

# Design Standards Letter

**Letter Number: G-1973-20**

**Letter Date: 12/10/1973**

**Effective Date: 01/01/1974**

**Section/Plan No.: D Forms**

**Subject: Revised Traffic Signal SP Forms**

## Body

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ALL DIVISION AND DISTRICT ENGINEERS

Attached are several copies of Form SP-22. Reduced examples of the remaining forms are shown in Figures 8-02.9 through 8-02.18, Volume II, Chapter VIII, of the Design Manual.

PLEASE NOTE: Each District is being furnished several copies of Traffic Signal Warrant Form SP-22. When submitting signal warrants, only the ORIGINAL COPY need be submitted with supporting data affixed thereto. A Xerox copy should be retained by the District. Plan sheet size Mylar Tracings of Forms SP-36, SP-37 (Series), and SP-38 (Series) are being furnished each District to negate ordering these forms from the Headquarters' Office. Each District is to make their own reproducibles from these tracings. The tracings are not to be modified without Headquarters Office approval. Revised tracings will be sent to the Districts when revisions become necessary, as in metric system. Please read paragraph (2) of Subsection 8-02.21 in Volume II of the Design Manual before preparing reproducibles of these forms.

Specific revisions to the SP Forms are as follows:

SP-22 Traffic Signal Warrants. This form has been revised to a "work sheet" type form. Warrants based upon projected and peak hour volumes have been added. The School Crossing Warrant has been completely revised.

SP-36 Traffic Signal Symbols. Heretofore this was not an SP sheet. Commission furnished signs have been added to this sheet and are numerically coded. Only the code number need be shown on the signal plan and "B" sheet. A yellow arrow symbol has been added.

SP-37 Traffic Signal Control Operation. The legend on this sheet has been revised.

SP-37A Traffic Signal Control Operation. The legend and color sequence have been revised. A flow diagram has been added. This sheet is used for 5 or 6 phase actuated signal control.

SP-37B Traffic Signal Control Operation. The legend and color sequence have been revised. A flow diagram has been added. This sheet is used for 5 or 6 phase vehicle and pedestrian actuated control.

SP-37C Traffic Signal Control Operation. The legend and color sequence has been revised. A flow diagram has been added. This sheet is used for 8 phase actuated control. The phasing and color sequence must be modified if pedestrian control is required.

SP-37D Traffic Signal Control Operation. The Legend and color sequence have been revised. This sheet utilized two 3-phase electro-mechanical actuated controllers to control a diamond interchange.

The Type FD-M4 Control operation sheet, previously SP-37D, has been deleted as this type interchange controller is no longer specified.

SP-37E Traffic Signal Control Operation. This is a new sheet and is used for actuated control of half- or full-diamond interchanges. It utilizes two 2-phase, or two 3-phase actuated controllers in the same cabinet, and having mutual coordination between the B phase of each controller. A special provision is included in the contract explaining control operation.

SP-38A, B, C Traffic Signal Quantity Sheets. These sheets replace Forms SP-38 and SP-39. They have been redrawn and rearranged to provide additional space for complex intersections.

SP-38A provides for locating, by Station and offset, all traffic signal appurtenances. All signal quantities, except cable, conduit, signal faces, and down lights, are shown on this sheet. Phase modules for solid state controllers are no longer a pay item.

SP-38B is for tabulation of conduit and cable quantities. Symbols OR abbreviations can be used to indicate the appurtenances.

SP-38C is for tabulation of signal faces and downlights.

These SP Forms are effective with the January, 1974 Letting. Plans previously submitted for the January or February Letting will be revised by the Headquarters Office.

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Surveys and Plans