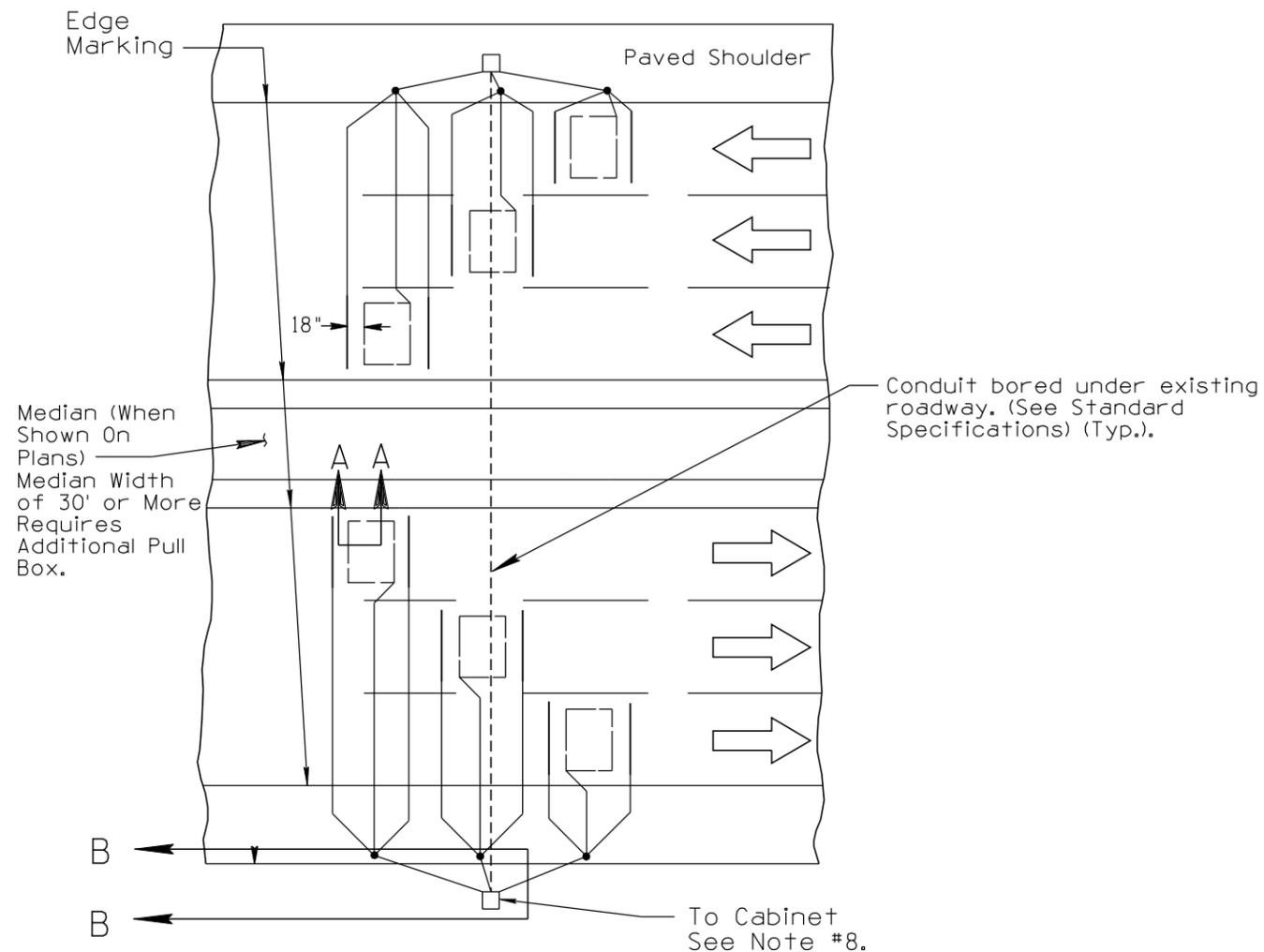
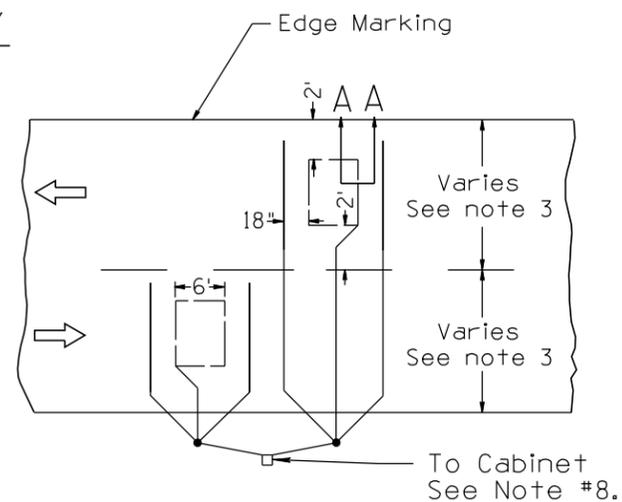


