### Memorandum

To: Programs, Projects, and Operations Subcommittee

From: Lori Ann Laster, Stormwater Management Engineer

Date: June 5, 2024

RE: Amendment No. 5 with HDR for WP-4

In May 2017, the Board selected HDR Engineering, Inc. (HDR) for the preliminary design of West Papillion Regional Basin Number 4 (WP4), Dam Site 19 (DS19), and Dam Site 12 (DS12) Projects. Preliminary design was completed in 2018. The contract has since been amended to provide final design, design adjustments, bidding services, and construction administration services.

Construction of WP4 began in March 2023. Once the contractor was mobilized and began work, several site-related issues were encountered. Groundwater levels on the site were much higher than expected so the soil borrow areas had to be adjusted to get dry material for the main dam. To minimize costs, additional borrow areas were identified across the entire site. This led to the need to prepare additional grading plans and revise the trail plan.

Based on the original construction schedule the contract included 2,310 hours for the Resident Project Representative (RPR) on site. This assumed that there would be a 13-week winter shutdown. However, weather conditions over the winter only required a 2-week shutdown. While some work was done over the winter, the project has also encountered delays with the construction of the new sanitary sewer lift station due to utility line coordination with the City of Gretna and OPPD and dewatering concerns. The original substantial completion date for the project was August 1, 2024. With these delays we are currently expecting a substantial completion date of September 15, 2024. This extended timeline requires additional hours for the RPR.

The proposed amendment, cost estimate and schedule are attached. HDR will provide professional services on an hourly basis not to exceed the amount of \$213,200 bringing the total contract amount to \$3,877,026.

Management recommends that the Subcommittee recommend to the Board that the General Manager be authorized to execute Amendment No. 5 with HDR Engineering, Inc. for Professional Engineering Services for modifications to the Final Design of the WP4 Project in an amount not to exceed \$213,200, bringing the total contract amount to \$3,877,026 subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.

This is **EXHIBIT K**, consisting of 2 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated May 22, 2017.

## AMENDMENT TO OWNER-ENGINEER AGREEMENT Amendment No. 5

The Effective Date of this Amendment is:, 2024.
Background Data
Effective Date of Owner-Engineer Agreement: May 22, 2017
Owner: Papio-Missouri River Natural Resources District (P-MRNRD)
Engineer: HDR Engineering, Inc. (HDR)
Project: Preliminary Design of Dam Site 12, Dam Site 19, and Regional Detention Basin WP-4.
Nature of Amendment: [Check those that are applicable and delete those that are inapplicable.]
X Additional Services to be performed by Engineer
X Modifications to services of Engineer
Modifications to responsibilities of Owner
X Modifications of payment to Engineer
X Modifications to time(s) for rendering services
Modifications to other terms and conditions of the Agreement
Description of Modifications:
a. Modify Article 7 – Definitions, 7.01.A.24 Maximum Amount. Remove "three million, six hundred sixty-three thousand, eight hundred and twenty-six dollars (\$3,663,826.00)." and replace with "three million, eight hundred seventy-seven thousand twenty-six dollars (\$3,877,026.00)."
b. The Scope of Services currently authorized to be performed by Engineer in

2) Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses" shall be amended to include Appendix 2 to Exhibit C-5.

accordance with the Agreement and previous amendments, if any, is modified as

Exhibit A, "Engineer's Services", shall be amended to include Exhibit A-5, Engineer's Services for Amendment No. 5 and Attachment 1 to Exhibit A-5.

1)

