

## 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: July 26, 2016

SUBJECT:

Approve Contract Change Order No. 2, Santa Ana Canyon - Below Prado -

Inland Empire Brine Line Protection Project, Project No. 2-0-00105,

District 2 [\$115,544] District Funds 100%

**RECOMMENDED MOTION:** That the Board of Supervisors:

Ratify the attached Contract Change Order No. 2 between the District and Blue Iron, Inc., providing compensation for Extra Work required for the completion of the Santa Ana Canyon - Below Prado - Inland Empire Brine Line Protection project.

#### **BACKGROUND:**

**Summary** 

The Board approved a contract with Blue Iron, Inc., in the amount of \$6,307,935 as Agenda Item Number 11-4 on September 15, 2015. Contract Change Order No. 1 was approved by the District on June 1, 2016 and increased the authorized contract amount by \$26,080.25 to a total of \$6,334,015.85.

Continued on Page 2.

AD:mcv P8\205749 JASON E. UHLEY

General Manager-Chief Engineer

FINANCIAL DATA	Curre	ent Fiscal Year:	Next Fiscal Year:		Total Cost:		Ongoing Cost:		(per Exec. Office)
COST	\$	115,554	\$	0	\$	115,554	\$	0	Consent □ Policy □
NET DISTRICT COST	\$	115,554	\$	0	\$	115,554	\$	0	Consent - Policy -
COLIDADE OF FUNDO - OF400 047			400 507000						4 11

**SOURCE OF FUNDS**: 25120 947420 527980

Zone 2 Const/Maint/Misc-Contracts

Budget Adjustment: No
For Fiscal Year: 16/17

C.E.O. RECOMMENDATION:

APPROVE

Steven C. Horn

**County Executive Office Signature** 

#### MINUTES OF THE BOARD OF SUPERVISORS

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

Prev. Agn. Ref.: 11-4 of 09/15/15

District: 2<sup>nd</sup>

Agenda Number:

11-1

### 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, Santa Ana Canyon - Below Prado -

Inland Empire Brine Line Protection Project, Project No. 2-0-00105,

District 2 [\$115,544] District Funds 100%

**DATE:** July 26, 2016 **PAGE:** Page 2 of 2

#### **BACKGROUND:**

#### Summary (continued)

Per Section II, Article 2.07A, Board authorization of Contract Change Order No. 2 is necessary to ratify payment for Extra Work that results in an individual contract change exceeding \$100,000. Items found in the Extra Work include: digging exploratory test pits, auger predrilling, and changing a hydroseed mix (see Change Order Report below for Technical Summary).

This Contract Change Order is set at a not to exceed cost of \$115,554.81. However, the District realized a cost savings of \$60,705 thanks to a reduction of construction materials. Taking this cost savings into account, the adjusted authorized contract amount is \$6,388,866, which adds \$54,850 (0.9%) to the original authorized contract amount.

#### **ATTACHMENTS:**

#### A. CHANGE ORDER REPORT

NUMBER	AMOUNT	PERCENT	DESCRIPTION
Change Order No. 1	\$26,080.25	0.4%	Debris Removal and Waler Bolts
Change Order No. 2	\$115,554.81	1.8%	Predrilling and Hydroseed

The Contractor encountered a shallow sandstone bedrock layer that significantly slowed their progress for the final 312 lineal feet of sheet pile installation. The District requested a geologist to evaluate the subsurface conditions in greater detail and determine the feasibility of pressing the remaining sheet piles to their full depth of 53 feet. The Contractor was directed to assist with the subsurface evaluation by digging two exploratory test pits as directed by the geologist. Using the geologist's findings, the District determined that (with predrilling) the remaining sheet piles could be shortened somewhat, resulting in savings in installation and materials costs.

#### B. LOCATION MAP

P8\205749

#### RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT

CONTRACT CHANGE ORDER NO. 2

You are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not

Project: Santa Ana Canyon – Below Prado – Inland Empire Brine Line Protection Project

Sheet 1 of 1 sheets

Project No. 2-0-00105

Blue Iron, Inc.

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 covers three (3) separate items of Extra Work performed by the Contractor for which no payment item was included in the contract, and includes:
	<ol> <li>The cost associated with the additional time, equipment and labor required to dig two (2) exploratory test pits. The District directed the Contractor to dig the exploratory test pits in order to determine the magnitude of a sandstone bedrock layer near the surface that had considerably slowed the sheet pile installation progress. The cost of this Extra Work is \$2,575.66.</li> <li>The cost associated with the additional time, equipment and labor required for auger predrilling and sheet pile installation. The Contractor needed to predrill through the sandstone bedrock layer to a predetermined depth in order to achieve the required tip embedment for the sheet piles. The cost of this Extra Work item is \$107,052.72.</li> <li>The cost associated with the change in materials from an upland hydroseed mix to a riparian hydroseed mix at Aliso Creek Wash. The cost of this Extra Work item is \$5,926.43.</li> </ol>
	The District agrees to pay Blue Iron, Inc. on a Time & Materials basis for the Extra Work performed. The Extra Work described in this change order will be paid in accordance with Section II, Article 2.07 and Section VII, Article 7.03 of the General Provisions.
	The total cost of this Contract Change Order is \$115,554.81.
	Estimated Cost: Decrease \$ or Increase \$_115,554.81_
}	By reason of this order the time of completion will be adjusted as follows:
4	Submitted by: Date: 6/29/16
	Approved: Date: V 9 16
	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 ful payment therefor the prices shown above.  Accepted: Date  Contractor  Contractor
	Accepted: Date 130/10 Reith Jones Title Project Engineer

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.

