

Agenda Item: 7.

MEMORANDUM

TO: Programs, Projects & Operations Subcommittee

FROM: Lori Ann Laster, Stormwater Management Engineer

SUBJECT: Review and Recommendation on Amendment 6 to Professional Services Contract with HDR for Papio Dam Site 15A

DATE: October 5, 2016

Construction on Papio Dam Site 15A (DS15A) began in May 2015. The original construction schedule anticipated that the dam and park improvements would be substantially completed by October 1, 2016 with a final completion date of December 1, 2016.

However, several factors outside of the contractor's control have affected the construction schedule. Utility lines on the existing Ida Street Bridge were not removed by Verizon prior to their May 1 deadline which resulted in a delay to access by McArdle Grading Company (MCG). During this time, a bird's nest was found near the bridge and construction was halted until the nest was fledged. In addition to these issues, construction has been delayed due to a loss of 114 days due to 77 inches of rain since May 1, 2016.

The construction schedule has now been revised to have substantial completion on July 1, 2017 and final completion on September 1, 2017. The time extension for the contractor will increase the amount of time necessary for HDR's Resident Project Representative to be on site for construction observation. HDR's proposed professional services contract amendment No. 6 is attached. HDR estimates that the RPR will need 1,780 hours to provide observation services until completion of construction. Due to work delays, 1,190 hours are remaining in the original contract, therefore the additional time needed is 590 hours. There will also be additional construction meetings, permit coordination, and contract administration activities HDR will be required to complete. These tasks result in an increase of \$191,738 to HDR's hourly not-to-exceed contract.

Management recommends that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute for and on behalf of the District contract Amendment 6 to HDR's Professional Service Contract for the Papio Dam Site 15A project in the amount of \$191,738, bringing the total not-to-exceed contract amount to \$3,997,287, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.



Sent Electronically on October 4, 2016

October 4, 2016

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

RE: Dam Site 15A and Associated Improvements Phase III - Construction Administration Services
Contract Extension for Construction Services Amendment No. 6

Dear John:

HDR Engineering, Inc. is pleased to submit the attached Amendment No. 6 to our Agreement to extend our construction administration services at the Dam Site 15A project to December 31, 2017. The construction contract has been extended due to delays beyond the control of the contractor for the construction of the Ida Street bridge and roadway. Construction was delayed as a result of utility relocations, additional stabilization required at the Ida Street bridge and weather conditions.

The majority of the costs associated with the time extension are for the resident project representative (RPR). Our RPR has been providing full-time observation, observing multiple construction activities during the day, and when required additional staff is called to observe critical activities. This amendment accounts for only additional RPR hours that exceeded our original estimate of 6,928 hours. In addition, an adjustment for an increase in the 2017 RPR hourly rate has also been included. HDR has been reviewing development plans for the Lakeview Point SID and its impact on Dam Site 15A. In Amendment No. 5, effort was limited to 40 hours, which has been expended. This amendment includes an additional 40 hours to review Lakeview Point designs.

The amended agreement is not to exceed the amount of \$191,738. Please print two copies of the Agreement, sign both copies, retain one copy for your records and return the other signed copy for our files.

We look forward to continue working with you on this very important project. If you have any questions, please contact me at 402-399-1078 at your convenience.

Very truly yours,
HDR ENGINEERING, INC.

Laurie Carrette Zook, 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 January 14, 2010.

**AMENDMENT TO OWNER-ENGINEER AGREEMENT
Amendment No. 6**

1. *Background Data:*

- a. Effective Date of Owner-Engineer Agreement: January 14, 2010
- b. Owner: Papio-Missouri River Natural Resources District (P-MRNRD)
- c. Engineer: HDR Engineering, Inc. (HDR)
- d. Project: Dam Site 15A and Associated Improvements

2. *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 A5, "Engineer's Services for Amendment No. 6" and Enclosure A, Subconsultant Proposals.
 - 2) Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses", Appendix 1, shall be amended to include Attachment C5, "Engineer's Fee Estimate".
- b. For the Engineer's Services set forth above, Owner shall pay Engineer the following additional compensation:
 - 1) An amount equal to Engineer's Direct Labor Costs times a factor of 3.15 for the services of Engineer's employees engaged on the Project, plus Reimbursable Expenses, provided however, and notwithstanding anything to the contrary contained in this Agreement, the total amount of money due to ENGINEER for such services and for Reimbursable Expenses and Engineer's Consultant's charges shall not exceed the amount of \$191,738 under this Amendment for Phase III services.

