

T-Mobile

SITE #: SL04119C
SITE NAME: UP_L_OGADENCYN_AMPEN
STATE: UTAH
COUNTY: WEBER COUNTY
PROJECT TYPE: L600
RAN TEMPLATE: 67G998G 6160

CLIENT

T-Mobile

268 W 12300 S
DRAPER, UTAH 84020

CONSULTANT

**COAL CREEK
CONSULTING**

8283 N. HAYDEN RD., STE 258
SCOTTSDALE, ARIZONA 85258
PHONE: (480) 429-0533

ENGINEER OF RECORD

SEAL



NO.	DATE	DESCRIPTION	BY
1	09/23/24	REVIEW	DRK

PROJECT INFORMATION
JOB: 13-379-04

**SL04119C
UP_L_OGADENCYN
_AMPEN**

244 OGDEN CANYON
OGDEN, UTAH 84401

SHEET TITLE

**TITLE SHEET, VICINITY
MAP & GENERAL
INFORMATION**

JURISDICTIONAL APPROVAL

SHEET NUMBER

T-1

CODE COMPLIANCE:

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE CODES ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THE CODES.

2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL MECHANICAL CODE
2020 NATIONAL ELECTRICAL CODE/NFPA-70

ACCESSIBILITY REQUIREMENTS:

THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE CURRENT INTERNATIONAL BUILDING CODE.

PROJECT SUMMARY

SITE ADDRESS:
244 OGDEN CANYON
OGDEN, UTAH 84401

PROPERTY OWNER:
OGDEN CITY CORPORATION
2549 WASHINGTON BLVD STE. 522
OGDEN, UTAH 84401

APN: 130-750-002
ZONING CLASSIFICATION: N/A
JURISDICTION: CITY OF OGDEN
LAT: 41.244635 (41°14'40.68"N)
LONG: -111.89541 (111°53'43.47"W)

PROJECT DESCRIPTION

T-MOBILE PROPOSES TO:

- REMOVE BREAKERS IN EXISTING SUB-PANEL
- REMOVE (3) EQUIPMENT CABINETS
- REMOVE (1) DOG HOUSE
- REMOVE (4) TMA'S AT ANTENNAS, (2) PER SECTOR
- REMOVE (2) ANTENNAS, (1) PER SECTOR
- ADD A NEW BREAKER IN EXISTING SUB-PANEL
- ADD A POWER CONDUIT
- ADD (2) EQUIPMENT CABINETS
- ADD (1) HYBRID CABLE TO RADIOS
- ADD A NEW H-FRAME TO EQUIPMENT PLATFORM
- ADD (4) NEW RADIO MODULES TO H-FRAME
- ADD (4) COAX CABLES UP TO ANTENNAS
- ADD (4) TMA'S, (2) PER SECTOR
- ADD (2) ANTENNAS, (1) PER SECTOR

PROJECT TEAM

PROJECT MANAGER:
T-MOBILE
121 ELECTION RD.
DRAPER, UTAH 84020
CONTACT: AMY A. DONER
PHONE: (801) 891-3331
EMAIL: AMY.DONER1@T-MOBILE.COM

CONSTRUCTION MANAGER:
COAL CREEK CONSULTING
8283 N. HAYDEN RD. SUITE 258
SCOTTSDALE, ARIZONA 85258
CONTACT: IAN WALKER
PHONE (801) 946-8585

SITE ACQ. CONSULTANT:
COAL CREEK CONSULTING
8283 N. HAYDEN RD. SUITE 258
SCOTTSDALE, ARIZONA 85258
CONTACT: GREG HEISSER
PHONE: (623) 363-4561

A&E DESIGN:
COAL CREEK CONSULTING
8283 N. HAYDEN RD. SUITE 258
SCOTTSDALE, ARIZONA 85258
CONTACT: SHAWN EVANS
PHONE (602) 758-5829

ELECTRICAL ENGINEER:
EXCELLENCE IN ENGINEERING
12005 ANTELOPE TRAIL
PARKER, COLORADO 80138
CONTACT: LOREN PRIEST
PHONE (303) 748-1189

SHEET INDEX

T-1 TITLE SHEET, VICINITY MAP & GENERAL INFO.

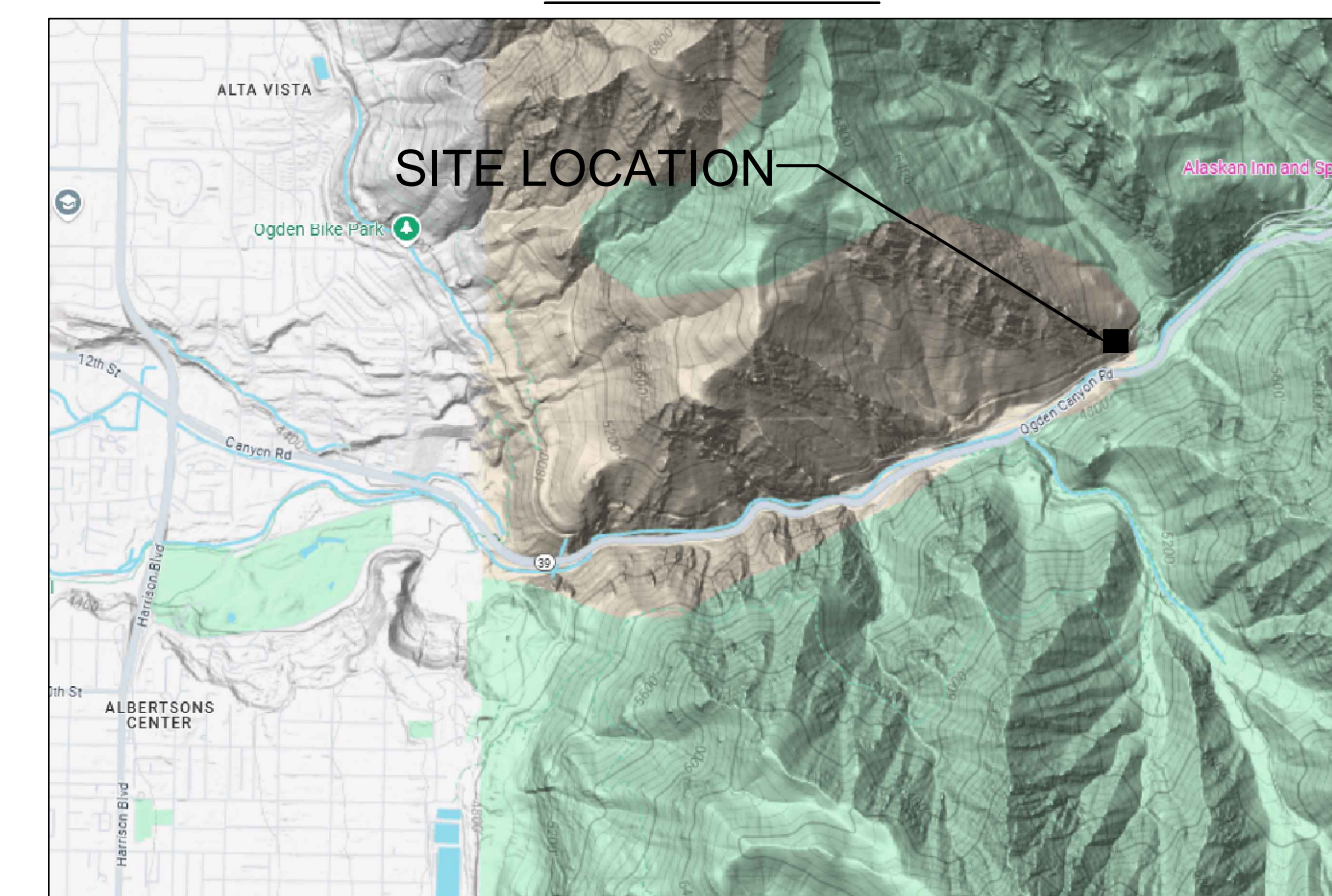
CIVIL:

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ELECTRICAL

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VICINITY MAP



DRIVING DIRECTIONS

DIRECTIONS TO THE SITE FROM THE T-MOBILE OFFICE:
TAKE I-15 N. TO EXIT 324 AND MERGE ONTO HWY 89 N.. EXIT AT HARRISON BLVD (HWY 203) AND CONTINUE N..
TURN RIGHT ON CANYON RD.. TURN LEFT AND THEN TURN RIGHT TO STAY ON OGDEN CANYON FRONTAGE RD..
FOLLOW THIS ROAD TO THE TOP OF THE RIDGE.

RFDS VER: 5 DATED 9/29/2022 AT 7:46:01 AM

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ENGINEER OF RECORD
 SEAL

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDATION

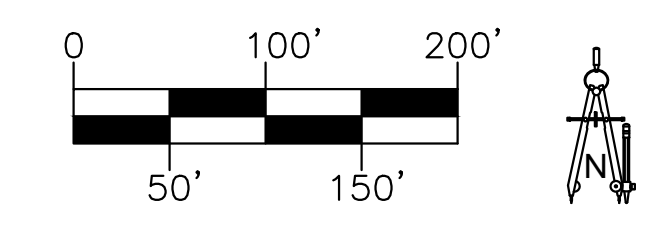
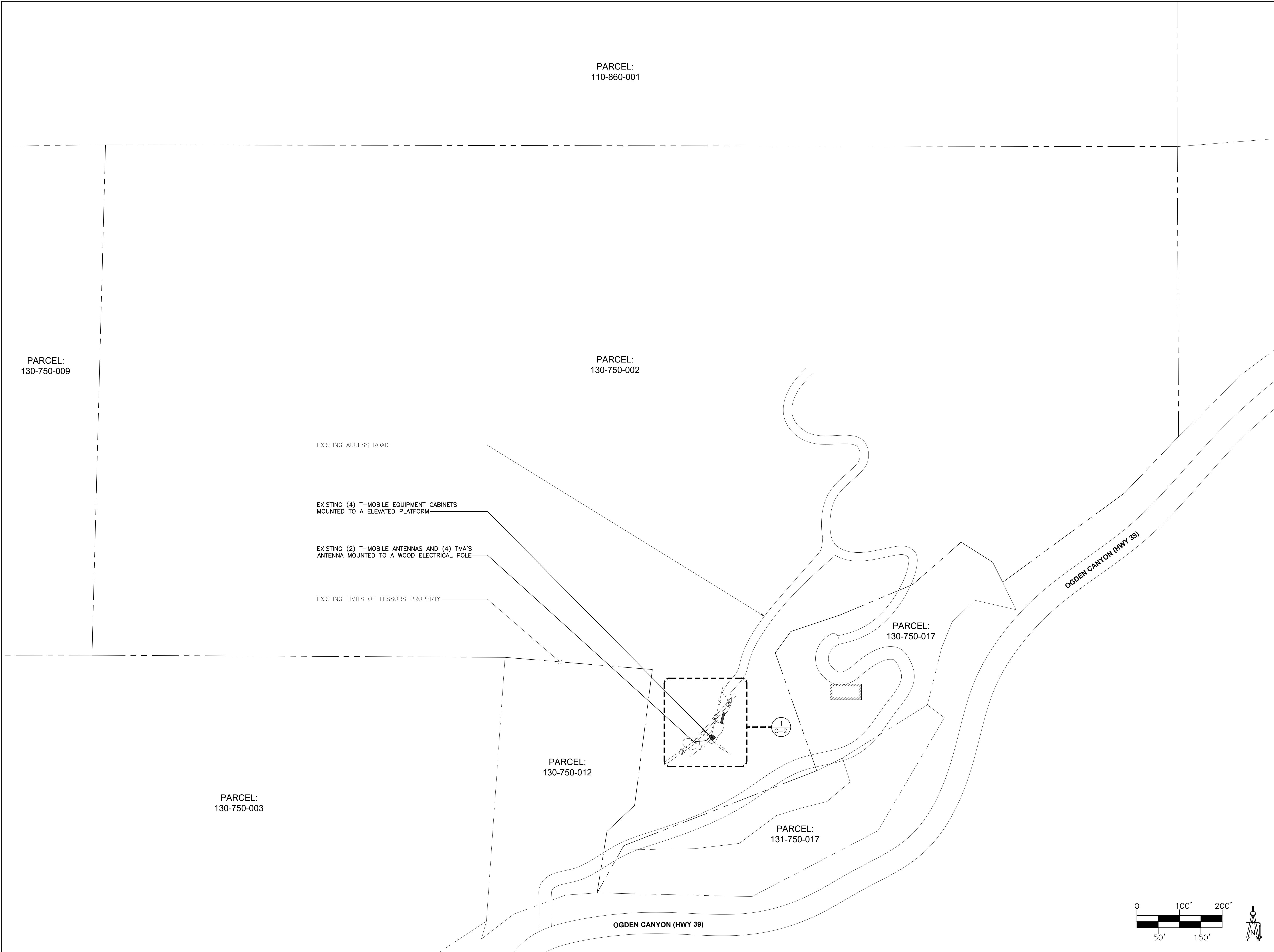
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SHEET TITLE
SITE PLAN

