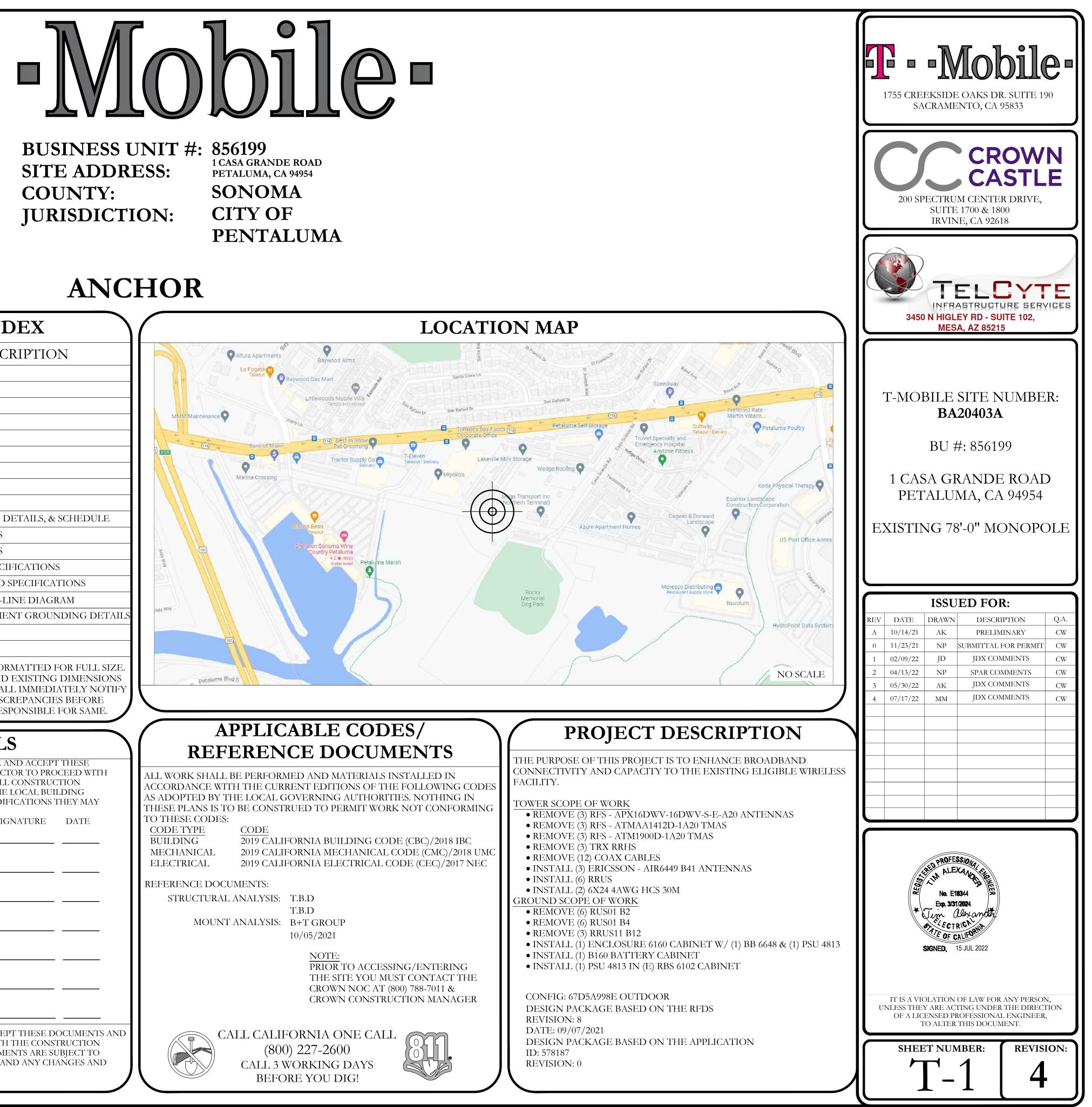


T-MOBILE SITE NUMBER: BA20403A T-MOBILE SITE NAME: SKOFF TRUCKING/CINGULAR SITE TYPE: MONOPOLE 78'-0'' **TOWER HEIGHT:**

SIT	TE IN	FORMATION	\mathcal{M}		DRAWING INDEX		
CROWN CASTLE USA INC. SITE NAME:			SHE	ET #	SHEET DESCRIPTIO		
		HWY 101 - LAKEVILLE		[-1	TITLE SHEET		
]	I -2	GENERAL NOTES		
SITE ADDRESS:		CASA GRANDE ROAD Staluma, ca 94954	C	-1.0	SITE PLAN		
COUNTY:		DNOMA	С	-2.1	EXISTING EQUIPMENT PLAN		
MAP/PARCEL #:	00.	5-050-037	C	-2.2	FINAL EQUIPMENT PLAN		
AREA OF CONSTRUCT		XISTING	(2-3	ELEVATIONS		
LATITUDE:		°13'54.0"N (38.231667)	(C-4	ELEVATIONS		
LONGITUDE: LAT/LONG TYPE:		2°36'30.9"W (-122.608583) AD83	(C-5	ELEVATIONS		
GROUND ELEVATION:			(C-6	ELEVATIONS		
CURRENT ZONING:	-	U1B	(C-7	ANTENNA PLAN, MOUNTING DETAILS, 8		
JURISDICTION:	CI	TY OF PENTALUMA	(2-8	EQUIPMENT SPECIFICATIONS		
OCCUPANCY CLASSIFIC	CATION: U		(2-9	EQUIPMENT SPECIFICATIONS		
TYPE OF CONSTRUCTI			C-10,	/12/13	EQUIPMENT TO REMAIN SPECIFICATION		
A.D.A. COMPLIANCE:		CILITY IS UNMANNED AND NOT FOR JMAN HABITATION	C	-11	EQUIPMENT TO BE REMOVED SPECIFICA		
PROPERTY OWNER:		ETALUMA UNITED GROUP LLC	H	E-1	AC PANEL SCHEDULE & ONE-LINE DIAG		
		3809 STONY POINT ROAD SANTA ROSA, CA 95407	(G-1	ANTENNA/GROUND EQUIPMENT GROU		
	511	IN IN ROSA, CA 93407	(6-2	GROUNDING DETAILS		
TOWER OWNER:		CTM1 LLC NE PARK PLACE, SUITE 300,	(3-3	GROUNDING DETAILS		
CARRIER/APPLICANT: CROWN CASTLE USA INC. APPLICATION ID:		MOBILE 55 CREEKSIDE OAKS DR. SUITE 190 CRAMENTO, CA 95833 8187	AND C T	ONDITI(HE ENGI	R SHALL VERIFY ALL PLANS AND EXISTING ONS ON THE JOB SITE AND SHALL IMMED INEER IN WRITING OF ANY DISCREPANCI NG WITH THE WORK OR BE RESPONSIBLE		
ELECTRIC PROVIDER:	,			APPROVALS			
N/A TELCO PROVIDER: N/A N/A		/A	DC TH DC DH	THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PRO THE CONSTRUCTION DESCRIBED HEREIN. ALL CONSTRUC DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUI DEPARTMENT AND ANY CHANGES AND MODIFICATIONS T IMPOSE. PRINT NAME SIGNATURE			
(PROJ	ECT TEAM	PR	OJECT MA	ANAGER		
A&E FIRM:	3450 N HIG MESA, AZ 8	NFRASTRUCTURE SERVICES LEY RD, SUITE 102 5215 FELCYTE.COM		DNST. PM. ENGINE			
CDOWNI CASTI E	2520 TODIN	CDON WAY SHITE 200	SA	C REP.	·		
CROWN CASTLE USA INC. DISTRICT CONTACTS:	CHARLOTT	GDON WAY, SUITE 300 E, NC 28277	PL	AN CONS	ULTANT		
	(949) 930-435 GARY HOR	ACE - CONSTRUCTION MANAGER	PR	OP. OWN	ER		
	(661) 330-3745 LAURA MANSFIELD - A&E SPECIALIST			MOBILE R	EP BOVE HEREBY APPROVE AND ACCEPT THESE I		
T-MOBILE CONTACT:	(925) 737-104 MICHELLE			ORIZE THI IBED HER V BY THE	E CONTRACTOR TO PROCEED WITH THE CONS REIN. ALL CONSTRUCTION DOCUMENTS ARE S LOCAL BUILDING DEPARTMENT AND ANY CH		
T-MOBILE CONTACT:		STEFFLER STEFFLER@T-MOBILE.COM			LOCAL BUILDING DEPARTMENT AND ANY S THEY MAY IMPOSE.		





SITE WORK GENERAL NOTES:

- 1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES, SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.
- 3. ALL SITE WORK TO COMPLY WITH QAS-STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE" AND LATEST VERSION OF TIA 1019 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.'
- 4. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS.
- 5. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- 6. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
- 7. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
- 8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- 9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- 10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 11. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE PROJECT SPECIFICATIONS.
- 12. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL
- 13. NOTICE TO PROCEED- NO WORK TO COMMENCE PRIOR TO COMPANY'S WRITTEN NOTICE TO PROCEED AND THE ISSUANCE OF A PURCHASE ORDER.
- 14. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN STANDARD CED-STD-10253 INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH THE ANSI/TIA-322 (LATEST EDITION).

STRUCTURAL STEEL NOTES

- ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.
- 2. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4") CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
- 3. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8"Ø ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
- 4. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

CONCRETE AND REINFORCING STEEL NOTES:

- 1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- 2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. SLAB FOUNDATION DESIGN ASSUMING ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
- 3. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
- 4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
 - CONCRETE CAST AGAINST EARTH CONCRETE EXPOSED TO EARTH OR WEATHER:
 - #6 AND LARGER... ...2 IN #5 AND SMALLER & WWF.....
 -1 1/2 IN. CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND SLAB AND WALLS3/4 IN.
 - BEAMS AND COLUMNS.....1 1/2 IN.
- 5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE. IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

MASONRY NOTES:

- HOLLOW CONCRETE MASONRY UNITS SHALL MEET A.S.T.M. SPECIFICATION C90, GRADE N. TYPE 1. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (F'm) SHALL BE 1500 PSI.
- 2. MORTAR SHALL MEET THE PROPERTY SPECIFICATION OF A.S.T.M. C270 TYP. "S" MORTAR AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.
- 3. GROUT SHALL MEET A.S.T.M. SPECIFICATION C475 AND HAVE A MINIMUM 28 DAY
- COMPRESSIVE STRENGTH OF 2000 PSI.
- 5. WALL SHALL RECEIVE TEMPORARY BRACING. TEMPORARY BRACING SHALL NOT BE
- REMOVED UNTIL GROUT IS FULLY CURED.

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY: CONTRACTOR-SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION) CARRIER-T-MOBILE
- TOWER OWNER-CROWN CASTLE USA INC. OEM-ORIGINAL EQUIPMENT MANUFACTURER
- 2. 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 AND CROWN CASTLE USA INC.
- 3. 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.
- 4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.
- 5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- 6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
- 7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 8. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR AND CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWINGS.
- 10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- 11. SUBCONTRACTOR 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.
- 12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

ABBREVIATIONS AND SYMBOLS:

ABBREVIATIONS:

AGL BTS (E) MIN. REF RF T.B.D. T.B.R. TYP REQ EGR AWG EGR BCW SIAD GEN IGR RBS	ABOVE GRADE LEVEL BASE TRANSCEIVER STATION EXISTING MINIMUM REFERENCE RADIO FREQUENCY TO BE DETERMINED TO BE RESOLVED TYPICAL REQUIRED EQUIPMENT GROUND RING AMERICAN WIRE GAUGE MASTER GROUND BAR EQUIPMENT GROUND BARE COPPER WIRE SMART INTEGRATED ACCESS DEVICE GENERATOR INTERIOR GROUND RING (HALO) RADIO BASE STATION	

4. CONCRETE MASONRY SHALL BE LAID IN RUNNING (COMMON) BOND.

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
- EXOTHERMIC WELD (CADWELD) (UNLESS OTHERWISE NOTED)
- MECHANICAL CONNECTION
- ----- GROUNDING WIRE

ELECTRICAL INSTALLATION NOTES:

- 1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
- 2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
- 3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC. HILTI EPOXY ANCHORS ARE REQUIRED BY CROWN CASTLE USA INC.
- 4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
- 5. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- 6. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
- 7. 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).
- 8. PANEL BOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
- 9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- 10. 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.
- 11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG 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.
- 12. 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.
- 13. 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).
- 14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
- 15. 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.
- 16. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT) OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- 17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
- 18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- 19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
- 20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
- 21. 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).
- 22. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
- 23. 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.
- 24. 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.
- 25. 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.
- 26. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- 27. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
- 28. INSTALL PLASTIC LABEL ON THE METER CENTER TO SHOW "T-MOBILE".
- 29. ALL CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

GREENFIELD GROUNDING NOTES:

- EQUIPMENT.
- GROUND BUS ARE PERMITTED.

- CONNECTIONS BELOW GRADE.

- CONNECTIONS.
- CORROSION RESISTANT MATERIAL.
- ACCORDANCE WITH THE NEC.

- AS WELL).

ľ
DESCRIPTI
240/120
AC NEUTR
GROUND (E
VDC POS
VDC NE
240V OR 208
480V, 39
* SEE NEC 21

1. 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.

2. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTAL 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.

3. 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.

4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

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

6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 AWG SOLID TINNED COPPER FOR OUTDOOR BTS.

CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE

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

9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.

10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. 11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING

12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.

13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.

14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.

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

16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A

17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN

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

19. 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.

