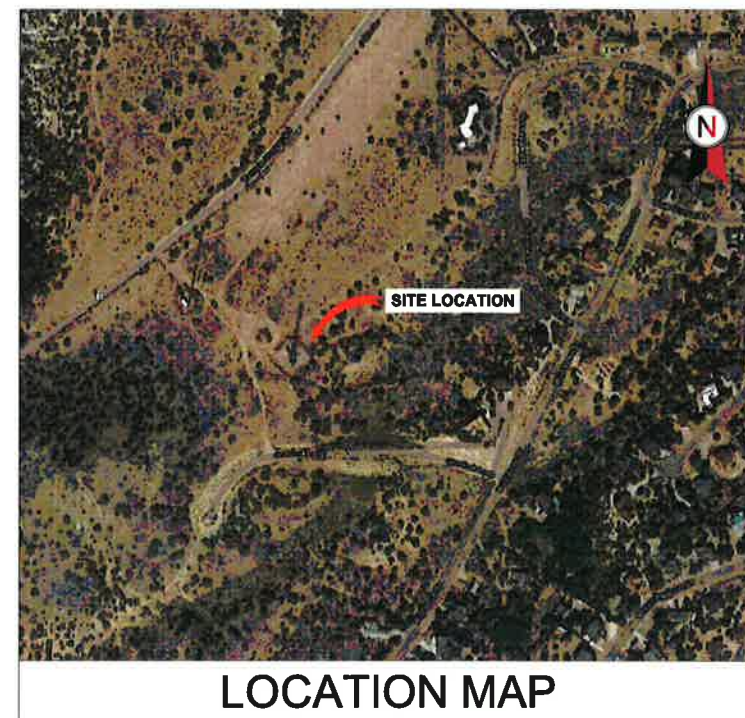


VICINITY MAP



**AMERICAN TOWER®**

ATC SITE NAME: CANON CITY  
 ATC SITE NUMBER: 370533  
 T-MOBILE SITE NAME: DN04300B  
 T-MOBILE SITE NUMBER: DN04300B  
 SITE ADDRESS: 12868 CR 3  
 CANON CITY, CO 81212-0000  
 SITE CLASS: SELF SUPPORT



LOCATION MAP

**BACKHAUL UPGRADE\_MW UPGRADE SECOND\_SITE MOD  
 DN04300B-0002175609**

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
<p>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.</p> <ol style="list-style-type: none"> <li>2021 INTERNATIONAL BUILDING CODE (IBC)</li> <li>2023 NATIONAL ELECTRICAL CODE (NEC)</li> <li>LOCAL BUILDING CODE</li> <li>CITY/COUNTY ORDINANCES</li> </ol>	<p><u>SITE ADDRESS:</u>            12868 CR 3            CANON CITY, CO 81212-0000            COUNTY: FREMONT</p> <p><u>GEOGRAPHIC COORDINATES:</u>            LATITUDE: 38.40615581            LONGITUDE: -105.26637542            GROUND ELEVATION: 5768' AMSL</p>	<p>THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:  <b>TOWER WORK:</b>            REMOVE (1) COAX CABLE AND (1) RFU-C ODU            INSTALL FIBER IP-20D ODU, (1) 3/8" FIBER CABLE AND (1) 5/8" POWER CABLE            EXISTING (6) ANTENNAS AND (2) PENDANT CONNECT(S) TO REMAIN            EXISTING (6) RRH(S) W/ SWIVEL MOUNT(S) TO BE RELOCATED TO ANTENNA MOUNTING PIPE(S)</p> <p><b>GROUND WORK:</b>            EXISTING T-MOBILE GROUND EQUIPMENT TO REMAIN</p>	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	<p><b>PROJECT TEAM</b></p> <p><u>TOWER OWNER:</u> AMERICAN TOWER            10 PRESIDENTIAL WAY            WOBURN, MA 01801</p> <p><u>ENGINEER:</u> FULLERTON ENGINEERING CONSULTANTS, LLC            1100 E. WOODFIELD ROAD, SUITE 500            SCHAUMBURG, IL 60173</p> <p><u>APPLICANT:</u> T-MOBILE</p> <p><u>PROPERTY OWNER:</u> LLOYD OLOMON            12868 CR 3            CANON CITY, CO 81212-0000</p>	<p><b>PROJECT NOTES</b></p> <ol style="list-style-type: none"> <li>THE FACILITY IS UNMANNED.</li> <li>A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE.</li> <li>THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE.</li> <li>NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED.</li> <li>HANDICAP ACCESS IS NOT REQUIRED.</li> <li>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).</li> </ol>	G-001	TITLE SHEET	0	03/29/2024	RV
	<p><b>UTILITY COMPANIES</b></p> <p>POWER COMPANY: T.B.D.            PHONE: T.B.D.</p> <p>TELEPHONE COMPANY: T.B.D.            PHONE: T.B.D.</p>	<p><b>PROJECT LOCATION DIRECTIONS</b></p> <p>FROM CANON CITY, CO DEPART US-50 / W ROYAL GORGE BLVD TOWARD S 6TH ST 0.5 MI. TURN LEFT ONTO S 1ST ST 0.6 MI. ROAD NAME CHANGES TO TEMPLE CANYON RD 0.5 MI. KEEP RIGHT TO STAY ON TEMPLE CANYON RD 1.1 MI. ARRIVE AT TEMPLE CANYON RD</p>	G-002	GENERAL NOTES	0	03/29/2024	RV
			C-101	DETAILED SITE PLAN	0	03/29/2024	RV
			C-201	TOWER ELEVATION	0	03/29/2024	RV
			C-401	ANTENNA INFORMATION & SCHEDULE	0	03/29/2024	RV
			C-501	CONSTRUCTION DETAILS	0	03/29/2024	RV
			E-501	GROUNDING DETAILS	0	03/29/2024	RV
			R-601	SUPPLEMENTAL			
			R-602	MOUNT ANALYSIS - SUPPLEMENTAL			



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REV.	DESCRIPTION	BY	DATE
A	PRELIM	AH	03/21/24
0	FINAL	RV	03/29/24

ATC SITE NUMBER:  
**370533**  
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 CANON CITY, CO 81212-0000

SEAL:



ATC PROJ. #: 14752410\_G0  
 CUST. ID: DN04300B  
 CUST. #: DN04300B

TITLE SHEET

SHEET NUMBER: **G-001** REVISION: **0**



**GENERAL CONSTRUCTION NOTES:**

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

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

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

**SPECIAL CONSTRUCTION**

**ANTENNA INSTALLATION NOTES:**

1. WORK INCLUDED:
  - A. ANTENNA AND COAXIAL/HYBRID CABLES ARE FURNISHED BY T-MOBILE UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL.
  - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND T-MOBILE SPECIFICATIONS.
  - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
  - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.
  - E. INSTALL COAXIAL/HYBRID CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL/HYBRID CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
2. ANTENNA AND COAXIAL/HYBRID CABLE GROUNDING:
  - A. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.

