



- ## PROJECT GENERAL NOTES

- ## CONSTRUCTION NOTES



PROJECT INFORMATION:

LSV_BLACK_WIDOW_SC
SW-NV-LVSTEXP4-VZW
SW-NV-LVSTRI-00137

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

CURRENT ISSUE DATE:

05/05/17

ISSUED FOR:

PROPOSED WORK

REV.: DATE: DESCRIPTION: BY:

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2	05/05/17	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

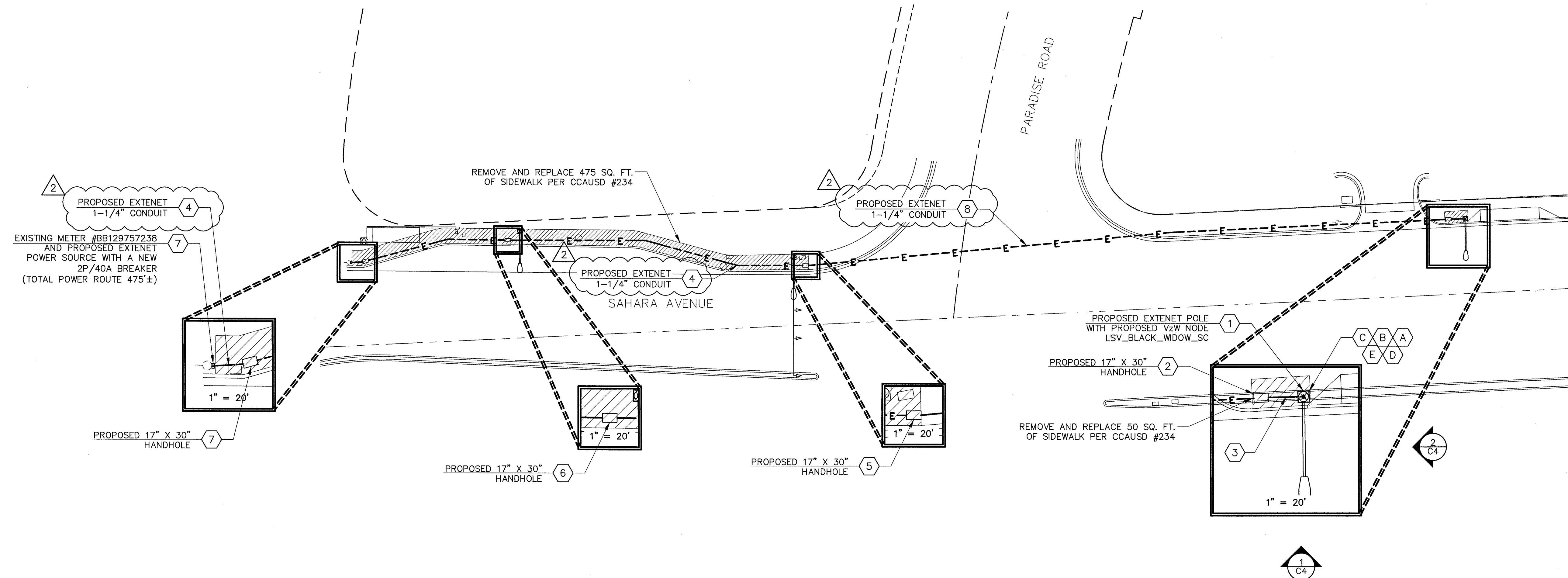
SHEET NUMBER: REVISION:

C3

2

11" X 17" SCALE 24" X 36" SCALE
1" = 50' 1" = 25'

SITE PLAN



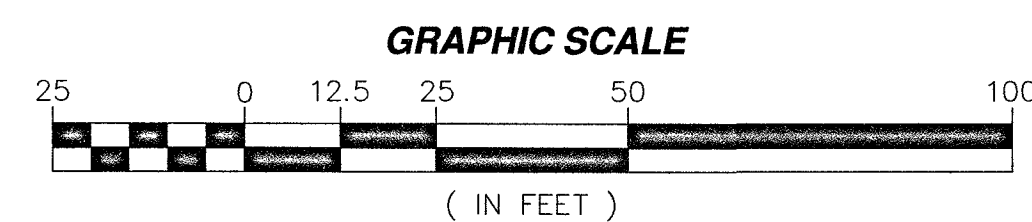
CONSTRUCTION NOTES

- 1 PROPOSED 1-1/4" CONDUIT FOR POWER FROM NEW EXTENET POLE TO PROPOSED 17"x 30" VAULT AND (2) PROPOSED 1-1/4" CONDUITS FOR FIBER FROM EXTENET POLE TO PROPOSED 17"x30" VAULT. SEE DETAIL 1, SHEET C7.
- 2 PROPOSED 17" X 30" EXTENET HANDHOLE. SEE DETAIL 2, SHEET C7 AND DETAIL 1, SHEET C8. REMOVE AND REPLACE SIDEWALK PANELS AS REQUIRED PER CCAUSD #234. SEE DETAIL 5, SHEET C7.
- 3 OPEN TRENCH WITH (3) 1-1/4" CONDUITS. SEE DETAIL 3, SHEET C7. REMOVE AND REPLACE SIDEWALK PANELS AS REQUIRED PER CCAUSD #234. SEE DETAIL 5, SHEET C7.
- 4 OPEN TRENCH WITH (1) 1-1/4" CONDUIT. SEE DETAILS 3 AND 5, SHEET C7.
- 5 PROPOSED 17" X 30" EXTENET HANDHOLE. SEE DETAIL 2, SHEET C7 AND DETAIL 2, SHEET C8. REMOVE AND REPLACE SIDEWALK PANELS AS REQUIRED PER CCAUSD #234. SEE DETAIL 5, SHEET C7.
- 6 PROPOSED 17" X 30" EXTENET HANDHOLE. SEE DETAIL 2, SHEET C7 AND DETAIL 3, SHEET C8. REMOVE AND REPLACE SIDEWALK PANELS AS REQUIRED PER CCAUSD #234. SEE DETAIL 5, SHEET C7.
- 7 PROPOSED 17" X 30" EXTENET HANDHOLE. SEE DETAIL 2, SHEET C7 AND DETAIL 4, SHEET C8. REMOVE AND REPLACE SIDEWALK PANELS AS REQUIRED PER CCAUSD #234. SEE DETAIL 5, SHEET C7.
- 8 N-DIRECTIONAL BORE WITH (1) 1-1/4" CONDUIT. SEE DETAILS 5, SHEET C7 AND DETAIL 5, SHEET C8.
- A PROPOSED MOUNTING BRACKET ON PROPOSED EXTENET POLE. SEE DETAIL 1, SHEET C8.
- B PROPOSED RRH ATTACHED TO MOUNTING BRACKET ON PROPOSED EXTENET POLE. SEE DETAIL 2, SHEET C8.
- C PROPOSED ANTENNAS MOUNTED ON TOP OF PROPOSED EXTENET POLE SEE DETAIL 3 AND 4, SHEET C8.
- D PROPOSED DISTRIBUTION PANEL MOUNTED ON PROPOSED EXTENET POLE. SEE DETAIL 4, SHEET E1.
- E PROPOSED PANEL SCHEDULE FOR PROPOSED DISTRIBUTION PANEL SEE DETAIL 2, SHEET E1

LEGEND

---	CENTERLINE
---	EASEMENT
---	RIGHT-OF-WAY
---	CURB AND CUTTER
---	EDGE OF SIDEWALK
---	UNDERGROUND POWER ROUTE
---	UNDERGROUND POWER ROUTE
---	FIRE HYDRANT
---	STREET LIGHT

NORTH



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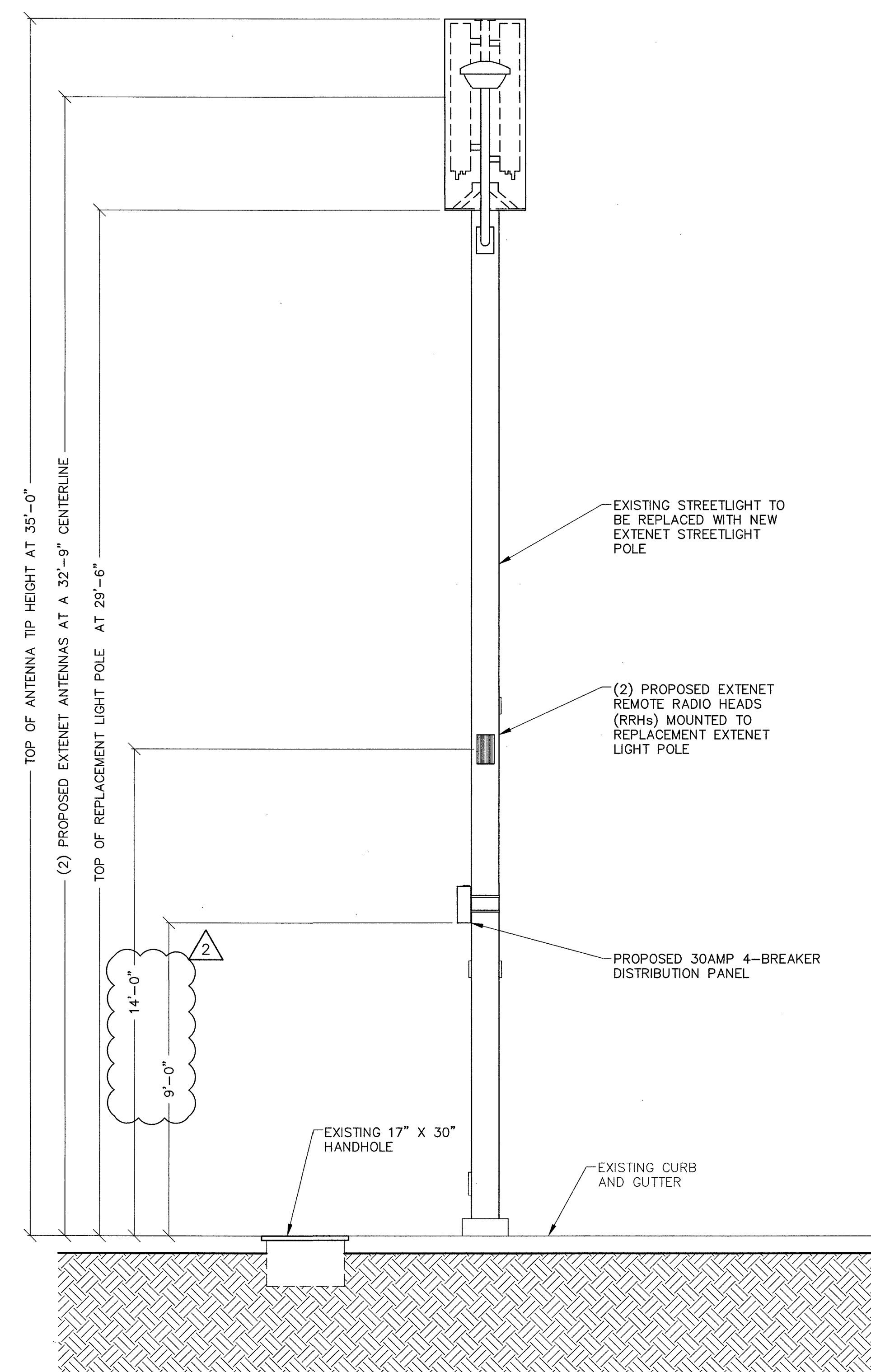
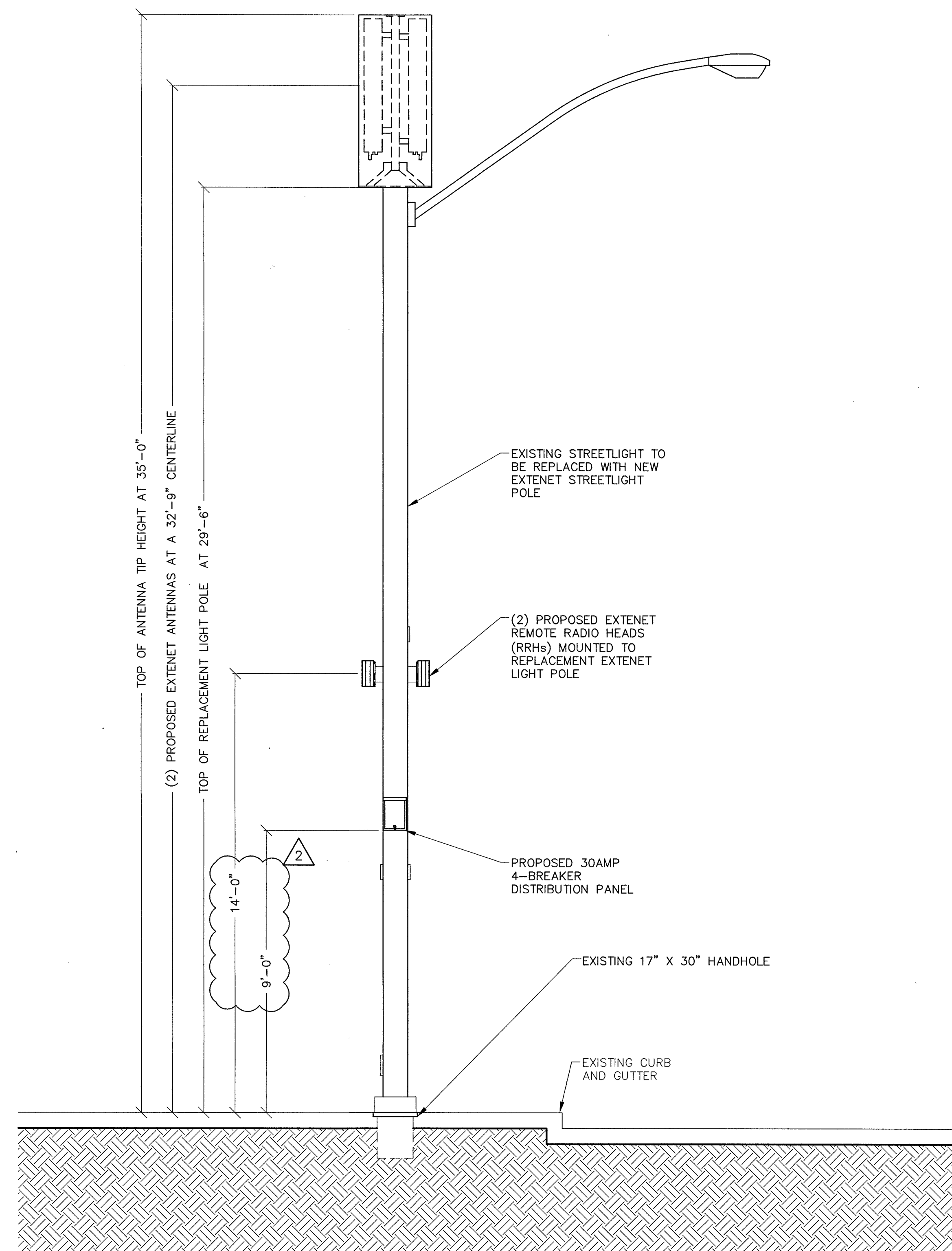


SHEET TITLE:

SOUTH AND EAST
ELEVATION

SHEET NUMBER: REVISION:

C4 2



EAST ELEVATION

11" X 17" SCALE 24" X 36" SCALE
1" = 5' 1" = 2'-6"

2

SOUTH ELEVATION

11" X 17" SCALE 24" X 36" SCALE
1" = 5' 1" = 2'-6"

1

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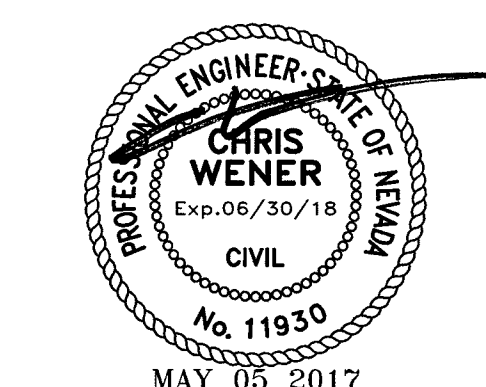
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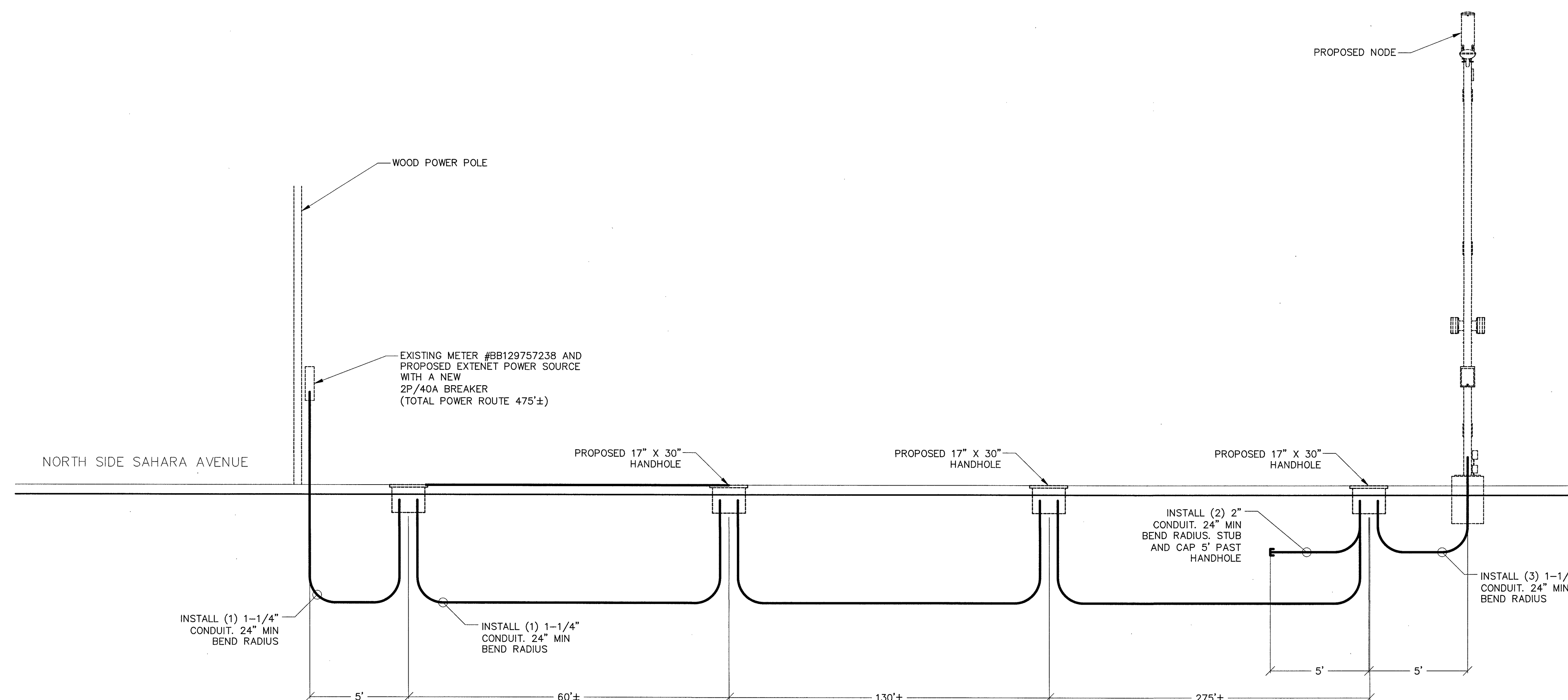


SHEET TITLE:

CONDUIT DIAGRAM

SHEET NUMBER: REVISION:

C5 2



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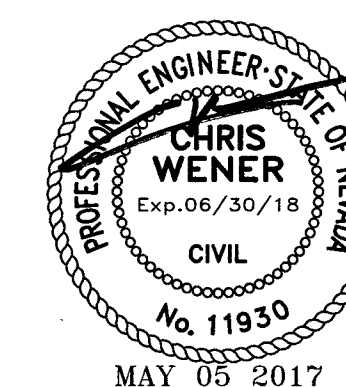
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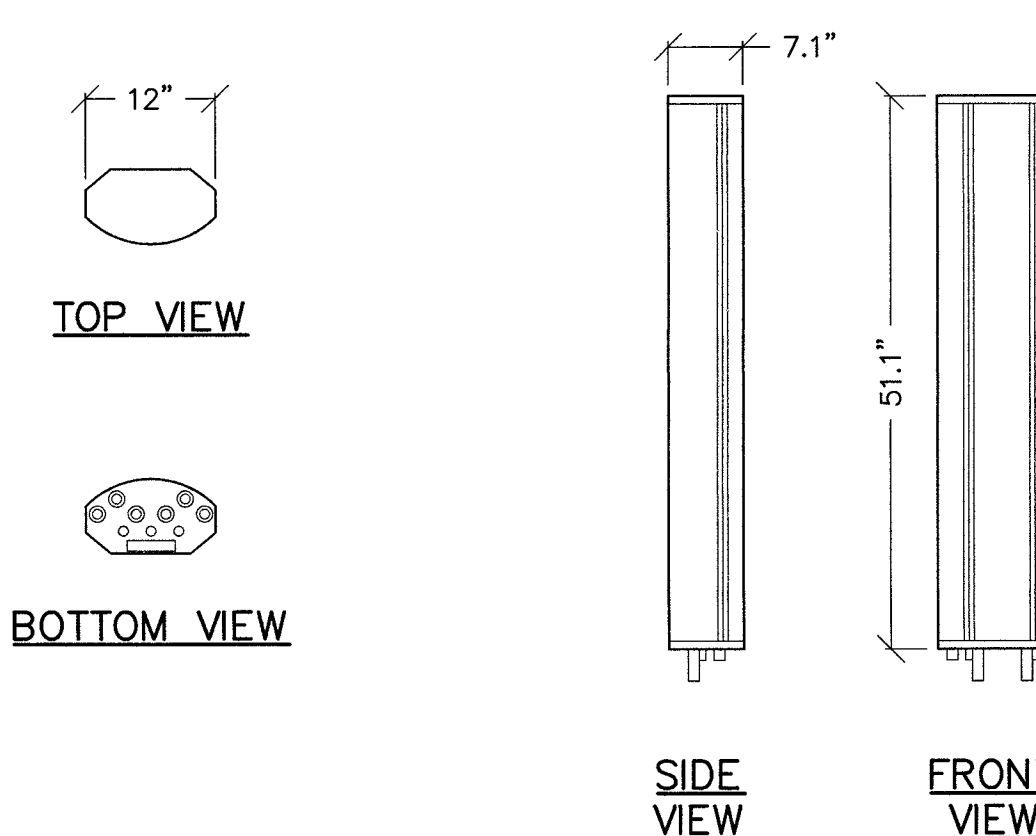
SHEET TITLE:

CONSTRUCTION DETAILS

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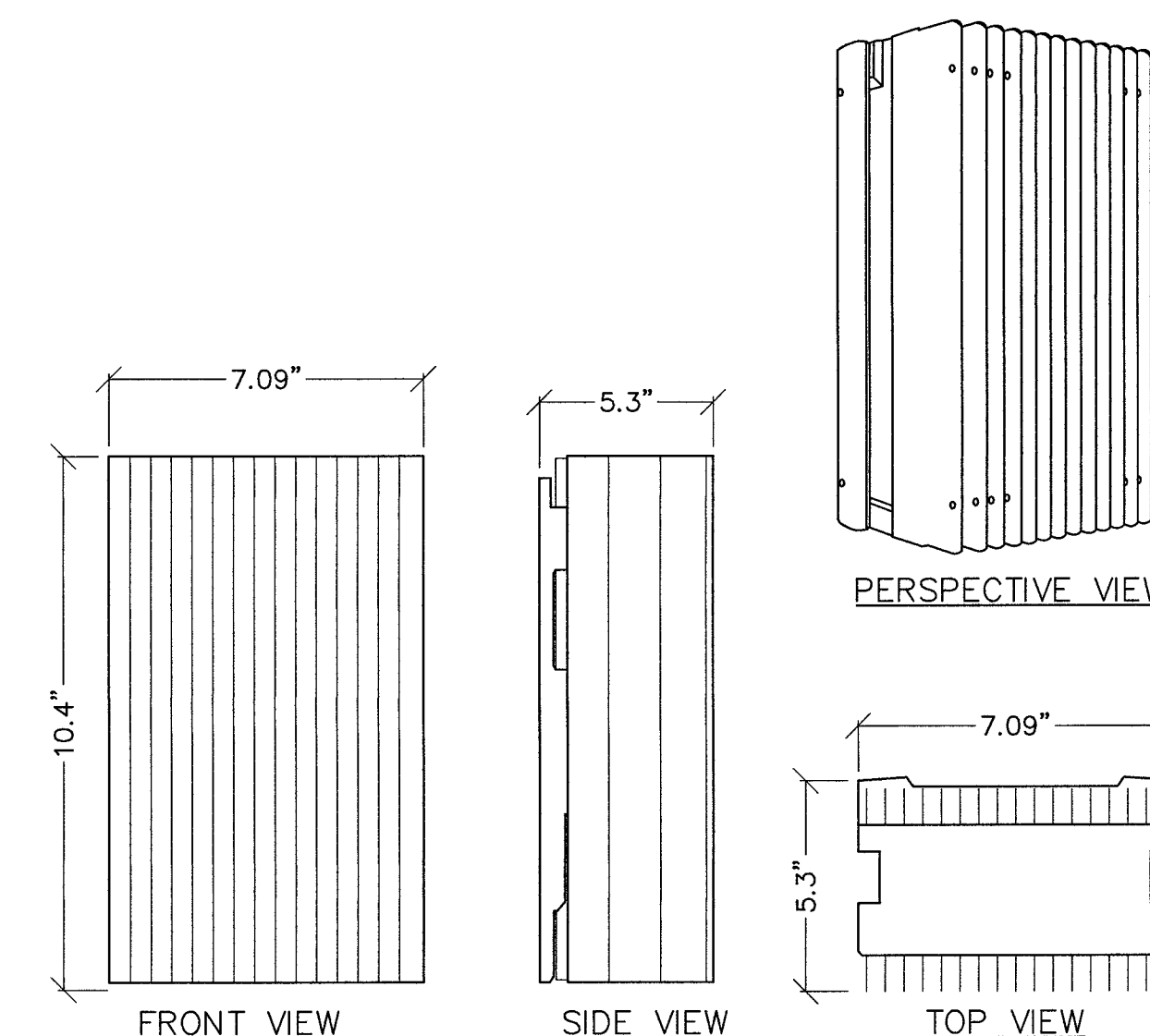
C6 2