JURISDICTIONAL APPROVAL

SHEET NUMBER
C-1



SCALE: 1" = 100'-0" 1

SITE PLAN

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CLIENT



268 W 12300 S
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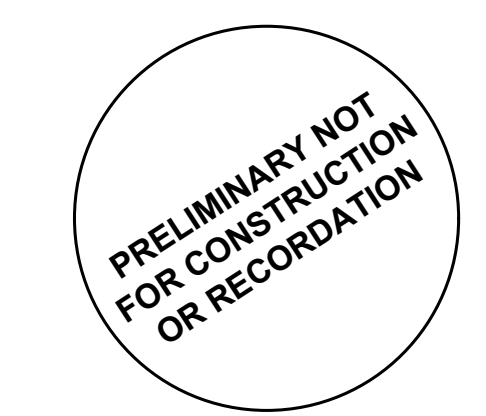
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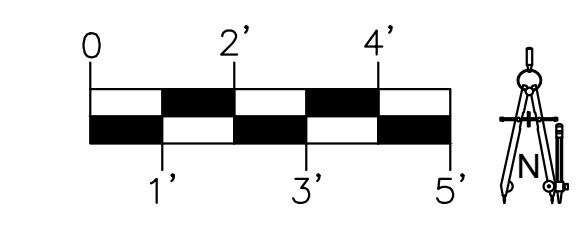
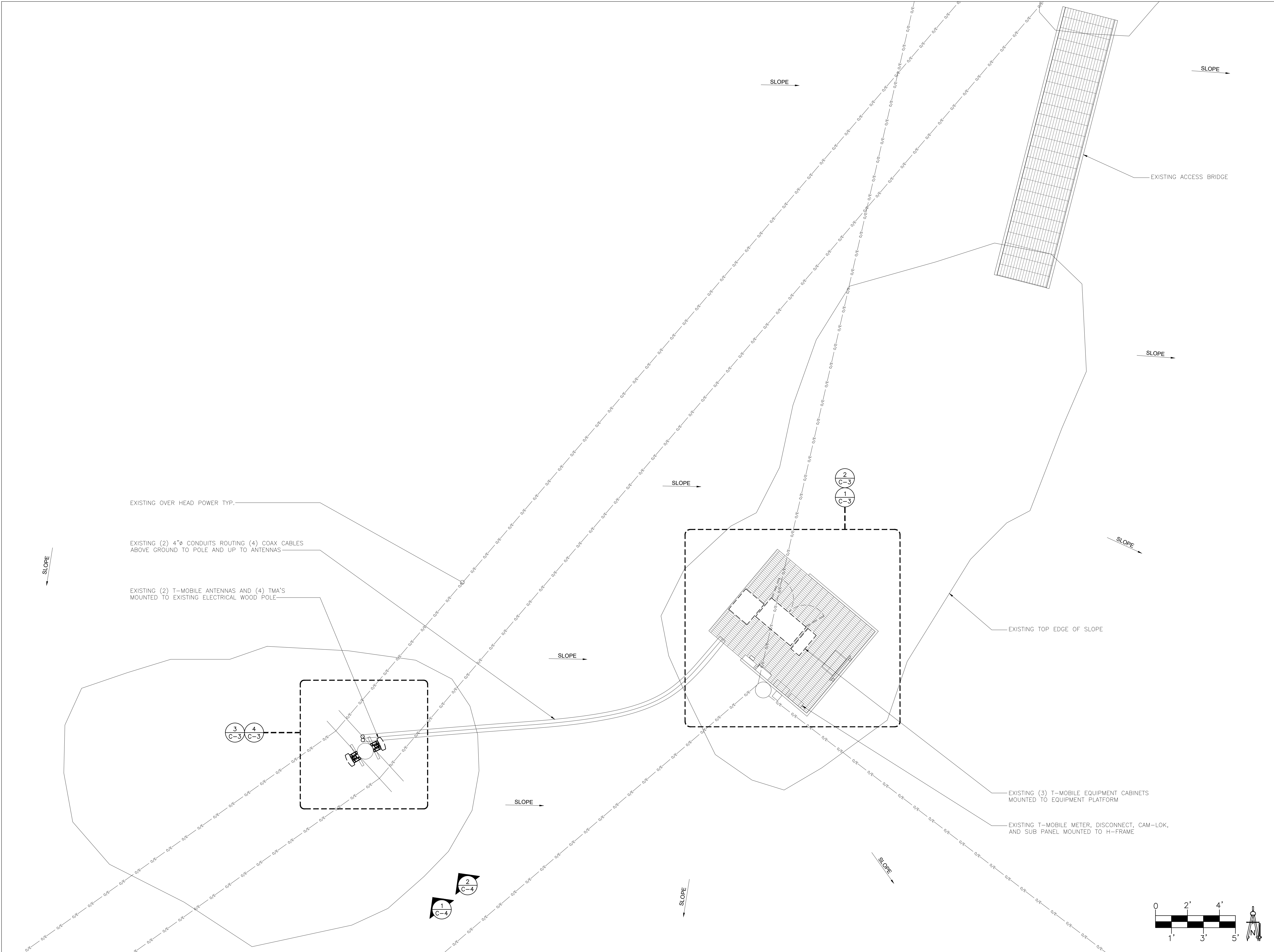
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ENLARGED SITE PLAN

JURISDICTIONAL APPROVAL

SHEET NUMBER

C-2



SCALE: 3/8" = 1'-0"

1

ENLARGED SITE PLAN

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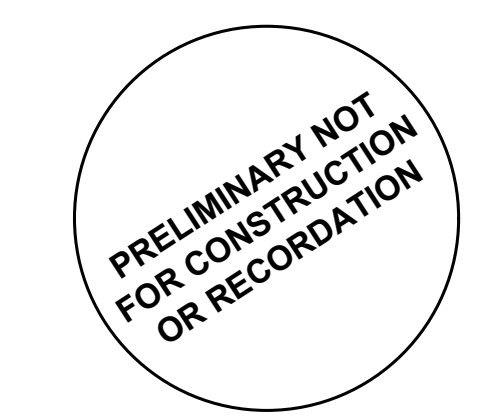
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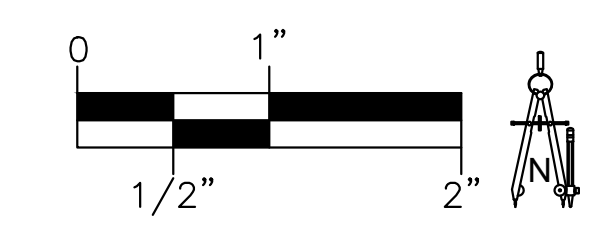
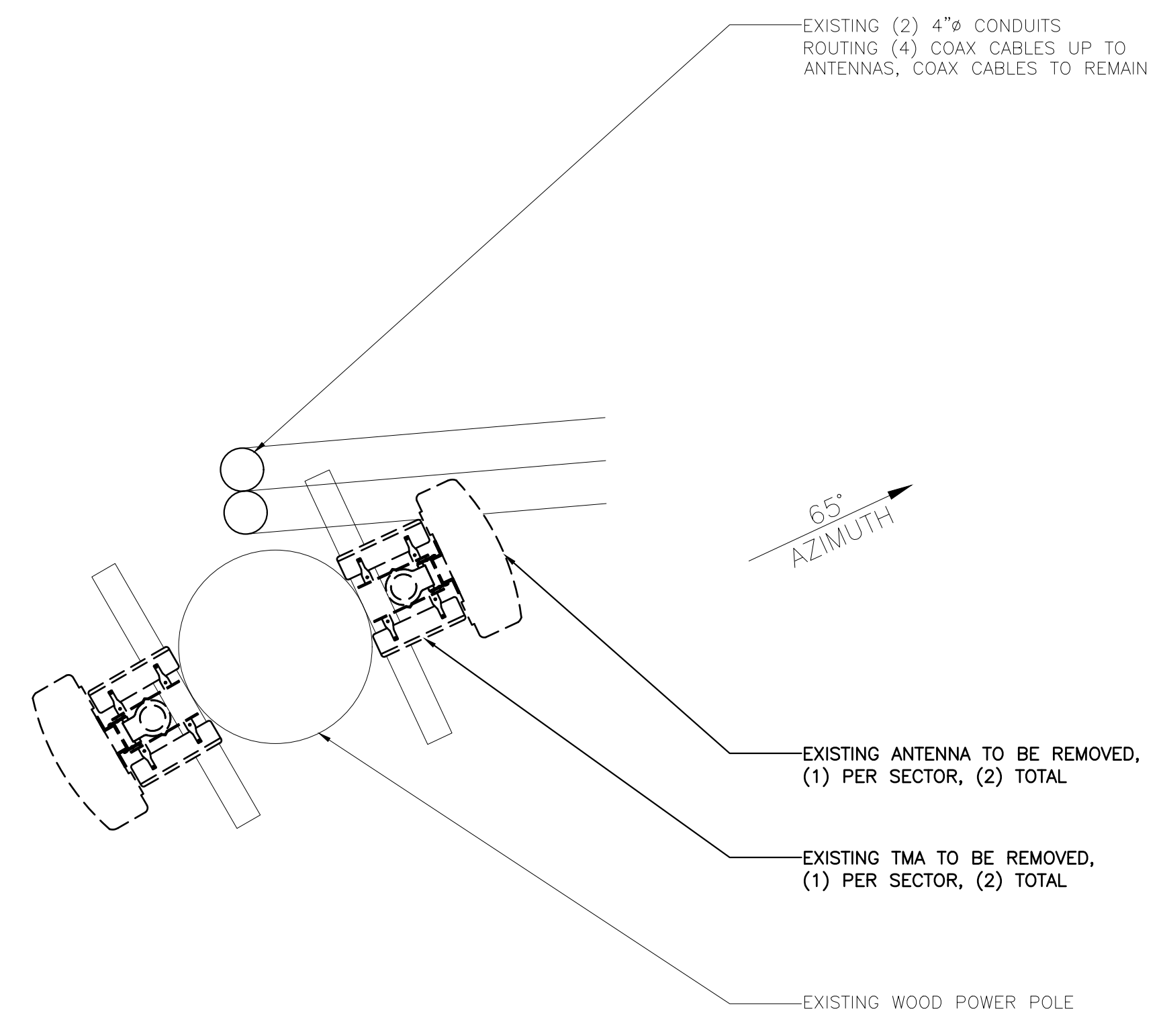
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SHEET TITLE
**EXISTING/NEW
ANTENNA PLAN**

