



- ## PROJECT GENERAL NOTES

- ### CONSTRUCTION NOTES



PROJECT INFORMATION:
LSV_BONES_SC
SW-NV-LVSTEXP4-VZW
SW-NV-LVSTRI-00136

UNADDRESSED POLE
SAHARA AVENUE AND
PARADISE ROAD
LAS VEGAS, NEVADA 89109

CURRENT ISSUE DATE:
05/04/17

ISSUED FOR:
PROPOSED WORK

REV.: DATE: DESCRIPTION: BY:

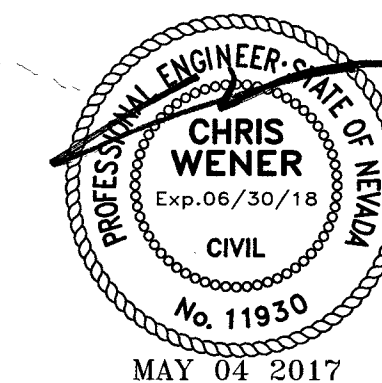
REV.	DATE	DESCRIPTION	BY
2	05/04/17	BP REVISION	V.H.
1	03/20/17	100% PERMITTING	V.H.
0	03/17/17	90% PERMITTING	V.H.

PLANS PREPARED BY:

SPECTRUM

SPECTRUM SERVICES, INC.
4850 WEST OQUENDO ROAD
LAS VEGAS, NEVADA 89118
PHONE: (702) 367-7705
FAX: (702) 367-8733

LICENSURE:



SHEET TITLE:

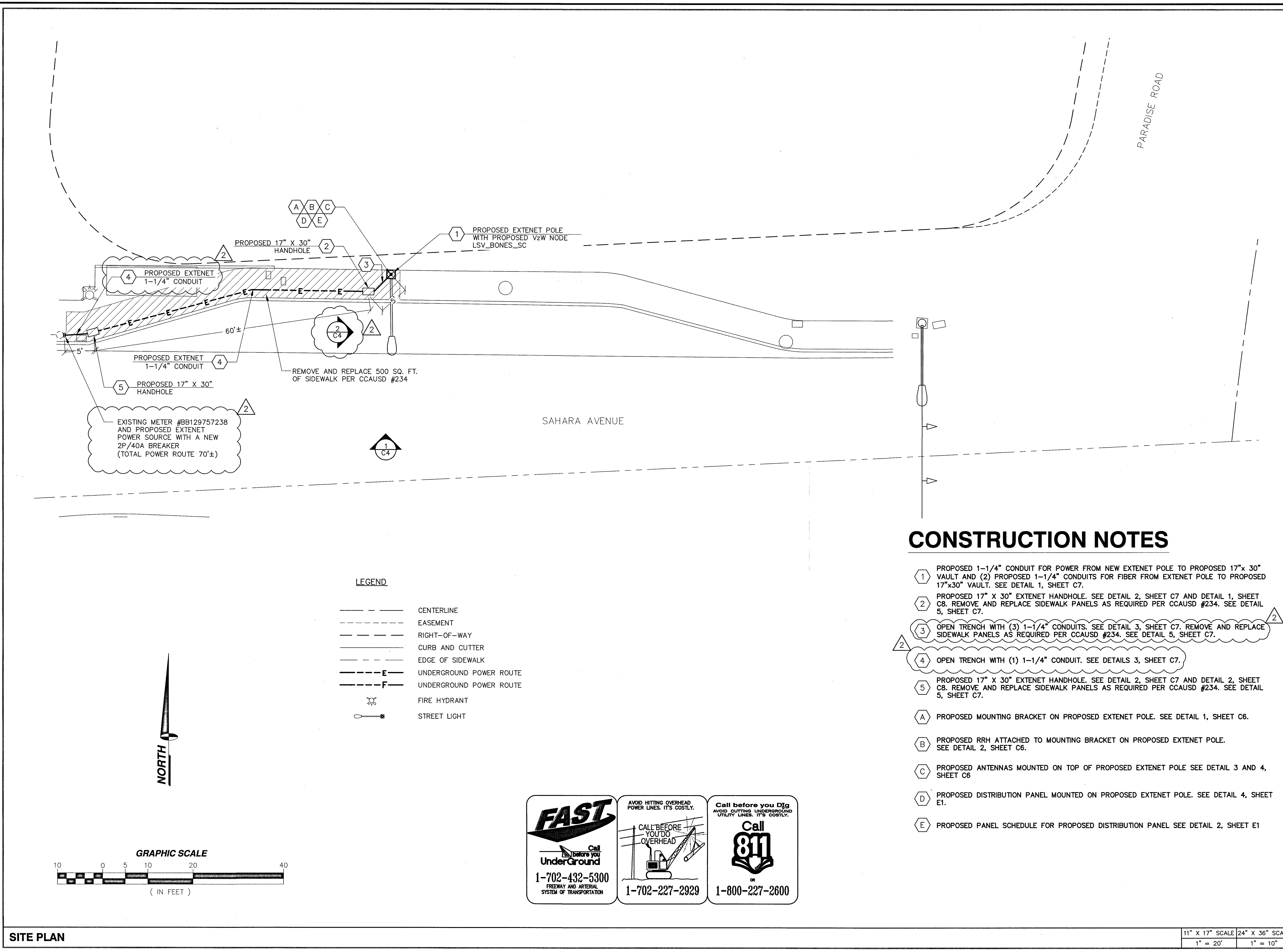
SITE PLAN

SHEET NUMBER: REVISION:

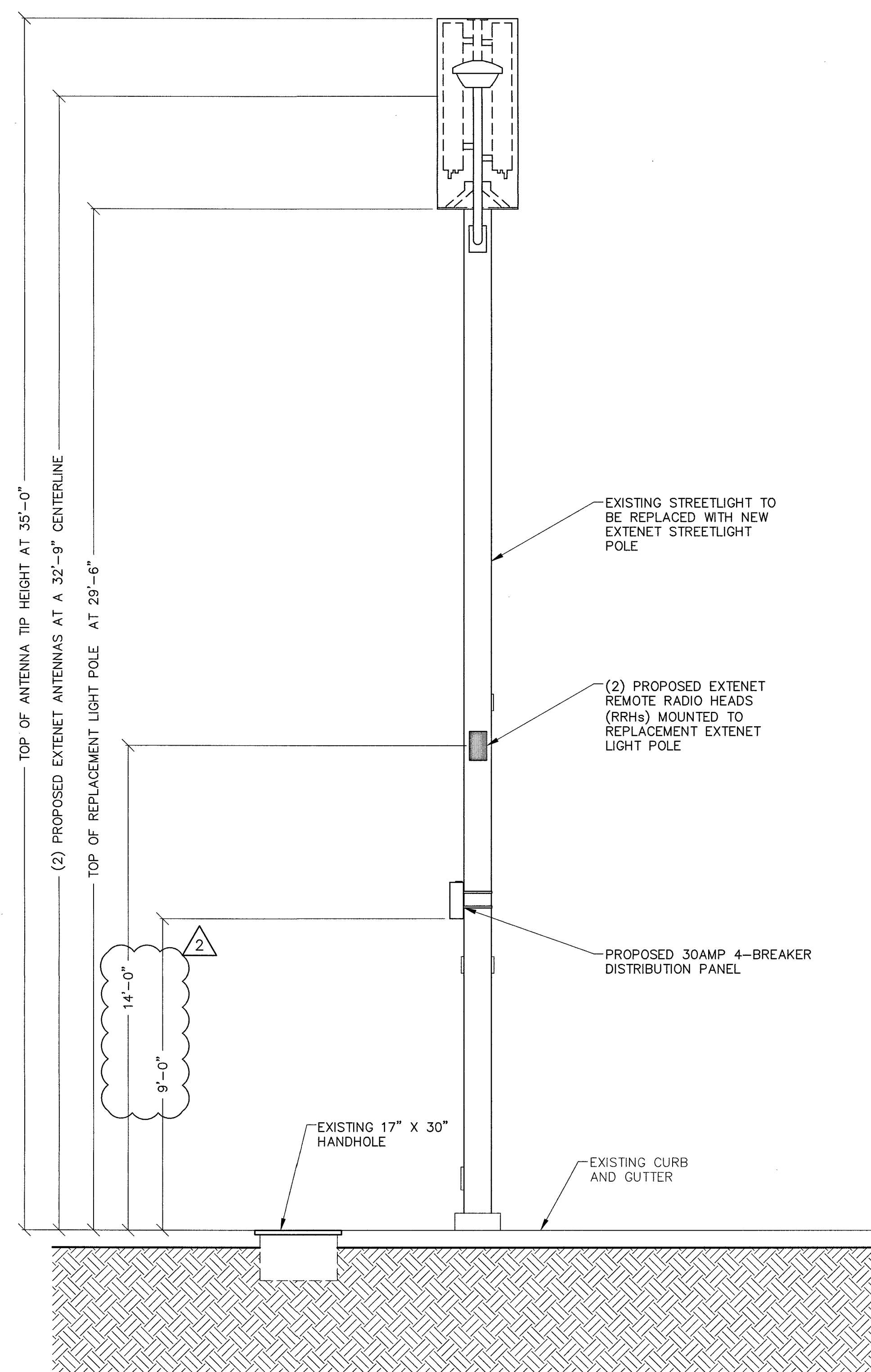
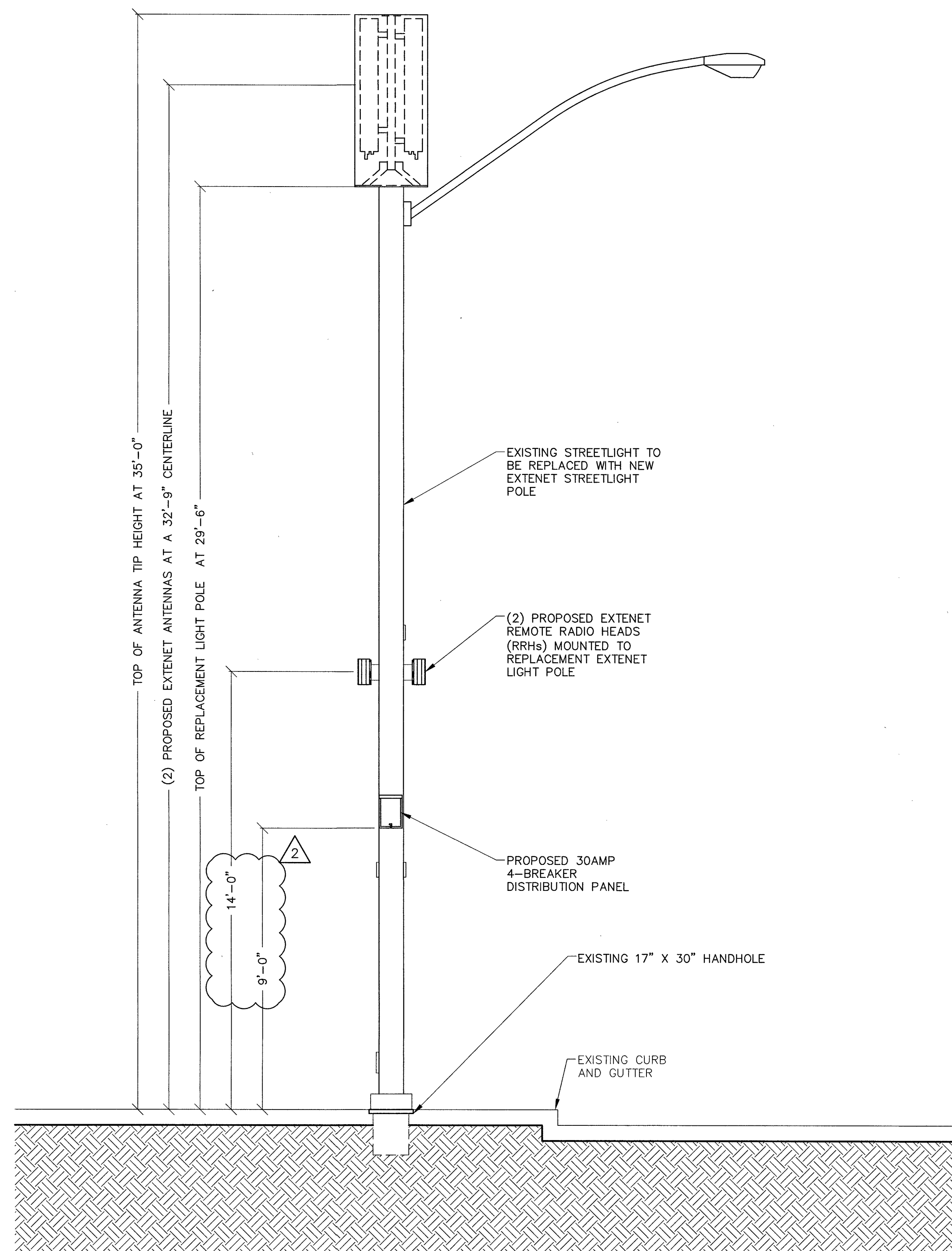
C3

