

163146.001.01_MIKESVILLE.dwg - SheetGN-1 - User: fperkins - Jun 15, 2022 - 2:58pm

PROJECT COMPLIANCE NOTES:

- THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP ACCESS IS REQUIRED).
- OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.
- NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS PROPOSAL, UNLESS DURING EMERGENCY.
- OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
- ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST AT&T SYSTEM GROUNDING STANDARDS. "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF LTE SITES AND WILL FOLLOW AT&T GROUNDING AND BONDING REQUIREMENTS FOR NETWORK FACILITIES AT&T DOC ID ATT-TP-76416 AND AT&T POLICY LETTER ATT-CEM-13002.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED DURING CONSTRUCTION OPERATION.
- THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DRAWINGS PROVIDED BY THE APPLICANT REPRESENTATIVE. THE CONTRACTOR SHALL NOTIFY TURF VENDOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- NO ADDITIONAL PARKING IS PROPOSED. EXISTING ACCESS AND PARKING WILL BE USED.
- NO ADDITIONAL LANDSCAPING IS PROPOSED AT THIS SITE.
- ALL COAXIAL CABLE/FIBER AND DC CABLE INSTALLATION IS TO FOLLOW MANUFACTURER'S INSTRUCTION.

GREENFIELD GROUNDING NOTES:

ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC AND AT&T GROUNDING AND BONDING REQUIREMENTS FOR NETWORK FACILITIES ATT-TP-76416 AND AT&T POLICY LETTER ATT-CEM-13002.

THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.

THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.

METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH MINIMUM #2 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. TIN STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.

EACH CABINET AND FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #2 TIN STRANDED COPPER FOR INDOOR/ROOFTOP APPLICATIONS; #2 AWG SOLID TINNED COPPER FOR OUTDOOR GROUND CABINETS.

CONNECTIONS TO THE GROUND BAR SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BAR ARE PERMITTED.

ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE (2) CONDUCTORS OF #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.

USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.

EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS; A MINIMUM OF (2) CRIMPS AND WINDOWLESS LUGS FOR OUTDOOR APPLICATIONS AND WINDOWED LUGS FOR INDOOR APPLICATIONS.

ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE GROUNDING RING.

APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.

MISCELLANEOUS ELECTRICAL & NON-ELECTRICAL METAL BOXES, FRAMES & SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC AND AT&T GROUNDING & BONDING REQUIREMENTS FOR NETWORK FACILITIES ATT-TP-76416 & AT&T POLICY LETTER ATT-CEM-13002.

BOND ALL METALLIC OBJECTS WITHIN 6 FT. OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.

GROUPS FOR INDOOR SITE EQUIPMENT SHALL BE LANDED ON THE APPROPRIATE SECTION OF THE CRGB OR HALO AS PER ATT-TP-76416 AND AT&T POLICY LETTER ATT-CEM-13002.

GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS, WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

ELECTRICAL INSTALLATION NOTES:

ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.

CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

WIRING, RACEWAY & SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.

ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.

CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.

EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH PROPER LABELING ID, 145 TYPE FIBER TAG, WITH UV RATED P-TOUCH LABEL, MINIMUM WIDTH OF 1/2". THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.

ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH PLASTIC TAPE PER COLOR SCHEDULE. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (I.E. PANEL BOARD AND CIRCUIT ID'S).

PANEL BOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH P-TOUCH LABELS ON 145 TYPE FIBER TAGS.

THERE SHALL BE NO USE OF NYLON TIE CABLE FOR INDOOR USE.

POWER, CONTROL AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET & DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.

SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#2 TIN STRANDED OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET AND DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.

POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET AND DRY) OPERATION WITH OUTER JACKET LISTED OR LABELED FOR THE LOCATION USED UNLESS OTHERWISE SPECIFIED.

ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75° C (90° C IF AVAILABLE).

RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E. RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT) OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.

RIGID NONMETALLIC CONDUIT (I.E. RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.

CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER).

EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND RATED NEMA 1 (OR BETTER) INDOORS OR NEMA 3R (OR BETTER) OUTDOORS.

METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

INSTALL PLASTIC LABEL ON THE METER CENTER TO SHOW "AT&T WIRELESS".

PROJECT GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

TURF VENDOR-
CONTRACTOR-
OWNER-
OEM-

GENERAL CONTRACTOR (CONSTRUCTION)
AT&T
ORIGINAL EQUIPMENT MANUFACTURER
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY TURF VENDOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE TURF VENDOR.
- CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWINGS.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- CONSTRUCTION SHALL COMPLY WITH AT&T AND MANUFACTURER SPECIFICATIONS.
- ALL ITEMS REMOVED FROM SERVICE ON SITES THAT HAVE AN AT&T ASSET TAG MUST BE LOGGED BACK IN WITH AT&T.

ABBREVIATIONS AND SYMBOLS:

ABBREVIATIONS:

AGL	ABOVE GRADE LEVEL
BTS	BASE TRANSCEIVER STATION
(E)	EXISTING
MIN.	MINIMUM
N.T.S.	NOT TO SCALE
REF	REFERENCE
RF	RADIO FREQUENCY
T.B.D.	TO BE DETERMINED
T.B.R.	TO BE RESOLVED
TYP	TYPICAL
REQ	REQUIRED
EGR	EQUIPMENT GROUND RING
AWG	AMERICAN WIRE GAUGE
MGB	MASTER GROUND BAR
EG	EQUIPMENT GROUND
BCW	BARE COPPER WIRE
SIAD	SMART INTEGRATED ACCESS DEVICE
GEN	GENERATOR
IGR	INTERIOR GROUND RING (HALO)
RBS	RADIO BASE STATION

SYMBOLS:

	SOLID GROUND BUS BAR
	SOLID NEUTRAL BUS BAR
	SUPPLEMENTAL GROUND CONDUCTOR
	2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
	SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
	CHEMICAL GROUND ROD
	TEST WELL
	DISCONNECT SWITCH
	METER

THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION THAT IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS.

DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



USID: 45057
FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT
TOWER

PROJECT NO: 163146.001.01

CHECKED BY: FWP

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
O	6/15/22	FWP	CONSTRUCTION

B&T ENGINEERING, INC.



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

SHEET NUMBER:

GN-1

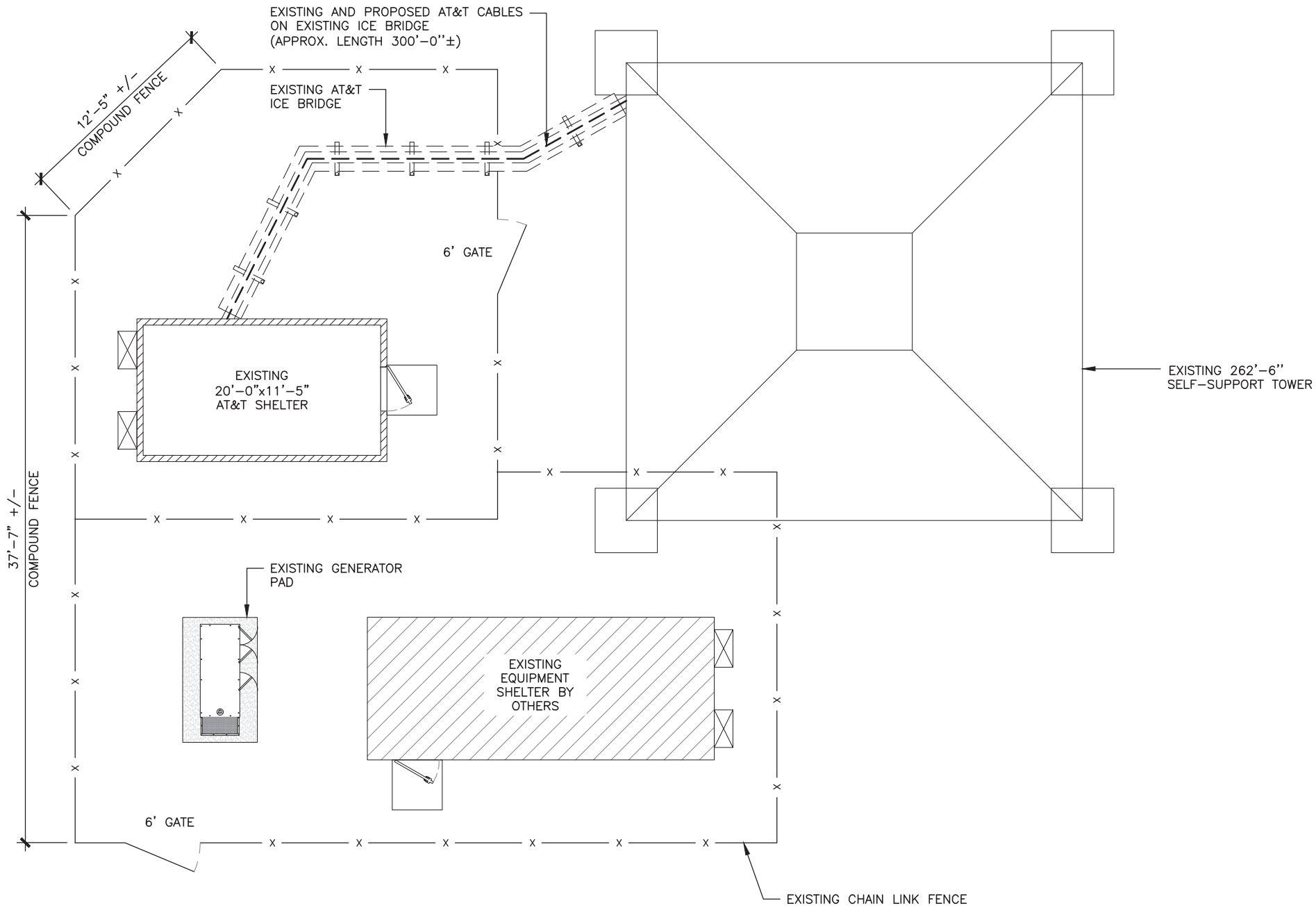
REVISION:

0

- CONSTRUCTION NOTES:
1. CONTRACTOR TO FILL ANY EXISTING GRAVEL AREAS THAT ARE DISTURBED DURING THE COURSE OF CONSTRUCTION, GRAVEL TO MATCH EXISTING.
 2. THE CONTRACTOR TO ENSURE THAT NO DAMAGE OR DEBRIS OCCURS ON THE ADJACENT PROPERTIES.
 3. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITH LOW MAINTENANCE NATIVE GRASS AND COVER WITH APPROVED STRAW.
 4. CONTRACTOR SHALL PROVIDE ALL REQUIRED EROSION CONTROL TECHNIQUES AND BEST MANAGEMENT PRACTICES PER LOCAL AND STATE REQUIREMENTS AS APPLICABLE.
 5. NORTH ARROW SHOWN ON PLANS REFERS TO TRUE NORTH. CONTRACTOR SHALL VERIFY NORTH AND INFORM ARCHITECT/ENGINEER OF ANY DISCREPANCY BEFORE STARTING CONSTRUCTION.

CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE RAYCAP INSTALL ON THE TOWER TO ACCOMODATE THE QUANTITY OF RRHs.

CONTRACTOR MUST FIELD VERIFY ALL MEASUREMENTS AND FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.



1 ENLARGED SITE PLAN
SCALE: 0' 4' 8' 16' 32'



THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION THAT IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS.

DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



USID: 45057
FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT TOWER

PROJECT NO: 163146.001.01
CHECKED BY: FWP

ISSUED FOR:			
REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
O	6/15/22	FWP	CONSTRUCTION

B&T ENGINEERING, INC.



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

SHEET NUMBER: C-1
REVISION: 0

NOTE:

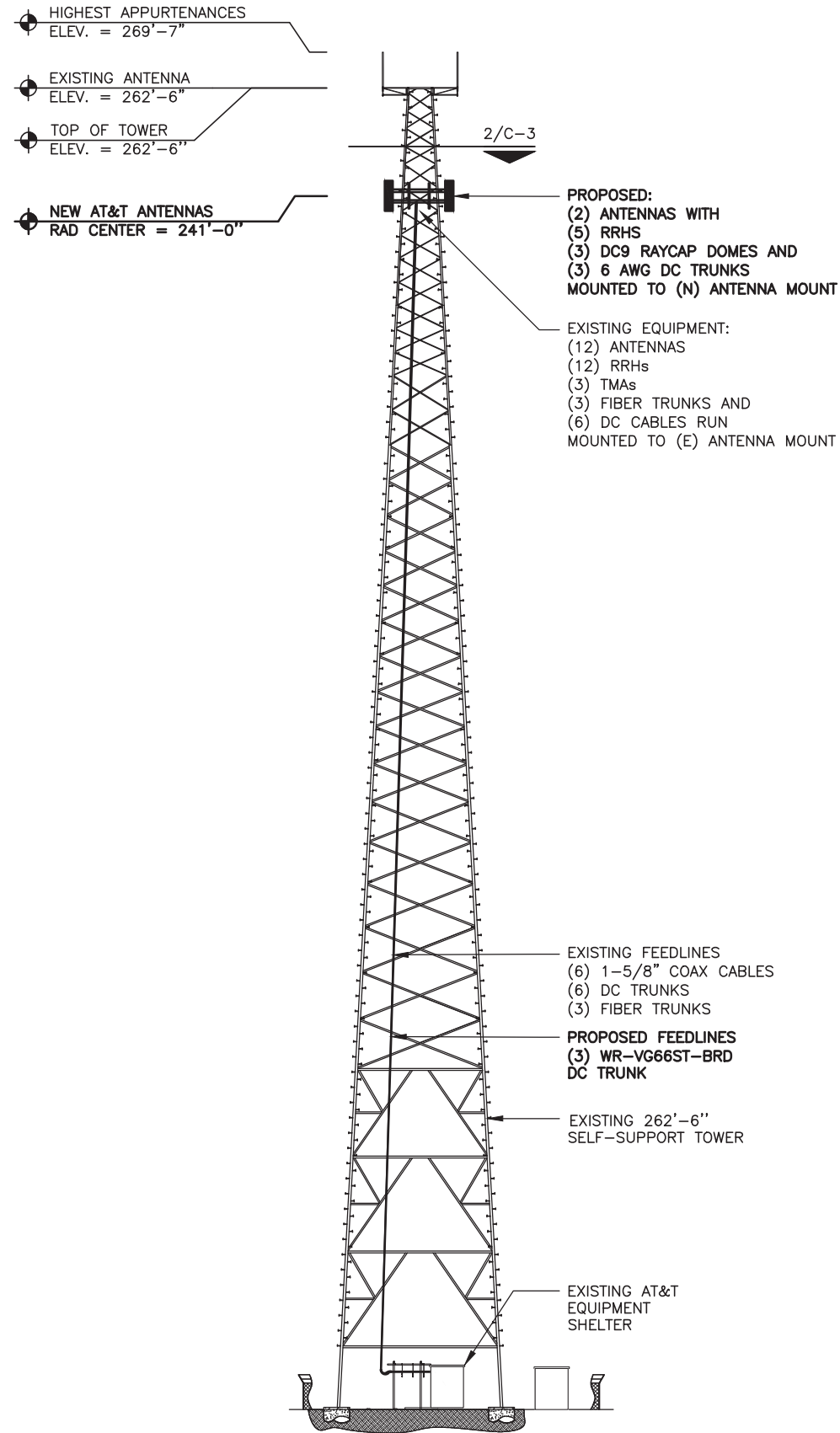
1. A STRUCTURAL ANALYSIS SHALL BE PERFORMED BY THE OWNER'S AGENT TO CERTIFY THAT THE EXISTING/PROPOSED COMMUNICATION STRUCTURE AND COMPONENTS ARE STRUCTURALLY ADEQUATE TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, COAXIAL CABLES, AND OTHER APPURTENANCES. THE OWNER'S AGENT SHALL FURNISH A CERTIFICATION LETTER SEALED BY A REGISTERED PROFESSIONAL ENGINEER STATING THAT THIS STRUCTURAL ANALYSIS WAS PREPARED IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS.
2. IF ANY WORK IS PERFORMED AT THIS SITE THAT REQUIRES THE SITE TO BE OFF AIR OR TURNED DOWN, THE SWITCH IS TO BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION VIA NCR/CTS.
3. INSTALLATION SHALL BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF RADIO ANTENNAS, TRANSMISSION LINES, AND SUPPORT STRUCTURES. ANTENNA WORK TO BE INSTALLED PER THE REQUIREMENTS OF THE TOWER MANUFACTURER'S SPECIFICATION.
4. ANTENNA AND MOUNT DESIGN MUST COMPLY WITH TIA-EIA-222-H AND ALL LOCAL CODES.
5. CONTRACTOR TO PROVIDE THE PROPER COAX JUMPER SUPPORT ATTACHMENTS TO THE TOWER AND ANTENNA MOUNT.

CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE RAYCAP INSTALLED ON THE TOWER TO ACCOMMODATE THE QUANTITY OF RRU'S.

THE CONTRACTOR MUST FIELD VERIFY ALL MEASUREMENTS AND FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

NOTES:

1. REFER TO CURRENT RFDS FOR ADDITIONAL INFO.
2. ADJUST ANTENNA MOUNTS AS REQUIRED TO ACHIEVE THE AZIMUTH SPECIFIED AND LIMIT RF SHADOWING.
3. UNLESS NOTED OTHERWISE THE CONTRACTOR MUST PROVIDE ALL MATERIAL NECESSARY.
4. CONTRACTOR TO RETURN ALL EXISTING ANTENNAS BEING REMOVED TO AT&T.



1 TOWER ELEVATION
SCALE: N.T.S.

THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION THAT IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS.

DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



USID: 45057
FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT
TOWER

PROJECT NO: 163146.001.01

CHECKED BY: FWP

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
O	6/15/22	FWP	CONSTRUCTION

B&T ENGINEERING, INC.



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

SHEET NUMBER: C-2

REVISION: 0



USID: 45057
FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

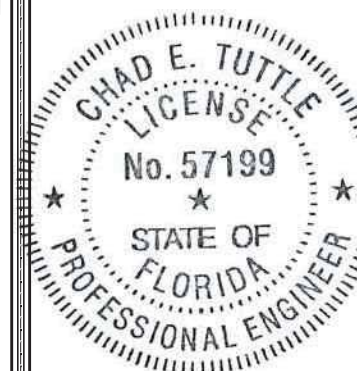
EXISTING SELF-SUPPORT
TOWER

PROJECT NO: 163146.001.01
CHECKED BY: FWP

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
O	6/15/22	FWP	CONSTRUCTION

B&T ENGINEERING, INC.



