Agenda Item: 6.

MEMORANDUM

TO: Little Papio Channel Stabilization Project

Ad Hoc Consultant Selection Subcommittee

FROM: Martin P. Cleveland, Construction Engineer

SUBJECT: Little Papio Channel Stabilization Project

Agreement for Professional Services with HDR Engineering

DATE: August 4, 2016

On July 7, 2016, the Ad Hoc Subcommittee interviewed and selected HDR Engineering (HDR) to provide the professional services for Little Papio Channel Stabilization Project. On July 14, 2016, the Board of Directors authorized negotiations with HDR. District staff and HDR representatives have worked together to prepare the enclosed scope of services, schedule and cost estimate for this project.

HDR will be responsible for providing project management, preliminary design, permitting, final design and construction administration for stabilizing eleven (11) locations of slope instability (sloughs) of the Little Papio Channel Stabilization Project.

The total fee for this work is on an hourly rate basis and a not to exceed amount of \$398,228.00, as provided for in the attached agreement.

Management recommends that the Little Papio Channel Stabilization Project Ad Hoc Consultant Selection Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute the proposed Professional Services Agreement with HDR Engineering for the Little Papio Channel Stabilization Project for the maximum not to exceed amount of \$398,228.00, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.

18316 MC:pb file 532

For Papio-Missouri River Natural Resources District Little Papillion Creek Channel Stabilization Project Douglas County, NE

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT OMAHA, NE

ENGINEERING PROPOSAL

BACKGROUND AND BASIS OF PROPOSAL

The purpose of this effort is to provide engineering evaluations and analysis, final design services, permitting services, and construction observation and administration for eleven (11) locations of slope instability along the Little Papillion Creek channel as identified by P-MRNRD staff between Pratt Street and Q Street in Omaha. The locations are listed in Table 1.

Table 1. Slope Instability Locations

Location	Station
Pratt Street to Blondo Street	73+50R
	76+00L
	78+00R
	89+50L
Blondo Street to Western Avenue	108+00R
	132+50R
	132+50L
Western Avenue to Cass Street	145+00L
Cass Street to 72 nd Street	217+50R
72 nd Street to Center Street	270+50R
Center Street to Q Street	383+00R

SCOPE OF SERVICES - Little Papillion Creek Channel Stabilization

The objective of this Project is to provide professional services to the P-MRNRD. The scope of work is segmented into seven (7) task series:

Task Series 100 – Project Management

Task Series 200 – Engineering Evaluation and Analysis

Task Series 300 - Preliminary and Final Design

Task Series 400 – Permitting

Task Series 500 – Bidding Assistance

Task Series 600 - Construction Contract Administration

Task Series 700 – Channel Instability Evaluation and Design Guidelines

The HDR Team proposes to provide the following professional services.

TASK SERIES 100 - PROJECT MANAGEMENT

Task Objectives:

Coordinate work effort, administer contract, and provide quality control.

HDR Activities:

<u>Task 110 Project Management.</u> Conduct general project management tasks. Includes development of project initiation forms including the development of a project management plan, monthly invoicing, monthly progress reports, project close out activities and other administration project activities.

<u>Task 120 Meetings.</u> Conduct coordinating meetings to discuss Project tasks and present findings.

- Kickoff meeting with P-MRNRD staff.
- Meetings with P-MRNRD staff after engineering evaluation and analysis to discuss results.
- Meetings after development of contract documents;

Task Deliverables:

- Monthly invoices and progress reports.
- Meeting agenda and notes.

Key Understandings:

• Coordination Meetings will be held at the offices of the P-MRNRD, USACE, or at the Project site.

TASK SERIES 200 - ENGINEERING EVALUATION AND ANALYSIS

Task Objectives:

HDR will evaluate the channel instability at each of the eleven (11) locations along Little Papillion Creek, collect data, perform a limited geotechnical investigation, install monitoring well(s) where appropriate, and prepare a technical memorandum presenting a summary of findings and a recommended course of action.

HDR Activities:

<u>Task 210 Data Collection.</u> Collect and review existing information and conduct site visits as needed throughout the work.

<u>Subtask 210.1 Data Collection and Review.</u> Collect and review existing information including:

- Historical site and aerial photographs.
- Preconstruction and as-built drawings and photographs.
- U.S. Army Corps of Engineers' Little Papillion Creek Channel Improvement Project Operation and Maintenance Manual.
- Discussions with U.S. Army Corps of Engineers regarding the history of instability along the channel.
- Results of any available geotechnical information, grading and building plans.
- Survey a typical section in the vicinity of the channel instability area to locate the limits of cracks, sloughs, and locate any surface features (i.e. trails, culverts, etc.).
 The survey will be tied into the USACE Little Papillion Creek Channel Improvement stationing. The survey will be conducted under sub-contract to Lamp Rynearson and Associates (LRA) of Omaha, NE, per the scope in Attachment A.

<u>Subtask 210.2 Site Visits.</u> Conduct up to six (6) site visits to evaluate existing conditions and site constraints.

<u>Task 220 Geotechnical Investigation and Well Installation.</u> Evaluate the subsurface characteristics of the site.

A geotechnical investigation will only be conducted at 217+50R under sub-contract to Thiele Geotech of Omaha, NE, in accordance with the scope in Attachment B. This investigation will include one (1) exploratory test boring to retrieve samples of the subsurface soils. The purpose of this task is to develop an understanding of the subsurface conditions and to prepare a subsurface profile that may assist in the evaluation of the seepage and stability issues. In addition, this boring will be converted to a monitoring well

as a means to measure water levels and artesian pressures that may be present in the underlying alluvial sands.

Perform laboratory tests on the samples obtained during drilling. Conduct the following tests:

- 6 Atterberg limits
- 6 sieve analysis with hydrometer
- 10 density and moisture contents

<u>Task 230 Summary of Findings and Recommended Course of Action.</u> Prepare a technical memorandum providing a summary of findings of the background data review and geotechnical investigation results, and recommend a course of action for all sites with the exception of Station 270+50R. A preliminary geotechnical investigation, including site survey and implementation of a monitoring well, is currently being developed under a separate contract.

Deliverables:

Technical Memorandum.

Key Understandings:

- P-MRNRD or USACE will provide as-built drawings for the channel improvements, repairs and any other improvements at the instability locations.
- P-MRNRD will provide the USACE summary of the recent field visit with P-MRNRD staff.
- P-MRNRD will provide results of all USACE geotechnical investigations (borings, lab test reports, instrumentation data, and photographs) if available.
- P-MRNRD to provide access to/across private property for site visits and geotechnical investigation.
- The geotechnical information will accompany the Section 408 submittal. No separate final geotechnical report will be prepared.
- All deliverables will be electronic. No hard copies will be printed.
- An evaluation of potential contamination on or near the site is not included, but can be provided as Additional Services.
- If it is determined that more than one boring is required, it will be provided as Additional Services.

TASK SERIES 300 - PRELIMINARY AND FINAL DESIGN

Task Objectives:

HDR will perform slope stability evaluation and analysis for the existing condition and the proposed stabilization measure at each of the eleven (11) locations. HDR will also develop draft and final design details of the proposed stabilization measures

HDR Activities:

<u>Task 310 Preliminary Design.</u> Prepare preliminary design drawings. Drawings to be prepared in AutoCAD, Version 2014 format. A preliminary list of sheets for each set of contract documents (3) may include:

- Cover Sheet
- Site Plan (1 sheet per site)
- Typical Sections/Typical Details (2 sheets per site)

<u>Subtask 320 Final Design</u>. Prepare final design drawings and technical specifications. Specifications will be based on EJCDC three part technical specification. Prepare opinion of approximate construction cost.

Deliverables:

Preliminary Design Documents (drawings, technical specifications)

• Final Design Documents (drawings, technical specifications, opinion of approximate construction cost)

Key Understandings:

- The purpose of the design is to stabilize the channel where slope distress has occurred at the eleven (11) sites identified by P-MRNRD staff. Any modifications to the design concept after work has been completed resulting from unforeseen changes in soil conditions or requirements will be considered Additional Services.
- One set of contract documents will be developed for the sites listed in Table 1. If it is determined that additional contract documents are required, that work effort will be provided as Additional Service.
- Drawings will be 11"x17" format.
- LRA as a subconsultant will provide pre-construction topographic survey and legal description for ten (10) of the eleven (11) sites, per the Scope in Attachment A. This information will be used for design and development of quantities.
- P-MRNRD will provide front end bidding documents. HDR to provide the technical specifications. HDR will compile the contract document. Five (5) hard copies will be printed.
- All plans and specification deliverables will be electronic. No hard copies will be printed.
- Schedule is based on obtaining permits in a timely fashion. If obtaining permits are delayed, bidding and construction will be delayed.

TASK SERIES 400 – PERMITTING

Task Objectives:

Assist P-MRNRD in coordinating with regulatory agencies, and developing necessary documentation for submission of Section 404 permitting and Section 408 approval.

HDR Activities:

<u>Task 410 Agency Coordination.</u> Conduct a pre-application meeting with USACE to discuss compliance with Section 404 of the Clean Water Act.

<u>Task 420 Wetland Delineation.</u> Perform wetland delineations for all instability locations. A delineation report will be prepared. No stream or wetland functional assessments will be performed.

<u>Task 430 Section 404 Documentation.</u> Prepare Pre-Construction Notification authorization under the Nebraska Regional General Permit (NE 1998-11497).

<u>Task 440 Section 408 Documentation.</u> Prepare a Section 408 submittal to USACE indicating that the integrity of the flood control channel will be maintained during and after construction. The 408 submittal will include the following items:

- Project description of existing condition and proposed stabilization measure.
- Slope stability and material compatibility evaluation.
- Results of the geotechnical investigation.
- Statement that the proposed stabilization measures will not impact the integrity of the channel improvement project during and after the proposed construction.
- Preliminary design plans. Final plans will be provided upon acceptance of the Section 408 submittal.
- Draft and final specifications for construction.
- Requirements for the contractor's Emergency Action Plan.

Deliverables:

- Wetland Delineation Report (Draft, electronic submittal, Final, electronic and hard copy)
- Section 404 Pre-Construction Notifications (Draft and Final)

 Section 408 Submittal. All pertinent geotechnical information and analysis will be included with this submittal.

Key Understandings:

- The pre-application meeting with USACE staff will be attended by two (2) HDR staff;
- One (1) meeting after the Section 404 and Section 408 submittals prior to contract document development will be held with P-MRNRD staff and attended by three (3) HDR staff;
- It is assumed that the existing Regional General Permit (NE 1998-11497) can be used for authorization.
- It as assumed that Section 401 Water Quality Certification will be automatically covered under this Regional General Permit and will be coordinated by USACE.
- If the proposed activities do not comply with the Regional General Permit, it is assumed that the project would qualify for an existing Nationwide Permit (#3 or #13). However, a coordination meeting with USACE would determine if the project qualifies for coverage under either of these Nationwide Permits. Permanent wetland impacts are not anticipated to exceed 0.1 acres and no mitigation would be required.
- No stream or wetland functional assessment would be required.
- The Section 408 submittal will require 3 hard copies and one electronic copy or a CD.
- It is assumed that only a technical review from USACE is required and no NEPA documentation will be required. If NEPA documentation is required, it will be provided as an Additional Service.
- The Section 408 submittal to the USACE may take 6 to 8 weeks for review or longer depending on staff availability.
- It is assumed that USACE will not require Section 106 documentation support by P-MRNRD.
- It is assumed that a City of Omaha Post Construction Stormwater Management Plan permit is not required.
- P-MRNRD is exempt from city and county zoning and building regulations including floodplain permitting regulations. Relevant submissions to the City should state that they are for information only.
- It is assumed that the total area disturbed by grading is less than 1 acre and will not require an NPDES permit or City of Omaha grading permit.
- P-MRNRD will provide the most recent HEC-RAS model of Little Papillion Creek which is considered the best available information. The model will be executed, and channel hydraulic parameters will be used in support of performing the hydraulic evaluation in support of the Section 408 submittal. It is assumed the proposed design will reestablish channel cross-sections to conditions that existed when the floodplain was delineated and no additional hydraulic modeling will be required. If additional hydrologic/hydraulic modeling is required, it can be provided as Additional Services.

TASK SERIES 500 - BIDDING ASSISTANCE

Task Objectives:

Assist P-MRNRD in preparing the invitation for bids, attend the pre-bid meeting, provide replies to prospective bidder inquiries, attend the bid opening, assist with review of the bids received, and prepare a recommended action for P-MRNRD Board consideration.

HDR Activities:

<u>Task 510 Bid Modifications.</u> Receive and respond to questions from plan holders concerning interpretations of the bidding procedure. HDR to provide technical interpretations on the design. Inquiries that can be addressed by referring to information in the Bidding Documents will be recorded in telephone conservation records. Address inquiries that require a modification of the Bidding Documents by preparing an addendum item. HDR to prepare appropriate addenda for P-MRNRD distribution.

<u>Task 520 Pre-Bid Meeting.</u> Attend pre-bid meeting with prospective bidders. Prepare agenda and notes for the pre-bid portion of the meeting. Address inquiries that require a modification of the Bidding Documents by preparing an addendum item.

<u>Task 530 Bid Opening.</u> Attend the Bid Opening to assist in the initial screening of bids regarding Bidder's use of required Bid Forms, inclusion of Bid Security and inclusion of other qualifying information to accompany the Bid. Tabulate bids. Evaluate bids and prepare a letter of recommendation.

Task Deliverables:

- Electronic copy of addenda(um) to be distributed by P-MRNRD to all plan holders.
- Pre-bid meeting agenda and minutes.
- Tabulation of bids and letter of recommendation of award.

Key Understandings:

- HDR will be the issuing office in the bidding documents for questions and will coordinate with P-MRNRD on responses.
- P-MRNRD is responsible for bid solicitation.
- HDR is responsible for document distribution (including addendum) and bid opening.
- P-MRNRD is responsible for advertising the project and payment of any fees.
- Bidding assistance is for one (1) set of contract documents and one (1) contractor. If it is determined that separate contract documents are required for one or more sites, bidding assistance associated with that work effort will be provided as additional service.

TASK SERIES 600 - CONSTRUCTION ADMINISTRATION

Task Objectives:

Provide full-time on-site observation and document construction activities.

HDR Activities:

Task 610 Preconstruction Meeting. Assist P-MRNRD with organizing and holding a preconstruction meeting. The meeting will be attended by representatives from HDR, P-MRNRD, Contractor, and other interested parties. The main purpose of the meetings will be to establish lines of communication, discuss areas of responsibility, establish operational constraints, and to discuss and clarify items.

<u>Task 620 Shop Drawing Review.</u> Review shop drawings and samples for compliance with contract documents.

Task 630 Construction Observation. Conduct full-time on-site observation of work in progress to determine if work is generally proceeding in accordance with the Contract Documents. Anticipated duration of construction is 55 working days from contractor mobilization. The level of construction observation effort included in this scope equates to 550 hours (10-hour days for 55 days) for a full-time resident project representative (RPR) for the anticipated duration. Reasonable variations in work days and schedules are anticipated, but no protracted overtime, work stoppages or extended work schedules are anticipated. A geotechnical engineer will observe the start of construction and will provide periodic visits to observe the progress of the construction. If the construction schedule exceeds the estimated effort, all parties agree that the contract will be adjusted.

The following activities are to be conducted:

- Conduct a construction kickoff meeting.
- Conduct up to ten (10) construction progress meetings.
- Provide clarifications and interpretations of Contract Documents to Contractor.

- Assist in negotiating change orders.
- Maintain files for correspondence, shop drawings and samples, change orders and other project related documents.
- Maintain log book to record working days; weather conditions; weekly activities; decisions; and general observations.
- Review and verify applications for payment with Contractor. HDR will provide a recommendation and forward payment application to P-MRNRD.
- Conduct a substantial completion inspection and submit a list of observed items requiring completion or correction. After items on list have been completed or corrected, HDR to issue Certificate of Substantial Completion.
- Conduct a final inspection and submit a list of observed items requiring completion or correction. After items on list have been completed or corrected, HDR to review final payment application.