**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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REV.	DESCRIPTION	BY	DATE
△	PRELIM	AH	03/21/24
△	FINAL	RV	03/29/24
△			
△			
△			

ATC SITE NUMBER:  
**370533**  
 ATC SITE NAME:  
**CANON CITY**  
 T-MOBILE SITE NAME:  
**DN04300B**  
 SITE ADDRESS:  
 12868 CR 3  
 CANON CITY, CO 81212-0000

SEAL:



ATC PROJ. #: 14752410\_G0  
 CUST. ID: DN04300B  
 CUST. #: DN04300B

**GENERAL NOTES**

SHEET NUMBER: **G-002** REVISION: **0**

**SITE PLAN NOTES:**

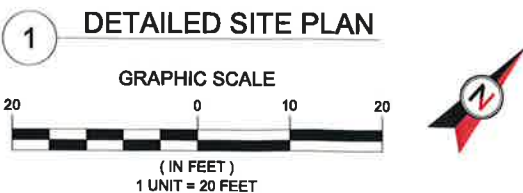
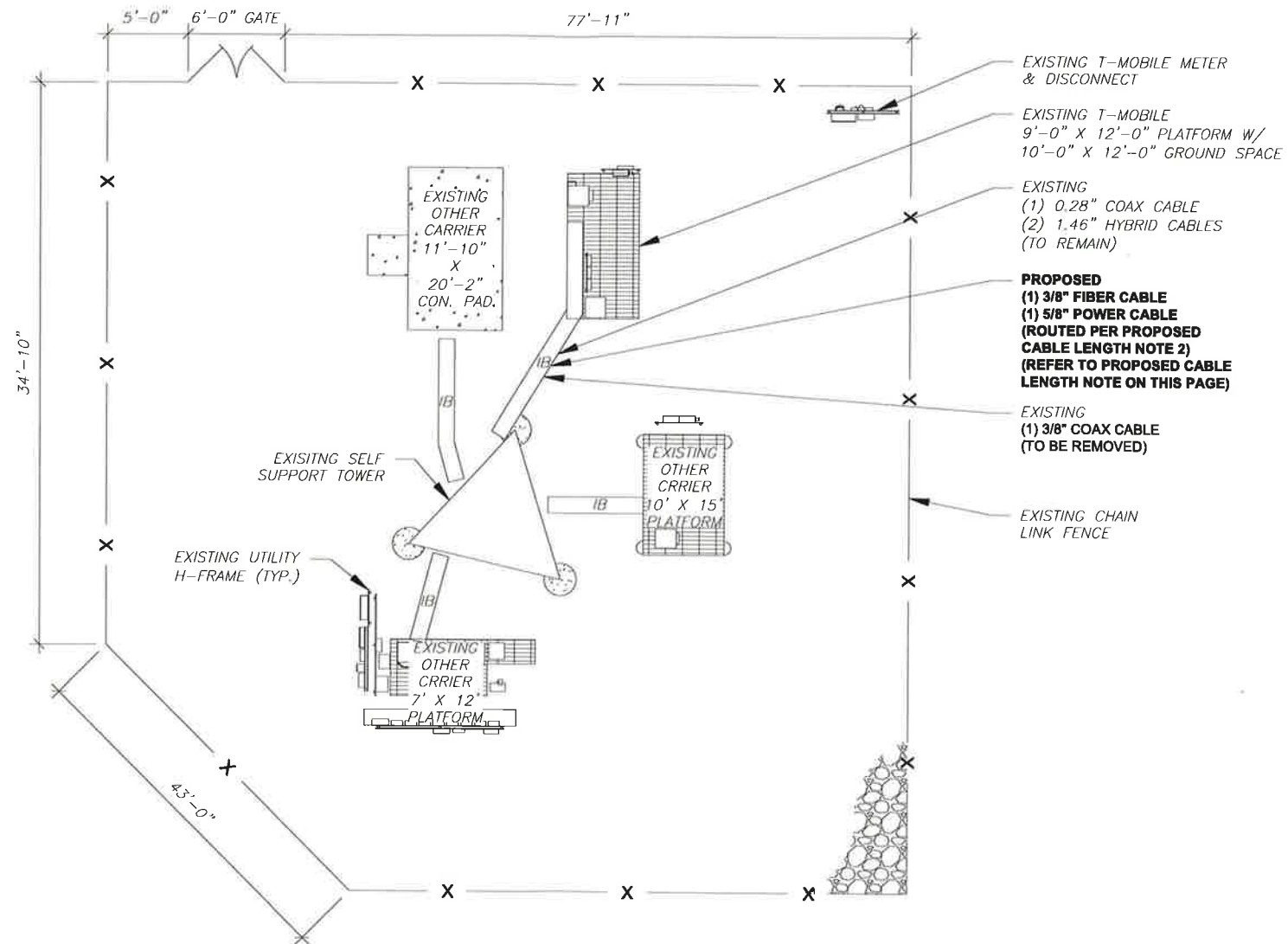
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE 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. NO ELECTRICAL SCOPE IS INCLUDED IN THIS PROJECT.

**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 NOTES:**

1. ESTIMATED LENGTH OF PROPOSED CABLE IS 205'. 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. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).



