

METRONET NETWORK CABINET CONSTRUCTION DRAWINGS



3701 COMMUNICATIONS WAY
EVANSVILLE, IN 47715
812-213-1095

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2-BAY NETWORK
CABINET
DUNN, NC

DESIGN ENG: LWW
DRAWN BY: SLF
REVIEWED BY: LWW

SUBMITTALS		
DATE	DESCRIPTION	REV
9/22/22	PERMITTING	A



SITE LOCATION MAP
LAT/LONG: 35.258756, -78.676368
3856 NC-82, DUNN, NC, 28334



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**CALL 48 HOURS
BEFORE DIGGING**



Know what's below.
Call before you dig.

PERMITTING

METRONET CONTACTS:

PROJECT DIRECTOR:

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OVERLAND PARK, KS 66214
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LEE.WRIGHT@METRONET.COM

SCALE:	NTS
SITE ADDRESS:	3856 NC-82
SITE NAME:	DUNN CABINET
SHEET NAME:	COVER SHEET
SHEET NUMBER:	1



**SEE SHEET 3
FOR SITE DETAILS**



Dunn SEGRA Hut Site



3781 COMMUNICATIONS WAY
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DUNN, NC**

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SCALE: 1" = 60'

SITE ADDRESS:
3856 NC-82

SITE NAME:
DUNN CABINET

SHEET NAME:
SITE PLAN

SHEET NUMBER:
2

CABINET MOUNTING DETAIL



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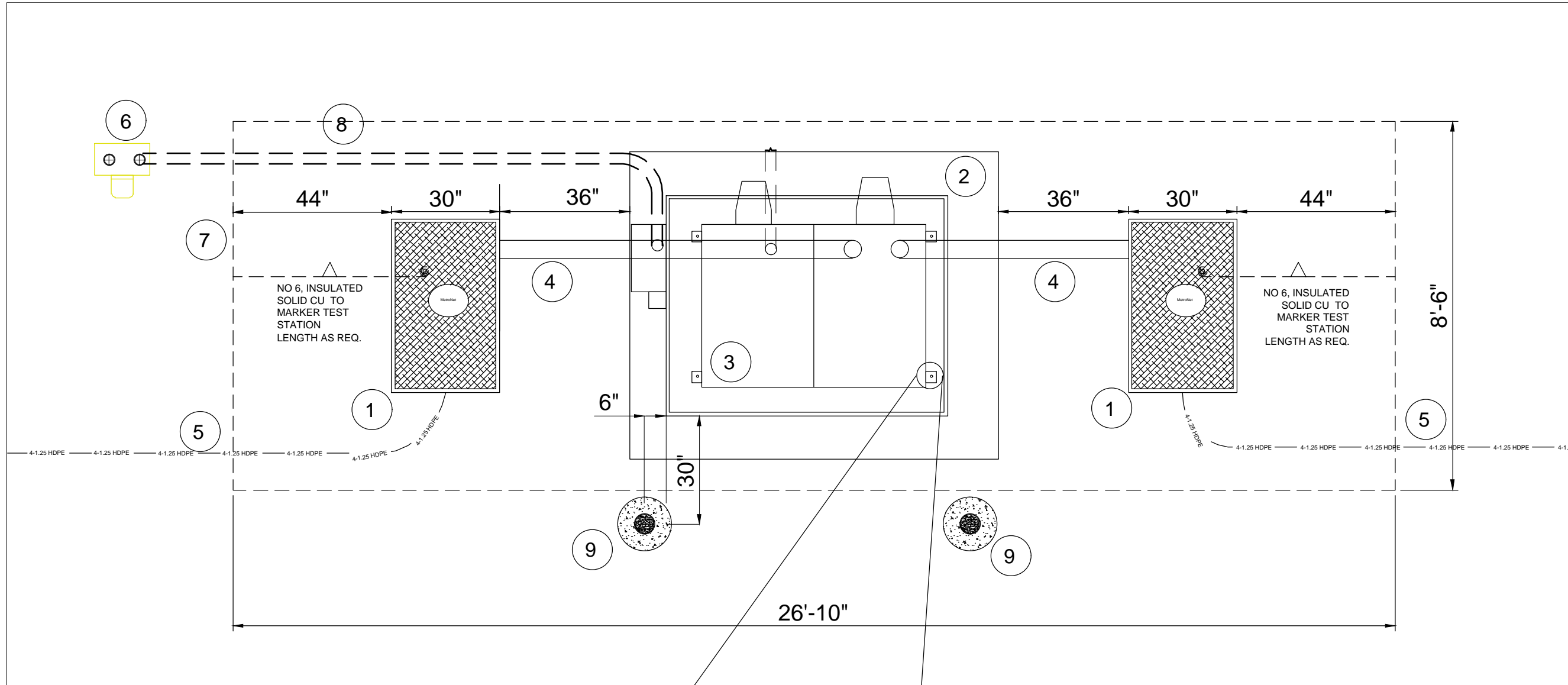
2-BAY NETWORK CABINET
DUNN, NC

