER MESH  
INSTALLATION DETAILS

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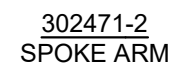


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5.000" SPINE CLAMP  
WELDMENT  
FABRICATION DETAILS

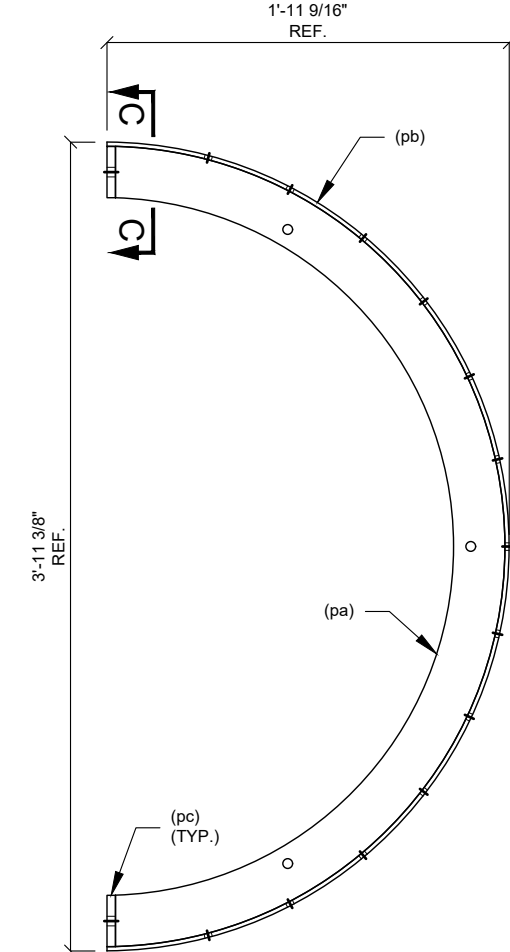
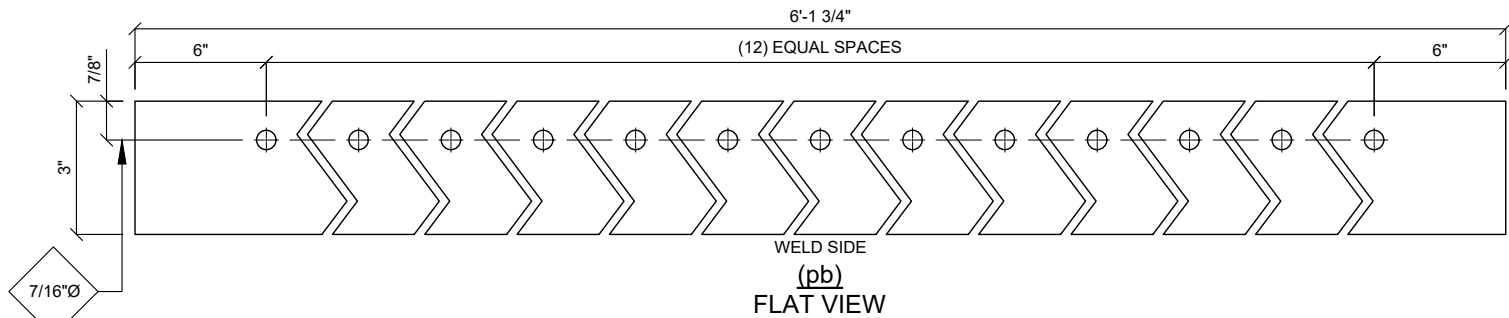
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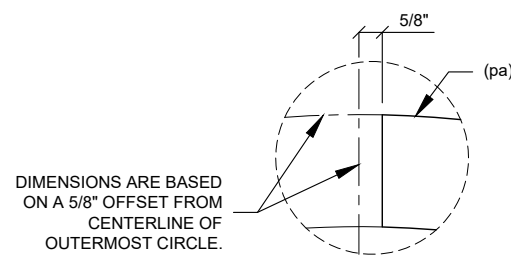
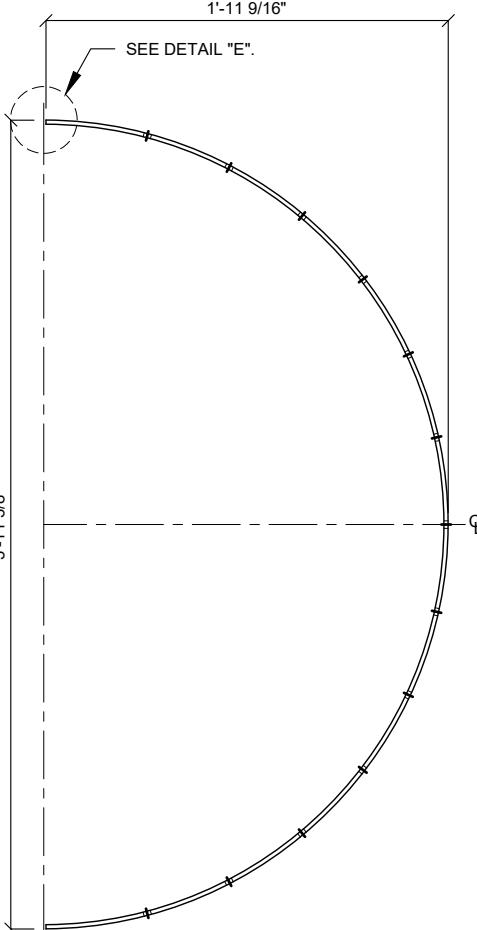
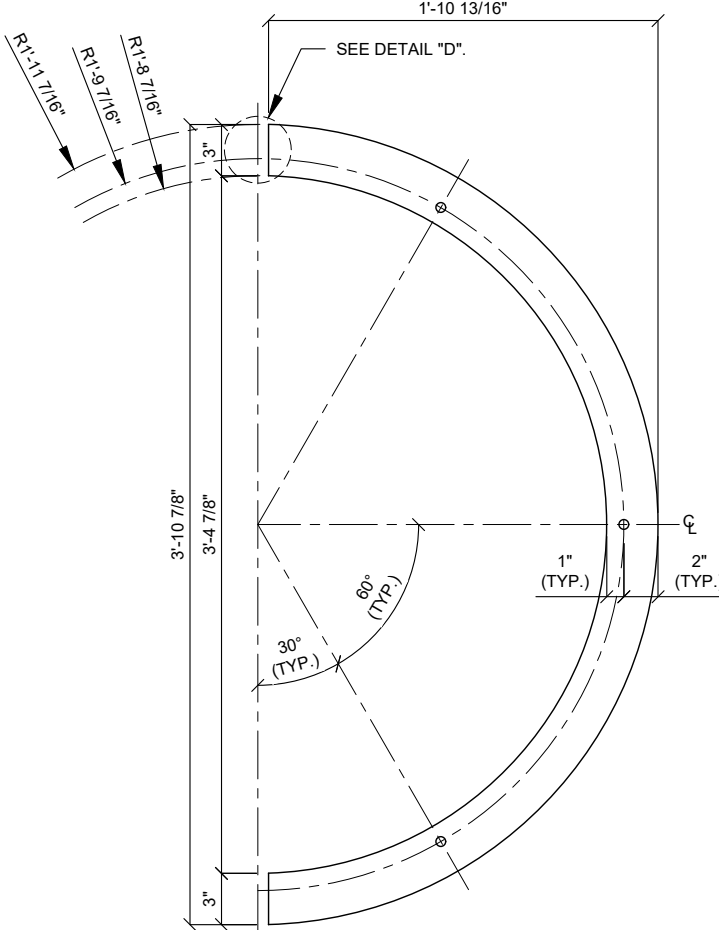
302471-2	PL 1/2" X 2 1/2"	1'-6 1/2"		6.6#	6.9#
<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>LENGTH</b>	<b>NOTES</b>	<b>BLK WT</b>	<b>GALV WT</b>
<b>MATERIAL:</b> A572 GR. 50		<b>FINISH:</b> GALVANIZED		<b>HOLES:</b> 13/16"Ø U.N.O.	
<b>TOLERANCE NOTE:</b> TOLERANCES ON DIMENSIONS ARE ±0.030" FOR MACHINING AND ±0.060" FOR STRUCTURAL, U.N.O.					



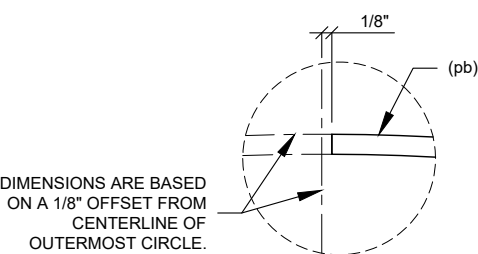




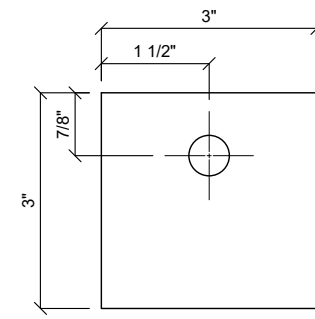
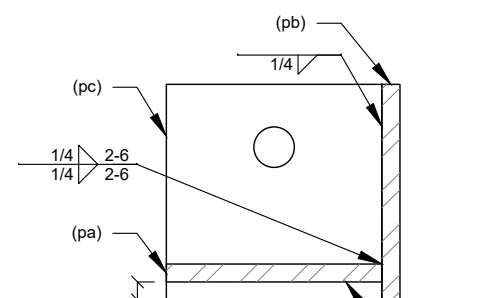
302471-3  
RING WELDMENT




DETAIL "D"



DETAIL "E"



(pc)	2	PL 1/2" X 3"	0'-3"		2.6#
(pb)	1	PL 1/4" X 3"	6'-1 3/4"		15.7#
(pa)	1	PL 1/4" X 22 13/16"	3'-10 7/8"	SHAPE	14.4#
302471-3	1	48" RING WELDMENT	3'-11 3/8"		32.6#
PART NO.	QTY	DESCRIPTION	LENGTH	NOTES	BLK WT
MATERIAL: A572 GR. 50		FINISH: GALVANIZED	HOLES: 9/16"Ø U.N.O.		GALV WT: 34.3#
TOLERANCE NOTE: TOLERANCES ON DIMENSIONS ARE ±0.030" FOR MACHINING AND ±0.060" FOR STRUCTURAL, U.N.O.					



**AMERICAN TOWER®**  
A.T. ENGINEERING SERVICES, PLLC  
1 FENTON MAIN STREET  
SUITE 300  
CARY, NC 27511  
PHONE: (919) 468-0112  
COA: PEC.0001553

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REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	TMR	03/28/25
1			
2			
3			
4			

ATC SITE NUMBER:  
302471  
ATC SITE NAME:  
RIDGEFIELD-DANBURY RD.  
CONNECTICUT

SITE ADDRESS:  
746 DANBURY ROAD  
RIDGEFIELD, CT 06877



Digitally Signed: 2025-04-03

DRAWN BY:	TMR
APPROVED BY:	CLJ
DATE DRAWN:	03/28/25
ATC JOB NO:	14922626_C6_05

48" RING WELDMENT  
FABRICATION DETAILS

SHEET NUMBER:	REVISION:
Z-503	0

# **EXHIBIT C**

## **Structural Analysis**



## Structural Analysis Report

**Structure** : 99 ft Canister Pole (Proposed Expansion Included)

**ATC Asset Name** : Ridgefield-Danbury Rd.

**ATC Asset Number** : 302471

**Engineering Number** : 14922626\_C3\_03

**Proposed Carrier** : T-MOBILE

**Carrier Site Name** : Ridgefield/ RT 7

**Carrier Site Number** : CT11297C

**Site Location** : 746 Danbury Road  
Ridgefield, CT 06877-2712  
41.33° N, 73.4723° W

**County** : Fairfield

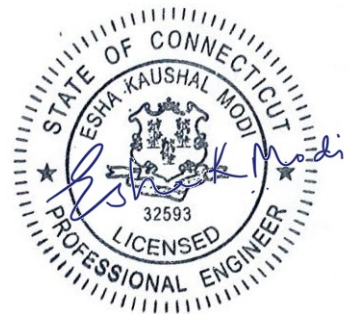
**Date** : March 4, 2025

**Max Usage** : 79%

**Analysis Result** : Pass - Pending Expansion

Created By:

Kobby Gyimah  
Structural Engineer I



COA: PEC.0001553

## **Table of Contents**

Introduction .....	3
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Analysis .....	3
Conclusion .....	3
Structure Usages .....	4
Maximum Reactions .....	4
Tower Loading .....	5
Standard Conditions .....	Attached
Calculations .....	Attached

## Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 99 ft Canister Pole tower (Proposed Expansion Included) to reflect the change in loading by T-MOBILE.