<u>Task 640 Construction Closeout.</u> Compile construction documentation and prepare record drawing, which will be the final record drawings, corrected to reflect field conditions observed and changes documented by the contractor during the construction period. An addendum to the Operations and Maintenance (O&M) Manual for the Little Papillion Channel Improvement Project will be prepared and submitted to USACE.

Task Deliverables:

- Construction documentation
- · Record drawings
- Addendum to O&M Manual

Key Understandings:

- LRA will provide post-construction topographic survey.
- LRA will provide construction staking.
 - Grade staking provide lath along proposed new grades at approximate 50 foot spacing;
 - Provide lath at location of stone filled trenches;
 - O Place lath adjacent to the existing bike path at 100-foot intervals with USACE stationing for reference of field personnel. It is assumed that a total of two trips, 4 hours per trip, will be required by the survey crew, and one trip for initial grading and one trip for verification or checks. Re-staking required as a result of Contractor's actions will be considered Additional Services;
- HDR will provide LRA with an AutoCAD model of the proposed design for use with staking of the items listed above.
- Horizontal datum will be Nebraska State Plane.
- Vertical datum will be NAVD 88.
- The Contractor will be responsible for marking up a set of drawings as changes are identified. Upon completion of construction, the marked-up drawings will be used in making "record" revisions to the original drawings.
- It is assumed that the construction for the eight (8) sites located north of Cass Street and the one (1) site south of L Street will take five (5) weeks, the site located near Station 270+50R will take three (3) weeks, and the site near Station 217+00R will take three (3) weeks, and the construction between sites will not occur concurrently.

TASK SERIES 700 – CHANNEL INSTABILITY EVALUATION AND DESIGN GUIDELINES

Task Objectives:

HDR will develop guidance on the evaluation, analysis, proposed mitigation concepts, and design templates for potential channel instabilities along Little Papillion Creek.

HDR Activities:

<u>Task 710 Analysis</u>, <u>Evaluation</u>, <u>and Mitigation Concepts</u> Prepare a listing of typical channel instabilities, the associated causes, and potential mitigation concepts.

<u>Subtask 720 Design Templates.</u> Prepare a set of design templates for each channel instability type identified in Task 710. Design templates will be prepared for each of the observed modes of failure observed along the Little Papillion Creek, which include:

- Near vertical scarp and sloughing with the sloughed material present along the channel (partial slope failure);
- Near vertical scarp and sloughing without the sloughed material present along the channel (Complete slope failure);
- Slide mass relatively intact and slope movement is minimal.

Templates for the repair of typical channel instabilities can be used by P-MRNRD staff for potential future projects. Variables to be addressed with the design templates are slope height, slope angle, depth of slide, and condition of slide (failed or relatively intact). If artesian pressures are present at the site, a special design will be warranted and will not be included in the design templates. Following completion of the above tasks, a technical memorandum will prepared which will present the results.

Deliverables:

• Technical Memorandum

Key Understandings:

• Depending on the site conditions, a geotechnical investigation may be required to verify some of the design assumptions included in the template.

Appendix B Scope of Services Thiele Geotechnical

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August 1, 2016

Mr. Pat Poepsel, P.E. HDR Engineering, Inc. 8404 Indian Hills Drive Omaha, Nebraska 68114

RE: MONITORING WELL INSTALLATION AND LAB TESTING PAPILLION CREEK, NORTH OF PACIFIC STREET, OMAHA, NEBRASKA

Dear Mr. Poepsel:

Enclosed is our proposal for professional contract drilling services and laboratory testing to be performed at the above-referenced project. The accompanying proposal describes the scope of services that will be provided, the estimated cost, and the contract terms.

Thiele Geotech, Inc. looks forward to working with you on this project. If you have any questions or if there is any additional information that I can provide, please feel free to give me a call. If the accompanying proposal is acceptable, please return a signed copy to our office.

Respectfully,

Thiele Geotech, Inc.

Cody Kimball, E.I.

Professional Contract Drilling Services Proposal Papillion Creek North of Pacific Street Omaha, NE August 1, 2016

Thiele Geotech, Inc. (TG) is pleased to submit our proposal for professional contract drilling services and laboratory testing to be performed at the above referenced site. The following sections detail our proposed scope of services and the estimated cost of these services. The Cost Estimate worksheet is attached in Exhibit A. This proposal will be held open for a period of 45 days from the above date.

PROJECT DESCRIPTION

The project site is identified as Papillion Creek north of Pacific Street in Omaha, Nebraska.

SCOPE OF SERVICES

TG understands that HDR Engineering, Inc. is requesting professional contract drilling services and laboratory testing be provided at the above-referenced project site.

These services are understood to include the installation of one (1) permanent 2-inch diameter monitoring well up to approximately 55 feet below existing ground surface using hollow stem auger drilling methodology. The boring will be advanced by first collecting soil samples on five foot intervals with Shelby tubes in cohesive soil and split-barrel sampler in cohesionless soil within 4.25-inch diameter hollow-stem, continuous flight augers. Cohesive samples will be kept in the Shelby tubes and will be stored in our lab. The split barrel samples will be sealed in ziploc bags and will also be stored in our lab. The well will be completed by installing 15 feet of 0.010-inch machine slotted, 2-inch nominal diameter, schedule 40 PVC well screen in the bottom portion of the well boring. Schedule 40 PVC riser will then be extended to the ground surface for flush mount completion. 12/20 sand pack and bentonite chips will be placed within the annulus to complete the monitoring well. The bottom of the screened section that tips out in clay will be grouted and the clay zone above the anticipated layer will also be sealed to isolate the screen within the sand layer. The monitoring well will be completed as a permanent well with a sealable and lockable cap under 4-inch diameter, lockable, flush mount steel cover.

Following completion of the well, it will be developed utilizing disposable polyethylene bailers.

All drill cuttings will be thin spread on site.

All appropriate paperwork, forms, and/or fees will be completed/provided as necessary.

Soil samples obtained during drilling will be tested according to requested test schedule. These soil tests include moisture contents, unconsolidated undrained triaxial compression tests, hydrometers with sieves, and Atterberg limits. Four of each is planned.

ESTIMATED COST & SCHEDULE

Based on the indicated work scope, the total cost for this project is estimated at \$6,553.50. Actual work performed by TG and authorized by HDR Engineering will be invoiced at the rates indicated on the attached Cost Estimate worksheet.

Approximately one (1) day on-site will be required to complete the professional contract drilling services. TG is very sympathetic to changing schedules based upon client demands or weather conditions; therefore, TG will work with our client to accommodate their schedule.

EXHIBITS

Exhibit A - Cost Estimate

THIELE-GEOTECH, INC.

Robert K. Lapke

13478 Chandler Road

Omaha, Nebraska 68138-3716

402/556-2171 Fax 402/556-7831

8/1/2016

Proposed North Piezometer Papillion Creek & Pacific Street, Omaha, NE

Description	Estimated Quantity	Unit Rate	Estimated Cost
Drilling			
Mobilization (Zone 1)	1.0	140.00	140.00
Environmental Drilling (/day)	1.0	2,000.00	2,000.00
Surface Completion (/hr)	2.0	150.00	300.00
Materials			
2" PVC Wel Screen (/5' stick)	1.0	40.00	40.00
2" PVC Wel Screen (/10' stick)	1.0	60.00	60.00
2" PVC Wel Riser (/10' stick)	5.0	38.00	190.00
2" PVC End Cap (ea.)	1.0	18.00	18.00
2" Locking Cap (ea.)	1.0	29.00	29.00
Well Pack (/bag)	12.0	18.00	216.00
Bentonite Chips (/bags)	2.0	22.00	44.00
Coated Bentonite Pellets (/bucket)	2.0	80.00	160.00
Flush Mount Cover (ea.)	1.0	82.00	82.00
Sack-Crete (/bag)	9.0	12.00	108.00
Bentonite Grout (/bag)	20.0	30.00	600.00
Well Registration Processing			
Well Registration Fees (Nebraska) (/wells)	1.0	80.50	80.50
Environmental Technician (/hr.)	1.0	78.00	78.00
Laboratory Testing			
Hydrometer	4.0	110.00	440.00
Sieves	4.0	75.00	300.00
Atterberg Limits	4.0	80.00	320.00
Moisture Content	4.0	7.00	28.00
Project Management			
Senior Project Geologist	2.0	140.00	280.00
Project Engineer (/hr.)	4.0	110.00	440.00
		Subtotal	5,953.50
Contingency		10%	600.00
		Total =	6,553.50



Omaha, Nebraska 68154 [P] 402.496.2498

[F] 402.496.2730 www.LRA-inc.com

July 27, 2016

EMAIL

Mr. Pat Engelbert HDR Engineering, Inc. 8404 Indian Hills Drive Omaha, NE 68114

Pat.Engelbert@hdrinc.com

REFERENCE:

Proposal for Surveying Services

Topographic Survey 10 areas along Little Papillion Creek

Omaha, Nebraska

Dear Mr. Engelbert:

Lamp, Rynearson & Associates, Inc. (LRA) is pleased to present this proposal to HDR Engineering. Inc. (HDR) to provide surveying services associated with the Little Papillion Creek embankment stabilization project along the Little Papillion Creek from Maple Street to "L" Street. We understand that the scope of our services for this project will be:

TOPOGRAPHIC SURVEY

Perform a topographic survey consisting of the following items:

Locate the limits (top/bottom) of the existing embankment that has separated or sloughed "scarp" at ten (10) areas along the Little Papillion Creek from Maple Street to "L" Street, each survey area identified in the RFP. The survey will show:

- Top Toe of existing Little Papillion Creek on the side of the embankment failure.
- · Edge of water.
- Top-bottom of cracked (scarp).
- Any pipes protruding from the embankment visible at the time of the survey.
- Obtain three cross-sections of the embankment at the beginning, middle and end limits of the scarp (slough area).
- · Rocked areas within the survey limits.

DELIVERABLES

Provide an AutoCAD Civil3D 2014 drawing showing the following:

- 1) Contours at 1-foot intervals.
- 2) Profile sections of the scarp area.
- Stations of the Little Papillion Creek referenced to the COE plans provided to LRA by HDR.
- 4) Control points used for the survey.
- 5) Datum of survey (horizontal and vertical).

LAMP RYNEARSON COMPANIES



LAMP RYNEARSON







MODIFIED VERSION of

Exhibit A – Engineer's Services

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Proposal for Surveying Services Little Papillion Creek July 27, 2016 Page 2 of 3

6) Utilities located during the field survey.

7) Any improvements visible in the area of survey.

CONSTRUCTION STAKING - POST CONTRUCTION SURVEY

Construction staking

 Grade staking – provide lath along the proposed new grades at approximate 50feet spacing;

Provide lath at stone filled trenches (for site 270+50 only – approximately 7 trenches)

 Place lath adjacent to the existing bike path at 50 feet intervals with USACE stationing for reference of filed personnel.

Post construction topographic survey

Upon completion of grading operations perform a topographic survey of the "asconstructed" repair area and provide the same deliverables as provided with the pre-construction surveys.

Our proposal is based on the following assumptions:

1) Horizontal datum will be Nebraska State Plane.

2) Vertical Datum will be NAVD88.

3) LRA will be provided with the COE plans showing the creek stationing prior to commencement of field work.

SCHEDULE

We are prepared to begin work on the project upon the return of the signed proposal and or contract. The field survey will be completed within approximately seven (7) days from the date of commencement dependent upon any weather events, AutoCAD and PDF files will be delivered within two (2) weeks of commencement of the field work.

COMPENSATION

We propose to bill for our services on the basis of hourly charge rates plus reimbursable expenses incurred. For the tasks listed above, our fees will not exceed the following amounts:

Pre-Construction survey

\$ 9,500

Construction staking/Post construction survey

\$11,000

Total \$20,500

Additional services beyond the scope of services outlined above will be billed on the basis of hourly charge rates plus reimbursable expenses incurred.

SUPPLEMENTAL TERMS AND CONDITIONS

This fee estimate is provided to HDR for proposal purposes only, if LRA is selected to provide survey services for this project we will then enter into a professional services agreement with negotiated terms and conditions.

MODIFIED VERSION of

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Proposal for Surveying Services Little Papillion Creek July 27, 2016 Page 3 of 3

We appreciate the opportunity to present this proposal, and we look forward to assisting you in the successful completion of this project. We would be glad to discuss any questions you may have on our proposal. If this proposal is acceptable, we ask that you acknowledge by signing below and returning one (1) signed copy to us.

Sincerely,

Todd L. Whitfield, R.L.S. Principal, Survey Group Leader	
Enclosure	
Accepted By:	
HDR Engineering, Inc.	Date

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Exhibit A - Engineer's Services

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Page 12

Engelbert, Pat

From:

Todd L. Whitfield <Todd.Whitfield@LRA-INC.com>

Sent:

Thursday, August 04, 2016 11:33 AM Engelbert, Pat

To: Subject:

RE: Little Papio Survey

Pat,

Looking at the areas that are to be surveyed for this project and the parcels shown on the Douglas County GIS and also making some assumptions on how they would access the work areas I am estimating that the cost for us to create temporary easement documents (which would include exhibit drawings with legal descriptions) would be approximately \$7000-\$9000.

The work involved would be.

- 1) Searching for existing boundary monumentation and creating a parcel tract map for each owner involved.
- 2) Ordering title searches for the parcels abutting the work areas.
- 3) Creating easement exhibit drawings with legal descriptions (HDR to provide proposed work limits for each

Please call if you have questions.

Thanks

Sincerely,



Todd L. Whitfield, RLS Principal, Survey Group Leader

¥ 402,496,2498 402,496,2730 todd,whitfield@LRA-inc.com \$LRA-inc.com > Lamp Rynearson



From: Engelbert, Pat [mailto:Pat.Engelbert@hdrinc.com] Sent: Friday, July 22, 2016 4:01 PM

To: Todd L. Whitfield < Todd. Whitfield@LRA-INC.com >

Subject: Little Paplo Survey

Todd,

Attached is the RFP for the Little Papio Channel Stabilization project. Please develop a cost estimate to provide survey for 10 of the 11 sites (you have already done site 270+50R). The approximate survey length per site is listed in the attached word document. The scope would be the same as was provided for the Blue Cross Blue Shield site (270+50R).

Have a good weekend.

Patrick J. Engelbert, PE Water Resources Section Manager

HDR

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MODIFIED VERSION of

Exhibit A - Engineer's Services

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	ď	PAPIO - MISSO LITTLE PAI	Exhibit A Appendix 1 PIO - MISSOURI RIVER NATURAL RESOURCES DISTR LITTLE PAPILLION CREEK CHANNEL STABILIZATION SCHEDULE	Exhibit A Appendix RIVER NATURAL RE ON CREEK CHANNE SCHEDULE	Exhibit A Appendix 1 JURI RIVER NATURAL RESOURCES DISTRICT PILLION CREEK CHANNEL STABILIZATION SCHEDULE	RCES DIST	RICT				
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ASK SERIES 1	TASK SERIES 100 – PROJECT MANAGEMENT		888								
Task 110	Project Management										
task 120	Meetings										
ASK SERIES 2	TASK SERIES 200 - DESIGN OF CHANNEL STABILIZATION										
Task 210	Data Collection										
Subtask 210.1	Data Collection and Review										
Subtask 210.2	Site Visits										
Task 220	Geotechnical Investigation and Well Installation		80								
Task 230	Summary of Findings and Course of Action TM										
ASK SERIES 3	TASK SERIES 300 – Preliminary and Final Design				0 N N N N				3 100 3		
Task 310	Preliminary Design										
Task 320	Final Design										
ASK SERIES 4	TASK SERIES 400 – Permitting				0 0 0	N 00 00 00					
Task 410	Agency Coordination		79								
Task 420	Wetland Delineation										
Task 430	Section 404 Documentation										
Task 440	Section 408 Documentation										
ASK SERIES 5	TASK SERIES 500 – BIDDING ASSISTANCE								O OF STREET		
Task 510	Bid Modifications										
Task 520	Pre-Bid Meeting	Y									
Task 530	Bid Opening										
ASK SERIES 6	TASK SERIES 600 - CONSTRUCTION CONTRACT ADMINISTRATION				T. Contraction						
Task 610	Preconstruction Meeting										
Task 620	Shop Drawing Review										
Task 630	Construction Observation										
Task 640	Construction Closeout										

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This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES

Original Version
Prepared by



Issued and Published Jointly by







MODIFIED VERSION

Papio-Missouri River Natural Resources District

A redline comparison copy of this document highlighting the changes made to the original version will be made available to you upon request.