DESIGN ENG: LWW

DRAWN BY: SLF

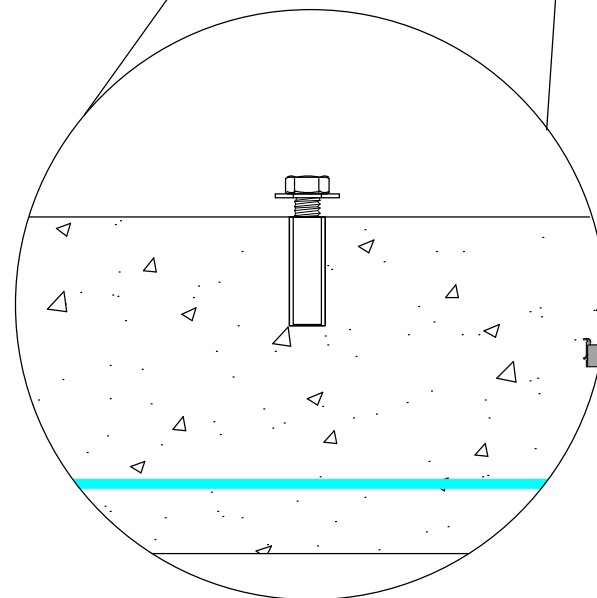
REVIEWED BY: LWW

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DETAIL NOTES:

1. 30"Wx48"Lx30"D Handhole
2. Cabinet Concrete Pad 8'-6"L x 7'-1"W
3. Cabinet Footprint 62"L x 45"W
4. 2 Ea. 4" SCH 40 PVC Conduit
5. 4 Ea. 1 1/4" HDPE Duct
6. Meter Pedestal (ELECTRICAL)
7. 3" SCH 40 PVC Elect. Conduit-UL Listed
8. Ground Field Extents
9. 5" ID DIA x 7'L Steel Pipe Bollard, Concrete Filled. (As Required, Site Specific)



CONCRETE FASTENING TYPICAL
1/2" STAINLESS STEEL DROP IN
ANCHOR - 1/2" NUT & FLAT WASHER

INSTALLATION NOTE:
DRILL AND INSTALL WEDGE ANCHORS
DURING PLACEMENT OF THE CABINET
ONTO THE PAD TO INSURE
PLACEMENT ACCURACY.

SCALE: NTS

SITE ADDRESS:
3846 NC-82

SITE NAME:
DUNN CABINET

SHEET NAME:
CABINET DETAILS

SHEET NUMBER:

3

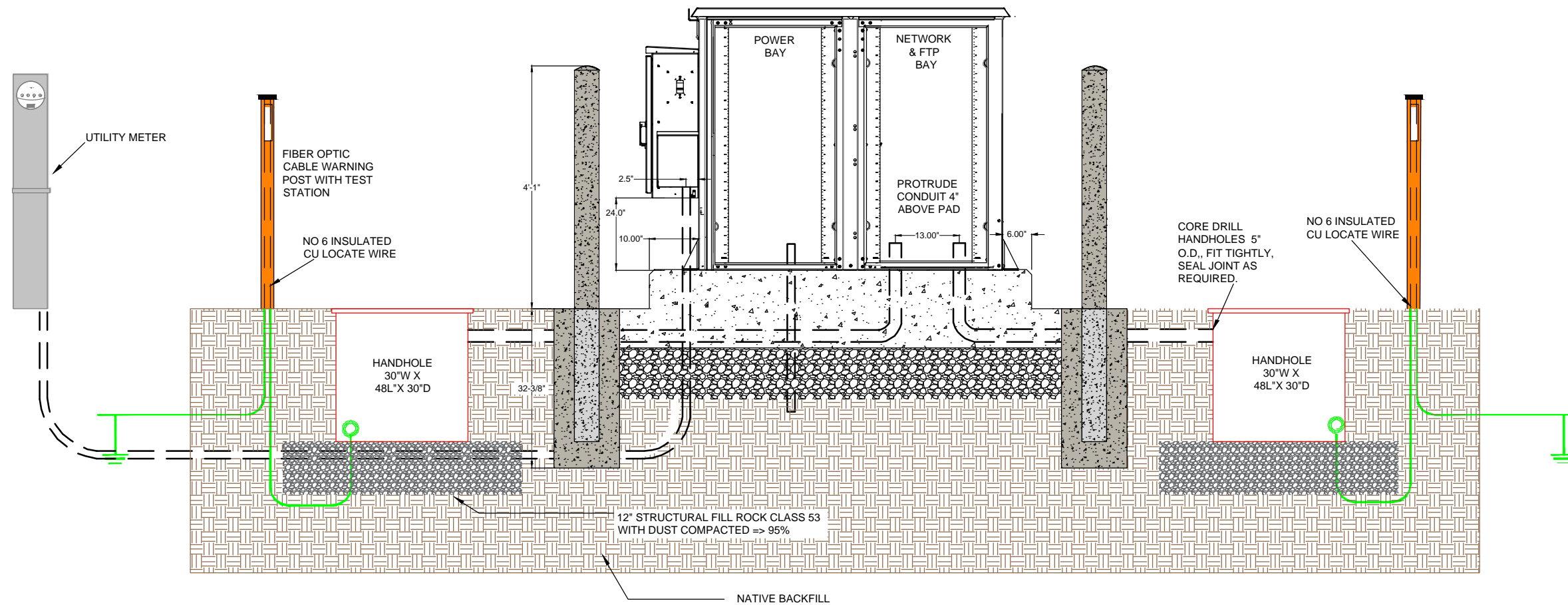
BOLLARDS - OPTIONAL AS SITE DICTATES
PIPE BOLLARD SPECIFICATIONS:

CARBON STEEL PIPE SHALL BE 5"ID DIA X 7'L, CONFORMING TO SCHEDULE 40 ASTM A 53 GRADES A AND B.

1. PIPE SHALL BE FILLED WITH A MIN 3,000 PSI CONCRETE. A DOMED CAP 1" HIGH SHALL BE HAND FORMED TO PROVIDE WATER RUNOFF.
2. CONCRETE FOOTER SHALL BE A MIN 3,000 PSI CONCRETE, 3'D X 15" DIA.
3. PIPE SHALL BE PROVIDED FACTORY PAINTED WITH RUST INHIBITOR PRIMER FINISH. THE FINAL FINISH SHALL BE PAINTED YELLOW.

GENERAL NOTE:

- A.) A FINAL INSPECTION OF THE SITE CONFIRMING THE SITE IS RESTORED AND CLEANED UP SHALL BE COMPLETED BY THE PROJECT MANAGER PRIOR TO FINAL METRONET ACCEPTANCE OF THE WORK.



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**2-BAY NETWORK
 CABINET
 DUNN, NC**

DESIGN ENG: LWW
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SUBMITTALS		
DATE	DESCRIPTION	REV
9/22/22	PERMITTING	A

SCALE: NTS
 SITE ADDRESS: 3856 NC-82
 SITE NAME: DUNN CABINET
 SHEET NAME: CABINET DETAILS
 SHEET NUMBER: 4



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**2-BAY NETWORK CABINET
DUNN, NC**

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REVIEWED BY: LWW

SUBMITTALS

DATE	DESCRIPTION	REV
9/22/22	PERMITTING	A

SCALE: NTS
SITE ADDRESS: 3856 NC-82
SITE NAME: DUNN CABINET
SHEET NAME: CABINET DETAILS
SHEET NUMBER: 5

SPECIFICATIONS AND NOTES

SITE:
STRUCTURAL FILL SHALL BE MECHANICALLY COMPACTED IN 6" LIFTS TO 95% OR GREATER PROCTOR (ASTM D-698). WITH A COMPACTION TEST RUN ON EACH LIFT (1 TEST PER 248 SF). STRUCTURAL FILL SHALL EXTEND A MINIMUM OF 12" BEYOND THE PAD PERIMETER. ALL SUBGRADE WITHIN THE SLAB AREA SHALL BE COMPACTED TO 95% STANDARD PROCTOR. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. ALL EXCAVATION SHALL BE FREE OF WATER BEFORE PLACING CONCRETE.