JURISDICTIONAL APPROVAL

SHEET NUMBER

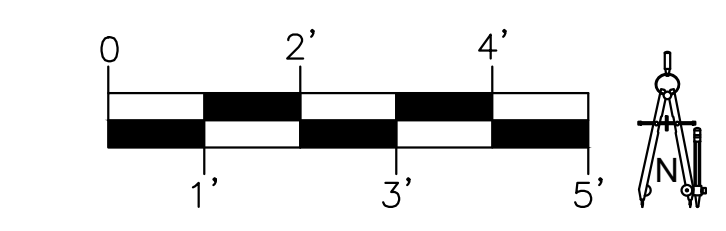
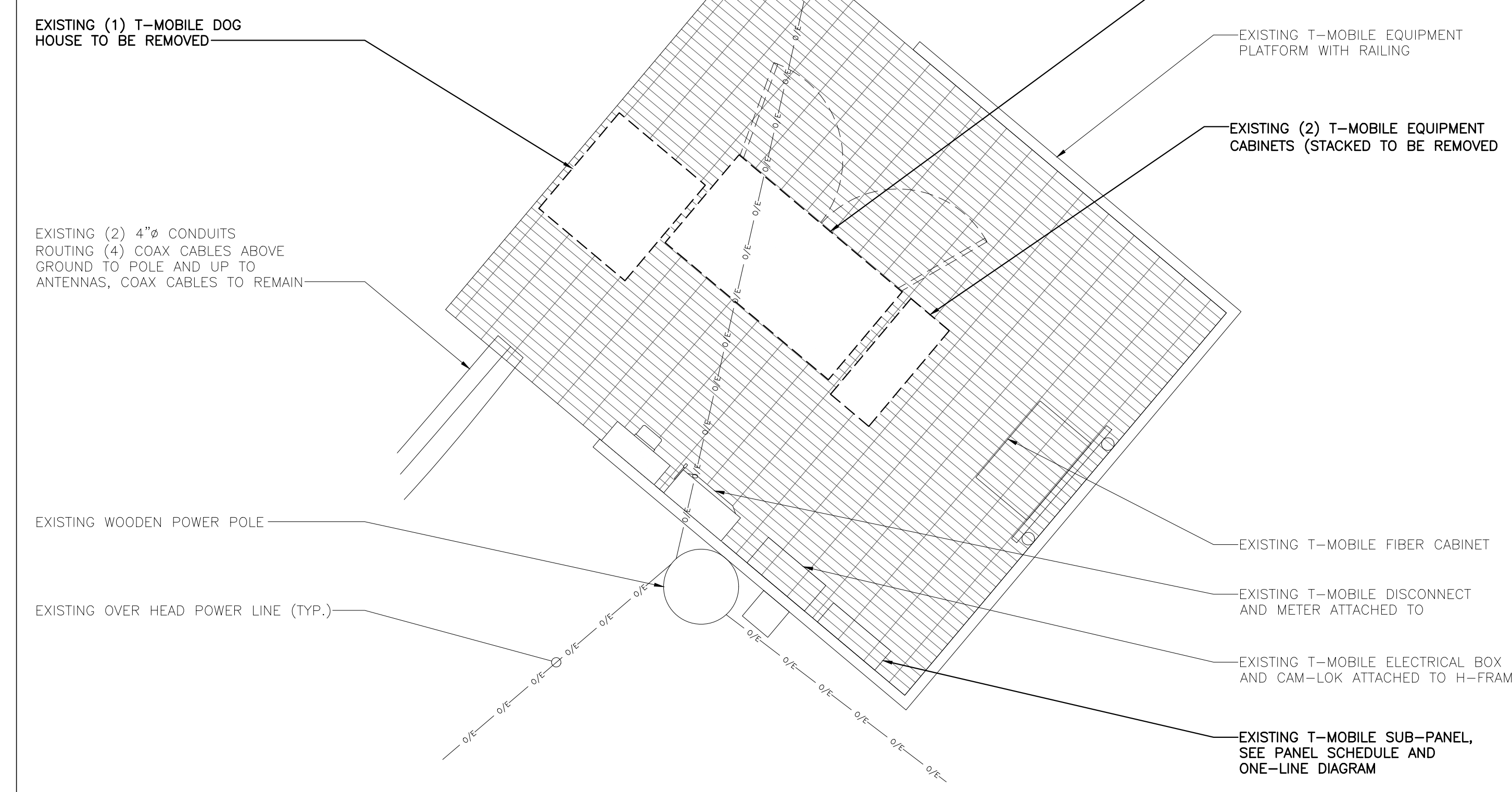
C-3



EXISTING ANTENNA PLAN

SCALE: 1" = 1'-0"

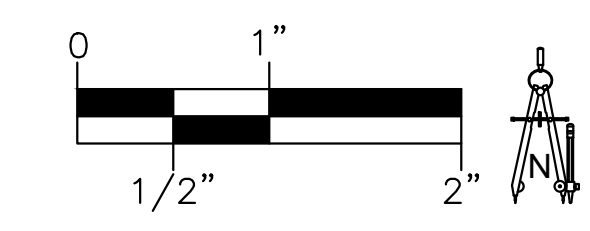
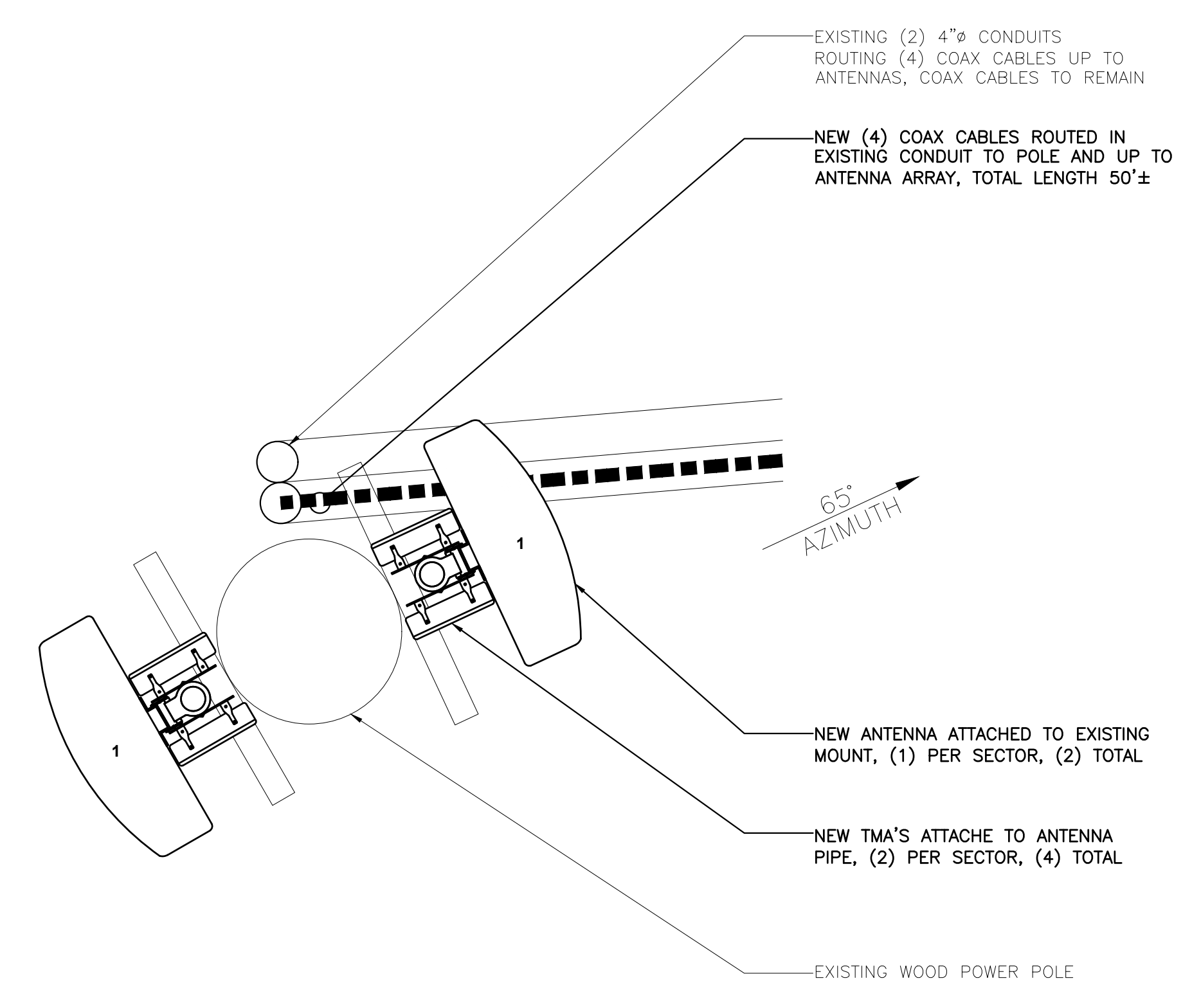
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EXISTING EQUIPMENT PLAN

SCALE: 1/2" = 1'-0"

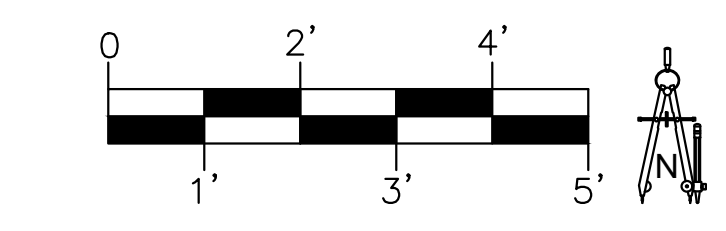
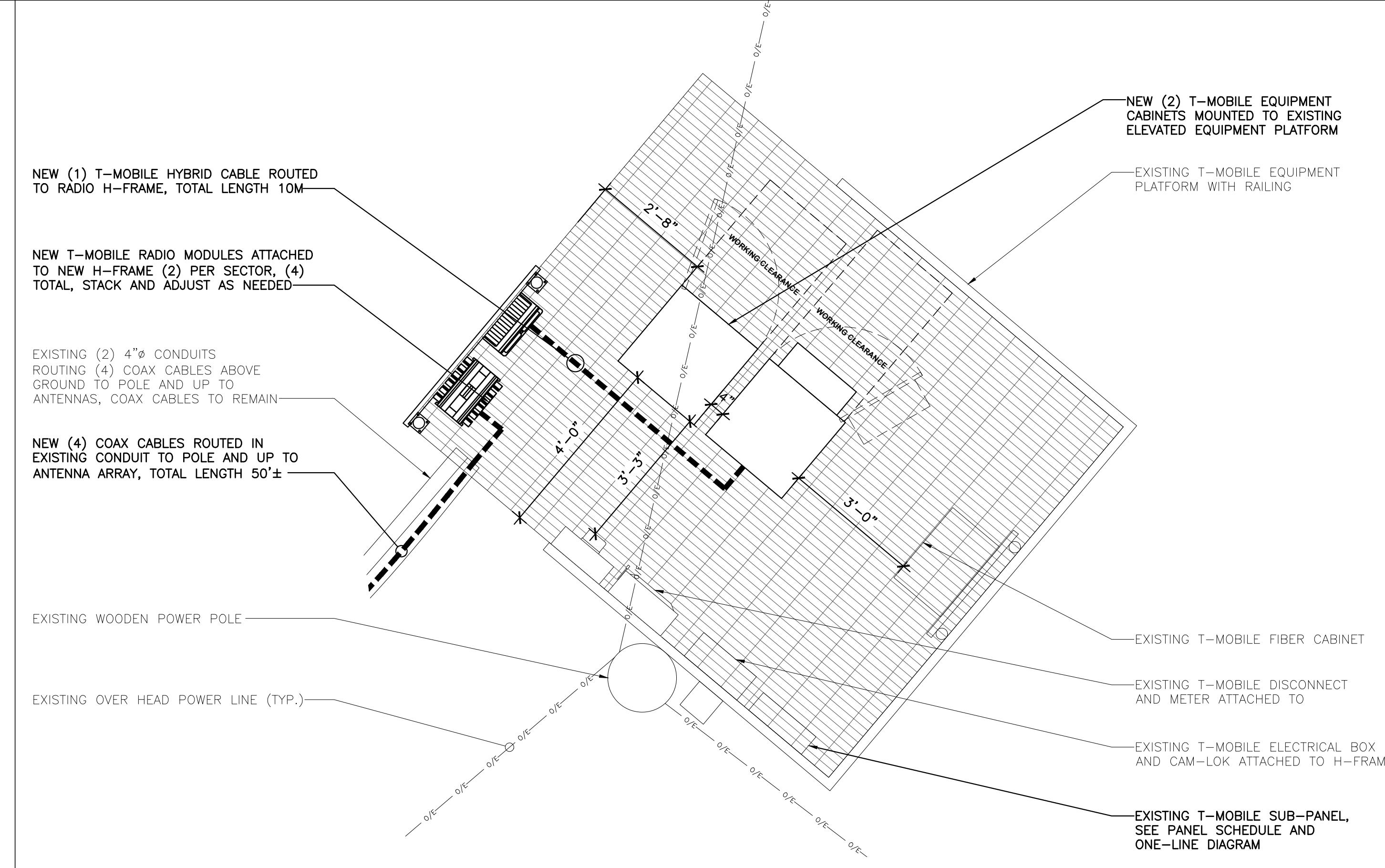
1



NEW ANTENNA PLAN

SCALE: 1" = 1'-0"

4



NEW EQUIPMENT PLAN

SCALE: 1/2" = 1'-0"