## Supporting Documents

<b>Tower:</b>	Stealth, Paul J Ford Job #31900-003, dated January 7, 2000 Mapping by TEP Job #93974-210563, dated July 25, 2019
<b>Foundation:</b>	Stealth, Paul J Ford Job #31900-003, dated April 12, 2000
<b>Geotechnical:</b>	Clarence Welty Report, dated June 29, 1999

## Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

<b>Basic Wind Speed:</b>	115 mph (3-second gust)
<b>Basic Wind Speed w/ Ice:</b>	47 mph (3-second gust) w/ 1.00" radial ice concurrent
<b>Code(s):</b>	ANSI/TIA-222-I / 2021 IBC / 2022 Connecticut State Building Code
<b>Exposure Category:</b>	B
<b>Risk Category:</b>	II
<b>Topographic Factor Procedure:</b>	Method 1
<b>Feature:</b>	Flat
<b>Crest Height (H):</b>	0 ft
<b>Crest Length (L):</b>	0 ft
<b>Spectral Response:</b>	$S_{05} = 0.18$ , $S_{01} = 0.07$
<b>Site Class:</b>	Default

## Conclusion

Based on the analysis results, the expanded structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report. Expansion design details will be provided in a subsequent service.

If you have any questions or require additional information, please reach out to your American Tower contact. If you do not have an American Tower contact and have an Engineering question, please contact [Engineering@americantower.com](mailto:Engineering@americantower.com). Please include the American Tower asset name, asset number, and engineering number in the subject line for any questions.



### Structure Usages

Structural Component	Usage	Control	Result
Pole Shaft	78.7%	1.2D + 1.0W	Pass
Serviceability Usage	23.7%	1.0D + 1.0W	Pass
Upper Flange Plate @ 69.0 ft	20.0%	Plate	Pass
Base Plate @ 0.0 ft	31.1%	Rods	Pass
Mat & Pier	21.4%	Bearing [Soil]	Pass

### Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Shear (k)
Monopole Base	227.2	8.9	4.5

*\*Reactions shown reflect the results from the Load Case with maximum Moment excluding Overstrength Load Cases*

Structure base reactions were analyzed using available geotechnical and foundation information.

### **T-MOBILE Final Loading**

Elev (ft)	Qty	Equipment	Lines
88.0	3	Commscope FVV-65A-R3	(18) 7/8" Coax
	6	Commscope TMT19G21BL26-21	
84.0	1	48"Ø Canister+	-

Install proposed lines inside the pole shaft.

### **Other Existing/Reserved Loading**

Elev (ft)	Qty	Equipment	Lines
98.0	3	48" x 12" Panel	(9) 7/8" Coax
94.0	1	24.5"Ø Canister	-
74.0	1	26.5"Ø Canister	-

*(If table breaks across pages, please see previous page for data in merged cells)*



## **Standard Conditions**

All engineering services performed by A.T. Engineering Services LLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts, and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Services LLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Services LLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates, and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

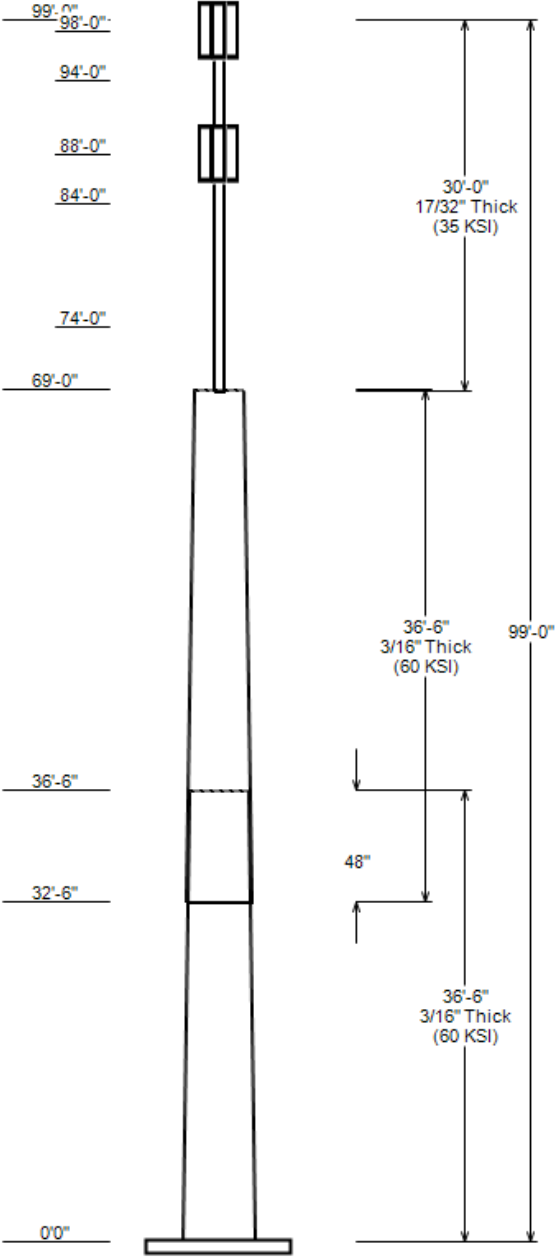
Unless explicitly agreed by both the client and A.T. Engineering Services LLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Services LLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

ANALYSIS PARAMETERS			
Design Wind:	115 mph	Ice Wind:	47 mph w/ 1.0" ice
Risk Category:	II	Exposure:	B
Topo Factor:	Method 1	Topo Feature:	Flat
Structure Height:	99.0 ft	Base Elevation:	0.00 ft
Base Diameter:	33.91 in	Base Rotation:	0.00°
Service Wind:	60 mph	S <sub>DI</sub> :	0.068
		S <sub>DS</sub> :	0.180
		Structure Type:	Custom
		Taper:	0.1200 (in/ft)

POLE SECTION PROPERTIES							
Section	Length (ft)	Flat Diameter (in)		Thick (in)	Joint Type	Joint Length (in)	Pole Shape
		Top	Bottom				
1	36.500	29.53	33.90	0.188		0.00	18 Sides
2	36.500	26.00	30.38	0.188	Slip Joint	48.00	18 Sides
3	30.000	5.00	5.00	0.525	Butt Joint	0.00	Round

DISCRETE APPURTENANCE		LINEAR APPURTENANCE	
Elev (ft)	Description	Elev To (ft)	Description
98.0	(3) Generic 48" x 12" Panel	98.0	(9) 7/8" Coax
94.0	(1) 24.5"ø Canister	88.0	(18) 7/8" Coax
88.0	(3) Commscope FVV-65A-R3		
88.0	(6) Commscope TMAT19G21BL26-21		
84.0	(1) 48"ø Canister+		
74.0	(1) 26.5"ø Canister		



GLOBAL BASE REACTIONS

Load Case	Moment (kip-ft)	Axial (kip)	Shear (kip)
1.2D + 1.0W	227.17	8.87	4.47
0.9D + 1.0W	225.72	6.65	4.47
1.2D + 1.0Di + 1.0Wi	62.79	12.52	1.26
1.2D + 1.0Ev + 1.0Eh	16.20	8.67	0.22
0.9D - 1.0Ev + 1.0Eh	16.05	6.06	0.22
1.0D + 1.0W	56.46	7.40	1.10

ANALYSIS PARAMETERS

Location:	Fairfield County,CT	Height:	99 ft
Type and Shape:	Custom, Round	Base Diameter:	33.91 in
Manufacturer:	Undetermined	Top Diameter:	26.00 in
K <sub>d</sub> (non-service):	0.95	Taper:	0.1200 in/ft
K <sub>e</sub> :	0.98	Rotation:	0.000°

ICE & WIND PARAMETERS

Risk Category:	II	Design Wind Speed:	115 mph
Exposure Category:	B	Design Wind Speed w/ Ice:	47 mph
Design Ice Thickness:	1.00 in		
Topo Factor Procedure:	Method 1		
Crest Height(H):	0 ft	Service Wind Speed:	60 mph
Crest Length(L):	0 ft	HMSL:	510.00 ft
Feature:	Flat	Distance from Apex (x):	0 ft
		Upwind/Downwind:	

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	Default	Period Based on Rayleigh Method (sec):	1.63
T <sub>L</sub> (sec):	6	P:	1
S <sub>ds</sub> :	0.180	S <sub>d1</sub> :	0.068
		C <sub>s</sub> :	0.030
		C <sub>s</sub> Max:	0.030
		C <sub>s</sub> Min:	0.030

LOAD CASES

1.2D + 1.0W	115 mph Wind with No Ice
0.9D + 1.0W	115 mph Wind with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	47 mph Wind with 1" Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	60 mph Wind with No Ice
1.2D + 1.0Ev + 1.5Eh	Seismic Overstrength
0.9D - 1.0Ev + 1.5Eh	Seismic Overstrength (Reduced DL)



SHAFT SECTION PROPERTIES																			
Section	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Joint Len (in)	Weight (lb)	Bottom						Top						Taper (in/ft)
							Dia (in)	Elev (ft)	Area (in <sup>2</sup> )	Ix (in <sup>4</sup> )	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in <sup>2</sup> )	Ix (in <sup>4</sup> )	W/t Ratio	D/t Ratio	
1-18	36.50	0.1875	60		0.00	2,330	33.90	0.000	20.07	2,882.1	30.12	180.83	29.52	36.50	17.46	1,898.5	26.00	157.47	0.1200
2-18	36.50	0.1875	60	Slip	48.00	2,070	30.38	32.500	17.97	2,069.4	26.81	162.03	26.00	69.00	15.36	1,293.1	22.69	138.67	0.1200
3-R	30.00	0.5250	35	Butt	0.00	753	5.00	69.000	7.38	18.5	0.00	9.52	5.00	99.00	7.38	18.5	0.00	9.52	0.0000
Total Shaft Weight						5,153													

DISCRETE APPURTENANCE PROPERTIES										
Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	No Ice			Ice		
					Weight (lb)	EPAA (sf)	Orientation Factor	Weight (lb)	EPAA (sf)	Orientation Factor
98.00	Generic 48" x 12" Panel	3	1.00	0.000	30.00	5.067	0.01	102.37	6.263	0.01
94.00	24.5"ø Canister	1	1.00	0.000	261.80	5.480	1.00	377.83	7.909	1.00
88.00	Commscope TMA19G21BL26-21	6	1.00	0.000	18.70	0.775	0.01	32.84	1.147	0.01
88.00	Commscope FVV-65A-R3	3	1.00	0.000	34.60	5.915	0.01	120.98	7.272	0.01
84.00	48"ø Canister+	1	1.00	0.000	577.70	16.090	1.00	830.80	23.139	1.00
74.00	26.5"ø Canister	1	1.00	0.000	283.60	6.070	1.00	406.24	8.695	1.00
Totals	Row Count: 6	15			1,429.10			2,481.96		

LINEAR APPURTENANCE PROPERTIES												
Load Case Azimuth (deg): 0.00												
Elev From (ft)	Elev To (ft)	Qty	Description	Diameter (in)	Weight (lb/ft)	Flat	Max/ Row	Distance Between Rows(in)	Distance Between Cols(in)	Azimuth (deg)	Distance From Face (in)	Exposed To Wind Carrier
0.00	98.00	9	7/8" Coax	1.09	0.33	N	0	0	0	0	0	N SPRINT NEXTEL
0.00	88.00	18	7/8" Coax	1.09	0.33	N	0	0	0	0	0	N T-MOBILE

ASSET: 302471, Ridgefield-Danbury Rd.  
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-I  
PROJECT: 14922626\_C3\_03