3. Agreement Summary (Reference only)	
a. Original Agreement amount: (Phase I)	\$ 620,300
b. Amendment No. 1 (Phase I)	\$ 102,579
c. Amendment No. 2 (Phase II)	\$ 1,274,762
d. Amendment No. 3 (No Cost Change)	\$ 0
e. Amendment No. 4 (Phase III)	\$ 1,713,111
f. This Amendment No. 5 (Phase III)	\$ 94,797
g. This Amendment No. 6 (Phase III)	\$ <u>191,738</u>
h. Adjusted Agreement amount:	\$ 3,997,287

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. The Effective Date of this Amendment is _____.

OWNER:

ENGINEER:

Papio-Missouri River Natural Resources District

HDR Engineering, Inc.

By: _____

By: 

Print

Print

name: John Winkler

name: Matt Tondl, PE

Title: General Manager

Title: Senior Vice President

Date Signed: _____

Date Signed: 10/4/16

This is **EXHIBIT A**, consisting of 6 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated January 14, 2010.

Engineer's Services

AMENDMENT NO. 6

**Dam Site 15A
for Papio-Missouri River Natural Resources District
Douglas County, NE**



**ENGINEERING PROPOSAL – PHASE III CONSTRUCTION CONTRACT
ADMINISTRATION SERVICES DUE TO CONSTRUCTION SCHEDULE EXTENSION**



BACKGROUND AND BASIS OF PROPOSAL

HDR Engineering, Inc. was requested to provide additional construction administration services for the Dam Site 15A Project. The Contractor's construction schedule has been extended to complete the Ida Street bridge and roadway improvements. Construction was delayed as a result of utility relocations, additional stabilization required at Ida Street Bridge and weather conditions.

The Agreement between P-MRNRD and McArdle Grading had a substantially completion date on or before October 1, 2016 and final completion by December 1, 2016. A change order was issued to change the substantial completion date to July 1, 2017 and the final completion to September 1, 2017. HDR's original agreement with P-MRNRD was for 24 months or between April 14, 2015 to April 14, 2017, with an 18 month construction period of May 1, 2015 to December 1, 2016. This amendment extends the contract time from April 14, 2017 to December 31, 2017 or 8-1/2 months.

SCOPE OF SERVICES – ADDITIONAL CONSTRUCTION ADMINISTRATION

As a result of the construction time extension, HDR will perform additional construction administration services for the following task series:

- Task Series 100 – Project Management (Amendment No. 4)
- Task Series 400 – Construction Contract Administration Services (Amendment No. 4)
- Task Series 100 – Design and Construction Coordination (Amendment No. 5)

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:

- The contract extension is for construction administration services to be conducted between April 14 and December 31, 2017.

MODIFY TASK SERIES 400 CONSTRUCTION CONTRACT ADMINISTRATIVE SERVICES

Task Objectives:

To provide construction contract administration services.

HDR Activities:

Task 410 Records and Reports. Document construction activities.

410.1 Field Book etal. Maintain field book as the official Construction Contract Document and readily accessible by P-MRNRD. HDR to maintain field book to record weather conditions; daily activities; decisions; and general observations. This includes payment application verification, maintaining QC test results, maintaining photographic documentation, and project filing.

410.2 Weekly Report Summaries. HDR will prepare a weekly report summarizing the daily activities.

410.4 Payment Application Verification. Contractor will prepare monthly payment application and HDR to verify quantities. HDR will review and recommend payment.

Task 420 Construction Contract Support.