2

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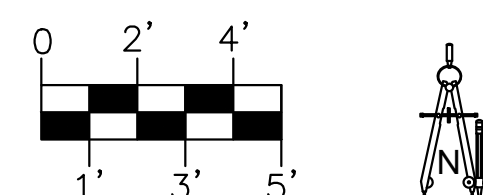
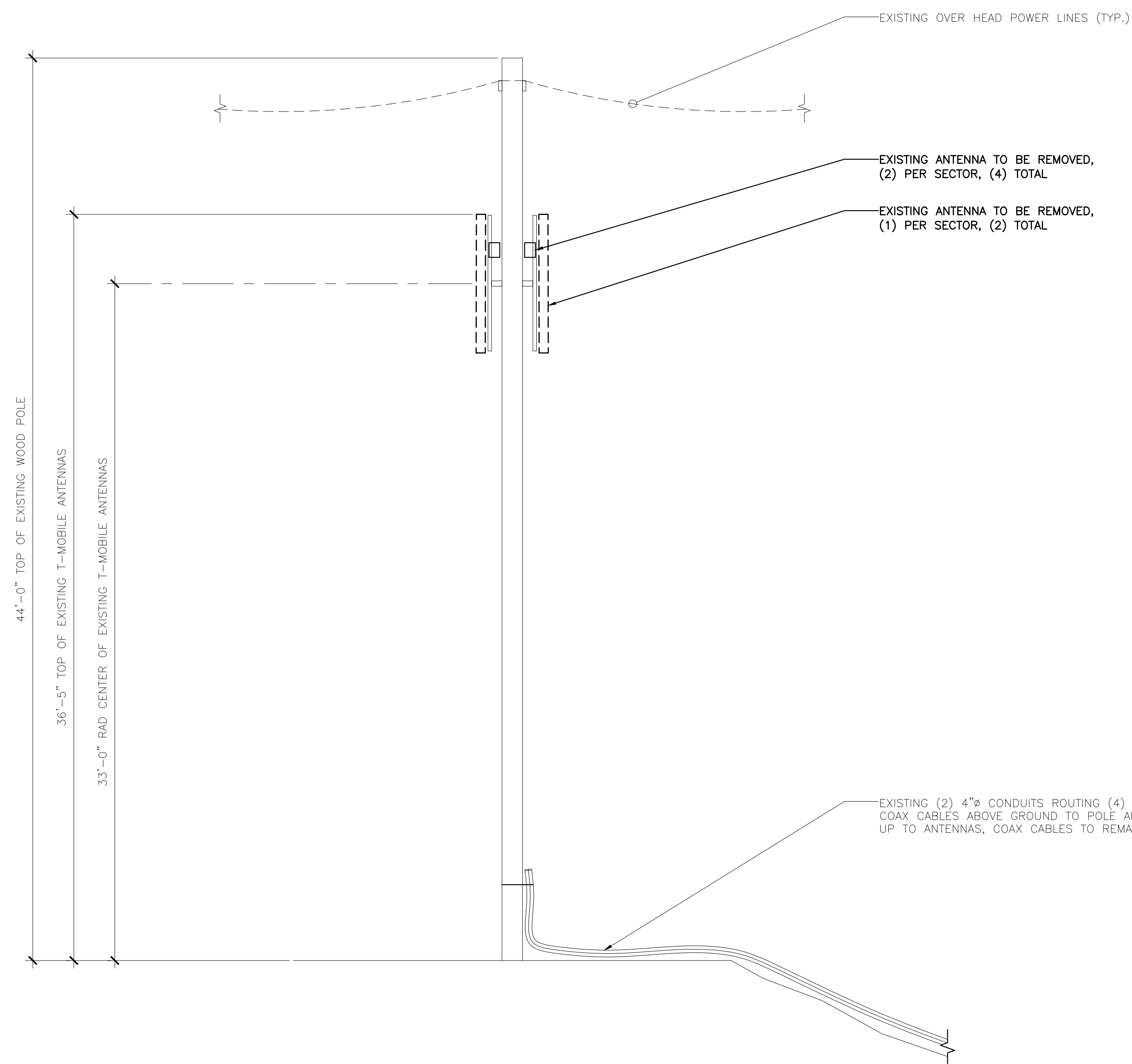
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EXISTING/NEW ELEVATIONS

JURISDICTIONAL APPROVAL

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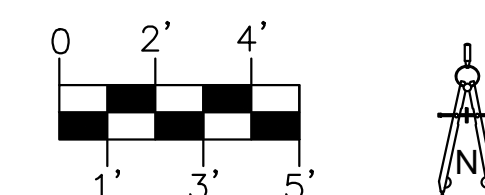
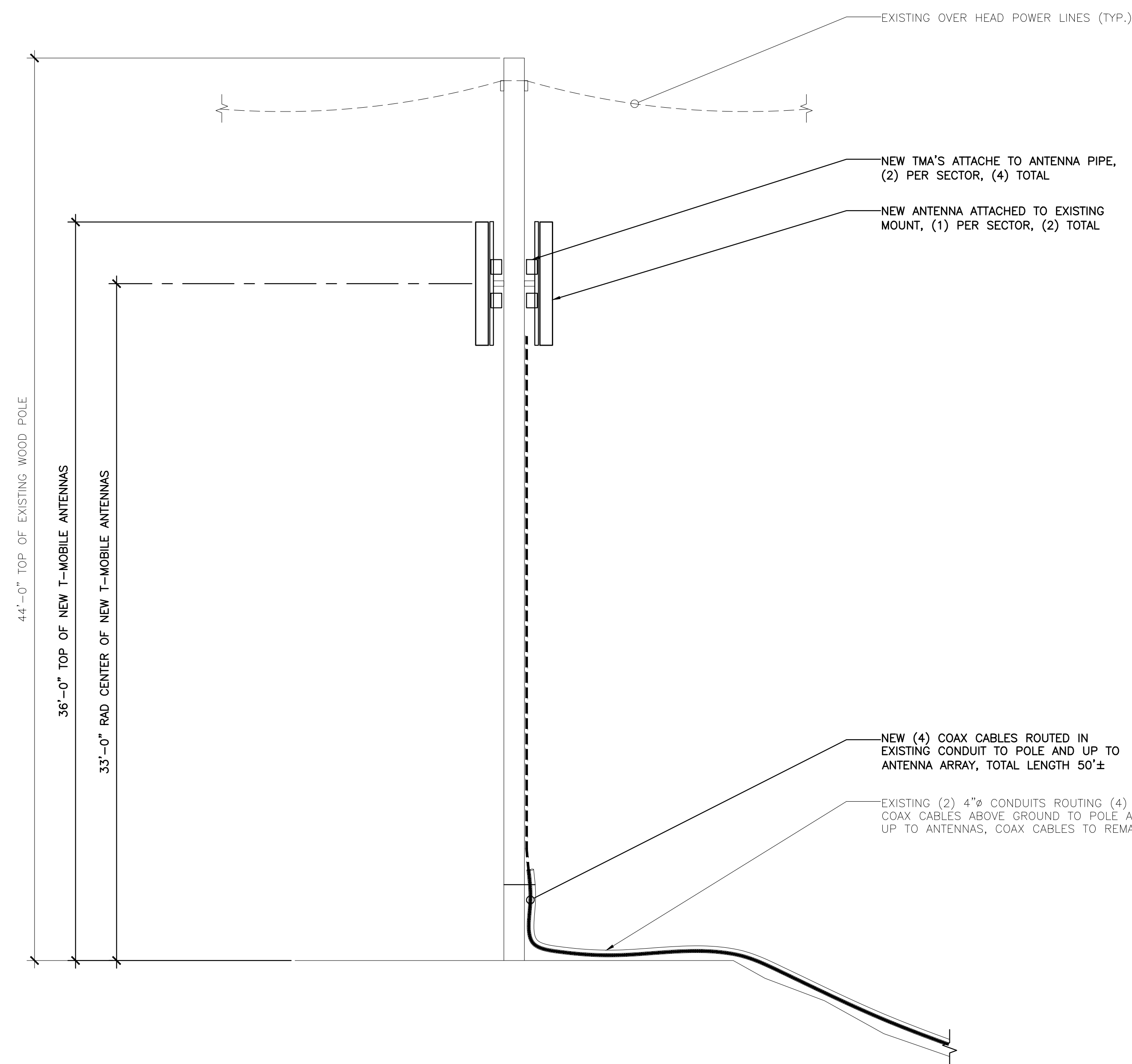
C-4



EXISTING SOUTH WEST ELEVATION

SCALE: 1/4" = 1'-0"

2



NEW SOUTH WEST ELEVATION

SCALE: 1/4" = 1'-0"

1

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Fiber/HCS Labeling New Sites

Initial installation on new build sites(Fiber strand Color)

- U1900 (Band2) **Red & Blue**
 - Data port 1 = **Red**
 - Data port 2 = **Blue**
- L2100 (Band 4 & 66) **GREEN & YELLOW**
 - Data Port 1 = **GREEN**
 - Data Port 2 = **YELLOW**
- L700 (Band12) **WHITE & BLACK**
 - Data 1 = **WHITE**
 - Data 2 = **BLACK**

If the site only has 600 use the 700 fibers for that, If using a new HCS for the addition of 600 use 700 fiber strand colors.

ALSO label the fiber in the cabinet for DU connections.

- Alpha/Beta/Gamma/Delta, B4-B66 data port 1 or 2
- Alpha/Beta/Gamma/Delta, B2 data port 1 or 2
- Alpha/Beta/Gamma/Delta, B12 data port 1 or 2
- Alpha/Beta/Gamma/Delta, B71 data port 1 or 2

When using multiple HCS trunk lines label them numerically with purple tape band(s).

- For example the 2nd HCS will be HCS 2 with 2 purple tape bands.

ANTENNA AND CABLE SCHEDULE											
SECTOR	ANT. POS. #	ANTENNA TYPE	RAD CENTER	AZIMUTH	MECHANICAL DOWN TILT	ELECTRICAL DOWN TILT	CABLE TYPE	# OF LINES	LENGTH	RADIO	
ALPHA	1	RFS-APXAALL18M-U-0J20 (OCTO)	33'	65°	0	4 & 2	7/8" COAX	EX-4 NEW-4	50'	4480 B71+B85 4460 B25+B66	TMAT19G21B68-21
BETA	1	RFS-APXAALL18M-U-0J20 (OCTO)	33'	240°	0	6 & 4	6X24 4AWG	1	10M	4480 B71+B85 4460 B25+B66	TMAT19G21B68-21

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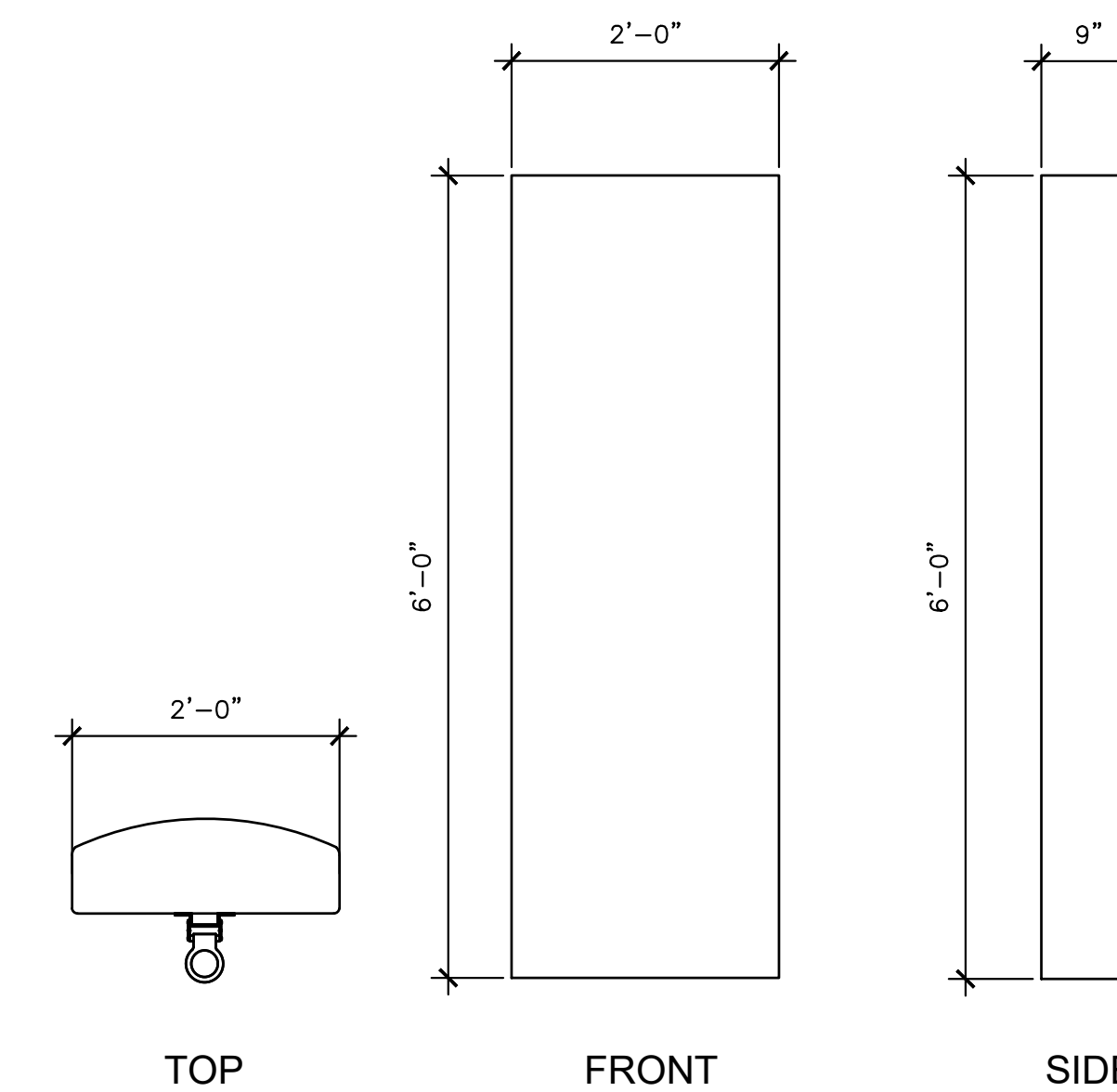
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ANTENNA SCHEDULE