SEGMENT PROPERTIES												
Seg Top Elev (ft)	Description	(Max Length: 5 ft)	Thick (in)	Flat Dia (in)	Area (in²)	Ix (in⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in³)	Z (in³)	Weight (lb)
0.00			0.1875	33.905	20.065	2,882.10	30.12	180.83	62.2	167.4	0.0	0.0
5.00			0.1875	33.305	19.708	2,731.00	29.56	177.63	62.8	161.5	0.0	338.4
10.00			0.1875	32.705	19.351	2,585.20	28.99	174.43	63.4	155.7	0.0	332.3
15.00			0.1875	32.105	18.994	2,444.70	28.43	171.23	63.9	150.0	0.0	326.2
20.00			0.1875	31.505	18.637	2,309.40	27.86	168.03	64.5	144.4	0.0	320.1
25.00			0.1875	30.905	18.280	2,179.20	27.30	164.83	65.1	138.9	0.0	314.1
30.00			0.1875	30.305	17.923	2,054.00	26.74	161.63	65.7	133.5	0.0	308.0
32.50	Bot - Section 2		0.1875	30.005	17.745	1,993.20	26.45	160.03	66	130.8	0.0	151.7
35.00			0.1875	29.705	17.566	1,933.70	26.17	158.43	66.3	128.2	0.0	302.3
36.50	Top - Section 1		0.1875	29.900	17.682	1,972.30	26.36	159.47	66.1	129.9	0.0	179.9
40.00			0.1875	29.480	17.432	1,889.80	25.96	157.23	66.5	126.3	0.0	209.1
45.00			0.1875	28.880	17.075	1,776.00	25.40	154.03	67.1	121.1	0.0	293.5
50.00			0.1875	28.280	16.718	1,666.90	24.83	150.83	67.7	116.1	0.0	287.5
55.00			0.1875	27.680	16.361	1,562.40	24.27	147.63	68.3	111.2	0.0	281.4
60.00			0.1875	27.080	16.004	1,462.30	23.70	144.43	68.9	106.4	0.0	275.3
65.00			0.1875	26.480	15.647	1,366.60	23.14	141.23	69.5	101.6	0.0	269.2
69.00	Top - Section 2		0.1875	26.000	15.361	1,293.10	22.69	138.67	69.9	98.0	0.0	211.0
69.00	Bot - Section 3		0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	
70.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	25.1
74.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	100.5
75.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	25.1
80.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	125.6
84.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	100.5
85.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	25.1
88.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	75.3
90.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	50.2
94.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	100.5
95.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	25.1
98.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	75.3
99.00			0.5250	5.000	7.381	18.50	0.00	9.52	35	7.4	10.6	25.1
Total:												5,153.4

CALCULATED FORCES													
Load Case: 1.2D + 1.0W			115 mph Wind with No Ice										30 Iterations
Gust Response Factor:		1.10											
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 (deg)	Ratio
0.00	-8.87	-4.47	0.00	-227.2	0.00	227.17	1,122.92	325.06	989.88	780.81	0	0	0.299
5.00	-8.40	-4.23	0.00	-204.8	0.00	204.82	1,113.37	319.28	954.97	760.33	0.06	-0.11	0.277
10.00	-7.95	-4.00	0.00	-183.6	0.00	183.65	1,103.45	313.49	920.68	739.82	0.22	-0.21	0.256
15.00	-7.50	-3.77	0.00	-163.6	0.00	163.64	1,093.15	307.71	887.02	719.32	0.49	-0.3	0.235
20.00	-7.05	-3.54	0.00	-144.8	0.00	144.79	1,082.48	301.92	853.99	698.82	0.86	-0.39	0.214
25.00	-6.62	-3.32	0.00	-127.1	0.00	127.09	1,071.42	296.14	821.59	678.35	1.32	-0.48	0.194
30.00	-6.20	-3.15	0.00	-110.5	0.00	110.51	1,059.99	290.35	789.81	657.93	1.86	-0.55	0.174
32.50	-5.99	-3.03	0.00	-102.6	0.00	102.64	1,054.13	287.46	774.15	647.73	2.16	-0.59	0.164
35.00	-5.60	-2.94	0.00	-95.1	0.00	95.06	1,048.17	284.57	758.65	637.55	2.48	-0.63	0.155
36.50	-5.37	-2.82	0.00	-90.6	0.00	90.65	1,052.06	286.45	768.71	644.17	2.68	-0.65	0.146
40.00	-5.08	-2.62	0.00	-80.8	0.00	80.77	1,043.65	282.40	747.13	629.93	3.17	-0.69	0.133
45.00	-4.67	-2.39	0.00	-67.6	0.00	67.65	1,031.32	276.62	716.84	609.66	3.93	-0.75	0.116
50.00	-4.28	-2.14	0.00	-55.7	0.00	55.72	1,018.60	270.83	687.18	589.47	4.74	-0.8	0.099
55.00	-3.89	-1.90	0.00	-45.0	0.00	45.00	1,005.52	265.05	658.14	569.38	5.59	-0.84	0.083
60.00	-3.51	-1.66	0.00	-35.5	0.00	35.49	992.05	259.26	629.73	549.41	6.49	-0.88	0.068
65.00	-3.13	-1.44	0.00	-27.2	0.00	27.21	978.20	253.48	601.95	529.58	7.43	-0.91	0.055
69.00	-2.84	-1.33	0.00	-21.5	0.00	21.47	966.85	248.85	580.17	513.81	8.2	-0.93	0.045
69.00	-2.84	-1.33	0.00	-21.5	0.00	21.47	232.49	69.75	27.44	27.72	8.2	-0.93	0.787
70.00	-2.78	-1.32	0.00	-20.1	0.00	20.14	232.49	69.75	27.44	27.72	8.39	-0.93	0.739
74.00	-2.27	-1.12	0.00	-14.8	0.00	14.85	232.49	69.75	27.44	27.72	9.65	-2.01	0.546

ASSET: 302471, Ridgefield-Danbury Rd.  
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-I  
PROJECT: 14922626\_C3\_03

CALCULATED FORCES

75.00	-2.22	-1.10	0.00	-13.7	0.00	13.74	232.49	69.75	27.44	27.72	10.09	-2.23	0.505
80.00	-2.01	-1.05	0.00	-8.3	0.00	8.26	232.49	69.75	27.44	27.72	12.91	-3.08	0.307
84.00	-1.19	-0.46	0.00	-4.1	0.00	4.07	232.49	69.75	27.44	27.72	15.66	-3.45	0.152
85.00	-1.15	-0.43	0.00	-3.6	0.00	3.61	232.49	69.75	27.44	27.72	16.39	-3.51	0.135
88.00	-0.77	-0.37	0.00	-2.3	0.00	2.30	232.49	69.75	27.44	27.72	18.64	-3.65	0.086
90.00	-0.70	-0.33	0.00	-1.6	0.00	1.56	232.49	69.75	27.44	27.72	20.18	-3.71	0.059
94.00	-0.27	-0.08	0.00	-0.3	0.00	0.26	232.49	69.75	27.44	27.72	23.32	-3.77	0.011
95.00	-0.24	-0.06	0.00	-0.2	0.00	0.17	232.49	69.75	27.44	27.72	24.11	-3.77	0.007
98.00	-0.03	-0.01	0.00	-0.0	0.00	0.01	232.49	69.75	27.44	27.72	26.47	-3.77	0.000
99.00	0.00	-0.01	0.00	0.0	0.00	0.00	232.49	69.75	27.44	27.72	27.26	-3.77	0.000

CALCULATED FORCES

Load Case: 0.9D + 1.0W

115 mph Wind with No Ice (Reduced DL)

30 Iterations

Gust Response Factor: 1.10  
 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 (deg)	Ratio
0.00	-6.65	-4.47	0.00	-225.7	0.00	225.72	1,122.92	325.06	989.88	780.81	0	0	0.295
5.00	-6.30	-4.23	0.00	-203.4	0.00	203.38	1,113.37	319.28	954.97	760.33	0.06	-0.11	0.273
10.00	-5.96	-3.99	0.00	-182.2	0.00	182.24	1,103.45	313.49	920.68	739.82	0.22	-0.21	0.252
15.00	-5.62	-3.76	0.00	-162.3	0.00	162.28	1,093.15	307.71	887.02	719.32	0.49	-0.3	0.231
20.00	-5.28	-3.53	0.00	-143.5	0.00	143.49	1,082.48	301.92	853.99	698.82	0.85	-0.39	0.210
25.00	-4.96	-3.30	0.00	-125.8	0.00	125.85	1,071.42	296.14	821.59	678.35	1.31	-0.47	0.190
30.00	-4.64	-3.13	0.00	-109.4	0.00	109.35	1,059.99	290.35	789.81	657.93	1.84	-0.55	0.171
32.50	-4.48	-3.02	0.00	-101.5	0.00	101.52	1,054.13	287.46	774.15	647.73	2.14	-0.59	0.161
35.00	-4.19	-2.92	0.00	-94.0	0.00	93.98	1,048.17	284.57	758.65	637.55	2.46	-0.62	0.152
36.50	-4.02	-2.81	0.00	-89.6	0.00	89.60	1,052.06	286.45	768.71	644.17	2.66	-0.64	0.143
40.00	-3.80	-2.61	0.00	-79.8	0.00	79.77	1,043.65	282.40	747.13	629.93	3.14	-0.69	0.130
45.00	-3.50	-2.37	0.00	-66.7	0.00	66.73	1,031.32	276.62	716.84	609.66	3.89	-0.74	0.113
50.00	-3.20	-2.13	0.00	-54.9	0.00	54.89	1,018.60	270.83	687.18	589.47	4.7	-0.79	0.096
55.00	-2.91	-1.89	0.00	-44.2	0.00	44.24	1,005.52	265.05	658.14	569.38	5.55	-0.83	0.081
60.00	-2.62	-1.64	0.00	-34.8	0.00	34.81	992.05	259.26	629.73	549.41	6.44	-0.87	0.066
65.00	-2.34	-1.42	0.00	-26.6	0.00	26.60	978.20	253.48	601.95	529.58	7.36	-0.9	0.053
69.00	-2.12	-1.32	0.00	-20.9	0.00	20.91	966.85	248.85	580.17	513.81	8.12	-0.92	0.043
69.00	-2.12	-1.32	0.00	-20.9	0.00	20.91	232.49	69.75	27.44	27.72	8.12	-0.92	0.764
70.00	-2.08	-1.30	0.00	-19.6	0.00	19.60	232.49	69.75	27.44	27.72	8.32	-0.92	0.716
74.00	-1.70	-1.09	0.00	-14.4	0.00	14.39	232.49	69.75	27.44	27.72	9.55	-1.97	0.526
75.00	-1.66	-1.07	0.00	-13.3	0.00	13.29	232.49	69.75	27.44	27.72	9.99	-2.18	0.487
80.00	-1.50	-1.02	0.00	-8.0	0.00	7.96	232.49	69.75	27.44	27.72	12.73	-3	0.294
84.00	-0.88	-0.44	0.00	-3.9	0.00	3.89	232.49	69.75	27.44	27.72	15.41	-3.36	0.144
85.00	-0.85	-0.41	0.00	-3.4	0.00	3.45	232.49	69.75	27.44	27.72	16.12	-3.42	0.128
88.00	-0.57	-0.36	0.00	-2.2	0.00	2.21	232.49	69.75	27.44	27.72	18.32	-3.55	0.082
90.00	-0.52	-0.31	0.00	-1.5	0.00	1.49	232.49	69.75	27.44	27.72	19.81	-3.61	0.056
94.00	-0.20	-0.08	0.00	-0.2	0.00	0.24	232.49	69.75	27.44	27.72	22.86	-3.66	0.010
95.00	-0.18	-0.05	0.00	-0.2	0.00	0.16	232.49	69.75	27.44	27.72	23.63	-3.66	0.007
98.00	-0.02	-0.01	0.00	-0.0	0.00	0.01	232.49	69.75	27.44	27.72	25.93	-3.67	0.000
99.00	0.00	-0.01	0.00	0.0	0.00	0.00	232.49	69.75	27.44	27.72	26.7	-3.67	0.000