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

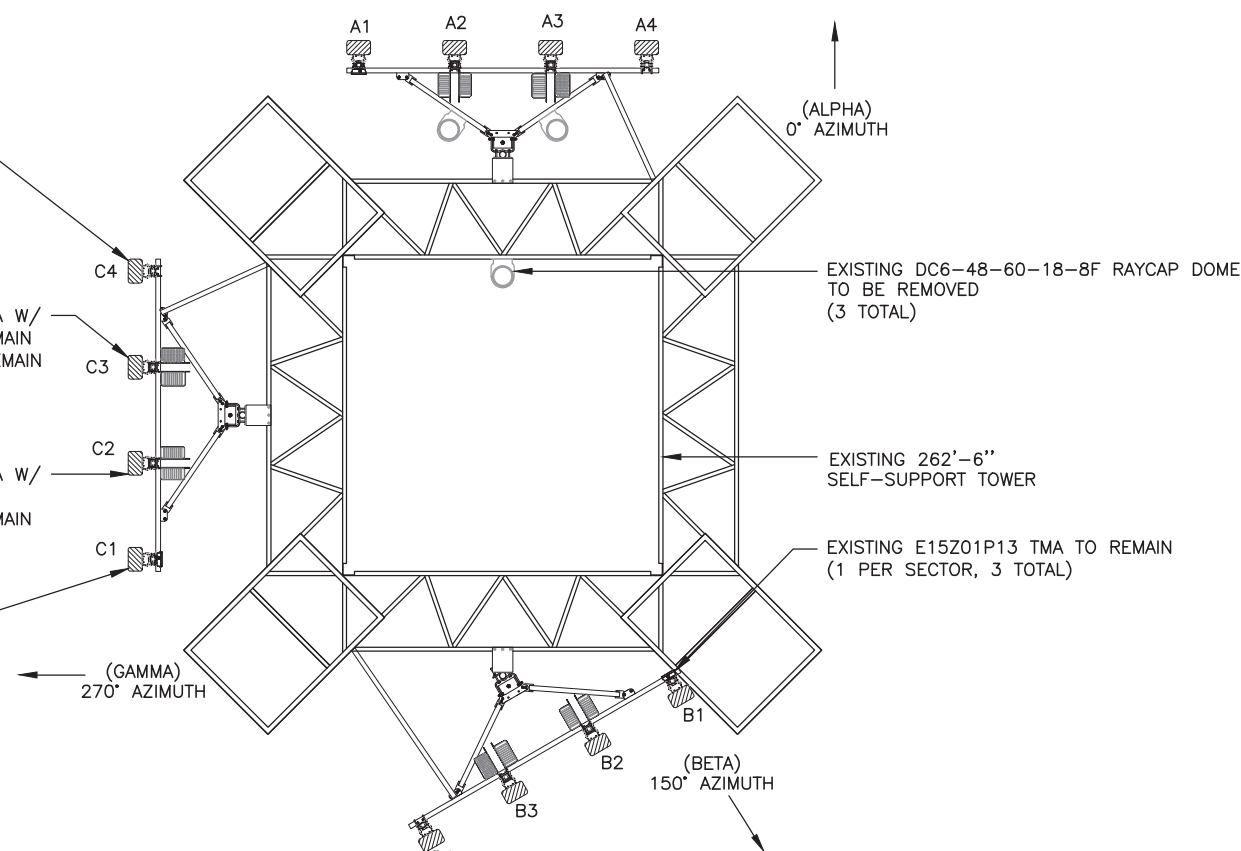
SHEET NUMBER: **C-3**
REVISION: **0**

EXISTING ANDREW - SBNHH-1D85B
ANTENNA TO REMAIN
(1 PER SECTOR, 3 TOTAL)

EXISTING ANDREW - SBNHH-1D85B ANTENNA W/
(1) ERICSSON - 4449 B5/B12 RRH TO REMAIN
(1) ERICSSON - 8843 B2/B66A RRH TO REMAIN
(1 PER SECTOR, 3 TOTAL)

EXISTING ANDREW - SBNHH-1D85B ANTENNA W/
(1) ERICSSON - 4478 B14 RRH TO REMAIN
(1) ERICSSON - 8843 B2/B66 RRH TO REMAIN
(1 PER SECTOR, 3 TOTAL)

EXISTING ANDREW - DBXNH-8585B-R2M
ANTENNA TO REMAIN
(1 PER SECTOR, 3 TOTAL)



1 EXISTING ANTENNA AZIMUTH PLAN
SCALE: 0' 1' 4' 8' 20'



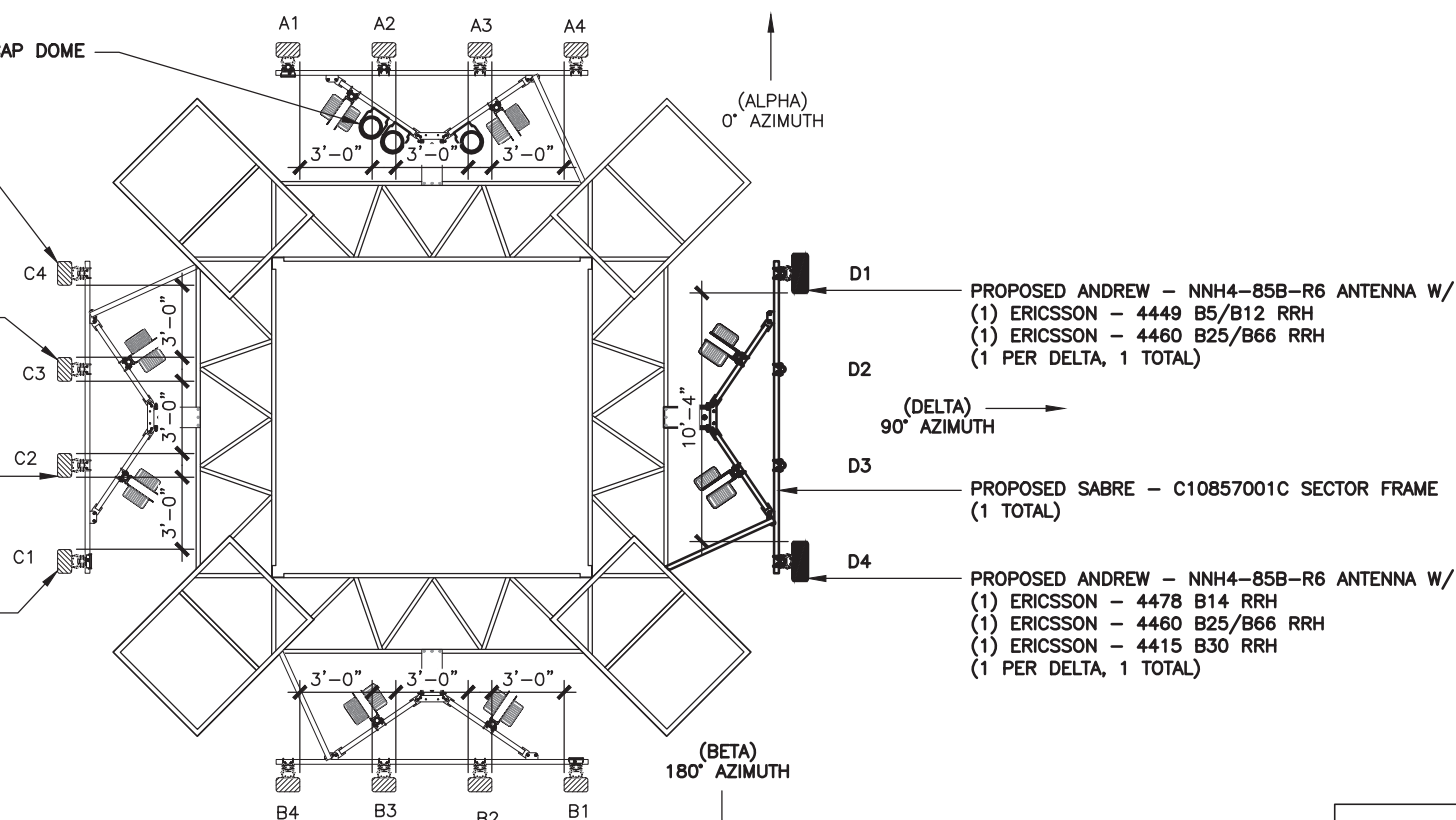
PROPOSED RAYCAP - DC9-48-60-24-8C-EV RAYCAP DOME
(3 TOTAL)

EXISTING ANDREW - SBNHH-1D85B ANTENNA
(1 PER SECTOR, 3 TOTAL)

EXISTING ANDREW - SBNHH-1D85B ANTENNA W/
(1) ERICSSON - 4449 B5/B12 RRH
(1) ERICSSON - 8843 B2/B66A RRH
(1 PER SECTOR, 3 TOTAL)

EXISTING ANDREW - SBNHH-1D85B ANTENNA W/
(1) ERICSSON - 4478 B14 RRH
(1) ERICSSON - 8843 B2/B66 RRH
(1 PER SECTOR, 3 TOTAL)

EXISTING ANDREW - DBXNH-8585B-R2M ANTENNA
(1 PER SECTOR, 3 TOTAL)



2 PROPOSED ANTENNA AZIMUTH PLAN
SCALE: 0' 1' 4' 8' 20'



CONSTRUCTION NOTE: REFER TO MOUNT
ANALYSIS FOR RRH LOCATION

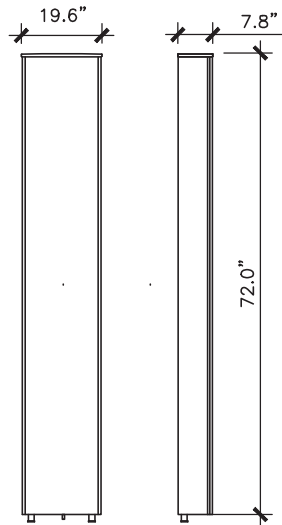
CONSTRUCTION NOTE: REFER TO
CURRENT RFDS FOR ADDITIONAL INFO.

CONSTRUCTION NOTE: DC9 LOCATIONS
TO BE DETERMINED BY RFDS

CONSTRUCTION NOTE: CONTRACTOR TO
ENSURE MINIMUM OF 36" EDGE TO
EDGE SEPARATION BETWEEN EXISTING
AND PROPOSED ANTENNAS PER SECTOR
AND THE ANTENNA BACKPLANES OF
SAME ON DIFFERENT FACE'S (ADJACENT
SECTORS ON SAME RAD CENTER).
REMAINDER OF ANTENNAS TO BE
EQUALLY SPACED.

THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY OR
TRADE SECRET INFORMATION THAT IS EXEMPT FROM
DISCLOSURE UNDER APPLICABLE LAWS.

DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT
CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



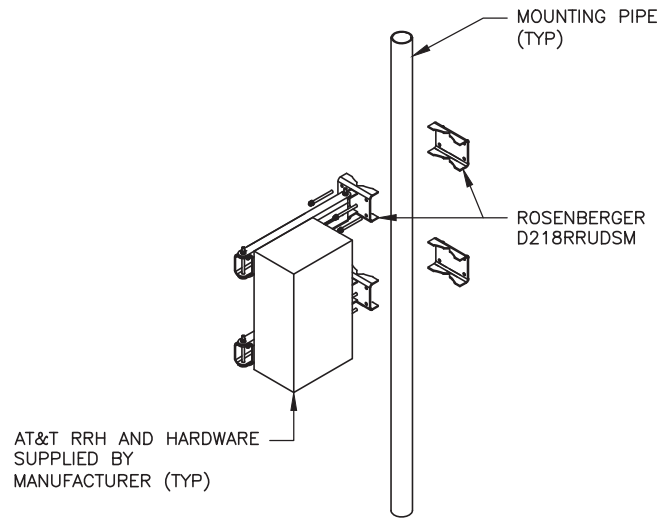
1 ANDREW - NNH4-85B-R6
SCALE: N.T.S.

