



1 Cityplace Dr, Suite 490
Creve Coeur, MO 63141

Phone: (314) 513-0147
www.crowncastle.com

July 22nd, 2022

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

RE: **Notice of Exempt Modification for AT&T
Crown Site ID#842859; AT&T Site ID#CT05833
371 Terryville Avenue, Bristol, CT 06010
Latitude: 41.679919 / Longitude: -72.96255**

Dear Ms. Bachman:

AT&T currently maintains (12) antennas at the 168-foot mounts on the existing 168.5-foot Monopole Tower located at **371 Terryville Avenue, Bristol**. The property is owned by Laviero Realty LLC and the Tower by Crown Castle. AT&T now intends to replace six (9) antennas. This modification/proposal includes hardware that is both 4G(LTE) and 5G capable through remote software configuration and either or both services may be turned on or off at various times.

Planned Modifications:

Tower:

REMOVE AND REPLACE

- (3) Kathrein 800-10121 antennas (**REMOVE**), (2) CCI TPA-65-LCUUUU-H8 Antennas (**REMOVE**), (1) Kathrein 800-10965 Antenna (**REMOVE**), (3) Ericsson – AIR6449 B77D (**REPLACE**), (3) Ericsson – AIR6419 B77G (antennas stacked) (**REPLACE**)
- (2) Kathrein 800-10966 antennas (**REMOVE**), (2) Quintel QD8616-7 antennas (**REPLACE**)
- (1) CCI DMP 65R-BU8DA antennas (**REMOVE**), (1) Quintel QD6616-7 antennas (**REPLACE**)
- (1) Kathrein 800-10798 antenna (**REMOVE**), (1) Matsing MS-MBA-3.2-H4.I4 antenna (**REPLACE**)
- (1) Raycap DC6-48-60-0-8F Squid (**REMOVE**) (1) Raycap DC9-48-60-24-8C-EV Squid (**REPLACE**)
- (3) Ericsson – RRUS-32-B2 (**REMOVE**) (3) Ericsson 8843 B2/B66A RRUs (**REPLACE**)
- (1) Ericsson – 4426 B66 RRU (**REMOVE**)
- (1) Ericsson – 4415 B25 RRU (**REMOVE**)
- (6) Powerwave LGP21401 TMAs (**REMOVE**), (5) Kaelus DBC0051F3V51-2 Diplexers (**REPLACE**)
- (6) 1-5/8” Coax Cables (**REMOVE**) (3) 6AWG DC Cables 7/8” (**REPLACE**), (1) 24 Pair fiber cable 3/8” (**REPLACE**)

RELOCATE

- (3) Ericsson – 4449 B5/B12 RRUs
- (3) Ericsson – 4478 B14 RRUs

The Foundation for a Wireless World.

CrownCastle.com



1 Cityplace Dr, Suite 490
Creve Coeur, MO 63141

Phone: (314) 513-0147
www.crowncastle.com

- (3) Ericsson RRUS-32 B30 RRUs
- (3) Ericsson – 4415 B30 RRUs
- (2) Ericsson 4415 B25 RRUs
- (1) CCI DMP65R-BU8DA Antenna
- (1) CCI DMP65R-BU6DA Antenna

INSTALL

- (1) Raycap DC9-48-60-24-8C-EV Squid
- (7) Y Cables

Ground:

REMOVE:

- (3) Ericsson RRUS 12 B25
- (3) Ericsson RRUW
- (1) DC6 Squid
- (1) Netsure 701 Power Plant

INSTALL:

- (1) Netsure 5100 PP
- (10) Rectifiers
- (1) OD Flex Cabinet
- (1) DC12-48-60-0-25E Squid
- (1) 6648 (+ Xcede)
- (1) 6675
- (1) 4-way GPS Splitter
- (1) New Purcell Cabinet

The facility was approved by Connecticut Siting Council by way of a Certificate of Environmental Compatibility on October 14th, 2003.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16-50j-72(b)(2). In accordance with R.C.S.A. §16-50j-73, a copy of this letter is being sent to Ellen Zoppo-Sassu, Mayor of the City of Bristol and Robert M. Flanagan, City Planner for the City of Bristol, and property owner, Laviero Realty LLC.

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



1 Cityplace Dr, Suite 490
Creve Coeur, MO 63141

Phone: (314) 513-0147
www.crowncastle.com

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

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

Sincerely,

Katie Adams
Crown Castle, Agent for AT&T
kadams@nbcllc.com
(781) 392-7547

cc:

Ellen Zoppo-Sassu, Mayor (*Via Federal Express*)
Mayor's Office
3rd Floor
111 North Main St.
Bristol, CT 06010
860.584.6250

Robert M. Flanagan, City Planner (*Via Federal Express*)
Land Use Department
111 North Main St.
Bristol, CT 06010
(860) 584-6225

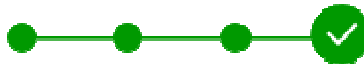
Laviero Realty LLC (*Via Federal Express*)
70 Maureen Dr
Bristol, CT 06010

Katie Adams

From: TrackingUpdates@fedex.com
Sent: Tuesday, August 2, 2022 1:36 PM
To: Katie Adams
Subject: FedEx Shipment 777539359287: Your package has been delivered



Hi. Your package was
delivered Tue, 08/02/2022 at
1:32pm.

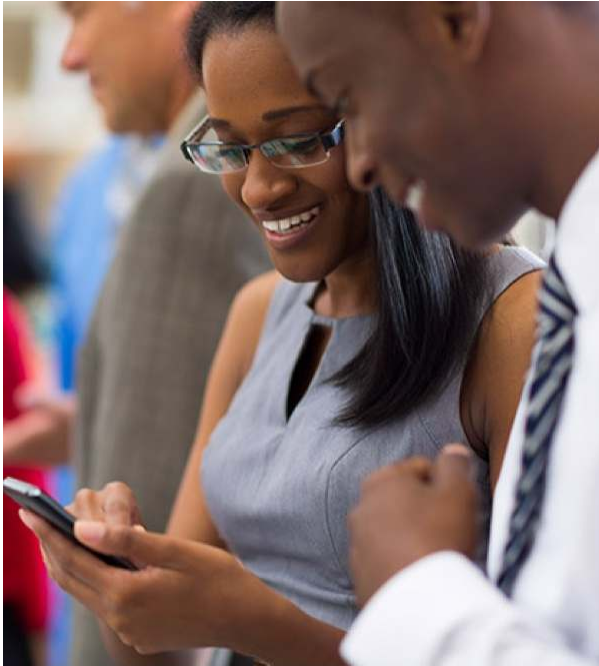


Delivered to 111 N MAIN ST, BRISTOL, CT 06010
Received by R.ROGER

OBTAIN PROOF OF DELIVERY

TRACKING NUMBER	777539359287
FROM	NB+C 100 Apollo Drive Suite 303 CHELMSFORD, MA, US, 01824
TO	Robert M. Flanagan, City Planner 111 North Main Street Land Use Department BRISTOL, CT, US, 06010
REFERENCE	100788 - CSC 1

SHIPPER REFERENCE	100788 - CSC
SHIP DATE	Mon 8/01/2022 06:12 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Pak
ORIGIN	CHELMSFORD, MA, US, 01824
DESTINATION	BRISTOL, CT, US, 06010
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	2.00 LB
SERVICE TYPE	FedEx Standard Overnight



Get the FedEx® Mobile app

Create shipments, receive tracking alerts, redirect packages to a FedEx retail location for pickup, and more from the palm of your hand
- **Download now.**



FOLLOW FEDEX



Please do not respond to this message. This email was sent from an unattended mailbox.
This report was generated at approximately 12:35 PM CDT 08/02/2022.

Katie Adams

From: TrackingUpdates@fedex.com
Sent: Tuesday, August 2, 2022 12:26 PM
To: Katie Adams
Subject: FedEx Shipment 777539383330: Your package has been delivered



Hi. Your package was delivered Tue, 08/02/2022 at 12:25pm.

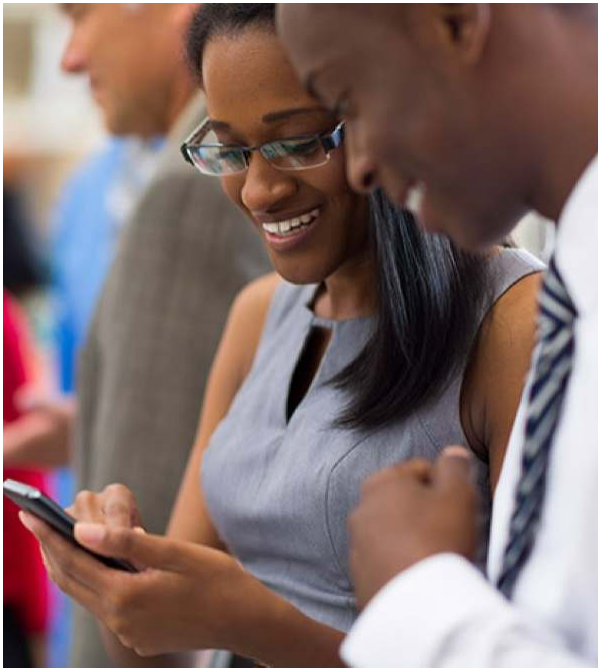


Delivered to 70 MAUREEN DR, BRISTOL, CT 06010

OBTAIN PROOF OF DELIVERY

TRACKING NUMBER	777539383330
FROM	NB+C 100 Apollo Drive Suite 303 CHELMSFORD, MA, US, 01824
TO	Laviero Realty LLC 70 Maureen Dr BRISTOL, CT, US, 06010
REFERENCE	100788 - CSC
SHIPPER REFERENCE	100788 - CSC

SHIP DATE	Mon 8/01/2022 06:12 PM
DELIVERED TO	Residence
PACKAGING TYPE	FedEx Pak
ORIGIN	CHELMSFORD, MA, US, 01824
DESTINATION	BRISTOL, CT, US, 06010
SPECIAL HANDLING	Deliver Weekday Residential Delivery
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	1.00 LB
SERVICE TYPE	FedEx Standard Overnight



Get the FedEx[®] Mobile app

Create shipments, receive tracking alerts, redirect packages to a FedEx retail location for pickup, and more from the palm of your hand - **Download now.**



FOLLOW FEDEX



✉ Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 11:26 AM CDT 08/02/2022.

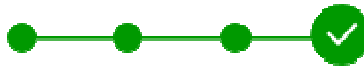
All weights are estimated.

Katie Adams

From: TrackingUpdates@fedex.com
Sent: Tuesday, August 2, 2022 10:19 AM
To: Katie Adams
Subject: FedEx Shipment 777539319489: Your package has been delivered



Hi. Your package was
delivered Tue, 08/02/2022 at
10:15am.

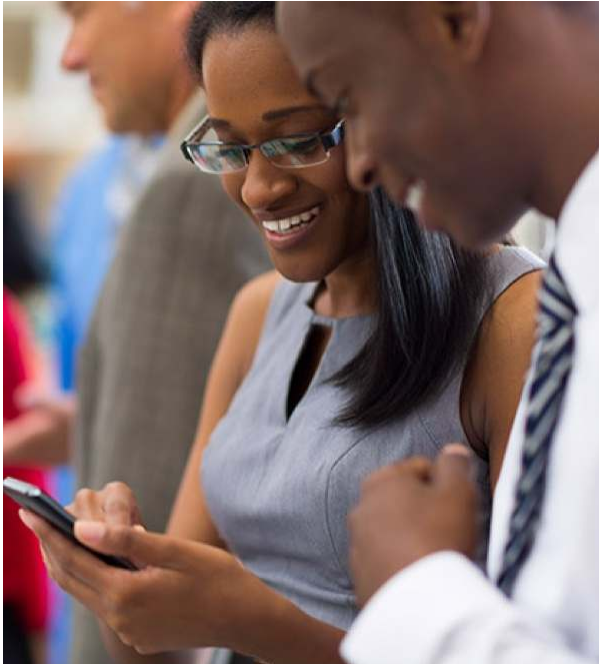


Delivered to 111 N MAIN ST, BRISTOL, CT 06010
Received by G.KRISTEN

OBTAIN PROOF OF DELIVERY

TRACKING NUMBER	777539319489
FROM	NB+C 100 Apollo Drive Suite 303 CHELMSFORD, MA, US, 01824
TO	Ellen Zoppo-Sassu, Mayor 111 North Main Street Mayors Office, 3rd Floor BRISTOL, CT, US, 06010
REFERENCE	100788 - CSC 1

SHIPPER REFERENCE	100788 - CSC
SHIP DATE	Mon 8/01/2022 06:12 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Pak
ORIGIN	CHELMSFORD, MA, US, 01824
DESTINATION	BRISTOL, CT, US, 06010
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	1.00 LB
SERVICE TYPE	FedEx Standard Overnight



Get the FedEx[®] Mobile app

Create shipments, receive tracking alerts, redirect packages to a FedEx retail location for pickup, and more from the palm of your hand
- **Download now.**



FOLLOW FEDEX



Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 9:18 AM CDT 08/02/2022.

Exhibit A

Original Facility Approval

Connecticut Siting Council^(/CSC)

[CT.gov Home](#) [./\(\)](#) [Connecticut Siting Council](#) [./CSC\)](#) DO 250 Bristol

[Decisions \(/CSC/Decisions/Decisions\)](#) >

[Meetings and Minutes \(/CSC/Common-Elements/v4-template/Council-Activity\)](#) >

[Pending Matters \(/CSC/1_Applications-and-Other-Pending-Matters/Pending-Matters\)](#) >

[About Us \(/CSC/Common-Elements/Common-Elements/Connecticut-Siting-Council---Description\)](#) >

[Contact Us \(/CSC/Common-Elements/Common-Elements/Contact-Us\)](#) >

Search Connecticut Siting Council



DOCKET NO. 250 - AT&T Wireless PCS, LLC d/b/a AT&T Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a wireless telecommunications facility at 371 Terryville Avenue or 522 Terryville Avenue, Bristol, Connecticut.	}	Connecticut
	}	Siting
	}	Council
	}	October 14, 2003

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a wireless telecommunications facility including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to AT&T Wireless PCS, LLC d/b/a AT&T Wireless (AT&T) for the construction, maintenance and operation of a wireless telecommunications facility at 371 Terryville Avenue (Site A), Bristol, Connecticut. The Council denies certification of Site B located at 522 Terryville Avenue, Bristol, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of Sprint and other entities, both public and private, but such tower shall not exceed a height of 170 feet above ground level.
2. The facility shall be relocated down gradient from the originally proposed Site A location, approximately 20 to 30 feet to the east onto a flat area.

3. The access road shall be relocated to use the existing driveway and parking lot on the property.
4. The Certificate Holder shall prepare a D&M Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a. a final site plan(s) of site development to include specifications for the tower, tower location, tower foundation, antennas, equipment building, access road, utility line, and landscaping; and
 - b. construction plans for site clearing, water drainage, and erosion and sedimentation control consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
4. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of electromagnetic radio frequency power densities of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall provide a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.
5. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
6. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing. The Certificate Holder shall provide space on the tower for no compensation for any municipal antennas, provided such antennas are compatible with the structural integrity of the tower.
7. If the facility does not initially provide wireless services within one year of completion of construction or ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
8. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antenna becomes obsolete and ceases to function.
9. Unless otherwise approved by the Council, this Decision and Order shall be void if the facility authorized herein is not operational within one year of the effective date of this Decision and Order or within one year after all appeals to this Decision and Order have been resolved.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in The Hartford Courant, and The Bristol Press.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

Applicant

AT&T Wireless PCS, LLC
d/b/a AT&T Wireless

Intervenor

Sprint Spectrum, L.P.
d/b/a Sprint PCS

Its Representative

Lucia Chiochio, Esq.
Cuddy & Feder LLP
90 Maple Avenue
White Plains, NY 10601

Its Representative

Thomas J. Regan, Esquire
Brown Rudnick Berlack Israels LLP
CityPlace I, 38th Floor
185 Asylum Street
Hartford, CT 06103-3402

Exhibit B

Property Card

TERRYVILLE AVE

Location TERRYVILLE AVE

Mblu 61 / 67-3 / /

Acct# 0272831

Owner LAVIERO REALTY LLC

Assessment \$150,290

Appraisal \$214,700

PID 101154

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$107,900	\$106,800	\$214,700

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$75,530	\$74,760	\$150,290

Owner of Record

Owner LAVIERO REALTY LLC

Sale Price \$0

Co-Owner

Certificate

Address 70 MAUREEN DR
BRISTOL, CT 06010

Book & Page 1564/0795

Sale Date 06/08/2004

Instrument 06

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
LAVIERO REALTY LLC	\$0		1564/0795	06	06/08/2004

Building Information

Building 1 : Section 1

Year Built:

Living Area: 0

Replacement Cost: \$0

Building Percent Good:

Replacement Cost

Less Depreciation: \$0

Building Attributes

Field	Description
Style:	Outbuildings
Model	
Grade:	
Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Num Kitchens	
Attic	
Bsmt	
Bsmt Gar	
Fireplaces_2	
Fin Bsmt	
Fin Bsmt Qual	
Num Park	
Fireplaces	
MHP	
Fndtn Cndtn	
Basement	

Building Photo



(http://images.vgsi.com/photos2/BristolCTPhotos///0053/DSC04022_53632)

Building Layout

 Building Layout (ParcelSketch.ashx?pid=101154&bid=40915)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

Extra Features	Legend

No Data for Extra Features

Land

Land Use

Use Code 302
Description Ind Vac Lnd
Zone I
Neighborhood
Alt Land Appr No
Category

