



**VERIZON SITE NUMBER: 418549**  
**VERIZON SITE NAME: ISLANDER - A**  
**SITE TYPE: MONOPOLE**  
**TOWER HEIGHT: 150'-0"**

**BUSINESS UNIT #: 880416**  
**SITE ADDRESS: 8477 SE 68TH STREET**  
**MERCER ISLAND, WA 98040**  
**COUNTY: KING COUNTY**  
**JURISDICTION: KING COUNTY**

**VERIZON 16543399**

**JURISDICTIONAL APPROVAL:**



3245 158TH AVENUE MS 231  
 BELLEVUE, WA 98008



1505 WESTLAKE AVENUE NORTH, SUITE 800  
 SEATTLE, WA 98109



1825 W. WALNUT HILL LANE, SUITE 120  
 IRVING, TEXAS 75038

**VERIZON SITE NUMBER: 418549**

**BU #: 880416**  
**SEATTLE QWEST - SEA155**  
 8477 SE 68TH STREET  
 MERCER ISLAND, WA 98040  
 EXISTING 150'-0" MONOPOLE

**ISSUED FOR:**

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	02/17/2023	RC	PRELIMINARY	AMT
0	03/09/2023	RC	FINAL	AMT
1	03/16/2023	RC	FINAL	AMT
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3	09/08/2023	RC	FINAL	AMT
4	11/29/2023	RC	FINAL	AMT
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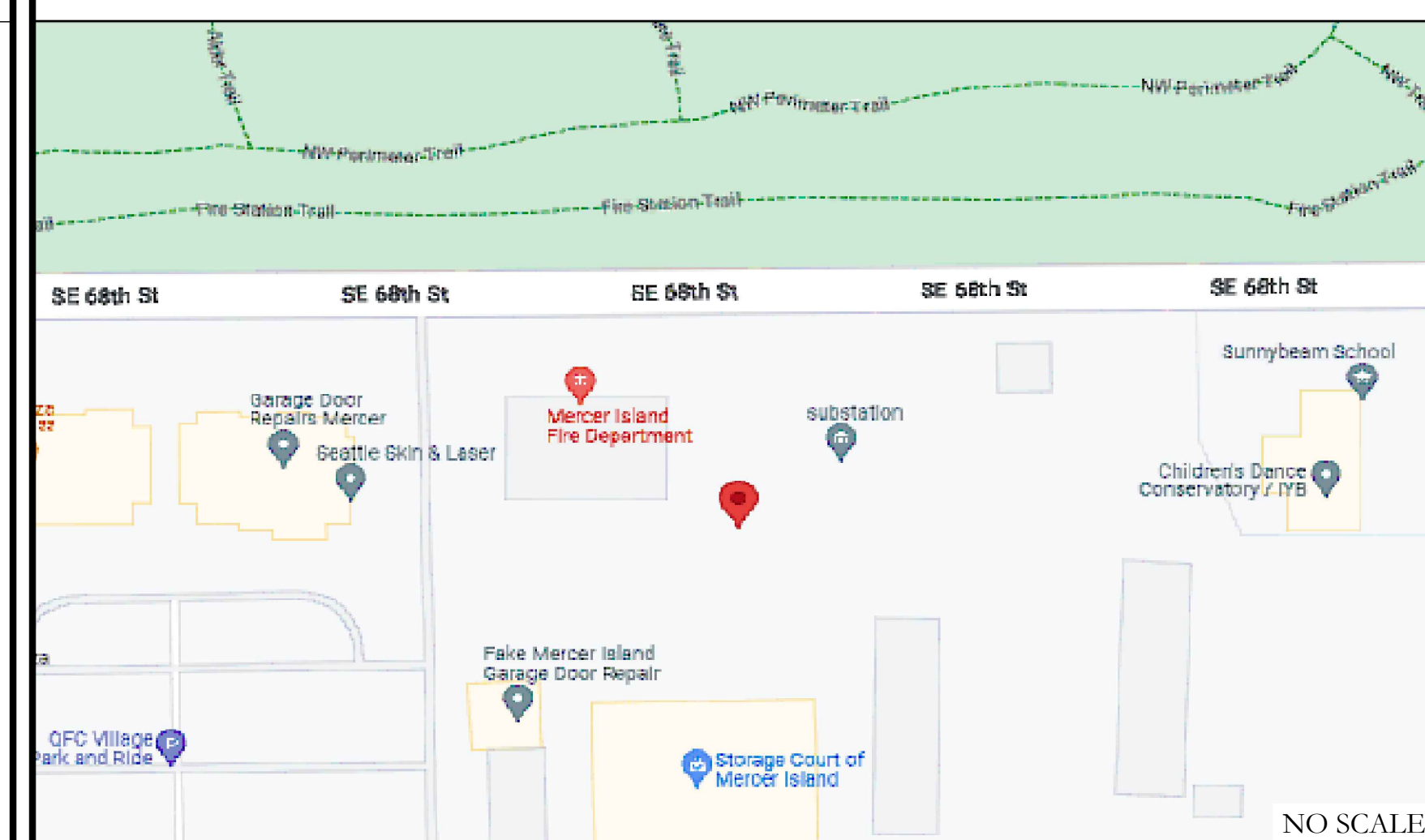
**SHEET NUMBER:**

**T-1**

**REVISION:**

**5**

**LOCATION MAP**



DRIVING DIRECTIONS FROM VERIZON LOCAL OFFICE (3245 158TH AVENUE MS 231, BELLEVUE, WA 98008): DEPART AND HEAD (NORTHEAST), TURN RIGHT, THEN IMMEDIATELY TURN RIGHT ONTO 158TH AVE SE, TURN RIGHT ONTO SE EASTGATE WAY, TAKE THE RAMP ON THE LEFT FOR I-90 WEST AND HEAD TOWARD SEATTLE, HEAD ON THE RAMP RIGHT AND FOLLOW SIGNS FOR ISLAND CREST WAY, TURN RIGHT ONTO SE 68TH ST, TURN LEFT, TURN LEFT, ARRIVE AT 8477 SE 68TH STREET, MERCER ISLAND, WA 98040.

**APPLICABLE CODES/REFERENCE DOCUMENTS**

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE	CODE
BUILDING	2018 IBC
MECHANICAL	2018 IMC
ELECTRICAL	2020 NEC

**REFERENCE DOCUMENTS:**

STRUCTURAL ANALYSIS: TOWER ENGINEERING PROFESSIONALS  
 DATED: 12/12/2023  
 MOUNT ANALYSIS: TBD  
 DATED: TBD  
 RFDS REVISION: N/A  
 DATED: 02/27/2023  
 ORDER ID: 640386  
 REVISION: 0



CALL WASHINGTON ONE CALL  
 (800) 424-5555  
 CALL 3 WORKING DAYS  
 BEFORE YOU DIG!



**SITE INFORMATION**

CROWN CASTLE USA INC. SEATTLE QWEST - SEA155  
 SITE NAME:  
 SITE ADDRESS: 8477 SE 68TH STREET  
 MERCER ISLAND, WA 98040  
 COUNTY: KING COUNTY  
 MAP/PARCEL #: TBD  
 AREA OF CONSTRUCTION: EXISTING  
 LATITUDE: 47.54166667°/47° 32' 30.0" N  
 LONGITUDE: -122.22361111°/122° 13' 25.0" W  
 LAT/LONG TYPE: NAD83  
 GROUND ELEVATION: 142'  
 CURRENT ZONING: TBD  
 JURISDICTION: KING COUNTY  
 OCCUPANCY CLASSIFICATION: U  
 TYPE OF CONSTRUCTION: IIB  
 A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION  
 PROPERTY OWNER: PUGET SOUND ENERGY  
 PO BOX 91269, BOT-01H  
 BELLEVUE WA 98009-9269  
 TOWER OWNER: CROWN CASTLE  
 2000 CORPORATE DRIVE  
 CANONSBURG, PA 15317  
 CARRIER/APPLICANT: VERIZON WIRELESS  
 3245 158TH AVENUE MS 231  
 BELLEVUE, WA 98008  
 ELECTRIC PROVIDER: SEATTLE CITY LIGHT  
 TELCO PROVIDER: CENTURYLINK

**DRAWING INDEX**

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1.1	OVERALL SITE PLAN
C-1.2	SITE PLAN
C-2	EXISTING & NEW ELEVATION
C-3	ANTENNA PLANS & CABLE SCHEDULE
C-4	EQUIPMENT SPECS
C-5	RFDS
C-6	CONFIGURATION DIAGRAM
G-1	GROUNDING PLAN
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS
ATTACHED	SDD MOD TOWER DESIGN BY OTHERS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 22"X34". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

**PROJECT DESCRIPTION**

THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

**TOWER SCOPE OF WORK:**

- REMOVE (3) ANTENNAS
- REMOVE CONCEALMENT CANISTER
- INSTALL (3) ANTENNAS
- INSTALL (3) PIPE TO PIPE MOUNT
- INSTALL (3) BLAST
- INSTALL (1) OVP
- INSTALL (3) RRUS 8843
- INSTALL (1) HYBRID CABLE
- INSTALL STRUCTURAL MODIFICATIONS PER STRUCTURAL MODIFICATION DESIGN BY TOWER ENGINEERING PROFESSIONALS DATED 12/12/2023

**GROUND SCOPE OF WORK:**

- INSTALL (1) OVP

NOTE:  
 PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN CONSTRUCTION MANAGER

**APPROVALS**

VERIZON SIGNATURE BLOCK		
APPROVAL	SIGNATURE	DATE
SITE ACQUISITION		
CONSTRUCTION		
RADIO		
MICROWAVE		
TELCO		
EQUIPMENT		
PROJECT ADMINISTRATOR		
WO ADMINISTRATOR		
CROWN CASTLE USA INC. SIGNATURE BLOCK		
APPROVAL	SIGNATURE	DATE
SITE ACQUISITION		
PLANNER		
CONSTRUCTION		
PROJECT MANAGER		
UTILITY MANAGER		
LANDLORD		

**CONTRACTOR PMI REQUIREMENTS**

PMI ACCESSED AT	https://pmi.vzwsmart.com
SMART TOOL VENDOR	----
PROJECT NUMBER	----
VzW LOCATION CODE (PSLC)	418549

\*\*\* PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT

**MOUNT MODIFICATION REQUIRED**      **N**

**VzW APPROVED SMART KIT VENDORS**

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VzW SMART KIT APPROVED VENDORS

**PROJECT TEAM**

A&E FIRM: TRYLON  
 1825 W. WALNUT HILL  
 LANE, SUITE 120  
 IRVING, TEXAS 75038  
 CROWN CASTLE USA INC. DISTRICT CONTACTS:  
 1505 WESTLAKE AVENUE NORTH, SUITE 800  
 SEATTLE, WA 98109  
 KIARRA GALE - PROJECT MANAGER  
 KIARRA.GALE@CROWNCastle.COM  
 JON ACEBAL - CONSTRUCTION MANAGER  
 JON.ACEBAL@CROWNCastle.COM



**SITE PLAN DISCLAIMER:**  
 PROPERTY LINES AND STRUCTURES HAVE BEEN DIGITIZED FROM PREVIOUS PLAN SETS. CROWN CASTLE USA INC. HAS NOT COMPLETED A SITE SURVEY AND THEREFORE MAKES NO CLAIMS AS TO THE ACCURACY OF INFORMATION DEPICTED ON THIS SHEET.

**JURISDICTIONAL APPROVAL:**

**verizon**  
 3245 158TH AVENUE MS 231  
 BELLEVUE, WA 98008

**CROWN CASTLE**  
 1505 WESTLAKE AVENUE NORTH, SUITE 800  
 SEATTLE, WA 98109

**Trylon**  
 1825 W. WALNUT HILL LANE, SUITE 120  
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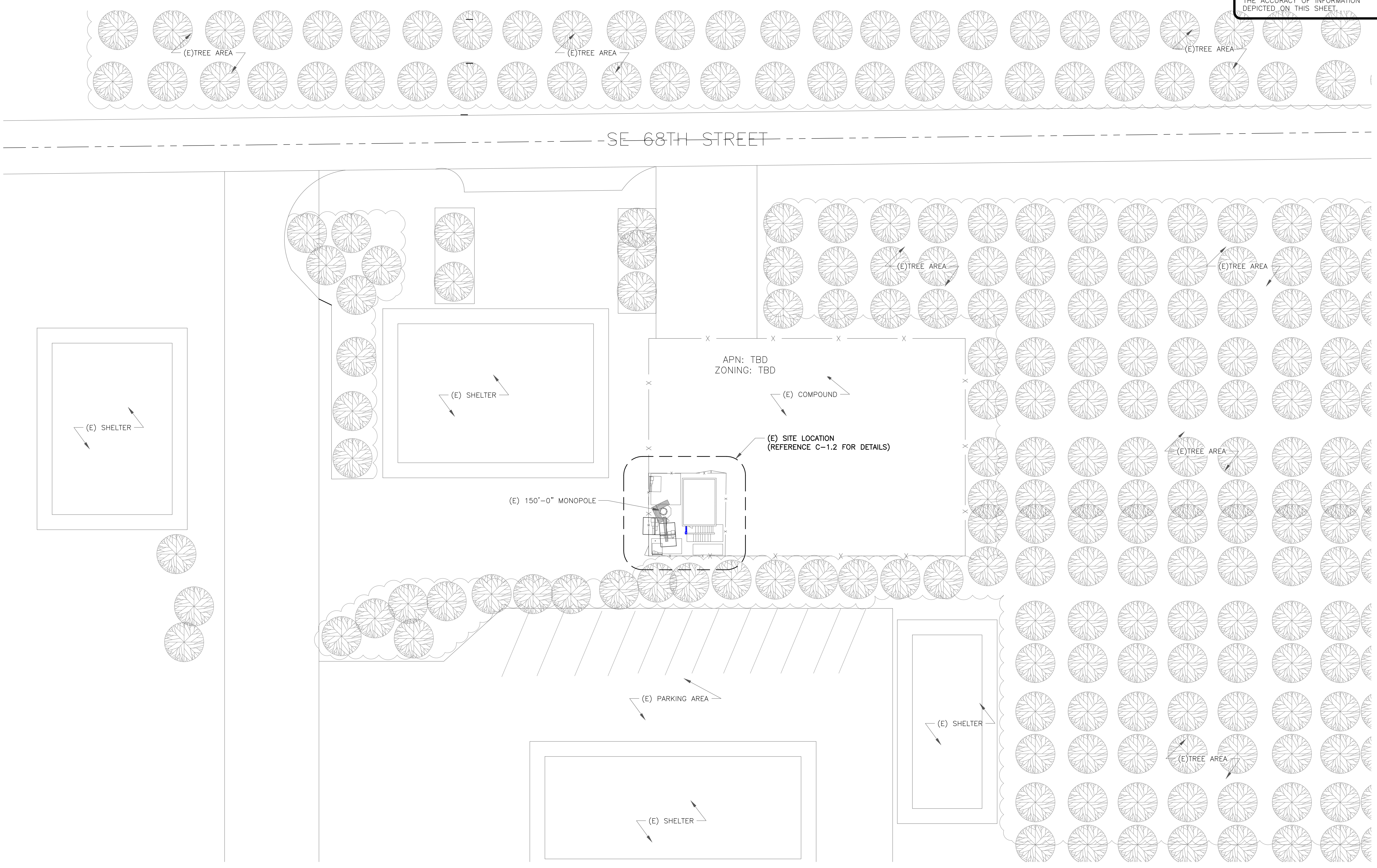
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**MICHAEL S. MOORE**  
 STATE OF WASHINGTON  
 12/20/2023  
 REGISTERED PROFESSIONAL ENGINEER

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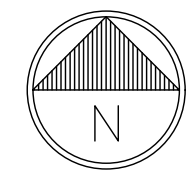
SHEET NUMBER: **C-1.1** REVISION: **5**



**1 OVERALL SITE PLAN**  
 SCALE: 1"=10'-0" (FULL SIZE)  
 1"=20'-0" (11x17)



1 SITE PLAN  
 SCALE: 1/2"=1'-0" (FULL SIZE)  
 1/4"=1'-0" (11x17)



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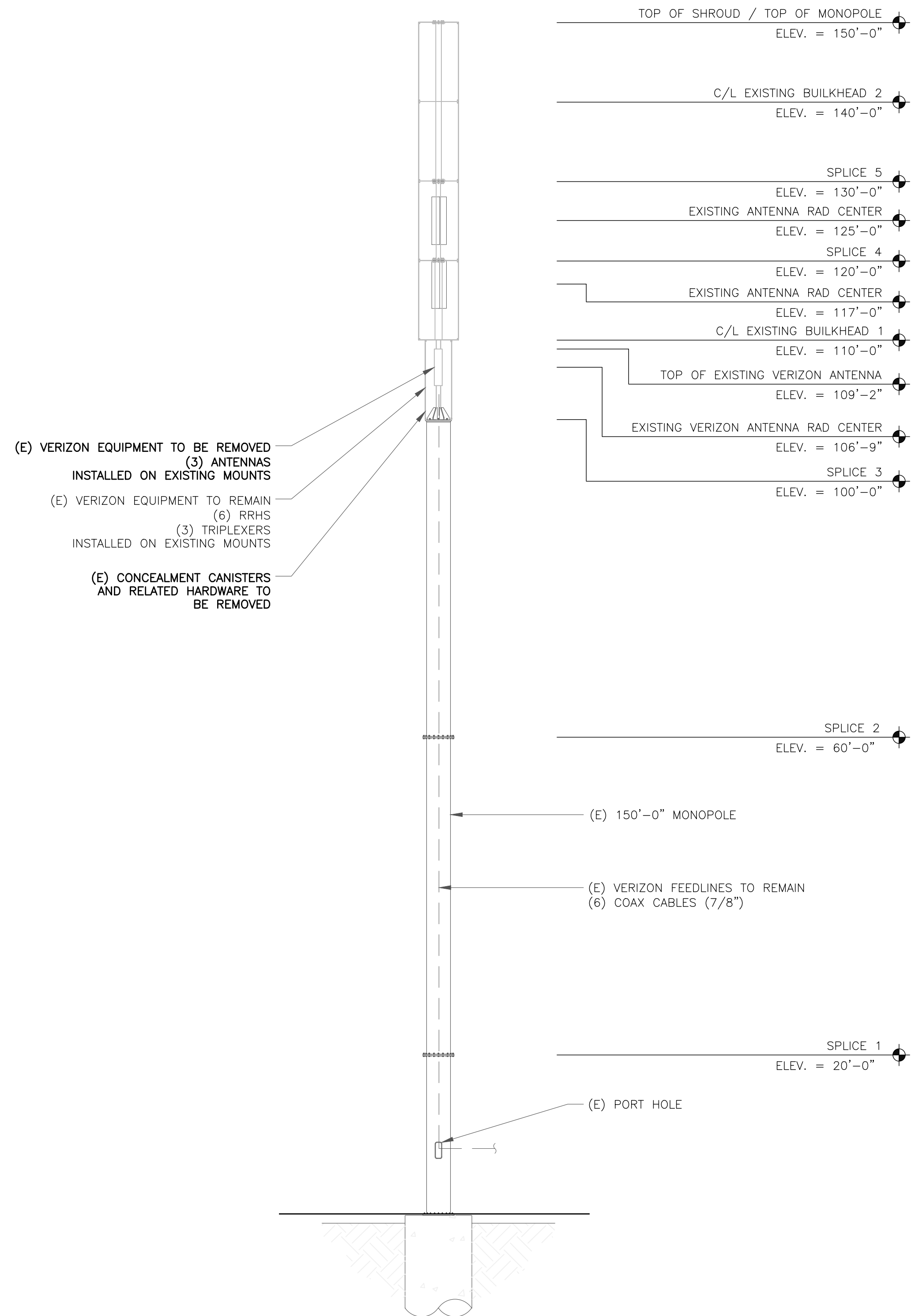


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SHEET NUMBER:  
**C-1.2**

REVISION:  
**5**

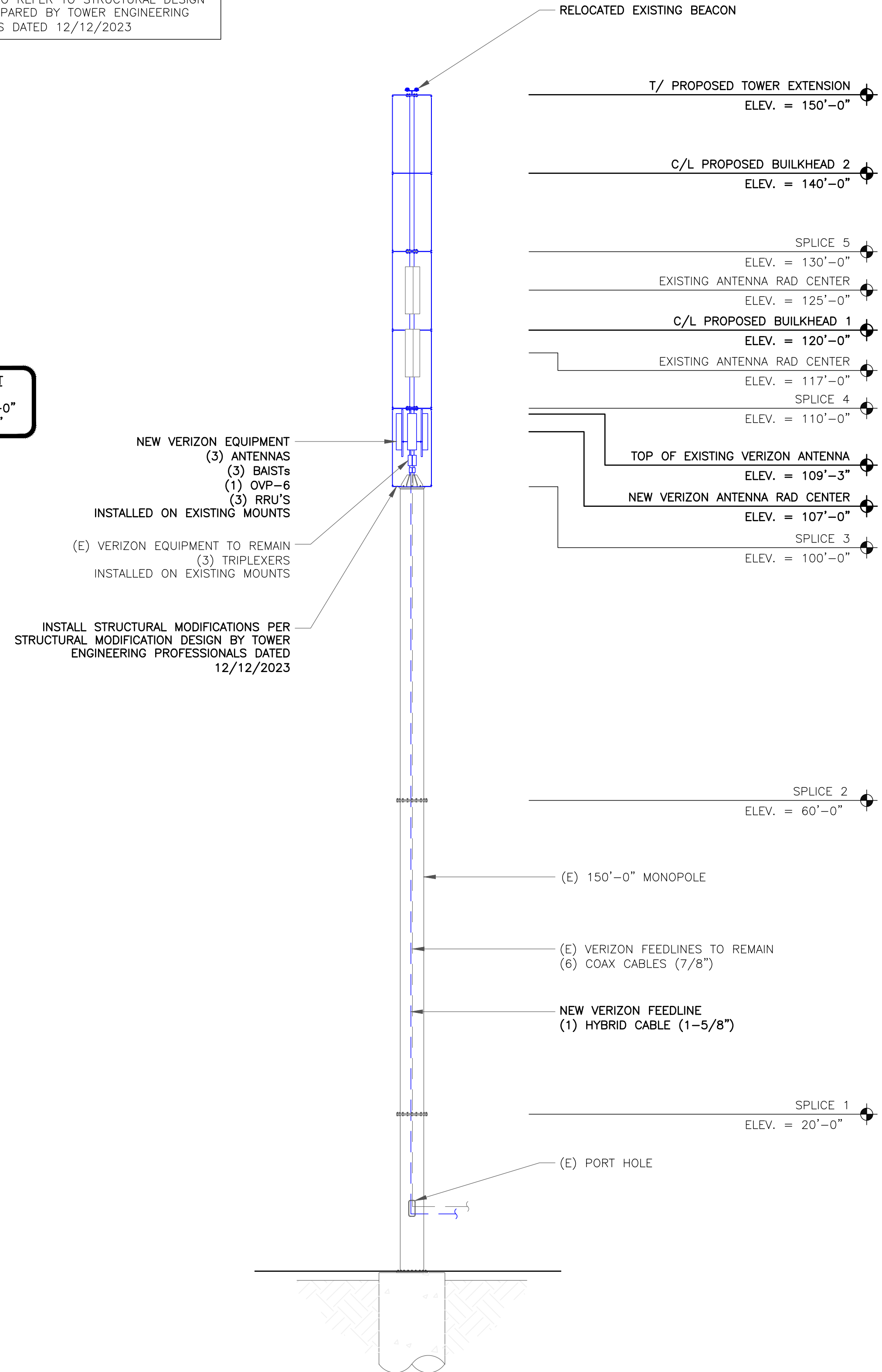
**VERIZON EQUIPMENT**  
 ANTENNA CL: 106'-9"  
 MOUNT CL: 106'-9"



