

TYPE II DRAIN OUTLET DETAILS

- ① ALL METAL CONDUITS SHALL BE ELECTRICALLY BONDED BY A GROUND BUSHING AND #6 AWG BARE COPPER WIRE. FOR PVC CONDUIT, ALL GROUND WIRES SHALL BE CONNECTED.
- ② SIGNAL PULL BOXES SHALL BE EMBOSSED "STATE SIGNALS" AND LIGHTING PULL BOXES "STATE LIGHTING."
- ③ PULL BOX FRAMES AND COVERS SHALL BE CAST IRON AND THE FOLLOWING MINIMUM DIMENSIONS:
 FRAME SIZE: 29" x 29"
 FRAME HEIGHT: 4 1/4"
 OPENING SIZE: 22 1/2" x 22 1/2"
 FRAME WEIGHT: 120 LBS.
 COVER SIZE: 22 5/8" x 22 5/8"
 COVER THICKNESS: 3/4"
 COVER WEIGHT: 140 LBS.

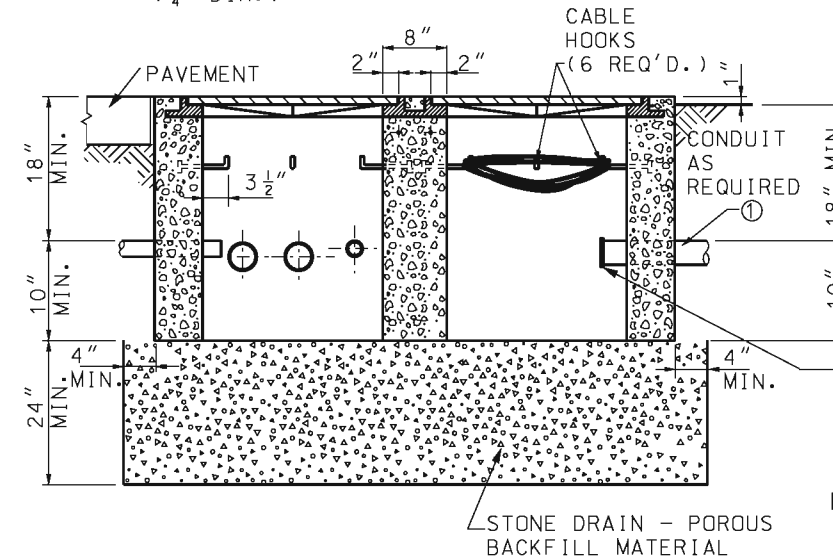
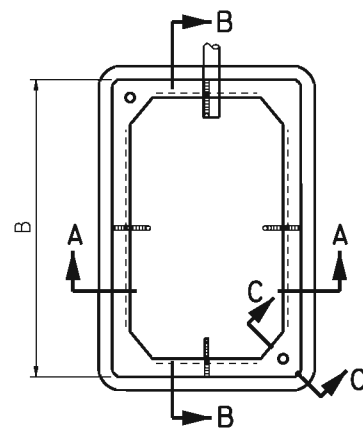
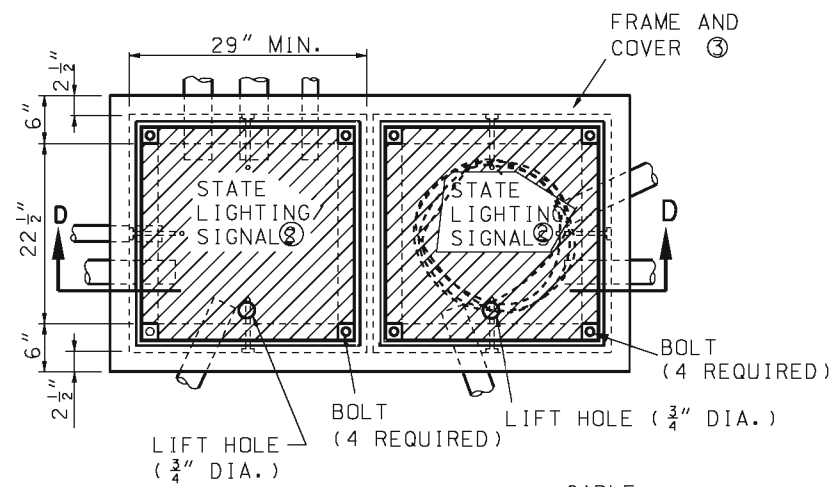
GENERAL NOTES:
 ALL DIMENSIONS SHOWN ARE NOMINAL.
 BOLT CLEANOUT DETAIL SHALL BE APPROVED BY ENGINEER.
 PAVEMENT AND SUBGRADE SHALL BE AS SHOWN ON PLANS.
 STONE DRAIN MATERIAL SHALL CONFORM TO SECTION 1009 OF THE STANDARD SPECIFICATIONS.

STANDARD CONCRETE PULL BOX

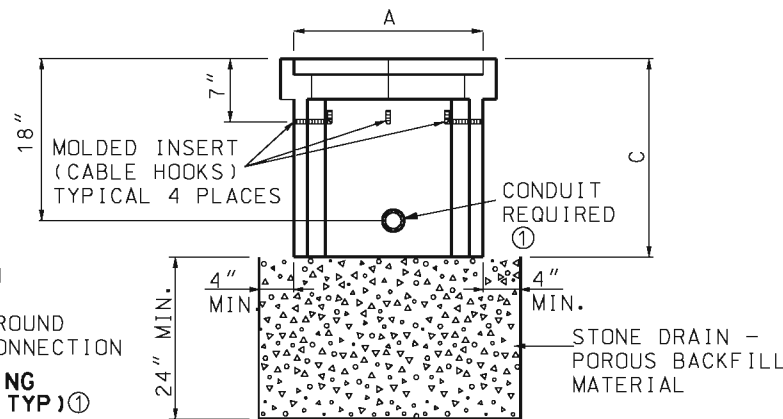
DOUBLE CONCRETE PULL BOX, TYPE A

<p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)</p>	
	<p>TRAFFIC SIGNALS CONCRETE PULL BOXES</p>
DATE EFFECTIVE: 04/01/2019 DATE PREPARED: 1/16/2019	<p>902.20G</p>
SHEET NO. 1 OF 3	

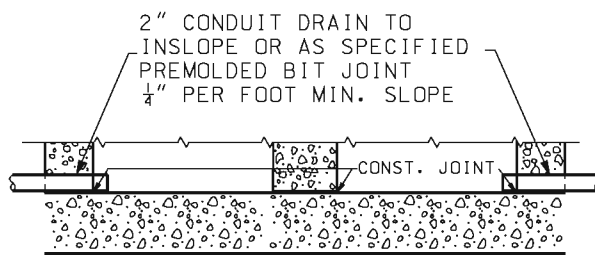
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



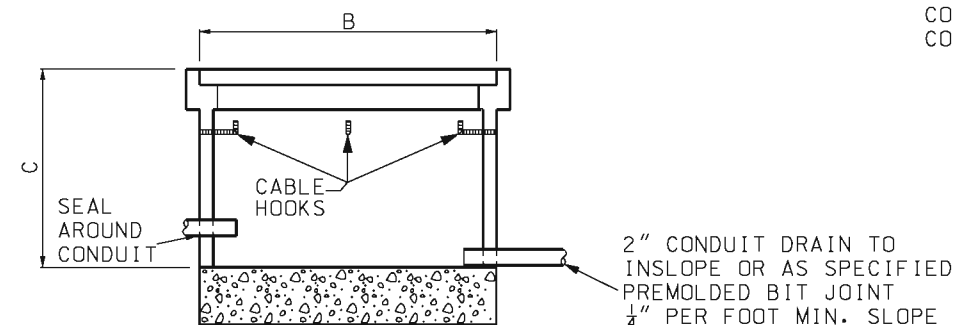
SECTION D-D
TYPE I DRAIN TYPE



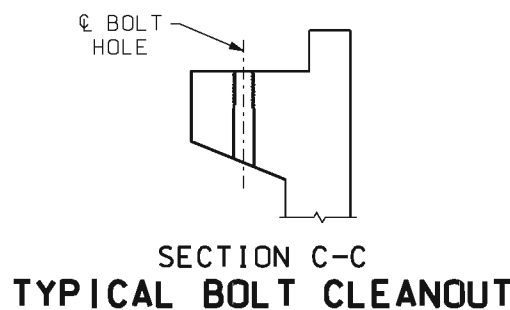
SECTION A-A
TYPE II DRAIN TYPE



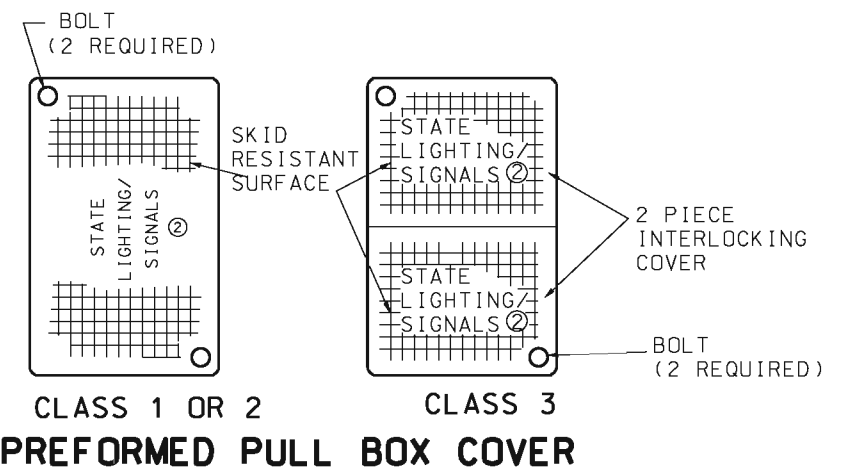
TYPE II DRAIN TYPE
(SEE DRAIN OUTLET DETAILS)
(SECTION ABOVE BREAK APPLICABLE TO TYPE I DRAIN.)
DOUBLE CONCRETE PULL BOX, TYPE B



SECTION B-B
TYPE II DRAIN TYPE
PREFORMED PULL BOX



SECTION C-C
TYPICAL BOLT CLEANOUT



NUMBER OF ENTERING CONDUCTORS	CLASS	PREFORMED PULL BOX MINIMUM DIMENSIONS		
		A	B	C
< 23	1	17"	30"	22"
23 - 68	2	24"	36"	24"
> 68	3	30"	48"	36"

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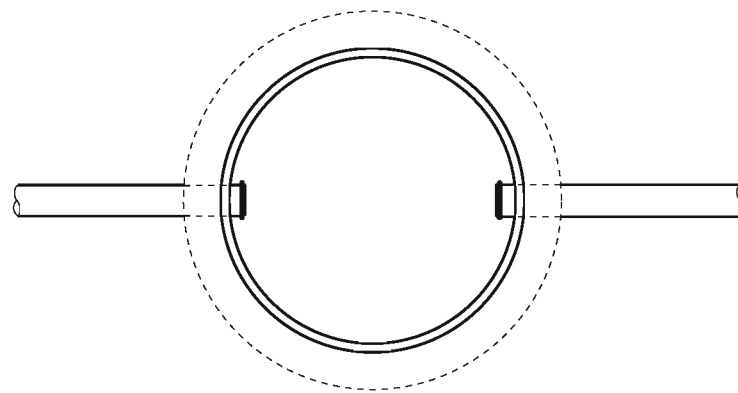
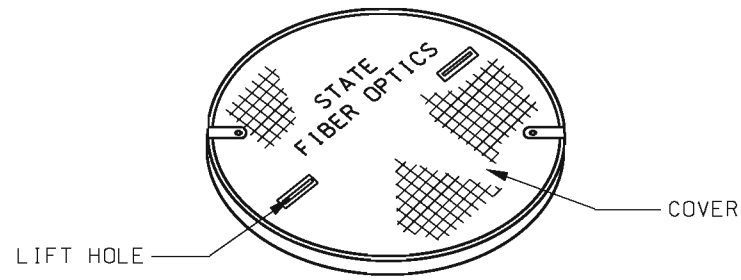
GENERAL NOTES:

IF AN EXTENSION IS USED WITH A PREFORMED BOX, THE LIP OF THE EXTENSION MAY BE INTERIOR OR EXTERIOR. THE EXTENSION SHALL BE COMPATIBLE AND FROM THE SAME MANUFACTURER.

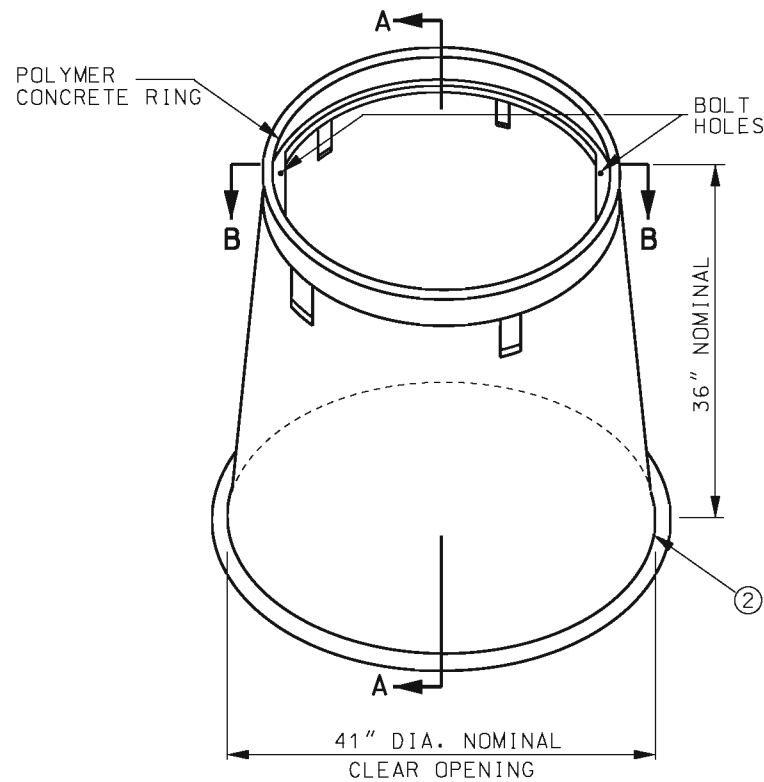
IF PREFORMED PULL BOXES ARE SPECIFIED, THE CONTRACTOR MAY USE THE STANDARD CONCRETE PULL BOX IN LIEU OF THE CLASS 1 OR 2 PREFORMED PULL BOX OR THE DOUBLE CONCRETE PULL BOX, TYPE A, IN LIEU OF THE CLASS 3 PREFORMED PULL BOXES.

		MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
		TRAFFIC SIGNALS CONCRETE AND PREFORMED PULL BOXES	
DATE EFFECTIVE: 11/01/2010 DATE PREPARED: 9/3/2010	902.20G		SHEET NO. 2 OF 3

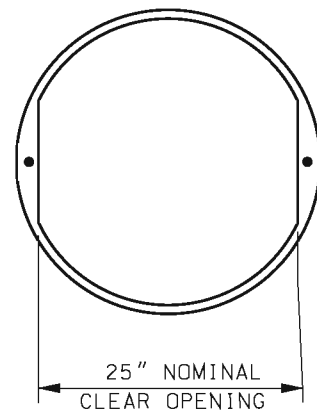
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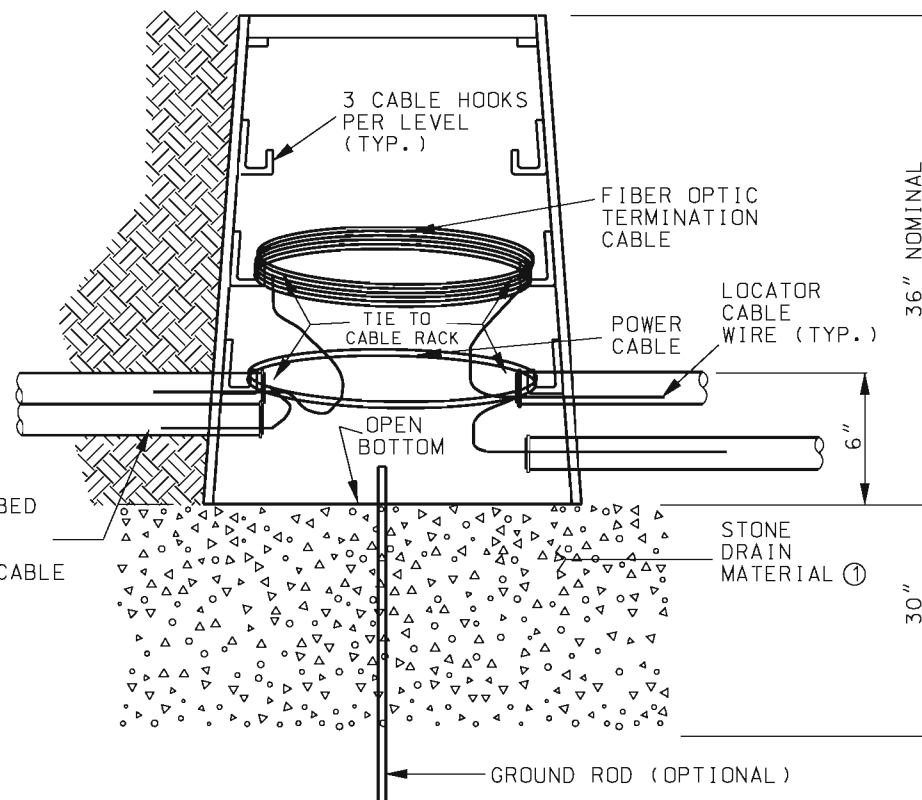
PLAN



CIRCULAR PULL BOX CLASS 5



SECTION B-B



SECTION A-A
TYPE I DRAIN TYPE

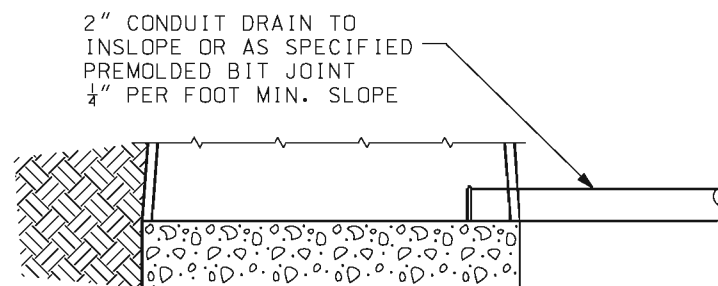
- ① AGGREGATE SHALL BE TYPE 1 CONFORMING TO SEC 1007.
- ② BOX SHALL BE OF A FLARE DESIGN AND HAVE A LIP FOR STABILIZATION.

GENERAL NOTES:

A MINIMUM OF NINE HOOKS, INSTALLED IN THREE LEVELS, SHALL BE INCLUDED WITH EACH PULL BOX.

IF SUBSURFACE CONDITIONS EXIST WHICH PROHIBIT THE PLACEMENT OF THE GROUND ROD IN A VERTICAL POSITION, THE ROD MAY BE DRIVEN AT AN OBLIQUE ANGLE NOT TO EXCEED 45 DEGREES FROM VERTICAL OR BURIED IN A TRENCH AT LEAST 30 IN. DEEP. CONNECTION TO GROUND ROD SHALL BE CADWELDED.

THE CIRCULAR PULL BOX COVER SHOULD BE SIZED TO FIT A BOX WITH A CLEAR OPENING OF 25".



TYPE II DRAIN TYPE

(SEE DRAIN OUTLET DETAILS)
(SECTION ABOVE BREAK APPLICABLE TO TYPE I DRAIN.)

MoDOT MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI
 KATHRYN PHILLIPS HARVEY
 NUMBER PE-23751
 PROFESSIONAL ENGINEER
 THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

**TRAFFIC SIGNALS
 CONCRETE AND PREFORMED
 PULL BOXES**

DATE EFFECTIVE: 11/01/2010
 DATE PREPARED: 9/3/2010

902.20G

SHEET NO.
 3 OF 3

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