SCALE: N.T.S. 1



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DETAILS

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C-5

NOT USED	SCALE: N.T.S.	5	NOT USED	SCALE: N.T.S.	4	NOT USED	SCALE: N.T.S.	3	NEW ANTENNA	SCALE: N.T.S.	2
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ELECTRICAL SPECIFICATIONS

- SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL PERFORM ALL VERIFICATION, OBSERVATION TESTS, AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
- HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
- THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (O.S.H.A.)
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORY AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA & NBFU.
- CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
- CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS
- COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.
- PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
- ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
- USE T-TAP CONNECTIONS ON ALL MULTI-CIRCUITS WITH COMMON NEUTRAL CONDUCTOR FOR LIGHTING FIXTURE.
- ALL CONDUCTORS SHALL BE COPPER.
- ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES AND DRAWINGS.
- PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
- LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT VIA X-RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
- PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH SECTION NO. 4305 AND NO. 4304 OF THE U.B.C.
- RECEPTACLES SHALL BE 20 AMPERE, 125 VOLT A.C., WHITE AS REQUIRED BY THE ARCHITECT OR APPROVED EQUAL.
- WALL SWITCHES SHALL BE SINGLE-POLE, HUBBELL #1201 OR EQUIVALENT, WHITE AS REQUIRED BY THE ARCHITECT.
- PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS, SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE RACO #800, 1/2" RAISED WORK COVERS.
- WIRE AND CABLE CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM, NO BX OR ROMEX CABLE IS PERMITTED UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.
- GROUNDING CONDUCTORS SHALL BE SOLID TINNED COPPER AND ANNEALED #2.
- GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8" ROUND AND 10' LONG, COPPERWELD OR APPROVED EQUAL.
- METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS. MANUFACTURED BY SQUARE D COMPANY OR APPROVED EQUAL.
- ALL MATERIALS SHALL BE U.L. LISTED.
- CONDUIT:
 - RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR RIGIDCONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
 - ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
 - FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.
 - ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 24" BELOW GRADE.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
- CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS TO BE PAID BY CONTRACTOR.

GENERAL ELECTRICAL NOTES

- CONDUIT LAYOUTS SHOWN ON THE PLANS ARE DIAGRAMMATIC, NOT INDICATING THE EXACT ROUTING REQUIRED. THE CONTRACTOR SHALL ROUTE CONDUITS AS REQUIRED BY THE CONDITIONS OF INSTALLATION.
- ALL EQUIPMENT PROVIDED BY THE ELECTRICAL CONTRACTOR SHALL BE LISTED AND LABELED BY A NATIONALLY-RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, FOR THE CONDITIONS OF INSTALLATION.
- DEVICE LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. EXACT DEVICE LOCATIONS SHALL BE AS INDICATED ON THE ARCHITECTURAL PLANS OR AS DIMENSIONED. IF NOT SHOWN ON THE ARCHITECTURAL PLANS OR DIMENSIONED ON THE ELECTRICAL PLANS, VERIFY EXACT LOCATION WITH THE ARCHITECT PRIOR TO ROUGH-IN.
- ALL WIRE COUNTS ARE TYPICALLY NOT SHOWN BETWEEN LIGHT FIXTURES OR RECEPTACLES. PROVIDE ALL REQUIRED EVEN WHERE NOT SHOWN.
- WHERE SIZE IS NOT SHOWN ON THE DRAWINGS, CIRCUITS SHALL CONSIST OF #12 PHASE AND GROUNDED (NEUTRAL CONDUCTORS) AND A #12 CU GROUND IN 3/4" CONDUIT. MC CABLE SHALL BE ACCEPTABLE IN WALLS. ALL BRANCH CIRCUIT HOME-RUNS SHALL BE IN CONDUIT.
- UNLESS SPECIFICALLY NOTED OTHERWISE, THE ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL UTILIZATION EQUIPMENT SHOWN ON THE DRAWINGS. VERIFY THE TYPE OF FINAL CONNECTION AND PROVIDE APPROPRIATE WIRING METHOD.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL, PLUMBING AND GENERAL CONTRACTORS, PRIOR TO ORDERING OR INSTALLATION OF ANY EQUIPMENT, MECHANICAL AND PLUMBING EQUIPMENT REQUIREMENTS ARE PROVIDED IN THE ELECTRICAL DESIGN. THE CONTRACTOR WILL NOT BE COMPENSATED FOR COSTS ASSOCIATED WITH CHANGING THE ELECTRICAL SYSTEMS TO MATCH UTILIZATION EQUIPMENT, EVEN IF THE ELECTRICAL WORK IS INSTALLED PER THE ELECTRICAL DRAWINGS.
- INSULATION & WIRE TYPES SHALL BE AS FOLLOWS: PANEL FEEDERS - XHHW COPPER, WIRING ABOVE GRADE - THIN COPPER, WIRING BELOW GRADE - THIN COPPER, UNLESS NOTED OTHERWISE.
- SOME CONDUCTOR SIZES ARE BASED ON THE USE OF 75 DEGREE C CONDUCTOR RATINGS. THE CONTRACTOR SHALL VERIFY, PRIOR TO INSTALLATION OF CONDUCTORS OR CONDUIT FEEDING ANY EQUIPMENT THAT ALL ELECTRICAL EQUIPMENT IS RATED FOR USE WITH 75 DEGREE C WIRING. IF ANY EQUIPMENT IS RATED FOR USE WITH LESS THAN 75 DEGREE C CONDUCTORS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR EVALUATION/CORRECTION.
- UNLESS SPECIFICALLY NOTED OTHERWISE, SYSTEMS PROVIDED OR INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE COMPLETE AND FULLY-FUNCTIONING AFTER INSTALLATION. COMPONENTS NOT SHOWN, BUT REQUIRED FOR THE PROPER OPERATION OF THE EQUIPMENT OR SYSTEM, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE PROJECT.
- THE CONTRACTOR SHALL PERFORM ALL PERFORMANCE TESTS REQUIRED OR RECOMMENDED BY EQUIPMENT MANUFACTURERS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER SEVEN (7) DAYS PRIOR TO TESTING AND SHALL ALLOW OBSERVATION OF THE TESTING BY THE ENGINEER.
- ALL RECEPTACLES INSTALLED WITHIN 6 FEET OF A SINK SHALL BE GFI PROTECTED.
- UNLESS OTHERWISE NOTED, ALL EQUIPMENT DISCONNECTS SHALL BE NEMA TYPE 3R, FUSIBLE, 30A, 3 POLE, FUSE PER EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- ALL PENETRATIONS IN WALLS SHALL BE SEALED WITH FLEXIBLE ACOUSTIC CAULKING. CAULKING SHALL BE APPLIED AROUND OUTLET BOXES TO PROVIDE A COMPLETE SEAL BETWEEN THE BOX AND THE WALL.
- PRIOR TO TRENCHING IN ANY AREA, THE CONTRACTOR SHALL CONTACT ELECTRICAL, COMMUNICATIONS/DATA, CABLE TV, GAS, AND WATER UTILITY PROVIDERS (BLUE STAKE) AND HAVE ALL UTILITIES IN THE AREA IDENTIFIED. IN ADDITION, THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A SUBCONTRACTOR SPECIALIZING IN THE LOCATION OF UNDERGROUND STRUCTURES TO IDENTIFY ANY OBSTACLES IN THE PATH OF TRENCHING (PRIOR TO COMMENCING WORK). DAMAGE TO ANY UNDERGROUND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL AND STATE CODES INCLUDING THE NEC 17. OVER CURRENT DEVICES SHALL BE LOCATED WHERE THEY WILL NOT BE EXPOSED TO PHYSICAL DAMAGE.
- HOMERUNS SHALL NOT BE GANGED TOGETHER UNLESS SHOWN GANGED.
- CONTRACTOR SHALL CONTACT ENGINEER IN WRITING (RFI) PRIOR TO PROCEEDING WITH ANY WORK NOT CLEARLY SHOWN ON THESE CONTRACT DOCUMENTS. ENGINEER WILL NOT ACCEPT ANY RESPONSIBILITY FOR WORK HE HAS NOT EXPLICITLY AUTHORIZED.
- PROVIDE IDENTIFICATION AT THE DISTRIBUTION PANEL FOR BRANCH CIRCUITS THAT FEED EMERGENCY LIGHTING UNIT EQUIPMENT.
- ELECTRICAL EQUIPMENT THAT IS LIKELY TO REQUIRE MAINTENANCE WHILE ENERGIZED SHALL BE PROPERLY MARKED TO WARN PERSONNEL OF ARC FLASH HAZARD.
- PROVIDE A #18 OR LARGER COPPER TRACER WIRE SECURELY ATTACHED TO THE NON-METALLIC CABLE, PIPE OR CONDUIT AT 9"-0" ON CENTER. IT SHALL HAVE A 12" OF TRACER WIRE ACCESSIBLE ABOVE GRADE AT ANY ABOVE GRADE TERMINATION PER ARIZONA STATE STATUTE.
- UTILITY COORDINATION
 - THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF DRAWINGS TO ELECTRICAL AND TELCO UTILITIES AS REQUIRED FOR DESIGN.
 - THE CONTRACTOR SHALL NOT TRENCH OR INSTALL CONDUITS (ON THE UTILITY OR LOAD SIDE) TO THE SES OR TO THE UTILITY TRANSFORMER (PRIMARY OR SECONDARY), OR TO THE UTILITY CONNECTION POINT BEFORE RECEIVING A FINAL DESIGN FROM THE UTILITY.
 - THE CONTRACTOR SHALL NOT INSTALL EQUIPMENT PADS FOR THE SES OR ANY UTILITY EQUIPMENT (TRANSFORMERS, SWITCHING CABINETS, ETC) PRIOR TO RECEIPT OF FINAL PLANS FROM THE UTILITY.
 - THE CONTRACTOR SHALL NOT BE COMPENSATED FOR ADDITIONAL WORK REQUIRED TO MEET THE REQUIREMENTS OF THE UTILITY WHICH IS THE RESULT OF PROCEEDING PRIOR TO RECEIPT OF A FINAL UTILITY DESIGN.
- SERIES RATING NOTES:
 - WHERE A CIRCUIT BREAKER IS USED ON A CIRCUIT HAVING AN AVAILABLE FAULT CURRENT HIGHER THAN THE MARKED INTERRUPTING RATING BY BEING CONNECTED ON THE LOAD SIDE OF AN ACCEPTABLE OVERCURRENT PROTECTIVE DEVICE HAVING A HIGHER RATING, THE CIRCUIT BREAKER SHALL MEET THE REQUIREMENTS SPECIFIED IN (1) AND (2).
 - TESTED COMBINATIONS. THE COMBINATION OF LINE-SIDE OVERCURRENT DEVICE AND LOAD-SIDE CIRCUIT BREAKER(S) IS TESTED AND MARKED ON THE END USE EQUIPMENT, SUCH AS SWITCHBOARDS AND PANELBOARDS.
 - MOTOR CONTRIBUTION. SERIES RATINGS SHALL NOT BE USED WHERE
 - MOTORS ARE CONNECTED ON THE LOAD SIDE OF THE HIGHER-RATED OVERCURRENT DEVICE AND ON THE LINE SIDE OF THE LOWER-RATED OVERCURRENT DEVICE, AND
 - THE SUM OF THE MOTOR FULL-LOAD CURRENTS EXCEEDS 1 PERCENT OF THE INTERRUPTING RATING OF THE LOWER-RATED CIRCUIT BREAKER.
 - WHERE CIRCUIT BREAKERS OR FUSES ARE APPLIED IN COMPLIANCE WITH THE SERIES COMBINATION RATINGS MARKED ON THE EQUIPMENT BY THE MANUFACTURER, THE EQUIPMENT ENCLOSURE(S) SHALL BE LEGIBLY MARKED IN THE FIELD TO INDICATE THE EQUIPMENT HAS BEEN APPLIED WITH A SERIES COMBINATION RATING. THE MARKING SHALL BE READILY VISIBLE AND STATE THE FOLLOWING:

CAUTION - SERIES COMBINATION SYSTEM RATED _____ AMPERES.