Land Line Valuation

Size (Acres) 0.63
Frontage
Depth
Assessed Value \$74,760
Appraised Value \$106,800

Outbuildings

Outbuildings						<u>Legend</u>
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
CB3	PreCastConcCel			290.00 S.F.	\$0	1
FN4	Fence 8'			290.00 L.F.	\$2,900	1
CELL	Cell Tower/Site			1.00 UNITS	\$105,000	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2020	\$107,900	\$106,800	\$214,700
2019	\$107,900	\$106,800	\$214,700
19	\$107,900	\$106,800	\$214,700

Assessment			
Valuation Year	Improvements	Land	Total
2020	\$75,530	\$74,760	\$150,290
2019	\$75,530	\$74,760	\$150,290
19	\$75,530	\$74,760	\$150,290

Exhibit C

Construction Drawings



AT&T SITE NUMBER: CTL05833
AT&T SITE NAME: BRISTOL CENTER
AT&T FA CODE: 10070954
AT&T PACE NUMBER: MRCTB054912, MRCTB055826, MRCTB053470, MRCTB053265, MRCTB054651, MRCTB052892
AT&T PROJECT: 5G NR 1SR CBAND, BBU RECONFIGURATION WITH NEW IDS, 5G NR ACTIVATION, SPLIT SECTOR - LTE

BUSINESS UNIT #: 842859
SITE ADDRESS: 371 TERRYVILLE AVENUE BRISTOL, CT 06010
COUNTY: HARTFORD
SITE TYPE: MONOPOLE
TOWER HEIGHT: 168'-6"



AT&T SITE NUMBER: CTL05833

BU #: 842859
BRISTOL CENTER

371 TERRYVILLE AVENUE
 BRISTOL, CT 06010

EXISTING
 168'-6" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DWG./QA
A	3/25/22	JHW	PRELIMINARY REVIEW	KT
0	6/17/22	MEH	CONSTRUCTION	MTJ

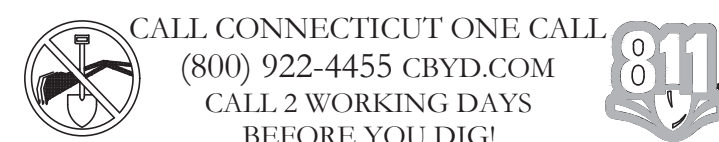
SITE INFORMATION

CROWN CASTLE USA INC. BRISTOL CENTER
SITE NAME: BRISTOL CENTER
SITE ADDRESS: 371 TERRYVILLE AVENUE BRISTOL, CT 06010
COUNTY: HARTFORD
MAP/PARCEL #: 61-67-3
AREA OF CONSTRUCTION: EXISTING
LATITUDE: 41.679919
LONGITUDE: -72.96255
LAT/LONG TYPE: NAD83
GROUND ELEVATION: 531'
CURRENT ZONING: I - INDUSTRIAL
JURISDICTION: CONNECTICUT SITING COUNCIL
OCCUPANCY CLASSIFICATION: U
TYPE OF CONSTRUCTION: IIB
A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER: LAVIERO REALTY LLC 70 MAUREEN DR BRISTOL, CT 06010
TOWER OWNER: CROWN CASTLE USA INC 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT: AT&T TOWER ASSET GROUP 575 MOROSGO DRIVE ATLANTA, GA 30324-3300
ELECTRIC PROVIDER: EVERSOURCE 800-592-2000
TELCO PROVIDER: LIGHTTOWER (855) 91-FIBER

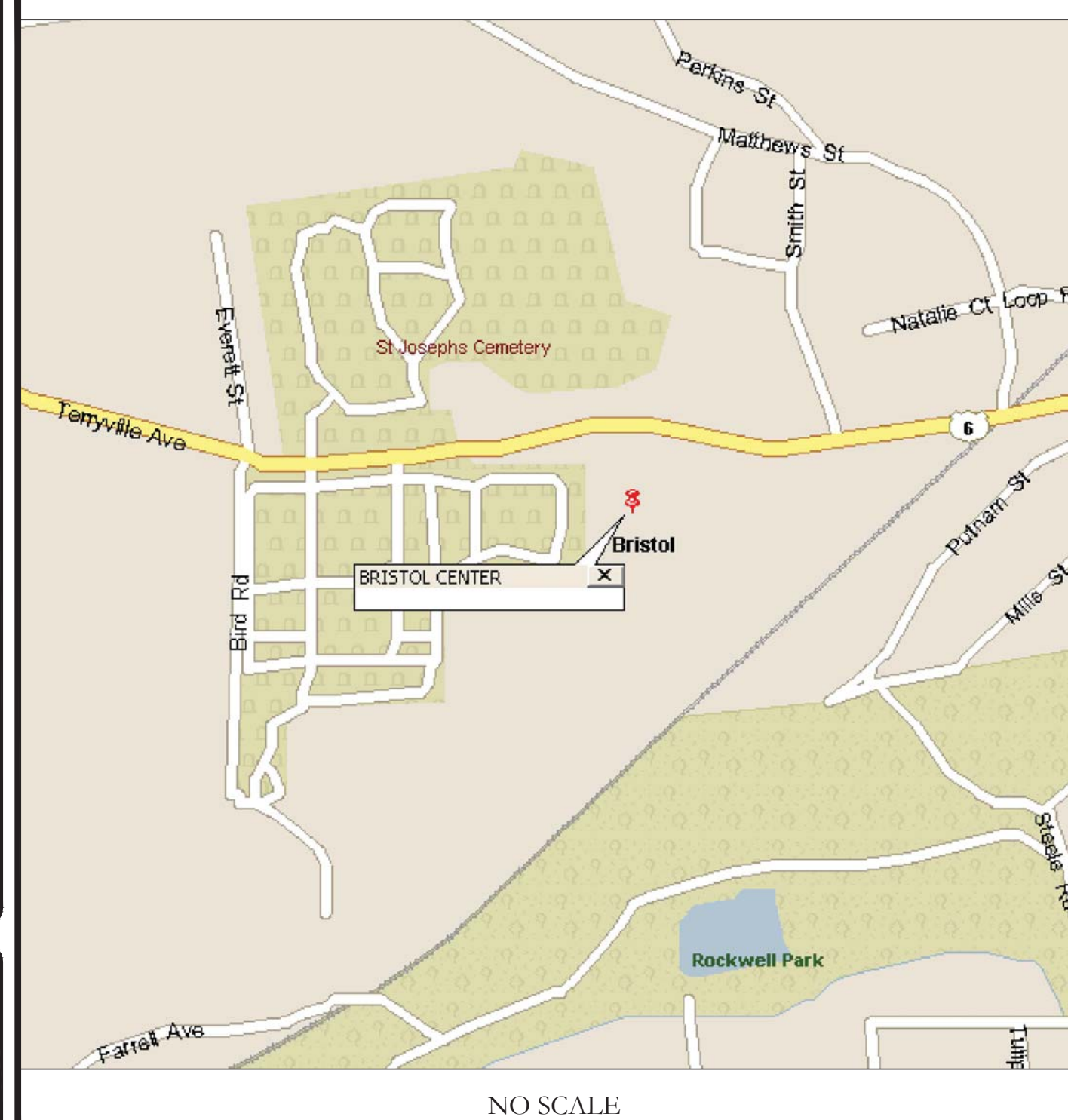
DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1.1	SITE PLAN
C-1.2	EXISTING & FINAL EQUIPMENT PLANS
C-2	FINAL ELEVATION & ANTENNA PLANS
C-3	FINAL EQUIPMENT SCHEDULE
C-4	EQUIPMENT MOUNTING DETAILS
C-5.1	EQUIPMENT SPECS
C-5.2	EQUIPMENT SPECS
G-1	GROUNDING SCHEMATIC
G-2	GROUNDING DETAILS
ATTACHED	PLUMBING DIAGRAM

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR FULL SIZE. 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.



LOCATION MAP



SITE PHOTO



PROJECT TEAM

A&E FIRM: B+T GROUP 1717 S. BOULDER AVE. TULSA, OK 74119 MARVIN PHILLIPS marvin.phillips@btgrp.com
CROWN CASTLE USA INC. DISTRICT CONTACTS: 3530 TORINGDON WAY, SUITE 300 CHARLOTTE, NC 28277
 PAUL PEDICONE - PROJECT MANAGER PAUL.PEDICONE@CROWNCastle.COM
 JASON D'AMICO - CONSTRUCTION MANAGER JASON.DAMICO@CROWNCastle.COM

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) KATHREIN - 800-10121 ANTENNAS
- REMOVE (2) KATHREIN - 800-10966 ANTENNAS
- REMOVE (1) CCI - DMP65R-BU8DA ANTENNAS
- REMOVE (2) CCI - TPA-65R-LCUUUU-H8 ANTENNAS
- REMOVE (1) KATHREIN - 800-10965 ANTENNAS
- REMOVE (1) KATHREIN - 800-10798 ANTENNAS
- REMOVE (1) ERICSSON - 4426 B66 RADIO
- REMOVE (1) ERICSSON - 4415 B25 RADIO
- REMOVE (3) ERICSSON - RRUS-32 B2
- REMOVE (6) POWERWAVE TECHNOLOGIES - LGP21401 TMA5
- REMOVE (6) COAX CABLES (1-5/8")
- RELOCATE ALL EXISTING RADIOS TO T-ARMS
- INSTALL (6) ERICSSON - AIR6449 B77D+AIR6419 B77G STACKED ANTENNAS WITH INTEGRATED RADIO
- INSTALL (2) QUINTEL - QD8616-7 ANTENNAS
- INSTALL (1) QUINTEL - QD6616-7 ANTENNA
- INSTALL (1) MATSING - MS-MBA-3.2-H4-L4 ANTENNA
- INSTALL (3) ERICSSON - 8843 B2/B66A RADIOS ON SECTOR SPLIT
- INSTALL (5) KAELUS - DBC0051F3V51-2 DIPLEXERS
- INSTALL (1) RAYCAP - DC9-48-60-24-8C-EV SQUID
- INSTALL (3) 6AWG DC CABLES (7/8")
- INSTALL (1) 24 PAIR FIBER CABLE (3/8")
- INSTALL (7) Y-CABLES

GROUND SCOPE OF WORK:

- REMOVE (3) RRUS12 B25
- REMOVE (3) RRUW
- REMOVE (1) DC6
- REMOVE (1) NETSURE 701 PP
- INSTALL (1) NETSURE 5100 PP
- INSTALL (10) RECTIFIERS
- INSTALL (1) OD FLEX CABINET
- INSTALL (1) DC12-48-60-0-25E
- INSTALL (1) 6648 (+XCEDE)
- INSTALL (1) 6675
- INSTALL (1) 4-WAY GPS SPLITTER
- INSTALL NEW PURCELL CABINET

INSTALL (1) ERICSSON - 4449 RADIO ON SECTOR SPLIT
INSTALL (6) 2-3/8" O.D. (SCH 40) X 8'-0" LONG MOUNT PIPES

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 CONNECTICUT SBC/2015 IBC
MECHANICAL	2018 CONNECTICUT SBC/2015 IMC
ELECTRICAL	2018 CONNECTICUT SBC/2017 NEC

REFERENCE DOCUMENTS:
 STRUCTURAL ANALYSIS: BLACK & VEATCH CORP. DATED: 2/15/22
 MOUNT ANALYSIS: INFINIGY ENGINEERING, PLLC DATED: 12/6/21
 RFDS REVISION: FINAL DATED: 6/7/22
 ORDER ID: 586265
 REVISION: 0



B&T ENGINEERING, INC.
 PEC.0001564
 Expires 2/10/23

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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

SHEET NUMBER: T-1
REVISION: 0



575 MOROSGO DRIVE
ATLANTA, GA 30324-3300



3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065



1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

AT&T SITE NUMBER:
CTL05833

BU #: 842859
BRISTOL CENTER

371 TERRYVILLE AVENUE
BRISTOL, CT 06010

EXISTING
168'-6" MONOPOLE

ISSUED FOR:

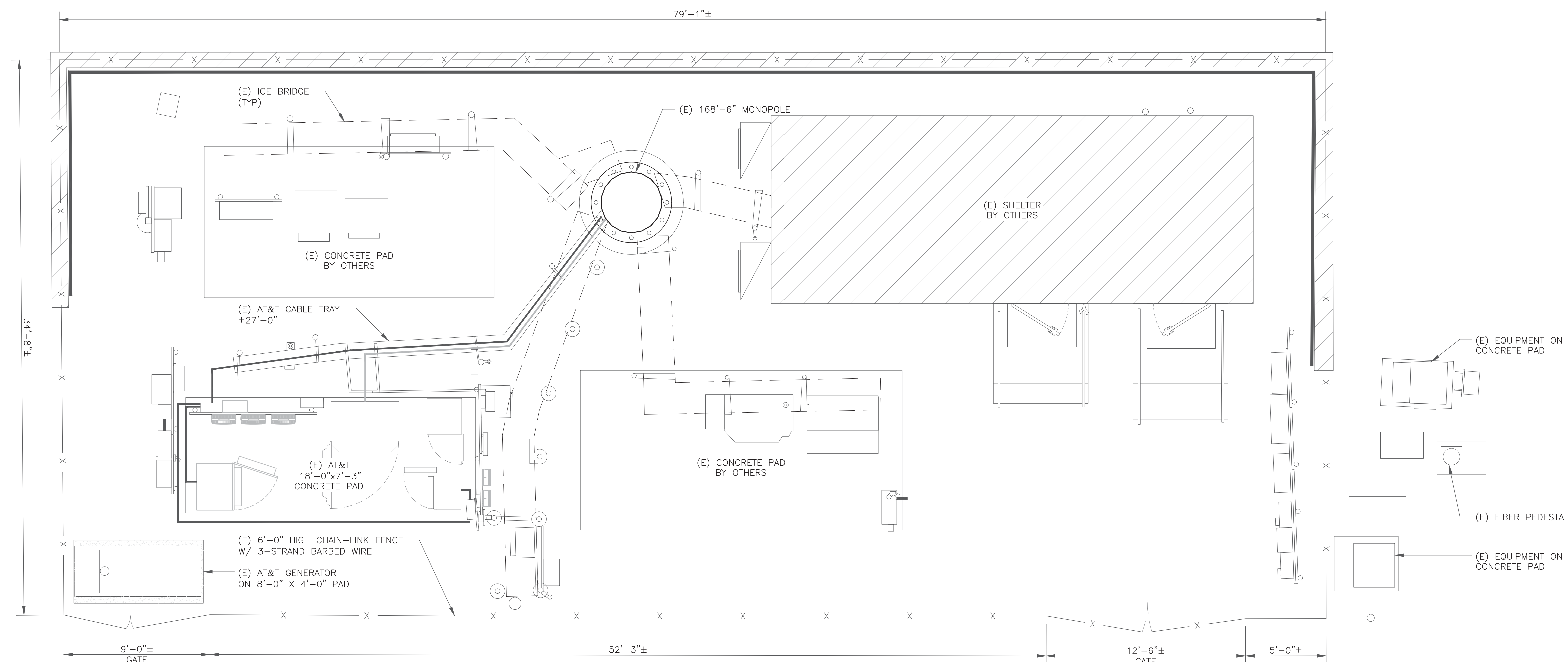
REV	DATE	DRWN	DESCRIPTION	DES./QA
A	3/25/22	JHW	PRELIMINARY REVIEW	KT
0	6/17/22	MEH	CONSTRUCTION	MTJ



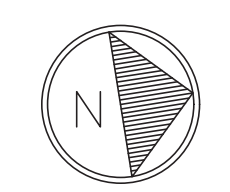
B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER: **C-1.1** REVISION: **0**



