

VICINITY MAP



AMERICAN TOWER®

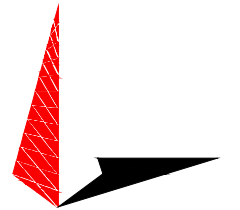
ATC SITE NAME: MONUMENT CO
 ATC SITE NUMBER: 302418
 AT&T MOBILITY PACE NUMBERS: MRUTH056118 (4TXRX ANTENNA RETROFIT), MRUTH056102 (5G NR 1SR), MRUTH056098 (BWE TOWER TOP RRH ADD), MRUTH056100 (4TX4RX SOFTWARE RETROFIT)
 AT&T MOBILITY SITE ID: COL02014
 AT&T MOBILITY FA CODE: 10101123
 AT&T MOBILITY SITE NAME: MONUMENT HILL
 SITE ADDRESS: 20017 BEACON LITE RD
 MONUMENT, CO 80132-9619



LOCATION MAP

**AT&T MOBILITY
 ANTENNA AMENDMENT PLAN**

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. 1. 2018 INTERNATIONAL BUILDING CODE (IBC) 2. 2017 NATIONAL ELECTRIC CODE (NEC) 3. LOCAL BUILDING CODE 4. CITY/COUNTY ORDINANCES	<u>SITE ADDRESS:</u> 20017 BEACON LITE RD MONUMENT, CO 80132-9619 COUNTY: EL PASO <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 39.12256 LONGITUDE: -104.8663 GROUND ELEVATION: 7,382' AMSL <u>ZONING INFORMATION:</u> JURISDICTION: EL PASO COUNTY PARCEL ID: 7102300001	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: <u>TOWER WORK:</u> REMOVE (2) ANTENNA(S) AND (3) TMA(S). INSTALL MOUNT MODIFICATION(S), (3) ANTENNA(S), (9) RRH(S), (1) SQUID(S), (1) 0.96" 6 AWG 6 DC TRUNK(S), (1) 0.39" FIBER TRUNK(S), AND (1) 2" CONDUIT(S). EXISTING (9) ANTENNA(S), (12) RRH(S), (2) SQUID(S), (6) 7/8" COAX CABLE(S), (4) 0.78" 8 AWG 6 DC TRUNK(S), (2) 0.39" FIBER TRUNK(S), AND (3) 2" CONDUIT(S) TO REMAIN. <u>GROUND WORK:</u> REMOVE (1) -48VDC OUTDOOR POWER PLANT(S), (1) +24VDC OUTDOOR POWER PLANT(S), (1) BBU CABINET(S), (7) RECTIFIER(S), AND (2) CONVERTER(S). INSTALL (1) VERTIV NETSURE 512 -48VDC POWER PLANT(S), (1) EA. HE 2KW -48VDC RECTIFIER(S), (2) EA. HE 1.5KW -48VDC/+24VDC CONVERTER(S), (1) DC12(S), (1) PURCELL FLX21 CABINET(S), (3) 50A AHFIB BREAKER(S), (3) 50A AHLBBA BREAKER(S), (3) 25A AHCA BREAKER(S), AND (2) 25A FSM4 5GNR BREAKER(S).	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	<u>PROJECT TEAM</u> <u>TOWER OWNER:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801 <u>APPLICANT:</u> AT&T MOBILITY <u>ENGINEER:</u> TOWER ENGINEERING PROFESSIONALS 326 TRYON RD RALEIGH, NC 27603-3530 <u>PROPERTY OWNER:</u> INTERSTATE 25 PROPERTIES LTD 970 CORRAL VALLEY RD COLORADO SPRINGS, CO 80929-9315		G-001	TITLE SHEET	0	03/29/23	SRZ
<u>UTILITY COMPANIES</u> POWER COMPANY: MOUNTAIN VIEW ELECTRIC PHONE: (719) 495-2283 TELEPHONE COMPANY: VERIZON PHONE: (800) 837-4966	<u>PROJECT LOCATION DIRECTIONS</u> I-25 EXIT 163 COUNTY LINE ROAD. GO WEST, THEN SOUTH ON BEACON LITE ROAD FOR 1/4 MILE. BEAR LEFT TO SITE.	<u>PROJECT NOTES</u> 1. THE FACILITY IS UNMANNED. 2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. 3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE. 4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED. 5. HANDICAP ACCESS IS NOT REQUIRED. 6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.61000 (B)(7).	C-101	GENERAL NOTES	0	03/29/23	SRZ
			C-201	DETAILED SITE PLAN	0	03/29/23	SRZ
			C-102	DETAILED EQUIPMENT LAYOUT	0	03/29/23	SRZ
			C-201	TOWER ELEVATION	0	03/29/23	SRZ
			C-401	ANTENNA INSTALLATION	0	03/29/23	SRZ
			C-402	ANTENNA SCHEDULE	0	03/29/23	SRZ
			C-501	CONSTRUCTION DETAILS	0	03/29/23	SRZ
			E-101	ELECTRICAL DETAILS	0	03/29/23	SRZ
			E-102	ONE-LINE DIAGRAM	0	03/29/23	SRZ
		E-501	GROUNDING DETAILS	0	03/29/23	SRZ	
		R-601	SUPPLEMENTAL				
		R-602	SUPPLEMENTAL				
		R-603	SUPPLEMENTAL				
		R-604	SUPPLEMENTAL				
		R-605	SUPPLEMENTAL				
		R-606	SUPPLEMENTAL				
		R-607	SUPPLEMENTAL				
		R-608	SUPPLEMENTAL				
			MOUNT MODIFICATION DRAWINGS				



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A	PRELIMINARY	RRG	02/20/23
B	90% CONSTRUCTION	RMJ	03/17/23
0	100% CONSTRUCTION	SRZ	03/29/23

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DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	0

GENERAL CONSTRUCTION NOTES:

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

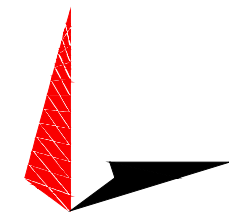
- PROVIDED.
22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MOBILITY MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
 23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE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

**SPECIAL CONSTRUCTION
ANTENNA INSTALLATION NOTES:**

1. WORK INCLUDED:
 - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY AT&T MOBILITY UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL.
 - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND AT&T MOBILITY SPECIFICATIONS.
 - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
 - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.
 - E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
 - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
 - G. ANTENNA AND COAXIAL CABLE GROUNDING:
 2. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.

3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

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



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A	PRELIMINARY	RRG	02/20/23
B	90% CONSTRUCTION	RMJ	03/17/23
0	100% CONSTRUCTION	SRZ	03/29/23

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AT&T MOBILITY SITE NUMBER:
COL02014
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SEAL:



DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

GENERAL NOTES

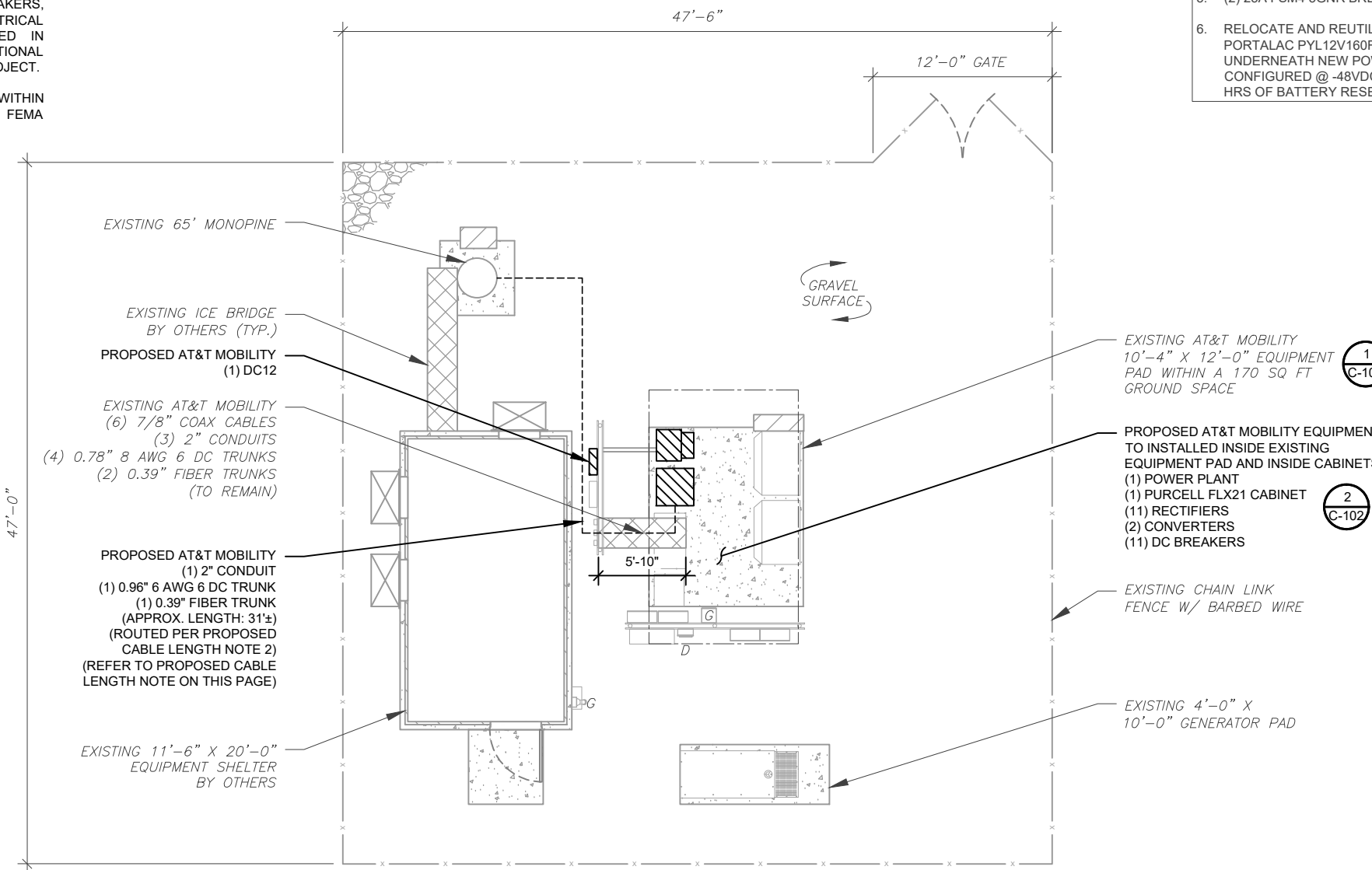
SHEET NUMBER: G-002	REVISION: 0
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SITE PLAN NOTES:

1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE AT&T MOBILITY REPRESENTATIVE AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.
4. THE TOWER IS LOCATED IN ZONE "X", AREAS DETERMINED TO BE WITHIN THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL #08041C0276G, DATED DECEMBER 07, 2018.

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

- PROPOSED CABLE LENGTH:**
1. ESTIMATED LENGTH OF PROPOSED CABLE IS 110'. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES), CDS DEFER TO GREATEST CABLE LENGTH.
 2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPINE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPINE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.



- NOTES:**
1. EXISTING +24VDC OUTDOOR POWER PLANT; REPLACE EXISTING OUTDOOR POWER PLANT WITH NEW VERTIV NETSURE -48VDC POWER SYSTEM; INSTALL (1) NEW VERTIV NETSURE 512 -48VDC POWER PLANT OUTFITTED WITH (11) EA. HE 2KW -48VDC RECTIFIERS & (2) EA. HE 1.5KW -48VDC/+24VDC CONVERTER MODULES.
 2. (3) 50A BREAKER FOR AHFIB
 3. (3) 50A BREAKER FOR AHLBBA
 4. (3) 25A BREAKER FOR AHCA
 5. (2) 25A FSM4 5GNR BREAKER
 6. RELOCATE AND REUTILIZE (12) EXISTING GS PORTALAC PYL12V160FT BATTERIES TO UNDERNEATH NEW POWER PLANT i.e. (3) STRINGS CONFIGURED @ -48VDC NOMINAL TO ACHIEVE 2.5 HRS OF BATTERY RESERVE

