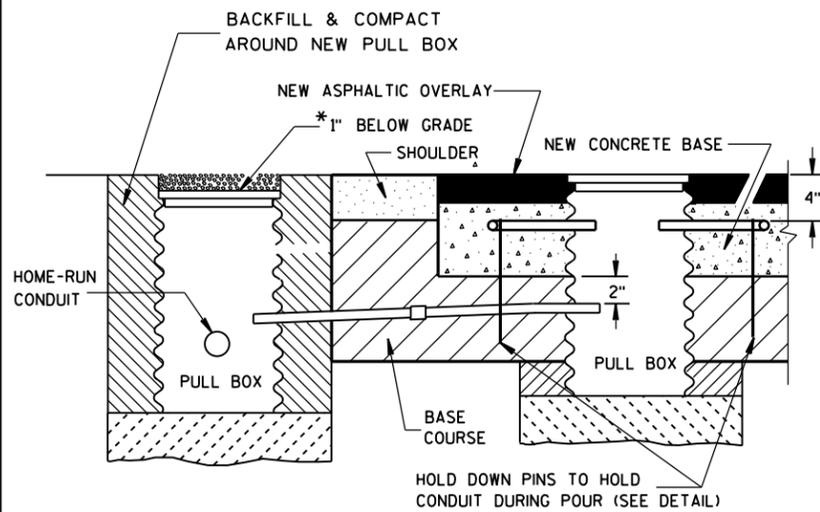


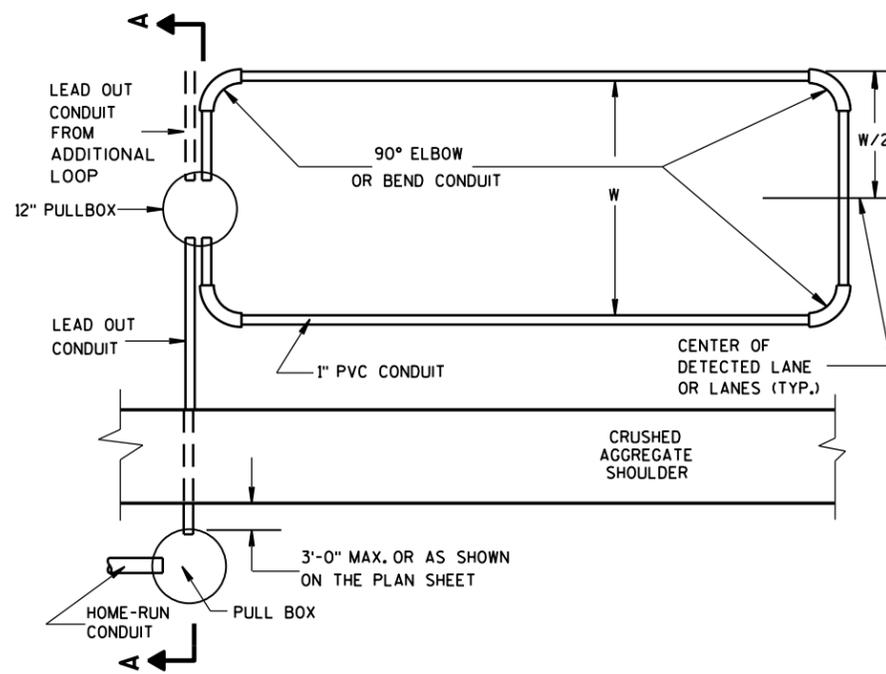
# 9F7: Loop Detector Installed in New Concrete Base with new Asphaltic Overlay Round CSCP Pullbox



**SECTION A-A  
NO CURB & GUTTER**

## LOOP DETECTOR INSTALLATION DETAIL

\*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



**TYPICAL PLAN OF LOOP DETECTOR  
WITH 12" PULLBOX**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

VERIFY THICKNESS OF NEW ASPHALTIC OVERLAY BEFORE INSTALLING PULL BOX AND RELATED CONDUIT.

CONDUIT SHALL BE FULLY ENCASED IN NEW CONCRETE BASE (2" MINIMUM COVER).

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

ANY PVC LEAD-OUT CONDUIT CONTAINING MORE THAN ONE TWISTED PAIR OF LOOP LEAD WIRE SHALL BE 2".

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

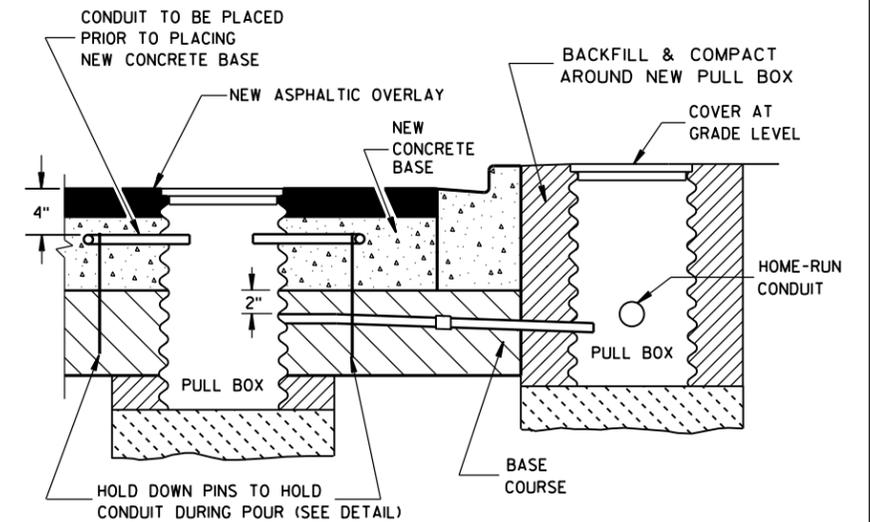
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, INTO THE PULL BOX IN THE PAVEMENT, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

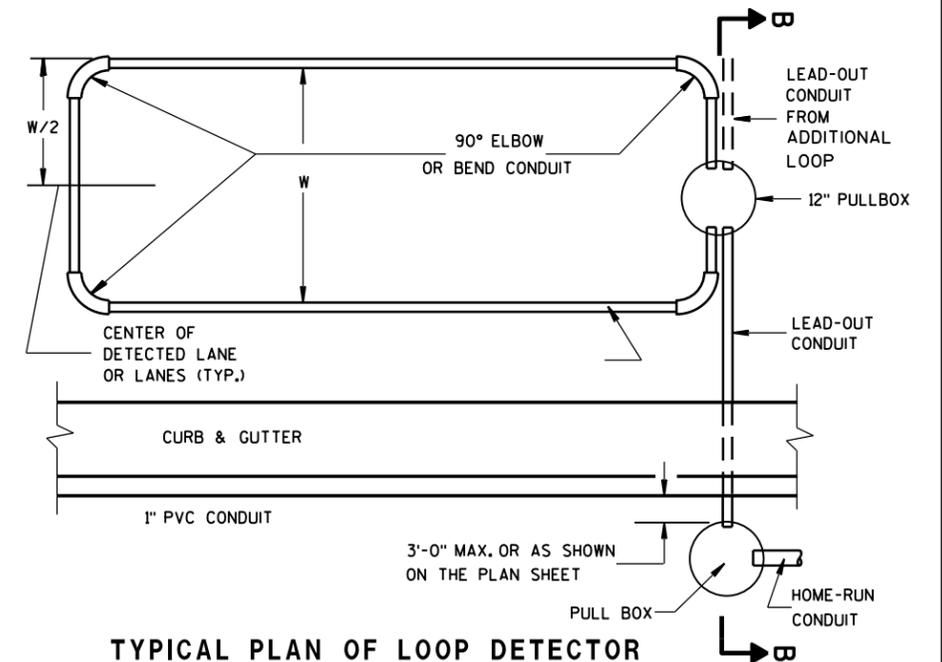
PROTECTION OF THE PULL BOX AND RELATED CONDUITS SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE NEW CONCRETE BASE IS POURED.

PROTECTION OF THE PULL BOX SHALL BE REQUIRED AFTER THE NEW CONCRETE BASE IS POURED AND BEFORE THE NEW ASPHALTIC OVERLAY IS PLACED.

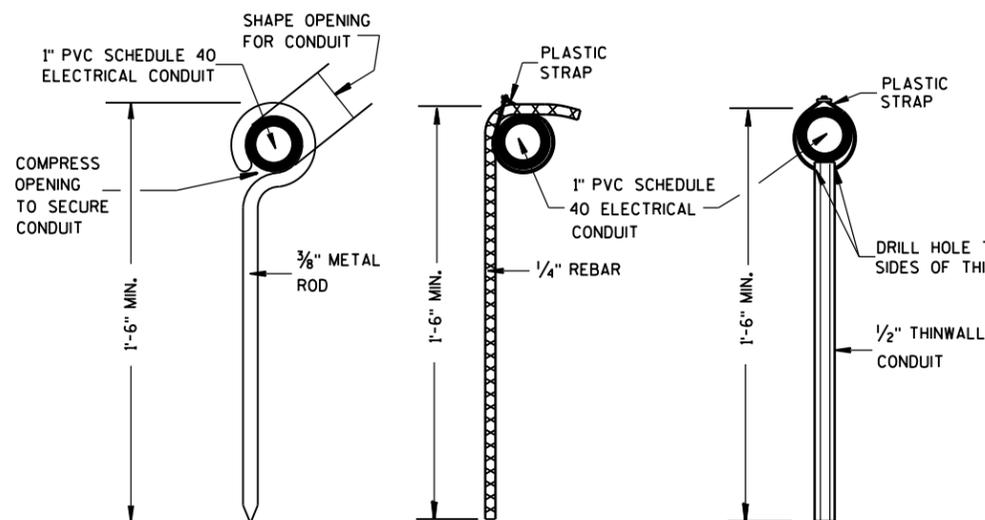
12" PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.



**SECTION B-B  
CURB & GUTTER  
LOOP DETECTOR INSTALLATION DETAIL**



**TYPICAL PLAN OF LOOP DETECTOR  
WITH 12" PULLBOX**



**TYPICAL DETAILS FOR HOLD DOWN PINS**

<b>LOOP DETECTOR INSTALLED IN NEW CONCRETE BASE WITH NEW ASPHALTIC OVERLAY ROUND CSCP PULLBOX</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER
FHWA	

*Loop Detector Installed in New Concrete Base with new Asphaltic Overlay Round CSCP  
Pullbox*

**References:**

NONE

**Bid items associated with this drawing:**

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
652.0800	Conduit Loop Detector .....	LF
653.0100 - 0150	Pull Boxes Steel (inch) .....	EACH
655.0700	Loop Detector Lead In Cable .....	LF
655.0800	Loop Detector Wire .....	LF

**Standardized Special Provisions associated with this drawing:**

<u>STSP NUMBER</u>	<u>TITLE</u>
NONE	

**Other SDDs associated with this drawing:**

<a href="#">SDD 9b2</a>	Conduit
<a href="#">SDD 9b4</a>	Pull Box

**Design Notes:**

NONE

**Contact Person:**

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