

2-2.8 Erosion Control

Drafting Standards

Use acronyms, symbols and abbreviations shown on the Standard Plans to prepare project plans. Non-standard acronyms, symbols, and abbreviations must be shown on the first sheet of the applicable plan series (e.g. EC-1 and ECL-1). Refer to Section 2-1.2 “Drafting Standards” for further information.

Utility Policy

Caltrans Utility Policy requires that all utilities be shown on the advertised contract plans sheets for every project (unless a utility exception is granted by the Chief, HQ Division of Design) whether Caltrans owned or utilities owned by others (public or private). Every project must have a completed Utility Policy Certification signed by a licensed civil engineer. Usually the same engineer will produce and be responsible for the utility plans.

As a convenience and reminder to the contractor and/or subcontractor, utility facilities may be shown on erosion control plans when there may be a potential conflict with project work. When utility facilities are shown a second (2nd) time (in addition to them being shown on the utility plan sheets) the line weight may be reduced to de-emphasize the utility line in comparison to project work. Refer to Section 2-2.13 “Utility Facilities” for further information.

Right of Way

The defined right of way may be shown on the erosion control plans (in addition to being shown on the roadway layouts) when it is determined that erosion control work is located near the right of way. Refer to Section 2-1.1 “Right of Way” for further information.

Master Files

The background for erosion control plan view sheets utilizes the base map. The base map consists of two (2) separate files:

- Master Topographic file
- Master Design file

The Master Topographic file (“**bb**” file) is developed and maintained by the Surveys and Photogrammetry units in the district. The “**bb**” file includes existing features that are always dropped out on plan view sheets.

The Master Design file (“**aa**” file) is developed and maintained by the roadway design unit in the district. The “**aa**” file contains the new permanent design features that are shown solid on plan view sheets. The right of way and alignment may be new or existing, but they are shown solid on plan view sheets.

Master files may contain a lot of information, but only the necessary information needed for any specific contract plan sheet is to be merged into that contract plan sheet (active file). Plan view sheets must maintain the state plane coordinates from the master files. The roadbed is always shown. Refer to Section 3.8 “Master Files” of the CADD User’s Manual for further information.

Composition of Project Plans

Do not call out roadway bid items on erosion control plans. Do not include plan sheets that have no work. Use break lines in place of match lines between plan sheets that are not contiguous. The number of erosion control plans may not correspond numerically to the roadway layout or planting plan sheets. A key map may be necessary to eliminate confusion on the number of each type of plan view sheet. Refer to Section 2-1.1 “Composition of Project Plans and General Preparation Procedures” for further information.

Erosion Control Plan

Erosion control plans provide a visual representation in plan view of new erosion control work in relation to highway facilities.

Erosion control plans typically show locations of the following:

- Erosion control types
- Fiber rolls
- Compost socks
- Mulches

For each contiguous erosion control area or linear item on each sheet, a callout must identify the representative symbol for each erosion control type, fiber roll, or compost sock shown per direction of travel or quadrant area. The erosion control type callout will include either the erosion control type and the area in square feet, or the erosion control type and a location number (in a circle) that refers to information included in the erosion control quantity table. For fiber rolls and compost socks include a callout

such as “Fiber Roll” either with a quantity or location number referring to information included in the erosion control quantity table.

Depending on the size and type of project, the erosion control work may be identified with an erosion control quantity table by stationing or post miles and other dimensions as needed (e.g. setback, offset, width, limit of existing vegetation, etc.). The erosion control quantity table must be supported by erosion control typical details and showing disturbed soil area locations on the roadway layout plans as needed to identify the limits of erosion control work.

If a project includes both erosion control and planting work, do not duplicate callouts for the exact same construction on both the erosion control and planting plans. Erosion control work can be shown on the planting plans.

Erosion Control Legend

The erosion control legend utilizes tables to show the erosion control types, seed mixtures, and other erosion control work such as fiber rolls, compost socks, and mulches.

For each erosion control type, the erosion control type table describes the:

- Bid items (compost, straw, incorporate materials, fiber roll, RECP, hydroseed, hydromulch)
- Sequence of application
- Material (compost, straw, seed, fiber, tackifier, netting)