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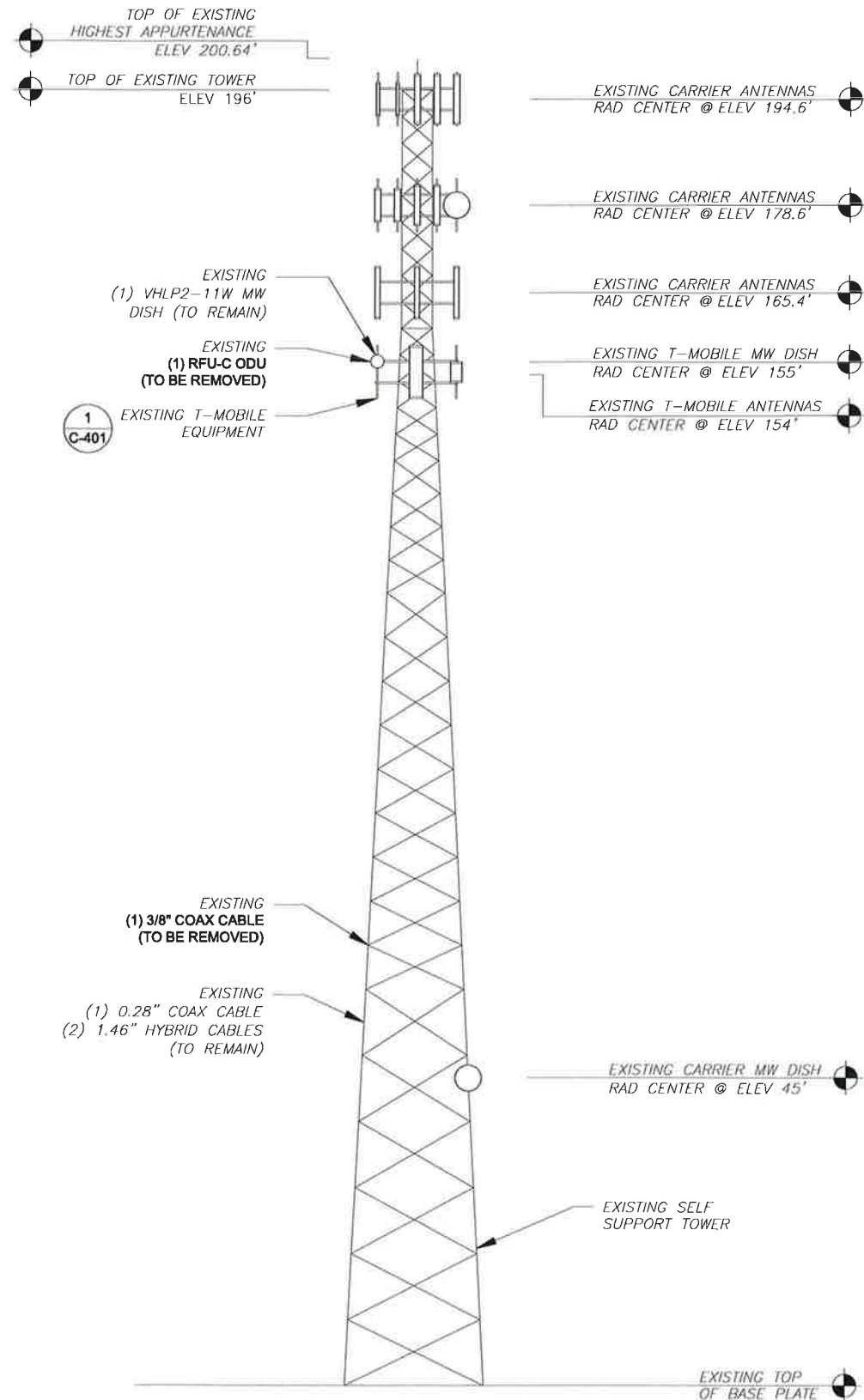
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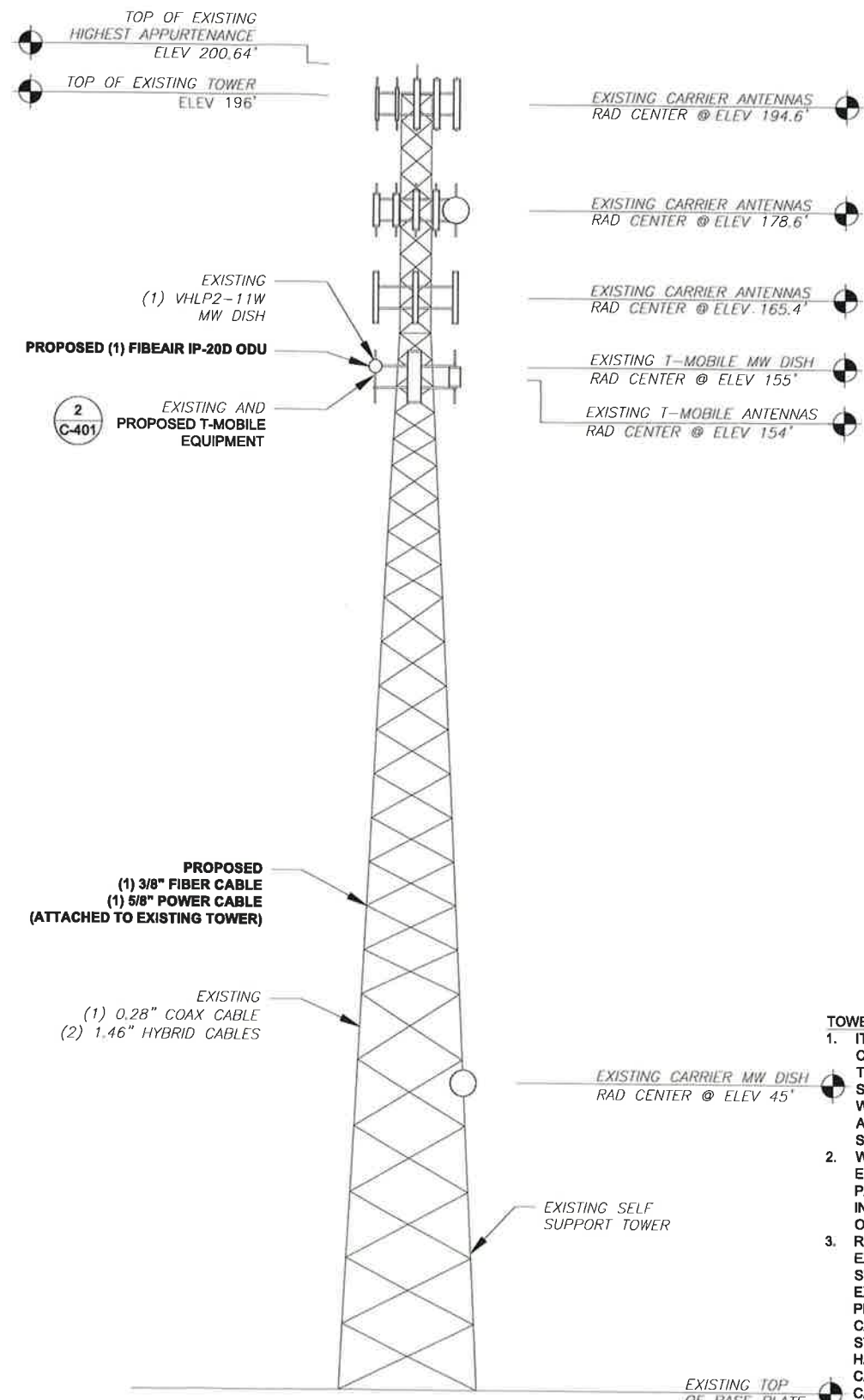
ATC PROJ. #: 14752410\_G0  
CUST. ID: DN04300B  
CUST. #: DN04300B

