

## **SPECIAL NOTE FOR TRAFFIC SIGNAL LOOP DETECTORS**

**1.0 DESCRIPTION.** Be advised that there are existing traffic signal loop detectors within the construction limits of this project. Except as specified herein, perform traffic signal loop replacement in accordance with the Department's Standard/Supplemental Specifications, Special Provisions, Special Notes, and Standard/Seepia Drawings, current editions and as directed by the Engineer. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for replacement of traffic signal loop installation(s) and all other work specified as part of this contract.

**1.1 Pre-bid Requirements.** Conform to Subsection 723.03.17

**2.0 MATERIALS.** Except as specified herein, furnish materials in accordance with Subsection 732.02 and Section 835. Provide for materials to be sampled and tested in accordance with the Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in this Special Note.

**2.1 Maintain and Control Traffic.** See Traffic Control Plan.

**2.2 Sand.** Furnish natural sand meeting the requirements of Subsection 804.04.01.

**2.3 Seeding.** Furnish Seed Mix Type I.

**2.4 Loop Saw Slot and Fill.** Furnish loop sealant, backer rod, and non-shrink grout according to the Saw Slot Detail.

**2.5 Junction Boxes.** Furnish junction box type B, #57 aggregate, and geotextile filter type IV according to junction box detail.

**2.6 Cable No. 14/1 Pair (Lead-in).** Furnish cable that is specified in Section 835. Cable shall be ran splice free. This shall include splice kits to connect to the loop wire.

**2.7 Conduit.** Furnish and install appropriate conduit from transitions to the roadway, junction boxes and poles. See details below.

**3.0 CONSTRUCTION.** Except as specified herein, install and test Traffic Signal Loop Detectors in accordance with Section 723 and the drawings.

**3.1 Testing.** Conform to Subsection 723.03.17 (A)

**3.2 Coordination.** Conform to Subsection 723.03.17 (B)

**3.3 Connection.** Conform to Subsection 723.03.17 (C)

**3.4 Maintain and Control Traffic.** See Traffic Control Plan.

**3.5 Milling.** Conform to Subsection 723.03.17 (F)

**3.6 Loop Saw Slot and Fill.** Conform to Subsection 723.03.13 (A).

**3.7 Backfilling and Disturbed Areas.** Conform to Subsection 723.03.11.

**3.8 Removal.** Conform to Subsection 723.03.16.

**3.9 Property/Roadway Damage.** Conform to Subsection 723.03.17 (J).

**3.10 Right-of-Way Limits.** Conform to Subsection 723.03.17 (K).

**3.11 Utility Clearance.** Conform to Subsection 716.03.01.

**3.12 Control.** Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to permit other contractors, state forces, public utility companies, and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with each other's work will be reduced to a minimum. The Contractor agrees to make no claims against the Department for additional compensation due to delays or other conditions created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to ensure the completion of the work in general harmony and in a satisfactory manner, and the Engineer's decision shall be final and binding upon the Contractor.

**3.13 Bore and Jack.** Conform to Subsection 723.03.06 (I).

**3.14 Open Cut Roadway.** Conform to Subsection 723.03.06 (I).

**4.0 MEASUREMENT.** See Subsection 723.04 for bid item notes. Additional bid items include the following:

**4.1 Loop Test.** The Department will measure the quantity as each individual unit loop tested. The Department will not measure disconnection, reconnection, traffic control, re-splicing per specifications, before and after testing per note above, and any associated hardware for payment and will consider them incidental to this item of work.