20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 TINNED SOLID IN 3/4" LIQUID TIGHT CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE LIQUID TIGHT CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL

NEC INSULATOR COLOR CODE						
PHASE/CODE LETTER	WIRE COLOR					
LEG 1	BLACK					
LEG 2	RED					
Ν	WHITE					
G	GREEN					
+	*RED-POLARITY MARK AT TERMINATION					
-	*BLACK-POLARITY MARK AT TERMINATION					
PHASE A	BLACK					
PHASE B	RED(ORG. IF HI LEG)					
PHASE C	BLUE					
PHASE A	BROWN					
PHASE B	ORANGE					
PHASE C	YELLOW					
	PHASE/CODE LETTER LEG 1 LEG 2 N 5 G 5 + 5 PHASE A PHASE A PHASE A PHASE C PHASE A PHASE A PHASE A					

10.5(C)(1) AND (2)



T-MOBILE SITE NUMBER **BA20403A**

BU #: 856199

1 CASA GRANDE ROAD PETALUMA, CA 94954

EXISTING 78'-0" MONOPOLE

ISSUED FOR:

1550ED I OK.						
REV	DATE	DRAWN	DESCRIPTION	Q.A.		
А	10/14/21	AK	PRELIMINARY	CW		
0	11/23/21	NP	SUBMITTAL FOR PERMIT	CW		
1	02/09/22	JD	JDX COMMENTS	CW		
2	04/13/22	NP	SPAR COMMENTS	CW		
3	05/30/22	AK	JDX COMMENTS	CW		
4	07/17/22	MM	JDX COMMENTS	CW		



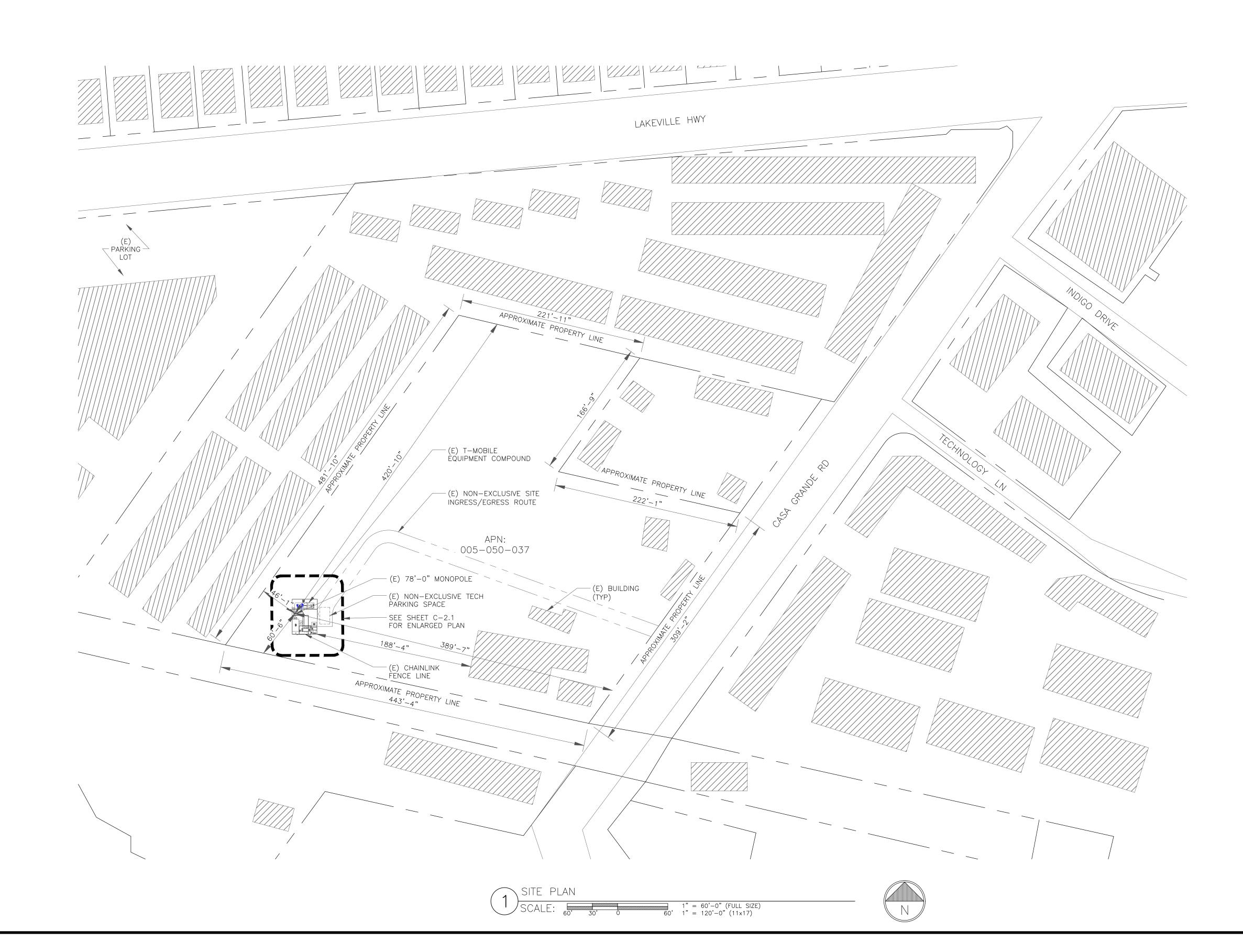
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

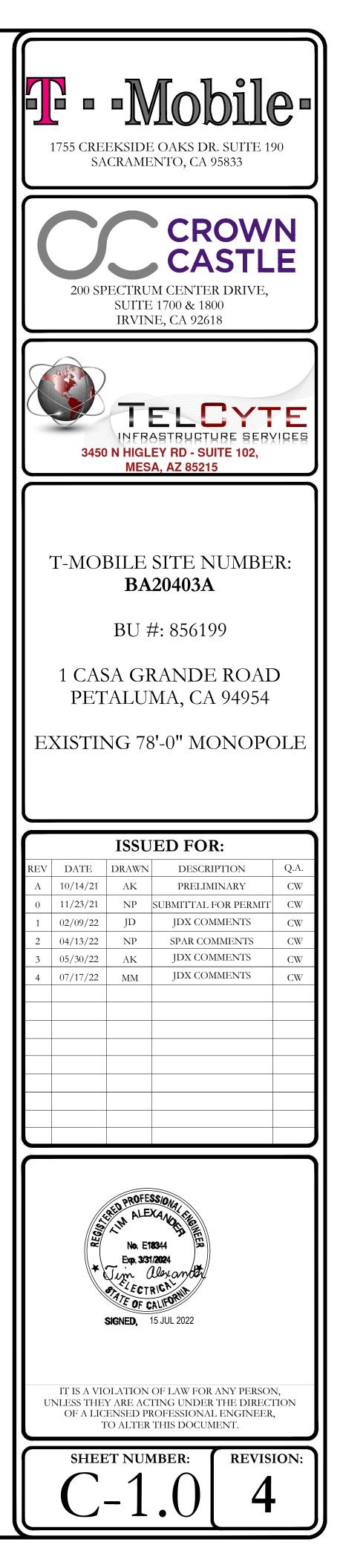
SHEET NUMBER:

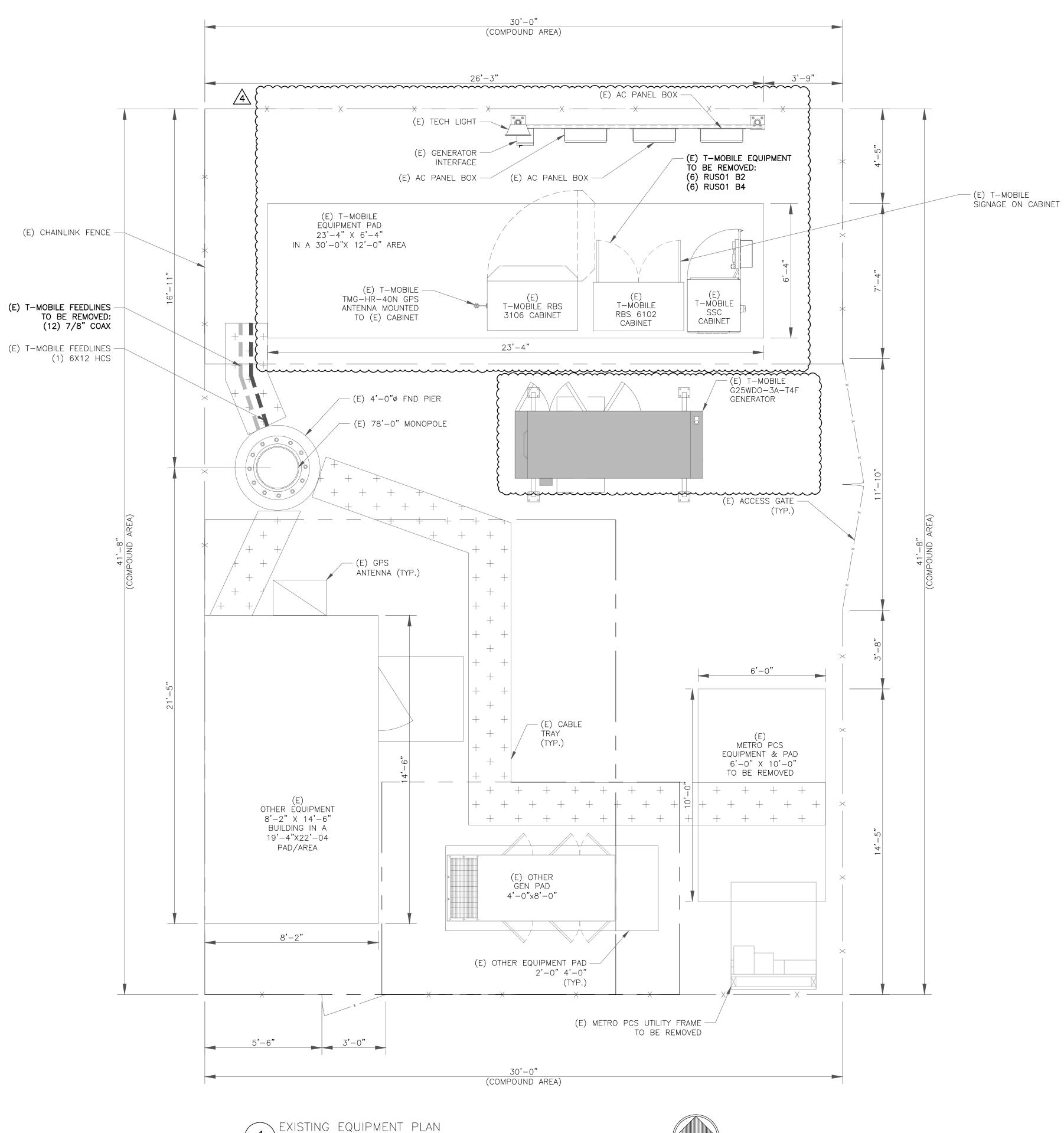
REVISION:

NOTE:

T-MOBILE OR ITS DESIGNERS SHALL REMOVE THE ANTENNAS AND ALL RELATED COMMUNICATION EQUIPMENT FROM THE SUBJECT PROPERTY WITHIN SIX MONTHS OF DETERMINATION BY THE DEPARTMENT DIRECTOR THAT THE PROPOSED FACILITIES ARE NO LONGER NEEDED, OR UTILIZED IN THE MANNER APPROVED BY THIS CONDITIONAL USE PERMIT.

