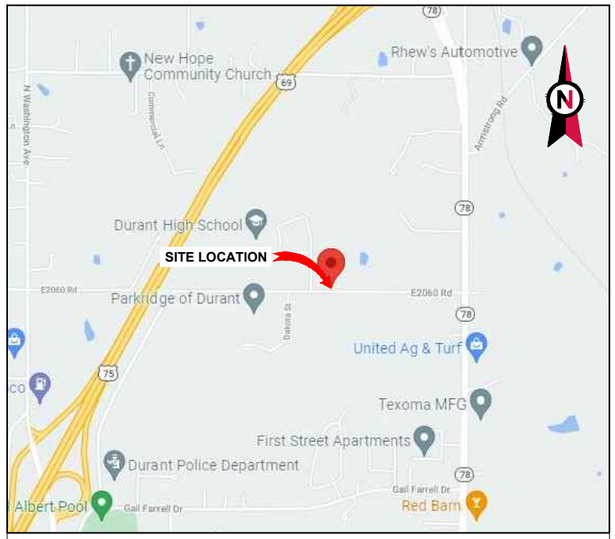


VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: DURANT NORTH OK
ATC SITE NUMBER: 419771
T-MOBILE SITE NAME: OK02165A
T-MOBILE SITE NUMBER: OK02165A
SITE ADDRESS: 608 GERLACH DRIVE
DURANT, OK 74701-2557

LOCATION MAP

T-MOBILE SPRINT RETAIN ANTENNA AMENDMENT PLAN
56790EZ_SR_T CONFIGURATION

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.

1. 2014 INTERNATIONAL BUILDING CODE (IBC) WITH AMENDMENTS
2. 2009 NATIONAL ELECTRIC CODE (NEC) WITH AMENDMENTS
3. LOCAL BUILDING CODE
4. CITY/COUNTY ORDINANCES

UTILITY COMPANIES

POWER COMPANY: TBD
PHONE: TBD
TELEPHONE COMPANY: TBD
PHONE: TBD

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

PROJECT SUMMARY

SITE ADDRESS:

608 GERLACH DRIVE

DURANT, OK 74701-2557

COUNTY: BRYAN

GEOGRAPHIC COORDINATES:

LATITUDE: 34.02681900

LONGITUDE: -96.37822800

GROUND ELEVATION: 690' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

T-MOBILE
6200 OAK TREE BLVD, STE 125
INDEPENDENCE, OH 44131

PROPERTY OWNER:

STEVEN C. JORDAN, JORDAN
FAMILY TRUST OWNER
P.O. BOX 98
ARDMORE, OK 73401-0098

PROJECT DESCRIPTION

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

TOWER WORK:

REMOVE (6) ANTENNA(s) AND (6) RRH(s)

INSTALL (6) ANTENNA(s), (6) RRH(s), (2) JUNCTION BOX(s) AND (2) HCS 2.0 TRUNK CABLE(s)

EXISTING (1) DISH, (1) ODU AND (1) 1/2" COAX CABLE TO REMAIN

GROUND WORK:

REMOVE (1) SSC CABINET AND (1) 6102 CABINET

INSTALL (1) DELTA HPL3 600A SITE SUPPORT CABINET AND (1) DELTA LB3 BATTERY CABINET

EXISTING (1) PPC CABINET, (1) FIBER CABINET AND (1) METER TO REMAIN

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.

PROJECT LOCATION DIRECTIONS

FROM DURANT REGIONAL AIRPORT, HEAD SOUTHWEST TOWARD CESSNA DR, TURN RIGHT ONTO CESSNA DR, TURN LEFT, TURN RIGHT ONTO PIPER, TURN LEFT ONTO WALDRON RD, TURN RIGHT ONTO S 9TH AVE, TURN LEFT, TURN RIGHT ONTO S 12TH AVE, TURN LEFT ONTO W LIVE OAK ST, TURN RIGHT ONTO N WASHINGTON AVE, TURN RIGHT ONTO CARL ALBERT DR, CONTINUE ONTO E2060 RD/GERLACH DR, DESTINATION WILL BE ON THE LEFT.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	A	12/14/21	SA
G-002	GENERAL NOTES	A	12/14/21	SA
C-101	DETAILED SITE PLAN	A	12/14/21	SA
C-102	DETAILED GROUND PLAN	A	12/14/21	SA
C-201	TOWER ELEVATION	A	12/14/21	SA
C-401	ANTENNA INFORMATION & SCHEDULE	A	12/14/21	SA
C-501	CONSTRUCTION DETAILS	A	12/14/21	SA
C-502	CABLE AND MOUNTING DETAILS	A	12/14/21	SA
E-501	GROUNDING DETAILS & ELECTRICAL NOTES	A	12/14/21	SA
R-601	SUPPLEMENTAL			
R-602	SUPPLEMENTAL			
R-603	SUPPLEMENTAL			
R-604	SUPPLEMENTAL			
R-605	SUPPLEMENTAL			

AMERICAN TOWER®

REV.	DESCRIPTION	BY	DATE
A	PRELIM	SA	12/14/21

ATC SITE NUMBER:
419771

ATC SITE NAME:
DURANT NORTH OK

T-MOBILE SITE NAME:
OK02165A

SITE ADDRESS:
608 GERLACH DRIVE
DURANT, OK 74701-2557

SEAL:

PRELIMINARY: NOT FOR CONSTRUCTION

T-Mobile

DATE DRAWN:	12/14/21
ATC JOB NO:	13752067_G3
CUSTOMER ID:	OK02165A
CUSTOMER #:	OK02165A

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	A

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. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
29. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY 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.
30. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE 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.
31. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
32. 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.
33. 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 CABLES ARE FURNISHED BY T-MOBILE UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OD COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL AND
   - B. INSTALL ANTENNA AS INDICATE 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. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
   - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
   - G. ANTENNA AND COAXIAL CABLE GROUNDING:
2. ALL EXTERIOR #6 GREED GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.
3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

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

AMERICAN TOWER®

REV.	DESCRIPTION	BY	DATE
A	PRELIM	SA	12/14/21

ATC SITE NUMBER:
419771

ATC SITE NAME:
DURANT NORTH OK

T-MOBILE SITE NAME:
OK02165A

SITE ADDRESS:
608 GERLACH DRIVE
DURANT, OK 74701-2557

SEAL:

PRELIMINARY: NOT FOR CONSTRUCTION

T-Mobile

DATE DRAWN:	12/14/21
ATC JOB NO:	13752067_G3
CUSTOMER ID:	OK02165A
CUSTOMER #:	OK02165A

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	A

SITE PLAN NOTES:

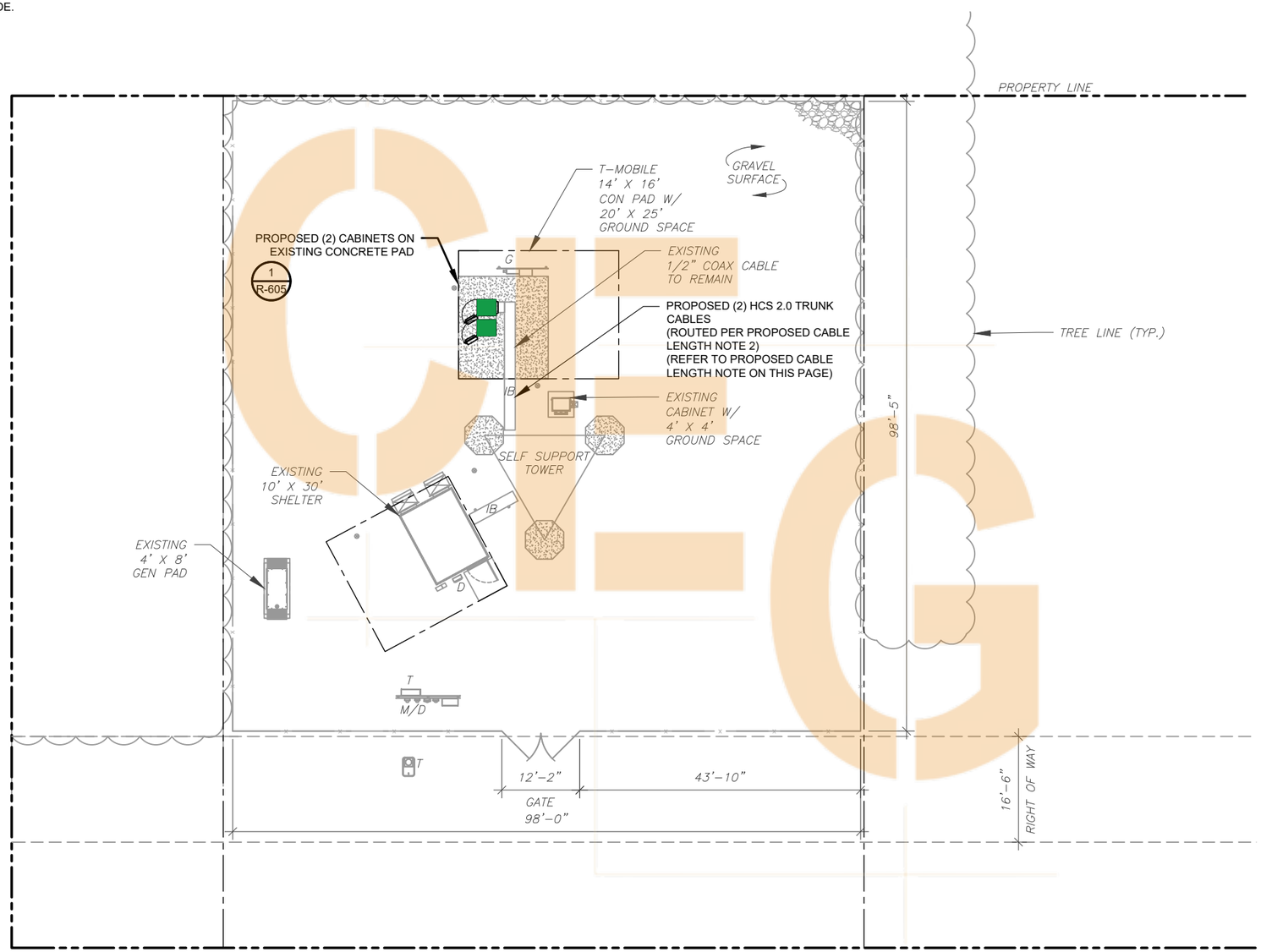
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.

