

Board of Aldermen Request for Action

MEETING DATE: 3/7/2023 **DEPARTMENT:** Public Works – Water

AGENDA ITEM: Resolution 1196 - A Resolution authorizing the Mayor to execute Amendment 1 to Authorization No. 89 with HDR Engineering, Inc. for engineering and construction services for the Raw Water Pump, Valve Vault and Zebra Mussel Control.

REQUESTED BOARD ACTION:

A motion to approve Resolution 1196, authorizing and directing the mayor to execute Amendment No. 1 to Authorization No. 89 with HDR Engineering, Inc. for engineering and construction services for the Raw Water Pump, Valve Vault and Zebra Mussel Control in the amount of \$24,140.

SUMMARY:

The Raw Water Pump project has exceeded the expected completion date due to several factors including equipment and supply chain delays, adjacent construction project by the Corps, and additional requirements for power from Platte Clay Electric. HDR has expended their Authorization 89 and is requesting the City's consideration of an amendment of \$24,140 for the additional services they have and will complete to finalize this project.

HDR has provided excellent project management and staff would support this amendment.

PREVIOUS ACTION:

Resolution 762, January 7, 2020, approving Authorization 89 with HDR for design and construction services for the Raw Water Pump Station, Valve Vault and Zebra Mussel Control in an amount of \$472,655.

POLICY ISSUE:

Infrastructure Maintenance and growth

FINANCIAL CONSIDERATIONS:

There are sufficient funds within the CWWS budget for this amendment,

ATT A OLUMATRUTO	
ATTACHMENTS:	
□ Ordinance	☐ Contract
☑ Resolution	☐ Plans
☐ Staff Report	☐ Minutes
☑ Other: Engineer Memo	

RESOLUTION 1196

A RESOLUTION AUTHORIZING AND DIRECTING THE MAYOR TO EXECUTE AMENDMENT 1 TO AUTHORIZATION NO. 89 WITH HDR ENGINEERING, INC. FOR ENGINEERING SERVICES FOR THE RAW WATER PUMP STATION, VALVE VAULT, AND ZEBRA MUSSEL CONTROL

WHEREAS, on January 7, 2020, the Board approved Resolution 762, Authorization 89 with HDR for engineering and design services for the Raw Water Pump Station, Valve Vault, and Zebra Mussel Control project in an amount of \$472,655; and

WHEREAS, the project was bid in June of 2021 with an anticipated completion date of October 2022; and

WHEREAS, the project has experienced delays due to equipment and supply chain shortages and the Corps completing some drainage improvements to the dam; and

WHEREAS, HDR has incurred additional costs for engineering and project administration not included in their scope of Authorization 89 in the amount of \$24,140.00.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF SMITHVILLE, MISSOURI:

THAT the Mayor is hereby authorized to execute Amendment #1 to Authorization No. 89 with HDR Engineering, Inc. for additional engineering and project administration services in the amount of \$24,140 bringing the total cost for Authorization 89 to \$496,795.

PASSED AND ADOPTED by the Board of Aldermen and **APPROVED** by the Mayor of the City of Smithville, Missouri, the 7th day of March, 2023.

Damien Boley,	Mayor
ATTEST:	
Linda Drummo	and City Clark



February 27, 2023

Mr. Charles Soules, P.E. Public Works Director City of Smithville, Missouri 107 W. Main Street Smithville, MO 64089

RE: RFP No. 21-15: Raw Water Pump Station, Valve Vault, and Zebra Mussel Control HDR Project No. 10208674

Dear Mr. Soules,

HDR and the City of Smithville entered into an agreement for engineering design and construction administrative services for the Raw Water Pump Station project on January 7, 2020. On September 15, 2020, the Smith's Fork Pump Station design and construction services were added to the Raw Water Pump Station work since the two projects are in the same vicinity. The construction documents were completed and approved by all jurisdictional authorities (City of Smithville, Clay County, U.S. Army Corps of Engineers, & MDNR) in the spring of 2021. The project was Bid in June 2021 with Notice to Proceed issued to the awarded contractor, Irvinbilt Constructors, Inc., on August 2, 2021. The construction contract stipulated project final completion to be reached by October 1, 2022. Due to several material supply chain restrictions and third-party coordination issues the completion of construction has been delayed and is now anticipated to be June 1, 2023.

HDR has strived to minimize the impact of these delays on the overall success of the project but has had to perform additional services beyond those contemplated in our original agreement. HDR is requesting an amendment to our engineering services contract to compensate for these additional efforts. A summary of HDR's additional services follows.

