COUNTY OF LAKE
DEPARTMENT OF PUBLIC WORKS

Date
07/10/2017

CHANGE ORDER MEMORANDUM

TO:
COUNTY OF LAKE

FROM:
Ramon Montes de Oca, R.E., QUINCY ENGINEERING

FILE:
COUNTY CONTRACT NO. 16-03
COUNTY PROJECT NAME _Foard Road at Anderson Creek Bridge Replacement
FEDERAL PROJECT NO. BRLO-5914(068)

CCO NO.	SUPPLEMENT NO.	CATEGORY CODE
3		

CONTINGENCY BALANCE (Including this change):
$ 69,005.91

CHANGE ORDER AMOUNT $ 9,476.70
___ INCREASE ___X___ DECREASE

COUNTY BOARD OF SUPERVISORS APPROVAL REQUIRED? YES _X_ NO _____

SUPPLEMENTAL FUNDS PROVIDED
$ 0

IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS YES _X_ NO___

ORIGINAL CONTRACT TIME:	TIME ADJUSTMENT THIS CHANGE:	PREVIOUSLY APPROVED TIME ADJUSTMENTS:	PERCENTAGE TIME ADJUSTED (Including this change)	TOTAL # OF UNRECONCILED DEFERRED TIME (Including this change)
90 DAY(S)	64 DAY(S)	3 DAY(S)	74.4 %	0

COMPREHENSIVE DESCRIPTION, JUSTIFICATION, AND COST SUMMARY

This Change Order provides for:
CCO #3 Item #1: ADJUST CONTRACT ITEMS AT CONTRACT PRICE

Bid Item # 11 Temporary Fiber Roll: (Δ = -25%)
Engineers Estimate
370 LF @ $5.00/ LF = $1,850.00
Actual
277 LF @ $5.00/ LF = $1,385.00
Difference
(-93 LF @ $5.00/ LF = ($465.00)
Finding
Quantity underrun greater than 25%, Contractor did not request adjustment.
Therefore, no adjustment to unit price required.

Bid Item # 12 Temporary Silt Fence: (Δ = -81%)
Engineers Estimate
370 LF @ $8.00/ LF = $2,960.00
Actual
70 LF @ $8.00/ LF = $560.00
Difference
(-300) LF @ $8.00/ LF = ($2,400.00)
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 Salvage Concrete Barrier (Type K): (Δ = -100%)
Engineers Estimate
130 LF @ $25.00/LF = $3,250.00
Actual
0 LF @ $25.00/ LF = $0.00
Difference
(- 130) LF @ $25.00/ LF = ($3,250.00)
Finding
Quantity underrun greater than 25%, Contractor did not request adjustment. Therefore, no adjustment to lump sum price required.

Bid Item # 23 Roadway Excavation: (Δ = -25%)
Engineers Estimate
200 CY @ $92.00/ CY = $18,400.00
Actual
149.2 CY @ $92.00/ CY = $13,726.40.00
Difference
(-50.8) CY @ $92.00/ CY = ($4,673.60)
Finding
Quantity underrun greater than 25%, Contractor did not request adjustment. Therefore, no adjustment to lump sum price required.

Bid Item # 27 Imported Borrow: (Δ = -13%)
Engineers Estimate
240 CY @ $65.00/ CY = $15,600.00
Actual
209.11 CY @ $65.00/ CY = $13,592.15
Difference
(-30.89) CY @ $65.00/ CY = ($2,007.85)
Finding
Quantity within 25% of bid quantity. No adjustment to unit price required.

Bid Item # 30 Class 2 Aggregate Base: (Δ = -14%)
Engineers Estimate
150 CY @ $100.00/ CY = $15,000.00
Actual
129.58 CY @ $100.00/ CY = $12,958.00
Difference
(-20.42) CY @ $100.00/ CY = ($2,042.00)
Finding
Quantity within 25% of bid quantity. No adjustment to unit price required.

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Bid Item # 43 Midwest Guardrail System: (Δ = -10%)
Engineers Estimate
75 CY @ $350.00/ LF = $26,250.00
Actual
67.5 LF @ $350.00/ LF = $23,625.00
Difference
(-7.5) LF @ $350.00/ LF = ($2,625.00)
Finding
Quantity within 25% of bid quantity. No adjustment to unit price required.

CCO #3 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 (Dry 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.

Concurred By		ESTIMATE OF COST		
DESIGN ENGINEER	DATE:		THIS REQUEST	TO DATE
Robert Ferguson	7/11/2017	ITEMS	-$17,463.45	-$5,774.05
Quincy Engineering		FORCE ACCOUNT	$0.00	$4,304.39
		AGREED PRICE	$7,986.75	$8,081.75
PROJECT MANAGER	DATE:	ADJUSTMENT	$0.00	$0.00
Fred Pezeshk	7/11/17	TOTAL	-$9,476.70	$6,612.09
Lake County		FEDERAL PARTICIPATION		
Resident Engineer Signature	DATE:	_X_ PARTICIPATING	_____ PARTICIPATING IN PAR_0_ NONE	
Ramon Montes de Oca	7/11/17	_____ NON-PARTICIPATING (Maintenance)	_____ NON-PARTICIPATING	
Quincy Engineering				

COUNTY of LAKE
DEPARTMENT OF TRANSPORTATION PUBLIC WORKS
Foard Road at Anderson Creek
Bridge Replacement Project

REPORT NO. Cat. 46

DATE: 12/17/16 DAY: Saturday
Shift Start: 1130 Stop 1200

BID No. 16-04
FAP No. BRLO-5914
ASSISTANT RESIDENT ENGINEER'S DAILY REPORT

WEATHER
Clear am.
Clear pm.
Temp. Min. 30 F
Max 47 F

HOURS - ITEMS

DESCRIPTION	On site	Item 35 – STRUCTURAL CONCRETE, BRIDGE (F)	Item	Item	Item	Item	Off job	IDLE	Contr.	Names & Equip. #'s
Superintendent w/TRUCK T&TT 00-06		1					7		Bridgeway	Rafael Jiminez
Laborer w/TRUCK T&TT 12-20		1					7		Bridgeway	Juan Garcia
OE W/ TRUCK T&TT 60		1					7		Penhall	David Bailey
OE W/ TRUCK T&TT 60		1					7		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.

According to 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 according to 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 form 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 from the Dry Creek site.

Middletown Rancheria
No monitor on site today.

Signature	Title
Ramon Montes de Oca, PE	Assistant Resident Engineer