This document is a MODIFIED VERSION of

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This Agreement has been prepared for use with <u>EJCDC® C-700, Standard General Conditions of the Construction</u> <u>Contract, 2013 Edition</u>. Their provisions are interrelated, and a change in one may necessitate a change in the other. For guidance on the completion and use of this Agreement, see EJCDC® E-001, Commentary on the EJCDC Engineering Services Agreements, 2013 Edition.

NOTE: EJCDC publications may be purchased at www.ejcdc.org, or from any of the sponsoring organizations above.

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AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES (P-MRNRD MODIFIED)

THIS IS AN AGREEMENT effective as of	1]			("Effective	e Date") between
Papio-Missouri River Natural Resources District					ē	("Owner") and
[HDR Engineering, Inc.]						("Engineer").
Owner's Project, of which Engineer's services under Little Papillion Creek Channel Stabilization Project		greeme	nt are a	part, is g	enerally ide	ntified as follows:
						("Project").
Other terms used in this Agreement are defined in	Article '	7.				
Engineer's services under this Agreement are ger channel instability, and design, permit, and provi stabilization measures.]					-	·
Owner and Engineer further agree as follows: ARTICLE 1 – SERVICES OF ENGINEER						
1.01 Scope						
A. Engineer shall provide, or ca Exhibit A.	use to	be pro	vided,	the servi	ces set for	th herein and in

ARTICLE 2 - OWNER'S RESPONSIBILITIES

2.01 General

- A. Owner shall have the responsibilities set forth herein and in Exhibit B.
- B. Owner shall pay Engineer as set forth in Article 4 and Exhibit C.
- C. Owner shall be responsible for all requirements and instructions that it furnishes to Engineer pursuant to this Agreement, and for the accuracy and completeness of all programs, reports, data, and other information furnished by Owner to Engineer pursuant to this Agreement. Engineer may use and rely upon such requirements, programs, instructions, reports, data, and information in performing or furnishing services under this Agreement, subject to any express limitations or reservations applicable to the furnished items.

- D. Owner shall give written notice to Engineer as soon as reasonably practicable whenever Owner observes or otherwise becomes aware of:
 - 1. any development that affects the scope or time of performance of Engineer's services;
 - 2. the presence at the Site of any Constituent of Concern; or
 - 3. any relevant, material defect or nonconformance in: (a) Engineer's services, (b) the Work, (c) the performance of any Constructor, or (d) Owner's performance of its responsibilities under this Agreement.

ARTICLE 3 - SCHEDULE FOR RENDERING SERVICES

3.01 *Commencement*

A. Engineer is authorized to begin rendering services as of the Effective Date.

3.02 *Time for Completion*

- A. Engineer shall complete its obligations as expeditiously as is consistent with professional skill and care and the orderly progress of the Project, within a reasonable time. Specific periods of time for rendering services, or specific dates by which services are to be completed, are provided in Exhibit A, and are hereby agreed to be reasonable.
- B. If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's services is impaired, or Engineer's services are delayed or suspended and such changes or delays increase the time of performance of Engineer's services, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- C. If Owner authorizes changes in the scope, extent, or character of the Project or Engineer's services in writing, then Owner shall pay Engineer compensation based on Engineer's normal hourly rates for time actually and necessarily devoted to services rendered in completing the additional services or shall negotiate an agreed upon fixed amount to perform such additional services, and the time for completion of Engineer's services shall be adjusted equitably, as agreed upon in writing by the parties.
- D. Owner shall make decisions and carry out its other responsibilities in a timely manner so as not to unreasonably delay the Engineer's performance of its services.
- E. If Engineer fails, through its own fault, to complete the performance required in this Agreement within the time set forth, as duly adjusted, then Owner shall be entitled, as its sole remedy, to the recovery of direct damages, if any, resulting from such failure in addition to any other remedies to which Owner may be entitled.

ARTICLE 4 – INVOICES AND PAYMENTS

4.01 Invoices

A. Preparation and Submittal of Invoices: Engineer shall prepare invoices in accordance with its standard invoicing practices and the terms of Exhibit C. Engineer shall submit its invoices to Owner on a monthly basis by the last business day of the month. Invoices are due and payable within 45 days of receipt. Notwithstanding anything to the contrary, in no event shall Owner be obligated to make any payment, whether as compensation for services or relating to charges by consultants, reimbursement and/or otherwise, that would result in exceeding the Maximum Amount unless Owner otherwise agrees in a signed written agreement entered into pursuant to this Agreement.

4.02 Payments

- A. Application to Interest and Principal: Payment will be credited first to any interest owed to Engineer and then to principal.
- B. Failure to Pay: Subject to Paragraph 4.02.C, if Owner fails to make any payment due Engineer for services and expenses within 45 days after receipt of Engineer's invoice, then:
 - 1. amounts due Engineer will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day; and
 - Engineer may, after giving seven days written notice to Owner, suspend services under this Agreement until Owner has paid in full all amounts due for services, expenses, and other related charges. Owner waives any and all claims against Engineer for any such suspension.
- C. Disputed Invoices: If Owner disputes an invoice, either as to amount or entitlement, then Owner shall as soon as reasonably practicable advise Engineer in writing of the specific basis for doing so, may withhold only that portion so disputed, and must pay the undisputed portion subject to the terms of Paragraph 4.01. Engineer shall continue performing services while any dispute is pending provided Owner has paid all undisputed amounts. Owner may withhold payment to the extent required to protect Owner from loss arising out of Engineer's performance or failure to perform any services.
- D. Sales or Use Taxes: If after the Effective Date of this Agreement any governmental entity takes a legislative action that imposes additional sales or use taxes on Engineer's services or compensation under this Agreement, then Engineer may invoice such additional sales or use taxes for reimbursement by Owner. Owner shall reimburse Engineer for the cost of such invoiced additional sales or use taxes; such reimbursement shall be in addition to the compensation to which Engineer is entitled under the terms of Exhibit C.

ARTICLE 5 - OPINIONS OF COST

5.01 Opinions of Probable Construction Cost

A. Engineer's opinions (if any) of probable Construction Cost are to be made on the basis of Engineer's experience, qualifications, and general familiarity with the construction industry. However, because Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by Engineer.

5.02 Designing to Construction Cost Limit

A. If a Construction Cost limit is established between Owner and Engineer, such Construction Cost limit and a statement of Engineer's rights and responsibilities with respect thereto will be specifically set forth in Exhibit F to this Agreement.

5.03 Opinions of Total Project Costs

A. The services, if any, of Engineer with respect to Total Project Costs shall be limited to assisting the Owner in tabulating the various categories that comprise Total Project Costs. Engineer assumes no responsibility for the accuracy of any opinions of Total Project Costs.

ARTICLE 6 - GENERAL CONSIDERATIONS

6.01 Standards of Performance

- A. Standard of Care: The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession currently practicing under similar circumstances at the same time and in Nebraska. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with any services performed or furnished by Engineer.
- B. Technical Accuracy: Owner shall not be responsible for discovering deficiencies in the technical accuracy of Engineer's services. Engineer shall correct deficiencies in technical accuracy without additional compensation, unless such corrective action is directly and solely attributable to deficiencies in Owner-furnished information.
- C. Consultants: Engineer may retain such Consultants as Engineer deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objections by Owner.
- D. Reliance on Others: Subject to the standard of care set forth in Paragraph 6.01.A, Engineer and its Consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.

- E. Compliance with Laws and Regulations, and Policies and Procedures:
 - 1. Engineer and Owner shall comply with applicable Laws and Regulations.
 - Owner's policies, procedures, performance standards and other information (collectively, the "Owner Policies") are accessible at http://www.papionrd.org/about-nrd/policies-and-manuals/. Engineer shall comply with any and all such Owner Policies and with any other instructions of Owner relating to Engineer's performance of services under this Agreement that Owner provides to Engineer in writing (collectively with Owner Policies, the "Owner Requirements"), subject to the standard of care set forth in Paragraph 6.01.A, and to the extent compliance is not inconsistent with professional practice requirements.
 - 3. This Agreement is based on Laws and Regulations and Owner Requirements as of the Effective Date. The following may be the basis for modifications to Owner's responsibilities or to Engineer's scope of services, times of performance, or compensation, as applicable:
 - a. changes after the Effective Date to Laws and Regulations;
 - b. the receipt by Engineer after the Effective Date of new or different Owner Requirements.
 - 4. Prior to the Effective Date, Engineer shall promptly notify Owner in writing of any objections to the Owner Requirements or conflicts between the Owner Requirements and Laws and Regulations and the parties shall use their best efforts to resolve such objections or conflicts.
- F. Engineer shall not be required to sign any document, no matter by whom requested, that would result in the Engineer having to certify, guarantee, or warrant the existence of conditions whose existence the Engineer cannot ascertain. Owner agrees not to make resolution of any dispute with the Engineer or payment of any amount due to the Engineer in any way contingent upon the Engineer signing any such document.
- G. The general conditions for any construction contract documents prepared hereunder are to be EJCDC® C-700 "Standard General Conditions of the Construction Contract" (2013 Edition), prepared by the Engineers Joint Contract Documents Committee and amended and/or supplemented by the parties (the "Standard General Conditions"), unless expressly indicated otherwise in Exhibit J or elsewhere in this Agreement.
- H. Engineer shall not at any time directly supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have direct authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Site, nor for any failure of a Constructor to comply with Laws and Regulations applicable to that Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor unless such action or omission is caused in whole or in part by Engineer.

- I. Intentionally deleted.
- J. Engineer shall not be responsible for any decision made regarding the Construction Contract Documents, or any application, interpretation, clarification, or modification of the Construction Contract Documents, other than those made or caused to be made by Engineer or its Consultants or other agents or representatives.
- K. Engineer is not required to provide and does not have any responsibility for surety bonding or insurance-related advice, recommendations, counseling, or research, or enforcement of construction insurance or surety bonding requirements.
- L. Engineer's services do not include providing legal advice or representation.
- M. Engineer's services do not include (1) serving as a "municipal advisor" for purposes of the registration requirements of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) or the municipal advisor registration rules issued by the Securities and Exchange Commission, or (2) advising Owner, or any municipal entity or other person or entity, regarding municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms, or other similar matters concerning such products or issuances.
- N. While at the Site, Engineer, its Consultants, and their employees and representatives shall comply with the applicable requirements of Contractor's and Owner's safety programs. Engineer understands, acknowledges and agrees that Engineer is responsible for ensuring that it, its Consultant, and their employees and representatives are aware and know of the applicable requirements of Contractor's and Owner's safety programs

6.02 Design Without Construction Phase Services

A. Engineer shall be responsible only for those Construction Phase services expressly required of Engineer in Exhibit A, Paragraph A1.05. With the exception of such expressly required services, Engineer shall have no design, Shop Drawing review, or other obligations during construction, and Owner assumes all responsibility for the application and interpretation of the Construction Contract Documents, review and response to Contractor claims, Construction Contract administration, processing of Change Orders and submittals, revisions to the Construction Contract Documents during construction, construction observation and review, review of Contractor's payment applications, and all other necessary Construction Phase administrative, engineering, and professional services; and Owner waives only those claims against the Engineer directly connected thereto.

6.03 Use of Documents

A. All Documents are instruments of service in respect to this Project, and shall become property of Owner without restriction or further limitation on their use, subject to receipt by Engineer of full payment for all services relating to preparation of the Documents and subject to Owner acknowledging that such documents are not intended or represented to be suitable for use on the Project unless completed by Engineer, or for use or reuse by Owner or others on extensions of the Project, on any other project, or for any other purpose, without written verification or adaptation by Engineer or another engineer. Engineer acknowledges that the Project is a public project subject to the Nebraska public record statutes, Neb. Rev. Stat. § 87-712, et seq.

- B. If Engineer is required to prepare or furnish Drawings or Specifications under this Agreement, Engineer shall deliver to Owner at least one original printed record version of such Drawings and Specifications, signed and sealed according to applicable Laws and Regulations. If requested by Owner, at no additional expense, Engineer shall make Documents available in an electronic format to be agreed upon by the parties.
- C. Intentionally deleted.
- D. If Engineer at Owner's request verifies the suitability of the Documents, completes them, or adapts them for extensions of the Project or for any other purpose, then Owner shall compensate Engineer at rates or in an amount to be agreed upon by Owner and Engineer.

6.04 Electronic Transmittals

- A. Owner and Engineer may transmit Project-related correspondence, Documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, in accordance with a mutually agreeable protocol.
- B. If this Agreement does not establish protocols for electronic or digital transmittals, then Owner and Engineer shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

6.05 Insurance

- A. Engineer shall procure and maintain insurance as set forth in Exhibit G. Engineer shall cause Owner to be listed as an additional insured on any applicable general liability insurance policy carried by Engineer with a waiver of subrogation for such additional insureds.
- B. Owner shall procure and maintain insurance as set forth in Exhibit G. Owner shall cause Engineer and its Consultants to be listed as additional insureds on any general liability policies carried by Owner, which are applicable to the Project.
- C. Owner shall require Contractor to purchase and maintain general liability and other insurance in accordance with the requirements of Paragraph 6.03 of the "Standard General Conditions of the Construction Contract," No. C-700 (Rev. 1) as amended and/or supplemented by the parties, and shall cause Engineer and its Consultants to be listed as additional insureds with respect to such liability insurance purchased and maintained by Contractor for the Project.

- D. Owner and Engineer shall each deliver to the other certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates shall be furnished prior to commencement of Engineer's services and at renewals thereafter during the life of the Agreement.
- E. All policies of property insurance relating to the Project shall allow for waiver of subrogation rights and contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insured or additional insured thereunder or against Engineer or its Consultants.
- F. All policies of insurance shall contain a provision or endorsement that the coverage afforded will not be canceled or reduced in limits by endorsement, and that renewal will not be refused, until at least 10 days prior written notice has been given to the primary insured. Upon receipt of such notice, the receiving party shall promptly forward a copy of the notice to the other party to this Agreement.
- G. At any time, Owner may request that Engineer or its Consultants, at Owner's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in Exhibit G. If so requested by Owner, and if commercially available, Engineer shall obtain and shall require its Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by Owner, and Exhibit G will be supplemented to incorporate these requirements.

6.06 Suspension and Termination

A. Suspension:

- 1. By Owner: Owner may suspend the Project upon seven days written notice to Engineer.
- By Engineer: Subject to Paragraph 4.02.C, Engineer may, after giving seven days written
 notice to Owner, suspend services under this Agreement if Owner has failed to pay
 Engineer for undisputed invoiced services and expenses, as set forth in Paragraph 4.02.B,
 or in response to the presence of Constituents of Concern at the Site, as set forth in
 Paragraph 6.10.D.
- B. *Termination*: The obligation to provide further services under this Agreement may be terminated:

1. For cause,

- a. by Owner upon 7 days written notice if Engineer fails to fulfill in a timely and proper manner any of its obligations hereunder. Owner shall be entitled to withhold payment to Engineer until the Project is completed and the damages to Owner due to Engineer's default have been determined. Engineer shall be entitled to payment for the value of services performed less a deduction for the damages suffered by Owner as a result of the default.
- b. by Engineer:

- upon seven days written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional;
- upon seven days written notice if the Engineer's services for the Project are delayed or suspended for more than 120 days for reasons beyond Engineer's control; or
- 3) as set forth in Paragraph 6.10.D.
- 4) Engineer shall have no liability to Owner on account of such termination.
- c. Notwithstanding the foregoing, this Agreement will not terminate under Paragraph 6.06.B.1.a if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 7 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 7 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 30 days after the date of receipt of the notice.
- 2. For convenience, by Owner for any reason or no reason and with or without cause effective upon Engineer's receipt of notice from Owner.
- C. Effective Date of Termination: The terminating party under Paragraph 6.06.B may set the effective date of termination at a time up to 30 days later than otherwise provided to allow Engineer to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.