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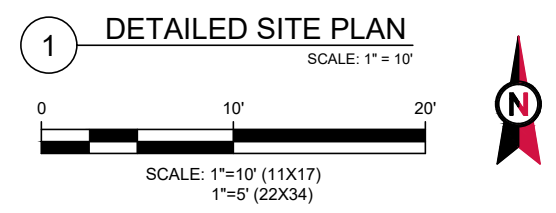
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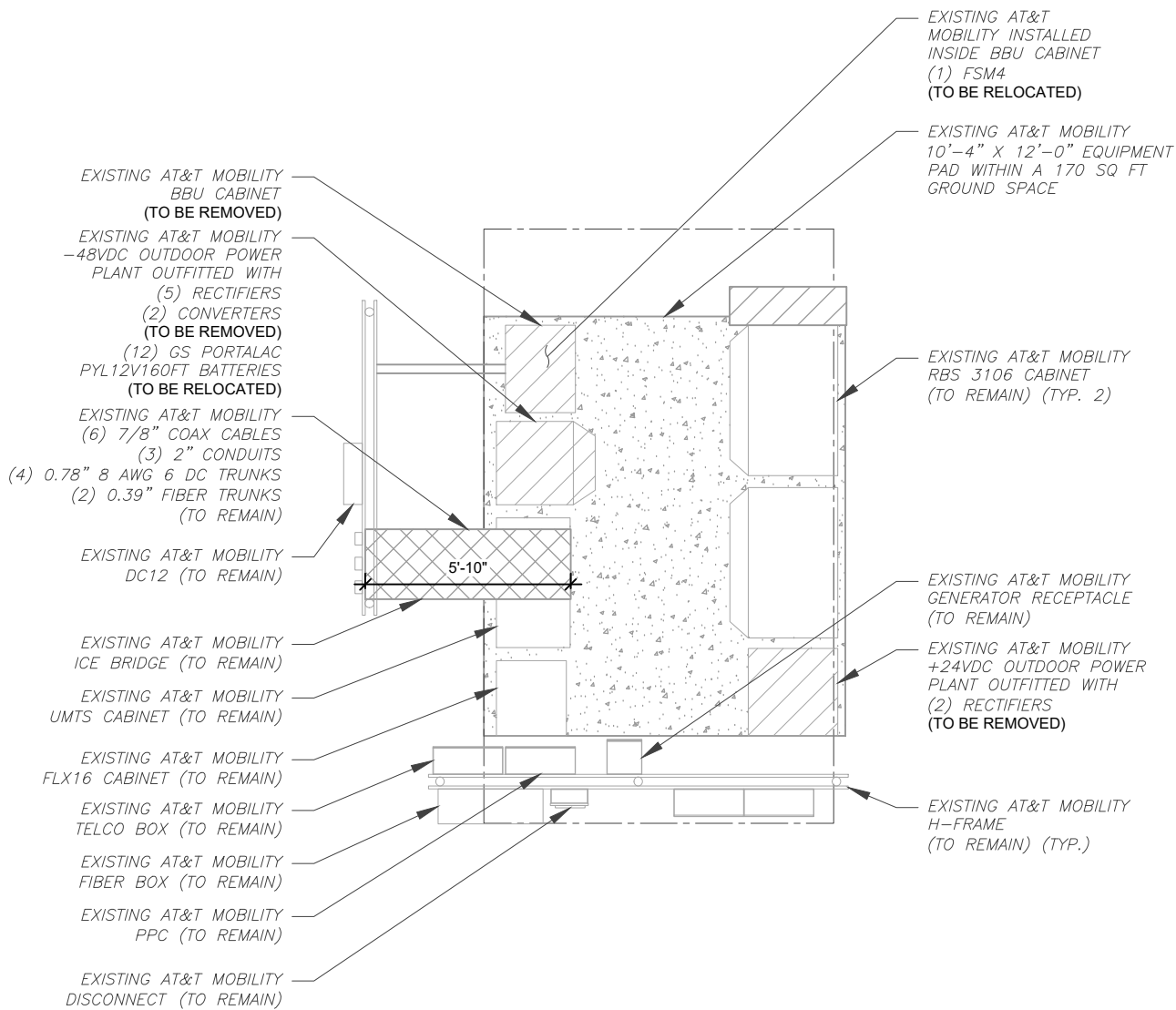
ANDREW RAGNAR
5821
PROFESSIONAL ENGINEER
03/29/23

DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

DETAILED SITE PLAN	
SHEET NUMBER: C-101	REVISION: 0

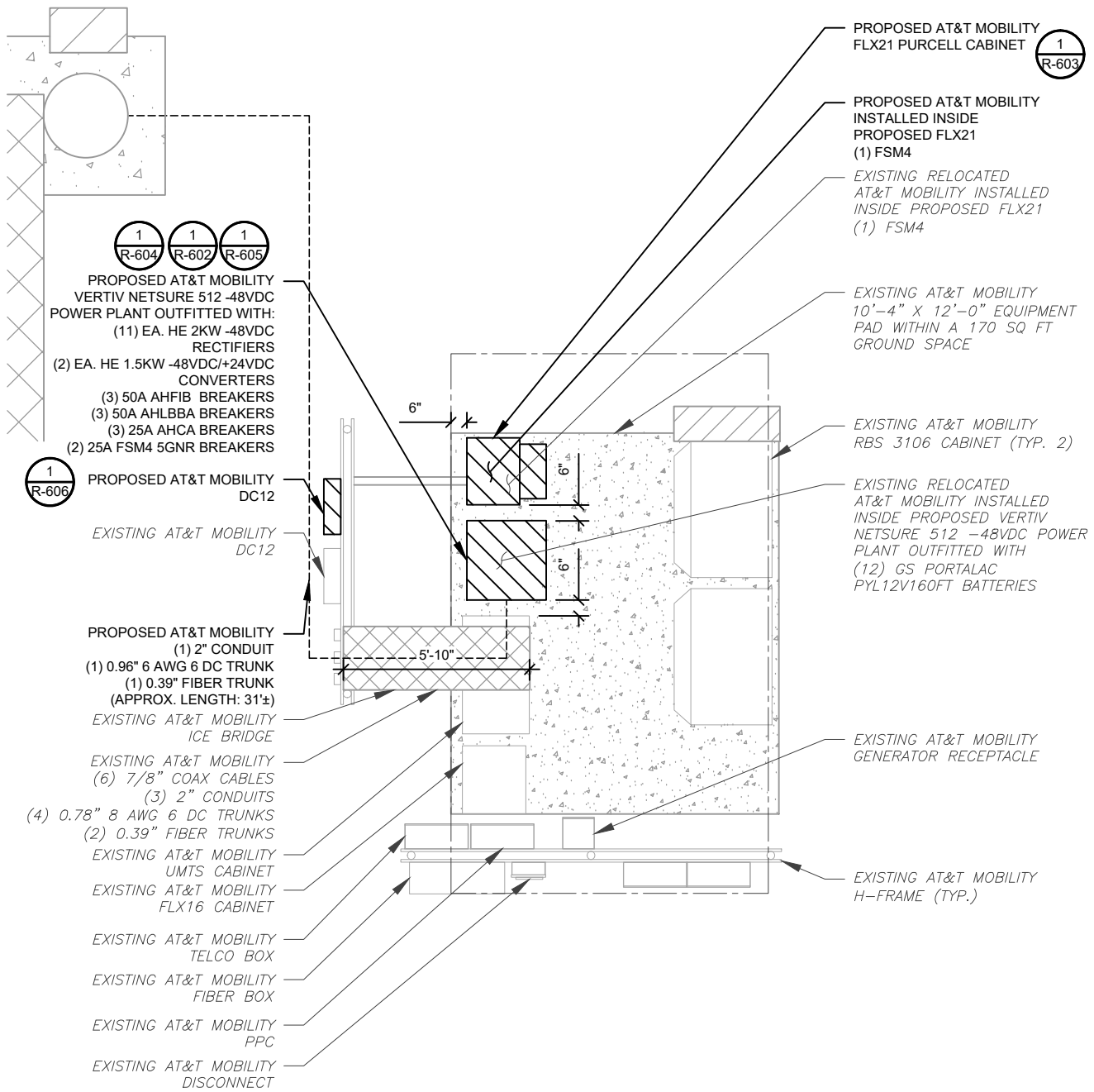


EXISTING BBU CONFIGURATION:
 (1) AMIA, (1) ASIA, AND (3) ABIA

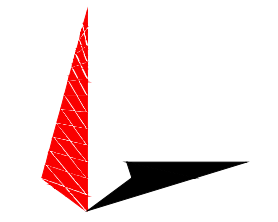


1 EXISTING GROUND EQUIPMENT LAYOUT
 SCALE: 1"=5' (11X17)
 1"=2.5' (22X34)

FINAL BBU CONFIGURATION:
 (2) AMIA, (1) ASIA, (3) ABIA, (1) ABIO, AND (1) ASIL



2 PROPOSED GROUND EQUIPMENT LAYOUT
 SCALE: 1"=5' (11X17)
 1"=2.5' (22X34)



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C	100% CONSTRUCTION	SRZ	03/29/23

ATC SITE NUMBER: 302418
 ATC SITE NAME: MONUMENT CO
 AT&T MOBILITY SITE NUMBER:
COL02014
 AT&T MOBILITY SITE NAME:
MONUMENT HILL
 SITE ADDRESS:
 20017 BEACON LITE RD
 MONUMENT, CO 80132-9619

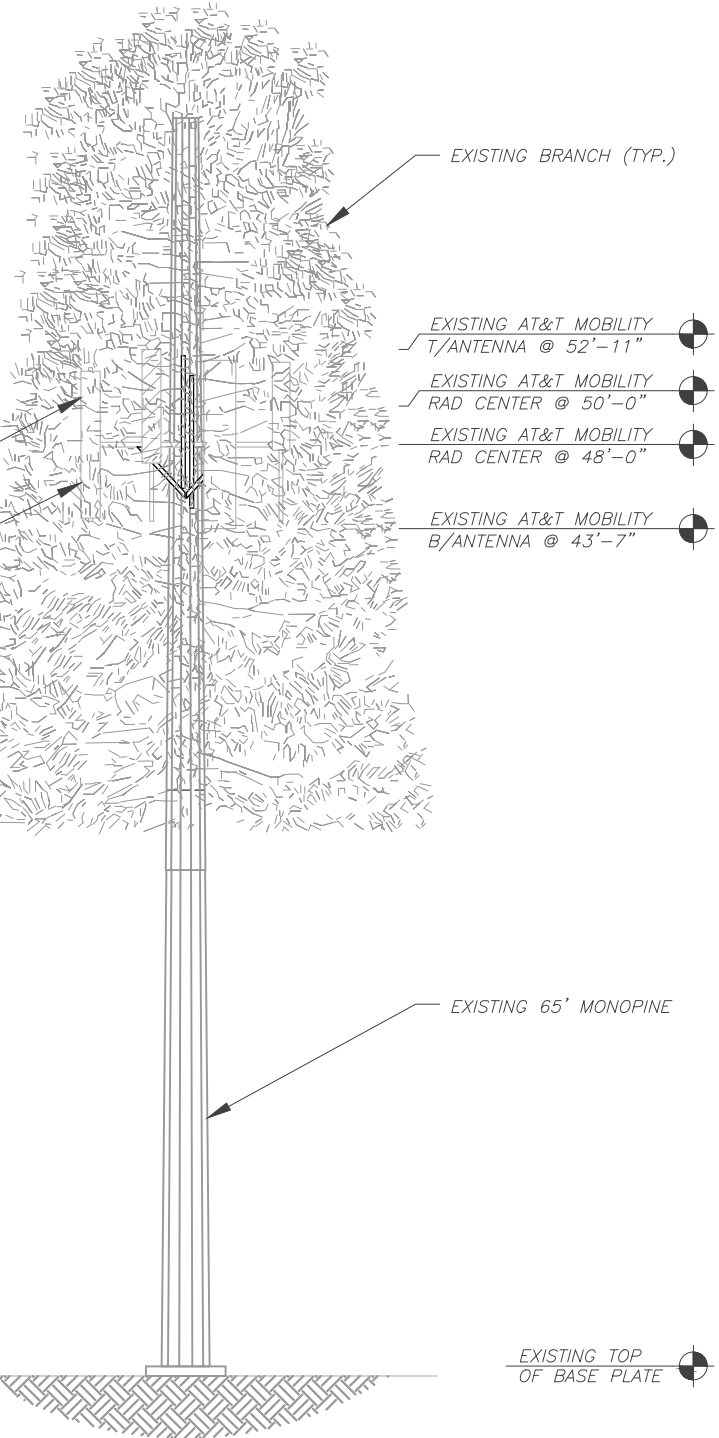


DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

DETAILED EQUIPMENT LAYOUT

SHEET NUMBER:	REVISION:
C-102	0

TOP OF EXISTING TOWER
ELEV. 65'



1 EXISTING TOWER ELEVATION
SCALE: 1" = 10'
SCALE: 1"=10' (11X17)
1"=5' (22X34)

- 1**
C-401
- EXISTING AT&T MOBILITY EQUIPMENT
- (2) 7770 ANTENNAS
 - (3) 800-10992K ANTENNAS
 - (1) AM-X-CD-16-65-00T-RET ANTENNAS
 - (3) ET-X-UW-70-16-70-18-IR-AT-RA ANTENNAS
 - (3) KRY 112 71/2 TMAs
 - (3) FLEXI RRH 4T4R B14 160W FRBI RRHs
 - (3) B66A RRH4X45-4R RRHs
 - (3) RRH2x40W_7L RRHs
 - (3) B25 RRH4X30-4R RRHs
 - (2) DC6-48-60-18-8F SQUIDS
 - (6) 7/8" COAX CABLES
 - (3) 2" CONDUITS
 - (4) 0.78" 8 AWG 6 DC TRUNKS
 - (2) 0.39" FIBER TRUNKS (TO REMAIN)
 - (2) 7263 ANTENNAS (TO BE REMOVED)

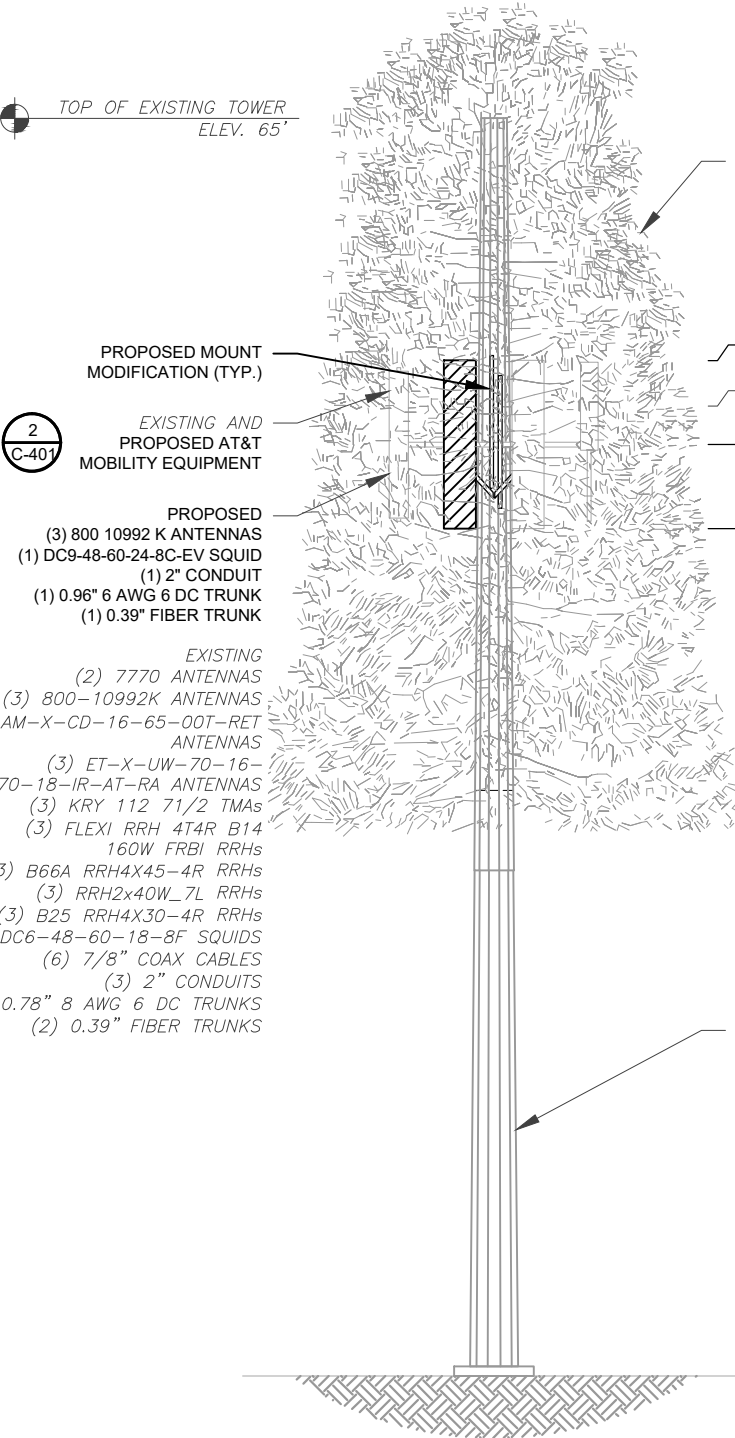
- EXISTING AT&T MOBILITY T/ANTENNA @ 52'-11"
- EXISTING AT&T MOBILITY RAD CENTER @ 50'-0"
- EXISTING AT&T MOBILITY RAD CENTER @ 48'-0"
- EXISTING AT&T MOBILITY B/ANTENNA @ 43'-7"

EXISTING 65' MONOPINE

EXISTING TOP OF BASE PLATE

PER MOUNT ANALYSIS COMPLETED BY AMERICAN TOWER CORPORATION, DATED MARCH 01, 2023, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.

