

2-2.24 Structure Design

The preparation of bridge plans is the responsibility of the Office of Structure Design. Proposed bridge construction plans are sent to the district for a check of all data pertaining to horizontal and vertical alignment and for verification of clearances.

For guidelines on preparation and design of bridge plans, see the Caltrans Bridge Design Details Manual and the Structural Detailing Standards.

In addition to the design of bridges, the Office of Structure Design is responsible for the design and aesthetic features of the following types of buildings and structures:

- Maintenance stations
- Roadside rests
- Pumping plants
- Special design sound walls, retaining walls and earth retaining structures

Additions and modifications to existing buildings or miscellaneous transportation facilities is also the responsibility of the Office of Structure Design.

The preparation of plans specific to the construction or modification of a building is the responsibility of a structural engineer.

Sheet types that may be used for construction or modification of a building are:

- General Plan (general layout and index of structures design work)
- Architectural Plans
- Structural Plans
- Mechanical Plans
- Electrical Plans
- Sanitary Plans (sewers for buildings)

Standard drawings applicable to building related work are available from the Transportation Architecture Branch of the Office of Structure Design.

If the construction or modification of a building requires road work to be performed, then the associated road work should be shown on those sheets that contain that specific type of work, for example:

- Layouts or Construction Detail sheets would show, as applicable to the project, construction of road connections to the building, construction of parking areas, paving of existing surfaced areas, etc.
- PD sheets would show pavement striping and signing
- Landscaping sheets would show planting and irrigation work

The building construction plans are to follow the last sheet of the road work portion of the project plans (this includes new and revised standard plans applicable to the project). This order of plan sheets follows the convention used for a highway construction project, where the bridge plans follow roadway plans.

If building construction plans (such as a roadside rest) are part of the project plans for highway construction, then the plan sheets use the naming convention as detailed in Section 2.2 of the CADD Users Manual. The sheet name and print sequence is shown in Section 2.1 of the CADD Users Manual.

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