D. Payments Upon Termination:

- 1. In the event of any termination under Paragraph 6.06, Engineer will be entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all Reimbursable Expenses incurred through the effective date of termination. Upon making such payment, Owner shall have full ownership and rights to use of Documents, at Owner's sole risk, subject to the provisions of Paragraph 6.03.
- In the event of termination by Owner for convenience or by Engineer for cause, Engineer shall be entitled, in addition to invoicing for those items identified in Paragraph 6.06.D.1, to invoice Owner and receive payment of a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with Engineer's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Exhibit C and incurred prior to the effective date of the

termination. Under no circumstances shall Owner be responsible for Engineer's indirect or consequential damages, including, but not limited to, lost or anticipated profits.

6.07 Controlling Law

A. This Agreement is to be governed by the Laws and Regulations of the state of Nebraska.

6.08 Successors, Assigns, and Beneficiaries

- A. Owner and Engineer and the successors, executors, administrators, and legal representatives of Owner and Engineer (and to the extent permitted by Paragraph 6.08.B the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
- B. Engineer may not assign, sublet, or transfer any rights under or interest (including, but without limitation, money that is due or may become due) in this Agreement without the written consent of Owner, except to the extent that any assignment, subletting, or transfer is mandated by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge Engineer from any duty or responsibility under this Agreement.
- C. Unless expressly provided otherwise in this Agreement:
 - Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Constructor, other third-party individual or entity, or to any surety for or employee of any of them.
 - 2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.
 - 3. Owner agrees that the substance of the provisions of this Paragraph 6.08.C shall appear in the Construction Contract Documents.

6.09 Dispute Resolution

- A. Owner and Engineer agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice prior to invoking the procedures of Exhibit H or other provisions of this Agreement, or exercising their rights at law.
- B. If the parties fail to resolve a dispute through negotiation under Paragraph 6.09.A, then either or both may invoke the procedures of Exhibit H. If Exhibit H is not included, or if no dispute resolution method is specified in Exhibit H, then the parties may exercise their rights at law.

- A. Owner represents to Engineer that as of the Effective Date to the best of Owner's knowledge no Constituents of Concern, other than those disclosed in writing to Engineer, exist at the Site.
- B. If Engineer encounters or learns of an undisclosed Constituent of Concern at the Site, then Engineer shall notify (1) Owner and (2) appropriate governmental officials if Engineer reasonably concludes that doing so is required by applicable Laws or Regulations.
- C. It is acknowledged by both parties that Engineer's scope of services does not include any services related to unknown or undisclosed Constituents of Concern. If Engineer or any other party encounters, uncovers, or reveals an undisclosed Constituent of Concern, or if investigative or remedial action, or other professional services, are necessary with respect to undisclosed Constituents of Concern, then Engineer may, at its option and without liability, suspend performance of services on the portion of the Project affected thereby until Owner: (1) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Constituents of Concern; and (2) warrants that the Sire is in full compliance with applicable Laws and Regulations.
- D. If the presence at the Site of undisclosed Constituents of Concern adversely affects the performance of Engineer's services under this Agreement, then the Engineer shall have the option of (1) accepting an equitable adjustment in its compensation or in the time of completion, or both; or (2) terminating this Agreement for cause on 30 days notice.
- E. Owner acknowledges that Engineer is performing professional services for Owner and that Engineer is not and shall not be required to become an "owner," "arranger," "operator," "generator," or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, which are or may be encountered at or near the Site in connection with Engineer's activities under this Agreement.

6.11 Indemnification and Mutual Waiver

A. Indemnification by Engineer: To the fullest extent permitted by Laws and Regulations, Engineer shall indemnify and hold harmless Owner, and Owner's officers, directors, members, managers, partners, agents, consultants, and employees, from and against any and all claims, costs, losses, damages, and judgments (including, but not limited to, all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to this Agreement and/or the Project, provided that any such claim, cost, loss, damages, or judgment is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission or intentional misconduct of Engineer or Engineer's principals, officers, directors, managers members, partners, agents, employees, or Consultants or other representatives.

- B. Indemnification by Owner: To the extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from and against any and all claims, costs, losses, damages, and judgments (including, but not limited to, all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to this Agreement and/or the Project, provided that any such claim, cost, loss, damages, or judgment is directly attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission or intentional misconduct of Owner or Owner's officers, directors or employees with respect to this Agreement or to the Project.
- C. Environmental Indemnification: To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from all claims, costs, losses, damages, actions, and judgments (including reasonable consultants' and attorneys fees and expenses) caused by, arising out of, relating to, or resulting from a Constituent of Concern at, on, or under the Site, provided that (1) any such claim, cost, loss, damages, action, or judgment is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, and (2) nothing in this paragraph shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence or willful misconduct.
- D. *No Defense Obligation:* The indemnification commitments in this Agreement do not include a defense obligation by the indemnitor unless such obligation is expressly stated.
- E. Intentionally deleted.
- F. Mutual Waiver: To the fullest extent permitted by Laws and Regulations, Owner and Engineer waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement or the Project, from any cause or causes; provided, however, that this waiver does not apply to restrict or limit available insurance or indemnity claims arising from third-party property damage or bodily injury claims.

6.12 Records Retention

A. Engineer shall maintain on file in legible form, for a period of five years following completion or termination of its services, all Documents, records (including cost records), and design calculations related to Engineer's services or pertinent to Engineer's performance under this Agreement. Upon Owner's request, Engineer shall provide a copy of any such item to Owner at no cost to Owner.

- A. Notices: Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, by facsimile, by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.
- B. *Survival:* All express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion or termination for any reason.
- C. Severability: Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Engineer, which agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- D. Waiver: A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.
- E. Accrual of Claims: To the fullest extent permitted by Laws and Regulations, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no later than the date of Substantial Completion.
- F. Non-Discrimination. Engineer shall not discriminate against any employee or applicant for employment, to be employed in the performance of the Project, with respect to his/her hire, tenure, terms, conditions, or privileges of employment, because of his or her race, color, religion, sex, disability, or national origin.
- Ethics in Public Contracting. Engineer represents and warrants that it has not and will not pay or offer to pay, either directly or indirectly, any fee, commission compensation, gift, gratuity, or anything of value to any Nebraska or other government officer, board member, employee or evaluator based on the understanding that the receiving person's vote, actions, or judgment will be influenced thereby. Engineer further represents and warrants that it is prohibited from utilizing the services of lobbyists, attorneys, political activists, or consultants to secure any contract in any way relating to the Project. It is the intent of this Paragraph 6.13.F to assure that the prohibition of government contact during the procurement process is not subverted through the use of lobbyists, attorneys, political activists, or consultants. It is the intent of the Owner that the process of evaluation of proposals and award of the Work and the Project be completed without external influence. It is not the intent of this Paragraph 6.13.F to prohibit any party from seeking professional advice, for example consulting legal counsel, regarding terms and conditions of this or any other contract or agreement or proposal. Engineer may not refer to receiving the award of this Agreement or the Project in advertising in such a manner as to state or imply that it or its services are endorsed or preferred by Owner. News releases pertaining to the Work shall not be issued without prior written approval from Owner. If Engineer is found to be in non-compliance with this Paragraph 6.13.F, Engineer may forfeit

- the Agreement and the Project and any contract or other agreement relating to the Project awarded to it.
- H. Sovereign Immunity. Nothing in this Agreement or in any other agreement between the parties shall be construed as a waiver of all or any part of, or as in any way limited, the sovereign immunity afforded to Owner pursuant to Laws and Regulations.

ARTICLE 7 - DEFINITIONS

7.01 Defined Terms

- A. Wherever used in this Agreement (including the Exhibits hereto) terms (including the singular and plural forms) printed with initial capital letters have the meanings indicated in the text above, in the exhibits, in the following provisions, in the Standard General Conditions, or in the following definitions:
- Addenda—Written or graphic instruments issued prior to the opening of bids which clarify, correct, or change the bidding requirements or the proposed Construction Contract Documents.
- 2. Additional Services—The services to be performed for or furnished to Owner by Engineer in accordance with Part 2 of Exhibit A of this Agreement.
- 3. Agreement—This written contract for professional services between Owner and Engineer, including all exhibits identified in Paragraph 8.01 and any duly executed amendments.
- 4. Application for Payment—The form acceptable to Owner and Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Construction Contract.
- 5. *Basic Services*—The services to be performed for or furnished to Owner by Engineer in accordance with Part 1 of Exhibit A of this Agreement.
- 6. Change Order—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Construction Contract Price or the Construction Contract Times, or other revision to the Construction Contract, issued on or after the effective date of the Construction Contract.
- 7. Change Proposal—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth in the Construction Contract, seeking an adjustment in Construction Contract Price or Construction Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Construction Contract Documents or the acceptability of Work under the Construction Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Construction Contract.

- 8. Constituent of Concern—Asbestos, petroleum, radioactive material, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq.; (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, State, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
- 9. Construction Contract—The entire and integrated written contract between the Owner and Contractor concerning the Work.
- 10. Construction Contract Documents—Those items designated as "Contract Documents" in the Construction Contract, and which together comprise the Construction Contract.
- 11. Construction Contract Price—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Construction Contract Documents.
- 12. Construction Contract Times—The number of days or the dates by which Contractor shall: (a) achieve milestones, if any, in the Construction Contract; (b) achieve Substantial Completion; and (c) complete the Work.
- 13. Construction Cost—The cost to Owner of the construction of those portions of the entire Project designed or specified by or for Engineer under this Agreement, including construction labor, services, materials, equipment, insurance, and bonding costs, and allowances for contingencies. Construction Cost does not include costs of services of Engineer or other design professionals and consultants; cost of land or rights-of-way, or compensation for damages to property; Owner's costs for legal, accounting, insurance counseling, or auditing services; interest or financing charges incurred in connection with the Project; or the cost of other services to be provided by others to Owner. Construction Cost is one of the items comprising Total Project Costs.
- 14. Constructor—Any person or entity (not including the Engineer, its employees, agents, representatives, and Consultants), performing or supporting construction activities relating to the Project, including but not limited to Contractors, Subcontractors, Suppliers, Owner's work forces, utility companies, other contractors, construction managers, testing firms, shippers, and truckers, and the employees, agents, and representatives of any or all of them.
- 15. Consultants—Individuals or entities having a contract or other arrangement with Engineer to furnish services with respect to this Project.
- 16. *Contractor*—The entity or individual with which Owner enters into a Construction Contract.

- 17. Day—A calendar day of 24 hours measured from midnight to the next midnight.
- 18. Documents—Data, reports, Drawings, Specifications, Record Drawings, building information models, civil integrated management models, and other deliverables, whether in printed or electronic format, provided or furnished in appropriate phases by Engineer to Owner pursuant to this Agreement.
- 19. *Drawings*—That part of the Construction Contract Documents that graphically shows the scope, extent, and character of the proposed Work to be performed by Contractor in accordance with and for the benefit of the Project.
- 20. Effective Date—The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, the date on which this Agreement is signed and delivered by the last of the parties to sign and deliver.
- 21. Engineer—The individual or entity named as such in this Agreement.
- 22. Field Order—A written order issued by Engineer which requires minor changes in the Work but does not change the Construction Contract Price or the Construction Contract Times.
- 23. Laws and Regulations; Laws or Regulations—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 24. Maximum Amount—The aggregate amount of three hundred ninety eight thousand two hundred twenty eight dollars (\$398,228), which is the maximum to be paid by Owner with respect to and/or pursuant to this Agreement under any and all circumstances unless Owner agrees otherwise in a signed written agreement entered into pursuant to this Agreement.
- 25. Owner—The individual or entity named as such in this Agreement and for which Engineer's services are to be performed. Unless indicated otherwise, this is the same individual or entity that will enter into any Construction Contracts concerning the Project.
- 26. Project—As defined on the first page of this Agreement, and including the total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the services to be performed or furnished by Engineer under this Agreement are a part.
- 27. Record Drawings—Drawings depicting the completed Project, or a specific portion of the completed Project, prepared by Engineer as an Additional Service and based on Contractor's record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications, as delivered to Engineer and annotated by Contractor to show changes made during construction.

- 28. Reimbursable Expenses—The expenses incurred reasonably and directly by Engineer in connection with the performing or furnishing of Basic Services and Additional Services for the Project, as detailed in Exhibit C.
- 29. Resident Project Representative—The authorized representative of Engineer, if any, assigned to assist Engineer at the Site during the Construction Phase. The Resident Project Representative will be Engineer's agent or employee and under Engineer's supervision. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative. The duties and responsibilities of the Resident Project Representative, if any, are as set forth in Exhibit D.
- 30. Samples—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
- 31. Shop Drawings—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Construction Contract Documents.
- 32. Site—Lands or areas to be indicated in the Construction Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
- 33. Specifications—The part of the Construction Contract Documents that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- 34. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
- 35. Substantial Completion—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Construction Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 36. Supplier—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
- 37. Total Project Costs—The total cost of planning, studying, designing, constructing, testing, commissioning, and start-up of the Project, including Construction Cost and all other Project labor, services, materials, equipment, insurance, and bonding costs, allowances

for contingencies, and the total costs of services of Engineer or other design professionals and consultants, together with such other Project-related costs that Owner furnishes for inclusion, including but not limited to cost of land, rights-of-way, compensation for damages to properties, Owner's costs for legal, accounting, insurance counseling, and auditing services, interest and financing charges incurred in connection with the Project, and the cost of other services to be provided by others to Owner.

- 38. Work—The entire construction or the various separately identifiable parts thereof required to be provided under the Construction Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Construction Contract Documents.
- 39. Work Change Directive—A written directive to Contractor issued on or after the effective date of the Construction Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

ARTICLE 8 - EXHIBITS AND SPECIAL PROVISIONS

8.01 Exhibits Included:

- A. Exhibit A, Engineer's Services.
- B. Exhibit B, Owner's Responsibilities.
- C. Exhibit C, Payments to Engineer for Services and Reimbursable Expenses.
- D. Exhibit D, Duties, Responsibilities and Limitations of Authority of Resident Project Representative.
- E. Exhibit E, Notice of Acceptability of Work.
- F. Exhibit F, Construction Cost Limit. NOT USED.
- G. Exhibit G, Insurance.
- H. Exhibit H, Dispute Resolution.
- I. Exhibit I, Limitations of Liability. NOT USED.
- J. Exhibit J, Special Provisions.
- K. Exhibit K, Amendment to Owner-Engineer Agreement.

8.02 Total Agreement

A. This Agreement, (together with the exhibits included above) constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a written instrument duly executed by both parties. Amendments should be based whenever possible on the format of Exhibit K to this Agreement.

8.03 Designated Representatives

A. With the execution of this Agreement, Engineer and Owner shall designate specific individuals to act as Engineer's and Owner's representatives with respect to the services to be performed or furnished by Engineer and responsibilities of Owner under this Agreement. Such an individual shall have authority to transmit instructions, receive information, and render decisions relative to this Agreement on behalf of the respective party whom the individual represents.

