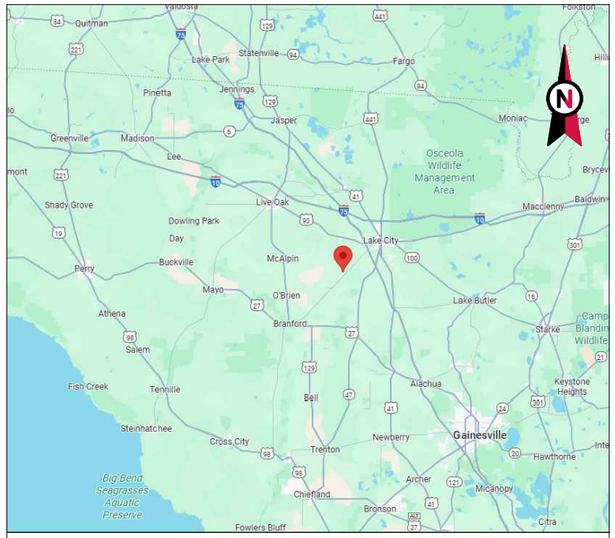

VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: COLUMBIA (CHARLES) FL
ATC SITE NUMBER: 417139
T-MOBILE SITE NAME: 9JK2817A
T-MOBILE SITE NUMBER: 9JK2817A
SITE ADDRESS: 917 SW CHARLES TERRACE
LAKE CITY, FL 32024-4402
SITE CLASS: SELF SUPPORT

LOCATION MAP

T-MOBILE MICROWAVE PLAN

COMPLIANCE CODE

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.

2021 IBC
NATIONAL ELECTRICAL CODE (NFPA 70, NEC 2020)
2023 FLORIDA BUILDING CODE, MECHANICAL, 8TH EDITION (IMC 2021 W/ AMND)
2023 FLORIDA BUILDING CODE, PLUMBING, 8TH EDITION (IPC 2021 W/ AMND)
2023 FLORIDA BUILDING CODE, ENERGY CONSERVATION, 8TH EDITION (IECC 2021 W/ AMND)
2023 FLORIDA FIRE PREVENTION CODE, 8TH EDITION (NFPA 1, 2021 W/ AMND)
8TH ED (2023) FLORIDA BUILDING CODE
2023 FLORIDA BUILDING CODE, RESIDENTIAL, 8TH EDITION (IRC 2021 W/ AMND)
2023 FLORIDA BUILDING CODE, FUEL GAS, 8TH EDITION (IFGC 2018 W/ AMND)

2023 FLORIDA BUILDING CODE, EXISTING BUILDING, 8TH EDITION (IEBC 2021 W/ AMND)

UTILITY COMPANIES

POWER COMPANY: VERIZON WIRELESS EAST
PHONE: 800-852-2671 (EAST)

TELEPHONE COMPANY:
PHONE:

811 Know what's below. Call before you dig.

PROJECT SUMMARY

SITE ADDRESS:

917 SW CHARLES TERRACE
LAKE CITY, FL 32024-4402
COUNTY: COLUMBIA

GEOGRAPHIC COORDINATES:

LATITUDE: 30.10632986
30° 6' 22.787" N
LONGITUDE: -82.76005675
82° 45' 36.204" W
GROUND ELEVATION: 104' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

T-MOBILE

ENGINEER:

SMW ENGINEERING
158 BUSINESS CENTER DRIVE
BIRMINGHAM, AL 35244
CONTACT: JEREMY SHARIT, PE
PHONE: 205-397-6781
SMW#: 25-5156

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:

INSTALL:
- (1) VHLP3-11W/A MICROWAVE DISH
- (1) FibeAir IP-20D-HP ODU
- (1) 1/4" COAX CABLE
- (1) 2.17" (55mm) HYBRID

PROJECT NOTES

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).

PROJECT LOCATION DIRECTIONS

FROM I-75 TAKE EXIT 427 ONTO US-90.3 MILES TURN LEFT ONTO W US 90.6 MILES TURN LEFT ONTO SW CTY RD 252B2.2 MILES TURN RIGHT ONTO SW STATE RD 2474.2 MILES TURN RIGHT ONTO CYPRESS LAKE RD1 MILE TURN RIGHT ONTO SW CHARLES TER.4 MILES ACCESS ROAD ON RIGHT

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	06/25/25	RA
G-002	GENERAL NOTES	0	06/25/25	RA
C-101	DETAILED SITE PLAN	0	06/25/25	RA
C-102	DETAILED EQUIPMENT PLAN	0	06/25/25	RA
C-201	TOWER ELEVATION	0	06/25/25	RA
C-401	ANTENNA INFORMATION & SCHEDULE	0	06/25/25	RA
C-501	CONSTRUCTION DETAILS	0	06/25/25	RA
E-501	GROUNDING DETAILS	0	06/25/25	RA
R-601	SUPPLEMENTAL			

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LAKE CITY, FL 32024-4402

SEAL:
CA# 33693

JEREMY SHARIT LICENSE No. 75137 STATE OF FLORIDA PROFESSIONAL ENGINEER

ATC PROJ. #:	15322453_C8
CUST. ID:	9JK2817A
CUST. #:	9JK2817A

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	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 NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
32. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE T-MOBILE REP. ANY WORK FOUND BY THE T-MOBILE REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
33. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
34. T-MOBILE FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE T-MOBILE WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
35. T-MOBILE OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO T-MOBILE OR THEIR ARCHITECT/ENGINEER.

