

Memorandum

To: Papio-Missouri River Natural Resources District Programs Projects and Operations Subcommittee
From: Paul W. Woodward PE, Groundwater Management Engineer
Date: May 2, 2019
Re: Review and Recommendation on Amendment #2 to JEO Consulting Group Professional Services Agreement for the Independent External Review of Missouri River R-613 and R-616 Levee Accreditation

As required as part of the U.S. Army Corps of Engineers (USACE) Section 408 approval process for modifications to federal projects, JEO Consulting is currently under contract with the District to provide professional services for the Independent External Peer Review (IEPR) of the proposed modifications to the Missouri River Levee System Units R-613 and R-616. The original contract and amendment #1, for a total maximum fee of \$277,374.00, provided for services to review the design prior to 408 approval by the USACE. Of this amount, JEO has completed their services required for review of the design plans and been paid for \$238,174.33, leaving approximately \$37,000 under the existing contract.

The next phase in the IEPR process requires JEO to follow the project through construction and reviewing any changes or modifications during construction that are different from the approved 408 design plans and specifications. As a result of the March 2019 flood and damage to the levees, there will likely be additional design and construction changes that occur. JEO has prepared the enclosed scope of services in Amendment #2 to cover their anticipated IEPR responsibilities through construction.

The proposed Amendment #2 utilizes the remaining contract budget and increases the maximum not to exceed value of the contract by \$131,090 from \$277,374.00 to \$408,464.00.

Management recommends that the subcommittee recommend to the Board of Directors that the General Manager be authorized to execute the proposed Amendment #2 to the Professional Services Agreement with JEO Consulting Group, Inc. for the Independent External Peer Review for the Missouri River R-613 and R-616 Federal Levee Accreditation Project in the amount of \$131,090, making the total maximum not to exceed agreement amount \$408,464, 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 [22 March 2013].

AMENDMENT TO OWNER-ENGINEER AGREEMENT
Amendment No. 2

The Effective Date of this Amendment is: 9 May 2019.

Background Data

Effective Date of Owner-Engineer Agreement: 22 March 2013

Owner: Papio-Missouri River Natural Resources District

Engineer: JEO Consulting Group, Inc.

Project: Independent External Peer Review for Missouri River R-613 and R-616 Levee Accreditation

Nature of Amendment: [Check those that are applicable and delete those that are inapplicable.]

- Modifications to services of Engineer
- Modifications of payment to Engineer
- Modifications to time(s) for rendering services

Description of Modifications:

Exhibit A, Attachment 1, "Scope of Services," of this Agreement, including the previous amendment No. 1, shall be amended to include the Attachment 1 to Exhibit K Amendment No. 2, attach hereto. Only those tasks from Exhibit A, Attachment 1, "Scope of Services," that are modified or added are listed in the attached. All other tasks in Exhibit A, Attachment 1, "Scope of Services" under the Agreement are unchanged and shall remain in effect.

Exhibit C1, Appendix 2 "Fee Estimate" shall be amended to include Construction Review Detailed Fee Schedule attached to this amendment. It is understood among the parties that \$37,000 still exists in the budget and the \$37,000 will be used to offset the amounts contained in the Detailed Fee Schedule attached hereto.

Agreement Summary:

Original agreement amount:	\$207,756.00
Net change for prior amendments:	\$69,618.00
This amendment amount:	\$131,090.00
Adjusted Agreement amount:	\$408,464.00

This is **EXHIBIT K**, consisting of [2] pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated [22 March 2013].

Change in time for services (days or date, as applicable): To be determined based on construction schedule, progress, and submittals.

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:	ENGINEER:
_____	_____
By:_____	By:_____
Print Name:_____	Print Name: Lalit Jha, PE/CFM _____
Title:_____	Title: <u>Vice President Water Resources</u>
Date Signed:_____	Date Signed:_____



ATTACHMENT 1 TO EXHIBIT K
AMENDMENT NO. 2
INDEPENDENT EXTERNAL PEER REVIEW FOR
MISSOURI RIVER R-613 AND R-616 LEVEE ACCREDITATION
PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT
JEO PROJECT NO. R121047.00

REFERENCE:

Professional Services/Consultant Agreement effective date 22 March 2013.