420.6 Construction Meetings. HDR to facilitate periodic construction conferences with the Construction Contactor to discuss schedule, planned activities and other related work. It is assumed that the Engineer will attend the bi-weekly construction meetings (16 conferences are assumed) at the same time that Engineer visits the site for observations. Agenda will be prepared by the HDR prior to the conference and conference notes will be prepared by the HDR.

Task 430 Permit Compliance Support.

430.1 SWPPP Compliance Monitoring. Conduct minimum of weekly site visit to the site and prepare report on BMP performance. Submit on PWCP website.

430.3 Migratory Bird Survey. Provide bird survey during the nesting season for migratory birds (April 1 to July 15).

Task Deliverables:

- Field Book and Quantity Book
- Weekly construction reports
- Payment applications
- SWPPP reports
- Bird Survey reports

Key Understandings:

- Duration of additional construction is 8-1/2 months from April 15 to September 1, 2017.
- Full-time resident project representative (RPR) will provide construction quality assurance for the Project. A minimum of 1 RPR will be on site at all times and additional RPR will be used when multiple activities are under construction. The level of construction observation effort in 2017 included in this scope equates to 1,780 hours for the RPR. Approximately 1,190 hours of RPR hours will not be expended in 2016, resulting in a net increase of 590 hours. A 60-hour per week for 24 weeks for 1 RPR plus 100 hours for concurrent work that requires additional field support. Reasonable variations in work days and schedules are anticipated, but no protracted overtime, work stoppages or extended work schedules are assumed.

MODIFY TASK SERIES 100 DESIGN AND CONSTRUCTION COORDINATION

Task Objectives: Coordinate with P-MRNRD and City of Omaha on development issues.

HDR Activities: **Task 130 Lakeview Pointe Development Coordination.** HDR to attend meetings and provide comments on development features that will impact the Main Dam and reservoir. This effort is limited to 40 hours of engineering time.

Task Deliverables:

- Email of Review Comments

Key Understandings:

- LRA, under contract with Lakeview Pointe, is working with the developer in creating a mix-use development.

**PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT
CONSTRUCTION CONTRACT ADMINISTRATION
FEE ESTIMATE - OCTOBER 3, 2016**