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

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

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

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REV.	DESCRIPTION	BY	DATE
A	PRELIM	RA	06/12/25
0	FINAL	RA	06/25/25

ATC SITE NUMBER:
417139

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COLUMBIA (CHARLES) FL

T-MOBILE SITE NAME:
9JK2817A

SITE ADDRESS:
917 SW CHARLES TERRACE
LAKE CITY, FL 32024-4402

SEAL:
CA# 33693

THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED & SEALED BY JEREMY D SHARIT, PE (#751337) USING A DIGITAL SIGNATURE IN ACCORDANCE IN ACCORDANCE WITH FAC 61G15-23.004, WITH A DIGITAL CERTIFICATION ISSUED BY ENTRUST INC. PLEASE REFERENCE SHEET T1 TO VIEW THE SIGNATURE AND VERIFY ITS PROPERTIES. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ATC PROJ. #:	15322453_C8
CUST. ID:	9JK2817A
CUST. #:	9JK2817A

GENERAL NOTES

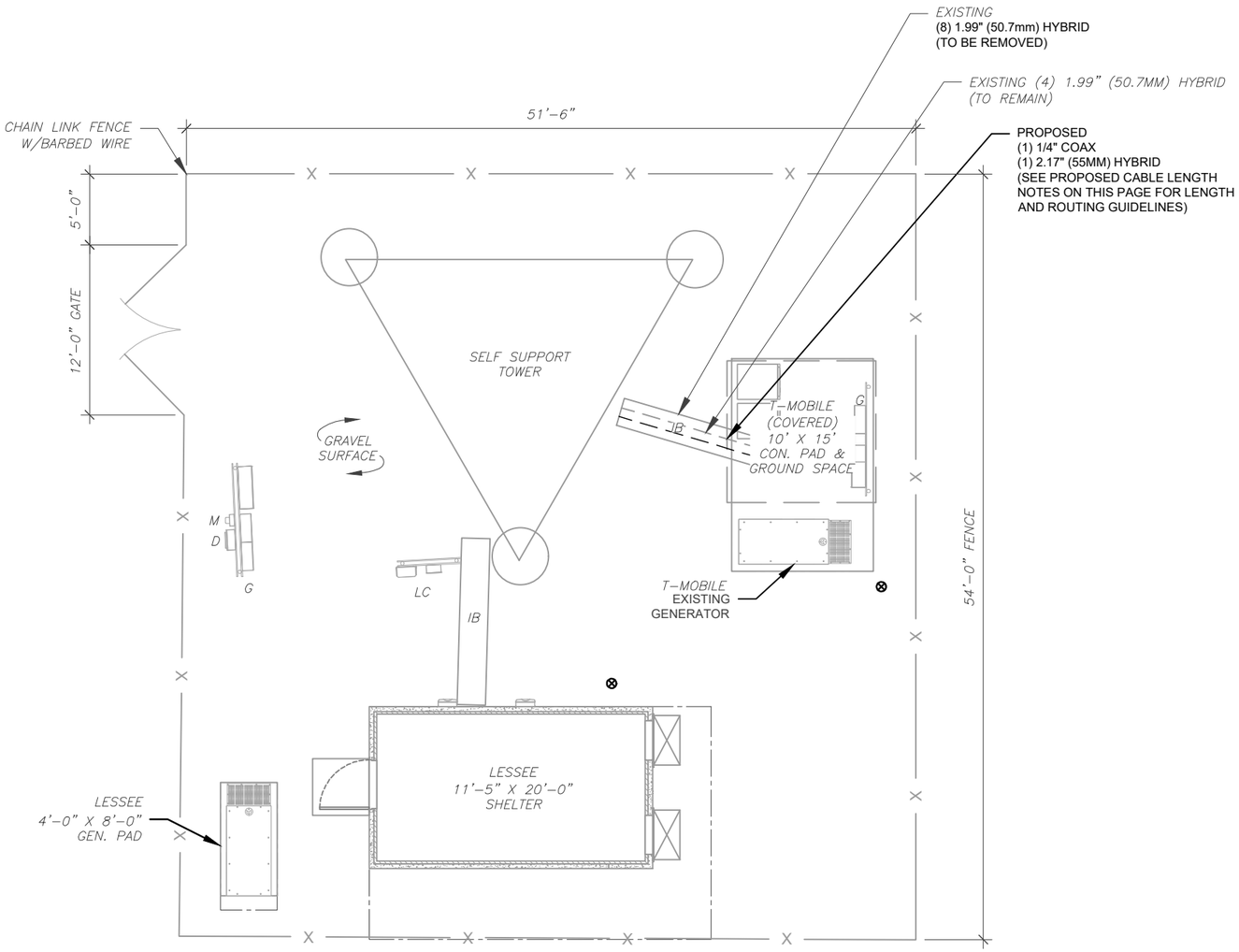
SHEET NUMBER:	REVISION:
G-002	0

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.