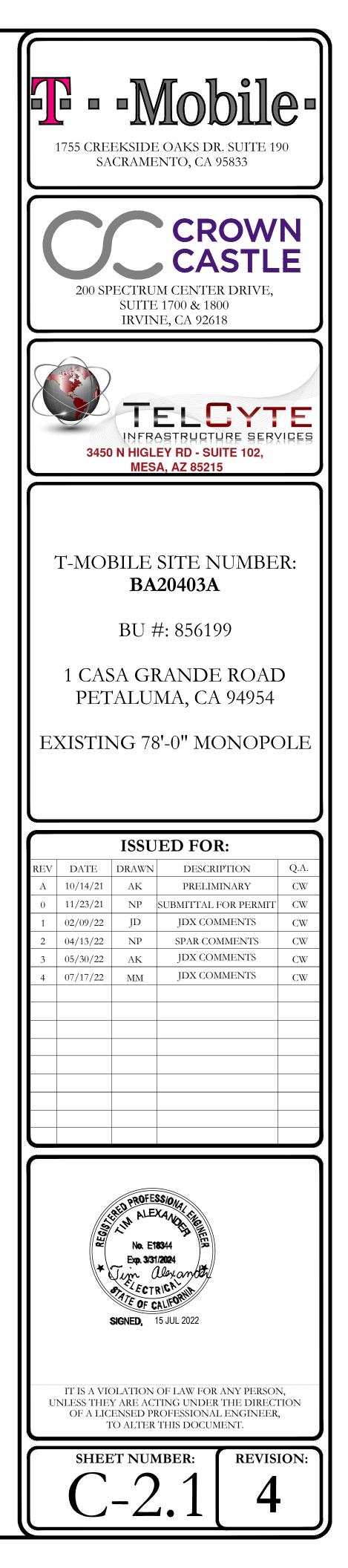


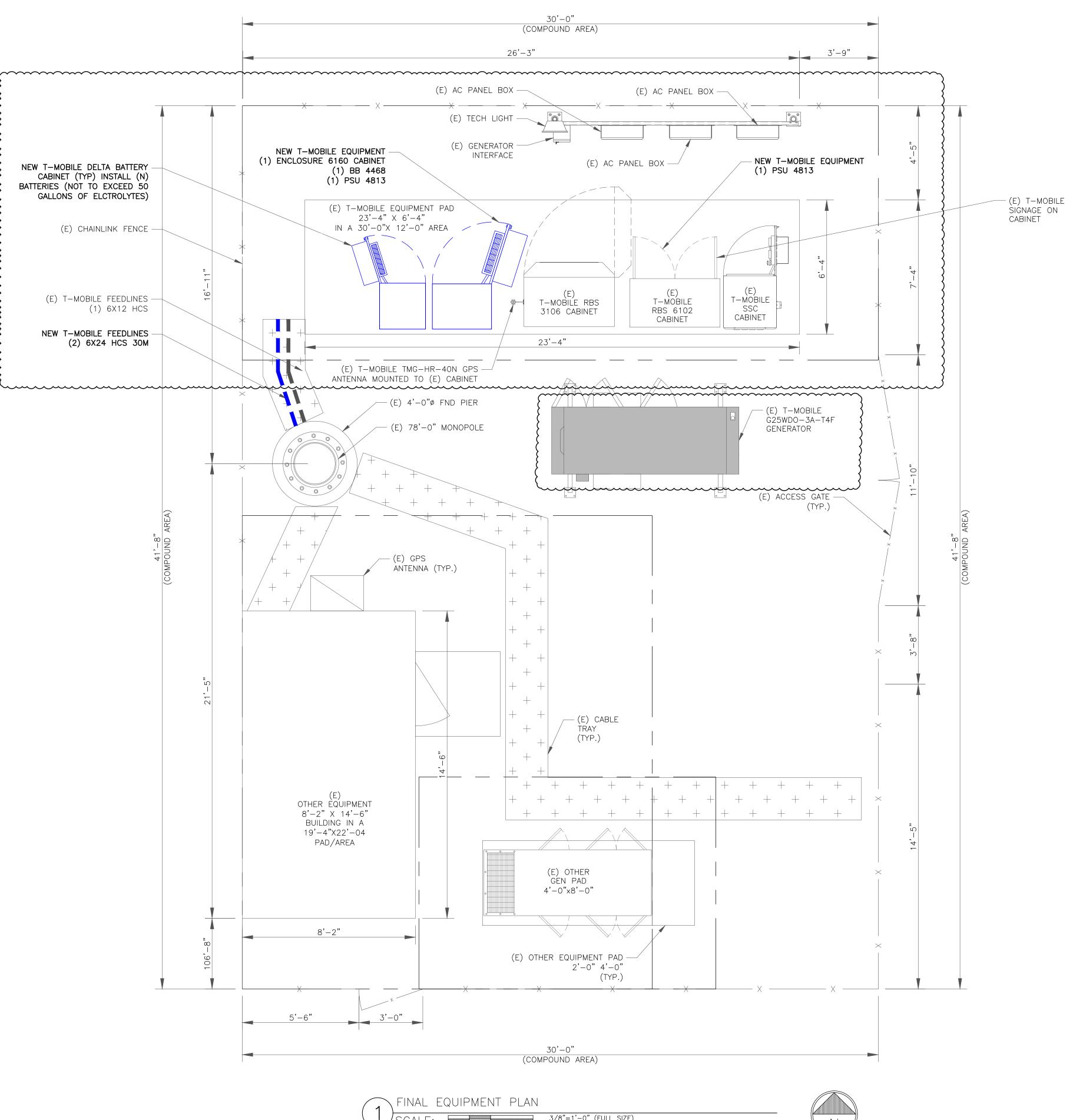




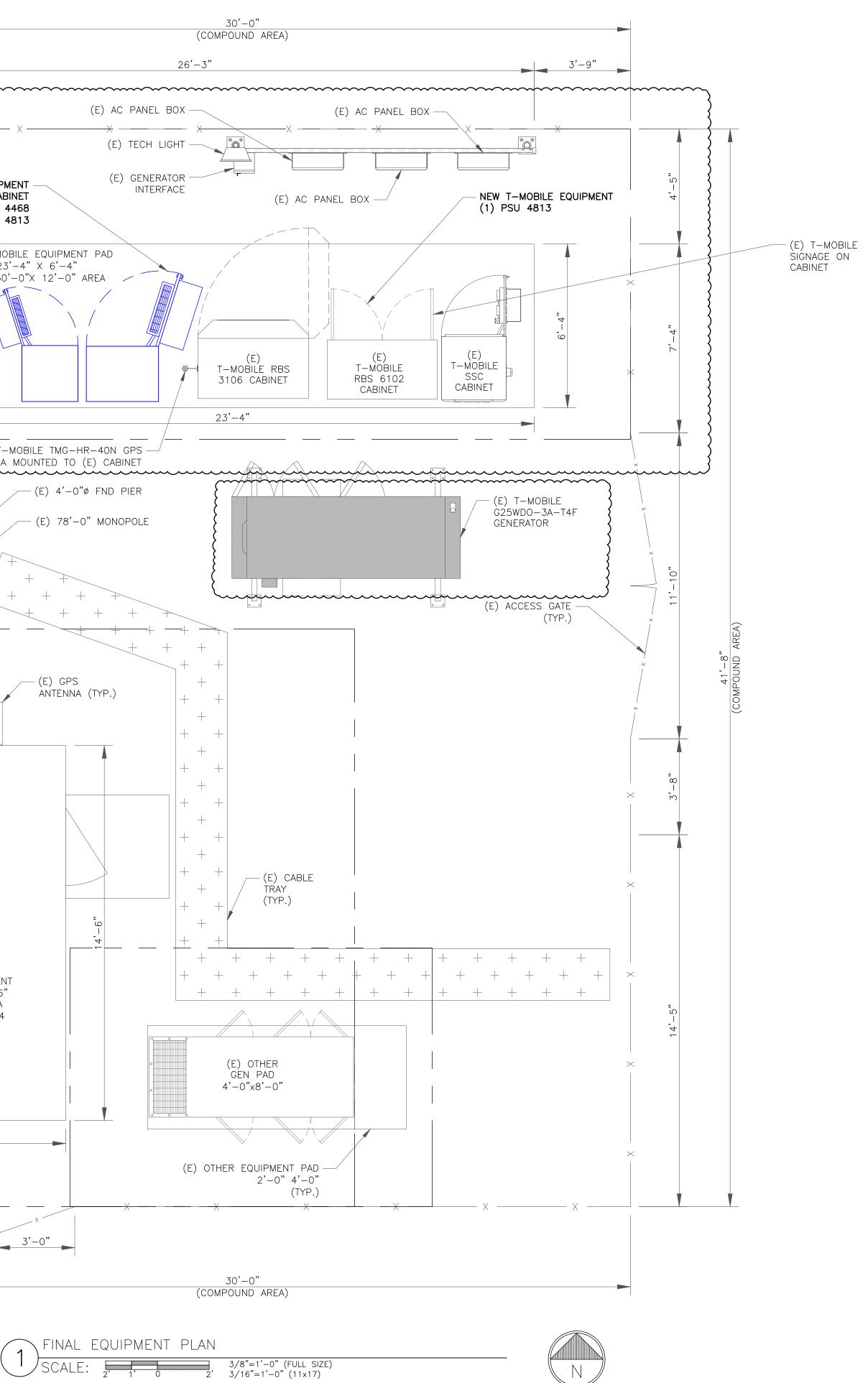
SCALE: 2' 1' 0 2' 3/8"=1'-0" (FULL SIZE) 3/16"=1'-0" (11x17)