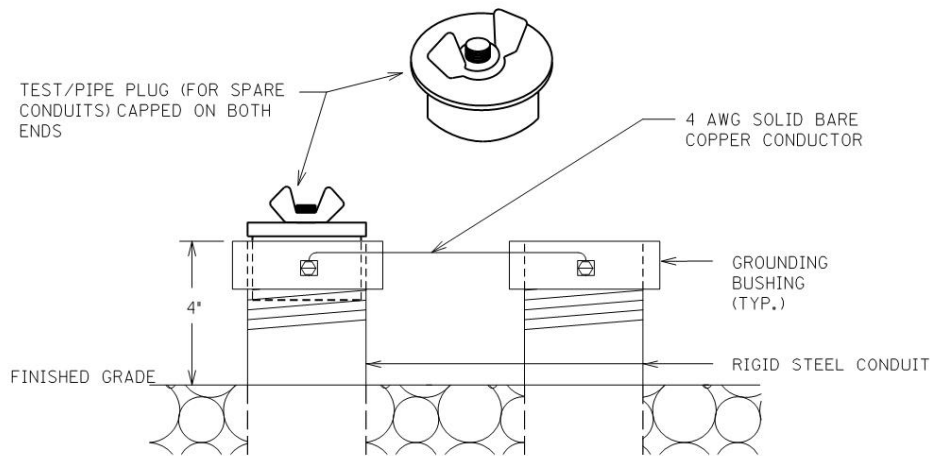
**5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities of listed items according to Subsection 723.05 in addition to the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
Conduit 1"	4792	Linear Foot
PVC Conduit – 1 ¼ inch – sch 80	24900EC	Linear Foot
PVC Conduit – 2 inch – sch 80	24901EC	Linear Foot
Conduit 2"	4795	Linear Foot
Electrical Junction Box type B	4811	Each
Loop Test	24963ED	Each
Trenching and Backfilling	4820	Linear Foot
Loop Wire	4830	Linear Foot

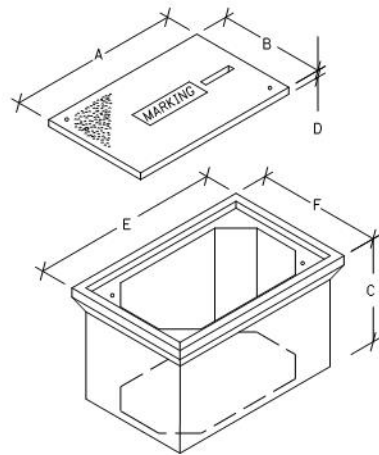
Traffic Signal Loop Detectors  
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Cable-No. 14/1 Pair	4850	Linear Foot <sup>1</sup>
Loop Saw Slot and Fill	4895	Linear Foot <sup>1</sup>
Bore and Jack Conduit	21543EN	Linear Foot <sup>3</sup>
Open Cut Roadway	4821	Linear Foot <sup>3</sup>

The Department will consider payment as full compensation for all work required under these notes and the Standard Specifications.



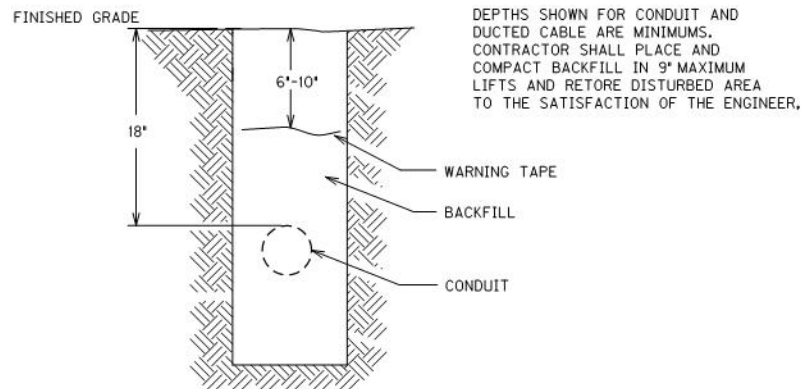
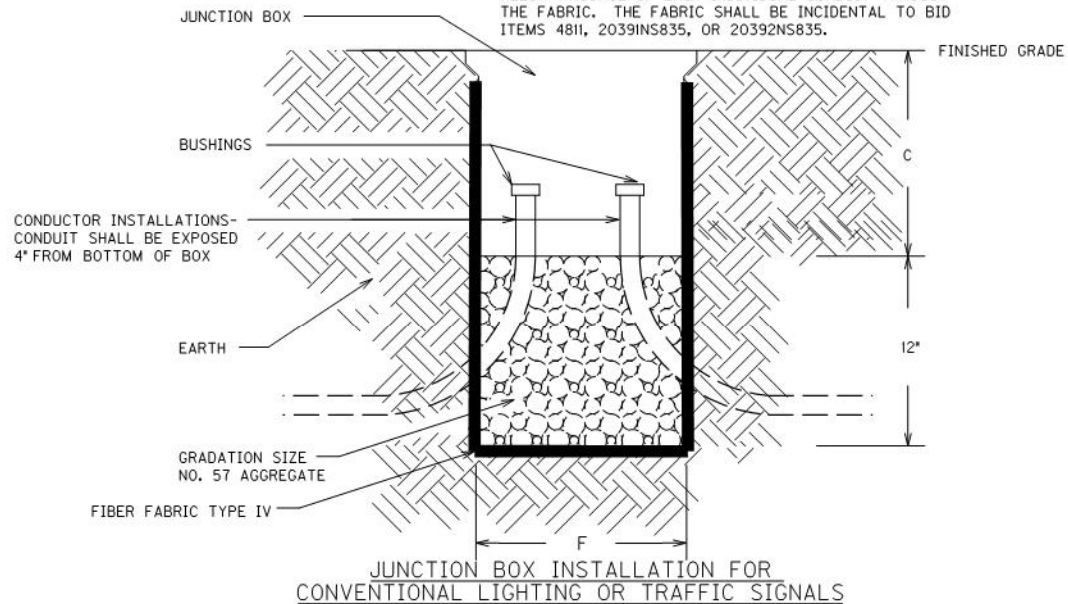
TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL



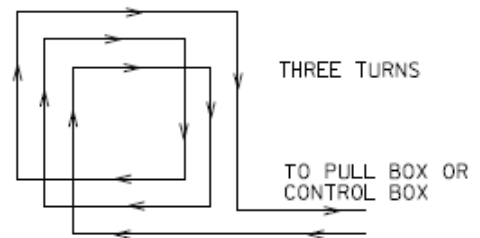
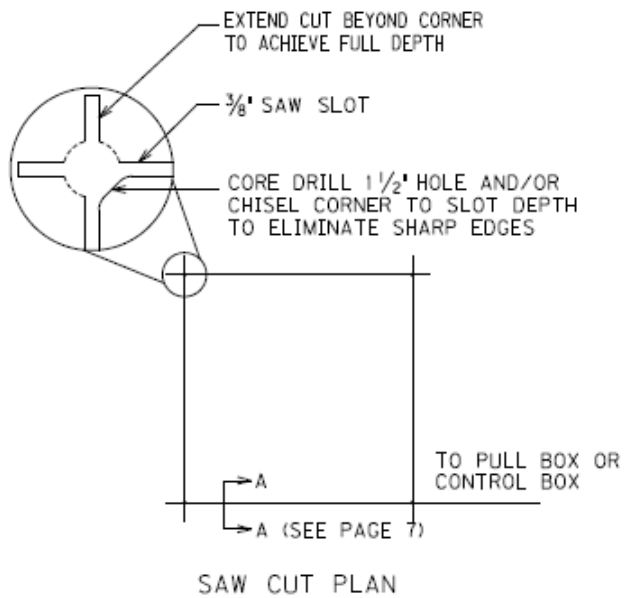
JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D	E	F
TYPE A	23"	14"	27"	2"	25"	15"
TYPE B	18"	11"	12"	1 3/4"	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