CALCULATED FORCES

Load Case: 1.2D + 1.0Di + 1.0Wi 47 mph Wind with 1" Radial Ice 29 Iterations  
 Gust Response Factor: 1.10 Ice Dead Load Factor 1.00  
 Dead load Factor: 1.20 Ice Importance 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 (deg)	Ratio
0.00	-12.52	-1.26	0.00	-62.8	0.00	62.79	1,122.92	325.06	989.88	780.81	0	0	0.092
5.00	-11.89	-1.19	0.00	-56.5	0.00	56.50	1,113.37	319.28	954.97	760.33	0.02	-0.03	0.085
10.00	-11.26	-1.12	0.00	-50.6	0.00	50.55	1,103.45	313.49	920.68	739.82	0.06	-0.06	0.079
15.00	-10.63	-1.06	0.00	-44.9	0.00	44.93	1,093.15	307.71	887.02	719.32	0.14	-0.08	0.072
20.00	-10.00	-0.99	0.00	-39.6	0.00	39.64	1,082.48	301.92	853.99	698.82	0.24	-0.11	0.066
25.00	-9.38	-0.93	0.00	-34.7	0.00	34.68	1,071.42	296.14	821.59	678.35	0.36	-0.13	0.060
30.00	-8.76	-0.88	0.00	-30.0	0.00	30.05	1,059.99	290.35	789.81	657.93	0.51	-0.15	0.054
32.50	-8.45	-0.84	0.00	-27.8	0.00	27.85	1,054.13	287.46	774.15	647.73	0.59	-0.16	0.051
35.00	-7.97	-0.82	0.00	-25.7	0.00	25.74	1,048.17	284.57	758.65	637.55	0.68	-0.17	0.048
36.50	-7.68	-0.78	0.00	-24.5	0.00	24.52	1,052.06	286.45	768.71	644.17	0.74	-0.18	0.045
40.00	-7.25	-0.73	0.00	-21.8	0.00	21.77	1,043.65	282.40	747.13	629.93	0.87	-0.19	0.042
45.00	-6.66	-0.65	0.00	-18.2	0.00	18.15	1,031.32	276.62	716.84	609.66	1.08	-0.2	0.036
50.00	-6.07	-0.58	0.00	-14.9	0.00	14.88	1,018.60	270.83	687.18	589.47	1.3	-0.22	0.031
55.00	-5.49	-0.51	0.00	-12.0	0.00	11.96	1,005.52	265.05	658.14	569.38	1.53	-0.23	0.026
60.00	-4.92	-0.44	0.00	-9.4	0.00	9.40	992.05	259.26	629.73	549.41	1.78	-0.24	0.022
65.00	-4.36	-0.37	0.00	-7.2	0.00	7.21	978.20	253.48	601.95	529.58	2.03	-0.25	0.018
69.00	-3.92	-0.34	0.00	-5.7	0.00	5.72	966.85	248.85	580.17	513.81	2.24	-0.25	0.015
69.00	-3.92	-0.34	0.00	-5.7	0.00	5.72	232.49	69.75	27.44	27.72	2.24	-0.25	0.223
70.00	-3.87	-0.34	0.00	-5.4	0.00	5.38	232.49	69.75	27.44	27.72	2.3	-0.25	0.211
74.00	-3.24	-0.29	0.00	-4.0	0.00	4.02	232.49	69.75	27.44	27.72	2.64	-0.54	0.159
75.00	-3.19	-0.29	0.00	-3.7	0.00	3.72	232.49	69.75	27.44	27.72	2.76	-0.6	0.148
80.00	-2.94	-0.28	0.00	-2.3	0.00	2.27	232.49	69.75	27.44	27.72	3.52	-0.83	0.095
84.00	-1.86	-0.13	0.00	-1.2	0.00	1.16	232.49	69.75	27.44	27.72	4.26	-0.94	0.050
85.00	-1.81	-0.12	0.00	-1.0	0.00	1.03	232.49	69.75	27.44	27.72	4.46	-0.96	0.045
88.00	-1.14	-0.10	0.00	-0.6	0.00	0.65	232.49	69.75	27.44	27.72	5.08	-0.99	0.028
90.00	-1.05	-0.09	0.00	-0.4	0.00	0.45	232.49	69.75	27.44	27.72	5.5	-1.01	0.021
94.00	-0.48	-0.03	0.00	-0.1	0.00	0.09	232.49	69.75	27.44	27.72	6.35	-1.03	0.005
95.00	-0.44	-0.02	0.00	-0.1	0.00	0.06	232.49	69.75	27.44	27.72	6.57	-1.03	0.004
98.00	-0.04	0.00	0.00	0.0	0.00	0.00	232.49	69.75	27.44	27.72	7.22	-1.03	0.000
99.00	0.00	0.00	0.00	0.0	0.00	0.00	232.49	69.75	27.44	27.72	7.43	-1.03	0.000



CALCULATED FORCES

Load Case: 1.0D + 1.0W

60 mph Wind with No Ice

28 Iterations

Gust Response Factor: 1.10  
 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 (deg)	Ratio
0.00	-7.40	-1.10	0.00	-56.5	0.00	56.46	1,122.92	325.06	989.88	780.81	0	0	0.079
5.00	-7.01	-1.05	0.00	-50.9	0.00	50.94	1,113.37	319.28	954.97	760.33	0.01	-0.03	0.073
10.00	-6.64	-0.99	0.00	-45.7	0.00	45.71	1,103.45	313.49	920.68	739.82	0.06	-0.05	0.068
15.00	-6.26	-0.93	0.00	-40.8	0.00	40.77	1,093.15	307.71	887.02	719.32	0.12	-0.08	0.062
20.00	-5.90	-0.88	0.00	-36.1	0.00	36.11	1,082.48	301.92	853.99	698.82	0.21	-0.1	0.057
25.00	-5.54	-0.82	0.00	-31.7	0.00	31.72	1,071.42	296.14	821.59	678.35	0.33	-0.12	0.052
30.00	-5.19	-0.78	0.00	-27.6	0.00	27.62	1,059.99	290.35	789.81	657.93	0.46	-0.14	0.047
32.50	-5.01	-0.75	0.00	-25.7	0.00	25.67	1,054.13	287.46	774.15	647.73	0.54	-0.15	0.044
35.00	-4.69	-0.73	0.00	-23.8	0.00	23.79	1,048.17	284.57	758.65	637.55	0.62	-0.16	0.042
36.50	-4.50	-0.70	0.00	-22.7	0.00	22.70	1,052.06	286.45	768.71	644.17	0.67	-0.16	0.040
40.00	-4.26	-0.65	0.00	-20.2	0.00	20.24	1,043.65	282.40	747.13	629.93	0.79	-0.17	0.036
45.00	-3.92	-0.59	0.00	-17.0	0.00	16.98	1,031.32	276.62	716.84	609.66	0.98	-0.19	0.032
50.00	-3.59	-0.54	0.00	-14.0	0.00	14.01	1,018.60	270.83	687.18	589.47	1.18	-0.2	0.027
55.00	-3.26	-0.48	0.00	-11.3	0.00	11.33	1,005.52	265.05	658.14	569.38	1.39	-0.21	0.023
60.00	-2.94	-0.42	0.00	-9.0	0.00	8.95	992.05	259.26	629.73	549.41	1.62	-0.22	0.019
65.00	-2.63	-0.36	0.00	-6.9	0.00	6.86	978.20	253.48	601.95	529.58	1.85	-0.23	0.016
69.00	-2.38	-0.34	0.00	-5.4	0.00	5.41	966.85	248.85	580.17	513.81	2.05	-0.23	0.013
69.00	-2.38	-0.34	0.00	-5.4	0.00	5.41	232.49	69.75	27.44	27.72	2.05	-0.23	0.205
70.00	-2.35	-0.33	0.00	-5.1	0.00	5.07	232.49	69.75	27.44	27.72	2.09	-0.23	0.193
74.00	-1.93	-0.28	0.00	-3.7	0.00	3.74	232.49	69.75	27.44	27.72	2.41	-0.5	0.143
75.00	-1.89	-0.28	0.00	-3.5	0.00	3.46	232.49	69.75	27.44	27.72	2.52	-0.56	0.133
80.00	-1.72	-0.26	0.00	-2.1	0.00	2.08	232.49	69.75	27.44	27.72	3.23	-0.77	0.082
84.00	-1.01	-0.12	0.00	-1.0	0.00	1.04	232.49	69.75	27.44	27.72	3.92	-0.87	0.042
85.00	-0.97	-0.11	0.00	-0.9	0.00	0.92	232.49	69.75	27.44	27.72	4.1	-0.88	0.037
88.00	-0.66	-0.09	0.00	-0.6	0.00	0.59	232.49	69.75	27.44	27.72	4.67	-0.92	0.024
90.00	-0.60	-0.08	0.00	-0.4	0.00	0.40	232.49	69.75	27.44	27.72	5.06	-0.93	0.017
94.00	-0.23	-0.02	0.00	-0.1	0.00	0.07	232.49	69.75	27.44	27.72	5.85	-0.95	0.003
95.00	-0.20	-0.01	0.00	-0.0	0.00	0.05	232.49	69.75	27.44	27.72	6.04	-0.95	0.003
98.00	-0.03	0.00	0.00	0.0	0.00	0.00	232.49	69.75	27.44	27.72	6.64	-0.95	0.000
99.00	0.00	0.00	0.00	0.0	0.00	0.00	232.49	69.75	27.44	27.72	6.84	-0.95	0.000

EQUIVALENT LATERAL FORCES METHOD ANALYSIS

Design Spectral Response Acceleration at Short Period ( $S_{ds}$ ):	0.180
Design Spectral Response Acceleration at 1.0 Second Period ( $S_{d1}$ ):	0.068
Long-Period Transition Period ( $T_L$ - Seconds):	6
Importance Factor ( $I_e$ ):	1.000
Response Modification Coefficient (R):	1.500
Seismic Response Coefficient ( $C_s$ ):	0.030
Upper Limit $C_s$ :	0.030
Lower Limit $C_s$ :	0.030
Period based on Rayleigh Method (sec):	1.630
Redundancy Factor ( $\rho$ ):	1.000
Seismic Force Distribution Exponent (k):	1.570
Total Unfactored Dead Load:	7.400 k
Seismic Base Shear (E):	0.220 k

SEISMIC FORCES

1.2D + 1.0Ev + 1.0Eh	Seismic	Height Above Base (ft)	Weight (lb)	$W_z$ (lb-ft)	$C_{vx}$	Horizontal Force (lb)	Vertical Force (lb)
Segment							
28		98.5	25	33	0.008	2	31
27		96.5	84	108	0.028	6	104
26		94.5	28	35	0.009	2	35
25		92	112	133	0.034	8	139
24		89	56	63	0.016	4	69
23		86.5	102	110	0.028	6	126
22		84.5	34	35	0.009	2	42
21		82	136	135	0.035	8	168
20		77.5	170	154	0.040	9	210
19		74.5	34	29	0.008	2	42
18		72	136	110	0.028	6	168
17		69.5	34	26	0.007	1	42
16		67	247	178	0.046	10	305
15		62.5	314	203	0.052	12	388
14		57.5	320	182	0.047	10	395
13		52.5	326	160	0.041	9	403
12		47.5	332	140	0.036	8	410
11		42.5	338	120	0.031	7	418
10		38.25	240	72	0.019	4	297
9		35.75	193	52	0.014	3	239
8		33.75	325	80	0.021	5	401
7		31.25	174	38	0.010	2	215
6		27.5	353	63	0.016	4	436
5		22.5	359	47	0.012	3	443
4		17.5	365	32	0.008	2	451
3		12.5	371	19	0.005	1	458
2		7.5	377	9	0.002	1	466
1		2.5	383	2	0.000	0	473
Generic 48" x 12" Panel		98	90	118	0.030	7	111
24.5"ø Canister		94	262	321	0.083	18	324
Commscope TMA19G21BL26-21		88	112	124	0.032	7	139
Commscope FVV-65A-R3		88	104	115	0.030	7	128
48"ø Canister+		84	578	593	0.153	34	714
26.5"ø Canister		74	284	239	0.062	14	351
<b>Totals:</b>			<b>7,396</b>	<b>3,876</b>	<b>1.000</b>	<b>222</b>	<b>9,142</b>

SEISMIC FORCES

0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)	Height Above Base (ft)	Weight (lb)	$W_z$ (lb-ft)	$C_{vx}$	Horizontal Force (lb)	Vertical Force (lb)
Segment							
28		98.5	25	33	0.008	2	22
27		96.5	84	108	0.028	6	73