2

11" X 17" SCALE 24" X 36" SCALE
1" = 20' 1" = 10'



SITE PLAN



extenetSM
SYSTEMS
3030 WARRENVILLE ROAD, SUITE 340
LISLE, ILLINOIS 60532

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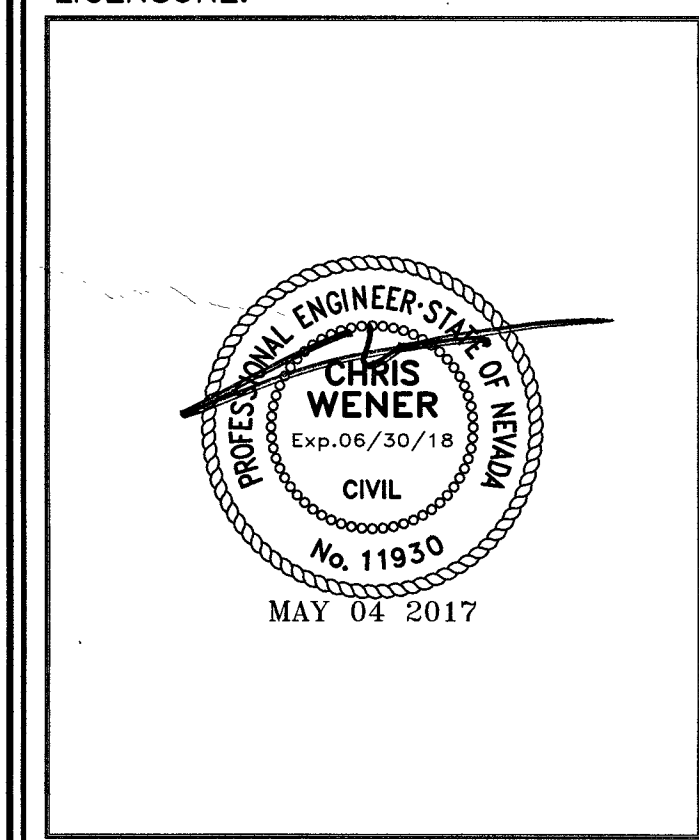
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SHEET TITLE:

SOUTH AND EAST
ELEVATION

SHEET NUMBER:=====REVISION:=====

C4

2



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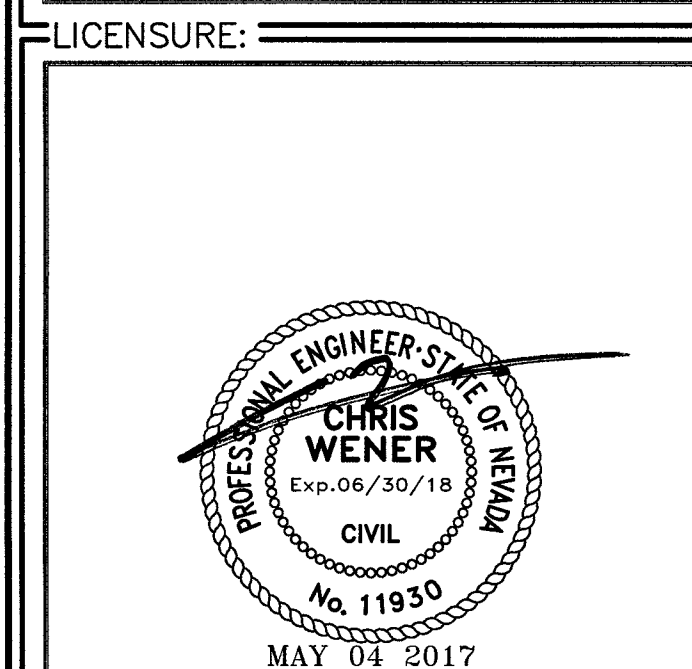
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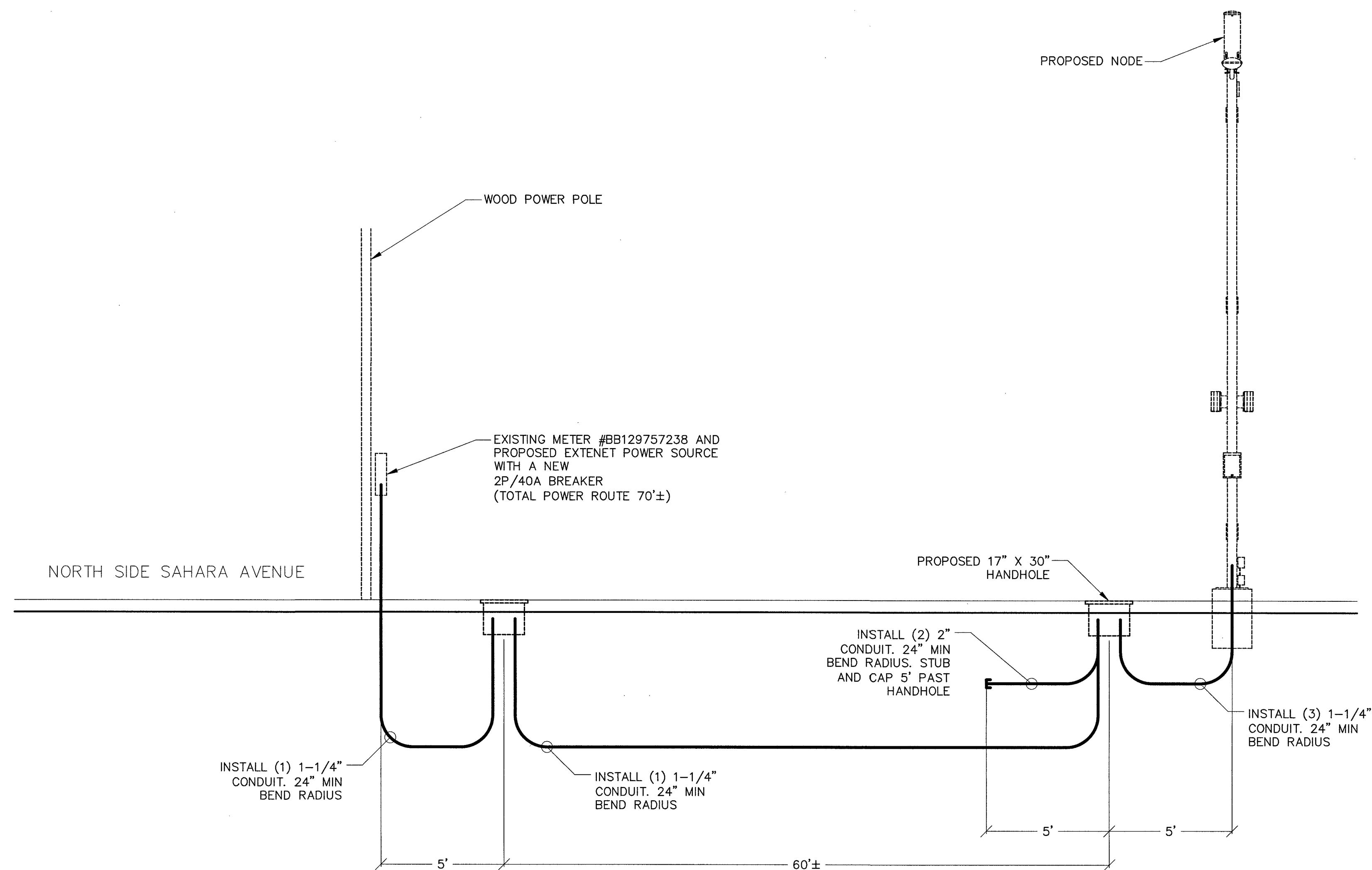
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SHEET TITLE:
CONDUIT DIAGRAM

