CONSULTANT PROJECT REVIEW PROCEDURE

State Bridge Projects
Consultants are used on state bridge projects when the workload exceeds the capacity of the Bridge Section or when special expertise is required.

A Bridge Section Engineer will be assigned when a new bridge design project is provided to the consultant. The reviewing engineer should have experience in the design of structures similar to the one to be reviewed. The Review Engineer will then become the contact for technical questions raised by the consultant throughout the design phase. This communication allows early identification of critical design areas and reduces the chances of major revisions.

The Review Engineer will not generally perform an exhaustive check on the design. All details, plans, and related work will be reviewed to ensure conformance with the criteria that follows.

The consultant shall apply his own seal and signature to the plans, and thereby assumes full responsibility for their correctness and general conformance with good engineering practice.

The following indicates the degree and type of checking to be performed by the Bridge Section:
Structure Concept Study Review
All concept studies will be thoroughly reviewed to ensure adequate evaluation of:

- Structure types that are compatible to the site conditions
- Preliminary cost estimates
- Advantages/disadvantages of each structure type
- Economy, feasibility, and constructibility
- Structure types recommended for additional study or final design

A review of the bridge layouts will be made to ensure that span lengths, clearances, and all site conditions are adequately addressed.

Final Situation and Layout
Plans should be thoroughly checked by using the checklist located in Chapter 17 of the Bridge Design Manual (*BDM)*. Conformance of grades, alignments, and other data between roadway and bridge plans should be checked.

The hydraulic and foundation criteria shown on the plans shall conform to the approved ITD-211 Bridge Structures Hydraulic Survey and approved Geotechnical Engineering Report.

Final Design Review
Plans should be reviewed for completeness, constructibility, compliance with current ITD standards, and good engineering practices.

A review of major structural elements should be performed. However, no stress analysis is generally required unless the detail appears questionable.

Pay items and Special Provisions should be reviewed for conformance with the Standard Specifications. Quantity calculations and rebar schedules are generally not checked in detail.

Design calculations shall be on 8.5"x11" paper with a proper heading and with an index. The signature, date and Idaho seal of a registered engineer of the consulting firm shall be on a title sheet.

Final Plan Review
Plans will be checked for all changes required by the Final Design Review.
The signature, date and Idaho seal of a registered engineer of the consulting firm shall be on each drawing.
Any new or significantly modified Special Provisions shall be added to the X:drive SPB folder.

LPA Projects with Federal-Aid Funds

Counties and cities also frequently use Consultants to design bridges for LPA projects with Federal Aid funds under LHTAC project management.

Under the LHTAC Stewardship Agreement 2020, LHTAC will review/approve TS&L, S&L, and PS&E documents. ITD will provide review comments when requested.

LHTAC shall follow all procedures listed in the Bridge Design Manual.

Occasionally from time to time, there may be a need on a specific LPA project to deviate from procedures in the Bridge Design Manual. When these situations arise, LHTAC shall document the specific reasons for the deviation including the proposed changes. This information shall be shared with ITD for review and approval. This information shall be retained in the project's file records.

In accordance with the LHTAC Stewardship Agreement 2020, ITD has authority to review LPA projects with Federal-aid funds and may audit these projects at its discretion to ensure adherence to Bridge Design Manual procedures.

Revisions:

Oct 2016	Changed Article number from 0.2 to 0.02.
Nov 2019	Deleted "placed in a binder" from the design calculation requirements in Final Design Review.
Sep 2020	Changed name of "Phase 4 Foundation Report" to "Geotechnical Engineering Report" to agree with the Materials Manual. Added LHTAC Stewardship procedures.
July 2021	Revised ITD-210 to ITD-211 to conform to the ITD Bridge Hydraulics Manual.