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

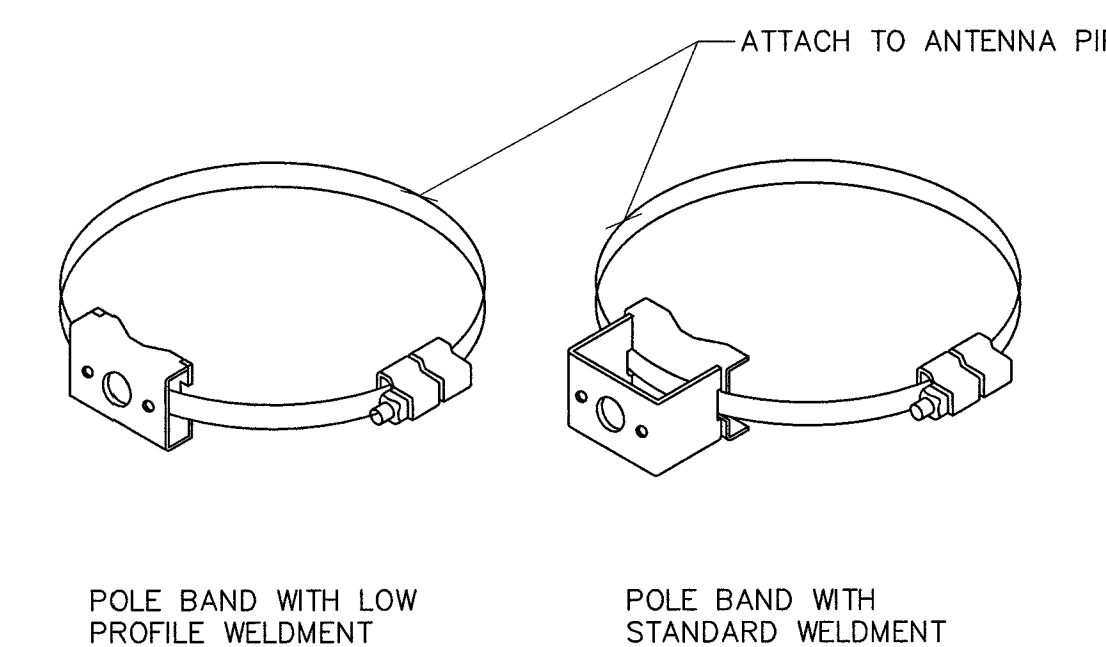


5 ANTENNA DETAIL

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



REMOTE RADIO HEAD (RRH)

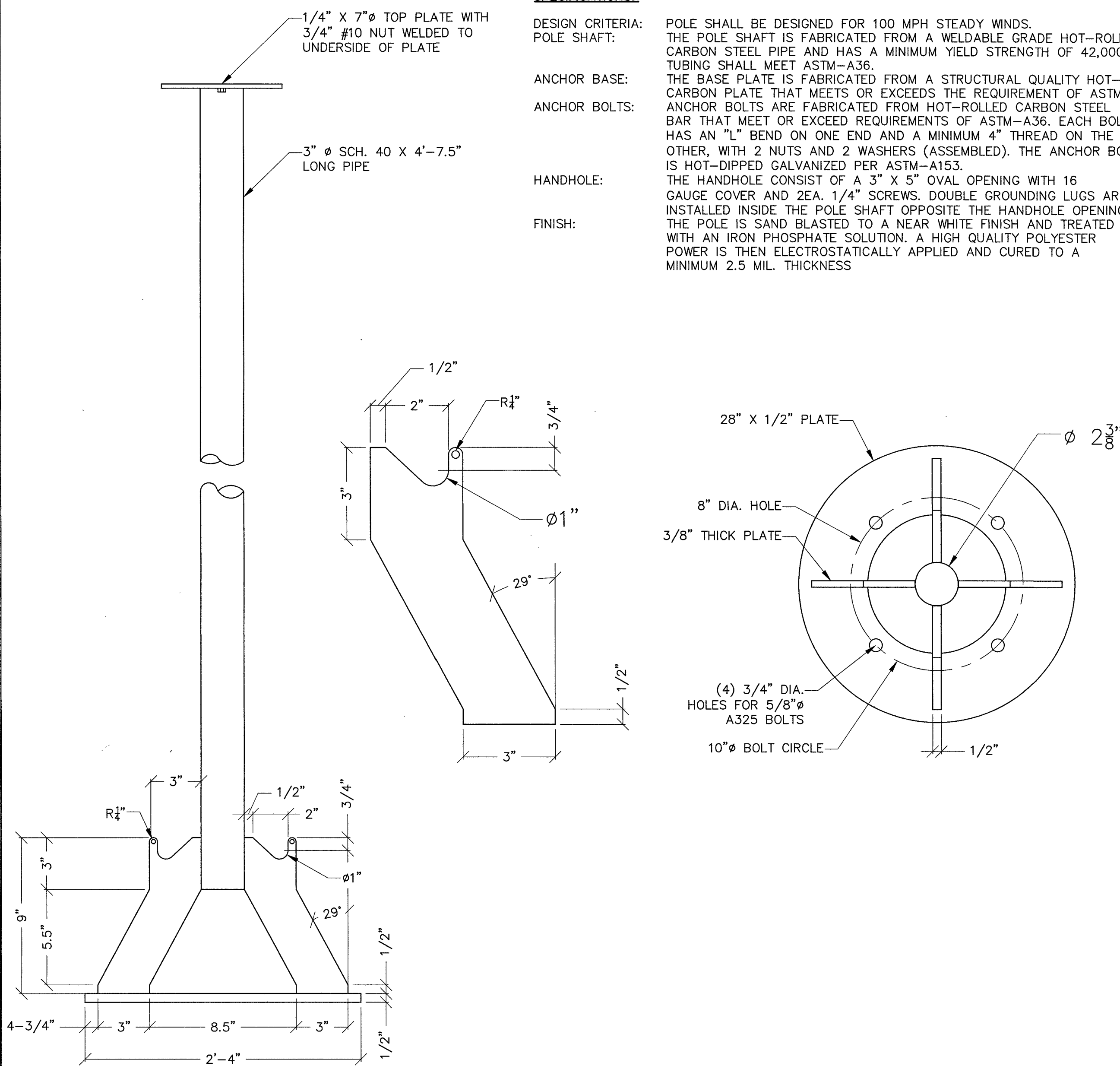


4 MOUNTING BANDS

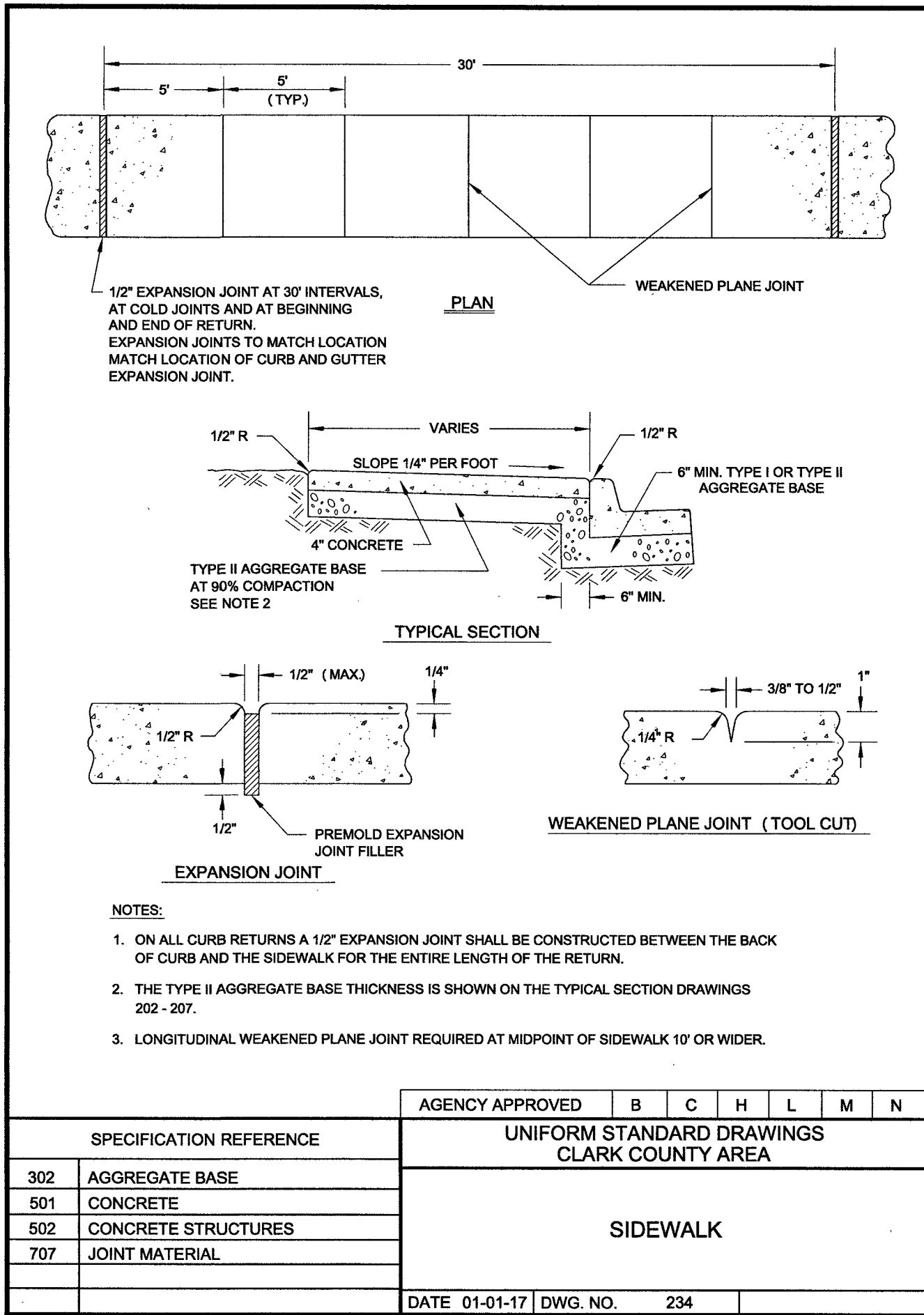
NOT USED

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. 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
FINISH:

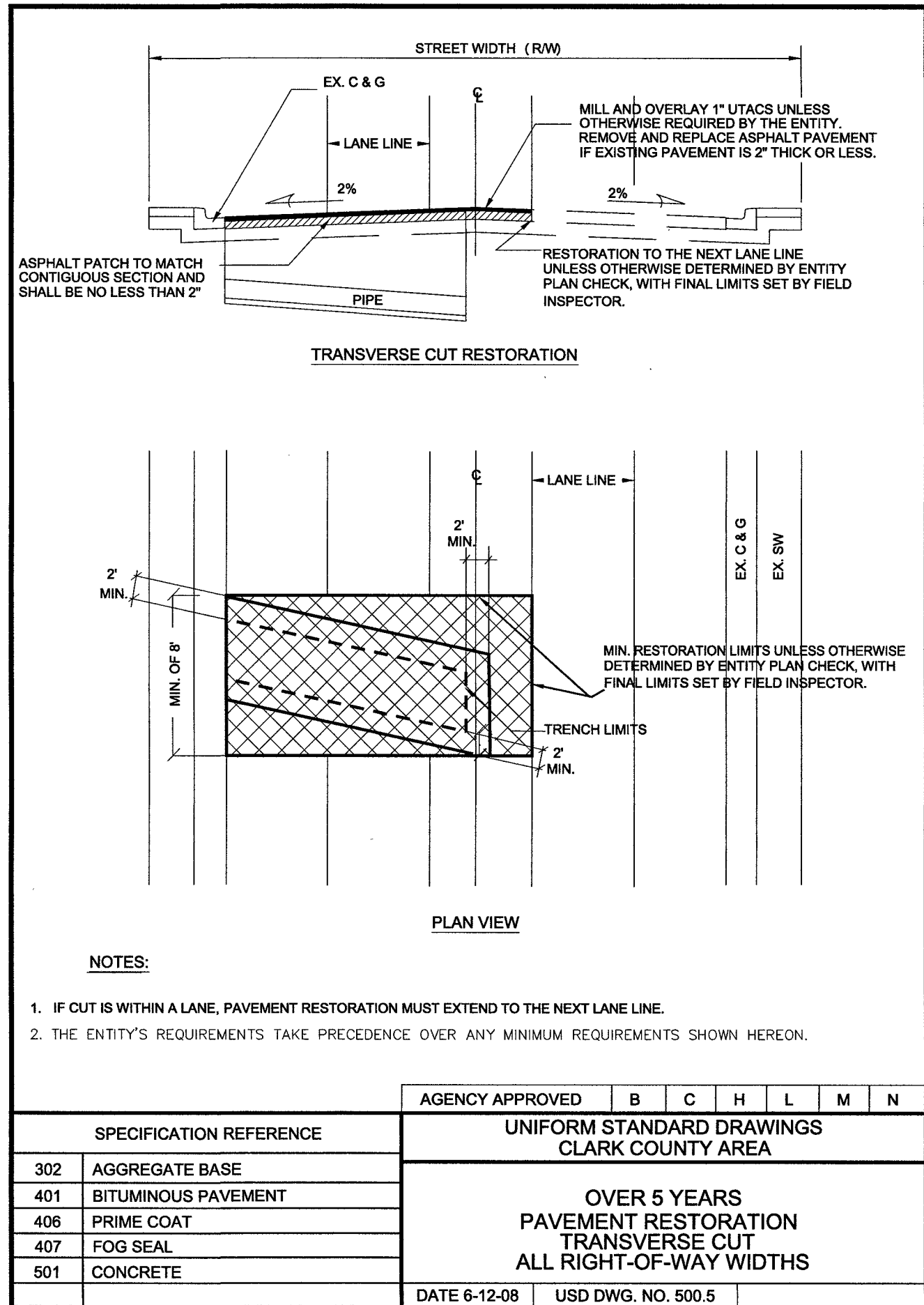


CEM-TEC APS ANTENNA MAST



CCAUSD #234 SIDEWALK RESTORATION

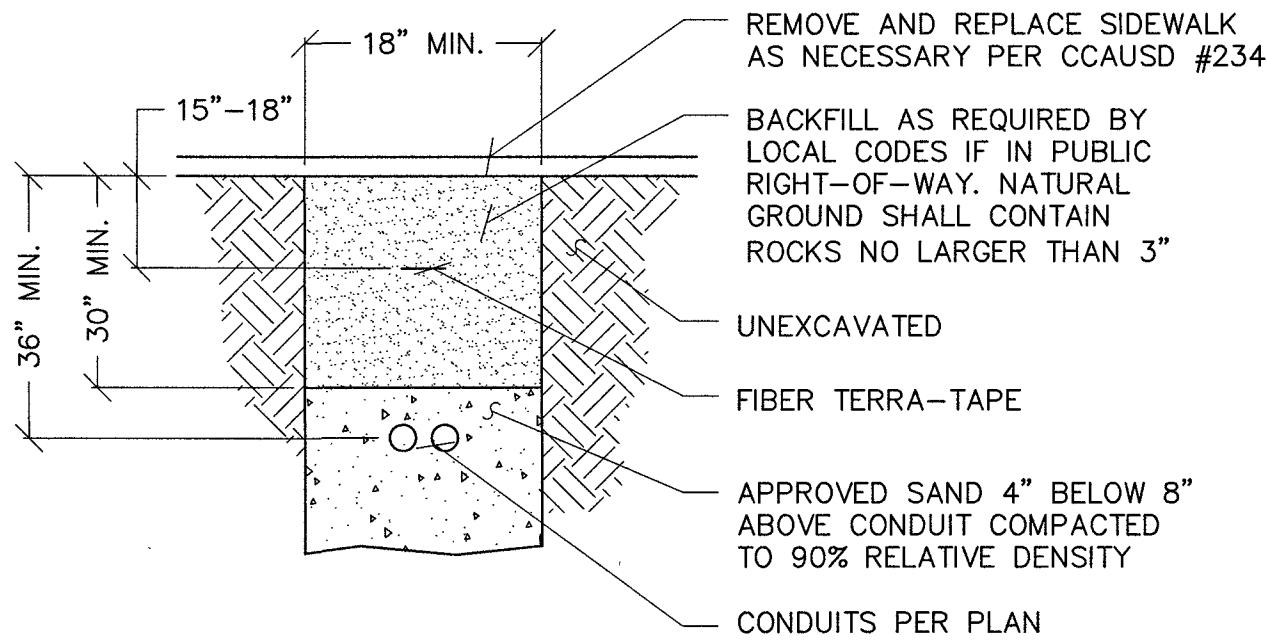
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USD NO. 500.5 PAVEMENT RESTORATION

SCALE: NONE 4

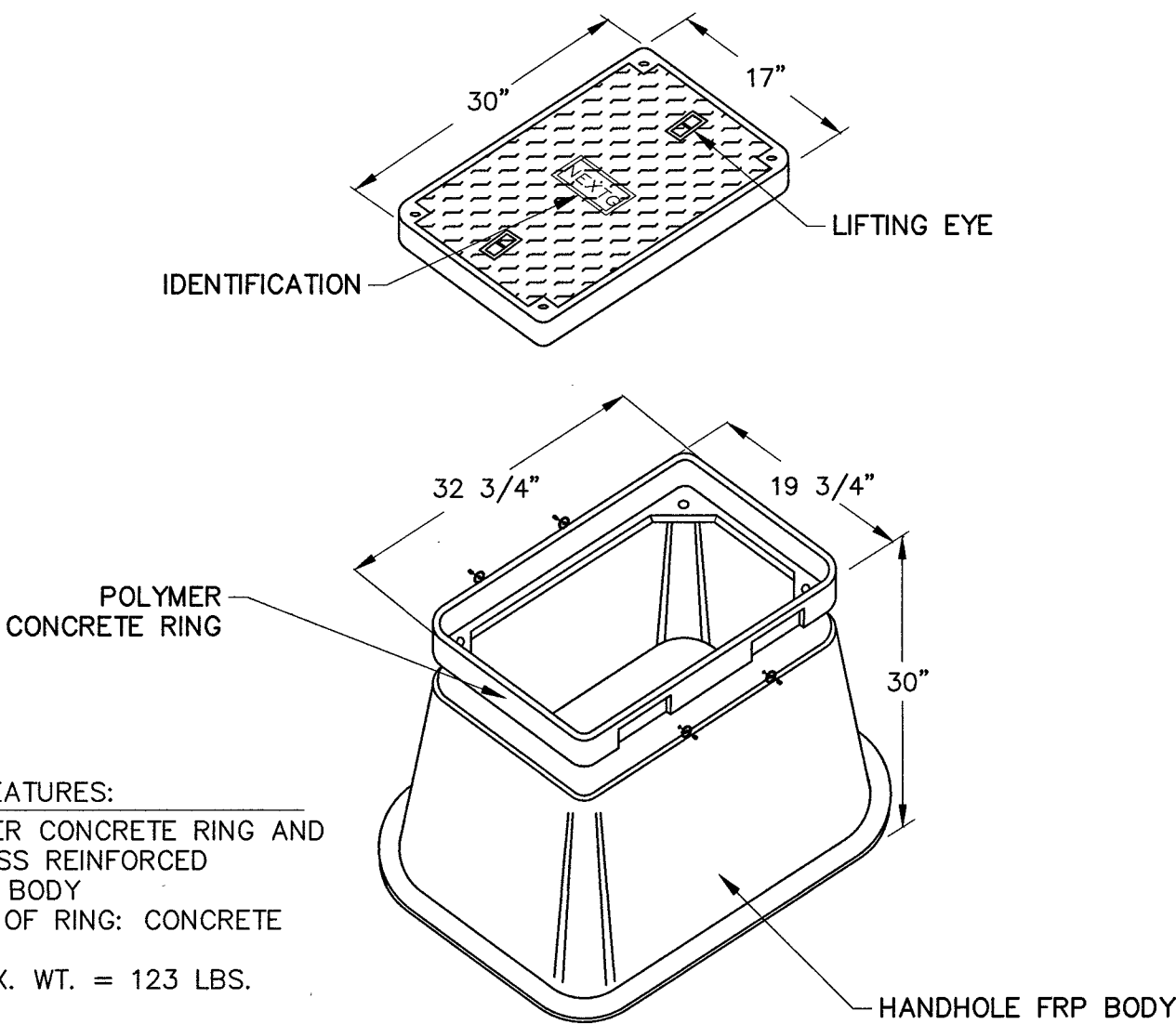
NOTE: TYPICAL INSTALLATION.
UTILITY DESIGN TAKES PRECEDENCE.