• MINIMUM  
NOTE: STACKABLE BOXES ARE PERMITTED

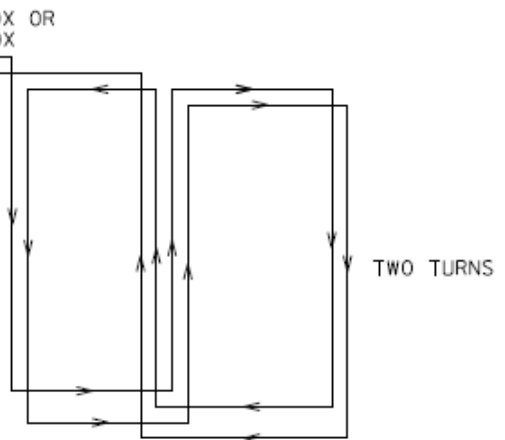
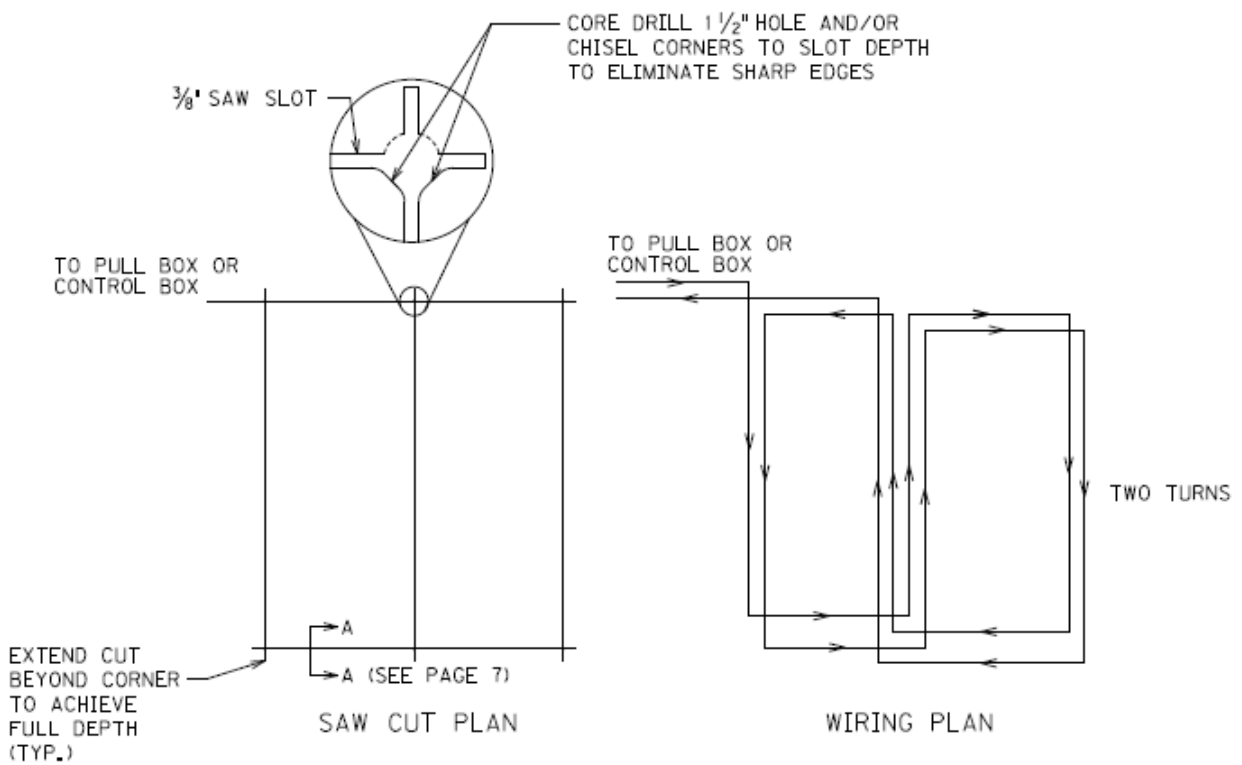
BEFORE THE INSTALLATION OF THE #57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FABRIC SHALL EXTEND TO JUST BELOW THE LIP OF THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE "X CUT" ONLY AS MUCH AS NECESSARY TO ALLOW PASSAGE OF EACH INDIVIDUAL CONDUIT THROUGH THE FABRIC. THE FABRIC SHALL BE INCIDENTAL TO BID ITEMS 4811, 2039INS835, OR 20392NS835.



