

CHANGE ORDER MEMORANDUM

Date  
7/10/2017

TO: COUNTY OF LAKE			FILE: COUNTY CONTRACT NO. <u>16-04</u>	
FROM: Ramon Montes de Oca, R.E., QUINCY ENGINEERING			COUNTY PROJECT NAME <u>Dry Creek Road at Dry Creek Bridge Replacement</u>	
			FEDERAL PROJECT NO. <u>BRLO-5914(080)</u>	
CCO NO. <u>2</u>	SUPPLEMENT NO.	CATEGORY CODE	CONTINGENCY BALANCE (Including this change): \$ <u>83,841.64</u>	
CHANGE ORDER AMOUNT \$ <u>2,637.36</u> <u>X</u> INCREASE <u>      </u> DECREASE			COUNTY BOARD OF SUPERVISORS APPROVAL REQUIRED? YES <u>X</u> NO <u>      </u>	
SUPPLEMENTAL FUNDS PROVIDED \$ <u>0</u>			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS YES <u>X</u> NO <u>      </u>	
ORIGINAL CONTRACT TIME: <u>90</u> DAY(S)	TIME ADJUSTMENT THIS CHANGE: <u>64</u> DAY(S)	PREVIOUSLY APPROVED TIME ADJUSTMENTS: <u>0</u> DAY(S)	PERCENTAGE TIME ADJUSTED (Including this change) <u>71.1</u> %	TOTAL # OF UNRECONCILED DEFERRED TIME (Including this change) <u>0</u>

COMPREHENSIVE DESCRIPTION, JUSTIFICATION, AND COST SUMMARY

This Change Order provides for:

Item #1: ADJUST CONTRACT ITEMS AT CONTRACT PRICE

Bid Item # 1 Furnish Field Office: ( $\Delta = -100\%$ )

Engineers Estimate

1 LS @ \$12,000.00/ LS = \$12,000.00

Actual

0 LS @ \$12,000.00/ LS = \$0.00

Difference

(- 1.00) LS @ \$12,000.00/ LS = (\$12,000.00)

Finding

Quantity underrun greater than 25%, Contractor did not request adjustment.

Therefore, no adjustment to lump sum price required.

Bid Item # 10 Temporary Fiber Roll: ( $\Delta = -47\%$ )

Engineers Estimate

870 LF @ \$8.00/ LF = \$6,960.00

Actual

464 LF @ \$8.00/ LF = \$3,712.00

Difference

(-406) LF @ \$8.00/ LF = (\$3,248.00)

Finding

Quantity underrun greater than 25%, Contractor did not request adjustment.

Therefore, no adjustment to unit price required.

Bid Item # 11 Temporary Silt Fence: ( $\Delta = -63\%$ )

Engineers Estimate

323 LF @ \$9.00/ LF = \$2,907.00

Actual

118 LF @ \$9.00/ LF = \$1,062.00

Difference

(-205) LF @ \$9.00/ LF = (\$1,845.00)

Finding

Quantity underrun greater than 25%, Contractor did not request adjustment.

Therefore, no adjustment to unit price required.

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Bid Item # 20 Roadway Excavation: ( $\Delta$  = -3%)

Engineers Estimate

212 CY @ \$95.00/ CY = \$20,140.00

Actual

206 CY @ \$95.00/ CY = \$19,570.00

Difference

(-6) CY @ \$95.00/ CY = (\$570.00)

Finding

Quantity within 25% of bid quantity. No adjustment to unit price required.

Bid Item # 26 Class 2 Aggregate Base: ( $\Delta$  = -16%)

Engineers Estimate

112 CY @ \$252.00/ CY = \$28,224.00

Actual

94.3 CY @ \$252.00/ CY = \$23,763.60

Difference

(-17.7) CY @ \$252.00/ CY = (\$4,460.40)

Finding

Quantity within 25% of bid quantity. No adjustment to unit price required.

Bid Item # 33 Rock Slope Protection Fabric (Class 8): ( $\Delta$  = -26%)

Engineers Estimate

419 SQYD @ \$3.00/ SQYD = \$1,257.00

Actual

308 SQYD @ \$3.00/ SQYD = \$924.00

Difference

(-111) SQYD @ \$3.00/ SQYD = (\$333.00)

Finding

Quantity underrun greater than 25%, Contractor did not request adjustment.

Therefore, no adjustment to unit price required.

**Item #2: EXTRA WORK AT AGREED LUMP SUM**

Grooving of the Bridge decks was attempted on 12/17/2016. The operator told the Resident Engineer that that machine would remove approximately 1.5" to 2" from the bridge deck due to the relatively short vertical curve of the structure. (see attached daily for additional detail). This was not allowed by the Resident Engineer as it violated the project Specifications and would be detrimental to the Structure. Over the following months the Designer and construction management team researched how to best comply with the Caltrans Specifications. It was determined that the equipment of the size required for a structure of this geometry was specialty equipment with only one or two units in the Country. After several site visits and discussions with the Director of Research of the International Grind and Groove Association, it was decided that the grooving would be changed to the transverse direction. The Contractor found a subcontractor who could perform this work and a price was agreed upon. During the time that these events occurred, "grind and groove" was the controlling operation and could not be performed, therefore, the Contractor is entitled to additional working days that represent the time from 12/17/2016 to 3/23/2017 when the operation resumed. The Contractor is granted 64 working day for this item.

This contract ran concurrently with a similar project (Foard Road at Anderson Creek) that involved the same prime and sub contractors. It was decided by all that the cost to perform this change in grooving operation would be split evenly between both projects.