Original agreement amount:  Dam Site 12 \$707,140  Dam Site 19 \$717,403  Basin WP-4 \$619,280	\$ 2,043,823
Net contract change for Amendment No. 1:	\$ 1,434,813
WP-4 Phases II and III Services: WP-4 Credit for Remaining Phase I Service	\$ 1,498,745 ces: -\$ 63,932
Amendment No. 2:	
Phase II Services:	\$ 68,972
Amendment No. 3:	
Phase II Services:	\$ 51,346
Amendment No. 4:	
Phase II Services:	\$ 64,872
Amendment No. 5:	
Phase III Services:	\$ 213,200
Adjusted Agreement amount:	\$ 3,877,026
Change in time for services (days or date, as app	licable): April 1, 2024 to December 31, 2024
The foregoing Agreement Summary is for reference only including those set forth in Exhibits C, C-1, C-2, C-3, C-4 a	
Owner and Engineer hereby agree to modify the about Amendment. All provisions of the Agreement not modified.	
OWNER: Papio-Missouri River Natural Resources District	ENGINEER: HDR Engineering, Inc.
י מאוט ואווטסטעור ווועכר ואמנערמו ולפסטעונפס טוסנרוכנ	ווטת בווקוווככוווק, וווכ.
By:	By:
Print Name: John Winkler	Print Name: Matthew Tondl P.F.
NAME MAN WINKING	Name Mannew Lond PF

Agreement Summary:

Title:

Date Signed:

Senior Vice President

General Manager

Title:

Date Signed:

This is **Attachment 1** to **EXHIBIT A-5**, consisting of 2 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated <u>May 22, 2017.</u>

#### **AMENDMENT NO. 5**

#### Engineer's Services for Amendment No. 5

Papio-Missouri River Natural Resources District Final Design and Construction Services for WP-4 Papillion Creek Watershed, Sarpy County, NE



#### **ENGINEERING PROPOSAL**

### **BACKGROUND AND BASIS OF PROPOSAL**

This Scope of Services is to document professional services to the P-MRNRD for a final design and construction of regional detention basin WP-4 (Project). The scope includes Phase III – Construction Management Services.

The purpose of Amendment No. 5 is to modify the existing Agreement to reflect additional time and effort related to Construction Phase activities.

#### **Final Design and Construction Phases**

Amendment No. 5 addresses modifications to the following task series included in Phase III:

Task Series 1300 – Construction Contract Administrative Services

The previously scoped duration of construction phase professional services was 14 months, which anticipated an additional 3 month Winter shutdown. The revised duration of construction is 17 months from approximately March 1, 2023 through September 2024 with two weeks of Winter shutdown.

#### TASK SERIES 1300 – CONSTRUCTION CONTRACT ADMINISTRATIVE SERVICES

#### Modify: <u>Task 1310.1 Records and Reports Documentation</u>

Full-time resident project representative (RPR) providing construction quality assurance
for the Project. The level of construction observation effort included in this scope
amendment equates to 1,170 hours. Reasonable variations in work days and schedules
are anticipated, but no protracted overtime, work stoppages or extended work schedules
are assumed.

#### Modify: <u>Task 1320.1 Contract Documentation Clarification</u>

 Coordination, clarification, and documentation of responses to Contractor regarding earthwork quantities, specifications, and payments.

**MODIFIED VERSION** of

June 2024

Attachment 1 to Exhibit A-5 – Proposed Scope of Services for Amendment No. 5

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Modify: <u>Task 1320.4 Submittal Reviews</u>

- Additional review time due to multiple Contractor submittal revisions, reviews, and resubmissions.
- Additional coordination and modifications to Covington Lift Station due to delayed and changed OPPD requirements.
- Review time for multiple Contractor installed dewatering wells submittals.

Modify: <u>Task 1320.6 Technical Field Observations</u>

- Additional visits related to fisheries enhancement coordination, structural review, and inspections of lift station appurtenances.
- Additional site visits for geotechnical engineer related to coordination with Contractor on groundwater specification requirements and Contractor installed dewatering wells.

Modify: <u>Task 1320.8 Design Modifications</u>

- Trail redesign due to additional borrow area excavations.
- Coordination & design of alternate fishing nodes due to unsuitability of sheet piling and NGPC typical revisions.
- Redesign of channel mitigation due to additional channel pool impacts.
- Preparation of Mitigation Plan Amendment addressing channel mitigation plan revision and coordination with USACE.

Modify: Task 1330.2 USACE Section 404 Baseline Monitoring & Notification

• Field survey of downstream channel not included in previous scope.