1 EXISTING NORTH ELEVATION  
 SCALE: NOT TO SCALE

STRUCTURAL NOTES:  
 CONTRACTOR TO REFER TO STRUCTURAL ANALYSIS REPORT PREPARED BY TOWER ENGINEERING PROFESSIONALS DATED 12/12/2023  
 CONTRACTOR TO REFER TO STRUCTURAL DESIGN DRAWINGS PREPARED BY TOWER ENGINEERING PROFESSIONALS DATED 12/12/2023

**VERIZON EQUIPMENT**  
 ANTENNA CL: 107'-0"  
 MOUNT CL: 106'-9"

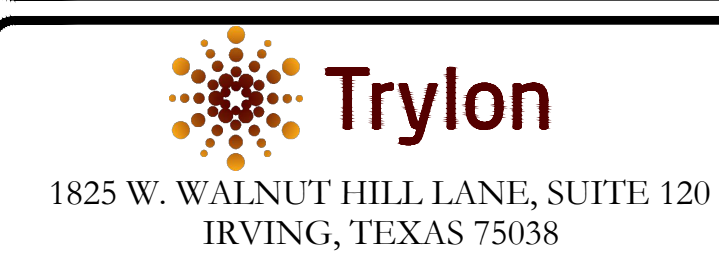


2 FINAL NORTH ELEVATION  
 SCALE: NOT TO SCALE

**JURISDICTIONAL APPROVAL:**



**CROWN CASTLE**  
 1505 WESTLAKE AVENUE NORTH, SUITE 800  
 SEATTLE, WA 98109



1825 W. WALNUT HILL LANE, SUITE 120  
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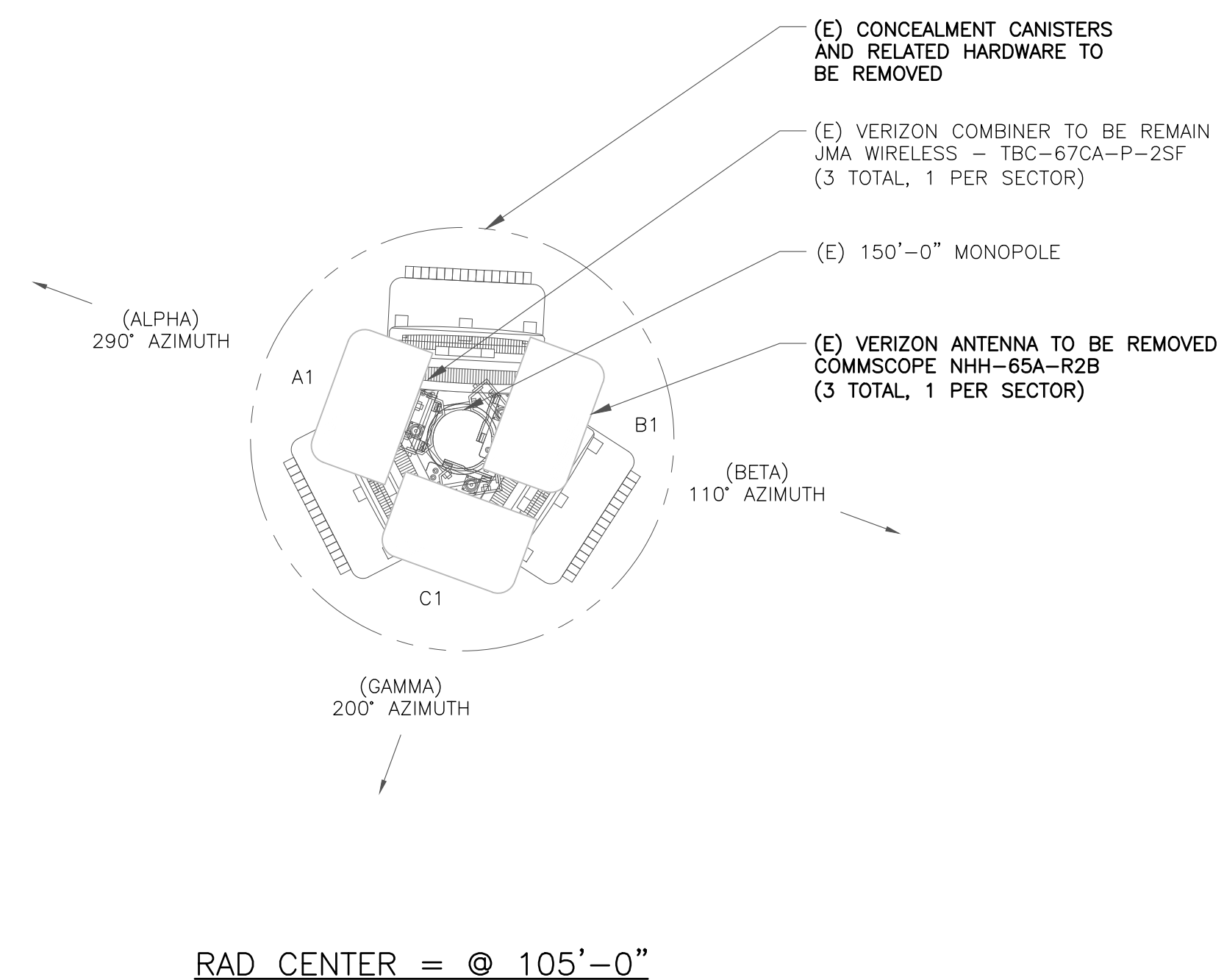
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SHEET NUMBER: **C-2** REVISION: **5**

ANTENNA SCHEDULE										
SECTOR	POS.	TECHNOLOGY	RAD CENTER	AZIMUTH	ANTENNA MANUFACTURER	ANTENNA MODEL	MECH. TILT	ELECT. TILT	TOWER MOUNTED EQUIPMENT	FEEDLINE TYPE
ALPHA	A1	LTE700, LTE850, LTE1900, LTEAWS, LTEAWS3, 5G	107'-0"	290°	COMMSCOPE	NHHS4-65A-R3B	4°	4°/8°/8°/ 4°/4°/3°	EQUIPMENT ARE AT GROUND (1) JMA WIRELESS - TBC-67C-A-P-2SF (1) RRRS 8843	HYBRID
BETA	B1	LTE700, LTE850, LTE1900, LTEAWS, LTEAWS3, 5G	107'-0"	110°	COMMSCOPE	NHHS4-65A-R3B	4°	4°/8°/8°/ 4°/4°/3°	EQUIPMENT ARE AT GROUND (1) JMA WIRELESS - TBC-67C-A-P-2SF (1) RRRS 8843	HYBRID
GAMMA	C1	LTE700, LTE850, LTE1900, LTEAWS, LTEAWS3, 5G	107'-0"	200°	COMMSCOPE	NHHS4-65A-R3B	4°	4°/8°/8°/ 4°/4°/3°	EQUIPMENT ARE AT GROUND (1) JMA WIRELESS - TBC-67C-A-P-2SF (1) RRRS 8843	HYBRID
									(1) RAYCAP - RRFDC-3315-PF-48	

CABLE SCHEDULE			
STATUS	CABLE TYPE	SIZE	QUANTITY
EXISTING	COAX	7/8"	6
NEW	HYBRID	6x12	1
FINAL CABLE QUANTITY			7

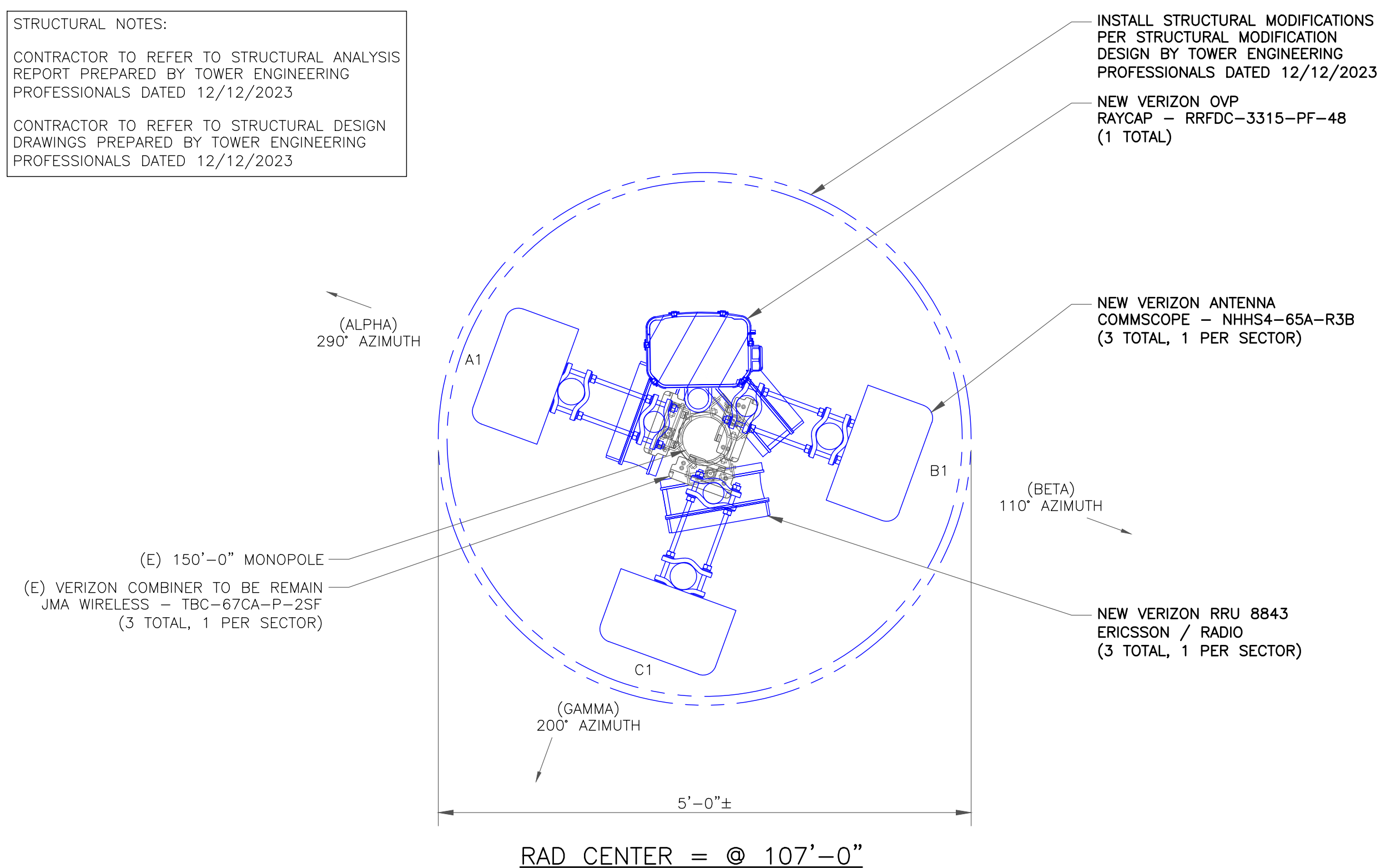
1 ANTENNA AND CABLE SCHEDULE  
SCALE: NOT TO SCALE



2 EXISTING ANTENNA PLAN  
SCALE: NOT TO SCALE



STRUCTURAL NOTES:  
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3 FINAL ANTENNA PLAN  
SCALE: NOT TO SCALE



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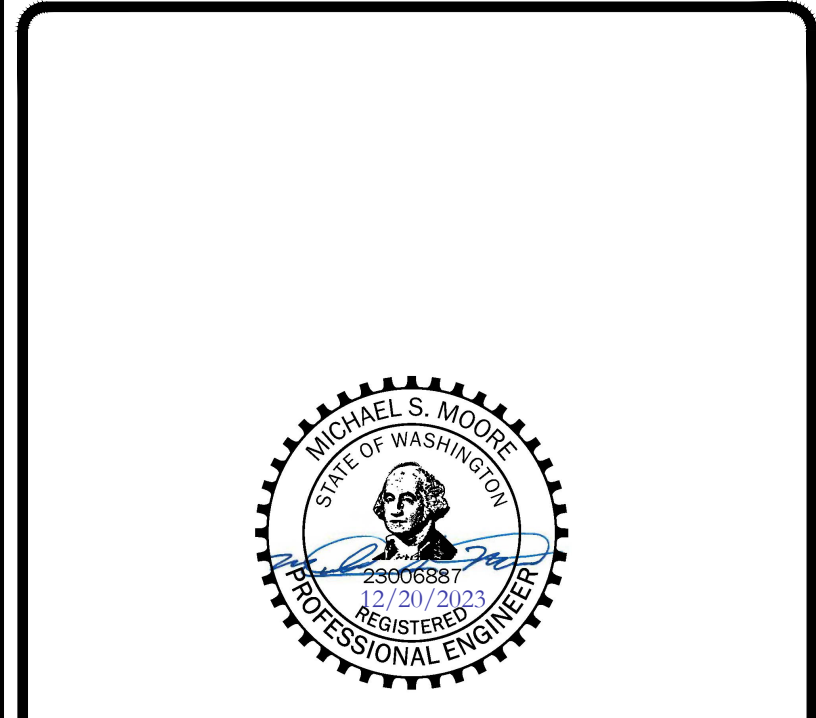
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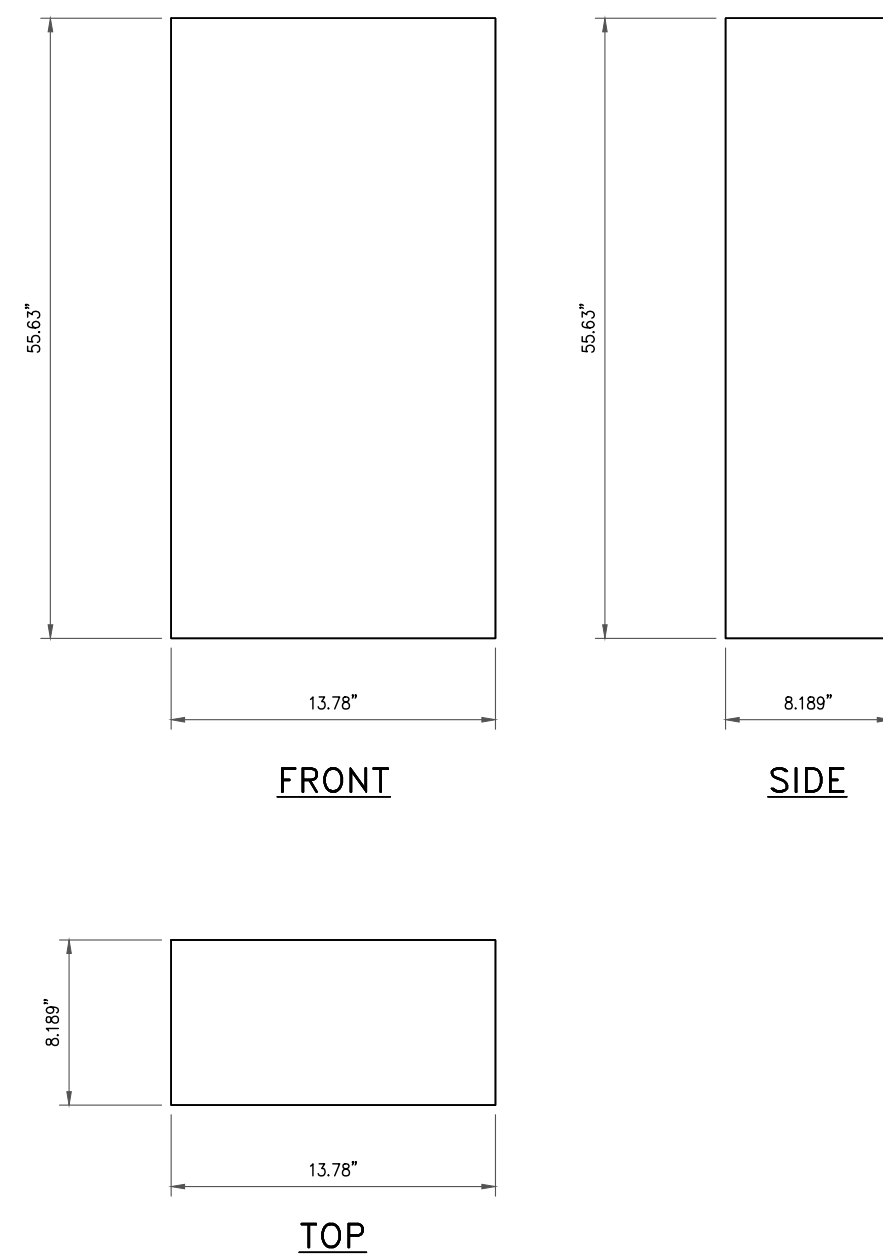


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SHEET NUMBER: **C-3** REVISION: **5**

**PANEL ANTENNA (COMMSCOPE-NHHS4-65A-R3B)**

DIMENSIONS, HxWxD: 55.63"x13.78"x8.189"  
 WEIGHT, W/O BRACKETS: 50.706 lbs



1 NHHS4-65A-R3B ANTENNA DETAIL  
 SCALE: NOT TO SCALE

**ATSBT-TOP-FM-4G**



**Top Smart Bias Tee**

- Reduces cable and site lease costs by eliminating the need for AISG home run cables
- Weatherproof AISG connectors
- Intuitive schematics simplify and ensure proper installation
- Enhanced lightning protection plus grounding stud for additional surge protection
- 7-16 DIN female connector (BTS)
- 7-16 DIN male connector (ANT)
- Operates at 10-30 Vdc
- AISG 1.1 and 2.0 compliant

**Product Classification**

**Product Type** RET bias tee

**General Specifications**

**AISG Input Connector** 8-pin DIN Female  
**Antenna Interface** 7-16 DIN Male  
**Antenna Interface Signal** RF | dc Blocked  
**BTS Interface** 7-16 DIN Female  
**BTS Interface Signal** AISG data | RF | dc  
**Color** Silver  
**EU Certification** CE  
**Grounding Lug Thread Size** M8  
**Smart Bias Tee Type** 10-30 V Top

**Dimensions**

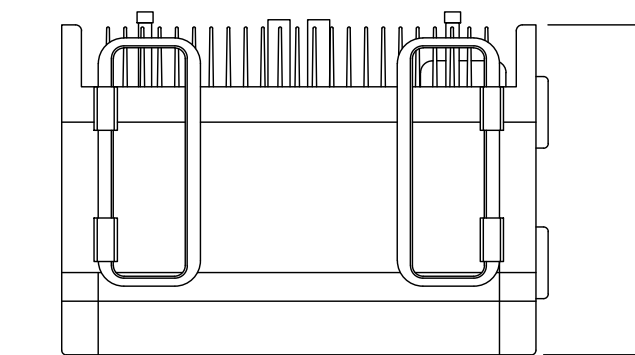
**Height** 143 mm | 5.63 in  
**Width** 94 mm | 3.701 in  
**Depth** 50 mm | 1.969 in

**Electrical Specifications**

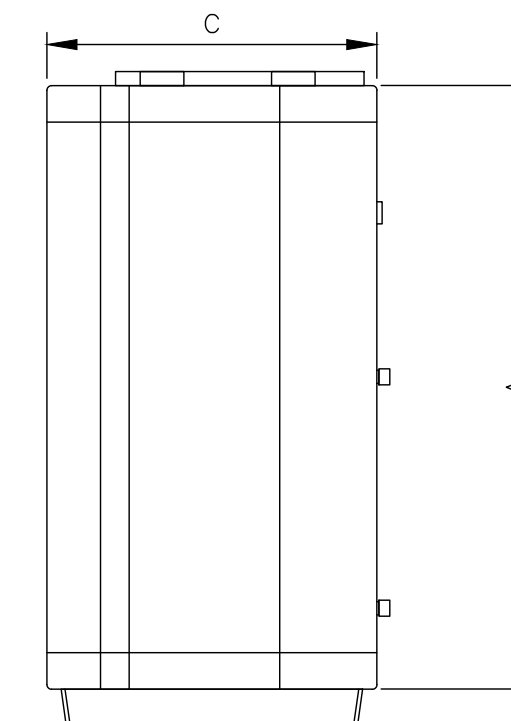
**3rd Order IMD** -158 dBc  
**3rd Order IMD Test Method** Two +43 dBm carriers  
**Insertion Loss, typical** 0.1 dB  
**Electromagnetic Compatibility (EMC)** CFR 47 Part 15, Subpart B, Class B | EN 55022, Class B | ICES-003 Issue 4 CAN

2 ANDREW / ATSBT-TOP-FM BIAS TEE DETAIL  
 SCALE: NOT TO SCALE

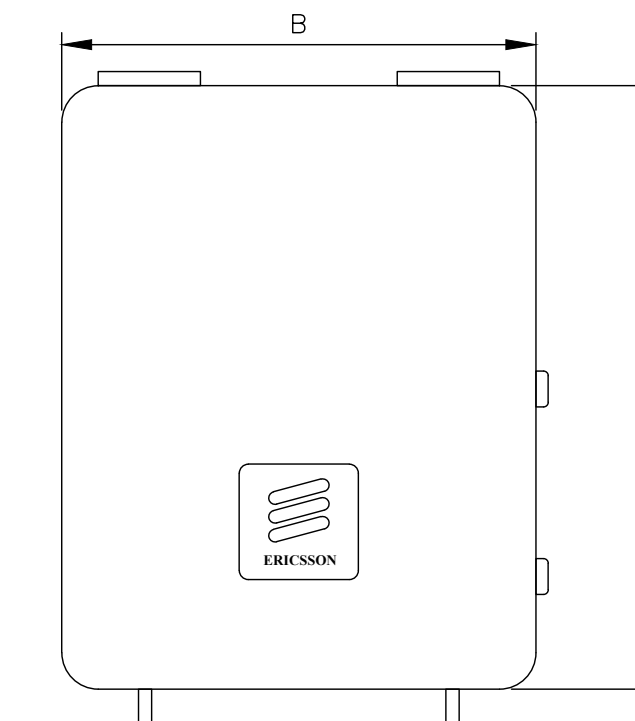
MANUFACTURER:		ERICSSON
MODEL NO.:		RRUS 8843
DIMENSIONS:		TOTAL WEIGHT :
A	18.0"	70.0"
B	13.2"	
C	9.4"	