1 DETAILED SITE PLAN

GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

N

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
———	CHAINLINK FENCE

PROPOSED CABLE NOTES:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **±300'**. 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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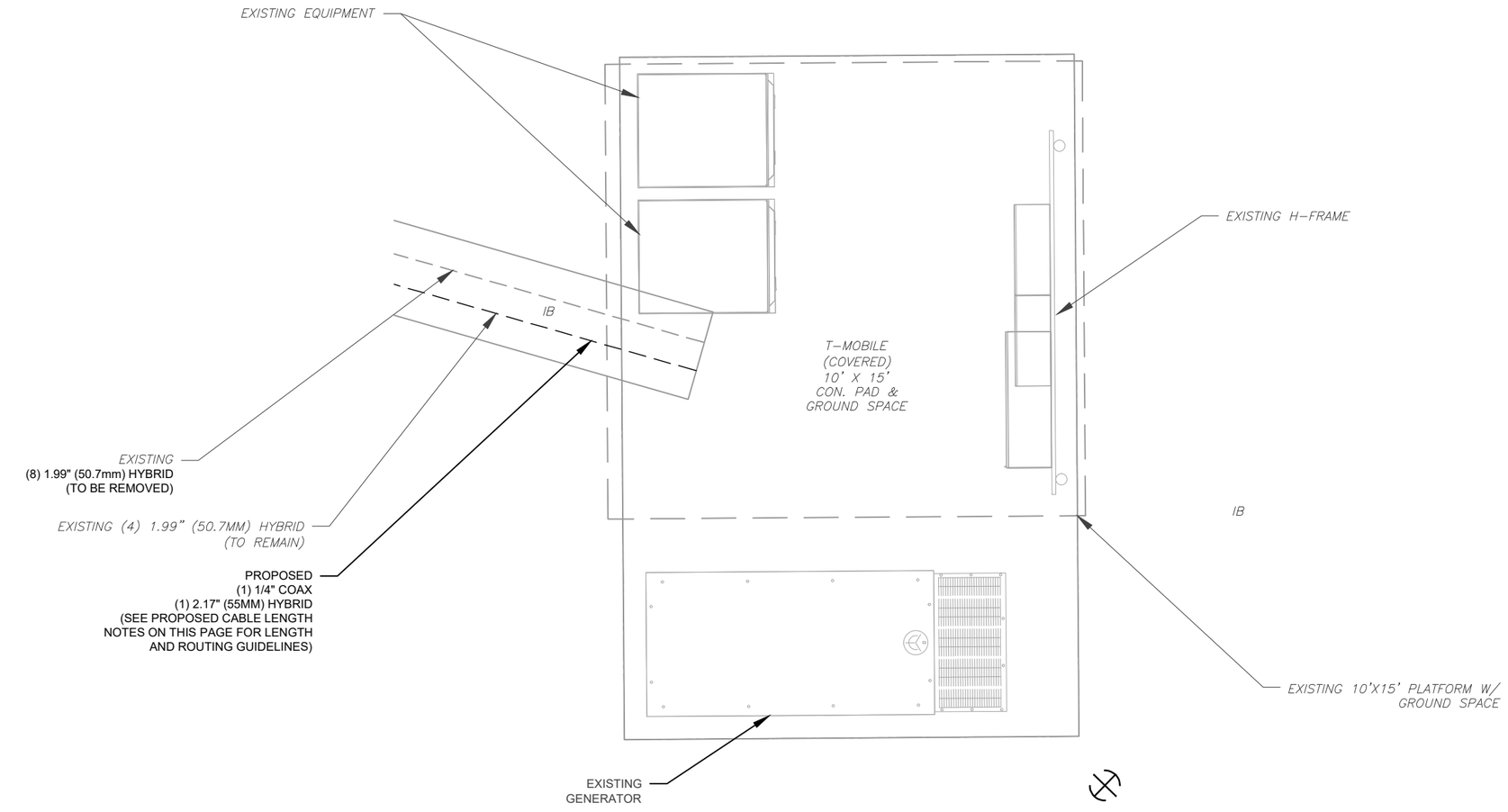
CUST. #:	9JK2817A

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0

SITE PLAN NOTES:

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



1 EQUIPMENT LAYOUT

GRAPHIC SCALE

3 0 1.5 3

(IN FEET)
1 UNIT = 3 FEET

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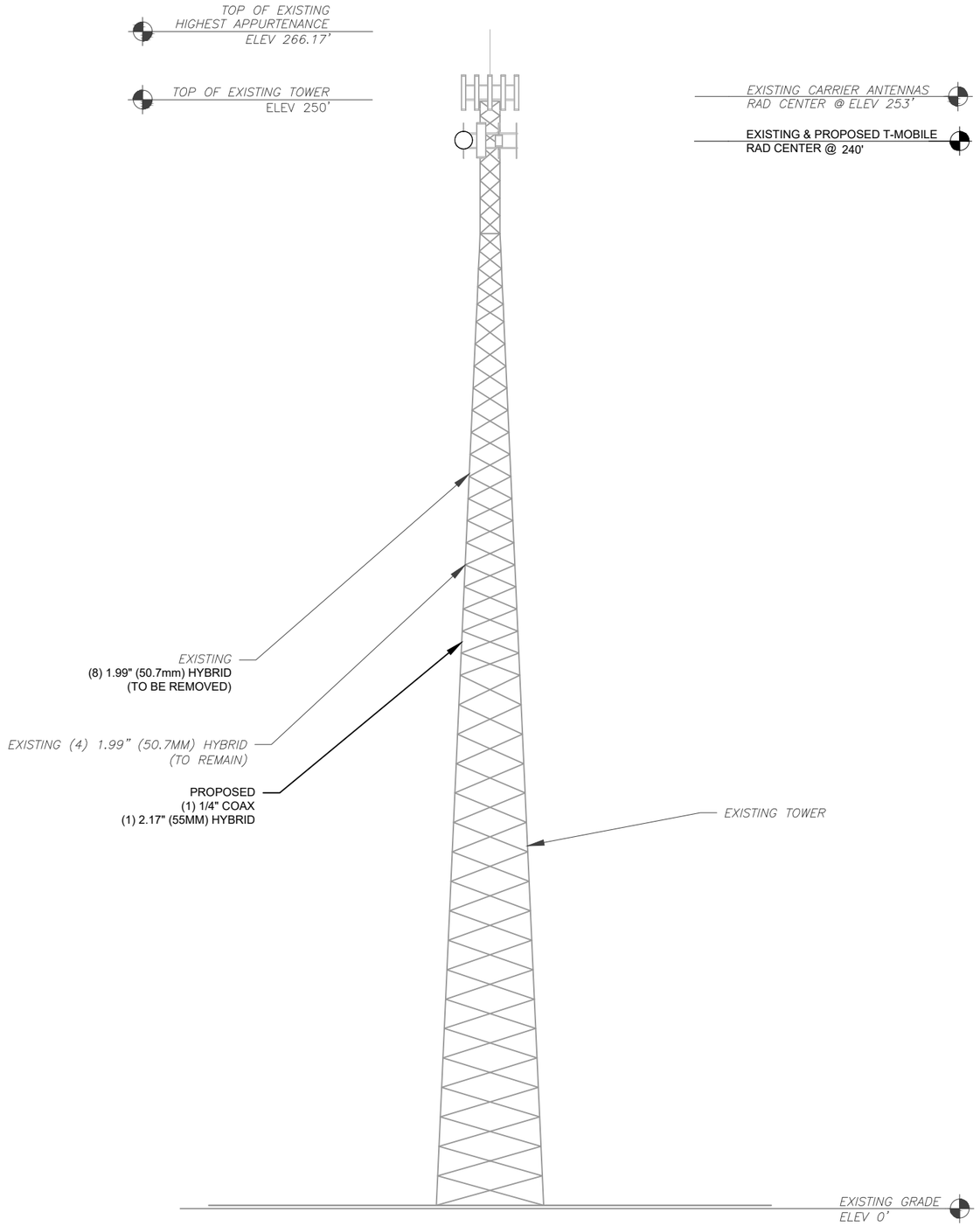
DETAILED EQUIPMENT PLAN

SHEET NUMBER:	REVISION:
C-102	0



1 TOWER ELEVATION
SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY ATC, DATED 05/29/2025, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION DETAILED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.

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

TOWER NOTE:

1. 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.
2. 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.
3. 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).
4. TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.

AMERICAN TOWER®

T-Mobile

SMW ENGINEERING GROUP, LLC
TOGETHER PLANNING A BETTER TOMORROW
158 BUSINESS CENTER DRIVE
BIRMINGHAM, AL 35244
TEL: 205-252-6985 www.smweng.com