SEISMIC FORCES

0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Segment	Height Above Base (ft)	Weight (lb)	W <sub>z</sub> (lb-ft)	C <sub>vx</sub>	Horizontal Force (lb)	Vertical Force (lb)
26	94.5	28	35	0.009	2	24
25	92	112	133	0.034	8	97
24	89	56	63	0.016	4	49
23	86.5	102	110	0.028	6	88
22	84.5	34	35	0.009	2	29
21	82	136	135	0.035	8	118
20	77.5	170	154	0.040	9	147
19	74.5	34	29	0.008	2	29
18	72	136	110	0.028	6	118
17	69.5	34	26	0.007	1	29
16	67	247	178	0.046	10	213
15	62.5	314	203	0.052	12	271
14	57.5	320	182	0.047	10	276
13	52.5	326	160	0.041	9	282
12	47.5	332	140	0.036	8	287
11	42.5	338	120	0.031	7	292
10	38.25	240	72	0.019	4	208
9	35.75	193	52	0.014	3	167
8	33.75	325	80	0.021	5	280
7	31.25	174	38	0.010	2	150
6	27.5	353	63	0.016	4	305
5	22.5	359	47	0.012	3	310
4	17.5	365	32	0.008	2	315
3	12.5	371	19	0.005	1	320
2	7.5	377	9	0.002	1	326
1	2.5	383	2	0.000	0	331
Generic 48" x 12" Panel	98	90	118	0.030	7	78
24.5"ø Canister	94	262	321	0.083	18	226
Commscope TMA19G21BL26-21	88	112	124	0.032	7	97
Commscope FVV-65A-R3	88	104	115	0.030	7	90
48"ø Canister+	84	578	593	0.153	34	499
26.5"ø Canister	74	284	239	0.062	14	245
Totals:		7,396	3,876	1.000	222	6,390

SEISMIC FORCES

1.2D + 1.0Ev + 1.5Eh

Seismic Overstrength

Segment	Height Above Base (ft)	Weight (lb)	W <sub>z</sub> (lb-ft)	C <sub>vx</sub>	Horizontal Force (lb)	Vertical Force (lb)
28	98.5	25	33	0.008	3	31
27	96.5	84	108	0.028	9	104
26	94.5	28	35	0.009	3	35
25	92	112	133	0.034	11	139
24	89	56	63	0.016	5	69
23	86.5	102	110	0.028	9	126
22	84.5	34	35	0.009	3	42
21	82	136	135	0.035	12	168
20	77.5	170	154	0.040	13	210
19	74.5	34	29	0.008	2	42
18	72	136	110	0.028	9	168
17	69.5	34	26	0.007	2	42
16	67	247	178	0.046	15	305
15	62.5	314	203	0.052	17	388
14	57.5	320	182	0.047	16	395
13	52.5	326	160	0.041	14	403
12	47.5	332	140	0.036	12	410
11	42.5	338	120	0.031	10	418
10	38.25	240	72	0.019	6	297
9	35.75	193	52	0.014	4	239
8	33.75	325	80	0.021	7	401
7	31.25	174	38	0.010	3	215
6	27.5	353	63	0.016	5	436

SEISMIC FORCES

1.2D + 1.0Ev + 1.5Eh

Seismic Overstrength

Segment	Height Above Base (ft)	Weight (lb)	W <sub>z</sub> (lb-ft)	C <sub>vx</sub>	Horizontal Force (lb)	Vertical Force (lb)
5	22.5	359	47	0.012	4	443
4	17.5	365	32	0.008	3	451
3	12.5	371	19	0.005	2	458
2	7.5	377	9	0.002	1	466
1	2.5	383	2	0.000	0	473
Generic 48" x 12" Panel	98	90	118	0.030	10	111
24.5"ø Canister	94	262	321	0.083	28	324
Commscope TMAT19G21BL26-21	88	112	124	0.032	11	139
Commscope FVV-65A-R3	88	104	115	0.030	10	128
48"ø Canister+	84	578	593	0.153	51	714
26.5"ø Canister	74	284	239	0.062	21	351
<b>Totals:</b>		<b>7,396</b>	<b>3,876</b>	<b>1.000</b>	<b>333</b>	<b>9,142</b>

SEISMIC FORCES

0.9D - 1.0Ev + 1.5Eh

Seismic Overstrength (Reduced DL)

Segment	Height Above Base (ft)	Weight (lb)	W <sub>z</sub> (lb-ft)	C <sub>vx</sub>	Horizontal Force (lb)	Vertical Force (lb)
28	98.5	25	33	0.008	3	22
27	96.5	84	108	0.028	9	73
26	94.5	28	35	0.009	3	24
25	92	112	133	0.034	11	97
24	89	56	63	0.016	5	49
23	86.5	102	110	0.028	9	88
22	84.5	34	35	0.009	3	29
21	82	136	135	0.035	12	118
20	77.5	170	154	0.040	13	147
19	74.5	34	29	0.008	2	29
18	72	136	110	0.028	9	118
17	69.5	34	26	0.007	2	29
16	67	247	178	0.046	15	213
15	62.5	314	203	0.052	17	271
14	57.5	320	182	0.047	16	276
13	52.5	326	160	0.041	14	282
12	47.5	332	140	0.036	12	287
11	42.5	338	120	0.031	10	292
10	38.25	240	72	0.019	6	208
9	35.75	193	52	0.014	4	167
8	33.75	325	80	0.021	7	280
7	31.25	174	38	0.010	3	150
6	27.5	353	63	0.016	5	305
5	22.5	359	47	0.012	4	310
4	17.5	365	32	0.008	3	315
3	12.5	371	19	0.005	2	320
2	7.5	377	9	0.002	1	326
1	2.5	383	2	0.000	0	331
Generic 48" x 12" Panel	98	90	118	0.030	10	78
24.5"ø Canister	94	262	321	0.083	28	226
Commscope TMAT19G21BL26-21	88	112	124	0.032	11	97
Commscope FVV-65A-R3	88	104	115	0.030	10	90
48"ø Canister+	84	578	593	0.153	51	499
26.5"ø Canister	74	284	239	0.062	21	245
<b>Totals:</b>		<b>7,396</b>	<b>3,876</b>	<b>1.000</b>	<b>333</b>	<b>6,390</b>

1.2D + 1.0Ev + 1.0Eh

Seismic

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-8.67	-0.22	0.00	-16.20	0.00	16.20	1,122.92	325.06	990	780.81	0.00	0.00	0.03
5.00	-8.20	-0.22	0.00	-15.09	0.00	15.09	1,113.37	319.28	955	760.33	0.00	-0.01	0.03

ASSET: 302471, Ridgefield-Danbury Rd.  
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-I  
PROJECT: 14922626\_C3\_03

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
10.00	-7.74	-0.22	0.00	-13.97	0.00	13.97	1,103.45	313.49	921	739.82	0.02	-0.02	0.03
15.00	-7.29	-0.22	0.00	-12.86	0.00	12.86	1,093.15	307.71	887	719.32	0.04	-0.02	0.03
20.00	-6.85	-0.22	0.00	-11.75	0.00	11.75	1,082.48	301.92	854	698.82	0.06	-0.03	0.02
25.00	-6.41	-0.22	0.00	-10.66	0.00	10.66	1,071.42	296.14	822	678.35	0.10	-0.04	0.02
30.00	-6.20	-0.21	0.00	-9.57	0.00	9.57	1,059.99	290.35	790	657.93	0.14	-0.04	0.02
32.50	-5.80	-0.21	0.00	-9.04	0.00	9.04	1,054.13	287.46	774	647.73	0.16	-0.05	0.02
35.00	-5.56	-0.21	0.00	-8.51	0.00	8.51	1,048.17	284.57	759	637.55	0.19	-0.05	0.02
36.50	-5.26	-0.20	0.00	-8.20	0.00	8.20	1,052.06	286.45	769	644.17	0.21	-0.05	0.02
40.00	-4.84	-0.20	0.00	-7.49	0.00	7.49	1,043.65	282.40	747	629.93	0.24	-0.06	0.02
45.00	-4.43	-0.19	0.00	-6.51	0.00	6.51	1,031.32	276.62	717	609.66	0.31	-0.06	0.02
50.00	-4.03	-0.18	0.00	-5.57	0.00	5.57	1,018.60	270.83	687	589.47	0.37	-0.07	0.01
55.00	-3.64	-0.17	0.00	-4.68	0.00	4.68	1,005.52	265.05	658	569.38	0.44	-0.07	0.01
60.00	-3.25	-0.16	0.00	-3.84	0.00	3.84	992.05	259.26	630	549.41	0.52	-0.07	0.01
65.00	-2.94	-0.15	0.00	-3.06	0.00	3.06	978.20	253.48	602	529.58	0.60	-0.08	0.01
69.00	-2.90	-0.14	0.00	-2.47	0.00	2.47	232.49	69.75	27	27.72	0.66	-0.08	0.10
69.00	-2.90	-0.14	0.00	-2.47	0.00	2.47	966.85	248.85	580	513.81	0.66	-0.08	0.01
70.00	-2.73	-0.14	0.00	-2.33	0.00	2.33	232.49	69.75	27	27.72	0.68	-0.08	0.10
74.00	-2.34	-0.13	0.00	-1.76	0.00	1.76	232.49	69.75	27	27.72	0.80	-0.21	0.07
75.00	-2.13	-0.12	0.00	-1.64	0.00	1.64	232.49	69.75	27	27.72	0.85	-0.23	0.07
80.00	-1.96	-0.11	0.00	-1.03	0.00	1.03	232.49	69.75	27	27.72	1.15	-0.34	0.05
84.00	-1.21	-0.07	0.00	-0.58	0.00	0.58	232.49	69.75	27	27.72	1.45	-0.38	0.03
85.00	-1.08	-0.07	0.00	-0.50	0.00	0.50	232.49	69.75	27	27.72	1.54	-0.39	0.02
88.00	-0.74	-0.05	0.00	-0.30	0.00	0.30	232.49	69.75	27	27.72	1.79	-0.41	0.01
90.00	-0.60	-0.04	0.00	-0.20	0.00	0.20	232.49	69.75	27	27.72	1.96	-0.42	0.01
94.00	-0.25	-0.02	0.00	-0.05	0.00	0.05	232.49	69.75	27	27.72	2.32	-0.43	0.00
95.00	-0.14	-0.01	0.00	-0.03	0.00	0.03	232.49	69.75	27	27.72	2.41	-0.43	0.00
98.00	0.00	0.00	0.00	0.00	0.00	0.00	232.49	69.75	27	27.72	2.68	-0.43	0.00
99.00	0.00	0.00	0.00	0.00	0.00	0.00	232.49	69.75	27	27.72	2.77	-0.43	0.00

0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-6.06	-0.22	0.00	-16.05	0.00	16.05	1,122.92	325.06	990	780.81	0.00	0.00	0.03
5.00	-5.73	-0.22	0.00	-14.94	0.00	14.94	1,113.37	319.28	955	760.33	0.00	-0.01	0.03
10.00	-5.41	-0.22	0.00	-13.83	0.00	13.83	1,103.45	313.49	921	739.82	0.02	-0.02	0.02
15.00	-5.10	-0.22	0.00	-12.72	0.00	12.72	1,093.15	307.71	887	719.32	0.04	-0.02	0.02
20.00	-4.79	-0.22	0.00	-11.62	0.00	11.62	1,082.48	301.92	854	698.82	0.06	-0.03	0.02
25.00	-4.48	-0.21	0.00	-10.53	0.00	10.53	1,071.42	296.14	822	678.35	0.10	-0.04	0.02
30.00	-4.33	-0.21	0.00	-9.45	0.00	9.45	1,059.99	290.35	790	657.93	0.14	-0.04	0.02
32.50	-4.05	-0.21	0.00	-8.92	0.00	8.92	1,054.13	287.46	774	647.73	0.16	-0.05	0.02
35.00	-3.89	-0.21	0.00	-8.40	0.00	8.40	1,048.17	284.57	759	637.55	0.19	-0.05	0.02
36.50	-3.68	-0.20	0.00	-8.09	0.00	8.09	1,052.06	286.45	769	644.17	0.20	-0.05	0.02
40.00	-3.39	-0.19	0.00	-7.39	0.00	7.39	1,043.65	282.40	747	629.93	0.24	-0.06	0.02
45.00	-3.10	-0.19	0.00	-6.41	0.00	6.41	1,031.32	276.62	717	609.66	0.30	-0.06	0.01
50.00	-2.82	-0.18	0.00	-5.48	0.00	5.48	1,018.60	270.83	687	589.47	0.37	-0.06	0.01
55.00	-2.54	-0.17	0.00	-4.59	0.00	4.59	1,005.52	265.05	658	569.38	0.44	-0.07	0.01
60.00	-2.27	-0.15	0.00	-3.76	0.00	3.76	992.05	259.26	630	549.41	0.51	-0.07	0.01
65.00	-2.06	-0.14	0.00	-2.98	0.00	2.98	978.20	253.48	602	529.58	0.59	-0.08	0.01
69.00	-2.03	-0.14	0.00	-2.41	0.00	2.41	232.49	69.75	27	27.72	0.66	-0.08	0.10
69.00	-2.03	-0.14	0.00	-2.41	0.00	2.41	966.85	248.85	580	513.81	0.66	-0.08	0.01
70.00	-1.91	-0.14	0.00	-2.26	0.00	2.26	232.49	69.75	27	27.72	0.67	-0.08	0.09
74.00	-1.64	-0.12	0.00	-1.71	0.00	1.71	232.49	69.75	27	27.72	0.79	-0.20	0.07
75.00	-1.49	-0.12	0.00	-1.58	0.00	1.58	232.49	69.75	27	27.72	0.84	-0.23	0.06
80.00	-1.37	-0.11	0.00	-1.00	0.00	1.00	232.49	69.75	27	27.72	1.13	-0.33	0.04
84.00	-0.84	-0.07	0.00	-0.56	0.00	0.56	232.49	69.75	27	27.72	1.43	-0.37	0.02
85.00	-0.75	-0.07	0.00	-0.48	0.00	0.48	232.49	69.75	27	27.72	1.51	-0.38	0.02
88.00	-0.52	-0.05	0.00	-0.29	0.00	0.29	232.49	69.75	27	27.72	1.75	-0.40	0.01
90.00	-0.42	-0.04	0.00	-0.20	0.00	0.20	232.49	69.75	27	27.72	1.92	-0.41	0.01