IDENTIFIED REPLACEMENT COMPONENTS REQUIRED
 - TESTED COMBINATIONS. THE COMBINATION OF THE LINE-SIDE OVERCURRENT DEVICE AND LOAD SIDE CIRCUIT BREAKER(S) IS TESTED AND MARKED ON THE END USE EQUIPMENT, SUCH AS SWITCHBOARDS AND PANELBOARDS.

SYMBOL LIST

(NOT ALL MAY BE USED)

ELECTRICAL SYMBOLS

	FLUORESCENT STRIP FIXTURE, LENGTH PER PLAN. SURFACE WALL-MOUNTED LIGHT FIXTURE.
	SOLID "JBOX" ON ANY FIXTURE INDICATES A FIXTURE WITH AN INTEGRAL EMERGENCY POWER SUPPLY, PER THE SPECIFICATIONS.
	POLE-MOUNTED LIGHT FIXTURE.
	SINGLE POLE TOGGLE SWITCH
	PHOTOCELL, MOUNTED ON ROOF UNLESS NOTED OTHERWISE.
	DUPLEX CONVENIENCE RECEPTACLE
	"CROSS SLASH" ON ANY RECEPTACLE INDICATES INTEGRAL GROUND FAULT PROTECTION.
	DOUBLE DUPLEX (FOURPLEX) CONVENIENCE RECEPTACLE
	JUNCTION BOX. "C" INDICATES CEILING MOUNTED, "F" INDICATES FLOOR MOUNTED (SUBSCRIPTS ARE TYPICAL FOR ALL DEVICES)
	VOICE OUTLET
	DATA OUTLET
	COMBINATION TELEPHONE AND DATA OUTLET IN THE SAME BOX
	HORSEPOWER RATED MANUAL MOTOR SWITCH
	FUSIBLE DISCONNECT SWITCH FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE. SIZE AND FUSES AS PER RECOMMENDATIONS OF EQUIPMENT'S MANUFACTURER OR AS NOTED. 30A, 3P, 250V, NEMA 3R UNLESS NOTED OTHERWISE. (N. INDICATES NON-FUSED).
	ELECTRICAL MOTOR. SEE DRAWINGS FOR SIZE.
	DISTRIBUTION PANELBOARD, MOTOR CONTROL CENTER OR SERVICE ENTRANCE SECTION. SEE DRAWINGS FOR EXACT TYPE.
	DISTRIBUTION TRANSFORMER
	SURFACE MOUNTED PANEL BOARD.
	FLUSH MOUNTED PANEL BOARD.
	TELEPHONE MOUNTING BOARD.
	TEST WELL/GROUND ROD
	GROUND ROD - 5/8" x 10' COPPER CLAD
	CADWELD CONNECTION
	MECHANICAL CONNECTION
	GROUNDING WIRE
	GROUND BAR
	SURGE SUPPRESSOR GROUND BAR
	METER AND MAIN BREAKER
	MANUAL XFR SWITCH AND GEN. RECEPT.
	GPS ANTENNA
	ELECTRICAL POWER
	T-1 LINE
WIRE AND CONDUIT	
	FLEXIBLE CONDUIT
	CONDUIT CONCEALED IN WALLS OR ABOVE CEILING W/ 2 #12, #12 GND, 3/4" C., UNLESS NOTED OTHERWISE.
	CONDUIT ROUTED UNDER FLOOR OR BELOW GRADE W/ 2 #12, #12 GND, 3/4" C., UNLESS NOTED OTHERWISE.
	CONDUIT TURNING UP.
	CONDUIT TURNING DOWN.
1-LINE DIAGRAM	
	CIRCUIT BREAKER, FIXED MOUNTED.
	CIRCUIT BREAKER, DRAWOUT MOUNTING.
	FUSIBLE SWITCH. SIZE AS INDICATED ON DRAWINGS.
	TRANSFORMER. SEE ONE-LINE FOR TYPE AND SPECIFICATION.
	CURRENT TRANSFORMER
	METERING DEVICE
	PANELBOARD, MAIN LUG ONLY
	PANELBOARD, MAIN CIRCUIT BREAKER
	TRANSFER SWITCH - MANUAL OR AUTOMATIC
	INDICATES A FEED-THROUGH LUG CONNECTION
	UNINTERRUPTIBLE POWER SUPPLY
	GENERATOR WITH INTEGRAL PROTECTION
	WEATHERHEAD

SHEET INDEX

E-1	SPECS/GENERAL NOTES/LEGENDS/SHEET INDEX
E-2	ENLARGED POWER PLAN
E-3	ONE-LINE AND EXISTING/NEW PANEL SCHEDULE
E-4	EQUIPMENT/ANTENNA GROUNDING PLAN AND NOTES

ABBREVIATIONS

C.O.	= CONDUIT ONLY
PVC.	= SCHEDULE 40 PLASTIC CONDUIT
GRC.	= GALVANIZED RIGID CONDUIT
MTD.	= MOUNTED
W.P.	= WEATHERPROOF
U.O.N.	= UNLESS OTHERWISE NOTED
G. OR GRD.	= GROUND
N. OR NEUT.	= NEUTRAL
A. OR AMP.	= AMPERE
KW.	= KILOWATTS
W.	= WATTS
~	= PHASE
DIA	= DIAMETER
H.P. OR HP	= HORSEPOWER
XFMR	= TRANSFORMER
C.B.	= CIRCUIT BREAKER
CKT.	= CIRCUIT
SW.	= SWITCH
MTS	= MANUAL TRANSFORMER SWITCH
F.A.	= FIRE ALARM
RECPT.	= RECEPTACLE
E.C.	= ELECTRIC CONTRACTOR
G.C.	= GENERAL CONTRACTOR
1P, 2P, & 3P	= SINGLE POLE, TWO POLE, & THREE POLE
EGB	= EQUIPMENT GROUND BUS
MGB	= MAIN GROUND BUS
AFC	= AVAILABLE FAULT CURRENT
AWG	= AMERICAN WIRE GAUGE
BCW	= BARE TINNED COPPER WIRE
GPS	= GLOBAL POSITIONING SYSTEM
PPC	= POWER PROTECTION CABINET
TYP.	= TYPICAL
RGS	= RIGID GALVANIZED STEEL
EMT	= ELECTRICAL METALLIC TUBING
DWG	= DRAWING
BTS	= BASE TRANSMISSION SYSTEM
GEN	= GENERATOR
BSCW	= BARE STRANDED COPPER WIRE
ISCW	= INSULATED STRANDED COPPER WIRE

CLIENT

T-Mobile

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CONSULTING**

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LLC**

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SEAL

**PRELIMINARY NOT
FOR CONSTRUCTION
OR RECORDATION**

NO.	DATE	DESCRIPTION	BY
1	09/23/24	REVIEW	DRK

PROJECT INFORMATION

JOB: 13-379-04

**SL04119C
UP_L_OGADENCYN
_AMPEN**

244 OGDEN CANYON
OGDEN, UTAH 84401

SHEET TITLE

**SPECS / GENERAL
NOTES / LEGENDS /
SHEET INDEX**

JURISDICTIONAL APPROVAL

SHEET NUMBER

E-1

NEW T-MOBILE RADIO MODULES ATTACHED TO NEW H-FRAME (2) PER SECTOR, (4) TOTAL, STACK AND ADJUST AS NEEDED

EXISTING (2) 4"Ø CONDUITS ROUTING (4) COAX CABLES ABOVE GROUND TO POLE AND UP TO ANTENNAS, COAX CABLES TO REMAIN

NEW (4) COAX CABLES ROUTED IN EXISTING CONDUIT TO POLE AND UP TO ANTENNA ARRAY, TOTAL LENGTH 50'±

EXISTING WOODEN POWER POLE

EXISTING OVER HEAD POWER LINE (TYP.)