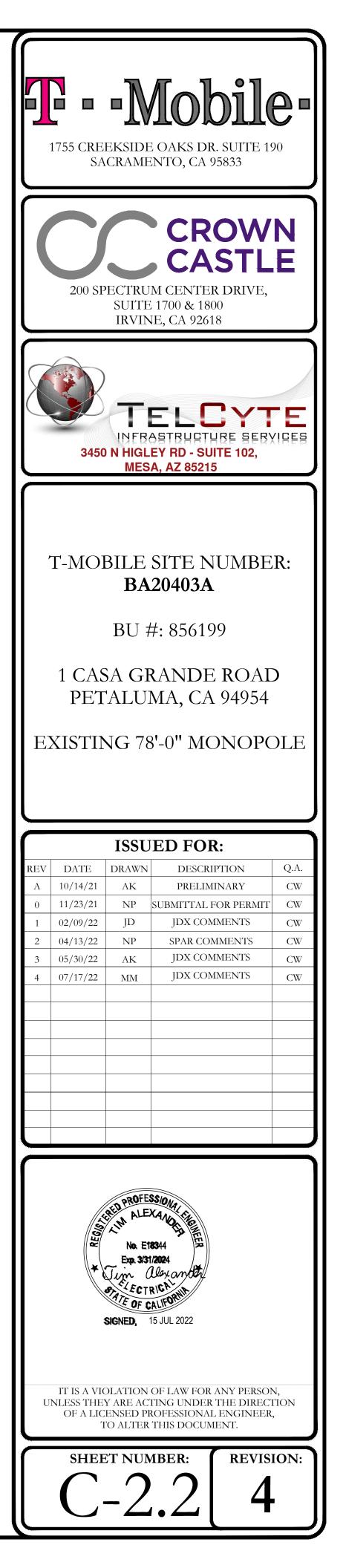


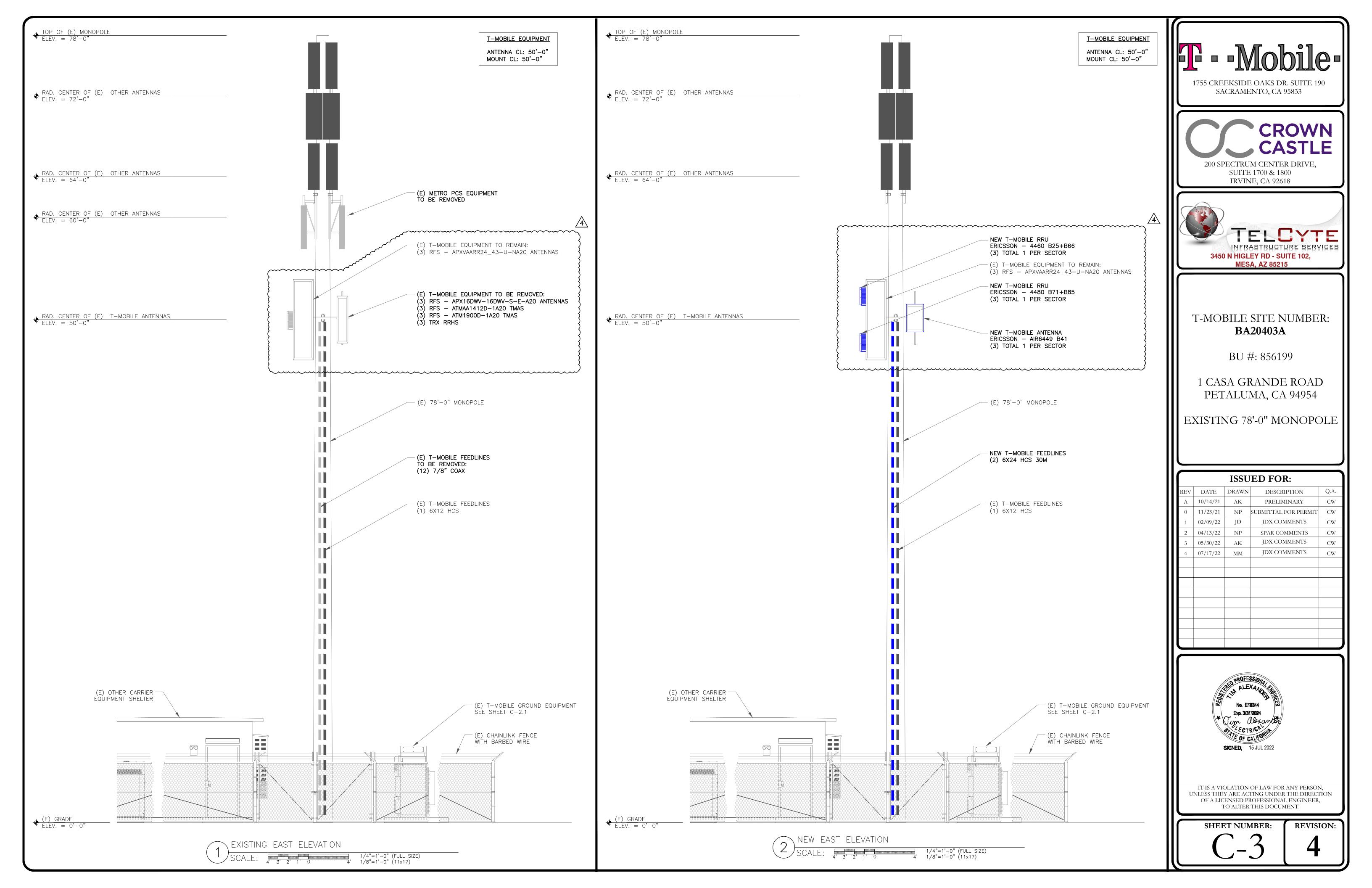


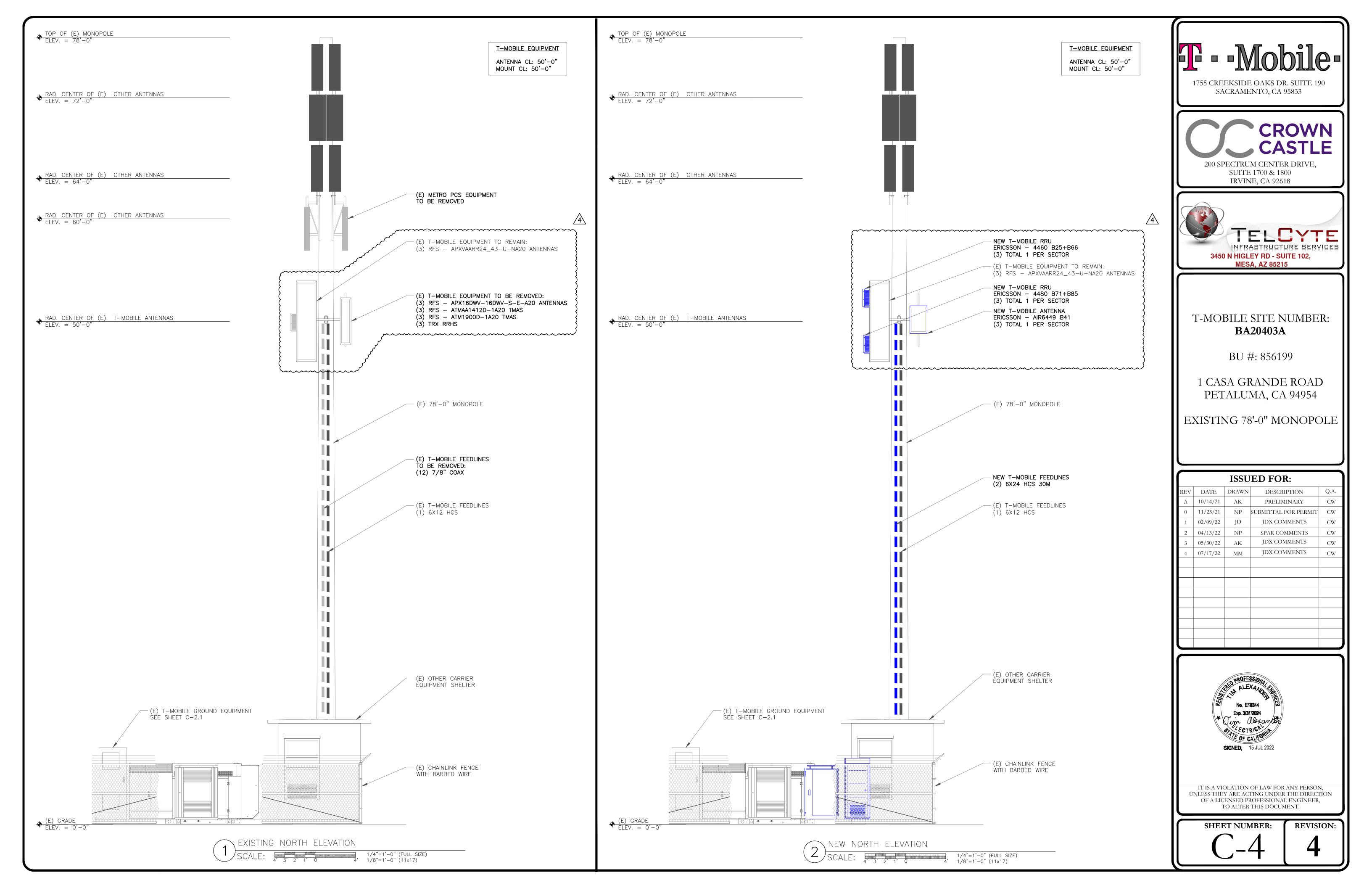


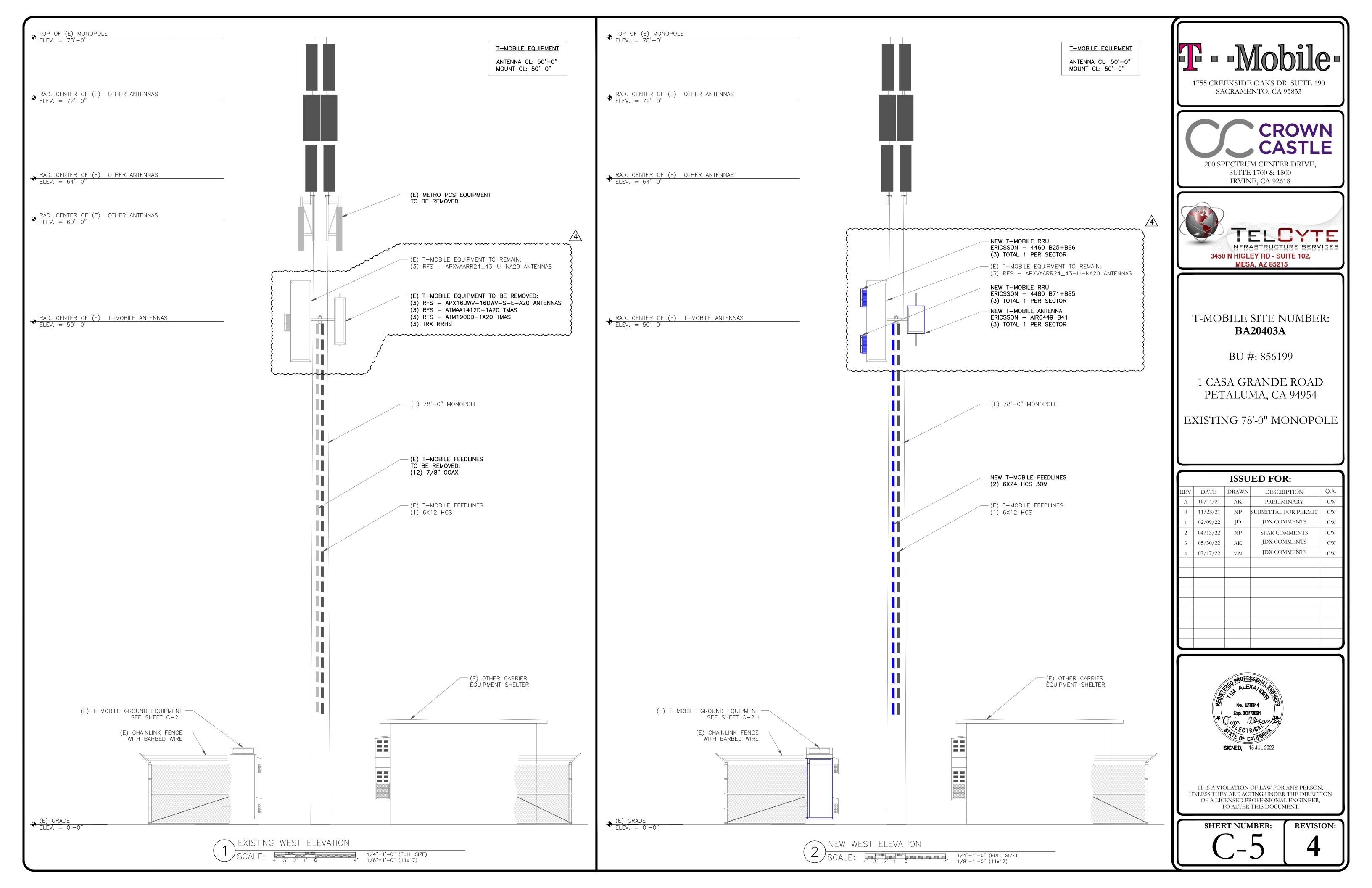
<u>∠4</u>∖

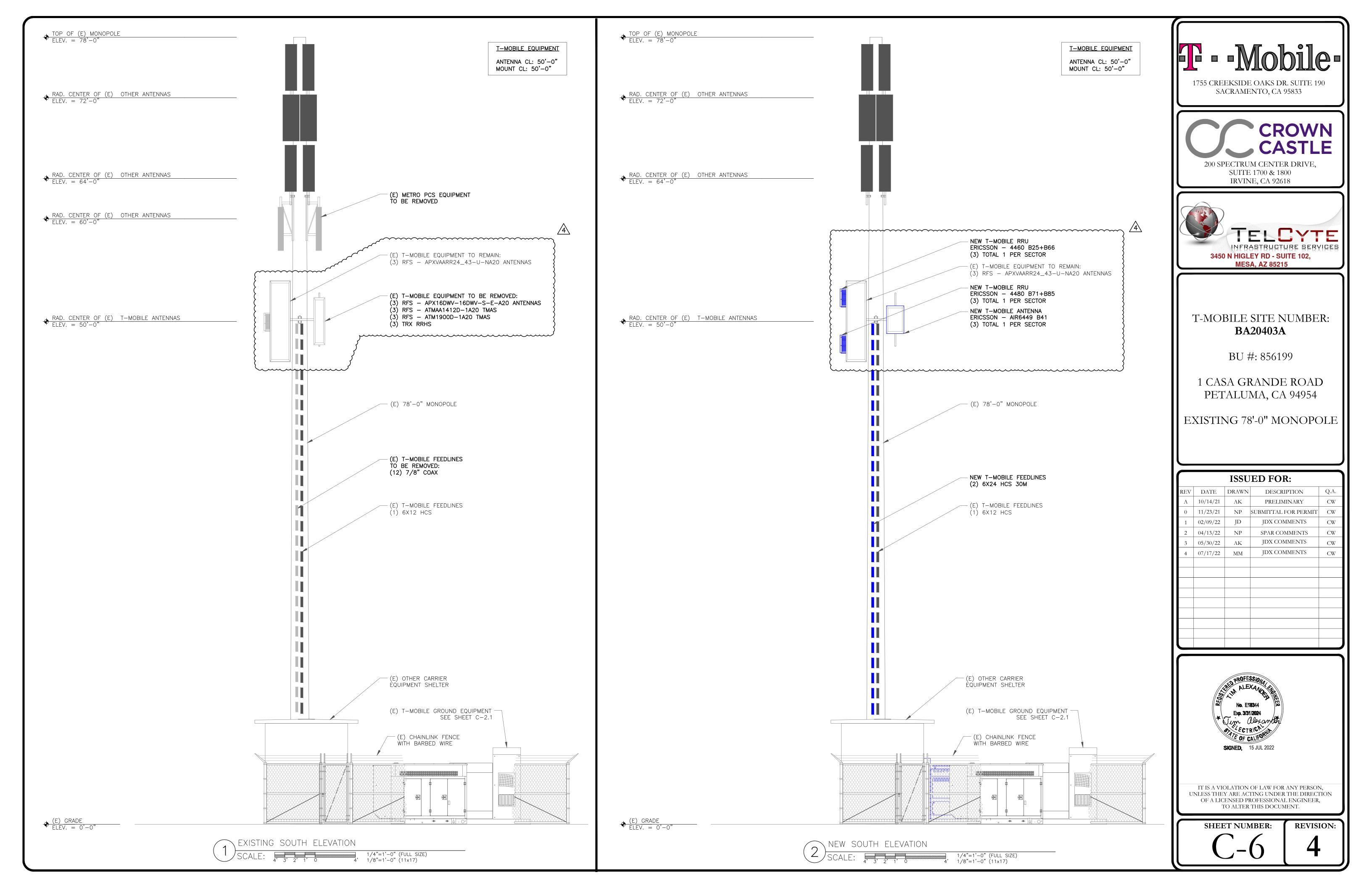


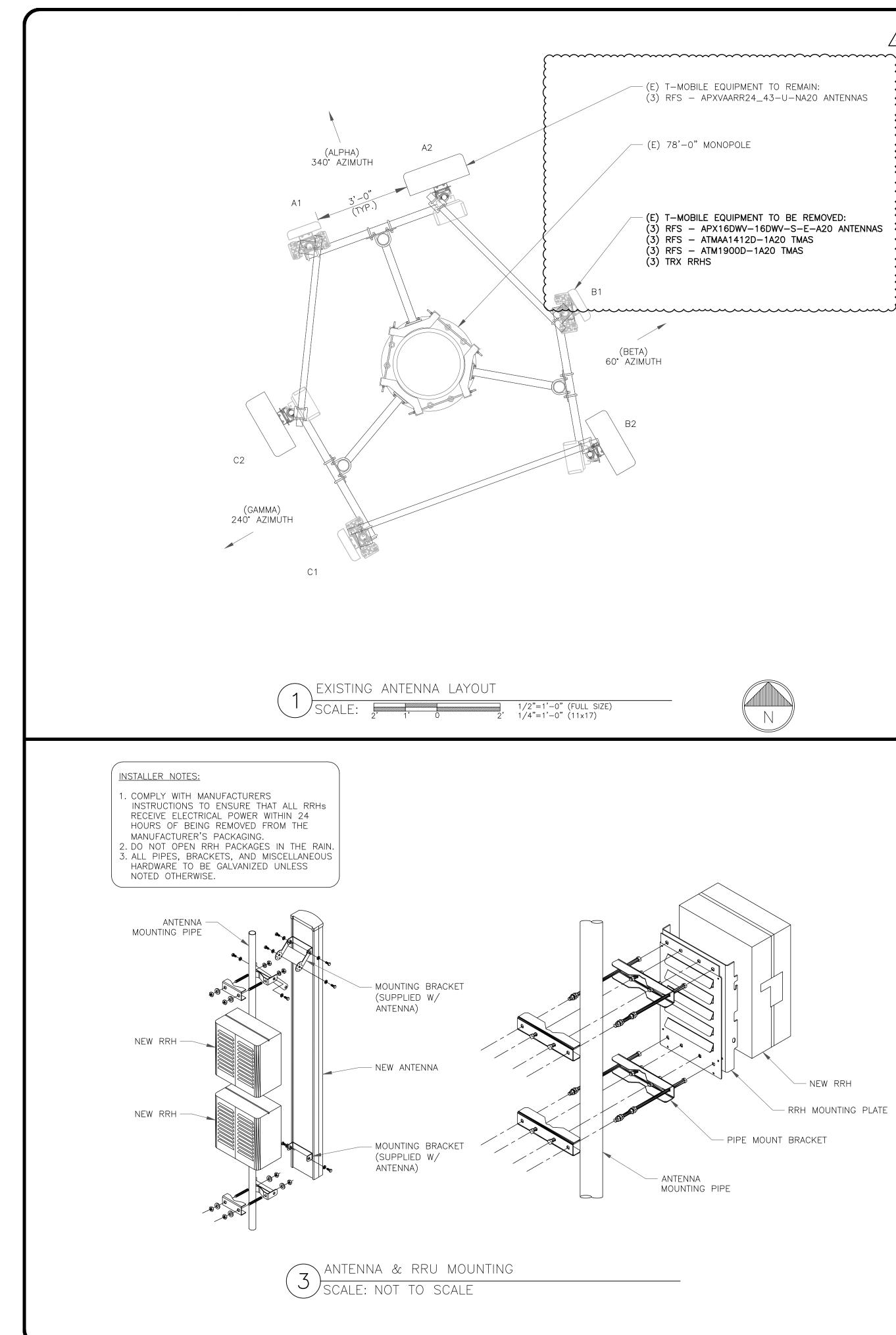












ANTENNA SCHEDULE

— NEW RRH - RRH MOUNTING PLATE

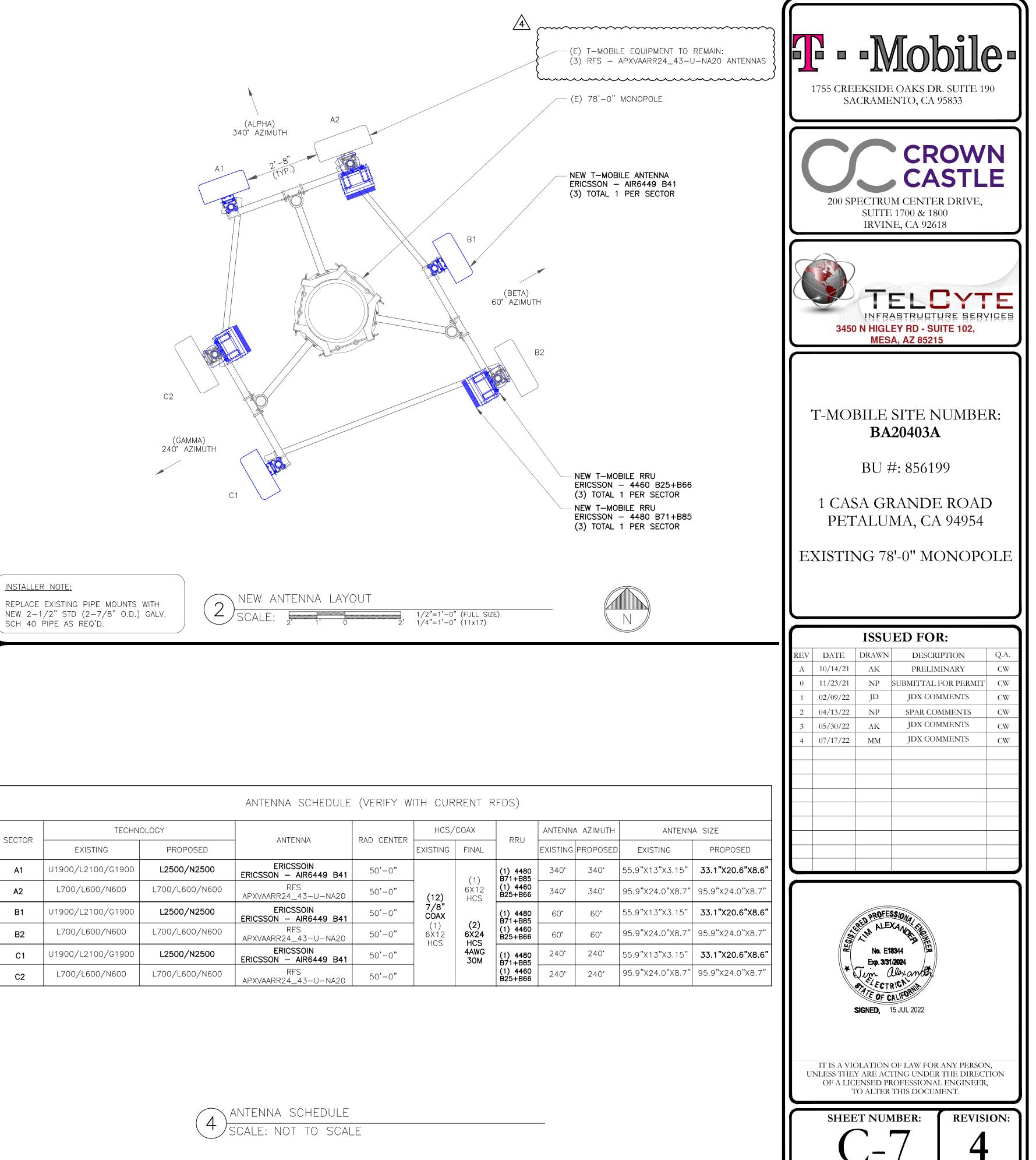
			ANTENNA SCHEDULE	(VERIFT W	IIH CUR	KENI P	(FDS)
SECTOR EXISTING	TECHN	OLOGY			HCS/COAX		- RRU
	PROPOSED	– ANTENNA	RAD CENTER	EXISTING	FINAL		
A1	U1900/L2100/G1900	L2500/N2500	ERICSSOIN ERICSSON - AIR6449 B41	50'-0"		(1)	(1) 4480 B71+B85
A2	L700/L600/N600	L700/L600/N600	RFS APXVAARR24_43-U-NA20	50'-0"	(12)	6X12 HCS	(1) 4460 B25+B66