2 NOT USED
SCALE: N.T.S.

3 NOT USED
SCALE: N.T.S.

4 RRH DUAL BRACKET MOUNT DETAIL
SCALE: N.T.S.

NOTE:
COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRH'S RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING. DO NOT OPEN RRH PACKAGES IN THE RAIN.

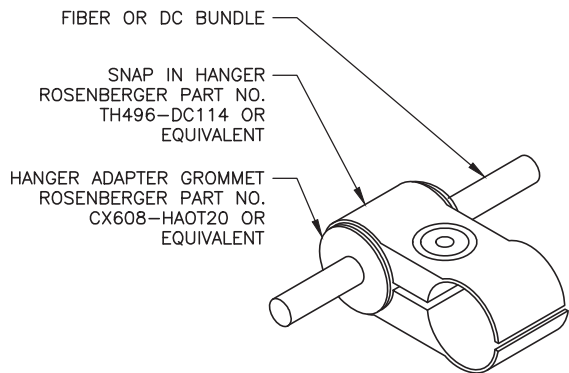


THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION THAT IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS.

DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.

MISCELLANEOUS MATERIALS SCHEDULE		
DESCRIPTION	MODEL NUMBER	QUANTITY
SNAP-IN HANGER	TH496-DC114	230
HANGER ADAPTER GROMMET	CX608-HA0711	230
HOISTING GRIP	CX051-HG38PL	-
HOISTING GRIP	CX06-HC12PL	3
GROUNDING KIT	-	-

- NOTES:
- REFER TO JSA DOCUMENTS FOR EXACT CABLE NUMBER AND MANUFACTURER SPECIFICATIONS FOR PROPER GROMMETS AND HANGER TO SUPPORT THE FIBER AND DC CABLE BUNDLES.
 - REFER TO STRUCTURAL ANALYSIS FOR EXACT CABLE ROUTING AND MOUNTING CONFIGURATION.

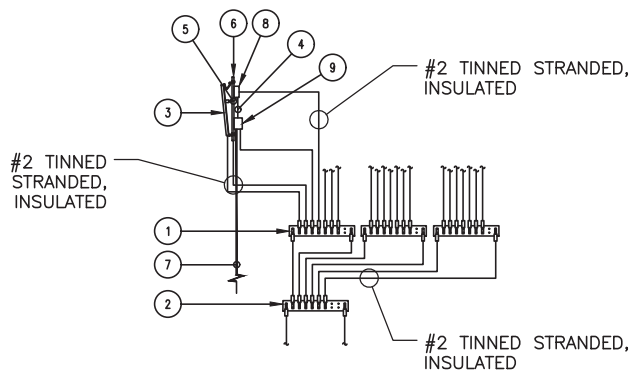


DOUBLE CLAMP

5 ANTENNA MOUNT DETAIL
SCALE: N.T.S.

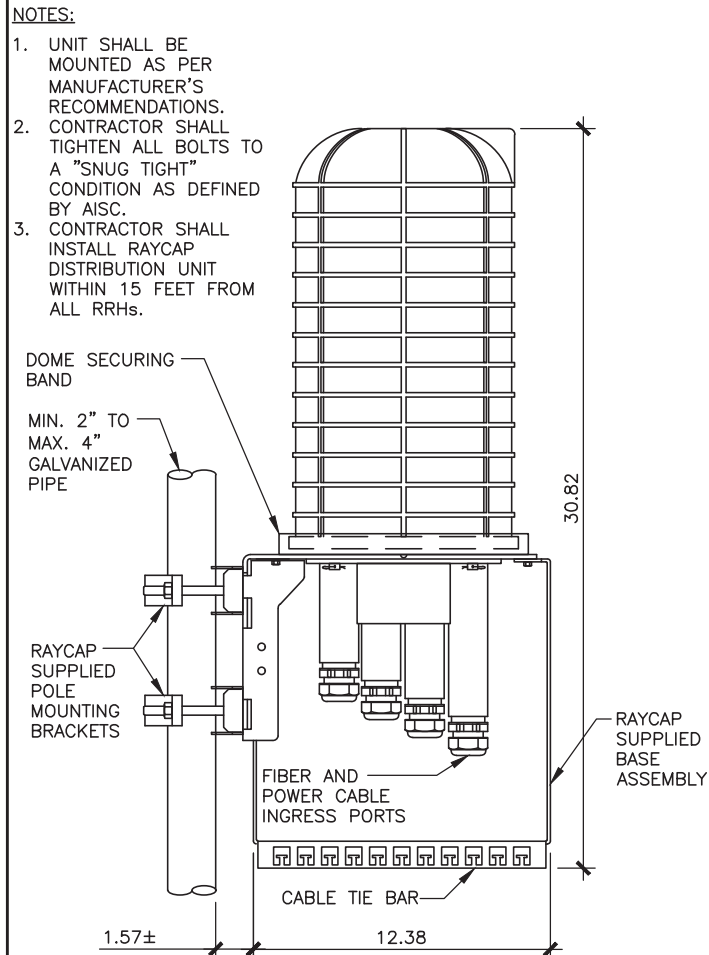
6 HANGER ADAPTER GROMMET DETAILS
SCALE: N.T.S.

- KEYNOTE LEGEND:
- SECTOR GROUND BAR (TYP)
 - COLLECTOR GROUND BAR
 - NEW ANTENNA
 - SINGLE PAIR FIBER & DC POWER
 - JUMPER CABLE, 1/2" TYP
 - PIPE MOUNT
 - DC POWER & FIBER TO RAYCAP UNIT
 - REMOTE RADIO HEAD (RRH) (IF APPLICABLE)
 - DC6/DC9 RAYCAP SURGE SUPPRESSOR (IF APPLICABLE)



- UTILIZE EXISTING AT&T GROUND BARS AND GROUNDING
- ADD GROUND BARS IF THERE ARE INSUFFICIENT LUG POSITIONS
- REFERENCE AT&T BONDING & GROUNDING PRACTICE TP76416

7 ANTENNA GROUNDING SCHEMATIC
SCALE: N.T.S.



8 DC9-48-60-24-8C-EV MOUNT DETAIL
SCALE: N.T.S.



USID: 45057
FA: 10091919
MIKESVILLE

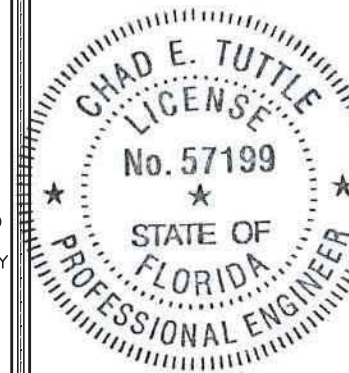
3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT
TOWER

PROJECT NO: 163146.001.01
CHECKED BY: FWP

ISSUED FOR:			
REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
D	6/15/22	FWP	CONSTRUCTION

B&T ENGINEERING, INC.



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

SHEET NUMBER: C-4
REVISION: 0

163146.001.01_MIKESVILLE.dwg - SheetC-5 - User: fperkins - Jun 15, 2022 - 2:58pm

DC/FIBER DEMARCATION BOX							NOTES Follow AT&T antenna separation MOP to avoid PIM Please use SFP-7module for LTE 700/850 and LTE PCS/AWS
RAYCAP DC FIBER DEMARCATION BOX			CABLES				
MOUNTING HEIGHT	MODEL	QTY	MODEL	SIZE	QTY	LENGTH PER LINE	
—	—	—	—	—	—	—	
241'–0"	DC9–48–60–24–8C–EV	3	ROSENBERGER (18) PAIR FIBER TRUNK	3/8"	3	254'–0"	
			(6) #8 AWG TINNED COPPER CONDUCTORS	3/4"	6	254'–0"	
			(6) #6 AWG TINNED COPPER CONDUCTORS	0.957"	3	254'–0"	