NEW (2) T-MOBILE EQUIPMENT CABINETS MOUNTED TO EXISTING ELEVATED EQUIPMENT PLATFORM

EXISTING T-MOBILE EQUIPMENT PLATFORM WITH RAILING

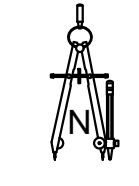
NEW T-MOBILE POWER CONDUIT ROUTED TO NEW EQUIPMENT RACK

EXISTING T-MOBILE FIBER CABINET

EXISTING T-MOBILE DISCONNECT AND METER ATTACHED TO

EXISTING T-MOBILE ELECTRICAL BOX AND CAM-LOK ATTACHED TO H-FRAME

EXISTING T-MOBILE SUB-PANEL, SEE PANEL SCHEDULE AND ONE-LINE DIAGRAM



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SEAL



NO.	DATE	DESCRIPTION	BY
1	09/23/24	REVIEW	DRK

PROJECT INFORMATION
JOB: 13-379-04

SL04119C
UP_L_OGADENCYN
_AMPEN

244 OGDEN CANYON
OGDEN, UTAH 84401

SHEET TITLE

ENLARGED POWER PLAN

JURISDICTIONAL APPROVAL

SHEET NUMBER

E-2

NOT USED

SCALE: N.T.S

2

ENLARGED POWER PLAN

1

NOT USED

SCALE: N.T.S

3

NOT USED

SCALE: N.T.S

1

RFDS VER: 5 DATED 9/29/2022 AT 7:46:01 AM

EXISTING 200 AMP PANEL												ELECTRICAL PANEL SCHEDULE																							
LOCATION: PPC												65/10KAIC SERIES RATED												VOLTAGE: 208 / 120 V 1Ø,3W											
MOUNTING: SURFACE												NEMA RATING:3R												MAINS: 200 A MCB											
																								BUS: 200 A CU											
LOAD DESCRIPTION	EMT COND	CU GRND	PHASE NEUT	CKT BRKR	CIR NO.	LOAD AMPS PHASE A	PHASE B	CIR NO.	CKT BRKR	PHASE NEUT	CU GRND	EMT COND	LOAD DESCRIPTION	EMT COND	CU GRND	PHASE NEUT	CKT BRKR	CIR NO.	LOAD AMPS PHASE A	PHASE B	CIR NO.	CKT BRKR	PHASE NEUT	CU GRND	EMT COND	LOAD DESCRIPTION									
MISC	3/4"	10	10	30	1	0.0		60	6	10	3/4"	MECH						1	0.0							MECH									
TRANS END					2	1.5		2					RBS 6102					3	1.5							RBS 6102									
MISC Cont.			10		3	0.0		2					MECH Cont.					4	0.0							MECH Cont.									
MISC DOG HOUSE	3/4"	12	12	20	5	0.0		60	6	10	3/4"	MECH						5	0.0							MECH									
BUSSED SPACE					6	12.5		6					B.T.S. (OFF)					6	12.5							B.T.S. (OFF)									
BUSSED SPACE					7	0.0		2					MECH					7	0.0							MECH									
BUSSED SPACE					8	4.2		8					B.T.S. (OFF)					8	4.2							B.T.S. (OFF)									
BUSSED SPACE					9	0.0		10					MISC					9	0.0							MISC									
BUSSED SPACE					10	105.0		10					RBS 6201					10	105.0							RBS 6201									
BUSSED SPACE					11	0.0		12					MISC Cont.					11	0.0							MISC Cont.									
BUSSED SPACE					12	0.0		14					MISC Cont.					12	0.0							MISC Cont.									
BUSSED SPACE					13	0.0		14					MISC Cont.					13	0.0							MISC Cont.									
BUSSED SPACE					14	0.0		14					MISC Cont.					14	0.0							MISC Cont.									
BUSSED SPACE					15	0.0		16		2			MISC Cont.					15	0.0							MISC Cont.									
BUSSED SPACE					16	0.0		18					BUSSED SPACE					16	0.0							BUSSED SPACE									
BUSSED SPACE					17	0.0		18					BUSSED SPACE					17	0.0							BUSSED SPACE									
BUSSED SPACE					18	0.0		20					BUSSED SPACE					18	0.0							BUSSED SPACE									
BUSSED SPACE					19	0.0		20					BUSSED SPACE					19	0.0							BUSSED SPACE									
					20	0.0		20					BUSSED SPACE					20	0.0							BUSSED SPACE									
						119.0	110.7	CONTRACTOR TO INSTALL APPROVED HANDLE TIE ON ALL SHARED NEUTRAL CIRCUITS.																											
1 PHASE DEMAND (VA)						SYMBOL LIST																													
LIGHTING						0.0																													
25% OF LIGHTING						0.0																													
RECEPTACLES						360.0																													
MECHANICAL						0.0																													
25% LARGEST MOTOR						0.0																													
MISCELLANEOUS						23,844.0																													
						0.0																													
						0.0																													
						0.0																													
						0.0																													
						0.0																													
						0.0																													
						24,204.0																													
24.2 KVA @ 208 V 1Ø																																			
116.4 A @ 208 V 1Ø																																			

CODE LOAD SUMMARY
PANEL 'PPC' @ 208V = 116.4 A

NEW 200 AMP PANEL												ELECTRICAL PANEL SCHEDULE																							
LOCATION: PPC												65/10KAIC SERIES RATED												VOLTAGE: 208 / 120 V 1Ø,3W											
MOUNTING: SURFACE												NEMA RATING:3R												MAINS: 200 A MCB											
																								BUS: 200 A CU											
LOAD DESCRIPTION	EMT COND	CU GRND	PHASE NEUT	CKT BRKR	CIR NO.	LOAD AMPS PHASE A	PHASE B	CIR NO.	CKT BRKR	PHASE NEUT	CU GRND	EMT COND	LOAD DESCRIPTION	EMT COND	CU GRND	PHASE NEUT	CKT BRKR	CIR NO.	LOAD AMPS PHASE A	PHASE B	CIR NO.	CKT BRKR	PHASE NEUT	CU GRND	EMT COND	LOAD DESCRIPTION									
MISC	3/4"	10	10	30	1	0.0		60	6	10	3/4"	MECH						1	0.0							MECH									
TRANS END					2	1.5		2					RBS 6102					3	1.5							RBS 6102									
MISC Cont.					3	0.0		2					MECH Cont.					4	0.0							MECH Cont.									
MISC 6160 WITH 6 RECTIFIERS	3/4"	8	4	80	5	0.0		60	6	10	3/4"	MECH						5	0.0							MECH									
MISC Cont.					6	12.5		6					B.T.S. (OFF)					6	12.5							B.T.S. (OFF)									
BUSSED SPACE					7	0.0		2					MECH					7	0.0							MECH									
BUSSED SPACE					8	4.2		8					B.T.S. (OFF)					8	4.2							B.T.S. (OFF)									
BUSSED SPACE					9	0.0		10					MISC					9	0.0							MISC									
BUSSED SPACE					10	105.0		10					RBS 6201					10	105.0							RBS 6201									
BUSSED SPACE					11	0.0		12					MISC Cont.					11	0.0							MISC Cont.									
BUSSED SPACE					12	0.0		14					MISC Cont.					12	0.0							MISC Cont.									
BUSSED SPACE					13	0.0		14					MISC Cont.					13	0.0							MISC Cont.									
BUSSED SPACE					14	0.0		14					MISC Cont.					14	0.0							MISC Cont.									
BUSSED SPACE					15	0.0		16		2			MISC Cont.					15	0.0							MISC Cont.									
BUSSED SPACE					16	0.0		18					BUSSED SPACE					16	0.0							BUSSED SPACE									
BUSSED SPACE					17	0.0		18					BUSSED SPACE					17	0.0							BUSSED SPACE									
BUSSED SPACE					18	0.0		20					BUSSED SPACE					18	0.0							BUSSED SPACE									
BUSSED SPACE					19	0.0		20					BUSSED SPACE					19	0.0							BUSSED SPACE									
					20	0.0		20					BUSSED SPACE					20	0.0							BUSSED SPACE									
						119.0	110.7	CONTRACTOR TO INSTALL APPROVED HANDLE TIE ON ALL SHARED NEUTRAL CIRCUITS.																											
1 PHASE DEMAND (VA)						SYMBOL LIST																													
LIGHTING						0.0																													
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MISCELLANEOUS						23,844.0																													
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						0.0																													
						0.0																													
						0.0																													
						0.0																													
						24,204.0																													
24.2 KVA @ 208 V 1Ø																																			
116.4 A @ 208 V 1Ø																																			

CODE LOAD SUMMARY
PANEL 'PPC' @ 208V = 116.4 A

FAULT CALCULATIONS

FAULT AVAILABLE AT THE SERVICE: 13,021 AMPS RMS SYMM
SERVICE VOLTAGE: 120/208V, 1PH

EXISTING 200A ATS:
DISTANCE: 4 Feet
CONDUIT TYPE: Conductive
CONDUCTOR: #3/0
Fault Available L-L: 12,532A

EXISTING 200A Panel:
DISTANCE: 4 Feet
CONDUIT TYPE: Conductive
CONDUCTOR: #3/0
Fault Available L-L: 12,079A

NOTE:
#6 COPPER WIRE AND GREATER SHALL BE (COPPER) THWN WIRE OR (COPPER) XHHW.

NOTE:
PRIOR TO RUNNING CONDUIT ROUTE -- CONTRACTOR SHALL CONTACT THE T-MOBILE PROJECT MANAGER AND VERIFY THE EQUIPMENT CABINET LAYOUT CONFIGURATION AND ROUTE CONDUITS ACCORDINGLY.

NOTE:
PRE-CONSTRUCTION MEETING AND ELECTRICAL EASEMENT REQUIRED.

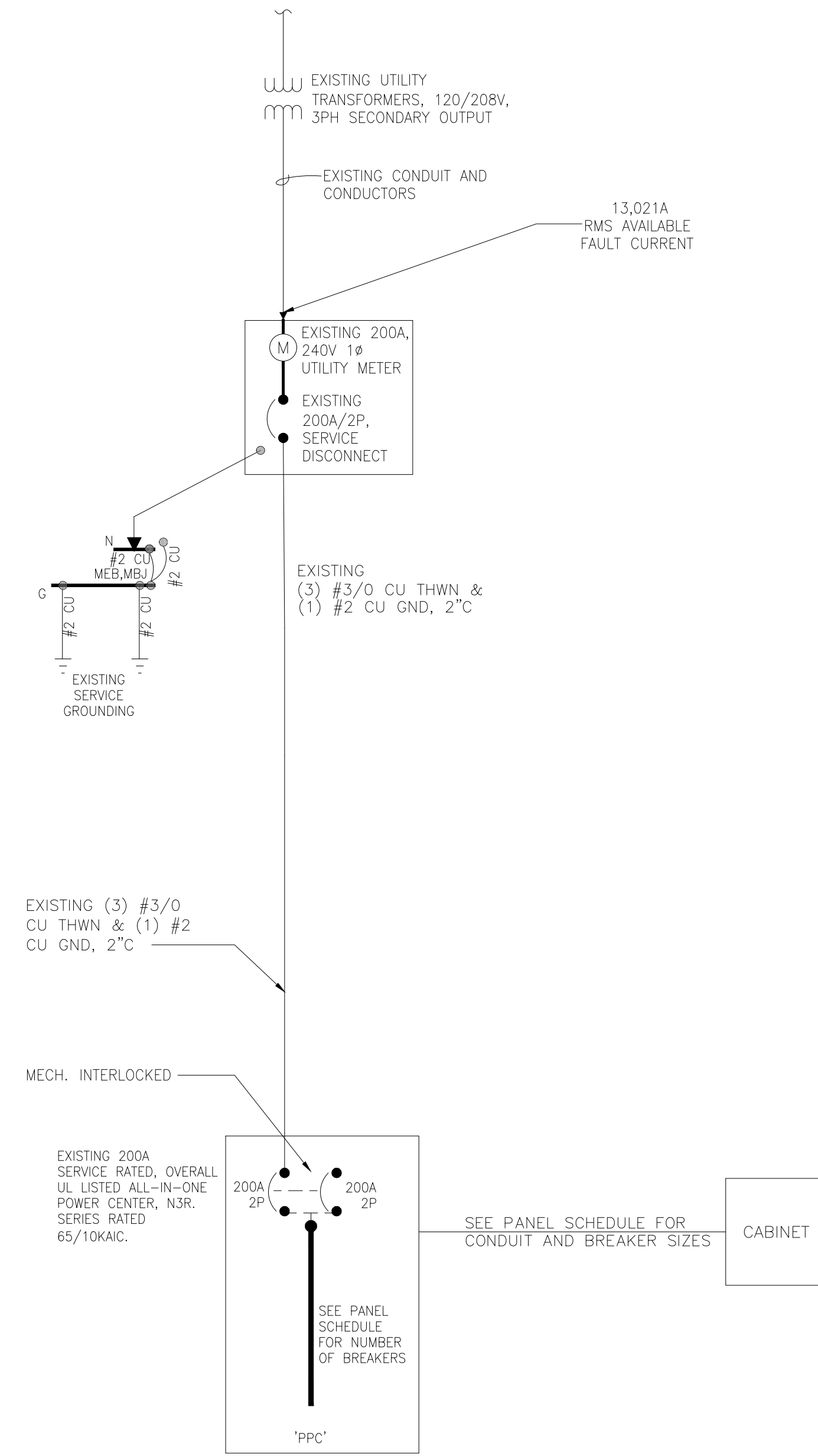
CALL 4-7 WORKING DAYS BEFORE YOU DIG
263-1100
INSIDE MARICOPA COUNTY
1-800-STAKE-IT
OUTSIDE MARICOPA COUNTY

CONTRACTOR SHALL TAG EACH CIRCUIT CONDUCTOR AT EACH J-BOX, OUTLET, SWITCH, ETC. WITH THE CIRCUITS IDENTIFICATION.

Power Company: GARKANE ENERGY COOP
Representative: _____
Telephone #: _____

Telephone Company: _____
Representative: _____
Telephone #: _____

Submit drawings to Utility Company representative as required in the General Notes included in the Electrical Drawings.



ONE-LINE DIAGRAM
N.T.S.