SHEET NUMBER: C5
REVISION: 2

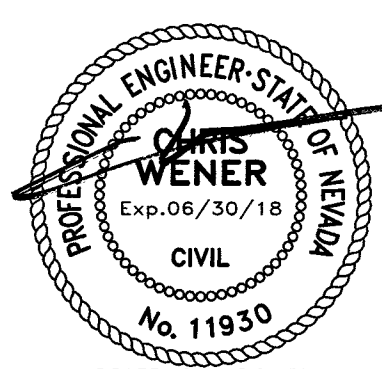


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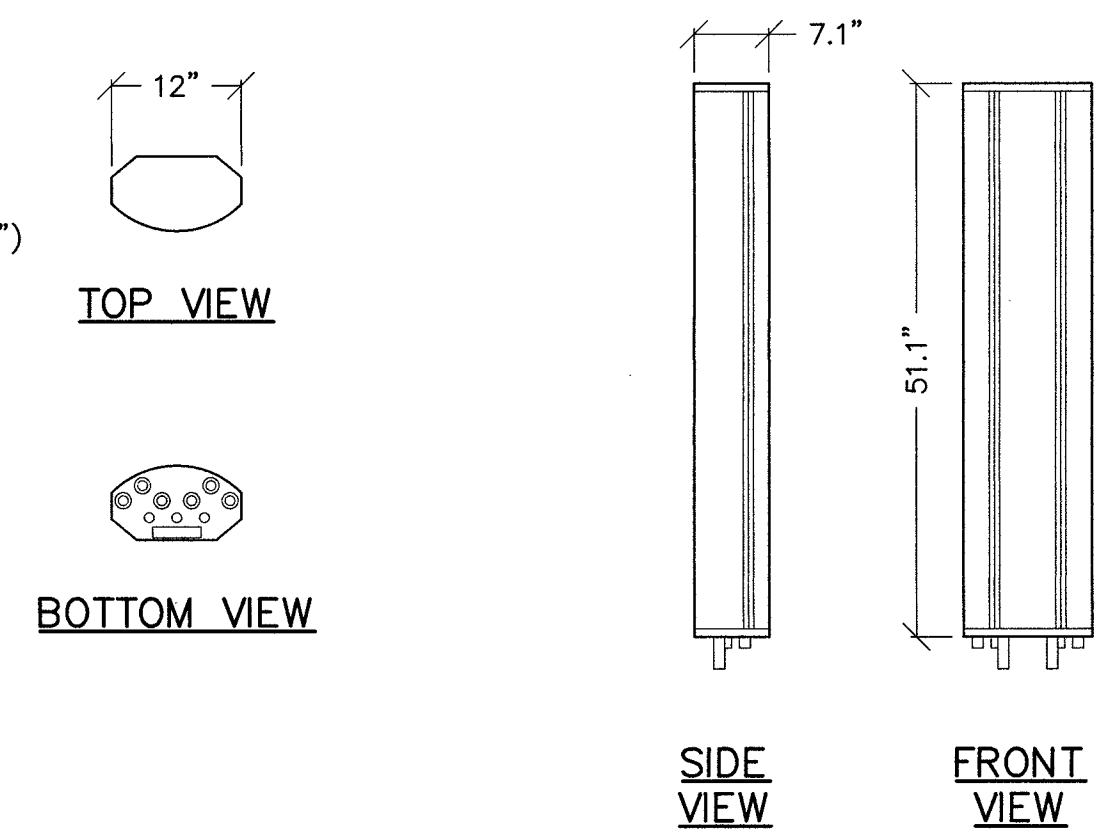
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SHEET TITLE:
CONSTRUCTION DETAILS

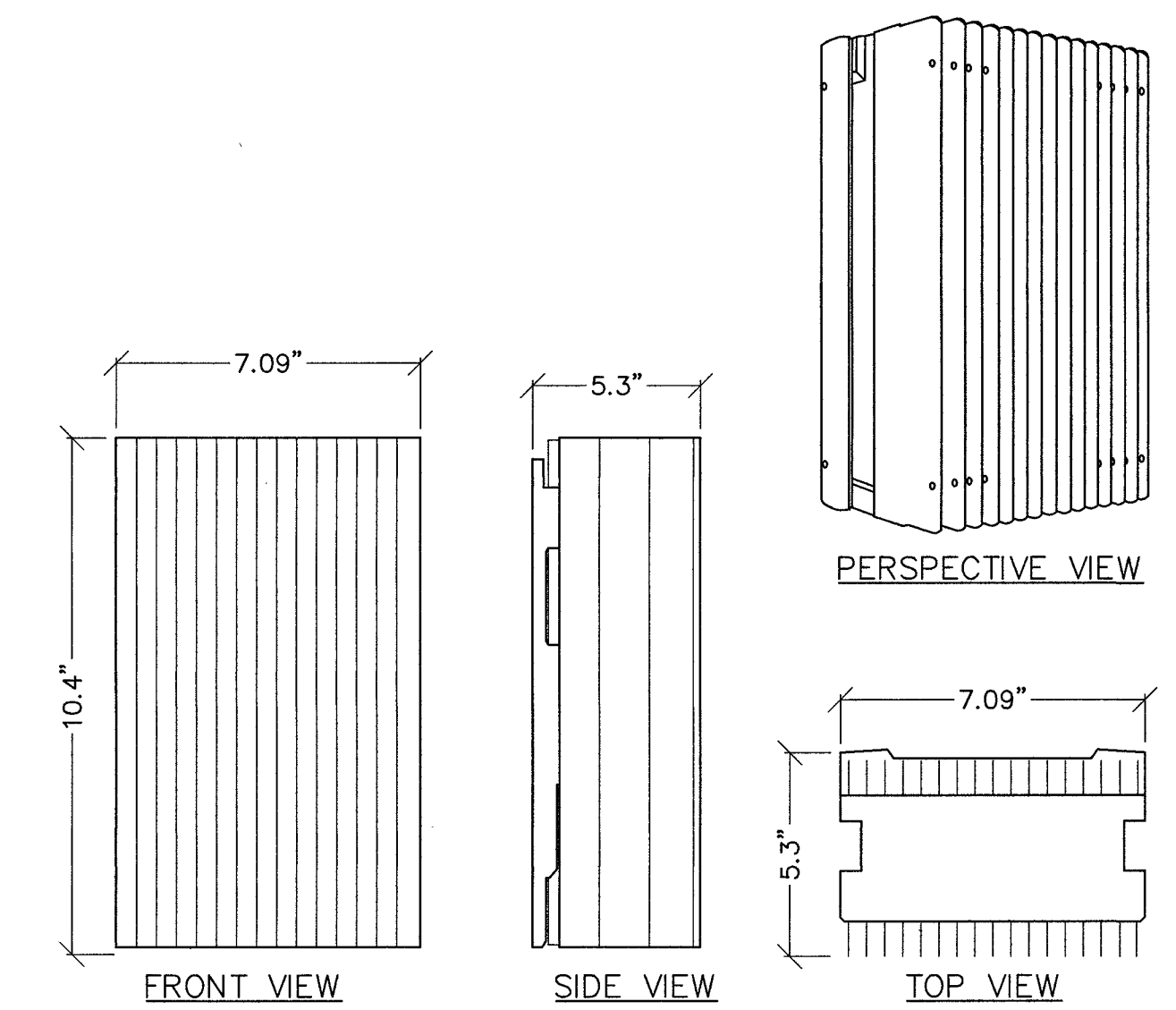
SHEET NUMBER: C6
REVISION: 2

AMPHENOL HEX654CU0100x ANTENNA SPECIFICATIONS
DIMENSION, LxWxD 1298x305x180mm (51.1"x12.0"x7.1")
NET WEIGHT 13.5 KG (29.8 LBS)
LIGHTNING PROTECTION DIRECT GROUND

