

Submittal and Acceptance Process for State and/or Federally Funded Bridge Projects

One of the main functions of the State Aid Bridge Unit is reviewing local bridge plans to ensure they meet the applicable rules, guidelines, and manual requirements. This document explains how to submit plans (and associated documents) for review and acceptance.

This submittal and acceptance process applies to all state and/or federally funded bridges that are greater than or equal to 10 feet in length, with the following exceptions:

Standard MnDOT sized precast concrete box culverts are reviewed by the District State Aid Office, but **not** by State Aid Bridge, unless it is being used as a pedestrian/bicycle crossing or contains a headwall or other non-standard features.

Major and/or complex bridges may require a modified submittal process. Contact the State Aid Bridge Unit with questions.

A courtesy review of locally funded bridges may be provided at the request of the owner.

For further information on bridge review, acceptance and signature requirement, refer to the [Bridge Engineer Approval Guidelines](#) (PDF).

Preliminary Bridge Plans Submittal

The owner (or their consultant) shall submit the following to State Aid Bridge:

- An electronic PDF copy of the Preliminary Bridge Plans.
- An electronic PDF copy of the Hydraulic Data Sheet and Hydraulic Risk Analysis.
- An electronic PDF copy of the Soils Report.

Preliminary Bridge Plans shall typically contain (at a minimum):

- General Plan and Elevation showing span lengths, abutment and pier locations, profile grade information, and horizontal curve and superelevation information (if applicable).
- Bridge cross section showing deck material and barrier/railing requirements.
- Design and material specifications, construction specifications, painting requirements, loading requirements, traffic counts, design speed, construction notes, and pay items.
- Bridge layout sheet and corner details.
- Staged construction limits and removal details.
- Survey sheets including hydraulic information and soil boring logs.

State Aid Bridge reviews and marks up comments (in red) and returns an electronic PDF copy of the marked up plans to the owner, owner's consultant and DSAE for review. The owner and DSAE, as they see fit, may add additional comments to pass on to the owner's consultant and State Aid Bridge. An electronic PDF copy of the transmittal letter is forwarded to: DSAE, Owner, Owner's Consultant, and the State Aid Bridge file.

Final Bridge Plans Submittal

The owner (or their consultant) shall submit the following to State Aid Bridge:

- One hard copy and one electronic PDF copy of the Final Bridge Plans.
- An electronic PDF copy of the Division SB Special Provisions.

Final Bridge Plans shall typically contain (at a minimum):

- General Plan and Elevation showing span lengths, abutment and pier locations, profile grade information, and horizontal curve and superelevation information (if applicable).
- Bridge cross section showing deck material and barrier/railing requirements.
- Design and material specifications, construction specifications, painting requirements, loading requirements, traffic counts, design speed, construction notes, and pay items.
- Bridge layout sheet.
- Staging sheets (if applicable).
- Aesthetic detail sheets (if applicable).
- Substructure sheets.
- Superstructure sheets.
- Bridge standard sheets.
- Survey sheets including hydraulic information and soil boring logs.
- There are some good resources for plan preparation/sheet order and plan content on the MnDOT Bridge Office website: [Summary of Recommended Drafting Standards](#) (PDF) and [Guidelines for Checking Final Design Bridge Plans](#) (PDF).

State Aid Bridge reviews and marks up comments (in red) and returns an electronic PDF copy of the marked up plans with an electronic PDF copy of the transmittal letter to the owner's consultant. An electronic PDF copy of the transmittal letter is also forwarded to: Owner, DSAE, and the State Aid Bridge file.

Certified Final Bridge Plans Submittal For State Bridge Engineer Signature

Upon resolution of the final plan comments from the State Aid Bridge Unit and/or District State Aid personnel, the owner (or their consultant) shall submit the following to District State Aid:

- An electronic PDF of the Certified Final Bridge Plans containing all appropriate signatures – including the owner and their consultant on the General Plan and Elevation sheet.

At this time, signed bridge rating forms and files need to be sent to the State Aid Bridge Load Ratings Engineer.

Submit the following:

- An electronic PDF of the completed load rating forms for the bridge. These forms must be signed by the load rating engineer (who is a professional engineer) and the Program Administrator.
- AASHTOWare BrR file.

State Aid Bridge receives the electronic PDF of the Certified Plans from SALT (or District State Aid) and back checks them against the Final Plans and gets the signature of the State Bridge Engineer. The final, signed electronic PDF of the Certified Plans are then returned to SALT (or District State Aid) for final funding approval prior to letting.

For further guidance on the Certified Final Bridge Plans submittal and acceptance process, refer to the [Certified Final Bridge Plan Submittal and Acceptance Guidelines](#) (PDF).

Courtesy Review for Locally Funded Bridge Project on Local Routes

If a bridge project is fully funded with local funds, then the bridge plans **do not** need to be signed by the State Bridge Engineer nor do they need to be submitted for plan review.

Even though plan reviews are not required for these bridges, an owner can request the State Aid Bridge Unit to provide a courtesy review of the plans. Please note that in times of heavy workload, the courtesy review may be an abbreviated review or in rare occurrences the request could be denied.

The bridge plans do need to be designed/detailed per the appropriate State Aid Rules, MnDOT LRFD Bridge Design Manual, Current AASHTO design specifications, etc. as required by Minnesota State Statutes.

Whether or not these plans are reviewed by the State Aid Bridge Unit, the owner shall submit the following to the State Aid Bridge Unit (for archival purposes):

- An electronic PDF copy of the Certified Final Bridge Plans to upload into our MnDOT eDIGS system for inspection purposes, etc.
- An electronic PDF copy of the Hydraulic Data Sheet and Hydraulic Risk Analysis (if applicable).
- An electronic PDF copy of the Soils Report (if applicable).

At this time, signed bridge rating forms and files need to be sent to the State Aid Bridge Load Ratings Engineer. Submit the following:

- An electronic PDF of the completed load rating forms for the bridge. These forms must be signed by the load rating engineer (who is a professional engineer) and the Program Administrator.
- AASHTOWare BrR file.

Submittal and Acceptance Process for State Owned Bridges Initiated by Local Agencies

The plan review process is different for local vehicular and pedestrian bridges/tunnels over/under interstate or trunk highways. Since they affect trunk highway routes, these bridges will be reviewed by the MnDOT Bridge Office and not the State Aid Bridge Unit.

***** It is imperative that the MnDOT Bridge Design Engineer knows of these projects as soon as possible in order to add these projects into their work schedule. *****

- Replacement bridge preliminary plans are submitted to the MnDOT Bridge Office Preliminary Plans Unit and the MnDOT Bridge Design Engineer must be notified of the project in order to get the project on their work schedule.
- Rehabilitation preliminary plans are submitted to the appropriate regional construction engineer at the MnDOT Bridge Office – Construction Unit.
- Once the preliminary plans are approved, final plans are to be completed and routed through the MnDOT Bridge Design Engineer. The plans will then be given to one of the design units for review.
- Be aware that some TH corridors may have certain aesthetic requirements and these will need to be coordinated with the MnDOT Bridge Office Preliminary Plans Unit.