ANTENNA AND COAX SCHEDULE

ANTENNA AND COAX SCHEDULE																					
SECTOR	AZ	ANTENNAS							CABLES					RRU		A2 MOD (QTY)	DPLEXER/TRIPLEXER			TMA	
		RAD CENTER	ANTENNA		(QTY)	APPROXIMATE ANTENNA SPECS	DOWNTILT		MODEL	SIZE	(QTY)	LENGTH/ LINE	COLOR CODE	MODEL	(QTY)		MODEL	TWR (QTY)	GRND (QTY)	MODEL	(QTY)
			MAKE	MODEL			ELEC	MECH													
ALPHA (A1)	0°	241'–0"	ANDREW	DBXNH–8585B–R2M	1	H=73.2" x W=11.9" x D=7.1"	–	0°	LDF7–50A	1 5/8"	2	254'–0"	1 RED	–	–	–	CM1007–DBPXBC–002	–	2	E15Z01P13	1
ALPHA (A2)	0°	241'–0"	ANDREW	SBNHH–1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 2 6	15'–0" 15'–0" 10'–0"	2 RED	4478 B14 8843 B2/B66	1 1	–	–	–	–	–	
ALPHA (A3)	0°	241'–0"	ANDREW	SBNHH–1D85B	1	H=72.9" x W=11.9" x D=7.1"	6°/3°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 4 6	15'–0" 15'–0" 10'–0"	3 RED	4449 B5/B12 RRUS–32 B66A	1 1	–	–	–	–	–	
ALPHA (A4)	0°	241'–0"	ANDREW	SBNHH–1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	1/2" COAX JUMPER (RRH TO ANTENNA)	1/2"	6	10'–0"	4 RED	–	–	–	–	–	–	–	
BETA (B1)	180°	241'–0"	ANDREW	DBXNH–8585B–R2M	1	H=73.2" x W=11.9" x D=7.1"	–	0°	LDF7–50A	1 5/8"	2	254'–0"	1 BLUE	–	–	–	CM1007–DBPXBC–002	–	2	E15Z01P13	1
BETA (B2)	180°	241'–0"	ANDREW	SBNHH–1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 2 6	15'–0" 15'–0" 10'–0"	2 BLUE	4478 B14 8843 B2/B66	1 1	–	–	–	–	–	
BETA (B3)	180°	241'–0"	ANDREW	SBNHH–1D85B	1	H=72.9" x W=11.9" x D=7.1"	6°/3°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 4 6	15'–0" 15'–0" 10'–0"	3 BLUE	4449 B5/B12 RRUS–32 B66A	1 1	–	–	–	–	–	
BETA (B4)	180°	241'–0"	ANDREW	SBNHH–1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	1/2" COAX JUMPER (RRH TO ANTENNA)	1/2"	6	10'–0"	4 BLUE	–	–	–	–	–	–	–	
GAMMA (G1)	270°	241'–0"	ANDREW	DBXNH–8585B–R2M	1	H=73.2" x W=11.9" x D=7.1"	–	0°	LDF7–50A	1 5/8"	2	254'–0"	1 GREEN	–	–	–	CM1007–DBPXBC–002	–	2	E15Z01P13	1
GAMMA (G2)	270°	241'–0"	ANDREW	SBNHH–1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 2 6	15'–0" 15'–0" 10'–0"	2 GREEN	4478 B14 8843 B2/B66	1 1	–	–	–	–	–	
GAMMA (G3)	270°	241'–0"	ANDREW	SBNHH–1D85B	1	H=72.9" x W=11.9" x D=7.1"	6°/3°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 4 6	15'–0" 15'–0" 10'–0"	3 GREEN	4449 B5/B12 RRUS–32 B66A	1 1	–	–	–	–	–	
GAMMA (G4)	270°	241'–0"	ANDREW	SBNHH–1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	1/2" COAX JUMPER (RRH TO ANTENNA)	1/2"	6	10'–0"	4 GREEN	–	–	–	–	–	–	–	
DELTA (D1)	90°	241'–0"	ANDREW	NNH4–85B–R6	1	H=72" x W=19.6" x D=7.8"	2°/4°/2°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	1 3 8	15'–0" 15'–0" 10'–0"	1 ORANGE	4449 B5/B12 4460 B25/B66	1 1	–	–	–	–	–	
DELTA (D2)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
DELTA (D3)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
DELTA (D4)	90°	241'–0"	ANDREW	NNH4–85B–R6	1	H=72" x W=19.6" x D=7.8"	2°/4°/2°	0°	1/2" COAX JUMPER (RRH TO ANTENNA)	1/2"	12	10'–0"	4 ORANGE	4478 B14 4460 B25/B66 4415 B30	1 1 1	–	–	–	–	–	
				TOTAL	14				TOTAL LDF7–50 1 5/8" COAX ACTIVE	6	1,524'–0"			TOTAL	17	0	TOTAL	0	6	TOTAL	3
										TOTAL LDF7–50 1 5/8" COAX INACTIVE	8	1,524'–0"									
										TOTAL ROSENBERGER FIBER JUMPERS 3/8"	25	375'–0"									
										TOTAL ROSENBERGER SINGLE PAIR DC CABLE 7/16"	21	315'–0"									
										TOTAL 1/2" COAX JUMPERS	74	740'–0"									
										TOTAL 5/16" RET CABLES	4	1,016'–0"									

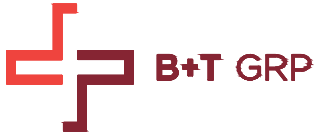
NOTES:

1. ANTENNA AND COAX INFORMATION PROVIDED FROM THE RFDS VERSION 1.00 DATED 4/4/22.
2. CONTRACTOR TO VERIFY RF INFO WITH CLIENT PRIOR TO CONSTRUCTION.
3. COAX LENGTHS ARE APPROXIMATE AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.
4. ALL COAX SHALL BE COLOR CODED AT TOP AND BOTTOM JUMPER, AND AT TOP OF TOWER, BOTTOM OF TOWER, AND INSIDE SHELTER ON MAIN COAX.
5. EACH MAIN COAX SHALL HAVE CORROSION PROOF "ID TAGS" INSTALLED INSIDE THE SHELTER AT THE PORT AND AT THE ANTENNA.
6. **BOLD** DENOTES NEW EQUIPMENT.

1 ANTENNA AND COAX SCHEDULE
SCALE: N.T.S.

THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION THAT IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS.

DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



USID: 45057
FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

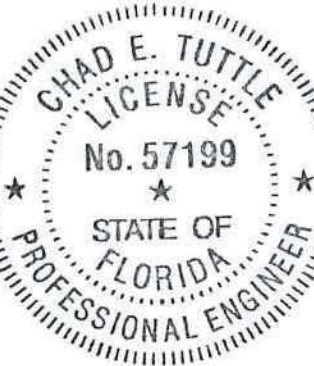
EXISTING SELF-SUPPORT
TOWER

PROJECT NO: 163146.001.01

CHECKED BY: FWP

ISSUED FOR:			
REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
D	6/15/22	FWP	CONSTRUCTION

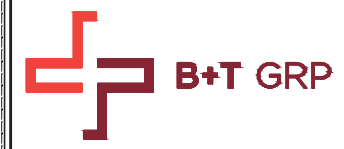
B&T ENGINEERING, INC.



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

SHEET NUMBER: C-5

REVISION: 0



USID: 45057
FA: 10091919
MIKESVILLE

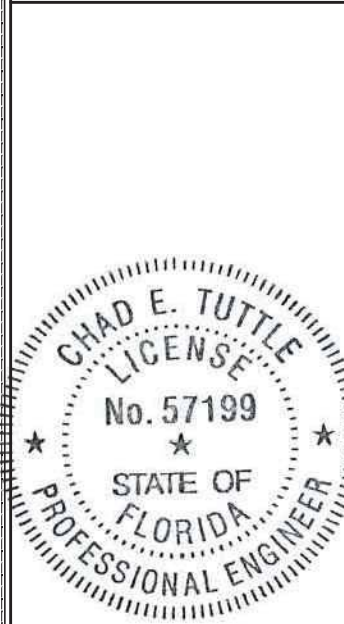
3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT
TOWER

PROJECT NO: 163146.001.01
CHECKED BY: FWP

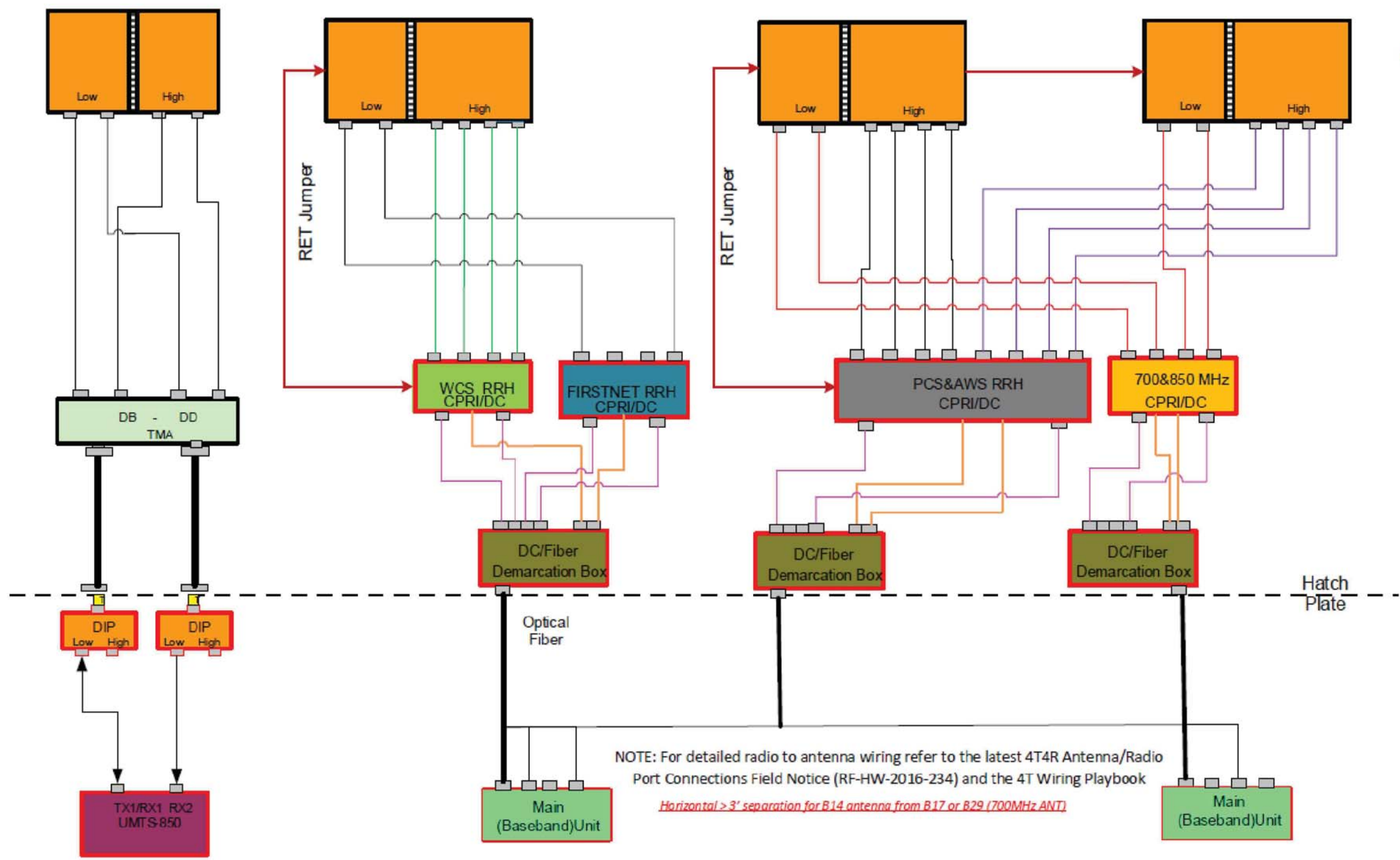
ISSUED FOR:			
REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
D	6/15/22	FWP	CONSTRUCTION

B&T ENGINEERING, INC.



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

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



700/850 = SFP-7
1900/AWS = SFP-7
WCS = SFP-3
FN = SFP-3

1 PLUMBING DIAGRAM - ALPHA, BETA, & GAMMA SECTORS
SCALE: N.T.S.

THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION THAT IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS.

DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



USID: 45057
FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT
TOWER

PROJECT NO: 163146.001.01
CHECKED BY: FWP

ISSUED FOR:			
REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
O	6/15/22	FWP	CONSTRUCTION

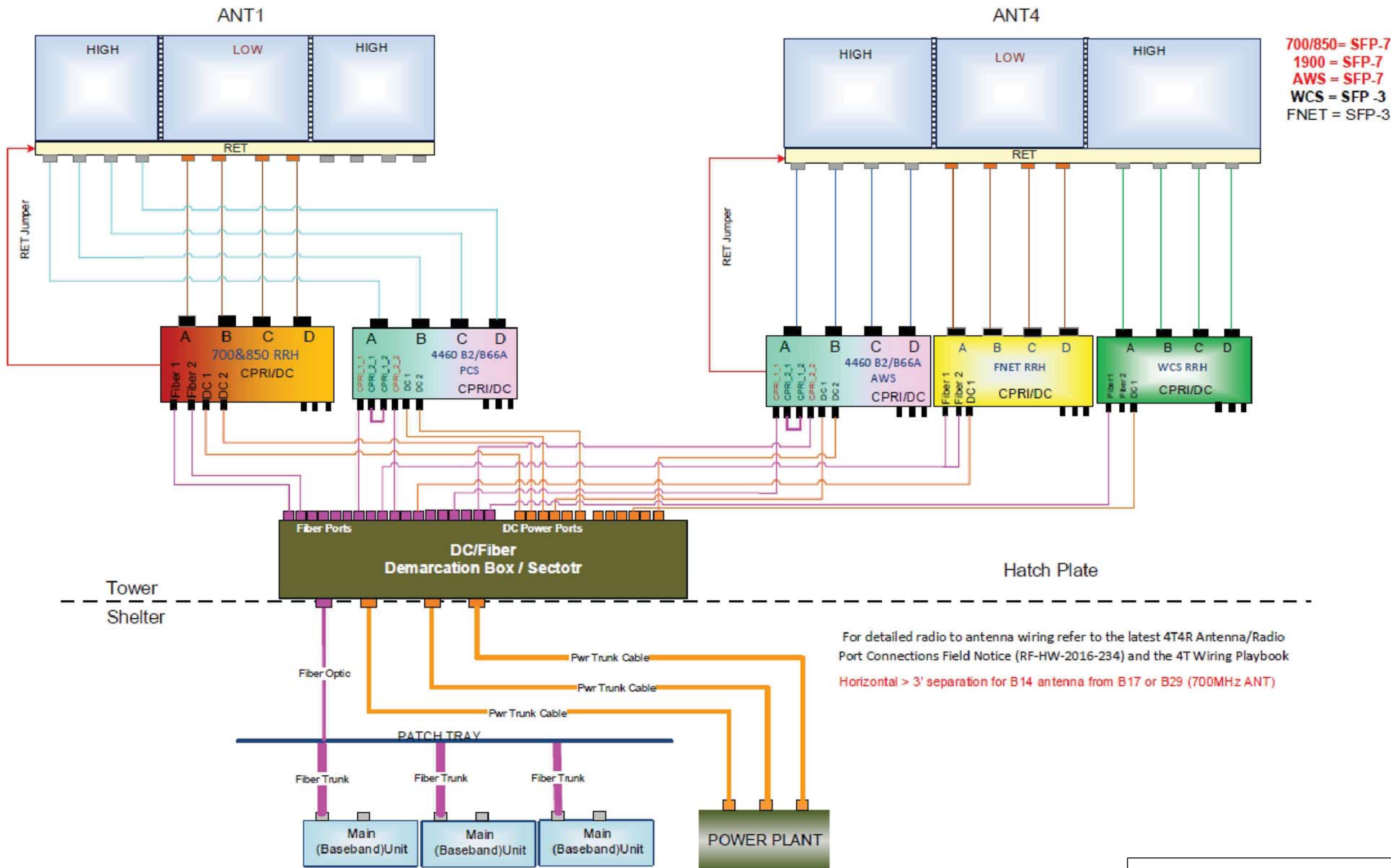
B&T ENGINEERING, INC.



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

SHEET NUMBER: REVISION:

RF-2 0



1 PLUMBING DIAGRAM - DELTA SECTOR
SCALE: N.T.S.

THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION THAT IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS.

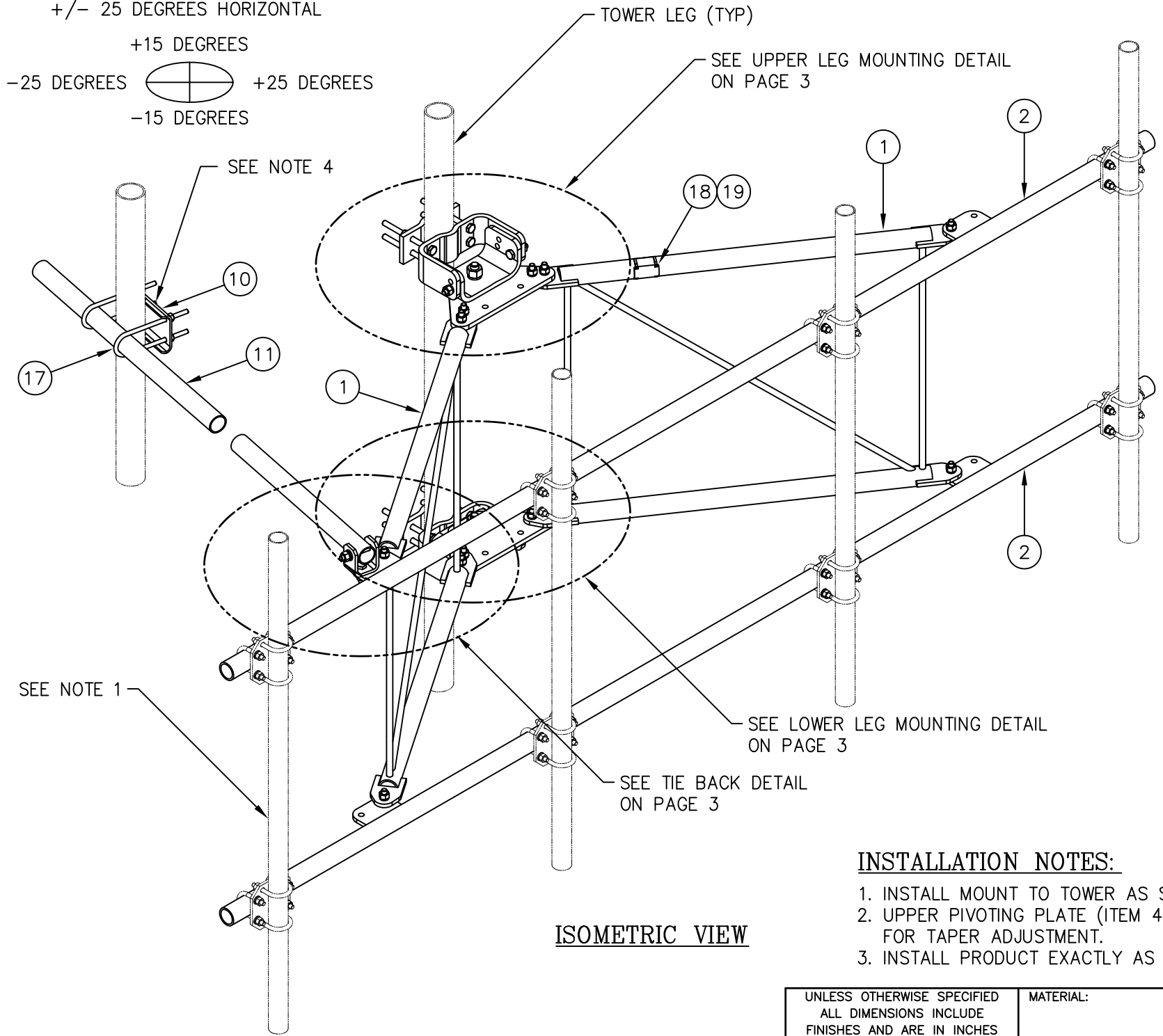
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



TIEBACK ANGLE RANGE DETAIL

+/- 15 DEGREES VERTICAL
+/- 25 DEGREES HORIZONTAL

+15 DEGREES
-25 DEGREES +25 DEGREES
-15 DEGREES



ISOMETRIC VIEW

NOTES:

- 1. MOUNTING PIPES & CROSSOVER PLATE KITS MUST BE PURCHASED SEPARATELY.
- 2. QUANTITIES SHOWN IN LISTS OF MATERIAL ARE FOR ONE (1) V-BOOM ONLY.
- 3. THIS V-BOOM WILL MOUNT TO THE FOLLOWING: 1 1/2"Ø TO 5 9/16"Ø ROUND LEG.
- 4. TIEBACK MUST BE CONNECTED TO A RIGID MEMBER THAT PROVIDES ADEQUATE SUPPORT WITHIN THE LIMITS NOTED ABOVE IN THE TIEBACK ANGLE RANGE DETAIL UNLESS APPROVED BY THE ENGINEER OF RECORD.