PROJECT DESCRIPTION

The Owner is in the process of modifying Missouri River Levee Units R-613 and R616 (collectively “the Levee Systems”) to meet Federal Emergency Management Agency (“FEMA”) accreditation requirements. The Levee Systems are also in the U.S. Army Corps of Engineers (“USACE”) PL 84-99 Rehabilitation Program. USACE Section 408 authorization is a process required to alter the federal levee system. This Section 408 authorization requires additional requirements that must be met, including a Type II, Independent External Peer Review, Safety and Assurance Review (“IEPR”). The purpose of the IEPR is to ensure that good science, sound engineering, and public health, safety and welfare are incorporated into the design and eventual construction of modifications federally constructed projects. The IEPR includes a review of the design activities prior to the construction phase and periodically thereafter until the construction activities are completed.

The original agreement (executed May 20, 2013) and Amendment #1 (executed January 16, 2018) authorized JEO Consulting Group to provide the IEPR through the design phase. Five (5) reviews were performed by the Engineer on the Levee Systems to coincide with the 60%, 90% and three reviews of the 100% design submittals. The design submittals and available DrChecks comments from Omaha District USACE were reviewed by the Engineer at each stage. The Engineer provided review comments and IEPR reports to the Owner to facilitate USACE submittals in April 2017 and May 2018.

Since May 2018 the Owner has bid the project and is proceeding with construction. The purposes of this amendment is to authorize the IEPR team to provide review and coordination during the project construction phase in accordance with USACE EC 1165-2-217, “Review Policy for Civil Works” dated February 20, 2018.

Task 1: Preconstruction Site Visit and Establish Critical Construction Milestones

- The IEPR team will perform a preconstruction site visit with the construction plans in hand. Following the site visit, the IEPR team will discuss and establish critical construction milestones for the project and recommended appropriate IEPR



involvement. Recommended critical construction milestones and recommended IEPR involvement will be provided to the Owner via memo.

Task 2: Monthly IEPR Team Coordination and Construction Updates

- One member of the IEPR team will serve as the designated IEPR point of contact (POC) during construction. It is understood that there are weekly meetings planned between the contractor, designer and Owner. The IEPR POC or other team member will attend one (1) construction progress meeting each month during the construction season. The IEPR POC will brief the IEPR team to keep the team abreast as to the overall construction progress and impending critical construction milestones. Relevant feedback will be coordinated with the Owner.

Task 3: Bi-Monthly IEPR Team Construction Update Meeting

- Every other month, the IEPR POC will coordinate a meeting/conference call with the IEPR team. The purpose of this meeting is to provide a more in-depth construction debriefing to the IEPR team, allow the team to ask questions, provide for discussion on critical aspects of construction, and potential issues to pass on to the Owner. Relevant feedback will be coordinated with the Owner.

Task 4: Critical Construction Milestones Site Visit

- While critical construction milestones will be established following the preconstruction site visit, for this task we have assumed two (2) site visits by the entire IEPR team. These site visits may or may not be necessary and the actual attendees will be determined based on the critical construction milestones established and construction progress. Relevant feedback will be coordinated with the Owner and a memo will be developed documenting the visit.

Task 5: Review of Proposed Construction Changes / Modifications and Testing Results

- The primary focus of this task is to evaluate any proposed construction changes and those which were identified during design as to-be-determined during construction. The evaluation would be similar in scope/purpose as those completed during design to assure public health, safety and welfare. While it is difficult to estimate the level of effort necessary prior to issues arising, we have established an assumed level of effort for each IEPR team member. This is based on discussions with the Owner that up to 20% of the system may require a review based on potential design updates or those required due to the March 2019 flooding. We have assumed 40 hours each for the IEPR team members.
- This task also includes the review of construction materials tests and test results by the appropriate IEPR team member. An assumed level of effort for various IEPR team members was developed for this scoped task.



Task 6: Review of Updated Operation and Maintenance Manual

- The primary focus of this task is to review updates to the Operation and Maintenance Manual to assure public health, safety and welfare. An assumed level of effort for various IEPR team members was developed for this scoped task.