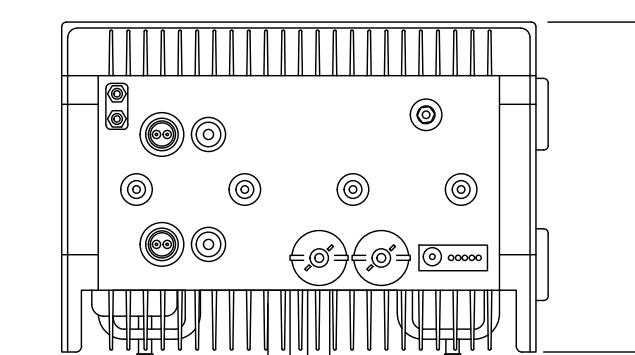
TOP VIEW



SIDE VIEW



FRONT VIEW



BACK VIEW

3 ERICSSON - RADIO 8843 DETAIL  
 SCALE: NOT TO SCALE

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C-4

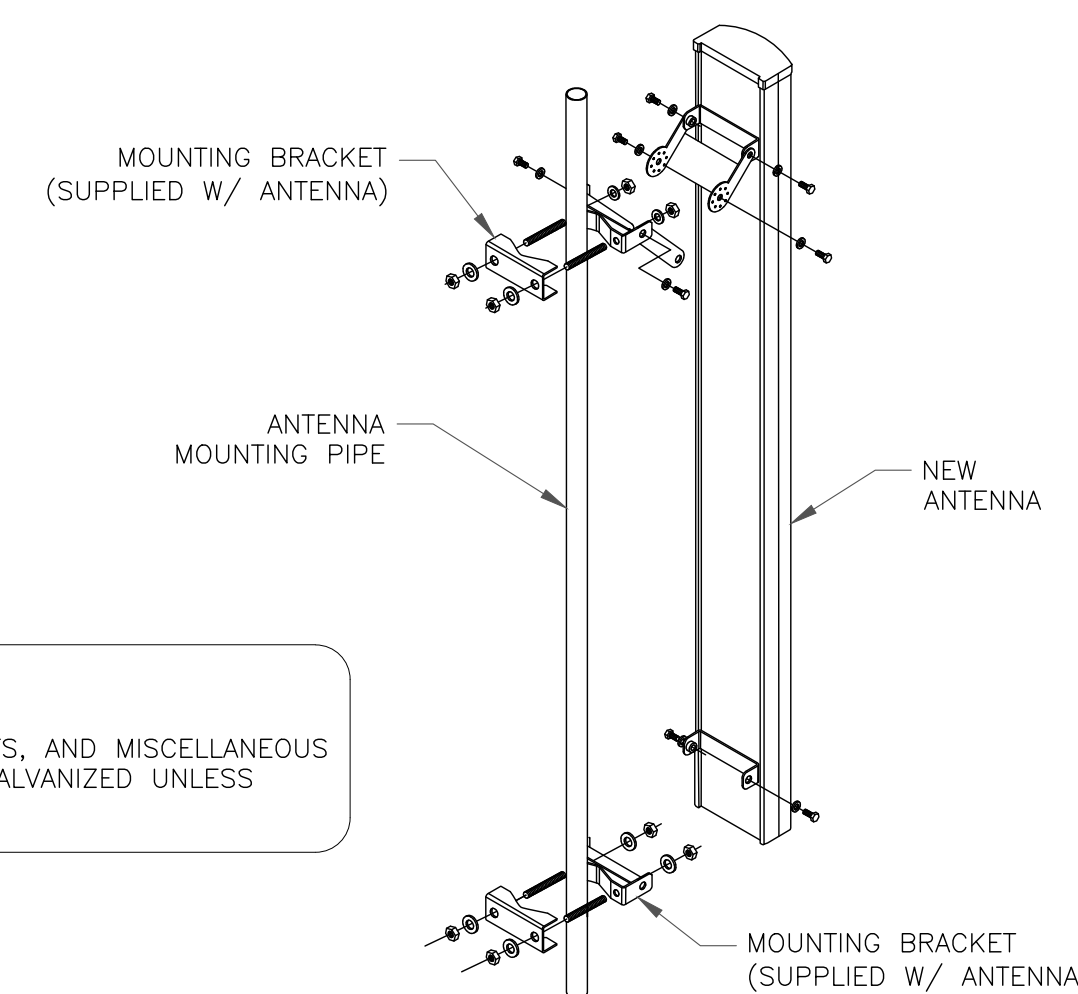
REVISION:

5



PV-BC-35-14 Pipe to Pipe Clamp, Joins 2 3/8" to 5" OD Pipe

4 PERFECT VISION PV-BC-35-14 PIPE TO PIPE MOUNT  
 SCALE: NOT TO SCALE



**INSTALLER NOTE:**

1. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.

5 ANTENNA MOUNTING DETAIL  
 SCALE: NOT TO SCALE

### Antenna Summary

**Added**

700	850	1900	AWS	AWS3	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity	Item ID
LTE	5G	LTE	LTE	LTE	5G	CommScope	NHHS4-65A-R3B	106.7	109	110(B) 200(C) 290(A)	false	false	PHYSICAL	3	

**Removed**

700	850	1900	AWS	AWS3	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity	Item ID
LTE	LTE 5G	LTE	LTE	LTE		COMMSCOPE	NHH-65A-R2B	106.7	109	110(B) 200(C) 290(A)	false	false	PHYSICAL	3	

**Retained**

700	850	1900	AWS	AWS3	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity	Item ID
No data available.															

Added: 3
Removed: 3
Retained: 0

### Equipment Summary

**Added**

Equipment Type	Location	700	850	1900	AWS	AWS3	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity	Item ID
RRU	Tower						5G	Ericsson	8843			PHYSICAL	3	
Hybrid Cable	Tower								6X12			PHYSICAL	1	
BAIST	Tower								MODEM-X			PHYSICAL	3	
OVP Box	Tower								OVP-6			PHYSICAL	1	
OVP Box	Shelter								OVP-6			PHYSICAL	1	

**Removed**

Equipment Type	Location	700	850	1900	AWS	AWS3	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity	Item ID
No data available.														

**Retained**

Equipment Type	Location	700	850	1900	AWS	AWS3	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity	Item ID
RRU	Tower	LTE	5G					Ericsson	4449			PHYSICAL	3	
RRU	Tower			LTE	LTE	LTE		Ericsson	8843			PHYSICAL	3	
Triplexer	Tower								TWIN LOW/AWS/PCS			PHYSICAL	3	
Coaxial Cables	Tower											PHYSICAL	6	
Triplexer	Shelter								TWIN LOW/AWS/PCS			PHYSICAL	3	

JURISDICTIONAL APPROVAL:



VERIZON SITE NUMBER: 418549

BU #: 880416  
**SEATTLE QWEST - SEA155**  
 8477 SE 68TH STREET  
 MERCER ISLAND, WA 98040  
 EXISTING 150'-0" MONOPOLE

**ISSUED FOR:**

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	02/17/2023	RC	PRELIMINARY	AMT
0	03/09/2023	RC	FINAL	AMT
1	03/16/2023	RC	FINAL	AMT
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3	09/08/2023	RC	FINAL	AMT
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5	12/20/2023	RC	FINAL	AMT

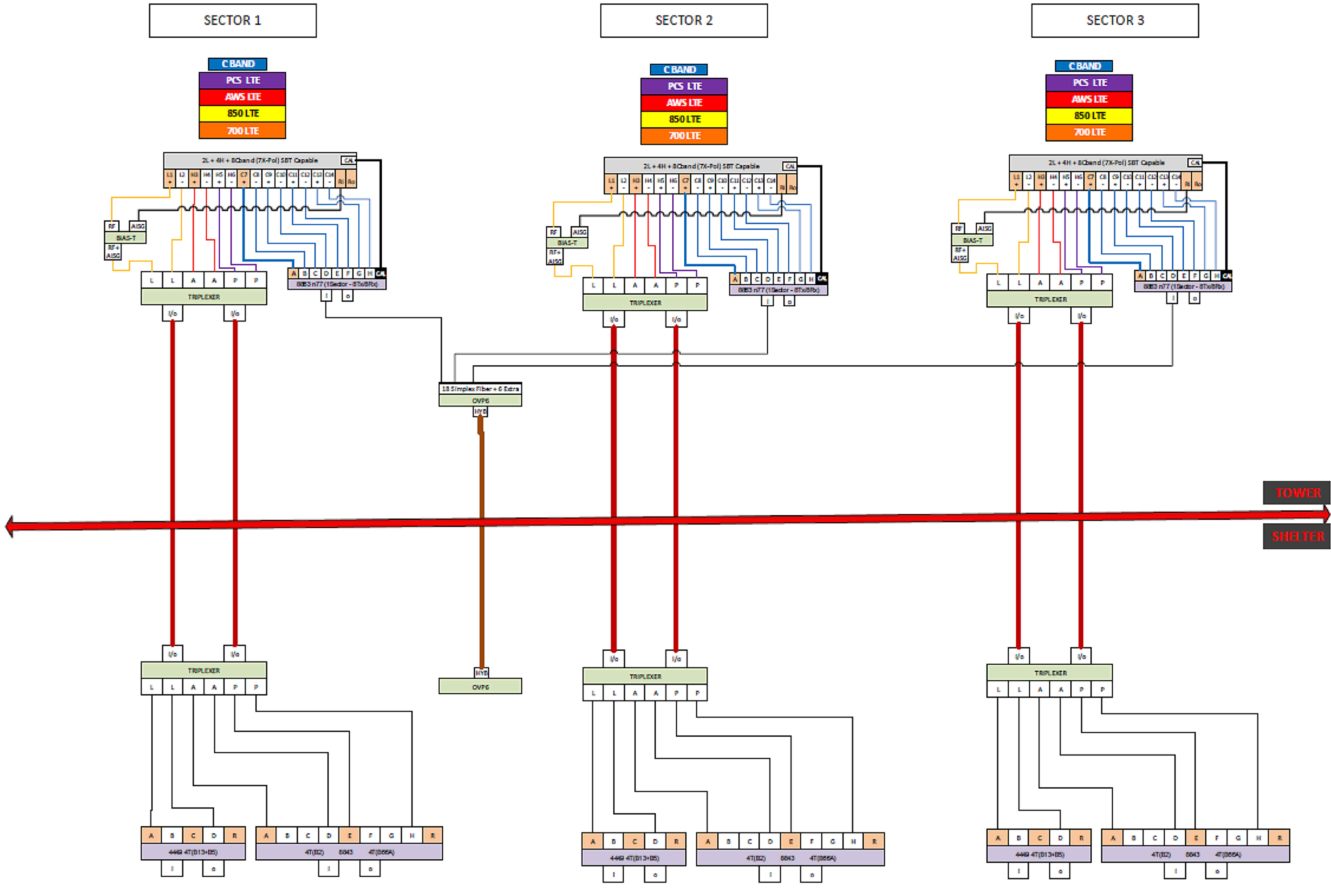


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SHEET NUMBER: **C-5**      REVISION: **5**



# ISLANDER – C BAND IT DIAGRAM



1 CONFIGURATION DIAGRAM  
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:



3245 158TH AVENUE MS 231  
BELLEVUE, WA 98008



1505 WESTLAKE AVENUE NORTH, SUITE 800  
SEATTLE, WA 98109



1825 W. WALNUT HILL LANE, SUITE 120  
IRVING, TEXAS 75038

VERIZON SITE NUMBER: 418549

BU #: 880416  
SEATTLE QWEST - SEA155  
8477 SE 68TH STREET  
MERCER ISLAND, WA 98040  
EXISTING 150'-0" MONOPOLE

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SHEET NUMBER:  
**C-6**

REVISION:  
**5**

**JURISDICTIONAL APPROVAL:**



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BELLEVUE, WA 98008



1505 WESTLAKE AVENUE NORTH, SUITE 800  
SEATTLE, WA 98109



1825 W. WALNUT HILL LANE, SUITE 120  
IRVING, TEXAS 75038

VERIZON SITE NUMBER: 418549

BU #: 880416  
SEATTLE QWEST - SEA155  
8477 SE 68TH STREET  
MERCER ISLAND, WA 98040  
EXISTING 150'-0" MONOPOLE

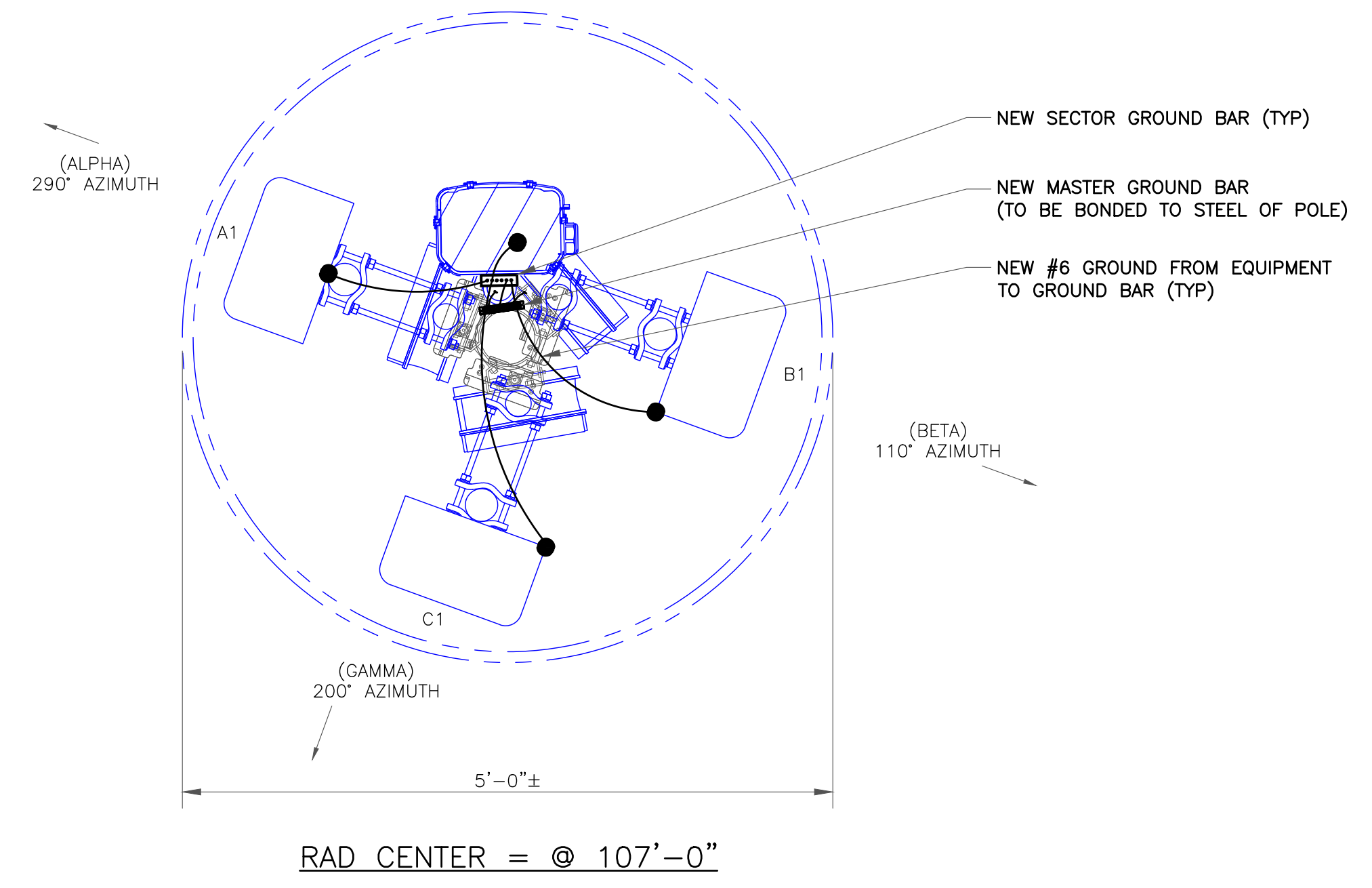
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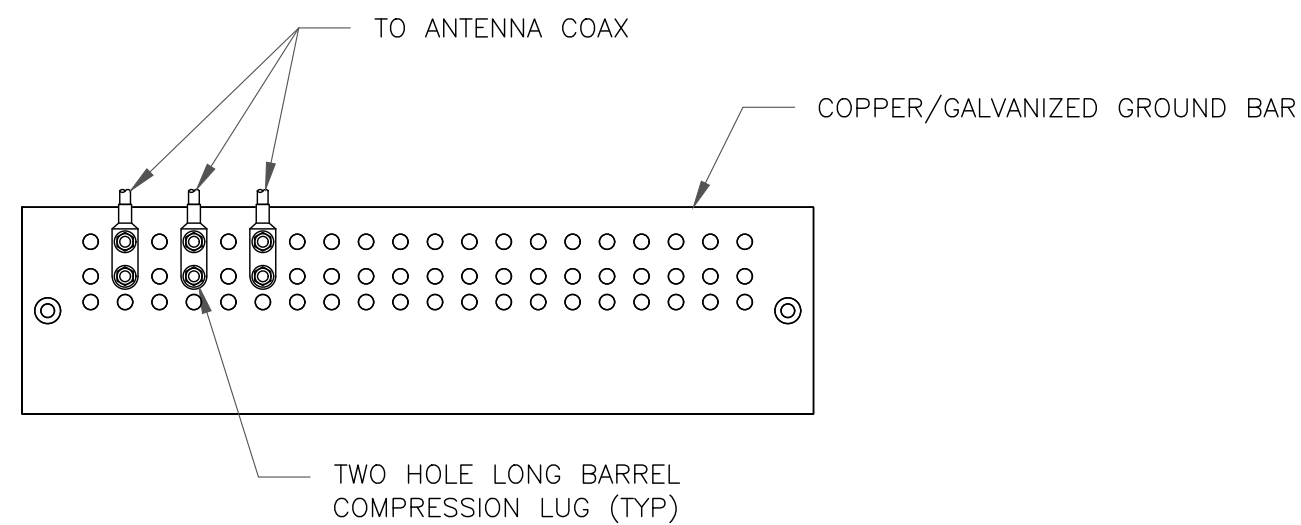
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SHEET NUMBER: **G-1** REVISION: **5**

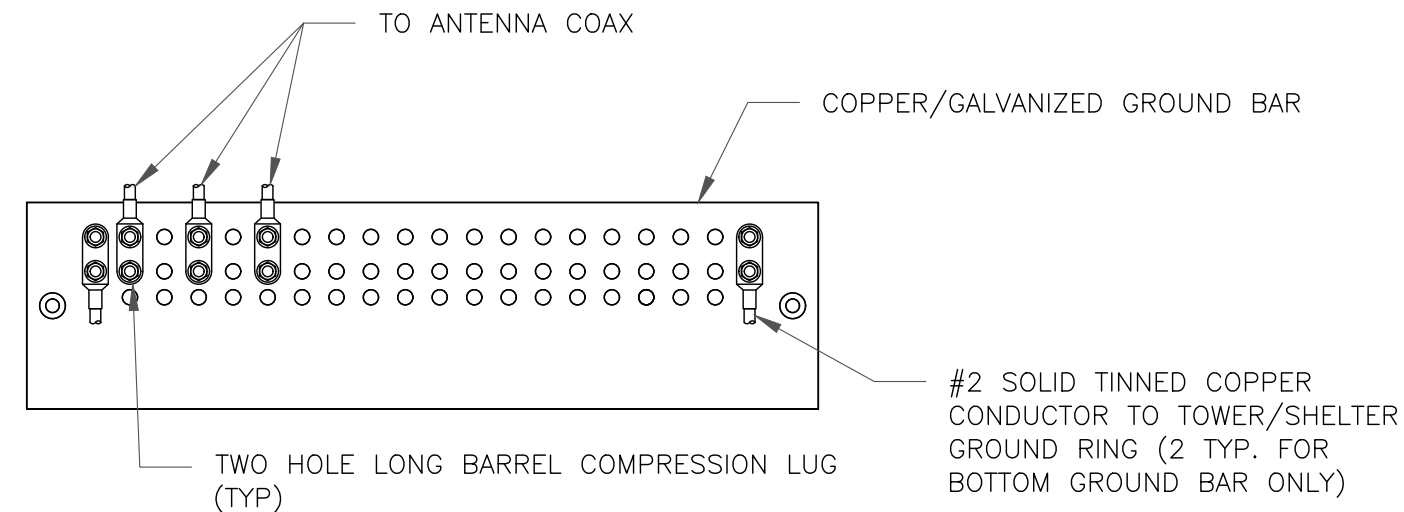




NOTES:

- DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
- EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
- GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO ANTENNA MOUNT STEEL.