CALCULATED FORCES													
Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
94.00	-0.17	-0.02	0.00	-0.04	0.00	0.04	232.49	69.75	27	27.72	2.27	-0.41	0.00
95.00	-0.10	-0.01	0.00	-0.03	0.00	0.03	232.49	69.75	27	27.72	2.35	-0.41	0.00
98.00	0.00	0.00	0.00	0.00	0.00	0.00	232.49	69.75	27	27.72	2.61	-0.42	0.00
99.00	0.00	0.00	0.00	0.00	0.00	0.00	232.49	69.75	27	27.72	2.70	-0.42	0.00

ANALYSIS SUMMARY

Load Case	Base Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	4.47	0.00	8.87	0.00	0.00	227.17	69.00	0.79
0.9D + 1.0W	4.47	0.00	6.65	0.00	0.00	225.72	69.00	0.76
1.2D + 1.0Di + 1.0Wi	1.26	0.00	12.52	0.00	0.00	62.79	69.00	0.22
1.2D + 1.0Ev + 1.0Eh	0.22	0.00	8.67	0.00	0.00	16.20	69.00	0.1
0.9D - 1.0Ev + 1.0Eh	0.22	0.00	6.06	0.00	0.00	16.05	69.00	0.1
1.0D + 1.0W	1.10	0.00	7.40	0.00	0.00	56.46	69.00	0.21

ANALYSIS SUMMARY - OVERSTRENGTH LOAD CASES

Load Case	Base Reactions					
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.0Ev + 1.5Eh	0.33	0.00	8.67	0.00	0.00	24.31
0.9D - 1.0Ev + 1.5Eh	0.33	0.00	6.06	0.00	0.00	24.07

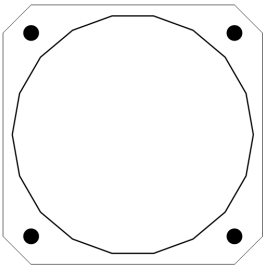
BASE PLATE ANALYSIS @ 0 FT

APPLIED REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
227.17	8.87	4.47

PLATE PARAMETERS (ID# 33467)

Width:	37	in
Shape:	Square	
Thickness:	2.25	in
Grade:	A572-50	
Yield Strength:	50	ksi
Tensile Strength:	65	ksi
Clip Length:	4	in
Rod Detail Type:	d	
Clear Distance	4.75	in
Base Weld Size:	0.125	in
Orientation Offset:	-	°
Analysis Type:	Plastic	
Neutral Axis:	45	°



ANCHOR ROD PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	F <sub>y</sub> (ksi)	F <sub>u</sub> (ksi)	Spacing (in)	Offset (°)
Original [ID#34346]	Cluster	4	2.25	41	A615-75	75	100	5	-

COMPONENT PROPERTIES

Component	ID	Gross Area (in <sup>2</sup> )	Net Area (in <sup>2</sup> )	Individual Inertia (in <sup>4</sup> )	Moment of Inertia (in <sup>4</sup> )	Threads/in
Pole	33.905"ø x 0.1875" (18 Sides)	19.7606	-	-	2808.38	-
Bolt Group	Original (4) 2.25"ø	3.9761	3.2477	0.8393	2394.70	4.5

REACTION DISTRIBUTION

Component	ID	Moment M <sub>u</sub> (k-ft)	Axial Load P <sub>u</sub> (k)	Shear V <sub>u</sub> (k)	Moment Factor
Pole	33.905"ø x 0.1875" (18 Sides)	227.2	8.87	4.47	1.000
Bolt Group	Original (4) 2.25"ø	227.2	-	4.47	1.000

BASE PLATE BEND LINE ANALYSIS @ 0 FT

POLE PROPERTIES					PLATE PROPERTIES		
Flat-to-Flat Diameter:	34.03	in	Flat Width:	6.000	in	Neutral Axis:	45°
Point-to-Point Diameter:	34.56	in	Flat Radians:	0.349	rad		
Orientation Offset:	-	°					
Bend Line	Chord Length (in)	Additional Length (in)	Section Modulus (in <sup>3</sup> )	Applied Moment M <sub>u</sub> (k-in)	Moment Capacity ΦM <sub>n</sub> (k-in)	Flexure Result M <sub>u</sub> /ΦM <sub>n</sub>	
Flats	18.296	0.00	23.156	158.9	1042.0	15.3%	✓
Corners	17.771	0.00	22.491	139.7	1012.1	13.8%	✓

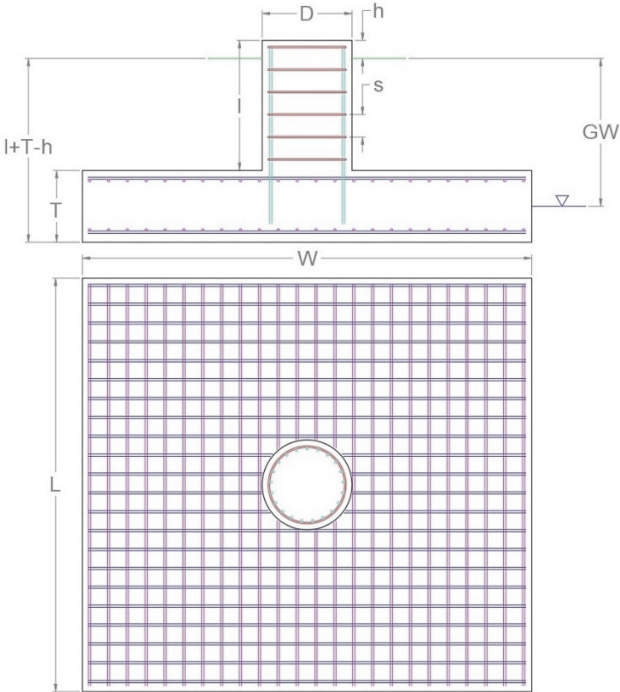
PLASTIC ANCHOR ROD ANALYSIS

Class	Group Quantity	Rod Diameter (in)	Applied Axial Load P <sub>u</sub> (k)	Applied Shear Load V <sub>u</sub> (k)	Compressive Capacity ΦP <sub>n</sub> (k)	Interaction Result
Original	4	2.25	75.8	2.2	243.6	31.1% ✓

MONOLITHIC MAT & PIER FOUNDATION ANALYSIS

APPLIED GLOBAL REACTIONS		
Moment (k-ft)	Axial (k)	Shear (k)
227.17	8.87	4.47

FOUNDATION PARAMETERS			
Mat Length:	L	13.5	ft
Mat Width:	W	13.5	ft
Mat Thickness:	T	4	ft
Base Depth:	L+T-h	9	ft
Pier Shape:		Square	
Pier Width:	D	5.5	ft
Pier Height above Grade:	h	0.5	ft
Concrete Compressive Strength:		3,000	psi
Mat Top Rebar:		(14) #9 bars [60 ksi]	
Mat Bottom Rebar:		(14) #9 bars [60 ksi]	
Pier Vertical Rebar:		(24) #9 bars [60 ksi]	
Pier Rebar Ties:	s	#4 bars @ 14.0" c/c [40 ksi]	
Rebar Clear Cover:		3.0	in
Tower Eccentricity:	ecc	0	ft
Tower Leg Count		1	



SOIL PARAMETERS			
Water Table Depth [BGL]:	GW	7	ft
Soil Unit Weight:		125	pcf
Ultimate Skin Friction:		0	psf
Ultimate Bearing Pressure:		8,000	psf
Bearing Pressure Type:		Gross	
Coefficient of Shear Friction:		0.6	

SOIL STRENGTH ANALYSIS			
Soil Strength Reduction Factor, $\Phi_s$	Uplift Strength Reduction Factor, $\Phi_s$	Asset Dead Load Factor	Dead Load Factor
0.75	0.75	0.9	1.2

SOIL OVERTURNING ANALYSIS		
Design Moment, $M_{u,Design}$ (k-ft)	Nominal Overturning Capacity, $\Phi_m M_n$ (k-ft)	Soil Overturning Usage, $M_{u,Design} / \Phi_m M_n$
269.64	1,566.92	17.2%

SOIL BEARING ANALYSIS			
Net Bearing Pressure, $P_{u,Net}$ (psf)	Nominal Bearing Capacity, $\Phi_b P_n$ (psf)	Bearing Pressure Controlling Load Direction	Soil Bearing Usage, $P_{u,net} / \Phi_b P_n$
1,285.00	6,000.00	Parallel to Pad Edge	21.4%

SOIL SLIDING SHEAR ANALYSIS					
Applied Shear Force, $V_u$ (k)	Friction Resistance (k)	Passive Pressure (psf)	Passive Pressure Resistance (k)	Nominal Shear Capacity, $\Phi_s V_n$ (k)	Soil Sliding Shear Usage, $V_u / \Phi_s V_n$
4.47	128.37	875.0	47.25	131.72	3.0%

ASSET: 302471, Ridgefield-Danbury Rd.  
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-I  
PROJECT: 14922626

#### MAT REINFORCING STEEL STRENGTH ANALYSIS

Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, $\Phi_b$	Strength Shear Reduction Factor, $\Phi_v$	Strength Compression Reduction Factor, $\Phi_c$
29,000	0.9	0.75	0.65

#### MAT REINFORCING ONE WAY SHEAR ANALYSIS

One Way Design Shear, $V_u$ (k)	Nominal One Way Shear Capacity, $\Phi_c V_n$ (k)	One Way Shear Controlling Load Direction	Mat One Way Shear Usage, $V_u / \Phi_c V_n$	
2.40	271.62	Diagonal to Pad Edge	0.9%	✓

#### MAT REINFORCING PUNCHING SHEAR ANALYSIS

Punching Shear Design Stress, $v_u$ (psi)	Nominal Punching Shear Capacity, $\Phi_c V_n$ (psi)	Mat Punching Shear Usage, $v_u / \Phi_c V_n$	
3.5	164.3	2.1%	✓

#### MAT REINFORCING MOMENT TRANSFER ANALYSIS

Moment Transfer Effective Flexural Width, $w_t$ (in)	Neutral Axis Depth (in)	Pier Moment at Joint, $M_{ut}$ (k-in)	Nominal Moment Transfer Capacity, $\Phi M_{sc,f}$ (k-in)	Mat Moment Transfer Usage, $0.6 M_{ut} / \Phi M_{sc,f}$	
17.50	2.08	0.00	43,095.1	0.0%	✓

#### MAT REINFORCING FLEXURE ANALYSIS - UPPER STEEL

Factored Moment, $M_u$ (k-ft)	Nominal Flexural Capacity, $\Phi M_n$ (k-ft)	Flexural Steel Controlling Load Direction	Mat Upper Rebar Flexure Usage, $M_u / \Phi M_n$	
65.62	2,709.68	Parallel to Pad Edge	2.4%	✓

