MEMORANDUM

To: PPO Subcommittee

From: Amanda Grint, Water Resources Engineer

Date: March 4, 2020

Re: Amendment No. 5 to Professional Services Contract with HDR Engineering for

Zorinsky Basin 2

In 2016, HDR Engineering, Inc. was awarded a professional services contract for the Preliminary Design (Phase 1) of the Zorinsky Basin No. 2 (ZB2) project for a not to exceed amount of \$470,200. Amendment 1 and 2 followed in April and November 2017, for the final design and construction administration as well as additional out of scope items. Amendment 3 was approved in August 2018, to address revisions to the stream mitigation. Amendment 4 approved in December 2018, extended the schedule and included additional technical assistance for unusually high ground water table and minor drawing modifications bringing the total contract not to exceed amount of \$1,723,991. ZB2 is the last of four planned water quality basins identified through a community planning session in 1999 to protect the water quality of Zorinsky Lake. See attached map. Amendment No. 5 addresses the following items:

- Extend the Project Management and SWPPP inspections for an additional seven months to match the updated construction schedule.
- Additional construction contract administration for seven months.

A proposed detailed scope of work and cost estimate for Amendment 5 are attached for review. HDR would provide these additional out of scope items on an hourly basis not to exceed the amount of \$205,900, for a total contract not to exceed amount of \$1,929,891.

Management recommends that the Subcommittee recommend to the Board that the General Manager be authorized to execute Amendment No. 5 to the Professional Services Agreement with HDR Engineering, Inc. for the Zorinsky Water Quality Basin Number 2 project in an amount not to exceed \$205,900 bringing the total contract not to exceed amount to \$1,929,891, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.



LEGEND

---- EASEMENTS ----- TOP OF DAM ELEV. 1191.0 - SPLLWAY ELEV. 1183.0 PROPERTY LIMITS -- PROPERTY PARCELS

GENERAL NOTES

- 1. TOP OF DAM AFTER SETTLEMENT SET AT ELEVATION 1191.0. 2. DESIGN SEDIMENT STORAGE AVAILABLE BELOW ELEVATION
- DESIGN SEDIMENT IS TOMAGE AVAILABLE BELLOW LELEVATION
 1181.5 = 97 ACRE-FT.
 EXISTING TOPOGRAPHY IS COMBINATION OF JUNE 2016 EAA
 CONSULTING GROUP, 2010 LIDAR 2.METER DEM FROM NEBRASKA DNR,
 AND 2016 OLSSON ASSOCIATES PROPOSED GRADING PLAN FOR GRANDVIEW RIDGE SUBDIVISION.
- COORDINATES ARE MODIFIED STATE PLANE (MODIFIED SCALE FACTOR) = 0.99961299)
- 2. ELEVATIONS ARE NAVD 88, NAD 1983.

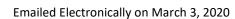


CAPACITY AND RESERVOIR AREA PLAN

2 8

MISSOURI RIVER
NATURAL
RESOURCES
DISTRICT

00G-02.dwg G-2





March 3, 2020

John Winkler General Manager Papio-Missouri River Natural Resources District 8901 S. 154th Street Omaha, NE 68138-3621

RE: Zorinsky Water Quality Basin No. 2

Phase III Construction Administration Services Amendment No. 5

Extend Construction Administration Services

Dear John,

HDR Engineering, Inc. is pleased to submit the attached Amendment No. 5 to our Agreement for the Phase III Construction Administration services on the Zorinsky Water Quality Basin #2 project. This amendment extends our construction services schedule as requested by P-MRNRD. The not to exceed estimate for Amendment No. 5 is \$ 205,900. The amended agreement is not to exceed \$1,929,891

Please sign the Agreement and provide me with a signed copy for my files. Our receipt of your signed acceptance will constitute our Notice to Proceed.

We look forward to continue working with you on this very important project. If you have any questions, please contact me at 402.926.7110 at your convenience.

Very truly yours, HDR Engineering, Inc.