POWER TRENCHING

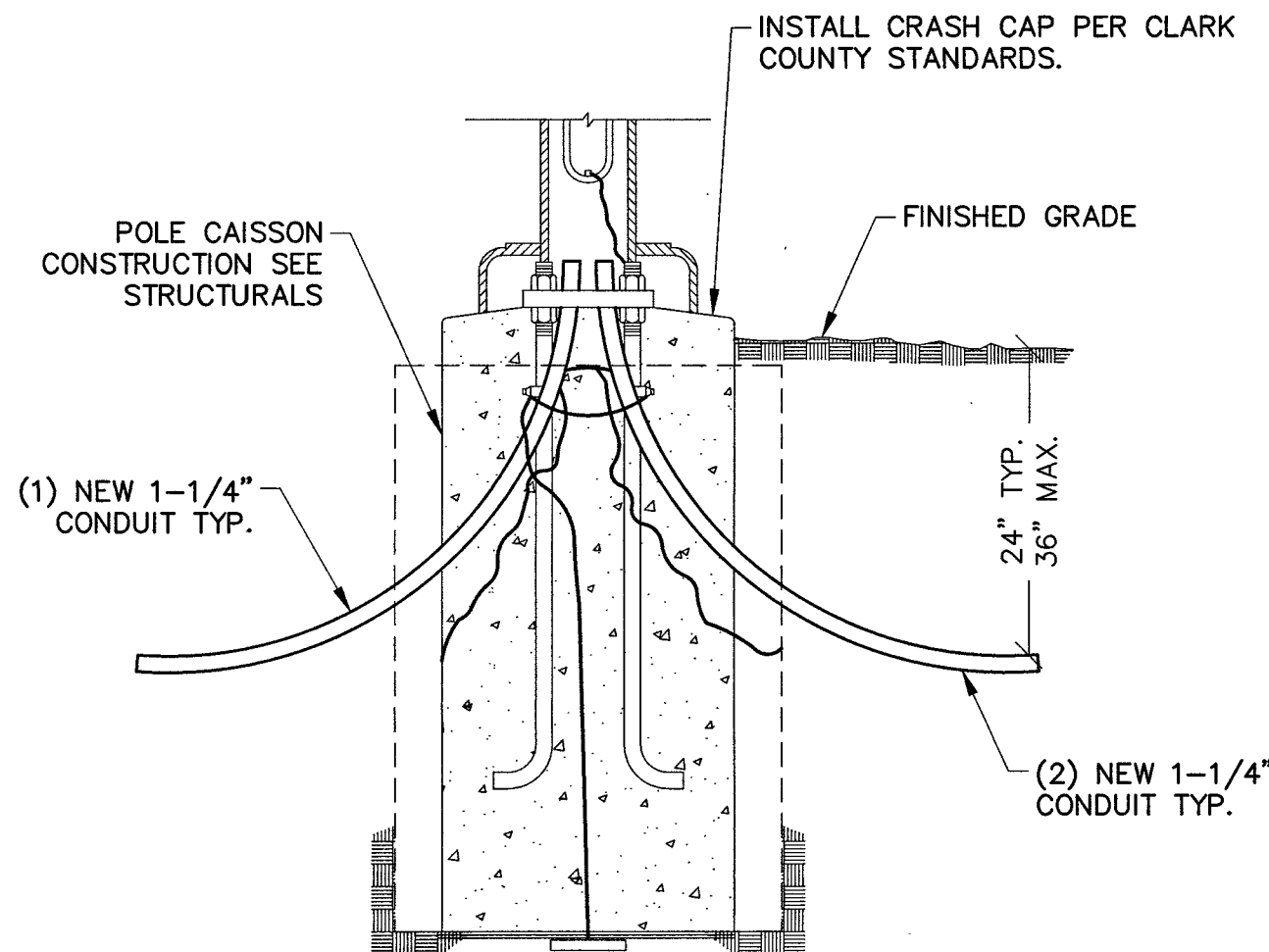
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COVER FEATURES:
* PW - 10,400 LBS. WHEEL
LOAD ON
10\"/>



17" X 30" HANDHOLE

SCALE: NONE 2



POLE POWER ROUTING

SCALE: NONE 1

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

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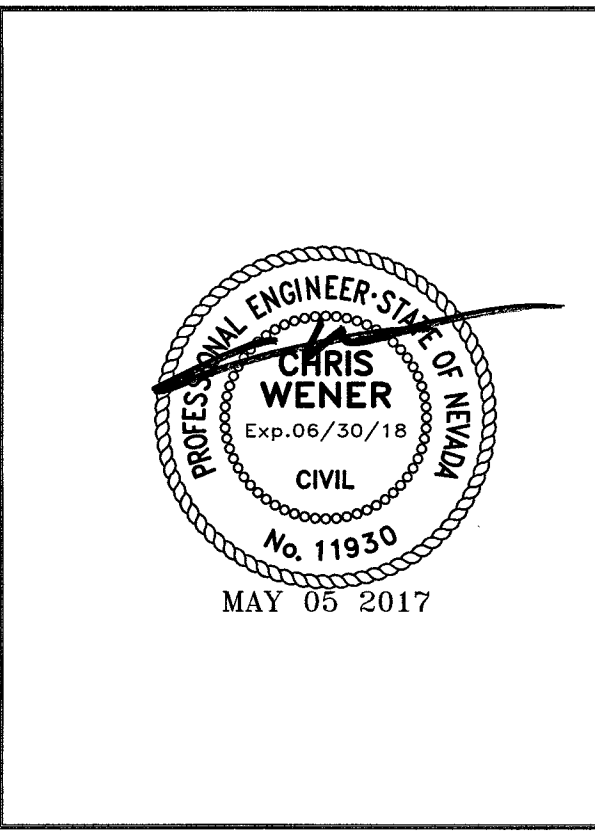
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SHEET TITLE:

CONSTRUCTION DETAILS

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C7 2

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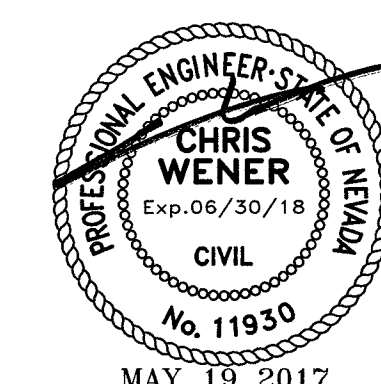
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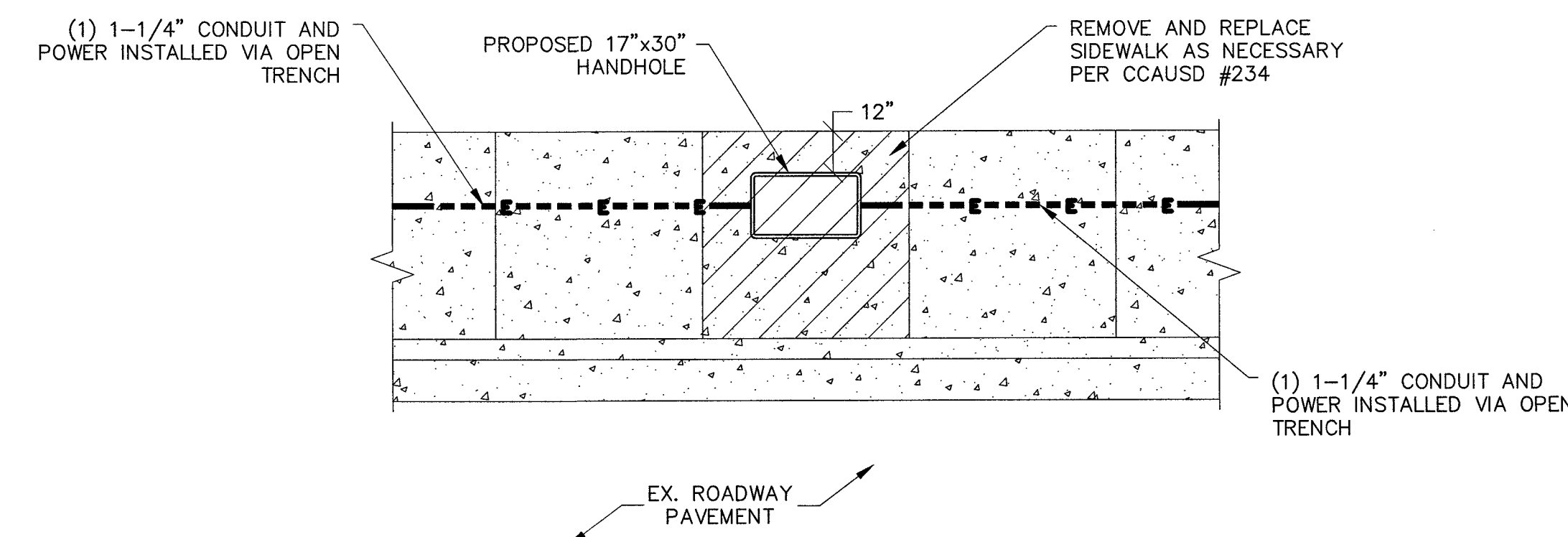
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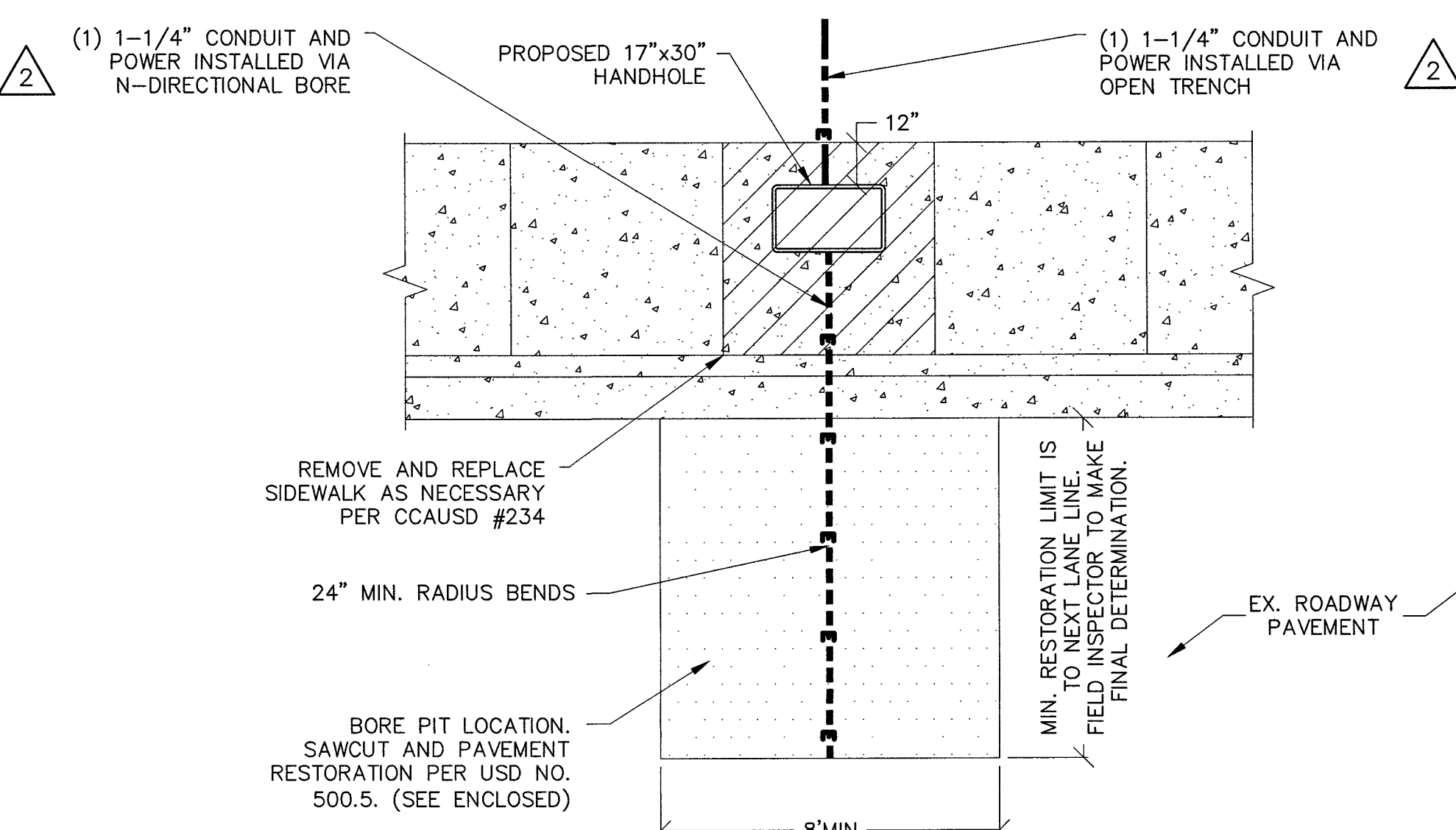
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C8

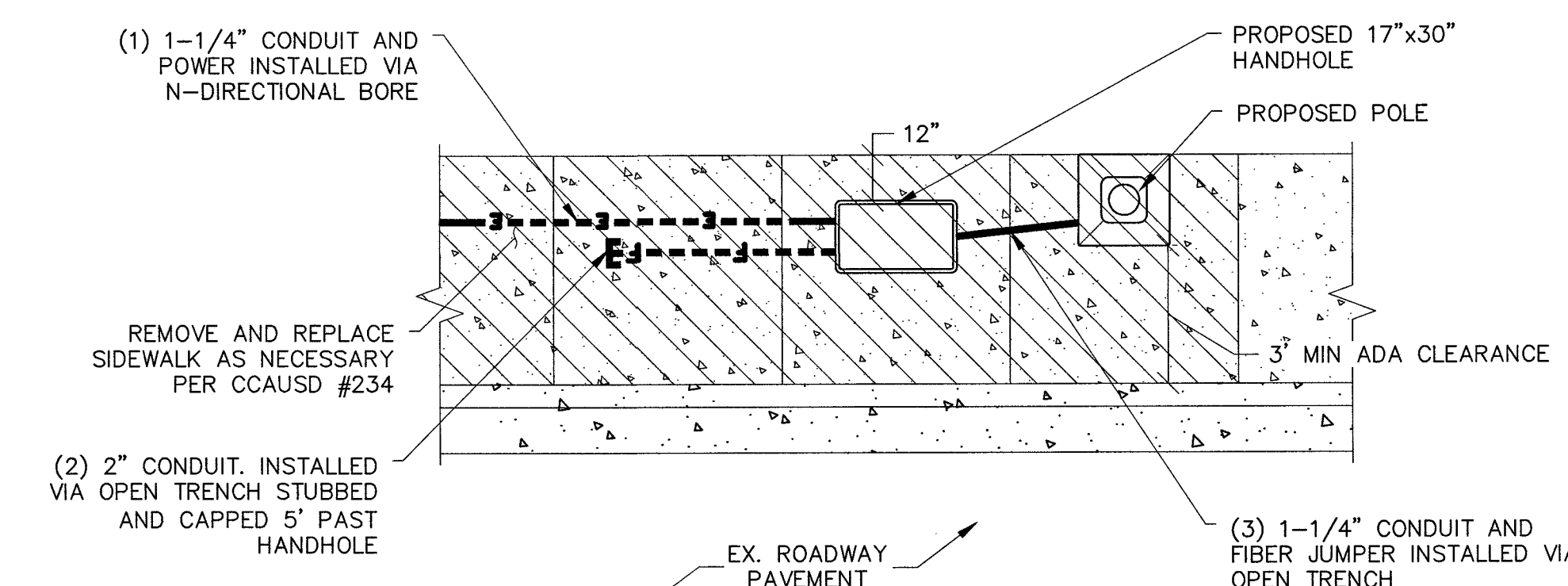
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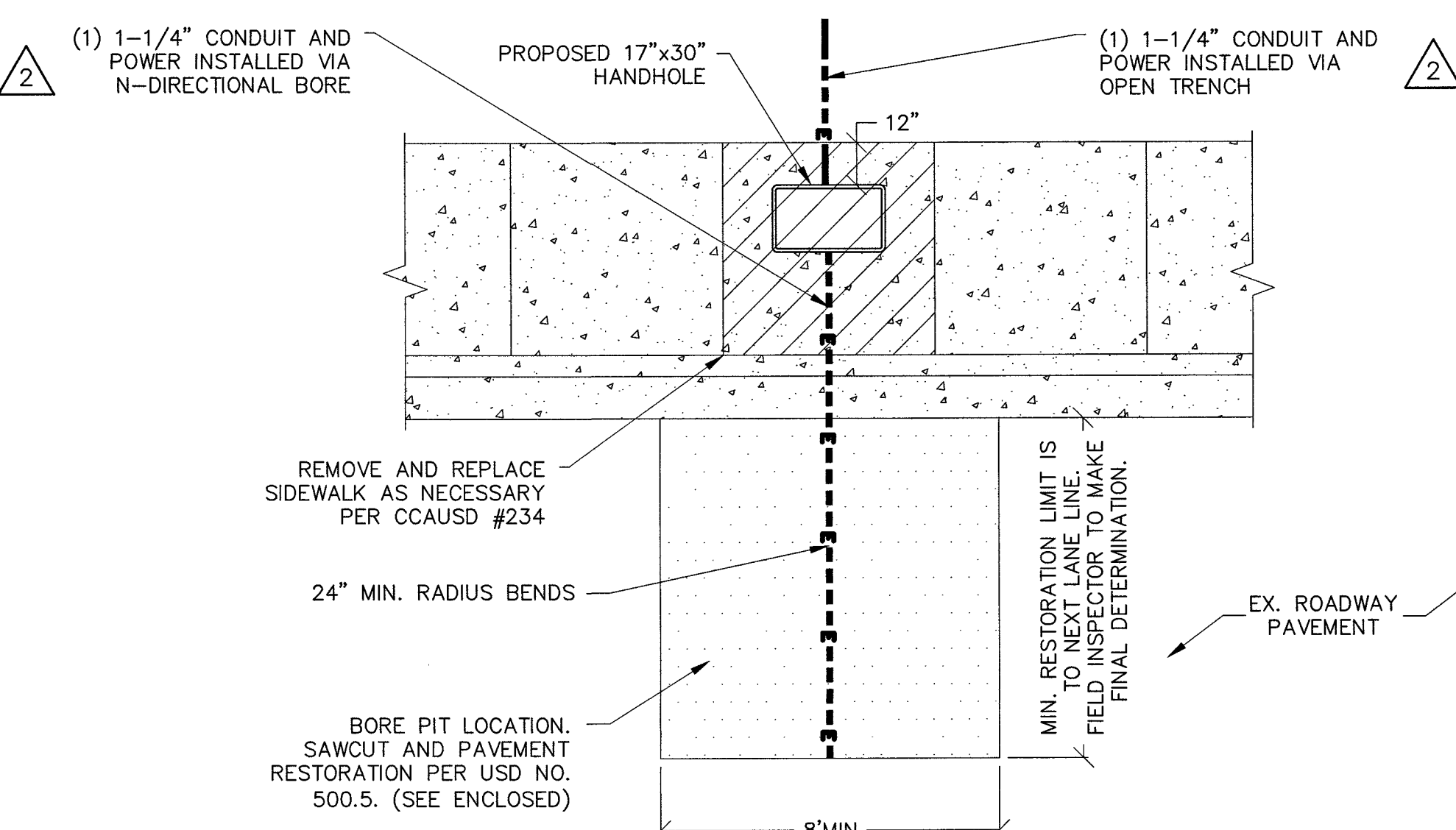


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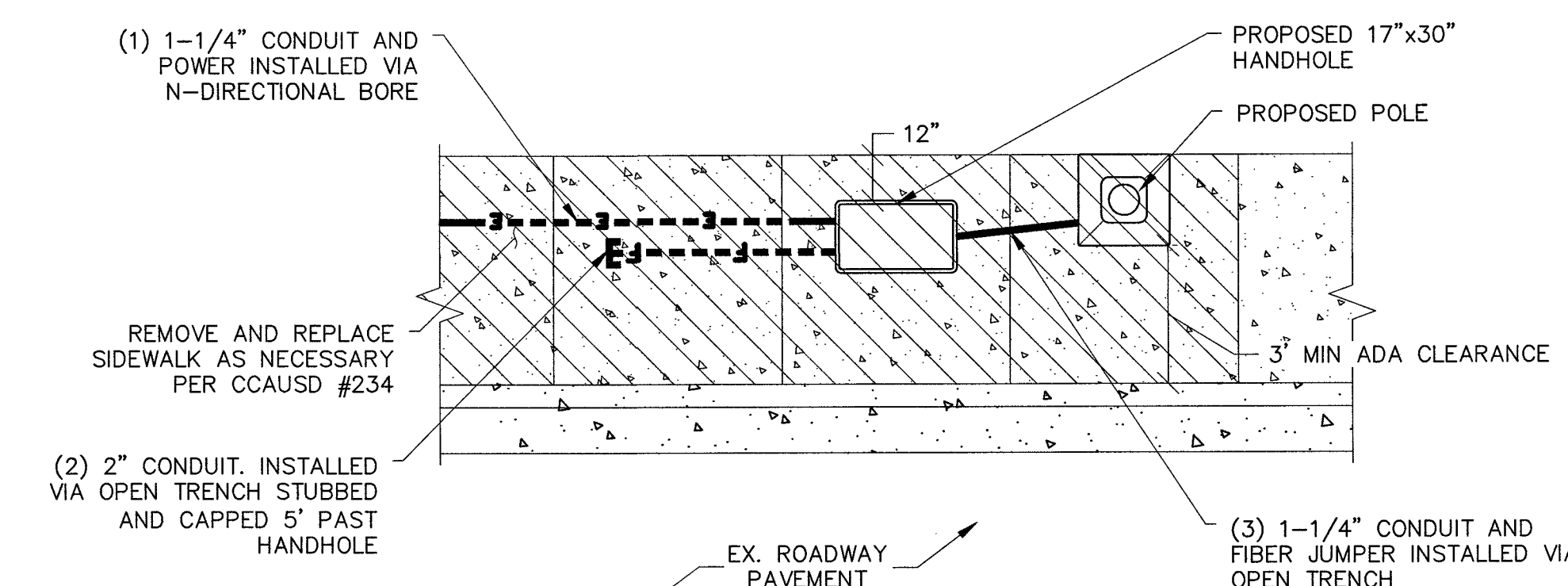


