**NOTES:**

1. Microloop installations require two parallel directional drilling bores (12” apart), the leading edge to leading edge, and 18” to 24" beneath the roadway for each direction of the roadway.

2. Microloop speed monitoring systems require 2 Microloops sensor sets per conduit per lane, one in the leading conduit and one in the lagging conduit, evenly distributed across the lane. A Microloop sensor set is defined as a 1, 2, or 3 probe sensor set that is wired in series at the factory, resulting in a single sensor.

3. Backfill with excavated material and thoroughly tamp.

4. For cabinet and foundation standard drawings and details, refer to T.S. 7-4 and T.S. 4-1.

5. All excavated material not reused shall be properly disposed of.

6. Where pull boxes are installed in concrete areas, 1/2" rebar shall be used as an expansion joint.

7. Where pull boxes are used to terminate conduit for the directional drilling, an extension pull box is to be used.


9. Directional Drilling Contractor Certification Course must be completed prior to installation.

10. Contact MPO Data Analysis at (602)-712-8583 or (602)-712-7172.

   no less than 7 working days prior to installation of the loop detectors. MPO Data Analysis will have a technician available to oversee the installation, and to answer any questions pertaining to the proper installation and layout of the Microloop components.

---

**CONDUIT TERMINATION SECTION 4-4**

**MICRO-LOOP DIRECTIONAL DRILL BORING**

**MICROLOOP INSTALLATION IN UNDIVIDED HIGHWAY**

**MICROLOOP INSTALLATION IN MULTI-LANE DIVIDED HIGHWAY**

**MEDIAN WHEN SHOWN ON PLAN**

**MEDIAN WIDTH AT 30" OR MORE Requires ADDITIONAL PULL BOX**

**Bore shot for single cabinet installations**

**To Master Pullbox**

**Concrete Aggregate No. 57**

**8" Typ.**

**4" Typ.**

**18" Min.**

See Note 3

---

**ARIZONA DEPARTMENT OF TRANSPORTATION**

INTERREGIONAL TRANSPORTATION DIVISION

TRAFFIC SIGNALS & LIGHTING

STANDARD DRAWINGS

MICROLOOPS

FOR

SPEED/VEHICLE CLASS

NOT TO SCALE