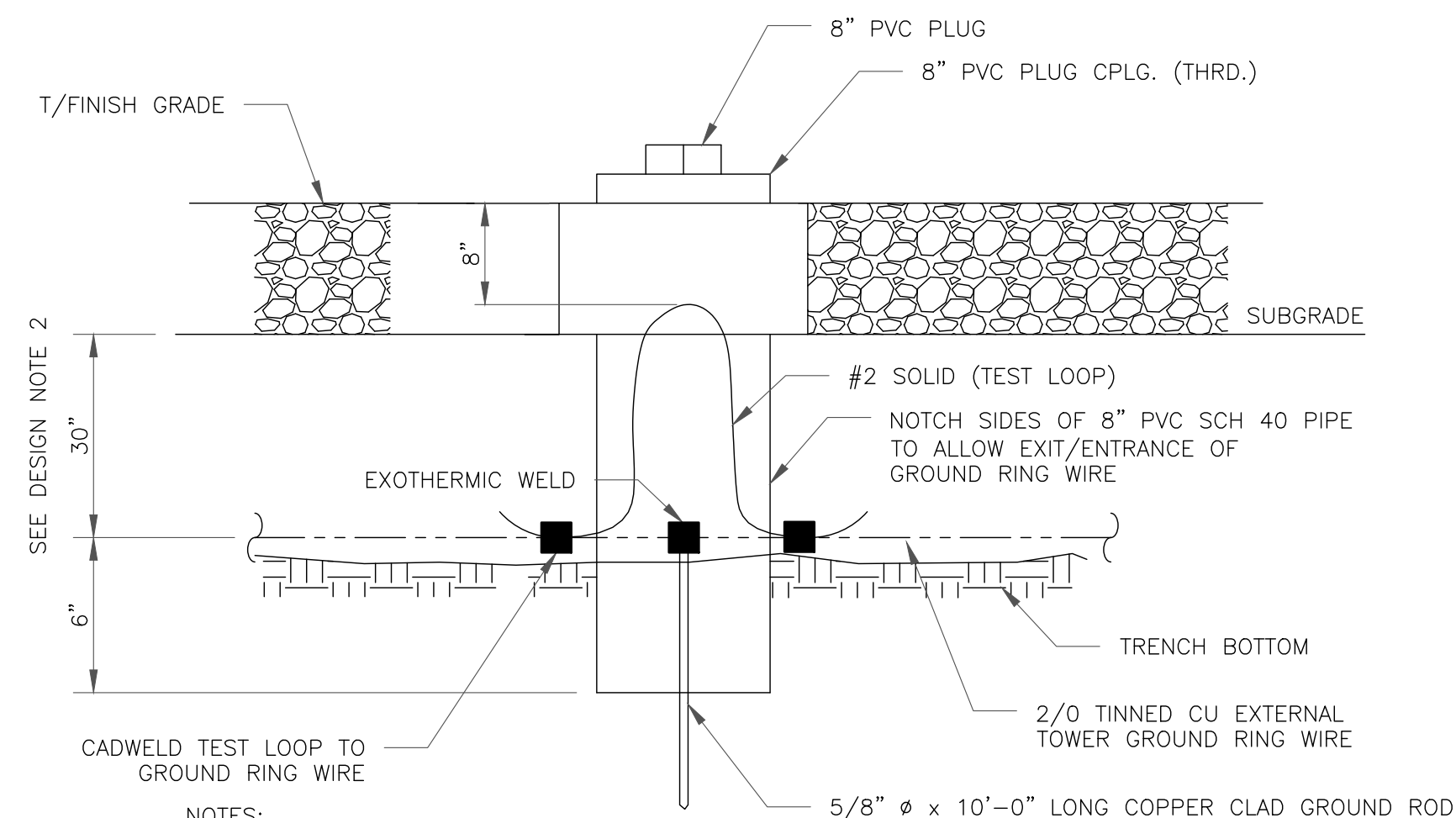
1 ANTENNA SECTOR GROUND BAR DETAIL  
SCALE: NOT TO SCALE



NOTES:

- EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
- GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
- GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

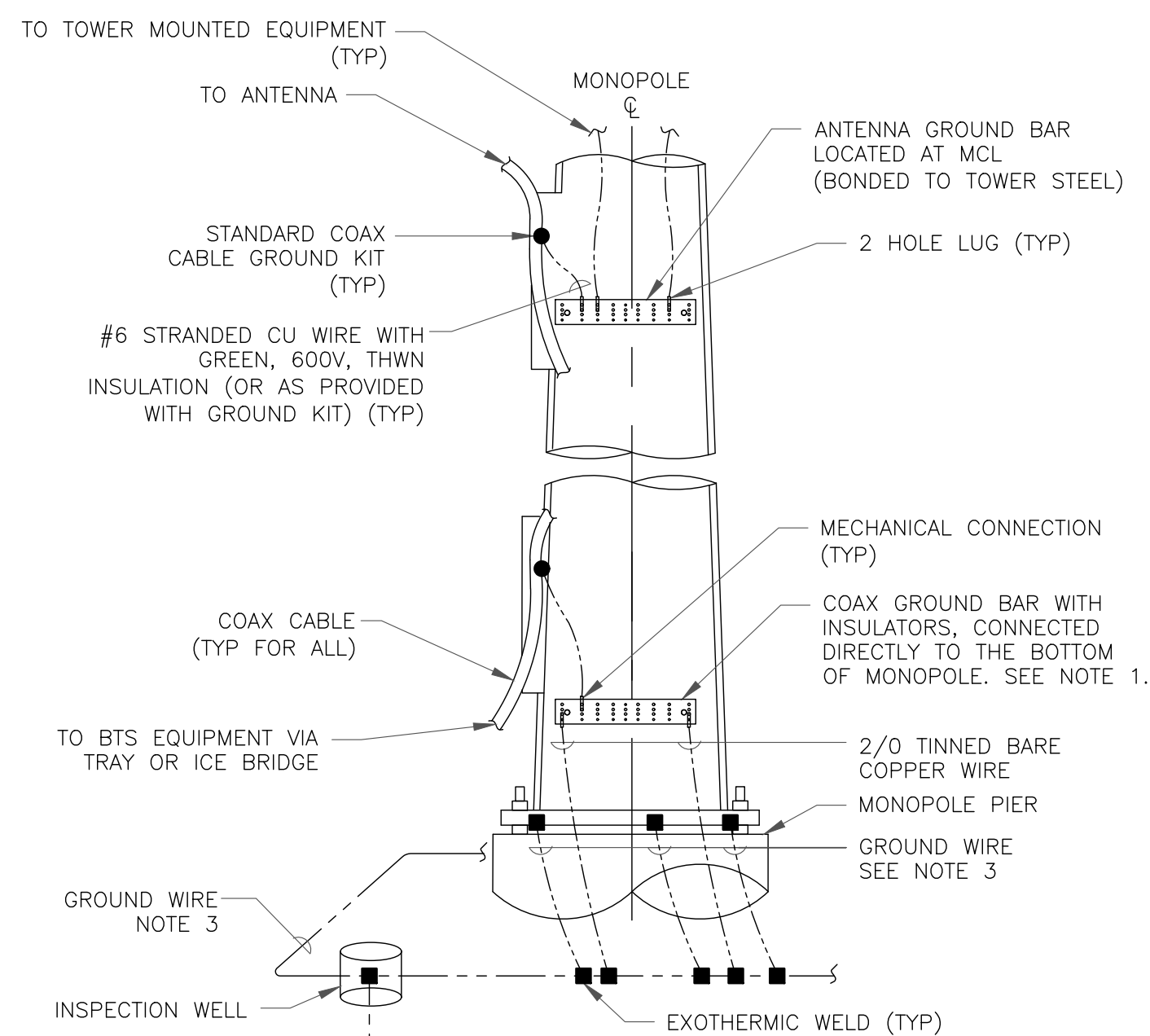
2 TOWER/SHELTER GROUND BAR DETAIL  
SCALE: NOT TO SCALE



NOTES:

- GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
- GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

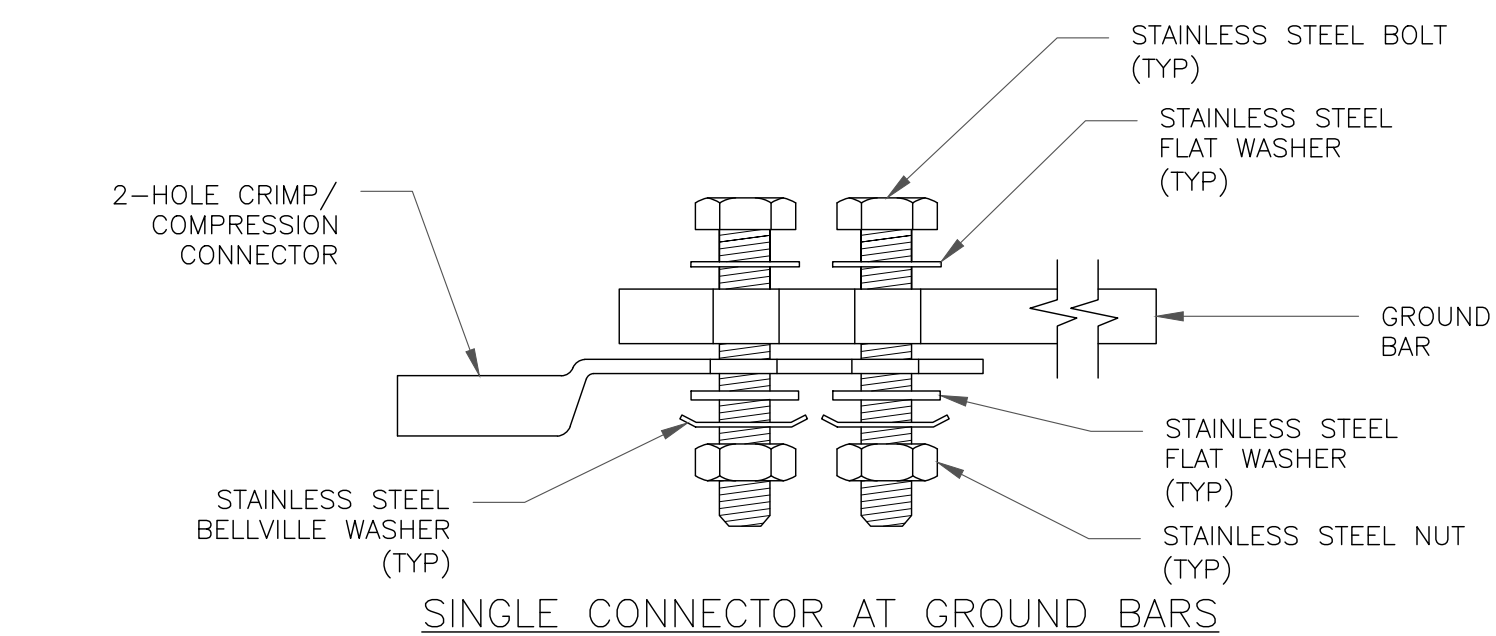
3 INSPECTION WELL DETAIL  
SCALE: NOT TO SCALE



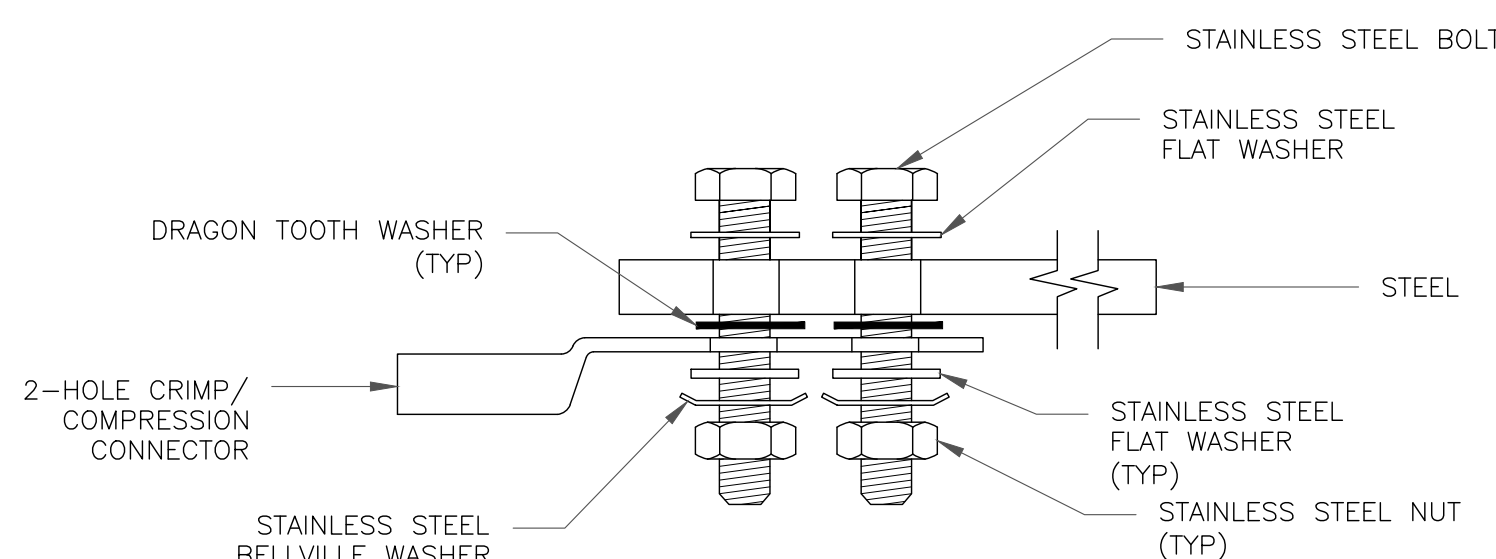
NOTES:

- NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATIONS AND CONNECTION ORIENTATION. COAXIAL CABLES EXCEEDING 200 FEET ON THE TOWER SHALL HAVE GROUND KITS AT THE MIDPOINT. PROVIDE AS REQUIRED.
- ONLY MECHANICAL CONNECTIONS ARE ALLOWED TO BE MADE TO CROWN CASTLE USA INC. TOWERS. ALL MECHANICAL CONNECTIONS SHALL BE TREATED WITH AN ANTI-OXIDANT COATING.
- ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF THE RECOGNIZED EDITION OF ANSI/TIA 222 AND NFPA 780.

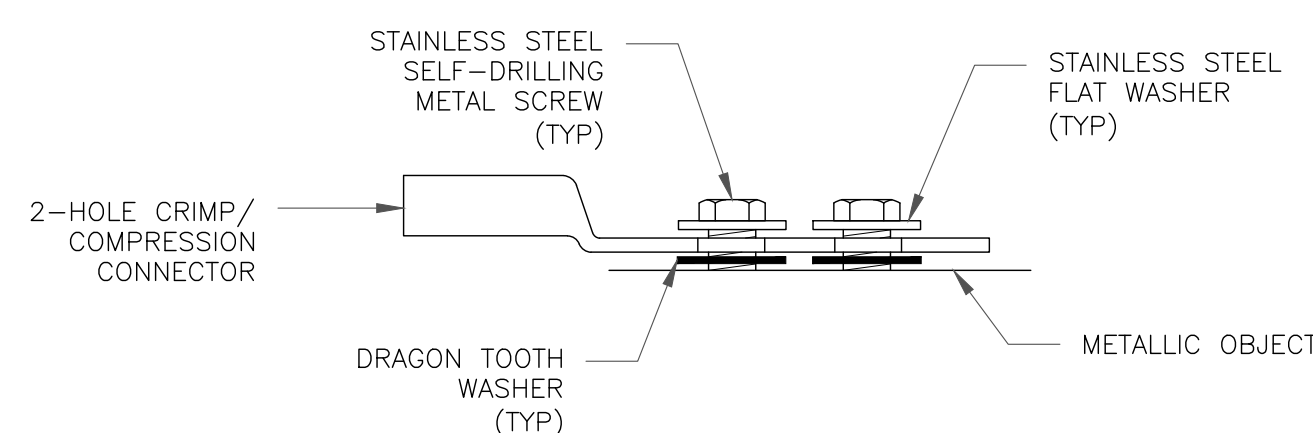
4 TYPICAL ANTENNA CABLE GROUNDING  
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

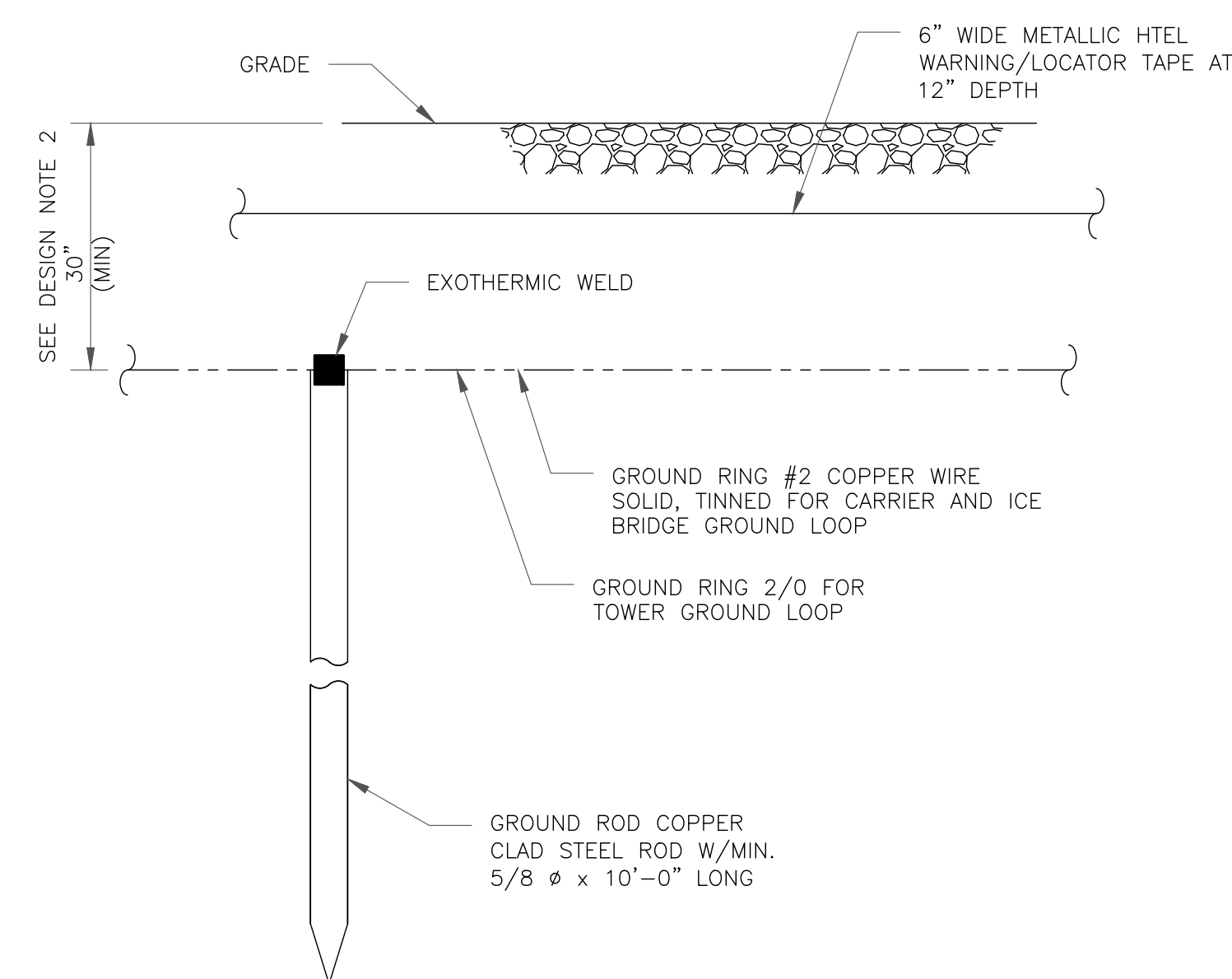


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS  
SCALE: NOT TO SCALE



NOTES:

- GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
- GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

6 GROUND ROD DETAIL  
SCALE: NOT TO SCALE

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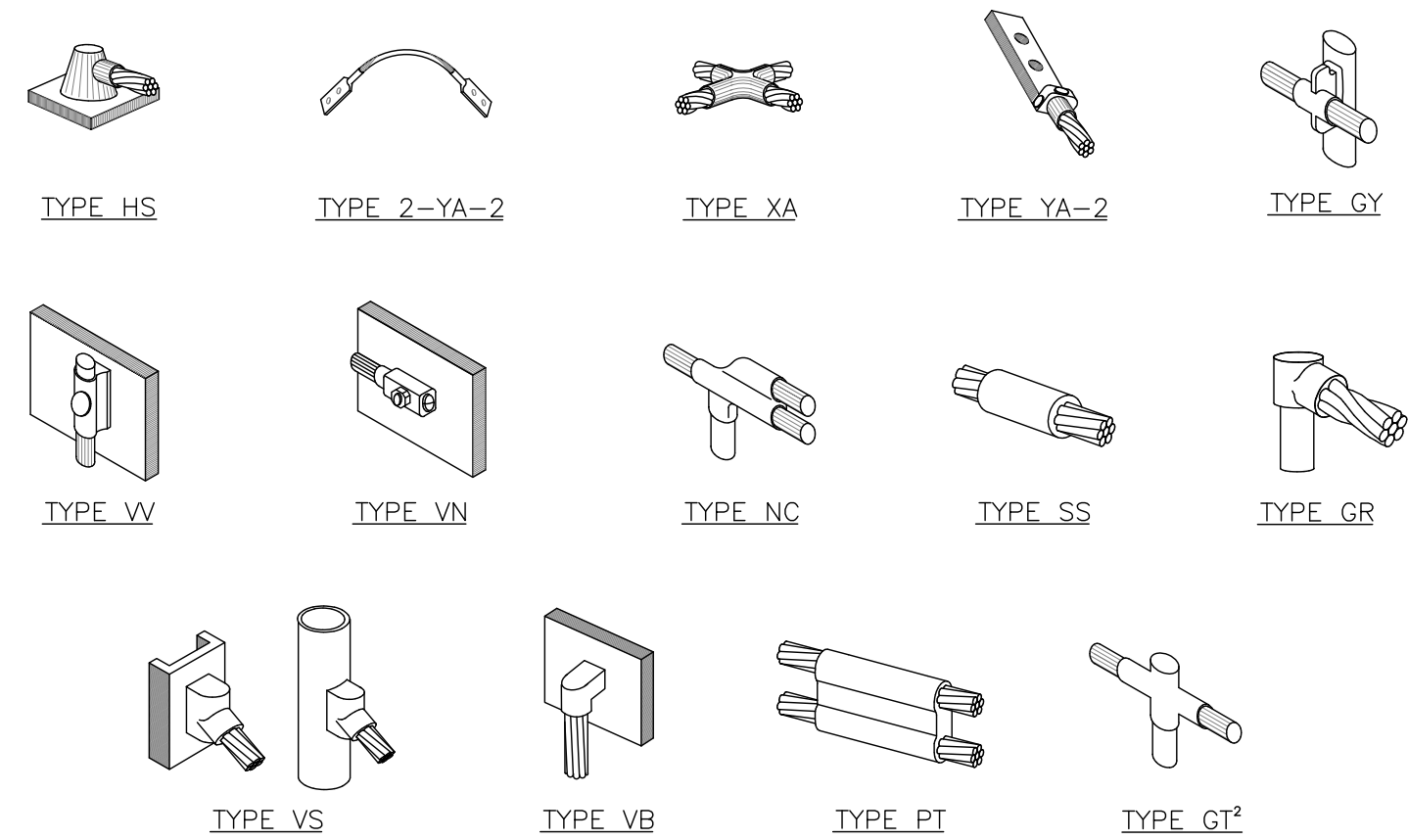
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SHEET NUMBER:

G-2

REVISION:

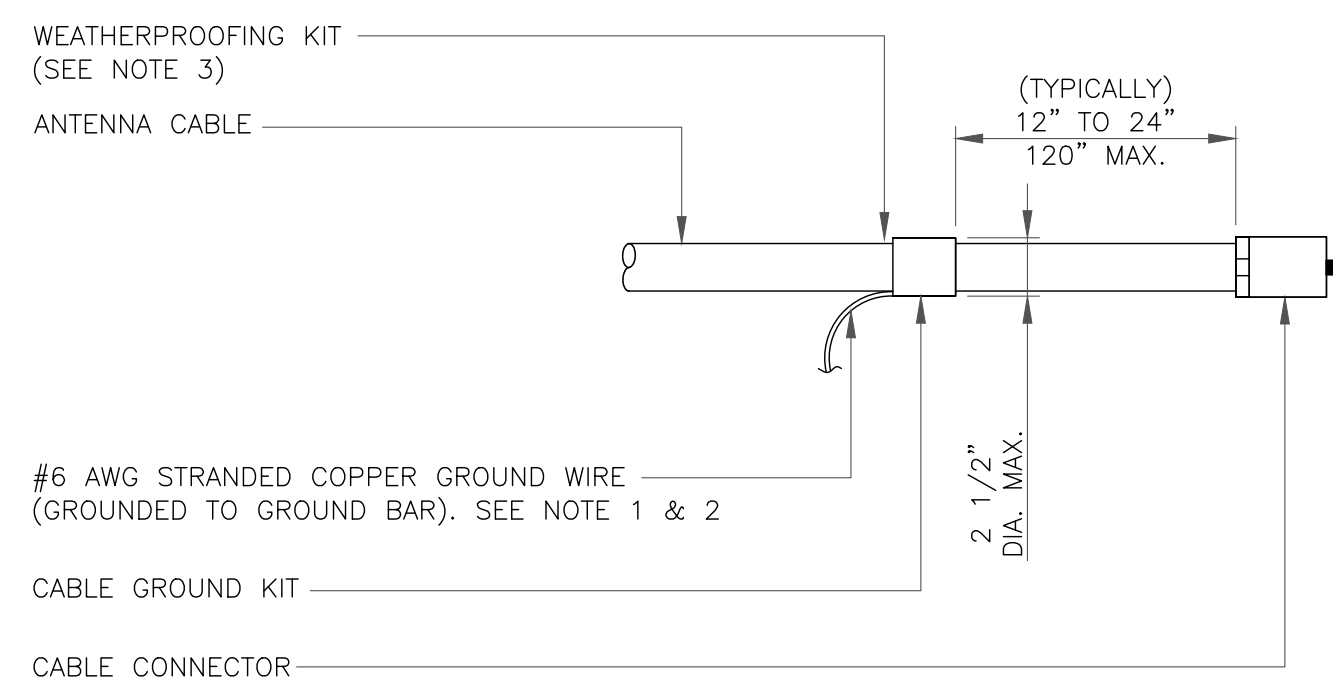
5



**NOTE:**

1. ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.
2. MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

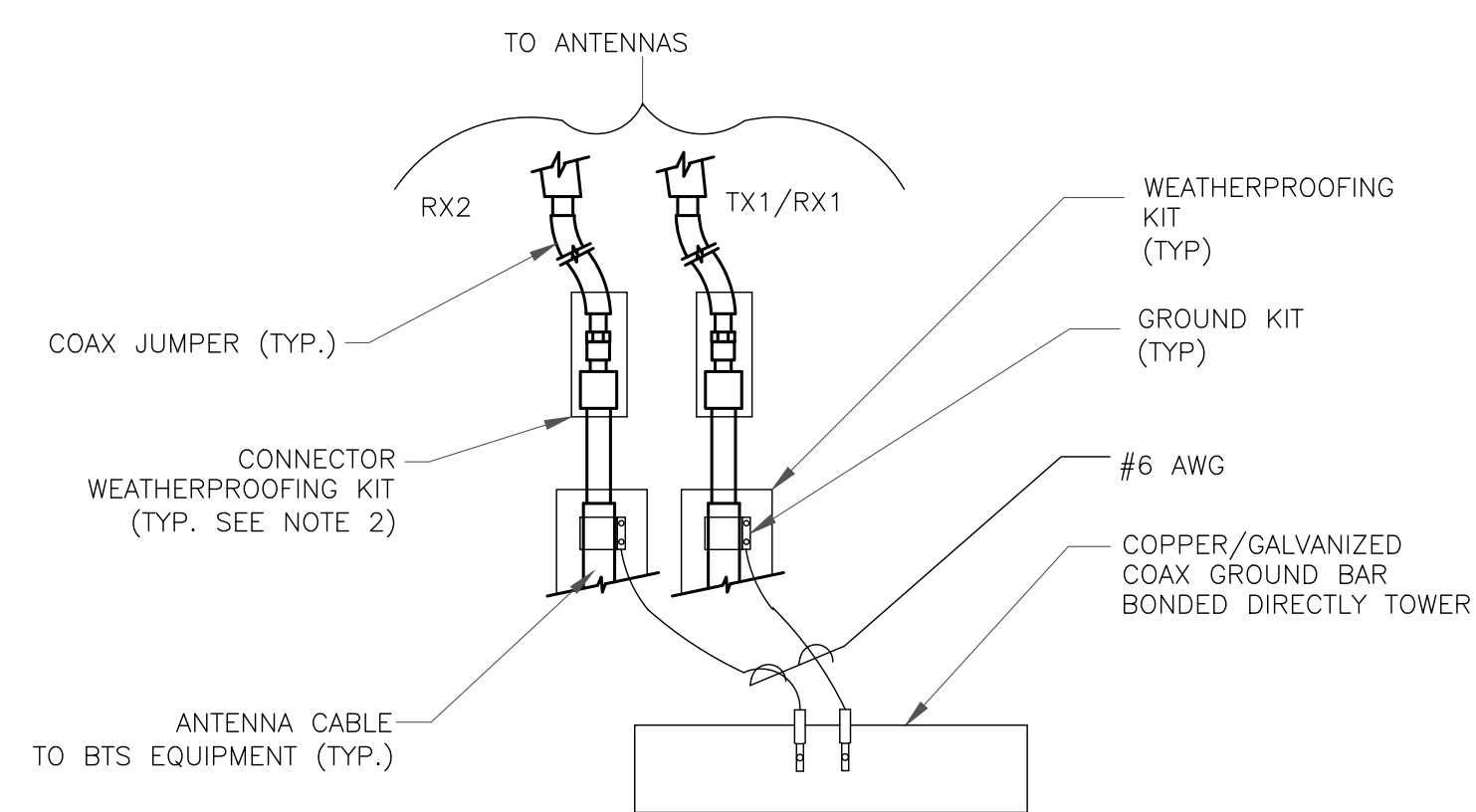
**1 CADWELD GROUNDING CONNECTIONS**  
SCALE: NOT TO SCALE



**NOTES:**

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

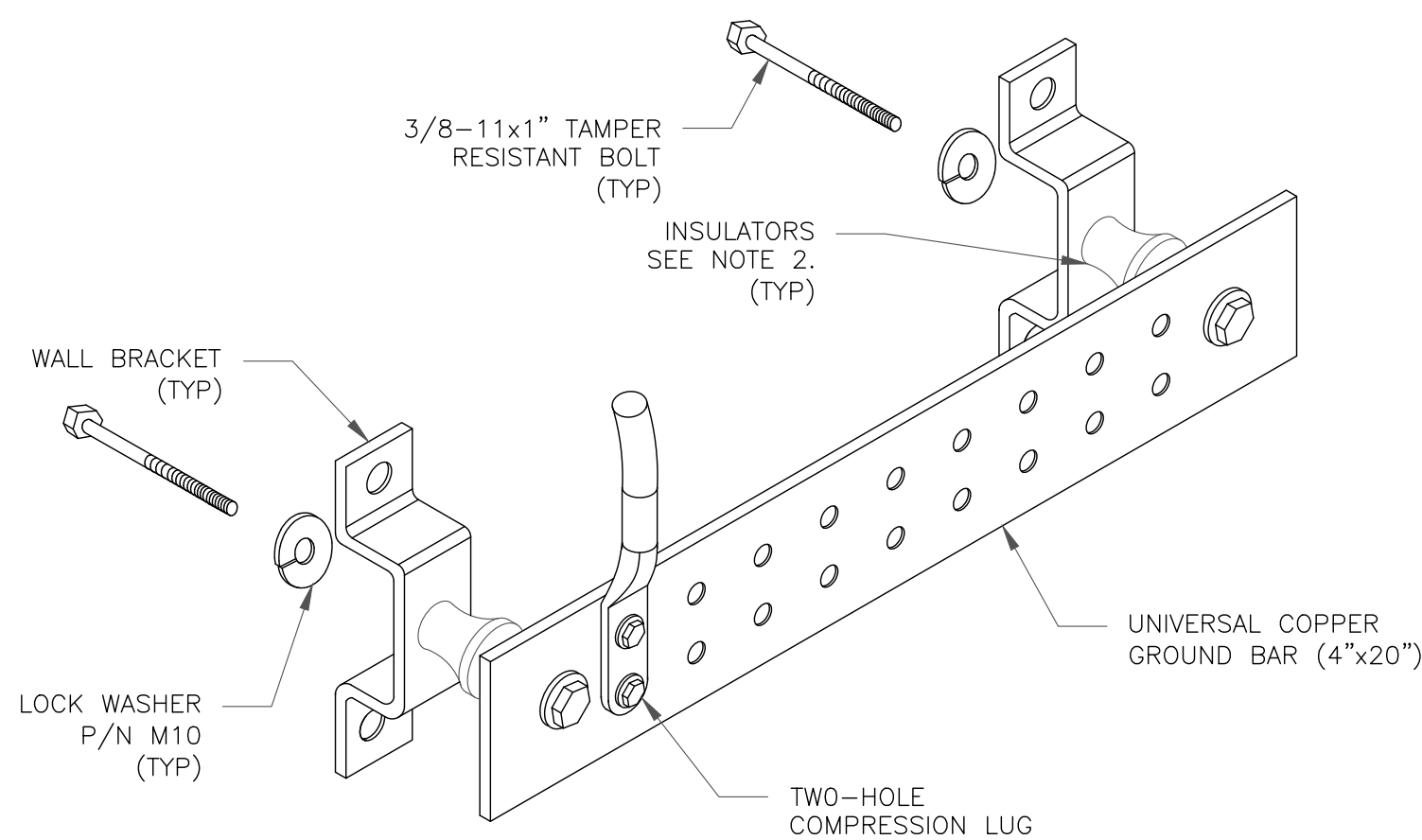
**3 CABLE GROUND KIT CONNECTION**  
SCALE: NOT TO SCALE



**NOTES:**

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

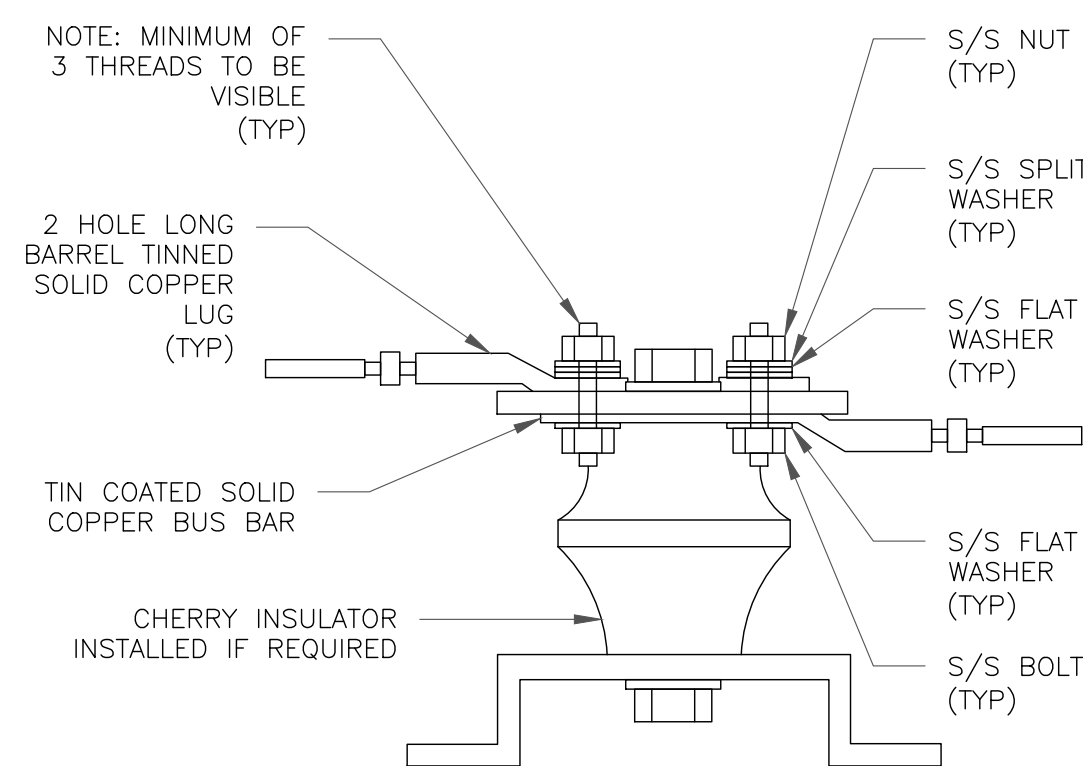
**4 GROUND CABLE CONNECTION**  
SCALE: NOT TO SCALE



**NOTES:**

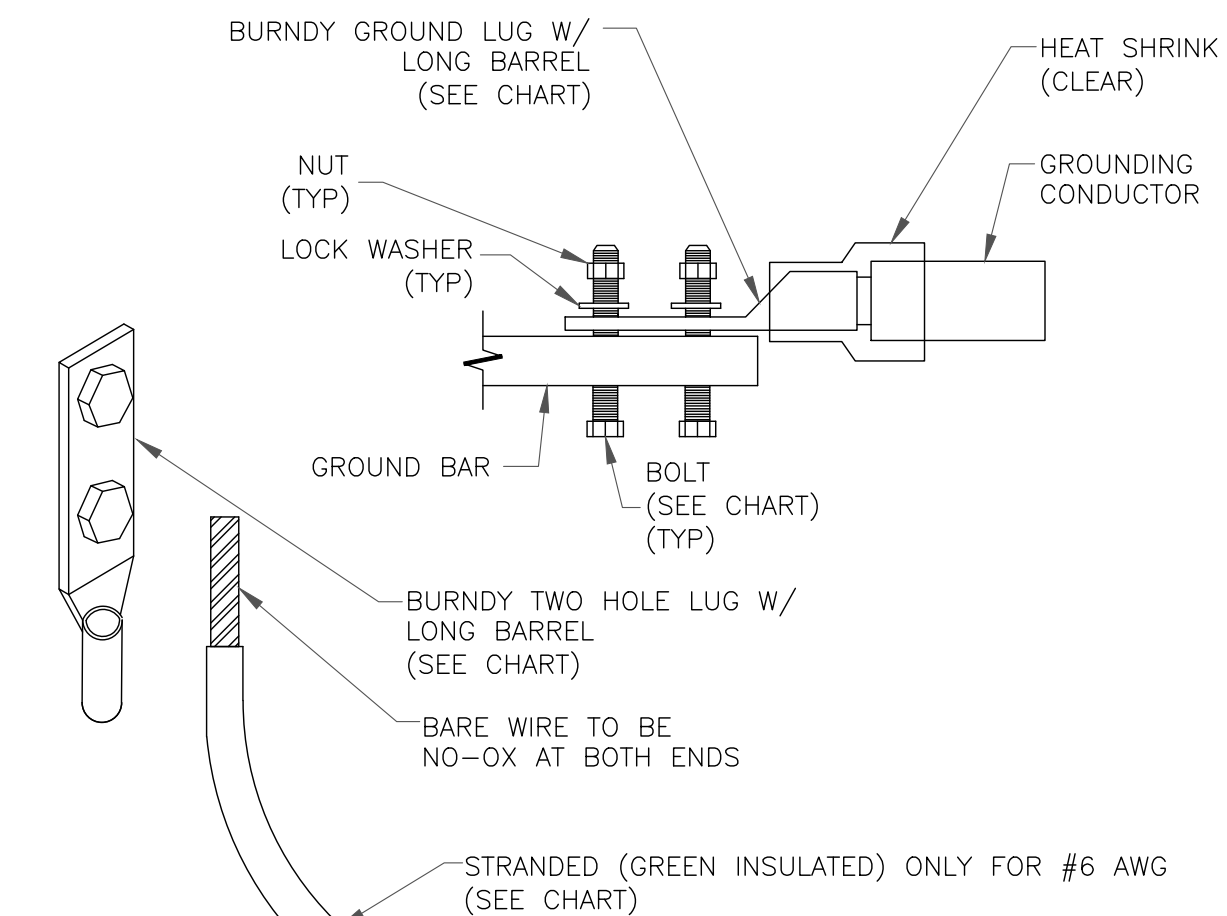
1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION. CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL. USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

**6 GROUND BAR DETAIL**  
SCALE: NOT TO SCALE



**7 LUG DETAIL**  
SCALE: NOT TO SCALE

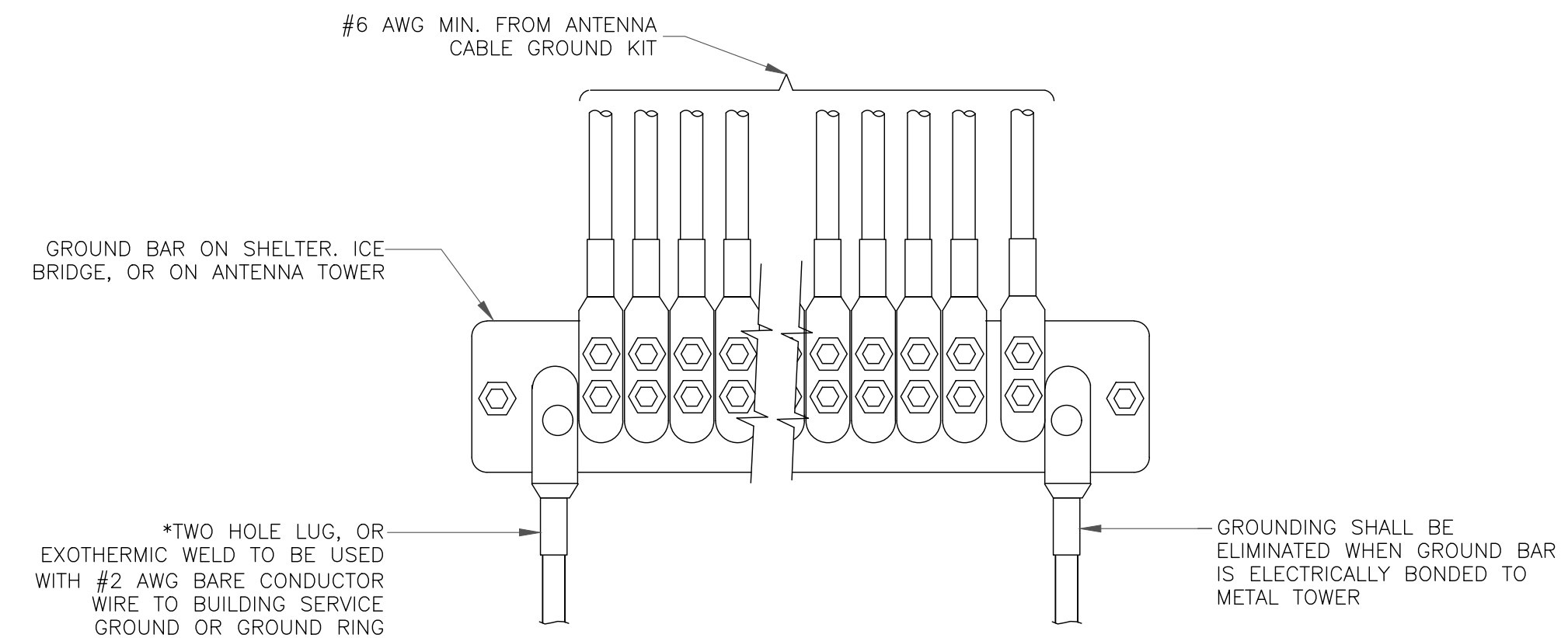
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



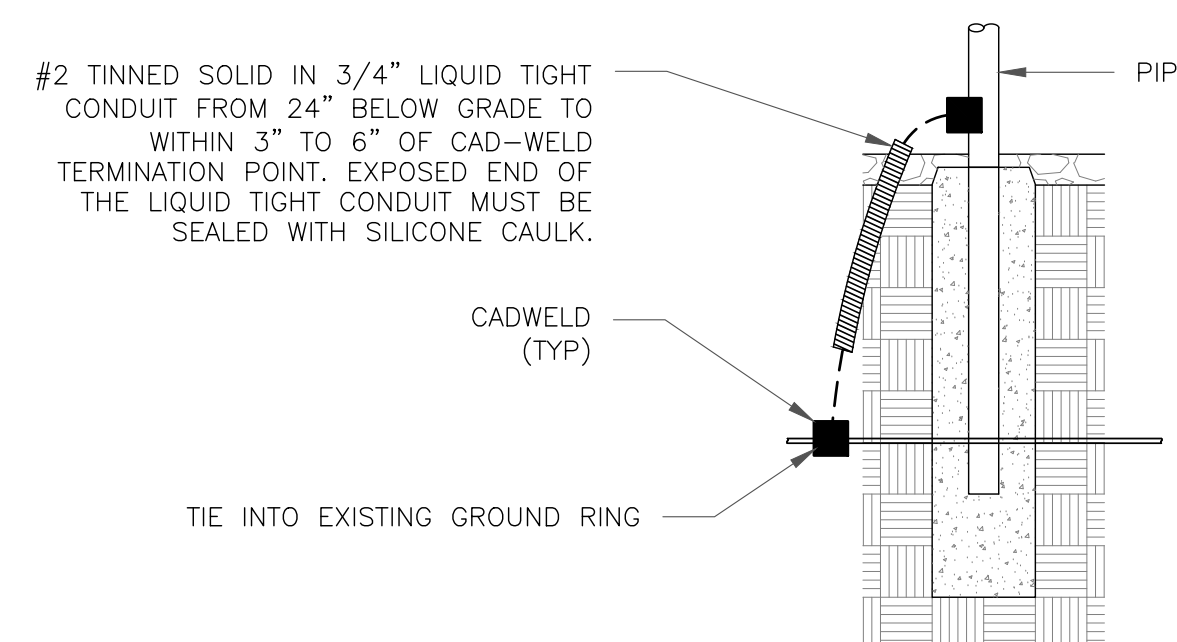
**NOTES:**

1. ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.

**2 MECHANICAL LUG CONNECTION**  
SCALE: NOT TO SCALE



**5 GROUNDWIRE INSTALLATION**  
SCALE: NOT TO SCALE



**8 TRANSITIONING GROUND DETAIL**  
SCALE: NOT TO SCALE

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SHEET NUMBER:

G-3

REVISION:

5

# STRUCTURAL DESIGN DRAWINGS

SITE NAME:

## SEATTLE QWEST - SEA155

CROWN CASTLE BU NUMBER:

### 880416

SITE ADDRESS:

## 8477 SE 68TH STREET MERCER ISLAND, WA 98040 (KING COUNTY)

### N 47°32'30.00", W 122°13'25.00"

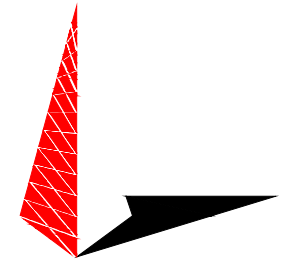
#### HOT WORK INCLUDED

NA	BASE GRINDING ONLY
NA	BASE WELDING (AND GRINDING)
NA	AERIAL GRINDING ONLY
NA	AERIAL WELDING (AND GRINDING)

PLANS PREPARED FOR:

**CROWN CASTLE**

PLANS PREPARED BY:



**TOWER ENGINEERING PROFESSIONALS**  
326 TRYON ROAD  
RALEIGH, NC 27603  
OFFICE: (919) 661-6351  
www.tepgroup.net

#### MODIFICATION PROVISIONS

THE MODIFICATIONS DEPICTED ON THESE DRAWINGS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE STRUCTURAL MODIFICATION ANALYSIS REPORT COMPLETED BY TEP, JOB NO.: 151934.904269 DATED DECEMBER 12, 2023 (REV 0).