REV.	DESCRIPTION	BY	DATE
A	PRELIM	RA	06/12/25
0	FINAL	RA	06/25/25

ATC SITE NUMBER:
417139

ATC SITE NAME:
COLUMBIA (CHARLES) FL

T-MOBILE SITE NAME:
9JK2817A

SITE ADDRESS:
917 SW CHARLES TERRACE
LAKE CITY, FL 32024-4402

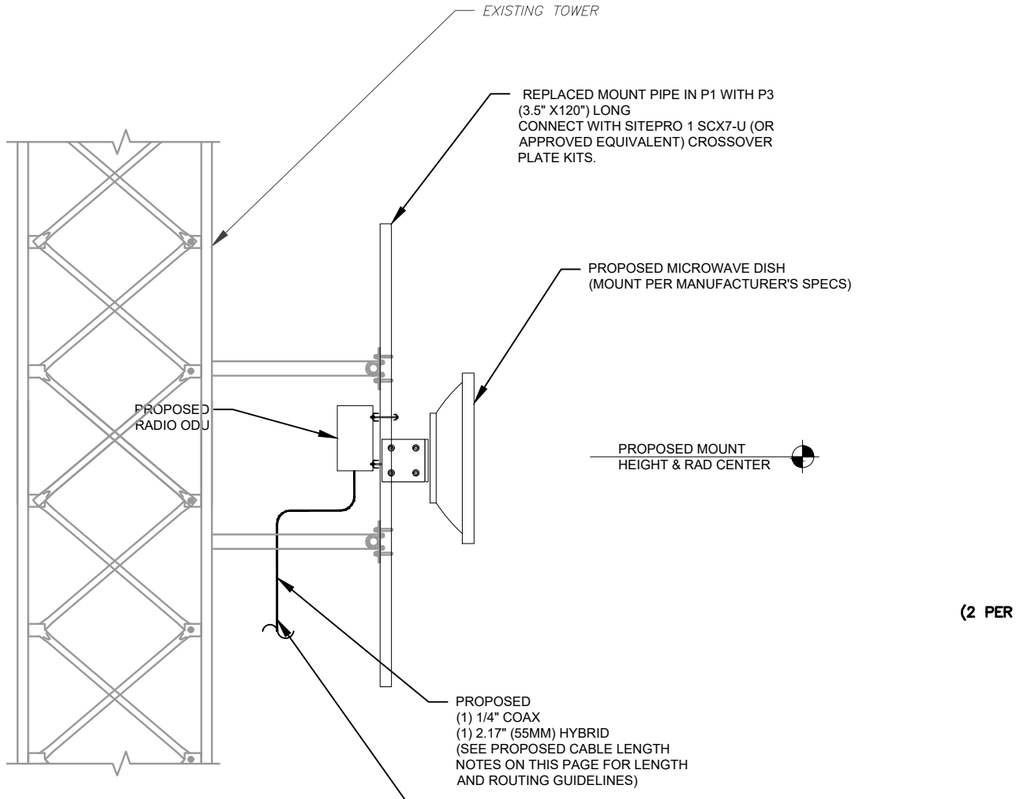
SEAL:
CA# 33693

THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED & SEALED BY JEREMY D SHARIT, PE (#751337) USING A DIGITAL SIGNATURE IN ACCORDANCE IN ACCORDANCE WITH FAC 61G15-23.004, WITH A DIGITAL CERTIFICATION ISSUED BY ENTRUST INC. PLEASE REFERENCE SHEET T1 TO VIEW THE SIGNATURE AND VERIFY ITS PROPERTIES. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ATC PROJ. #:	15322453_C8
CUST. ID:	9JK2817A
CUST. #:	9JK2817A

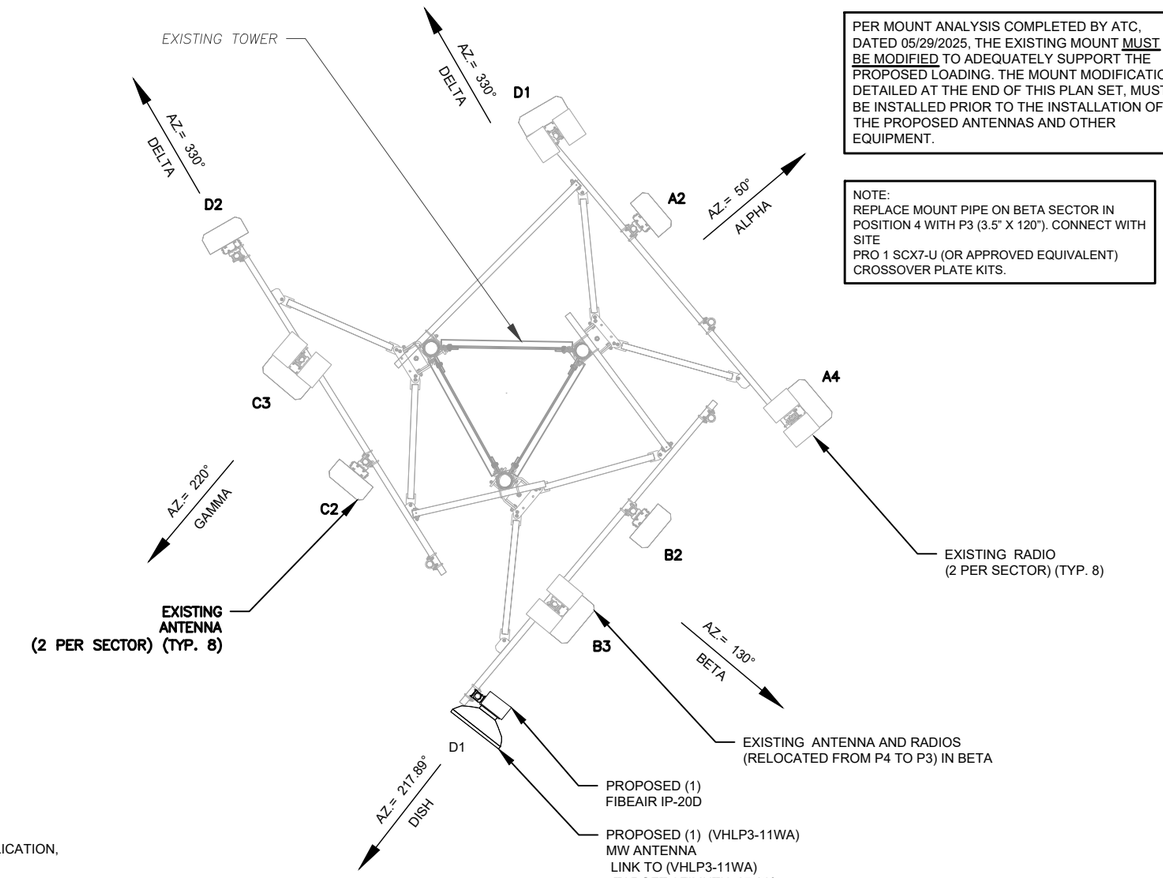
TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-201	0



1 PROPOSED MICROWAVE DISH DETAIL

SCALE: N.T.S.



2 FINAL ANTENNA PLAN

SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY ATC, DATED 05/29/2025, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION DETAILED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.

NOTE:
REPLACE MOUNT PIPE ON BETA SECTOR IN POSITION 4 WITH P3 (3.5" X 120"). CONNECT WITH SITE PRO 1 SCX7-U (OR APPROVED EQUIVALENT) CROSSOVER PLATE KITS.