B1	U1900/L2100/G1900	L2500/N2500	ERICSSOIN ERICSSON – AIR6449 B41	50'-0"	7/8" COAX	(-)	(1) 4480 B71+B85
B2	L700/L600/N600	L700/L600/N600	RFS APXVAARR24_43-U-NA20	50'-0"	(1) (2) 6X12 6X24 HCS HCS	(1) 4460 B25+B66	
C1	U1900/L2100/G1900	L2500/N2500	ERICSSOIN ERICSSON – AIR6449 B41	50'-0"		4AWG 30M	(1) 4480 B71+B85
C2	L700/L600/N600	L700/L600/N600	RFS APXVAARR24_43-U-NA20	50'-0"		(1) 4460 B25+B66	

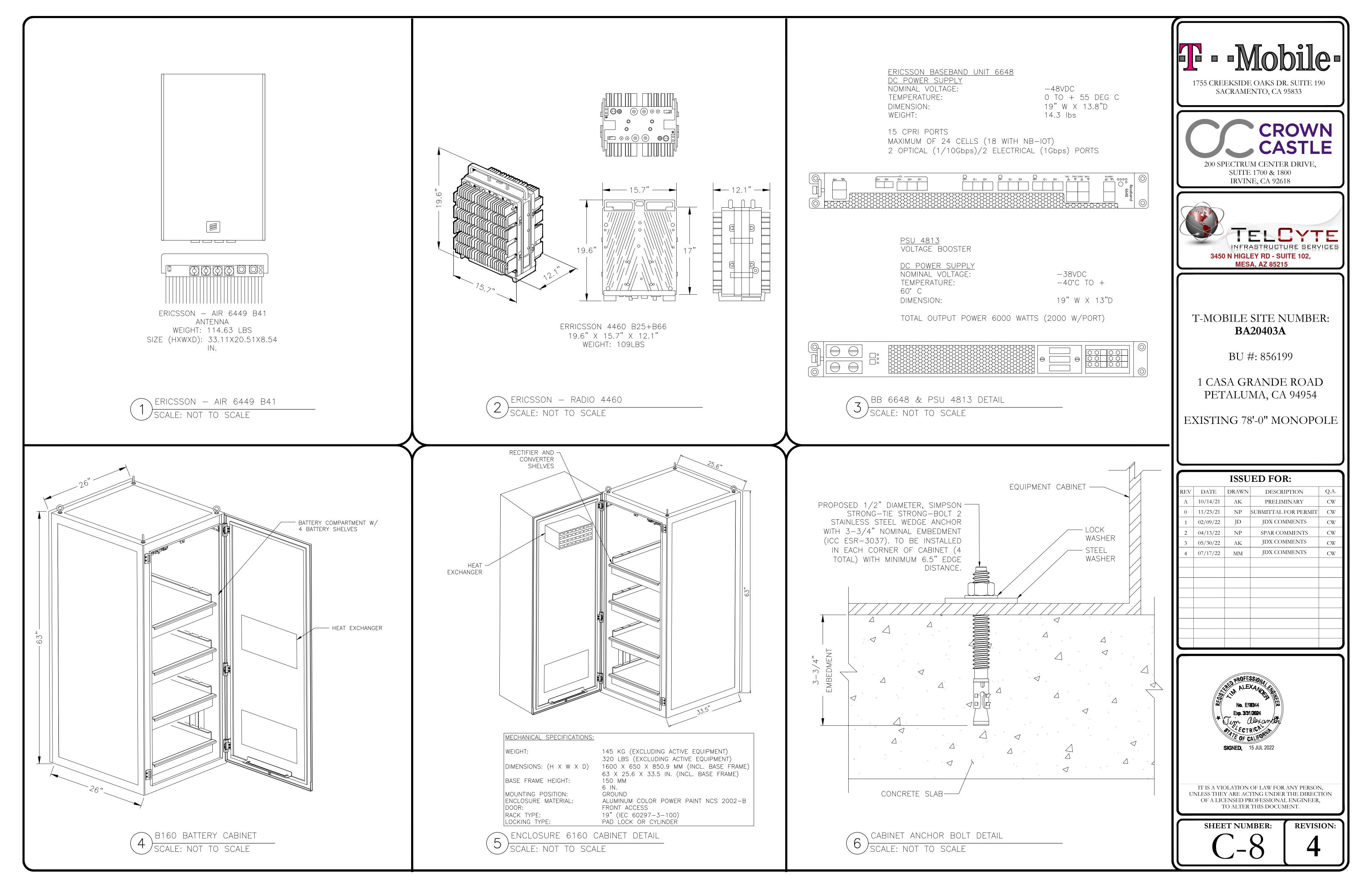
ANTENNA SCHEDULE (VERIEY WITH CURRENT REDS)

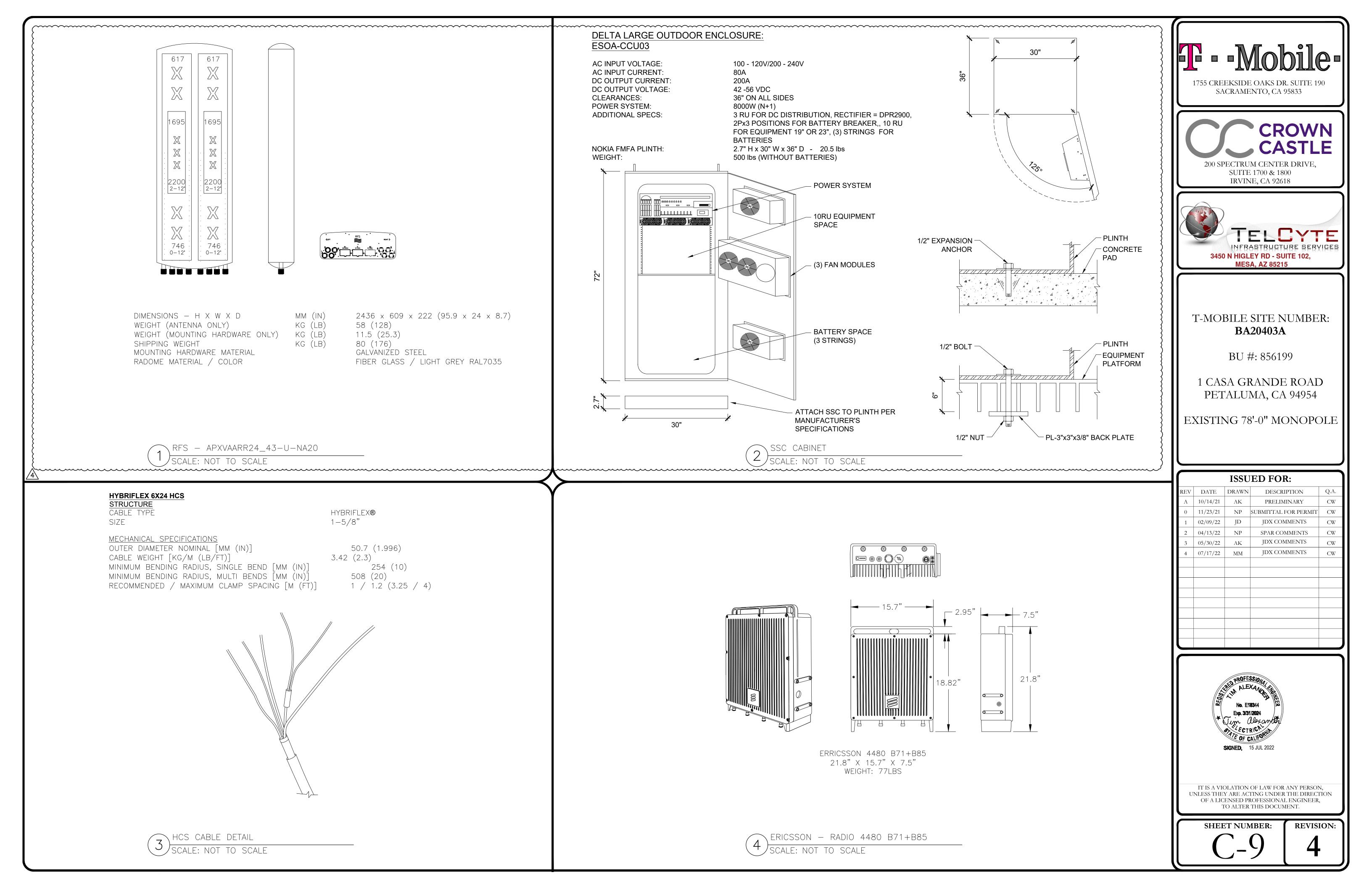
C1 INSTALLER NOTE: REPLACE EXISTING PIPE MOUNTS WITH

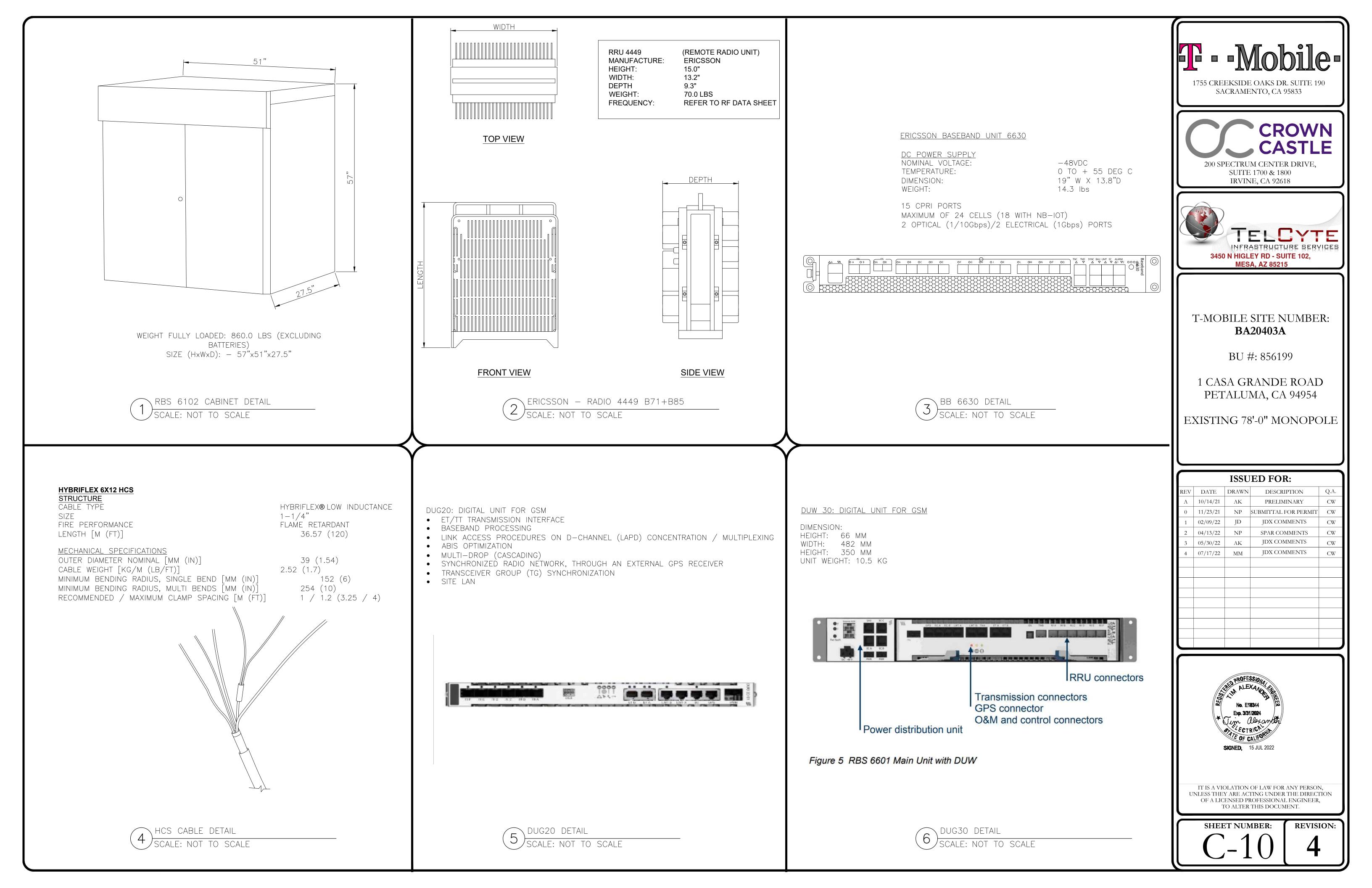
SCH 40 PIPE AS REQ'D.