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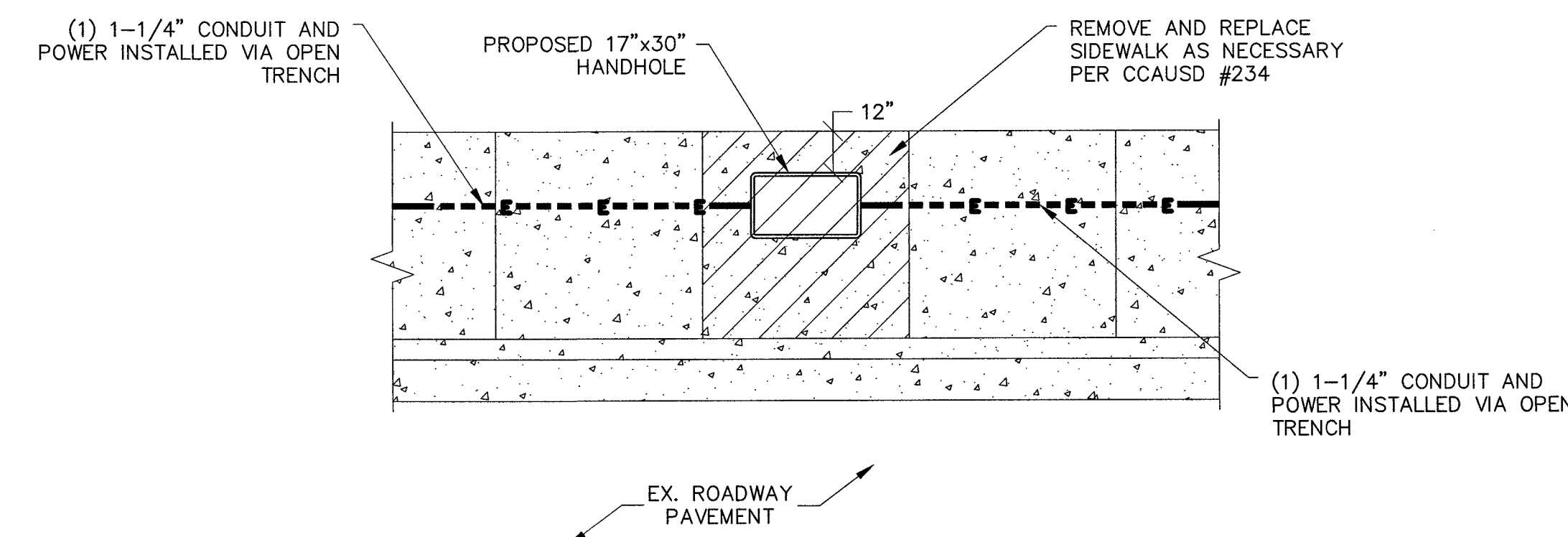
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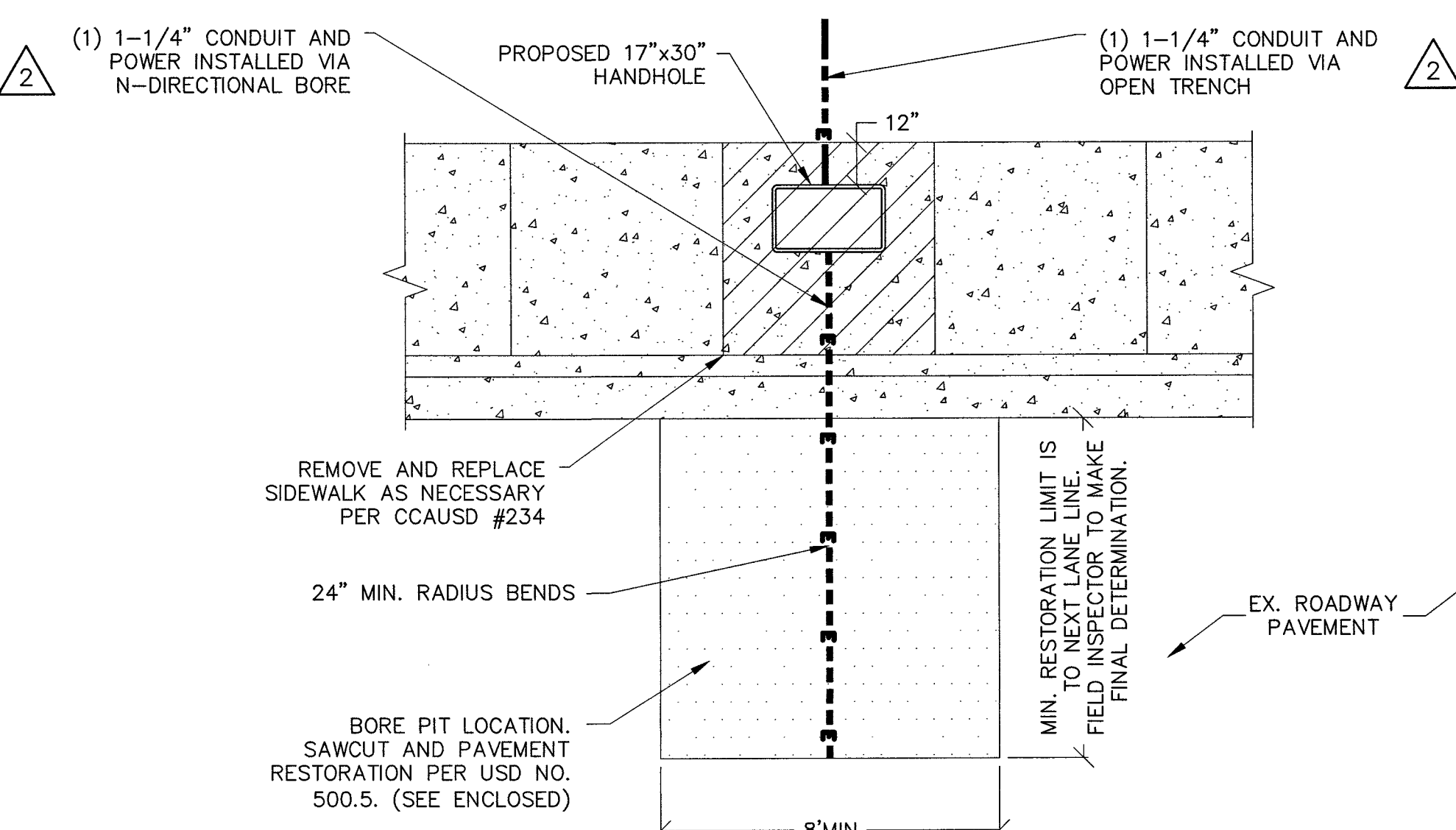
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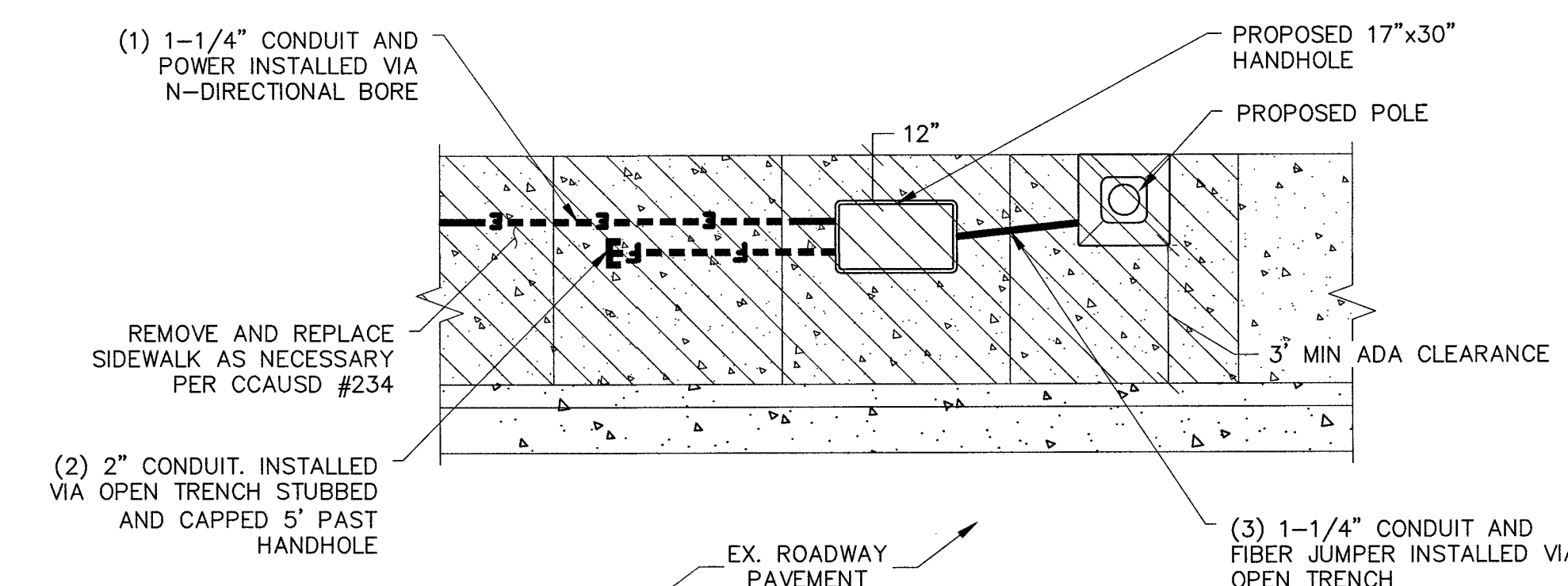
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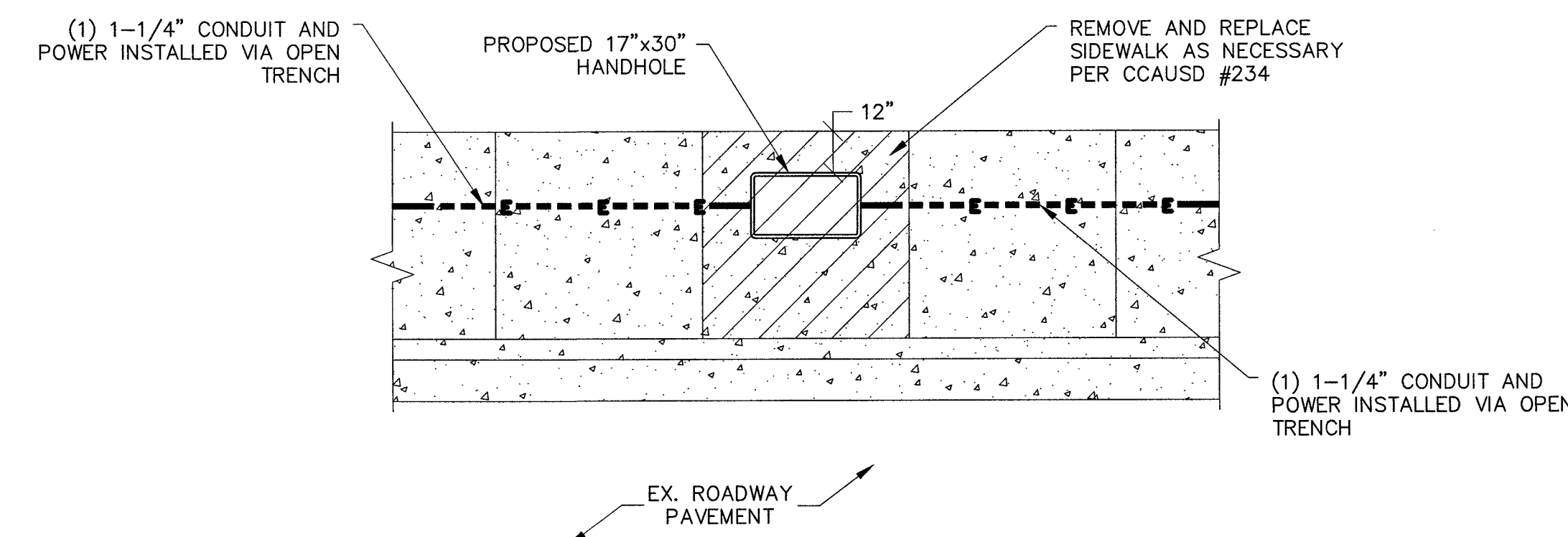
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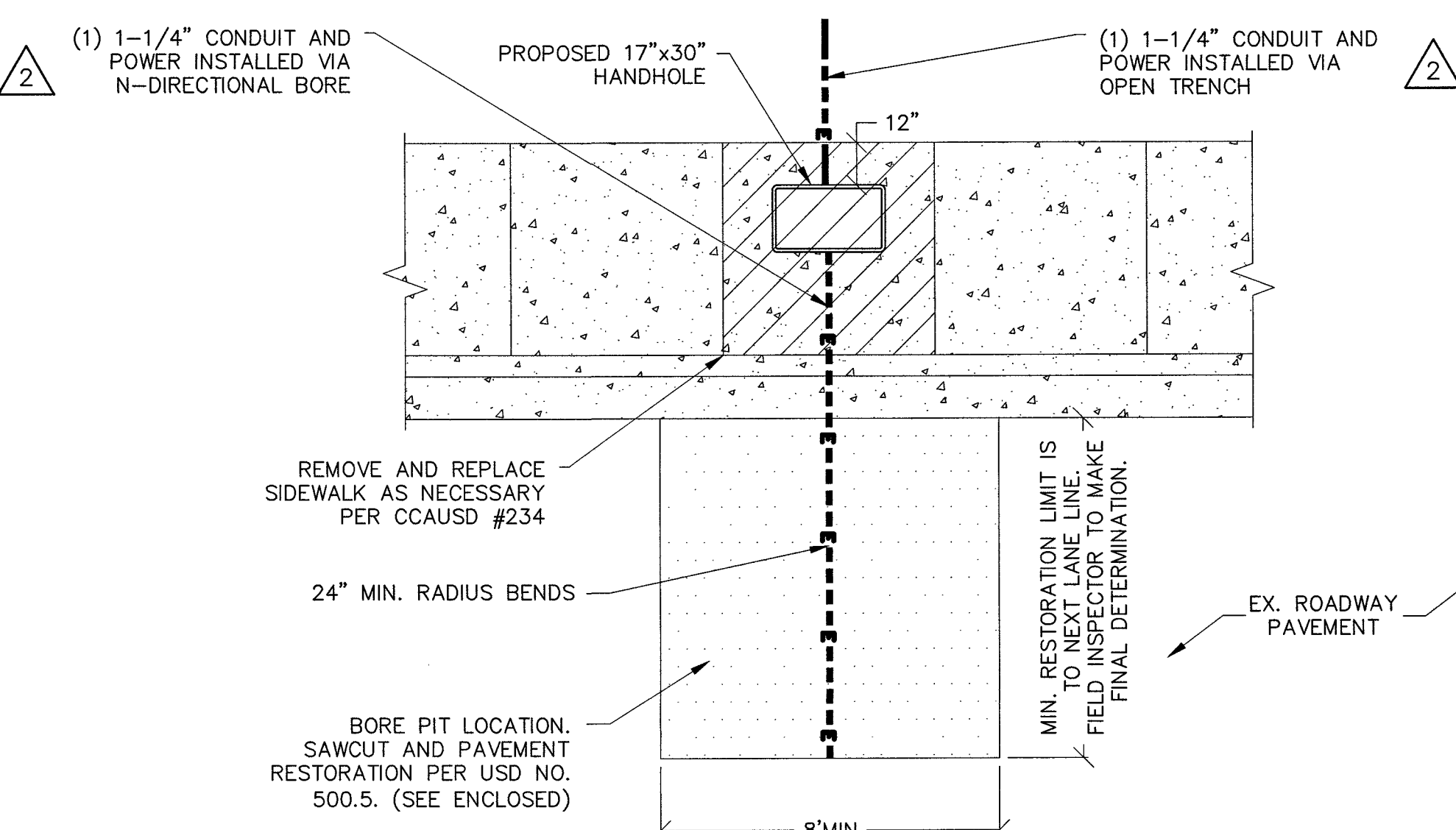
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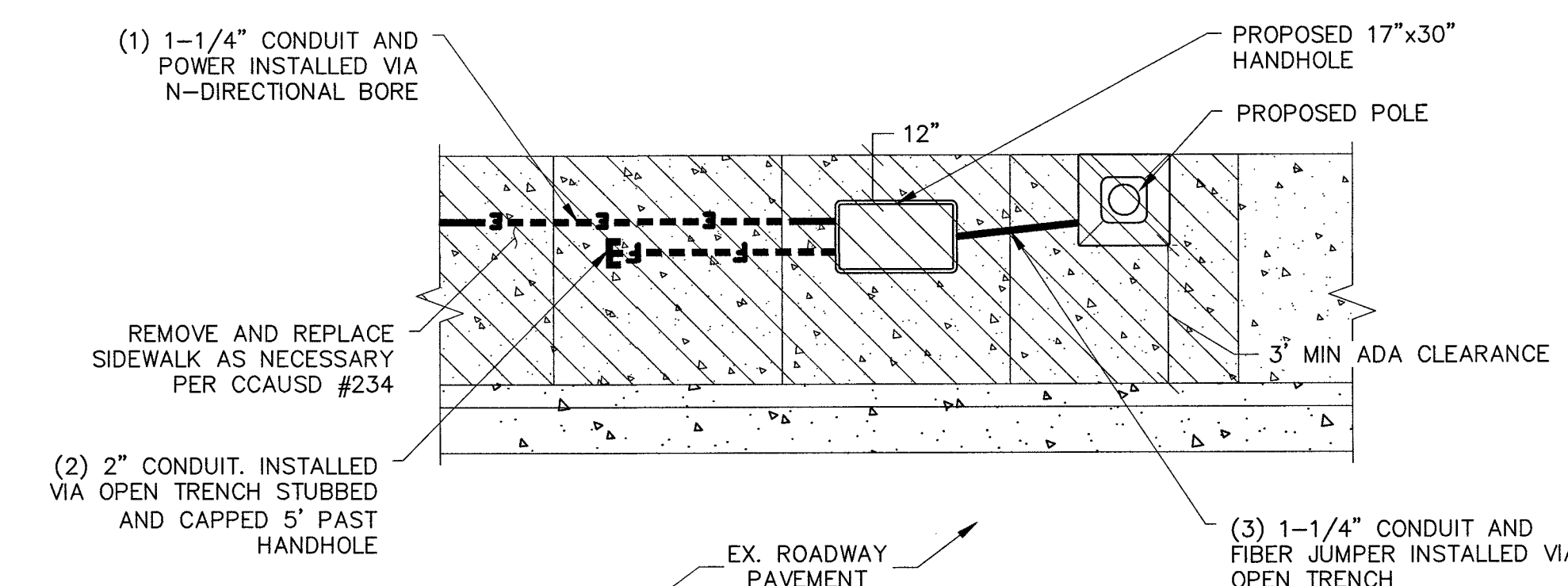
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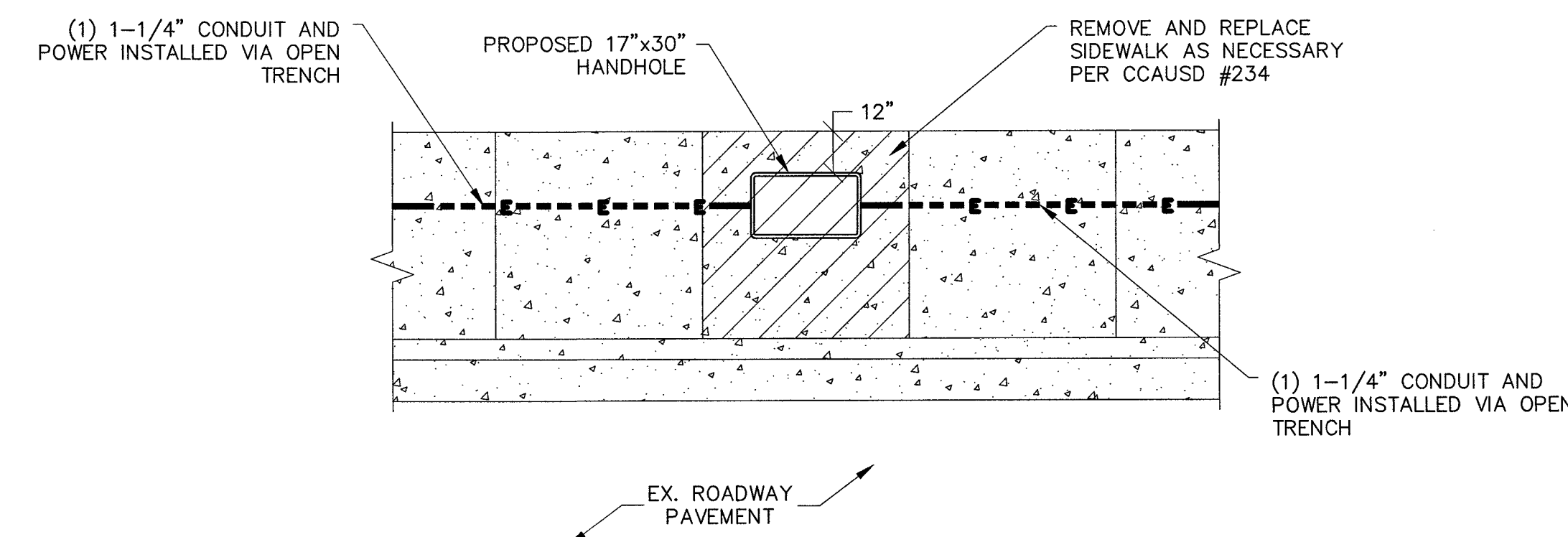
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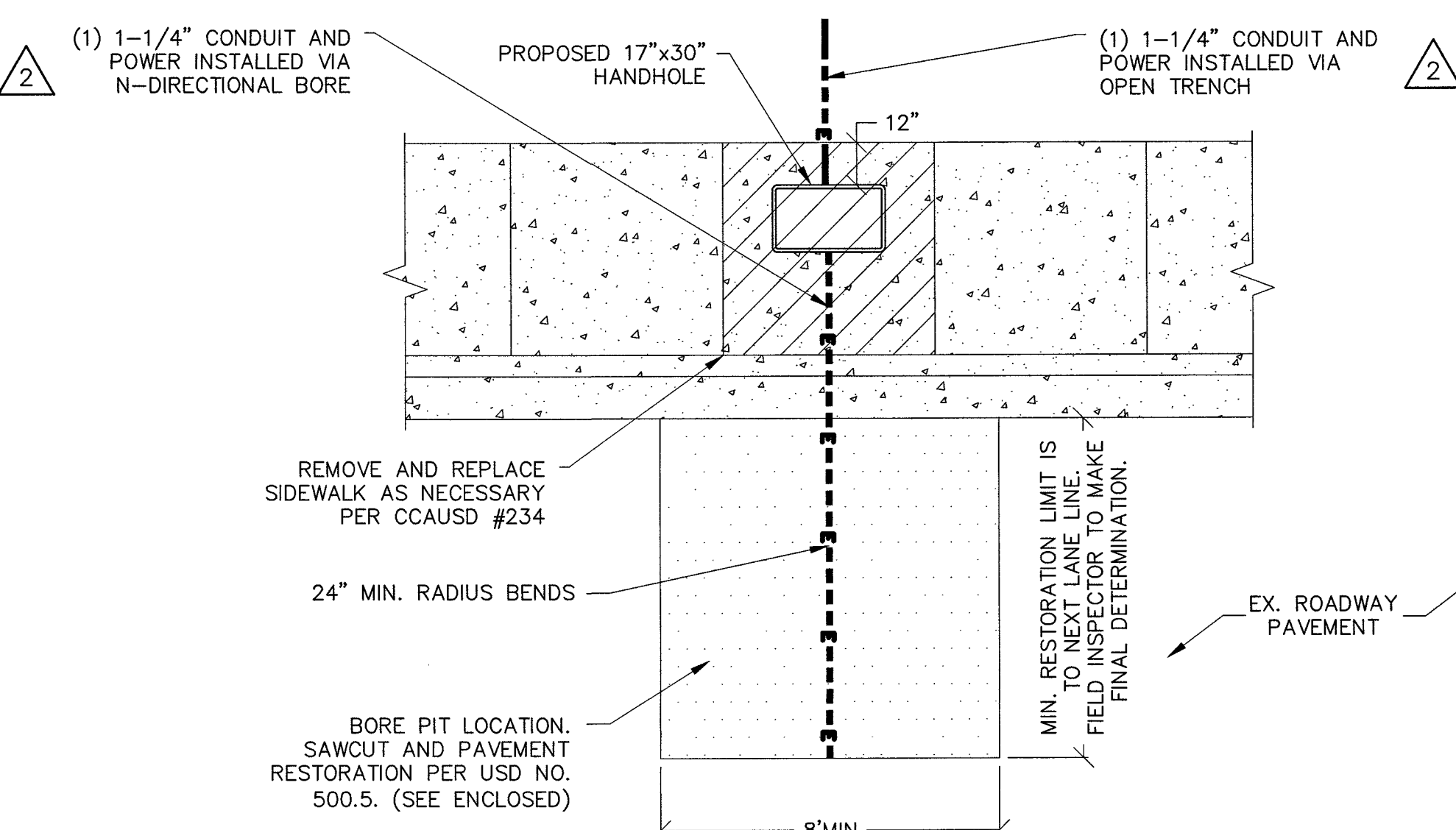
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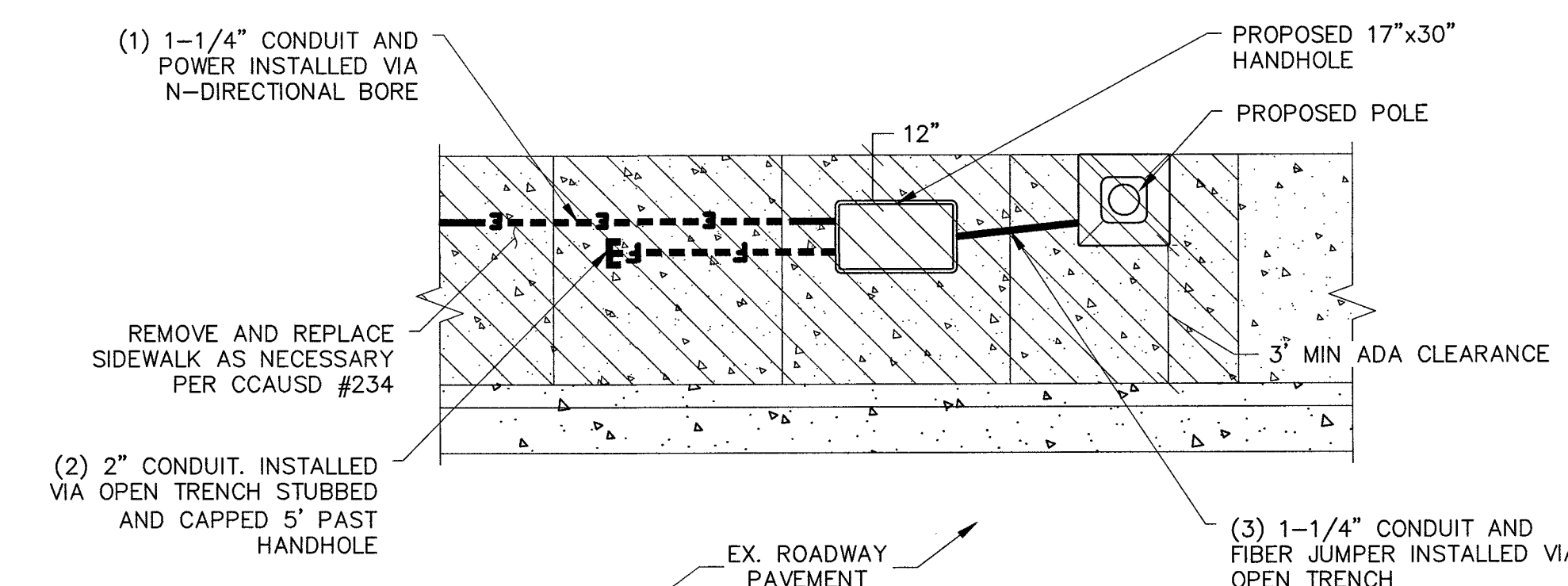
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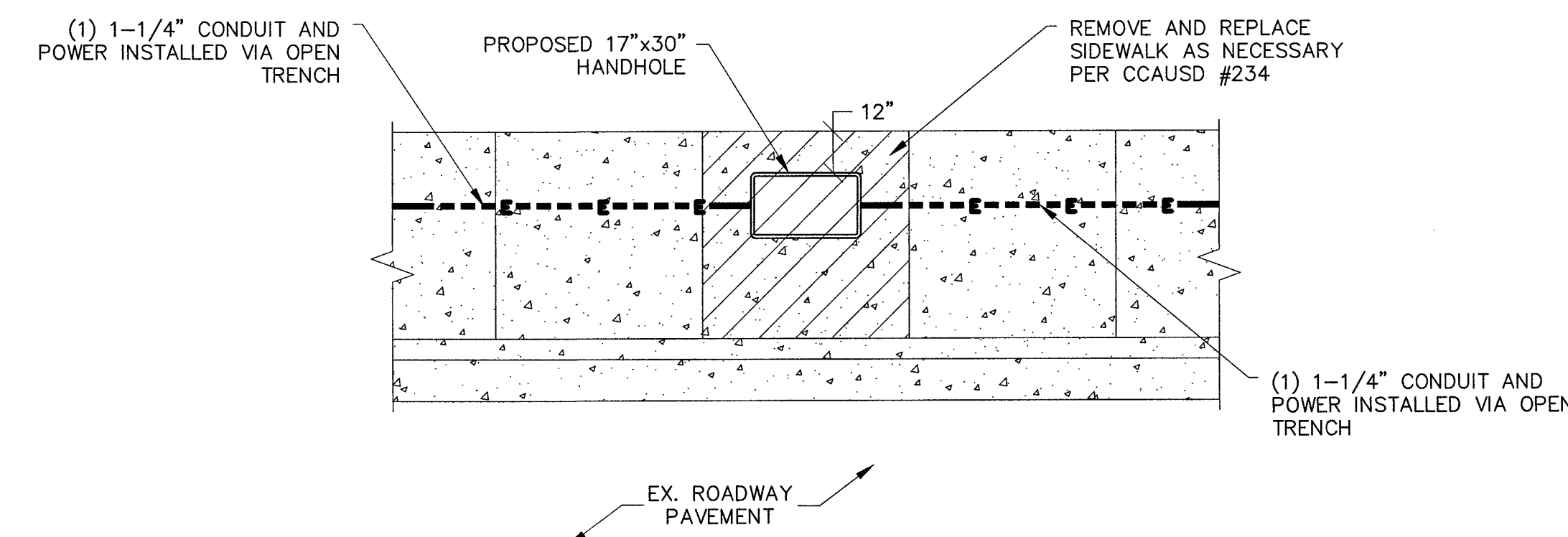