CONCRETE CODE:
ALL CONCRETE SHALL BE MIXED, FORMED, FINISHED, CURED, AND PROTECTED IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE PORTLAND CEMENT ASSOCIATION (PCA) AND THE AMERICAN CONCRETE INSTITUTE (ACI)

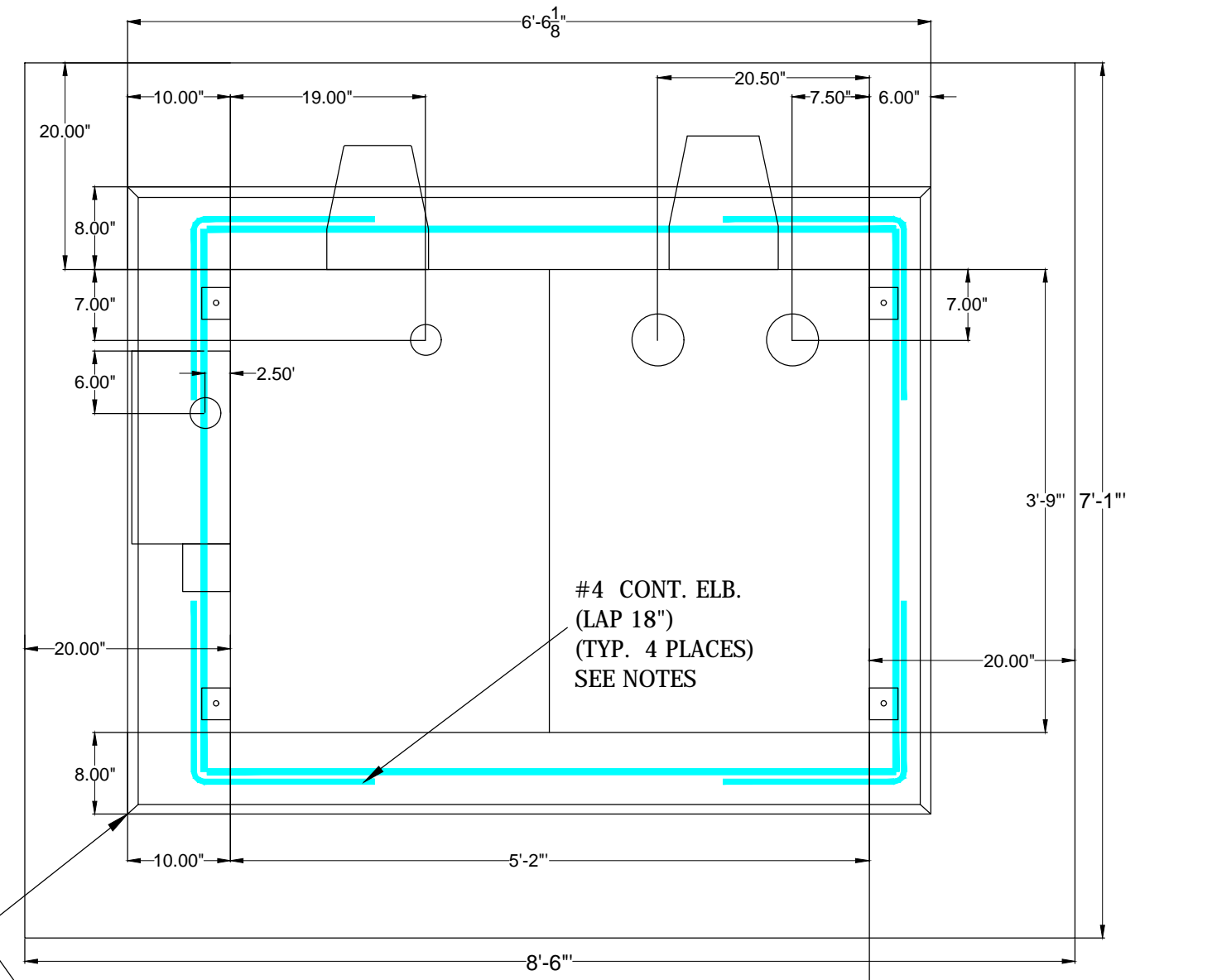
MIX:
PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE II. MIX SHALL HAVE 20% (BY CEMENTITIOUS MATERIAL WEIGHT) FLY ASH CONFORMING TO ASTM C618, CLASS F. MIX SHALL BE FIBER REINFORCED CONFORMING TO ASTM A820-06 - STANDARD SPECIFICATIONS FOR FOR COMMERCIAL FIBER-REINFORCED CONCRETE. AGGREGATE SIZE SHALL BE 1/2" NOMINAL AND SHALL CONFORM TO ASTM C33. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 4000 PSI. MAXIMUM SLUMP SHALL BE 5.5 INCHES. NO STRENGTH ACCELERATING ADDITIVES WITHOUT APPROVAL OF ENGINEER.