PROPOSED ANTENNA AND RF EQUIPMENT SCHEDULE

LOCATION			ANTENNA SUMMARY			NON ANTENNA SUMMARY			PROPOSED CABLING SUMMARY	
SECTOR	RAD	AZ	POS	MODEL NUMBER	STATUS	POS	MODEL NUMBER	STATUS	COAX/ELLIPTICAL	STATUS
D1	240'	217.89°	D1	VHLP3-11WA	ADD	D1	(1) FIBEAIR IP-20D ODU	ADD	(1) 1/4" COAX (1) 2.17" (55MM) HYBRID	ADD

2 ANTENNA SCHEDULE

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REV.	DESCRIPTION	BY	DATE
A	PRELIM	RA	06/12/25
0	FINAL	RA	06/25/25

ATC SITE NUMBER:
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ATC SITE NAME:
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T-MOBILE SITE NAME:
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SITE ADDRESS:
917 SW CHARLES TERRACE
LAKE CITY, FL 32024-4402

SEAL:
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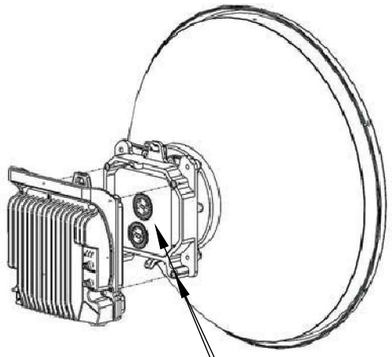
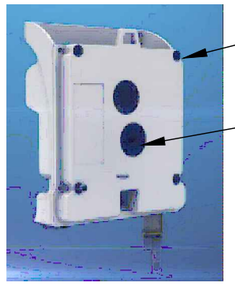
ATC PROJ. #:	15322453_C8
CUST. ID:	9JK2817A
CUST. #:	9JK2817A

ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER:	REVISION:
C-401	0



FIBEAIR IP-20D MOUNT

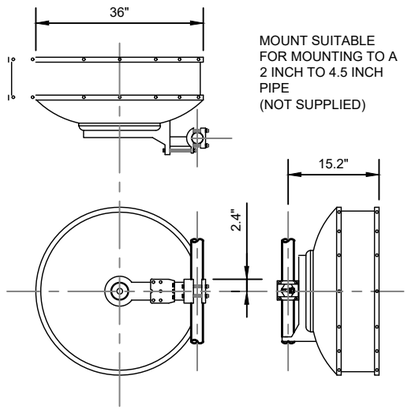


NOTE:
ATTACH FIBEAIR IP-20D TO MICROWAVE MOUNTING PLATE TO OBTAIN V/H POLARIZATION

1. THIS IS A BRIEF DESCRIPTION OF FIBEAIR IP-20D PIPE MOUNTING.
2. FIBEAIR IP-20D PROVIDE (4) MOUNTING BOLTS AS SHOWN TO ATTACH TO THE DIRECT MOUNT COUPLER PLATE AS SHOWN.
3. THE HANDLE OF THE FIBEAIR IP-20D SHOULD ALWAYS BE ORIENTED (TOWARD THE SKY)TO HELP PROTECT THE CONNECTION INTERFACES FROM THE WEATHER.
4. THE COUPLER INCLUDES DETAILED INSTRUCTIONS FOR MOUNTING AND GASKET PLACEMENT.

1 PROPOSED FIBEAIR IP-20D INSTALLATION DETAIL

SCALE: NOT TO SCALE



MOUNT SUITABLE
FOR MOUNTING TO A
2 INCH TO 4.5 INCH
PIPE
(NOT SUPPLIED)

ELECTRICAL SPECIFICATIONS	
FREQUENCY BAND, GHz	17.7-19.7
LOW BAND GAIN, dBi	43.1
MID BAND GAIN, dBi	43.5
TOP BAND GAIN, dBi	43.7
BEAMWIDTH, DEGREES	1.1
FRONT/BACK dB	40.2
XPD, dB	30.0
RETURN LOSS dB 10.125-11.700	17.7

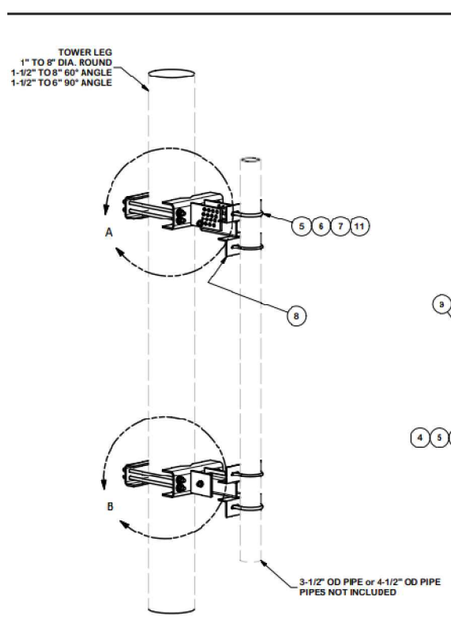
NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL APPROPRIATE PIPE CLAMPS AND MOUNTING HARDWARE PER MANUFACTURER'S RECOMMENDATIONS AND SITE CM.
2. PROPOSED RFU'S SHALL BE MOUNTED SUCH THAT THEY ARE ACCESSIBLE FOR MAINTENANCE.
3. CONTRACTOR SHALL CONFIRM STRUCTURAL CAPACITY/INTEGRITY OF EXISTING MOUNT PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL FIELD VERIFY THE INSTALLATION LOCATION OF RFU'S AT ANTENNA ELEVATION SUCH TO NOT CREATE A TRIPPING HAZARD OR INTERFERE WITH ANTENNAS AND ASSOCIATED EQUIPMENT.