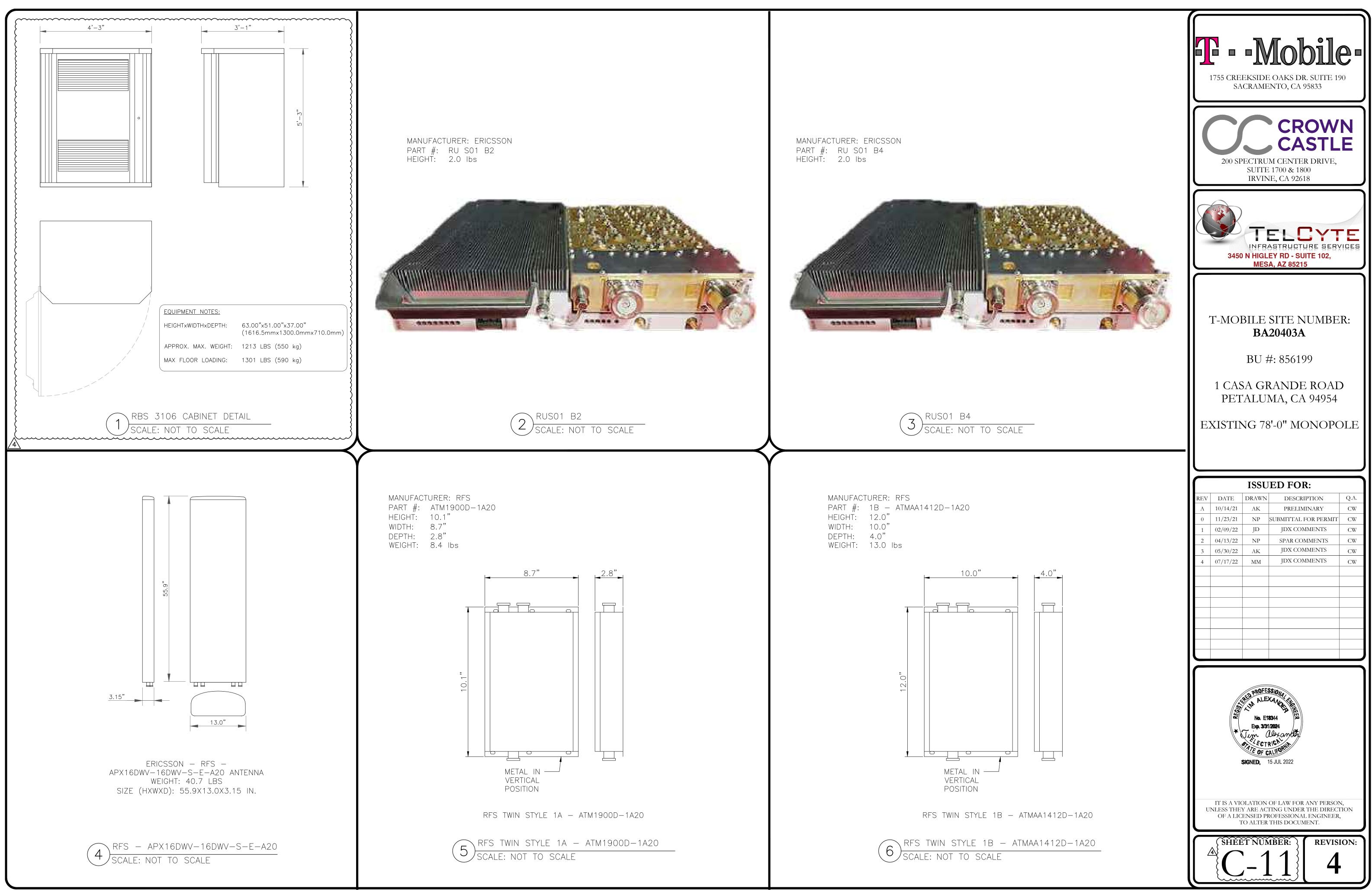
<u>/4</u>













G25WDO-3A-T4F

Diesel Rental Generator Serial Code: G06

T4F DUAL California 49HP Compilant



Key Features

DC System Voltage

Battery Size / Output

Fluid Capacities

Cooling System Capacity

Usable Fuel Cell Capacity Usable DEF Tank Capacity

0Hz Fuel Consumption

eference Conditions

Rated Ambient Temperature

Minimum Starting Temperature (Standard)

Minimum Starting Temperature (w/ Cold Start Opt)

@ 25% Load @ 50% Load

@ 75% Load

@ 100% Load

DEF Runtime

Maximum Altitude

Engine Crankcase Lubricant Capacity

 Designed and manufactured in an ISO9001-certified facility in Statesville, North Carolina, USA. · Heavy duty mobile generator system designed for prime power operation in rental, construction and special events applications.

Voltage	Frequency	Power	Prime Power Rating			
Configuration	(Hz)	Factor	kVA	kW	Current (A)	
600/346V - 3Ø WYE	60	0.8	N/A	N/A	N/A	
480/277V - 3Ø WYE	60	0.8	25	20	30	
240/139V - 3Ø WYE	60	0.8	25	20	60	
208/120V - 3Ø WYE	60	0.8	22	17	61	
240/120V - 1Ø ZIG ZAG	60	1.0	17	17	69	
400/230V - 3Ø WYE	50	0.8	20	16	29	

1.	l'acnometer:
2.	Oil Pressure:
3.	Coolant Tem
4.	Fuel Level: L
5.	Control Powe
6.	Alarm Silence
7.	Voltage Adju
8.	Run / Idle Co
9.	TG410 Contr
	Frequency-m
11.	AC Ammeter
	AC Voltmeter

Engine Data Engine Manufacturer Doosan Model Number D18 Prime Output @ 1800 RPM 33.5 bhp 25 kWm Standby Output @ 1800 RPM 40.1 bhp 30 kWm 30.8 bhp 23 kWm Prime Output @ 1500 RPM Standby Output @ 1500 RPM 34.8 bhp 26 kWm Engine Type Four Cycle, Inline Engine Control ECU Emissions Certification EPA Tier 4 Final Number of Cylinders 3 Turbocharged / Intercooled / cEGR Aspiration Diesel Oxidation Catalyst (DOC) Aftertreatment Technology Bore × Stroke 3.54 × 3.7 in 90 x 94 mm Displacement 109.5 in³ 1.794 L 17.0:1 Compression Ratio Governor Type Isochronous + / - 0.25% Steady State Speed Regulation Accuracy Single Step Load Acceptance 100% 50% Glycol / 50% Water Cooling System Charging Alternator Output 90A

Alternator Data				
Alternator Manufacturer		Marelii Motori		
Alternator Model		MJB 160 SB4		
Alternator Type		Four Pole Re	volving Field	
Number of Leads		12	2	
Insulation Class		н	L. C.	
Winding Pitch		2/	3	
Voltage Connection Method		Three Position Volta	ge Selector Switch	
Excitation Method		Brushless w/ Au	xiliary Windings	
Voltage Regulator Model		Mark V	Analog	
Voltage Regulation Accuracy		+/-1	1%	
Maximum Unbalance Load		25	%	
Total Harmonic Distortion (THD)		<2% @ 0	% Load	
Telephone Influence Factor (TIF)		<	ю	
Motor Starting Capability		480V	600V	
SkVA @ 20% Voltage Dip		21	N/A	
SkVA @ 25% Voltage Dip		28	N/A	
SkVA @ 30% Voltage Dip		36	N/A	
SkVA @ 35% Voltage Dip		45	N/A	
Power Connections			~	
Main Circuit Breaker Rating	70 A	/г	٦d	
Overcurrent Trip Setpoint (240V-1Ø)	70 A	(_`	2	
Overcurrent Trip Setpoint (208V-3Ø & 240V-3Ø)	68 A	\x[ry/	
Overcurrent Trip Setpoint (240V-3Ø Delta)	N/A	V	4/	
Overcurrent Trip Setpoint (480V-3Ø)	33 A	NEMA 5-20R Receptacle		
Overcurrent Trip Setpoint (600V-3Ø)	N/A			
20A-125V GFCI Duplex (NEMA 5-20R) Receptacles	2			
50A—125/250V Temp Power (CS6369) Receptacies	2	Rece	Jacie	
400A-600V Camlock Connectors (Optional)	1 Set		^ ^	
Terminal Board Maximum Cable Size (Bare Wire)	AWG 6- 350MCM		240V	
Terminal Board Maximum Cable Lug Size	7/16 in (11 mm)		D 120V	

GENERATOR DETAIL

G25WDO-3A-T4F | Diesel Rental Generator

12 V

Group 31 / 700CCA

N/A

L

6.3

10.2

177

N/A

Runtime

70.8

46.7

33.4

25.9

-29°C-40°C

-18°C

-29°C

Gal

1.6

2.7

46.7

N/A

L/h

2.5

3.5

5.3

6.8

-20°F-104°F

0°F

-20°F

Gal/h

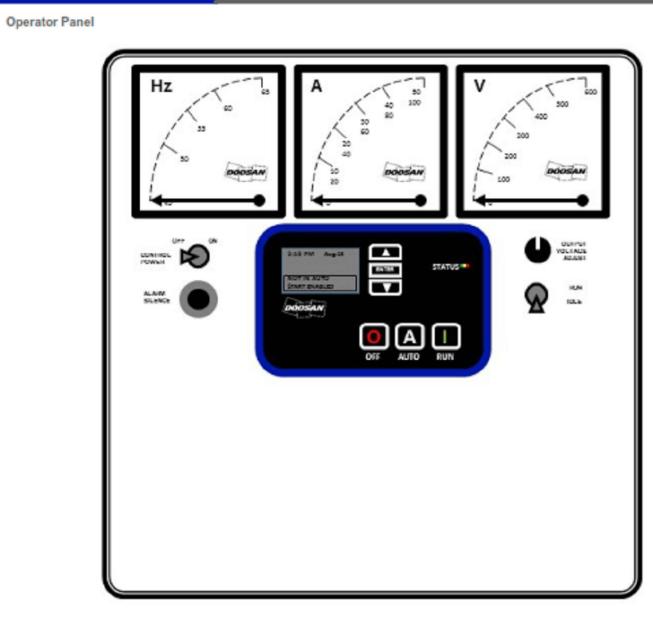
0.66

1.0

1.4

1.8

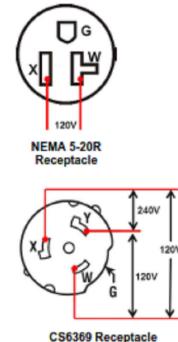
G25WDO-3A-T4F | Diesel Rental Generator



Operator Panel Features

1. Tachometer: LCD Display : LCD Display mperature: LCD Display LCD Display wer On / Off Switch e Button (optional) stment Control ontrol Switch oller neter: 45-65 Hz scale r: Dual scale: 0-50 A @ 480V / 0-100A @ 208V eter: 0-600 V scale

G25WDO-3A-T4F | Diesel Rental Generator





SCALE: NOT TO SCALE



TG410 Genset Controller Features

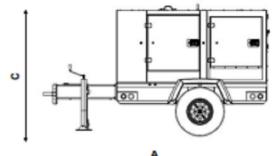
Functionality

- Automatic shutdowns and warnings
- Manual and remote AutoStart Engine speed adjustment
- Aftertreatment conditioning controls and status lcons
- Auto / Force / Inhibit
- SAE J1939 electronic engine communication Engine Fault Code Annunciation
- SPN / FMI / OC
- 150 Event Fault Log
- Isolated RS 485 Modbus communication capable NFPA 110 Level 1 capable
- Maintenance counter
- AutoStart on low battery capable
- Exerciser clock
- Automatic, inverse time delay overcurrent protection

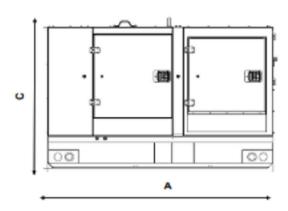
Form Factor

- 6-Button control
- 6-Line LCD Display with user adjustable contrast and temperature compensation from -4°F (-20°C) to 158°F (70°C)
- Conformal coated circuit board for protection against moisture and contaminants
- Rugged polycarbonate enclosure designed to survive extreme applications and abuse
- Controller functions in ambient conditions ranging from -40°F/C to 158°F (70°C)
- Meets or exceeds SAE J1113-11 with respect to electrical transients
- Meets or exceeds SAE J1455 with respect to vibration, thermal shock and cycling
- Meets or exceeds MIL-STD-461E with respect to electromagnetic compatibility Maximum 600V AC, true RMS sensing, +/- 1% full scale accuracy
- Current sensing, +/- 2% full scale accuracy

Running Gear	т
Gross Vehicle Weight Rating (GVWR)	3376 lb
Gross Axle Weight Rating (GAWR)	5080 lb
Configuration	
Suspension	
Standard Brake System Configuration	
Optional Brake System Configuration	
Tires	
Wheels	15"
Track Width	61.7 in
Lighting and Reflectors	Meets Federal/Can
Electrical Connection to Towing Vehicle	7-Pole
Standard Trailer Coupling	
Optional Trailer Coupling	2-Inch Ball
Hitch Height	5-Po
Safety Chains	2 × 5/16*
Jack Stand Configuration	Trun
Package Data	With Runnin
Length (A)	130.5 in
Width (B)	72.8 in
Height (C)	76.6 in
Weight (Shipping)	2010 lb
Weight (Ready to Run)	3140 lb
Sound Level @ 23ft (7m), 100% Load	