1 SITE PLAN
SCALE: 1/4"=1'-0" (FULL SIZE)
1/8"=1'-0" (11x17)





575 MOROSGO DRIVE
ATLANTA, GA 30324-3300



3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065



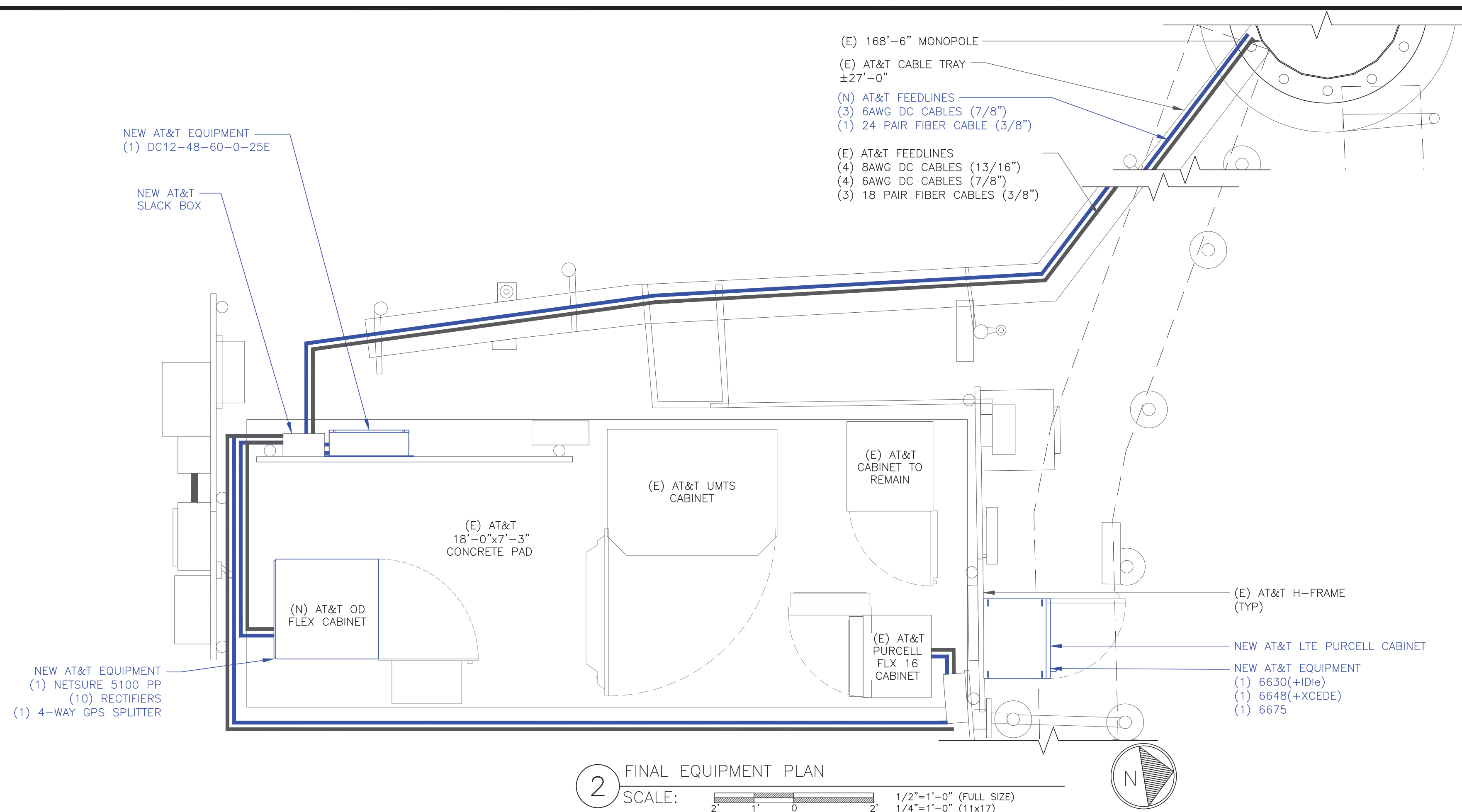
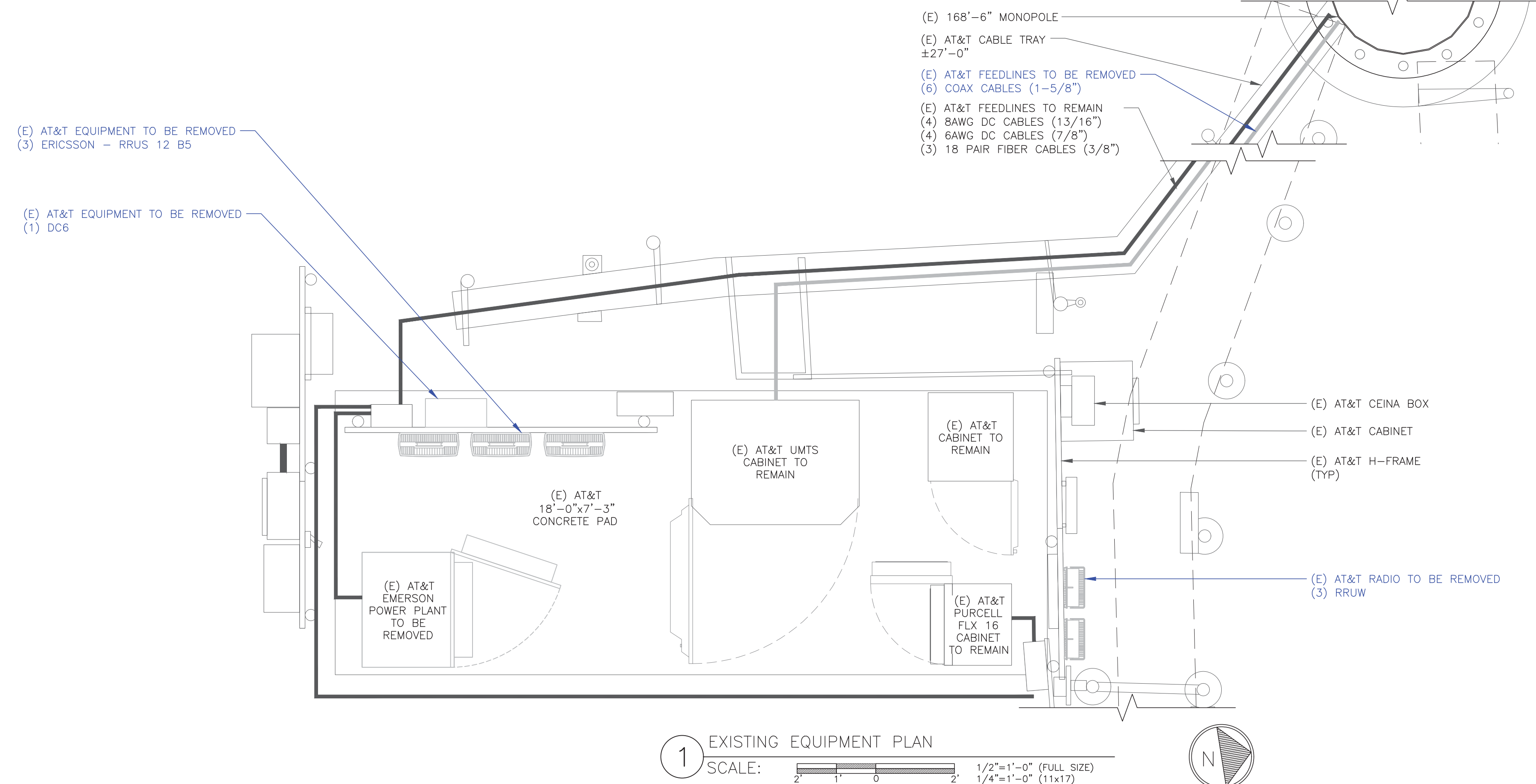
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

AT&T SITE NUMBER:
CTL05833

BU #: 842859
BRISTOL CENTER

371 TERRYVILLE AVENUE
BRISTOL, CT 06010

EXISTING
168'-6" MONOPOLE



GROUND SCOPE OF WORK:

- REMOVE (3) RRUS12 B25
- REMOVE (3) RRUW
- REMOVE (1) DC6
- REMOVE (1) NETSURE 701 PP
- INSTALL (1) NETSURE 5100 PP
- INSTALL (10) RECTIFIERS
- INSTALL (1) OD FLEX CABINET
- INSTALL (1) DC12-48-60-0-25E
- INSTALL (1) 6648 (+XCEDE)
- INSTALL (1) 6675
- INSTALL (1) 4-WAY GPS SPLITTER
- INSTALL NEW LTE PURCELL CABINET

NOTE:

THE POWER DESIGN FOR ANY AC ELECTRICAL POWER CHANGES IS TO BE PERFORMED BY OTHERS AND IS SHOWN HERE FOR REFERENCE PURPOSES ONLY. AT&T IS SOLELY RESPONSIBLE FOR THE ELECTRICAL POWER DESIGN.

ISSUED FOR:

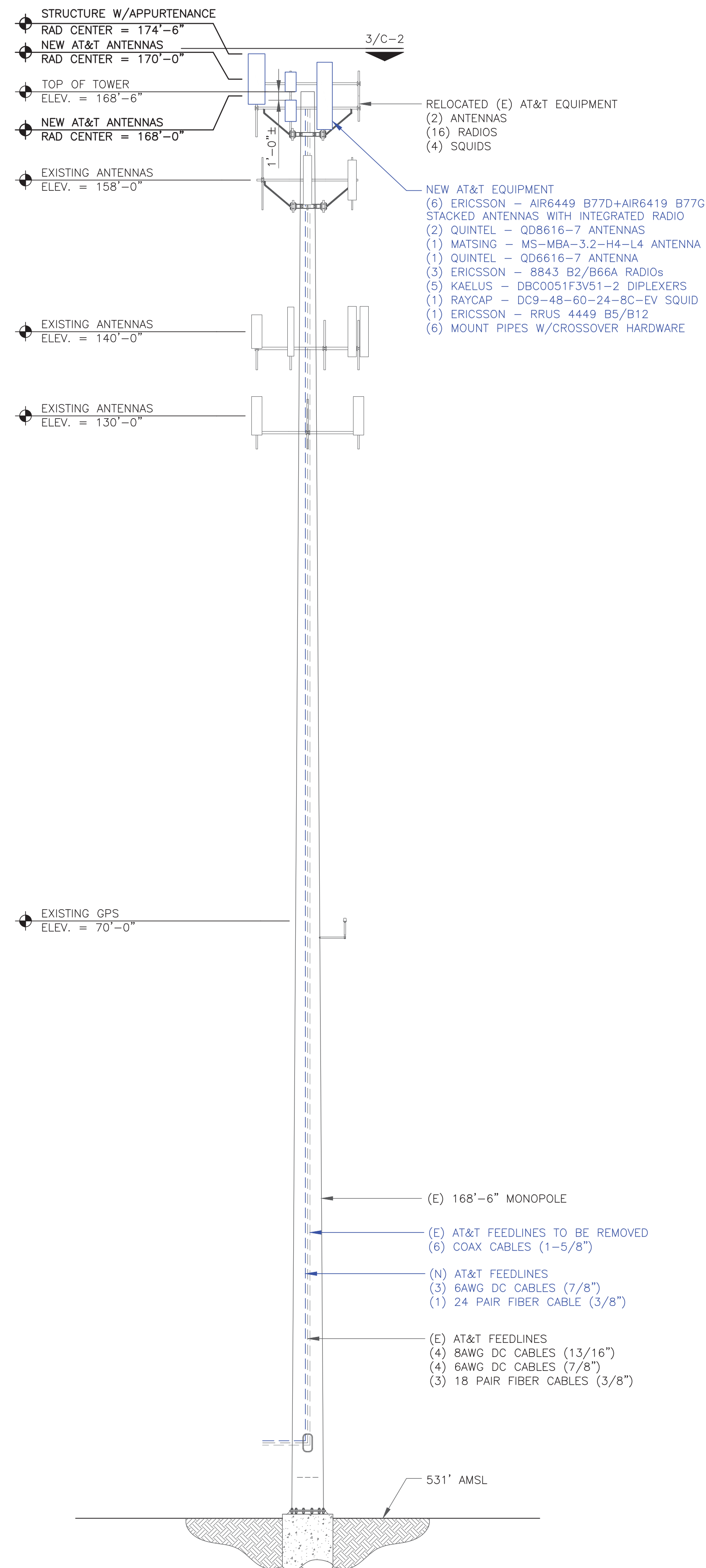
REV	DATE	DRWN	DESCRIPTION	DES./QA
A	3/25/22	JHW	PRELIMINARY REVIEW	KT
0	6/17/22	MEH	CONSTRUCTION	MTJ



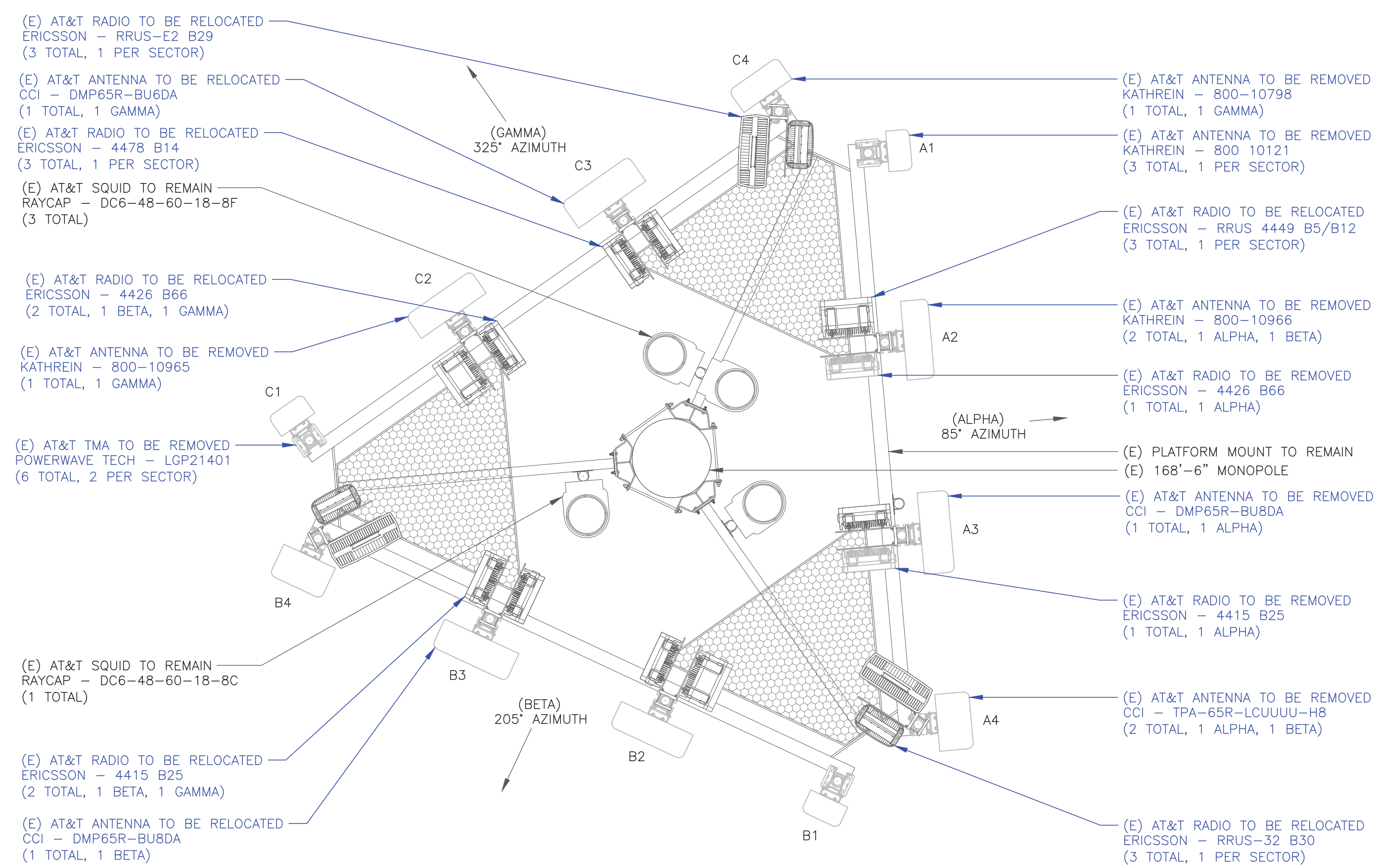
B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

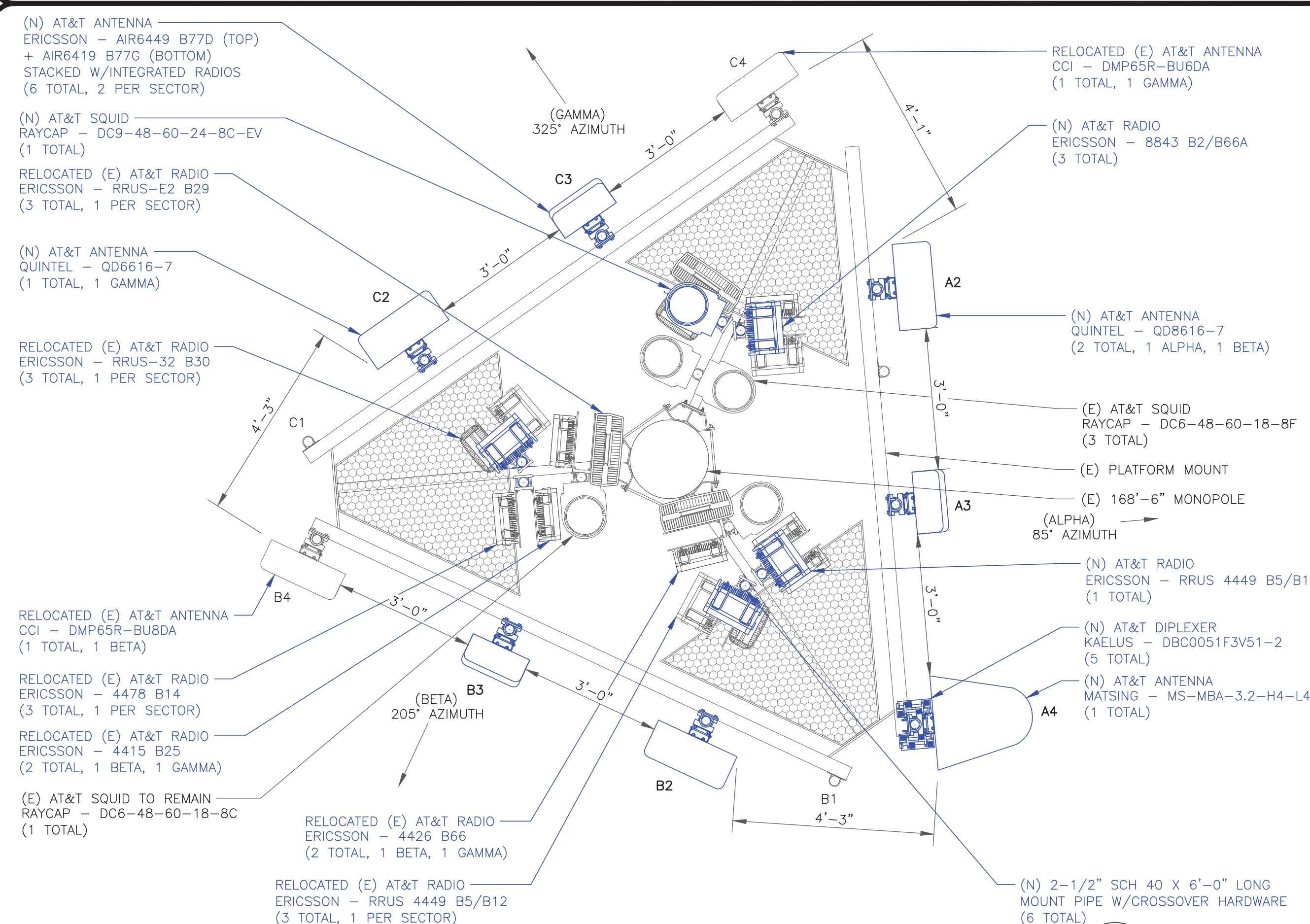
SHEET NUMBER: **C-1.2** REVISION: **0**



1 FINAL ELEVATION
SCALE: NOT TO SCALE



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



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

"LOOK UP" - CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:

THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY 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, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.

