

## MEMORANDUM

**TO:** Programs, Projects, and Operations Subcommittee

**FROM:** Zach Nelson, Project Manager

**SUBJECT:** Review and Recommendation of Professional Services Agreement with Olsson, Inc for the Elk Creek – NRCS Emergency Watershed Protection Project Repair

**DATE:** 9/24/2020

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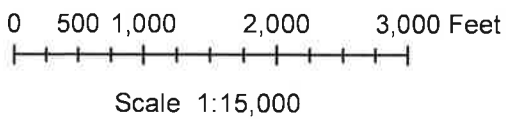
Drainage District #5 was formed in the early 1900s to address drainage and flooding problems along the bottomlands adjoining the Missouri River. In 1999 the Papio-Missouri River NRD assumed the responsibilities of Drainage District #5 as a direct result of a merger. The NRD now maintains the 15 miles of levees along both Pigeon and Elk Creeks. The cost of capital improvements to the drainage project are shared equally from the NRD's general fund and the revenue generated from the special property tax assessment on drainage improvement project area (IPA) properties. The special property tax assessment on the IPA brings in approximately \$45,000 annually.



In 2013, the District utilized the NRCS Emergency Watershed Protection Program to repair the right bank of the Elk Creek levee. Additional right-of-way was acquired to widen out the levee to increase capacity and create more stable 3:1 slopes. The left bank of the levee was not repaired at the time due to budget constraints. In the spring of 2019, the left bank was severely damaged during the bomb-cyclone event that devastated parts of Nebraska. Since then, District staff has been working to prepare an application for EWP Funding. Under the program, the repair of the left bank could be eligible for up to 75% cost share from the NRCS. The remaining portion of the project would be funded between a 50/50 split between the Improvement Project Area and District.

One of the constraints of the program is that the repairs must be designed and completed with 220 days of receiving approval. In order to expedite the design process, the District is proposing to enter into an agreement with Olsson, Inc to begin design work immediately upon approval of project funding. Attached is Olsson's proposed scope of work and fee estimate totaling \$117,900.

**Staff recommends that the Subcommittee recommend to the Board that the District's procurement procedure Policy 15.2 be waived and the General Manager be authorized to execute a professional services contract with Olsson, Inc for the Elk Creek - NRCS Emergency Watershed Protection Plan Project Repair, not to exceed, amount of \$117,900, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.**

# Damage Survey Report Site 31-3-19-5021-107



-  Area of Potential Effect
-  Length of Proposed Repair

Date: 4/27/2020

## SCOPE OF SERVICES

This exhibit is hereby attached to and made a part of the Letter Agreement for Professional Services dated September 30, 2020 between Papio-Missouri River Natural Resources District ("Client") and Olsson, Inc. ("Olsson") providing for professional services. Olsson's Scope of Services for the Agreement is indicated below.

### PROJECT DESCRIPTION AND LOCATION

Project will be located: Dakota City, Nebraska – Papio-Missouri River Natural Resources District Nebraska

Project Description: Final design and Specifications for repair of the Elk Creek Levee System.

### SCOPE OF SERVICES

Olsson shall provide the following services (Scope of Services) to Client for the Project:

#### Background and Overview

The purpose of the work included in this contract is to provide professional services for the final design of the Elk Creek Levee Repair near Dakota City, Nebraska. Final plans will be completed for the levee repair. Land rights maps will be provided as part of this project.

The Papio Missouri River NRD (P-MRNRD) is the "Client" for this project. Olsson is the project consultant.

#### **Phase 100 – Project Management**

##### **Task 100001 – Project Management**

- Provide project management throughout the Project to communicate and coordinate with the project sponsor(s).
- Organize and direct Olsson project team members and resources; and to assure Olsson's professional services tasks are performed in a quality manner consistent with the project schedule, budget, and contract requirements.
- Provide monthly status updates to the P-MRNRD primary contact for the project.

##### **Task 100002 – Project Meetings**

- Organize and lead a project kickoff meeting with key P-MRNRD and Olsson representatives, at the P-MRNRD office. The meeting agenda will focus on discussions towards achieving a joint, detailed understanding of the project objectives, the project scope, and of the deliverables to be provided as a result of the services Olsson will perform during the design project.