2 PROPOSED 3'-0" MICROWAVE SPECIFICATION

SCALE: NOT TO SCALE

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	1	CF6	LOWER GATE FOOT WELDMENT		12.72	12.72
2	1	CF8	UPPER GATE FOOT WELDMENT		13.90	13.90
3	2	GBB	GATE BACKING BAR	11 1/2 in	4.53	9.06
4	8	G12R-15	1/2" x 15" GALV. THREADED ROD		0.84	6.69
4	8	G12R-12	1/2" x 12" GALV. THREADED ROD		0.67	5.35
5	24	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	1.72
6	24	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	0.82
7	26	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.36
8	2	X-UAPM	UNIVERSAL ANGLE TUBE 9"		9.31	18.62
9	2	A12NUT	1/2" HDG A325 HEX NUT	15/32 in	0.07	0.14
10	2	A1285	1/2" x 5" A325 HDG BOLT		0.34	0.69
11	4	X-UB1358	1/2" X 3-5/8" X 5-1/2" X 3" GALV U-BOLT		0.77	3.09
11	4	X-UB1458	1/2" X 4-5/8" X 7" X 3" GALV U-BOLT		0.97	3.89
					TOTAL WT.#	78.72



TOLERANCE NOTES

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

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

DESCRIPTION
1" STAND-OFF, 3-1/2" AND 4-1/2" OD PIPE
UNIVERSAL SLIDING TAPERED PIPE MOUNT

SITE PRO 1 — Engineering Support Team: 1-888-753-7446 — A valmont company — Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.	SHEET
4711	RH18 3/15/2010		TAM-3U	1 OF 2
CLASS / SUB: 81 / 01	DRAWING USAGE: CUSTOMER	CHECKED BY: BMC 4/22/2010	DWG. NO.: TAM-3U	

3 PROPOSED MICROWAVE MOUNT

SCALE: NOT TO SCALE

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REV.	DESCRIPTION	BY	DATE
A	PRELIM	RA	06/12/25
0	FINAL	RA	06/25/25

ATC SITE NUMBER:
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ATC SITE NAME:
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T-MOBILE SITE NAME:
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SITE ADDRESS:
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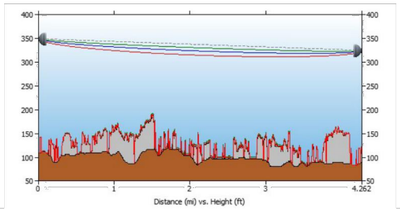
ATC PROJ. #:	15322453_C8
CUST. ID:	9JK2817A
CUST. #:	9JK2817A

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-501	0

iQ.link — Link Budget Report

Date Printed: [DATE]
Create Date: 22-JAN-2025
Link ID: 3012507
Link Name: 9JK2817A_9JK0785A
Region: South
Created By: CVance5



Path length (4.26 mi)

9JK2817A	
Latitude:	30-06-22.8 N
Longitude:	82-45-36.2 W
Azimuth:	217.89 Deg
Elevation:	108.27 ft

Frequency (GHz) = 11.00 GHz	
K1:	[PL-K1]
%F1:	[PL-F1]
K2:	[PL-K2]
%F2:	[PL-F2]

9JK0785A	
Latitude:	30-03-26.9 N
Longitude:	82-48-13.5 W
Azimuth:	37.86 Deg
Elevation:	88.58 ft

1

Antenna CL:	240.00 ft AGL

K3:	[PL-K3]
%F3:	[PL-F3]

Antenna CL:	235.00 ft AGL

4-2-25: Equip appears to be the same as 9JK1172B as listed on that data sheet
(1) VHLP3 Dish
(1) IP-20D/RFU-D-HP ODU
(1) 1/4" coax power cable and
(1) .55mm fiber cable

Transmission details		
SITE ID:	9JK2817A	9JK0785A
[CLUSTER_ID_LABEL]:	[CLUSTER_ID_A]	[CLUSTER_ID_B]
[CALL_SIGN_LABEL]:	[CALL_SIGN_A]	[CALL_SIGN_B]
ASR #:		
AAV_CONTRACT_ID:	ATT224	[AAV_CONTRACT_ID_B]
AAV_CONTRACT_STATUS:	[AAV_CONTRACT_STATUS_A]	Not Available
Ethernet Installed:	[1_95_STATUS_A]	[1_95_STATUS_B]
Latitude:	30-06-22.8 N	30-03-26.9 N
Longitude:	82-45-36.2 W	82-48-13.5 W
Azimuth (deg):	217.89 Deg	37.86 Deg
Vertical angle (deg):	0.09 Down	0.04 Up
Elevation:	108.27 ft	88.58 ft
Antenna model:	VHLP3-11WA	VHLP3-11WA
Antenna manufacturer:	ANDREW CORPORATION	ANDREW CORPORATION
Antenna Id:	220	220
Antenna gain (dBi):	38.50 dBi	38.50 dBi
Antenna diameter:	2.95 ft	2.95 ft
Antenna CL:	240.00 ft AGL	235.00 ft AGL
Diversity Antenna model:		
Diversity Antenna manufacturer:		
Diversity Antenna Id:		
Diversity Antenna gain (dBi):		
Diversity Antenna diameter:		
Diversity Antenna CL:		
Branch Loss Tx/Rx (dB):	1.00 dB/1.00 dB	1.00 dB/1.00 dB
Attenuator Common/Tx/Rx (dB):		
Waveguide #1 Model, Len, Loss(dB):		
Waveguide #2 Model, Len, Loss(dB):		
Waveguide #3 Model, Len, Loss(dB):		