- INSTALLER NOTES:**
- REFERENCE C-3 FOR FINAL EQUIPMENT SCHEDULE.
 - REFERENCE C-4 FOR NEW EQUIPMENT SPECIFICATIONS.
 - CONTRACTOR TO VERIFY ALL ANTENNA TIP HEIGHTS DO NOT EXCEED BEACON BASE HEIGHT.
 - 3'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE ANTENNAS ON SAME SECTOR.
 - 6'-0" MINIMUM DISTANCE REQUIRED BETWEEN 700BC & 700DE ANTENNAS ON SAME SECTOR.
 - 4'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE 700 ANTENNAS ON OPPOSING SECTORS.
 - ALL ANTENNA MEASUREMENT DISTANCES MUST BE EDGE TO EDGE (RELOCATE ANTENNAS AS NEEDED).
 - 8" MINIMUM DISTANCE REQUIRED BETWEEN ANTENNA & RADIO. SEE GENERIC EXAMPLE DETAIL ON SHEET C-4.

AT&T
575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

AT&T SITE NUMBER:
CTL05833

BU #: 842859
BRISTOL CENTER

371 TERRYVILLE AVENUE
BRISTOL, CT 06010

EXISTING
168'-6" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
A	3/25/22	JHW	PRELIMINARY REVIEW	KT
0	6/17/22	MEH	CONSTRUCTION	MTJ

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER:
C-2

REVISION:
0

NOTE: RFDS BEING USED
DATED 6/7/22 V FINAL

FINAL ANTENNA AND FEEDLINE SCHEDULE

POS.	TECH	STATUS	AZIMUTH	ANTENNA TYPE	ANTENNA RAD CENTER	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	MAIN COAX SIZE	MAIN COAX LENGTH	COAX QTY	TMA QTY AND MODEL	SURGE PROTECTION	DC/FIBER CABLES	RRHs QTY & MODEL ON TOWER	LOCATION	DIPLXER ON TOWER	DIPLXER ON GROUND	RET CABLE
ALPHA SECTOR																		
A1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	N
A2	LTE	NEW	85°	QUINTEL - QD8616-7	168'-0"	0°	0°/0°	-	-	-	-	(1) (E) DC6-48-60-18-8F (1) (E) DC6-48-60-18-8C	(4) (E) 13/16" 8AWG DC (1) (E) 3/8" 18 PAIR FIBER	(1) (E) ERICSSON - 4478 B14 (1) (E) ERICSSON - RRUS-32 B30 (1) (E) ERICSSON - RRUS-E2 B29	TOWER	N	N	N
A3	5G	NEW	85°	ERICSSON - AIR6419 B77G ERICSSON - AIR6449 B77D STACKED	171'-8" 168'-3"	0°	0°/3°/3°	-	-	-	-	(1) (N) DC9-48-60-24-8C-EV	(1) (N) 3/8" 24 PAIR FIBER (3) (N) 7/8" 6AWG DC	INTEGRATED RADIO	TOWER	N	N	N
A4	LTE/5G	NEW	85°	MATSING - MS-MBA-3.2-H4-L4	170'-0"	0°	0°/2°/7°/7°/0°/2°/7°/7°/7°/7°/7°/7°/7°/7°/7°/7°/7°/7°/7°/7°/7°	-	-	-	-	-	(1) ERICSSON - RRUS 4449 B5/B12 (3) (N) ERICSSON - 8843 B2/B66A (1) (N) ERICSSON - RRUS 4449 B5/B12	TOWER TOWER TOWER	Y	N	N	
BETA SECTOR																		
B1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	N
B2	LTE/5G	NEW	205°	QUINTEL - QD8616-7	170'-0"	0°	0°/3°/2°/2°/2°/2°/2°	-	-	-	-	(1) (E) DC6-48-60-18-8F	(2) (E) 6AWG DC (1) (E) 3/8" 18 PAIR FIBER	(1) ERICSSON - 4478 B14 (1) ERICSSON - 4415 B25 (1) ERICSSON - 4426 B66 (1) ERICSSON - RRUS-E2 B29	TOWER	N	N	N
B3	5G	NEW	205°	ERICSSON - AIR6419 B77G ERICSSON - AIR6449 B77D STACKED	169'-8" 166'-3"	0°	0°/0°	-	-	-	-	-	INTEGRATED RADIO	TOWER	N	N	N	
B4	LTE/5G	EXISTING	205°	CCI - DMP65R-BU8DA	170'-0"	0°	0°/2°/3°	-	-	-	-	-	(1) ERICSSON - RRUS 4449 B5/B12 (1) ERICSSON - RRUS-32 B30	TOWER	N	N	N	
GAMMA SECTOR																		
C1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	N
C2	LTE/5G	NEW	325°	QUINTEL - QD8616-7	170'-0"	0°	2°/3°/6°/6°/6°/6°/6°	-	-	-	-	(1) (E) DC6-48-60-18-8F	(2) (E) 7/8" 6AWG DC (1) (E) 3/8" 18 PAIR FIBER	(1) ERICSSON - 4478 B14 (1) ERICSSON - 4415 B25 (1) ERICSSON - 4426 B66 (1) ERICSSON - RRUS-E2 B29	TOWER	N	N	N
C3	5G	NEW	325°	ERICSSON - AIR6419 B77G ERICSSON - AIR6449 B77D STACKED	169'-8" 166'-3"	0°	0°/0°	-	-	-	-	-	INTEGRATED RADIO	TOWER	N	N	N	
C4	LTE/5G	EXISTING	325°	CCI - DMP65R-BU6DA	170'-0"	0°	2°/2°/3°	-	-	-	-	-	(1) ERICSSON - RRUS 4449 B5/B12 (1) ERICSSON - RRUS-32 B30	TOWER	N	N	N	


NOTE: BOLD DENOTES NEW EQUIPMENT



575 MOROSGO DRIVE
ATLANTA, GA 30324-3300



3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065



1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

AT&T SITE NUMBER:
CTL05833


BU #: **842859**
BRISTOL CENTER

371 TERRYVILLE AVENUE
BRISTOL, CT 06010

EXISTING
168'-6" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
A	3/25/22	JHW	PRELIMINARY REVIEW	KT
0	6/17/22	MEH	CONSTRUCTION	MTJ



8/17/22

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER: C-3	REVISION: 0
-----------------------------	-----------------------

① FINAL ANTENNA AND FEEDLINE SCHEDULE
SCALE: NOT TO SCALE

AT&T SITE NUMBER:
CTL05833

BU #: 842859
BRISTOL CENTER

371 TERRYVILLE AVENUE
BRISTOL, CT 06010

EXISTING
168'-6" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	3/25/22	JHW	PRELIMINARY REVIEW	KT
0	6/17/22	MEH	CONSTRUCTION	MTJ



B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

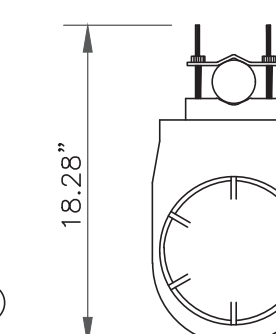
IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER: **C-4** REVISION: **0**

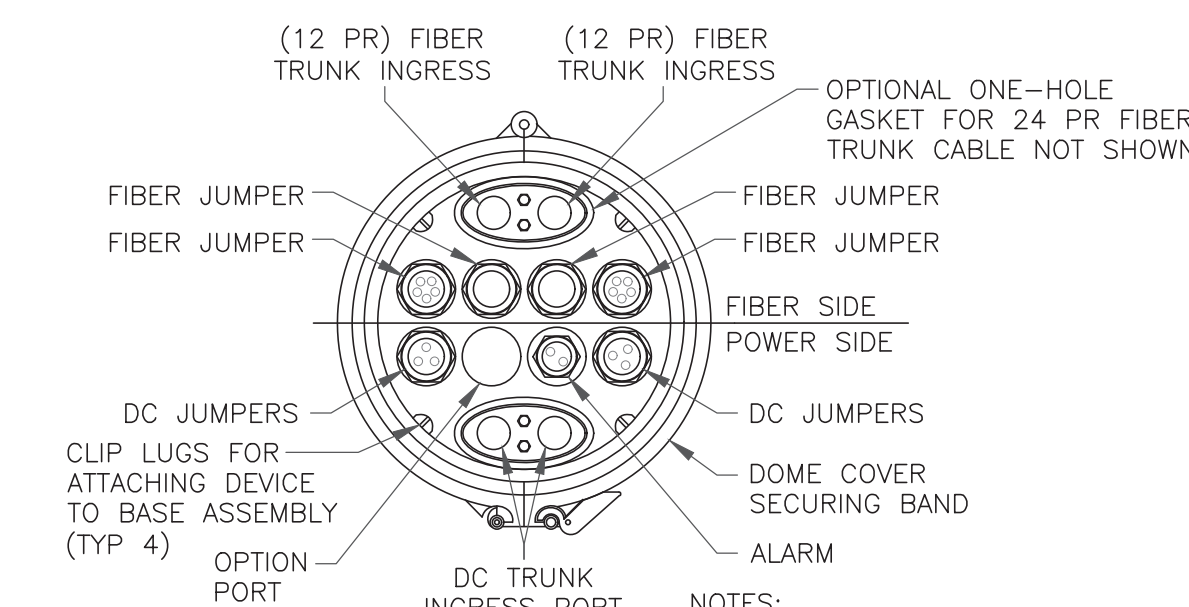
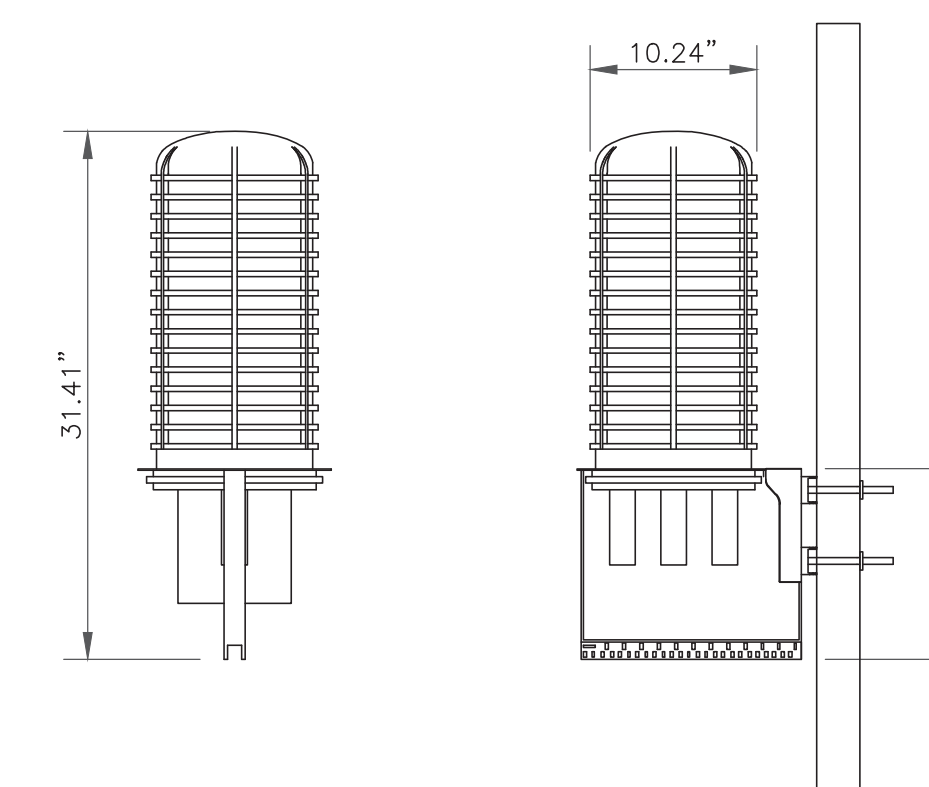
3 NOT USED
SCALE: NOT TO SCALE

RAYCAP
DC9-48-60-24-8C-EV

RAYCAP -- DC9-48-60-24-8C-EV
SIZE: 10.24x31.40 IN.
WEIGHT: 26.2 LBS
NOMINAL OPERATING VOLTAGE: 48 VDC
VOLTAGE PROTECTION RATING: 330 V
WIND LOADING: 150 MPH SUSTAINED (105.7 LBS)
WIND LOADING: 195 MPH GUST (213.6 LBS)



CONTRACTOR TO USE "THREAD LUBRICANT" ON
MOUNTING BOLTS DURING INSTALLATION



NOTES:
1. REMOVE CABLE SEALING GLAND AND
INSTALL M32x1.5 METRIC-TO-1" NPT
ADAPTER (COOPER CROUSE-HINES P/N
CAP 740 994 OR EQUIVALENT MFR) WHEN
CONNECTING CONDUIT TO OVP.

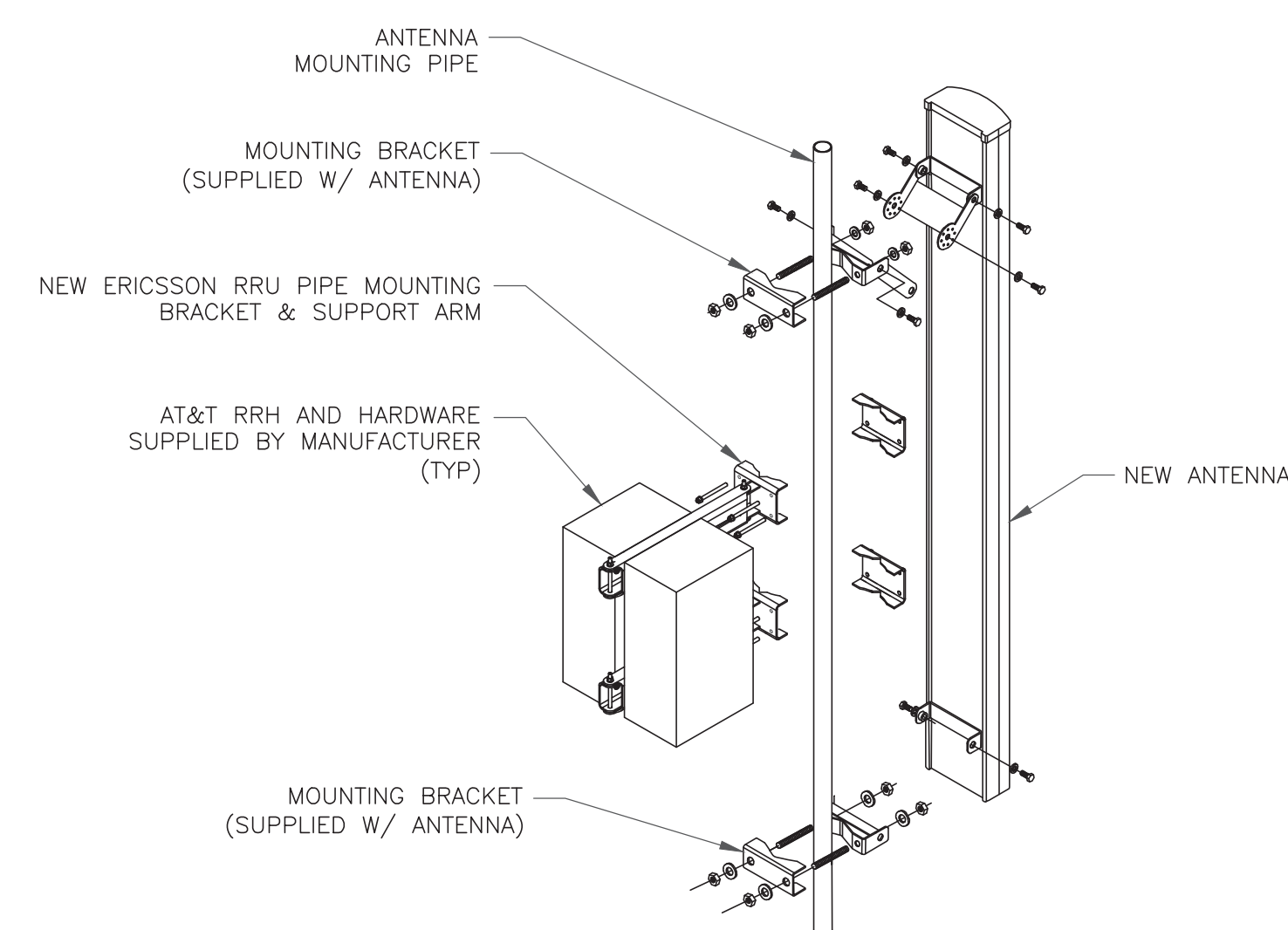
6 SQUID MOUNTING DETAIL
SCALE: NOT TO SCALE