TOP OF EXISTING TOWER
ELEV. 65'



2 PROPOSED TOWER ELEVATION
SCALE: 1" = 10'
SCALE: 1"=10' (11X17)
1"=5' (22X34)

- 2**
C-401
- EXISTING AND PROPOSED AT&T MOBILITY EQUIPMENT
- PROPOSED MOUNT MODIFICATION (TYP.)
- (3) 800 10992 K ANTENNAS
 - (1) DC9-48-60-24-8C-EV SQUID
 - (1) 2" CONDUIT
 - (1) 0.96" 6 AWG 6 DC TRUNK
 - (1) 0.39" FIBER TRUNK
- EXISTING
- (2) 7770 ANTENNAS
 - (3) 800-10992K ANTENNAS
 - (1) AM-X-CD-16-65-00T-RET ANTENNAS
 - (3) ET-X-UW-70-16-70-18-IR-AT-RA ANTENNAS
 - (3) KRY 112 71/2 TMAs
 - (3) FLEXI RRH 4T4R B14 160W FRBI RRHs
 - (3) B66A RRH4X45-4R RRHs
 - (3) RRH2x40W_7L RRHs
 - (3) B25 RRH4X30-4R RRHs
 - (2) DC6-48-60-18-8F SQUIDS
 - (6) 7/8" COAX CABLES
 - (3) 2" CONDUITS
 - (4) 0.78" 8 AWG 6 DC TRUNKS
 - (2) 0.39" FIBER TRUNKS

- PROPOSED AT&T MOBILITY T/ANTENNA @ 52'-5"
- EXISTING AT&T MOBILITY RAD CENTER @ 50'-0"
- PROPOSED AT&T MOBILITY RAD CENTER @ 48'-0"
- PROPOSED AT&T MOBILITY B/ANTENNA @ 43'-7"

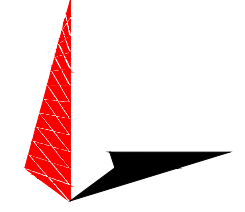
EXISTING 65' MONOPINE

EXISTING TOP OF BASE PLATE

NOTE:
ALL ANTENNAS TO BE PAINTED TO MATCH EXISTING AND COVERED WITH PINE NEEDLE SOCKS FOR CONCEALMENT AND STEALTH TREATMENT. CONTRACTOR TO VERIFY.

- DETAILED SOW:**
TOPSIDE
REMOVE (2) 7263 ANTENNAS
REMOVE (3) KRY 112 71/2 TMAs
INSTALL (3) 800 10992K ANTENNAS
INSTALL (3) AIRSCALE TRI RRH 4T4R B12/14/29 370W AHLBBA RRHs
INSTALL (3) AIRSCALE RRH 4T4R B5 160W AHCA RRHs
INSTALL (3) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB RRHs
INSTALL (1) DC9-48-60-24-8C-EV SQUID
INSTALL (1) 2" CONDUIT
INSTALL (1) 0.96" 6 AWG 6 DC TRUNK
INSTALL (1) 0.39" FIBER TRUNK
RETAIN (2) 7770 ANTENNAS
RETAIN (1) AM-X-CD-16-65-00T-RET ANTENNAS
RETAIN (3) 800-10992K ANTENNAS
RETAIN (3) ET-X-UW-70-16-70-18-IR-AT-RA ANTENNAS
RETAIN (3) B66A RRH4X45-4R RRHs
RETAIN (3) FLEXI RRH 4T4R B14 160W FRBI RRHs
RETAIN (3) RRH2x40W_7L RRHs
RETAIN (3) B25 RRH4X30-4R RRHs
RETAIN (2) DC6-48-60-18-8F SQUIDS
RETAIN (6) 7/8" COAX CABLES
RETAIN (3) 2" CONDUITS
RETAIN (4) 0.78" 8 AWS 6 DC TRUNKS
RETAIN (2) 0.39" FIBER TRUNKS
- TEST NEW LINES PER MARKET SPEC
LABEL NEW CABLES PER MARKET SPEC
GROUND NEW EQUIPMENT PER MARKET SPEC
BOTTOMSIDE
-REMOVE (1) BBU CABINET
-REMOVE (1) -48VDC OUTDOOR POWER PLANT
-REMOVE (1) +24VDC OUTDOOR POWER PLANT
-REMOVE (7) RECTIFIERS
-REMOVE (2) CONVERTERS
-INSTALL (1) VERTIV NETSURE 512 -48VDC POWER PLANT
-INSTALL (11) EA. HE 2KW -48VDC RECTIFIERS
-INSTALL (2) EA. HE 1.5KW -48VDC/+24VDC CONVERTERS
-INSTALL (3) 50A AHFIB BREAKERS
-INSTALL (3) 50A AHLBBA BREAKERS
-INSTALL (3) 25A AHCA BREAKERS
-INSTALL (2) 25A FSM4 5GNR BREAKERS
-INSTALL (1) PURCELL FLX21 CABINET
TEST NEW LINES PER MARKET SPEC
LABEL NEW CABLES PER MARKET SPEC
GROUND NEW EQUIPMENT PER MARKET SPEC

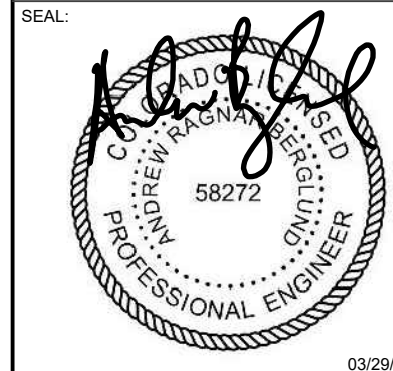
- TOWER NOTES:**
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
 - WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
 - ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPINE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPINE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
 - TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.).
 - TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.



TOWER ENGINEERING PROFESSIONALS
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REV.	DESCRIPTION	BY	DATE
A	PRELIMINARY	RRG	02/20/23
B	90% CONSTRUCTION	RMJ	03/17/23
C	100% CONSTRUCTION	SRZ	03/29/23

ATC SITE NUMBER: 302418
ATC SITE NAME: MONUMENT CO
AT&T MOBILITY SITE NUMBER:
COL02014
AT&T MOBILITY SITE NAME:
MONUMENT HILL
SITE ADDRESS:
20017 BEACON LITE RD
MONUMENT, CO 80132-9619

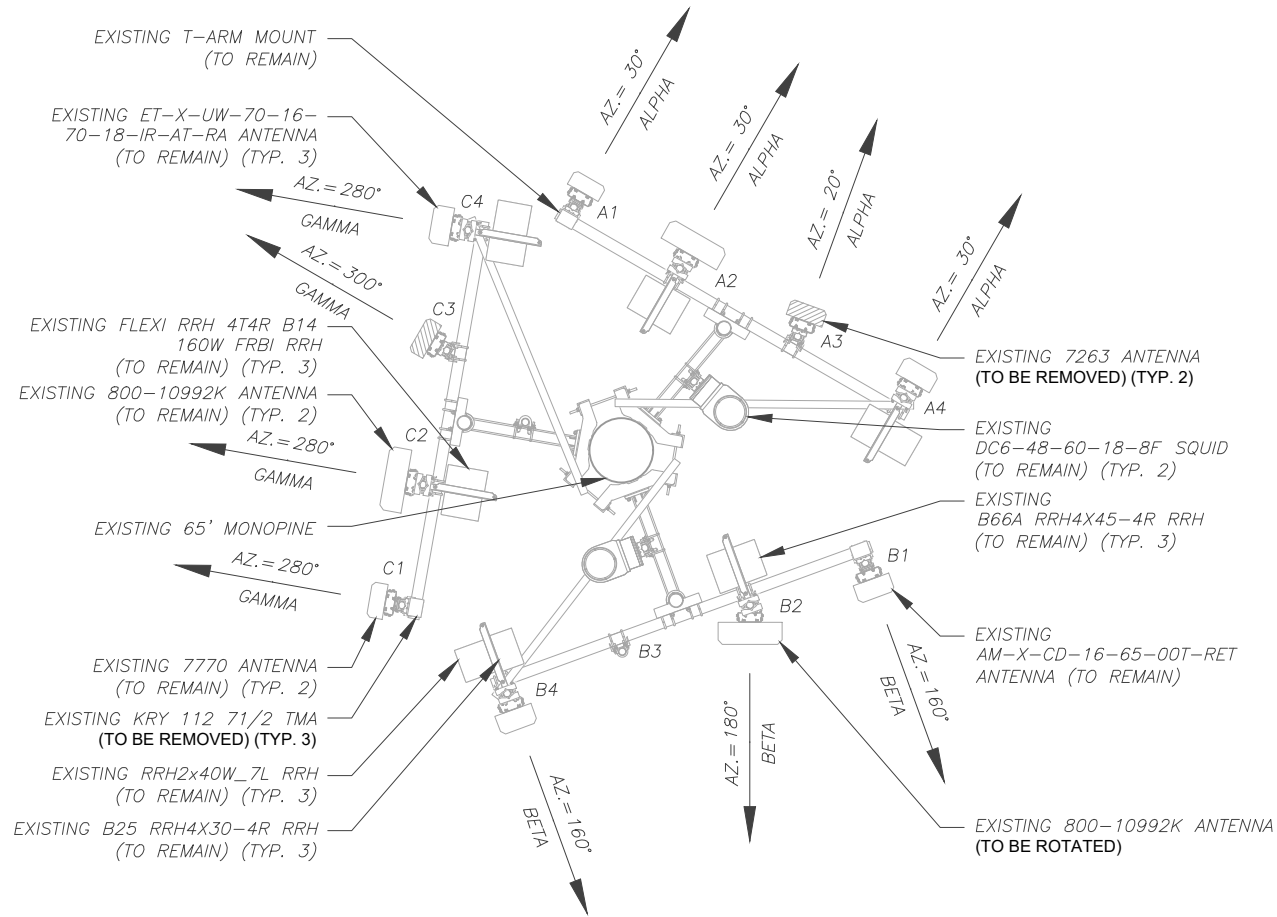


DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

TOWER ELEVATION

SHEET NUMBER:
C-201
REVISION:
0

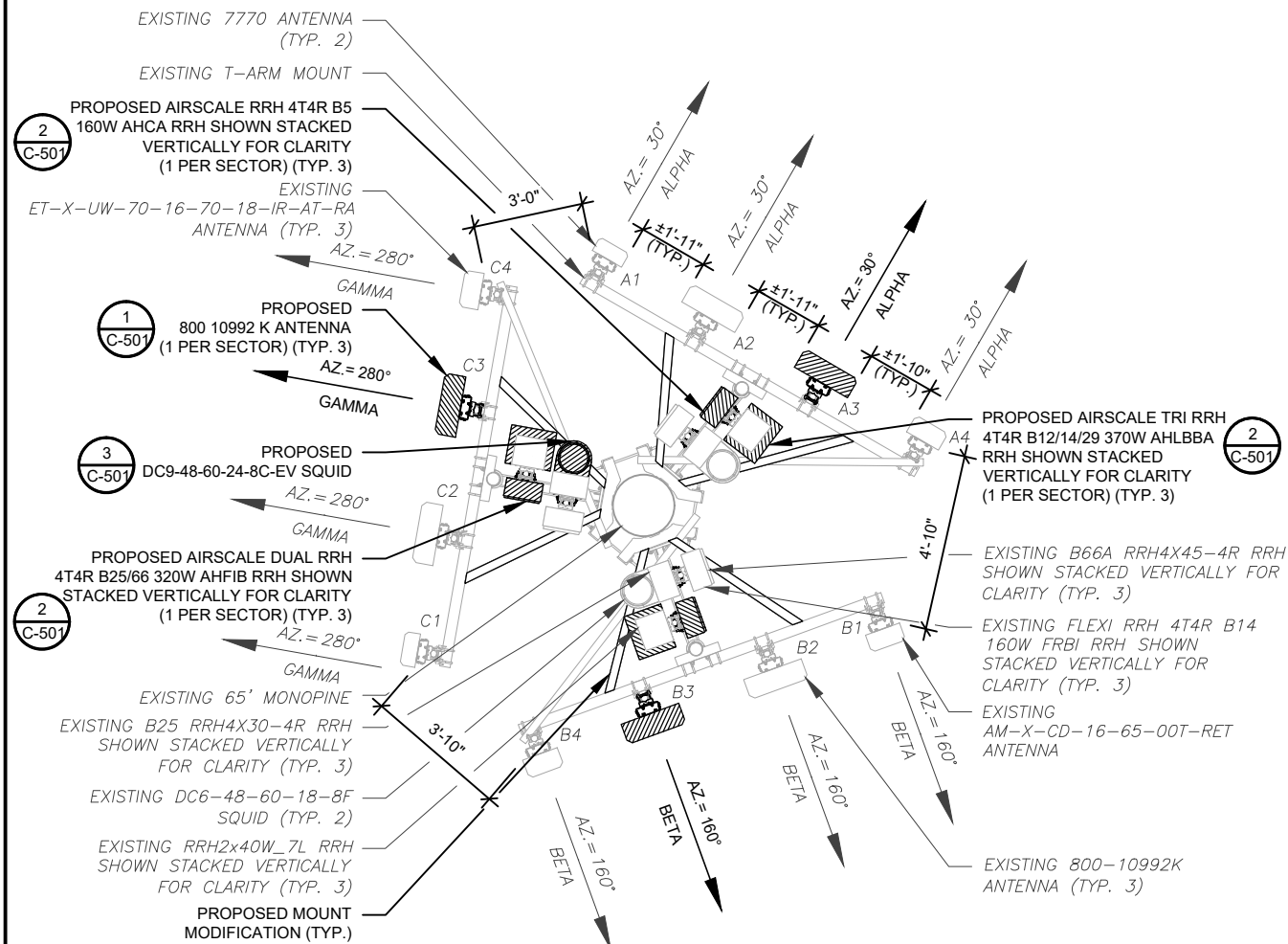
EXISTING CONFIGURATIONS ARE BASED ON RFDS. CONTRACTOR TO VERIFY EXISTING CONDITIONS.



