

Department of Transportation

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

October 31st, 2025

To: Users of Oregon DOT Bridge Design Manual

Subject: Revisions to the ODOT Bridge Design Manual

The BDM has been updated with multiple technical revisions, including a major rewrite of Section 1.14.1 and adding Sections 1.2.3.7 and 2.6 Risk. See the attachment for an update summary. The revised BDM and format guide are being released in web-based Acrobat files, which can be accessed at the following web site:

http://www.oregon.gov/ODOT/Bridge/Pages/Bridge-Design-Manual.aspx

The revised BDM can be viewed from the site or downloaded and printed. The documents are also available on Projectwise.

These revisions apply to new design projects as of the effective date of January 1st, 2026. New projects for in-house designs 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 would like to thank the many people who provided comments and suggestions for this BDM update. Going forward, the BDM will be published on an annual basis. Please send comments or suggestions for the **October 2026** BDM to Emily Clyburn at: emily.clyburn@odot.oregon.gov



Raymond Bottenberg State Bridge Engineer

Attachment: BDM Update Summary October 2025

October 2025 Update ODOT Bridge Design Manual

Update Summary

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

<u>Section 1 – Design Standards and Practices</u>

Preface Removed local agency language and referred to 1.2.3.6.

- 1.2.1.1 Adopted LRFD Bridge Design Specifications (10th Edition, 2024)
 Adopted Guide Specifications for LRFD Seismic Bridge Design 3rd Edition, (2023)

 Adopted Guide Specifications for Seismic Isolation Design 4th Edition, (2014) with 2023 Interim Revisions.
- 1.2.2.1 Revised to state Design Exceptions relating to barrier protecting a bridge column require signature of the State Bridge Engineer.
- 1.2.2.2 Updated Design Deviation process to submit a templated form.
- 1.2.3.6 Removed language differentiating design deviations for local agency projects based on road classification. All local agency projects require design deviations.
- 1.2.3.7 Added a High Value bridge design category.
- 1.2.6.1.4 Added a reference to 1.17.2.7 for seismic design requirements for bridge widening.
- 1.2.10.2 Defines specific requirements for upgrading facilities when alterations are made by a Bridge Maintenance category project – related to pedestrian route access.
- 1.3.4.2 Removed lateral load design requirements for bridge raising.
- 1.3.4.3 Revised falsework design criteria.
- 1.4.2 Added section to require a design deviation when using 3D modeling.
- 1.6.2.3 Updated guidance resource for full continuous spans, simple for dead load continuous for live load bridges.
- 1.6.2.17 Updated guidance resource for steel bridge bearings.
- 1.6.5.1 Removed ASTM F3125 GR F1852 from high-strength bolt use guidelines.
- 1.9.2.4.1 Changed requirements for approach pavement when there are skewed approach slabs.

- 1.9.3.1.6.1 Clarified when waterproofing membranes are required. Provided guidance on the ACP lift thickness typically used with rolled membranes. Removed option for spray membranes on Local Agency Projects.
- 1.9.3.3.4 Added language to clarify use of containment when using hydrodemolition.
- 1.9.5 Added guidance to contact the environmental unit.
- 1.9.5.2 Added commentary.
- 1.10.1 Added the sentence "coordinate and resolve..."
- 1.10.3.1 Added a paragraph in the commentary to explain total scour calculation.
- 1.10.5.8 Rewrote section to align with *LRFD Bridge Design Specifications* (10th Edition, 2024) Section 2.6.4.4.
- 1.13.2 Updated table to reflect addition of:

BR273, MASH TL-3 crash tested curb and parapet retrofit rail BR277 – BR280, MASH TL-4 crash tested Historic Look Rail (available in January 2026)

BR287, round tube option for Type F Tube Retrofit

BR266, retired drawing. Replaced with BR472 and BR473, MASH TL-3 crash tested box culvert guardrail system.

- 1.14.1 Technical content rewritten and reformatted to two column format. Most notably changing to design all elastomeric bearings using Method B.
- 1.14.2 Reformatted to two column format.
- 1.15.5.2.1Added the preference is first to eliminate inhabitable spaces on bridges, and next to provide deterrents. Increased the trigger height for certain access requirements from 15 to 17.5 feet.
- 1.17.1 Adopted *3rd Edition of AASHTO Guide Specifications*. Clarified design criteria for Non-conventional bridges.
- 1.17.2.3 Adopt Risk-Targeted ground motins.
- 1.17.2.4 Adopted AASHTO–USGS Seismic Design Ground Motion Database for Upper Level Ground Motions.
- 1.17.2.7 Rewrote technical content and reformatted to two column format.
- 1.17.5 Deleted language and marked "Reserved" for future use.
- 1.17.7 Rewrote technical content and reformatted to two column format.

Section 2 – Processes

- 2.1.1 New Section outlining Bridge Engineering Services
- 2.4 Expanded to include Formal & Informal QC Process Items
- 2.5.7.2 Expanded guidance on Independent Peer Reviews (IPRs)
- 2.6 New section on Risk Assessment and Risk Management for Bridges

2025_Letter_for_Final_Revisions_to_BDM

Final Audit Report 2025-10-30

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By: Yadira MENDOZA (Yadira.MENDOZA@odot.oregon.gov)

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