

**SUBMITTAL TO THE FLOOD CONTROL AND
WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



FROM: General Manager-Chief Engineer

SUBMITTAL DATE:
January 6, 2015

SUBJECT: Approve Contract Change Order No. 2. Eagle Canyon Dam and Debris Basin,
Project No. 6-0-00190, 4th District \$998,762] District Funds 100%

RECOMMENDED MOTION: That the Board of Supervisors:
Ratify the attached Contract Change Order No. 2 between the District and Hal Hays Construction, Inc., providing compensation for extra work required and extending the total contract working days for the completion of the Eagle Canyon Dam and Debris Basin due to changed conditions.

BACKGROUND:

Summary

On November 4, 2014, the basis for this Change Order was reviewed by the Capital Project Review Committee (as established by Board of Supervisors, Item 3.40, November 7, 2006). The finding of the Committee was that the change request should be recommended for approval.

Continued on Page 2.

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WARREN D. WILLIAMS
General Manager-Chief Engineer

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost:	POLICY/CONSENT (per Exec. Office)
COST	\$ 998,762	\$	\$ 998,762	\$	Consent <input type="checkbox"/> Policy <input type="checkbox"/>
NET DISTRICT COST	\$ 998,762	\$	\$ 998,762	\$	
SOURCE OF FUNDS: 25160 947500 527980 Zone 6 Const/Maint/Misc-Contracts				Budget Adjustment: No	
				For Fiscal Year: 14/15	

C.E.O. RECOMMENDATION:

APPROVE

BY:
Imelda Delos Santos

County Executive Office Signature

MINUTES OF THE BOARD OF SUPERVISORS

FORM APPROVED COUNTY COUNSEL
DATE 1/21/15
BY: GREGORY P. PRIAMOS

FISCAL PROCEDURES APPROVED
BY JEANINE J. REY, FINANCE DIRECTOR
Concurrence

RUC

- A-30
- 4/5 Vote
- Positions Added
- Change Order

**SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT
BOARD OF SUPERVISORS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**
FORM 11: Approve Contract Change Order No. 2, Eagle Canyon Dam and Debris Basin,
Project No. 6-0-00190, 4th District [\$998,762] District Funds 100%

DATE: January 6, 2015

PAGE: Page 2 of 2

BACKGROUND:

Summary (continued)

The Board approved a contract with Hal Hays Construction, Inc., in the amount of \$9,849,777 as Agenda Item Number 11-2 on February 26, 2013.

Per Section II, Article 2.07A, Board authorization of Contract Change Order No. 2 is necessary to ratify payment for Extra Work associated with the spillway modifications that are necessary to assure long-term stability of exposed rock cut slopes at the spillway. (See Change Order Report below for Technical Summary).

This Contract Change Order is set at a not to exceed cost of \$1,535,106. However, we have realized substantial savings on other items by designing the contract bid items to scale to actual quantities (particularly the site remediation items). Taking into account the savings, the adjusted authorized contract amount is \$10,848,539, which is \$998,762 (10.1%) above the original authorized contract amount (reflected in Financial Data field on Page 1 of this Form 11).

This significant additional new work requires an extension of contract working days from 350 to 544.

County Counsel has reviewed this matter and has approved the attached change order as to legal form.

A. CHANGE ORDER REPORT

NUMBER	AMOUNT	PERCENT	DESCRIPTION
Change Order No. 1	\$0	0%	Extension of Working Days
Change Order No. 2	\$1,535,106	15.6%	Spillway Geotechnical Issues

Change Order No. 2 Technical Summary - The project's original geotechnical investigation concluded that the cut slopes in the spillway would be stable under static and seismic conditions. However, in one area, the joints and fractures in the rock were found to be more extensive than expected and oriented such that seismic loading could cause rock to fall onto the right side of the spillway. The District, in consultation with our onsite geotechnical consultant, has determined that the most efficient remedy is additional concrete lining bolstered by rock bolt anchors (also known as tie-backs) to lock down the problematic cut slope. The approved plans and specifications did not include specialized work of this nature.