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. THIS PROJECT INCLUDES NO INSTALL OR MODIFICATION AT GRADE.

LEGEND

⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACAL
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



1 DETAILED SITE PLAN

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 UNIT = 20 FEET

PROPOSED CABLE LENGTH:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **225'**. 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).

AMERICAN TOWER®

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ATC SITE NUMBER:
419771

ATC SITE NAME:
DURANT NORTH OK

T-MOBILE SITE NAME:
OK02165A

SITE ADDRESS:
608 GERLACH DRIVE
DURANT, OK 74701-2557

SEAL:

PRELIMINARY: NOT FOR CONSTRUCTION

T-Mobile

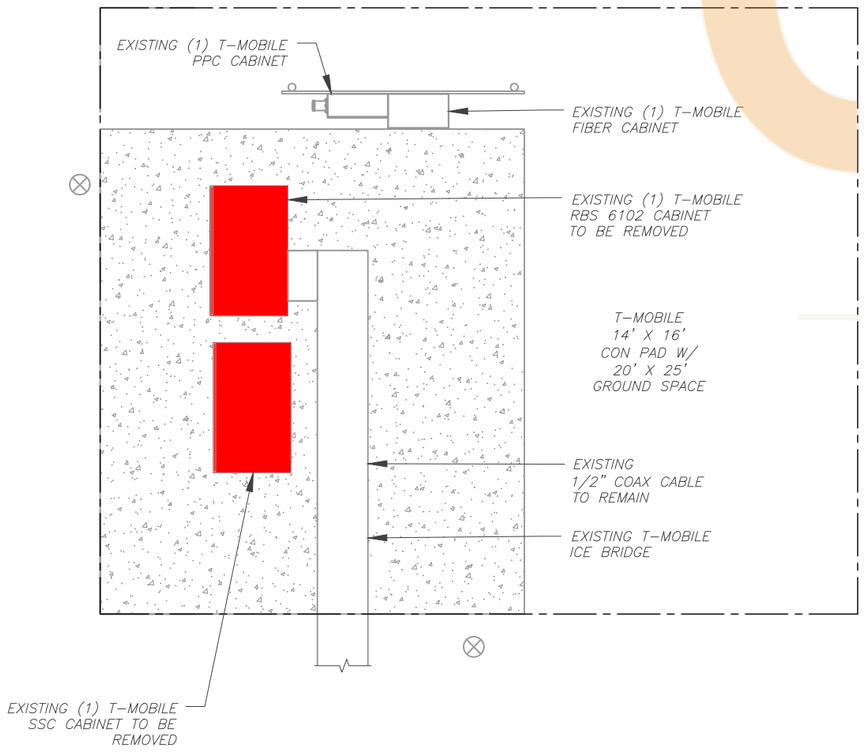
DATE DRAWN:	12/14/21
ATC JOB NO:	13752067_G3
CUSTOMER ID:	OK02165A
CUSTOMER #:	OK02165A

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	A

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. REMOVE EXISTING 2G CABINETS, AND POWER / TELCO WHIPS ASSOCIATED WITH THE DEAD EQUIPMENT IF APPLICABLE.
3. ALL OPEN PORTS NEED TO BE SEALED / WEATHERPROOFED PROPERLY
4. ALL UNNEEDED / EXCESS EQUIPMENT AND GARBAGE TO BE REMOVED FROM EQUIPMENT AREA. DISPOSE OF MATERIALS PROPERLY OFF SITE.



1 EXISTING GROUND EQUIPMENT LAYOUT

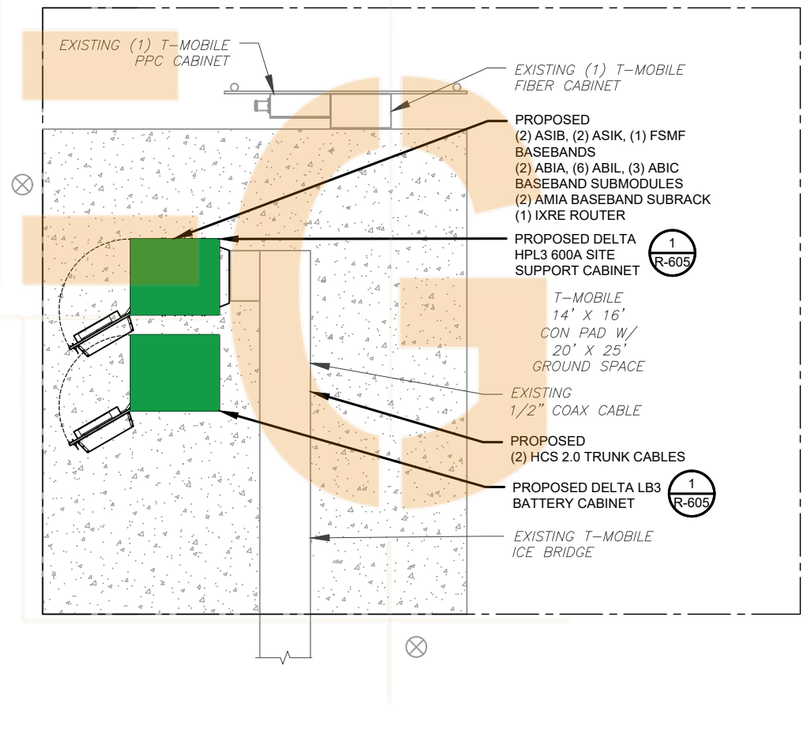
0 5' 10'

SCALE: 1"=5' (11X17)
1"=2.5' (22X34)

LEGEND
EXISTING EQUIPMENT TO BE REMOVED

T-MOBILE CM APPROVAL REQUIRED BEFORE INSTALLING CABINETS

NOTE:
CABINETS TO BE ANCHORED TO EXISTING CONCRETE PAD USING (4) 1/2" DIA. HILTI KWIK BOLT TZ STAINLESS STEEL ANCHORS W/ 3-3/4" NOMINAL EMBEDMENT (ICC ESR-1917). ANCHORS TO BE INSTALLED IN EACH CORNER OF CABINET.



2 PROPOSED GROUND EQUIPMENT LAYOUT

0 5' 10'

SCALE: 1"=5' (11X17)
1"=2.5' (22X34)

LEGEND
PROPOSED EQUIPMENT TO BE INSTALLED

AMERICAN TOWER®

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A	PRELIM	SA	12/14/21

ATC SITE NUMBER:
419771

ATC SITE NAME:
DURANT NORTH OK

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SITE ADDRESS:
608 GERLACH DRIVE
DURANT, OK 74701-2557

SEAL:

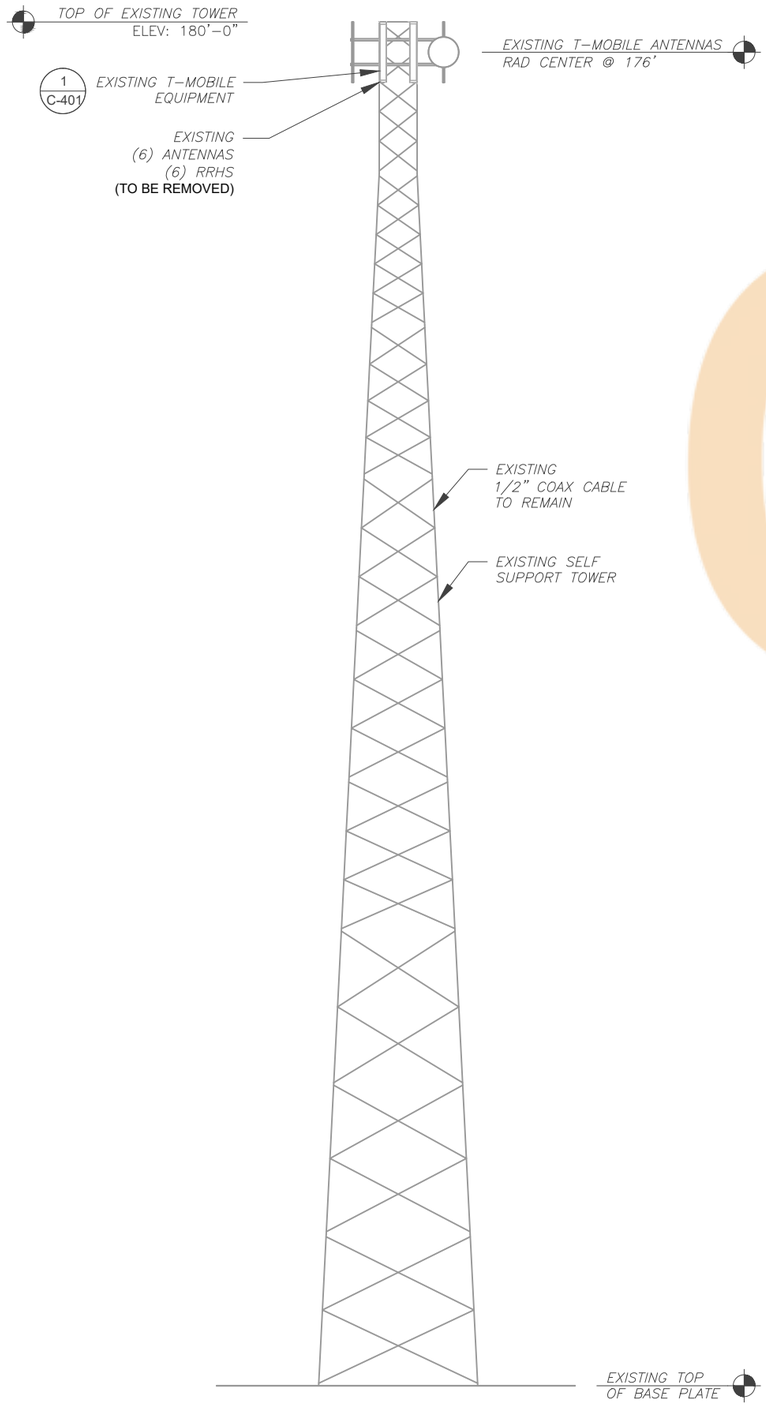
PRELIMINARY: NOT FOR CONSTRUCTION

T-Mobile

DATE DRAWN:	12/14/21
ATC JOB NO:	13752067_G3
CUSTOMER ID:	OK02165A
CUSTOMER #:	OK02165A

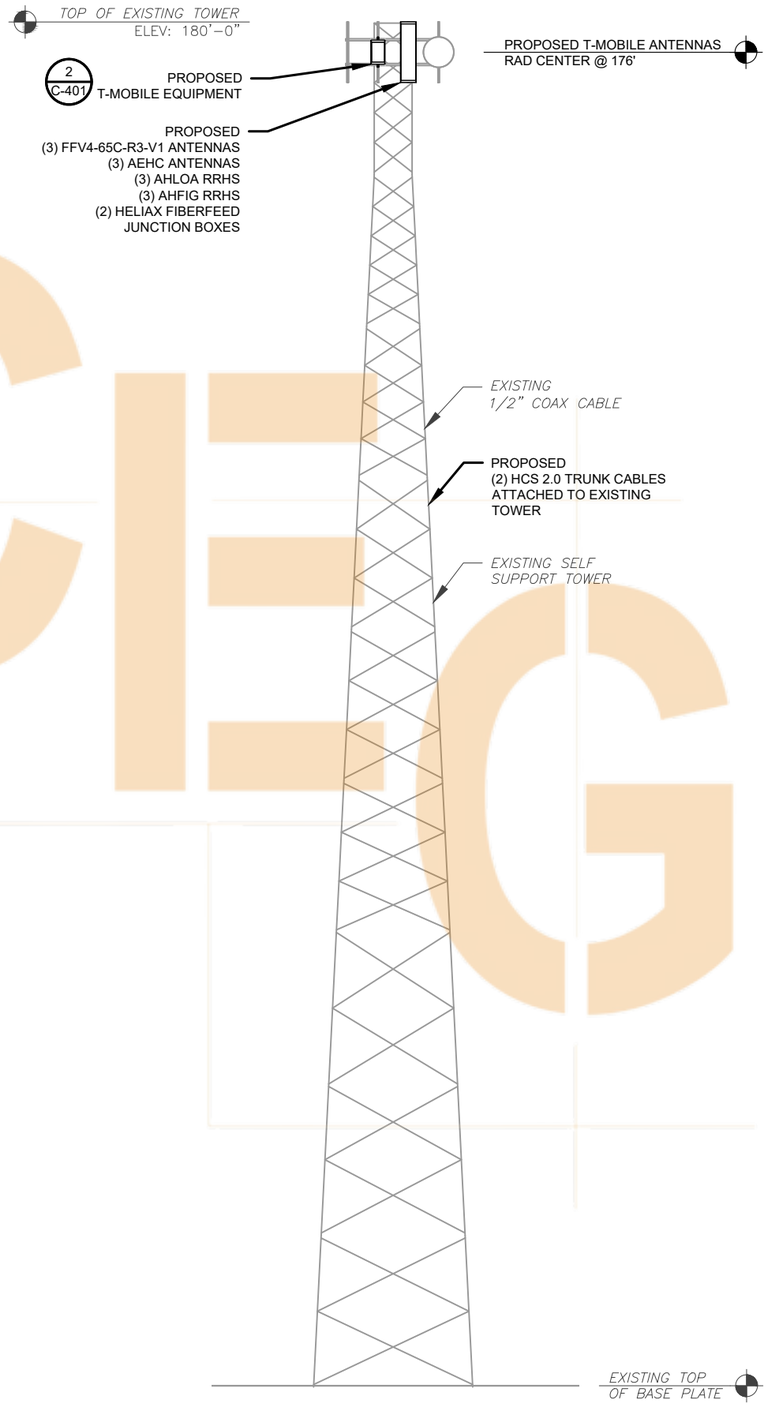
DETAILED GROUND PLAN

SHEET NUMBER:	REVISION:
C-102	A



1 EXISTING TOWER ELEVATION

SCALE: N.T.S.



2 PROPOSED TOWER ELEVATION

SCALE: N.T.S.

ATC IS ANALYZING THE ANTENNA MOUNT UNDER A SEPARATE PROJECT. CONSTRUCTION IS NOT TO PROCEED UNTIL THE STRUCTURE AND MOUNT ANALYSIS IS COMPLETE AND INDICATES THE ADDITIONAL LOADING DOES NOT OVERSTRESS THE MOUNT

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 ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)

AMERICAN TOWER®

REV.	DESCRIPTION	BY	DATE
A	PRELIM	SA	12/14/21

ATC SITE NUMBER:
419771

ATC SITE NAME:
DURANT NORTH OK

T-MOBILE SITE NAME:
OK02165A

SITE ADDRESS:
608 GERLACH DRIVE
DURANT, OK 74701-2557

SEAL:

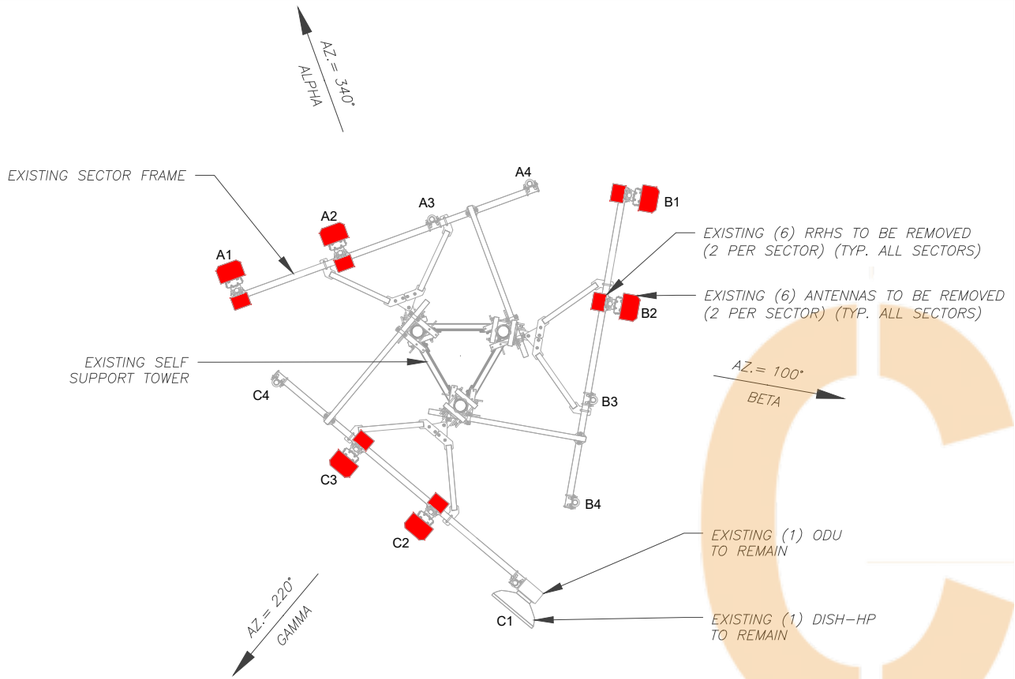
PRELIMINARY: NOT FOR CONSTRUCTION

T-Mobile

DATE DRAWN:	12/14/21
ATC JOB NO:	13752067_G3
CUSTOMER ID:	OK02165A
CUSTOMER #:	OK02165A

TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-201	A

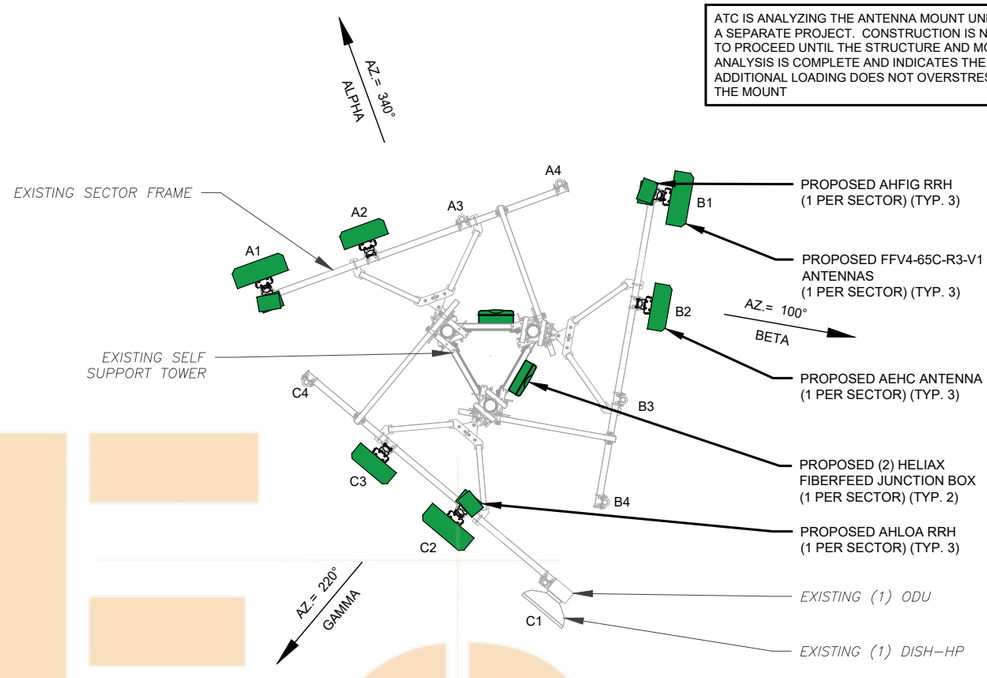


1 EXISTING ANTENNA PLAN

N

LEGEND

EXISTING EQUIPMENT TO BE REMOVED



ATC IS ANALYZING THE ANTENNA MOUNT UNDER A SEPARATE PROJECT. CONSTRUCTION IS NOT TO PROCEED UNTIL THE STRUCTURE AND MOUNT ANALYSIS IS COMPLETE AND INDICATES THE ADDITIONAL LOADING DOES NOT OVERSTRESS THE MOUNT