- Extension of Construction Phase Services from 12 months to 21 months. The delays are for the following reasons:
 - o Parts and Supply Chain shortages, most notably the generators and pipe fittings. The generator for the Raw Water Pump Station did not arrive until mid-December 2022.
 - The 24-inch by 16-inch, 90-degree bend in the Raw Water Pump Station arrived in November of 2022.
 - To speed up receiving the generator, HDR and Irvinbilt both requested prices and delivery times from other suppliers in late December 2021 and January 2022. The evaluation concluded expedited delivery of the equipment was not feasible.
 - The Corps of Engineers' project on the dam spillway, which overlapped the City's raw water valve vault work, was not completed until December 2022. Irvinbilt had to wait for the Corps' work to be completed in this area before beginning excavation and construction of the vault.
 - The valve vault construction delay pushed the first available time to complete the work into the winter. Performing this work requires bypass pumping of the City's raw water supply to

the treatment plant. Sustained freezing weather is not conductive to bypass pumping and would require frequent dewatering to prevent freezing within the system while shutdown at night. To reduce this risk, the project team and Corps jointly agreed the vault work should be delayed until March 2023 when weather is typically more favorable.

- Second, HDR has expended additional effort working with Platte Clay Electric Coop (PCEC) for power supply to the site, preparation of easement documents for the Corps of Engineers, and equipment shortages and delays on parts PCEC is supplying.
 - HDR began working with Jay Butts at PCEC in June to 2020 to obtain construction requirements and pricing. A month before the Project was Bid in April 2021, we attempted to obtain contract pricing again along with review of the drawings but did not receive a response on pricing. In March of 2022, it was learned that Jay had moved departments and Steve Johnson had taken over the work.
 - Steve Johnson with PCEC then requested easement revisions and special requirements from the City and the Corps of Engineers. HDR had to revise the drawings and easements for the new transformer location.
- Third, HDR has expended additional effort to locate the existing 12-inch raw water main at the Raw Water PS. This included drawing and easement revisions to move the pump station to accommodate the revised location of the existing 12-inch raw water main.
- Fourth, HDR evaluated costs and prepared drawings during construction for relocating the potable water service to the Raw Water Pump Station potable water supply. This work did not result in a change order for the project but did require additional effort on HDR's part.

In general, HDR has expended extra effort beyond those included in the original Authorization due to equipment delays and shortages resulting in extending the construction duration by 9 months and additional work performed to meet the Corps of Engineers and PCEC requirements. For the additional services completed to date HDR respectfully requests a Contract Amendment on Authorization 89, Raw Water Pump Station in the amount of \$24,140.00. Attached is the spreadsheet listing the additional labor hours for the extra effort.

We have always appreciated the long-standing working relationship that HDR has with the City of Smithville. We pride ourselves on delivering projects for the City with minimal change orders or contract amendments. Thank you for your consideration, if you should have comments or questions, or would like to meet to discuss this information, please call me at 816-347-1137 or e-mail to Kenton.Newport@hdrinc.com.

Sincerely,

HDR Engineering Inc.

Kenton Newport, P.E.

Kenton Newport

Project Manager

Authorization 89 - Raw Water Pump Station, Valve Vault, and Zebra Mussel Control

Smithville, Missouri - Amendment 1: Extension of Construction Services

Scope and Fee

Scope and Fee												
	Newport,		Boyd, Thomas K	Wiseman, David	McCann,		Campbell, Joni					
Staff	Kenton L	Call, Brady	III	L	Victoria	Fuller, Trevor	L	Yakle, Johnny R	Shields, Tyler	Dinkel, Tracy L		
Project Role	Project Manager III	Project Engineer	Electrical Engineer	Sr. Structural Engineer	Structural Engineer	Admin	Admin	Land Surveyor	Survey Technician II	Cadd/GIS Technician IV		
Billing Rate	\$200.00	\$120.00	\$175.00	\$290.00	\$135.00	\$125.00	\$125.00	\$175.00	\$90.00	\$150.00	HDR Expenses	Total
TASKS												
A. Task 1 - Extension of Construction Phase Services from 12 months to 21 months												
1 Additional Monthly Progress Meetings	8										\$60	\$1,660
2 Additional Payment Applications	4											\$800
3 Special Progress Meetings	8			2	6						\$65	\$3,055
4 Corps of Engineers - Additional Raw Water Easements and Project Coordination	2							4	12	4	\$90	\$2,870
5 Platte Clay Electric Coop Meetings and new Electrical Easements	8		8					4	12	4	\$65	\$5,445
6 Field Locate Existing 12-inch Raw Water Water Line - Relocate Pump Station	4	8								16	\$65	\$4,225
7 Potable Water Service Changes for the Raw Water Pump Station and Cost Estimates	8	16								8	\$65	\$4,785
8 Project Management	4					4						\$1,300
Subtotal Hours	46	24	8	2	6	4	0	8	24	32		
Subtotal Dollars	\$9,200	\$2,880	\$1,400	\$580	\$810	\$500	\$0	\$1,400	\$2,160	\$4,800	\$410	\$24,140
Total Task 1												\$24,140
Total Hours	46	24	8	2	6	4	0	8	24	32		154
Total Billing Amount		\$2,880	\$1,400	\$580	\$810	\$500	\$0	\$1,400	\$2,160	\$4,800	\$410	\$24,140

Total Amendment Amount: \$24,140

FDR