

Design Standards Letter

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Effective Date: 06/25/1965

Section/Plan No.: None

Subject: Form SP-14 New & Revised Special Provisions - Revised Standard Drawing

Body

ALL DIVISION DISTRICT AND URBAN ENGINEERS AND CHIEF COUNSEL:

We are transmitting, under separate cover, several copies of the following new or revised special provisions, revised standard drawing, and Form SP-14

TRAFFIC SIGNALS. Various sections and subsections of this special provision have been revised. The major revisions are as follows:

Section 71.3 Signal Heads. This section was revised to specifically eliminate the rods for fastening individual signal sections together. Also, the Contractor is required to be responsible for adapting new section heads to existing signal sections.

Subsection 71.3.8 An additional louver has been added with a smaller degree of cut-off.

Subsection 71.4.4 Steel Post. This subsection was added, and it requires galvanizing of the Type C-3 Post.

Subsection 71.6.4 Panel Wiring. This subsection was revised to require plug-in type circuit breakers in place of the disconnect switch.

Subsection 71.6.6 The following requirements were added to this subsection. A pressure grip type terminal strip located in the controller cabinet for the termination of signal head cable leads. The signal manufacturer is required to furnish a wiring harness from terminal strip to the signal contacts.

Subsection 71.6.14.3 Timing. This subsection was revised to specifically set forth the number of cycle gears that are to be furnished with each controller.

Subsection 71.6.14.12 Type M-M Multi-Dial Master. Revised for the same reason as for Subsection 71.6.14.3.

Subsection 71.7.7.1 Timing. Revised for the same reason as for Subsection 71.6.14.3

Subsection 71.7.8 Background Cycle Unit. Revised for the same reason as for Subsection 71.6.14.3.

Subsection 71.7 Auxiliary Equipment for Actuated Controllers. This was revised to include the necessary relays in the controller cabinet.

Subsection 71.8 Detectors. The Type C for Radar-Vehicle Detector was deleted from the specifications, since we plan to discontinue the use of this type of detector.

Subsection 71.8.6 Ultra-Sonic Vehicle Detector. This subsection was revised to require tension clips on all tubes when the transceiver or sensing unit is mounted on a bridge.

Subsection 71.8.9 Inductive Loop Detectors. All of this subsection has been added to the Standard throw-in specifications. One major change has been made in this specification over the previous specification for this detector. The loop configuration is three turns of #14 AWG wire continuous from the nearest handhole located by the loop, around the loop and back to the handhole. In place of having the inductive loop lead continuous all the way to the controller, a control cable of one #12 - 2 conductor cable for the induction loop will be continuous from the handhole located nearest to the inductive loop to the controller. A poured splice will be made in the handhole to connect the inductive loop leads to the control cable.

Subsection 71.10.1 Multi-Conductor Traffic Signal Cable. This was revised to include the manufacturer's identification of the type of cable.

Subsection 71.10.3.1.2 Thermoplastic. A Class B insulation was added to this classification.

Subsection 71.11 Power Cable. A requirement was added to this subsection for all power cable to be marked on the outside of the sheath with the manufacturer's name and identification of the type of cable.

Subsection 71.14.5.3 Post Erection. A requirement was added to this subsection for all signal posts to be grounded by a #6 AWG bare copper wire to the conduit.

Subsection 71.14.6.3 This subsection was changed entirely and the reference to Sec. 70.5 deleted.

Subsection 71.14.6.5 The following was added to this subsection. All equipment that is to be reused for modification of a signal installation is to be painted one coat of paint.

Subsection 71.16 Basis of Payment. The list of items of material and work for which no direct payment will be made to the Contractor has been deleted from the specifications. A statement which essentially will inform the Contractor that all items not specifically provided for in the contract will be included in the various bid items, has been used to replace a listing of all the non-payment items.

Pedestrian Interval Timing Unit. This special provision has been revised to provide external dials for adjusting the timing operation.

Pedestrian Extension Timing Unit. This special provision was revised for the same reason as for the pedestrian interval timing unit.

Section 61. Rigid Pipe Culverts and Sewers. The second page of this special provision has been revised to delete Sections 61.4.4.1 and 61.4.4.2 of the Standard Specifications. The proper combination of class of reinforced concrete pipe and bedding class as determined from the table of allowable overfill heights will be used regardless of whether the pipe is to be installed under a fill, in a trench, or in a combination of fill and trench. It is important to specify the bedding class for the pipe on the plans, if other than Class C.

Field Laboratories. This is a new special provision to be used only in all Federal Aid contracts where field laboratories are needed for the proposed work. Items of work requiring a field laboratory consist of Section 21.20, Compacting, Section 30 Soil Cement Base, Section 31 Aggregate Base, Section 32 Soil-Lime Stabilization, Section 41 Plant Mix Bituminous Surface, Section 41.20 Plant Mix Bituminous Stabilized Base, Section 43 Asphaltic Concrete Pavement, and Section 48 Portland Cement Concrete Pavement. This special provision will be included when one or more laboratories are required for a project and Item 99003, Field Laboratories, per lump sum, will be included in the itemized proposal and estimate.

Section 120 Corrugated Metal Pipe and Pipe Arches. Page five (5) of this special provision has been revised to state that "Bituminous coating of flared galvanized metal end sections will not be required."

Bidders Check or Bond. This special provision has been revised to permit the certified or cashier's check to be drawn on any bank or trust company.

Standard Drawing 60.00. This standard drawing has been revised to incorporate changes in the manufacture of flared end sections. Several of the more important changes on this drawing include the addition of two sizes of metal arch end sections and six sizes of pipe end sections, several revisions of the end section dimensions, and the addition of notes concerning three piece bodies and connections to helically corrugated pipe and pipe arches.

Form SP-14. This form has been revised to bring it up to date; however, two special provisions have been revised since the form was printed. The revision date of the Bidders Check or Bond should read June, 1965, in lieu of October, 1963, and the revision date of page five (5) of Section 120 Corrugated Metal Culvert Pipe and Pipe Arches should read June, 1965, in lieu of January, 1965.

All of the above revisions and additions will be effective with the June 25, 1965 Letting.

L. V. McLaughlin
Engineer of Surveys and Plans