1 NOT USED
SCALE: NOT TO SCALE

2 NOT USED
SCALE: NOT TO SCALE

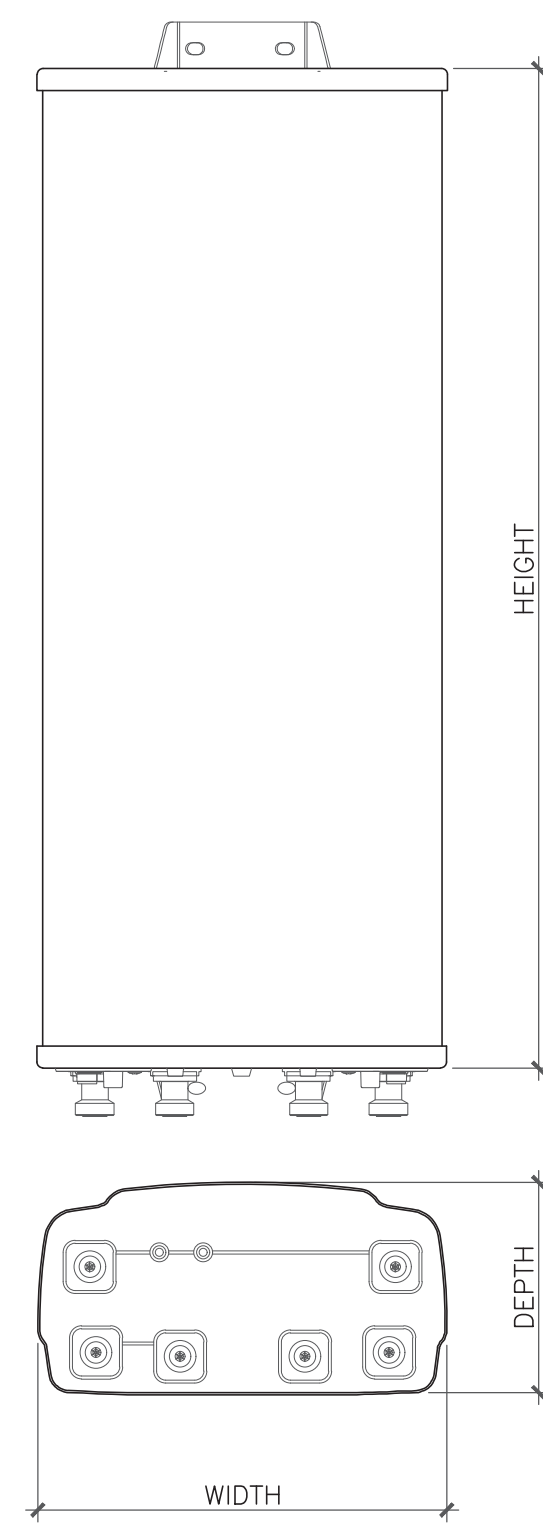
INSTALLER NOTE:

1. COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRHs RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING.
2. DO NOT OPEN RRH PACKAGES IN THE RAIN.
3. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.
4. RRHs SHALL NOT BE INSTALLED CLOSER THAN 8" TO ANTENNAS.



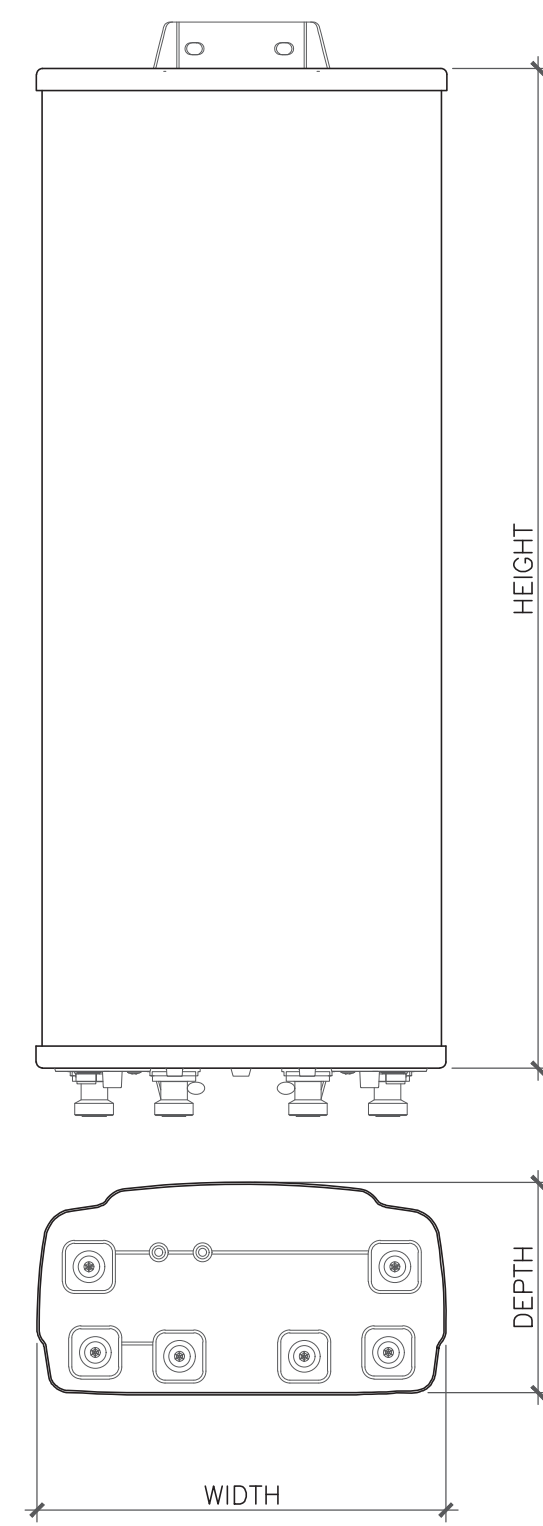
5 ANTENNA WITH DUAL RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

4 NOT USED
SCALE: NOT TO SCALE



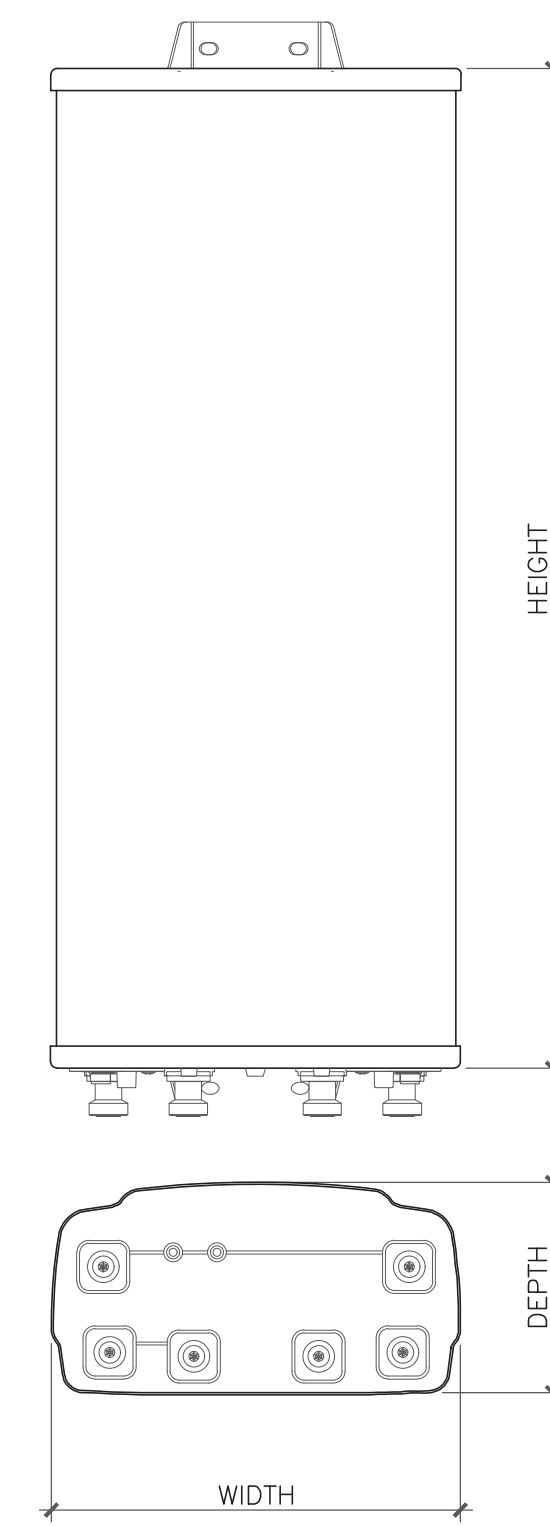
ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
QD8616-7	96"	22"	9.6"	150 lbs

1 ANTENNA DETAIL
SCALE: NOT TO SCALE



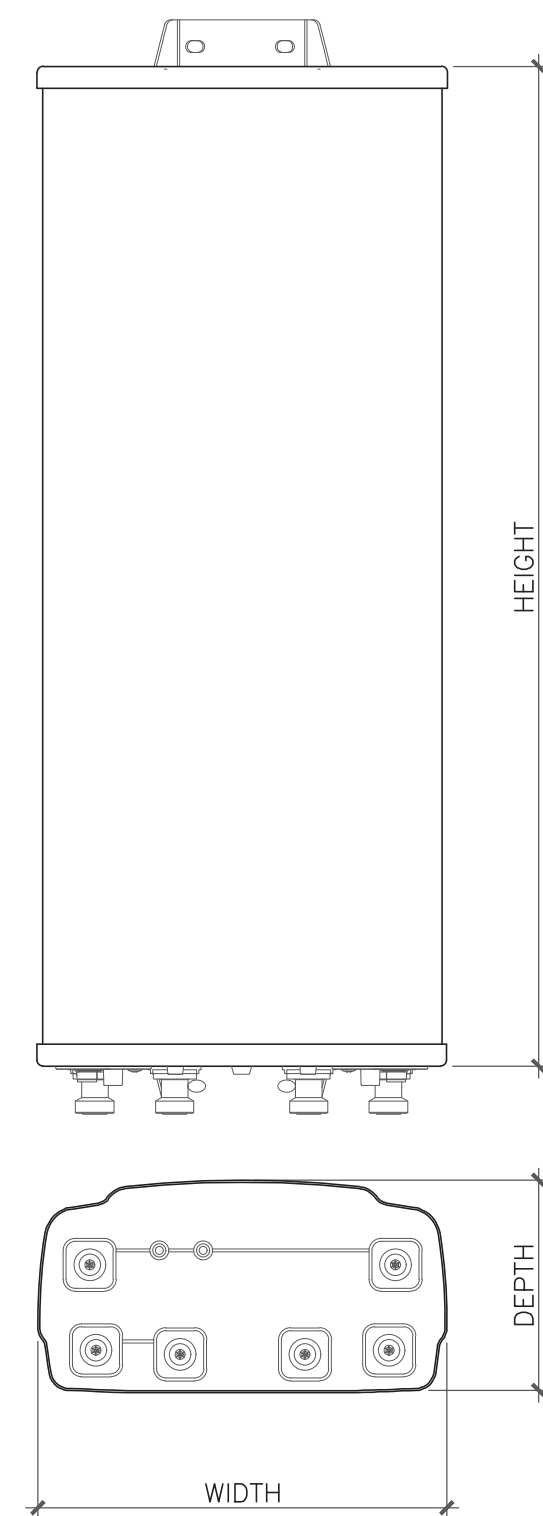
ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
QD6616-7	72"	22"	9.6"	130 lbs

2 ANTENNA DETAIL
SCALE: NOT TO SCALE



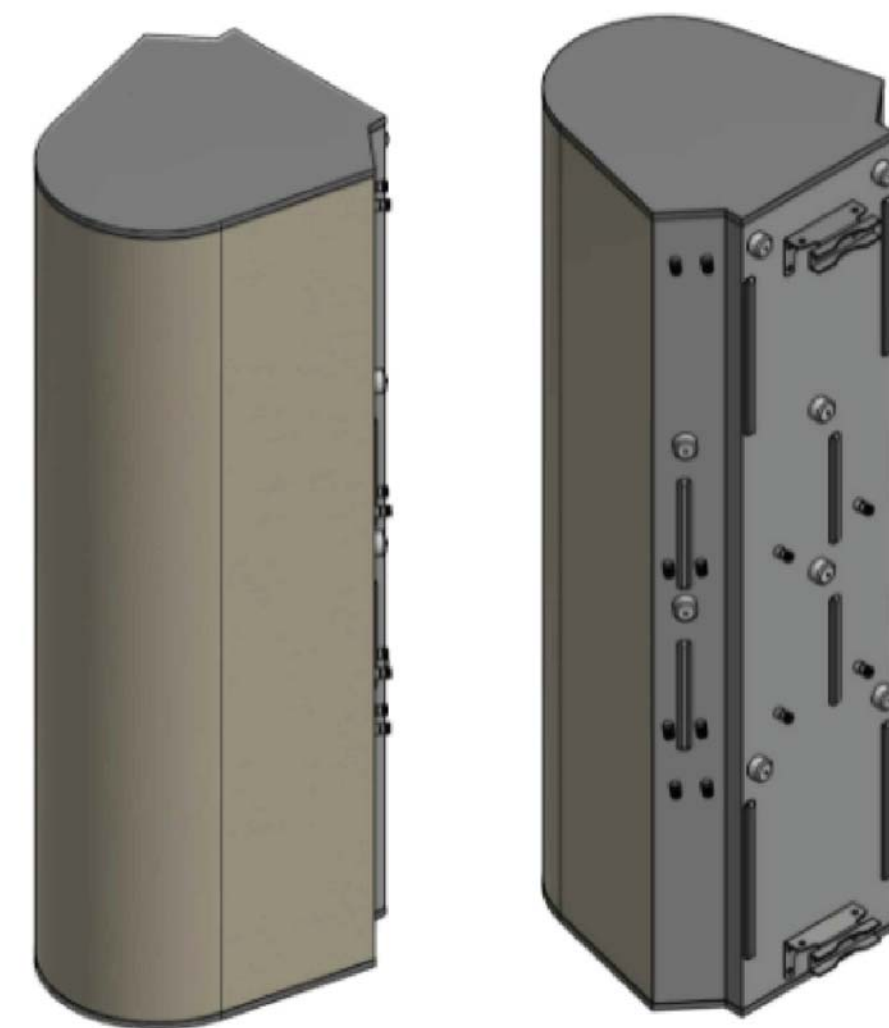
ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
AIR6449 B77D	30.39"	15.87"	8.07"	81.6 lbs

3 ANTENNA DETAIL
SCALE: NOT TO SCALE



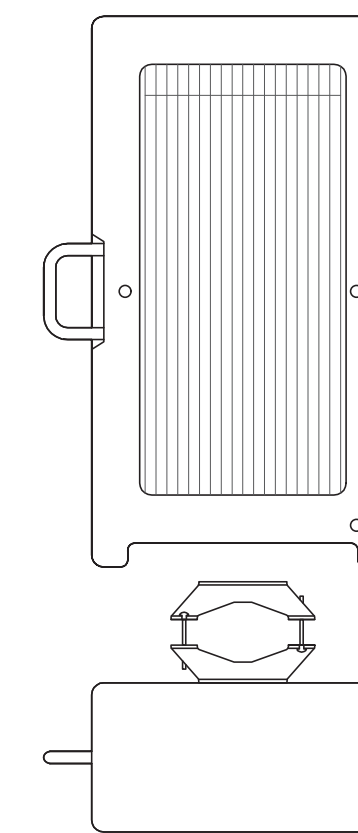
ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
AIR6419 B77G	27.95"	15.75"	6.68"	66.2 lbs

4 ANTENNA DETAIL
SCALE: NOT TO SCALE



ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
MS-MBA-3.2-H4-L4	72"	24"	25"	130 lbs

5 ANTENNA DETAIL
SCALE: NOT TO SCALE



ERICSSON - 8843 B2/B66A
WEIGHT (FULLY EQUIPPED): 72 LBS
SIZE (HxWxD): 14.9x13.2x10.9 IN.
CONNECTOR TYPE: 4.3-10 FEMALE (4 TOTAL PORTS)

6 RRH DETAIL
SCALE: NOT TO SCALE

575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

AT&T SITE NUMBER:
CTL05833

BU #: **842859**
BRISTOL CENTER

371 TERRYVILLE AVENUE
BRISTOL, CT 06010

EXISTING
168'-6" MONOPOLE

ISSUED FOR:

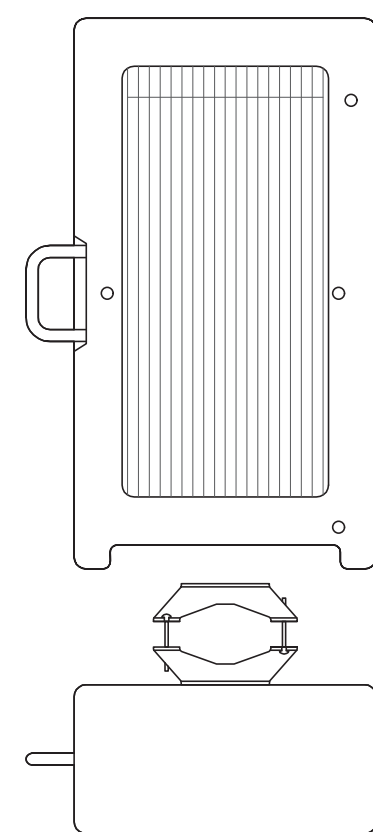
REV	DATE	DRWN	DESCRIPTION	DES./QA
A	3/25/22	JHW	PRELIMINARY REVIEW	KT
0	6/17/22	MEH	CONSTRUCTION	MTJ