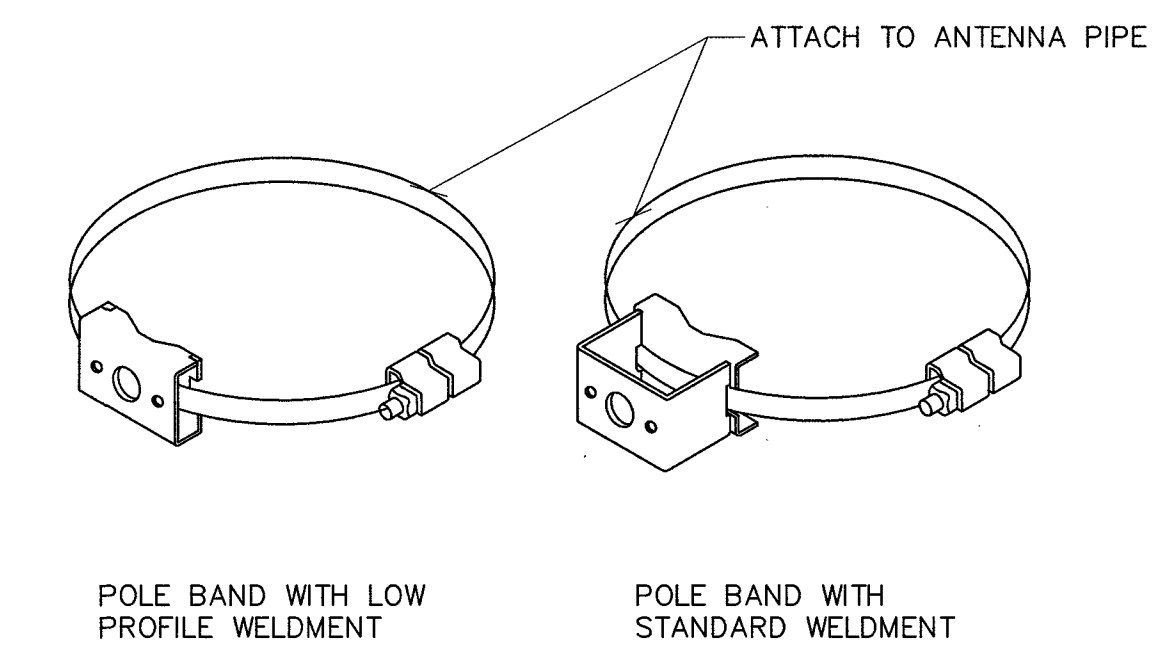


SCALE: NONE 5 **ANTENNA DETAIL**

NOKIA 9768 B66 (AWS1-3) 2x5W
COLOR: LIGHT GRAY
DIMENSIONS, H x W x D: 10.4" x 7.09" x 5.3"
VOLUME (WITHOUT ANTENNAS): <6.5L
WEIGHT, APPROXIMATELY (WITHOUT ANTENNAS): 15 LBS



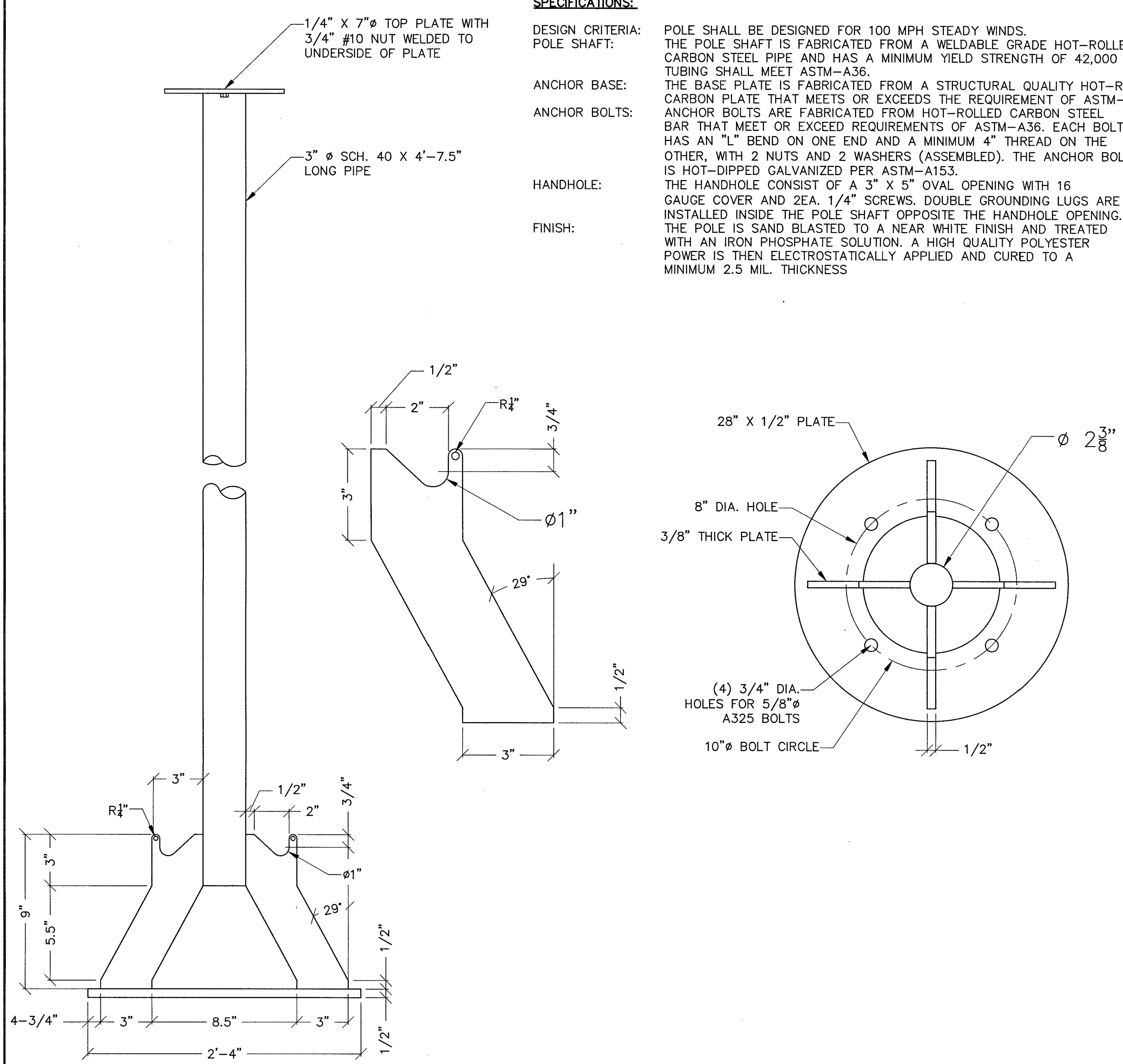
SCALE: NONE 2 **REMOTE RADIO HEAD (RRH)**