**MODIFIED VERSION** of

June 2024

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# APPENDIX 2 PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT AMENDMENT NO. 5 - PHASE III: CONSTRUCTION CONTRACT ADMINISTRATION OF WP-4 FEE ESTIMATE - MAY 2024

HDR Engineering, Inc. Estimated Hours/Costs											Subcon	sultants	Est. Total Cost			
	TASKS	Project Manager	Specialist	Senior Staff	Technical Staff	RPR	Total Hours	Total Labor Cost	Printing	Travel	Misc.	Total Expenses	Totals	JEO	Total Sub- Consult.	
TASK 1300 CONSTRUCTION CONTRACT ADMINISTRATIVE SERVICES																
Task 1310	Records and Reports			_												
Subtask 1310.1	Records and Report Documentation					1170	1170	\$155,610		\$ 2,000		\$2,000	\$157,610		\$0	\$157,610
Task 1320	Construction Contract Support		-									-				
Subtask 1320.1	Contract Documentation Clarification	2		8			10	\$2,552				\$0	\$2,552		\$0	\$2,552
Subtask 1320.4	Submittal Reviews and PTCS Tracking		2	4	8		14	\$2,865				\$0	\$2,865	\$4,710	\$4,710	\$7,575
Subtask 1320.5	Construction Meetings						0	\$0				\$0	\$0	\$3,900	\$3,900	\$3,900
Subtask 1320.6	Technical Field Observations				16		16	\$2,715		\$50		\$50	\$2,765	\$4,700	\$4,700	\$7,465
Subtask 1320.8	Design Modifications			20	60		80	\$15,100				\$0	\$15,100	\$17,705	\$17,705	\$32,805
Task 1330	Permit Compliance Support											·				
Subtask 1330.2	USACE Section 404 Baseline Monitoring and Notification						0	\$0				\$0	\$0	\$1,250	\$1,250	\$1,250
	TOTAL HOURS	2	2	32	84	1170	1290									
	TOTAL COST	\$584	\$524	\$7,872	\$14,252	\$155,610	\$178,842	\$178,842	\$0	\$2,050	\$0	\$2,050	\$180,892	\$32,265	\$32,265	\$213,200

# JEO CONSULTING GROUP INC - ESTIMATED HOURS/COSTS PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT AMENDMENT #5 FEE ESTIMATE - MAY 2024

JEO Consulting Group Inc. Estimated Hours/Costs											
TASKS			Sr. PE and QC	PE	Layne	CAD/GIS	Surveyor	Admin/ Clerical	Total Hours	Totals	
TASK 1300 CONSTRUCTION CONTRACT ADMINISTRATIVE SERVICES											
Task 1310	Records and Reports										
Subtask 1310.1	Records and Report Documentation								0	\$0	
Subtask 1310.2	As-Built Drawings								0	\$0	
Task 1320	Construction Contract Support										
Subtask 1320.1	Contract Documentation Clarification								0	\$0	
Subtask 1320.2	Survey Control and Verification Checks								0	\$0	
Subtask 1320.3	Material QA Testing								0	\$0	
Subtask 1320.4	Submittal Reviews		2 2	6	16				26	\$4,710	
Subtask 1320.5	Construction Meetings		ŝ	6	8				20	\$3,900	
Subtask 1320.6	Project Tracking Collaboration System								0	\$0	
Subtask 1320.7	Technical Field Observations			4	24				28	\$4,700	
Subtask 1320.8	Instrumentation Data Interpretation								0	\$0	
Subtask 1320.9	Design Modifications		4 1	10	36	60			111	\$17,705	
Task 1330	Permit Compliance Support										
Subtask 1330.1	SWPPP Compliance Monitoring								0	\$0	
Subtask 1330.2	USACE Section 404 Baseline Monitoring and Notification					2	8		10	\$1,250	
Subtask 1330.3	NDNR Approval to Store Water								0	\$0	
Estimated Task Hours Subtotal		1		26			_	0			
Estimated Task Cost Subtota TOTAL HOURS		\$2,94			\$13,860			\$0			
	1		26	84			0	195			
	\$ 2,94	0 \$ 705	\$ 4,810	\$ 13,860	\$ 8,990	\$ 960	\$ -	\$ 32,265	\$ 32,265		