B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER: **C-5.1** REVISION: **0**



ERICSSON - RRUS 4449 B5/B12
 WEIGHT (FULLY EQUIPPED): 71 LBS
 SIZE (HxWxD): 17.9x13.19x9.44 IN.
 CONNECTOR TYPE: 4.3-10 FEMALE (4 TOTAL PORTS)

1 ERICSSON - RRUS 4449 B5/B12
 SCALE: NOT TO SCALE



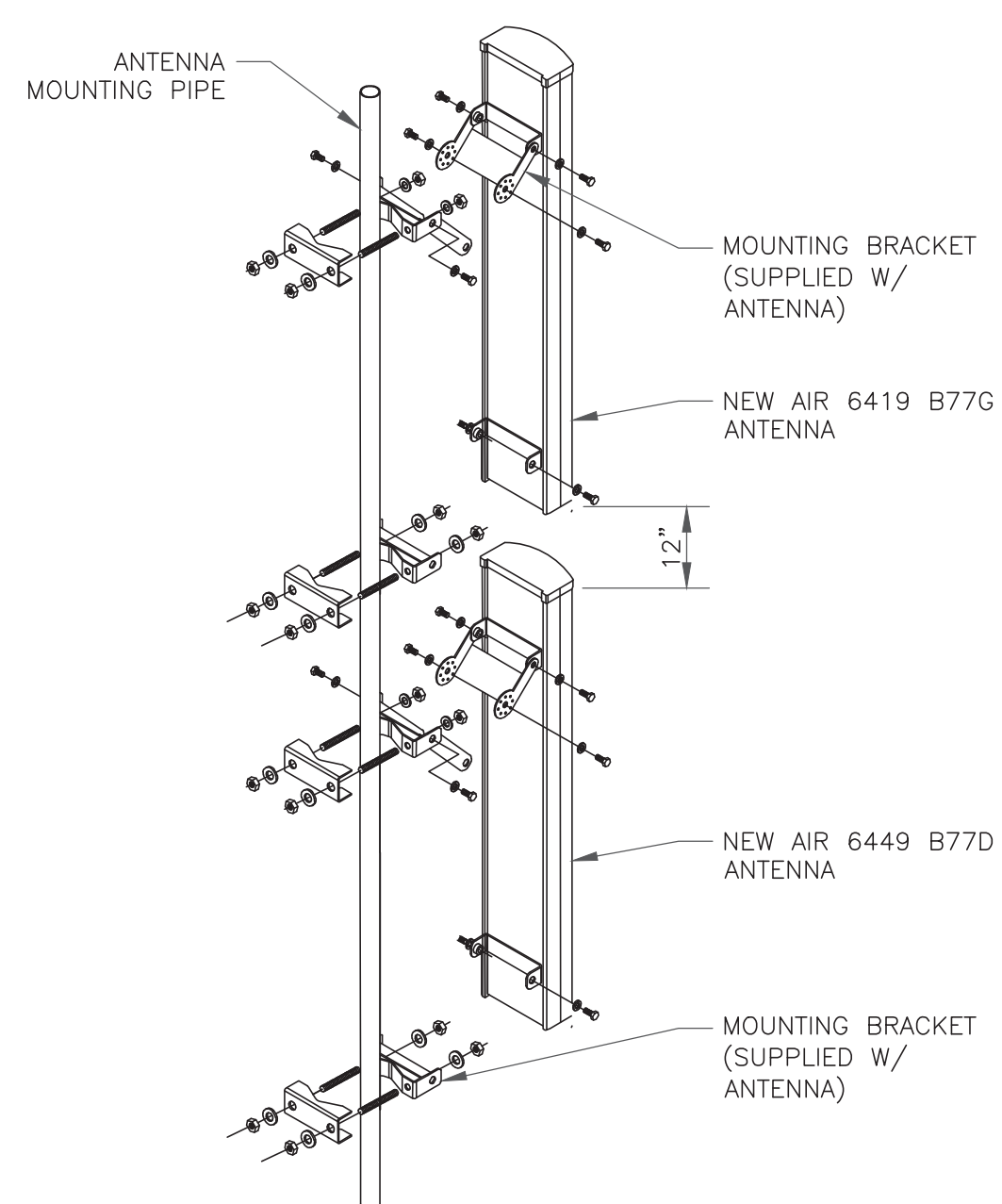
DIPLEXER DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
DBC0051F3V51-2	8"	6.2"	4.4"	12.4 lbs

2 KAEPLUS - DBC0051F3V51-2
 SCALE: NOT TO SCALE

3 NOT USED
 SCALE: NOT TO SCALE

INSTALLER NOTES:

1. COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRHs RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING.
2. DO NOT OPEN RRH PACKAGES IN THE RAIN.
3. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.



4 STACKED ANTENNA MOUNTING DETAIL
 SCALE: NOT TO SCALE

5 NOT USED
 SCALE: NOT TO SCALE

6 NOT USED
 SCALE: NOT TO SCALE

575 MOROSGO DRIVE
 ATLANTA, GA 30324-3300

3 CORPORATE PARK DRIVE, SUITE 101
 CLIFTON PARK, NY 12065

1717 S. BOULDER
 SUITE 300
 TULSA, OK 74119
 PH: (918) 587-4630
 www.btgrp.com

AT&T SITE NUMBER:
CTL05833

BU #: **842859**
BRISTOL CENTER

371 TERRYVILLE AVENUE
 BRISTOL, CT 06010

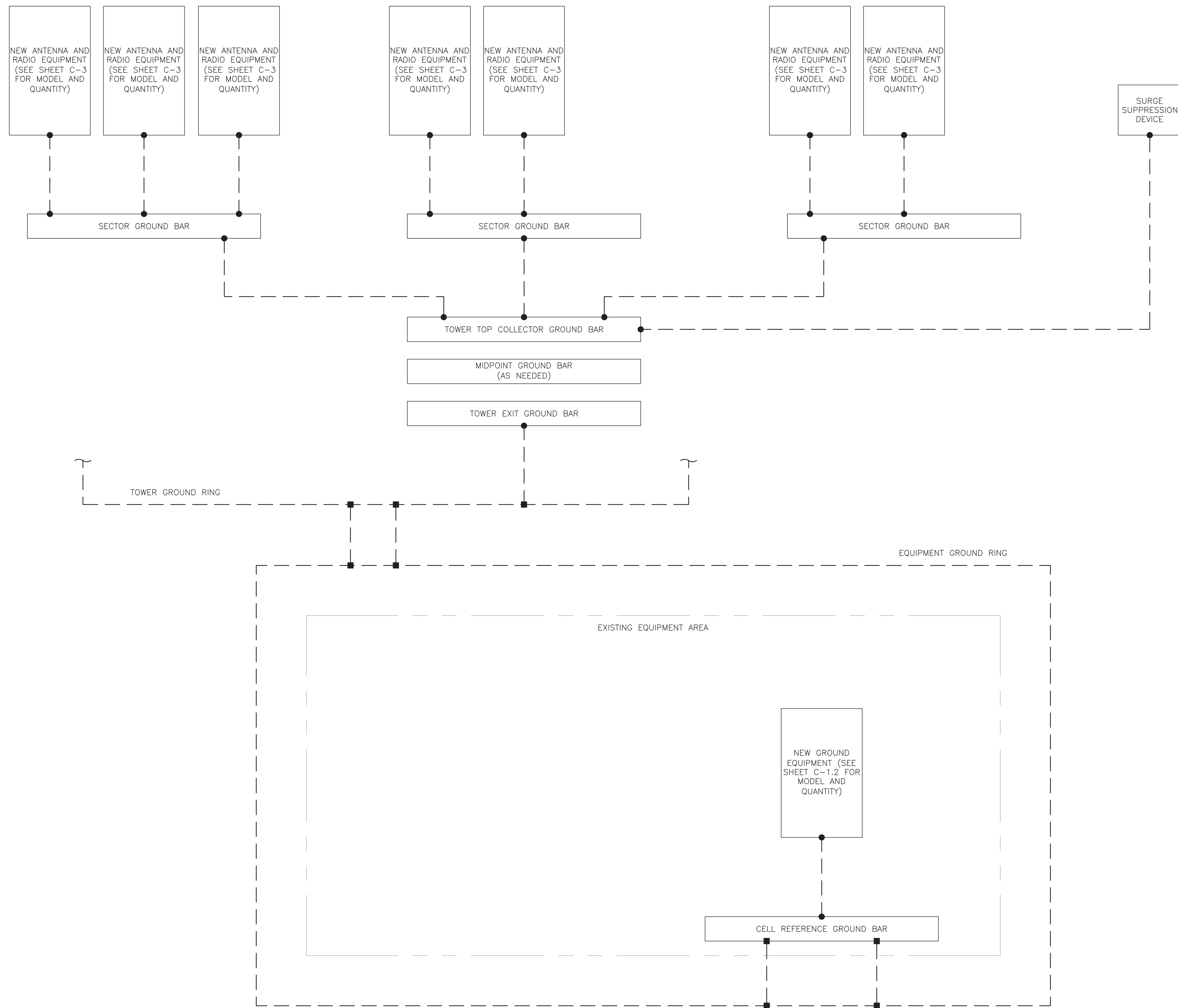
EXISTING
 168'-6" MONOPOLE

ISSUED FOR:				
REV	DATE	DRWN	DESCRIPTION	DES./QA
A	3/25/22	JHW	PRELIMINARY REVIEW	KT
0	6/17/22	MEH	CONSTRUCTION	MTJ

B&T ENGINEERING, INC.
 PEC.0001564
 Expires 2/10/23

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: C-5.2	REVISION: 0
-------------------------------	-----------------------



GROUNDING PLAN LEGEND:

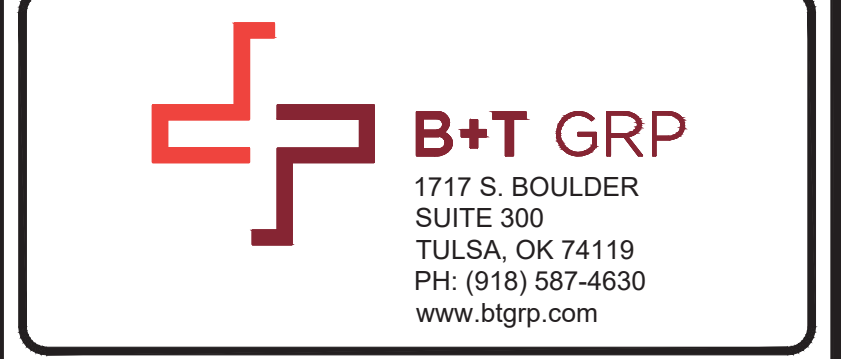
- GROUND WIRE
- EXOTHERMIC WELD
- MECHANICAL CONNECTION
- COPPER GROUND ROD
- ⊗ GROUND ROD W/ TEST WELL

CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUITS (ATT-TP-76416 7.6.7).

HATCH PLATE GROUND BAR: BOND TO THE INTERIOR GROUND RING WITH (2) #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT, THE CELL SITE REFERENCE GROUND BAR MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) #2 STRANDED GREEN INSULATED COPPER CONDUCTORS.

EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE (ATT-TP-76416 7.6.7.2).

DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICES CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR PER TP76300 SECTION H 6 AND TP76416 FIGURE 7-11 REQUIREMENTS.



AT&T SITE NUMBER:
CTL05833

BU #: 842859
BRISTOL CENTER

371 TERRYVILLE AVENUE
BRISTOL, CT 06010

EXISTING
168'-6" MONOPOLE

ISSUED FOR:

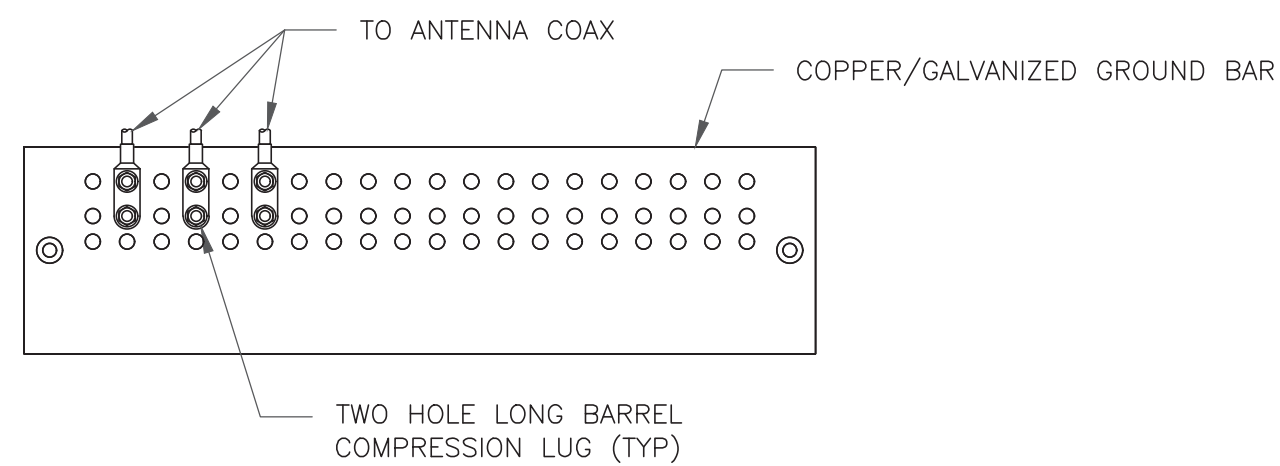
REV	DATE	DRWN	DESCRIPTION	DES./QA
A	3/25/22	JHW	PRELIMINARY REVIEW	KT
0	6/17/22	MEH	CONSTRUCTION	MTJ

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

1 GROUNDING SCHEMATIC
SCALE: NOT TO SCALE

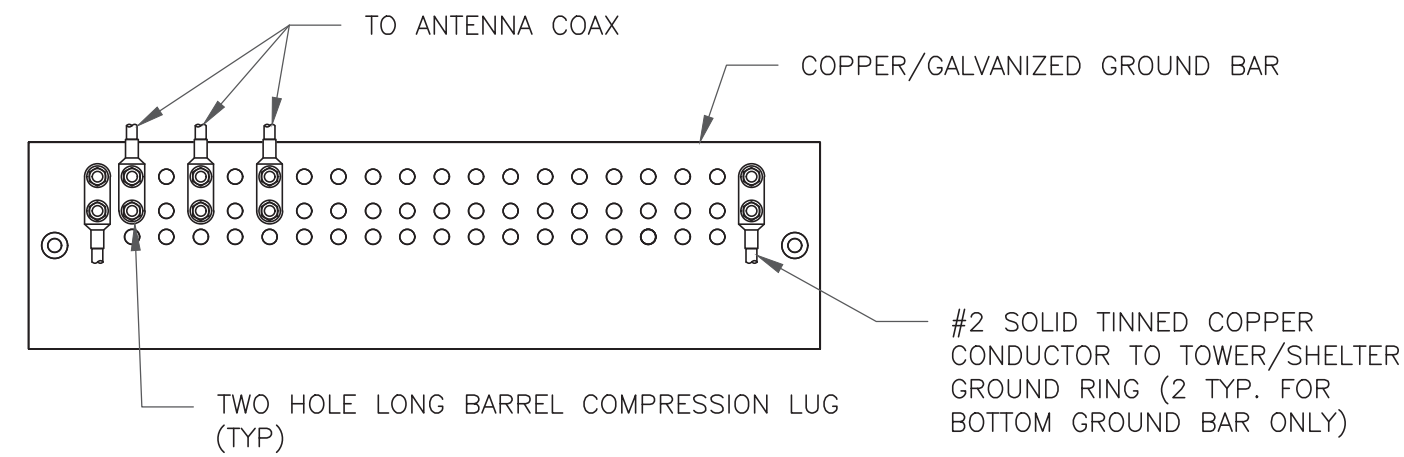
SHEET NUMBER: **G-1** REVISION: **0**



NOTES:

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

1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE

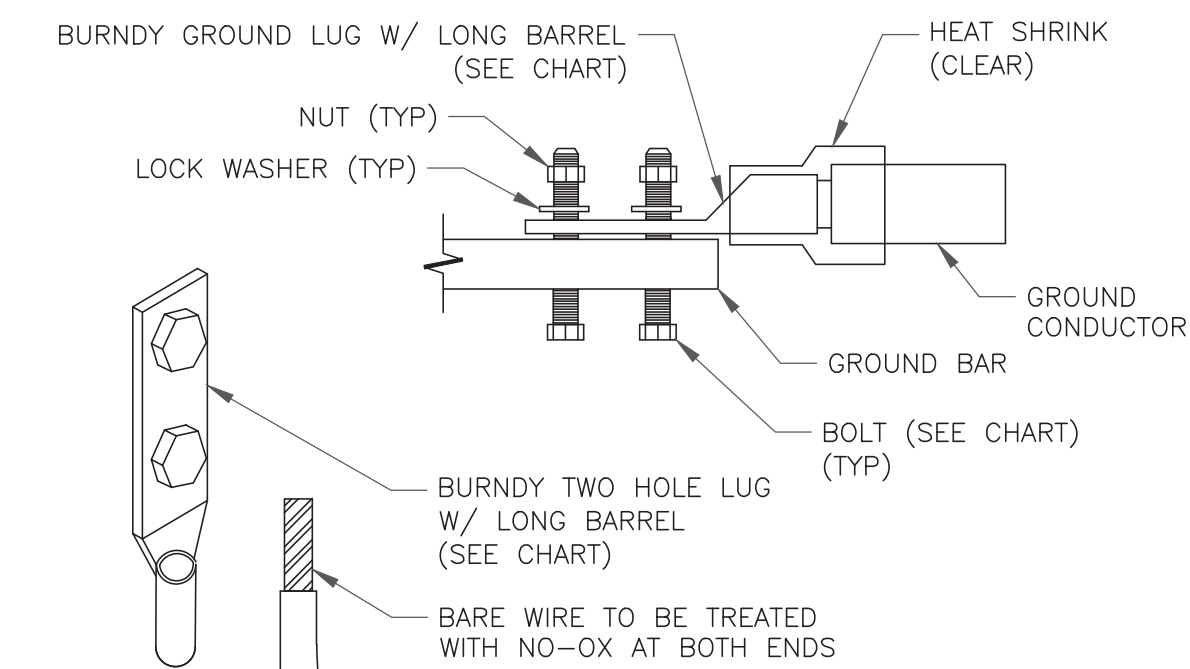


NOTES:

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

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

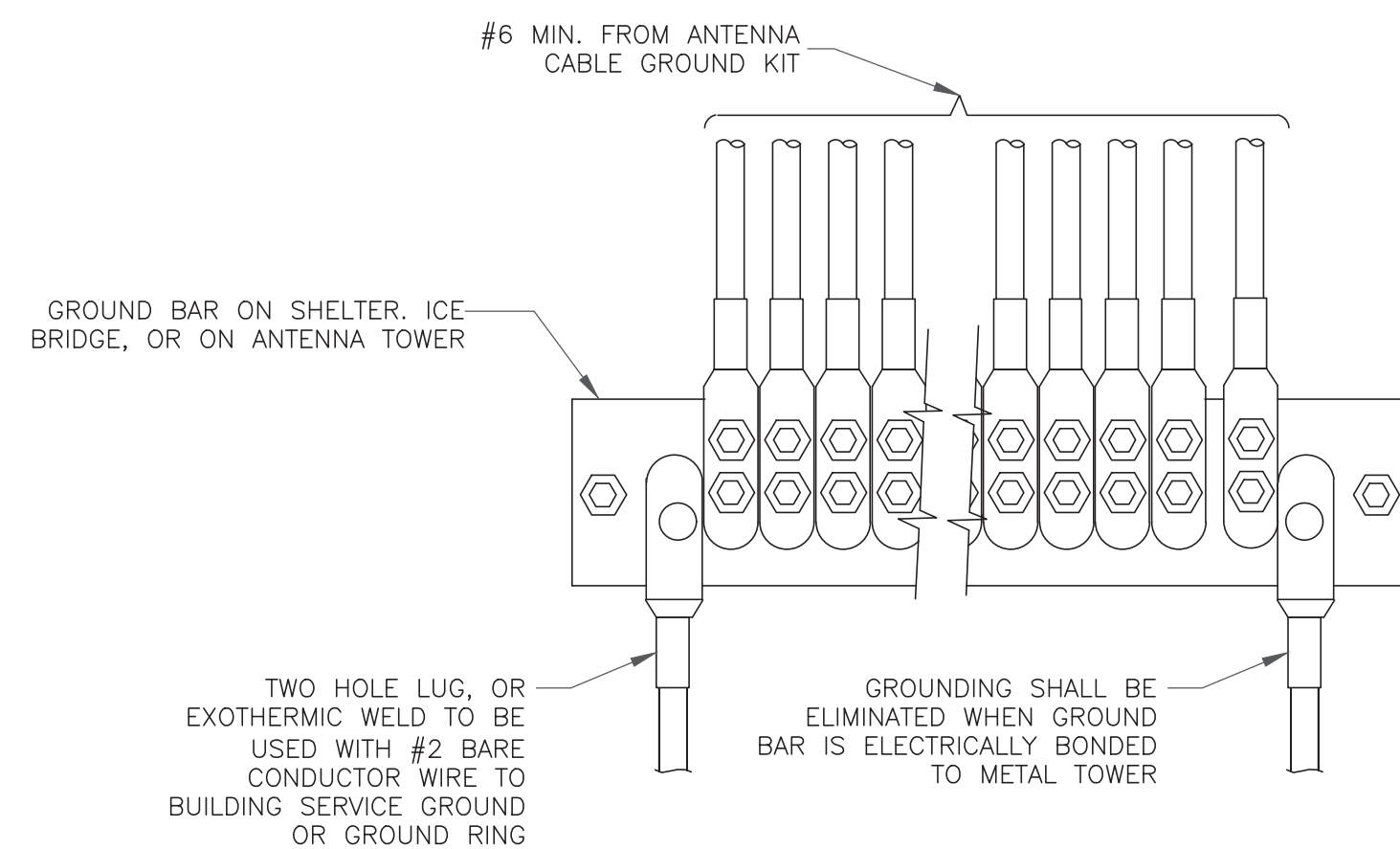
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 SOLID TINNED	YA3C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 STRANDED	YA2C-2TC38	3/8" - 16 NC SS 2 BOLT
#2/0 STRANDED	YA26-2TC38	3/8" - 16 NC SS 2 BOLT
#4/0 STRANDED	YA28-2N	1/2" - 16 NC SS 2 BOLT



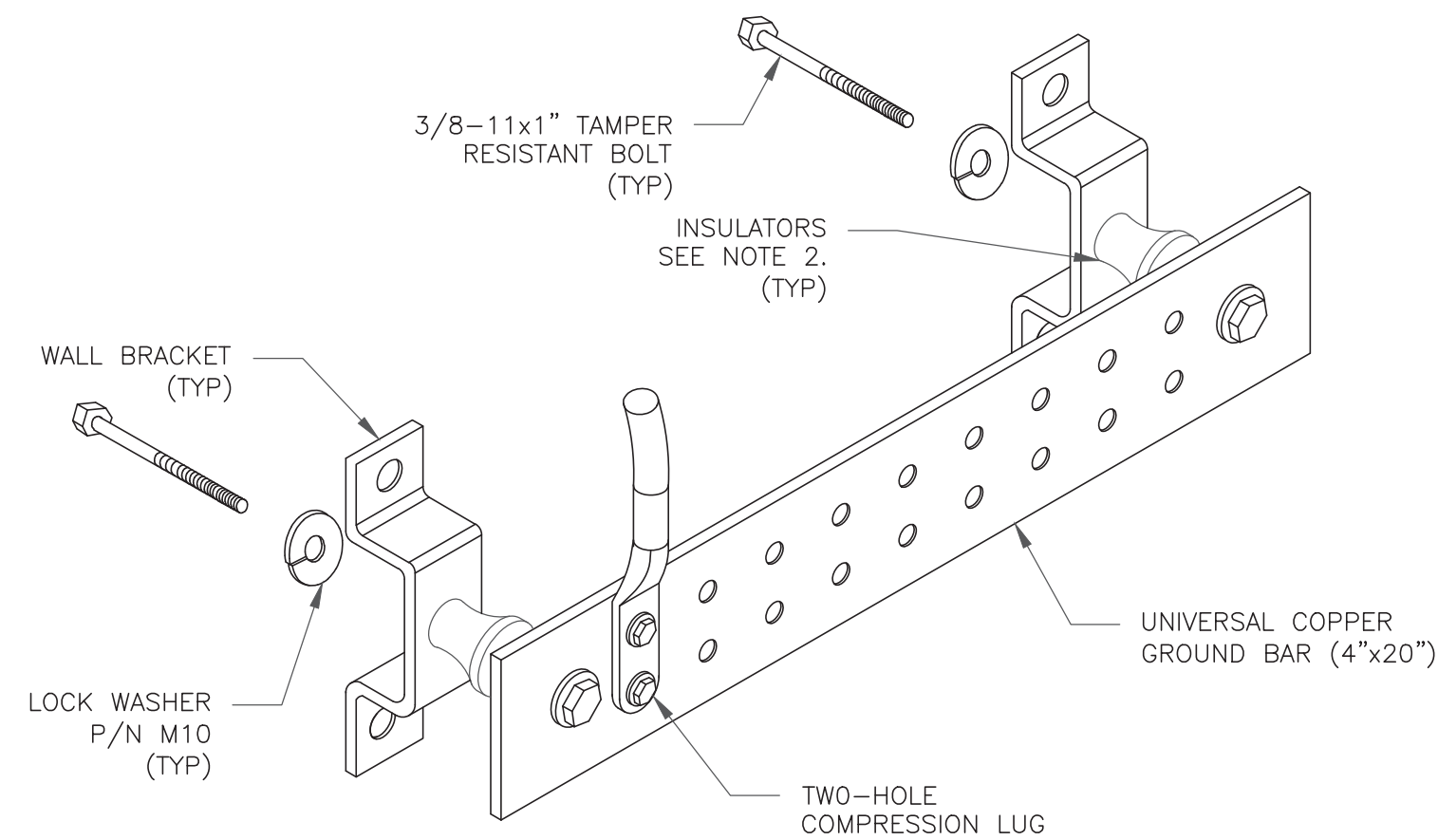
NOTE:

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.

3 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



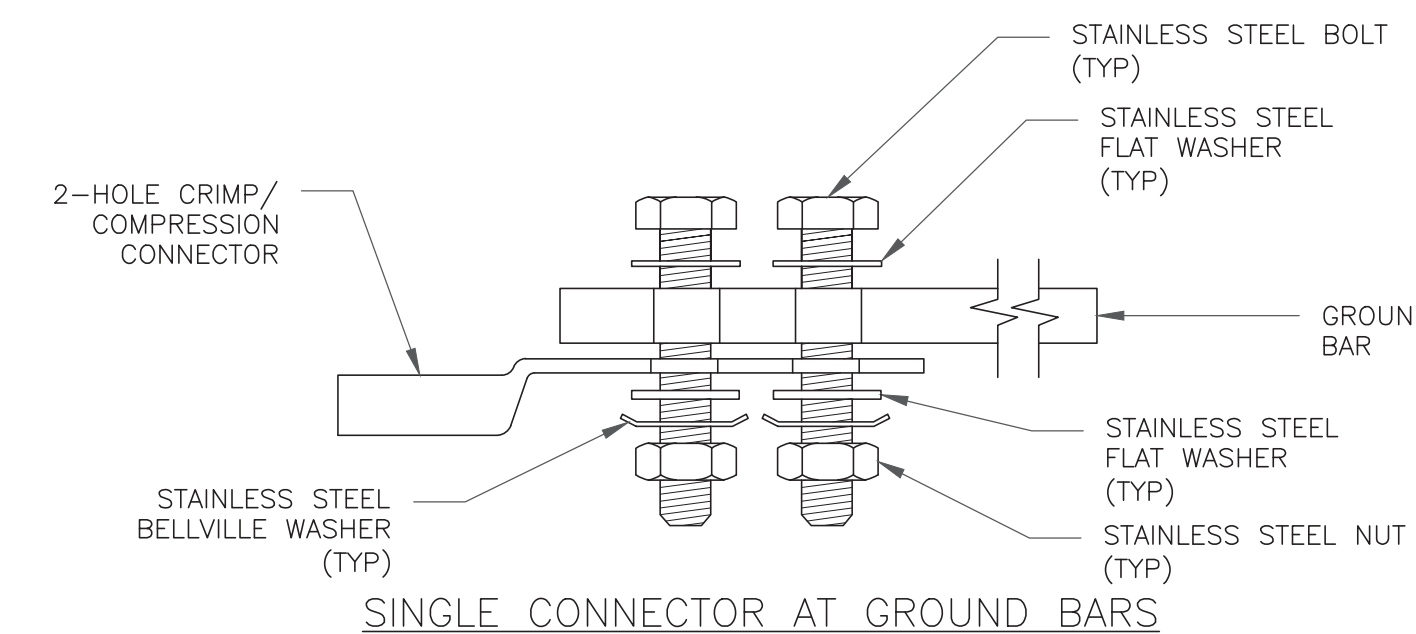
4 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



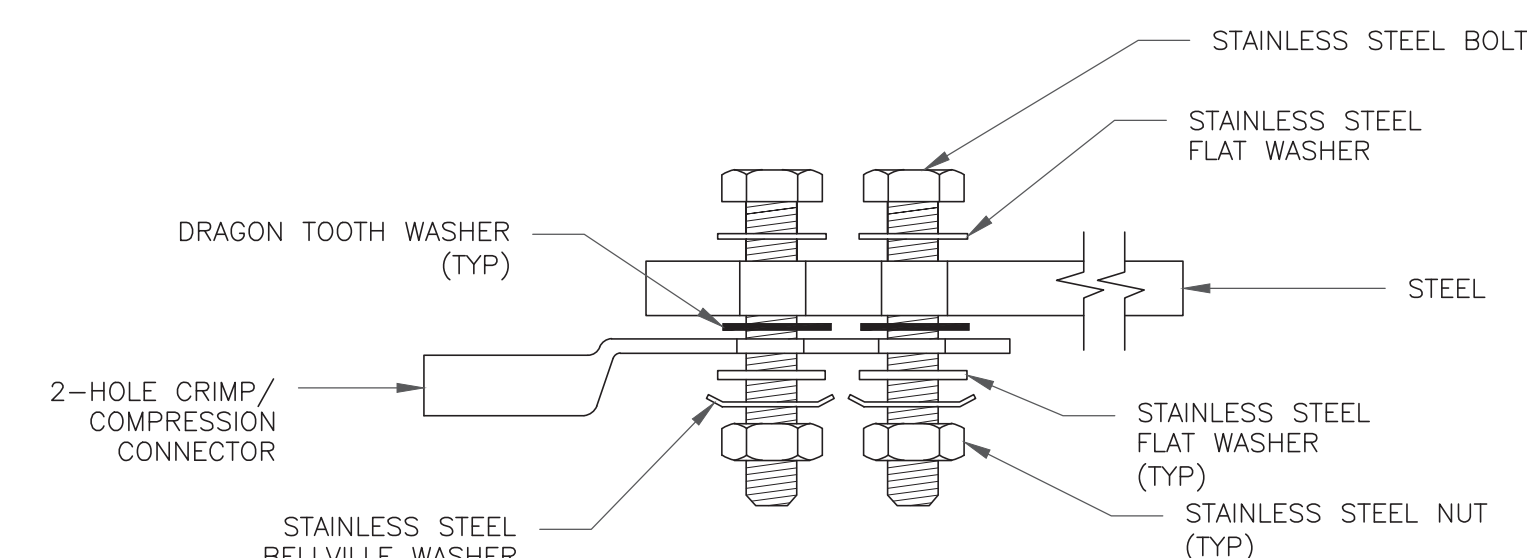
NOTES:

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.