2 FINAL ANTENNA PLAN

N

LEGEND

PROPOSED EQUIPMENT TO BE INSTALLED

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	176'	340°	A1	EXISTING SPRINT KEEP ANTENNA	-	-	RMV	(1) EXISTING RRH	RMV
			A2	EXISTING SPRINT KEEP ANTENNA	-	-	RMV	(1) EXISTING RRH	RMV
			A3	-	-	-	-	-	-
			A4	-	-	-	-	-	-
BETA	176'	100°	B1	EXISTING SPRINT KEEP ANTENNA	-	-	RMV	(1) EXISTING RRH	RMV
			B2	EXISTING SPRINT KEEP ANTENNA	-	-	RMV	(1) EXISTING RRH	RMV
			B3	-	-	-	-	-	-
			B4	-	-	-	-	-	-
GAMMA	176'	220°	C1	ANT2 0.6HP 18	-	-	RMN	MINI-LINK TN 2010	RMN
			C2	EXISTING SPRINT KEEP ANTENNA	-	-	RMV	(1) EXISTING RRH	RMV
			C3	EXISTING SPRINT KEEP ANTENNA	-	-	RMV	(1) EXISTING RRH	RMV
			C4	-	-	-	-	-	-

NOTES

1. CONFIRM WITH T-MOBILE REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
2. CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

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	176'	340°	A1	COMMSCOPE-FFV4-65C-R3-V1	L700/L600/N600/LAWS 3/L2100/G1900	-	ADD	(1) AHLOA (1) AHFIG	ADD
			A2	AEHC	-	-	ADD	-	-
			A3	-	-	-	-	-	-
			A4	-	-	-	-	-	-
BETA	176'	100°	B1	COMMSCOPE-FFV4-65C-R3-V1	L700/L600/N600/LAWS 3/L2100/G1900	-	ADD	(1) AHLOA (1) AHFIG	ADD
			B2	AEHC	-	-	ADD	-	-
			B3	-	-	-	-	-	-
			B4	-	-	-	-	-	-
GAMMA	176'	220°	C1	ANT2 0.6HP 18	-	-	RMN	MINI-LINK TN 2010	RMN
			C2	COMMSCOPE-FFV4-65C-R3-V1	L700/L600/N600/LAWS 3/L2100/G1900	-	ADD	(1) AHLOA (1) AHFIG	ADD
			C3	AEHC	-	-	ADD	-	-
			C4	-	-	-	-	-	-

EXISTING FIBER DISTRIBUTION/OVP BOX

MODEL NUMBER	STATUS
-	-

EXISTING CABLING SUMMARY

COAX	HYBRID	STATUS
1/2"	-	RMN

FINAL FIBER DISTRIBUTION / OVP BOX

MODEL NUMBER	STATUS
(2) HELIAX FIBERFEED (JUNCTION BOXES)	ADD

FINAL CABLING SUMMARY

COAX	HYBRID	STATUS
-	(2) 1.46"	ADD
1/2"	-	RMN

3 ANTENNA AND RF EQUIPMENT SCHEDULE

AMERICAN TOWER®

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DURANT, OK 74701-2557

SEAL:

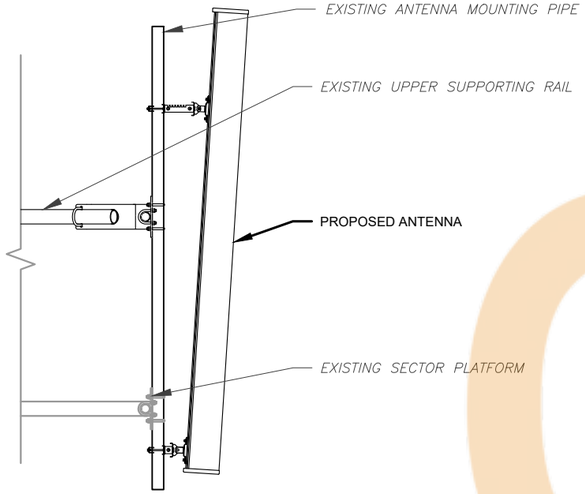
PRELIMINARY: NOT FOR CONSTRUCTION

T-Mobile

DATE DRAWN:	12/14/21
ATC JOB NO:	13752067_G3
CUSTOMER ID:	OK02165A
CUSTOMER #:	OK02165A

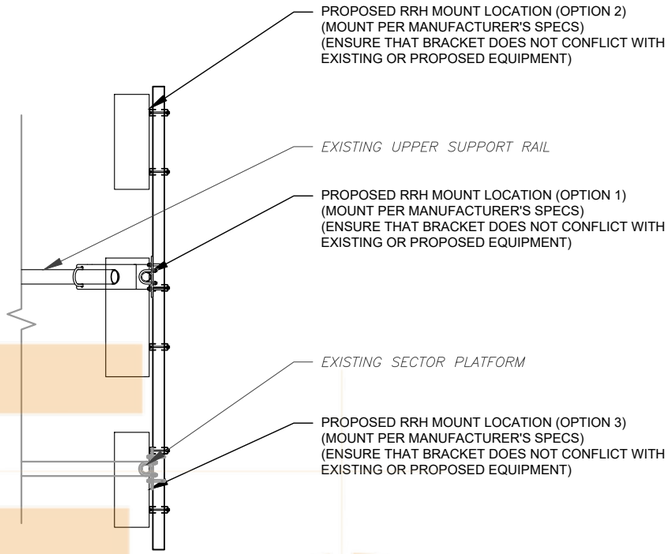
RF SCHEDULE AND ANTENNA INSTALLATION

SHEET NUMBER:	REVISION:
C-401	A



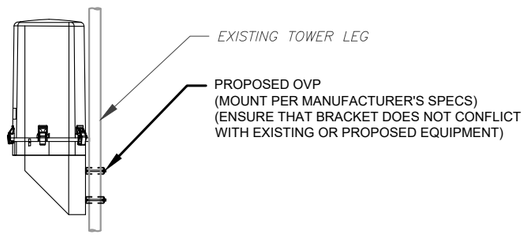
2 PROPOSED ANTENNA MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.



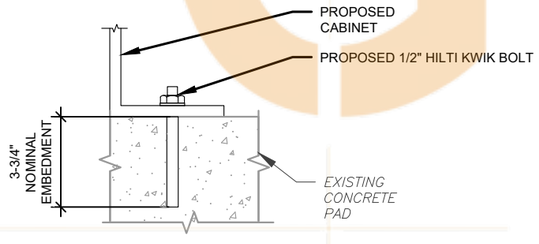
2 PROPOSED RRH MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.



3 PROPOSED OVP MOUNTING

SCALE: N.T.S.



NOTE:

INSTALL HILTI KWIK BOLT ANCHORS STRICTLY PER INSTALLATION INSTRUCTIONS INCLUDED WITH PRODUCT OR FOUND ONLINE AT WWW.US.HILTI.COM. PROPER INSTALLATION IS CRITICAL FOR FULL PERFORMANCE.

4 CABINET ATTACHMENT DETAIL

SCALE: NOT TO SCALE

AMERICAN TOWER®

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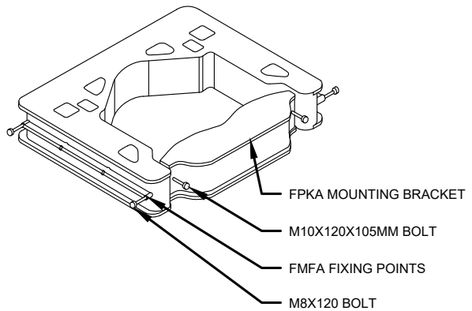
CUSTOMER ID:	OK02165A
CUSTOMER #:	OK02165A

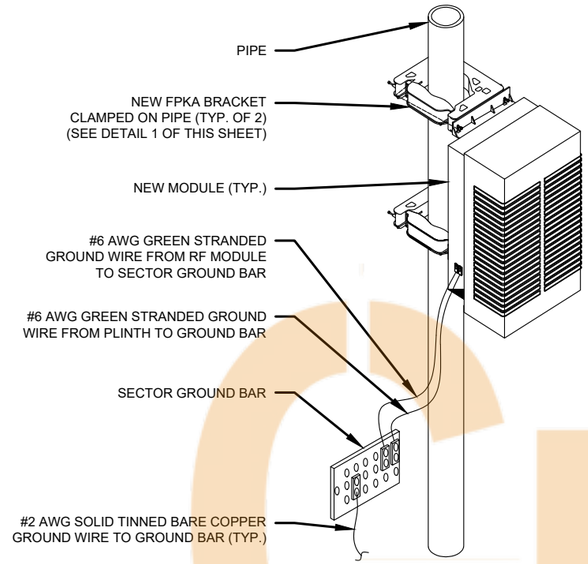
CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-501	A



1 FPKA BRACKET DETAIL

SCALE: N.T.S.



2 TYPICAL AHLOA UNIT MOUNTING DETAIL

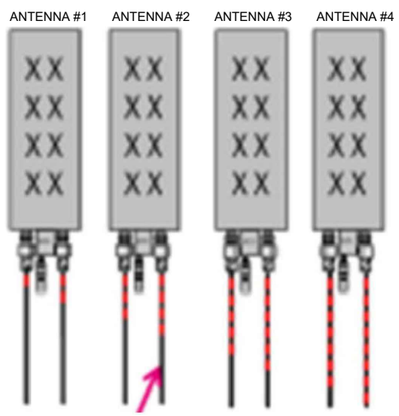
SCALE: N.T.S.

