SECTION 11.08 CONTROLLERS

11.08.01--Description: This item shall consist of furnishing and installing a pre-timed traffic controller, of the type specified for controlling the operation of the traffic signals as indicated on the sequence and timing chart on the plans, and all necessary auxiliary equipment required for satisfactory operation of the signal, at the location indicated on the plans or indicated by the Engineer and in conformity with these specifications.

This item shall also consist of furnishing and installing an Actuated Controller, which shall be a completely digital solid state unit, for controlling the operation of the traffic signals, as indicated on the sequence and timing chart on the plans, and all necessary auxiliary equipment required. The control equipment shall be installed at the location shown on the plans or as directed by the Engineer, and in conformance with these specifications.

11.08.02 -- Materials: The materials for this work shall conform to the requirement of Article M.16.09.

11.08.03--Construction Methods: The controller, mounted in controller cabinet, shall be installed at the locations shown on the plans in the following manner:

The pole-mounted controller cabinet shall be attached to the face of the pole with the use of saddle measuring 76 mm by 406 mm by 22 mm. The pole shall be drilled and tapped to accept two 10 mm by 38 mm round head, cadmium-plated, machine screws to fasten the controller cabinet to the pole. The saddle shall have two 13 mm diameter guide holes for 10 mm screw for fastening the controller cabinet. A hole shall be drilled in the pole, using a hole saw, to accept a 63.5 mm coupling which is to be welded to the pole. A 90° pull box shall be attached to the coupling with a standard pipe nipple, the bottom of the cabinet shall have an opening for cable entrance and four holes to fasten the flange of the 90° pull box.

The cabinet, when pedestal-mounted, shall be mounted with the use of a standard 100 mm pedestal adapter as shown on the installation detail sheet.

The base mounted cabinet shall have the base casting attached to the foundation and leveled before the cabinet proper is bolted to the base. A mastic type compound conforming to ASTM C-647 shall be used between the cabinet proper and the base casting to make the two units rain-tight.

11.08.04--Method of Measurement: This work will be measured for payment by the number of each type controller completed, operating, and accepted in place.

11.08.05 -- Basis of Payment: This work will be paid for as follows:

- 1. Pre-timed controller will be paid for at the Contract unit price each for "Pre-timed Controller" of the type specified, which price shall include cabinet, timer, timing dial, unit motor, signal-switching unit, panel board, flasher, jack-mounted relays, auxiliary equipment, paint and painting, and all materials, equipment, tools and labor incidental thereto.
- **2. Actuated controller** will be paid for at the Contract unit price each for "Actuated Controller" of the type specified, which price shall include controller, controller cabinet, wiring, flasher unit, radio line filter, necessary fittings for mounting, miscellaneous fittings, auxiliary equipment, paint and painting, and all materials, equipment, tools, and labor incidental thereto.

Pay Item Pay Unit
Pre timed Controller (Type) EA.
Actuated Controller (Type) EA.