- Following the kickoff meeting with the P-MRNRD, a meeting of the entire Olsson project team will be held in Olsson's office to review results of the kickoff meeting, the existing project information, project scope requirements, schedule, and responsibility assignments of each Olsson team member.
- A project update meeting with P-MRNRD (and Land Owners if necessary) to review and discuss the project status, and to allow an opportunity for P-MRNRD to request additional information or course corrections in the project work will be held at the P-MRNRD offices.

**Time and expense basis anticipated fee - \$10,000**

## **Phase 200 – Survey Services**

### **Task 200001 – Unmanned Aerial Vehicle (UAV) LiDAR Survey**

- Olsson will generate a Digital Terrain Model (DTM) from aerial LiDAR data collected by a survey grade sensor mounted to Olsson's UAV platform. This DTM will be tested for accuracy using validation points collected by survey crews to ensure it meets the mapping accuracy standards for 1-foot contours.
- The UAV LiDAR Survey will include approximately a length of 2.3 miles as shown in the attached Exhibit "A".
- The UAV LiDAR Survey will be conducted under the supervision of a professional land surveyor and certified commercial UAV pilot.
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- The Client will provide access to the site and permit the use of UAV's above the property(s).
- The survey units shall be US Survey Feet.
- Horizontal coordinates shall be based on the State Plane Coordinate System. Vertical coordinates shall be based on the North American Vertical Datum (NAVD88) using GEOID 12A CONUS.
- The targeted vertical accuracy class will be 10 cm for non-vegetated areas as defined by ASPRS Mapping Standards.
- The deliverable will be an AutoCAD .dwg file containing a DTM with 1-foot contours.

### **Task 200002 – Prepare a Site Plan**

- Prepare a site plan showing the information obtained during the UAV survey. The utility locations will be determined by surveying the visible features and using record information from the utility owners. No underground exploration for the utilities will be provided. Horizontal control will be based upon County Coordinates and vertical control will be based NAVD 88 datum.

### **Task 200003 – Landowner Maps**

- Compile ownership information and establish property locations. Landowner easement maps will be prepared for the up to five parcels.

**Time and expense basis anticipated fee - \$20,000**

**Phase 300 – Design Services**

**Task 300001 – Final Design**

Olsson shall design Elk Creek Levee improvements and prepare necessary permits. Based off the review of the conceptual plans and discussions with Client, Olsson will develop construction packets based off permitting requirements, construction costs, and schedule. Final design will include detailed plans for horizontal and vertical control, grading, and erosion control.

Submit one (1) 100% Final Plans to Client for each of the construction packets.

Develop one (1) Opinion of Probable Costs associated with construction costs for the each of the construction packets.

A formal in-house quality control review will be made at the 95% completion level. The review will include verification of compliance with design parameters, and regulatory agency standards.

**Task 300002 – NPDES/SWPPP and Floodplain Development Permitting**

Design temporary erosion control measures where needed to minimize sediment migration into Elk Creek. The total disturbed area is anticipated to be greater than 1 acre, so a Stormwater Pollution Prevention Plan (SWPPP) will be prepared in accordance with the National Pollutant Discharge Elimination (NPDES) Permit that will be submitted for this project.

Prepare and submit a floodplain development permit for the work associated with side slope improvements.

**Task 300003 – Final Specifications**

Prepare technical specifications based on engineer's standard specifications for use in bidding.

**Task 300004 – Quality Control/Quality Assurance**

A formal in-house quality control review will be made at 90% plans. The review will include verification of compliance with design parameters, and regulatory agency standards. This will include further discussion with our construction services team on constructability.

**Time and expense basis anticipated fee - \$59,500**

Should Client request work in addition to the Scope of Services, Olsson shall invoice Client for such additional services (Optional Additional Services) at the standard hourly billing labor rate charged for those employees actually performing the work, plus reimbursable expenses if any. Olsson shall not commence work on Optional Additional Services without Client's prior written approval. Olsson agrees to provide all of its services in a timely, competent and professional

manner, in accordance with applicable standards of care, for projects of similar geographic location, quality and scope.