1 EXISTING ANTENNA PLAN
SCALE: 1" = 5'
SCALE: 1" = 10' (11X17)
SCALE: 1" = 5' (22X34)



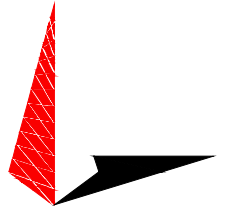
PER MOUNT ANALYSIS COMPLETED BY AMERICAN TOWER CORPORATION, DATED MARCH 01, 2023, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.



2 FINAL ANTENNA PLAN
SCALE: 1" = 5'
SCALE: 1" = 10' (11X17)
SCALE: 1" = 5' (22X34)



PROPOSED RRUs MUST BE INSTALLED A MINIMUM OF 12" AWAY FROM ALL ANTENNAS



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A	PRELIMINARY	RRG	02/20/23
B	90% CONSTRUCTION	RMJ	03/17/23
0	100% CONSTRUCTION	SRZ	03/29/23

ATC SITE NUMBER: 302418
ATC SITE NAME: MONUMENT CO
AT&T MOBILITY SITE NUMBER:
COL02014
AT&T MOBILITY SITE NAME:
MONUMENT HILL
SITE ADDRESS:
20017 BEACON LITE RD
MONUMENT, CO 80132-9619



03/29/23

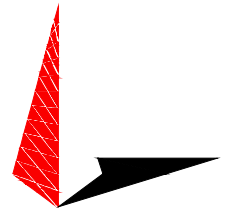


DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

ANTENNA INSTALLATION

SHEET NUMBER:	REVISION:
C-401	0

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A	PRELIMINARY	RRG	02/20/23
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ATC SITE NUMBER: 302418

ATC SITE NAME: MONUMENT CO

AT&T MOBILITY SITE NUMBER:

COL02014

AT&T MOBILITY SITE NAME:

MONUMENT HILL

SITE ADDRESS:
 20017 BEACON LITE RD
 MONUMENT, CO 80132-9619

SEAL:



03/29/23



DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

ANTENNA SCHEDULE

SHEET NUMBER:	REVISION:
C-402	0

EXISTING ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	50'	30°	A1	7770	UMTS 850/UMTS 1900	RMN	(1) KRY 112 71/2	RMV
	48'		A2	800-10992K	LTE 700/LTE AWS	RMN	(1) FLEXI RRH 4T4R B14 160W FRBI (1) B66A RRH4X45-4R	RMN
	50'	20°	A3	7263	GSM 850	RMV	-	-
	48'	30°	A4	ET-X-UW-70-16-70-18-IR-AT-RA	LTE 700/LTE 1900	RMN	(1) RRH2X40W_7L (1) B25 RRH4X30-4R	RMN
BETA	49'	160°	B1	AM-X-CD-16-65-00T-RET	UMTS 850/UMTS 1900	RMN	(1) KRY 112 71/2	RMV
	48'	180°	B2	800-10992K	LTE 700/LTE AWS	RMN	(1) FLEXI RRH 4T4R B14 160W FRBI (1) B66A RRH4X45-4R	RMN
		160°	B3	-	-	-	-	-
	B4		ET-X-UW-70-16-70-18-IR-AT-RA	LTE 700/LTE 1900	RMN	(1) RRH2X40W_7L (1) B25 RRH4X30-4R	RMN	
GAMMA	50'	280°	C1	7770	UMTS 850/UMTS 1900	RMN	(1) KRY 112 71/2	RMV
	48'		C2	800-10992K	LTE 700/LTE AWS	RMN	(1) FLEXI RRH 4T4R B14 160W FRBI (1) B66A RRH4X45-4R	RMN
	50'	300°	C3	7263	GSM 850	RMV	-	-
	48'	280°	C4	ET-X-UW-70-16-70-18-IR-AT-RA	LTE 700/LTE 1900	RMN	(1) RRH2X40W_7L (1) B25 RRH4X30-4R	RMN

NOTES

- CONFIRM WITH AT&T MOBILITY REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
- CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.
- THE ANTENNA ORIENTATION PLAN IS A SCHEMATIC. ATC DID NOT CONFIRM EXISTING SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO, ANTENNA AZIMUTHS, MOUNT CONFIGURATIONS AND TOWER ORIENTATION. SCALES SHOWN ARE FOR REFERENCE ONLY AND EXISTING DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO INSTALLATION AND NOTIFY ATC OF ANY DISCREPANCIES.
- CONTRACTOR TO ENSURE PROPER SEPARATION IN ACCORDANCE WITH AT&T'S FIRSTNET REQUIREMENTS (SEE SHEET R-607)

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

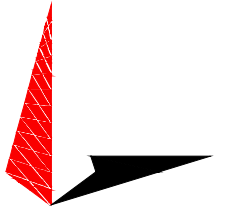
CABLE LENGTHS FOR JUMPERS
 JUNCTION BOX TO RRU: 15'
 RRU TO ANTENNA: 10'

FINAL ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	50'	30°	A1	7770	UMTS 850/UMTS 1900	RMN	-	-
	48'		A2	800-10992K	LTE 700/LTE AWS	RMN	(1) FLEXI RRH 4T4R B14 160W FRBI (1) B66A RRH4X45-4R (1) AIRSCALE TRI RRH 4T4R B12/14/29 370W AHLBBA	ADD
		A3	800 10992 K	5G 850/LTE 1900/LTE AWS	ADD	(1) AIRSCALE RRH 4T4R B5 160W AHCA (1) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB	ADD	
	A4	ET-X-UW-70-16-70-18-IR-AT-RA	LTE 1900/LTE	RMN	(1) RRH2X40W_7L (1) B25 RRH4X30-4R	RMN		
BETA	49'	160°	B1	AM-X-CD-16-65-00T-RET	UMTS 850/UMTS 1900	RMN	-	-
	48'		B2	800-10992K	LTE 700/LTE AWS	RMN	(1) FLEXI RRH 4T4R B14 160W FRBI (1) B66A RRH4X45-4R (1) AIRSCALE TRI RRH 4T4R B12/14/29 370W AHLBBA	ADD
		B3	800 10992 K	5G 850/LTE 1900/LTE AWS	ADD	(1) AIRSCALE RRH 4T4R B5 160W AHCA (1) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB	ADD	
	B4	ET-X-UW-70-16-70-18-IR-AT-RA	LTE 1900/LTE	RMN	(1) RRH2X40W_7L (1) B25 RRH4X30-4R	RMN		
GAMMA	50'	280°	C1	7770	UMTS 850/UMTS 1900	RMN	-	-
	48'		C2	800-10992K	LTE 700/LTE AWS	RMN	(1) FLEXI RRH 4T4R B14 160W FRBI (1) B66A RRH4X45-4R (1) AIRSCALE TRI RRH 4T4R B12/14/29 370W AHLBBA	ADD
		C3	800 10992 K	5G 850/LTE 1900/LTE AWS	ADD	(1) AIRSCALE RRH 4T4R B5 160W AHCA (1) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB	ADD	
	C4	ET-X-UW-70-16-70-18-IR-AT-RA	LTE 1900/LTE	RMN	(1) RRH2X40W_7L (1) B25 RRH4X30-4R	RMN		

EXISTING FIBER DISTRIBUTION/SQUID			EXISTING CABLING SUMMARY			
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS	
(2) DC6-48-60-18-8F	RMN	(3) 2" CONDUIT	(4) 0.78" 8 AWG 6	(2) 0.39"	RMN	
-	-	(6) 7/8"	-	-	RMN	

FINAL FIBER DISTRIBUTION/SQUID		FINAL CABLING SUMMARY			
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
(2) DC6-48-60-18-8F	RMN	(3) 2" CONDUIT	(4) 0.78" 8 AWG 6	(2) 0.39"	RMN
-	-	(6) 7/8"	-	-	RMN
(1) DC9-48-60-24-8C-EV	ADD	(1) 2" CONDUIT	(1) 0.96" 6 AWG 6	(1) 0.39"	ADD

1 EQUIPMENT SCHEDULES



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A	PRELIMINARY	RRG	02/20/23
B	90% CONSTRUCTION	RMJ	03/17/23
0	100% CONSTRUCTION	SRZ	03/29/23

ATC SITE NUMBER: 302418

ATC SITE NAME: MONUMENT CO

AT&T MOBILITY SITE NUMBER:

COL02014

AT&T MOBILITY SITE NAME:

MONUMENT HILL

SITE ADDRESS:

20017 BEACON LITE RD
 MONUMENT, CO 80132-9619

SEAL:



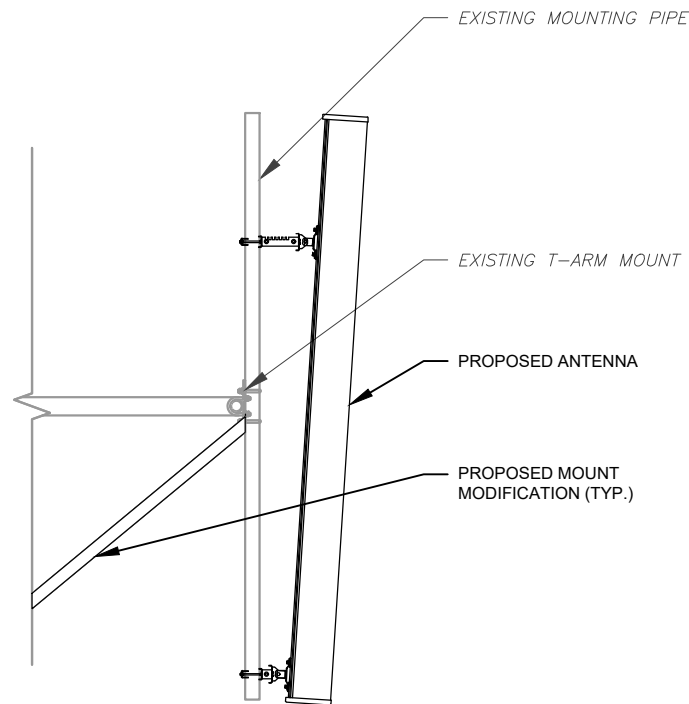
03/29/23



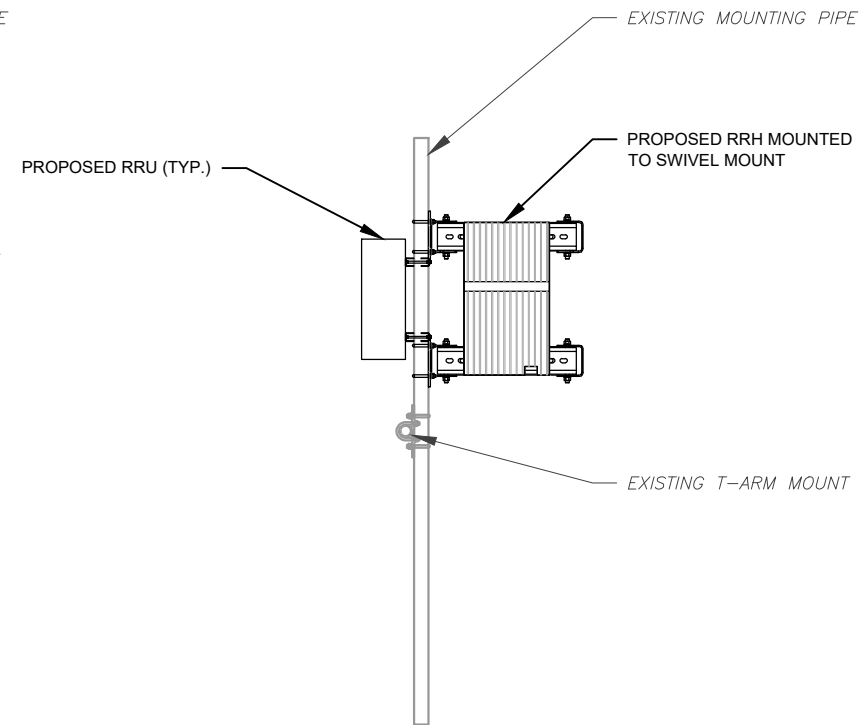
DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

**CONSTRUCTION
 DETAILS**

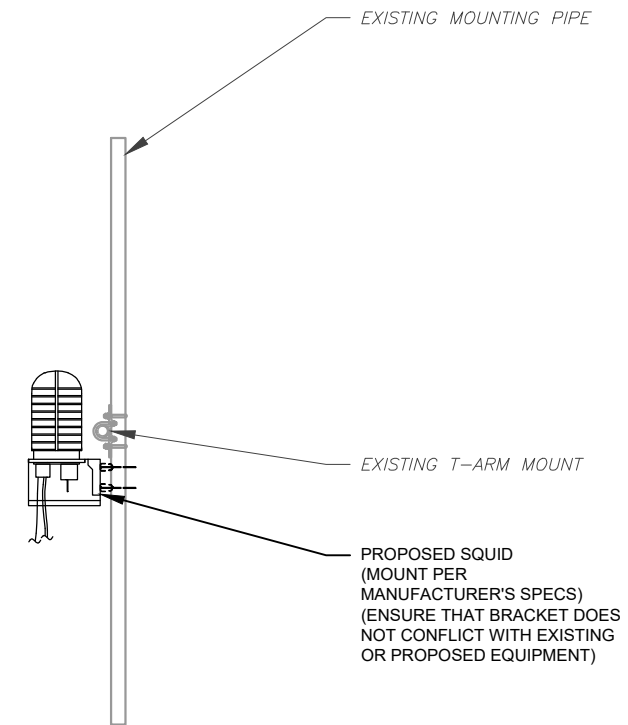
SHEET NUMBER:	REVISION:
C-501	0



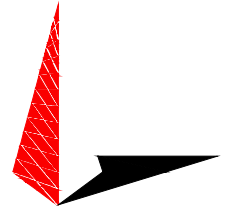
1 PROPOSED ANTENNA MOUNTING DETAIL
 SCALE: N.T.S.



