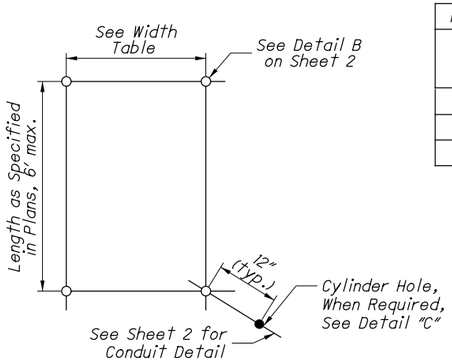
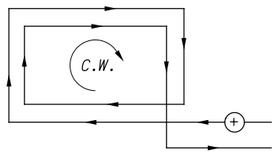


SAW CUT LAYOUT

RECTANGULAR LOOP CONSTRUCTION	
LOOP PERIMETER	NUMBER OF TURNS
LESS THAN 40'	4
40' TO 160'	3
OVER 160'	2



WINDING PATTERN

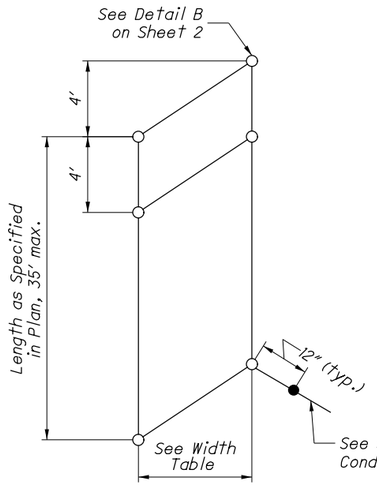
See Above Table for Number of Turns

RECTANGULAR DETECTOR LOOP DETAILS

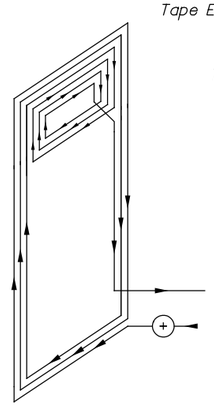
1. Rectangular detector loops shall not be used at the stop line or for dilemma zone detector.

WIDTH TABLE			
LANE WIDTH	RECTANGULAR AND POWERHEAD	QUADRUPOLE	ANGULAR DESIGN
11' AND LARGER	6' WIDTH	6' WIDTH	A= 4.5'
LESS THAN 11'	5' WIDTH	6' WIDTH	A= 4.0'

All stop line loops shall be tested with standard ODOT motorcycle and bicycle targets (see TEM Figure 498-27). Extension loops shall be tested using the motorcyle target.



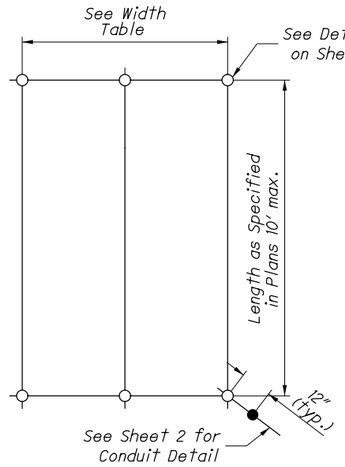
SAW CUT LAYOUT



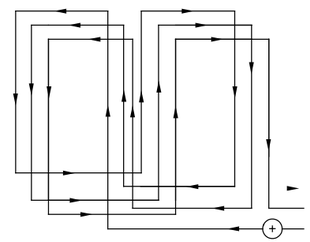
WINDING PATTERN

Number of Turns is 3 + 3

POWERHEAD DETECTOR LOOP DETAILS



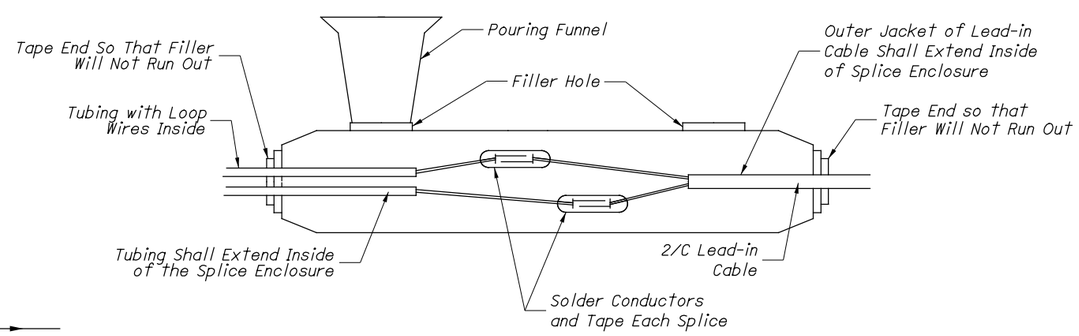
SAW CUT LAYOUT



WINDING PATTERN

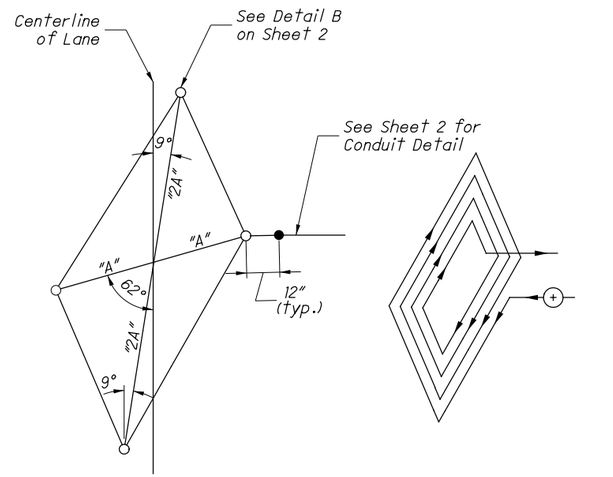
Number of Turns is 3-6-3

FIGURE 8 (QUADRUPOLE) LOOP DETAILS



1. Loop detectors wire to lead-in cable splices within the encapsulated splice enclosure shall be soldered.
2. If a pullbox is not specified in the plans, the waterproof splice enclosure shall be located in the first entered pole or pedestal, except if the controller cabinet is mounted on that pole or pedestal, in which case the loop wires shall be routed directly into the cabinet.
3. The enclosure shall not contain visible air bubbles (voids) greater than ¼". The Contractor shall replace at no cost all splices that do not meet this criterion.

SPLICE ENCLOSURE DETAIL



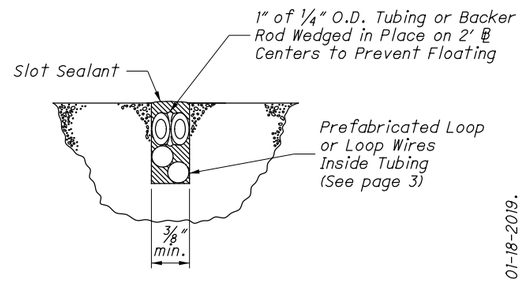
SAW CUT LAYOUT

WINDING PATTERN

Number of Turns is 4. See Width Table for Dimension "A"

ANGULAR DESIGN DETECTION (A.D.D.) LOOP DETAIL

1. There shall be one A.D.D. loop per travel lane.
2. The perimeter of an A.D.D. loop as shown above is 8.66 times the dimension "A".



1. Minimum saw slot depth: Asphalt 4"
   Concrete 2"
   Maximum saw slot depth: Concrete 2 1/2 "
2. Loop detector wire in tubing shall be as specified in CMS Table 732.19-1.
3. Loop detector sealant shall be a prequalified product in accordance with Supplement 1048.
4. Saw slots and probe holes shall be thoroughly cleaned and dried prior to installation of sealant.
5. Wire installations in new asphalt may be sawed and embedded with sealant in sub-surface course with subsequent covering by the surface course, subject to approval of the Engineer.

SLOT DETAIL

THIS DRAWING REPLACES TC-82.10 DATED 01-18-2019.

REVISION DATE 07-19-2019

STATE OF OHIO DEPARTMENT OF TRANSPORTATION ADMINISTRATOR David L. Holstein

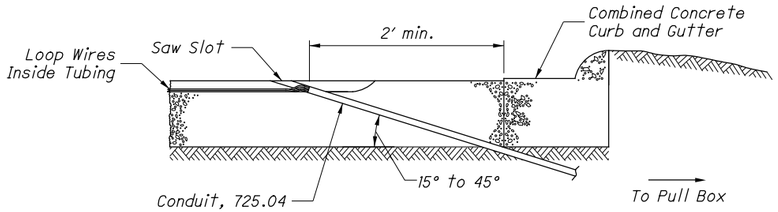
STDS. ENGINEER Duemmel

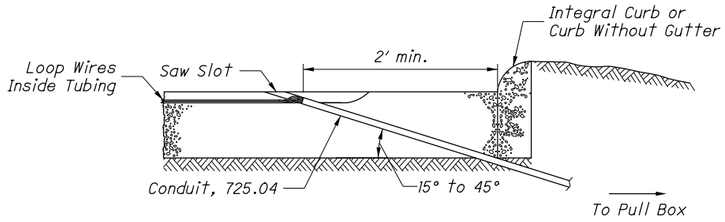
OFFICE OF ROADWAY ENGINEERING

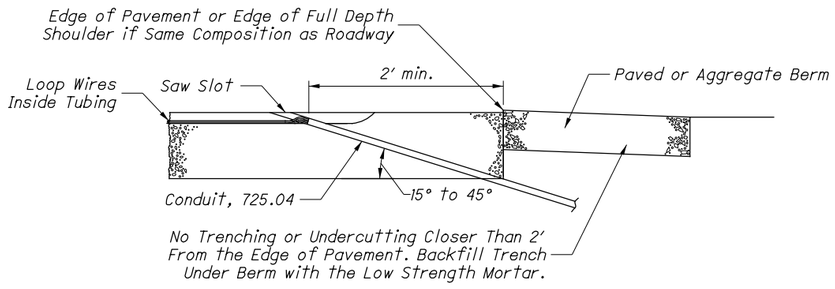
STANDARD ROADWAY CONSTRUCTION DRAWING

VEHICLE DETECTOR INSTALLATION DETAILS

SCD NUMBER TC-82.10

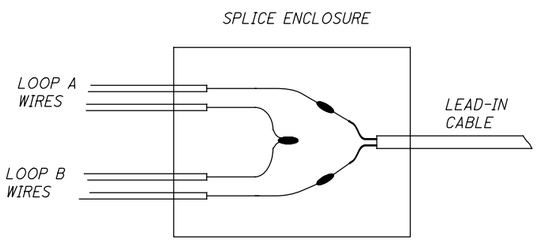






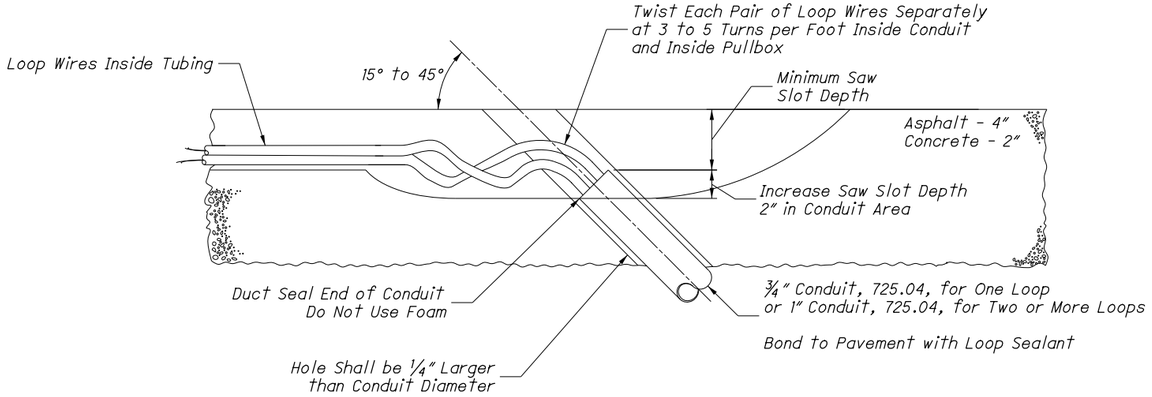
1. The drilled hole shall be located as shown above and within the full depth pavement. It shall not be drilled or cut through the paved berm, curb or curb and gutter section.
2. In areas of poor pavement condition, the saw slot depth shall be increased to insure adequate wire embedment. All field adjustments shall be subject to the approval of the Engineer.

TYPICAL DRILLED HOLE LOCATIONS

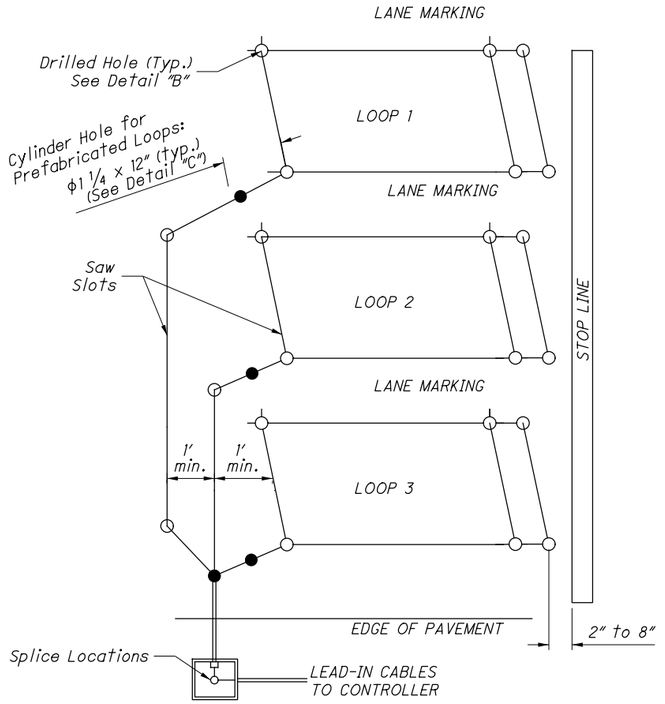


1. Where multiple loops use a single lead-in cable, series connections shall be used.
2. A maximum of 2 loops (3 wire splices) shall be used in any encapsulated splice kit.

SERIES CONNECTIONS

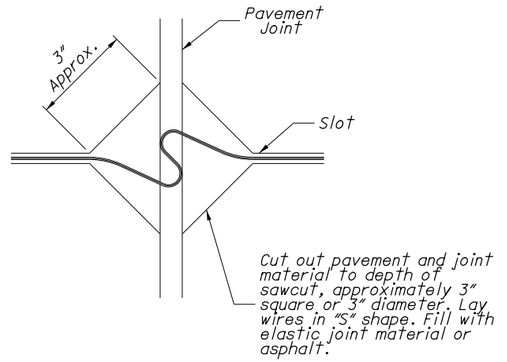


CONDUIT DRILLED HOLE DETAIL

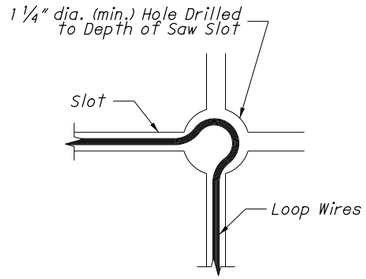


1. Only one set of loop wires shall be run in a saw slot over to the conduit hole location.
2. All adjacent saw slots shall have a minimum distance of 1′ between them. No saw slot shall be located within 1′ of a longitudinal or transverse joint in P.C.C. pavements if the slot is parallel to the joint.
3. Stop line detector loops shall each be on a separate detector unit channel to enhance motorcycle detection.
4. Loops shall be centered in lane.

MULTIPLE LOOP LAYOUT



JOINT CROSSING DETAIL IN P.C.C. PAVEMENTS



DETAIL "B"

THIS DRAWING REPLACES TC-82.10 DATED 01-18-2019.

REVISION DATE	STATE OF OHIO DEPARTMENT OF TRANSPORTATION ADMINISTRATOR	STDS. ENGINEER	OFFICE OF ROADWAY ENGINEERING
07-19-2019	David L. Holstein	Duemmel	

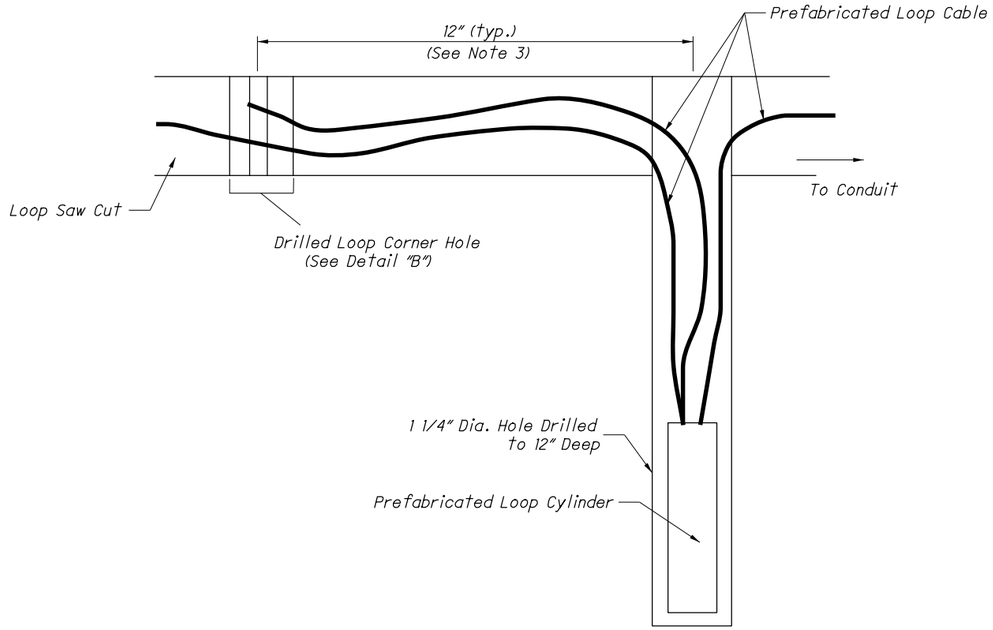
STANDARD ROADWAY CONSTRUCTION DRAWING

VEHICLE DETECTOR INSTALLATION DETAILS

SCD NUMBER **TC-82.10**

PREFABRICATED LOOP DETAILS

DETAIL "C"
(Prefabricated Saw-Cut Loops Only)



NOTES:

1. Prefabricated loops are required in all asphalt and non-reinforced concrete pavements. Do not install prefabricated loops in bridge decks.
2. Install prefabricated loops manufactured by Reno A&E, NeverFail, or approved equal.
3. Follow loop manufacturer's installation procedures to locate cylinder hole.

THIS DRAWING REPLACES TC-82.10 DATED 01-18-2019.

REVISION DATE 07-19-2019

STATE OF OHIO DEPARTMENT OF TRANSPORTATION ADMINISTRATOR David L. Holstein

STDS. ENGINEER Duemmel

OFFICE OF ROADWAY ENGINEERING

STANDARD ROADWAY CONSTRUCTION DRAWING

VEHICLE DETECTOR INSTALLATION DETAILS

SCD NUMBER TC-82.10