8.04 Engineer's Certifications

- A. Engineer certifies that it has not engaged in corrupt, fraudulent, or coercive practices in competing for or in executing the Agreement. For the purposes of this Paragraph 8.04:
- 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the selection process or in the Agreement execution;
- 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the selection process or the execution of the Agreement to the detriment of Owner, or (b) to deprive Owner of the benefits of free and open competition;
- "coercive practice" means harming or threatening to harm, directly or indirectly, persons
 or their property to influence their participation in the selection process or affect the
 execution of the Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

Owner:	Engineer: HDR Engineering, Inc.
Papio-Missouri River Natural Resources District By:	By: Marel Del
Print name: John Winkler	Print name: Matthew Tondl
Title: General Manager	Title: Sr. Vice President
Date Signed:	Date Signed: 8/4/2016
	Engineer License or Firm's Certificate No. (if required): State of:
Address for Owner's receipt of notices:	Address for Engineer's receipt of notices:
P-MRNRD	HDR Engineering, Inc.
8901 S. 154 th Street	8404 Indian Hills Drive
Omaha, NE 68138-3621	Omaha, NE 68114
Designated Representative (Paragraph 8.03.A):	Designated Representative (Paragraph 8.03.A):
Title:	Title:
Phone Number:	Phone Number:
E-Mail Address:	E-Mail Address:
	· · · · · · · · · · · · · · · · · · ·

This is **EXHIBIT A**, consisting of 23 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated [].

Engineer's Services

Article 1 of the Agreement is supplemented to include the following agreement of the parties.

Engineer shall provide Basic and Additional Services as set forth below.

PART 1 – BASIC SERVICES

A1.01 Evaluation, Design, Permitting and Construction Administration Phase

For Papio-Missouri River Natural Resources District Little Papillion Creek Channel Stabilization Project Douglas County, NE



ENGINEERING PROPOSAL

BACKGROUND AND BASIS OF PROPOSAL

The purpose of this effort is to provide engineering evaluations and analysis, final design services, permitting services, and construction observation and administration for eleven (11) locations of slope instability along the Little Papillion Creek channel as identified by P-MRNRD staff between Pratt Street and Q Street in Omaha. The locations are listed in Table 1.

Table 1. Slope Instability Locations

Location	Station
Pratt Street to Blondo Street	73+50R
	76+00L
	78+00R
	89+50L
Blondo Street to Western Avenue	108+00R
	132+50R
	132+50L
Western Avenue to Cass Street	145+00L
Cass Street to 72 nd Street	217+50R
72 nd Street to Center Street	270+50R
Center Street to Q Street	383+00R

MODIFIED VERSION of

SCOPE OF SERVICES - Little Papillion Creek Channel Stabilization

The objective of this Project is to provide professional services to the P-MRNRD. The scope of work is segmented into seven (7) task series:

Task Series 100 – Project Management

Task Series 200 – Engineering Evaluation and Analysis

Task Series 300 - Preliminary and Final Design

Task Series 400 – Permitting

Task Series 500 - Bidding Assistance

Task Series 600 - Construction Contract Administration

Task Series 700 – Channel Instability Evaluation and Design Guidelines

The HDR Team proposes to provide the following professional services.

TASK SERIES 100 – PROJECT MANAGEMENT

Task Objectives:

Coordinate work effort, administer contract, and provide quality control.

HDR Activities:

<u>Task 110 Project Management.</u> Conduct general project management tasks. Includes development of project initiation forms including the development of a project management plan, monthly invoicing, monthly progress reports, project close out activities and other administration project activities.

<u>Task 120 Meetings.</u> Conduct coordinating meetings to discuss Project tasks and present findings.

- Kickoff meeting with P-MRNRD staff.
- Meetings with P-MRNRD staff after engineering evaluation and analysis to discuss results.
- Meetings after development of contract documents;

Task Deliverables:

- Monthly invoices and progress reports.
- Meeting agenda and notes.

Key Understandings:

 Coordination Meetings will be held at the offices of the P-MRNRD, USACE, or at the Project site.

TASK SERIES 200 - ENGINEERING EVALUATION AND ANALYSIS

Task Objectives:

HDR will evaluate the channel instability at each of the eleven (11) locations along Little Papillion Creek, collect data, perform a limited geotechnical investigation, install monitoring well(s) where appropriate, and prepare a technical memorandum presenting a summary of findings and a recommended course of action.

HDR Activities:

<u>Task 210 Data Collection.</u> Collect and review existing information and conduct site visits as needed throughout the work.

<u>Subtask 210.1 Data Collection and Review.</u> Collect and review existing information including:

MODIFIED VERSION of

Exhibit A - Engineer's Services

- Historical site and aerial photographs.
- Preconstruction and as-built drawings and photographs.
- U.S. Army Corps of Engineers' Little Papillion Creek Channel Improvement Project Operation and Maintenance Manual.
- Discussions with U.S. Army Corps of Engineers regarding the history of instability along the channel.
- Results of any available geotechnical information, grading and building plans.
- Survey a typical section in the vicinity of the channel instability area to locate the limits of cracks, sloughs, and locate any surface features (i.e. trails, culverts, etc.).
 The survey will be tied into the USACE Little Papillion Creek Channel Improvement stationing. The survey will be conducted under sub-contract to Lamp Rynearson and Associates (LRA) of Omaha, NE, per the scope in Attachment A.

<u>Subtask 210.2 Site Visits.</u> Conduct up to six (6) site visits to evaluate existing conditions and site constraints.

<u>Task 220 Geotechnical Investigation and Well Installation.</u> Evaluate the subsurface characteristics of the site.

A geotechnical investigation will only be conducted at 217+50R under sub-contract to Thiele Geotech of Omaha, NE, in accordance with the scope in Attachment B. This investigation will include one (1) exploratory test boring to retrieve samples of the subsurface soils. The purpose of this task is to develop an understanding of the subsurface conditions and to prepare a subsurface profile that may assist in the evaluation of the seepage and stability issues. In addition, this boring will be converted to a monitoring well as a means to measure water levels and artesian pressures that may be present in the underlying alluvial sands.

Perform laboratory tests on the samples obtained during drilling. Conduct the following tests:

- 6 Atterberg limits
- 6 sieve analysis with hydrometer
- 10 density and moisture contents

Task 230 Summary of Findings and Recommended Course of Action. Prepare a technical memorandum providing a summary of findings of the background data review and geotechnical investigation results, and recommend a course of action for all sites with the exception of Station 270+50R. A preliminary geotechnical investigation, including site survey and implementation of a monitoring well, is currently being developed under a separate contract.

Deliverables:

Technical Memorandum.

Key Understandings:

- P-MRNRD or USACE will provide as-built drawings for the channel improvements, repairs and any other improvements at the instability locations.
- P-MRNRD will provide the USACE summary of the recent field visit with P-MRNRD staff.
- P-MRNRD will provide results of all USACE geotechnical investigations (borings, lab test reports, instrumentation data, and photographs) if available.
- P-MRNRD to provide access to/across private property for site visits and geotechnical investigation.
- The geotechnical information will accompany the Section 408 submittal. No separate final geotechnical report will be prepared.
- All deliverables will be electronic. No hard copies will be printed.

MODIFIED VERSION of

Exhibit A - Engineer's Services

- An evaluation of potential contamination on or near the site is not included, but can be provided as Additional Services.
- If it is determined that more than one boring is required, it will be provided as Additional Services.

TASK SERIES 300 - PRELIMINARY AND FINAL DESIGN

Task Objectives:

HDR will perform slope stability evaluation and analysis for the existing condition and the proposed stabilization measure at each of the eleven (11) locations. HDR will also develop draft and final design details of the proposed stabilization measures

HDR Activities:

<u>Task 310 Preliminary Design.</u> Prepare preliminary design drawings. Drawings to be prepared in AutoCAD, Version 2014 format. A preliminary list of sheets for each set of contract documents (3) may include:

- Cover Sheet
- Site Plan (1 sheet per site)
- Typical Sections/Typical Details (2 sheets per site)

<u>Subtask 320 Final Design</u>. Prepare final design drawings and technical specifications. Specifications will be based on EJCDC three part technical specification. Prepare opinion of approximate construction cost.

Deliverables:

- Preliminary Design Documents (drawings, technical specifications)
- Final Design Documents (drawings, technical specifications, opinion of approximate construction cost)

Key Understandings:

- The purpose of the design is to stabilize the channel where slope distress has occurred at the eleven (11) sites identified by P-MRNRD staff. Any modifications to the design concept after work has been completed resulting from unforeseen changes in soil conditions or requirements will be considered Additional Services.
- One set of contract documents will be developed for the sites listed in Table 1. If it
 is determined that additional contract documents are required, that work effort will
 be provided as Additional Service.
- Drawings will be 11"x17" format.
- LRA as a subconsultant will provide pre-construction topographic survey and legal description for ten (10) of the eleven (11) sites, per the Scope in Attachment A. This information will be used for design and development of quantities.
- P-MRNRD will provide front end bidding documents. HDR to provide the technical specifications. HDR will compile the contract document. Five (5) hard copies will be printed.
- All plans and specification deliverables will be electronic. No hard copies will be printed.
- Schedule is based on obtaining permits in a timely fashion. If obtaining permits are delayed, bidding and construction will be delayed.

TASK SERIES 400 - PERMITTING

Task Objectives:

Assist P-MRNRD in coordinating with regulatory agencies, and developing necessary documentation for submission of Section 404 permitting and Section 408 approval.

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Exhibit A - Engineer's Services

HDR Activities:

<u>Task 410 Agency Coordination.</u> Conduct a pre-application meeting with USACE to discuss compliance with Section 404 of the Clean Water Act.

<u>Task 420 Wetland Delineation.</u> Perform wetland delineations for all instability locations. A delineation report will be prepared. No stream or wetland functional assessments will be performed.

<u>Task 430 Section 404 Documentation.</u> Prepare Pre-Construction Notification authorization under the Nebraska Regional General Permit (NE 1998-11497).

<u>Task 440 Section 408 Documentation.</u> Prepare a Section 408 submittal to USACE indicating that the integrity of the flood control channel will be maintained during and after construction. The 408 submittal will include the following items:

- Project description of existing condition and proposed stabilization measure.
- Slope stability and material compatibility evaluation.
- Results of the geotechnical investigation.
- Statement that the proposed stabilization measures will not impact the integrity of the channel improvement project during and after the proposed construction.
- Preliminary design plans. Final plans will be provided upon acceptance of the Section 408 submittal.
- Draft and final specifications for construction.
- Requirements for the contractor's Emergency Action Plan.

Deliverables:

- Wetland Delineation Report (Draft, electronic submittal, Final, electronic and hard copy)
- Section 404 Pre-Construction Notifications (Draft and Final)
- Section 408 Submittal. All pertinent geotechnical information and analysis will be included with this submittal.

Key Understandings:

- The pre-application meeting with USACE staff will be attended by two (2) HDR staff;
- One (1) meeting after the Section 404 and Section 408 submittals prior to contract document development will be held with P-MRNRD staff and attended by three (3) HDR staff;
- It is assumed that the existing Regional General Permit (NE 1998-11497) can be used for authorization.
- It as assumed that Section 401 Water Quality Certification will be automatically covered under this Regional General Permit and will be coordinated by USACE.
- If the proposed activities do not comply with the Regional General Permit, it is assumed that the project would qualify for an existing Nationwide Permit (#3 or #13). However, a coordination meeting with USACE would determine if the project qualifies for coverage under either of these Nationwide Permits. Permanent wetland impacts are not anticipated to exceed 0.1 acres and no mitigation would be required.
- No stream or wetland functional assessment would be required.
- The Section 408 submittal will require 3 hard copies and one electronic copy or a CD
- It is assumed that only a technical review from USACE is required and no NEPA documentation will be required. If NEPA documentation is required, it will be provided as an Additional Service.
- The Section 408 submittal to the USACE may take 6 to 8 weeks for review or longer depending on staff availability.
- It is assumed that USACE will not require Section 106 documentation support by P-MRNRD.

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Exhibit A – Engineer's Services

- It is assumed that a City of Omaha Post Construction Stormwater Management Plan permit is not required.
- P-MRNRD is exempt from city and county zoning and building regulations including floodplain permitting regulations. Relevant submissions to the City should state that they are for information only.
- It is assumed that the total area disturbed by grading is less than 1 acre and will not require an NPDES permit or City of Omaha grading permit.
- P-MRNRD will provide the most recent HEC-RAS model of Little Papillion Creek which is considered the best available information. The model will be executed, and channel hydraulic parameters will be used in support of performing the hydraulic evaluation in support of the Section 408 submittal. It is assumed the proposed design will reestablish channel cross-sections to conditions that existed when the floodplain was delineated and no additional hydraulic modeling will be required. If additional hydrologic/hydraulic modeling is required, it can be provided as Additional Services.

TASK SERIES 500 - BIDDING ASSISTANCE

Task Objectives:

Assist P-MRNRD in preparing the invitation for bids, attend the pre-bid meeting, provide replies to prospective bidder inquiries, attend the bid opening, assist with review of the bids received, and prepare a recommended action for P-MRNRD Board consideration.

HDR Activities:

<u>Task 510 Bid Modifications.</u> Receive and respond to questions from plan holders concerning interpretations of the bidding procedure. HDR to provide technical interpretations on the design. Inquiries that can be addressed by referring to information in the Bidding Documents will be recorded in telephone conservation records. Address inquiries that require a modification of the Bidding Documents by preparing an addendum item. HDR to prepare appropriate addenda for P-MRNRD distribution.

<u>Task 520 Pre-Bid Meeting.</u> Attend pre-bid meeting with prospective bidders. Prepare agenda and notes for the pre-bid portion of the meeting. Address inquiries that require a modification of the Bidding Documents by preparing an addendum item.

<u>Task 530 Bid Opening.</u> Attend the Bid Opening to assist in the initial screening of bids regarding Bidder's use of required Bid Forms, inclusion of Bid Security and inclusion of other qualifying information to accompany the Bid. Tabulate bids. Evaluate bids and prepare a letter of recommendation.

Task Deliverables:

- Electronic copy of addenda(um) to be distributed by P-MRNRD to all plan holders.
- Pre-bid meeting agenda and minutes.
- Tabulation of bids and letter of recommendation of award.

Key Understandings:

- HDR will be the issuing office in the bidding documents for questions and will coordinate with P-MRNRD on responses.
- P-MRNRD is responsible for bid solicitation.
- HDR is responsible for document distribution (including addendum) and bid opening.
- P-MRNRD is responsible for advertising the project and payment of any fees.
- Bidding assistance is for one (1) set of contract documents and one (1) contractor. If it
 is determined that separate contract documents are required for one or more sites,
 bidding assistance associated with that work effort will be provided as additional
 service.

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Exhibit A - Engineer's Services

TASK SERIES 600 - CONSTRUCTION ADMINISTRATION

Task Objectives:

Provide full-time on-site observation and document construction activities.

HDR Activities:

<u>Task 610 Preconstruction Meeting.</u> Assist P-MRNRD with organizing and holding a preconstruction meeting. The meeting will be attended by representatives from HDR, P-MRNRD, Contractor, and other interested parties. The main purpose of the meetings will be to establish lines of communication, discuss areas of responsibility, establish operational constraints, and to discuss and clarify items.

<u>Task 620 Shop Drawing Review.</u> Review shop drawings and samples for compliance with contract documents.

<u>Task 630 Construction Observation</u>. Conduct full-time on-site observation of work in progress to determine if work is generally proceeding in accordance with the Contract Documents. Anticipated duration of construction is 55 working days from contractor mobilization. The level of construction observation effort included in this scope equates to 550 hours (10-hour days for 55 days) for a full-time resident project representative (RPR) for the anticipated duration. Reasonable variations in work days and schedules are anticipated, but no protracted overtime, work stoppages or extended work schedules are anticipated. A geotechnical engineer will observe the start of construction and will provide periodic visits to observe the progress of the construction. If the construction schedule exceeds the estimated effort, all parties agree that the contract will be adjusted.

The following activities are to be conducted:

- Conduct a construction kickoff meeting.
- Conduct up to ten (10) construction progress meetings.
- Provide clarifications and interpretations of Contract Documents to Contractor.
- Assist in negotiating change orders.
- Maintain files for correspondence, shop drawings and samples, change orders and other project related documents.
- Maintain log book to record working days; weather conditions; weekly activities; decisions; and general observations.
- Review and verify applications for payment with Contractor. HDR will provide a recommendation and forward payment application to P-MRNRD.
- Conduct a substantial completion inspection and submit a list of observed items requiring completion or correction. After items on list have been completed or corrected, HDR to issue Certificate of Substantial Completion.
- Conduct a final inspection and submit a list of observed items requiring completion or correction. After items on list have been completed or corrected, HDR to review final payment application.