2 PROPOSED RRH MOUNTING DETAIL
 SCALE: N.T.S.



3 PROPOSED SQUID MOUNTING DETAIL
 SCALE: N.T.S.



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A	PRELIMINARY	RRG	02/20/23
B	90% CONSTRUCTION	RMJ	03/17/23
C	100% CONSTRUCTION	SRZ	03/29/23

ATC SITE NUMBER: 302418

ATC SITE NAME: MONUMENT CO

AT&T MOBILITY SITE NUMBER:

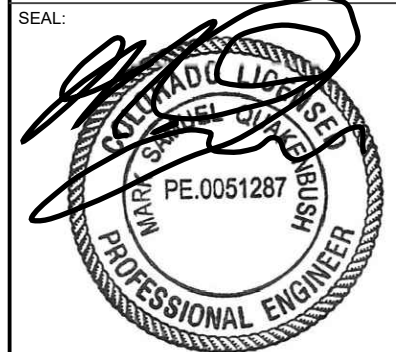
COL02014

AT&T MOBILITY SITE NAME:

MONUMENT HILL

SITE ADDRESS:
 20017 BEACON LITE RD
 MONUMENT, CO 80132-9619

SEAL:



03/29/23



DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

ELECTRICAL DETAILS

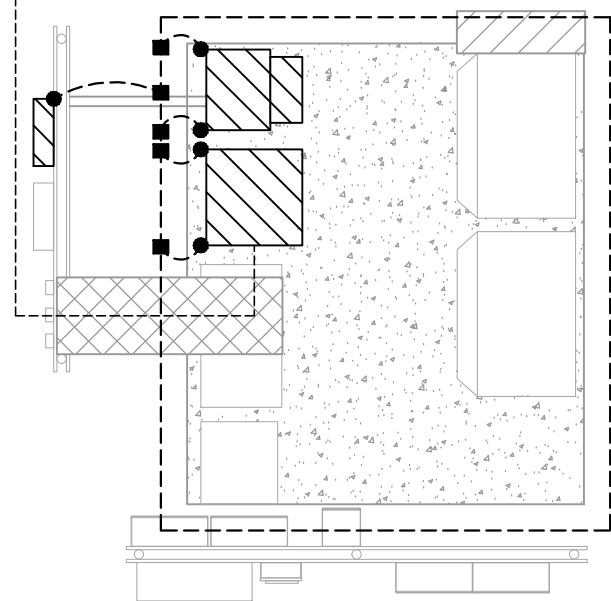
SHEET NUMBER:	REVISION:
E-101	0

AC POWER PANEL A (EXISTING)											
120/240 VOLTS, 1-PHASE, 3-WIRE, 200A											
MAIN BREAKER RATING (A) :			200			SYSTEM VOLTAGE (V) :			240		
DESCRIPTION	VA	c/nc	BKR	POSN	L1	L2	POSN	BKR	c/nc	VA	DESCRIPTION
SPARE / OFF	0	nc	100/2	1	0		2	30/2	c	0	SURGE
	0	nc		3		0	4		c	0	
RECTIFIER 1	705	c	30/2	5	1410		6	30/2	c	705	RECTIFIER 5
	705	c		7		1410	8		c	705	
RECTIFIER 2 / OFF	0	c	30/2	9	1920		10	20/1	c	1920	E911
	0	c		11		2880	12		30/1	c	
RECTIFIER 3	705	c	30/2	13	705		14	60/2	nc	0	SPARE / OFF
	705	c		15		705	16		nc	0	
ARGUS GFCI	180	nc	30/1	17	180		18				BLANK
ARGUS HEAT MAT	1000	c	30/1	19		1480	20	20/1	nc	480	GFI/LTS
RECTIFIER 4	705	c	30/2	21	2625		22	20/1	nc	1920	TELCO
	705	c		23		885	24		20/1	nc	
PHASE TOTALS (VA):					6840	7360					
PHASE TOTALS (A):					57	61					
CURRENT PER PHASE W/ 125% Continuous Loads(A):					67	75	Amperes/phase cannot exceed main breaker rating				
PANEL TOTAL (VA):					14200		Legend: c = continuous, nc = non-continuous				
PANEL TOTAL W/ 125% Continuous Loads (VA):					17060						

1 EXISTING A/C PANEL

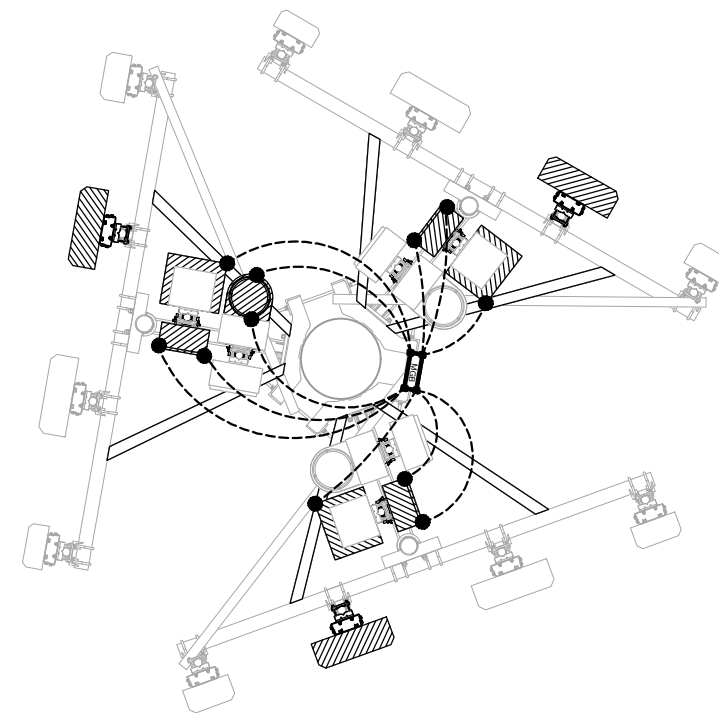
AC POWER PANEL A (PROPOSED)											
120/240 VOLTS, 1-PHASE, 3-WIRE, 200A											
MAIN BREAKER RATING (A) :			200			SYSTEM VOLTAGE (V) :			240		
DESCRIPTION	VA	c/nc	BKR	POSN	L1	L2	POSN	BKR	c/nc	VA	DESCRIPTION
SPARE / OFF	0	nc	100/2	1	0		2	30/2	c	0	SURGE
	0	nc		3		0	4		c	0	
RECT 1 & 2	1400	c	30/2	5	2800		6	30/2	c	1400	RECT 9 & 10
	1400	c		7		2800	8		c	1400	
RECT 3 & 4	1400	c	30/2	9	3320		10	20/1	c	1920	E911
	1400	c		11		4280	12		30/1	c	
RECT 5 & 6	1400	c	30/2	13	2100		14	30/2	c	700	RECT 11
	1400	c		15		2100	16		c	700	
ARGUS GFCI	180	nc	30/1	17	180		18				BLANK
ARGUS HEAT MAT	1000	c	30/1	19		1480	20	20/1	nc	480	GFI/LTS
RECT 7 & 8	1400	c	30/2	21	3320		22	20/1	nc	1920	TELCO
	1400	c		23		1580	24		20/1	nc	
PHASE TOTALS (VA):					11720	12240					
PHASE TOTALS (A):					98	102					
CURRENT PER PHASE W/ 125% Continuous Loads(A):					118	126	Amperes/phase cannot exceed main breaker rating				
PANEL TOTAL (VA):					23960		Legend: c = continuous, nc = non-continuous				
PANEL TOTAL W/ 125% Continuous Loads (VA):					29260						

2 PROPOSED A/C PANEL



LEGEND	
■	EXOTHERMIC CONNECTION
●	MECHANICAL CONNECTION
▭	ANTENNA GROUND BAR
▭	MASTER GROUND BAR

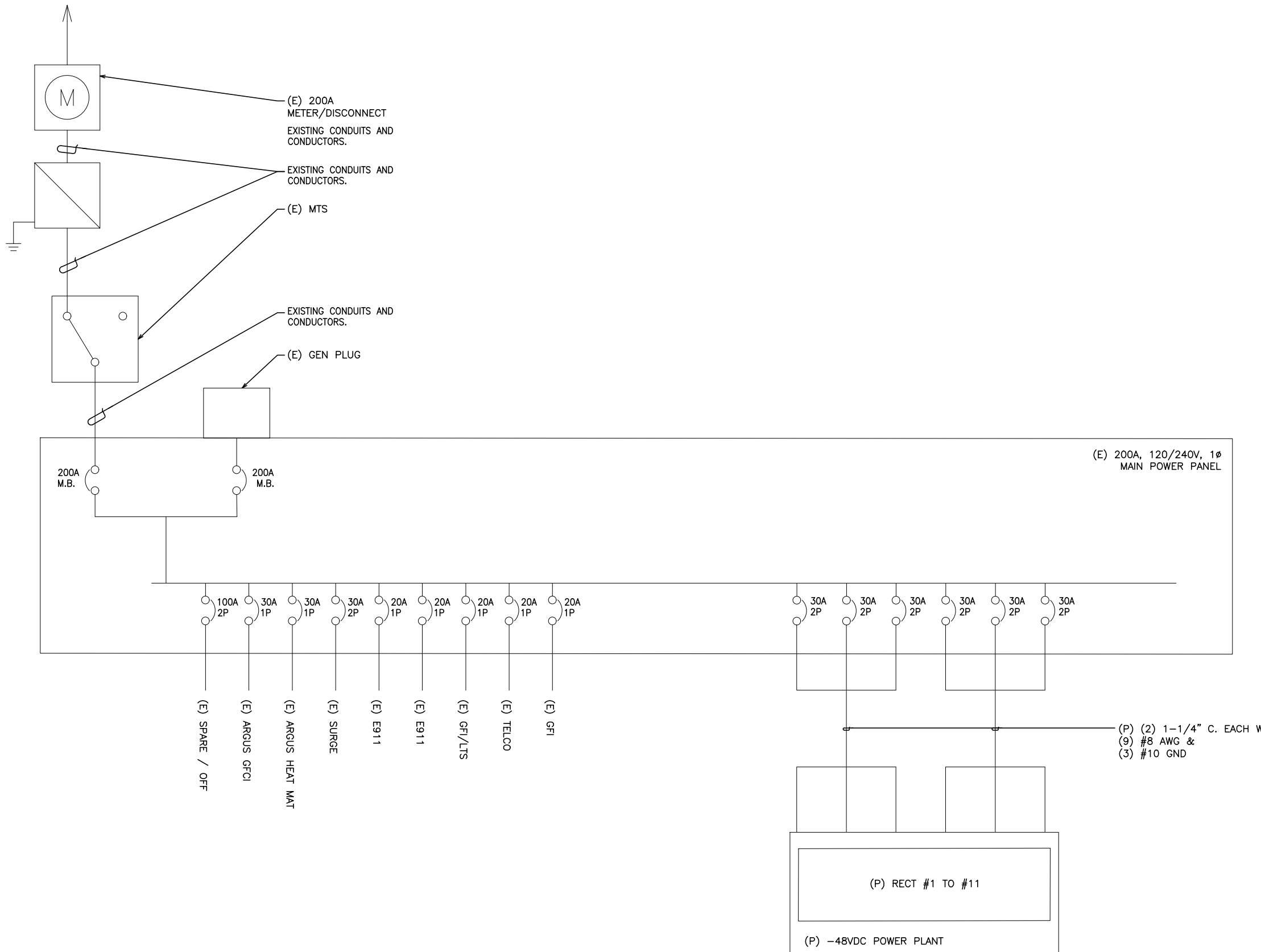
3 EQUIPMENT GROUNDING PLAN
 SCALE: N.T.S.



LEGEND	
■	EXOTHERMIC CONNECTION
●	MECHANICAL CONNECTION
▭	ANTENNA GROUND BAR
▭	MASTER GROUND BAR

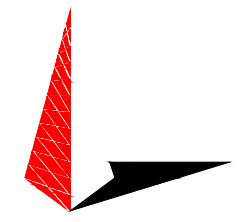
4 ANTENNA GROUNDING PLAN
 SCALE: N.T.S.

