

13.0 Bridge

13.1 Control

Development and management of the bridge plans within a contract plan set are the responsibility of the Region technical centers and consultants. The Bridge Designers and Drafters should coordinate with the Road Design Unit about project design criteria. The Bridge Designer should receive a design basemap CAD file from the Road Designer to begin the design of the bridge, box culvert, or other structural feature. This information is then given to a Bridge Drafter for addition to the basemap and to detail in the bridge portion of the contract plans. Structure design information on the plan sheets in the contract plan set, such as depth and length of structure, must match the same information on the bridge drawings. Lead drafter duties on large projects are defined in the *Bridge Office Practice Manual*.

Reference

References in this section to the "Bridge Office Practice Manual" are found in Volume 2, Section 4: Drafting Practices.

The bridge portion of the contract plans is reviewed at the T.S. & L. (type, size, and location) advance plans and final plans submittal stages by an ODOT Bridge Designer. A bridge title block with a box for the Bridge Engineer and Bridge Designer registration seal and signature is used on only the first bridge sheet. All of the other bridge sheets require only the designer's registration seal and signature. If the Bridge Designer is not registered, the supervisor's registration seal and signature shall be used. Signing and stamping of the plans is covered in depth in the *Bridge Office Practice Manual*.

Reference

Another manual that is often referenced in contract plans is the "Manual of Bridge Standard Drawings" which is separate from the "Standard Drawings for Design and Construction".

13.2 Development

The development of the bridge portion of the contract plans is described in detail in the *Bridge Office Practice Manual*. The Bridge Engineering Unit maintains their own standards that vary from the Road Design Unit standards. The primary differences in standards include seed files, drawing scales, cell libraries, CAD levels, and symbology. For more information, refer to the *Bridge Office Practice Manual*.

Sheet Order

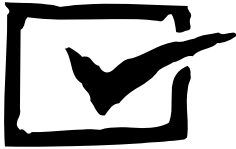
The order of the bridge plan sheets is identified in the *Bridge Office Practice Manual*. Several different types of sheets may be included in the bridge plans, such as plan, elevation and details.

Sheet Numbering

The bridge sheets **are not numbered** incrementally within the contract plan set. Every bridge sheet receives an assigned registered drawing number. The procedure for the request of drawing numbers for the bridge sheets is described in the *Bridge Office Practice Manual*.

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Note: For order of sheets in the contract plans as a whole, see section 2.1, Volume 1.



13.2 Development (Cont'd)

Placement of Required Items

Since there are many types of structures with various parameters, there are many possibilities for sheet layouts. General sheet layout and placement of required items are described in the *Bridge Office Practice Manual*.

Files

Generally there are three active files. See *Bridge Office Practice Manual* for what information is placed in each of these files. All of the existing and proposed drawing information is placed within the *active file*. The coordinate location of existing and proposed features is not maintained in the bridge drawing files.

13.3 Checklist

Bridge plans may include three types of drawings: title sheet, detail sheets, and standards sheets. See the *Bridge Office Practice Manual* for detailed requirements.