**DETAILED SITE PLAN**

SHEET NUMBER: **C-101** REVISION: **0**



1 EXISTING TOWER ELEVATION  
SCALE: N.T.S.



2 PROPOSED TOWER ELEVATION  
SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY ATC, DATED 03/11/2024, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.

ATC HAS COMPLETED THE TOWER ANALYSIS ON 03/13/2024 AND THE TOWER CAN ADEQUATELY SUPPORT THE PROPOSED LOADS.

**TOWER NOTE:**

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
- WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
- ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).
- TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.



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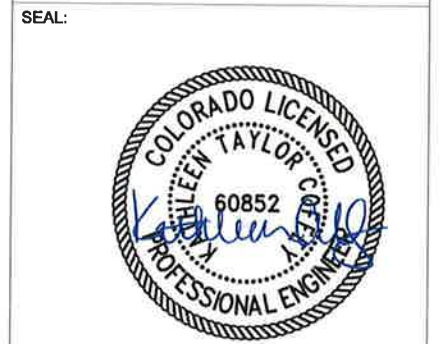
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**370533**

ATC SITE NAME:  
**CANON CITY**

T-MOBILE SITE NAME:  
**DN04300B**

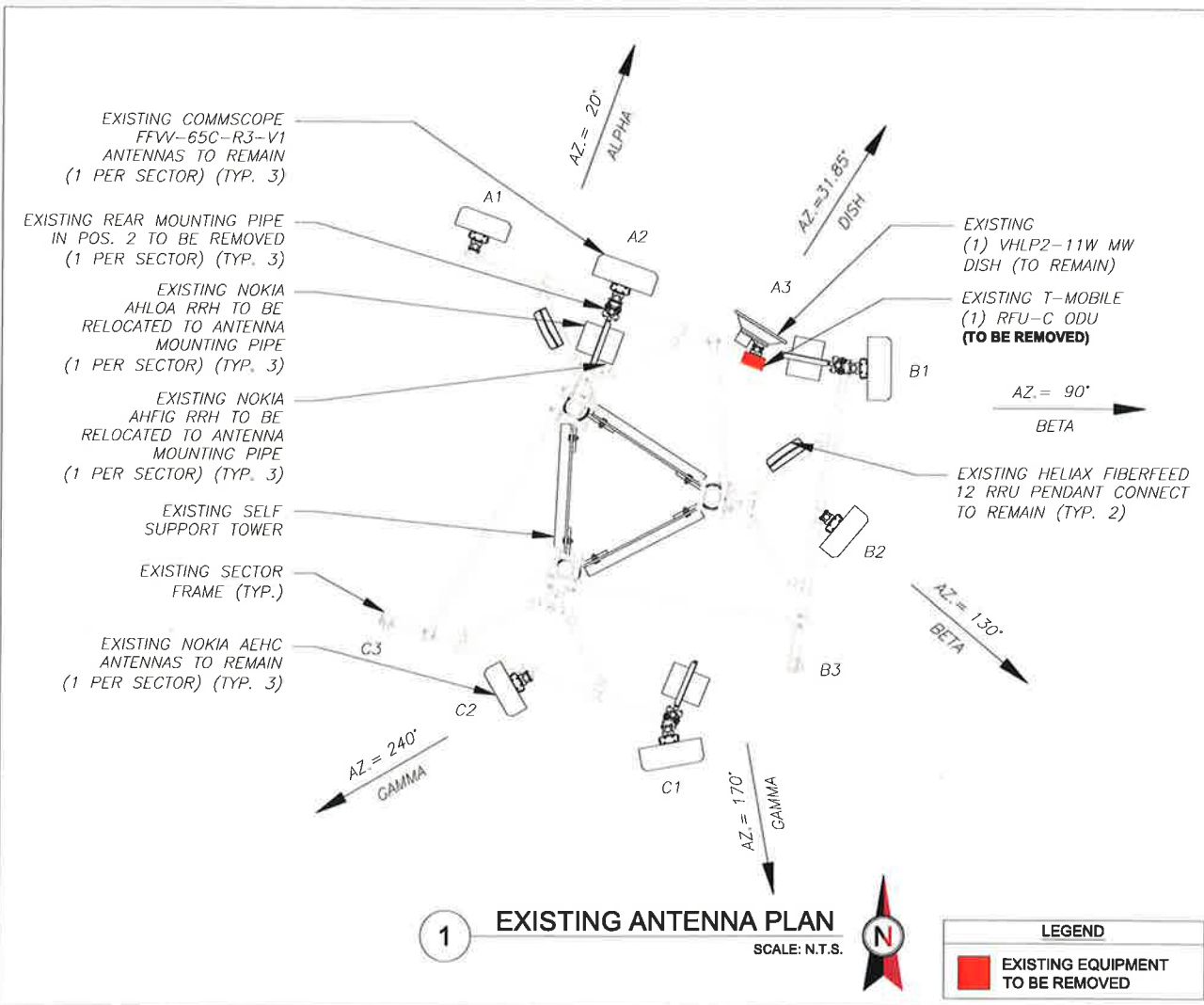
SITE ADDRESS:  
12868 CR 3  
CANON CITY, CO 81212-0000