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**Item #3: EXTRA WORK AT FORCE ACCOUNT**

Over the winter of 2016 and into January of 2017, multiple severe storms overwhelmed drainage systems adjacent to the project, causing erosion and damage to the project site. A repair plan was developed by QEI to bring the site back to designed condition as well as to restore the adjacent v-ditch to original form. This work required a NEPA revalidation. Work was performed at Force Account with a Field Order not to exceed of \$30,000.00.

<b>Concurred By</b>		<b>ESTIMATE OF COST</b>	
<b>DESIGN ENGINEER</b>	<b>DATE:</b>	<b>THIS REQUEST</b>	<b>TO DATE</b>
Reimond Garcia Quincy Engineering	7/11/17	ITEMS	
		FORCE ACCOUNT	
		AGREED PRICE	
<b>PROJECT MANAGER</b>	<b>DATE:</b>	ADJUSTMENT	
Fred Pezeshk Lake County	7/11/17		
		<b>TOTAL</b>	
<b>Resident Engineer Signature</b>	<b>DATE:</b>	<b>FEDERAL PARTICIPATION</b>	
Ramon Montes de Oca Quincy Engineering	7/11/17		
		<input checked="" type="checkbox"/> PARTICIPATING	<input type="checkbox"/> PARTICIPATING IN PART <input type="checkbox"/> NONE
		<input type="checkbox"/> NON-PARTICIPATING (Maintenance)	<input type="checkbox"/> NON-PARTICIPATING

# ITEM #2

COUNTY of LAKE

DEPARTMENT OF TRANSPORTATION PUBLIC WORKS

Dry Creek Road at Dry Creek

Bridge Replacement Project

REPORT NO. Cat. 46

DATE: 12/17/16 DAY: Saturday

Shift Start: 0900 Stop 1242

BID No. 16-04

FAP No. BRLO-5914(080)

ASSISTANT RESIDENT ENGINEER'S DAILY REPORT

## HOURS - ITEMS

WEATHER	On the job									
	Item 30 – STRUCTURAL CONCRETE, BRIDGE (F)									
	Item									
	Item									
DESCRIPTION	Item									
	Off job									
								IDLE		
								Contr.	Names & Equip. #'s	
Superintendent w/ TRUCK T&TT 00-06		3					5	Bridgeway	Rafael Jiminez	
Laborer w/ TRUCK T&TT 12-20		3					5	Bridgeway	Juan Garcia	
OE W/ TRUCK T&TT 60		3					5	Penhall	David Bailey	
OE W/ TRUCK T&TT 60		3					5	Penhall	Steve Dunbar	
Grinder /profiler							8	Penhall	#142-1938	
Tribal Monitor	x							Middletown Rancheria	Jesse Reyes	

## LOCATION & DESCRIPTION OF OPERATION:

### Bridgeway

At 0810 I arrived on site at Dry Creek to find no one had arrived yet. Arrival time of the Contractor was anticipated to be between 0800 and 0900.

Before the Contractor arrived, I began checking the deck for with the straight edge to locate any must grinds prior to the profile grinding and grooving. The bridge was covered in dirt and debris – contrary to specifications requiring that the Contractor prep the site before we perform this work. At 0900 the Bridgeway crew and their grinding subcontractor, Penhall, showed up on site.

We made introductions and then began talking about their approach to the work and how they thought that the bridge may be troublesome to grind on profile. We went to mid-span of the bridge and Penhall's operator said his machine would see the vertical curve of the bridge as a "bump" in the road and flatten it out. He explained that they had just come from the

Matthews bridge last night and that the bridge had a flatter profile and they still were required to take a significant amount of material from the high point. He said that this bridge would require even more grinding than Matthews because of the greater profile.

Per the operator, he said he would be cutting about 2.5" from the high point of the deck. This was not acceptable and I questioned why he was not able to just take the maximum allowed ½" off the deck at the high point and his reply was that this machine was a fixed frame machine and it has no adjustment between wheels. The only control they had is with mechanical screws at the four-wheel corners that they use to set the depth and sometimes adjust to super elevation changes.

I made calls to the design Engineer to see if he could confirm in Cad what the operator was saying.

I measured the wheel base of the grinding machine to be 17' 4" and the cutting head 5' in front of the rear wheels. Greg Young plotted machine dimension in cad along the theoretical profile and found that it would be cutting 5/8 to ¾" from the surface due to the machine length. This was not acceptable as specifications limit the minimum rebar clearance to 1 ¾" cover. Since ¼" sacrificial cover was added to the 2" planed dimension per the project specifications, the maximum grind depth would be ½".

Everyone then went to the Anderson Creek Bridge to look at that deck to see if it was any better. It turned out to be a worse grind compared to Dry Creek due to vertical curve geometry that would require a deeper grind of about 2.5".

We then returned to Dry Creek and I spoke with Rafael Jimenez (Bridgeway). I told him that per Penhall, they cannot grind the deck per the project specifications with this machine. He replied yes we will have to figure something else out. Penhall and Bridgeway then began leaving the site. The grinder was never unloaded from the trailer.

I also reminded Rafael that when they perform the grind and groove that the machine will only be able to reach approximately 18" from the railing and that the portion outside that would have to be transitioned from vertical by hand or other alternate method. He said he knew that and was ready to do that as soon as the main grind occurs.

We will request that Bridgeway provide an equipment submittal for the grind and groove operation prior to the next attempt.

#### **Penhall**

Penhall arrived on site at about 0900. They never unloaded the grinder from the trailer. We had discussion while standing on the deck. The operator David Bailey said he could not grind this deck with this equipment to the 1/2" maximum grind specification. The crew left at approximately 1242 hours.

#### **Middletown Rancheria**

Monitor not on site today.



Signature

Ramon Montes de Oca, PE

Title

Assistant Resident Engineer