EXISTING INCOMING UTILITY SERVICE



LEGEND:
 (E) - EXISTING
 (N) - NEW

1 ONE-LINE DIAGRAM
 SCALE: N.T.S.



TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603-3530
 OFFICE: (919) 661-6351
 www.tepgroup.net

REV.	DESCRIPTION	BY	DATE
A	PRELIMINARY	RRG	02/20/23
B	90% CONSTRUCTION	RMJ	03/17/23
0	100% CONSTRUCTION	SRZ	03/29/23

ATC SITE NUMBER: 302418
 ATC SITE NAME: MONUMENT CO
 AT&T MOBILITY SITE NUMBER:
COL02014
 AT&T MOBILITY SITE NAME:
MONUMENT HILL
 SITE ADDRESS:
 20017 BEACON LITE RD
 MONUMENT, CO 80132-9619

SEAL:

03/29/23

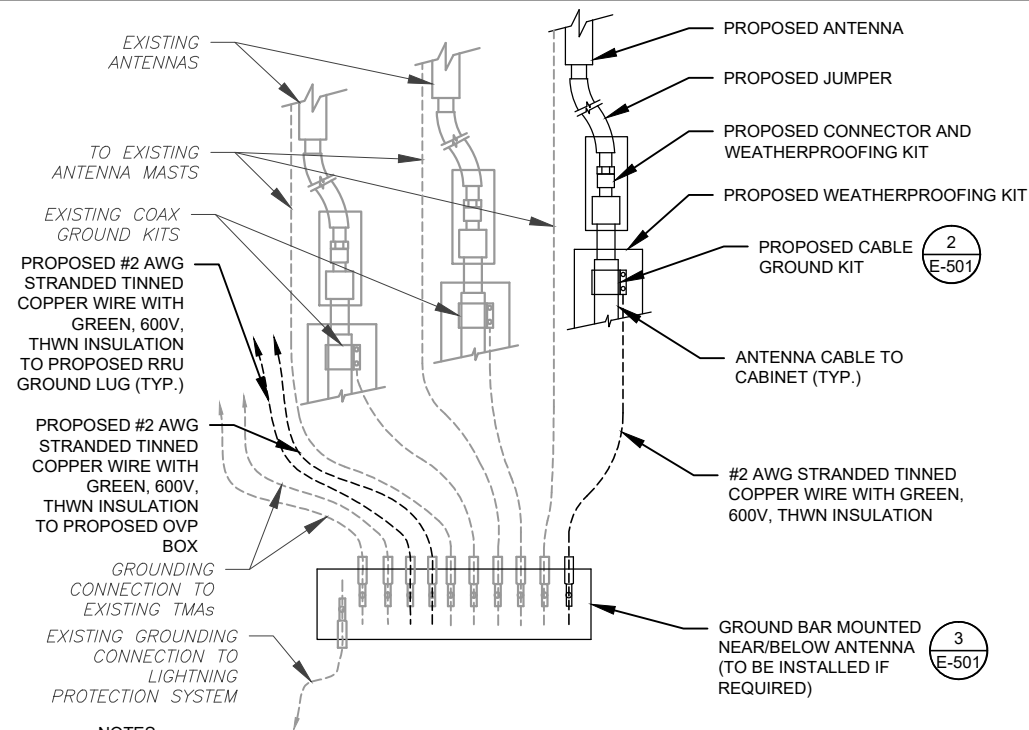


DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

ONE-LINE DIAGRAM

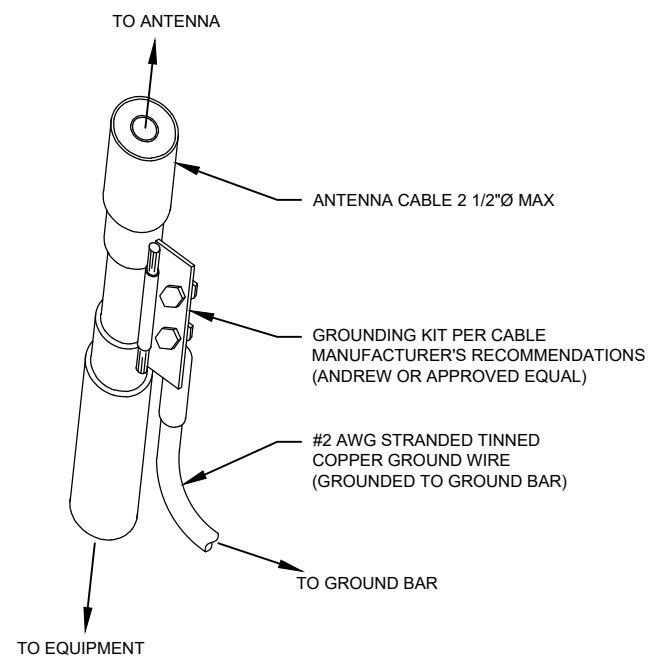
SHEET NUMBER: E-102	REVISION: 0
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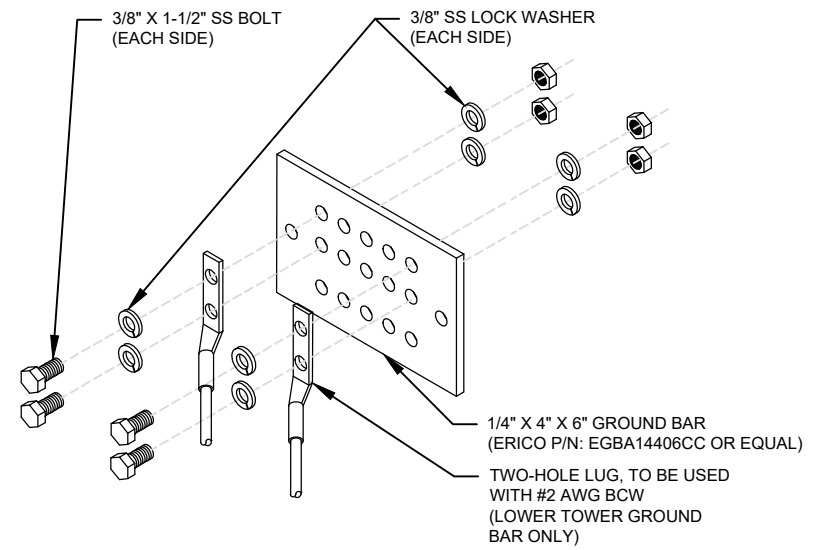
- NOTES:**
1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
 2. SITE GROUNDING SHALL COMPLY WITH AT&T MOBILITY GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH AT&T MOBILITY GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

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



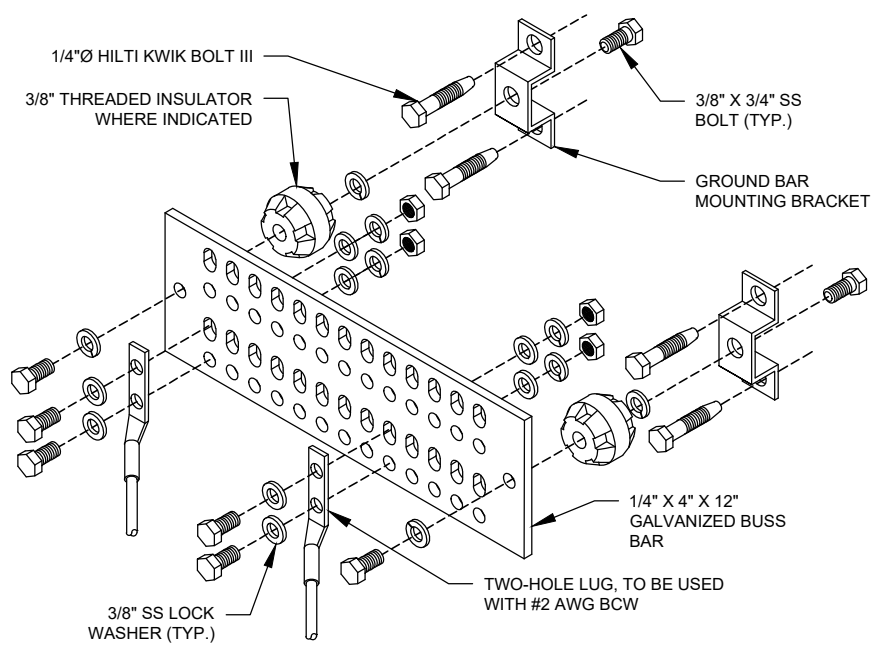
- GROUND KIT NOTES:**
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

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



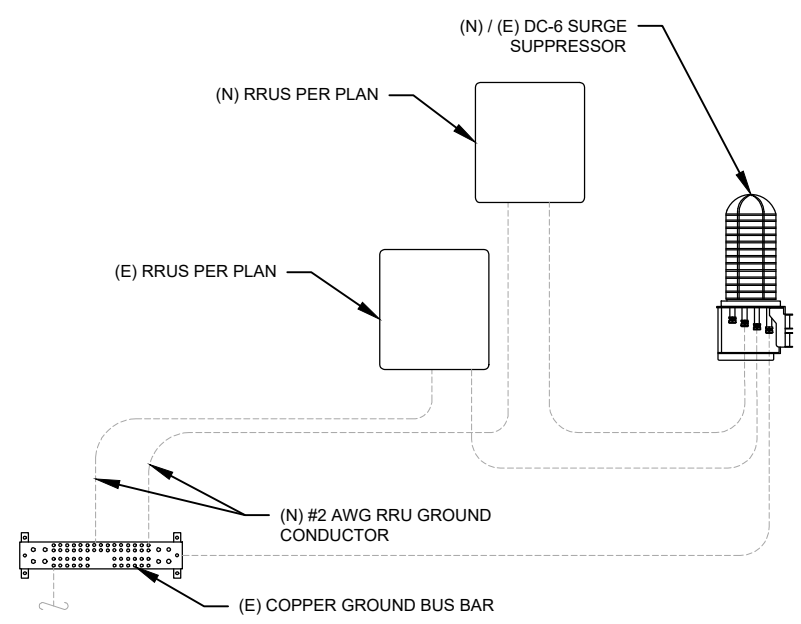
- GROUND BAR NOTES:**
1. GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
 2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

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

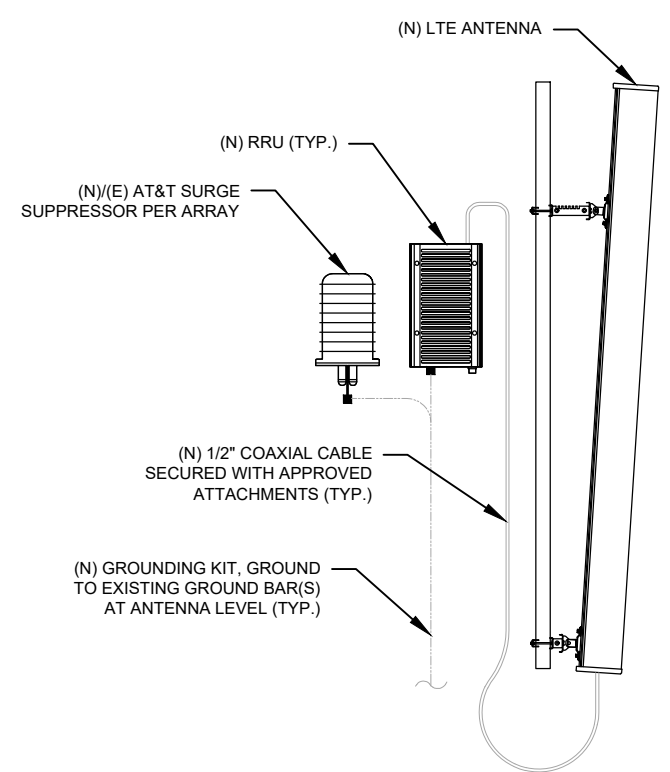


- GROUND BAR NOTES**
1. GROUND KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
 2. GROUND BAR SHALL BE BOLTED TO STRUCTURAL MEMBER OR ANCHORED TO CONCRETE SLAB W/ HILTI KWIK BOLT III.

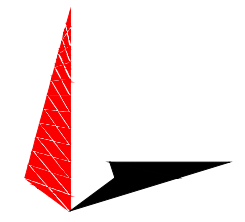
4 MAIN GROUND BAR DETAIL
SCALE: N.T.S.



5 RRU GROUNDING
SCALE: N.T.S.



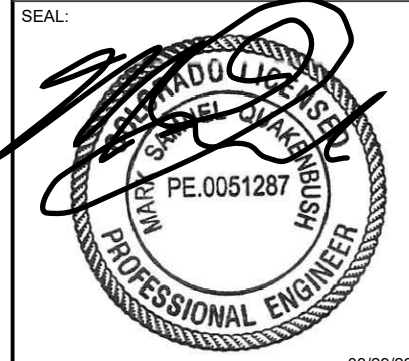
6 ANTENNA/RRU GROUNDING
SCALE: N.T.S.