Task 7: Final IEPR Memorandum

- Upon completion of the project construction and Operation and Maintenance Manual update the IEPR team will complete a Final IEPR Construction Memorandum which will contain the team's summary of the IEPR activities during and after construction. It is anticipated that the memorandum will contain the following information:
 - Summary of preconstruction Site Visit
 - List of critical construction milestones
 - Summary of construction changes and modifications
 - Summary of IEPR questions, comments, and design team responses during construction and Manual updates
 - IEPR Panelists who performed the review

Task 8: Project Management and Quality Control

- Project management throughout the extended duration will be maintained on a regular basis to inform the Owner of budget, schedule, and milestones. This includes general project administration, and monthly progress reports to be included with billing statements. Internal quality control will be completed for all deliverables.

ADDITIONAL SERVICES NOT INCLUDED

- A. Additional reviews and meetings not described
- B. Additional site visits by the IEPR team

PROJECT SCHEDULE

The review of submittals will be coordinated with the Owner and designer to provide timely feedback where necessary. The overall construction schedule is currently planned through December 2020; the this scope and schedule will be adjusted as necessary based on any modifications to the overall construction and project schedule.



AMENDMENT FEE

Project Phase: Construction	
Task 1: Preconstruction Site Visit and Establish Critical Construction Milestones	\$19,230.00
Task 2: Monthly IEPR Team Coordination and Construction Updates	\$22,660.00
Task 3: Bi-Monthly IEPR Team Construction Update Meeting	\$22,930.00
Task 4: Critical Construction Milestones Site Visit	\$20,410.00
Task 5: Review of Proposed Construction Changes / Modifications and Testing Results	\$47,850.00
Task 6: Review of Updated Operation and Maintenance Manual	\$7,190.00
Task 7: Final IEPR Memorandum	\$10,270.00
Task 8: Project Management and Quality Control	\$11,050.00
Estimated Travel/Reimbursable Expenses	\$6,500.00
Total This Amendment # 2	\$168,090.00

TOTAL PROJECT FEE

INITIAL CONTRACT – May 2013	\$207,756.00
AMENDMENT #1 – January 2018	\$69,618.00
Estimated Budget Remaining 30 April 2019*	\$37,000.00
AMENDMENT #2 – This Amendment	\$168,090.00

*As of April 30 2019 there is approximately \$37,000 remaining in the current contract (Original plus Amendment #1). This \$37,000 will be carried forward for use in the overall scope, including Amendment #2. Therefore, the net amended fee for Amendment #2 is \$131,090 (\$168,090 - \$37,000). The total amended fee after this existing available budget is accounted for is \$408,464 (\$277,374 + \$131,090).

TOTAL AMENDED FEE: \$408,464.00

Owner will be billed monthly for services to date. Invoices are due upon receipt. JEO will provide additional services at your request based on a current hourly rate schedule.

**R-613 and R-616-613 Levee System IEPR Type II - Construction Review
Detailed Fee Schedule**

Tasks	STAFF								
	LJ	BW	DF	RF	WW	JJ	KK	JS	staff
	Project Manager	Team Leader	H+H Engineer	Sr Geotech Engineer	Geotech Engineer	Sr Structural Engineer	Sr Civil Engineer	Sr Civil/Mech Engineer	Admin Assistant
1. Pre-Construction IEPR Site Visit - Establish Critical Construction Milestones	8	16	16	4	16	16	8	8	2
2. Monthly IEPR Team Coordination and Updates (20 months of Construction)	8	8	60	4	8	8	8	8	4
3. Bi-Monthly IEPR Team Construction Update Meeting (20 months of Construction)	8	8	20	2	8	8	8	8	4
1. Review of Construction Material Testing			4	4	16	8	8		2
4. Critical Construction Milestones IEPR Visit (2 Visits)	8	16	16	2	16	16	12	12	2
5. IEPR Team Review of Proposed Construction Changes / Modifications	20	40	40	10	40	20	40	20	10
6. Review of Updated O&M Manual	2	4	8		8	2	8	2	4
7. Final IEPR Construction Memorandum	4	12	20		4	2	4	2	6
8. Project Management and Quality Control (20 months of Construction)	10	10	30						10
Total Hours	68	114	214	26	116	80	96	60	44
Average Billable Rate	\$225	\$215	\$190	\$200	\$190	\$235	\$200	\$195	\$95
Total Cost	\$15,300	\$24,510	\$40,660	\$5,200	\$22,040	\$18,800	\$19,200	\$11,700	\$4,180

Travel Expenses:	\$6,000
Misc. Expenses :	\$500
Labor Costs:	\$161,590
Estimated Total Project Cost :	\$168,090