

NO	DESCRIPTION OF REVISIONS	MADE BY	DATE	NO	DESCRIPTION OF REVISIONS	MADE BY	DATE
1	REORGANIZED THE SHEETS IN THIS SERIES	J. GEIST	12/08	3	UPDATED FOR RE-ISSUE	L. LOPEZ	8/09
2	UPDATED FOR RE-ISSUE	L. LOPEZ	3/09	4	REVISED DETAILS / FUTURE STANDARD DRAWING T.S. 6-2	C. COLE	11/09

**NOTES:**

- The contractor shall install one piezo sensor in each lane between two detector loops, centered in the lane and spaced at 16 feet center to center. The contractor shall install the piezo sensor perpendicular to the roadway centerline. Each loop shall use stranded copper No. 14 AWG HDPE polyethylene insulated conductor conforming to IMSA 51-7, "Traffic Signal Cable". Each loop shall consist of 3 turns of wire and shall be a continuous run from the loop to the loop detector stub out. The 2 loop lead-in wires from the loop to the pull box shall be twisted together with a minimum of 2 turns per foot.
- ADOT will supply the piezo sensors with pre-attached cable, support brackets and grout which the contractor will install. Piezo sensor with cable shall be installed as one complete piece without splices, see T.S. 7-4 SECTION C-C. The contractor shall contact MPD Traffic Monitoring Section, at (602) 712-8585, no less than 14 working days prior to the installation of the Speed Vehicle Class System. The contractor shall install all components of the Speed Vehicle Class System at the same time. MPD Traffic Monitoring Section will have an Engineer available to oversee the installation, and to answer any questions pertaining to the proper installation of the Speed Vehicle Class System.
- On all installations of Speed Vehicle Class Systems, the contractor shall install the loops and Department-furnished piezo sensors in the pavement, including all connections to the pull box(es). The contractor shall also install the controller cabinet, Type A pole, pole foundation and all necessary pull boxes and conduit connections from the cabinet to the pull box(es) and from the edge of pavement to the pull box(es); unless otherwise indicated on the project plans.
- For lanes wider than 12 feet, the contractor shall install loops wider than 9 feet per the following formula:  
Loop Width = Lane Width minus 3 feet.
- Saw cuts shall be thoroughly and completely cleaned and cleared of any debris and sharp edges. Saw cut sealant for piezo sensors (between the sensors and edges of pavement) and the loops in AC pavement shall be sealed with an approved per-mix emulsified crack filler sealant per the Standard Specifications. Sealant in concrete pavement or finish AC course shall be, hot rubber sealant or an approved two-part epoxy loop sealant.
- Unless otherwise indicated on the project plans, the contractor shall install the piezo sensors and loops in the new or existing pavement immediately below the final surface course. The piezo sensors shall be installed a maximum of one inch below the final surface course.
- The contractor shall backfill the underground components with excavated material and compact the material in accordance with the Standard Specifications. Material not reused shall be disposed of by the contractor in an approved fashion.
- The contractor shall patch the existing pavement with similar material or material approved by the Engineer. The patch shall be least 1/4 " higher than existing pavement.
- See Standard Drawing T.S. 1 Series for pull box and for pull box installation details.
- See Standard Drawing T.S. 7-12 for cabinet placement and installation details.
- Offset pull box as necessary to avoid bottom of drainage ditch.

NOT TO SCALE

DESIGN APPROVED	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION TRAFFIC SIGNALS & LIGHTING STANDARD DRAWINGS	REVISION 11/09
<b>SIGNATURES</b>		DRAWING NO. T.S. 7-3
APPROVED FOR DISTRIBUTION	SPEED AND VEHICLE CLASS DETECTORS	Future T.S. 6-2 SHEET NO. 2 OF 2
<b>ON FILE</b>		