

Design Standards Letter

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Letter Date: 02/16/1968

Effective Date: 02/16/1968

Section/Plan No.: None

Subject: Traffic Signal "B" Sheets Special Provisions

Body

ALL DIVISION AND DISTRICT ENGINEERS AND CHIEF COUNSEL:

We are furnishing you several copies of the following revised standard drawings and special provisions. Under separate cover we are furnishing copy-flex prints of SP-38 and SP-39. All of these will be used as applicable, beginning with the February, 1968 Letting. Plans already submitted will be revised in this office.

Drawing 71.00. The abbreviated word "approximate" has been added to the concrete quantities for Bases and Controller Cabinets.

Drawing 71.01. The Type B tubular mount on this drawing has been revised to permit clearances for the Optically Limiting (OL) Signal Head and to show the lens arrangement. The terminal compartment has been relocated.

SP-38. The power supply section has been revised to allow for two (2) circuit breakers at the service pole and two (2) circuit breakers in the controller cabinet. The circuit breakers at the service pole should be rated five (5) amps higher than those located in the controller cabinet. Circuit breaker frames are to be specified in one of two sizes: 50 amp or 100 amp. If the circuit breaker ratings are less than 50 amps each, specify a frame size of 50 amps. If either of the two (2) breakers at either location exceeds 50 amps, use a 100-amp frame size.

The Controller and Accessory Equipment section has been revised to include solid state controller components and a controller cabinet. A cabinet should be specified on all signal projects unless an existing cabinet is to be used. If solid state signal control equipment is specified, the Contractor determines the cabinet size. Provide two (2) cubic yards of Class B Concrete on SP-38 for the controller base. When specifying a pre-timed controller, use the approximate concrete quantities shown on Standard Drawing 71.00 for base quantities. A pay item 71310 has been added for Controller Cabinet, each.

SP-39. The "Visors" column has been revised to allow for optically limiting (OL) visors. The present method of indicating OL signal heads is an asterisk and a note in the remarks

column.

Special Provisions - Traffic Signals

All pages of this special provision have been dated February, 1968, and the major revisions are as follows:

Section 71.1 Description. The definition of a controller has been changed so the cabinet can be paid for as a separate item.

Section 71.3 Signal Heads. This section has been revised to include the Optically Limiting (OL) signal head.

Section 71.6.15 Actuated Controllers. Subsection 71.6.15.4, Solid State Actuated Controllers, has been added.

Section 71.8 Detectors. 71.8.9, Inductive Loop Detectors, has been rewritten to specify present policy.

Section 71.14.7 Wiring. Methods of wiring the power supply to the controller have been revised to require a balanced circuit loading. Pre-timed controllers do not have separate load relays for the signal lamps (unless specified); therefore, the wiring diagram shown on Standard Drawing 71.00 does not apply to pre-timed equipment.

Section 71.14 Construction and Installation. Subsection 71.14.9, Junction Boxes, has been added due to their extensive use throughout the State.

Subsection 71.14.10. A provision for cleaning existing conduit has been added.

Section 71.16.3 Payment. This section has been revised to include pay items brought about by the foregoing revisions. Please note that the Controller Cabinet has been set up for separate payment.

Subsection 71.6.15.5, Type FI-6 Controller, and 71.6.15.6, Type FDM4 Controller, are new special provisions for diamond interchange use only. The specific type should be specified in the plans and the respective special provision included.

L. V. McLaughlin
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Surveys and Plans