John Engel, P.E. Project Manager

Enclosures

This is **EXHIBIT K**, consisting of 2 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated April 22, 2016.

AMENDMENT TO OWNER-ENGINEER AGREEMENT Amendment No. 5

The Effective Date of this Amendment is: . . **Background Data** Effective Date of Owner-Engineer Agreement: April 22, 2016 Owner: Papio-Missouri River Natural Resources District (P-MRNRD) Engineer: HDR Engineering, Inc. (HDR) Project: Zorinsky Water Quality Basin No. 2 Nature of Amendment: [Check those that are applicable and delete those that are inapplicable.] Additional Services to be performed by Engineer X Modifications to services of Engineer X Modifications to responsibilities of Owner X Modifications of payment to Engineer X Modifications to time(s) for rendering services X Modifications to other terms and conditions of the Agreement

Description of Modifications:

- a. The Scope of Services currently authorized to be performed by Engineer in accordance with the Agreement and previous amendments, if any, is modified as follows:
 - 1) Exhibit A, "Engineer's Services", shall be amended to include Exhibit A1, "Engineer's Services for Amendment No. 5" and Enclosure A, Subconsultants Proposals.
 - 2) Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses"
 - i) As modified by Amendments Nos. 1, 2, 3, and 4 change C2.01 as follows:
 - 1. C2.01.A.1 delete \$141,320" and replace with "\$154,744."
 - 2. C2.01.A.3 delete "\$1,723,991" and replace with \$1,929,891.
 - ii) Amend Appendix 1 to include Attachment 2, "Engineer's Fee Estimate "and Attachment 3 "Engineer's Schedule".
- b. Modify Article 7 Definitions, 7.01.A.24 Maximum Amount. Remove "one million seven hundred forty three thousand nine hundred ninety nine dollars (\$1,723,991)" and

Exhibit K – Amendment to Owner-Engineer Agreement.

replace with "one million nine hundred twenty nine thousand eight hundred ninety one dollars (\$1,929,891) ".

Agreement Summary:	
Original agreement amount (Preliminary Design):	\$ 470,200.00
Net change for Amendment No. 1 (Design & Const.):	\$ 858,930.00
Reduction in Phase I Scope and Fees:	\$ (49,470.00)
Net change for Amendment No. 2 (Add. Design):	\$ 56,200.00
Net change for Amendment No. 3 (Stream Mitigation):	\$ 107,700.00

Net change for Amendment No. 4 (Add Design & Const.): \$280,431.00 This amendment amount (Add Construction): \$205,900.00

Adjusted Agreement amount: \$ 1,929,891.00

Change in time of services: April 15, 2017 to November 1, 2020 (Amendment No. 5) (Additional 7 months)

The foregoing Agreement Summary is for reference only and does not alter the terms of the Agreement, including those set forth in Exhibit C.

Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect.

OWNER	OWNER:		ENGINEER:							
Papio-N	Missouri River Natural Resources District	HDR Eng	ineering, Inc.							
By:		By:								
Print name:	John Winkler	Print name:	Matthew Tondl, PIE							
Title:	General Manager	Title:	Senior Vice President							
Date Sig	gned:	Date Sign	ned:							

This is **EXHIBIT A1**, consisting of 5 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated April 22, 2016.

AMENDMENT NO. 5

Engineer's Services

PART 1 - BASIC SERVICES

A1.02 Phase III Construction Observation Services

Zorinsky Water Quality Basin No. 2 for Papio-Missouri River Natural Resources District Douglas County, NE



ENGINEERING PROPOSAL – ADDITIONAL DESIGN MODIFICATIONS DURING CONSTRUCTION AND CONSTRUCTION OBSERVATION SERVICES FOR EXTENDED CONSTRUCTION SCHEDULE



BACKGROUND AND BASIS OF PROPOSAL

HDR Engineering, Inc. was selected by the P-MRNRD to provide planning, permitting, preliminary and final design and construction contract administration services for Zorinsky Basin No. 2 (ZB-2). ZB-2 is a proposed water quality basin to be located upstream of Zorinsky Lake on Boxelder Creek located in Douglas County and is located near 204th and F Streets in Omaha, Nebraska.

