

May 23, 1978

BOSTON TRANSPORTATION DEPARTMENT LOOP DETECTOR TEST PROCEDURE

The following test procedures shall be performed by the contractor in the presence of the City of Boston Engineer or other engineer(s) designated by him, after installation as detailed below. The cost of equipment, labor and materials to perform such testing and similar re-testing following repairs, replacement, or adjustment of any detector shall be at no additional cost to the City above the total sum bid for each individual intersection.

After installation of wire loop vehicle detectors in the roadways and installation of loop connected leads to the controller cabinet, each loop and lead-in combination shall be tested for proper installation. The DC resistance from lead to lead of the same loop shall not exceed five ohms as measured by a high quality battery powered VOM. A megohm meter (megger) test at 500 volts DC or greater, shall be made between lead-in shield and the earth ground rod, prior to connection to the ground rod. This resistance shall be not less than 100 megohms. Then the two leads of a loop shall be temporarily spliced together and a similar meggar test made between the leads and the earth ground rod. This resistance shall be not less than 100 megohms. If any loop and lead-in combination fails to pass all three tests, it shall be repaired and then retested.