REINFORCEMENT STEEL:
REINFORCING SHALL BE DEFORMED BILLET-STEEL BARS CONFORMING TO ASTM A615, GRADE 60. REINFORCEMENT SHALL BE COLD BENT AND SHALL NOT BE WELDED. REINFORCEMENT SHALL BE CLEANED SO AS TO BE FREE OF OIL, DIRT, LOOSE MILL SCALE, AND LOOSE RUST OR OTHER COATINGS THAT WOULD DESTROY OR REDUCE THE BOND.

REINFORCEMENT CONTINUITY:
UNLESS SHOWN OTHERWISE ON THE DESIGN DRAWINGS, ALL REINFORCEMENT SHALL BE PLACED CONTINUOUS BY LAP SPlicing, UNLESS DETAILED OTHERWISE ON DESIGN DRAWINGS. REINFORCEMENT SHALL BE ACCURATELY PLACED AS PER ACI 301 AND SECURELY TIGHTLY TIED INTO POSITION WITH NO. 16 GA. ANNEALED WIRE NO GREATER THAN 2" INTERVALS ALONG THE LAP SPlicing.

PLACEMENT AND CURE:
PRODUCTION OF CONCRETE SHALL COMPLY WITH CHAPTER 7 OF ACI 301. PLACEMENT OF CONCRETE SHALL BE IN ACCORDANCE WITH CHAPTER 8 OF ACI 301. DURING HOT WEATHER, THE TEMPERATURE OF THE CONCRETE, AS PLACED, SHALL NOT EXCEED 90° F. DURING COLD WEATHER, CONCRETE SHALL BE MAINTAINED ABOVE 50° F FOR AT LEAST 7 DAYS AFTER PLACEMENT. HOT AND COLD WEATHER CONCRETE PLACEMENT SHALL BE IN ACCORDANCE WITH ACI 305 AND ACI 306. FRESHLY DEPOSITED CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING AND EXCESSIVELY HOT OR COLD TEMPERATURES AND SHALL BE MAINTAINED WITH MINIMAL MOISTURE LOSS AT A RELATIVELY CONSTANT TEMPERATURE FOR THE PERIOD OF TIME NECESSARY FOR THE HYDRATION OF THE CEMENT AND PROPER HARDENING OF THE CONCRETE. ALL NEWLY PLACED CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF 7 DAYS. CURING SHALL CONFORM TO THE REQUIREMENTS IN CHAPTER 12, ACI 301.

FINISHING:
TIE HOLES, HONEYCOMBS, AND OTHER CONCRETE SURFACE DEFECTS SHALL BE REPAIRED IN ACCORDANCE WITH CHAPTER 9 OF ACI 301 AS SOON AS PRACTICABLE AFTER FORM REMOVAL. THE REPAIR SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT DELAY, INTERFERE WITH, OR IMPAIR THE PROPER CURING OF THE FRESH CONCRETE. THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH REPAIR IF THE DEFECT IS GREATER THAN 5 INCHES DEEP AND LARGER THAN 200 SQUARE INCHES IN SURFACE AREA, OR IF THE DEPTH IS OVER 1/3 THE THICKNESS OF THE MEMBER AND GREATER THAN 6 INCHES IN ANY OTHER DIRECTION.