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

REV.	DESCRIPTION	BY	DATE
A	PRELIMINARY	RRG	02/20/23
B	90% CONSTRUCTION	RMJ	03/17/23
0	100% CONSTRUCTION	SRZ	03/29/23

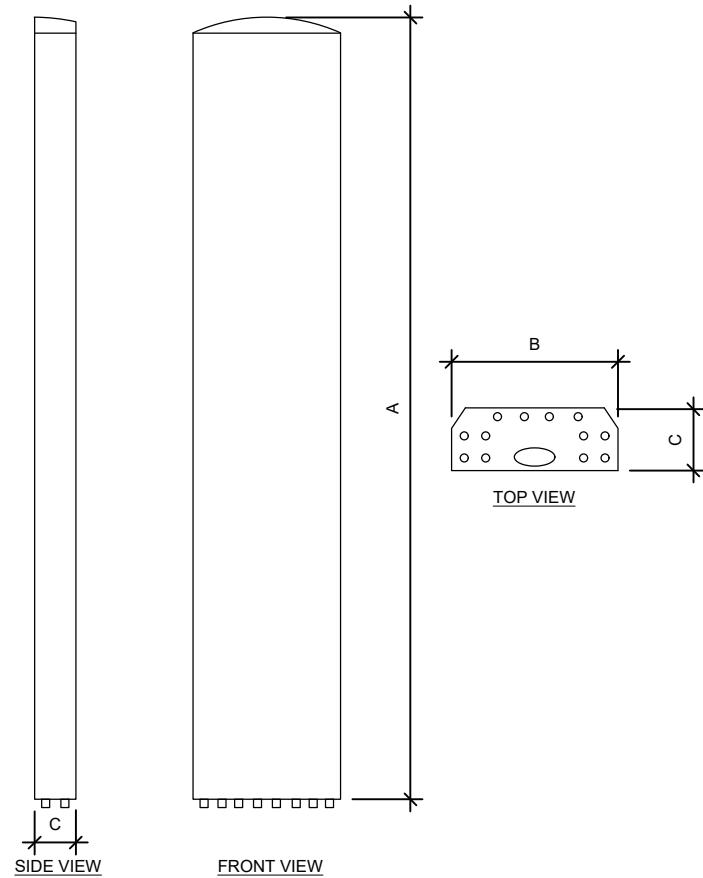
ATC SITE NUMBER: 302418
ATC SITE NAME: MONUMENT CO
AT&T MOBILITY SITE NUMBER:
COL02014
AT&T MOBILITY SITE NAME:
MONUMENT HILL
SITE ADDRESS:
20017 BEACON LITE RD
MONUMENT, CO 80132-9619



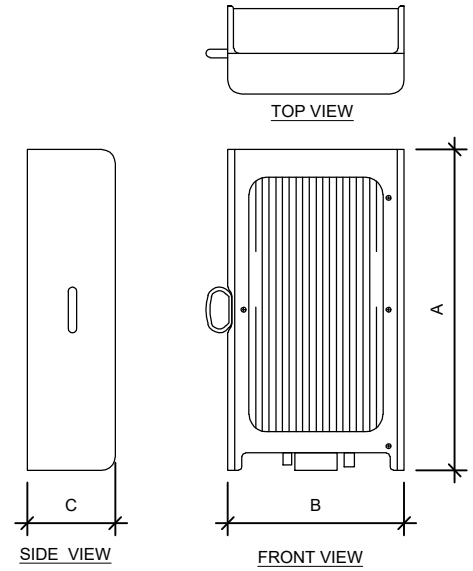
DATE DRAWN:	03/29/23
ATC JOB NO:	14193528
CUSTOMER NAME:	MONUMENT HILL
CUSTOMER ID:	COL02014

GROUNDING DETAILS

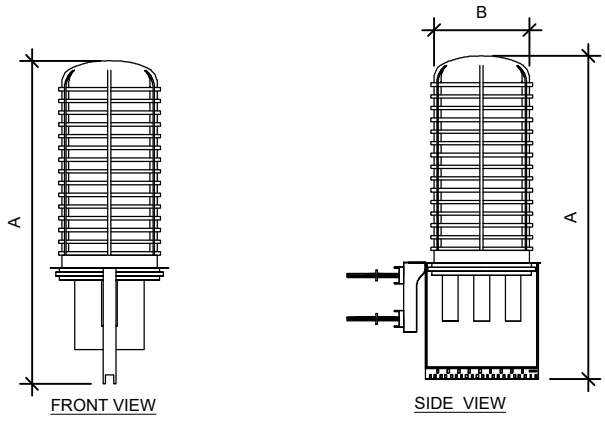
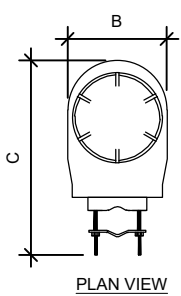
SHEET NUMBER:	REVISION:
E-501	0



ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
800 10992 K	105.2"	20.0"	6.9"	133.4



RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
AIRSCALE 4T4R B5 160W AHCA	13.3"	11.6"	6.5"	35.3
AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB	22.0"	12.1"	5.9"	66.1
AIRSCALE TRI RRH 4T4R B12/14/29 370W AHLBBA	24.0"	14.9"	12.7"	101.4



RAYCAP SPECIFICATIONS				
RAYCAP MODEL	A	B	C	WEIGHT (LBS)
DC9-48-60-24-8C-EV	25.9"	12.4"	9.7"	18.5

EQUIPMENT SPECIFICATIONS
SCALE: N.T.S.

SUPPLEMENTAL

SHEET NUMBER: **R-601**
REVISION: -



If required, for each single pole load circuit breaker ordered, order single pole 90 degree lug adapter kit NEQ.15152 (545405).

If required, for each two-pole load circuit breaker ordered, order two-pole 90 degree lug adapter kit NEQ.15982 (545404).

If required, for each three-pole load circuit breaker ordered, order three-pole 90 degree lug adapter kit NEQ.15983 (545571).

- 4. Order additional temperature probes as desired. The base power plant includes (4) temperature probes.

If more than (4) temperature probes are desired, order NEQ.15984 (547490) SMTEMP Module. Each module can accommodate (8) temperature probes. A maximum of (8) SMTEMP modules can be accommodated per system.

Order temperature probes, quantity as required.

Choose: NEQ.15985 (552992), 10.3 meter length NEQ.15986 (556155), 3.3 meter length

Example: If (20) total temperature probes are desired, order (2) SMTEMP modules and (16) temperature probes.

Order temperature probe extensions if initial length is not adequate, 10 meter length. Quantity as required, NEQ.15987 (04119122).

- 5. If DC generator disconnect breaker is required, order DC generator input connection kit, NEQ.20070 (564898) and 400 A bullet breaker NEQ.20063 (150860).

Vertiv™ XTE 601P Ordering Information

Table with columns: AT&T NUMBER, VERTIV™ NUMBER, DESCRIPTION. Includes sections for Outdoor DC Power System, Equipped with, Accessories, and Batteries.

Table with columns: AT&T NUMBER, VERTIV NUMBER, DESCRIPTION. Includes sections for Accessories and Batteries.

* 1200 watts at 65°C

VERTIV™ XTE 601P ENCLOSURE, NETSURE 512 POWER SYSTEM

Description

This outdoor power solution includes a NetSure™ 512 DC Power System and an environmentally controlled Vertiv XTE 601P enclosure that offers separate individually-cooled chambers for power equipment and batteries.

NetSure 512 DC Power System

- eSure™ rectifiers provide high energy efficiency
• Great output power at high temperatures
• Advanced remote monitoring with NCU controller

Vertiv™ XTE Enclosure

- Separate temperature-controlled zones for power and batteries
• Door-mounted cooling system & rear cable-entry compartment

Technical Specifications

Table of technical specifications including DC Power System Features, Rated Output Capacity, Environmental, Thermal Solutions, Equipment, and Safety.



Ordering Process

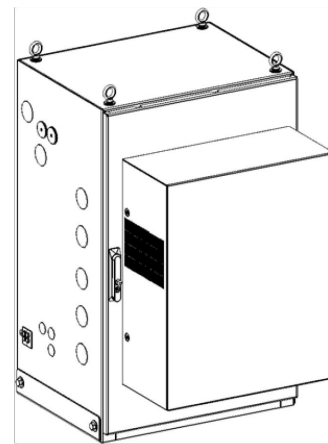
Follow the steps below for each DC power system required.

- 1. Order -48VDC 2000 watt rectifiers, quantity as required, NEQ.15930 (1R482000E3).
2. Order -48VDC to +24VDC 1500 watt converters, quantity as required, NEQ.15929 (1C48241500).
3. Order load circuit breakers and GMT fuse module NEQ.15981 (549017) as required per Bullet Nose Type Circuit Breakers on page 17 and GMT Fuse Modules on page 18.



Cabinet Dimensions

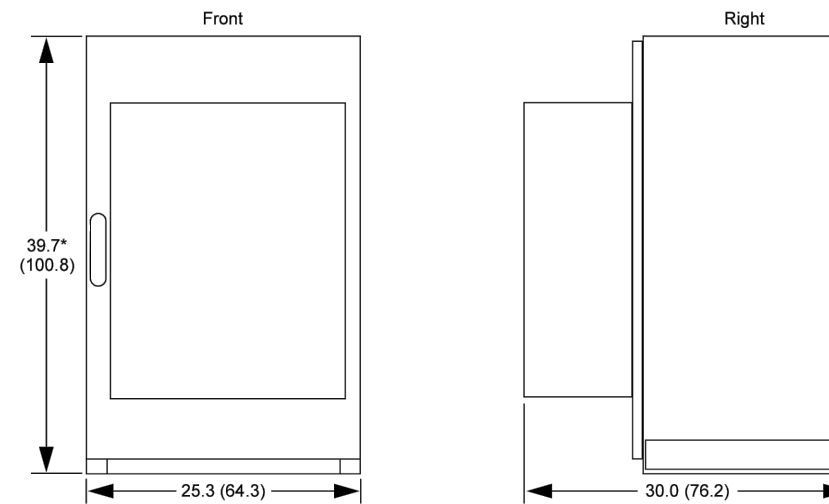
Important! If site requires a stacked configuration, see "Preparing a Stacked Configuration" on page 4.



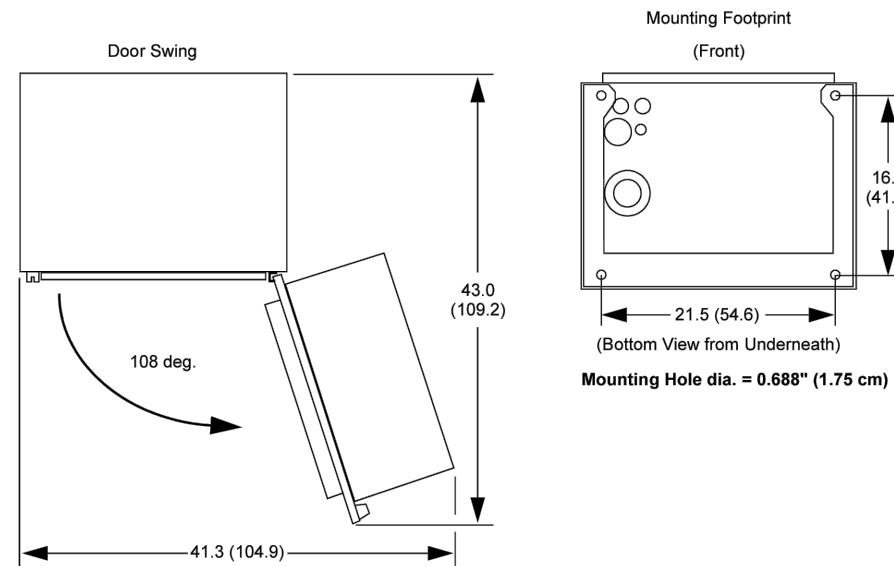
FLX21-2520
Installation Manual



Inches (centimeters)



*Height dimension increased by use of 4 in. or 14 in. plinth.



eSure™ Rectifier

R48-2000e3



eSure™ Rectifier



Benefits

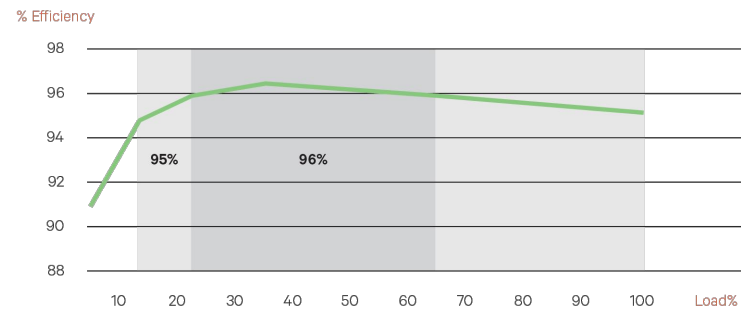
- Optimize the amount of energy delivered and reduce power consumption with over 96% efficiency.
- Increase space for revenue generating equipment with modules that pack more power in a small space with high power density.
- Facilitate easy maintenance, expansion and system changes with hot swappable capabilities.
- Enjoy increased reliability and active load sharing with Digital Signal Processing (DSP) which translates into fewer components and optimized operation.
- Appreciate the flexibility to utilize in a variety of applications with a wide input voltage range of 85 VAC to 300 VAC and full power output at temperatures from -40°C to +65°C.

In addition to reducing power consumption and lowering operating cost, eSure™ high-efficiency rectifiers offer superior performance and uncompromised reliability.

Description

The 2000 watt high-efficiency eSure rectifier (model R48-2000e3) converts standard AC supply voltages into stable nominal -48 VDC voltage that is adjustable to application needs. This constant power rectifier designed with the latest patented switch-mode technology, uses DSP (Digital Signal Processing) for efficient operation.

The R48-2000e3 can be connected in parallel with other rectifiers and converters to support a variety of telecom applications. Unified remote management and control of the power system is enabled when combined with a Vertiv™ controller.