#### MAT REINFORCING FLEXURE ANALYSIS - LOWER STEEL

Factored Moment, $M_u$ (k-ft)	Nominal Flexural Capacity, $\Phi M_n$ (k-ft)	Flexural Steel Controlling Load Direction	Mat Lower Rebar Flexure Usage, $M_u / \Phi M_n$	
109.70	2,709.68	Parallel to Pad Edge	4.0%	✓

#### PIER REINFORCING STEEL STRENGTH ANALYSIS

Rebar Cage Diameter (in)	Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, $\Phi_b$	Strength Shear Reduction Factor, $\Phi_v$	Strength Compression Reduction Factor, $\Phi_c$
57.88	29,000	0.9	0.75	0.65

#### PIER REINFORCING MOMENT ANALYSIS

Design Moment, $M_u$ (k-ft)	Nominal Moment Capacity, $\Phi_b M_n$ (k-ft)	Bending Reinforcement Ratio	Pier Rebar Flexure Usage, $M_u / \Phi_b M_n$	
251.76	3,060.62	0.006	8.2%	✓

#### PIER REINFORCING COMPRESSION ANALYSIS

Design Compression, $P_u$ (k)	Nominal Compressive Capacity, $\Phi_p P_n$ (k)	Pier Rebar Compressive Usage, $P_u / \Phi_p P_n$	
8.87	5,775.43	0.2%	✓

#### PIER REINFORCING SHEAR ANALYSIS

Design Shear, $V_u$ (k)	Nominal Shear Capacity, $\Phi_v V_n$ (k)	Pier Rebar Shear Usage, $V_u / \Phi_v V_n$	
4.47	403.50	1.1%	✓



## Upper Concealed Flange Plate Analysis @ 69'

### Flange Reactions, Location, & Type

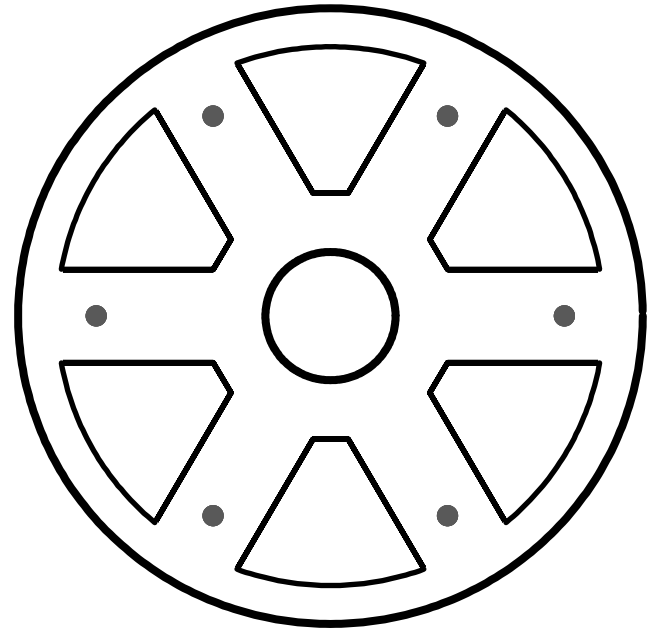
Moment, Mu	21.5	k-ft
Axial, Pu	2.84	k
Shear, Vu	1.33	k
Elevation	69	ft
Location	Upper	-
Plate Type	Spoked w/ Ring	
Include Flange Plate Bearing?	Yes	-
Has Stiffeners?	No	-

### Pole & Spine Geometry

Spine Diameter	5	in
Spine Thickness	0.525	in
Monopole/Outer Diameter	24	in
Monopole Thickness	0	in

### Flange Bolt Parameters & Results

Bolt Quantity	6	#
Bolt Diameter	1 1/8	in
Bolt Circle	18	in
Bolt Grade	A325 > 1"Ø	-
Bolt Yield Strength, Fy	81	ksi
Bolt Tensile Strength, Fu	105	ksi
Bolt Offset	No	
Group Bolts?	No	
Bolt Spacing		in
Moment of Inertia, I	185.4	in <sup>2</sup>
Gross Area, Ag	0.99	in <sup>2</sup>
Net Area, An	0.76	in <sup>2</sup>
Bolt Max Tension, Tu	7.28	k
Bolt Max Compression, Cu	8.23	k
Tension Yielding Capacity, ΦPn	72.46	k
Tension Rupture Capacity, ΦPn	60.09	k
<b>Flange Bolt Result</b>	<b>12%</b>	<b>Pass</b>



### Flange Plate Parameters

Flange Analysis Type	Outer	-
Plate Grade	A36	-
Plate Yield Strength, Fy	36	ksi
Plate Tensile Strength, Fu	58	ksi
Plate Thickness	2 1/4	in
Inner Plate Diameter	9	in
Spoke Quantity	6	#
Spoke Width	3 5/8	in
Outer Ring Inner Diameter	21	in

### Flange Plate Results

Moment Arm, a	4.500	in
Section Modulus, Z	4.588	in <sup>3</sup>
Applied Moment, Mu	29.18	k-in
Moment Capacity, ΦMn	148.65	k-in
<b>Flange Plate Result</b>	<b>20%</b>	<b>Pass</b>



**CENTERLINE**

# **EXHIBIT D**

**Power Density/RF Emissions Report**



# CENTERLINE

## Radio Frequency Exposure Analysis Report

May 9, 2025

T-Mobile

Site Name: Ridgefield/ RT 7

Site ID: CT11297C

Site Address: 746 Danbury Road, Ridgefield, CT 06877



Michael Fischer, P.E.  
Registered Professional Engineer (Electrical)  
Connecticut License Number 33928  
Expires January 31, 2026

Signed 09 May 2025

### Site Compliance Summary

T-Mobile Compliance Status:		Compliant
Cumulative Calculated Power Density (Ground Level):		2.35211 $\mu\text{W}/\text{cm}^2$
Cumulative General Population % MPE (Ground Level):		0.32277%
Cumulative Calculated Power Density (Adj. Rooftop):		0.05003 $\mu\text{W}/\text{cm}^2$
Cumulative General Population % MPE (Adj. Rooftop):		0.00684%



May 9, 2025

Centerline  
Attn: Peter Fales, Vice President  
750 W Center St, Suite 301  
West Bridgewater, MA 02379

RF Exposure Analysis for Site: **Ridgefield/ RT 7**

Centerline was contracted to analyze the proposed T-Mobile facility at **746 Danbury Road, Ridgefield, CT 06877** for the purpose of determining whether the predictive exposure from the proposed facility is within specified federal limits.

All information used in this report was analyzed as a percentage of the Maximum Permissible Exposure (% MPE) limits as detailed in 47 CFR § 1.1310 as well as Federal Communications Commission (FCC) OET Bulletin 65 Edition 97-01. The FCC MPE limits are typically expressed in units of milliwatts per square centimeter ( $\text{mW}/\text{cm}^2$ ) or microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The exposure limits vary depending upon the frequencies being utilized. The General Population/Uncontrolled MPE limit (in  $\text{mW}/\text{cm}^2$ ) for frequencies between 300 and 1500 is defined as frequency (in MHz) divided by 1500 ( $f_{\text{MHz}}/1500$ ). Frequencies between 1500 and 100,000 MHz have a General Population/Uncontrolled MPE limit of  $1 \text{ mW}/\text{cm}^2$  ( $1000 \mu\text{W}/\text{cm}^2$ ). The calculated power density at each sample point divided by the limit at each calculated frequency provides a result in % MPE. Summing the calculated % MPE from all contributors provides a cumulative % MPE at a particular sample point. Wireless carriers use different frequency bands with varying MPE limits; therefore, it is useful to report results in terms of % MPE as opposed to power density.

All results were compared to the FCC radio frequency exposure rules as detailed in 47 CFR § 1.1307(b) to determine compliance with the 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.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits, as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Additional details can be found in FCC OET 65.



## **Calculation Methodology**

Centerline has performed theoretical modeling of the site using a software tool, RoofMaster®, which incorporates calculation methodologies detailed in FCC OET 65. RoofMaster® uses a cylindrical model for conservative power density predictions within the near field of the antenna where the antenna pattern has not truly formed yet. Within this area power density values tend to decrease based upon an inverse distance function. At the point where it is appropriate for modeling to change from near-field calculations to far-field calculations, the power decreases inversely with the square of the distance. The modeling is based on worst-case assumptions in terms of transmitter power and duty cycle. No losses were included in the power calculations unless they were specifically provided for the project.

In OET 65, a far field model is presented to calculate the spatial peak power density. The RoofMaster® implementation of this model incorporates antenna manufacturer's horizontal and vertical pattern data to determine the power density in all directions. This model yields the power density at a single point in space. In order to determine the spatial power density for comparison to the FCC limits, the average of several points calculated within the human profile (0-6') must be conducted. RoofMaster® calculates seven power density values between 0-6' above the specified study plane and performs a linear spatial average.



## **Data & Results**

The following table details the antennas and operating parameters for the T-Mobile antenna system as well as any other antenna systems at the site. This is based on antenna information provided by the client and data compiled from other sources where necessary. The data below was input into Roofmaster® to perform the theoretical exposure calculations at ground level and the adjacent 30' rooftop.

The theoretical calculations performed in Roofmaster® determine the cumulative exposure at all sample points at ground level (0-6' spatial average) and the adjacent 30' rooftop (30-36' spatial average). The results from highest cumulative sample point at ground level and the adjacent 30' rooftop surrounding the site are displayed in the tables below. The contribution from directional antennas to the maximum cumulative totals varies greatly depending on location; therefore, the contribution from one antenna sector at the highest calculated exposure point may be greater or less than other sectors since sectorized directional antennas are pointed in different directions and there is not much overlapping exposure.

The contribution to the cumulative power density and % MPE for each antenna/frequency band is listed in the table(s) below. The cumulative power density and cumulative % MPE are displayed at the bottom of the table(s) below.



**Maximum Calculated Cumulative Power Density**  
**(Location: Base of the Tower)**

Antenna ID	Make / Model	Frequency Band (MHz)	Antenna Gain (dBd)	Antenna Centerline (ft)	Channel Count	TX Power/ Channel (watts)	ERP (watts)	Calculated Power Density ( $\mu\text{W}/\text{cm}^2$ )	General Population MPE Limit ( $\mu\text{W}/\text{cm}^2$ )	General Population % MPE
T-Mobile A 1	COMMSCOPE FVV-65A-R3	600	10.62	85.50	4.00	60.00	2768.29	0.00228	400.00	0.00057
T-Mobile A 1	COMMSCOPE FVV-65A-R3	700	10.64	85.50	4.00	20.00	927.02	0.00036	466.67	0.00008
T-Mobile A 1	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.00195	1000.00	0.00020
T-Mobile A 1	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.00195	1000.00	0.00020
T-Mobile A 1	COMMSCOPE FVV-65A-R3	2100	14.74	85.50	4.00	60.00	7148.44	0.00052	1000.00	0.00005
T-Mobile A 1	COMMSCOPE FVV-65A-R3	2500	15.19	85.50	4.00	60.00	7928.87	0.00269	1000.00	0.00027
T-Mobile B 2	COMMSCOPE FVV-65A-R3	600	10.62	85.50	4.00	60.00	2768.29	0.43542	400.00	0.10886
T-Mobile B 2	COMMSCOPE FVV-65A-R3	700	10.64	85.50	4.00	20.00	927.02	0.14028	466.67	0.03006
T-Mobile B 2	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.33003	1000.00	0.03300
T-Mobile B 2	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.33003	1000.00	0.03300
T-Mobile B 2	COMMSCOPE FVV-65A-R3	2100	14.74	85.50	4.00	60.00	7148.44	0.50342	1000.00	0.05034
T-Mobile B 2	COMMSCOPE FVV-65A-R3	2500	15.19	85.50	4.00	60.00	7928.87	0.52667	1000.00	0.05267
T-Mobile C 3	COMMSCOPE FVV-65A-R3	600	10.62	85.50	4.00	60.00	2768.29	0.03235	400.00	0.00809
T-Mobile C 3	COMMSCOPE FVV-65A-R3	700	10.64	85.50	4.00	20.00	927.02	0.00836	466.67	0.00179
T-Mobile C 3	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.01046	1000.00	0.00105
T-Mobile C 3	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.01046	1000.00	0.00105
T-Mobile C 3	COMMSCOPE FVV-65A-R3	2100	14.74	85.50	4.00	60.00	7148.44	0.01236	1000.00	0.00124
T-Mobile C 3	COMMSCOPE FVV-65A-R3	2500	15.19	85.50	4.00	60.00	7928.87	0.00252	1000.00	0.00025
							<b>Cumulative Power Density:</b>	<b>2.35211 <math>\mu\text{W}/\text{cm}^2</math></b>	<b>Cumulative % MPE:</b>	<b>0.32277%</b>