3/4" 45 DEGREE CHAMFER
EDGE ALL SIDES

12" DEPTH CLASS 53
CRUSHED ROCK, WITH
DUST COMPACTED => 95%

8" REVEAL
ABOVE
FINAL
GRADE

#4 CONT. ELB.
(LAP 18")
(TYP. 4 PLACES)
SEE NOTES

**NETWORK 2-BAY CABINET CONCRETE PAD
CONSTRUCTION**



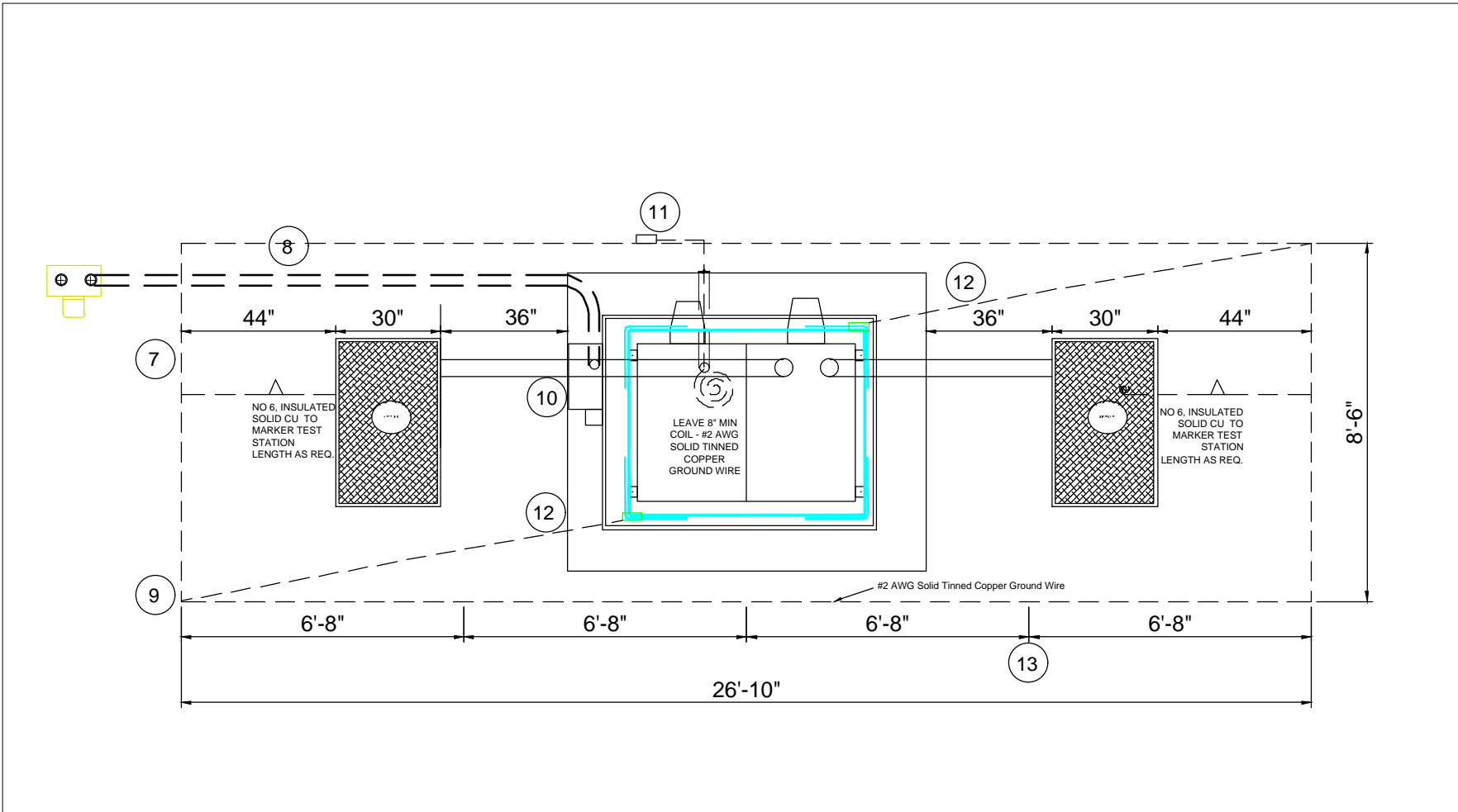
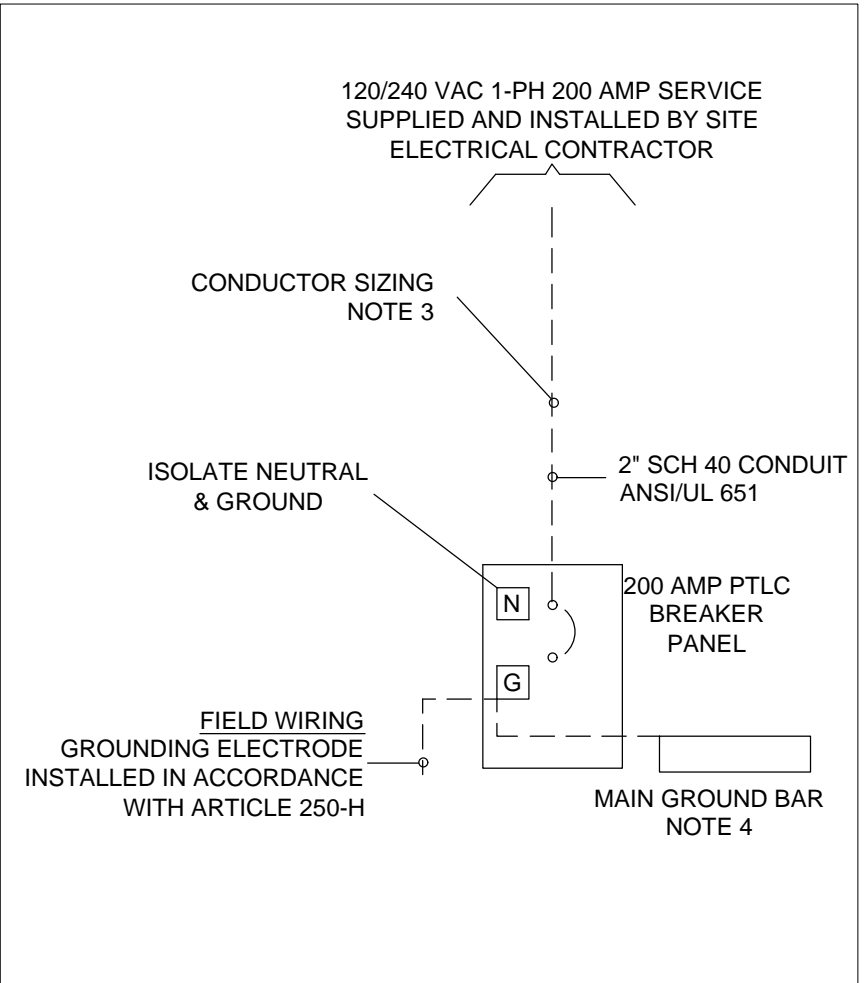
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NOTES:

- DASHED LINES DENOTE FIELD WORK.
- ISOLATE NEUTRAL & GROUND
- FEEDER CONDUCTORS (3) 2/0 THHN AND (1) NO.4 THHN GROUND IN ACCORDANCE WITH NEC (ARTICLE 215.2).
- #2 THHN BOND BETWEEN BREAKER GROUND AND MAIN GROUND BAR
- ALL LUGS THAT HOLD MORE THAN ONE WIRE SHALL BE LISTED FOR MULTI-BARRELL CONNECTIONS.
- ALL CONDUCTORS SHALL BE COPPER.
- 120/240 VAC, 200AMP, SINGLE PHASE PEDESTAL COORDINATE INSTALLATION WITH LOCAL ELECTRIC UTILITY.
- 3" SCHEDULE 40 CONDUIT, ANSI/UL 651. MEETING OR OR EXCEEDING THE REQUIREMENTS OF NEMA TC-2
- COPPER CLAD STEEL GROUND RODS, 5/8" X 8', 10 EA.
- INTERSECT 200 AMP 120/240 SINGLE PHASE POWER TRANSFER LOAD CENTER (PTLC)
- ALL GROUND RING CONDUCTORS AND GROUND ROD CONNECTIONS SHALL BE EXOTHERMIC WELDED.
- UFER GROUND-EXOTHERMIC WELD TO NO 4 REBAR, COORDINATE WITH CONCRETE CONTRACTOR.
- GROUND RING CONDUCTORS AND TOP OF GROUND RODS SHALL BE BURIED A MINIMUM DEPTH OF 18".

SCALE:	NTS
SITE ADDRESS:	3846 NC-82
SITE NAME:	DUNN CABINET
SHEET NAME:	CABINET ELECTRICAL DETAILS/ GROUNDING PLAN
SHEET NUMBER:	6