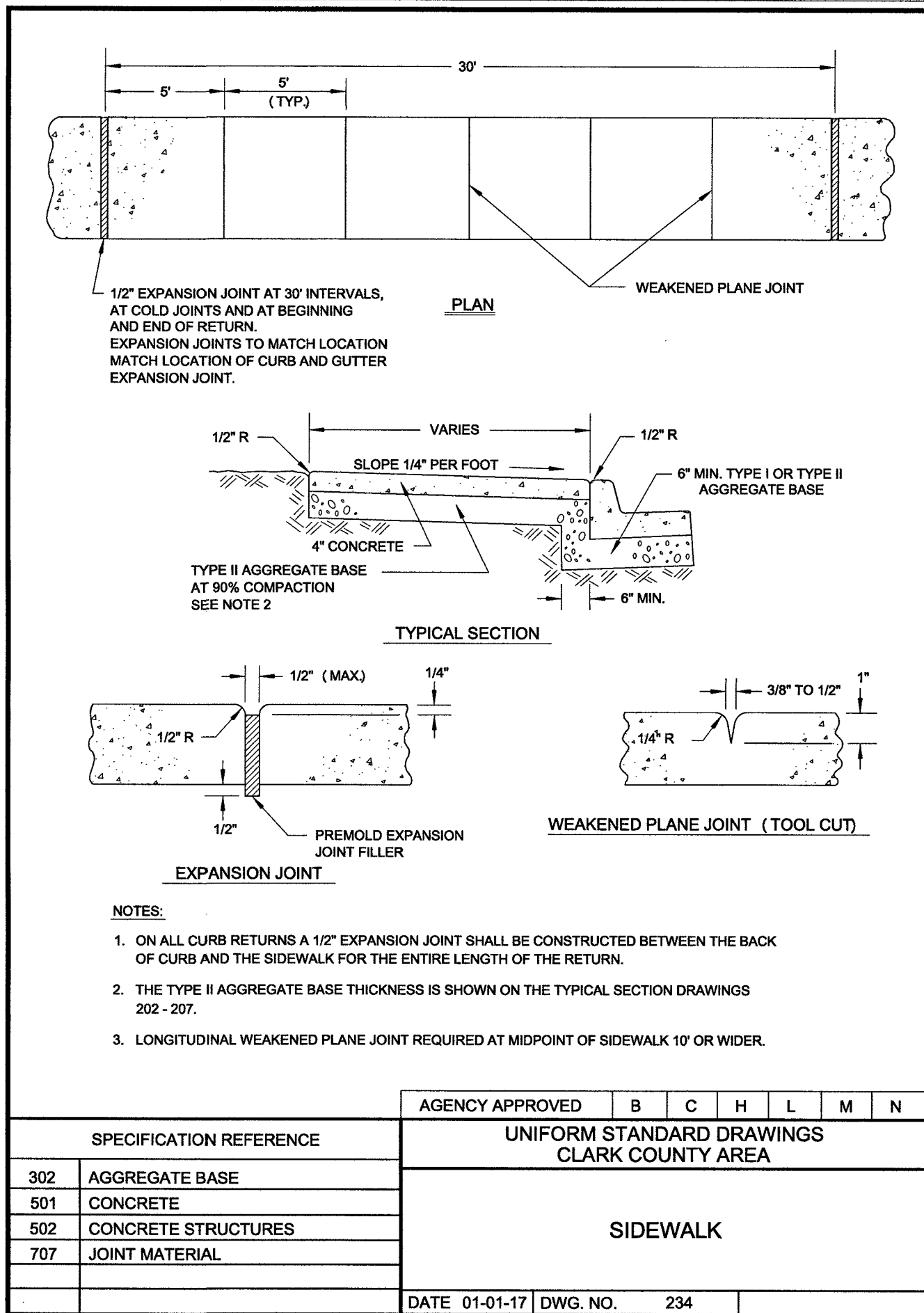
SCALE: NONE 4 **MOUNTING BANDS**

NOT USED

SPECIFICATIONS:
DESIGN CRITERIA: POLE SHALL BE DESIGNED FOR 100 MPH STEADY WINDS.
POLE SHAFT: THE POLE SHAFT IS FABRICATED FROM A WELDABLE GRADE HOT-ROLLED CARBON STEEL PIPE AND HAS A MINIMUM YIELD STRENGTH OF 42,000 PSI. TUBING SHALL MEET ASTM-A36.
ANCHOR BASE: THE BASE PLATE IS FABRICATED FROM A STRUCTURAL QUALITY HOT-ROLLED CARBON PLATE THAT MEETS OR EXCEEDS THE REQUIREMENT OF ASTM-A36
ANCHOR BOLTS: ANCHOR BOLTS ARE FABRICATED FROM HOT-ROLLED CARBON STEEL BAR THAT MEET OR EXCEED REQUIREMENTS OF ASTM-A36. EACH BOLT HAS AN "L" BEND ON ONE END AND A MINIMUM 4" THREAD ON THE OTHER, WITH 2 NUTS AND 2 WASHERS (ASSEMBLED). THE ANCHOR BOLT IS HOT-DIPPED GALVANIZED PER ASTM-A153.
HANDHOLE: THE HANDHOLE CONSIST OF A 3" X 5" OVAL OPENING WITH 16 GAUGE COVER AND 2EA. 1/4" SCREWS. DOUBLE GROUNDING LUGS ARE INSTALLED INSIDE THE POLE SHAFT OPPOSITE THE HANDHOLE OPENING.
FINISH: THE POLE IS SAND BLASTED TO A NEAR WHITE FINISH AND TREATED WITH AN IRON PHOSPHATE SOLUTION. A HIGH QUALITY POLYESTER POWER IS THEN ELECTROSTATICALLY APPLIED AND CURED TO A MINIMUM 2.5 MIL. THICKNESS



SCALE: NONE 4 **CEM-TEC APS ANTENNA MAST**



CCAUSD #234 SIDEWALK RESTORATION

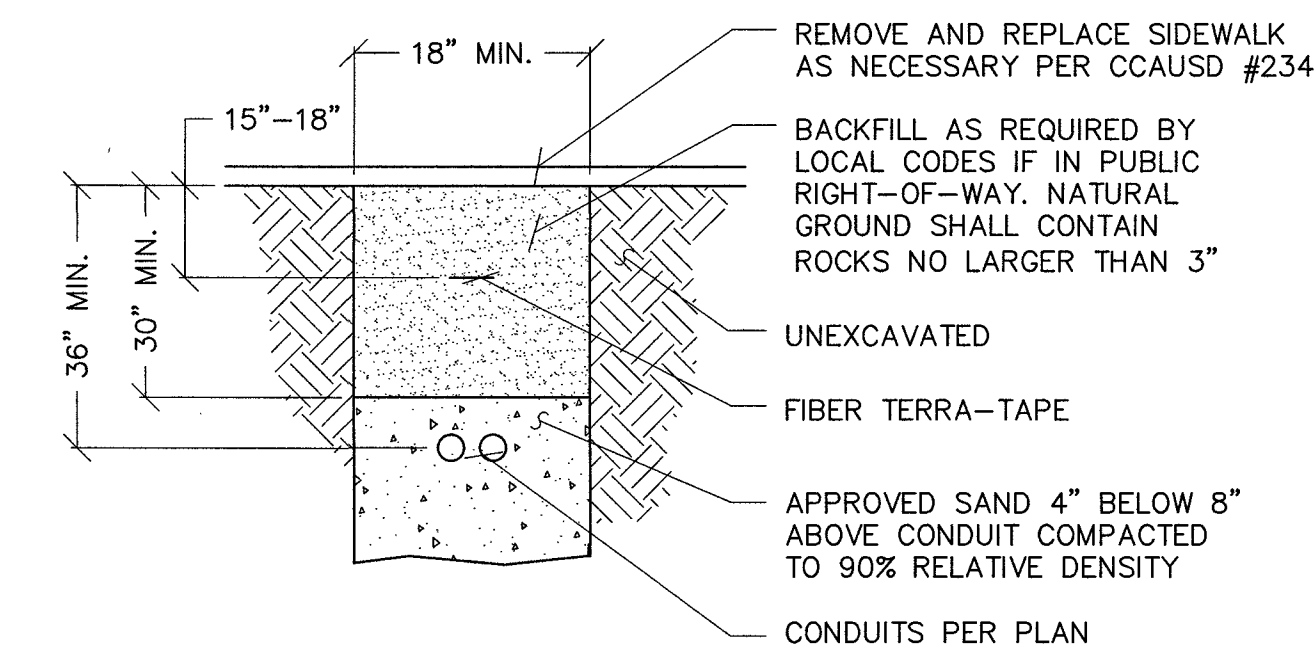
SCALE: NONE 5

NOT USED

SCALE: NONE 4

POLE POWER ROUTING

NOTE: TYPICAL INSTALLATION. UTILITY DESIGN TAKES PRECEDENCE.



