

LRFD Bridge Design Manual Update ~ January 17, 2025

BDM Articles Updated	Description of BDM Update	Implementation Date
1.14.1	E-file submittals for bridges shall include boring logs.	January 1, 2025
1.17, C1.17, 5.5.1.4.3	Update working and shop drawing articles to clarify stamping procedure. Also included process for rejection based on inadequate file naming convention. (Implementation date corresponds with release of updated language to IDOT SS 1105.03.)	April 1, 2025
1.18	Requiring each LPA review to include one of three status statements in the review email sent to the Owner.	January 1, 2025
1.19, C1.19	Added article addressing OSHA fall protection.	January 1, 2025
3.1.2	Removal of aerial agricultural photographs from list of needed information for preliminary design. Clarification to CADD program names.	January 1, 2025
3.1.3	Added design flood definition for Iowa DOT bridges	January 1, 2025
3.1.4	Added abbreviations for CADD program names, removed WSPRO abbreviation since this software is no longer used for Iowa DOT preliminary design.	January 1, 2025
3.1.5.2	Updates to several indirect references.	January 1, 2025
3.2	Updates to reflect added articles	January 1, 2025
3.2.2	Update to reflect article name change and updated design discharge frequency.	January 1, 2025
3.2.2.2	Removal of references to hydraulic program software that are no longer utilized for Iowa DOT preliminary design.	January 1, 2025
3.2.2.4	Clarification to the location for water surface elevation (stage) determination when using a 1D analysis.	January 1, 2025
3.2.2.5	Update to road design detail reference for overtopping events with long durations.	January 1, 2025
3.4.1.1	Policy update relative to provision of vertical clearance across the full railroad ROW for BNSF, UP, CN, and CP overhead structures.	January 1, 2025
3.4.1.6 & 3.4.2.6	Added a preference for preliminary design to continue a 44-inch barrier rail height (when proposed) through the bridge vs. tapering down when past the railroad ROW.	January 1, 2025
3.6.2.1	Update to light pole and sign truss guidance for situations with an urban median.	January 1, 2025

3.6.5	Removed statement relative to consultants providing additional information to the Typical Bridge Section detail, as now required for all designers.	January 1, 2025
3.6.9	Language edit for clarification relative to staged slab bridge removals and checks for legal loads.	January 1, 2025
3.7.3.3	Removed statement relative to older versions of the BSLT being grandfathered. Clarification to ABD and W point offset distance.	January 1, 2025
3.8	Preliminary unit cost policy updates. New policy note for designers to include 4% inflation to base bridge unit cost beyond January 2026.	January 1, 2025
3.11	Note to download forms from the BSB website to ensure the most recent version is used.	January 1, 2025
3.13	Removed outdated V8i submittal reference.	January 1, 2025
3.14	New Zone of Intrusion policy	January 1, 2025
4.1.3	Updated reference for AASHTO <i>Guide for the Development of Bicycle Facilities</i> .	January 1, 2025
4.1.5.2	Updated reference for BSNF and UPRR <i>Guidelines for Railroad Separation Projects</i>	January 1, 2025
4.2.3	Added an example for design of culverts in series	January 1, 2025
4.3.1	Updated reference related to culvert workflow.	January 1, 2025
4.5.1.1	Added a statement that cast in place RCB culvert headwalls shall be constructed level.	January 1, 2025
4.5.2	Added a statement that precast concrete box culvert end sections shall be constructed on the culvert slope	January 1, 2025
4.5.10	Update to the standard sheet number for stock passes	January 1, 2025
4.5.11	Updated unit costs. New policy note to include 4% inflation to estimates beyond January 2026.	January 1, 2025
5.2.4.1.1.2, 5.2.4.1.2	Starting with the October 2025 letting all new Class C and HPC decks shall include polypropylene fibers.	October 1, 2025
5.2.4.5	Limited conditions for use of transparent SIP deck forms to only bridges over railroads.	January 1, 2025
5.4.1.4.2	Reference to standard CADD sheets included for PPCB concrete sealer limits at beam ends for stub abutments.	January 1, 2025
5.6.1.1.1, 5.6.1.2.1, 5.6.1.2.7, 5.6.1.3.2	Clarified CCS span to depth ratios. Other small edits to various articles.	January 1, 2025
C5.8.1	On BDM web page a website link to “Iowa DOT Bridge Rail Guide” was added under BDM C5.8.1.	January 1, 2025

6.1.1, 6.1.7, 6.1.7.1, 6.1.7.2, 6.1.7.3, 6.1.7.4	Moved some language from 6.1.1. to 6.1.7.1. Added new articles to address construction and staging considerations for substructures including driven pile conflicts, shoring and cofferdam considerations, downdrag consideration for existing pile foundations, and bridge displacement due to construction generated vibration effects.	January 1, 2025
9.5.5	Added multiple sub articles under BDM 9.5.5 addressing aesthetics for substructures.	January 1, 2025
9.5.6	Reference BDM 5.8.1.2.5 for information on aesthetic barriers.	January 1, 2025
9.5.7	Reference BDM 5.8.1.2.5 for information on aesthetic pedestrian railing/fence.	January 1, 2025
9.5.8, C9.5.8	Added text addressing special lighting on bridges. Added Table C9.5.8 listing examples of projects with special lighting.	January 1, 2025
9.5.9, C9.5.9.1	Added multiple sub articles under BDM 9.5.9 addressing decorative concrete. Added Table C9.5.9.1 listing examples of precedent projects with decorative concrete.	January 1, 2025
9.5.10, C9.5.10	Added multiple sub articles under BDM 9.5.10 addressing coatings for structural concrete. BDM C9.5.10 provides some historical background on concrete coating usage by the Iowa DOT.	January 1, 2025
9.5.11, C9.5.11	Added multiple sub articles under BDM 9.5.11 addressing coatings for steel railings. BDM C9.5.11 provides some historical background on steel railing coatings usage by the Iowa DOT.	January 1, 2025
12.1.6	Recommend use of Google Maps and Street View to preview bridge condition prior to field exam. Modified language to indicate preferred practice of replacing sliding plate joints with strip seals. Recommend sounding the backwall when needed.	January 1, 2025
12.1.8, 12.1.8.1, 12.1.9.1.1, 12.1.9.1.2, 12.1.9.1.5	Clarified structural considerations related to deck repairs.	January 1, 2025
12.1.9.4.2, 13.5.1, 13.5.2	Added guidance related to deck removal for full and partial deck replacements specifically w.r.t. to not requiring debris containment systems in contract plans for railroads. New CADD Note E417 added.	January 1, 2025