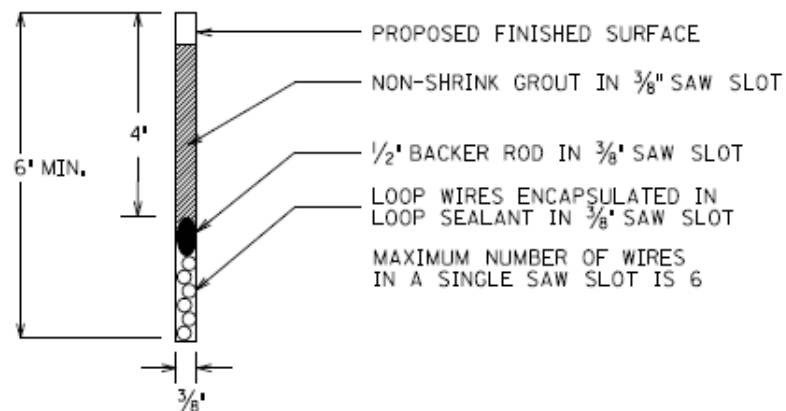
CONDUIT AND WARNING TAPE TRENCH



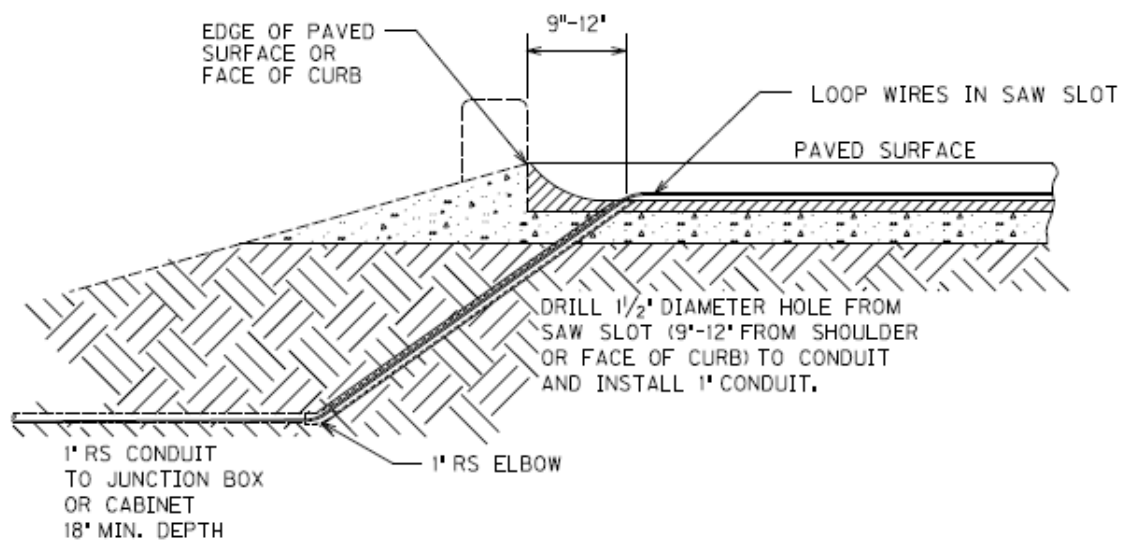
6'X6' LOOP



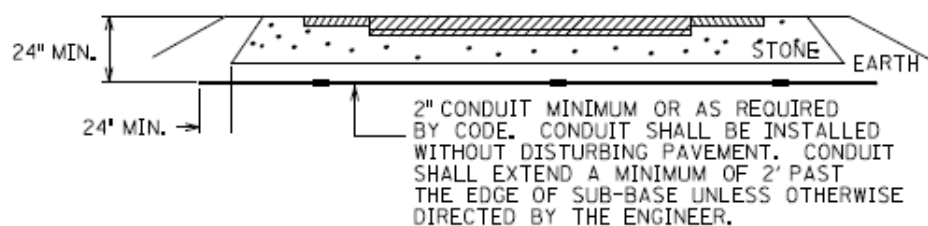
6'X30' QUADRAPOLE LOOP



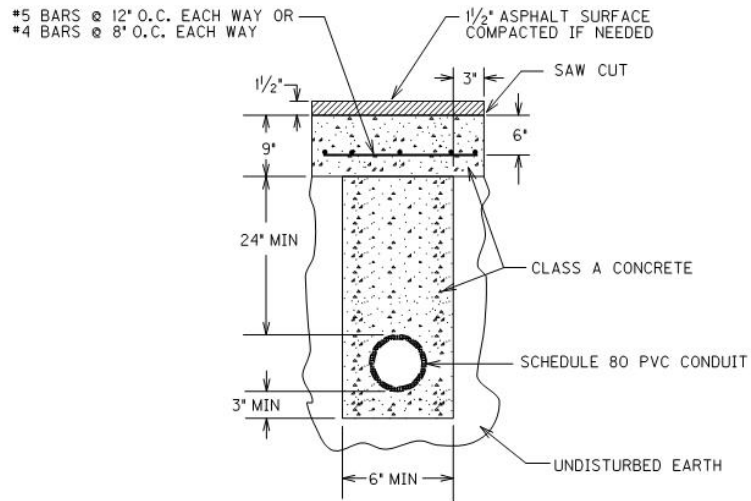
SECTION A-A (SAW SLOT DETAIL)