C10857001C 12' HD V-BOOM ASSEMBLY W/TIEBACK

ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	2	CW01222	WELDMENT, STANDOFF ARM	126
2.	2	CW01223	WELDMENT, FACE PIPE	147
3.	2	CS03109	PLATE, ROTATING	34
4.	1	CS03110	PLATE, PIVOTING (UPPER)	16
5.	1	CS03111	PLATE, LEG CLAMP (UPPER)	17
6.	1	CS03112	PLATE, PIVOTING (LOWER)	14
7.	1	CS03113	PLATE, LEG CLAMP (LOWER)	17
8.	2	CS03114	PLATE, LEG CLAMP (BACK)	14
9.	1	CS00098	PLATE, TIE BACK SWIVEL	3
10.	1	CS03285	PLATE, TIE BACK CLAMP	4
11.	1	CS03333	PIPE, TIE BACK	38
12.	2	C40026073	BOLT ASSEMBLY, 1 Ø X 3 A325	4
13.	8	C40140004	BOLT ASSEMBLY, 5/8 Ø X 8 A307	13
14.	1	C40026033	BOLT ASSEMBLY, 5/8 Ø X 4 1/2 A325	1
15.	12	C40026025	BOLT ASSEMBLY, 5/8 Ø X 2 1/2 A325	6
16.	5	C40026024	BOLT ASSEMBLY, 5/8 Ø X 2 1/4 A325	3
17.	2	C40034183	U-BOLT ASSEMBLY, 1/2 Ø X 2 9/16 C-C	3
18.	1	Z30992001	MOUNT CLASSIFICATION TAG C10857001C	1
19.	2	C40062103	STAINLESS STEEL SELF-LOCKING CABLE TIE	1
TOTAL WEIGHT				462

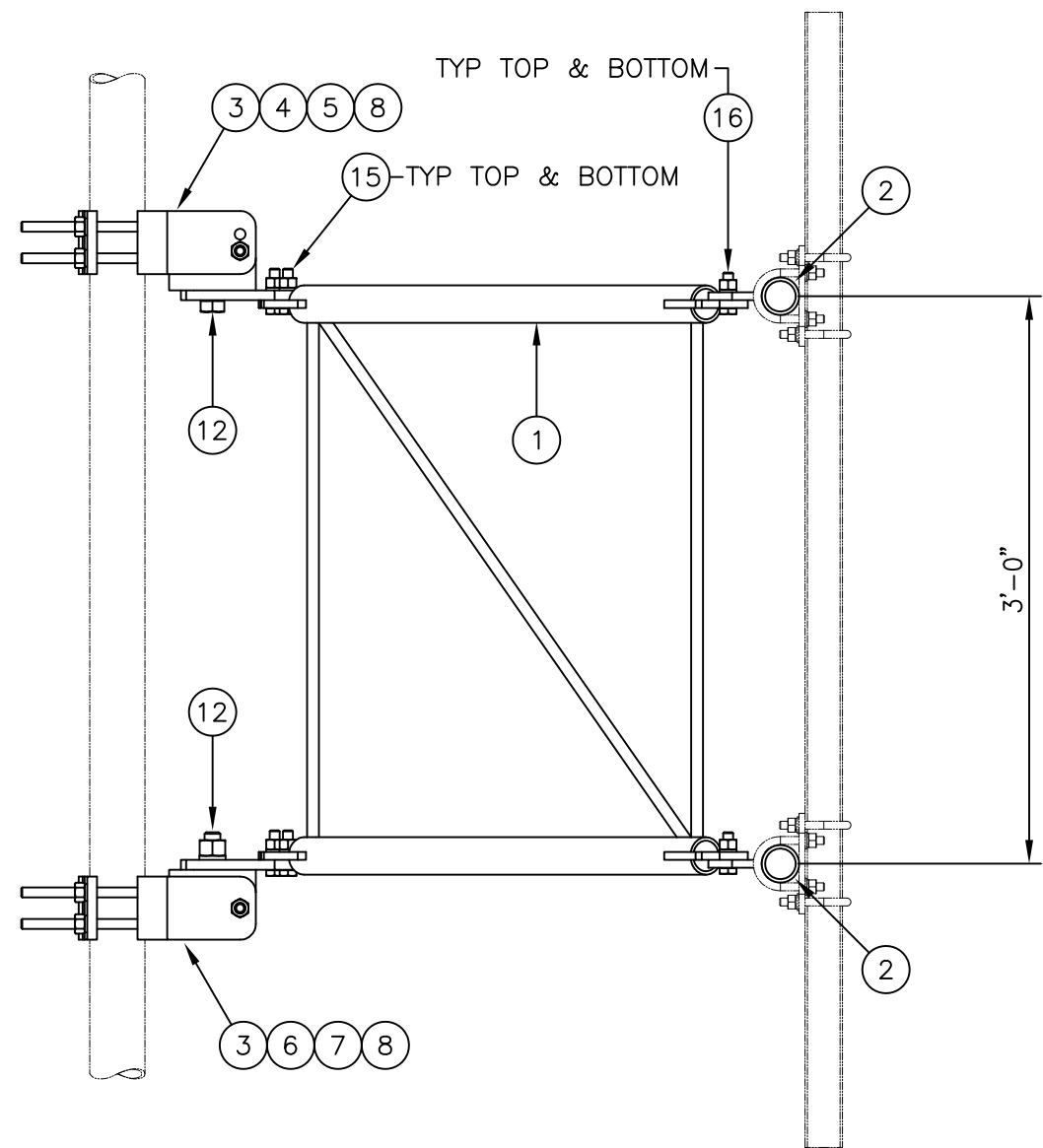
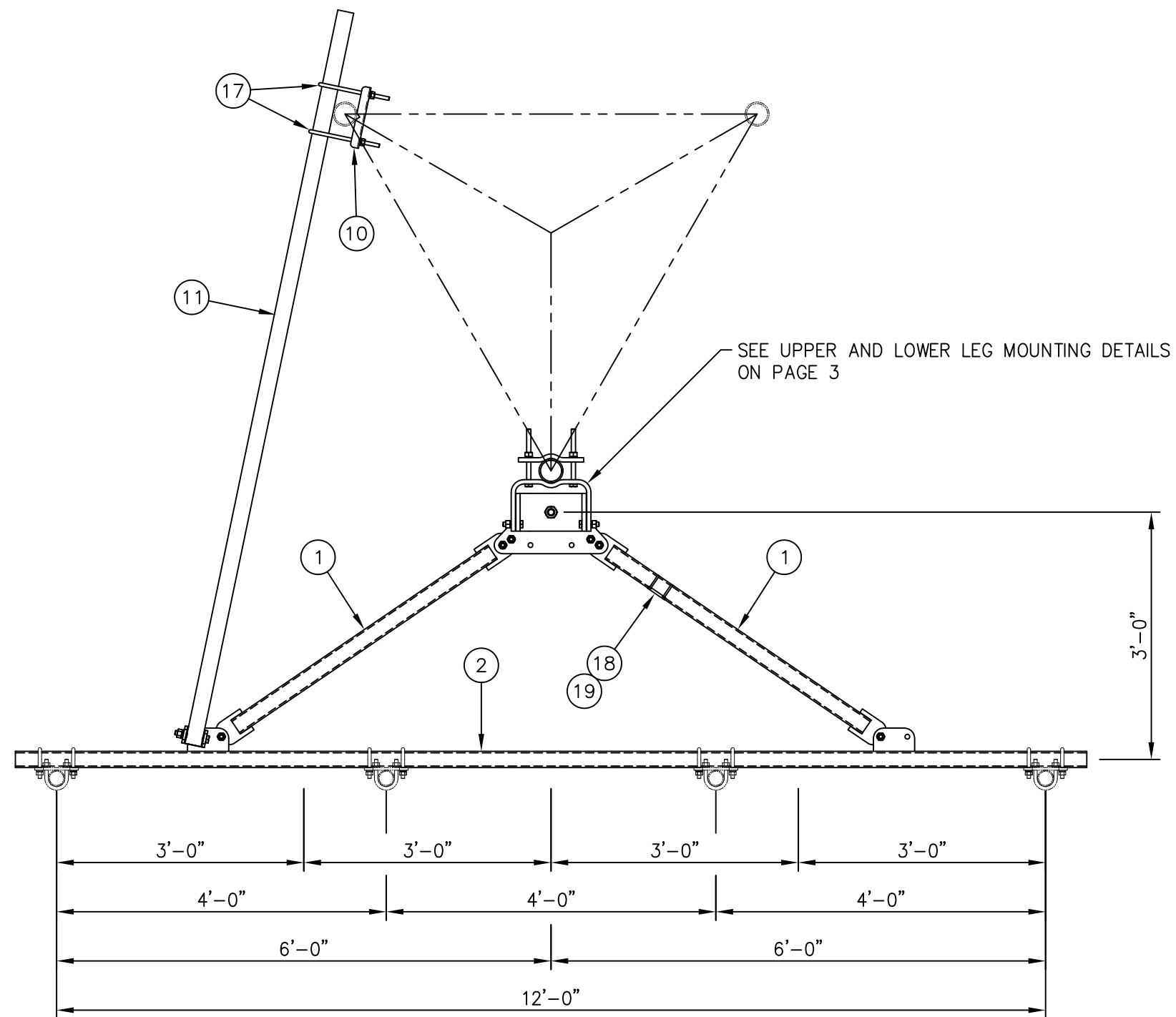
PACKAGING NOTE

- CK00386 INCLUDES ITEMS 1, 3, 4, 5, 6, 7, 12 & 15 (8 QTY)
CK00387 INCLUDES ITEMS 2, 8, 9, 10, 11, 13, 14, 15 (4 QTY), 16, 17, 18 & 19

INSTALLATION NOTES:

- 1. INSTALL MOUNT TO TOWER AS SHOWN, SO THAT WELDED STANDOFF DIAGONAL IS SLOPING DOWNWARD FROM TOWER END TO FACE PIPE END.
- 2. UPPER PIVOTING PLATE (ITEM 4) HAS THREE HOLES ON EACH SIDE AND UPPER LEG CLAMP PLATE (ITEM 5) HAS TWO HOLES ON EACH SIDE FOR TAPER ADJUSTMENT.
- 3. INSTALL PRODUCT EXACTLY AS SHOWN IN DRAWING, WITH ALL BOLTS FACING UPWARDS.