<u>Task 640 Construction Closeout.</u> Compile construction documentation and prepare record drawing, which will be the final record drawings, corrected to reflect field conditions observed and changes documented by the contractor during the construction period. An addendum to the Operations and Maintenance (O&M) Manual for the Little Papillion Channel Improvement Project will be prepared and submitted to USACE.

Task Deliverables:

- Construction documentation
- Record drawings
- Addendum to O&M Manual

MODIFIED VERSION of

Exhibit A – Engineer's Services

Key Understandings:

- LRA will provide post-construction topographic survey.
- LRA will provide construction staking.
 - Grade staking provide lath along proposed new grades at approximate 50 foot spacing;
 - o Provide lath at location of stone filled trenches;
 - O Place lath adjacent to the existing bike path at 100-foot intervals with USACE stationing for reference of field personnel. It is assumed that a total of two trips, 4 hours per trip, will be required by the survey crew, and one trip for initial grading and one trip for verification or checks. Re-staking required as a result of Contractor's actions will be considered Additional Services;
- HDR will provide LRA with an AutoCAD model of the proposed design for use with staking of the items listed above.
- Horizontal datum will be Nebraska State Plane.
- Vertical datum will be NAVD 88.
- The Contractor will be responsible for marking up a set of drawings as changes are identified. Upon completion of construction, the marked-up drawings will be used in making "record" revisions to the original drawings.
- It is assumed that the construction for the eight (8) sites located north of Cass Street and the one (1) site south of L Street will take five (5) weeks, the site located near Station 270+50R will take three (3) weeks, and the site near Station 217+00R will take three (3) weeks, and the construction between sites will not occur concurrently.

TASK SERIES 700 - CHANNEL INSTABILITY EVALUATION AND DESIGN GUIDELINES

Task Objectives:

HDR will develop guidance on the evaluation, analysis, proposed mitigation concepts, and design templates for potential channel instabilities along Little Papillion Creek.

HDR Activities:

<u>Task 710 Analysis, Evaluation, and Mitigation Concepts</u> Prepare a listing of typical channel instabilities, the associated causes, and potential mitigation concepts.

<u>Subtask 720 Design Templates</u>. Prepare a set of design templates for each channel instability type identified in Task 710. Design templates will be prepared for each of the observed modes of failure observed along the Little Papillion Creek, which include:

- Near vertical scarp and sloughing with the sloughed material present along the channel (partial slope failure);
- Near vertical scarp and sloughing without the sloughed material present along the channel (Complete slope failure);
- Slide mass relatively intact and slope movement is minimal.

Templates for the repair of typical channel instabilities can be used by P-MRNRD staff for potential future projects. Variables to be addressed with the design templates are slope height, slope angle, depth of slide, and condition of slide (failed or relatively intact). If artesian pressures are present at the site, a special design will be warranted and will not be included in the design templates. Following completion of the above tasks, a technical memorandum will prepared which will present the results.

Deliverables:

Technical Memorandum

Key Understandings:

• Depending on the site conditions, a geotechnical investigation may be required to verify some of the design assumptions included in the template.

MODIFIED VERSION of

Exhibit A - Engineer's Services

MODIFIED VERSION of



Omaha, Nebraska 68154 [P] 402.496.2498

IFI 402,496,2730 www.LRA-inc.com

July 27, 2016

EMAIL

Mr. Pat Engelbert HDR Engineering, Inc. 8404 Indian Hills Drive Omaha, NE 68114

Pat.Engelbert@hdrinc.com

REFERENCE:

Proposal for Surveying Services

Topographic Survey 10 areas along Little Papillion Creek

Omaha, Nebraska

Dear Mr. Engelbert:

Lamp, Rynearson & Associates, Inc. (LRA) is pleased to present this proposal to HDR Engineering. Inc. (HDR) to provide surveying services associated with the Little Papillion Creek embankment stabilization project along the Little Papillion Creek from Maple Street to "L" Street. We understand that the scope of our services for this project will be:

TOPOGRAPHIC SURVEY

Perform a topographic survey consisting of the following items:

Locate the limits (top/bottom) of the existing embankment that has separated or sloughed "scarp" at ten (10) areas along the Little Papillion Creek from Maple Street to "L" Street, each survey area identified in the RFP. The survey will show:

- Top Toe of existing Little Papillion Creek on the side of the embankment failure.
- Edge of water.
- Top-bottom of cracked (scarp).
- Any pipes protruding from the embankment visible at the time of the survey.
- Obtain three cross-sections of the embankment at the beginning, middle and end limits of the scarp (slough area).
- Rocked areas within the survey limits.

DELIVERABLES

Provide an AutoCAD Civil3D 2014 drawing showing the following:

- 1) Contours at 1-foot intervals.
- 2) Profile sections of the scarp area.
- 3) Stations of the Little Papillion Creek referenced to the COE plans provided to LRA by HDR.
- Control points used for the survey.
- 5) Datum of survey (horizontal and vertical).

LAMP RYNEARSON COMPANIES











MODIFIED VERSION of

Exhibit A - Engineer's Services

Proposal for Surveying Services Little Papillion Creek July 27, 2016 Page 2 of 3

6) Utilities located during the field survey.

7) Any improvements visible in the area of survey.

CONSTRUCTION STAKING - POST CONTRUCTION SURVEY

Construction staking

- o Grade staking provide lath along the proposed new grades at approximate 50-feet spacing:
- Provide lath at stone filled trenches (for site 270+50 only approximately 7 trenches)
- Place lath adjacent to the existing bike path at 50 feet intervals with USACE stationing for reference of filed personnel.

Post construction topographic survey

 Upon completion of grading operations perform a topographic survey of the "asconstructed" repair area and provide the same deliverables as provided with the pre-construction surveys.

Our proposal is based on the following assumptions:

- 1) Horizontal datum will be Nebraska State Plane.
- 2) Vertical Datum will be NAVD88.
- LRA will be provided with the COE plans showing the creek stationing prior to commencement of field work.

SCHEDULE

We are prepared to begin work on the project upon the return of the signed proposal and or contract. The field survey will be completed within approximately seven (7) days from the date of commencement dependent upon any weather events, AutoCAD and PDF files will be delivered within two (2) weeks of commencement of the field work.

COMPENSATION

We propose to bill for our services on the basis of hourly charge rates plus reimbursable expenses incurred. For the tasks listed above, our fees will not exceed the following amounts:

Pre-Construction survey \$ 9,500

Construction staking/Post construction survey \$11,000

Total \$20,500

Additional services beyond the scope of services outlined above will be billed on the basis of hourly charge rates plus reimbursable expenses incurred.

SUPPLEMENTAL TERMS AND CONDITIONS

This fee estimate is provided to HDR for proposal purposes only, if LRA is selected to provide survey services for this project we will then enter into a professional services agreement with negotiated terms and conditions.

MODIFIED VERSION of

Proposal for Surveying Services Little Papillion Creek July 27, 2016 Page 3 of 3

We appreciate the opportunity to present this proposal, and we look forward to assisting you in the successful completion of this project. We would be glad to discuss any questions you may have on our proposal. If this proposal is acceptable, we ask that you acknowledge by signing below and returning one (1) signed copy to us.

Sincerely,

Todd L. Whitfield, R.L.S. Principal, Survey Group Leader	
Enclosure	
Accepted By:	
HDR Engineering, Inc.	Date

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Exhibit A - Engineer's Services

Engelbert, Pat

From: Sent:

Todd L, Whitfield <Todd.Whitfield@LRA-INC.com>

Thursday, August 04, 2016 11:33 AM

To:

Engelbert, Pat

Subject:

RE: Little Papio Survey

Pat,

Looking at the areas that are to be surveyed for this project and the parcels shown on the Douglas County GIS and also making some assumptions on how they would access the work areas I am estimating that the cost for us to create temporary easement documents (which would include exhibit drawings with legal descriptions) would be approximately \$7000-\$9000.

The work involved would be.

- 1) Searching for existing boundary monumentation and creating a parcel tract map for each owner involved.
- 2) Ordering title searches for the parcels abutting the work areas.
- 3) Creating easement exhibit drawings with legal descriptions (HDR to provide proposed work limits for each

Please call if you have questions.

Thanks

Sincerely,



Todd L. Whitfield, RLS Principal, Survey Group Leader

🕿 402,496,2498 📕 402,496,2730 🚾 todd.whitfield@LRA-inc.com (\$) LRA-inc.com >> Lamp Rynearson





From: Engelbert, Pat [mailto:Pat.Engelbert@hdrinc.com]

Sent: Friday, July 22, 2016 4:01 PM

To: Todd L. Whitfield < Todd. Whitfield@LRA-INC.com >

Subject: Little Papio Survey

Todd,

Attached is the RFP for the Little Papio Channel Stabilization project. Please develop a cost estimate to provide survey for 10 of the 11 sites (you have already done site 270+50R). The approximate survey length per site is listed in the attached word document. The scope would be the same as was provided for the Blue Cross Blue Shield site (270+50R).

Have a good weekend.

Patrick J. Engelbert, PE

Water Resources Section Manager

HDR

MODIFIED VERSION of

Exhibit A - Engineer's Services

Attachment B Scope of Services Thiele Geotechnical

MODIFIED VERSION of

Exhibit A - Engineer's Services



13478 Chandler Road Omaha, Nebraska 68138-3716 402.556.2171 Fax 402.556.7831 www.thielegeotech.com

August 1, 2016

Mr. Pat Poepsel, P.E. HDR Engineering, Inc. 8404 Indian Hills Drive Omaha, Nebraska 68114

RE: MONITORING WELL INSTALLATION AND LAB TESTING PAPILLION CREEK, NORTH OF PACIFIC STREET, OMAHA, NEBRASKA

Dear Mr. Poepsel:

Enclosed is our proposal for professional contract drilling services and laboratory testing to be performed at the above-referenced project. The accompanying proposal describes the scope of services that will be provided, the estimated cost, and the contract terms.

Thiele Geotech, Inc. looks forward to working with you on this project. If you have any questions or if there is any additional information that I can provide, please feel free to give me a call. If the accompanying proposal is acceptable, please return a signed copy to our office.

Respectfully,

Thiele Geotech, Inc.

Cody Kimball, E.I.

GEOTECHNICAL MATERIAL ENVIRONMENTAL ENGINEERING

Professional Contract Drilling Services Proposal Papillion Creek North of Pacific Street Omaha, NE August 1, 2016

Thiele Geotech, Inc. (TG) is pleased to submit our proposal for professional contract drilling services and laboratory testing to be performed at the above referenced site. The following sections detail our proposed scope of services and the estimated cost of these services. The Cost Estimate worksheet is attached in Exhibit A. This proposal will be held open for a period of 45 days from the above date.

PROJECT DESCRIPTION

The project site is identified as Papillion Creek north of Pacific Street in Omaha, Nebraska.

SCOPE OF SERVICES

TG understands that HDR Engineering, Inc. is requesting professional contract drilling services and laboratory testing be provided at the above-referenced project site.

These services are understood to include the installation of one (1) permanent 2-inch diameter monitoring well up to approximately 55 feet below existing ground surface using hollow stem auger drilling methodology. The boring will be advanced by first collecting soil samples on five foot intervals with Shelby tubes in cohesive soil and split-barrel sampler in cohesionless soil within 4.25-inch diameter hollow-stem, continuous flight augers. Cohesive samples will be kept in the Shelby tubes and will be stored in our lab. The split barrel samples will be sealed in ziploc bags and will also be stored in our lab. The well will be completed by installing 15 feet of 0.010-inch machine slotted, 2-inch nominal diameter, schedule 40 PVC well screen in the bottom portion of the well boring. Schedule 40 PVC riser will then be extended to the ground surface for flush mount completion. 12/20 sand pack and bentonite chips will be placed within the annulus to complete the monitoring well. The bottom of the screened section that tips out in clay will be grouted and the clay zone above the anticipated layer will also be sealed to isolate the screen within the sand layer. The monitoring well will be completed as a permanent well with a sealable and lockable cap under 4-inch diameter, lockable, flush mount steel cover.

Following completion of the well, it will be developed utilizing disposable polyethylene bailers.

All drill cuttings will be thin spread on site.

All appropriate paperwork, forms, and/or fees will be completed/provided as necessary.

Soil samples obtained during drilling will be tested according to requested test schedule. These soil tests include moisture contents, unconsolidated undrained triaxial compression tests, hydrometers with sieves, and Atterberg limits. Four of each is planned.

ESTIMATED COST & SCHEDULE

Based on the indicated work scope, the total cost for this project is estimated at \$6,553.50. Actual work performed by TG and authorized by HDR Engineering will be invoiced at the rates indicated on the attached Cost Estimate worksheet.

Thiele Geotech Inc

MODIFIED VERSION of

Exhibit A - Engineer's Services

Approximately one (1) day on-site will be required to complete the professional contract drilling services. TG is very sympathetic to changing schedules based upon client demands or weather conditions; therefore, TG will work with our client to accommodate their schedule.

EXHIBITS

Exhibit A - Cost Estimate

THIELE-GEOTECH, INC.

Robert K. Lapke

13478 Chandler Road

Omaha, Nebraska 68138-3716

402/556-2171 Fax 402/556-7831

Thiele Geotech Inc

Drilling Cost Estimate Worksheet

Proposed North Plezometer Papillion Creek & Pacific Street, Omaha, NE

8/1/2016

Description	Estimated Quantity	Unit Rate	Estimated Gost
Drilling			
Mobilization (Zone 1)	1.0	140.00	140.00
Environmental Drilling (/day)	1.0	2,000,00	2,000.00
Surface Completion (/hr)	2.0	150.00	300.00
Waterials .			
2" PVC Wel Screen (/5" stick)	1.0	40.00	40.00
2" PVC Wel Screen (/10' stick)	11.0	60.00	60.00
2" PVC Wel Riser (/10' stick)	5.0	38.00	190,00
2" PVC End Cap (ea.)	1.0	18.00	18.00
2" Locking Cap (ea.)	1.0	29.00	29.00
Well Pack (/bag)	12.0	18.00	216.00
Bentonite Chips (/bags)	2.0	22.00	44.00
Coated Bentonite Pellets (/bucket)	2.0	80,00	160,00
Flush Mount Cover (ea.)	1.0	82.00	82 00
Sack-Crete (/bag)	9.0	12.00	108.00
Bentonite Grout (fbag)	20.0	30.00	600,00
Well Registration Processing			
Well Registration Fees (Nebraska) (/wells)	1.0	80.50	80.50
Environmental Technician (/hr.)	1.0	78,00	78.00
Laboratory Testing			
Hydrometer	4.0	110.00	440,00
Sieves	4.0	75.00	300.00
Atterberg Limits	4.0	80.00	320.00
Moislure Content	4.0	7.00	28.00
Project Management			
Senior Project Geologist	2.0	140.00	280.00
Project Engineer (/hr.)	4.0	110,00	440.00
		Subtotal =	5,953.50
Contingency		10%	600.00
		Total	6,553.50

Thiele Geotech Inc

MODIFIED VERSION of

Exhibit A - Engineer's Services

MODIFIED VERSION of

Exhibit A – Engineer's Services

PART 2 – ADDITIONAL SERVICES

A2.01 Additional Services Requiring Owner's Written Authorization

- A. If authorized in writing by Owner, Engineer shall provide Additional Services of the types listed below. These services are not included as part of Basic Services and will be paid for by Owner as indicated in Exhibit C.
 - Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans, or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.
 - Services to make measured drawings of existing conditions or facilities, to conduct tests
 or investigations of existing conditions or facilities, or to verify the accuracy of drawings
 or other information furnished by Owner or others.
 - Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by Engineer, or the Project's design requirements, including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Construction Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date or are due to any other causes beyond Engineer's control.
 - 4. Services resulting from Owner's request to evaluate additional Study and Report Phase alternative solutions beyond those agreed to in Paragraph A1.01.A.1 and 2.
 - 5. Services required as a result of Owner's providing incomplete or incorrect Project information to Engineer.
 - 6. Providing renderings or models for Owner's use, including services in support of building information modeling or civil integrated management.
 - 7. Undertaking investigations and studies including, but not limited to:
 - a. detailed consideration of operations, maintenance, and overhead expenses;
 - the preparation of feasibility studies (such as those that include projections of output capacity, utility project rates, project market demand, or project revenues) and cash flow analyses, provided that such services are based on the engineering and technical aspects of the Project, and do not include rendering advice regarding municipal financial products or the issuance of municipal securities;
 - c. preparation of appraisals;

- d. evaluating processes available for licensing, and assisting Owner in obtaining process licensing;
- e. detailed quantity surveys of materials, equipment, and labor; and
- f. audits or inventories required in connection with construction performed or furnished by Owner.
- Furnishing services of Consultants for other than Basic Services.
- 9. Providing data or services of the types described in Exhibit B, when Owner retains Engineer to provide such data or services instead of Owner furnishing the same.
- 10. Providing the following services:
 - a. Services attributable to more prime construction contracts than specified in Paragraph A1.03.D.
 - b. Services to arrange for performance of construction services for Owner by contractors other than the principal prime Contractor, and administering Owner's contract for such services.
- 11. Services during out-of-town travel required of Engineer, other than for visits to the Site or Owner's office as required in Basic Services (Part 1 of Exhibit A).
- 12. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructibility review requested by Owner in writing; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other documents as a result of such review processes.
- 13. Preparing additional bidding-related documents (or requests for proposals or other construction procurement documents) or Construction Contract Documents for alternate bids or cost estimates requested by Owner for the Work or a portion thereof.
- 14. Assistance in connection with bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services, except when such assistance is required to complete services required by Paragraph 5.02.A and Exhibit F.
- 15. Intentionally deleted.
- 16. Providing Construction Phase services beyond the original date for completion and readiness for final payment of Contractor, but only if and to the extent such services increase the total quantity of services to be performed in the Construction Phase, rather than merely shifting performance of such services to a later date.
- 17. Preparing Record Drawings, and furnishing such Record Drawings to Owner.

