

# Staff Report

for the Board of Directors' Meeting of September 27, 2017

**TO:** Board of Directors  
**FROM:** Gary D. King, PE, PhD, Engineering Manager  
Doug Hobbs, PE, Associate Engineer  
**DATE:** September 19, 2017  
**SUBJECT:** **Scotts Flat Spillway Phase II Repairs (FATR# 2094)**

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## ***ENGINEERING***

### **RECOMMENDATION:**

Approve a sole source contract with Alternative Structural Technologies Inc. (AST) in the amount of \$142,320.00 for the Phase II repairs of the Scotts Flat spillway, and authorize the General Manager to sign the appropriate documents.

### **BACKGROUND:**

Last winter's heavy rains caused Scotts Flat Lake to spill for an extended period of time resulting in the delamination and dislodging of portions of several spillway slabs above the reinforcement bar layer. Emergency measures were undertaken in March thru May to repair the delaminated areas as well as other concrete joints that were spalled.

The Division of Safety of Dams (DSOD) required the District to follow up the initial work with a second phase to seal all the remaining open joints and smooth the surface of spalled and rough slabs. This work will prevent infiltration of water into the subbase material and promote laminar flow of the water in the spillway chute. As initially agreed with DSOD, this work was to be done with standard sealing and concrete patching materials that are used by District maintenance staff.

As a result of the ongoing concerns associated with the Oroville Dam, DSOD's views changed concerning the District's proposed approach. A specialized epoxy sealant was required in place of the standard sealing material and, initially, no patching was allowed. Since extensive grinding is not practical, the District was able to obtain permission from DSOD to place patches for smoothing and joint repair using a specialized two part process of epoxy resin binder and specialized repair mortar.

These specialized epoxies require a specialized contractor experienced with the application of these epoxy products. AST has performed similar work on other dams and water conveyance facilities in California for a variety of clients and has worked extensively with DSOD and FERC. This issue has been discussed in the Engineering Committee as part of project status review. It is the recommendation of staff to approve a contract with AST.

**BUDGET IMPACTS:**

The contract can be funded from within the Hydro Reservoir, Dam, and Water Improvement Program (50112-52921) additional funds are available due to permit delays, until next year, on the French Lake project and savings on other budget items.

GDK