886.00

Designer Note: Check with Programming (John Fentem) prior to including this special provision. Intended to be used with traffic counter installations District wide/various routes. Also include 873.00d and 863.00d.

## **DETECTOR LOOP, SPECIAL FOR TRAFFIC COUNTERS**

Effective March 21, 1994 Revised January 1, 2007

This work shall consist of furnishing, installing, and testing detector loops in the pavement in conformance with the requirements of the plans, <u>Section 886 of the Standard Specifications</u> for Type I Detector Loops with the following exceptions:

If the saw slot was dry cut, water does not have to be used in the cleaning of the sawed slot. The slot may be cleaned by air pressure alone. If water is used, all water must be cleaned from slots by compressed air before wire installation.

Drilled holes shall be made at all corners to prevent sharp bends in the wire. Diagonal saw cuts shall not be used. The diameter of the holes shall be 1-1/4" (32 mm). The sharp corners where the drilled holes intersect the saw slots shall be knocked off with a chisel.

The resistance shall be a minimum of 100 megohms above ground under any conditions of weather or moisture. The loop and lead-in circuit shall have an inductance between 50 and 350 microhenries, 175 microhenries nominal. The quality factor (Q) shall be greater than 5. The Contractor shall provide the necessary instruments and do all the testing in the presence of the Engineer, and shall provide a copy of test results.

Each detector lean-in shall be installed in a separate P.V.C. conduit as shown in the plans. This conduit extends from the edge of pavement to the nearest gulfbox or terminal facility. The lead-in wires from each loop shall be twisted a minimum of 5 turns per 12" (305 mm).

Detector loops shall be centered in traffic lanes unless designated otherwise on the plans or by the Engineer. Traffic lanes shall be referred to by number as shown on the plans, and loop wires shall be color-coded accordingly. Color code shall be: Lane #1 – red, Lane #2 – white, Lane #3 – green, and Lane #4 – blue.

At all locations where pavement joints that are not doweled or pavement separation cracks (including areas where bituminous pavement abuts concrete pavement) are encountered by the slots sawed for the placement of the detector loops or lead-ins, a cored expansion hole shall be made per Standard 886001. The cored expansion holes are included in this pay item and no additional compensation will be made.

This work will be paid for at the contract unit price per Foot (Meter) of DETECTOR LOOP, SPECIAL of the type specified, measured along the sawed slot in the pavement containing the loops and lead-in, rather than the actual length of wire in the slot, which price shall be payment in full for furnishing, installing, and testing the detector loop complete in place.