POWER AND FIBER TRENCHING

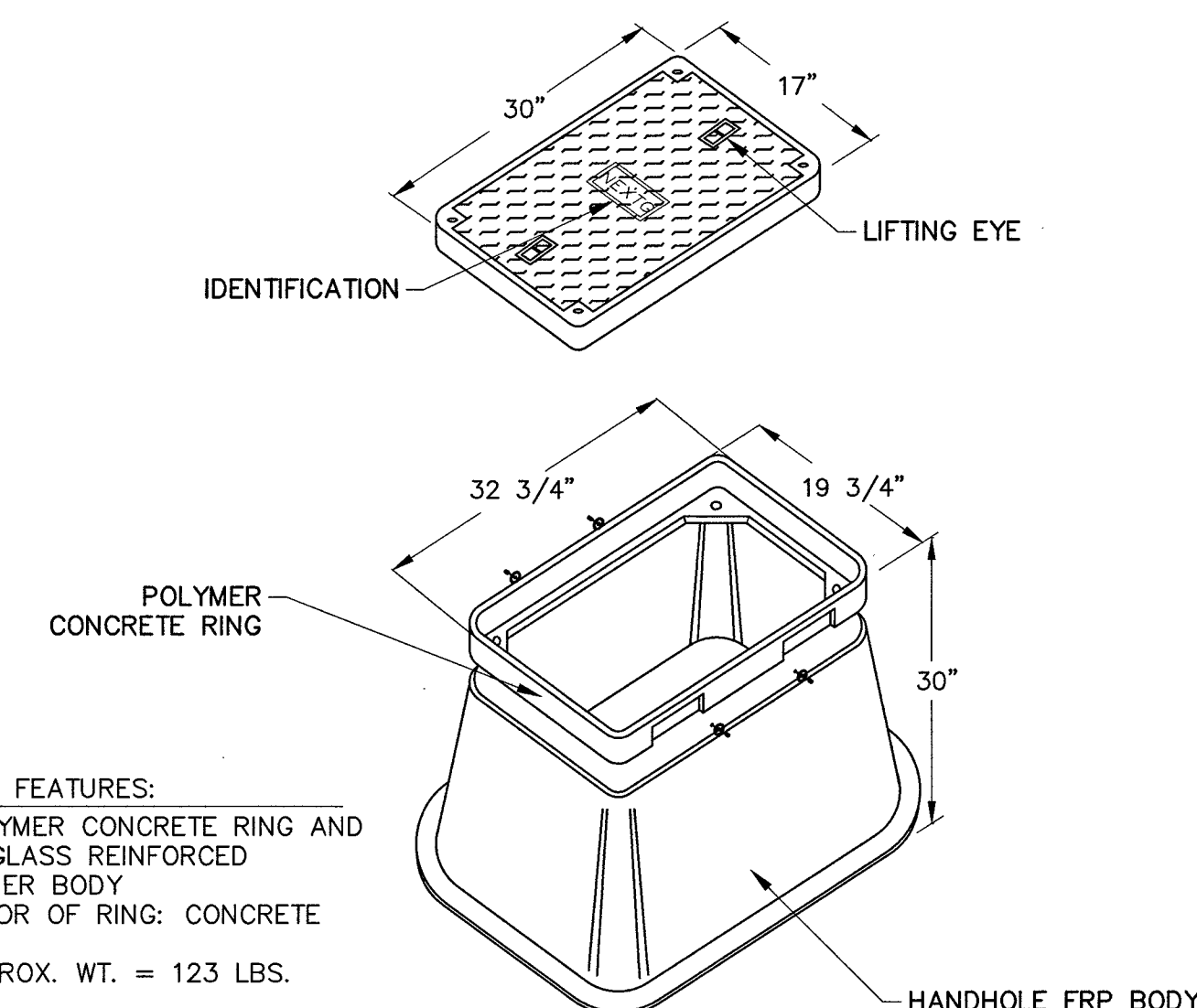
SCALE: NONE 3

COVER FEATURES:

- * PW - 10,400 LBS. WHEEL LOAD ON 10" X 10" PLATE.
- * APPROX. WT. = 72 LBS.
- * POLYMER CONCRETE
- * ONE PIECE COVER
- * FOUR BOLT DOWN
- * COLOR: CONCRETE GRAY
- * NON - SKID SURFACE

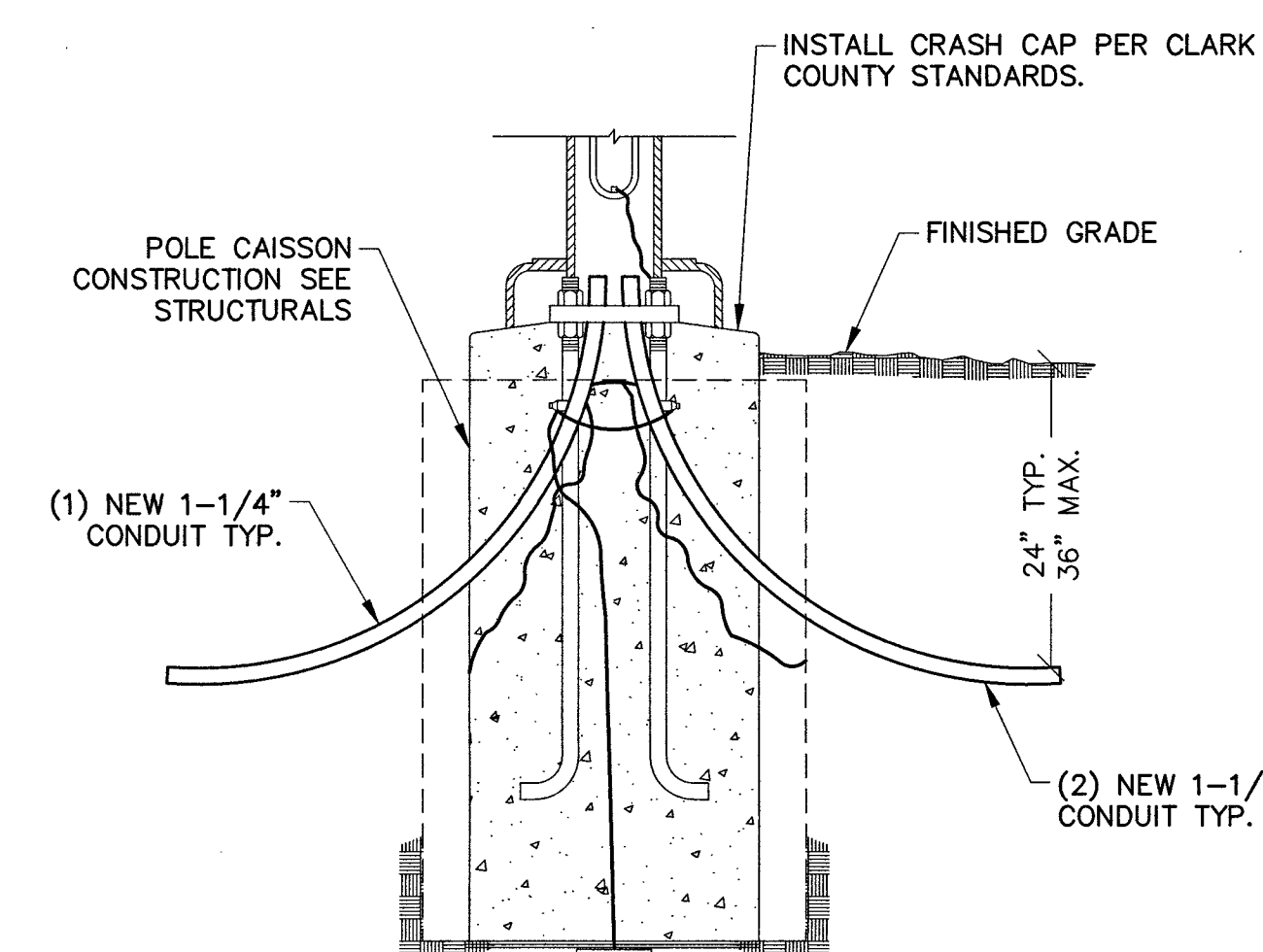
VAULT FEATURES:

- * POLYMER CONCRETE RING AND FIBERGLASS REINFORCED POLYMER BODY
- * COLOR OF RING: CONCRETE GRAY
- * APPROX. WT. = 123 LBS.



17" X 30" HANDHOLE

SCALE: NONE 2



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LICENSURE:

MAY 04 2017

SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NUMBER: REVISION:

C7 2

SCALE: NONE 1

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SHEET TITLE:

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SHEET NUMBER: REVISION:

C8

2

NOT USED

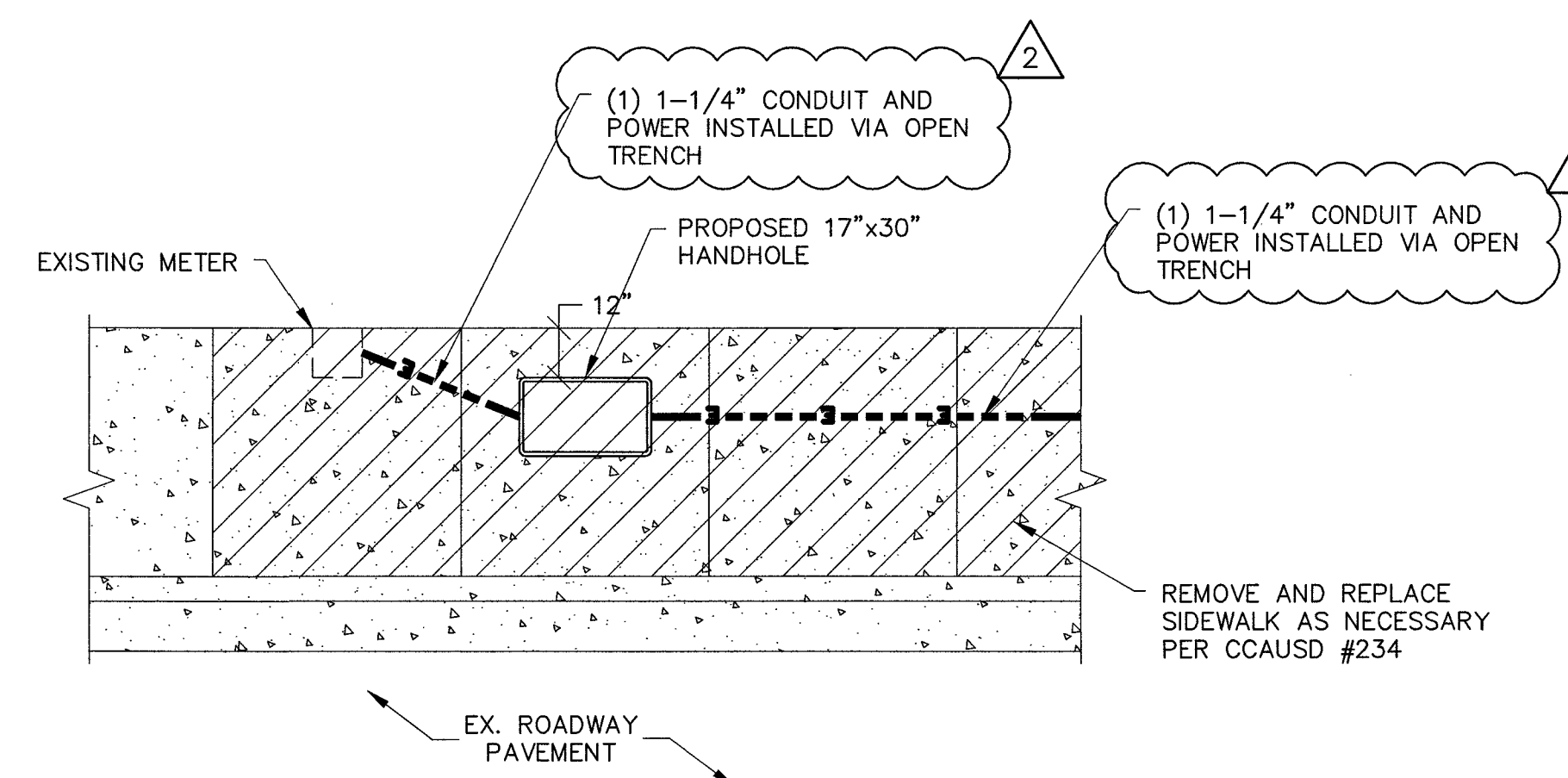
SCALE:
NONE

6

NOT USED

SCALE:
NONE

3



NOT USED

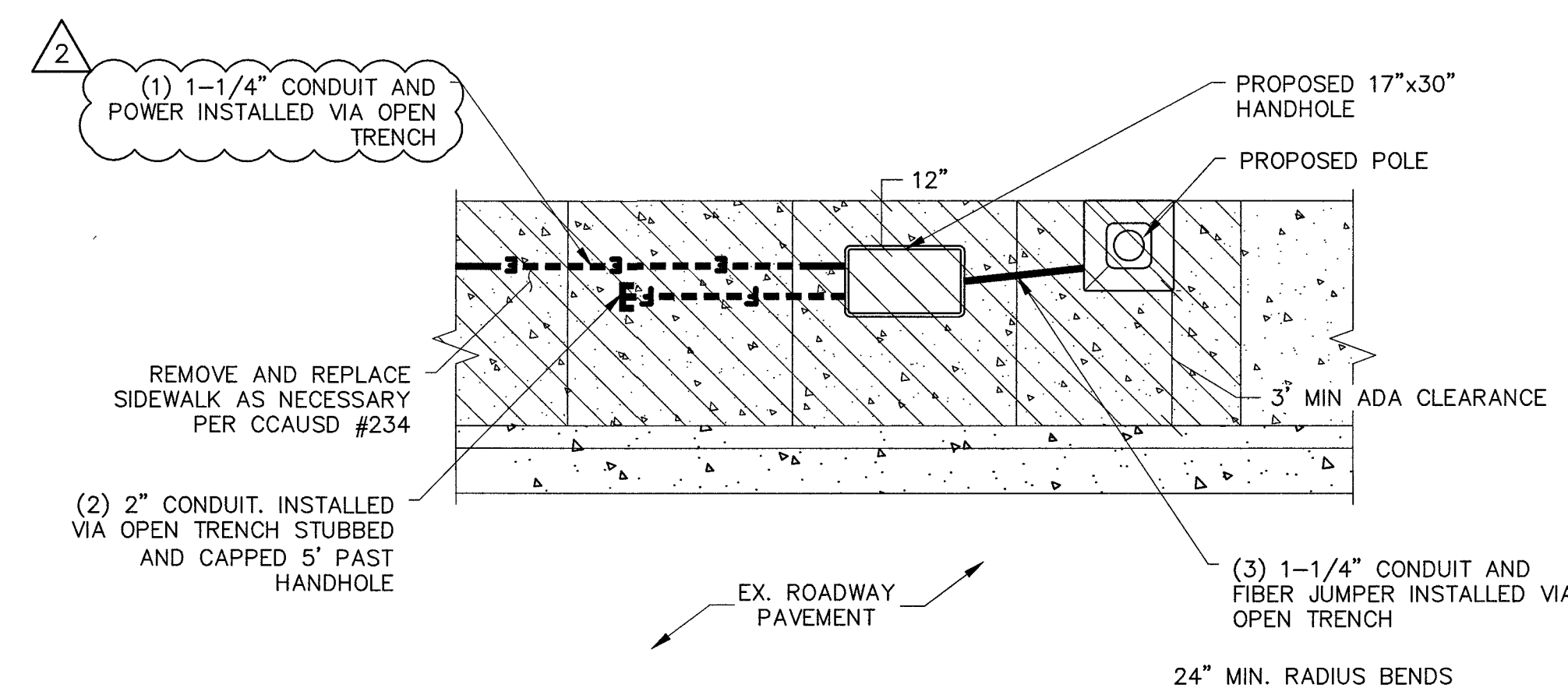
SCALE:
NONE

5

POWER INSTALLATION UNDER SIDEWALK AT METER

SCALE:
NONE

2



NOT USED

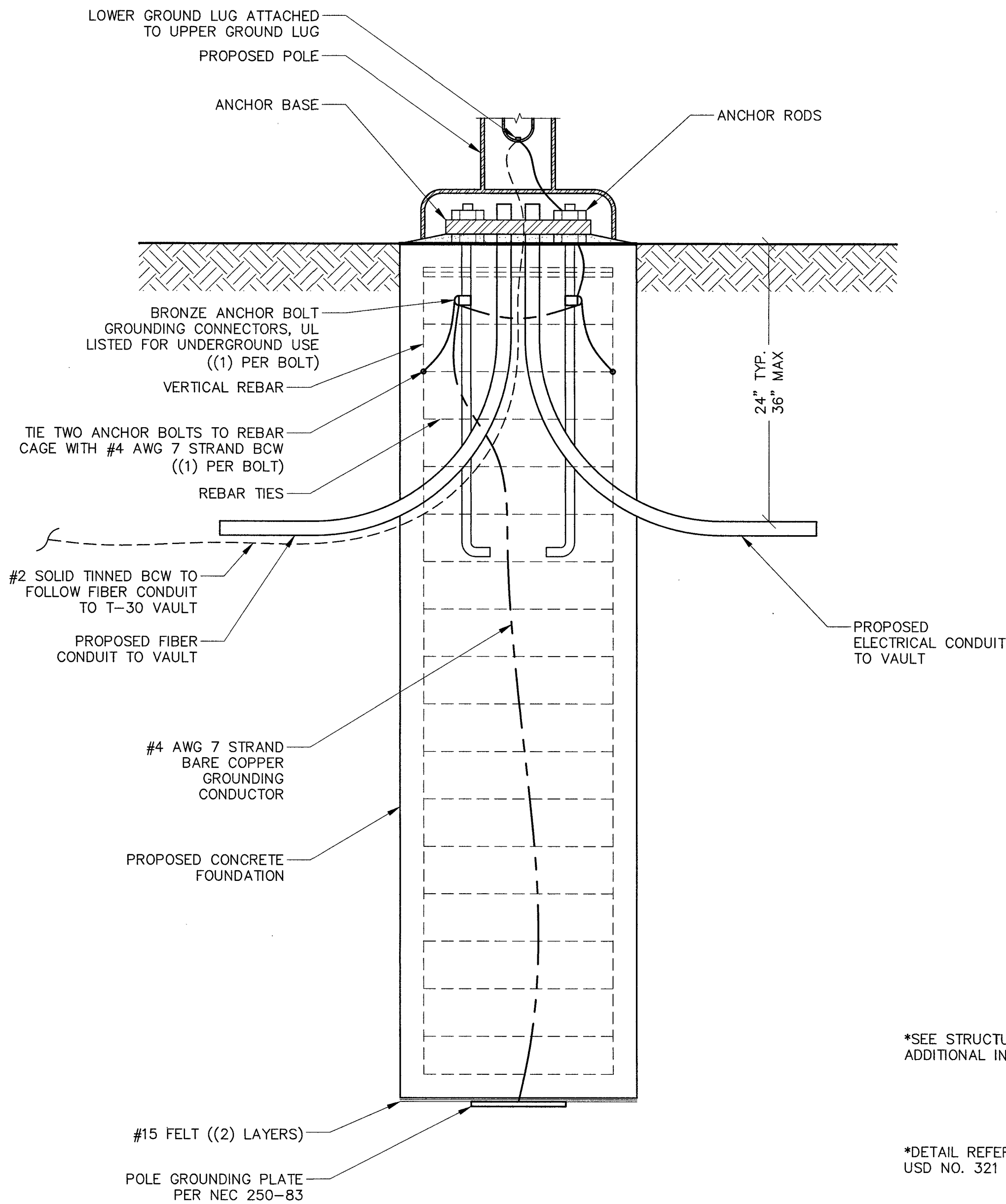
SCALE:
NONE

4

POWER AND FIBER INSTALLATION UNDER SIDEWALK AT PROPOSED POLE

SCALE:
NONE

1



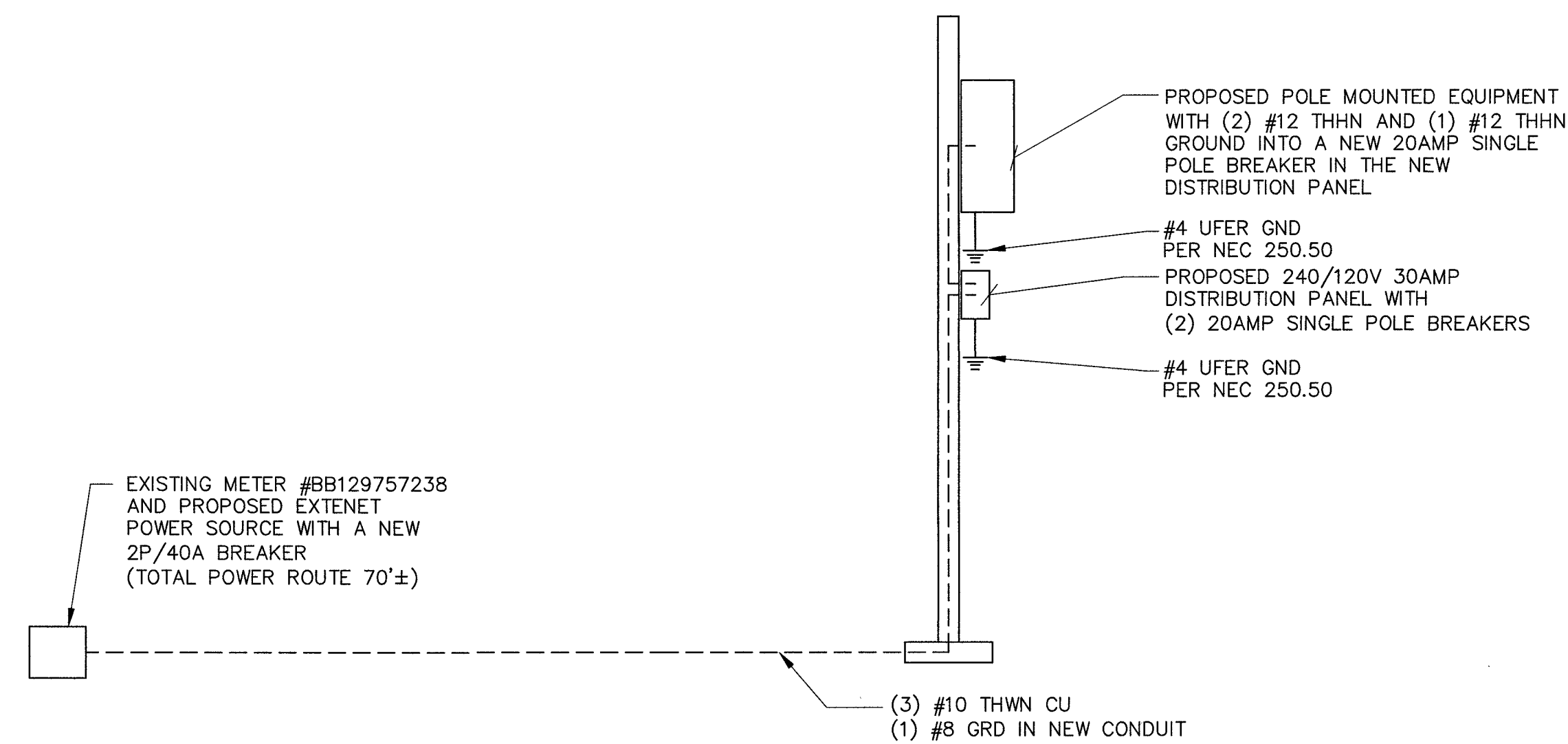
1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION REQUIREMENTS AND CONSTRUCTION ACCORDING TO SITE CONDITIONS AND CARRIER GROUNDING STANDARD, NSTD46 LATEST REVISION.
2. ALL GROUNDING CONDUCTORS: #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
3. GROUND RING TO GROUND BAR CONNECTIONS SHALL BE CADWELDED QTY. (2) #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
4. GROUND BAR TO EQUIPMENT AND CABLES SHALL BE #2 AWG BTCW W/ DOUBLE LUG CONNECTIONS.
5. GROUND BAR LOCATED IN BASE OF EQUIPMENT WILL BE PROVIDED, FURNISHED AND INSTALLED BY THE VENDOR.
6. GROUND BAR LOCATED BELOW WAVEGUIDE ENTRY PORT. CABLES SHALL BE #2 AWG BTCW/DOUBLE LUG CONNECTIONS. TWO PATHS TO GROUND RING.
7. ALL BELOW GRADE CONNECTIONS: EXOTHERMIC WELD TYPE, ABOVE GRADE CONNECTIONS: EXOTHERMIC WELD TYPE.
8. EXTERIOR GROUNDING CONDUCTORS: BURIED TO A MINIMUM DEPTH OF 1'-6" BELOW FINISHED GRADE TO ALLOW FOR FUTURE CONSTRUCTION.
9. INSTALL GROUND CONDUCTORS AND GROUND ROD MINIMUM OF 1'-0" FROM EQUIPMENT CONCRETE SLAB, SPREAD FOOTING, OR FENCE.
10. EXOTHERMIC WELD GROUND CONNECTION TO FENCE POST: TREAT WITH A COLD GALVANIZED SPRAY.
11. GROUND BARS:
EQUIPMENT GROUND BUS BAR (EGB) LOCATED AT BOTTOM OF ANTENNA POLE/MAST FOR MAKING GROUNDING JUMPER CONNECTIONS TO COAX FEEDER CABLES SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. JUMPERS (FURNISHED BY OWNERS) SHALL BE INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR.