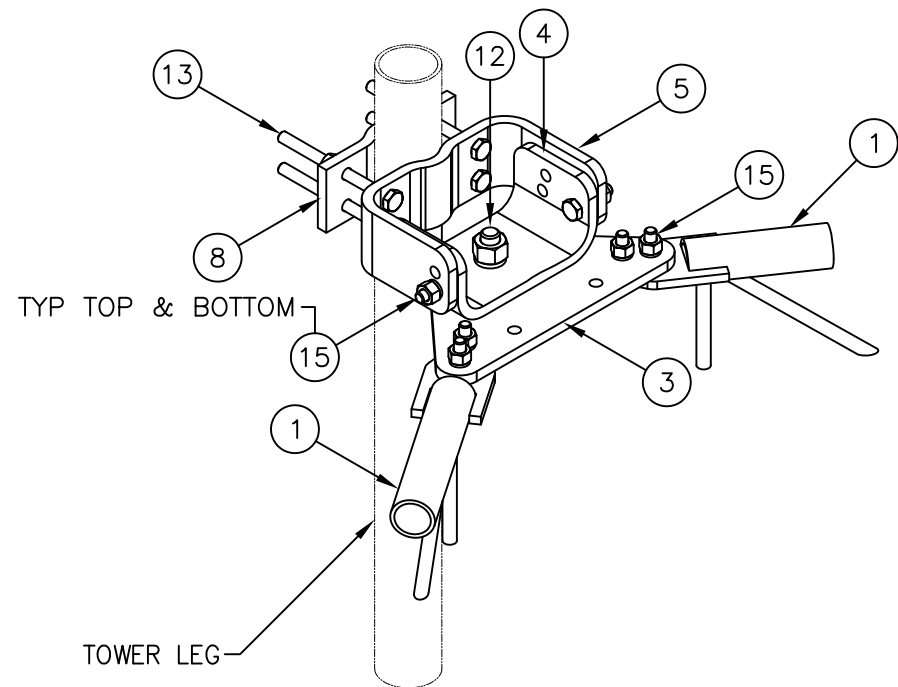
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES				MATERIAL:			12' HD V-BOOM ASSEMBLY W/TIEBACK (3' STANDOFF) W/NO ANTENNA MOUNTING PIPES						
TOLERANCES: FRACTIONS ± 1/16" ANGLES ± 1/2 DEG. DECIMALS ± .010"				TOLERANCES DO NOT APPLY TO RAW MATERIAL									
						CONFIDENTIAL This document and the information contained herein is the confidential trade secret property of Sabre Communications Corporation ("Sabre") and must not be reproduced, copied or used, in whole or in part, for any purpose without the prior written consent of Sabre. © 2015 Sabre Communications Corporation. All rights reserved.			SIZE B	DRAWING NO. C10857001C	REV 3		
3	10/19/16	KLE	DEL	ADDED INSTALLATION NOTES			DATE	12/22/15					
2	02/05/16	DLW	DEL	ADDED PACKAGING NOTE			DRAWN BY	WRF			SCALE None	PAGE 1 OF 3	
1	01/21/16	KLE	EK	REVISED NOTES & ADDED TIEBACK ANGLE RANGE DETAIL			CHECKED BY	EK					
REV	DATE	DRW	CHK	DESCRIPTION									



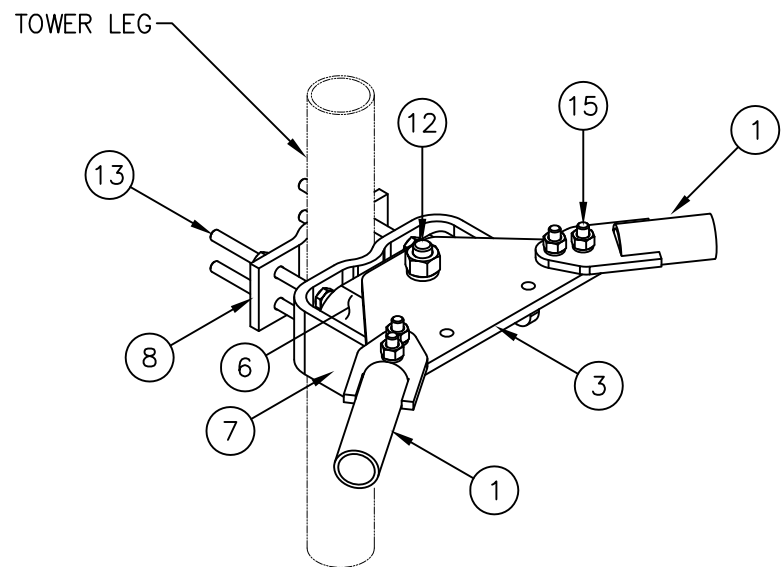
SIDE VIEW

MOUNTING OPTIONS
SHOWING MOUNTING PIPE PLACEMENTS

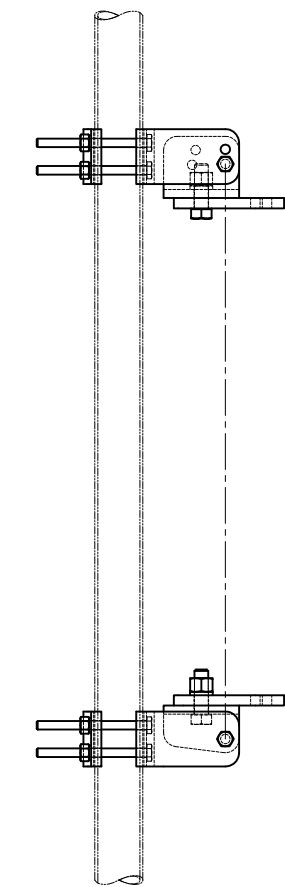
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES				MATERIAL:			12' HD V-BOOM ASSEMBLY W/TIEBACK (3' STANDOFF) W/NO ANTENNA MOUNTING PIPES					
TOLERANCES: FRACTIONS ± 1/16" ANGLES ± 1/2 DEG. DECIMALS ± .010"				TOLERANCES DO NOT APPLY TO RAW MATERIAL								
						CONFIDENTIAL This document and the information contained herein is the confidential trade secret property of Sabre Communications Corporation ("Sabre") and must not be reproduced, copied or used, in whole or in part, for any purpose without the prior written consent of Sabre. © 2015 Sabre Communications Corporation. All rights reserved.			SIZE B	DRAWING NO. C10857001C	REV 3	
3	10/19/16	KLE	DEL	ADDED INSTALLATION NOTES			DATE	12/22/15				
2	02/05/16	DLW	DEL	ADDED PACKAGING NOTE			DRAWN BY	WRF				
1	01/21/16	KLE	EK	REVISED NOTES & ADDED TIEBACK ANGLE RANGE DETAIL			CHECKED BY	EK				
REV	DATE	DRW	CHK	DESCRIPTION					SCALE None		PAGE 2 OF 3	



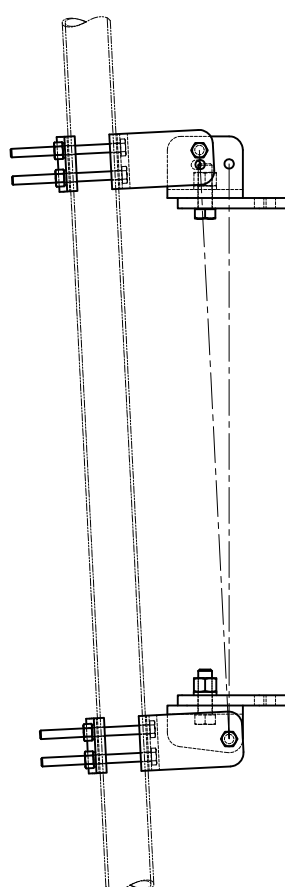
UPPER LEG MOUNTING DETAIL



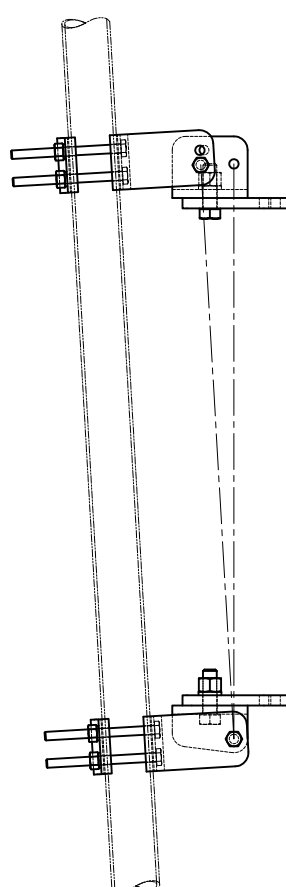
LOWER LEG MOUNTING DETAIL



STRAIGHT
TOWER SECTION

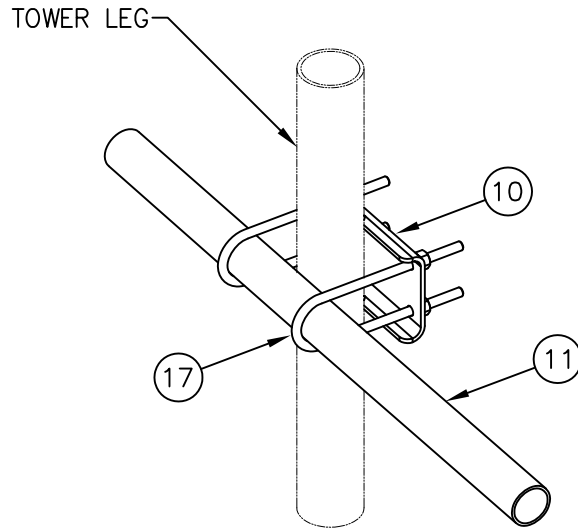


TAPERED
1'-9 IN 20' SLOPE

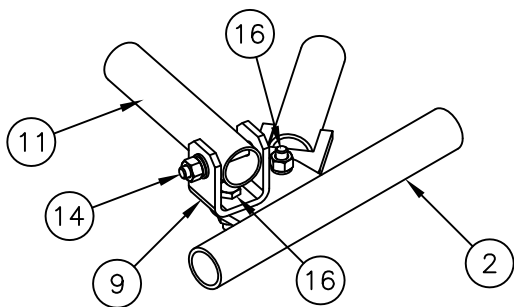


TAPERED
2' IN 20' SLOPE

-----PIVOTING OPTIONS-----



TIE BACK DETAIL
AT TOWER LEG



TIE BACK DETAIL
AT ANTENNA MOUNTING FRAME

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES				MATERIAL:			12' HD V-BOOM ASSEMBLY W/TIEBACK (3' STANDOFF) W/NO ANTENNA MOUNTING PIPES				
TOLERANCES: FRACTIONS ± 1/16" ANGLES ± 1/2 DEG. DECIMALS ± .010"				TOLERANCES DO NOT APPLY TO RAW MATERIAL							
						CONFIDENTIAL This document and the information contained herein is the confidential trade secret property of Sabre Communications Corporation ("Sabre") and must not be reproduced, copied or used, in whole or in part, for any purpose without the prior written consent of Sabre. © 2015 Sabre Communications Corporation. All rights reserved.			SIZE B	DRAWING NO. C10857001C	REV 3
3	10/19/16	KLE	DEL	ADDED INSTALLATION NOTES			DATE	12/22/15			
2	02/05/16	DLW	DEL	ADDED PACKAGING NOTE			DRAWN BY	WRF	SCALE None	PAGE 3 OF 3	
1	01/21/16	KLE	EK	REVISED NOTES & ADDED TIEBACK ANGLE RANGE DETAIL			CHECKED BY	EK			
REV	DATE	DRW	CHK	DESCRIPTION							