



Oregon

John A. Kitzhaber, M.D., Governor

Department of Transportation

Technical Leadership Center
ODOT Bridge Section MS #4
4040 Fairview Industrial Dr. SE
Salem, OR 97302

FILE CODE:

April 3, 2015

To: Users of Oregon DOT Bridge Design and Drafting Manual

Subject: Revisions to the ODOT Bridge Design and Drafting Manual

The ODOT Bridge Design and Drafting Manual (BDDM), 2013 has been updated with several revisions. The revised BDDM is being released in web-based Acrobat files, which can be accessed at the following web site:

http://www.oregon.gov/ODOT/HWY/BRIDGE/Pages/standards_manuals.aspx

The revised BDDM can be viewed from the site, or downloaded and printed. The revisions consist of 17 articles listed in the attachment.

These revisions apply to new design projects as of the effective date of April 6, 2015. New projects for ODOT designed projects are those that do not have an approved DAP by the effective date. New projects for outsourced projects are those that do not have an executed work order contract for PE. However, existing projects may make use of these revisions, if agreed to by the Agency Project Manager or Project Team Leader.

We are always interested in comments or suggestions on any of the provisions in the BDDM. Please send comments or suggestions to Craig Shike at:

Craig.L.Shike@odot.state.or.us

Bruce V. Johnson
State Bridge Engineer

Attachment: BDDM Update Summary April 2015

BVJ/jdj

April 2015 Update
ODOT Bridge Design & Drafting Manual

Update Summary

The following revisions are in reference to current BDDM section numbers:

Section 1 – Design and Detailing Practices

1.2.2 Bridge Design Deviations – Clarifies and revises the circumstances that require a design deviation.

1.5.1&2 Concrete, General & Concrete Finish - Clarify HPC use and concrete finish in pedestrian bridge decks

1.5.5.1.17 High Strength Reinforcement – Update high strength reinforcement information to reflect industry progress. Provide Grade 80 Deck design charts.

1.5.7.10 Concrete, Fillets – Expand on fillet requirements at end beams and crossbeams.

1.6.3.4 Painting or coating of new or existing metal – Introduce requirements for design of new structures to address future painting and inspection needs.

1.6.3.5 Process for recoating of an existing metal structure – Provide a checklist to ensure all variables are addressed during a recoating project.

1.9.1 Decks – Highly discourages the use of thermal systems on bridge decks unless supplied by a natural heat source.

1.9.1.1 Precast Concrete Deck Panels – Update UHPC availability information and incorporate lessons learned on recent projects.

1.9.4 Deck Overlays - Revise policy to include PCC overlays in deck stiffness and capacity calculations.

1.13 Glossary – Add definitions to glossary to clarify rail terms: “Retrofit”, “Rehabilitation”, “Replacement” and “Strengthening”.

1.13.2 Bridge Rail Retrofit Guidelines - Clarify and revise rail retrofit and rehab procedures and design requirements

1.24.5 Deck Drainage – Clarify when drainage curb for bridge pedestrian rail is needed

1.26.5 Corrosion Protection for Steel Piling – Clarify soil testing requirements and corrosion protection systems based on site environment.

1.30.2 Permanent Strengthening of Reinforced Concrete Bridges - Clarify intent of strengthening methods listed to state that other strengthening methods can also be considered.

Section 2 – Drafting Practices

None.

Section 3 – Procedures and Layout

3.2.3 MathCAD Template Library – Add the recently developed Bridge Calculation Template to the library list.

3.3 Bridge Design Process – Update section to reflect current practice and incorporate changes resulting from Task Force B.

3.14.10 Utilities – Revise the voltage limit allowed on bridges and redefine high voltage to conform to industry standards.