COAX COLOR CODING

- ANTENNAS WILL BE LABELED (BACK OF ANTENNA VIEW) RIGHT TO LEFT 1-X PORTS
- COAX/JUMPER LINES WILL BE IDENTIFIED BY SECTOR COLOR AND BY NUMBER OF BANDS AROUND THE COAX/JUMPER

SECTOR A	RED
SECTOR B	GREEN
SECTOR C	BLUE
SECTOR D	YELLOW
SECTOR E	WHITE
SECTOR F	PURPLE
LMU	BROWN + SECTOR COLOR BANDS (1 & 2)
FIBER ID	GRAY
UNUSED COAX	PINK
MICROWAVE	ORANGE
DWE T-1'S + GPS DOWNLINK CABLE	ID W/LABEL MAKER

FRONT OF THE ANTENNA



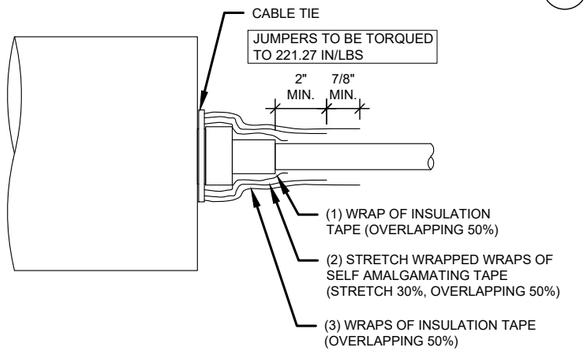
EXAMPLE: COAX WITH FOUR BANDS OF RED TAPE WILL REPRESENT ALPHA SECTOR AND THE 4TH PORT OF ANTENNA

ANTENNA AND COAXIAL CABLE SCHEDULE

1. ALL ANTENNAS SHALL BE FURNISHED WITH DOWNTILT BRACKETS. CONTRACTOR SHALL COORDINATE REQUIRED MECHANICAL DOWNTILT FOR EACH ANTENNA WITH RF ENGINEER. ANTENNA DOWNTILT SHALL BE SET AND VERIFIED BY A SMART LEVEL.
2. CONTRACTOR SHALL INSTALL COLOR CODE RINGS ON EACH OF THE HYBRID CABLES AND JUMPER CABLES WITH UV RESISTANT TAPE. ALL CABLE SHALL BE MARKED AT TOP AND BOTTOM WITH 2" COLOR TAPE OR STENCIL TAG. COLOR TAPE MAY BE OBTAINED FROM GRAYBAR ELECTRONICS.

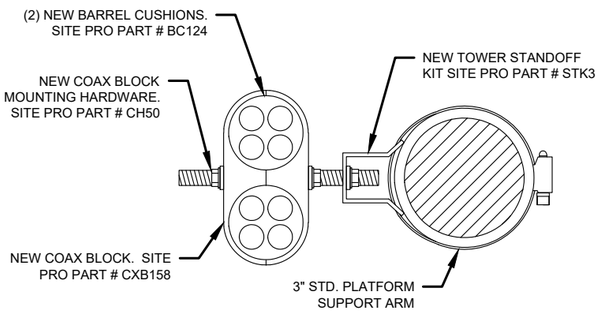
3 TAGGING COLOR AND NOTES

SCALE: N.T.S.



4 RF JUMPER CONNECTION DETAIL

SCALE: N.T.S.



5 RF JUMPER MOUNTING DETAIL

SCALE: N.T.S.

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SEAL:

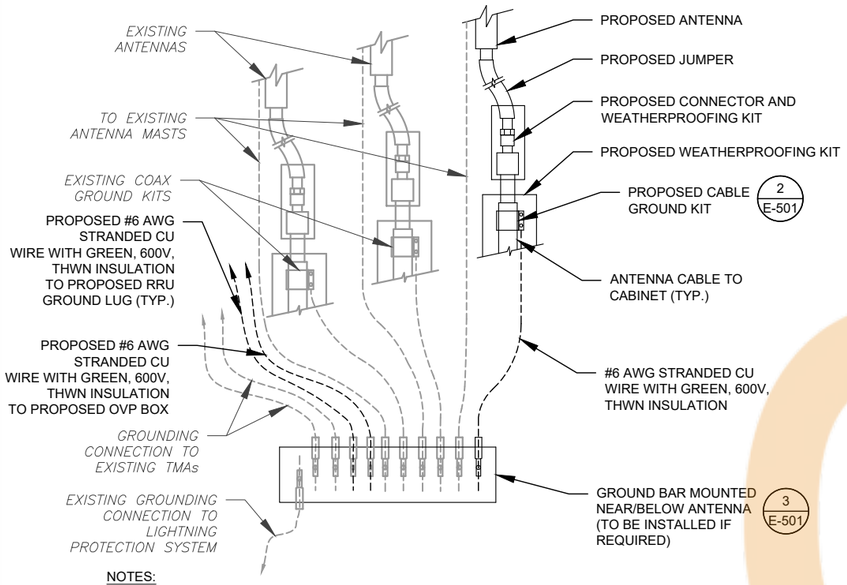
PRELIMINARY: NOT FOR CONSTRUCTION

T-Mobile

DATE DRAWN:	12/14/21
ATC JOB NO:	13752067_G3
CUSTOMER ID:	OK02165A
CUSTOMER #:	OK02165A

CABLE AND MOUNTING DETAILS

SHEET NUMBER:	REVISION:
C-502	A

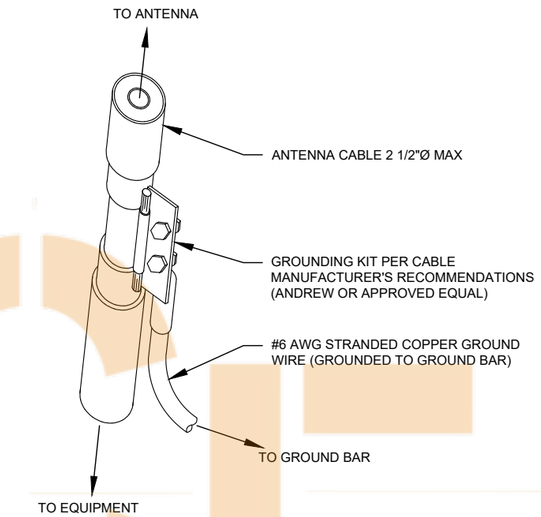


NOTES:

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.

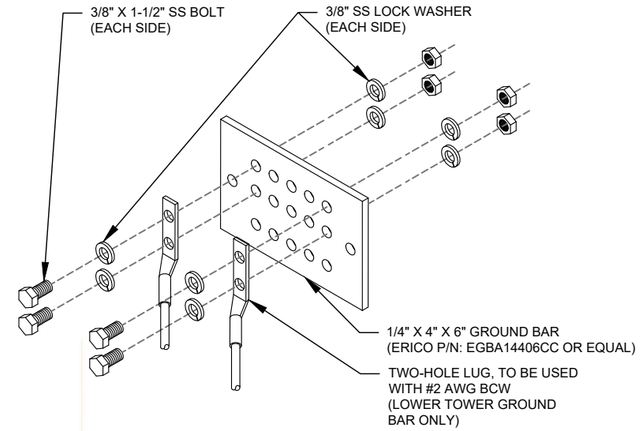


GROUND KIT NOTES:

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.

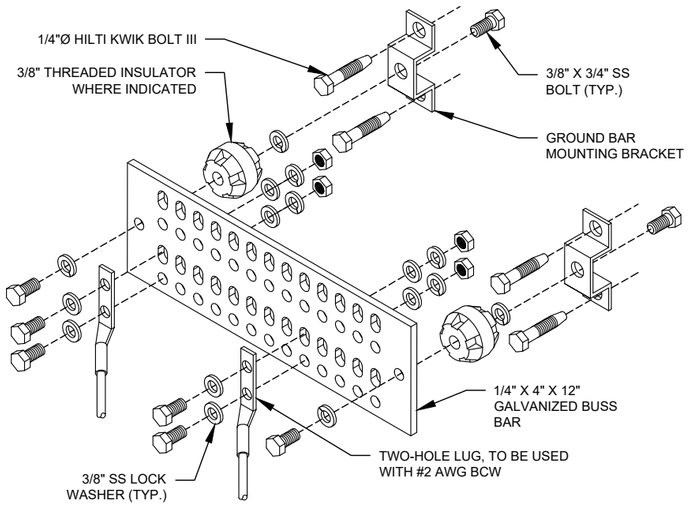


GROUND BAR NOTES:

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.



GROUND BAR NOTES

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

4 MAIN GROUND BAR DETAIL

SCALE: N.T.S.

GROUNDING NOTES:

1.) UNDERGROUND AND OVERHEAD UTILITY LENGTHS TO BE DETERMINED FROM SITE PLAN.

2.) SEE ELECTRICAL SPECIFICATIONS SECTION 16000 FOR ALL ELECTRICAL AND GROUNDING INSTALLATION REQUIREMENTS.

3.) FOR ORIENTATION OF SITE LAYOUT SEE SITE PLAN, DRAWING.

4.) UDA CABINET FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR.

5.) GROUND KITS PROVIDED BY OWNER SHALL BE RETROFITTED TO ACCOMMODATE 2 HOLE LUG CONNECTION AND APPROPRIATE LENGTH.

6.) CONTRACTOR RESPONSIBLE TO PROVIDE OWNER CERTIFICATION OF RESISTIVITY TESTING.

7.) GROUND RODS TO BE INSTALLED AT 10' CENTERS.

8.) ALL GROUND LEADS TO BE SLEEVED IN 3/4"Ø SCHEDULE 40 PVC CONDUIT AND SEALED W/ SILICON.

9.) GROUND BARS SUPPLIED BY OWNER AND INSTALLED BY CONTRACTOR.

10.) ALL BENDS IN GROUNDING SYSTEM MUST BE SMOOTH AND WELL ROUNDED AND MAINTAIN BENDING RADIUS.

11.) SEE SITE PLAN FOR COAXIAL ROUTING THIS SHEET IS INTENDED FOR GROUNDING CLARITY ONLY AND IS SCHEMATIC IN DETAIL.

12.) GROUND KITS SHALL BE INSTALLED BETWEEN 8"-18" OF ALL CONNECTORS.

