

DRAFT DESIGN EVALUATION PHASE
(60% DESIGN LEVEL)

Draft Design Report

- Basis of Design
 - Project deficiencies and plans to address
 - Design criteria used
- Hydraulic, geotechnical, and structural evaluations as needed to adequately develop the design
- Construction diversion and diversion and reservoir operation requirements.
- Estimated material quantities and source identification (on site/off site).
- Required mechanical components, including identification of long lead items
- Data to support the design, including detailed calculations, digital computer model printouts, catalog cut sheets, and other information as needed. This information can be included in Appendices
- Discussion on dewatering and level of engineering reviews.
- Identification of proposed materials for the project, including evaluation of the suitability of onsite materials and the need for offsite borrow sources.
- Identification of anticipated proprietary materials or products
- Documentation of subsurface conditions, including a summary of previous explorations and data and results of explorations performed for the preliminary design. This could include test borings, test pits, monitoring well or piezometer data, soil and rock laboratory testing, etc.
- An EOPCC or Preliminary-Level Construction Cost Estimate appropriate for this stage of design
- A list of anticipated regulatory permits and their responsible parties for obtaining permits.

Draft Drawings

- The drawings should be relatively complete, with layouts of all proposed features and sufficient details to perform quantity takeoffs and understand the limits of work.

Specifications Outline

- A technical specifications outline should be developed, listing the anticipated specification sections and key components of each specification.

60% Design Review Meeting

(following review of *Draft Design Report* by dam owner and MTDSP)

- Schedule and uncertainties with potential to impact schedule
- Additional analysis expectations for *Final Design Report*
- Discuss: diversion plan, reservoir operation and dewatering
- Drawings – clarifications, additional detail and corrections
- Cost estimate uncertainties