CLIENT



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DRAPER, UTAH 84020

CONSULTANT



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SEAL



NO.	DATE	DESCRIPTION	BY
1	09/23/24	REVIEW	DRK

PROJECT INFORMATION

JOB: 13-379-04

SL04119C
UP_L_OGADENCYN
_AMPEN

244 OGDEN CANYON
OGDEN, UTAH 84401

SHEET TITLE

ONE-LINE AND
EXISTING/NEW PANEL
SCHEDULE

JURISDICTIONAL APPROVAL

SHEET NUMBER

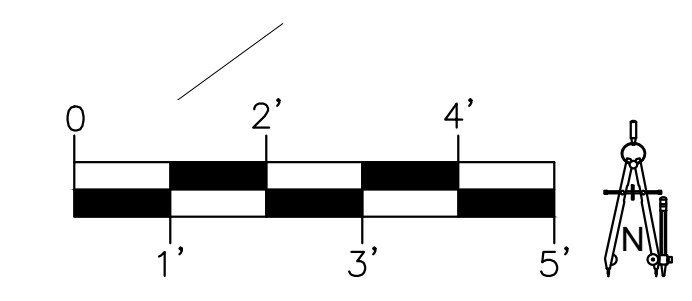
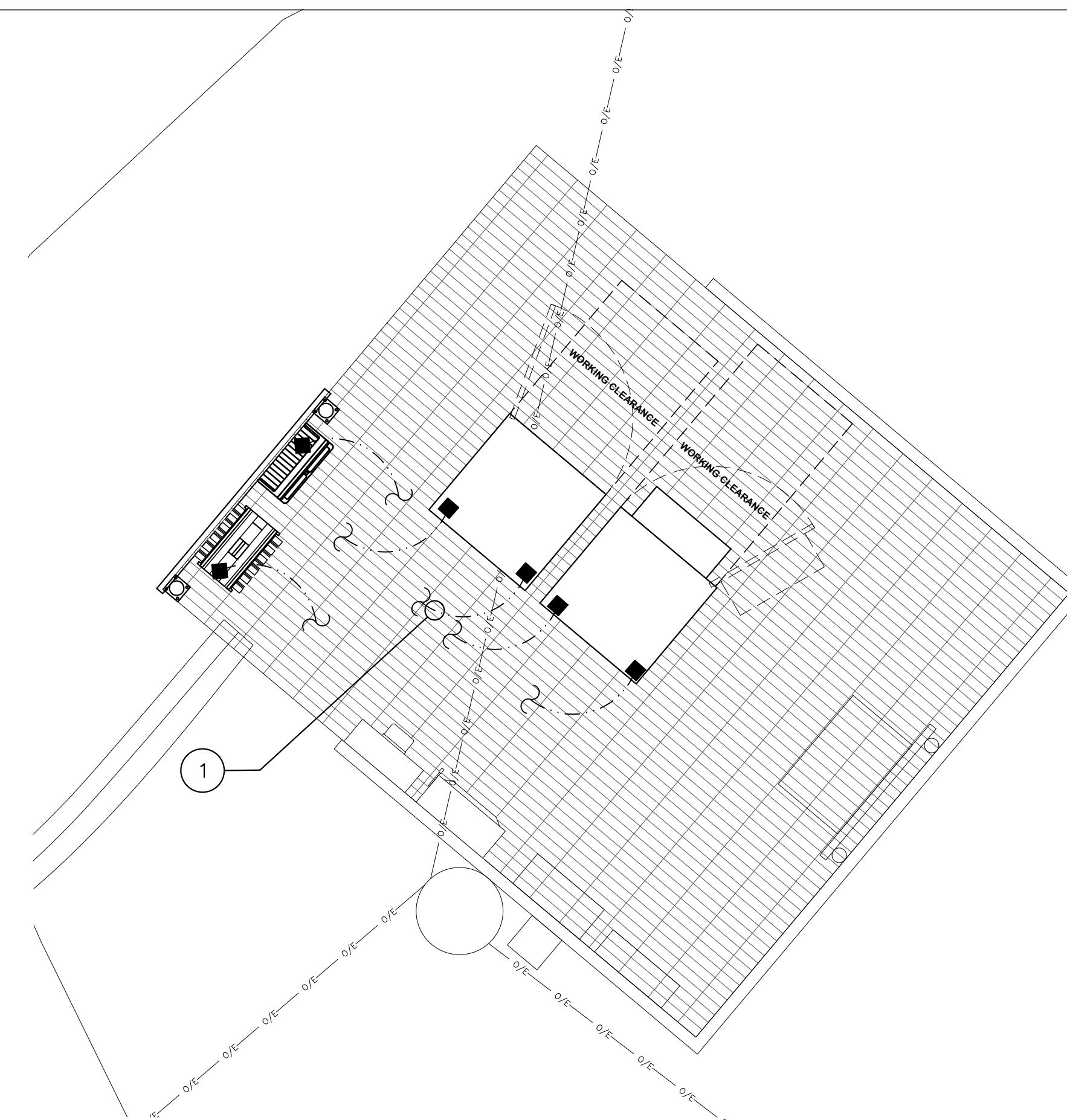
E-3

GENERAL GROUNDING NOTES

- 1) ALL GROUNDING LEADS INSTALLED TO ENSURE A SMOOTH PATH TO COUNTERPOISE WITHOUT KINKS OR SHARP BENDS OR RETURN UPWARDS.
- 2) CONTRACTOR WILL UTILIZE THE "FALL OF POTENTIAL MEASUREMENT METHOD" PER NETA STANDARDS, UTILIZING THE AEMC-4500 MEASURING DEVICE OR APPROVED T-MOBILE EQUIVALENT. ALL GROUND TESTING TO BE PERFORMED BEFORE CONNECTING TO POWER UTILITY GROUND AND PRIOR TO ANY BACKFILL OF GROUNDING TRENCHES. ELECTRICAL CONTRACTOR WILL PROVIDE A MINIMUM OF ONE (1) INSPECTION PORT FOR TESTING GROUNDING RESISTANCE. CONTRACTOR WILL INSTALL THE MINIMUM NUMBER OF GROUND PLATES INDICATED, SEE GROUNDING PLAN FOR APPROX. LOCATIONS. CONTRACTOR WILL INSTALL ADDITIONAL GROUNDING AS REQUIRED TO ACHIEVE 5 OHMS OR LESS TO GROUND.
- 3) IT IS THE INTENT THAT AT NO TIME ARE THE GROUND LEADS TO BE INSTALLED BELOW THE SURFACE OF THOSE AREAS DESIGNATED FOR FUTURE DISSOCIATED PADS OR SHELTERS.
- 4) THE CONTRACTOR WILL DOCUMENT MEGGER TEST RESULTS, REDLINE THE DRAWINGS FOR THE LOCATION OF ALL UNDERGROUND GROUNDING COMPONENTS AND PHOTOGRAPH WITH A DIGITAL CAMERA THE ENTIRE NEWLY INSTALLED GROUNDING SYSTEM PRIOR TO BACKFILL OF ANY OPEN TRENCHES.
- 5) ANY EXCEPTIONS TO THIS BASIC GROUNDING DESIGN GUIDELINE, ROUTING DESIGN, OR MODIFICATIONS, WILL BE DOCUMENTED AND DIMENSIONED BY WAY OF RED LINE DRAWINGS. IT IS THE RESPONSIBILITY OF THE SELECTED CONTRACTOR TO ENSURE THE NEWLY INSTALLED GROUNDING SYSTEM MEETS THE T-MOBILE STANDARD OF 5 OHMS OR LESS.
- 6) ELECTRICAL CONTRACTOR SHALL COORDINATE TELCO AND POWER ROUTING WITH BUILDING MANAGER PRIOR TO ROUGH-IN.
- 7) PRIOR TO RUNNING CONDUIT ROUTE - CONTRACTOR SHALL CONTACT THE T-MOBILE PROJECT MANAGER AND VERIFY THE EQUIPMENT CABINET LAYOUT CONFIGURATION AND ROUTE CONDUITS ACCORDINGLY.
- 8) ALL EXOTHERMIC CONNECTIONS INCLUDING THOSE TO GATE POST, FENCES AND ICE BRIDGE POSTS SHALL BE MADE BELOW GRADE.

GROUNDING KEY NOTES

- ① #2 TBCW, FROM NEW EQUIPMENT TO EXISTING GROUNDING (TYP. ALL EQUIPMENT)
- ② GROUND TO NEW SECTOR GROUND BAR WITH #2 TBCW (TYP.)



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SEAL

 PRELIMINARY NOT FOR CONSTRUCTION OR RECORDATION

NO.	DATE	DESCRIPTION	BY
1	09/23/24	REVIEW	DRK

GROUNDING NOTES

N.T.S

3

EQUIPMENT GROUNDING PLAN

SCALE: 1/2" = 1'-0"

1

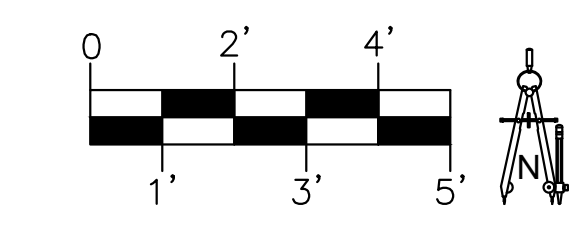
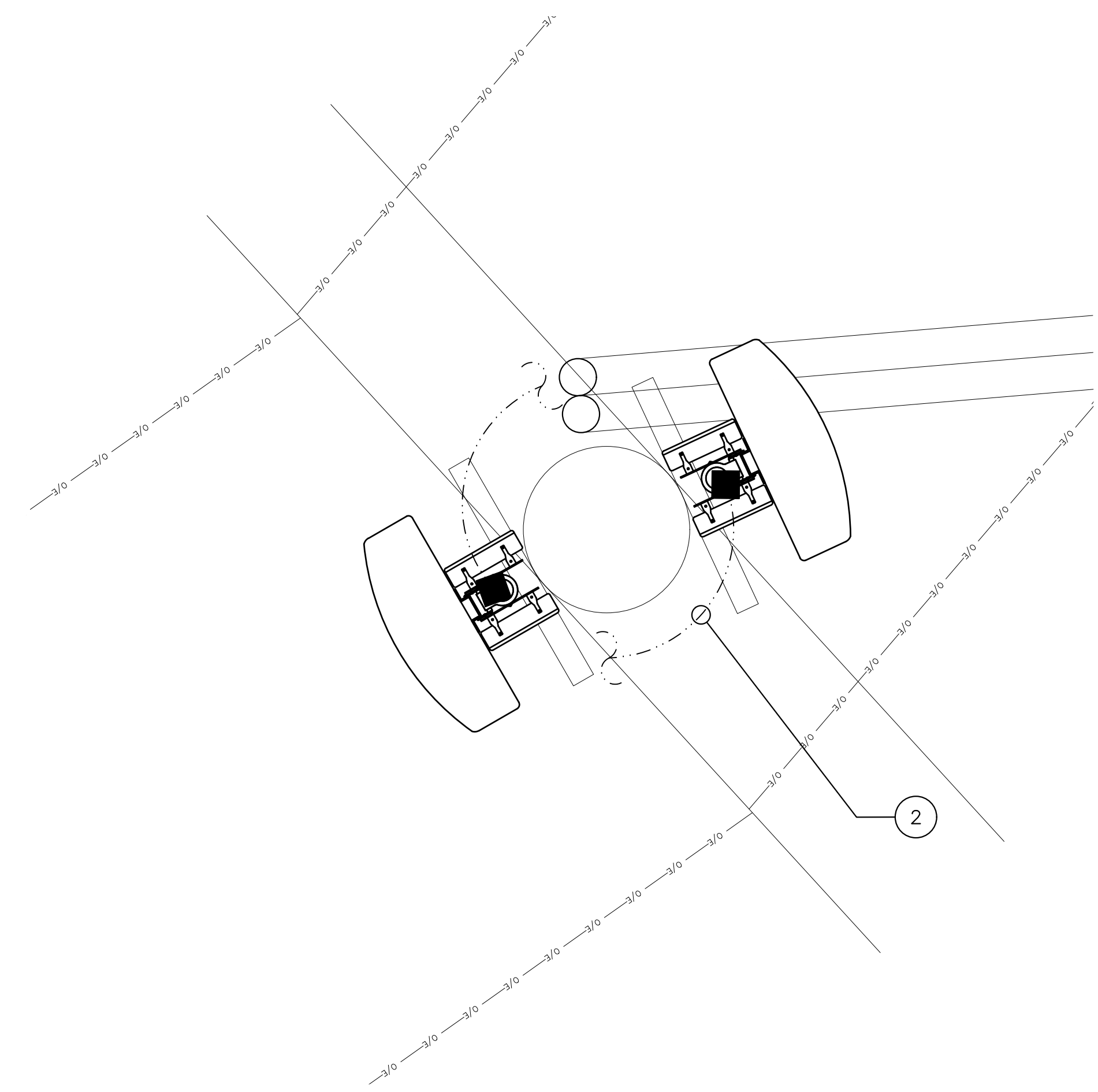
PROJECT INFORMATION
 JOB: 13-379-04
SL04119C
UP_L_OGADENCYN
_AMPEN
 244 OGDEN CANYON
 OGDEN, UTAH 84401

SHEET TITLE
EQUIPMENT/ANTENNA
GROUNDING PLAN
AND NOTES

JURISDICTIONAL APPROVAL

SHEET NUMBER

E-4



NOT USED

SCALE: N.T.S

4

ANTENNA GROUNDING PLAN

SCALE: 3/8" = 1'-0"

2

RFDS VER: 5 DATED 9/29/2022 AT 7:46:01 AM