13.) TOWER FOUNDATION DESIGN BY OWNER, INSTALLED BY CONTRACTOR.

14.) ADDITIONAL GROUND KITS TO BE PLACED AT 100' WHEN ANTENNA CENTERLINE IS 200' OR ABOVE.

15.) ALL CONDUITS TO BE SEALED W/ SILICONE TO PROVIDE A WATER TIGHT SEAL.

ELECTRICAL NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE T-MOBILE REPRESENTATIVE AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.
2. ATC HAS NOT VERIFIED ANY EXISTING T-MOBILE GROUND EQUIPMENT OR ELECTRICAL LOADING. PROPOSED WORK BASED ON INSTALLATION CONFIGURATION PROVIDED BY T-MOBILE. CONTRACTOR TO VERIFY EXISTING T-MOBILE PANEL HAS SUFFICIENT SPACE FOR PROPOSED BREAKER. PROPOSED CABLE AND CONDUIT SHALL BE MINIMUM SIZE PER BELOW:

OCPD SIZE	WIRE SIZE	GROUND SIZE	CONDUIT SIZE
80A/2P	2#3 AWG	#8 AWG	1-1/4"
100/2P	2#2 AWG	#8 AWG	1-1/4"
125A/2P	2#1 AWG	#8 AWG	1-1/2"
150A/2P	2#1/0 AWG	#8 AWG	1-1/2"

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T-Mobile

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CUSTOMER #:	OK02165A

GROUNDING DETAILS & ELECTRICAL NOTES

SHEET NUMBER:	REVISION:
E-501	A

Section 5 - RAN Equipment

Existing RAN Equipment

----- This section is intentionally blank. -----

Proposed RAN Equipment

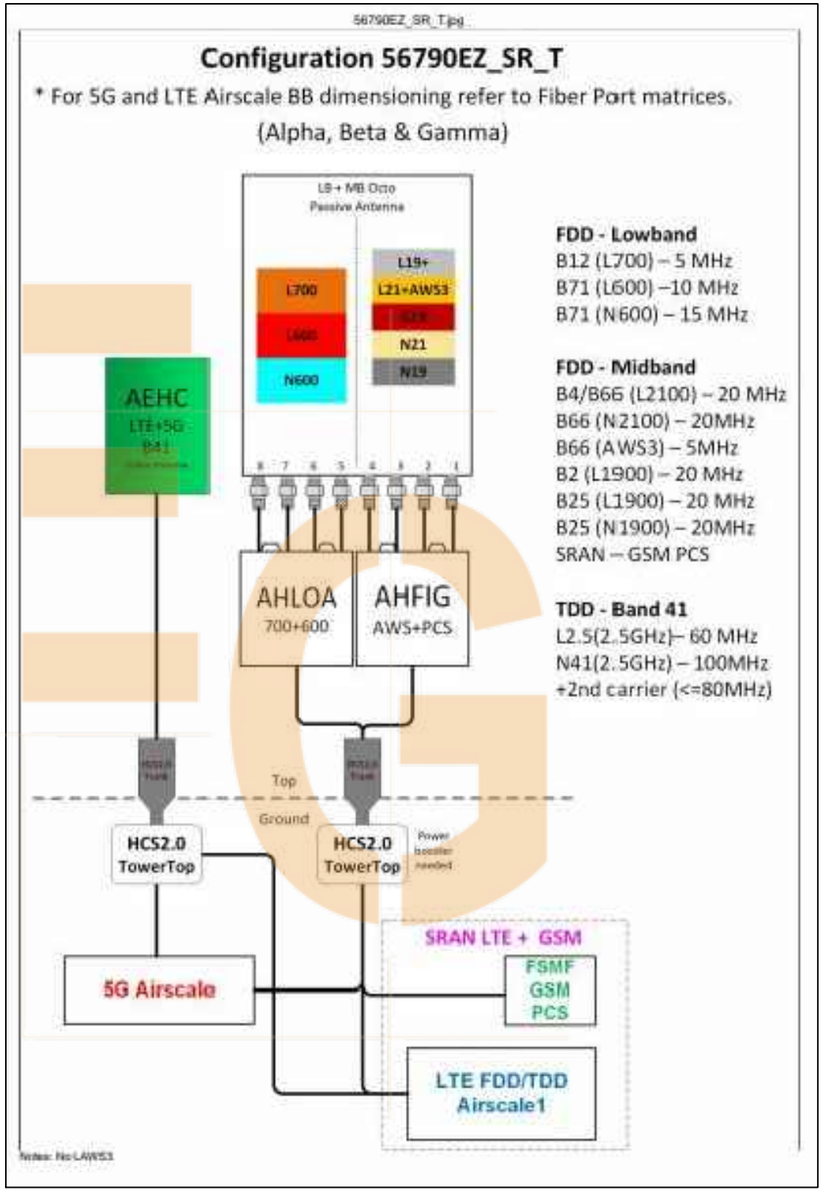
Template: 56790EZ_SR_T

Enclosure	1	2	3	4
Enclosure Type	Delta HPL3 600A DC plant	Tower Top Mount (Nokia)	Ancillary Equipment (Nokia)	Delta LB3 Battery Cabinet (4 strings)
Baseband	ASIB: L700, L800, L2100, L1900; ASIK: N2500; ASIK: N600, N1900 (DARK), N2100 (DARK); ASIB: L2500; FSMF: G1900			
Baseband Submodule	ABIA: L2100, L1900; ABIA: L700, L600; ABIL (x 3): N2500, N600; ABIC (x 3): L2500; ABIL (x 2): N1900 (DARK), N2100 (DARK)			
Baseband Subrack	AMIA (x 2)			
Hybrid Cable System	Voltage Booster PowerPlus w/ 2 Amplifier Raycap; Extra Amplifier for PowerPlus Voltage Booster		225' HCS 2.0 Trunk - 12#6AWG 24 SM FIBER PR (x 2)	
Junction Box			Nokia HCS 2.0 Tower Junction Box (x 2)	
Power subsystem	Rectifier Shelf *Select size*; Breakers *Select size*			Batteries *Select size*
Radio		AHLOA (x 3): L700, L800, N600; AHFIG (x 3): L2100, L1900, G1900, N1900 (DARK), N2100 (DARK)		
Transport System	CSR IXRe V2 (Gen2)			

RAN Scope of Work:

20211028:- Add new FSFM v105 for GSM. Reflected 2*HCS 2.0 Trunk = 225'. Voltage booster + 3rd Amp required for HCS 2.0 with AHLOA/AHFIG. 2 ABIA required as per Baseband Dimensioning.
110221: HCS updated to 225' after ACL update.

1 CABINET CONFIGURATION
SCALE: NOT TO SCALE

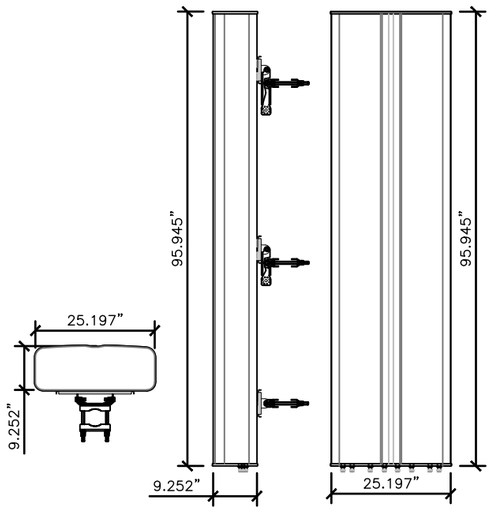


2 ANTENNA CONFIGURATION
SCALE: NOT TO SCALE

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

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-601	A



PLAN VIEW SIDE VIEW FRONT VIEW

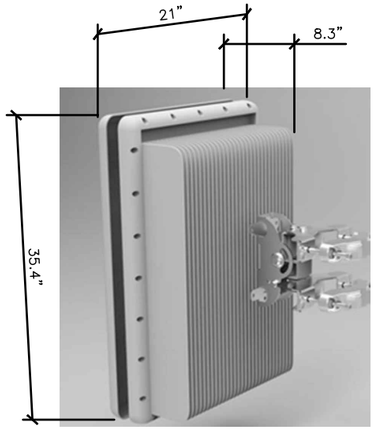
COMMSCOPE – FFVV-65C-R3-V1

8-PORT SECTOR ANTENNA

FREQUENCY RANGE	4 x 617–806 MHz 4 x 1695–2360 MHz
ANTENNA	124.6 Lbs
BRACKET	15.0 Lbs
TOTAL WEIGHT	139.6 Lbs

AIRSCALE DUAL RRH 4T4R B12/71 240W AHLOA	
SUPPORTED FREQUENCY BANDS	3GPP BAND 12/71
FREQUENCIES	BAND 12 ADJUSTED: RX 698 – 715 MHZ, TX 728 – 745 MHZ BAND 71: RX 663 MHZ – 698 MHZ, TX 617 MHZ – 652 MHZ
NUMBER OF TX/RX PATHS/PIPES	4 PIPES; 2T2R, 2T4R, 4T4R FOR BOTH BANDS
INSTANTANEOUS BANDWIDTH IBW	16 MHZ FOR B12 AND 35MHZ FOR B71 1 MHZ BELOW B12 NB IOT FUTURE USE
OCCUPIED BANDWIDTH OBW	52 MHZ TOTAL ACROSS BANDS
OUTPUT POWER	60W PER TX SHARED BETWEEN BANDS
SUPPLY VOLTAGE/RANGE	DC-48 V / -36 V TO -60 V
TYPICAL POWER CONSUMPTION	664W [ETSI BUSY HOUR LOAD AT 4TX@60W (BOTH BANDS ACTIVE)]
	395W [ETSI BUSY HOUR LOAD AT 4TX@30W (ONE BAND ACTIVE)]
ANTENNA PORTS	4 PORTS; 4.3-10+
OPTICAL PORTS	2x CPRI 9.8 Gbps
ALD CONTROL INTERFACES	AISG3.0 FROM ANT1,2,3,4 & RET (DC ON ANT1 & ANT3)
OTHER INTERFACES	EXTERNAL ALARM MDR-26 SERIAL CONNECTOR (4 INPUTS, 1 OUTPUT) DC CIRCULAR POWER CONNECTOR
PHYSICAL	560MM/22.04INCHESx308MM/12.126INCHESx189MM/7.44INCHES, 38KG/ 83.7 LBS WITHOUT COVER AND BRACKETS
OPERATING TEMPERATURE RANGE	-40°C TO 55°C (WITH NO SOLAR LOAD)
SURGE PROTECTION	CLASS II 5A
INSTALLATION OPTIONS	VERTICAL & HORIZONTAL BOOK MOUNT, POLE & WALL MOUNT