3

Total Waveguide Loss (dB):		
Other Losses (dB):	1.00 dB	1.00 dB
Frequency (GHz):	11.00 GHz	
Path length:	4.26 mi	
Free space loss (dB):	130.00 dB	
Atmospheric absorption loss (dB):	0.10 dB	
Obstruction Loss (dB):	0.00 dB (oLOS)	
Field margin (dB):	1.00 dB	
Net path loss (dB):	58.10 dB	58.10 dB
Configuration:	2+0/DP/DM/OMT	2+0/DP/DM/OMT
Radio model:	IP20D-HP11-80X-A_4501	IP20D-HP11-80X-A_4501
Radio manufacturer:	Ceragon Networks	Ceragon Networks
Radio Id:	754	754
Frequency Plan: Frequency (MHz):	High: N/A	Low: N/A
Polarization:	N/A	N/A
Emission designator:	80M0D7W	80M0D7W
Climatic factor:	2.00	
Terrain roughness factor:	4.00	
Average annual temperature:	68.26 degF	
Design Path Polarity:	Vertical	
Rain region:	Jacksonville, Florida	
0.01% Rain Rate:	72.9 mm/hr	
Passive Repeaters		
Antenna model:		
Antenna manufacturer:		
Antenna height:		

Modulation / Throughput	Tx Power A/B (dBm)		EIRP A/B (dBm)		Receive Signal A/B (dBm)		Composite Fade Margin A/B (dB)		Radio Threshold/ ACM Drop Level A/B (dBm)	
BPSK 67.00 Mbps	36.00	36.00	72.50	72.50	-21.10	-21.10	60.66	60.66	-86.30	-86.30

4

4QAM 119.00 Mbps	36.00	36.00	72.50	72.50	-21.10	-21.10	57.16	57.16	-80.50	-80.50
8QAM 195.00 Mbps	36.00	36.00	72.50	72.50	-21.10	-21.10	54.13	54.13	-76.80	-76.80
16QAM 244.00 Mbps	35.00	35.00	71.50	71.50	-22.10	-22.10	50.44	50.44	-73.80	-73.80
32QAM 321.00 Mbps	35.00	35.00	71.50	71.50	-22.10	-22.10	46.08	46.08	-70.40	-70.40
64QAM 394.00 Mbps	34.00	34.00	70.50	70.50	-23.10	-23.10	42.36	42.36	-67.50	-67.50
128QAM 466.00 Mbps	33.00	33.00	69.50	69.50	-24.10	-24.10	38.52	38.52	-64.50	-64.50
256QAM 537.00 Mbps	32.00	32.00	68.50	68.50	-25.10	-25.10	35.21	35.21	-61.80	-61.80
512QAM 590.00 Mbps	32.00	32.00	68.50	68.50	-25.10	-25.10	32.63	32.63	-59.10	-59.10
1KLQAM 642.00 Mbps	31.00	31.00	67.50	67.50	-26.10	-26.10	28.58	28.58	-55.90	-55.90
1KHQAM 682.00 Mbps	31.00	31.00	67.50	67.50	-26.10	-26.10	28.22	28.22	-55.50	-55.50
2KQAM 722.00 Mbps	31.00	31.00	67.50	67.50	-26.10	-26.10	25.37	25.37	-52.60	-52.60

Modulation/Throughput	Worst Month Multipath		Worst Month Rain		Annual Multipath		Annual Rain		Total Annual		Total Active in Mode	
	(100-%)	(s)	(100-%)	(s)	(100-%)	(s)	(100-%)	(s)	(100-%)	(s)	(100-%)	(s)
BPSK 67.00 Mbps	99.999997	0.08	99.999225	20.37	99.999999	0.32	99.999921	25.04	99.999920	25.36	0.000024	7.63
4QAM 119.00 Mbps	99.999903	0.17	99.999033	25.40	99.999998	0.71	99.999898	32.28	99.999895	32.99	0.000029	9.26
8QAM 195.00 Mbps	99.999987	0.35	99.998816	31.12	99.999996	1.42	99.999871	40.77	99.999866	42.18	0.000052	16.37
16QAM 244.00 Mbps	99.999969	0.81	99.998458	40.53	99.999989	3.31	99.999825	55.24	99.999814	58.55	0.000101	31.85
32QAM 321.00 Mbps	99.999916	2.21	99.997840	56.75	99.999971	9.04	99.999742	81.37	99.999713	90.41	0.000248	46.77
64QAM 394.00 Mbps	99.999802	5.20	99.997063	77.19	99.999933	21.28	99.999632	115.90	99.999565	137.18	0.000270	85.18
128QAM 466.00 Mbps	99.999521	12.59	99.995884	108.16	99.999837	51.55	99.999458	170.82	99.999295	222.36	0.000418	131.70
256QAM 537.00 Mbps	99.998972	27.01	99.994399	147.19	99.999649	110.60	99.999228	243.45	99.998877	354.06	0.000539	170.14
512QAM 590.00 Mbps	99.998140	48.89	99.992820	188.70	99.999365	200.23	99.998973	323.06	99.998338	524.19	0.001592	502.04
1KLQAM 642.00 Mbps	99.995277	124.13	99.989203	283.74	99.998388	508.38	99.998358	517.86	99.996746	1026.24	0.000212	66.91
1KHQAM 682.00 Mbps	99.994864	134.99	99.988798	294.40	99.998247	552.85	99.998287	540.30	99.996534	1093.15	0.002336	736.66
2KQAM 722.00 Mbps	99.990098	260.24	99.984860	397.89	99.996620	1065.82	99.997577	763.98	99.994198	1829.80	99.994198	3153470.29

Multipath fading method - VIGANTS
Rain fading method - Crane City/Jacksonville, Florida

5

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

SUPPLEMENTAL

SHEET NUMBER: R-601

REVISION: 0