ATTENTION ALL CONTRACTORS, ANYTIME YOU ACCESS A CROWN SITE FOR ANY REASON YOU ARE TO CALL THE CROWN NOC UPON ARRIVAL AND DEPARTURE, DAILY AT 800-788-7011.

QUALIFIED ENGINEERING SERVICES ARE AVAILABLE FROM TEP TO ASSIST CONTRACTORS IN CLASS IV RIGGING PLAN REVIEWS. FOR REQUESTED QUALIFIED ENGINEERING SERVICES, CONTACT TEP FOR QUOTE AT RIGGING@TEPGROUP.NET

#### INDEX OF SHEETS

NO.	SHEET TITLE	REV
T-1	TITLE SHEET	0
N-1	MI CHECKLIST AND NOTES	0
N-2	GENERAL NOTES	0
N-3	PROJECT NOTES	0
S-1	TOWER ELEVATION AND MODIFICATION SCHEDULE	0
S-2	CONCEALMENT INSTALLATION DETAILS	0

#### PROJECT INFORMATION

TOWER HEIGHT:	150-FT
TOWER MANUFACTURER:	ROHN CCI DOCUMENT: 2030383
WORK ORDER NO.:	2271772
ORDER NO.:	640386 REV. 5
DESIGN BUILDING CODE:	2021 WASHINGTON STATE BUILDING CODE
DESIGN STANDARD:	TIA-222-H

#### SAFETY CLIMB: 'LOOK UP'



THE INTEGRITY OF THE WIRE ROPE SAFETY CLIMB SYSTEM SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER REINFORCEMENTS AND EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF ANY WIRE ROPE SAFETY CLIMB ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, OR IMPACT TO THE ANCHORAGE POINTS IN ANY WAY. ANY COMPROMISED SAFETY CLIMB MUST BE REPORTED TO YOUR CROWN POC FOR RESOLUTION, INCLUDING EXISTING CONDITIONS.

#### PROJECT TEAM

##### CCI MODIFICATION PROJECT MANAGER:

NAME CROWN CASTLE  
CONTACT WESLEY POWER  
PHONE (678) 259-2265  
EMAIL WESLEY.POWER@CROWNCastle.COM

##### ENGINEERING FIRM PROJECT MANAGER:

NAME TOWER ENGINEERING PROFESSIONALS, INC.  
CONTACT RHETT PARK, P.E.  
PHONE (919) 661-6351  
EMAIL CMRP@TEPGROUP.NET

SEAL:



Electronic Copy December 12, 2023

0	12-12-23	MODIFICATION DRAWINGS
REV	DATE	ISSUED FOR:

DRAWN BY: RTP CHECKED BY: CDC

SHEET TITLE:

**TITLE SHEET**

SHEET NUMBER:	REVISION:
<b>T-1</b>	<b>0</b>
TEP#: 151934.904269	

## CON-FRM-10354 MI CHECKLIST

REQUIRED	REPORT ITEM	APPLICABLE CROWN DOC	BRIEF DESCRIPTION
<b>PRE-CONSTRUCTION</b>			
<b>X</b>	EOR APPROVED SHOP DRAWINGS	CON-SOW-10007	ONCE THE PRE-MODIFICATION MAPPING IS COMPLETE AND PRIOR TO FABRICATION, THE CONTRACTOR SHALL PROVIDE DETAILED ASSEMBLY DRAWINGS AND/OR SHOP DRAWINGS ALONG WITH EOR RFI FORM DETAILING ANY CHANGES FROM THE ORIGINAL DESIGN TO THE EOR FOR REVIEW AND APPROVAL.
<b>NA</b>	FABRICATION INSPECTION	CON-SOW-10007	A LETTER FROM THE FABRICATOR, STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH INDUSTRY STANDARDS AND THE CONTRACT DOCUMENTS, SHALL BE PROVIDED TO THE MI INSPECTOR FOR INCLUSION IN THE MI REPORT.
<b>NA</b>	FABRICATOR CERTIFIED WELD INSPECTION	CON-SOW-10007 CED-STD-10069	A CWI SHALL INSPECT ALL WELDING PERFORMED ON STRUCTURAL MEMBERS DURING FABRICATION. A WRITTEN REPORT SHALL BE PROVIDED TO THE MI INSPECTOR FOR INCLUSION IN THE MI REPORT.
<b>NA</b>	MATERIAL TEST REPORTS (MTR)	CON-SOW-10007	MATERIAL TEST REPORTS SHALL BE PROVIDED FOR MATERIAL USED AS REQUIRED PER SECTION 9.2.5 OF CED-SOW-10007. MTRS SHALL BE PROVIDED TO THE MI INSPECTOR FOR INCLUSION IN THE MI REPORT.
<b>NA</b>	FABRICATOR NDE INSPECTION REPORT	CED-SOW-10066 CED-STD-10069	CRITICAL SHOP WELDS THAT REQUIRE TESTING ARE NOTED ON THESE CONTRACT DRAWINGS. A CERTIFIED NDT INSPECTOR SHALL PERFORM NON-DESTRUCTIVE EXAMINATION AND A REPORT SHALL BE PROVIDED TO THE MI INSPECTOR FOR INCLUSION IN THE MI REPORT.
<b>NA</b>	NDE OF MONOPOLE BASE PLATE	ENG-SOW-10033	A NDE OF THE POLE TO BASE PLATE CONNECTION IS REQUIRED AND A WRITTEN REPORT SHALL BE PROVIDED TO THE MI INSPECTOR FOR INCLUSION IN THE MI REPORT.
<b>X</b>	PACKING SLIPS	CON-SOW-10007	PACKING/SHIPPING LIST FOR ALL MATERIAL USED DURING CONSTRUCTION OF THE MODIFICATION
ADDITIONAL TESTING AND INSPECTIONS:			
<b>NA</b>			
<b>CONSTRUCTION</b>			
<b>NA</b>	FOUNDATION INSPECTIONS	CED-SOW-10144	A VISUAL OBSERVATION OF THE EXCAVATION AND REBAR SHALL BE PERFORMED BEFORE PLACING THE CONCRETE. A VISUAL OBSERVATION OF THE REBAR SHALL BE PERFORMED BEFORE PLACING THE EPOXY. A SEALED WRITTEN REPORT SHALL BE PROVIDED TO THE MI INSPECTOR FOR INCLUSION IN THE MI REPORT.
<b>NA</b>	CONCRETE COMP. STRENGTH AND SLUMP TEST	CED-SOW-10144	THE CONCRETE MIX DESIGN, SLUMP TEST, AND COMPRESSIVE STRENGTH TESTS SHALL BE PROVIDED AS PART OF THE FOUNDATION REPORT.
<b>NA</b>	EARTHWORK: SOIL COMPACTION	CED-SOW-10144	FOUNDATION SOIL COMPACTION SHALL BE INSPECTED AND APPROVED BY AN APPROVED FOUNDATION INSPECTOR AND RESULTS INCLUDED AS PART OF THE FOUNDATION REPORT.
<b>NA</b>	EARTHWORK: BEARING CAPACITY	CED-SOW-10144	FOUNDATION SUB-GRADES SHALL BE INSPECTED AND APPROVED BY AN APPROVED FOUNDATION INSPECTOR AND RESULTS INCLUDED AS PART OF THE FOUNDATION REPORT.
<b>NA</b>	MICROPILE/ROCK ANCHOR	CED-SOW-10144	MICROPILES/ROCK ANCHORS SHALL BE INSPECTED BY THE FOUNDATION INSPECTION VENDOR AND SHALL BE INCLUDED AS PART OF THE FOUNDATION INSPECTION REPORT, ADDITIONAL TESTING AND/OR INSPECTION REQUIREMENTS ARE NOTED IN THESE CONTRACT DOCUMENTS AND GENERAL NOTES PAGE TWO.
<b>NA</b>	POST-INSTALLED ANCHOR ROD VERIFICATION	CON-SOW-10007 CON-FRM-10358	POST INSTALLED ANCHOR ROD VERIFICATION SHALL BE PERFORMED IN ACCORDANCE WITH CROWN REQUIREMENTS AND A REPORT SHALL BE PROVIDED TO THE MI INSPECTOR FOR INCLUSION IN THE MI REPORT.
<b>NA</b>	BASE PLATE GROUT VERIFICATION	ENG-STD-10323	THE GENERAL CONTRACTOR SHALL PROVIDE DOCUMENTATION TO THE MI INSPECTOR THAT CERTIFIES THAT THE GROUT WAS REMOVED AND/OR INSTALLED IN ACCORDANCE WITH CROWN REQUIREMENTS FOR INCLUSION IN THE MI REPORT.
<b>NA</b>	ELEPHANT ARMOR	OPS-SOW-10331	PHOTOS SHALL BE SUBMITTED IN ACCORDANCE WITH SECTION 6 FOR INCLUSION IN THE MI REPORT
<b>NA</b>	FIELD CERTIFIED WELD INSPECTION	CED-SOW-10066 CED-STD-10069	A CROWN APPROVED CERTIFIED WELD INSPECTOR SHALL INSPECT AND TEST FIELD WELDS, FOLLOWING ALL PROCEDURES SPECIFIED IN CROWN STANDARD DOCUMENTS APPLICABLE TO WELD INSPECTIONS. A REPORT SHALL BE PROVIDED. NDE OF FIELD WELDS SHALL BE PERFORMED AS REQUIRED BY CROWN STANDARDS AND CONTRACT DOCUMENTS. THE NDE REPORT SHALL BE INCLUDED IN THE CWI REPORT.
<b>NA</b>	FIELD NDE	CON-STD-10159 CON-SOW-10007	A NDE OF THE FIELD WELDS IN ACCORDANCE WITH CON-STD-10159 AND ANY ADDITIONAL NDE REQUIREMENTS NOTED IN THESE DESIGN DOCUMENTS
<b>X</b>	ON-SITE COLD GALVANIZING VERIFICATION	CON-STD-10149 CON-FRM-10358	THE GENERAL CONTRACTOR SHALL PROVIDE WRITTEN AND PHOTOGRAPHIC DOCUMENTATION TO THE MI INSPECTOR VERIFYING THAT ANY ON-SITE COLD GALVANIZING WAS APPLIED PER MANUFACTURER SPECIFICATIONS AND APPLICABLE STANDARDS.
<b>NA</b>	TENSION TWIST AND PLUMB	CON-STD-10261	THE GENERAL CONTRACTOR SHALL PROVIDE A REPORT IN ACCORDANCE WITH APPLICABLE STANDARDS DOCUMENTING TENSION TWIST AND PLUMB.
<b>X</b>	TOWER PLUMB DELIVERABLES	CON-SOW-10007	THE CONTRACTOR SHALL PROVIDE WRITTEN AND PHOTOGRAPHIC DOCUMENTATION TO THE MI INSPECTOR VERIFYING THE TOWER PLUMB CONDITION SEE REQUIREMENTS ON GENERAL NOTES SHEET PAGE TWO
<b>X</b>	CANISTER DRAWINGS	CON-SOW-10007	THE CONTRACTOR SHALL SUBMIT A LEGIBLE COPY OF ANY FINAL FABRICATION OR PARTS DRAWINGS PROVIDED BY THE CANISTER VENDOR
<b>X</b>	GC AS-BUILT DRAWINGS	CON-SOW-10007	THE GENERAL CONTRACTOR SHALL SUBMIT A LEGIBLE COPY OF THE ORIGINAL DESIGN DRAWINGS EITHER STATING "INSTALLED AS DESIGNED" OR NOTING ANY CHANGES THAT WERE REQUIRED AND APPROVED BY THE ENGINEER OF RECORD. EOR/RFI FORMS APPROVING ALL CHANGES SHALL BE SUBMITTED
ADDITIONAL TESTING AND INSPECTIONS:			
<b>NA</b>			
<b>POST-CONSTRUCTION</b>			
<b>X</b>	CONSTRUCTION COMPLIANCE LETTER	CON-SOW-10007 CON-FRM-10358	A LETTER FROM THE GENERAL CONTRACTOR STATING THAT THE WORKMANSHIP WAS PERFORMED IN ACCORDANCE WITH INDUSTRY STANDARDS AND THESE CONTRACT DRAWINGS
<b>NA</b>	POST-INSTALLED ANCHOR ROD PULL TESTS	CED-PRC-10119	POST-INSTALLED ANCHOR RODS SHALL BE TESTED BY A CROWN APPROVED PULL TEST INSPECTOR AND A REPORT SHALL BE PROVIDED INDICATING TESTING RESULTS.
<b>X</b>	PHOTOGRAPHS	CON-SOW-10007	PHOTOGRAPHS SHALL BE SUBMITTED TO THE MI. PHOTOS SHALL DOCUMENT ALL PHASES OF THE CONSTRUCTION. THE PHOTOS SHALL BE ORGANIZED IN A MANNER THAT EASILY IDENTIFIES THE EXACT LOCATION OF THE PHOTO.
<b>NA</b>	BOLT HOLE INSTALLATION VERIFICATION REPORT	CON-SOW-10007	THE MI INSPECTOR SHALL VERIFY THE HOLE SIZE AND CONDITION OF 10% OF ALL NON PRE-TENSIONED BOLTS INSTALLED AS PART OF THE MODIFICATION. THE MI REPORT SHALL CONTAIN THE COMPLETED BOLT INSTALLATION VERIFICATION REPORT, INCLUDING THE SUPPORTING PHOTOGRAPHS.
<b>X</b>	PUNCH LIST DEVELOPMENT AND CORRECTION DOCUMENTATION	CON-PRC-10283 CON-FRM-10285	FINAL PUNCH LIST INDICATING ALL NONCONFORMANCE(S) IDENTIFIED AND THE FINAL RESOLUTION/APPROVAL.
<b>X</b>	MI INSPECTOR RECORD DRAWING(S)	CON-SOW-10007	THE MI INSPECTOR SHALL OBSERVE AND REPORT ANY DISCREPANCIES BETWEEN THE CONTRACTOR'S REDLINE DRAWING AND THE ACTUAL COMPLETED INSTALLATION.
ADDITIONAL TESTING AND INSPECTIONS:			
<b>NA</b>			

THE MI CHECKLIST SHALL BE REVIEWED PRIOR TO THE START OF CONSTRUCTION. ALL PARTIES TO THE MODIFICATION SHALL UNDERSTAND CROWN REQUIREMENTS AND INSPECTION/DOCUMENTATION THAT IS APPLICABLE TO THE SCOPE OF WORK THEY ARE PERFORMING. ERRORS ON THE MI CHECKLIST SHALL BE BROUGHT TO THE ATTENTION OF THE CROWN POC AND EOR AS SOON AS POSSIBLE.

### MODIFICATION INSPECTION NOTES:

#### GENERAL

THE MI IS AN ON-SITE VISUAL AND HANDS-ON INSPECTION OF TOWER MODIFICATIONS INCLUDING A REVIEW OF CONSTRUCTION REPORTS AND ADDITIONAL PERTINENT DOCUMENTATION PROVIDED BY THE GENERAL CONTRACTOR (GC), AS WELL AS ANY INSPECTION DOCUMENTS PROVIDED BY 3RD PARTY INSPECTORS. THE MI IS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS; IN ACCORDANCE WITH APPLICABLE CROWN STANDARDS; AND AS DESIGNED BY THE ENGINEER OF RECORD (EOR).

NO DOCUMENT, CODE OR POLICY CAN ANTICIPATE EVERY SITUATION THAT MAY ARISE. ACCORDINGLY, THIS CHECKLIST IS INTENDED TO SERVE AS A SOURCE OF GUIDING PRINCIPLES IN ESTABLISHING GUIDELINES FOR MODIFICATION INSPECTION.

THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, AND THE MI INSPECTOR DOES NOT TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES. THE MI INSPECTOR SHALL INSPECT AND NOTE CONFORMANCE/NONCONFORMANCE AND PROVIDE TO THE CROWN POINT OF CONTACT (CROWN POC) FOR EVALUATION.

TO ENSURE THAT THE REQUIREMENTS OF THE MI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PURCHASE ORDER (PO) IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN THE GC AND/OR INSPECTOR SHALL CONTACT THE CROWN POINT OF CONTACT (CROWN POC).

REFER TO CROWN CON-SOW-10007, "MODIFICATION INSPECTION", FOR FURTHER DETAILS AND REQUIREMENTS.

#### SERVICE LEVEL COMMITMENT

THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING AN MI REPORT:

- THE GC SHALL PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFERABLY 10, TO THE MI INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR THE MI TO BE CONDUCTED.
- THE GC AND MI INSPECTOR COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE DURING THE MI TO HAVE ANY MINOR DEFICIENCIES CORRECTED DURING THE INITIAL MI. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MI CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES ARE AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE.

#### REQUIRED PHOTOS

BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE MI REPORT:

- PRE-CONSTRUCTION GENERAL SITE CONDITION
- PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
  - RAW MATERIALS
  - PHOTOS OF ALL CRITICAL DETAILS
  - FOUNDATION MODIFICATIONS
  - WELD PREPARATION
  - BOLT INSTALLATION
  - FINAL INSTALLED CONDITION
  - SURFACE COATING REPAIR
- POST CONSTRUCTION PHOTOGRAPHS
  - FINAL INFIELD CONDITION

PHOTOS OF ELEVATED MODIFICATIONS TAKEN ONLY FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.

THIS IS NOT A COMPLETE LIST OF REQUIRED PHOTOS, FOR A COMPLETE LIST OF PHOTOS SEE CROWN DOCUMENT # CED-SOW-10007.

#### NOTE:

X DENOTES A DOCUMENT NEEDED FOR THE PMI REPORT  
NA DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE PMI REPORT

PLANS PREPARED FOR:

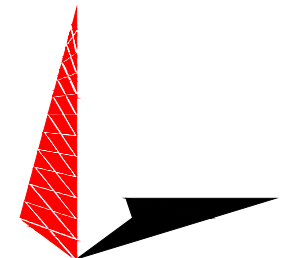
## CROWN CASTLE

PROJECT INFORMATION:

### SEATTLE - SEA155 BU #: 880416

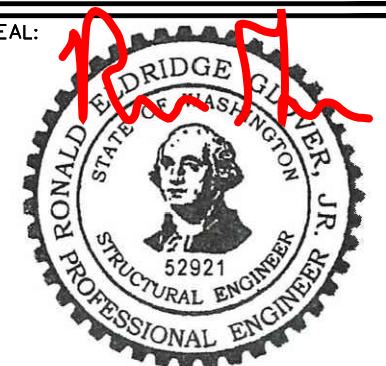
8477 SE 68TH STREET  
MERCER ISLAND, WA 98040  
(KING COUNTY)

PLANS PREPARED BY:



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O	12-12-23	MODIFICATION DRAWINGS					
REV	DATE	ISSUED FOR:					

DRAWN BY: RTP CHECKED BY: CDC

SHEET TITLE:

## MI CHECKLIST AND NOTES

SHEET NUMBER: <b>N-1</b>	REVISION: <b>0</b>
TEP#: 151934.904269	

**GENERAL NOTES:**

- The General Contractor (GC) shall reference CON-STD-10159, "Tower Modification Construction Specifications", as a continuation of the following General Notes. The GC shall keep a printed or electronic copy of this document with the Structural Design Drawings (SDD) at all times, in a location accessible to all Contractor Personnel, and shall ensure that all Contractor Personnel are aware of the information enclosed within the General Notes and CON-STD-10159.
- The Contract Documents are the property of Crown Castle (Crown). They are provided to the GC and its Lower Tier Contractors and material suppliers for the limited purpose of use in completing the Work for this Site, and shall be kept in strict confidence and not disclosed to any third parties. The Contract Documents shall not be used for any other purpose whatsoever without the prior written consent of Crown.
- Detail drawings, including notes and tables, shall govern over general notes and typical details. Contact the Crown Point of Contact (POC) and Engineer of Record (EOR) for clarification as needed.
- Do not scale drawings.
- Any Work performed without a prefabrication mapping is done at the risk of the GC and/or fabricator. All dimensions of existing structural elements are assumed based on the available documentation and are preliminary until field-verified by the GC, unless noted otherwise (UNO). Where discrepancies are found, GC shall contact the Crown POC and EOR through RFI.
- For this analysis and modification, the tower has been assumed to be in good condition without any structural defects, UNO. If the GC discovers any indication of an existing structural defect, contact the Crown POC and EOR immediately.
- All construction means and methods, including but not limited to erection plans, rigging plans, climbing plans, and rescue plans, shall be the responsibility of the GC responsible for the execution of the Work contained herein, and shall meet ANSI/ASSE A10.48 (latest edition); federal, state, and local regulations; and any applicable industry consensus standards related to the construction activities being performed. All rigging plans shall adhere to ANSI/ASSE A10.48 (latest edition) and Crown standard CED-STD-10253, "Rigging Program", including the required involvement of a qualified engineer for class IV construction to certify the supporting structure(s) in accordance with the ANSI/TIA-322 (latest edition).
- Hoisting grips used for feed line installation shall follow manufacturer guidelines for maximum installed spacing intervals and pull load capacity restrictions.
- The structural integrity of the modification design extends to the complete condition only. The GC must be cognizant that the removal of any structural component of an existing tower has the potential to cause the partial or complete collapse of the structure. All necessary precautions must be taken to ensure structural integrity, including, but not limited to, engineering assessment of construction stresses with installation maximum wind speed and/or temporary bracing and shoring.
- Aerial and underground utilities and facilities may or may not be shown on the drawings. The GC shall take every precaution to preserve and protect these items, which may include aerial or underground power lines, telephone lines, water lines, sewer lines, cable television facilities, pipelines, structures and other public and private improvements within or adjacent to the work area. The responsibility for determining the actual on-site location of these items shall rest exclusively with the GC.
- All manufacturer's hardware assembly instructions shall be followed, UNO. Conflicting notes shall be brought to the attention of the EOR and the Crown POC.

- The GC shall fabricate all required items per the materials specified below, UNO on the detail drawing sheets. If the GC finds for any component that the materials have not been clearly specified, the GC shall submit an RFI to the EOR to confirm the required material.