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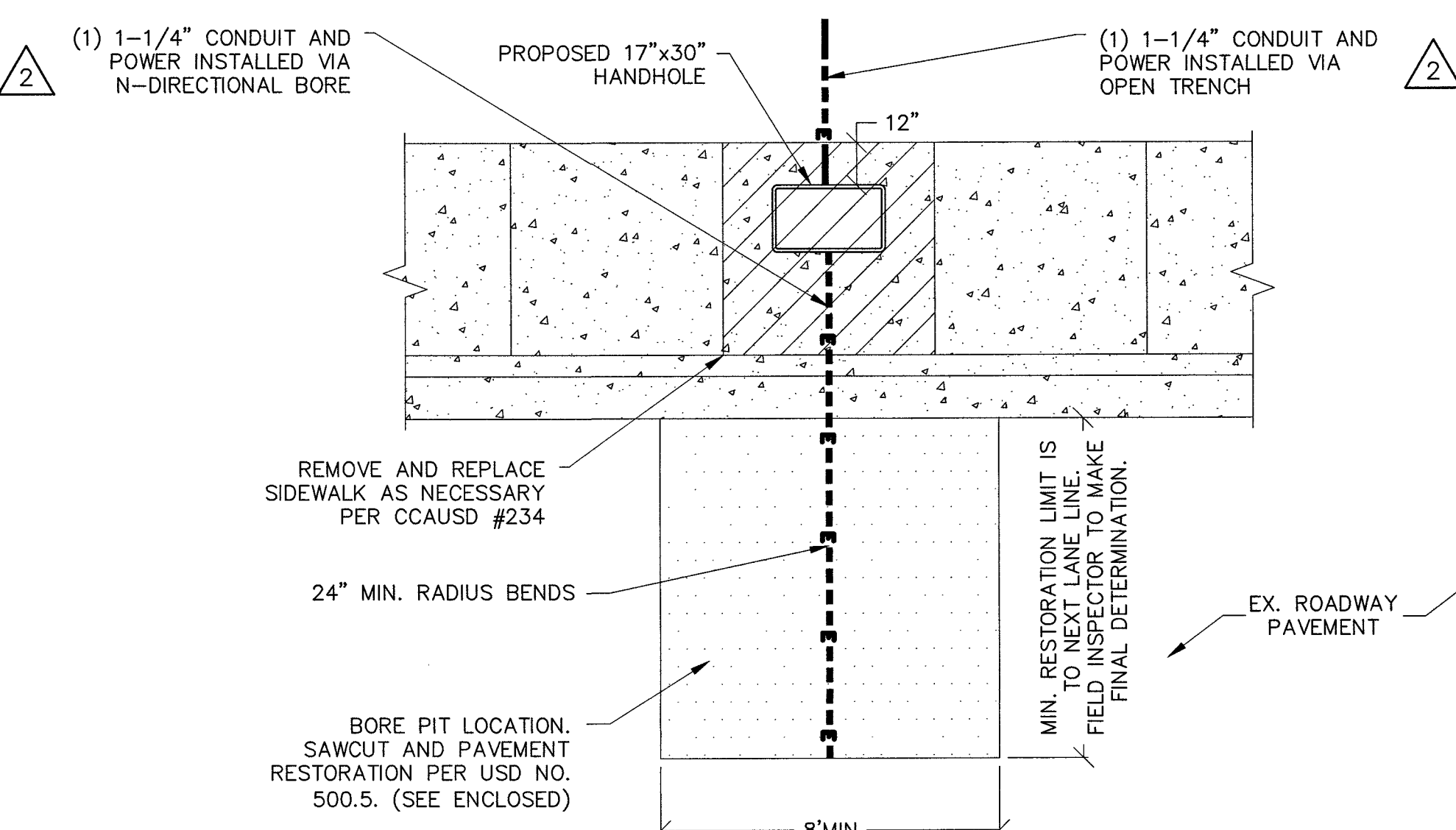
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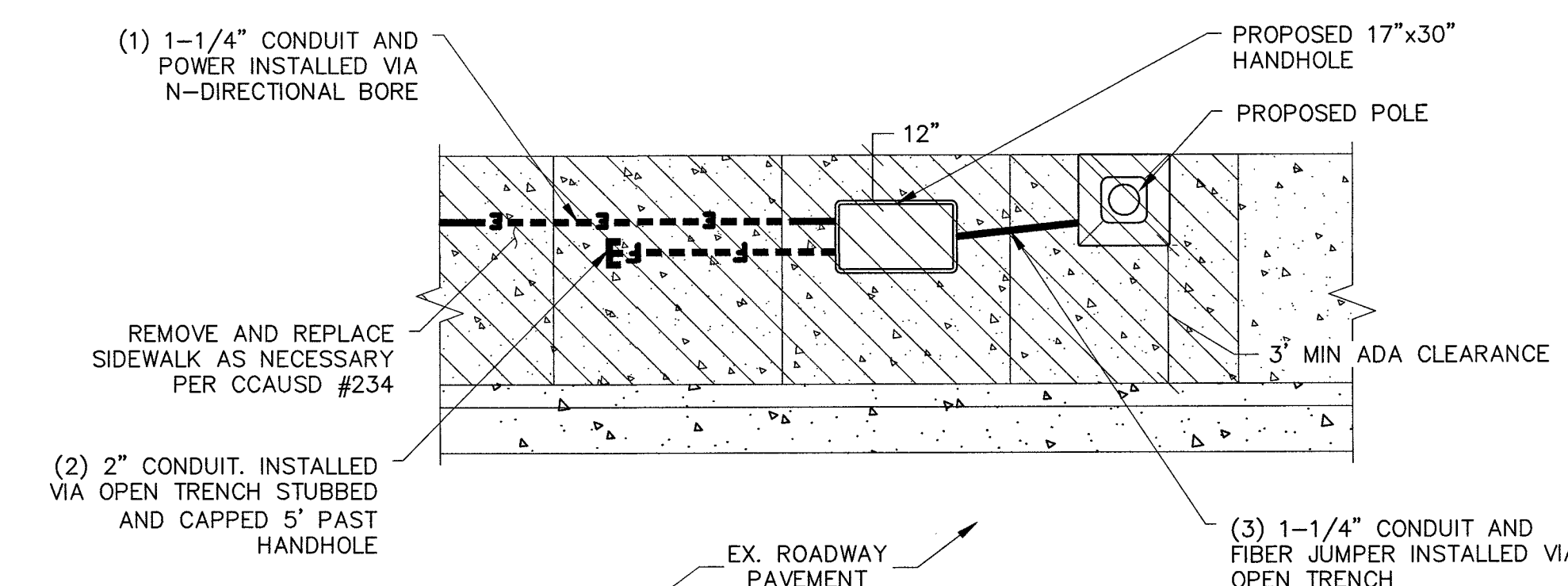
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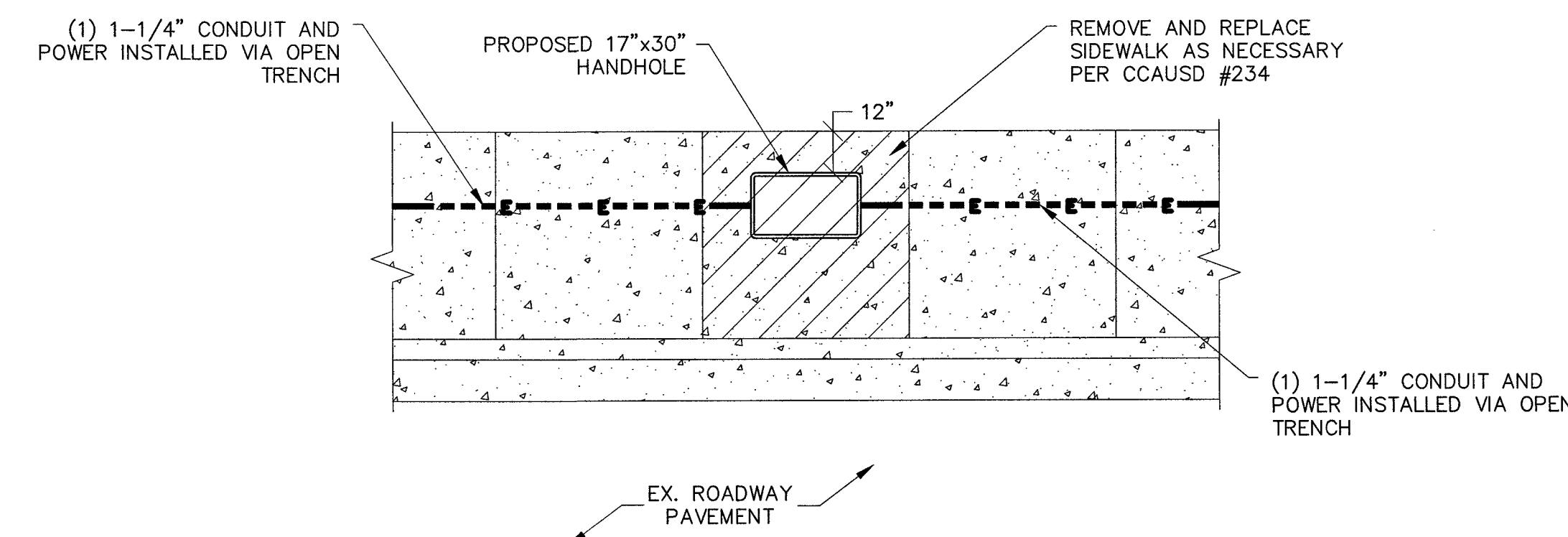
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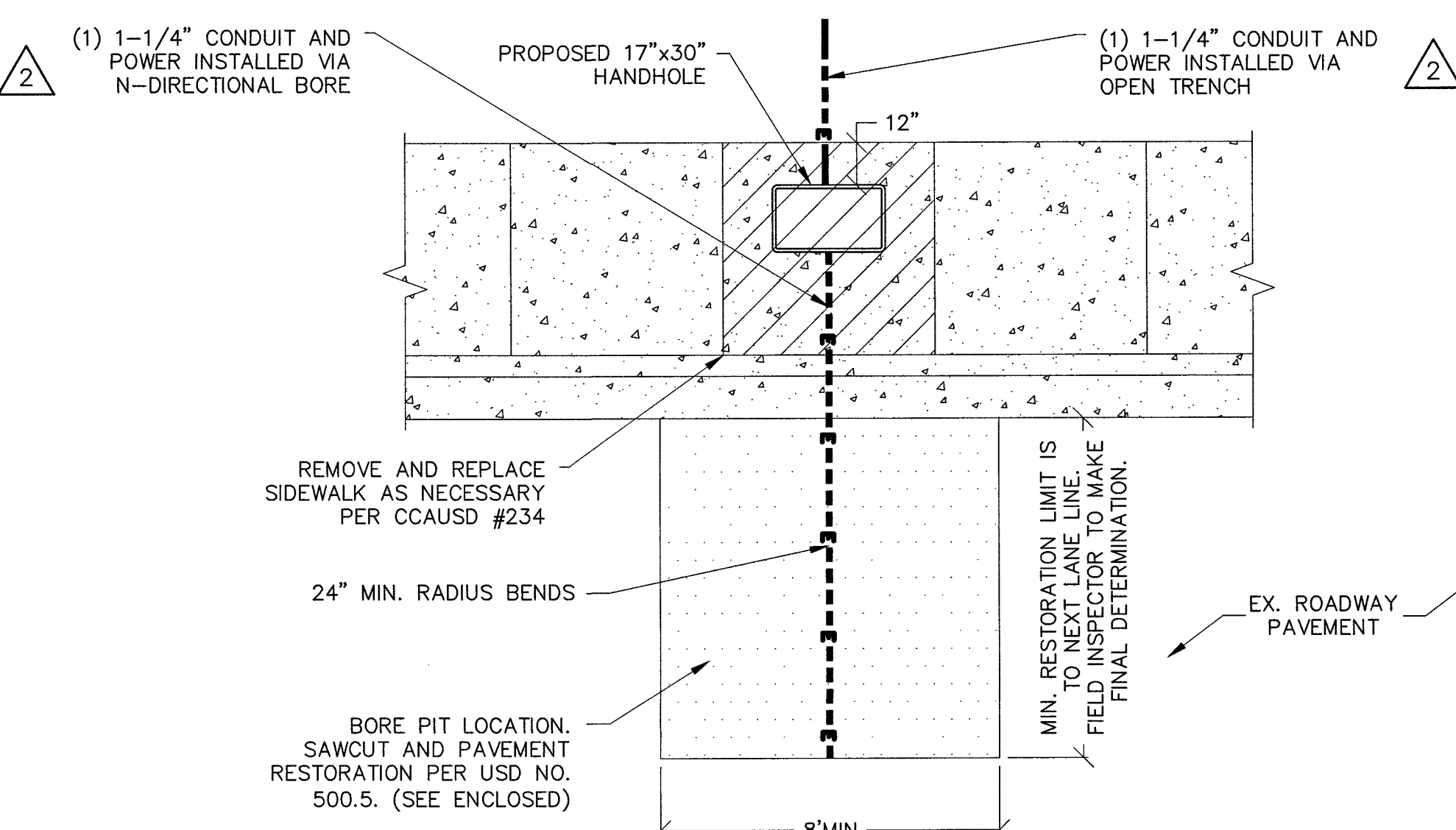
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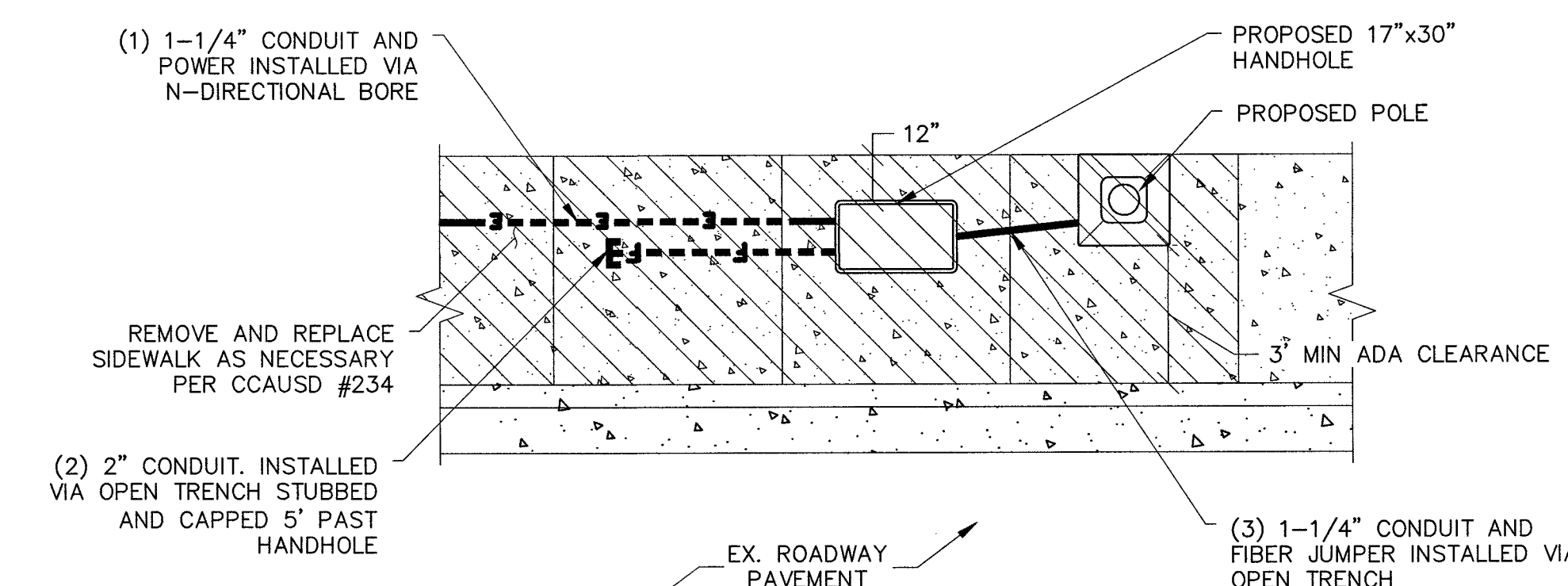
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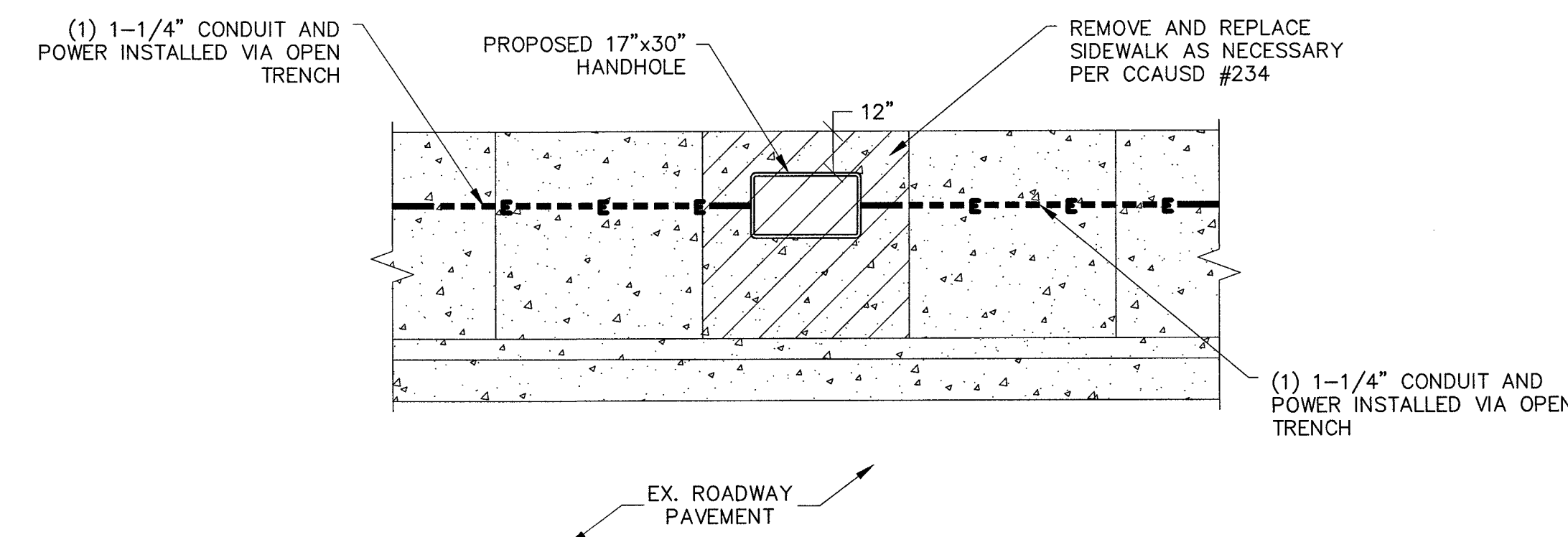
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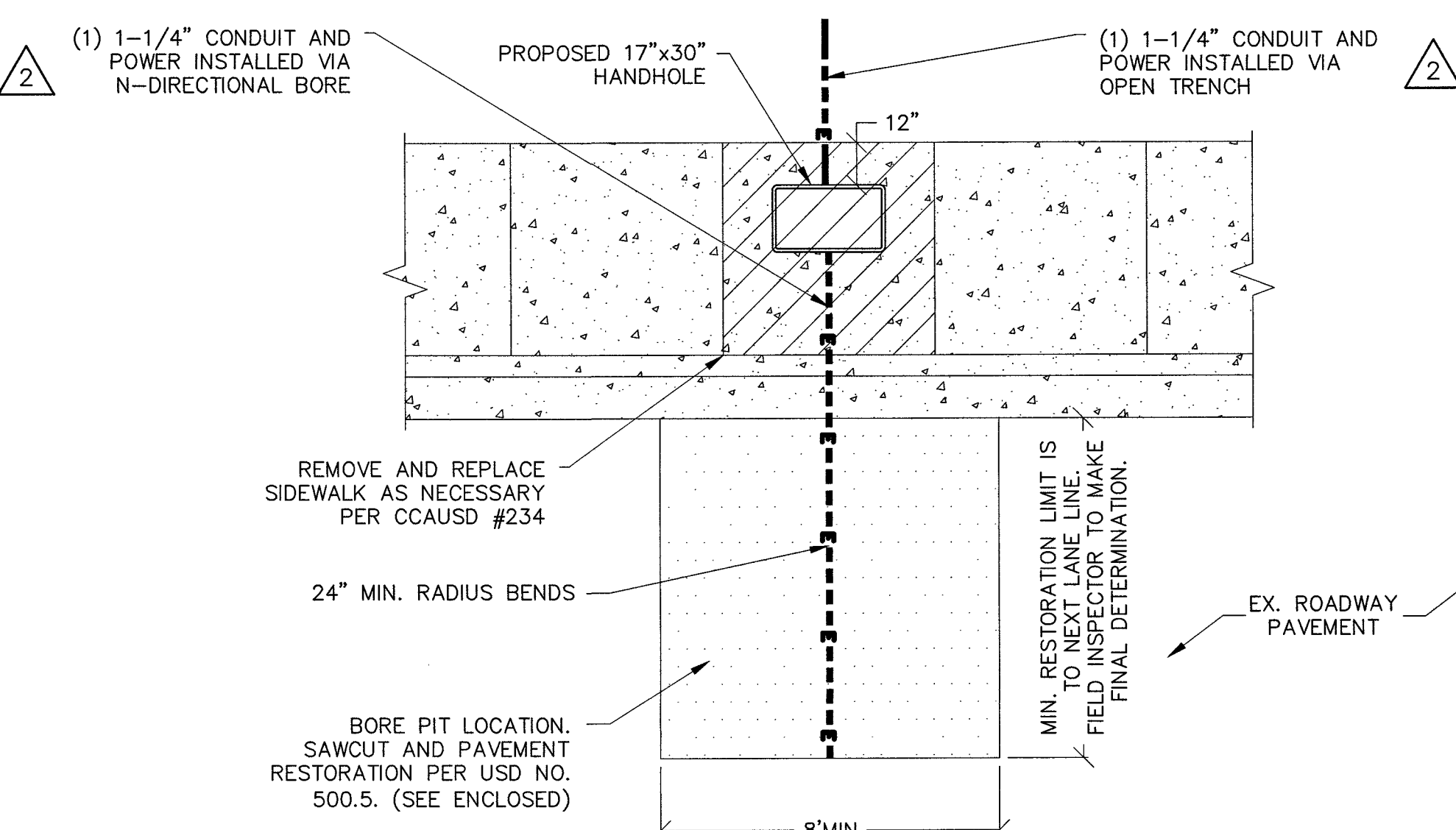
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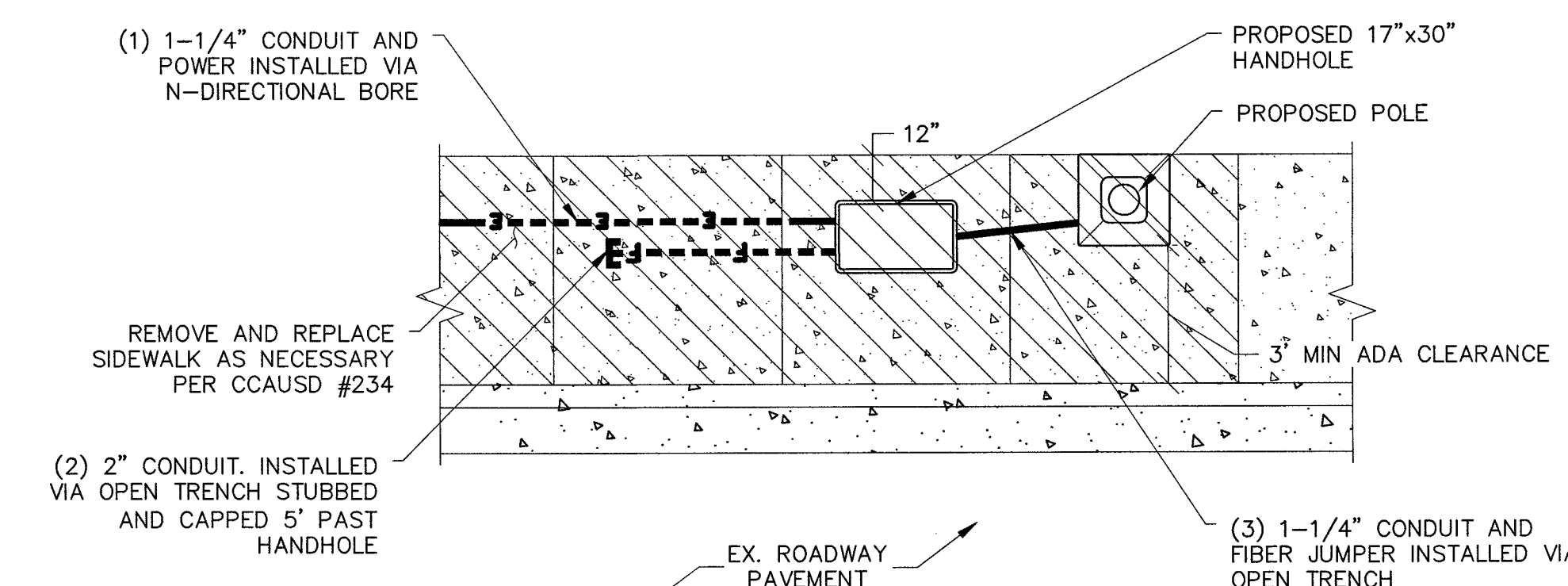
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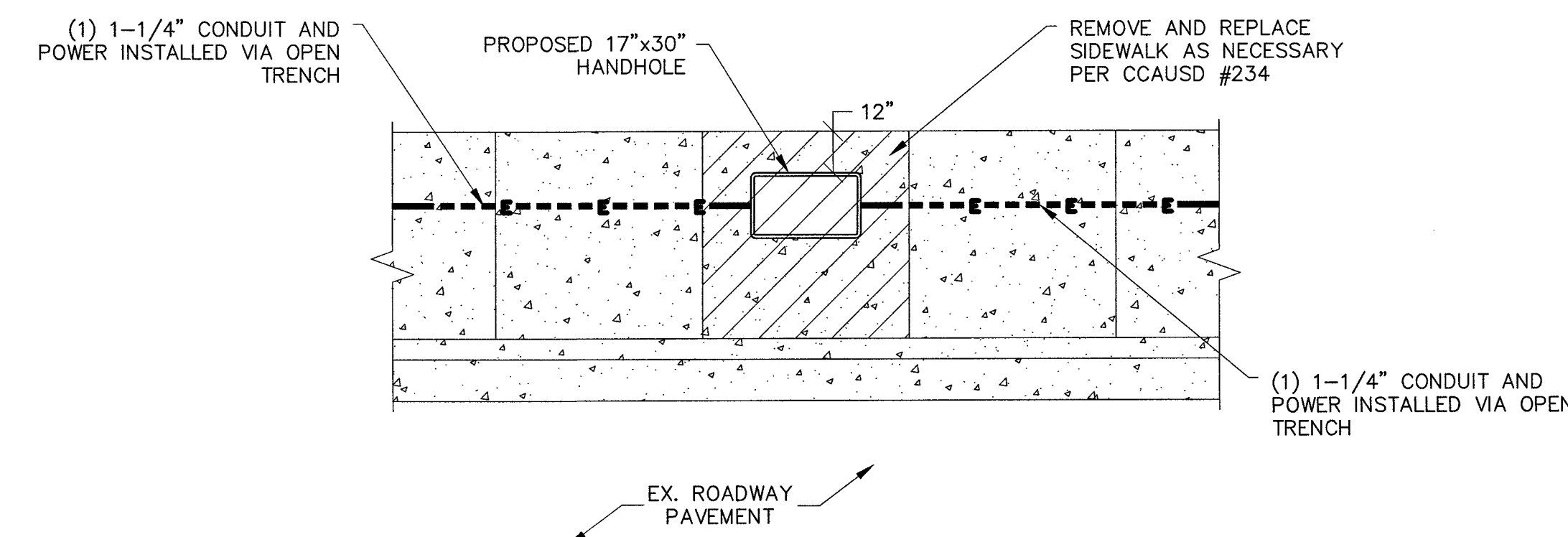
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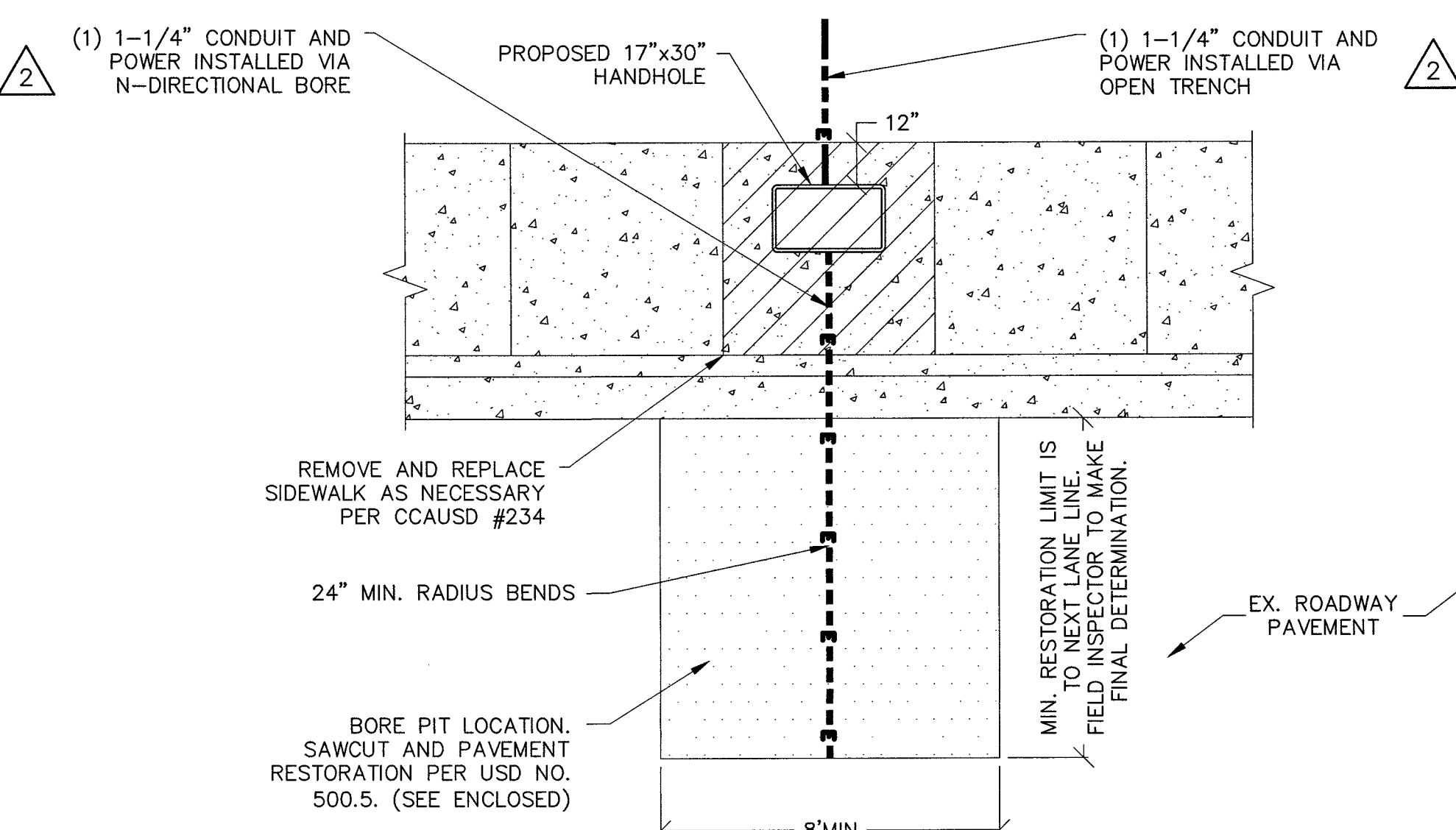