MAIN GROUND BUS BAR (MGB) LOCATED NEAR THE BASE OF THE RADIO EQUIPMENT CABINET(S) SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
12. ALL GROUNDING INSTALLATIONS AND CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR.
13. ALL BOLTED TORQUE CONNECTORS SHALL BE LONG-BARRELLED TYPES AND HAVE TWO HOLES FOR CONNECTION TO SURFACE AND NON-OXIDIZING AGENT APPLIED TO INHIBIT CORROSION.

GROUNDING NOTES

SCALE: NONE 3

Panel: A		PANEL VOLTAGE: 120/240 1Ø, 3W		CIRCUIT CODE:		N: NON-CONTINUOUS		M: MOTOR	
SLD: X		BUS: 60 AMPS		Plan: X		C: CONTINUOUS		P: PANEL	
LOCATION: X		MAIN: C.B. 30 AMPS		AIC RATING: 10,000 AMPS		R: DEMANDABLE RECEPTS		E: ELEV: (0)	
		MOUNTING: SURFACE				K: KITCHEN: (0)			
CKT NO	CODE	TRIP	POLE	LOAD DESIGNATION		CONNECTED VA		LOAD DESIGNATION	
				DESCRIPTION	NOTE	MISC	RECP	LTG	DESCRIPTION
1	N	20	1	Proposed Breaker					Proposed Breaker
3	N	20	1	SPARE					SPARE
PANEL NOTES:				PHASE TOTALS		ØA: 1,200		ØB: 0	
								PANEL(S) TOTAL CONNECTED VA: 1,200	
								PANEL(S) DEMAND KVA: 1.2	
								PANEL(S) DEMAND AMPS: 5.0	
								LARGEST Ø DEMAND AMPS: 10.0	

SCALE: NONE 2



SCALE: NONE 1

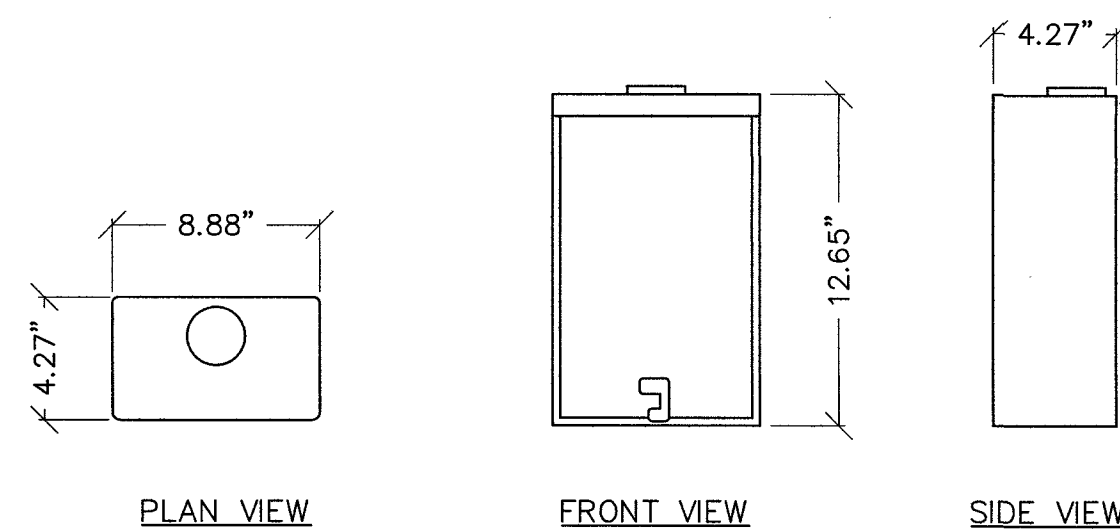
STREETLIGHT GROUNDING

SCALE: NONE 5

PANEL SCHEDULE

SQUARE D Q0612L100RBCP SPECIFICATIONS

NUMBER OF PHASES 1
NUMBER OF SPACES 4
MAXIMUM AMPERAGE 100 AMPS
VOLTAGE 120/240 VOLTS



DISTRIBUTION PANEL

SCALE: NONE 4

SINGLE LINE DIAGRAM



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PLANS PREPARED BY:



DGS
CONSULTING ENGINEERING SERVICES LLC

LICENSURE:



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PANEL SCHEDULE AND
NOTES

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E1 2