ENGINEERING

Staff Report

for the Regular Meeting of the Board of Directors, August 24, 2016

- TO: Board of Directors
- **FROM:** Gary King, Engineering Manager Doug Roderick, Senior Engineer

DATE: August 16, 2016

SUBJECT: Centennial Reservoir Project – Estimated Construction Cost of the Dam

RECOMMENDATION:

Discuss Estimated Construction Cost of the Dam for the Centennial Reservoir Project.

BACKGROUND:

AECOM has completed an estimated construction cost of the Dam for the Centennial Reservoir Project. These estimates are based on information from AECOM's Phase I and Phase II of the preliminary geotechnical investigation.

AECOM developed the estimates based on the two potential dam types and two potential dam axis alignments. Dam types under consideration are the roller compacted concrete (RCC) and concrete-faced rockfill dam (CFR). Work included development of conceptual layouts for RCC dam and CFR dam and associated spillway and outlet works, quantities of excavation and materials. Conceptual construction schedules for each alternative were also developed. AECOM developed unit prices for major items of work based on current interpreted site conditions and on costs from similar projects.

Summary of costs for the dam types/locations:

Dam Type, Location	Estimates
RCC, Axis 2	\$259,203,000
RCC, Axis 6	\$284,210,000
CFR, Axis 2	\$339,396,000
CFR, Axis 6	\$325,245,000

The estimates contain various contingency percentages on individual line items, with an overall project contingency of approximately 30%.

The estimates are consistent with Class 4 estimates, which are described by the Association for the Advancement of Cost Engineering (AACE).

Staff discussed this information at the Engineering Committee meeting on July 19, 2016.

The Report is on file with the District and will be posted to the Centennial Reservoir Project website following the Board meeting.

BUDGETARY IMPACT:

None - Informational Item only.

DR