

CHAPTER 1 PLAN PREPARATION

1-1 General

The contract plans contain engineering drawings from which the project is to be constructed; therefore, they should contain all information necessary for the contractors to submit sound bids and to construct the project with minimum revisions. The plans should be concise without repetitious notes and details.

The standardization of various items such as line weights, lettering, reference notes, etc., is a significant factor in producing uniformity and clarity in plan presentation. Personnel should become thoroughly familiar with all information presented herein and its application to the plans.

For plan sheet sequence see Figure 1-1.

1-2 Drafting Instructions

Accuracy is an important element in preparing construction plans. The technician should carefully check dimensions of details to ensure that errors are minimized.

The accuracy for dimensions used in the preparation of plans is shown in Figure 1-2. The accuracy for items not listed should be consistent with the figures shown in this manual.

~~Plan~~ Determine ~~what~~ which details should be included and how to present them so that elements which are related are shown together on the sheet and not scattered throughout the plans.

1-3 Plan Sheets

The standard Structure Design Unit plan sheets are 34 inches (864 mm) wide and 22 inches (559 mm) high. The border lines shall be 1 ½ inches (38 mm) from the left edge and ½ inch (12 mm) from the right, top and bottom edges, making an area 32 inches (813 mm) wide by 21 inches (533 mm) high.

To ensure legible prints, when final plan sheets are reduced in size, the minimum size lettering used shall be 1/8 inch (3.2 mm), see Figure 1-3.

~~Maintain level~~ Line symbology shall as shown in Figure 1-4. Designate skew angles as shown in Figure 1-5. Figures 1-6 through 1-10 are provided for computing bridge geometry and layout.