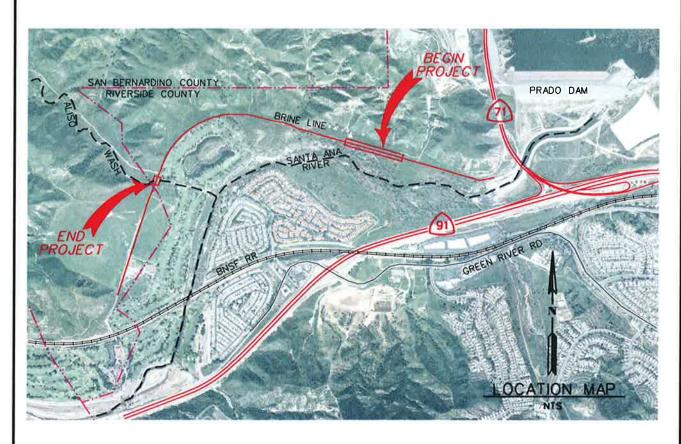
#### RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT

Project: Santa Ana Canyon - Below Prado - Inland Empire Brine Line Protection Project Sheet 1 of 1 sheet	its
Project No. 2-0-00105  CONTRACT CHANGE ORDER NO1	
To Blue Iron, Inc, Contra	
You are hereby directed to make the herein described changes from the plans and specifications or to do the following described wor included in the plans and specifications.	'k not
NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE GENERAL MANAGER-CHIEF ENGINEER OR THE BOARI SUPERVISORS OF THE DISTRICT.	D OF
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 line equipment is actually used and no allowance will be made for idle time. Change requested by  District	me as
This change order covers two (2) separate items of Extra Work performed by the Contractor for which payment item was included in the contract. The Extra Work is itemized as follows:	n no
1. The costs associated with additional excavation, backfill and debris removal across Aliso Creek. District authorized Blue Iron, Inc. to excavate up to 20 feet below the existing surface in order unearth and remove possible obstructions. The excavation took place along the Aliso Creek of pile alignment for a reach of approximately 116 feet (Station 10+64 to Station 11+80). Large defrom the excavation trench was hauled from the construction site. The Extra Work described in change order will be paid on a time and materials basis in accordance with Section II, Article 2 and Section VII, Article 7.03 of the General Provisions. The total cost associated with this E Work is \$22,140.25.	er to heet ebris this 2.07
2. The costs associated with changing the bolts from 8" to 10". The approved plans and specificat incorrectly identified waler connector bolts as 8" in length. The Extra Work described in this character is based on a lump sum basis in accordance with Section II, Article 2.07 and Section Article 7.03 of the General Provisions. The lump sum cost associated with this Extra Wor \$3,940.00.	ange VII,
The total cost associated with this change order is \$26,080.25 and will constitute full compensation for Extra Work.	the
Estimated Cost: Decrease \$ or Increase \$_26,080.2	.5
By reason of this order the time of completion will be adjusted as follows:	
Many RIC	
Submitted by:	
Submitted by: Date: MAy 31, 7016  Approved: Date: UHLEY, General Manager-Chief Engineer	
Date:	
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 provie equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept a payment therefor the prices shown above.	ide all as full
11/4 Than Tal	
Accepted: Date Contractor Since Transfer	

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.

Title

# SANTA ANA CANYON-BELOW PRADO INLAND EMPIRE BRINE LINE PROTECTION PROJECT PROJECT NO. 2-0-00105



The Inland Empire Brine Line Protection Project consists of the installation of approximately 2,500 LF of AZ26-700 sheet pile, having a width of approximately two feet and a maximum toe depth of 55 feet (15 feet below the scour depth), with tiebacks spaced approximately every 10 feet. Construction will occur in two different locations along the existing Santa Ana River (SAR) Trail. The easternmost portion (near Prado Dam), will extend approximately 2,100 linear feet. The westernmost portion at the outlet to Aliso Canyon will extend approximately 120 linear feet. The tiebacks have an average length of approximately 40 feet.

The proposed Project will protect the Inland Empire Brine Line from being exposed due to possible erosion caused by the Santa Ana River and Aliso Creek. The sheet piles at the easternmost location are necessary due to the proximity of the Santa Ana River to the Brine Line. The sheet piles at the westernmost location will protect the Brine Line from both the Santa Ana River and Aliso Creek floodwaters.