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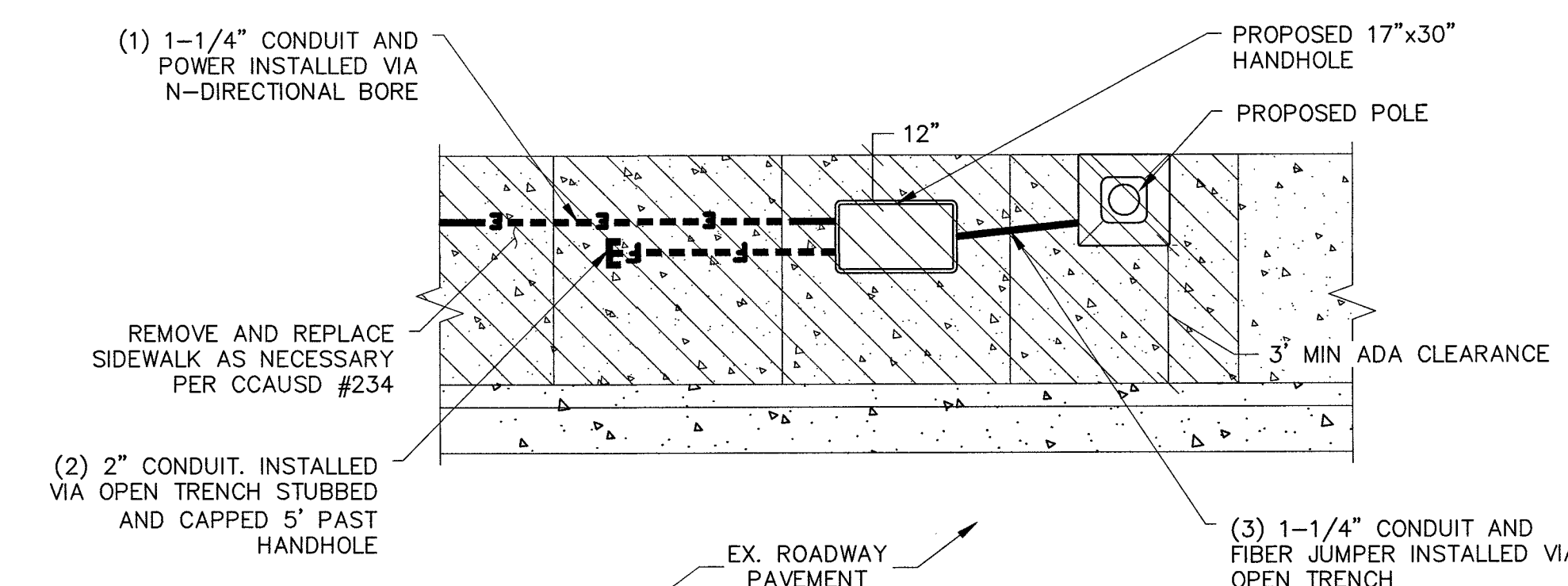
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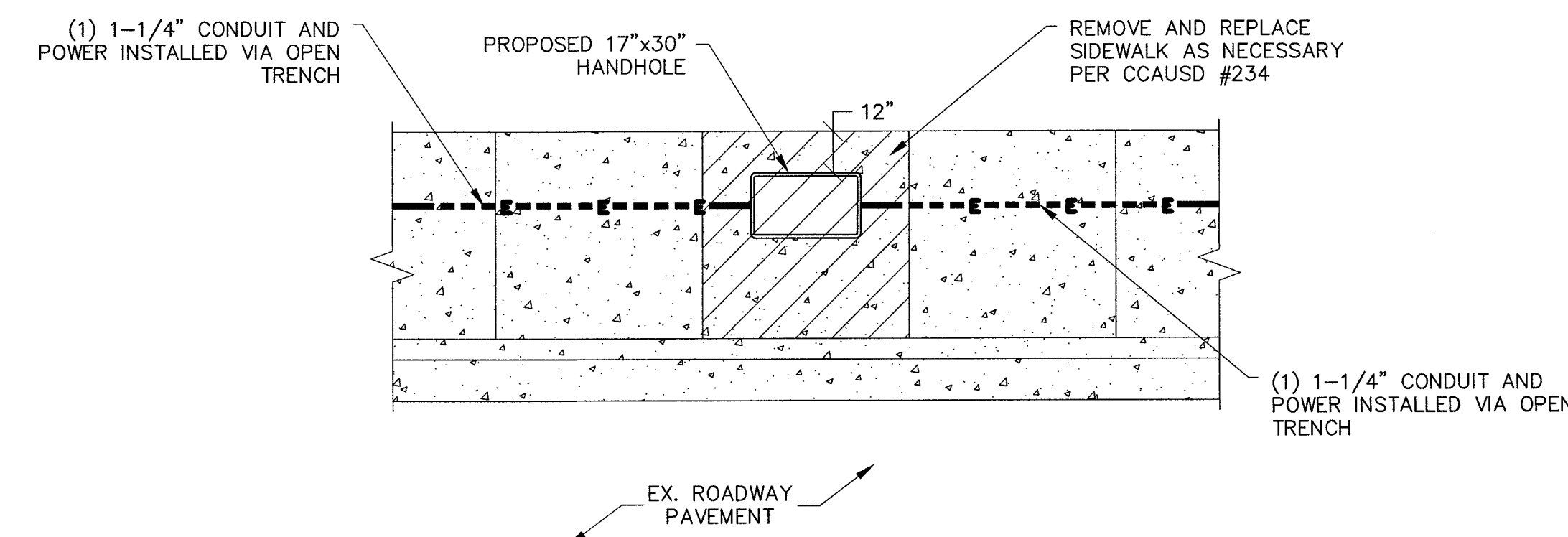
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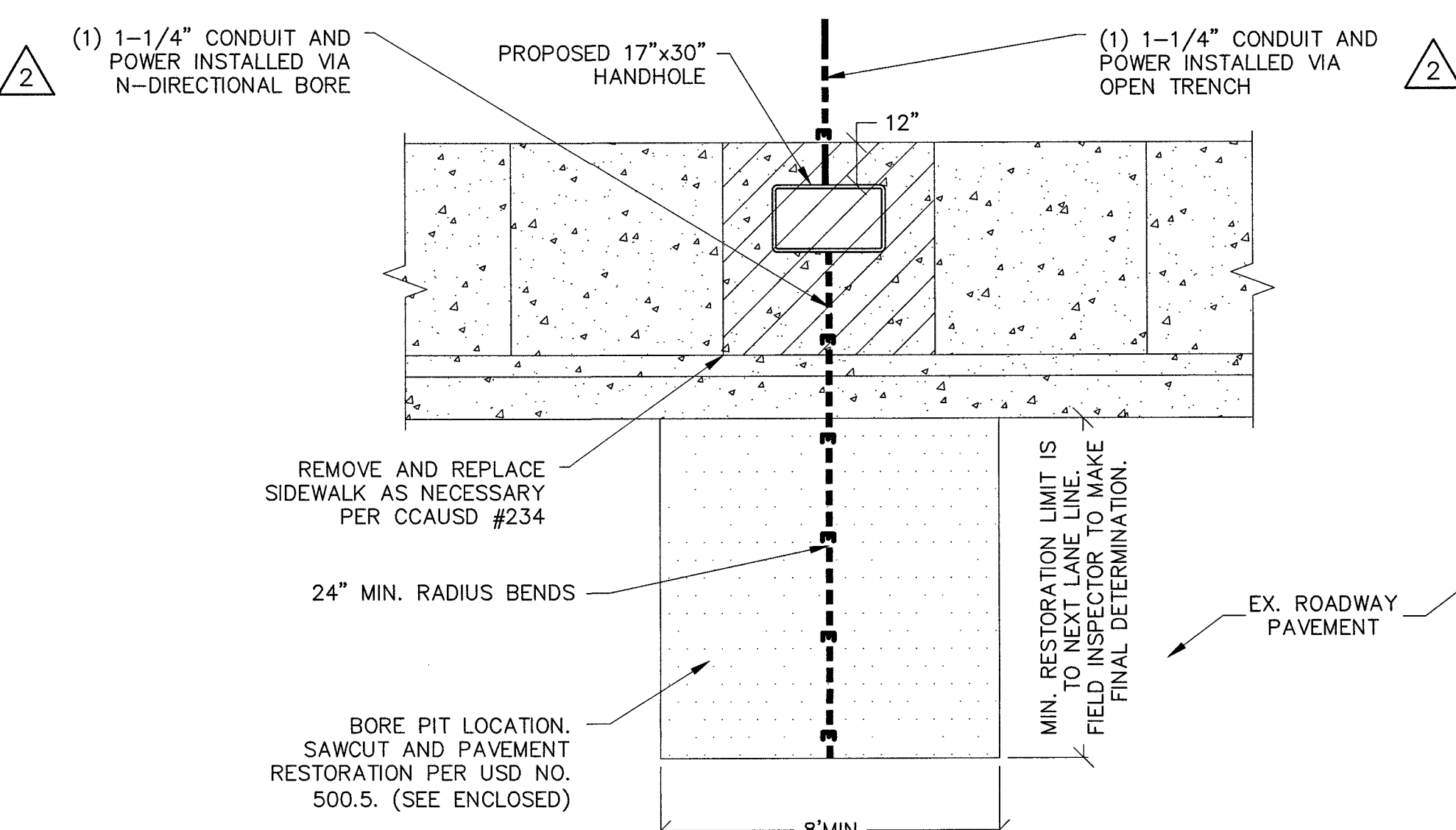
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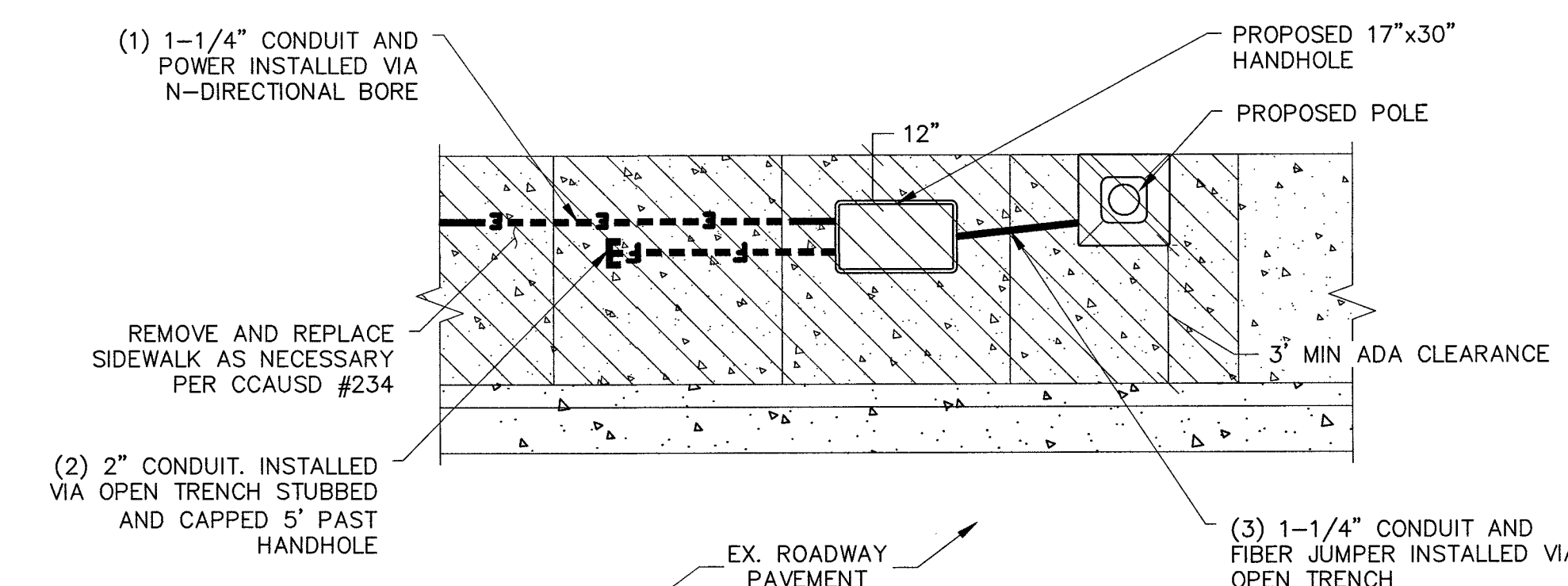
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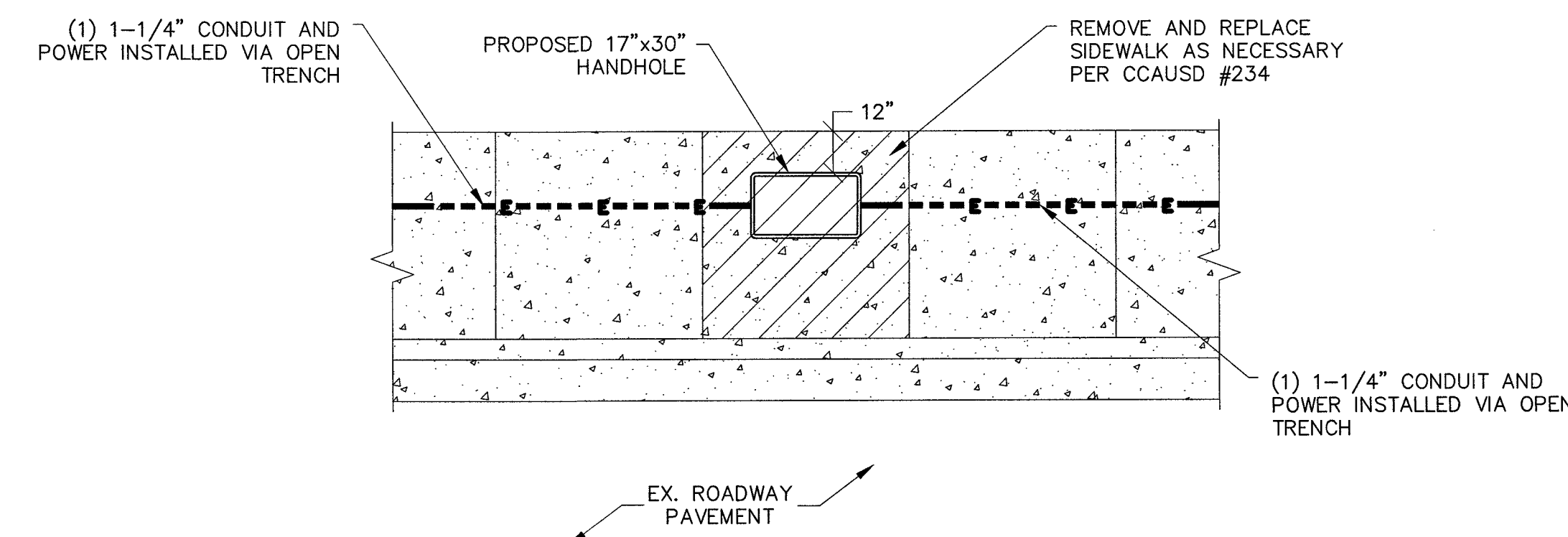
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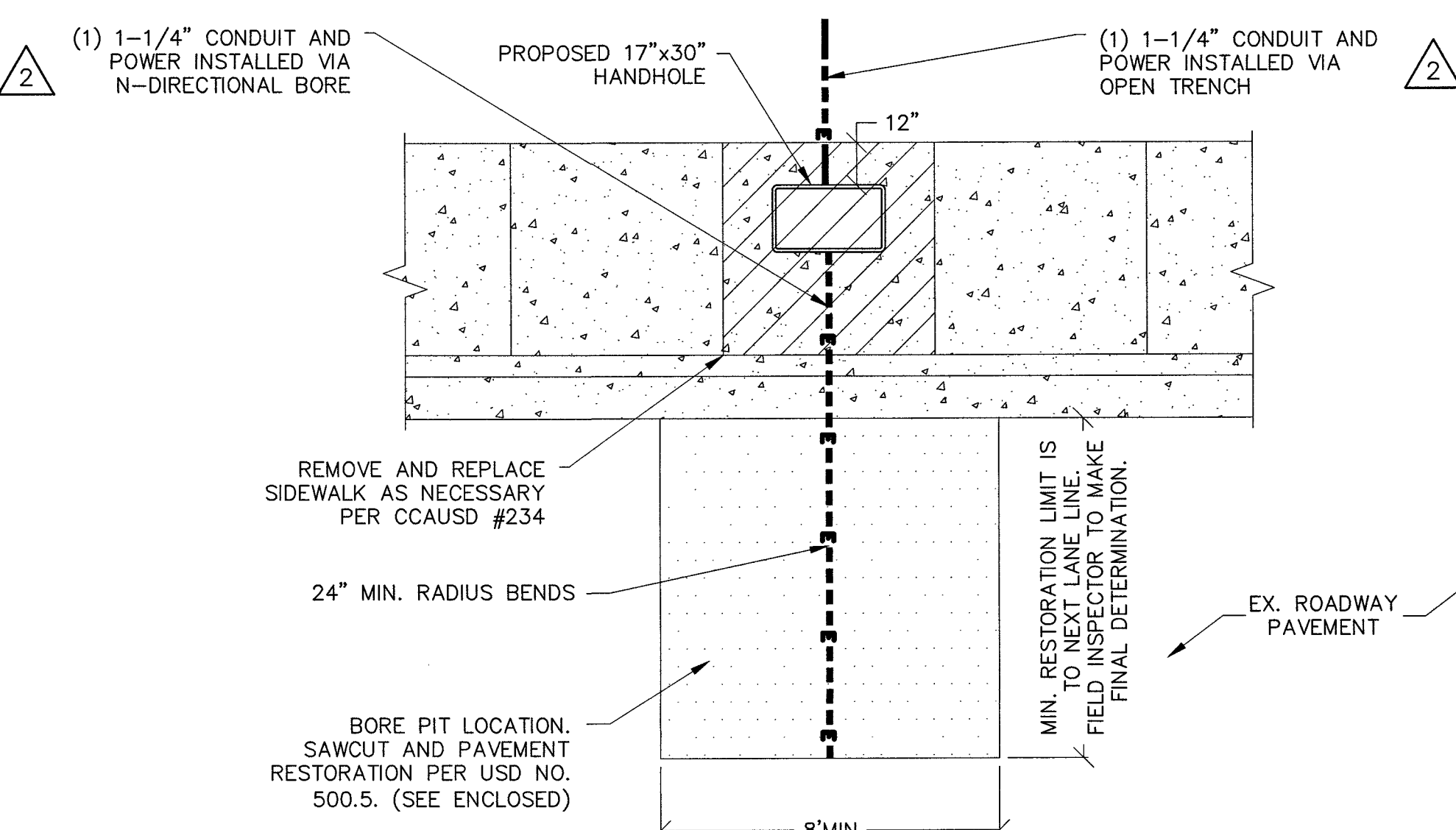
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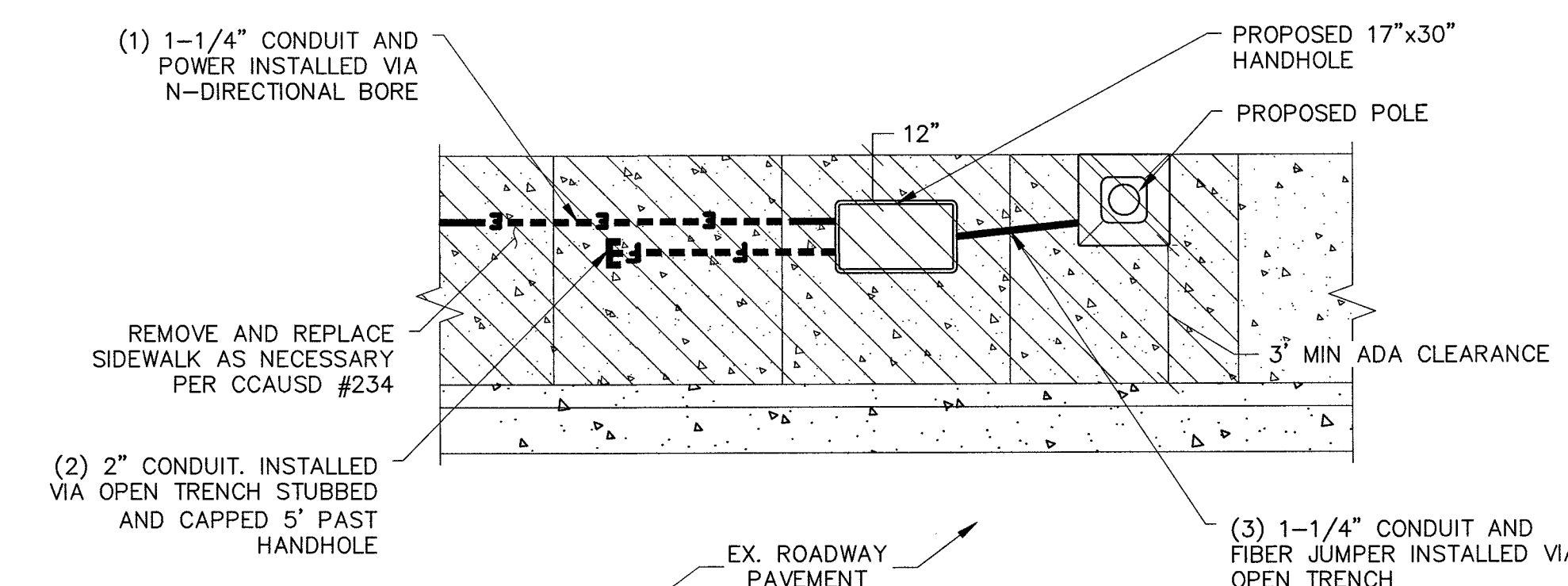
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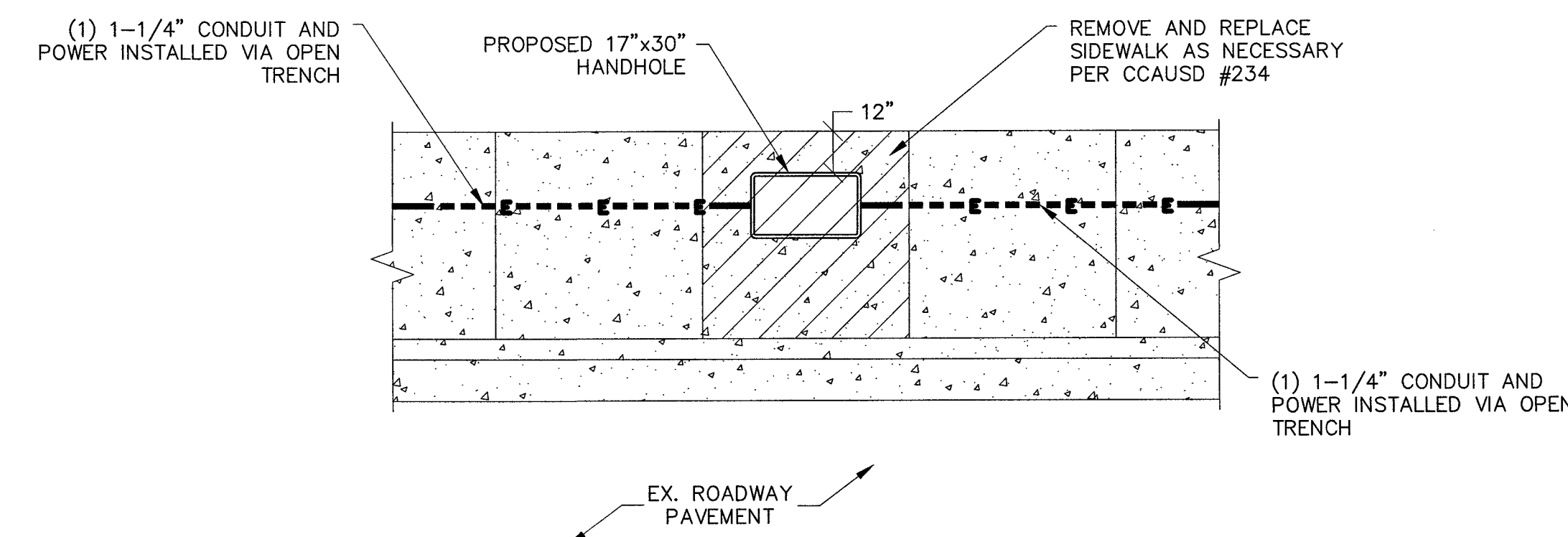
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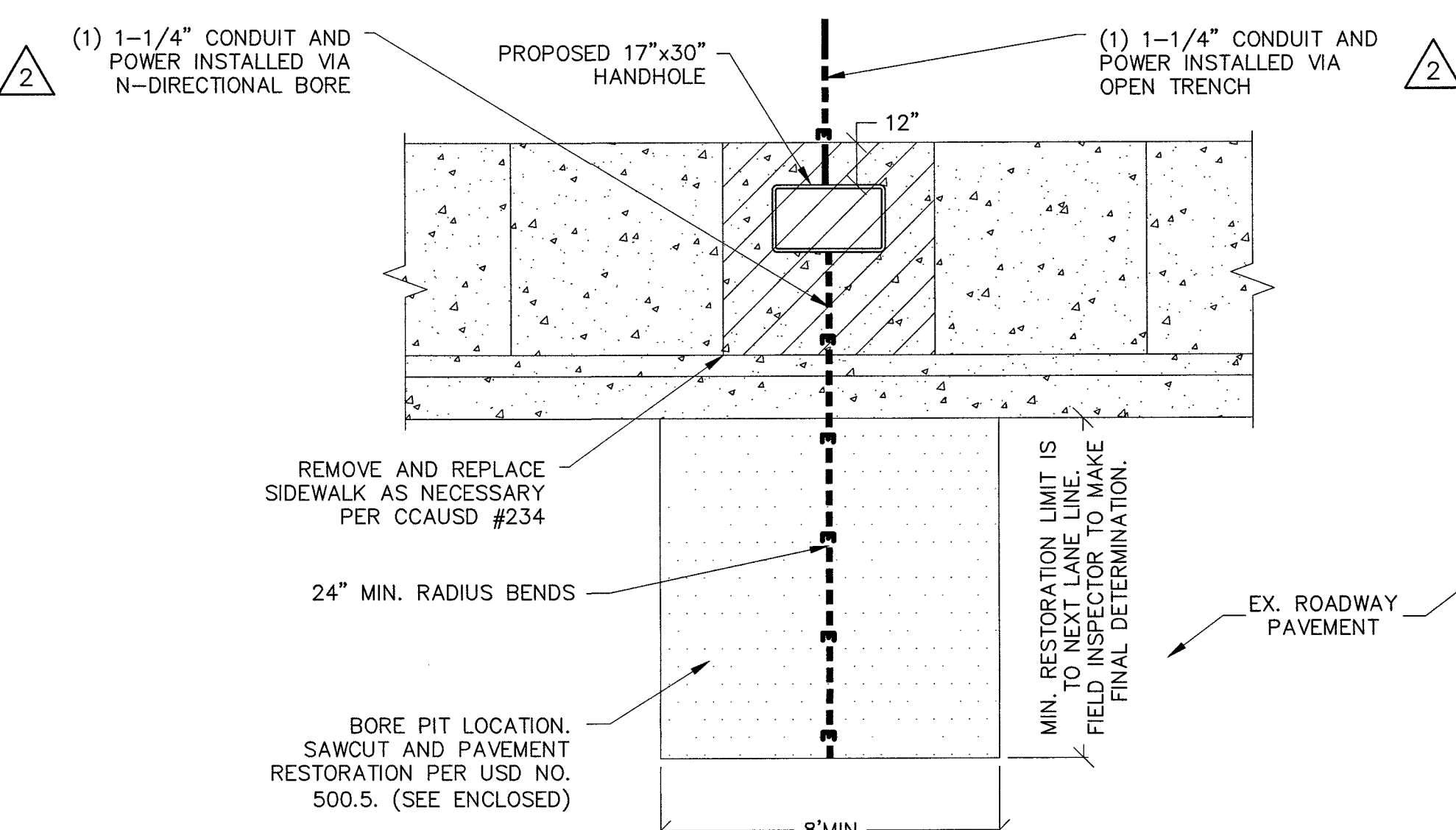