#### **Phase 400 – Bidding Services**

##### **Task 400001 – Bidding Services**

The team will prepare the appropriate bid documents and specifications for the project. Construction of all the proposed measures for the project may be bid as one project in one bid package or multiple bid packages depending on decision made during conceptual design.

Prepare bid advertisements and administer the plan distribution and bidding process. The Client will be responsible for advertising costs.

Schedule and run the bidding process including bid meetings, documenting the contractor selection process, and working with the Client and the selected contractor to prepare contract documents for construction of the proposed measures.

**Time and expense basis anticipated fee - \$8,400**

#### **Phase 500 – Construction Phase Services**

##### **Task 500001 - Construction Administration**

Communications – Olsson will be responsible for coordinating and conducting meetings related to the project. Olsson will record and submit minutes from any meetings to the Client and other project participants as appropriate.

Pre-Construction Kick-off Meeting – Prepare for and attend Pre-Construction kick-off meeting with Contractor, Owner, Engineer, Client and others requested by Olsson's Project Manager and/or Client.

Progress Meeting(s) - Prepare for and attend progress meeting(s) with the Contractor(s) or when requested by the Project Manager and/or Client.

Attend Stakeholder meetings with individuals and business owners affected by the project as appropriate to inform of construction progress and coordination needs.

Project Files -- Olsson will set up, utilize and maintain appropriate project files related to the project. Included in the files will be all project correspondence, change orders, meeting minutes, contracts, plans and specifications, traffic control plans (if necessary), Project Photo Log, Requests for Information (RFIs), material certifications, test reports, inspector's Daily Reports.

Shop Drawing and Materials Submittal Processing – Olsson will be responsible for logging in and distributing Contractor submitted Shop Drawings and Materials related to the project to the Design Engineer for review, as well as returning the marked-up Shop Drawings to the Contractor after review.

Contractor Quantity Tracking – Olsson shall monitor by regular site visits that the quantities are accurate and complete. Contractor quantity reports will be generated monthly.

Change Management - Olsson shall inform and verify any field modifications with the

Client prior to authorization of work. The consultant will Prepare Contract Change Orders (modifications) and Work Change Directives associated with the project for the Client's approval. Construction Contract Change Orders will be prepared utilizing newly approved or existing contract unit values.

**Task 500002 – Construction Observation**

Olsson shall document pre-construction conditions of the project site with photos for comparison and any dispute resolution during and/or after construction.

Olsson shall conduct field inspections of the project to check that the on-going progress and construction is completed in accordance with the contract documents and permits. In general, it is expected that an appropriate level of on-site inspection of the Contractor's work is varied.

Olsson shall prepare and keep detailed notes, computations, and measurements; records of quantities of pay items used in the work; and the tests, certifications, or basis of acceptance of these materials; and a daily record of the contractor's operations. Document all inspections in the field by photos, measurements, computations and/or observations as logged within the Daily Progress Reports (DPR's). DPR's will be prepared using traditional formats.

Olsson shall consult with the Client and Engineer of Record, regarding alignment changes, utility conflicts, change authorizations and change orders

Olsson shall conduct a project walk through with the Client, Engineer of Record and the Contractor to determine and document substantial and final completion.

**Task 500003 – Project Close Out**

Upon notice of completion by the Contractor, Olsson will field measure applicable items of work and prepare final estimates of installed quantities. The Project Manager will review the project records prior to the submission of a Final Quantity estimate for the project. Olsson will also prepare and submit the Final Quantity Estimate associated with the project. Olsson will furnish the appropriate project records and transmit them to the P-MRNRD's record system.

Document "punch list" items; prepare necessary correspondence to the Contractor related to punch list and project completion. Conduct project walk through with the Client, Engineer of Record and the Contractor to determine and document substantial completion. Prepare necessary correspondence to the Contractor related to punch list and project completion. including liquidated damages.

Olsson shall provide to the Client, written declaration of substantial and final completion.

Perform follow-up inspections after notification of resolution regarding nonconforming work prior to authorizing final payment.

Provide project debriefing with Client if requested.

**Time and expense basis anticipated fee - \$20,000**

**Total anticipate fee for all phases - \$117,900**