To more concisely respond to project requirements, a phased approach was proposed. Phase I, which included preliminary design, is completed. Phase II generally included preparing final design documents and providing bidding assistance is completed. Phase III is currently underway for construction contract administration services.

In Amendment No, 1, where Phase II and III tasks were defined, the duration of the project was 20-1/2 months (begin April 14, 2017 to December 31, 2018). At the time of bidding, the construction schedule was extended to reflect the past construction season's wet weather and higher than normal groundwater conditions, the completion date was established as December 1, 2019. Amendment No. 4 added an additional 4 months to the HDR schedule for the completion of the O&M Manual, extending the contract schedule to April 1, 2020. The construction contract has a completion date of June 1, 2020. Amendment No. 5 extends the contract an additional 7 months to cover the construction contract extension and closeout activities.

SCOPE OF SERVICES – PHASE III – MODIFICATION TO CONSTRUCTION CONTRACT ADMINISTRATION SERVICES

HDR will perform coordination and design of modifications and provide construction observation and supporting services for the extended construction schedule. The scope of work modifies the following tasks:

TASK SERIES 100 PROJECT MANAGEMENT

Task Objectives: Confirm that Project elements are being completed.

HDR Activities: Task 110 Project Management. Includes Project scheduling, administration

and coordination activities on the Project. Internal HDR Project Team meetings

will be conducted to discuss tasks, provide Project updates and review

deliverables. Prepare monthly invoices and progress report.

Task Deliverables:

Monthly invoices and progress report

Key Understandings:

 Extend the contract period from April 1, 2020 to November 1, 2020 or adding an additional 7 months of project management.

TASK SERIES 1000 CONSTRUCTION CONTRACT ADMINISTRATIVE SERVICES

Task Objectives:

To provide construction contract administration services during the construction schedule.

Task 1010 Records and Reports.

1010.1 Records and Reports. Continue to document construction activities.

Task 1020 Construction Contract Support.

- 1020.4 <u>Submittal Reviews.</u> Review Contractor submittals meeting contract document requirements.
- 1020.5 <u>Construction Meetings.</u> Facilitate construction conferences during the construction period.
- 1020.7 <u>Technical Field Observation</u>. Additional site visits were conducted by technical experts to respond to variations in site conditions. Continued high groundwater levels required technical experts to closely monitor the dewatering operation. The labyrinth weir and baffled chute spillway will require non-traditional structural construction and require additional technical oversight.

Task 1030 Permit Compliance Support.

1030.1 <u>SWPPP Compliance Monitoring.</u> Conduct minimum of weekly site visit to the site and prepare report on BMP performance. Submit to PWCP website.

Task Deliverables:

- Construction Documentation
- SWPPP reports
- Construction conference agenda and notes

Key Understandings:

- Contractor period of performance was extended to June 1, 2020 due to restricted access, wet weather and high groundwater levels. Previous construction schedule was to be completed by December 1, 2019.
- Full-time resident project representative (RPR) provides construction quality assurance for the Project during construction activity. Contractor continued to work during the winter months. The level of construction observation effort included in this scope equates to 1,074 hours for the RPR [additional actual 279 hours (Dec 2019 to Feb 2020), 13 weeks (March to May), for an average of 55 hours per week plus 80 hour allowance for work extending into June] when the Contractor is performing work requiring observation, as determined by HDR. Reasonable variations in work days and schedules are anticipated, but no protracted overtime, work stoppages or extended work schedules are assumed. At critical times, the Engineer and other technical personnel will be provided.