- 18. Supplementing Record Drawings with information regarding the completed Project, Site, and immediately adjacent areas obtained from field observations, Owner, utility companies, and other reliable sources.
- Conducting surveys, investigations, and field measurements to verify the accuracy of Record Drawing content obtained from Contractor, Owner, utility companies, and other sources; revise and supplement Record Drawings as needed.
- 20. Preparation of operation, maintenance, and staffing manuals.
- 21. Intentionally Deleted.
- 22. Intentionally Deleted.
- 23. Intentionally Deleted.
- 24. Preparing to serve or serving as a consultant or witness for Owner in any litigation, arbitration, lien or bond claim, or other legal or administrative proceeding or dispute related to the Project.
- 25. Overtime work requiring higher than regular rates.
- 26. Providing construction surveys and staking to enable Contractor to perform its work other than as required under Paragraph A1.05.A.8; any type of property surveys or related engineering services needed for the transfer of interests in real property; and providing other special field surveys.
- 27. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner.
- 28. Intentionally Deleted.
- 29. Other additional services performed or furnished by Engineer not otherwise provided for in this Agreement.

A2.02 Additional Services Not Requiring Owner's Written Authorization

- A. Engineer shall advise Owner in writing that Engineer is commencing to perform or furnish the Additional Services of the types listed below. For such Additional Services, Engineer need not request or obtain specific advance written authorization from Owner. Engineer shall cease performing or furnishing such Additional Services upon receipt of written notice to cease from Owner.
 - 1. Services in connection with Work Change Directives and Change Orders to reflect changes requested by Owner.
 - Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or equal" items; services after the award of the Construction Contract in evaluating and determining the

acceptability of a proposed "or equal" or substitution which is found to be inappropriate for the Project; evaluation and determination of an excessive number of proposed "or equals" or substitutions, whether proposed before or after award of the Construction Contract.

- 3. Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.
- 4. Additional or extended services during construction made necessary by (a) the presence at the Site of any Constituent of Concern or items of historical or cultural significance, (b) emergencies or acts of God endangering the Work, (c) damage to the Work by fire or other causes during construction, (d) a significant amount of defective, neglected, or delayed work by Contractor, (e) acceleration of the progress schedule involving services beyond normal working hours, or (f) default by Contractor.
- 5. Services (other than Basic Services during the Post-Construction Phase) in connection with any partial utilization of the Work by Owner prior to Substantial Completion.
- 6. Evaluating unreasonable or frivolous requests for interpretation or information (RFIs), Change Proposals, or other demands from Contractor or others in connection with the Work, or an excessive number of RFIs, Change Proposals, or demands.
- 7. Reviewing a Shop Drawing or other Contractor submittal more than three times, as a result of repeated inadequate submissions by Contractor, except to the extent such inadequate submissions are due to Engineer, its Consultants, agents and/or other representatives.
- 8. Intentionally Deleted.

This is **EXHIBIT B**, consisting of 4 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services**dated [].

Owner's Responsibilities

Article 2 of the Agreement is supplemented to include the following agreement of the parties.

- B2.01 In addition to other responsibilities of Owner as set forth in this Agreement, Owner shall at its expense:
 - A. Provide Engineer with all criteria and full information as to Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations.
 - Give instructions to Engineer regarding Owner's procurement of construction services (including instructions regarding advertisements for bids, instructions to bidders, and requests for proposals, as applicable), Owner's construction contract practices and requirements, insurance and bonding requirements, electronic transmittals during construction, and other information necessary for the finalization of Owner's bidding-related documents (or requests for proposals or other construction procurement documents), and Construction Contract Documents. Furnish copies (or give specific directions requesting Engineer to use copies already in Engineer's possession) of all design and construction standards, Owner's standard forms, general conditions (if other than the Standard General Conditions), supplementary conditions, text, and related documents and content for Engineer to include in the draft bidding-related documents (or requests for proposals or other construction procurement documents), and draft Construction Contract Documents, when applicable. Except to the extent Engineer makes any unauthorized Owner revisions which are not expressly acknowledged and approved by Owner in writing, Owner shall have responsibility for the final content of (1) such bidding-related documents (or requests for proposals or other construction procurement documents), and (2) those portions of any Construction Contract other than the design (as set forth in the Drawings, Specifications, or otherwise), and other engineering or technical matters; and Owner shall seek the advice of Owner's legal counsel, risk managers, and insurance advisors with respect to the drafting and content of such documents.
 - C. Furnish to Engineer any other available information pertinent to the Project including reports and data relative to previous designs, construction, or investigation at or adjacent to the Site.
 - D. Following Engineer's assessment of initially-available Project information and data and upon Engineer's request, furnish, or otherwise make available (if necessary through title searches, or retention of specialists or consultants) such additional Project-related information and data as is reasonably required to enable Engineer to complete its Basic and Additional Services. Such additional information or data would generally include the following:
 - 1. Intentionally Deleted.

- 2. Intentionally Deleted.
- 3. Intentionally Deleted.
- 4. Intentionally Deleted.
- 5. Explorations and tests of subsurface conditions at or adjacent to the Site; drawings of physical conditions relating to existing surface or subsurface structures at the Site; hydrographic surveys; with appropriate professional interpretation of such information or data.
- Environmental assessments, audits, investigations, and impact statements, and other relevant environmental, historical, or cultural studies relevant to the Project, the Site, and adjacent areas.
- 7. Data or consultations as required for the Project but not otherwise identified in this Agreement.
- E. Upon Engineer's request, arrange for appropriate access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services under the Agreement.
- F. Recognizing and acknowledging that Engineer's services and expertise do not include the following services, provide, as required for the Project:
 - Accounting, bond and financial advisory (including, if applicable, "municipal advisor" services as described in Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) and the municipal advisor registration rules issued by the Securities and Exchange Commission), independent cost estimating, and insurance counseling services.
 - Legal services with regard to issues pertaining to the Project as Owner requires, and, to the extent deemed necessary by Owner in Owner's sole discretion, that Contractor raises or Engineer reasonably requests.
 - 3. Such auditing services as Owner requires to ascertain how or for what purpose Contractor has used the money paid.
- G. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of samples, materials, and equipment required by the Construction Contract Documents (other than those required to be furnished or arranged by Contractor), or to evaluate the performance of materials, equipment, and facilities of Owner, prior to their incorporation into the Work with appropriate professional interpretation thereof. Provide Engineer with the findings and reports generated by testing laboratories, including findings and reports obtained from or through Contractor.
- H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by Engineer and such reviews,

approvals, and consents from others as may be necessary for completion of each phase of the Project.

- Advise Engineer of the identity and scope of services of any independent consultants employed by Owner to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructibility review.
- J. If Owner designates a construction manager or an individual or entity other than, or in addition to, Engineer to represent Owner at the Site, define and set forth as an attachment to this Exhibit B the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of Engineer.
- K. If more than one prime contract is to be awarded for the Work designed or specified by Engineer, then designate a person or entity to have authority and responsibility for coordinating the activities among the various prime Contractors, and define and set forth the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of Engineer as an attachment to this Exhibit B that is to be mutually agreed upon and made a part of this Agreement before such services begin.
- L. Following Engineer's reasonable request, inform Engineer in writing of any specific requirements of safety or security programs that are applicable to Engineer, as a visitor to the Site.
- M. Examine all alternative solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer (including obtaining advice of an attorney, risk manager, insurance counselor, financial/municipal advisor, and other advisors or consultants as Owner deems appropriate in its sole discretion with respect to such examination) and render in writing decisions pertaining thereto as soon as reasonably practicable.
- N. Intentionally Deleted.
- O. Intentionally Deleted.
- P. Place and pay for advertisement for Bids in appropriate publications.
- Q. Furnish to Engineer data as to Owner's anticipated costs for services to be provided by others (including, but not limited to, accounting, bond and financial, independent cost estimating, insurance counseling, and legal advice) for Owner so that Engineer may assist Owner in collating the various cost categories which comprise Total Project Costs.
- R. Attend and participate in, if deemed appropriate by Owner in Owner's sole discretion, the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings, and Site visits to inspect the Work and Project to determine Substantial Completion and readiness of the completed Work for final payment.

	ment, as required.	
T. Perfor	m or provide the following: N/A	

This is **EXHIBIT C**, consisting of 6 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services**dated [].

Payments to Engineer for Services and Reimbursable Expenses
COMPENSATION PACKET BC-2: Basic Services – Standard Hourly Rates

For the avoidance of doubt, this Exhibit C in its entirety is expressly subject to the last sentence of Paragraph 4.01.A in the Agreement. Article 2 of the Agreement is supplemented to include the following agreement of the parties:

ARTICLE 2 – OWNER'S RESPONSIBILITIES

- C2.01 Compensation For Basic Services (other than Resident Project Representative) Standard Hourly Rates Method of Payment
 - A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer's Resident Project Representative, if any, as follows:
 - An amount equal to the cumulative hours charged to the Project by each class of Engineer's personnel times Standard Hourly Rates for each applicable billing class for all services performed on the Project, plus Reimbursable Expenses and Engineer's Consultants' charges, if any.
 - The Standard Hourly Rates charged by Engineer constitute full and complete compensation for Engineer's services, including labor costs, overhead, and profit; the Standard Hourly Rates do not include Reimbursable Expenses or Engineer's Consultants' charges.
 - 3. Engineer's Reimbursable Expenses Schedule and Standard Hourly Rates are attached to this Exhibit C as Appendices 1 and 2.
 - The total compensation for services under Paragraph C2.01 is estimated to be \$398,228, based on the compensation shown in Exhibit C, Appendix 2.
 - 5. Following notice to Owner, Engineer may alter the distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered. For the avoidance of doubt, in no event shall such amount, in combination with any other compensation, reimbursement and/or any other amount to be paid by Owner with respect to and/or pursuant to this Agreement exceed the Maximum Amount unless Owner agrees otherwise in a signed written agreement entered into pursuant to this Agreement.
 - 6. The total estimated compensation for Engineer's services included in the breakdown by phases as noted in Paragraph C2.01.A.3 incorporates all labor, overhead, profit, Reimbursable Expenses, and Engineer's Consultants' charges.

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- 7. The amounts billed for Engineer's services under Paragraph C2.01 will be based on the cumulative hours charged to the Project during the billing period by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class, plus Reimbursable Expenses reasonably and actually incurred and Engineer's Consultants' charges.
- 8. The parties may, by mutual written agreement, adjust annually the Standard Hourly Rates and Reimbursable Expenses Schedule to reflect equitable changes in the compensation payable to Engineer.

C2.02 Compensation For Reimbursable Expenses

- A. Owner shall pay Engineer for all Reimbursable Expenses at the rates set forth in Appendix 1 to this Exhibit C to the extent they are actually and reasonably incurred in furtherance of the Project.
- B. Reimbursable Expenses include the expenses identified in Appendix 1 and the following: transportation (including mileage), lodging, and subsistence incidental thereto to the extent necessary for completion of the Project and specifically approved in advance by Owner in writing; providing and maintaining field office facilities including furnishings and utilities; reproduction of reports, Drawings, Specifications, bidding-related or other procurement documents, Construction Contract Documents, and similar Project-related items; and Consultants' charges. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for the use of highly specialized equipment.
- C. The amounts payable to Engineer for Reimbursable Expenses will be the Project-related internal expenses actually and reasonably incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to the Project, the latter multiplied by a factor of 1.0. For the avoidance of doubt, in no event will the Reimbursable Expenses, in combination with any other reimbursements, compensation and/or any other amounts to be paid by Owner with respect to and/or pursuant to this Agreement exceed the Maximum Amount unless otherwise agreed by Owner in a signed written agreement entered into pursuant to this Agreement.

C2.03 Other Provisions Concerning Payment

- A. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of 1.0. For the avoidance of doubt, in no event will such compensation, together with any other compensation, reimbursements and/or any other amounts to be paid by Owner with respect to and/or pursuant to this Agreement exceed the Maximum Amount unless otherwise agreed by Owner in a signed written agreement entered into pursuant to this Agreement.
- B. Factors: The external Reimbursable Expenses and Engineer's Consultants' factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.

COMPENSATION PACKET RPR-2:

Resident Project Representative – Standard Hourly Rates

For the avoidance of doubt, this Exhibit C in its entirety is expressly subject to the last sentence of Paragraph 4.01.A in the Agreement. Article 2 of the Agreement is supplemented to include the following agreement of the parties:

- C2.04 Compensation for Resident Project Representative Basic Services Standard Hourly Rates Method of Payment
 - A. Owner shall pay Engineer for Resident Project Representative Basic Services as follows:
 - 1. Resident Project Representative Services: For services of Engineer's Resident Project Representative under Paragraph A1.05.A of Exhibit A, an amount equal to the cumulative hours charged to the Project by each class of Engineer's personnel times Standard Hourly Rates for each applicable billing class for all Resident Project Representative services performed on the Project, plus related Reimbursable Expenses to the extent they are actually and reasonably incurred in furtherance of the Project and Engineer's Consultant's charges to the extent they are actually and reasonably incurred in furtherance of the Project, if any. The total compensation under this paragraph is estimated to be \$95, 265 based upon full-time RPR services on a ten-hour workday, Monday through Friday, over a 55 day construction schedule. For the avoidance of doubt, in no event will such compensation, in combination with any other compensation, reimbursements and/or any other amounts to be paid by Owner with respect to and/or pursuant to this Agreement exceed the Maximum Amount unless otherwise agreed by Owner in a signed written agreement entered into pursuant to this Agreement.
 - B. Compensation for Reimbursable Expenses:
 - For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01, and to the extent they are actually and reasonably incurred in furtherance of the Project and directly related to the provision of Resident Project Representative or Post-Construction Basic Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.
 - 2. Reimbursable Expenses include the expenses identified in Appendix 1 and the following: transportation (including mileage), lodging, and subsistence incidental thereto to the extent necessary for completion of the Project and specifically approved in advance by Owner in writing; providing and maintaining field office facilities including furnishings and utilities; reproduction of reports, Drawings, Specifications, bidding-related or other procurement documents, Construction Contract Documents, and similar Project-related items; and Consultants' charges. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for the use of highly specialized equipment.
 - The amounts payable to Engineer for Reimbursable Expenses, if any, will be those internal expenses related to the Resident Project Representative Basic Services that are actually incurred or allocated by Engineer, plus all invoiced external Reimbursable

Expenses allocable to such services, the latter multiplied by a factor of 1.0. For the avoidance of doubt, in no event will such reimbursements, in combination with any other reimbursements, compensation and/or other amounts paid by Owner with respect to and/or pursuant to this Agreement exceed the Maximum Amount unless otherwise agreed by Owner in a signed written agreement entered into pursuant to this Agreement.

- 4. The parties may, by mutual written agreement, adjust annually the Reimbursable Expenses Schedule to reflect equitable changes in the compensation payable to Engineer.
- C. Other Provisions Concerning Payment Under this Paragraph C2.04:
 - 1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of 1.0. For the avoidance of doubt, such compensation, together with any other compensation, reimbursements and/or any other amounts paid by Owner with respect to and/or pursuant to this Agreement exceed the Maximum Amount unless otherwise agreed by Owner in a signed written agreement entered into pursuant to this Agreement.
 - 2. Factors: The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
 - 3. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

Additional Services - Standard Hourly Rates

Article 2 of the Agreement is supplemented to include the following agreement of the parties:

C2.05 Compensation for Additional Services – Standard Hourly Rates Method of Payment

- A. Owner shall pay Engineer for Additional Services, if any, as follows:
 - 1. General: For services of Engineer's personnel engaged directly on the Project pursuant to Paragraph A2.01 or A2.02 of Exhibit A, except for services as a consultant or witness under Paragraph A2.01.A.20, (which if needed shall be separately negotiated based on the nature of the required consultation or testimony) an amount equal to the cumulative hours charged to the Project by each class of Engineer's personnel times Standard Hourly Rates for each applicable billing class for all Additional Services performed on the Project, plus related Reimbursable Expenses to the extent they are actually and reasonably incurred in furtherance of the Project and Engineer's Consultant's charges to the extent they are actually and reasonably incurred in furtherance of the Project, if any.
- B. Compensation For Reimbursable Expenses:
 - For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01 and are actually and reasonably incurred in furtherance of the Project and directly related to the provision of Additional Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.
 - 2. Reimbursable Expenses include the expenses identified in Appendix 1 and the following: transportation (including mileage), lodging, and subsistence incidental thereto to the extent necessary for completion of the Project and specifically approved in advance by Owner in writing; providing and maintaining field office facilities including furnishings and utilities; reproduction of reports, Drawings, Specifications, bidding-related or other procurement documents, Construction Contract Documents, and similar Project-related items; and Consultants' charges. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for the use of highly specialized equipment.
 - 3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be the Additional Services-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such Additional Services, the latter multiplied by a factor of 1.0.
 - The parties may, by mutual written agreement, adjust annually the Reimbursable Expenses Schedule to reflect equitable changes in the compensation payable to Engineer.
- C. Other Provisions Concerning Payment for Additional Services:

- 1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of 1.0.
- 2. Factors: The external Reimbursable Expenses and Engineer's Consultant's Factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
- 3. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

This is **Appendix 1 to EXHIBIT C**, consisting of 1 page, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated [].

Reimbursable Expenses Schedule

Reimbursable Expenses are subject to review and adjustment to the extent permitted by Exhibit C. Rates and charges for Reimbursable Expenses as of the date of the Agreement are:

8"x11" B/W Copies/Impressions	\$ 0.05/page	
8"x11" Color Copies/Impressions	0.05/page	
11"x17" B/W Copies/Impressions	\$ 0.09/page	
11"x17" Color Copies/Impressions	0.90/page	
Copies of Drawings	\$ 0.90/sq. ft.	
Mileage (auto)	\$ 0.54/mile	
Air Transportation	at cost	
Laboratory Testing	at cost	
GPS Instrument	\$ 75/day	
Meals and Lodging	at cost	

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

Standard Hourly Rates Schedule

A. Standard Hourly Rates:

- 1. Standard Hourly Rates are set forth in this Appendix 2 to this Exhibit C and include salaries and wages paid to personnel in each billing class plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.
- 2. The Standard Hourly Rates apply only as specified in Article C2.

B. Schedule:

Hourly rates for services performed on or after the date of the Agreement are shown in Exhibit C, Appendix 2.

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MODIFIED VERSION of

Exhibit C - Compensation Decision Guide.

This is **EXHIBIT D**, consisting of 5 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services**dated [].

Duties, Responsibilities, and Limitations of Authority of Resident Project Representative

Article 1 of the Agreement is supplemented to include the following agreement of the parties:

ARTICLE 1 - SERVICES OF ENGINEER

D1.01 Resident Project Representative

- A. Engineer shall furnish a Resident Project Representative ("RPR") to assist Engineer in observing progress and quality of the Work. The RPR may provide full time representation or may provide representation to a lesser degree. RPR is Engineer's representative at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions.
- Through RPR's observations of the Work, including field checks of materials and installed equipment, Engineer shall endeavor to provide protection for Owner against defects and deficiencies in the Work. However, Engineer shall not on its own behalf with respect to third parties, as a result of such RPR observations of the Work, be deemed to supervise, direct, or have control over the Work, nor shall Engineer (including the RPR) have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to the Work or any Constructor's work in progress, for the coordination of the Constructors' work or schedules, or for any failure of any Constructor to comply with Laws and Regulations applicable to the performing and furnishing of its work. The Engineer (including RPR) neither guarantees the performances of any Constructor nor assumes responsibility for any Constructor's failure to furnish and perform the Work, or any portion of the Work, in accordance with the Construction Contract Documents unless such failure was cause in whole or in part by Engineer, RPR, Consultants, and/or any of Engineer's other agents and/or other representatives. In addition, the specific terms set forth in Exhibit A, Paragraph A1.05, of this Agreement are applicable.
- C. The duties and responsibilities of the RPR are as follows:
 - General: RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner only with the knowledge of and under the direction of Engineer.
 - Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, schedule of values, and other schedules prepared by Contractor and consult with Engineer concerning acceptability of such schedules.

MODIFIED VERSION of

Exhibit D - Resident Project Representative.

- 3. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.
- 4. Safety Compliance: Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.

5. Liaison:

- a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Construction Contract Documents.
- b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
- c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.
- 6. Clarifications and Interpretations: Receive from Contractor submittal of any matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. Report to Engineer regarding such RFIs. Report to Engineer when clarifications and interpretations of the Construction Contract Documents are needed, whether as the result of a Contractor RFI or otherwise. Transmit Engineer's clarifications, interpretations, and decisions to Contractor.

7. Shop Drawings and Samples:

- a. Record date of receipt of Samples and Contractor-approved Shop Drawings.
- b. Receive Samples that are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
- c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal, if RPR believes that the submittal has not been received from Contractor, or has not been approved by Contractor or Engineer.
- 8. Proposed Modifications: Consider and evaluate Contractor's suggestions for modifications to the Drawings or Specifications, and report such suggestions, together with RPR's recommendations, if any, to Engineer. Transmit Engineer's response (if any) to such suggestions to Contractor.
- 9. Review of Work; Defective Work:

- a. Report to Engineer whenever RPR believes that any part of the Work is defective under the terms and standards set forth in the Construction Contract Documents, and provide recommendations as to whether such Work should be corrected, removed and replaced, or accepted as provided in the Construction Contract Documents.
- b. Inform Engineer of any Work that RPR believes is not defective under the terms and standards set forth in the Construction Contract Documents, but is nonetheless not compatible with the design concept of the completed Project as a functioning whole, and provide recommendations to Engineer for addressing such Work.; and
- c. Advise Engineer of that part of the Work that RPR believes should be uncovered for observation, or requires special testing, inspection, or approval.

10. Inspections, Tests, and System Start-ups:

- Consult with Engineer in advance of scheduled inspections, tests, and systems startups.
- b. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.
- c. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
- d. Observe whether Contractor has arranged for inspections required by Laws and Regulations, including but not limited to those to be performed by public or other agencies having jurisdiction over the Work.
- e. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work, record the results of these inspections, and report to Engineer.

11. Records:

- Maintain at the Site orderly files for correspondence, reports of job conferences, copies of Construction Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Construction Contract, RFIs, Engineer's clarifications and interpretations of the Construction Contract Documents, progress reports, approved Shop Drawing and Sample submittals, and other Project-related documents.
- b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, Subcontractors present at the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, deliveries of equipment or materials, daily activities,

decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.

- Upon request from Owner to Engineer, photograph or video Work in progress or Site conditions.
- d. Record and maintain accurate, up-to-date lists of the names, addresses, fax numbers, e-mail addresses, websites, and telephone numbers (including mobile numbers) of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
- e. Maintain records for use in preparing Project documentation.
- f. Upon completion of the Work, furnish original set of all RPR Project documentation to Engineer.

12. Reports:

- Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
- b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- Furnish to Engineer and Owner copies of all inspection, test, and system start-up reports.
- d. Immediately inform Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, possible force majeure or delay events, damage to property by fire or other causes, or the discovery of any potential differing site condition or Constituent of Concern.
- 13. Payment Requests: Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.
- 14. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

15. Completion:

- a. Participate in Engineer's visits to the Site for inspection regarding Substantial Completion, assist in the determination of Substantial Completion, and prior to the issuance of a Certificate of Substantial Completion submit a punch list of observed items requiring completion or correction.
- b. Participate in Engineer's visit in the company of Owner and Contractor to the Site for inspection to determine completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.
- c. Observe whether all items on the final punch list have been completed or corrected, and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work (Exhibit E).

D. Resident Project Representative shall not:

- 1. Authorize any deviation from the Construction Contract Documents or substitution of materials or equipment (including "or-equal" items).
- 2. Exceed limitations of Engineer's authority as set forth in this Agreement.
- Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers, or any Constructor.
- 4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of the Work, by Contractor or any other Constructor.
- Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
- 6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
- 7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
- 8. Authorize Owner to occupy the Project in whole or in part.

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

NOTICE OF ACCEPTABILITY OF WORK
PROJECT:
OWNER: Papio-Missouri River Natural Resources District
CONTRACTOR:
OWNER'S CONSTRUCTION CONTRACT IDENTIFICATION:
EFFECTIVE DATE OF THE CONSTRUCTION CONTRACT:
ENGINEER:
NOTICE DATE:
To: Papio-Missouri River Natural Resources District Owner
And To:
Contractor
From:Engineer
The Engineer hereby gives notice to the above Owner and Contractor that that the Work furnished and performed by Contractor under the above Construction Contract is acceptable, expressly subject to the

CONDITIONS OF NOTICE OF ACCEPTABILITY OF WORK

provisions of the related Contract Documents, the Agreement between Owner and Engineer for Professional Services dated _____, and the following terms and conditions of this Notice, and that

Engineer has recommended final payment of Contractor:

The Notice of Acceptability of Work ("Notice") is expressly made subject to the following terms and conditions to which all those who receive said Notice and rely thereon agree:

1. This Notice is given with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in Nebraska.

MODIFIED VERSION of

Exhibit E - Notice of Acceptability of Work.

- 2. This Notice reflects and is an expression of the Engineer's professional opinion.
- 3. This Notice is given as to the best of Engineer's knowledge, information, and belief as of the Notice Date.
- 4. This Notice is based entirely on and expressly limited by the scope of services Engineer has been employed by Owner to perform or furnish during construction of the Project (including observation and/or inspection of the Contractor's work) under Engineer's Agreement with Owner, and applies only to facts that are within Engineer's knowledge or could reasonably have been ascertained by Engineer as a result of carrying out the responsibilities specifically assigned to Engineer under such Agreement.
- 5. This Notice is not a guarantee or warranty of Contractor's performance under the Construction Contract, an acceptance of Work that is not in accordance with the related Contract Documents, including but not limited to defective Work discovered after final inspection, nor an assumption of responsibility for any failure of Contractor to furnish and perform the Work thereunder in accordance with the Construction Contract Documents, or to otherwise comply with the Construction Contract Documents or the terms of any special guarantees specified therein.
- 6. This Notice does not relieve Contractor of any surviving obligations under the Construction Contract, and is subject to Owner's reservations of rights with respect to completion and final payment.

Ву:		
Title:	 7	
Dated:		

Insurance

Paragraph 6.05 of the Agreement is supplemented to include the following agreement of the parties:

G6.05 Insurance

- A. The limits of liability for the insurance required by Paragraph 6.05.A and 6.05.B of the Agreement are as follows:
 - 1. By Engineer:

a. Workers' Compensation:

Statutory

b. Employer's Liability --

1) Bodily injury, each accident:

\$500,000

2) Bodily injury by disease, each employee:

\$500,000

3) Bodily injury/disease, aggregate:

\$500,000

- c. General Liability --
 - 1) Each Occurrence (Bodily Injury and Property Damage): \$1,000,000
 - 2) General Aggregate:

\$2,000,000

d. Excess or Umbrella Liability --

1) Per Occurrence:

\$5,000,000

2) General Aggregate:

\$5,000,000

e. Automobile Liability -- Combined Single Limit (Bodily Injury and Property Damage):

\$1,000,000

f. Professional Liability -

1) Each Claim Made

\$1,000,000

2) Annual Aggregate

\$2,000,000

g. Other (specify):

\$[]

- B. Additional Insureds:
 - 1. The Owner shall be listed on Engineer's general liability policy as provided in Paragraph 6.05.A.

MODIFIED VERSION of

Exhibit G – Insurance.

This is **EXHIBIT H**, consisting of 1 page, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated [].

Dispute Resolution

Paragraph 6.09 of the Agreement is supplemented to include the following agreement of the parties:

H6.08 Dispute Resolution

A. Mediation: Owner and Engineer agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement or the breach thereof ("Disputes") to mediation by a mediator to be mutually agreed upon by Owner and Engineer. Owner and Engineer agree to participate in the mediation process in good faith. The process shall be conducted on a confidential basis, and shall be completed within 120 days. If such mediation is unsuccessful in resolving a Dispute, then (1) the parties may mutually agree to a dispute resolution of their choice, or (2) either party may seek to have the Dispute resolved by a court of competent jurisdiction.

MODIFIED VERSION of

Exhibit H - Dispute Resolution.

This is **EXHIBIT J**, consisting of 1 page, referred to in and part of the **Agreement between Owner and Engineer for Professional Services**dated [].

Special Provisions

Paragraph(s) [parties:

] of the Agreement is/are supplemented to include the following agreement(s) of the

MODIFIED VERSION of

Exhibit J - Special Provisions.

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

AMENDMENT TO OWNER-ENGINEER AGREEMENT Amendment No. _____

The Effective Date of this Amendment is:
Background Data
Effective Date of Owner-Engineer Agreement:
Owner: Papio-Missouri River Natural Resources District
Engineer:
Project:
Nature of Amendment: [Check those that are applicable and delete those that are inapplicable.]
Additional Services to be performed by Engineer
Modifications to services of Engineer
Modifications to responsibilities of Owner
Modifications of payment to Engineer
Modifications to time(s) for rendering services
Modifications to other terms and conditions of the Agreement
Description of Modifications:
Agreement Summary:
Original agreement amount: \$ Net change for prior amendments: \$ This amendment amount: \$ Adjusted Agreement amount: \$
Change in time for services (days or date, as applicable):

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

MODIFIED VERSION of

Exhibit K – Amendment to Owner-Engineer Agreement.

OWNER	₹:	ENGINEER:
Papio-N	Missouri River Natural Resources District	
By: Name: Title:	John Winkler General Manager	By: Name: Title:
Date Sig	gned:	Date Signed:

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.