**Maximum Calculated Cumulative Power Density**  
**(Location: Adjacent Rooftop Approximately 160' North of the Site )**

Antenna ID	Make / Model	Frequency Band (MHz)	Antenna Gain (dBd)	Antenna Centerline (ft)	Channel Count	TX Power/ Channel (watts)	ERP (watts)	Calculated Power Density ( $\mu\text{W}/\text{cm}^2$ )	General Population MPE Limit ( $\mu\text{W}/\text{cm}^2$ )	General Population % MPE
T-Mobile A 1	COMMSCOPE FVV-65A-R3	600	10.62	85.50	4.00	60.00	2768.29	0.00995	400.00	0.00249
T-Mobile A 1	COMMSCOPE FVV-65A-R3	700	10.64	85.50	4.00	20.00	927.02	0.00282	466.67	0.00061
T-Mobile A 1	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.00774	1000.00	0.00077
T-Mobile A 1	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.00774	1000.00	0.00077
T-Mobile A 1	COMMSCOPE FVV-65A-R3	2100	14.74	85.50	4.00	60.00	7148.44	0.01054	1000.00	0.00105
T-Mobile A 1	COMMSCOPE FVV-65A-R3	2500	15.19	85.50	4.00	60.00	7928.87	0.01105	1000.00	0.00111
T-Mobile B 2	COMMSCOPE FVV-65A-R3	600	10.62	85.50	4.00	60.00	2768.29	0.00009	400.00	0.00002
T-Mobile B 2	COMMSCOPE FVV-65A-R3	700	10.64	85.50	4.00	20.00	927.02	0.00001	466.67	0.00000
T-Mobile B 2	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.00001	1000.00	0.00000
T-Mobile B 2	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.00001	1000.00	0.00000
T-Mobile B 2	COMMSCOPE FVV-65A-R3	2100	14.74	85.50	4.00	60.00	7148.44	0.00002	1000.00	0.00000
T-Mobile B 2	COMMSCOPE FVV-65A-R3	2500	15.19	85.50	4.00	60.00	7928.87	0.00001	1000.00	0.00000
T-Mobile C 3	COMMSCOPE FVV-65A-R3	600	10.62	85.50	4.00	60.00	2768.29	0.00000	400.00	0.00000
T-Mobile C 3	COMMSCOPE FVV-65A-R3	700	10.64	85.50	4.00	20.00	927.02	0.00000	466.67	0.00000
T-Mobile C 3	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.00001	1000.00	0.00000
T-Mobile C 3	COMMSCOPE FVV-65A-R3	1900	14.42	85.50	4.00	40.00	4427.11	0.00001	1000.00	0.00000
T-Mobile C 3	COMMSCOPE FVV-65A-R3	2100	14.74	85.50	4.00	60.00	7148.44	0.00000	1000.00	0.00000
T-Mobile C 3	COMMSCOPE FVV-65A-R3	2500	15.19	85.50	4.00	60.00	7928.87	0.00002	1000.00	0.00000
							<b>Cumulative Power Density:</b>	<b>0.05003 <math>\mu\text{W}/\text{cm}^2</math></b>	<b>Cumulative % MPE:</b>	<b>0.00684%</b>





## **Summary**

The theoretical calculations performed for this analysis yielded cumulative power density totals in all areas at ground level and the adjacent 30' rooftop that are within the allowable federal limits for public exposure to RF energy. Therefore, the site is **compliant** with FCC rules and regulations.

Samuel Cosgrove  
RF EME Technical Writer III  
Centerline



**CENTERLINE**

# **EXHIBIT E**

**Notices to Abutters, Property Owner,  
and Town Officials**



**Centerline Communications LLC**  
Cullen Morgan, Site Acq Consultant  
750 W Center Street, Suite 301  
West Bridgewater, MA 02379  
(941)549-7263  
[cmorgan@clinellc.com](mailto:cmorgan@clinellc.com)

May 30, 2025

**RE: Proposed Modifications to an Existing Telecommunications Facility at 746 Danbury Road in Ridgefield, Connecticut**

Dear Sir or Madam:

This firm represents T-Mobile Northeast LLC ("T-Mobile"). Today, T-Mobile filed a Sub-Petition for Declaratory Ruling (the "Sub-Petition") with the Connecticut Siting Council (the "Council") seeking approval to modify its existing wireless telecommunications facility at 746 Danbury Road in Ridgefield, Connecticut (the "Property"). T-Mobile intends to replace its existing antennas and TMAs with new antennas and TMAs in the same general locations inside the flagpole tower. However, to accommodate T-Mobile's proposed Antenna/TMA modifications, the upper portions of the tower's screening shroud will increase in size from 40-inch diameter (existing) to 48-inch diameter.

As presented in the Sub-Petition, the proposed facility modifications constitute an eligible facility request pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-153). A copy of the Sub-Petition is attached for your review. Please note that any comments or concerns regarding this proposal should be submitted to the Council within thirty (30) days of the date of the Sub-Petition.

This notice is being sent to you because you are listed as an owner of land that abuts the Property. If you have any questions regarding the Sub-Petition, the Council's process for reviewing the Sub-Petition or the details of the filing itself, please feel free to contact me at the number listed above. You may also contact the Council directly at 860-827-2935.

Sincerely,

**Cullen Morgan**  
**Site Acquisition Consultant**  
**Centerline Communications, LLC (Agent to T-Mobile)**

**CT11297C – T-MOBILE/AMERICAN TOWER – ABUTTING PROPERTY LIST**

**SUBJECT PARCEL #G08-0018**

**SUBJECT PARCEL ADDRESS: 746 DANBURY ROAD, RIDGEFIELD, CT 06877**

<b>Parcel #</b>	<b>Parcel Address</b>	<b>Parcel Owner(s)</b>	<b>Owner Mailing Address</b>
G25-9	74 SUGAR HOLLOW ROAD DANBURY, CT 06810	KEELER PROPERTY HOLDINGS LLC	111 TROY SCHENECTADY RD, LATHAM, NY 12110
H26-1	103-107 STARRS PLAIN ROAD DANBURY, CT 06810	STATE OF CONNECTICUT	210 CAPITOL AVENUE SUITE 1 HARTFORD, CT 06106
G08-0016	724 DANBURY ROAD RIDGEFIELD, CT 06877	GRB MANAGEMENT LLC	724 DANBURY ROAD RIDGEFIELD, CT 06106
G08-0022	DANBURY ROAD RIDGEFIELD, CT 06877	STATE OF CONNECTICUT	210 CAPITOL AVENUE SUITE 1 HARTFORD, CT 06106
G08-0023	DANBURY ROAD RIDGEFIELD, CT 06877	STATE OF CONNECTICUT	210 CAPITOL AVENUE SUITE 1 HARTFORD, CT 06106
G08-0024	LAUREL LANE RIDGEFIELD, CT 06877	STATE OF CONNECTICUT	210 CAPITOL AVENUE SUITE 1 HARTFORD, CT 06106
G08-0028	616 BENNETTS FARM ROAD RIDGEFIELD, CT 06877	EUREKA V LLC	335 MADISON AVENUE 15 <sup>TH</sup> FLOOR NEW YORK, NY 10017
G25-7-1	88 SUGAR HOLLOW ROAD DANBURY, CT 06810	CYPRESS MANAGEMENT GROUP LLC BART STANCO	PO BOX 1532 FAIRFIELD, CT 06825



**Centerline Communications LLC**  
Cullen Morgan, Site Acq Consultant  
750 W Center Street, Suite 301  
West Bridgewater, MA 02379  
(941)549-7263  
[cmorgan@clinellc.com](mailto:cmorgan@clinellc.com)

May 28, 2025

Keeler Property Holdings LLC  
111 Troy Schenectady Road  
Latham, NY 12110

**RE: Proposed Modifications to an Existing Telecommunications Facility at 746 Danbury Road in Ridgefield, Connecticut**

To Whom It May Concern:

This firm represents T-Mobile Northeast LLC ("T-Mobile"). Today, T-Mobile filed a Sub-Petition for Declaratory Ruling (the "Sub-Petition") with the Connecticut Siting Council (the "Council") seeking approval to modify its existing wireless telecommunications facility at 746 Danbury Road in Ridgefield, Connecticut (the "Property"). T-Mobile intends to replace its existing antennas and TMAs with new antennas and TMAs in the same general locations inside the flagpole tower. However, to accommodate T-Mobile's proposed Antenna/TMA modifications, the upper portions of the tower's screening shroud will increase in size from 40-inch diameter (existing) to 48-inch diameter.

As presented in the Sub-Petition, the proposed facility modifications constitute an eligible facility request pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-153). A copy of the Sub-Petition is attached for your review. Please note that any comments or concerns regarding this proposal should be submitted to the Council within thirty (30) days of the date of the Sub-Petition. Landowners whose property abuts the Property were also sent notice of this filing along with a copy of the Sub-Petition.

Please contact me if you have any questions regarding this proposal at 941-549-7263.

Best Regards,

**Cullen Morgan**  
**Site Acquisition Consultant**  
**Centerline Communications, LLC (Agent to T-Mobile Northeast LLC)**



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May 28, 2025

Rudy Marconi, First Selectman  
Jason Celestino, Building Official  
Town of Ridgefield  
400 Main Street  
Ridgefield, CT 06877

**RE: Proposed Modifications to an Existing Telecommunications Facility at 746 Danbury Road in Ridgefield, Connecticut**

Dear Mr. Marconi and Mr. Celestino,

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Best Regards,

**Cullen Morgan**  
**Site Acquisition Consultant**  
**Centerline Communications, LLC (Agent to T-Mobile Northeast LLC)**

# **EXHIBIT F**

**Letter of Authorization for Zoning/Permitting**





## **LETTER OF AUTHORIZATION FOR PERMITTING**

**Licensee Name: T-MOBILE NORTHEAST LLC d/b/a & T-MOBILE**  
**@ ATC Site Name: Ridgefield-Danbury Rd. ATC Site #: 302471 Project # 14922626**  
**Site Address: 746 Danbury Road Connecticut, Connecticut 06877-2712**  
**Site Coordinates: 41.32997662, -73.47233185**  
**Site Acquisition Vendor (Applicant Representative): CENTERLINE COMMUNICATIONS LLC**

I, Gregory Mercier, Managing Attorney, UST Legal for American Tower\*, owner/operator of the tower facility located at the address identified above (the "Tower Facility"), do hereby authorize T-MOBILE, CENTERLINE COMMUNICATIONS LLC and their successor(s), assign(s), and/or agent(s), (collectively, the "Licensee") to act as American Tower's non-exclusive agent for the sole purpose of filing and consummating any land-use, building, or electrical permit application(s) as may be required by the applicable permitting authorities for T-MOBILE NORTHEAST LLC d/b/a & T-MOBILE's telecommunications' installation on the Tower Facility.

I understand that these applications may be approved with conditions. The above authorization is limited to the acceptance by Licensee only of conditions related to Licensee's installation and any such conditions of approval or modifications will be Licensee's sole responsibility.

Signature:

Print Name: Gregory Mercier  
Managing Attorney, UST Legal  
American Tower\*

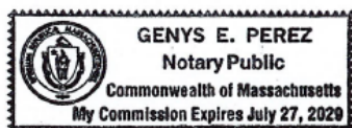
### **NOTARY BLOCK**

Commonwealth of MASSACHUSETTS  
County of Middlesex

This instrument was acknowledged before me by Gregory Mercier, Managing Attorney, UST Legal for American Tower\*, personally known to me (or proved to me based on satisfactory evidence of identification) to be the person whose name is signed on the preceding or attached document and acknowledged to me that they signed it voluntarily for its stated purpose.

WITNESS my hand and official seal, this 26<sup>th</sup> day of February 2025

Notary Seal



Notary Public   
Genys E. Perez  
My Commission Expires: July 27, 2029

\* American Tower is defined as American Tower Corporation and any of its affiliates or subsidiaries.