NO	DESCRIPTION OF REVISIONS	MADE BY	DATE
1	ORIGINAL ISSUE	J. GEIST	9/08
2	REORGANIZED THE SHEETS IN THIS SERIES	J. GEIST	12/08
3	NOTES REVISED	L. LOPEZ	3/09
4			



WIM INSTALLATION IN
MULTI-LANE DIVIDED HIGHWAY



WIM INSTALLATION
IN UNDIVIDED HIGHWAY

NOTES:

1. Weigh-in-motion systems require 1 loop detector between 2 flat type piezo sensors, centered in lane with an 18" separation as seen in drawing. Piezo sensor must be parallel to the leading edge of the loop detector and perpendicular to the roadway with no more than 1" variation across the face of the loop or piezo sensors. Each lane should be staggered to avoid cross-talk interference.
2. 10' piezo sensors are standard for all travel lanes up to 12 feet in width. For lanes wider than 12 feet adjust length of piezo to allow for 1 foot from center stripe and lane edge marking to maintain the sensors acquisition of all vehicles passing through the lane. ADOT will supply piezo and piezo encapsulation sealant/grout to be used during installation (See Note #10).
3. Two detector loops shall be installed per travel lane. The loops shall be aligned in the center of the travel lane and maintain 6 feet in length. For lanes wider than 12 feet; adjust the width of the loop with the following formula: Loop Width = Lane Width - 3 feet. Loops shall have 3 turns of IMSA 51-7 (part #8460XL) Traffic Signal Cable.
4. Unless otherwise indicated on the project plans, the contractor shall install the loop detectors in the new or existing pavement immediately below the final surface course. This requirement does not apply to Portland cement pavement (PCCP or PRCP).
5. Backfill with excavated material and thoroughly tamp. All excavated material not reused shall be property disposed of by the contractor.
6. Where pull boxes are installed in concrete areas, 1/2" felt shall be used as an expansion joint.
7. Saw cut sealant for detector loops and piezo sensors lead-in in AC shall be the emulsified crack filler sealant per the Standard Specifications. The sand shall be pre-mixed by the manufacturer. Sealant for detector loops in PCCP shall be the Elastomeric Sealant per the Standard Specifications, or an approved two-part epoxy loop sealant.
8. On loop/piezo traffic count systems noted as new, contractor shall furnish material and labor to complete installation of a count system, cabinet, A-pole, foundation, and all necessary conduit connections from cabinet to roadside pullbox(s). See detail drawing(s) on sheet 3 of 3 of T.S. 7-10. On loop/piezo traffic count systems noted as existing, contractor shall install the system only.
9. Use same material (or approved equal) for patching existing pavement. Patch to at least 1/4" greater thickness than existing pavement.
10. Contact MPD Traffic Monitoring Section, at (602) 712-8585, no less than 14 working days prior to installation of the loop detectors. MPD Traffic Monitoring Section will have an Engineer available to oversee the installation, and to answer any questions pertaining to the proper installation and layout of sensors.

DESIGN APPROVED	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION TRAFFIC SIGNALS & LIGHTING STANDARD DRAWINGS	REV. 3/09
APPROVED FOR DISTRIBUTION		DRAWING NO. T.S. 7-10

SHEET 1 OF 3
NOT TO SCALE

**SIGNATURE
ON FILE**

PIEZOELECTRIC WEIGHT SENSOR
AND
LOOP LANE LAYOUT