All structural elements shall be new and shall conform to the following requirements, UNO:

Monopoles:

- Structural shapes and plates: ASTM A572 Grade 65 (FY = 65 KSI)
- Welding electrodes, SMAW: E80XX
- Welding electrodes, FCAW: E8XT-XX
- Welding electrodes, GMAW: ER80S-X

Self-Support and Guyed Towers:

- Structural shapes and plates: ASTM A572 Grade 50 (FY = 50 KSI)
- Welding electrodes, SMAW: E70XX
- Welding electrodes, FCAW: E7XT-XX
- Welding electrodes, GMAW: ER70S-X

All tower types:

- Steel angle: ASTM A572 Grade 50 (FY = 50 KSI)
- Solid rod: ASTM A36 (FY = 36 KSI)
- Pipe/tube (round): ASTM A500 Grade C (FY = 46 KSI)
- Pipe/tube (square): ASTM A500 Grade C (FY = 50 KSI)
- Bolts: ASTM F3125 Grade A325 Type 1
- U-bolts: ASTM A307 Grade A, OR SAE J429 Grade 2
- Nuts: ASTM A563 Grade DH
- Washers: ASTM F436 Type 1
- Guy wires: ASTM A475 Grade EHS
- Bridge strand: ASTM A586 Grade 1

- After fabrication, hot-dip galvanize all steel items, UNO. Galvanize per ASTM A123, ASTM A153/A153M, OR ASTM A653 G90, as applicable. ASTM A490 bolts shall not be hot-dip galvanized, but shall instead be coated with Magni 565 or EOR approved equivalent, per ASTM F2833.
- Contractor Personnel shall not drill holes in any new or existing structural members, other than those drilled holes shown on structural drawings, without the approval of the EOR.
- For a list of Crown-approved cold galvanizing compounds, refer to OPS-STD-10149, "Tower Protective Coatings Guidelines".
- All exposed structural steel as the result of this scope of Work including welds (after final inspection of the weld by the CWI), field drilled holes, and shaft interiors (where accessible), shall be cleaned and two (2) coats cold galvanizing shall be applied by brush in accordance with OPS-STD-10149, "Tower Protective Coatings Guidelines". Photo documentation is required to be submitted to the MI Inspector.
- If removal of existing modifications is required per the modification scope, the GC shall clean and cold galvanize any existing empty bolt holes, UNO. If additional unexpected, oversized, or slotted holes are found, the GC shall contact the EOR and Crown POC for guidance prior to proceeding with the modifications.
- All Work involving base plate grout scope items or resulting in disturbance of base plate grout shall reference ENG-STD-10323, "Base Plate Grout", and shall follow any Base Plate Grout Removal notes contained herein.

- If scope of modification involves bark removal or installation, the GC shall reference CED-SOW-10265, "Tree Concealment for Monopoles", as well as CED-STD-10395, "Installation Guidelines for Bark Surfaces".
- If scope of modification involves concealment components including branching, the GC shall reference CED-CAT-10398, "Monopole Concealed Decorative Structures (CDS) Approved Components". All new branch installations require tethering.
- If scope of modification involves cathodic protection, the GC shall reference CED-SOW-10397, "Cathodic Protection Installation, Replacement, and Enhancement".
- All tower grounding affected by the Work shall be repaired or replaced in accordance with OPS-STD-10090, "Tower Grounding", and OPS-BUL-10133, "Grounding Repair Recommendation".
- If scope of modification requires removal or covering of tower ID tag, the tag must be replaced.
- Any hardware removed from the existing tower shall be replaced with new hardware of equal size and quality, UNO. No existing fasteners shall be reused.
- All joints using ASTM A325 or A490 bolts, U-bolts, V-bolts, and threaded rods shall be snug tightened, UNO.
- A nut locking device shall be installed on all proposed and/or replaced snug tightened ASTM A325 or A490 bolts, U-bolts, V-bolts, and threaded rods.
- All joints are bearing type connections UNO. If no bolt length is given in the Bill of Materials, the connection may include threads in the shear planes, and the GC is responsible for sizing the length of the bolt.
- Blind bolts shall be installed per the installation specifications on the corresponding Approved Fastener sheets contained in CON-CAT-10300, "Monopole Standard Drawings and Approved Reinforcement Components".
- If ASTM A325 or A490 bolts, and/or threaded rods are specified to be pre-tensioned, these shall be installed and tightened to the pretensioned condition according to the requirements of the RCSC Specification for Structural Joints Using ASTM High Strength Bolts.
- All proposed and/or replaced bolts shall be of sufficient length such that the end of the bolt be at least flush with the face of the nut. It is not permitted for the bolt end to be below the face of the nut after tightening is completed.

PLANS PREPARED FOR:

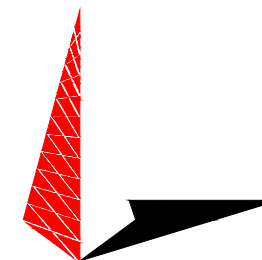
**CROWN CASTLE**

PROJECT INFORMATION:

**SEATTLE - SEA155  
BU #: 880416**

8477 SE 68TH STREET  
MERCER ISLAND, WA 98040  
(KING COUNTY)

PLANS PREPARED BY:



**TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD  
RALEIGH, NC 27603  
OFFICE: (919) 661-6351  
www.tepggroup.net

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0	12-12-23	MODIFICATION DRAWINGS
REV	DATE	ISSUED FOR:

DRAWN BY: RTP CHECKED BY: CDC

SHEET TITLE:

**GENERAL NOTES**

SHEET NUMBER: <b>N-2</b>	REVISION: <b>0</b>
TEP#: 151934.904269	

**TOWER PLUMB REQUIREMENTS:**

1. CHECK OF VERTICAL ALIGNMENT AND LEVEL OF BASE TOWER AND CANISTER ASSEMBLY SECTIONS FOR CONFORMANCE TO A PLUMB CONDITION IN ACCORDANCE WITH ANSI/TIA-222-H STANDARDS. PLUMB CONDITION IS TO BE DOCUMENTED WITH THE PROPER NOTES AND PICTURES TO PROVE, AT MINIMUM, THE FOLLOWING:
  - 1.1. DEFLECTION CALCULATIONS PER ANSI/TIA-222-H STANDARDS
  - 1.2. MINIMUM AND MAXIMUM (I.E. HOT AND COLD) SURFACE TEMPERATURE READINGS ON BASE MONOPOLE
  - 1.3. TIME OF DAY MEASURE WAS TAKEN (E.G. DAWN, NOON, DUSK)
  - 1.4. PICTURES OF A LEVEL OR DIGITAL INCLINOMETER MEASURED AT A MINIMUM OF (3) EQUIDISTANT LOCATIONS AROUND THE BASE PLATE TO PROVE LEVEL CONDITIONS
  - 1.5. AZIMUTH OR MONOPOLE FLAT NUMBER OF THE DIRECTION OF THE OUT-OF-PLUMB DEFLECTION

PLANS PREPARED FOR:

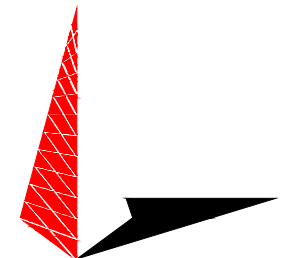
**CROWN CASTLE**

PROJECT INFORMATION:

**SEATTLE - SEA155  
BU #: 880416**

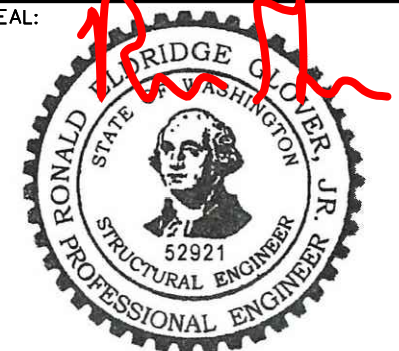
8477 SE 68TH STREET  
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REV	DATE	ISSUED FOR:

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SHEET TITLE:  
**PROJECT NOTES**

SHEET NUMBER: **N-3** REVISION: **0**  
TEP#: 151934.904269



**MANUFACTURER POLE SPECIFICATIONS**

TAPER:	-
BASE PLATE STEEL (Fy):	ASTM A36 (36 KSI)
ANCHOR RODS:	1 1/2"Ø ASTM A354

**MANUFACTURER SHAFT SECTION DATA**

SHAFT SECTION	SECTION SHAPE	SECTION LENGTH (FT.)	SECTION THICKNESS (IN.)	SECTION GRADE Fy (KSI)	FLANGE PLATE GRADE Fy (KSI)	LAP SPLICE (IN.)	DIAMETER ACROSS FLATS OR OF ROUND SECTION (IN.)	
							TOP	BOTTOM
1	ROUND	20.00	0.4320	35	50	-	6.625	6.625
2	ROUND	20.00	0.5000	35	50	-	8.625	8.625
3	ROUND	10.00	0.5000	42	50	-	8.625	8.625
4	ROUND	40.00	0.3750	42	36	-	36.000	36.000
5	ROUND	40.00	0.3750	42	36	-	36.000	36.000
6	ROUND	20.00	0.3750	42	36	-	36.000	36.000

NOTE: DIMENSIONS SHOWN DO NOT INCLUDE GALVANIZING TOLERANCES

**MODIFICATION SCHEDULE**

NO.	MODIFICATION DESCRIPTION	ELEVATION (FT.)	SHEET
1	REMOVE EXISTING CONCEALMENT CANISTERS AND BULKHEAD ATTACHMENTS.	100.00 - 130.00	S-2
2	INSTALL PROPOSED UNVENTED AND VENTED CONCEALMENT CANISTERS AND BULKHEAD ATTACHMENTS. CONCEALMENT CANISTERS TO BE INSTALLED PER CROWN DOC: CON-PRC-10127.	100.00 - 130.00	S-2
3	(1) NEW 60" NOMINAL DIAMETER VENTED CONCEALMENT ASSEMBLIES SHALL BE PROVIDED BY APPROVED VENTED CANISTER VENDOR. REFERENCE ITB EMAIL FOR MORE INFORMATION.	100.00 - 110.00	S-2
4	(2) NEW 60" NOMINAL DIAMETER UNVENTED CONCEALMENT ASSEMBLIES SHALL BE PROVIDED BY APPROVED UNVENTED CANISTER VENDOR. REFERENCE ITB EMAIL FOR MORE INFORMATION.	110.00 - 130.00	S-2
5	PAINT PROPOSED MODIFICATIONS TO MATCH TOWER SHAFT.	-	-
6	CONTRACTOR TO PLUMB TOWER PER SECTION 13.3.3 OF ANSI/TIA-222-H.	-	-
7	CROWN CASTLE WILL CONTRACT WITH A THIRD PARTY VENDOR TO PERFORM THE MODIFICATION INSPECTION. THE CONTRACTOR SHALL COORDINATE THE INSPECTION WITH THE MODIFICATION INSPECTOR AND CROWN CASTLE PROJECT MANAGER. SEE SHEET N-1 FOR DETAILS.	-	-

**NOTES:**

- PRIOR TO FABRICATION AND INSTALLATION, CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND QUANTITIES GIVEN. LENGTH AND QUANTITIES PROVIDED ARE FOR QUOTING PURPOSES ONLY, AND SHALL NOT BE USED FOR FABRICATION.
- FOR PARTS NOT DETAILED WITHIN THE DRAWING AND STARTING WITH "CCI-", SEE THE FOLLOWING CATALOG FOR DETAILS: CON-CAT-10300, MONOPOLE STANDARD DRAWINGS AND APPROVED REINFORCEMENT COMPONENTS.

PLANS PREPARED FOR:

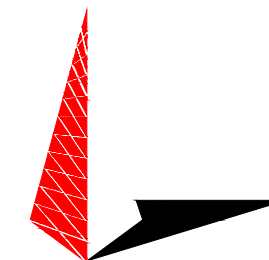
**CROWN CASTLE**

PROJECT INFORMATION:

**SEATTLE - SEA155  
BU #: 880416**

8477 SE 68TH STREET  
MERCER ISLAND, WA 98040  
(KING COUNTY)

PLANS PREPARED BY:



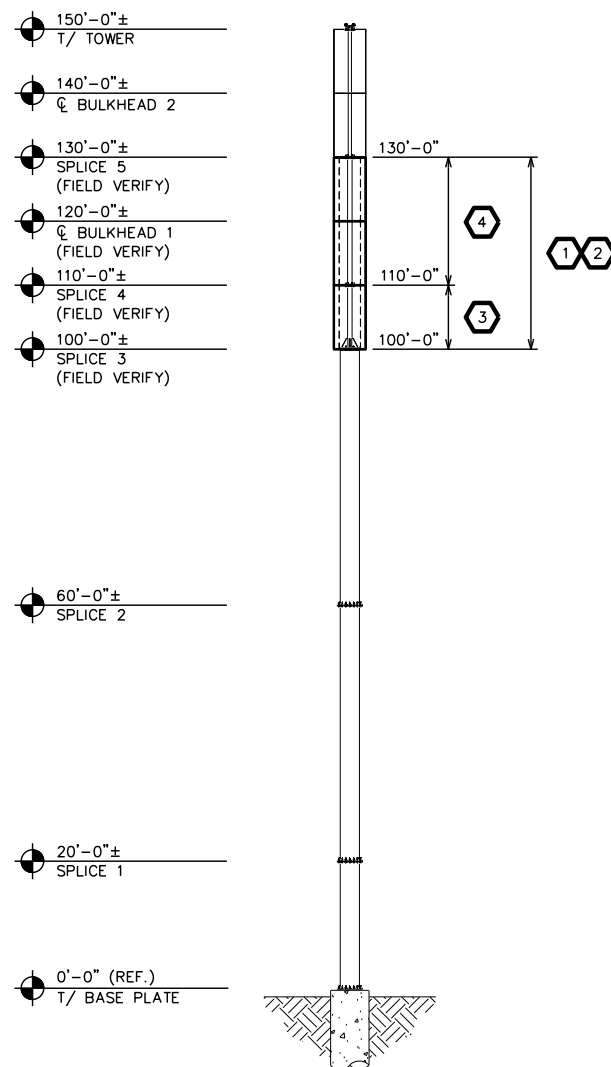
**TOWER ENGINEERING PROFESSIONALS**

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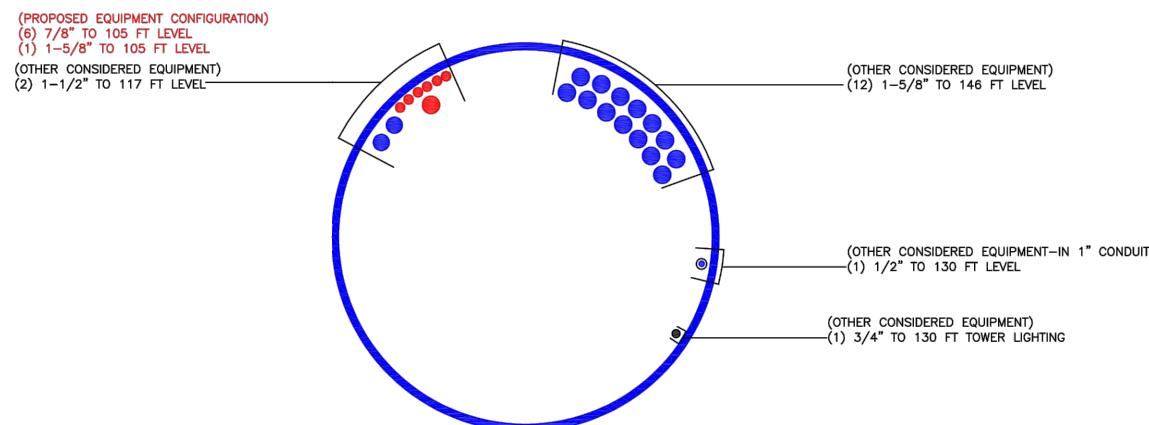


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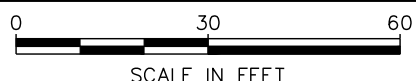
**NOTE:**

BASE LEVEL DRAWING PROVIDED BY CROWN CASTLE.



**TOWER ELEVATION**

SCALE: 1" = 30'-0"



**BASE LEVEL DRAWING**

SCALE: N.T.S.

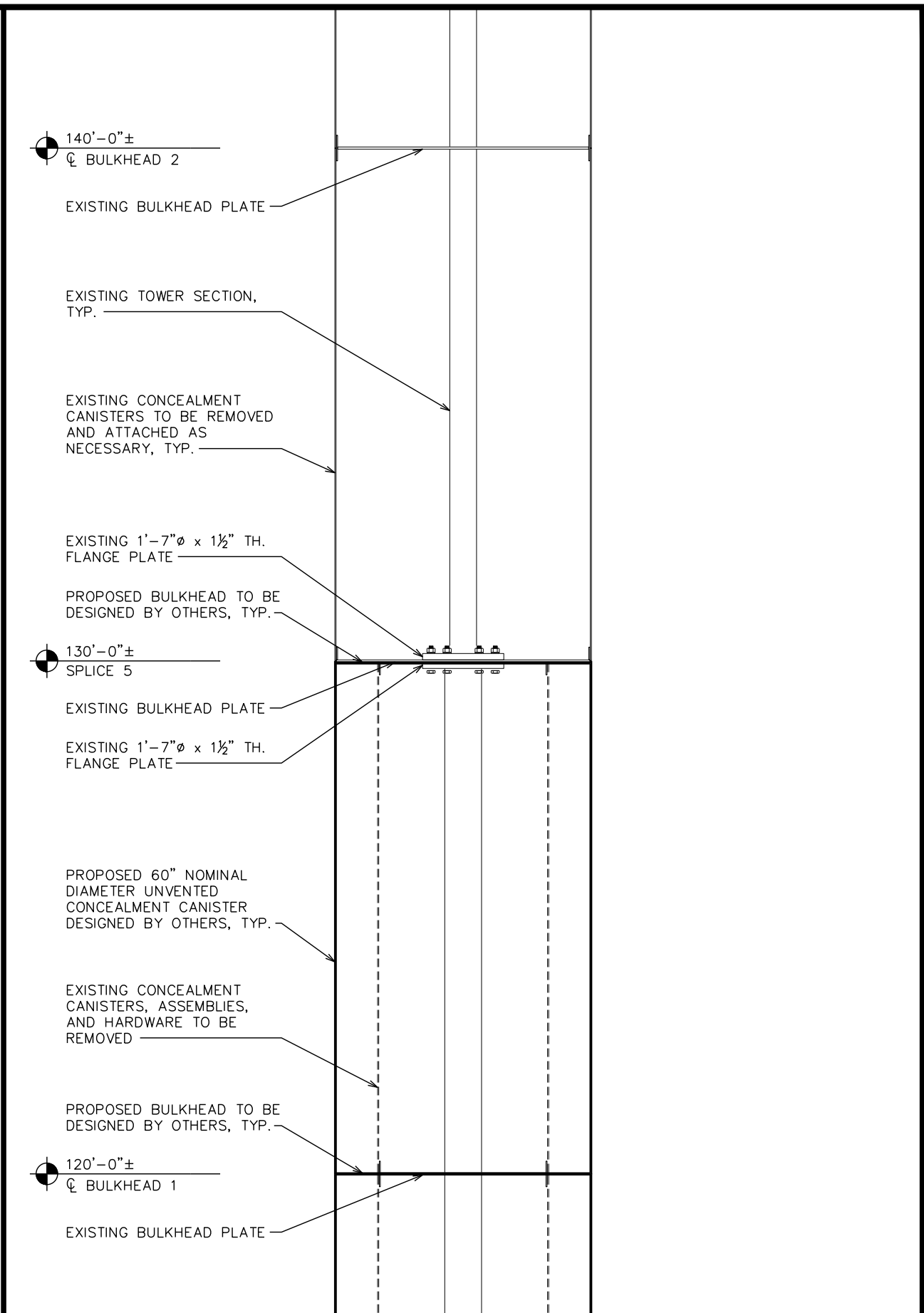
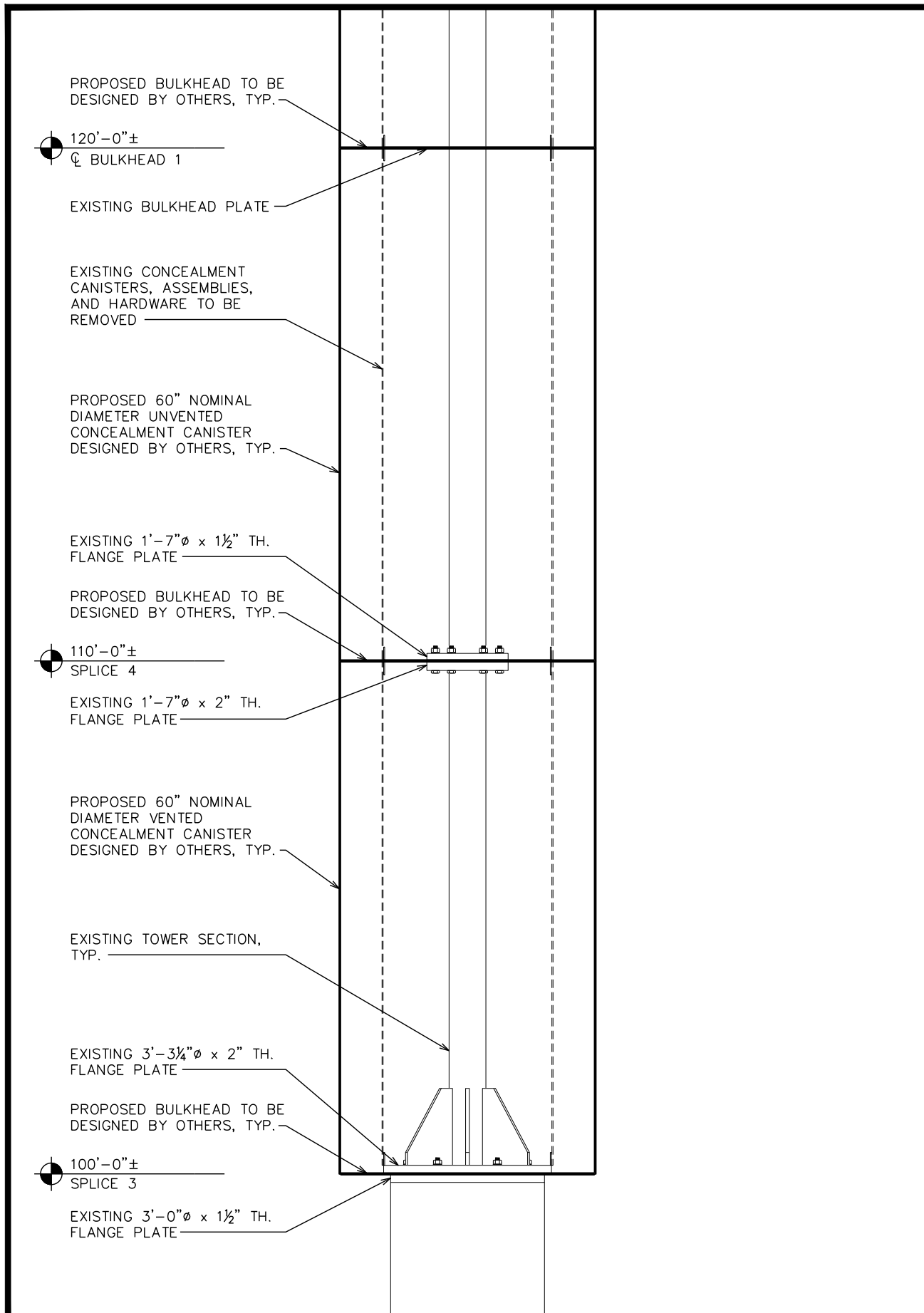
0	12-12-23	MODIFICATION DRAWINGS
REV	DATE	ISSUED FOR:

DRAWN BY: RTP CHECKED BY: CDC

SHEET TITLE:

**TOWER ELEVATION  
AND MODIFICATION  
SCHEDULE**

SHEET NUMBER: <b>S-1</b>	REVISION: <b>0</b>
TEP#: 151934.904269	



PLANS PREPARED FOR:

# CROWN CASTLE

PROJECT INFORMATION:

## SEATTLE - SEA155 BU #: 880416

8477 SE 68TH STREET  
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SEAL: *R. B. J.*

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0	12-12-23	MODIFICATION DRAWINGS
REV	DATE	ISSUED FOR:

DRAWN BY: RTP    CHECKED BY: CDC

SHEET TITLE:

## CONCEALMENT INSTALLATION DETAILS

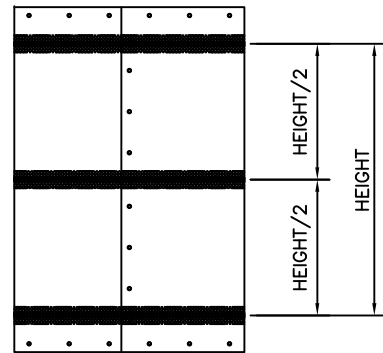
SHEET NUMBER: <h1 style="font-size: 2em;">S-2</h1>	REVISION: <h1 style="font-size: 2em;">0</h1>
TEP#: 151934.904269	

**PARTIAL ELEVATION**  
SCALE: 3/8" = 1'-0"  
  
SCALE IN FEET

**PARTIAL ELEVATION**  
SCALE: 3/8" = 1'-0"  
  
SCALE IN FEET

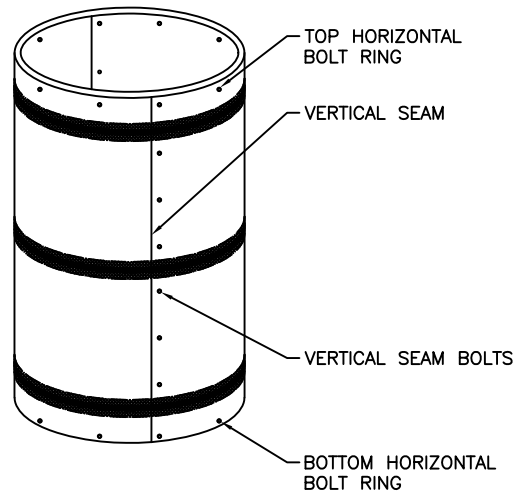
CONCEALMENT REINFORCEMENT SOLUTION – PARTS LIST

NO.	MANUFACTURER	DESCRIPTION	SIZE	PRODUCT NO.
(1)	USA STRAPPING	WOVEN POLYESTER STRAPPING	3/4"x250 FT. COIL	2700-34
(2)	MCNETT GEAR AID	DUAL-ADJUST BUCKLE	3/4" SIZE	80355
(3)	3M SCOTCH	BI-DIRECTIONAL FILAMENT TAPE	2.95"x54.7 YD. ROLL	8959
(4)	RUST-OLEUM	GLOSS CLEAR SPRAY	12 OZ.	249117

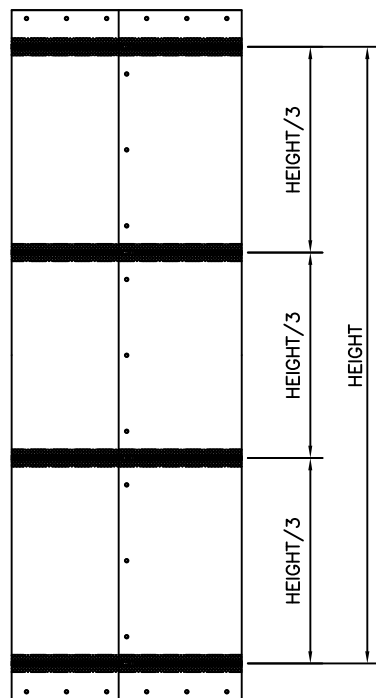


≤ 10'-0" CONCEALMENT COVER LEVEL HEIGHT

NOT TO SCALE



TOP BANDING SOLUTION TO BE APPLIED BELOW THE TOP HORIZONTAL BOLT RING



> 10'-0" CONCEALMENT COVER LEVEL HEIGHT

NOT TO SCALE

BOTTOM BANDING SOLUTION TO BE APPLIED ABOVE THE BOTTOM HORIZONTAL BOLT RING

GENERAL:

1.) THE REINFORCEMENT SOLUTION IS ONLY TO BE APPLIED TO VERTICALLY-FASTENED MULTI-PANEL OR "SECTORIZED" CONCEALMENT COVERS. SOLID ONE-PIECE CONCEALMENT COVERS ARE NOT TO BE TREATED WITH THIS SOLUTION. CONCEALMENT COVERS THAT HAVE UNDERGONE CROWN-SPECIFIED WIND TESTING AND HAVE BEEN APPROVED BY CROWN ARE NOT REQUIRED TO BE TREATED WITH THE BANDING SOLUTION. SEE CON-PRC-10127 FOR A LIST OF APPROVED CONCEALMENT COVERS.

2.) FOR CONCEALMENT COVER LEVELS MEASURING 10 FT. IN HEIGHT OR LESS, (3) EQUALLY-SPACED BANDING APPLICATIONS ARE TO BE INSTALLED AT THE TOP, MID-SPAN, AND BOTTOM REGIONS. FOR LEVELS GREATER THAN 10 FT. IN HEIGHT, (4) EQUALLY-SPACED BANDING APPLICATIONS ARE TO BE INSTALLED, AT THE TOP, UPPER MIDDLE, LOWER MIDDLE, AND BOTTOM REGIONS.

3.) FOR CONCEALMENT COVERS OF ALL HEIGHTS, THE TOP BANDING APPLICATION IS TO BE POSITIONED DIRECTLY BELOW THE TOP CONCEALMENT COVER HORIZONTAL BOLT RING AND THE BOTTOM BANDING APPLICATION DIRECTLY ABOVE THE BOTTOM HORIZONTAL BOLT RING.

4.) BANDING APPLICATION SHALL NOT COVER ANY VERTICAL OR HORIZONTAL FASTENERS.

INSTALLATION:

1.) STRAPPING IS TO BE LOOPED AROUND THE CONCEALMENT COVER AND EACH CUT END OF THE STRAPPING FED AROUND A CROSS BAR ON EACH END OF THE DUAL-ADJUST BUCKLE.

2.) STRAPPING IS TO BE HAND-TIGHTENED USING THE BUCKLE SUCH THAT THE STRAPPING LIES FLAT, UNTWISTED, AND SQUARE TO THE CONCEALMENT COVER.

3.) AT LEAST (2) CONTINUOUS LAYERS OF 3M 8959 TAPE ARE TO BE APPLIED ON TOP OF THE TIGHTENED STRAPPING SUCH THAT NO TAIL OF THE STRAPPING IS SHOWING OUTSIDE THE LAYERS OF TAPE.

4.) THE CURRENT DATE IS TO BE MARKED WITH PERMANENT INK ON THE TOP LAYER OF TAPE TO RECORD INSTALLATION DATE.

5.) ENSURE THAT THE SURFACE OF THE CANISTER IS FREE FROM OIL, GREASE, SOIL, DIRT, AND OTHER FOREIGN MATTER. THE SURFACE SHALL BE CLEAN, DRY AND SMOOTH TO RECEIVE THE STRAPPING AND THE TAPE.

6.) 3M 8959 TAPE SHALL BE TACKED DOWN BY APPLYING (2) COATS OF NON-YELLOWING CLEAR COAT SPRAY OVER THE TAIL END OF THE TAPE AFTER IT IS SECURELY TAPED DOWN. SECOND COAT SHALL BE APPLIED ONCE THE FIRST COAT IS DRY TO TOUCH.

PAINTING 3M 8959 TAPE [IF REQUIRED]:

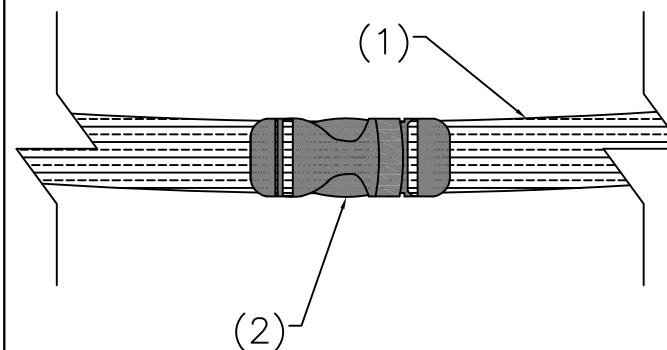
1.) AFTER FULL INSTALLATION OF THE THE REINFORCEMENT SOLUTION, THE TAPE SHALL BE COATED TO MATCH THE COLOR OF THE EXISTING CONCEALMENT CANISTER

1.1) AS AN EXAMPLE, IF THE EXISTING CONCEALMENT CANISTER IS WHITE, PAINTING WOULD NOT BE REQUIRED SINCE THE TAPE COLOR IS ALSO WHITE. HOWEVER, IF THE CANISTER IS BLACK, PAINT THE TAPE TO MATCH THE CANISTER COLOR.

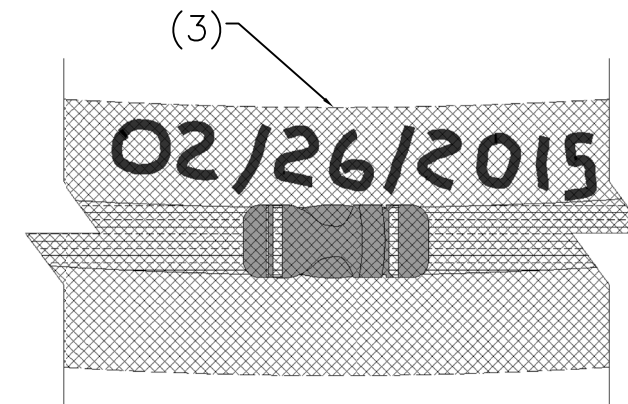
2.) PAINT SHALL BE APPLIED WITH A BRUSH FOR A CLEAN EDGE ON THE TAPE. SPRAY PAINT IS PERMISSIBLE PROVIDED THAT PAINTER'S TAPE IS UTILIZED TO AVOID PAINTING THE CANISTER. SECOND COAT SHALL BE APPLIED AFTER THE FIRST COAT IS DRY. THE SHEEN OF THE PAINT SHALL MATCH THE CANISTER

3.) THE INSTALLATION DATE SHALL BE MARKED ON TOP OF THE COATED SURFACE.

STRAPPING INSTALLATION DETAIL



TAPE INSTALLATION DETAIL



2000 CORPORATE DRIVE  
CANONSBURG PA, 15317

SPACE RESERVED FOR PROFESSIONAL SEALS

REVISIONS	NO.	DATE	DESCRIPTION	BY
				MAJ
	1	02/08/15	CONCEALMENT SOLUTION	MAJ
	2	02/04/16	CONCEALMENT SOLUTION	MAJ
	3	01/08/17	CONCEALMENT SOLUTION	MAJ
	4	06/29/20	ADDED SUBSTITUTE FOR HURRICANE TAPE	JMK
	5	06/29/20	REMOVED HURRICANE TAPE AND EDITED NOTE 1	AOS
	6	07/31/23		

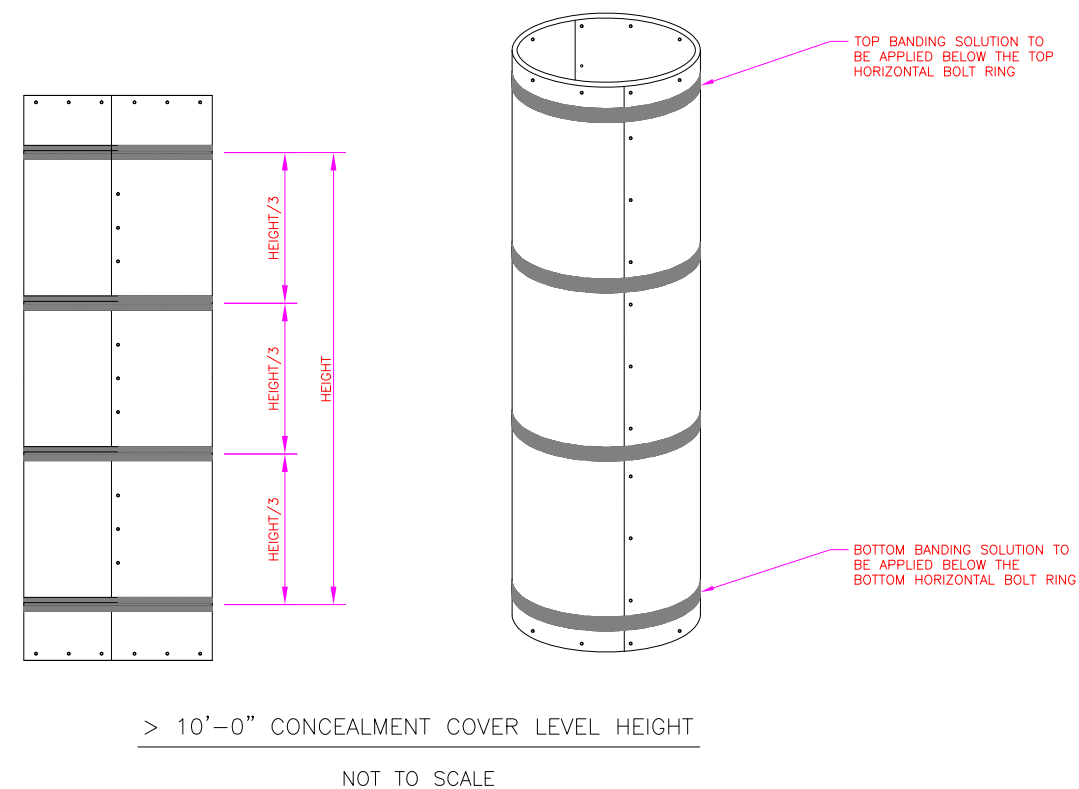
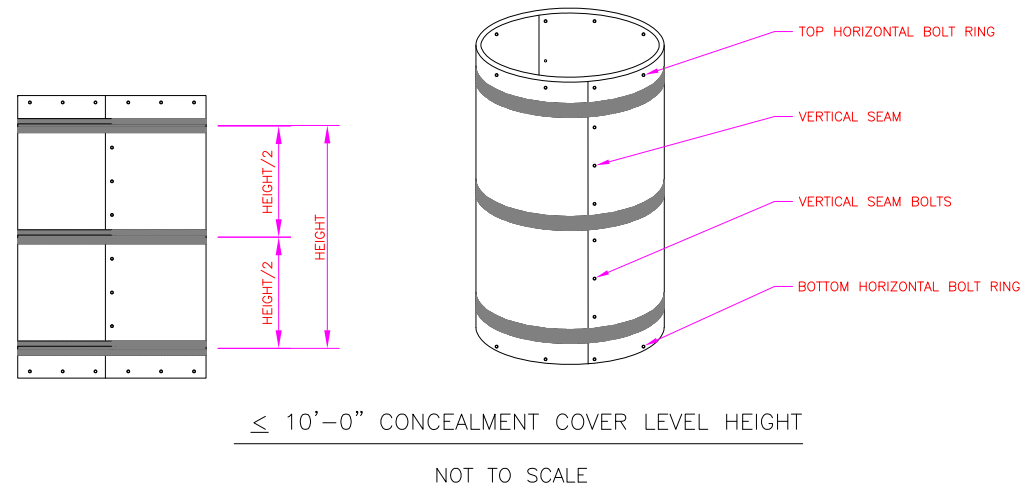
DRAWN BY: AOS  
CHECKED BY:  
DRAWING DATE: 07/31/23

SHEET TITLE

TYPE

SHEET NUMBER

PARTS LIST (MATERIAL PRICING GUIDE VENDOR PART #: CC-TWOTAPE-KIT)				
NO.	MANUFACTURER	DESCRIPTION	SIZE	PRODUCT NO.
(1)	3M SCOTCH	BL DIRECTIONAL FILAMENT TAPE	"2.95"x57.7 YD. ROLL	8959
(2)	GORILLA GLUE COMPANY	WHITE GORILLA TAPE	(2) 1.88" x 30 YD. ROLLS	6025001



NOTES:

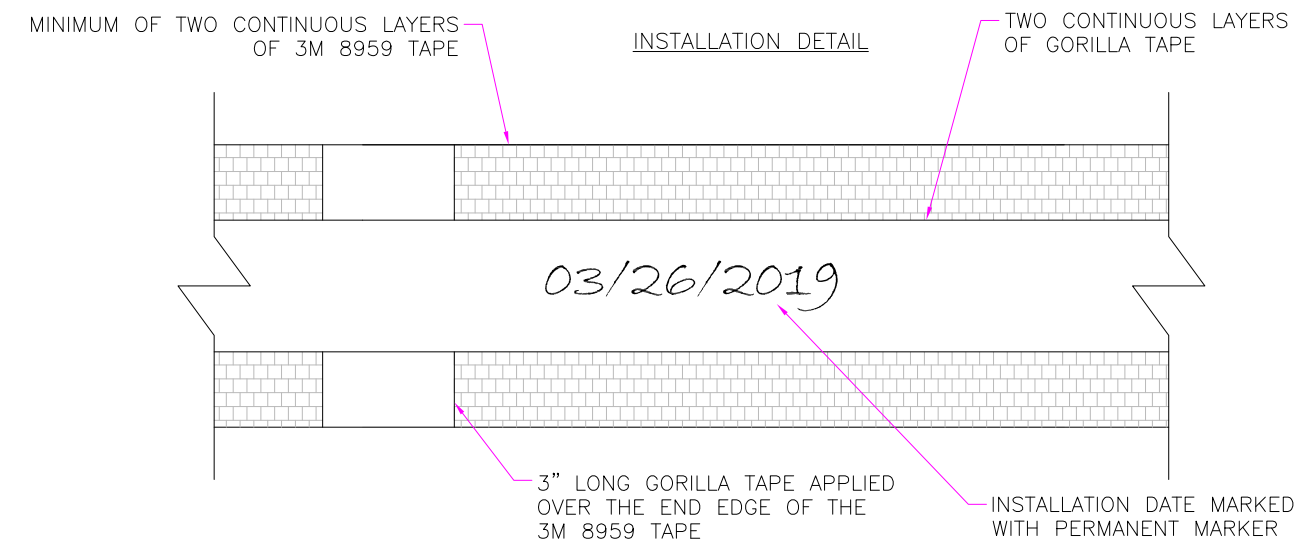
- 1.) THE REINFORCEMENT SOLUTION IS ONLY TO BE APPLIED TO VERTICALLY-FASTENED MULTI-PANEL OR "SECTORIZED" CONCEALMENT COVERS. SOLID ONE-PIECE CONCEALMENT COVERS ARE NOT TO BE TREATED WITH THIS SOLUTION. CONCEALMENT COVERS THAT HAVE UNDERGONE CROWN-SPECIFIED WIND TESTING AND HAVE BEEN APPROVED BY CROWN ARE NOT REQUIRED TO BE TREATED WITH THE BANDING SOLUTION. SEE CON-PRC-10127 FOR A LIST OF APPROVED CONCEALMENT COVERS.
- 2.) FOR CONCEALMENT COVER LEVELS MEASURING 10 FT. IN HEIGHT OR LESS, (3) EQUALLY-SPACED BANDING APPLICATIONS ARE TO BE INSTALLED AT THE TOP, MID-SPAN, AND BOTTOM REGIONS. FOR LEVELS GREATER THAN 10 FT. IN HEIGHT, (4) EQUALLY-SPACED BANDING APPLICATIONS ARE TO BE INSTALLED, AT THE TOP, UPPER MIDDLE, LOWER MIDDLE, AND BOTTOM REGIONS.
- 3.) FOR CONCEALMENT COVERS OF ALL HEIGHTS, THE TOP BANDING APPLICATION IS TO BE POSITIONED DIRECTLY BELOW THE TOP CONCEALMENT COVER HORIZONTAL BOLT RING AND THE BOTTOM BANDING APPLICATION DIRECTLY ABOVE THE BOTTOM HORIZONTAL BOLT RING.
- 4.) BANDING APPLICATION SHALL NOT COVER ANY VERTICAL OR HORIZONTAL FASTENERS.

INSTALLATION:

- 1.) ENSURE THAT THE SURFACE OF THE CANISTER IS FREE FROM OIL, GREASE, SOIL, DIRT, AND OTHER FOREIGN MATTER. THE SURFACE SHALL BE CLEAN, DRY AND SMOOTH TO RECEIVE THE TAPES.
- 2.) AT LEAST (2) CONTINUOUS LAYERS OF 3M 8959 TAPE ARE TO BE APPLIED FIRST ON TOP OF THE CONCEALMENT CANISTER.
- 3.) APPLY A 3" LONG GORILLA TAPE VERTICALLY TO TAPE DOWN THE END EDGE OF THE 3M 8959 TAPE PRIOR TO STEP 4.
- 4.) APPLY AT LEAST (2) CONTINUOUS LAYERS OF GORILLA TAPE OVER THE 3M 8959 TAPE.
- 5.) THE CURRENT DATE IS TO BE MARKED WITH PERMANENT MARKER ON THE TOP LAYER OF TAPE TO RECORD THE INSTALLATION DATE.

PAINTING TAPES [IF REQUIRED]:

- 1.) AFTER FULL INSTALLATION OF THE THE REINFORCEMENT SOLUTION, THE TAPES SHALL BE COATED TO MATCH THE COLOR OF THE EXISTING CONCEALMENT CANISTER.
  - 1.1) AS AN EXAMPLE, IF THE EXISTING CONCEALMENT CANISTER IS WHITE, PAINTING WOULD NOT BE REQUIRED SINCE THE TAPES ARE ALSO WHITE. HOWEVER, IF THE CANISTER IS BLACK, PAINT THE TAPES TO MATCH THE CANISTER COLOR.
- 2.) PAINT SHALL BE APPLIED WITH A BRUSH FOR A CLEAN EDGE. SPRAY PAINT IS PERMISSIBLE PROVIDED THAT PAINTER'S TAPE IS UTILIZED TO AVOID PAINTING THE CANISTER. SECOND COAT SHALL BE APPLIED AFTER THE FIRST COAT IS DRY. THE SHEEN OF THE PAINT SHALL MATCH THE CANISTER.
- 3.) THE INSTALLATION DATE SHALL BE MARKED ON TOP OF THE COATED SURFACE.



DRAWN BY: AOS

CHECKED BY:

DRAWING DATE: 07/31/2023



SHEET NUMBER:  
CON-PRC-10127P

REVISION:  
E

CONCEALMENT REINFORCEMENT SOLUTION - TWO-TAPE BANDING