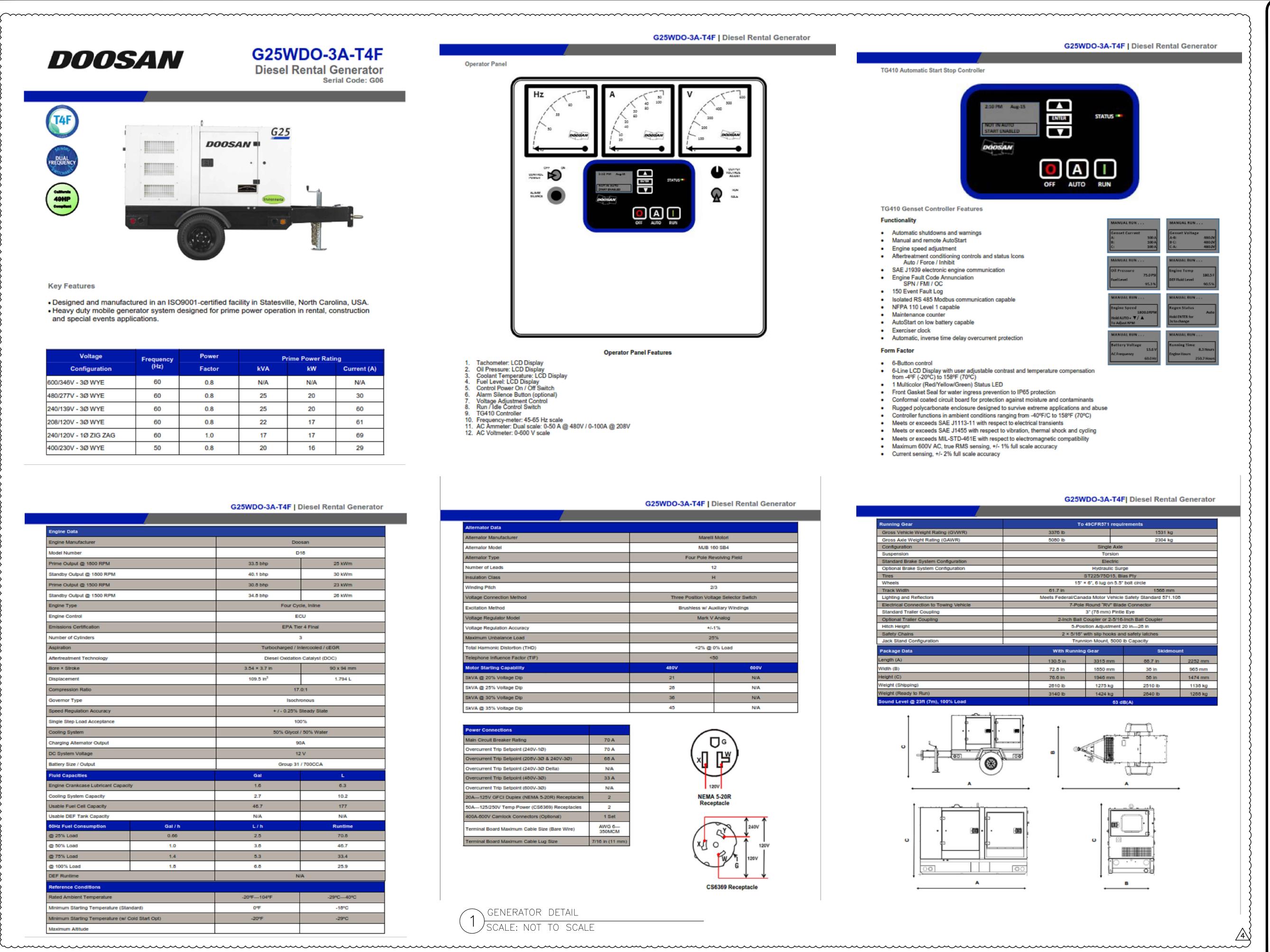


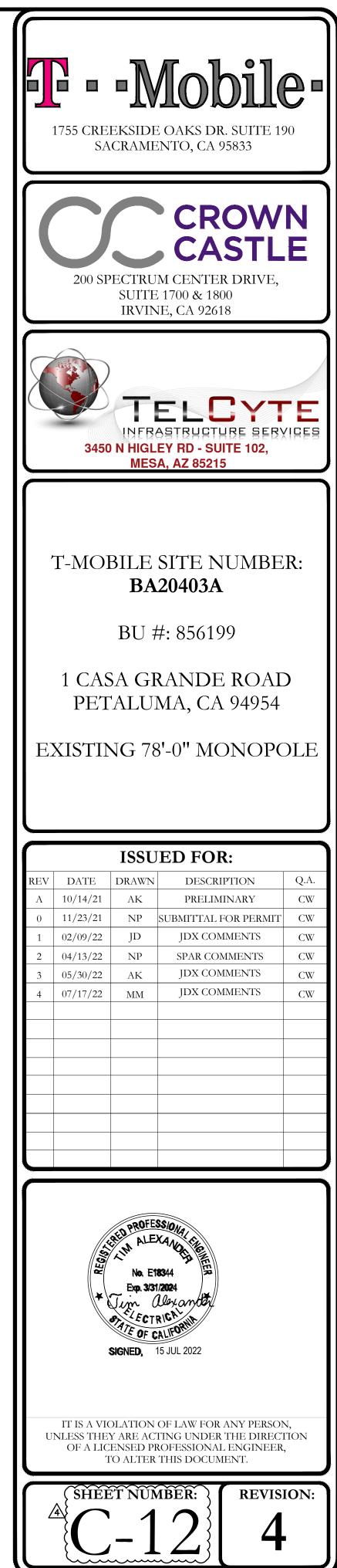




- CS6369 Receptacle

- 1 Multicolor (Red/Yellow/Green) Status LED
- Front Gasket Seal for water ingress prevention to IP65 protection









Low Noise Amplifier Specifications

Frequency Band (MHz): 1575.42 +/- 1.2 MHz
Amplifier Gain: 40 dB +/- 4 dB
Nominal Impedance: 50 ohms
Output VSWR (3dB bandwidth): < 2.0:1
Noise Figure (including pre-selector): ≤ 3.8 dB @ +25°C (typ.) ≤ 4.5 dB @ +25°C (max.)
Operating DC Voltage: 3.3- 12.0 V (regulated)
Survival DC Voltage: 28V
DC Current: 32 mA @ 5V (typ.) 40 mA @ 5V (max.)
Filtering: 4-stage filtering including pre-selector
Out-of-Band Rejection: ≥ 80 dB @ 1559 MHz ≥ 80 dB @ 1625 MHz

QUESTIONS? VISIT WWW.TALLEYCOM.COM OR CONTACT TALLEY AT 800.949. 7079 OR SALES@TALLEYCOM.COM TODAY.



GPS-TMG-HR-40N, High Rejection 40 dB With Enhanced Narrow Band Filtering

The GPS-TMG-HR-40N timing reference antennas feature a 40 dB amplifier and narrow band high rejection filtering specifically designed to support longlasting, trouble-free deployments in congested cell-site applications with severe interference around the GPS L1 frequency.

The proprietary quadrifiliar helix design, coupled with multi-stage filtering provides superior out-of-band rejection and lower elevation pattern performance than traditional patch antennas.

The unique radome shape sheds water and ice, while eliminating problems associated with bird perching. The antenna may be purchased by itself or with pipe mounting hardware. Custom models or site kits options are also available. The antenna label and collar mount are color coded red for differentiation purposes.

This antenna is made of materials that fully comply with provisions stipulated by EU directives RoHS 2002/95/EC.

Antenna Element Electrical Specifications

Frequency Band	Antenna Gain	Nominal Impedance	VSWR	Polarization	Connector
1575.42 +/- 10 MHz	3.5 dBic	50 ohms	s1.5:1	Right hand circular	N, female (one - bottom fed)

Mechanical Specifications

Antenna	Shipping	Antenna	Shipping	Radome
Dimensions	Dimensions	Weight	Weight	Color
5.0" H x 3.2" D	7.5" L x 4.4" W x 3.8" D	0.6 lbs	1.9 lbs	White
(126 H x 81 mm)	(190 L x 112 x 96 mm)	(0.3 kg)	(0.9 kg)	

Environmental Specifications

Temperature Range	Humidity
- 40°C to + 85°C	95%

Mounting

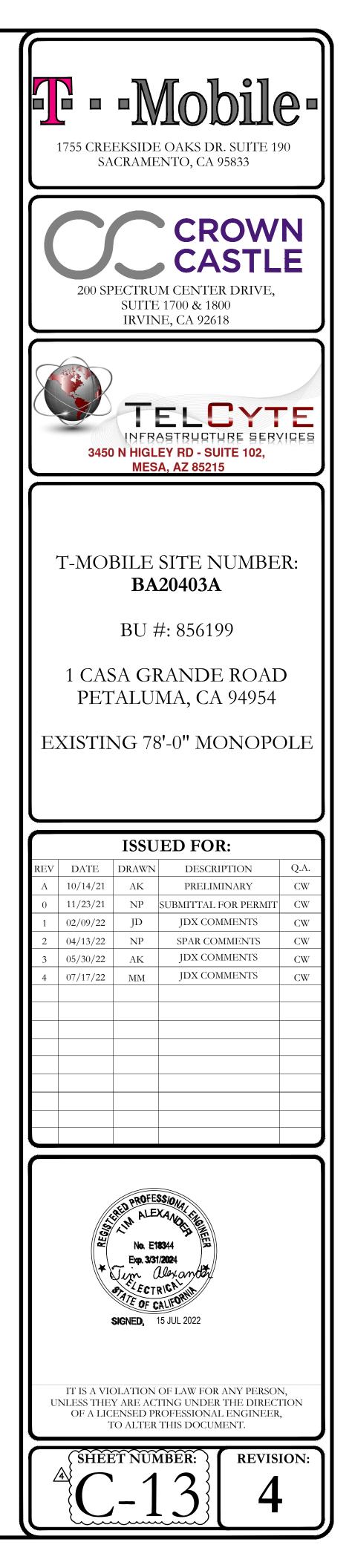
All mounting options fit pipes of 1"-1.45" (25 mm-37 mm) maximum diameter.

Model	Options
GPS-TMG-HR-40N	Antenna Only. Does not include mounting hardware.
GPS-TMG-HR-40NCM	Includes red powder coated collar mount (GPS-TMG-MNT-R)



GPS ANTENNA DETAIL SCALE: NOT TO SCALE

, NUT TO JUALL



			snc	US					US	snc			
LOAD		LOADS CONTINUOUS LOADS NONCONTINUOUS BREAKER		LOAD PER PHASE		BREAKER	LOADS NONCONTINUOUS	CONTINUOUS		LOAD			
	DESCRIPTION	VOLT- AMPS	LOADS C	NONCO	BR	"A"	"B"		NONCO	NONCO LOADS CC	VOLT- AMPS	DESCRIPTION	
1 3	SURGE SUPPRESSION	1	C C		30	801	801	60	NC NC		800 800	BATTERY CABINET	
5	GFCI RECEPTACLE	180		NC	15	360		20		С	180	TELCO PLUG	╈
7	TELCO RECEPTACLE	180	С		20		360	20		С	180	TELCO PLUG	
9	LIGHT	300	С		20	300		20				SPARE (OFF)	1
11 13	RBS 6102	8000 8000	C C		100	8000	8000	50				UMTS (OFF)	1
15	BLANK						0					BLANK	1
17	BLANK					0						BLANK	1
19	BLANK						0					BLANK	2
21	BLANK					0						BLANK	2
23	BLANK						0					BLANK	2
25	BLANK					0						BLANK	2
27	BLANK						0					BLANK	2
29	BLANK					0						BLANK	3
		CONNECTE	D PHAS		LS, VA:	9461	9161						
									AC PANEL DATA				
	CON	NECTED LOA	D PER	PHASE,	AMPS:	79	76		S١	/STEM	VOLTAGE:	240	
		NNECTED LC				9.461	9.161			MAIN	BREAKER:	200	-
		TOTAL COM			-	18.	622		BUSS RATING: 200			200	-
					,					MAIN	LUG ONLY:	N/A	
	NONCON	TINUOUS LC)AD PE	R PHAS	E. KVA:	0.980	0.800				C RATING:	65/10 KAIC SERIES-RATED	_
		LNONCON			-	1.780 NOTES:							
CONTINUOUS LOAD PER PHASE, KVA:				10.601	10.451								
	TOTAL CONTINUOUS LOAD, KVA:					053		-					
						-							
	DEMAND LOAD (CONT + NONCONT) PER PHASE, KVA: TOTAL DEMAND LOAD (CONTINUOUS + NONCONTINUOUS), KVA:				11.581	11.251						_	
						833							
	TOTAL DEMAND LOAD (CONT + NONCONT), AMPS:			97	94						-		
	PANEL CAPACITY, KVA:						000						
							168						_
	SPARE PANEL CAPACITY, KVA												

EXISTING AC PANEL, EXISTING BREAKER SCHEDULE SCALE: NOT TO SCALE

	BA20403A / H	EXISTIN	XISTING AC PANEL, PROPOSED BREAKER SCHEDULE										
			snc	US					US	snc			
			N N I					R	no	NUC			
	LOAD		CONTIN LOADS CONTINU		BREAKER	LOAD PER PHASE		BREAKER		ILLNO	LOAD		
	DESCRIPTION VOLT- AMPS		LOADS CONTINUOUS	LOADS NONCONTINUOUS	BF	"A"	"B"	BR	LOADS NONCONTINUOUS	LOADS CONTINUOUS	VOLT- AMPS	DESCRIPTION	
1	SURGE SUPPRESSION	1	C C		30	801	801	60	NC NC		800 800	BATTERY CABINET	2
5	GFCI RECEPTACLE	180	-	NC	15	360		20		С	180	TELCO PLUG	6
7	TELCO RECEPTACLE	180	С		20		360	20		С	180	TELCO PLUG	8
9	LIGHT	300	С		20	300		20				SPARE (OFF)	10
11		8000	С		100		8000	50					12
13	RBS 6102	8000	С		100	8000		50				UMTS (OFF)	14
15		8200	С		40.0*		8200					BLANK	16
17	6160 CABINET*	8200	С		100*	8200						BLANK	18
19	BLANK						0					BLANK	20
21	BLANK					0						BLANK	22
23	BLANK						0					BLANK	24
25	BLANK					0						BLANK	26
27	BLANK						0					BLANK	28
29	BLANK					0						BLANK	30
	(CONNECTE	D PHAS	SE TOTA	LS, VA:	17661	17361						
									AC PANEL DATA				
	CONNECTED LOAD PER PHASE, AMPS:					147	145		S١	/STEM	VOLTAGE:	240	
	CON	NECTED LC)AD PE	R PHAS	E, KVA:	17.661	17.361			MAIN	BREAKER:	200	
		TOTAL CON	NECT	ED LOA	D, KVA:	35.0)22			BUS	S RATING:	200	
					,					MAIN	LUG ONLY:	N/A	
	NONCONT)AD PE	R PHAS	E. KVA:	0.980	0.800				C RATING:		
						1.7	80		NOTES				
	TOTAL NONCONTINUOUS LOAD, KVA:												
							20.701						
	TOTAL CONTINUOUS LOAD, KVA:					20.851 41.5							
				00 2071					-				
	DEMAND LOAD (CON	Γ + ΝΟΝCΟ	NT) PE	R PHAS	E, KVA:	21.831	21.501						
	TOTAL DEMAND LOAD (CONTINUOUS + NONCONTINUOUS), KVA: TOTAL DEMAND LOAD (CONT + NONCONT), AMPS: PANEL CAPACITY, KVA:						333						
							179						
							000						
		SPARE PA				4.6	68						
												_	
						1							

1) CHANGES AND NEW CIRCUITS ARE INDICATED IN BOLD FONT WITH AN ASTERISK (*).