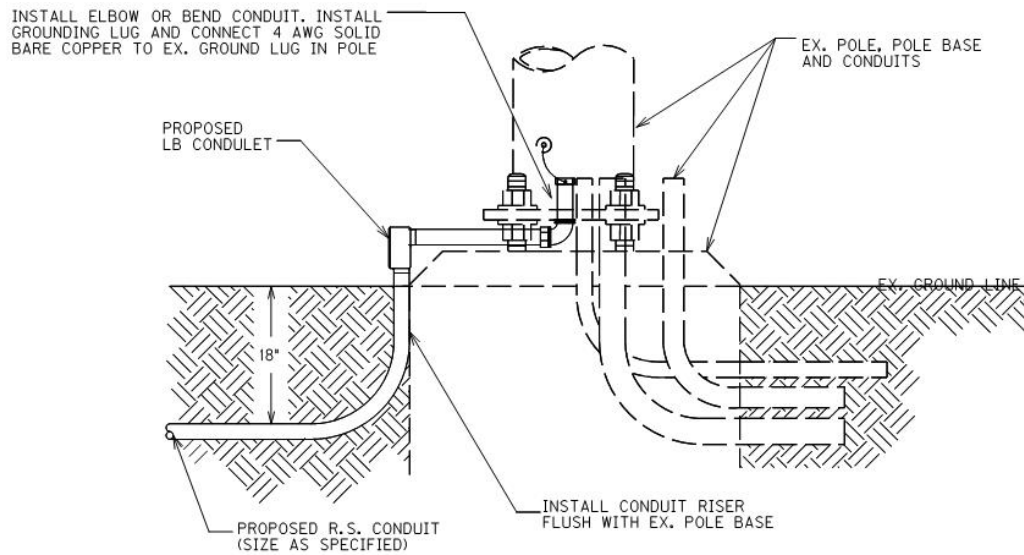
SAW SLOT EDGE OF PAVEMENT TRANSITION



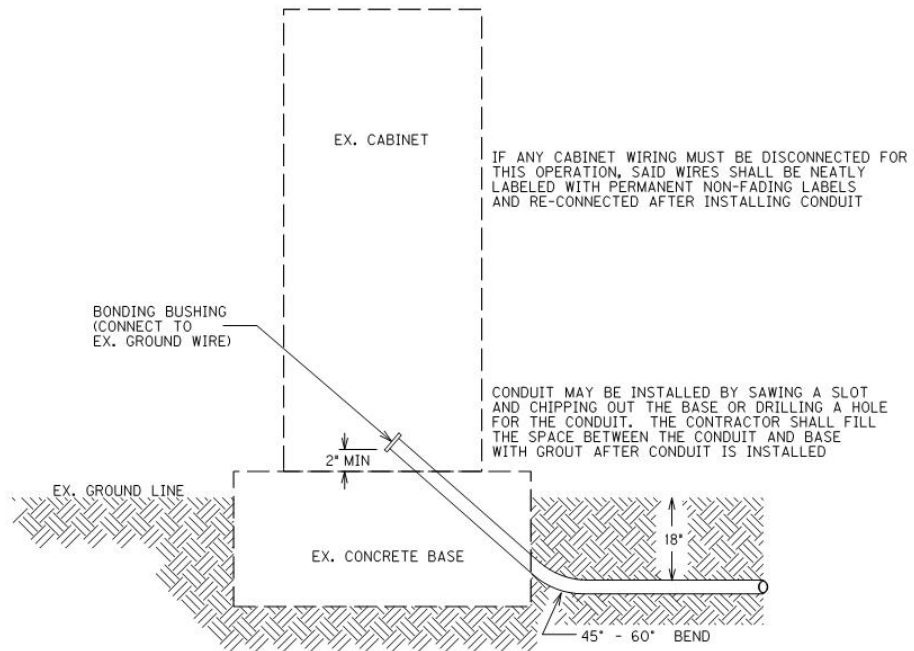
CONDUIT UNDER EXISTING PAVEMENT DETAIL



OPEN CUT PAVEMENT DETAIL



CONDUIT INSTALLATION IN EX. POLE BASE



CONDUIT INSTALLATION IN EX. CABINET BASE