ATC PROJ. #:	14752410_G0
CUST. ID:	DN04300B
CUST. #:	DN04300B

<b>TOWER ELEVATION</b>	
SHEET NUMBER: <b>C-201</b>	REVISION: <b>0</b>

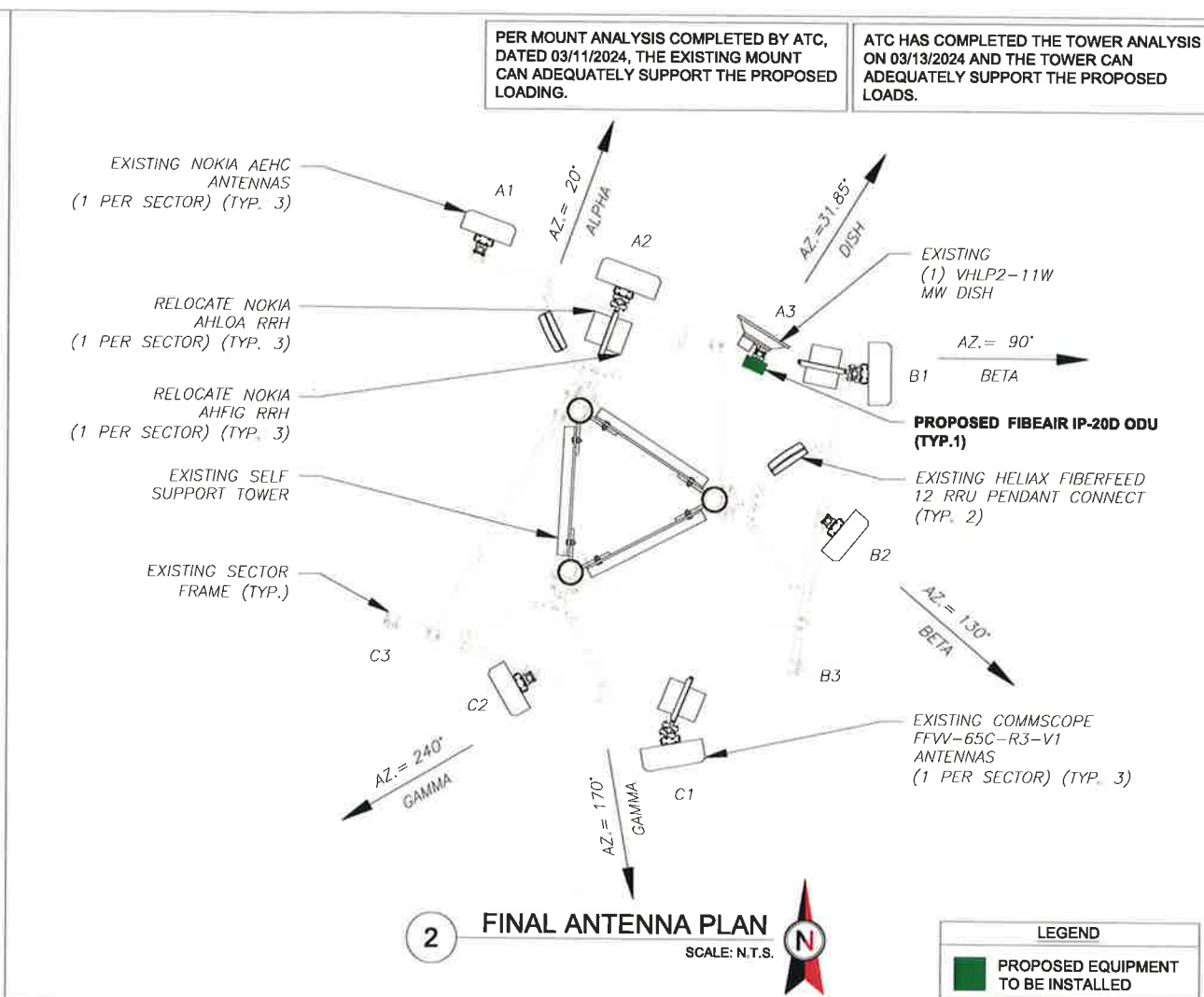
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**1 EXISTING ANTENNA PLAN**  
SCALE: N.T.S.

**LEGEND**

■ EXISTING EQUIPMENT TO BE REMOVED



**2 FINAL ANTENNA PLAN**  
SCALE: N.T.S.

**LEGEND**

■ PROPOSED EQUIPMENT TO BE INSTALLED

PER MOUNT ANALYSIS COMPLETED BY ATC, DATED 03/11/2024, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.

ATC HAS COMPLETED THE TOWER ANALYSIS ON 03/13/2024 AND THE TOWER CAN ADEQUATELY SUPPORT THE PROPOSED LOADS.

EXISTING ANTENNA SCHEDULE								NOTES	
LOCATION		ANTENNA SUMMARY				NON ANTENNA SUMMARY		STATUS	STATUS
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	ADDITIONAL TOWER MOUNTED EQUIPMENT		
ALPHA	154°	20°	A1	AEHC	N2500/L2500	0/0	-	-	
			A2	FFW-65C-R3-V1	L700,L600,N600,L1900,G1900,L2100	0/0	AHLOA AHFIG	REL REL	
	155°	31.85°	A3	VHLP2-11W MW DISH	L700,L600,N600,L1900,G1900,L2100	0/0	RFU-C ODU	RMV	
BETA	154°	90°	B1	FFW-65C-R3-V1	L700,L600,N600,L1900,G1900,L2100	0/0	AHLOA AHFIG	REL REL	
		130°	B2	AEHC	N2500/L2500	0/0	-	-	
		-	B3	-	-	-	-	-	
GAMMA	154°	170°	C1	FFW-65C-R3-V1	L700,L600,N600,L1900,G1900,L2100	0/0	AHLOA AHFIG	REL REL	
		240°	C2	AEHC	N2500/L2500	0/0	-	-	
		-	C3	-	-	-	-	-	

1. GC TO VERIFY THE FINAL RFDS MATCHES THE FINAL CONSTRUCTION DRAWINGS. GC TO NOTIFY ATC PM OF ANY DISCREPANCY PRIOR TO INSTALLING THE EQUIPMENT.