2) INSTALL (1) NEW 100A/2P BREAKER FOR NEW 6160 CABINET. 3) UPDATE PANEL DIRECTORY.

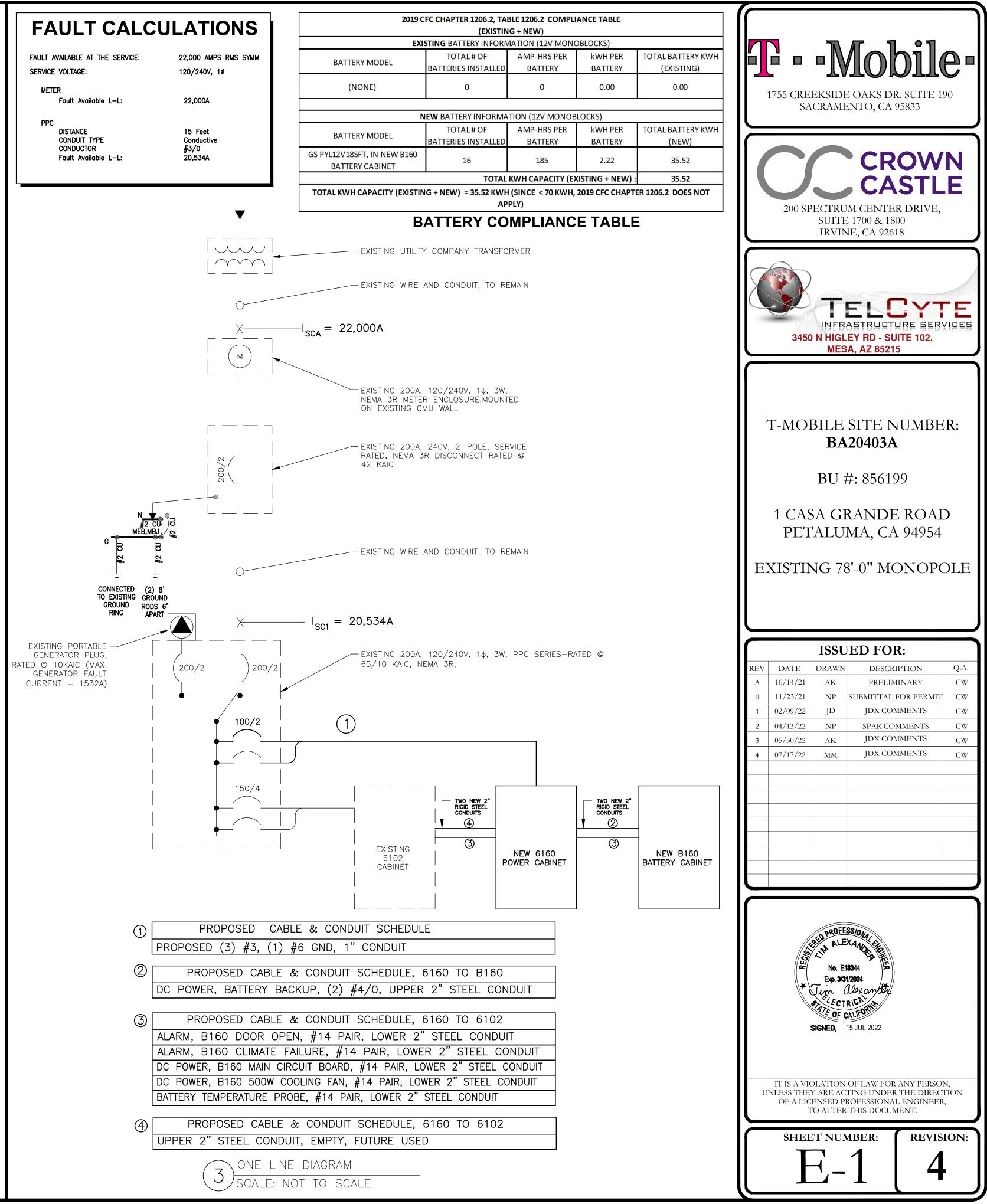
EXISTING AC PANEL, PROPOSED BREAKER SCHEDULE SCALE: NOT TO SCALE

<u>NOTES:</u>

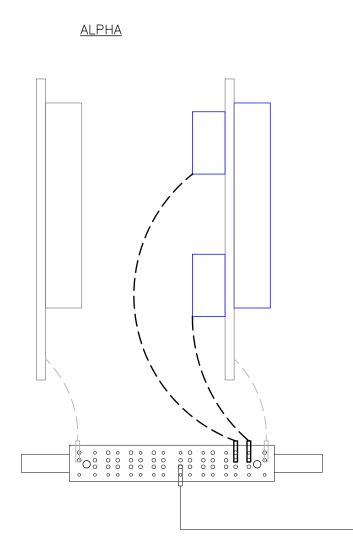
1. ALL NEW CONDUCTORS TO BE INSTALLED SHALL BE COPPER. ALL CONDUCTORS SHALL BE THHW, THWN, THWN-2, XHHW, OR XHHW-2 UNLESS NOTED OTHERWISE.

2. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING ITEMS SHOWN ON THE ELECTRICAL ONE-LINE DIAGRAM AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

3. ALL GROUNDING AND BONDING PER THE NEC.

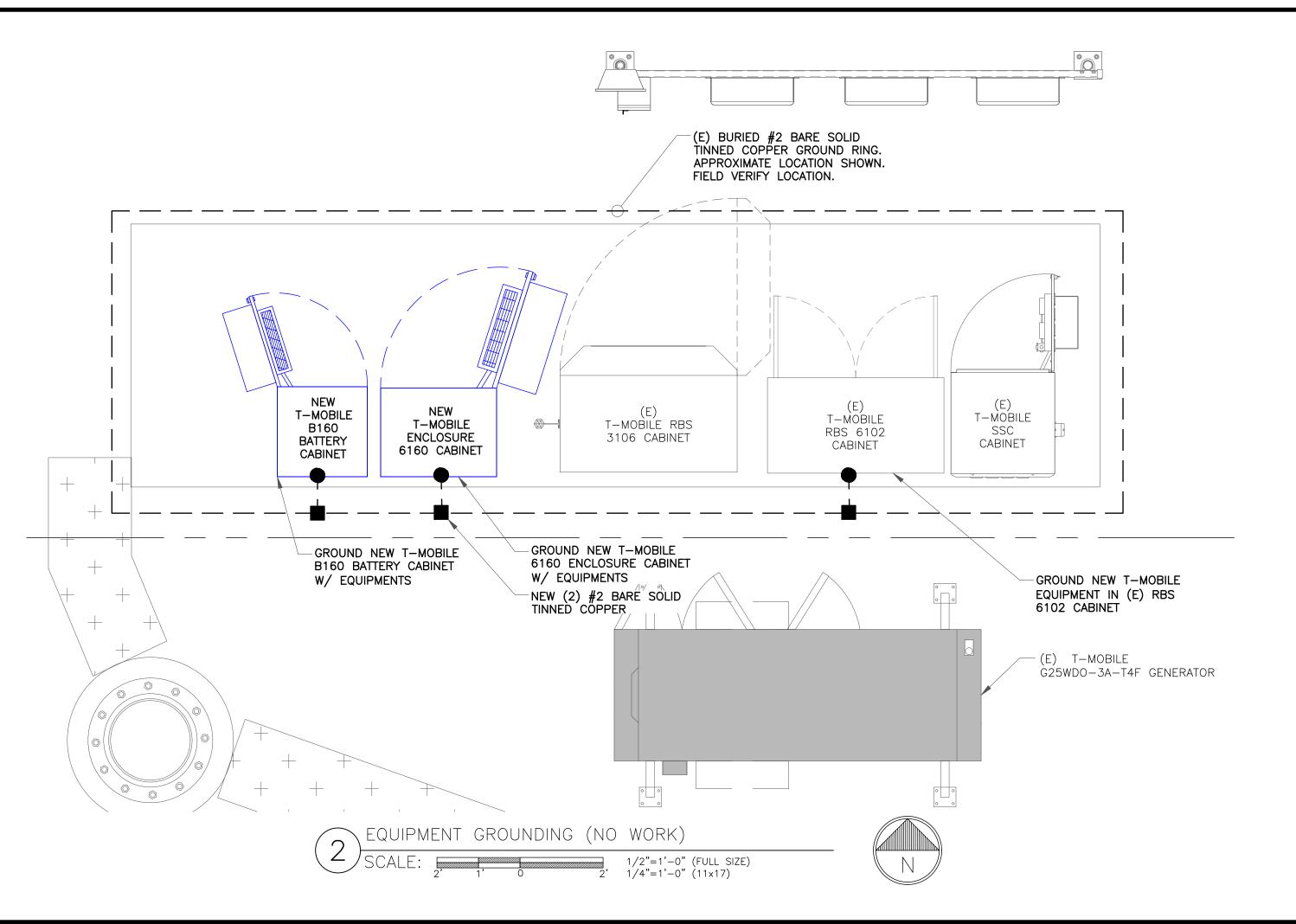


	BLE 1206.2 COMPLIANCE TABLE								
NG + NEW)									
MATION (12V MONOBLOCKS)									
I	AMP-HRS PER	kWH PER	TOTAL BATTERY KWH						
	BATTERY	BATTERY	(EXISTING)						
I	0	0.00	0.00						
1	TION (12V MONOB	LOCKS)							
I	AMP-HRS PER	kWH PER	TOTAL BATTERY KWH						
	BATTERY	BATTERY	(NEW)						
	185	2.22	35.52						
KWH CAPACITY (EXISTING + NEW) : 35.52									
H (SINCE < 70 KWH, 2019 CFC CHAPTER 1206.2 DOES NOT PPLY)									

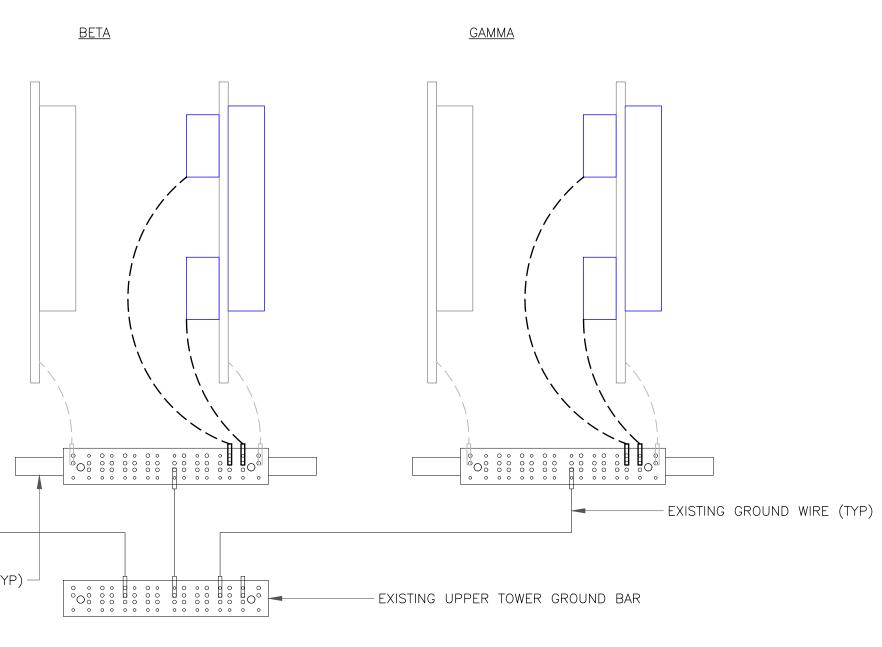


EXISTING ANTENNA SUPPORT HEADFRAME (TYP)-





GROUNE	DING LEGEND
\bigotimes	INSPECTION WELL VERIFY LOCATION W/ CONSTR. MGR.
\mathbf{X}	5/8"x10'-0" COPPER CLAD GROUND ROD, 10' O.C. (TYP)
	#6 AWG STRANDED & INSULATED
	#2 AWG SOLID COPPER TINNED
••••	GROUND BUS BAR
	EXOTHERMIC WELD (CADWELD) (UNLESS OTHERWISE NOTED)
igodot	MECHANICAL CONNECTION



ANTENNA GROUND DIAGRAM

SCALE: NOT TO SCALE