District Design staff and our geotechnical consultant worked up design drawings and detailed specifications for the additional work. The revised plans and specifications were reviewed and approved by the State of California Division of Safety of Dams. The District then negotiated the cost of the new work with our Contractor and Subcontractors.

Hal Hays' onsite drilling and blasting Subcontractor (Edick and Watt, Inc.) is experienced with installation of rock bolt anchorage systems and will be used to perform the specialty work. Edick and Watt, Inc. carried out the small-scale proof-of-concept testing needed to finalize the scope of the rock bolting design and they performed well.

As described in detail in the attached change order, four individual new contract items will be added in accordance with Section II, Article 2.07 and Section VII, Article 7.03 of the General Provisions.

RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT

Project: Eagle Canyon Dam and Debris Basin
Project No. 6-0-00190

Sheet 1 of 1 sheets

CONTRACT CHANGE ORDER NO. 2

To Hal Hays Construction, Inc., Contractor
You are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE GENERAL MANAGER-CHIEF ENGINEER OR THE BOARD OF SUPERVISORS OF THE DISTRICT.

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by District

This change order will cover the costs for the Extra Work associated with the spillway modifications that are necessary to assure long-term stability of exposed rock cut slopes at the spillway. The original geotechnical investigation performed for the project concluded that the cut slopes in the spillway would be stable under static and seismic conditions. However, in one area, the joints and foliation in the rock were found to be more extensive than expected and oriented such that seismic loading could cause rock fall onto the right side of the spillway. The District, in consultation with our onsite geotechnical consultant, has determined that the most efficient remedy is additional concrete lining bolstered by rock bolts (also known as tie-backs). The approved plans and specifications did not include specialized work of this nature.

District Design staff worked up additional design drawings for the modifications. The new plans were reviewed and approved by the State of California Division of Safety of Dams. The District then negotiated the cost of the new work with our Contractor and Subcontractors. The Extra Work described in this change order will be based on four individual new contract items: Item No. 57, Rock Bolts; Item No. 58, Class "A" Concrete, Spillway; Item No. 59, Spillway Excavation (Rock); and Item No. 60, Contract Extension Overhead. Contract Item Nos. 57 through 59 are based on individual lump sum basis in accordance with Section II, Article 2.07 and Section VII, Article 7.03 of the General Provisions. Contract Item No. 60 will be based on a monthly unit price in accordance with Section II, Article 2.07 and Section VII, Article 7.03 of the General Provisions.

The lump sum cost associated with contract Item No. 57, Rock Bolts is \$128,300.00; the lump sum cost associated with Item No. 58, Class "A" Concrete, Spillway is \$334,240.00; the lump sum cost associated with Item No. 59, Spillway Excavation (Rock) is \$213,911.28; the monthly unit price associated with Item No. 60, Contract Extension Overhead is \$107,331.83 not to exceed \$858,654.63.

The total not to exceed cost for this change order is \$1,535,105.91.

The parties mutually agree the project shall be extended to a total of 544 working days. Contractor agrees it will make no claim for additional compensation against District related to this project extension of working days, including but not limited to the work covered under this Change Order, material hauling, or other project work issues currently known to Contractor.

Estimated Cost: Decrease \$ _____ or Increase \$1,535,105.91

By reason of this order the time of completion will be adjusted as follows: Additional 194 working days.

Submitted by: [Signature] Date: 8 December 2014
ROBERT J. CULLEN, Chief of Design and Construction Division
Approved: [Signature] Date: 12/17/14
WARREN D. WILLIAMS, General Manager-Chief Engineer

Chairman, Board of Supervisors

We, the undersigned Contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

Accepted: Date DECEMBER 9, 2014 Contractor HAL HAYS CONSTRUCTION, INC.
By: [Signature], KIRBY S. HAYS Title PRESIDENT/CEO

If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.

FORM APPROVED COUNTY COUNSEL
BY: [Signature] DATE: 12/9/14
NEAL R. KIPNIS