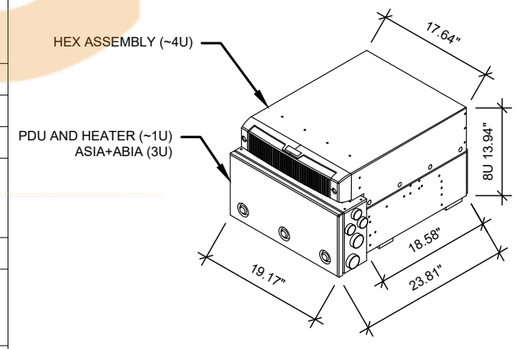
AIRSCALE DUAL RRH 4T4R
B12/71 240W AHLOA



NOKIA – AEHC BAND 41 M-MIMO

WEIGHT	108 Lbs

HEIGHT	8U (354 MM/ 13.94 INCH)
WIDTH (FRONT COVER)	487MM/ 19.17 INCH
WIDTH (CABINET)	448MM/ 17.64 INCH (FITS INTO 19 INCH RACK) 487MM/ 19.17 INCH (WITHOUT CONDUIT PLUGS OR FITTINGS)
DEPTH	TOTAL 605MM / 23.81 INCH (472MM/ 18.58 INCH FROM RACK MOUNTING SURFACE)
WEIGHTS	23 KG/ 50.71 LBS AMOB ENCLOSURE 3 KG/ 6.61 LBS ASIA (CORE MODULE) 2 KG/ 4.41 LBS ABIA (EXPANSION MODULE) 32 KG/ 70.55 LBS 1/2 CAPACITY (1 CORE + 3 EXPANSION) 41 KG/ 90.39 LBS FULL CAPACITY (2 CORE + 6 EXPANSION)
INGRESS PROTECTION	IP55
OPERATING TEMPERATURE	-40°C UP TO +55°C (WITHOUT SOLAR RADIATION)
INSTALLATION TEMPERATURE	-20°C - +55°C
AIRFLOW DIRECTION	BACK TO FRONT AIRFLOW DIRECTION SUPPORTED FOR HORIZONTAL (FCOA, 19" RACK, FLEXI STACK) FRONT TO BACK AIRFLOW DIRECTION SUPPORTED FOR VERTICAL(WALL AND POLE MOUNTING CASE)
CLEARANCES FOR COOLING	40 MM MINIMUM ON THE BACK AND FRONT SIDE
COLD START	~2H FROM -40°C TO -5°C *OPTIONAL 2ND HEATER CAN BE ADDED TO MEET NAM REQUIREMENT, COLD START FROM -40°C TO -5°C IN 1 HOUR INSTEAD OF 2 HOURS
NOMINAL SUPPLY VOLTAGE	-40.5 ... -57 V DC
INPUT VOLTAGE RANGE	EXTENDED SERVICE VOLTAGE RANGE SUPPORTED -36VDC .. -60VDC FLOATING
VOLUME	104.5L
MASS CAPACITY	SUPPORT MAX 18KG INSIDE
POWER CONSUMPTION	TYPICAL MAX ~265W (ALL FANS AT HIGHEST SPEED) COLD START ~600W (HEATER ON 55W + FANS AT LOW SPEED)
CONDUIT CABLE ENTRY	2X1.5" + 1" ON EACH LEFT AND RIGHT SIDe

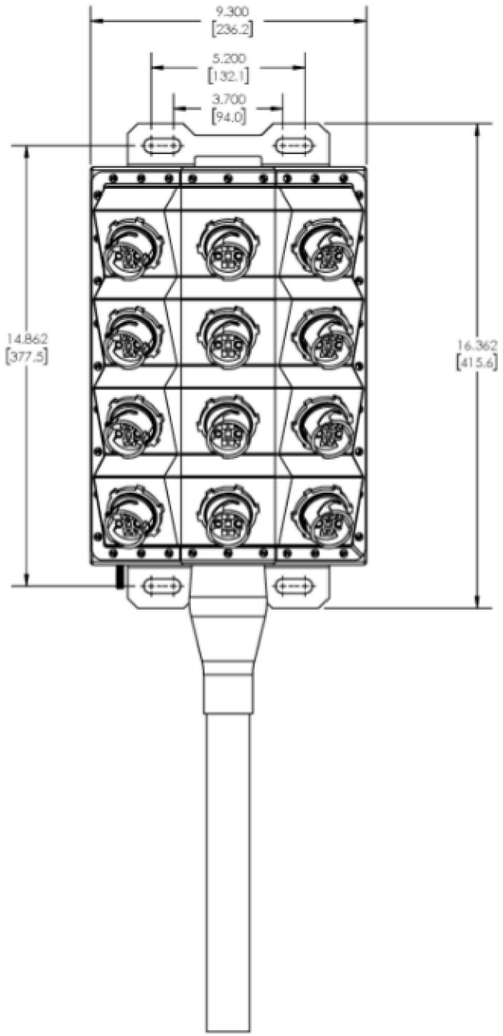


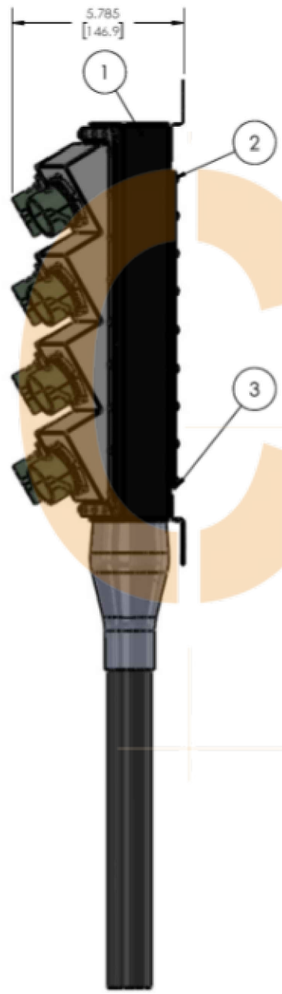
AIRSCALE SUBRACK
OUTDOOR AMOB

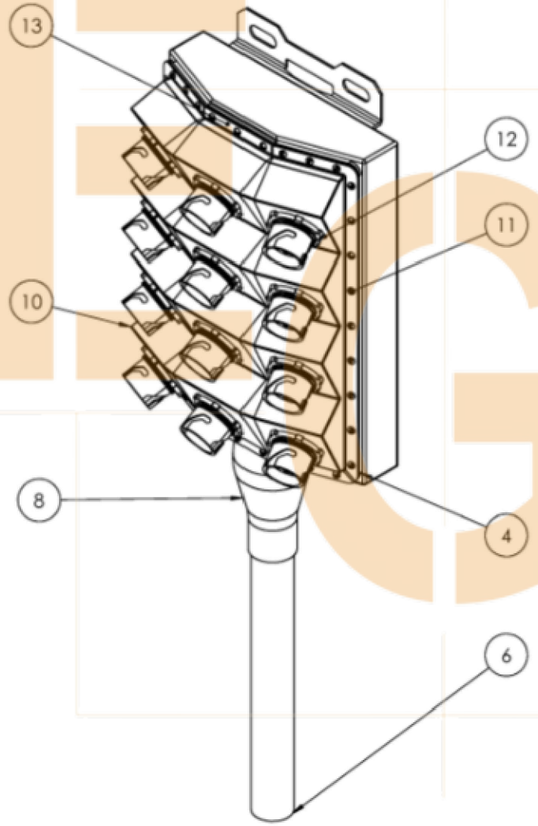
NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-602	A







ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	AC-BMBX05-HICAP-24IP-CRS	BASED BOX SUB ASY	1
2	AC-GSK05-HICAP-BP	EPDM GASKET FOR BACK PLATE	1
3	AC-MBX05-HICAP-24IP-BDR-CRS	BACKING PLATE CLOSURE CRS	1
4	AC-GSK05-HICAP-HX-SHE REV 1	EPDM GASKET HEX	1
5	25056d36zu	CABLE GLAND-TRUNK	1
6	Trunk Cable	HYBRID TRUNK CABLE	A/R
7	240_5	LOCK NUT-CABLE GLAND	1
8	HEAT SHRINK^AC-FB05-HICAP-FULLASY-CRS	HEAT SHRINK TUBE	1
10	AC-FB05-HICAP-HEXSHELL-SENK	POLYCARBONATE HEX SHELL-UV STABILIZED-SENKO CUTOUT	1
11	3GMR806058	TAMPERED PROOF #6-32 SCREW	64
12	IP25-LC4-AS-D	U HYBRID 25, 4 X LC & 2 X BAIWG ADAPTER ASSEMBLY	12
13	AC-STR05-HICAP-HX-GALV	GALV O-RING HEX	1
14	WASHER	WASHER	A/R

CUSTOMER APPROVAL

NAME: _____

SIGNATURE: _____

DATE: _____

REV.	DESCRIPTION	DATE
1	RELEASED FOR PRODUCTION.	20180530

REVISIONS

ALLIANCE™ CORPORATION

THE POWER OF BEING CONNECTED.

SIGNATURE CYCLE		DATE
DRAWN:	MLE	20180525
CHECKED:	DOB	20180529
APPROVED:	DOB	20180530

DIM: ALL DIMEMSIONS ARE IN INCHES, UNLESS OTHERWISE SPECIFIED.