2. GC TO CAP ALL UNUSED PORTS.

3. GC TO CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

**STATUS ABBREVIATIONS**

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

**CABLE LENGTHS FOR JUMPERS**

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

FINAL ANTENNA SCHEDULE									
LOCATION		ANTENNA SUMMARY				NON ANTENNA SUMMARY			
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	154°	20°	A1	AEHC	N2500/L2500	0/0	RMN	-	-
			A2	FFW-65C-R3-V1	L700,L600,N600,L1900,G1900,L2100	0/0	RMN	AHLOA AHFIG	REL REL
	155°	31.85°	A3	VHLP2-11W MW DISH	L700,L600,N600,L1900,G1900,L2100	0/0	RMN	FIBEAIR IP-20D ODU	ADD
BETA	154°	90°	B1	FFW-65C-R3-V1	L700,L600,N600,L1900,G1900,L2100	0/0	RMN	AHLOA AHFIG	REL REL
		130°	B2	AEHC	N2500/L2500	0/0	RMN	-	-
		-	B3	-	-	-	-	-	-
GAMMA	154°	170°	C1	FFW-65C-R3-V1	L700,L600,N600,L1900,G1900,L2100	0/0	RMN	AHLOA AHFIG	REL REL
		240°	C2	AEHC	N2500/L2500	0/0	RMN	-	-
		-	C3	-	-	-	-	-	-

EXISTING FIBER DISTRIBUTION / OVP BOX		EXISTING CABLING SUMMARY		
MODEL NUMBER	STATUS	HYBRID	COAX	STATUS
(2) HELIAX FIBERFEED 12 RRU PENDANT CONNECTS	RMN	(2) 1.46"	(1) 0.28"	RMN
-	-	-	(1) 3/8"	RMV

**3 EQUIPMENT SCHEDULES**

FINAL FIBER DISTRIBUTION/OVP BOX		FINAL CABLING SUMMARY				
MODEL NUMBER	STATUS	FIBER	POWER	HYBRID	COAX	STATUS
(2) HELIAX FIBERFEED 12 RRU PENDANT CONNECTS	RMN	-	-	(2) 1.46"	(1) 0.28"	RMN
-	-	(1) 3/8"	(1) 5/8"	-	-	ADD



1100 E. WOODFIELD ROAD, SUITE 500  
SCHAUMBURG, ILLINOIS 60173  
TEL: 847-908-8400  
www.fullerton-us.com

REV.	DESCRIPTION	BY	DATE
△	PRELIM	AH	03/21/24
△	FINAL	RV	03/29/24

ATC SITE NUMBER:  
**370533**

ATC SITE NAME:  
**CANON CITY**

T-MOBILE SITE NAME:  
**DN04300B**

SITE ADDRESS:  
12868 CR 3  
CANON CITY, CO 81212-0000



ATC PROJ. #: 14752410\_G0  
CUST. ID: DN04300B  
CUST. #: DN04300B

**ANTENNA INFORMATION & SCHEDULE**

SHEET NUMBER:  
**C-401**

REVISION:  
**0**



1100 E. WOODFIELD ROAD, SUITE 500  
 SCHAUMBURG, ILLINOIS 60173  
 TEL: 847-908-8400  
 www.fullerton-us.com

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REV.	DESCRIPTION	BY	DATE
A	PRELIM	AH	03/21/24
B	FINAL	RV	03/29/24

ATC SITE NUMBER:  
**370533**

ATC SITE NAME:

**CANON CITY**

T-MOBILE SITE NAME:

**DN04300B**

SITE ADDRESS:

12868 CR 3  
 CANON CITY, CO 81212-0000

SEAL:



ATC PROJ. #: 14752410\_G0

CUST. ID: DN04300B

CUST. #: DN04300B

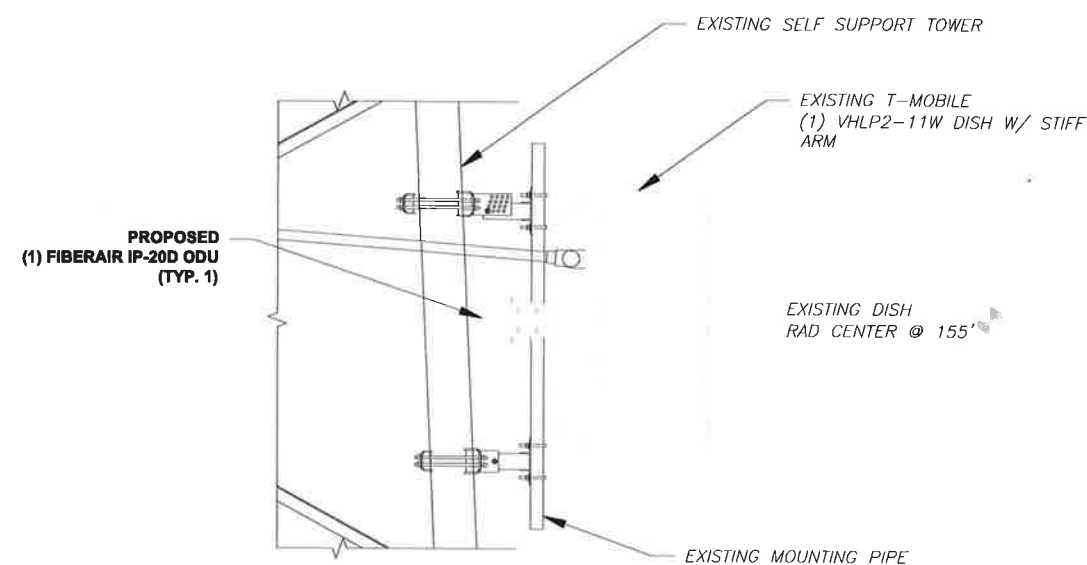
SUPPLEMENTAL

SHEET NUMBER:

**C-501**

REVISION:

**0**



**1** PROPOSED ODU MOUNTING DETAIL  
 SCALE: N.T.S.

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



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REV.	DESCRIPTION	BY	DATE
A	PRELIM	AH	03/18/24
B	FINAL	RV	03/29/24

ATC SITE NUMBER:  
**370533**  
ATC SITE NAME:  
**CANON CITY**  
T-MOBILE SITE NAME:  
**DN04300B**  
SITE ADDRESS:  
12868 CR 3  
CANON CITY, CO 81212-0000

