



Standard Plans Team

Who Are We?

Our team makes up the dynamic Standard Plans Unit of the Washington State Department of Transportation (WSDOT) Headquarters Design Policy, Standards, and Safety Research Section in Olympia. We:

- Develop the content of the *Standard Plans for Road, Bridge, and Municipal Construction (Standard Plans Manual)*
- Preserve the Standard Plans Archive
- Maintain the Plan Sheet Library
- Provide graphical support for departmental publications, documents, and presentations

What Do We Do?

Standard Plans Manual

Our team has the lead responsibility of updating the *Standard Plans Manual*, which is a compilation of all the plans used in WSDOT projects. We revise the manual annually to (1) stay current with changing laws, regulations, and policies, (2) keep pace with evolving technology, and (3) align with policy documents from federal transportation agencies.

The *Standard Plans Manual* is a legal document referred to during project construction and in contract plans. It is also used in the Plans, Specifications & Estimates (PS&E) phase of a project. Our team ensures the Standard Plans agree with and complement statewide design (*Design Manual*) and construction policies.

Although a plan or revision may begin life simply as an identified need, we make sure it undergoes rigorous processing before we include it in the manual. In our review of new plans and revised plans, we involve subject matter experts in materials; structures; traffic; construction; environmental; project control & reporting; strategic planning and programming; transit; maintenance and operations; and others.

Our next step is to submit the plan within the department for a general statewide review. We also extend the submittal to other agencies (such as the American Public Works Association). After we respond to the comments received, we apply to have the plan approved by the Division Office of the Federal Highway Administration.

Finally, we have the plan stamped by a licensed Professional Engineer, then signed by the Director & State Design Engineer, who approves it for publication. This is how a Future Standard Plan is produced.

Future Standard Plans

Future Standard Plans are those approved for publication, that are awaiting the next installment of a revision package (an annual cycle) before they can be referenced from a contract. We post them on the Standard Plans website as they become approved.

Because they are new or they supersede existing Standard Plans, we recommend familiarity with this set during current project design. A Future Standard Plan may be included in a forthcoming contract as a detail sheet.

Standard Plans Manual Archive

The Standard Plans Manual Archive is a service we provide to help people find the Standard Plans referenced in a contract.

We may change individual plans with each revision package/manual version. They are identified in the Archive by their “Approved for Publication” signature date. Because the manual is loose leaf, we discard outdated plans (expectedly) while they might still be needed. This is because at times it is necessary for us to produce the intended version of a Standard Plan for a particular contract.

The General Special Provisions within a contract state inclusion of the *Standard Plans Manual* and specify which plan by its “effective date.” Using this date, you can search complete preceding manuals through the Design Standards website (www.wsdot.wa.gov/design/standards).

Plan Sheet Library

The Plan Sheet Library is a resource we offer that provides drawings that are precluded from adoption as Standard Plans. However, you may still use these details, plans, and layouts whole or in part as an aid to contract plan composition (see the Design Standards website).

Among this collection of drawings may be introductory or experimental items whose intent is design direction/guidance, site-specific details requiring some customization, obsolete Standard Plans that have details still necessary for repair/maintenance or extension activities, or Local Agency details.

We developed the Plan Sheet Library in collaboration with engineering specialists and the HQ Design Office. The drawings:

- Fully comply with current design criteria.
- Are featured on an individual web page with any necessary descriptions, explanations, statements of intended use, comments, or caveats.
- Provide an illustration/photo of the item, with links to electronic versions of the plan and any special provisions.

What is a Standard Plan?

A Standard Plan is a statement of design policy. The *Standard Specifications for Road, Bridge, and Municipal Construction* defines Standard Plans as:

... specific plans or drawings adopted by the Contracting Agency which show frequently recurring components of Work that have been standardized for use.

The Washington Federal-Aid Stewardship Agreement of 2001 states that:

FHWA approval is required for all standard plans, amendments, and general special provisions, intended for use on Federal-aid construction projects on the NHS.

The Washington State Department of Licensing (DOL) requires that all Standard Plans be stamped and signed by a Professional Engineer. They must be developed under the direct supervision of that engineer, who must be knowledgeable in that area of engineering.

Each Standard Plan must adhere to WSDOT design policies, the Stewardship Agreement, construction practices, and DOL requirements.

Design Policy

To conform to WSDOT design policy, Standard Plans must comply with the following:

- WSDOT *Design Manual*
- WSDOT *Local Agency Guidelines Manual*
- WSDOT *Bridge Design Manual*
- WSDOT *Hydraulics Manual*
- WSDOT *Roadside Manual*
- AASHTO *A Policy on Geometric Design of Highways and Streets*
- AASHTO *Roadside Design Guide*
- AASHTO LRFD Bridge Design Specifications
- AASHTO Standard Specs for Structural Supports
- ADAAG guidelines for ADA accessibility
- US DOT *Manual on Uniform Traffic Control Devices*
- Washington State Building Code
- National Electrical Code
- NCHRP (National Cooperative Highway Research Program) Report 350
- Revised Code of Washington (state laws)
- APWA (American Public Works Association) standards
- WA State Department of Labor and Industries worker safety regulations
- WA State Department of Licensing PE stamping requirements
- Various National design publications for special user groups (pedestrians, cyclists, bus riders, etc.)

Construction Standard

A Standard Plan as a Construction Standard must comply with the following:

- WSDOT *Standard Specifications for Road, Bridge, and Municipal Construction*
- Amendments to the Standard Specifications and General Special Provisions
- WSDOT *Construction Manual*
- WSDOT *Plans Preparation Manual*
- WSDOT *Sign Fabrication Manual*
- WSDOT Qualified Products List
- WSDOT Modifications to the MUTCD
- ASTM (American Society for Testing and Materials) specifications
- Various Trade Association construction requirements

RESOURCES

Standard Plans: Go to this website for electronic versions of the WSDOT Standard Plans, Future Standard Plans, Standard Plans Manual Archive, and the Plan Sheet Library:

www.wsdot.wa.gov/design/standards

WSDOT Publications Services: Get a printed copy of the *Standard Plans Manual* here:

www.wsdot.wa.gov/publications/manuals/index.htm

CONTACT INFORMATION

Bill Berens – (360) 705-7256
berensb@wsdot.wa.gov

John Donahue – (360) 705-7952
donahjo@wsdot.wa.gov