

GENERAL NOTES

VII - 625 TRAFFIC SIGNAL HEADS, BY TYPE (Continued)

A) Eight (8") and/or twelve (12") traffic signal sections shall be installed with a combination tunnel type hood eight (8") and/or twelve (12") inches long, with an open slot at the bottom of the hood.

B) Reflectors shall be highly specular finished aluminum.

C) All traffic signals shall be arranged for span wire or mast arm mounting as shown on the plans.

D) Glass lenses, number and size, shall be as indicated on the intersection drawing. These lenses shall meet the latest ITE standards for lenses.

E) All signal optical units shall produce standard (ITE definition) light distributions.

F) All traffic signals and signal service entrance fixtures shall be painted according with the following:

Finish on body of signal, outside of hood, doors and service entrance fixture - Federal Yellow.

Finish on inside of hood - Flat Black.

Paint Requirements:

First Coat (all surfaces) - Epon oxide baking primer, Federal Spec. TT-P-636.

Second Coat (all surfaces) - Medium gray alkyd urea exterior baking enamel, Federal Spec. TT-E-480B.

Third Coat (yellow surface) - Federal Yellow alkyd urea exterior baking enamel, Federal Spec. TT-E-489B, color 13538.

Third Coat (flat black surfaces) - Alkyd urea black synthetic, heat-resisting glyceryl phthalate type 4, instrument black, military spec. E-5557.

G) Stainless steel latching devices and span wire hangers shall not be painted.

H) Balance adjustors shall be installed if necessary to maintain the traffic signals in a vertical position.

I) The components parts for assembling traffic signal heads shall consist of the following:

- 1) Galvanized span wire hanger for messenger wire or mast arm hanger.
- 2) Balance adjustor (one-way head only).
- 3) 1-1/2" service entrance head with galvanized nipple.
- 4) Traffic signal heads of the number, size and combinations of faces and sections indicated on the various intersection drawings, all required components including 1-1/2" top and bottom bracket assemblies and 1-1/2" galvanized rigid conduit drop pipe (variable length) to lock the signals in place and provide a water and dust tight installation.
- 5) All other incidentals necessary to make the assembly complete.

VII - 625 TRAFFIC SIGNAL HEADS, BY TYPE (Continued)

J) The Contractor shall furnish and install a traffic signal lamp in each traffic signal section. Signal lamps shall conform to the requirements of "A Standard For Traffic Signal Lamps" as approved by the Institute of Traffic Engineers (ITE) Board of Direction on December 26, 1967 with the following exceptions and qualifications:

1) Brass screw bases shall be required.

2) Lamp sizes shall be as follows:

	WATTS	RATED LIFE HOURS	LIGHT CENTER LENGTH
12" diameter red, green, green arrow	150	6000	3"
12" diameter yellow	69	6000	3"
8" diameter red, green, green arrow	121	6000	2-7/16"
8" diameter yellow	69	6000	2-7/16"

Lamps shall be installed with the open portion of the filament in the upward position.

Cost of furnishing and installing lamps shall be included in the bid price of each item requiring lamps.

K) Signals shall be installed such that the lowest point of the signal is sixteen (16) to seventeen (17) feet above the pavement surface.

Payment for Item 625 "Traffic Signals" will be made at the contract unit price for each signal assembly (by type) mounted in place, tested and accepted.

VIII - 625 SIGNAL CABLE, #14 AWG, BY TYPE

Traffic signal cable shall be weatherproof and shall consist of the number of conductors as specified on the plans. All conductors shall be AWG #14. Cables shall be insulated, jacketed, rated 600 volts for use in underground conduit or as aerial cable supported by a messenger. It shall be color coded and in every respect follow the international municipal signal association specification number 19-1-1967.

Payment for Item 625 "Traffic Signal Cable, #14 AWG" will be made at the contract unit price per lineal foot by type, in place, completed and accepted, including wiring, terminals, connections, testing, and all incidentals necessary.

IX - POWER CABLE 3/c #8 AWG - RHW (OR RHW TYPE) STRANDED

Power cable shall be weatherproof and shall be 3 conductor AWG #8 RHW (or RHW Type) stranded copper. Power cable shall be installed from the controller cabinet through the appropriate conduit, signal pole, and weatherhead. It shall be attached by the Cleveland Electric Illuminating Company to service cable with pressure connectors covered with mastic insulation. Three single conductor #8 RHW wires may be substituted; however, payment will be based upon the equivalent length of 3/c cable.

Payment for Item 625 "Power Cable" will be made at the contract unit price per lineal foot, in place, complete and accepted, including wiring, terminals, connections, testing, and all incidentals necessary and shall also include any costs incurred to arrange the service installation by the Cleveland Electric Illuminating Company in conformance with the plans.

X - LOOP DETECTOR WIRE AND LEAD-IN CABLE

Loop detector wire shall consist of single conductor, insulated, No. 14 AWG, RHW (or RHW Type) 600 V. stranded copper wire, and be installed in accordance with the typical loop detector detail. Each wire loop shall consist of the number of turns as required by the manufacturer of the loop detector. The loop wire shall run continuously to the adjacent pull box where it shall be spliced to the loop detector lead-in cable.

Payment for Item 625 "Loop Detector Wire" shall be made at the contract unit price per lineal foot in place for #14 detector wire and shall include detector wire, installation, jacket, conduit from roadway edge to pull box splice and all incidentals necessary to complete the installation. The estimated quantities of loop detector wire shown on the plans is based on an anticipated required number of turns. Payment will be based on the actual lineal feet installed as this is controlled by the detector manufacturer's requirements for loops.

Payment for Item 625 "Loop Detector Lead-In Cable" will be made at the contract unit price per lineal foot in place for #14 AWG 2 cond., polyethylene insulated, twisted pair, shielded and jacketed cable, including soldered waterproof poured splice.

XI - 625 CABLE SUPPORT ASSEMBLY

A cable support assembly shall be installed for each group of cables passing through each wire outlet near the top of pole, it shall be attached to the "J" hook as shown in the plans and shall consist of the following major items:

- A) One piece of three-strand copper-clad messenger, length as required.
- B) Two hot-dipped galvanized thimbles.
- C) Two #6 split bolt connectors.
- D) One bronze or stainless steel cable grip with single "U" eye bale.
- E) All other miscellaneous items that may be necessary to make the assembly complete.