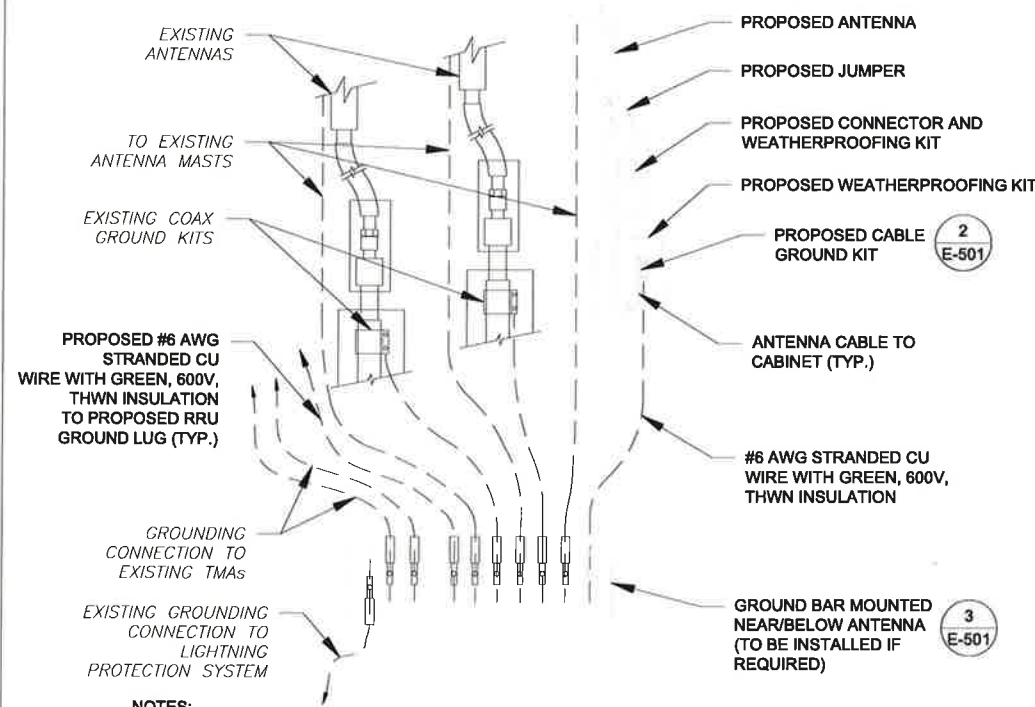
SEAL:



ATC PROJ. #: 14752410\_G0  
CUST. ID: DN04300B  
CUST. #: DN04300B

**GROUNDING DETAILS**

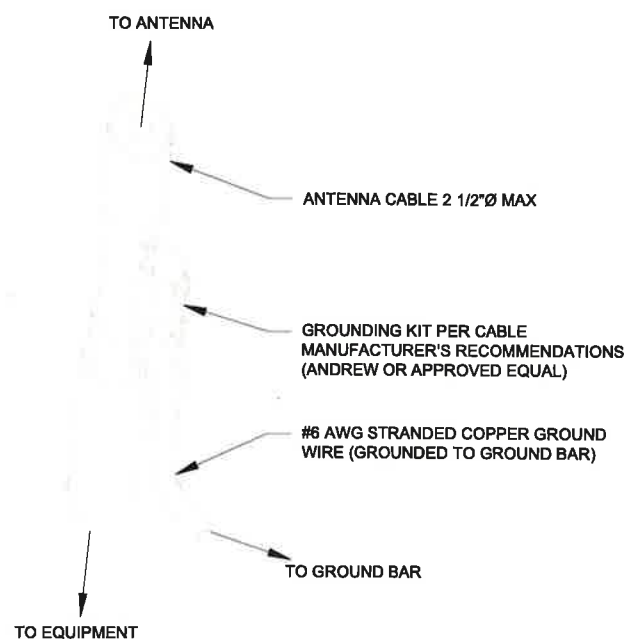
SHEET NUMBER: **E-501** REVISION: **0**



**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 T-MOBILE GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH T-MOBILE GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

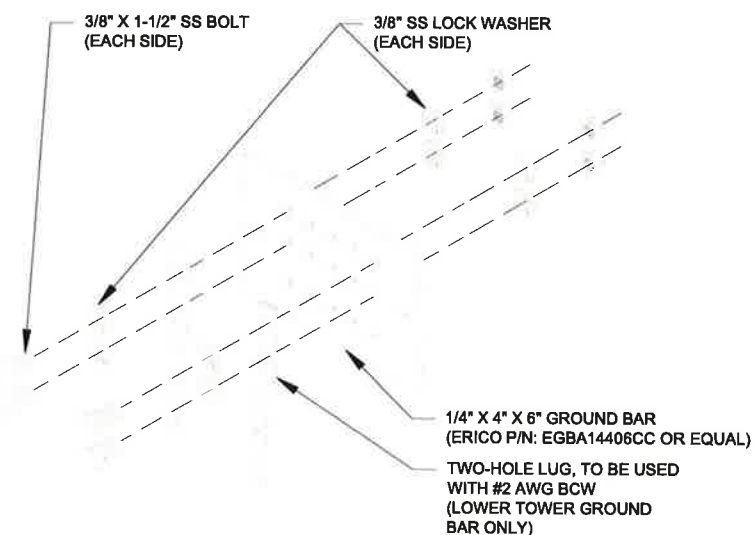
**1** TYPICAL ANTENNA GROUNDING DIAGRAM  
SCALE: N.T.S.



**GROUND KIT NOTES:**

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.



### High-availability, split-mount, modular multicore aggregation node

Designed uniquely for the North American market, FibeAir IP-20A is a highly-flexible aggregation node that delivers multi-Gbps radio capacity at a very large scale. Now available with multicore technology and new radio units, IP-20A features high modularity and flexibility and supports up to 8 radio links with an exceptionally wide variety of line interfaces via pluggable modules, in a wide range of network topologies - making it the preferred node for your transport network's aggregation sites.