R48-2000e3 Efficiency Curve at 250 VAC Nominal

Technical Specifications

AC Input	R48-2000E3
Voltage	85 VAC to 300 VAC (see figure 1), 187 VAC to 264 VAC (nominal)
Frequency	45 Hz to 65 Hz
Maximum Current	12 A
Power Factor	>0.99 from 50 to 100% load
Protection	High and low voltage protection, surge and lightning protection Adapts to poor quality grid (voltage dip, weak mains) Disconnection at 415 VAC Mains fuses in both lines

DC Output	
Voltage	-42 VDC to -58 VDC
Maximum Power	2000 W
Maximum Current	42 A @ -48 VDC, limit set point 0 to 42 A (see figure 2)
Peak Efficiency	96.2%
Protection	Fuse for reverse connection and back feeding protection High voltage shutdown High temperature protection

Control and Monitoring	
Converter Alarm and Signaling	Alarm and status reported via CAN bus to system controller
Visual Indications	Green LED: Normal Operation Yellow LED: Alarm Red LED: Failure

Environmental	
Operating	-40°C to 80°C / -40°F to +176°F (see figure 3 for derating)
Temperature Derating	Full output power up to +65°C at input voltage range 200 to 250 VAC (see figure 3)
Storage	-40°C to +70°C / -40°F to +158°F
Relative Humidity	0 to 95%
Altitude	Full output power up to +65°C at input voltage range @200- 250 VAC

Standards Compliance	
Safety	60950-1 (EN, IEC and UL)
EMC	EN55022, CISPR22, ETSI EN300 286: 2005, FCC CFR 47 Part 15, Telcordia GR-1089-CORE issue 6 (Class B conducted and radiated)
Environment	REACH, RoHS, WEEE

Mechanics	
Dimensions (H x W x D)	41 x 84.5 x 252.5 (mm) / 1.61 x 3.33 x 9.94 (inches)
Weight	1.13 kg / 2.49 lbs

Ordering Information

Model Number	Description
1R482000E3	eSure™ rectifier, -48 VDC, 2000 W

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R48-2000E3 (R06/20)

Figures

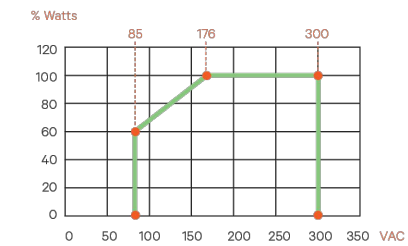


Figure 1: Output Power vs. Input Voltage and Vo > 48 V at Tamb <55°C

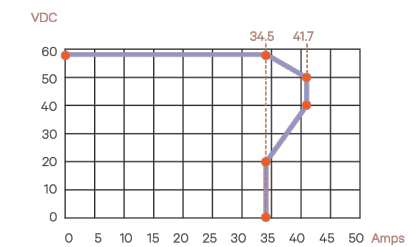


Figure 2: Output Voltage vs. Output Current at Maximum Output Power 2000 W

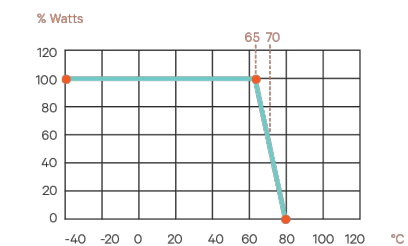


Figure 3: Output Power vs. Temperature at Uin > 200VAC

ESURE™ CONVERTER

C48/24-1500



ESURE™ CONVERTER



KEY FEATURES

Converter, 48 to 24 VDC, 1500 W

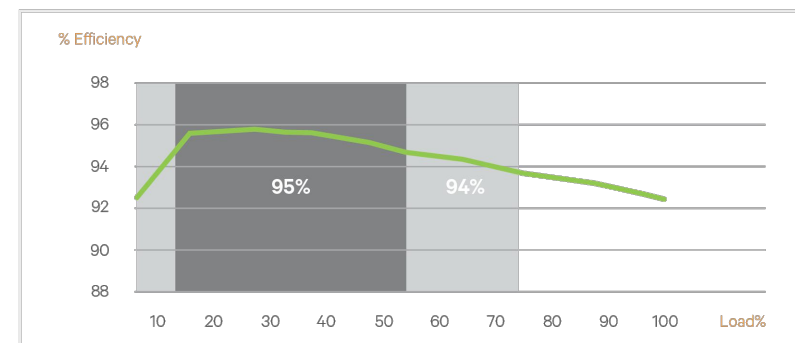
- High efficiency over 95% – reduces power consumption lowering operating costs
- High power density – provides more space for revenue generating equipment
- Hot pluggable and interchangeable – for easy expansions and maintenance
- Digital signal processing (DSP) – means fewer components, optimized operation and active load sharing for increased reliability
- Wide input voltage range (41 VDC to 58 VDC) – allows for flexibility, durability and resilience
- Wide operating temperature range from -40°C to +65° – meets the harshest climatic environment requirements
- Compliant with global standards – delivers quality, performance and reliability no matter what the application or location demands

In addition to reducing power consumption and lowering operating cost, eSure™ high-efficiency converters offer superior performance and uncompromised reliability.

Description

The eSure C48/24-1500 high-efficiency converter is designed to operate from a nominal 48 Vdc source to provide nominal 24 VDC load power, which is adjustable to application needs. This constant power converter designed with the latest patented switchmode technology, uses digital signal processing (DSP) for efficient operation.

When redundancy is critical or loads are high, multiple C48/24-1500 converters can be connected in parallel to support a variety of telecom applications. Unified remote management and control of the power system is enabled when combined with a Vertiv™ controller.



C48 24-1500 Efficiency Curve at 58 VDC Nominal

Technical Specifications

DC INPUT	
Voltage	41 VDC to 58.5 VDC
Maximum Current	39.5 A
DC OUTPUT	
Voltage	24 VDC to 28 VDC
Maximum Power	1500 W @ Vout >24 VDC
Maximum Current	63 A @ 48-24 VDC, limit set point 6.3 to 63 A (see figure 1)
Peak Efficiency	>95%
Psophometric Noise (System)	<2 mV; <32 dBmrc
Temperature Derating	See figure 2
CONTROL AND MONITORING	
Rectifier Alarm and Signaling	Alarm and status reported via CAN bus to system controller
Visual Indications	Green LED: Normal Operation Yellow LED: Alarm Red LED: Failure Flashing Red LED: Fan Failure
ENVIRONMENTAL	
Operating	-40°C to +80°C / -40°F to +176°F
Storage	-40°C to +85°C / -40°F to +185°F
Relative Humidity	0 to 95%
Altitude	2000 m / 6560 ft at full power
STANDARDS COMPLIANCE	
Safety	60950 (EN, IEC and UL)
EMC	ETSI EN 300 386 class A, FCC CFR 47 Part 15 class A, Telcordia GR-1089-CORE class A
Environment	REACH, R5, WEEE
MECHANICS	
Dimensions (H x W x D)	41 x 84.5 x 252.5 (mm) / 1.61 x 3.33 x 9.94 (inches)
Weight	113 kg / 249 lbs

Ordering Information

MODEL NUMBER	DESCRIPTION
1C48241 500	Converter, 48 to 24 VDC, 1500 W

Figures

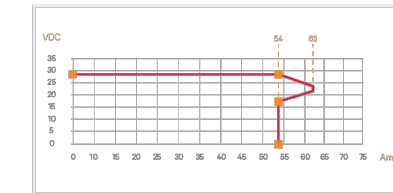


Figure 1:
Output voltage vs. Output current
at max. output power 1500 W

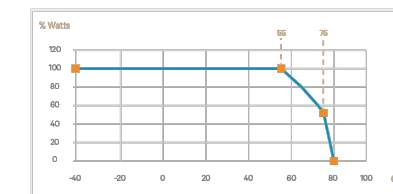


Figure 2:
Output Power vs. Temperature

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DATA SHEET

DC Surge Protection Solutions
DC12-48-60-0-25E
 Overvoltage Protection & Power Management Junction Box

The DC12-48-60-0-25E is designed to be the most robust and capable surge protector available for distributed antenna systems. The flexible design allows for indoor or outdoor mounting at the base station or centrally located at the top of the tower or rooftop for remote radio (RRH) protection. This model employs patented Strikesorb® 30-V1-HV modules capable of providing 60kA (8/20µs) of surge capacity for up to 12 -48VDC circuits.

powered by
Strikesorb®



DC12-48-60-0-25E ships with Conduit Fittings installed

Features

- Provides protection for twelve individual radio protection circuits at the base of sites
- Surge protection of 60kA 8/20µs
- Maximum impulse current 5kA 10/350µs
- UL 1449 3rd Edition Type 4 protection device
- IEC 61643-11 Class I protection for DC applications
- NEMA 4 rated enclosure
- Form C relay contacts included
- Simplifies inter-connectivity and cable management for DC conductors

Benefits

- Strikesorb modules are fully Recognized to UL 1449 3rd Edition and IEC 61643-11 Safety Standards, meeting all intermediate and high current fault requirements to facilitate use in original equipment manufacturers (OEM) applications.
- Offers unique maintenance-free protection against direct lightning currents.
- Utilizes a NEMA 4/12 dust-tight rated enclosure, allowing for indoor or outdoor installation on a roof or tower top.



Cable Gland kit included

Strikesorb is a registered trademark of Raycap
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 G02-00-267 131203



www.raycapsurgeprotection.com

SPECIFICATIONS

DC Surge Protection Solutions
DC12-48-60-0-25E
 Overvoltage Protection & Power Management Junction Box

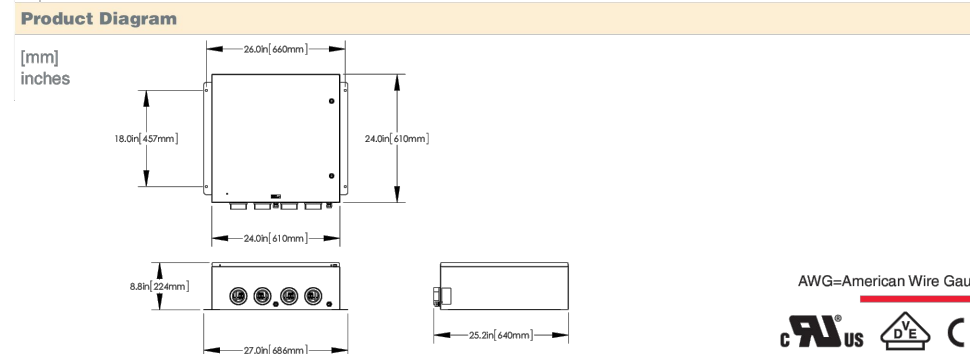
powered by
Strikesorb®

Electrical	
Model Number	DC12-48-60-0-25E
CEQ / ANT Number	CEQ. 12659
Surge Protective Device (SPD) Type to UL	Type 4
Surge Protective Device (SPD) Class to IEC	Class I
Nominal Operating DC Voltage [U _n]	48V
Maximum Impulse (Lightning) Current [I _{imp}]	5kA 10/350µs
Maximum Continuous Operating DC Voltage [U _c]	75VDC
Nominal Discharge Current [I _n]	20kA 8/20µs
Maximum Discharge Current [I _{max}]	60kA 8/20µs
Voltage Protection Rating (VPR)	400V
Voltage Protection Level [U _p]	410V
Suppression Technology	MOV
Protection Modes:	Normal Mode -48V to Return Common Mode Return to Ground

Mechanical	
Connection Terminal (Suppression) Method	Compression Lug
Connection Terminal (Suppression) Hardwired	Copper #14 to #2 AWG [2.5 to 35 mm ²] Aluminum #12 to #2 AWG [4 to 35 mm ²]
Form C Contact Connection (Terminal Block) Hardwired	#22 to #12 AWG [0.34 to 4 mm ²]
Operating Temperature (°C)	-40° C to +100° C
Storage Temperature (°C)	-70° C to +80° C
Enclosure Type (Outdoor)	NEMA 4 Rated
Enclosure Dimension (L x W x H)	24" x 24" x 8" [609.6 x 609.6 x 203.2 mm]
Weight	56.3 lbs [25.54 kg]

Additional Features	
Conduit Fittings	4- 2" Conduit Fittings
Cable Glands (kit included)	4- M63 Cable Glands

Standards Compliance & Certifications	
Standards	UL 1449 3rd Edition: 2009, IEC 61643-11:2011, IEC 61643-12 2nd Edition: 2008, IEEE C62.41.2: 2002, EN 61643-11: 2002 (including A11: 2007), NEMA LS 1
Certifications	UL, VDE, CE
Associations	ANSI, EN, IEC, IEEE, NEC, NEMA



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1 PROPOSED DC12 DETAIL
 SCALE: N.T.S.

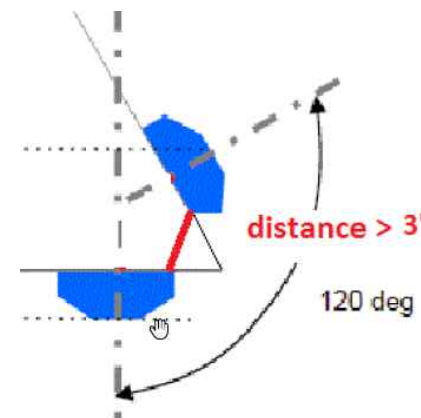
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SUPPLEMENTAL

SHEET NUMBER: **R-606**
 REVISION: -

RF REQUIREMENTS FOR 700 B14 FIRSTNET, 700 B12, 700D B29 ANTENNA SEPARATION

- ❑ Horizontal separation (side to side of antenna): $\geq 3'$
- ❑ Vertical separation (between the tips of the antennas): $> 3'$
- ❑ Inter-sector separation: $> 3'$ between the center of the antenna backplanes.



- ❑ Please note additional horizontal separation may be required if B14 antennas azimuth are different from others or antennas are severely angled with respect to the mount.
- ❑ Typical 3' horizontal separation can tolerate skew angle up to 6° .



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

SUPPLEMENTAL

SHEET NUMBER:
R-607

REVISION:
-



Post Modification Mount Analysis Report

ATC Asset Name : Monument CO
ATC Asset Number : 302418
Engineering Number : 14193528_C9_04
Mount Elevation : 50 ft
Proposed Carrier : AT&T Mobility
Carrier Site Name : Monument Hill
Carrier Site Number : COL02014
Site Location : 20017 Beacon Lite Road
 Monument, CO 80132-9619
 39.122568, -104.866305
County : El Paso
Date : March 1, 2023
Max Usage : 81%
Analysis Result : Contingent Pass

Prepared By:
 Michael Ellis
 Structural Engineer I

Reviewed By:



Authorized by "EOR"
 09 Mar 2023 11:31:02

Introduction

The purpose of this report is to summarize results of the mount analysis performed for AT&T Mobility at 50 ft.

Supporting Documents

Previous Analysis:	WYCO Engineering Services Project #175882, dated June 17, 2018
Radio Frequency Data Sheet:	RFDS ID #10101123, dated February 3, 2023
Reference Photos:	Site photos from 2022

Analysis

This mount was analyzed using American Tower Corporation's Mount Analysis Program and RISA-3D

Basic Wind Speed:	130 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 0.25" radial ice concurrent
Codes:	ANSI/TIA-222-H
Exposure Category:	C
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Spectral Response:	Ss = 0.217, S1 = 0.059
Site Class:	D - Stiff Soil - Default
Live Loads:	Lm = 500 lbs, Lv = 250 lbs

Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed above provided the modifications listed below are completed:

- Install modification per ATC Drawing #14193528_C9_04

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. PLEASE REFERENCE THE MOUNT ANALYSIS REPORT FOR COMPLETE MOUNT ANALYSIS CALCULATIONS AND DETAILS. SUPPLEMENTAL PAGES INCLUDED IN THE CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONSTRUCTION.