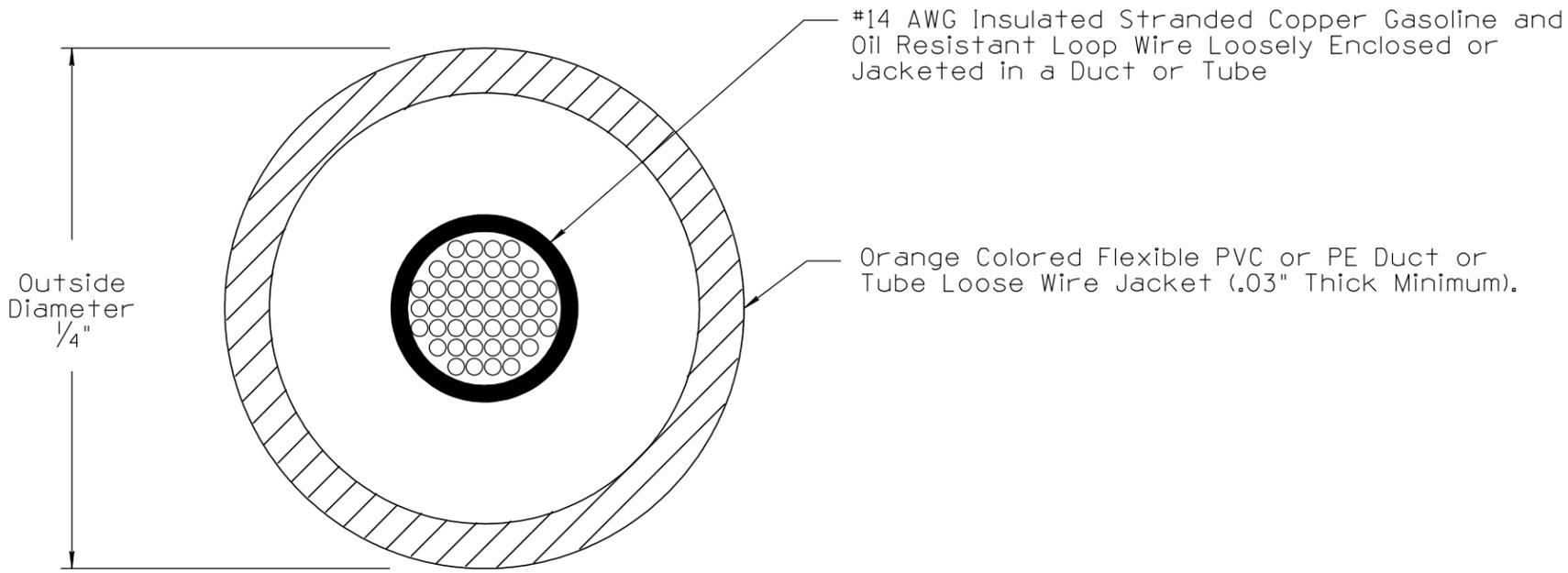


NO	1	2010 EDITION	NO	3	4
DESCRIPTION OF REVISIONS			DATE	03/10	
MADE BY	C. COLE		NO		
MADE BY			DATE		
DESCRIPTION OF REVISIONS			NO		
MADE BY			DATE		
DATE			NO		
NO			DATE		

NOTES CONTINUED:

22. The lead-in cable from the pull box back to the controller shall conform to the applicable requirements of IMSA Specification 50-2 with the exception that the cable can include up to 4 twisted pairs, not just one. The wire size shall be #14 copper stranded. The cable drain wire and shield shall be grounded at only one end (in the controller). The lead-in cable shall run continuously between the pull box and the controller without splices.
23. Lead-in cable to loop detector connections shall be soldered using an appropriate resin core solder. The solder connection shall then be made completely liquid-tight with an approved heat shrink connection kit that is specifically applicable to loop detector applications. Care shall be taken to heat the connection kit to the correct temperature without damaging the loop wire or lead-in wire insulation. Other types of connection are allowable if approved by the Engineer.
24. The lead-in access hole shall be backfilled and patched according to the detail shown on sheet 4. The contractor shall patch the existing pavement with an approved patch material (UPM or approved equal) in an acceptable manner. Care shall be taken not to damage loop wires. The patch shall be at least 1/4-inch (but not more than 1/2-inch) higher than existing pavement or it can be compacted flush if approved by the Engineer.
25. The final testing of each loop will involve a repeat of the tests specified per Note 21 and the following additional tests:
- Inductance: The inductance of each loop will be measured with an inductance tester. The inductance for a six by six foot loop with an 11 foot lead in shall be in the range between 50 and 80 microhenries. The inductance may be greater with larger loops and longer lead-ins but in no case shall the total inductance exceed 700 microhenries.
 - Operation Test: Each loop will be connected at the controller cabinet and the response observed per an operational loop amplifier unit under real or simulated traffic conditions (vehicle shall drive on to or over installed loops).
- Problems or failures shall be correct as directed by the Engineer.



DUCTED OR TUBED DETECTOR LOOP WIRE
 (Note: Shall Conform to Applicable Requirements of IMSA 51-7)

NOTES FOR THIS SHEET ONLY:

1. The Polyethylene (PE) or Polyvinyl (PVC) tube shall have a temperature rating of at least 100°.
2. Tube and wire shall be assembled by the manufacturer. Contractor assembly is not acceptable.

NOT TO SCALE

DESIGN APPROVED	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION TRAFFIC SIGNALS AND LIGHTING STANDARD DRAWINGS	REVISION 03/10
SIGNATURE		DRAWING NO. T.S. 7-1
APPROVED FOR DISTRIBUTION	LOOP DETECTOR LOCATION AND INSTALLATION DETAILS	SHEET NO. 5 OF 5
ON FILE		