HDR Engineering, Inc. Estimated Hours/Costs											Expenses					HDR	Sub-Consultant Estimated Costs				Est. Total Cost	
TASKS	Project Manager	Specialist	Senior Staff	Resource Specialist	Resource Support	Resident Project Rep.	Tech Support	Clerical	Total Hours	Total Labor Cost	Tech. Fee	Printing	Travel	Misc.	Total Expenses [1]	Totals	E&A	Thiele Geotech	R. Donovan	Total Sub-Consult.		
	\$ 218.00	\$ 239.70	\$ 217.30	\$ 172.10	\$ 141.90	\$ 101.80	\$ 104.10	\$ 92.00														
TASK SERIES 100 PROJECT MANAGEMENT																						
Task 110	Project Management	34						17	51	\$8,976	\$189	\$100		\$200	\$519	\$9,495				\$0	\$9,495	
	Estimated Task Hours Subtotal	34	0	0	0	0	0	17	51													
	Estimated Task Cost Subtotal	\$7,412	\$0	\$0	\$0	\$0	\$0	\$1,564		\$8,976	\$189	\$100	\$0	\$200	\$519	\$9,495	\$0	\$0	\$0	\$0	\$9,495	
TASK SERIES 400 CONSTRUCTION CONTRACT ADMINISTRATIVE SERVICES																						
	Adjustment for RPR Hour Rate for Remaining 2017 Hours									\$19,278						\$19,278				\$0	\$19,278	
Task 410	Records and Reports																					
Subtask 410.1	Field Book					590			590	\$60,062	\$2,183		\$12,888		\$16,359	\$76,421				\$0	\$76,421	
Subtask 410.2	Weekly Report Summaries (RPR hrs Included in Subtask 410.1)			20					20	\$4,346	\$74				\$74	\$4,420				\$0	\$4,420	
Subtask 410.4	Payment Application Verification (RPR hrs Included in Subtask 410.1)			32					32	\$6,954	\$118				\$118	\$7,072				\$0	\$7,072	
Task 420	Construction Contract Support																					
Subtask 420.6	Construction Meetings			64	64			32	160	\$27,866	\$592		\$322	\$100	\$1,056	\$28,922				\$0	\$28,922	
Task 430	Permit Compliance Support.																					
Subtask 430.1	SWPPP Compliance Monitoring.				16	200			216	\$31,134	\$799		\$690	\$200	\$1,778	\$32,912				\$0	\$32,912	
Subtask 430.3	Migratory Bird Survey					40			40	\$5,676	\$148				\$148	\$5,824				\$0	\$5,824	
	Estimated Task Hours Subtotal	0	0	116	80	240	590	0	32	1,058												
	Estimated Task Cost Subtotal	\$0	\$0	\$25,207	\$13,768	\$34,056	\$60,062	\$0	\$2,944		\$155,315	\$3,915	\$0	\$13,900	\$300	\$19,534	\$174,849	\$0	\$0	\$0	\$0	\$174,849
TASK SERIES 100 DESIGN AND CONSTRUCTION COORDINATION																						
Task 130	Lakeview Pointe Development Coordination			8	32				40	\$7,246	\$148				\$148	\$7,394				\$0	\$7,394	
	Estimated Task Hours Subtotal	0	0	8	32	0	0	0	40													
	Estimated Task Cost Subtotal	\$0	\$0	\$1,738	\$5,507	\$0	\$0	\$0		\$7,246	\$148	\$0	\$0	\$0	\$148	\$7,394	\$0	\$0	\$0	\$0	\$7,394	
	TOTAL HOURS	34	0	124	112	240	590	0	49	1,149												
	TOTAL COST	\$ 7,412	\$ -	\$ 26,945	\$ 19,275	\$ 34,056	\$ 60,062	\$ -	\$ 4,508		\$ 171,536	\$ 4,251	\$ 100	\$ 13,900	\$ 500	\$ 20,201	\$ 191,737	\$ -	\$ -	\$ -	\$ -	\$ 191,738

[1] Includes administrative fee for expenses (except techn. fee) @ 10%

Givens:

Original Agreement between P-MRNRD and McArdle Grading is Substantially completed on or before October 1, 2016 and Final completion by December 1, 2016.
Original Agreement between HDR and P-MRNRD for 24 months or from April 14, 2015 to April 14, 2017. With 18 month construction period of May 1, 2015 to December 1, 2016.
Contract with McArdle Grading Change Order: Substantial Completion July 1, 2017 and Final Completion is September 1, 2017
Extend HDR's contract time from April 14, 2017 to December 31, 2017.

Assumptions:

McArdle Grading Schedule dated September 8, 2016 has 2017 work as: Ida Street superstructure, Ida Street Road and trail tie-ins.
Additional RPR Time:
Additional RPR time for 2017 work as follows: average 6 days week for 10 hours/day or 60 hr/week + 100 hours of additional RPR for multiple concurrent activities
Weeks of construction in 2017 - 2 wks in January, 0 wks in February, 4 in March, 4 in April, 5 in May, 4 in June, 5 in July, 4 in August for total of 28 weeks
2017 RPR hours = 60 hr/week * 28 weeks + 100 additional RPR = 1,780 hours.
Number of RPR hours in Amendment No. 5 was 6,928 hours. As of September 24, 2016, 4,900 of RPR hours have been expended. Estimate of RPR until Dec 31, 2016 is 840 hours for a total of 5,740 hours, leaving 1,188 hours (say 1,190) of RPR.
Total additional hours need for 2017 work is 1,780-1,190 or 590 hours
Additional increase in RPR rates from 2015 to 2017 is \$16.20 (\$101.80-\$85.60). Increase due to RPR rate adjustment for remaining 2017 hours is \$16.20 * 1,190 or \$19,116.
SWPPP Monitoring Dec 2016 to November 2017 48 weeks * 4 hr/week or 192 hours, say 200 hours
Project Management extends 8-1/2 months (April to December 2017).