The FibeAir IP-20A operates within the entire microwave and millimeter-wave spectrum, offering high spectral efficiency across licensed and license-exempt frequency bands (4-86 GHz). It also supports all high-speed data interfaces (10G/1G/FE) and a wide variety of TDM interfaces (DS1, OC-3); operates with a wide variety of multicore, standard and high power radios; and accommodates various network configurations including 1x 8+0, 4x 2+0, and 8x 1+0.

**Note:** For exact feature availability, contact your Ceragon representative. In case of discrepancy between this Datasheet and the Technical Description for the product, the Technical Description prevails.

### General

#### Assembly options

1RU Chassis – 5x Universal slots;

2RU Chassis – 10x Universal slots

Redundant TCC slots (2RU chassis only)

#### Radio

#### Supported Frequency Range

Standard Power: 6-42 GHz, 71-76 GHz, 81-86 GHz

High Power: 4-11 GHz

#### Supported RFUs

RFU-D – High-capacity MultiCore radio

RFU-D-HP – High-capacity, high-power MultiCore radio

RFU-E – High capacity E-band radio

RFU-S – High-capacity radio

RFU-C – High-capacity radio

RFU-A – High-capacity, high-power radio

1500HP/RFU-HP – High-capacity, high-power radio

#### Typical Radio Configurations

N+0 (up to N=8), 1x 8+0, 2x 4+0, 4x 2+0, 8x 1+0, 1+1, 2+2

Split Mount (Standard Power, High Power)

All Indoor (High Power)

#### Radio Features

Multi-Carrier Adaptive Bandwidth Control (up to 8+0)

Protection and Diversity: HSB, SD (BBC and BBS)

High spectral utilization: BPSK to 4096 QAM w/ACM

Channel bandwidth:

- 4-42 GHz: up to 112 MHz
- E-Band: up to 500 MHz

**Note:** 112 channels are planned for future release.

• Planned for future release.

#### XPIC

Multiband (with IP-50E/IP-20E)

Advanced Space Diversity (ASD)\*

Field Replaceable Diplexers/ Field Replaceable Channel Filters

#### Ethernet

##### Ethernet Interfaces

1RU/2RU Traffic Interfaces - Up to 10 x 1000Base-T (RJ-45) or 1000base-X (SFP)

Up to 2 x 10Gbase-X (SFP+)

Management Interfaces - 2 x 10/100 Base-T (RJ-45)

SFP Types - Optical 1000Base-LX (1310 nm) or SX (850 nm)

##### Ethernet Features

MTU – 9600 Bytes

Quality of Service

- Multiple Classification criteria (VLAN ID, P-bits, IPv4 DSCP, IPv6 TC, MPLS EXP)
- 8 priority queues per port
- Deep buffering (configurable up to 64 Mbit per queue)
- WRED
- P-bit marking/remarking

4K VLANs

VLAN add/remove

MSTP, ERP (ITU-T G.8032)

Frame Cut Through – controlled latency and PDV for delay sensitive applications

Header DeDuplication – Capacity boosting by eliminating inefficiency in all layers (L2, MPLS, L3, L4, Tunneling – GTP for LTE, GRE)

Y.1731 Ethernet OAM

Y.1731 Ethernet Bandwidth Notification (ETH-BN)



### Product Images

#### IDU

IP-20A 1RU CHASSIS



IP-20A 2RU CHASSIS



#### Modules

RADIO MODEM CARDS (RMCs)



RADIO INTERFACE CARDS (RICs)



TRAFFIC CONTROL CARDS (TCCs)



ETHERNET LIC WITH 1 COMBO AND 3 ELECTRICAL OR OPTICAL INTERFACES



ETHERNET LIC WITH A SINGLE 10G OPTICAL INTERFACE



TDM LICs



Radio Units  
RFU-E



RFU-D



RFU-D-HP



RFU-S



RFU-C



RFU-A



1500HP/RFU-HP



### SUPPLEMENTAL

SHEET NUMBER:

R-601

REVISION:

0

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





## Mount Analysis Report

**ATC Asset Name** : Canon City  
**ATC Asset Number** : 370533  
**Engineering Number** : 14752410\_CB\_01  
**Mount Elevation** : 152 ft  
**Proposed Carrier** : T-Mobile  
**Carrier Site Name** : DN04300B  
**Carrier Site Number** : DN04300B  
**Site Location** : 12868 Cr 3  
 CANON CITY, CO 81212-0000  
 38.406156, -105.266375  
**County** : Fremont  
**Date** : March 11, 2024  
**Max Usage** : 88%  
**Analysis Result** : Contingent Pass

Prepared By:  
 Aviskar Ghansam  
 Structural Engineer I

*Aviskar Ghansam*

ATC Tower Services, LLC - 1 Fenton Main, Suite 300 - Cary, NC 27511 - 919.468.0112 Office - 919.466.5414 Fax - www.americantower.com

Digitally signed by Bryan Lanier  
 Date: 2024.03.13 21:35:24  
 04:00



Eng. Number 14752410\_CB\_01  
 March 11, 2024  
 Page 3

### Introduction

The purpose of this report is to summarize results of the mount analysis performed for T-Mobile at 152 ft.

### Supporting Documents

<b>Previous Analysis:</b>	ATC Project #13743168_CB_01, dated February 17, 2024
<b>Radio Frequency Data Sheet:</b>	RFDS ID #DN04300B, dated February 28, 2024
<b>Reference Photos:</b>	Site photos from 2023

### Analysis

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

<b>Basic Wind Speed:</b>	105 mph (3-Second Gust)
<b>Basic Wind Speed w/ Ice:</b>	50 mph (3-Second Gust) w/ 0.25" radial ice concurrent
<b>Codes:</b>	ANSI/TIA-222-H
<b>Exposure Category:</b>	C
<b>Risk Category:</b>	II
<b>Topographic Factor Procedure:</b>	Method 2
<b>Feature:</b>	Flat
<b>Crest Height (H):</b>	0 ft
<b>Crest Length (L):</b>	0 ft
<b>Spectral Response:</b>	Ss = 0.262, S1 = 0.072
<b>Site Class:</b>	D - Stiff Soil - Default
<b>Live Loads:</b>	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:

- Remove Rear Mount Pipe(s) A2 and attach RRU's directly to mount pipe in which the panel is attached to.
- A structural failure was addressed with the noted contingencies. The controlling member was a Horizontal with a usage of 200%.

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

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