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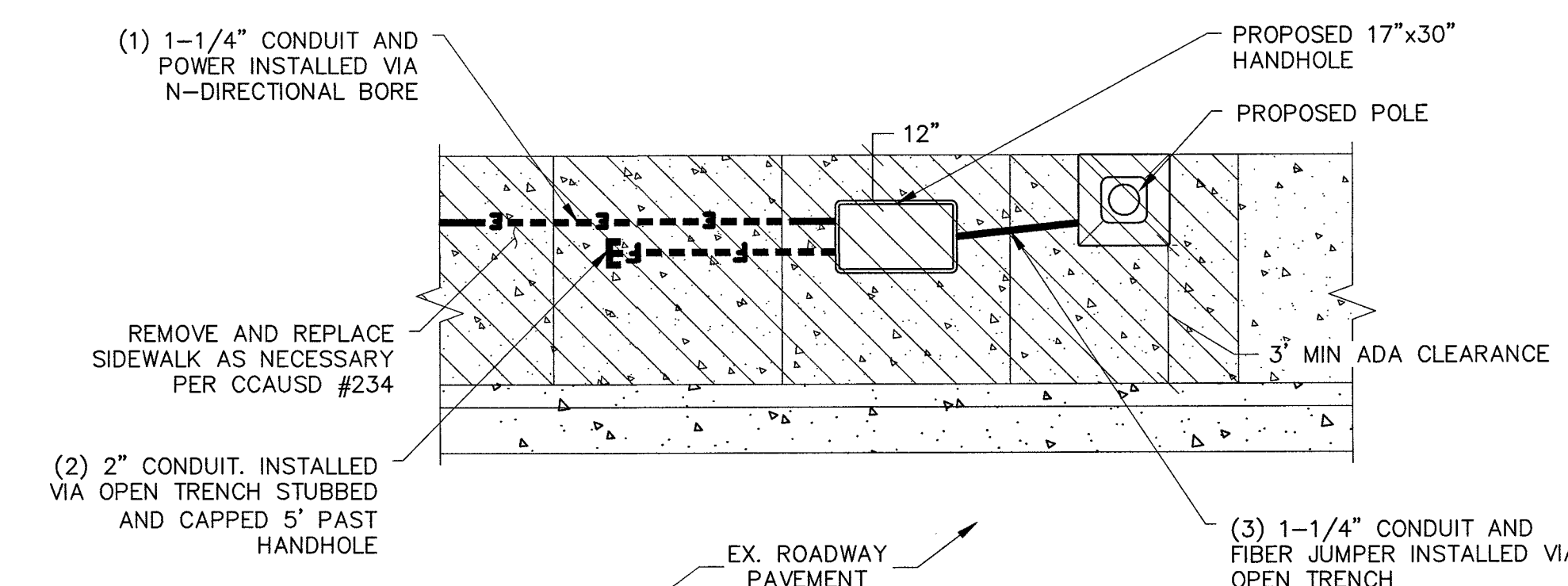
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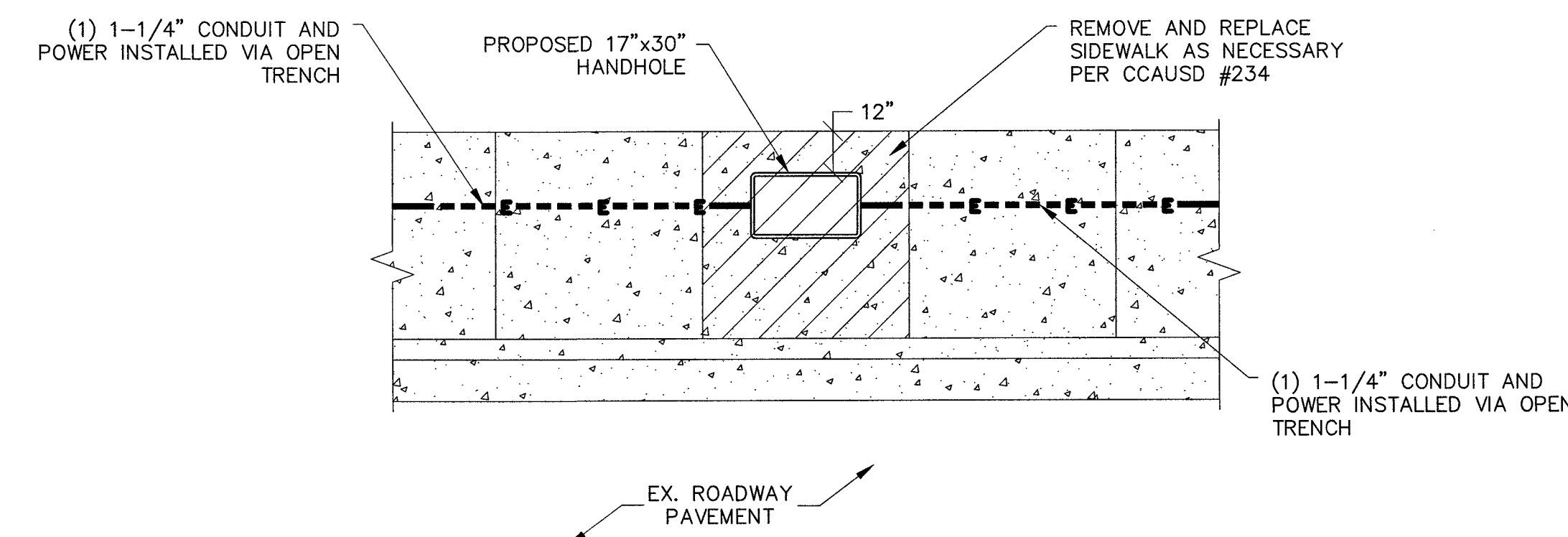
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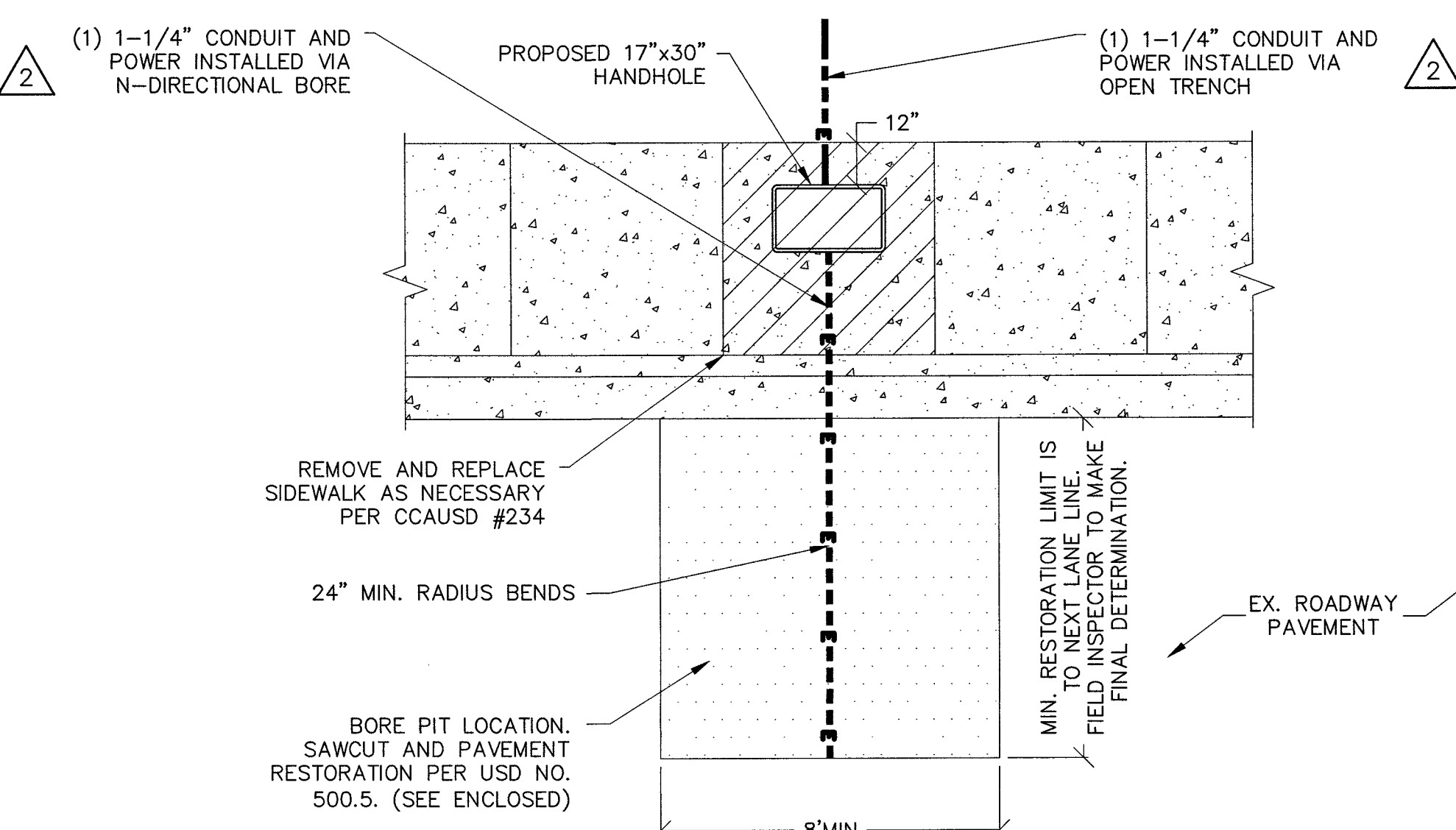
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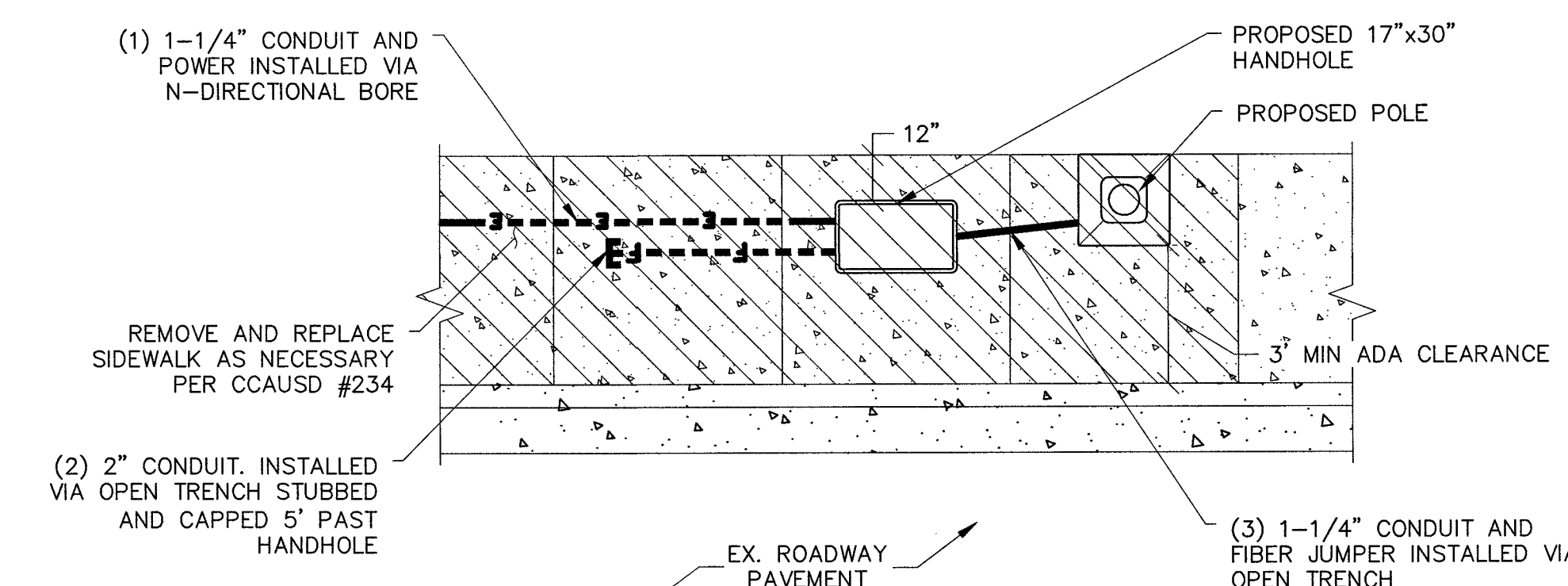
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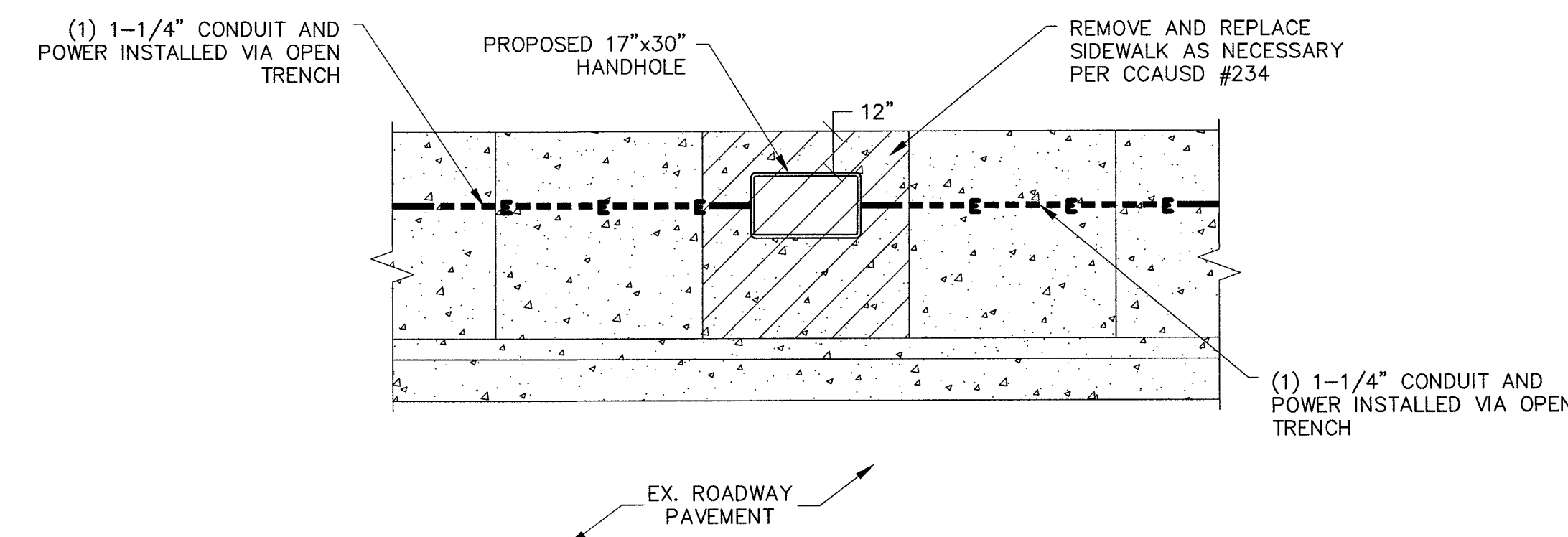
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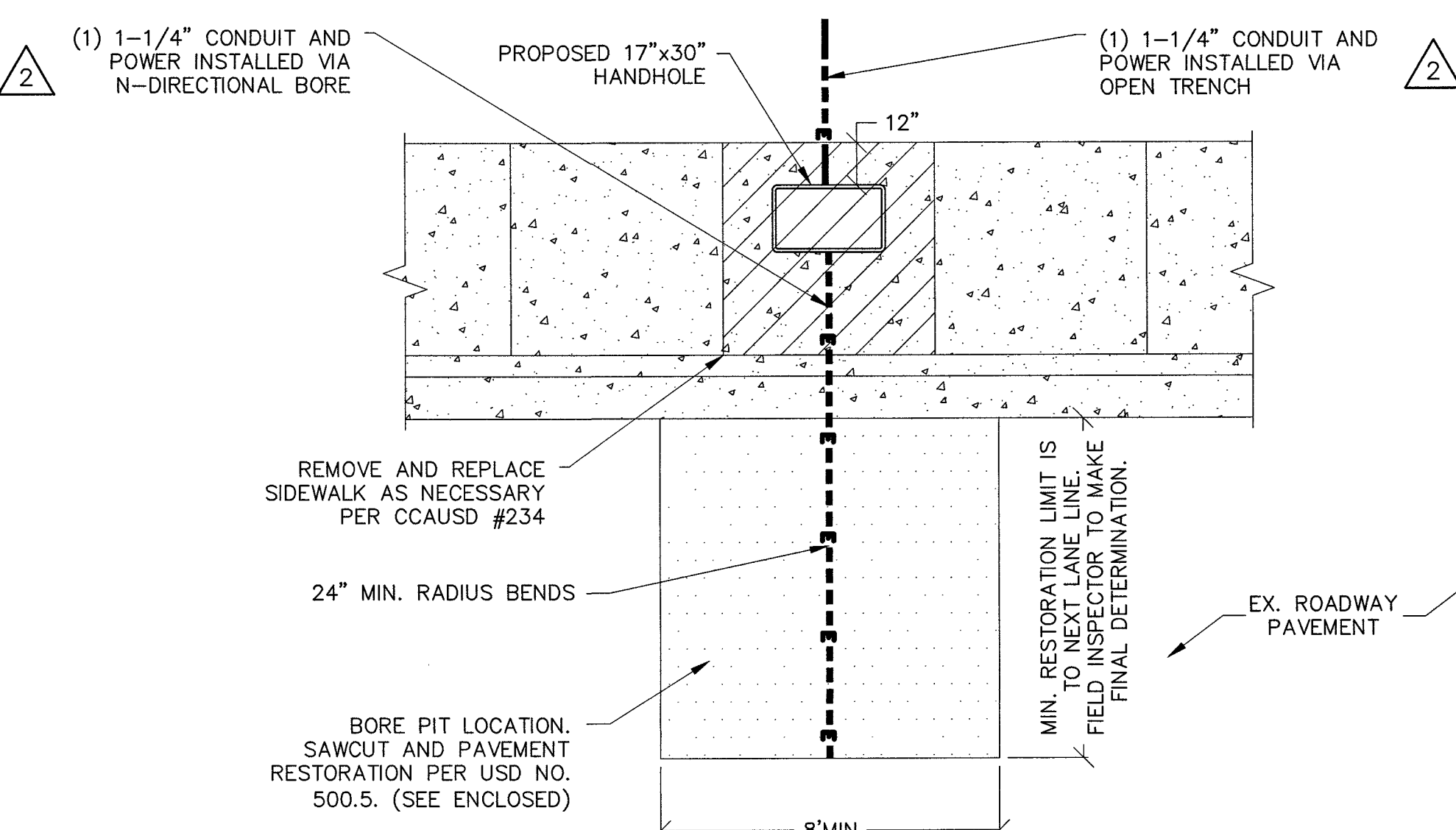
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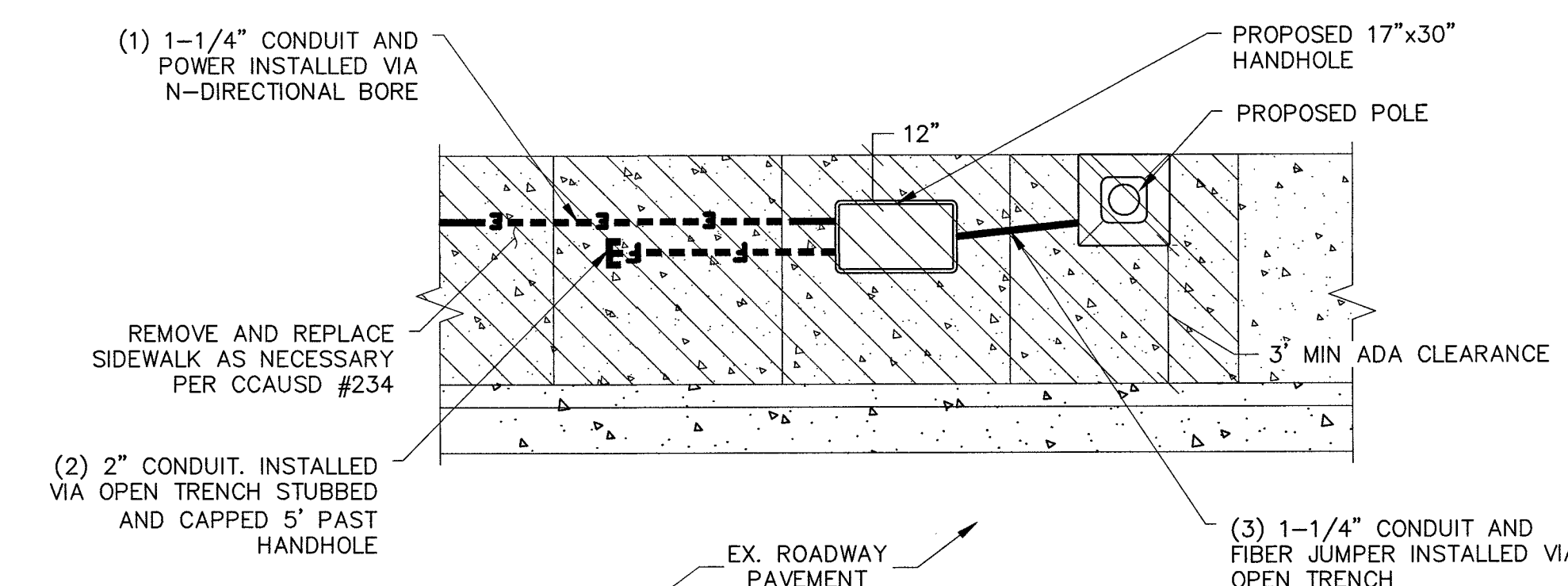
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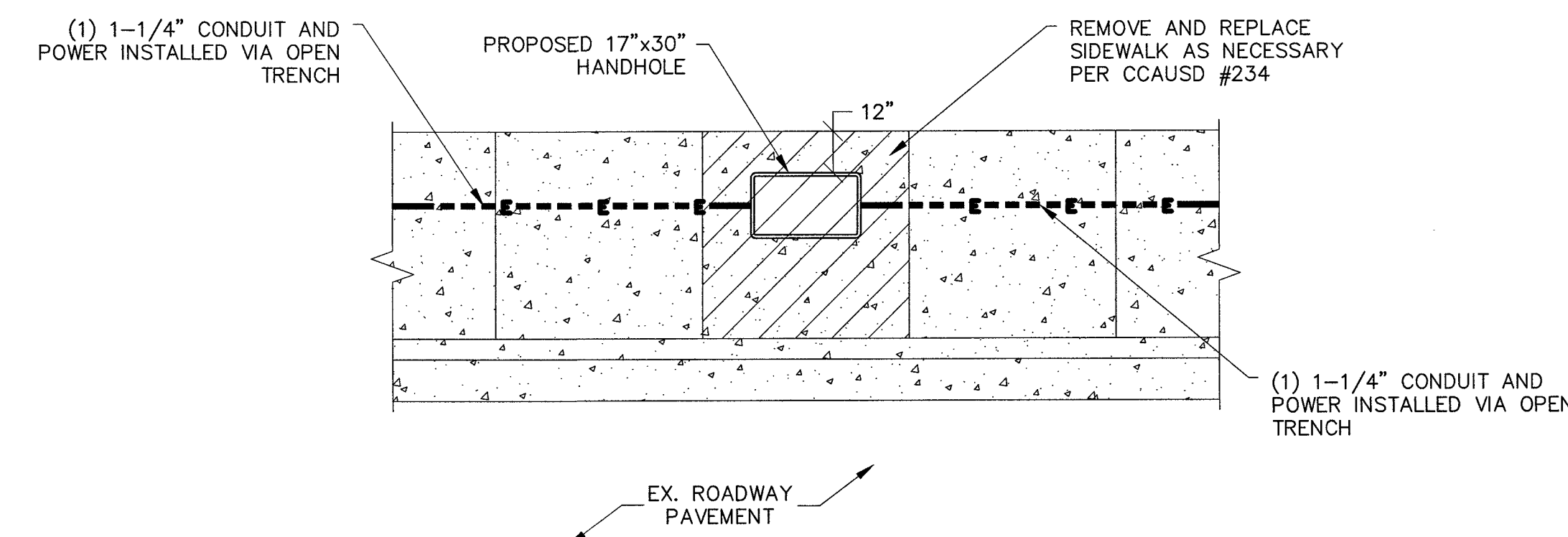
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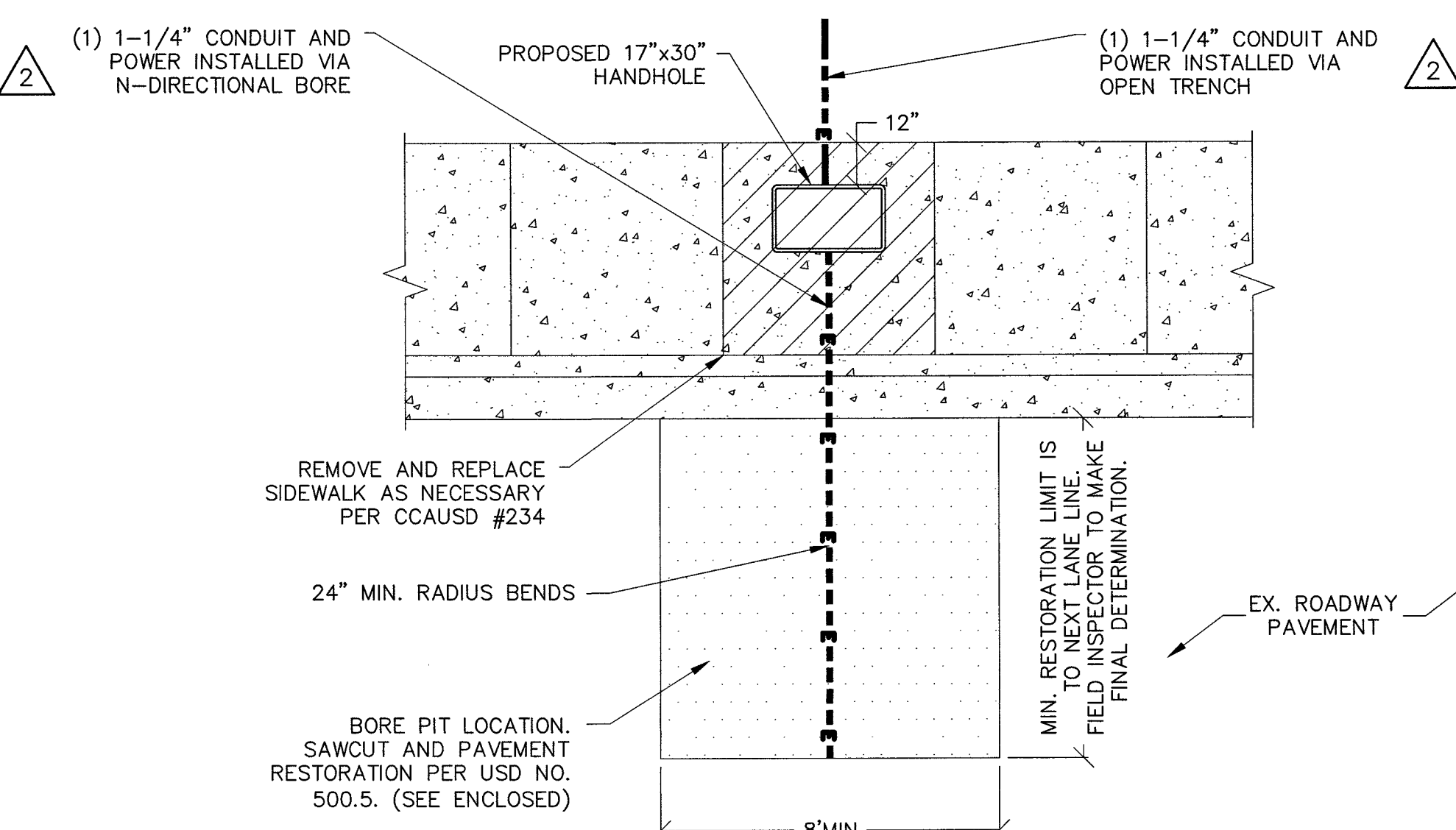
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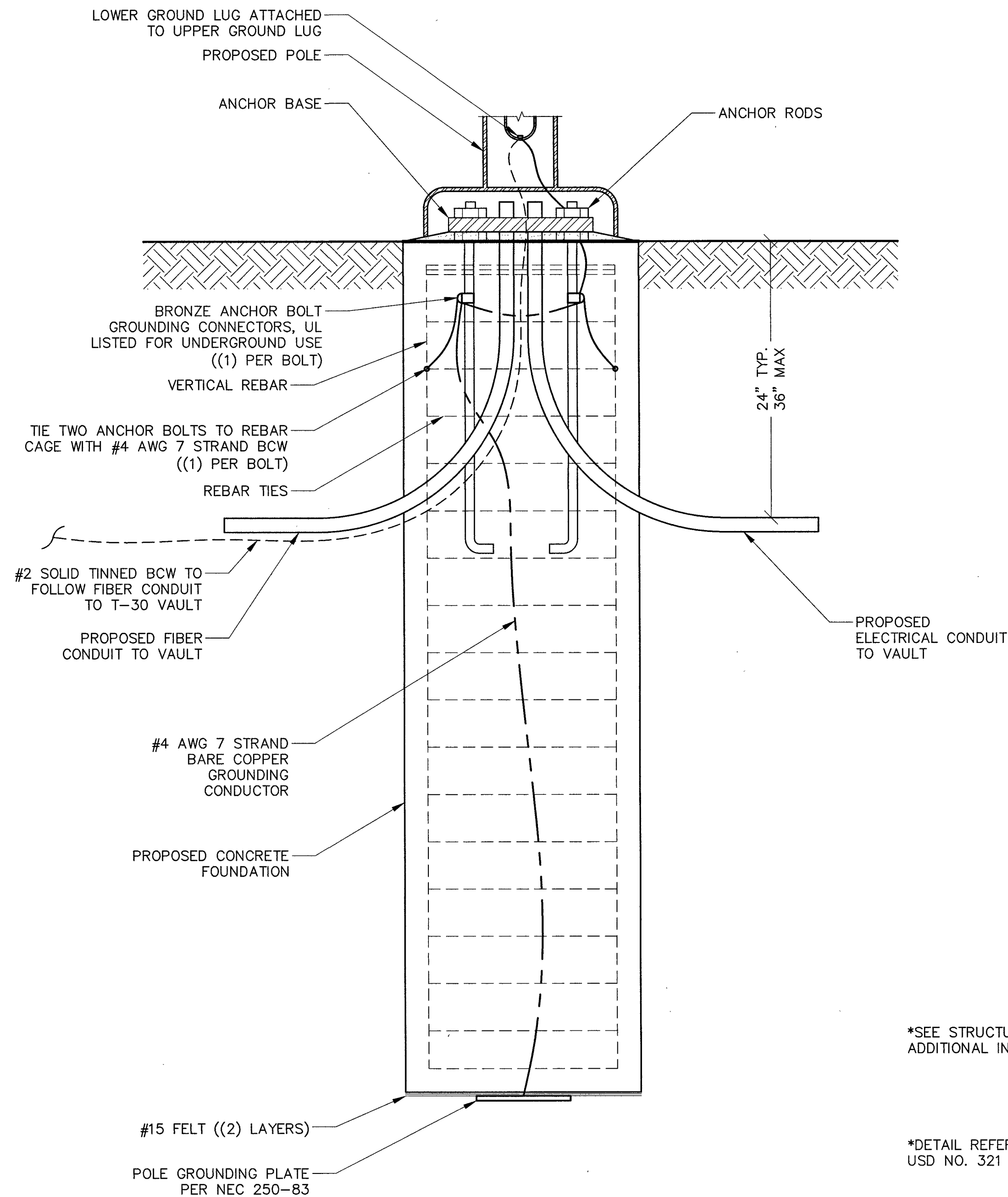