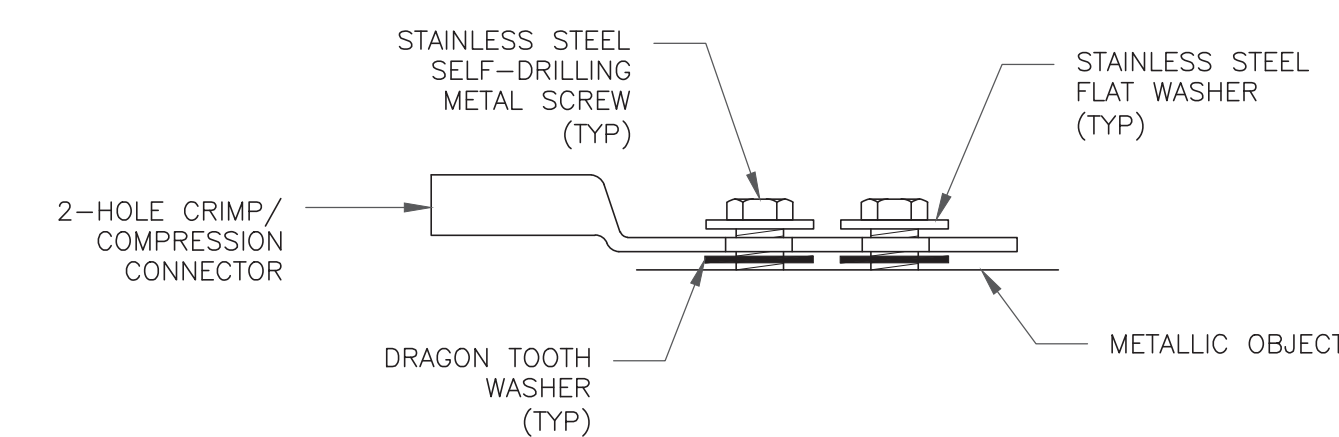
5 GROUND BAR DETAIL
SCALE: NOT TO SCALE



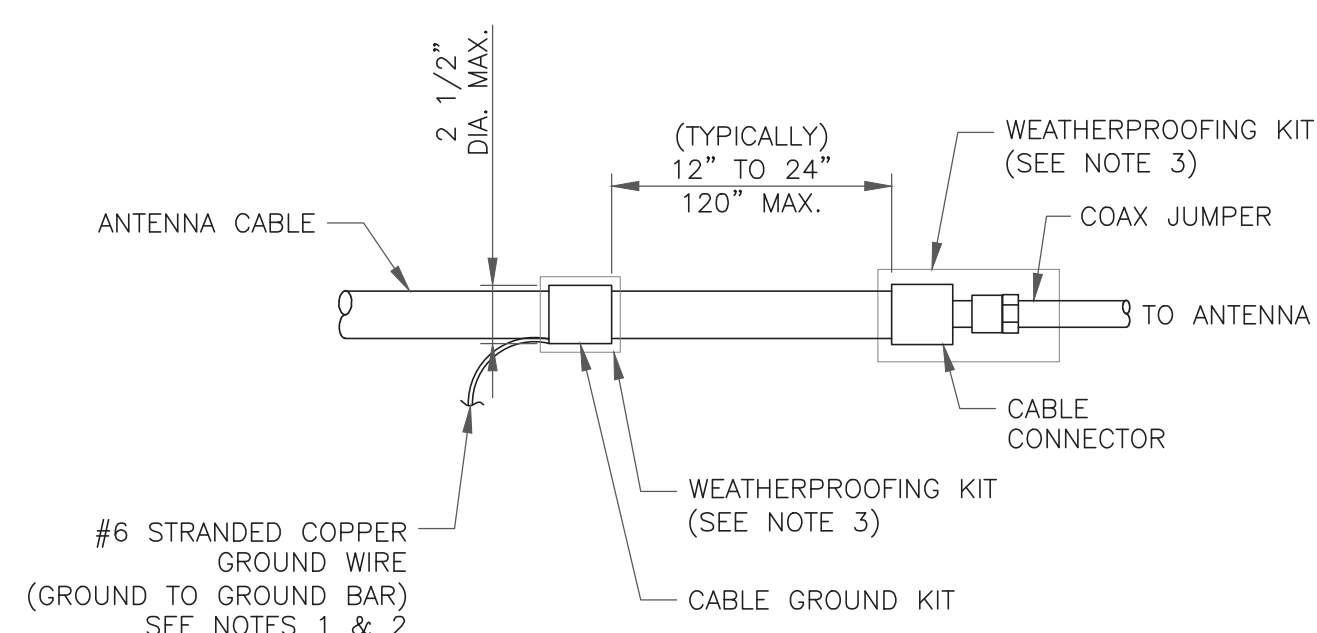
SINGLE CONNECTOR AT GROUND BARS



SINGLE CONNECTOR AT STEEL OBJECTS



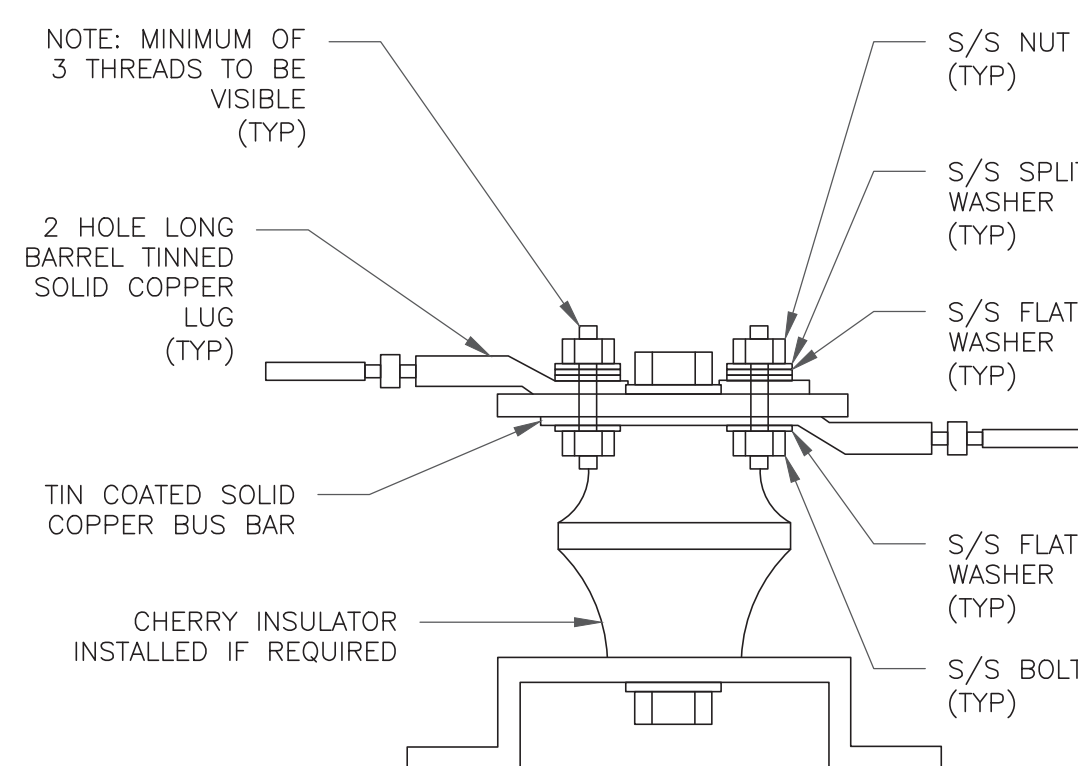
SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS



NOTES:

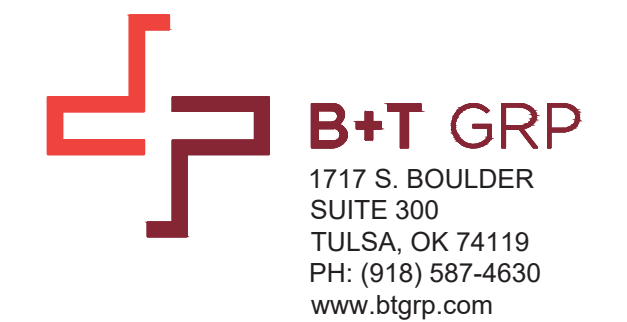
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

6 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE

8 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



AT&T SITE NUMBER:
CTL05833

BU #: 842859
BRISTOL CENTER

371 TERRYVILLE AVENUE
BRISTOL, CT 06010

EXISTING
168'-6" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	3/25/22	JHW	PRELIMINARY REVIEW	KT
0	6/17/22	MEH	CONSTRUCTION	MTJ



B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

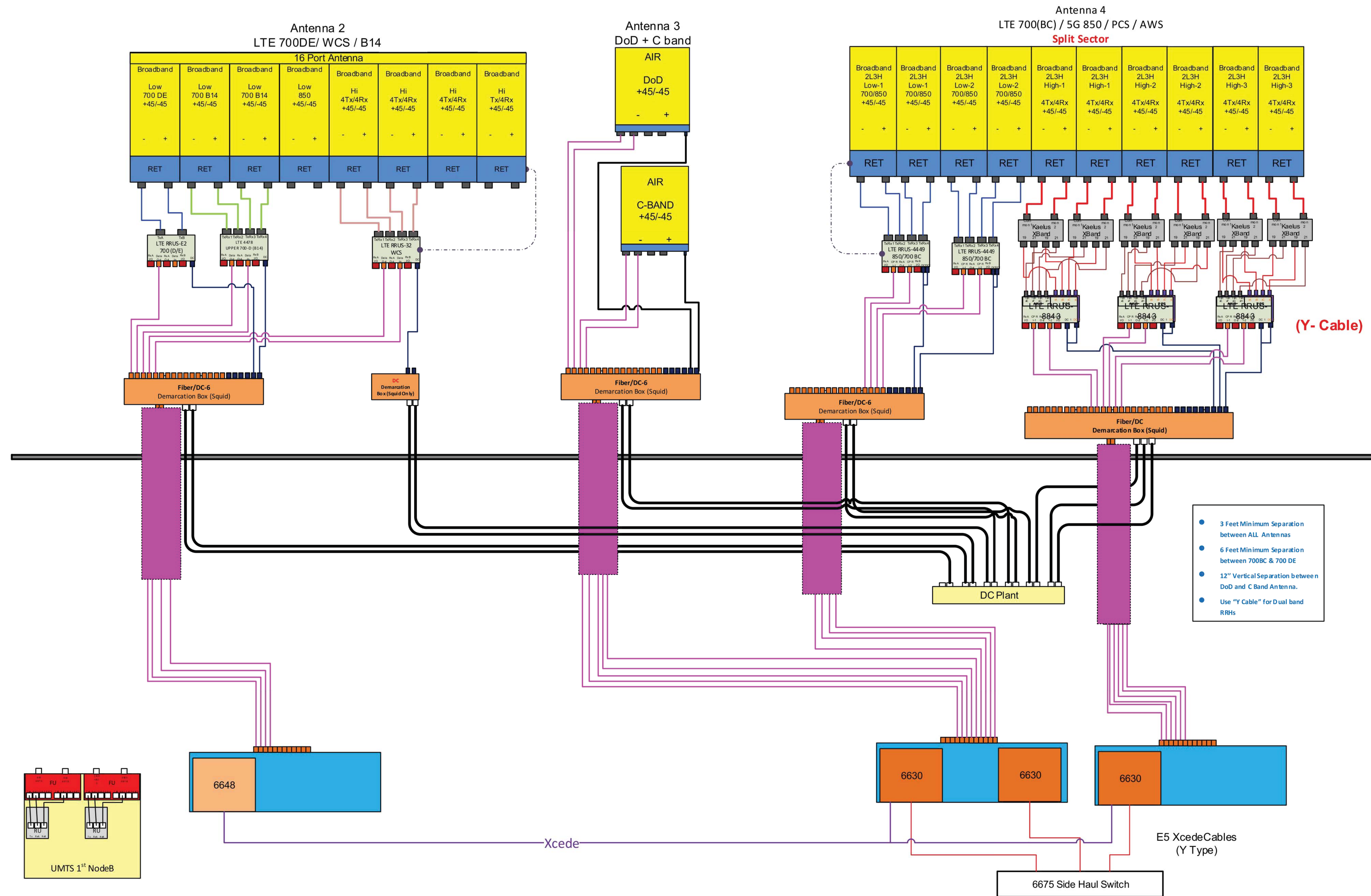
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

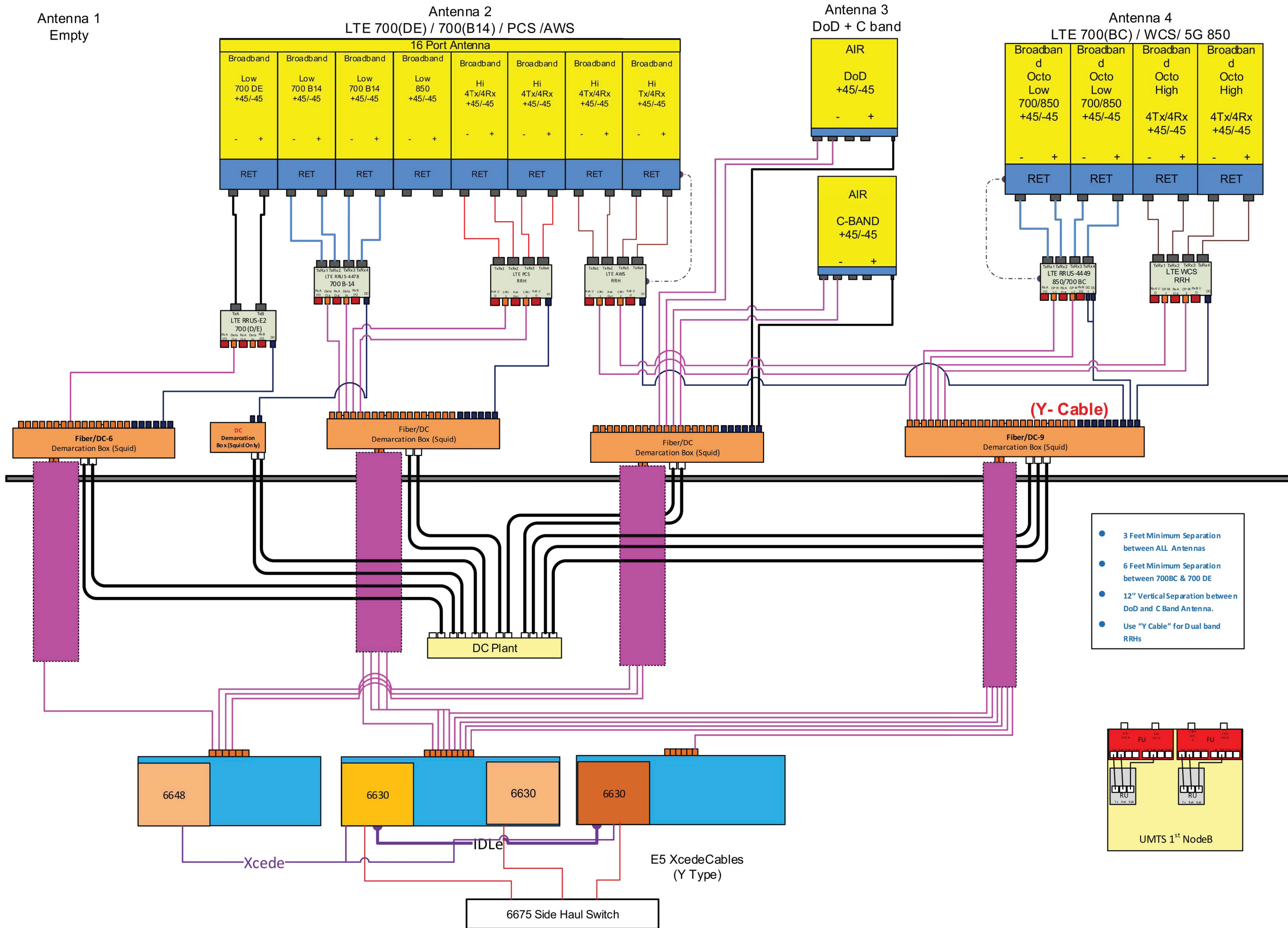
SHEET NUMBER:

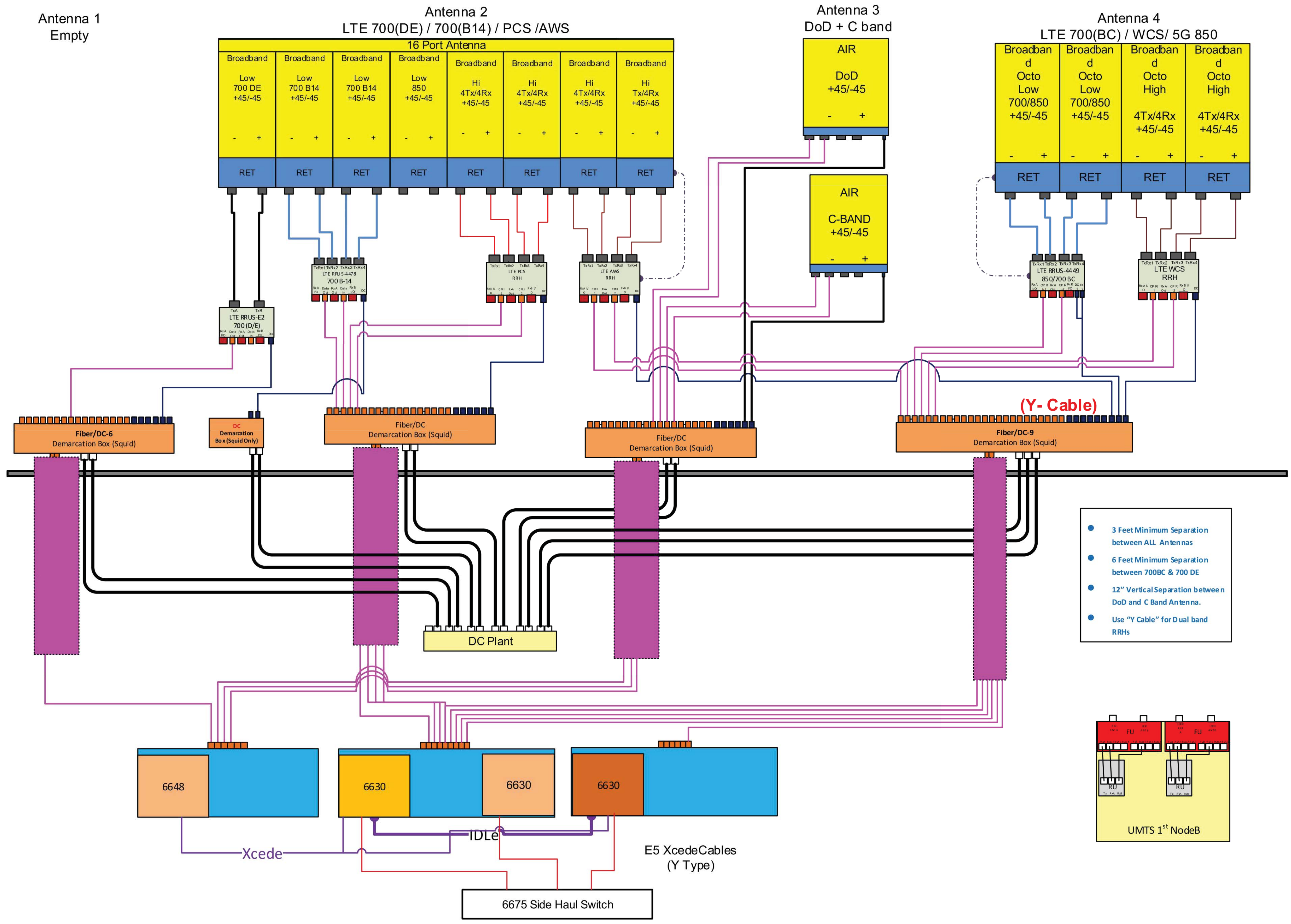
G-2

REVISION:

0







- 3 Feet Minimum Separation between ALL Antennas
- 6 Feet Minimum Separation between 700BC & 700 DE
- 12" Vertical Separation between DoD and C Band Antenna.
- Use "Y Cable" for Dual band RRHs