

MEMORANDUM

DATE:	November 20, 2013
TO:	Tim Begley; Jerry Kerley
FROM:	Sam Harrison, P.E.
RE:	Crossville WTP Improvements- Change Order #1

Attached is Change Order No. 1 for the Water Treatment Plant Improvements with W. Rogers Company. This change order decreases the contract value by \$266,179.29 and adds 138 days to the contract time.

Repairs to the concrete structures were bid on a unit price basis due to the unknown quantity of repairs that would be required. Change order items 1, 2, and 3 balance out the actual quantities utilized in the project. The filter basins required \$17,553.90 more repair than anticipated and the sedimentation and flocculation basins required \$45,807.79 and \$39,039.00 less repair than anticipated. In total, the concrete repairs were \$67,292.89 less than the amount bid.

The project included several allowance items to cover materials testing and miscellaneous changes to the scope of the work due to unknown conditions. Of the \$15,000.00 allowance approved for testing, only \$4,345.00 was utilized for concrete strength testing leaving a credit of \$10,655.00. Of the \$50,000.00 miscellaneous allowance approved, only \$4,500.00 was utilized for additional paving leaving a credit of \$45,500.00.

The initial bid price of the project was higher than the amount budgeted. To reduce the overall project cost, portions of the work were deleted from the project. Forklifts were removed from the scope at the bid form credit of \$54,000.00. The project as bid included modifications to lighting and ceilings as both plants these were deleted from the scope of the project at a total savings of \$27,395.00.

The project included three new roofs on separate structures. The contractor offered a substitution for a similar roof material at a savings of 50,000.00.

The project included new filter troughs for filters 5-8 at the Holiday Hills WTP. It was determined the existing troughs could be reused eliminating the need for the new troughs at a savings of \$8,793.00.

Multiple modifications were made through the course of construction to the raw water intake structure at the Holiday Hills WTP. It was decided to keep the block structure of the existing intake eliminating the need for new wood framing. Attic access was added to all of the buildings, the roof line rotated, and the skylights were repositioned to improve accessibility to the raw water pumps. In total, these changes resulted in a savings of \$422.00.

The water connection point to the PAC building at the Meadow Park WTP required an additional backflow preventer, piping and installation at an additional cost of \$1,777.60.

Plant personnel determined the blowers would be easier to maintain if they were located outside of the building instead of in the pipe gallery as bid. This required a change in the stainless steel piping routing, a new concrete pad, and a reduction in the miscellaneous metals resulting in a final credit of \$432.00.

The final item is a modification to the baffle walls installed at the Meadow Park WTP. The drawings indicated the adjoining walls had a T configuration. As determined in the field, the walls are actually straight making fabrication of the baffle wall less expensive resulting in a credit of \$3,467.00.

The duration of the project exceeded the contract time by 138 days. These delays were due to multiple factors including the complicated and critical nature of the electrical conversion at the Holiday Hills WTP.

We have reviewed the proposals received from W. Rogers Company and respectfully recommend the approval of this change order decreasing the value by \$266,179.29 for a total contract value of \$2,304,010.71 and adding 138 days to the contract time.

If you have any questions or comments, please feel free to contact me at your convenience.

CONTRACT CHANGE ORDER

PROJECT NAME:	City of Crossville	CHANGE ORDER NO.:		1
	Water Treatment Plant Improvements			
PROJECT NO .:	SSR- 11-47-009.0	DATE:	November 20, 20)13
LOCATION:	Crossville, Tennessee			

TO: W. Rogers Company

You Are Hereby Requested to Comply with the Following Changes from the Contract Plans and Specifications:

ITEM NO. (1)	DESCRIPTION OF CHANGES - QUANTITIES, UNITS, UNIT PRICES, CHANGE IN COMPLETE SCHEDULE, ETC. (2)	DECREASE IN CONTRACT (3)	INCREASE IN CONTRACT (4)
1.	Concrete repair at Holiday Hills WTP- filter basins.		\$17,553.90
2.	Concrete repair at Holiday Hills WTP- sedimentation basins.	\$45,807.79	
3.	Concrete repair at Holiday Hills WTP- flocculation basins.	39,039.00	
4.	Unused portion of materials testing allowance.	10,655.00	
5.	Unused portion of construction contingency allowance.	45,500.00	
6.	Delete forklifts from scope.	54,000.00	
7.	Delete lighting replacement at Meadow Park WTP.	21,905.00	
8.	Delete lighting over filters at Holiday Hills WTP.	5,490.00	
9.	Substitution for metal roof on three structures.	50,000.00	
10.	Eliminate FRP troughs from scope (filters 5-8).	8,793.00	
11.	Eliminate demolition and wood frame construction at Holiday Hills WTP intake.	3,437.00	
12.	Install attic doors on PAC buildings and insulate structures.		1,865.00
13.	Blocking for skylights & metal cover on building fascia.		1,150.00
14.	Install backflow preventer, piping, and labor.		1,777.60
15.	Relocate blowers to exterior of building at Holiday Hills WTP.	432.00	
16.	Modify baffle walls at Meadow Park WTP.	3,467.00	
Contract Price Prior to this Change Order:			\$2,570,190.00
Net Increase/Decrease Due to this Change Order:			(\$266,179.29)
Adjusted Contract Price, Including this Change Order:			\$2,304,010.71

T:\TEAM47\2011\11470090- CROSSVILLE WTP MODIFICATIONS\CONSTRUCTION ADMIN\CHANGE ORDERS\SLH131120_CO#1.DOC

The Total Adjusted Contract Price To Date Is Hereby \$2,304,010.71. The Time Provided for Final Completion in the Contract is also increased by <u>138 calendar days</u> by this Change Order.

Recommended By:		Date	
· · · · · · · · ·	Engineer		
Accepted By:		Date	_
	Contractor		
Approved By:		Date	
	Owner		

T:\TEAM47\2011\11470090- CROSSVILLE WTP MODIFICATIONS\CONSTRUCTION ADMIN\CHANGE ORDERS\SLH131120_CO#1.DOC