ATTACHMENT 2

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT

PHASE II AND PHASE III: CONSTRUCTION CONTRACT ADMINISTRATION OF ZORINSKY WATER QUALITY BASIN NO. 2 AMENDMENT NO. 5 FFF ESTIMATE - MARCH 2, 2020

						AMEND	WIENIN	10. 3 FE	= E211N	IAIE - WA	ARCH 2, A	2020									
		ted Hou	rs/Costs				Expenses					HDR				Est. Total Cost					
	TASKS		Project Manager	Specialist	Principal Staff	Senior Staff	Technical Staff	Tech Support	Admin/ Clerical	Total Hours	Total Labor Cost	Tech. Fee	Printing	Travel	Misc.	Total Expenses	Totals	E&A	Thiele Geotech	Total Sub- Consult.	
TASK SERIES 10	0 PROJECT MANAGEMENT													<u>.</u>							
Task 110	Project Management (7 months)		14		7	4	4		14	43	\$7,988	\$159		\$50		\$209	\$8,197			\$0	\$8,19
		Estimated Task Hours Subtotal	14	0	7	4	4	0	14	43											
		Estimated Task Cost Subtotal	\$3,472	\$0	\$1,708	\$832	\$520	\$0	\$1,456	\$7,988	\$7,988	\$159	\$0	\$50	\$0	\$209	\$8,197	\$0	\$0	\$0	\$8,19
TASK SERIES 10	000 CONSTRUCTION CONTRACT ADMIR	NISTRATION SERVICES																			
Task 1010	Records and Reports																				
Subtask 1010.1	Records and Reports (5 months)				60			1074		1134	\$139,224	\$4,196		\$7,000		\$11,196	\$150,420			\$0	\$150,42
Task 1020	Construction Contract Support																				
Subtask 1020.4	Submittal Reviews				16	20	20			56	\$10,664	\$207				\$207	\$10,871			\$0	\$10,87
Subtask 1020.5	Construction Meetings				30				4	34	\$7,736	\$126		\$350		\$476	\$8,212			\$0	\$8,21
Subtask 1020.7	Technical Field Observation			8		16	40			64	\$10,664	\$237		\$400		\$637	\$11,301			\$0	\$11,30
Task 1030	Permit Compliance Support																				
Subtask 1030.1	SWPPP Compliance Monitoring				8	16	84			108	\$16,200	\$400		\$300		\$700	\$16,900			\$0	\$16,90
		Estimated Task Hours Subtotal	-	8	114		144			1396											
		Estimated Task Cost Subtotal	·	\$2,136						. ,		\$5,165	\$0	\$8,050	\$0	\$13,215	\$197,703	\$0	\$0	\$0	\$197,70
		TOTAL HOURS	14	8	121	56	148	1,074	18	1,439											
																					т.
		TOTAL COST (ROUNDED)	\$ 3,472	\$ 2,136	\$ 29,524	\$ 11,648	\$ 19,240	\$ 124,584	\$ 1,872	\$ 192,476		\$ 5,324	\$ -	\$ 8,100	\$ -	\$ 13,424	\$ 205,900	\$ -	\$ -	\$ -	\$ 205,90

				AT	ГАСН	IMENT 3	3								
	PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT														
	PHASE III: CONSTRUCTION CONTRACT ADMINISTRATION OF ZORINSKY WATER QUALITY BASIN NO. 2														
	SCHEDULE FOR STREAM MITIGATION PERMITTING AND DESIGN - MARCH 2, 2020														
	Tasks	1	9-Dec	Jan-	20	Feb	Mar	Apr	May	Jun	July	Aug	Sep		
TASK SERIES 100	0 PROJECT MANAGEMENT														
Task 110	Project Management (7 months)														
TASK SERIES 100	00 CONSTRUCTION CONTRACT ADMINISTRATION SERVICES														
Task 1010	Records and Reports														
Subtask 1010.1	Records and Reports (5 months)														
Task 1020	Construction Contract Support														
Subtask 1020.4	Submittal Reviews														
Subtask 1020.5	Construction Meetings														
Subtask 1020.7	Technical Field Observation														
Task 1030	Permit Compliance Support						-								
Subtask 1030.1	SWPPP Compliance Monitoring														