SCALE: NONE 4



SCALE: NONE 6





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				Plan: X				BUS: 60 AMPS														C: CONTINUOUS				P: PANEL			
LOCATION: X								MAIN: C.B. 30 AMPS														R: DEMANDABLE RECEP				E: ELEV: (0)			
								AIC RATING: 10,000 AMPS										MOUNTING: SURFACE				K: KITCHEN: (0)							
CKT NO	CODE	TRIP	POLE	LOAD DESIGNATION				CONNECTED VA								LOAD DESIGNATION				TRIP	POLE	CODE	CKT NO						
				DESCRIPTION	NOTE	MISC	RECP	LTG	ØA	ØB	A	B	ØA	ØB	LTG	MISC	NOTE	DESCRIPTION											
1	N	20	1	Proposed Breaker					600					600				Proposed Breaker	20	1	N	2							
3	N	20	1	SPARE														SPARE	20	1	N	4							
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													

STREETLIGHT GROUNDING

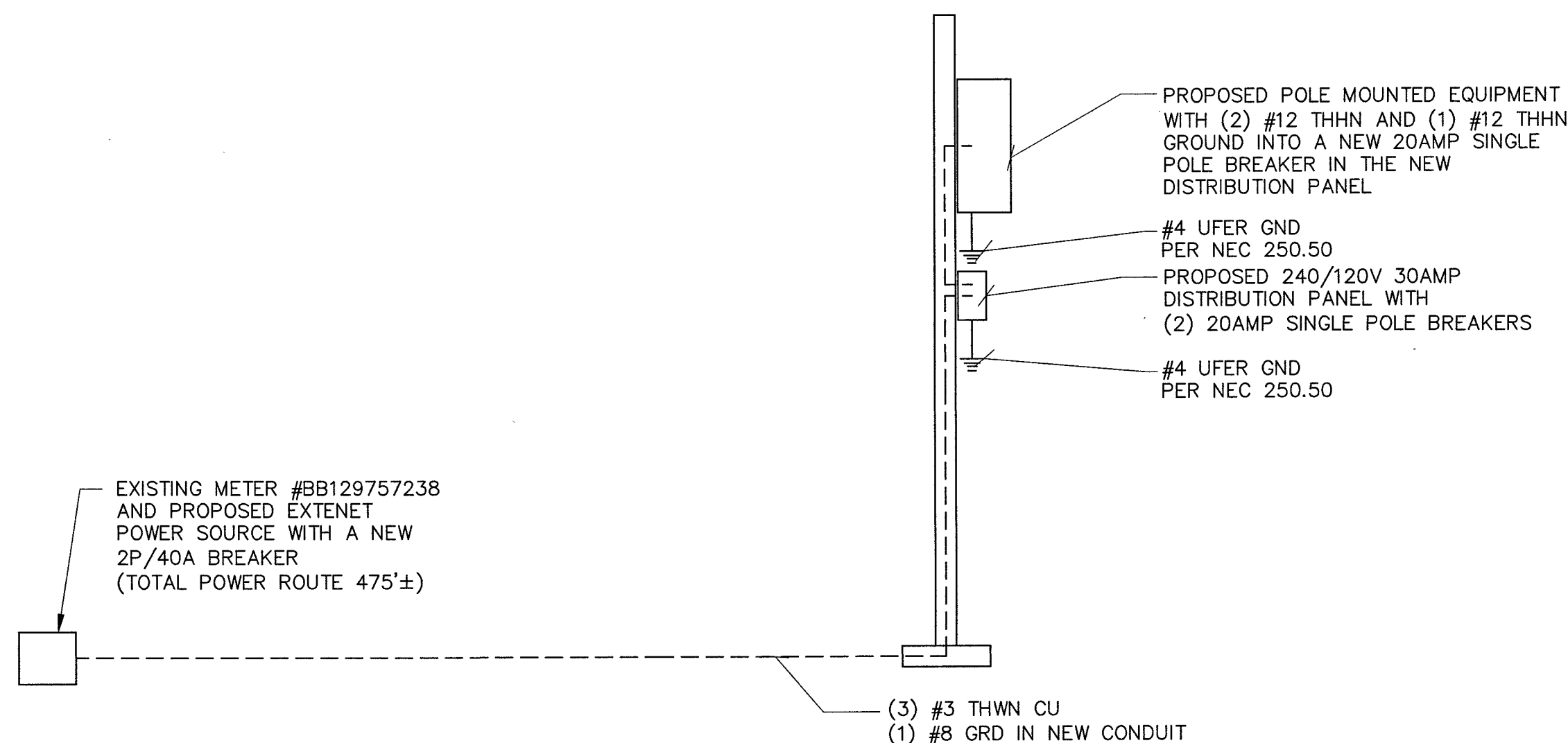
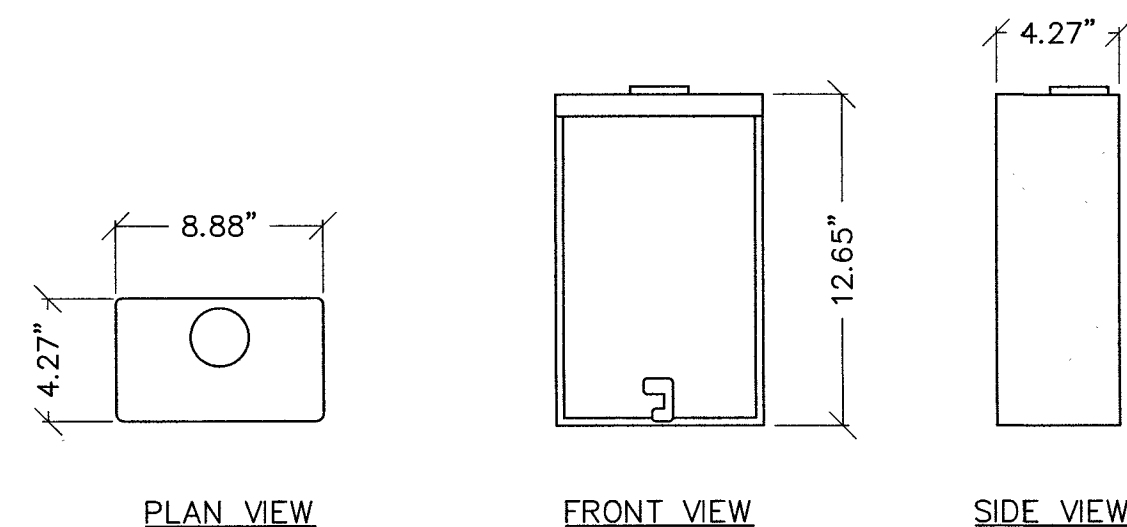
SCALE: NONE 5

PANEL SCHEDULE

SCALE: NONE 2

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

SCALE: NONE 1



PROJECT INFORMATION:

LSV_BLACK_WIDOW_SC
SW-NV-LVSTEXP4-VZW
SW-NV-LVSTRI-00137

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

CURRENT ISSUE DATE:

05/05/17

ISSUED FOR:

PROPOSED WORK

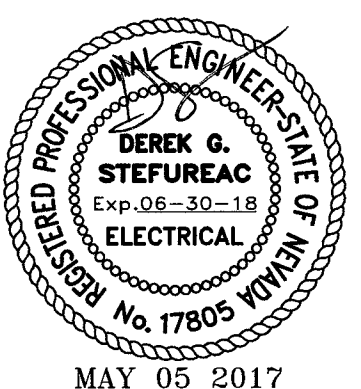
REV.: DATE: DESCRIPTION: BY:

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

PLANS PREPARED BY:



LICENSURE:



SHEET TITLE:

SINGLE LINE DIAGRAM,
PANEL SCHEDULE AND
NOTES

SHEET NUMBER: REVISION:

E1 2