DESCRIPTION:
HICAP HYBRID BREAKOUT CRS BOX (FULL ASSEMBLY)

MATERIAL: CR STEEL A 1008 CS

WEIGHT 8.76

FINISH: POWDER COATED

COLOUR: BLACK

SHEET NO: 1 OF 1

DWG NO:
AC-FB05-HICAP-FULLASY-CRS

SCALE:

TOLERANCE:

X.X	± 0.020"
X.XX	± 0.010"
X.XXX	± 0.005"

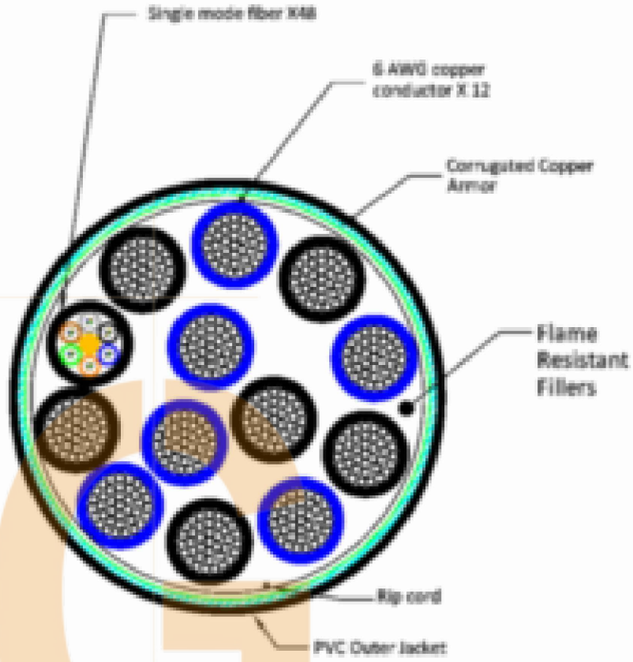
HICAP HYBRID BREAKOUT CRS BOX
(FULL ASSEMBLY)

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

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-603	A

MECHANICAL	JACKET COLOR	BLACK
	OUTER DIAMETER (IN)	1.46
	MIN BENDING RADIUS(IN), MULTIPLE BENDS, LOADED	29.2
	MIN BENDING RADIUS(IN), MULTIPLE BENDS, UNLOADED	14.6
	MIN BENDING RADIUS(IN), SINGLE BEND, UNLOADED	10.22
	MIN BENDING RADIUS(IN), FURCATION	1.2
	ARMOR	CORRUGATED COPPER
	WEIGHT(lb/kft)	1610
	COMPRESSION(lb/IN)	250
	TENSILE LOAD, LONG TERM(lbf)	180
	TENSILE LOAD, SHORT TERM(lbf)	600
ELECTRICAL	CONDUCTOR MATERIAL	COPPER
	CONDUCTOR CONSTRUCTION	STRAND
	CONDUCTOR COLOR	BLUE/BLACK
	RESISTIVITY(nΩ @20°C)	16.78 nohm-M
	CONDUCTORS, QTY	12
	CONDUCTOR SIZE(AWG)	6
	EMI SHIELD	YES
	UL RATING	UL TC-OF-ER
OPTICAL	FIBER TYPE	SINGLE MODE (G.657.A2)
	FIBERS, QTY	48
	ATTENUATION(dB/km), MAX, 1550/1285-1330 nm	0.5
	DISPERSION, MAX, 1550/1285-1330 nm	18 ps/3.5 ps
	RETURN LOSS(dB)	>50
	INSERTION LOSS(dB), POST ENVIRONMENTAL	REDUCTION < 0.65
	RETURN LOSS(dB), POST ENVIRONMENTAL	REDUCTION < 5
	CUTOFF WAVELENGTH(nm)	1260
	PIGTAIL TERMINATION	LC PAIR, STRAIGHT
ENVIRON	OPERATING TEMP(°F)	-40 TO +167
	STORAGE TEMP(°F)	-40 TO +167
	UV	IEC 60068-2-5
	THERMAL CYCLE	IEC 60068-2-14
	VIBRATION	IEC 60068-2-64
	IMPACT(ft lb)	4.4 NM PER ICEA696



NOTE: CABLE CROSS-SECTION NOT DRAWN TO SCALE

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

SUPPLEMENTAL

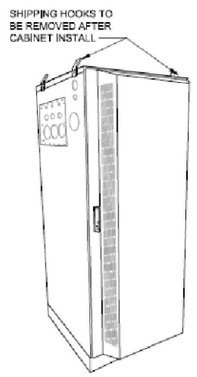
SHEET NUMBER:	REVISION:
R-604	A

MANUFACTURER:	DELTA
MODEL:	HPL3 SITE SUPPORT CABINET
WEIGHT:	551 LBS (WITHOUT EQUIPMENT)
DIMENSIONS:	30.0"x35.0"x72.0"

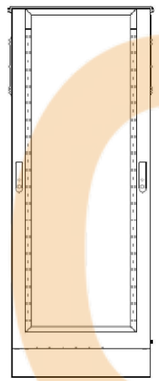
NOTE:

- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL KNOCKOUTS THROUGH
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND/OR CABLING

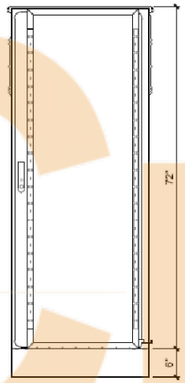
RACK ASSIGNMENT		
RU SLOT	DESCRIPTION	DESCRIPTION
27		CSR - SAR/SAS
26		
25	AIRSCALE	
24		
23		
22	FIBER MUX	
21	AIRSCALE	
20		
19		
18	FIBER MUX	
17	AIRSCALE	
16		
15		
14	FIBER MUX	
13	AIRSCALE	
12		
11		
10	FIBER MUX	
9	LEGACY BASEBAND	
8		
7		
6	LEGACY BASEBAND	
5		
4		
3	LEGACY BASEBAND	
2		
1		



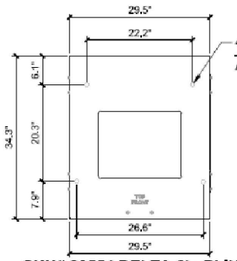
ISO VIEW N.T.S.



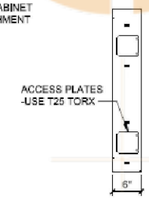
REAR VIEW



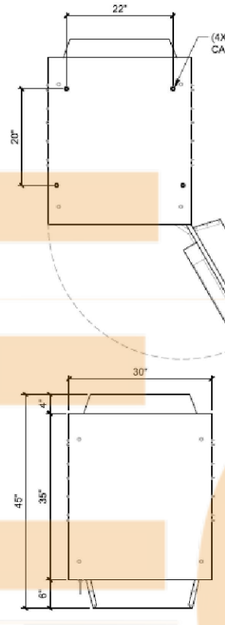
FRONT VIEW



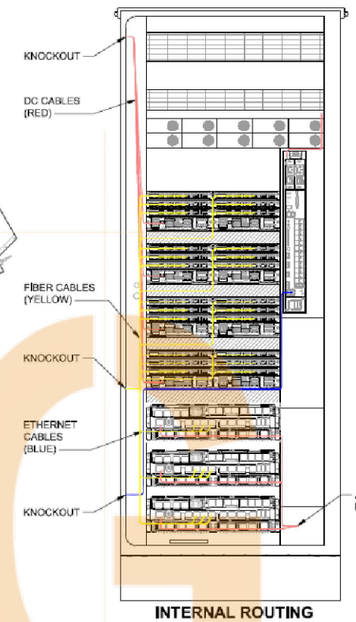
SKU# 33554 DELTA 6in PLINTH PLAN VIEW



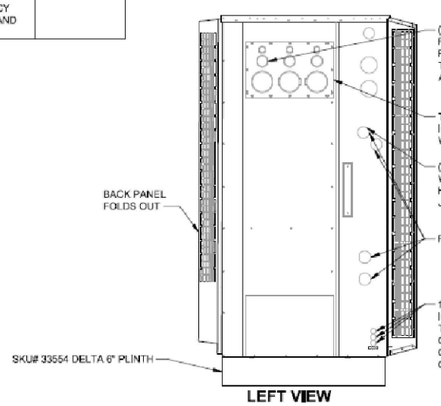
SKU# 33554 DELTA 6IN PLINTH SIDE VIEW



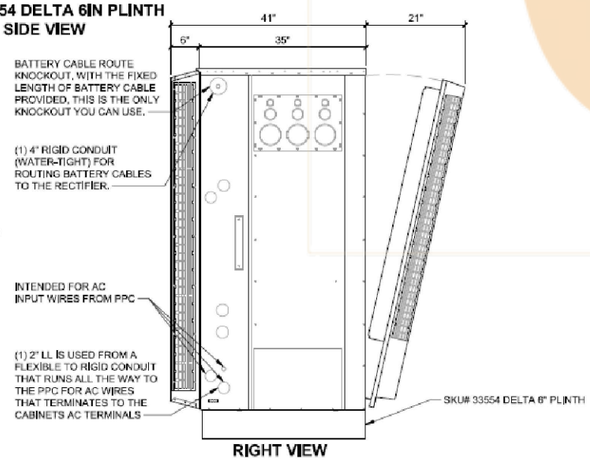
PLAN VIEW



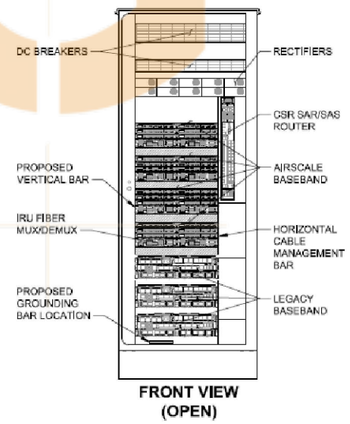
INTERNAL ROUTING



LEFT VIEW



RIGHT VIEW



FRONT VIEW (OPEN)

SKU# 33929 - DELTA HPL3 SITE SUPPORT CABINET | 1

22"x34" SCALE: N.T.S. | 11"x17" SCALE: N.T.S.

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

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-605	A