MEMORANDUM

TO:	Oakleaf Grade Stabilization Project Professional Services Ad-Hoc Consultant Selection Subcommittee									
FROM:	Ian Ghanavati, Water Resources Engineer									
SUBJECT:	Contract with Benesch for the Oakleaf Grade Stabilization Project									
DATE:	June 10, 2025									

On May 1st, 2025 the Ad-Hoc Consultant Selection Subcommittee selected Benesch to provide professional services necessary to design and permit a series of grade control structures within the Oakleaf Subdivision, located southeast of South 72nd Street and Capehart Road. Benesch and Papio NRD staff have discussed and prepared the attached agreement detailing the required services and associated time and fee estimates for the project. The agreement provides for design, permitting, and bidding assistance services from Benesch for a maximum not-to-exceed fee of \$174,037.00.

The agreement does not include construction phase services (such as construction oversight and testing) which are planned to be included in a future contract amendment.

The proposed scope, fee estimate, and task breakdown are attached.

Management recommends that the Subcommittee recommend to the Board that the General Manager be authorized to execute the professional services agreement for the Oakleaf Grade Stabilization Project with Benesch, for a maximum not-to-exceed fee of \$174,037.00, subject to such other terms and conditions as the General Manager determines necessary and Legal Counsel approves as to form.

CONSULTANT SCOPE OF SERVICES DESIGN AND PERMIT SERVICES PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT OAKLEAF GRADE STABILIZATION

OVERVIEW

The project consists of investigating approximately 3,400 linear feet of a Zwiebel Creek tributary within the Oak Leaf Subdivision, located southeast of South 72nd Street and Capehart Road, and designing grade control structures within the project stream limits. The work required for this project includes hydrologic and hydraulic stream modeling, topographic surveying, preliminary and final design, environmental surveying, and permitting.

Preliminary and final design will follow the Southern Sarpy Watersheds Partnership (SSWP) 2024 Watershed Management Plan (Plan) Grade Control Guidance Document, SSWP Plan Policies, Papio-Missouri River Natural Resources District (Papio-NRD) Erosion and Sediment Control Program Rules and Regulations, Omaha Regional Stormwater Design Manual, and U.S. Army Corps of Engineers (USACE) Regulatory Program Regulations.

UNDERSTANDING & ASSUMPTIONS

The Papio-NRD shall provide or obtain the following information as available:

- Agreements between the development and the Papio-NRD;
- Partnership's H&H Models (HEC-RAS, HEC-HMS, or others) created for the stream's watershed; and
- Right of Entry or Existing ROW information to allow access for field services.

The Consultant's design scope of work includes preparing and submitting the following items to the Papio-NRD:

- Drainage Report (Task 3);
- 90% Plans and Opinion of Cost Estimates (Task 3);
- Waters of the U.S Investigation Report (Task 4);
- Section 404 Permit Application Documents (Task 4);
- SWPPP/Grading Permit Documents (Task 4);
- Final Plans and Specifications for Construction Bidding (Task 5); and
- Bid Award Recommendation Letter (Task 5).

The Consultant proposes to provide these professional services for a Not-to-Exceed fee of \$174,037.00. The labor provided under this proposal shall be compensated based upon actual direct labor costs plus overhead and 12% profit. Direct expenses, including subconsultant costs, shall be reimbursed at cost or established industry standard rates (e.g., IRS rate for mileage). It is mutually agreed; the total scope of services is limited to those services requested that may be performed within the budget estimated in Attachment A unless additional fee is authorized. The Consultant will monitor requested services

relative to the estimated fee limits and notify the Papio-NRD in advance of any requests that may result in exceeding the fee limit identified.

The initial scope of work being requested is limited to those tasks identified herein. The Consultant's design scope of work does not include performing or preparing and submitting the following items that may be requested, if mutually agreeable, or are planned to be addressed via supplemental agreement:

- Impact mitigation design or procurement of wetland bank credits from outside sources to offset any project environmental impacts.
- Geotechnical services including investigation, reporting, field work, and laboratory testing.
- Construction phase services including construction engineering, inspection, staking, and materials testing.

Unless requested or required differently by standard process, all reports, permit applications and memorandums identified above and herein will be provided to the Papio-NRD in electronic (pdf) format, as well as AutoCAD files, ArcGIS shape files, and survey information and records associated with the project. It is assumed that only one (1) hard copy of any printed deliverables will be requested or required.

The Consultant will perform quality assurance and quality control activities throughout the execution of this scope of work in accordance with a project specific Project Quality Management Plan (PQMP) prepared by the Consultant.

ANTICIPATED PROJECT SCHEDULE

•	NTP on or before June 16, 2025
•	SurveyJuly to August 2025
٠	Wetland Delineation & ReportJuly to August 2025
•	H&H Analysis & Drainage Report July to September 2025
•	USACE Pre-Application Meeting August 2025
٠	Grade Control & Environmental Features SelectionSeptember 2025
•	Section 404 & NWP Applications September to November 2025
•	USACE Permit Submittal November 2025
•	90% Design Submittal November to December 2025
•	Bid Package Submittal March 2026
•	Bid Opening May 2026
	NOTE: Scheduling and execution of certain tasks are dependent on seasonal
	conditions and/or timely response from others. The Consultant will notify the
	Papio-NRD in a timely manner of any delays due to circumstances beyond our
	control, the effects on the schedule, and potential reasonable strategies to
	restore the overall project schedule, if possible.

1. PROJECT MANAGEMENT

1.1 Project Management

The Consultant will manage the coordination of the project team including regular team meetings, coordination with Papio-NRD staff, coordination with key stakeholders, monitoring of

project budgets and preparation of progress reports and invoices. A project schedule will be prepared at the beginning of the project and updated as requested by the Papio-NRD.

1.2 Coordination with Others

The Consultant will coordinate the design activities with agency partners (Southern Sarpy Watershed Partnership (SSWP), City of Papillion, Sarpy County, and U.S. Army Corps of Engineers (USACE)), the developer, and utility companies as needed.

1.3 Meetings

The Consultant will attend the following meetings, as requested by the Papio-NRD Project Manager and for the benefit of the project. The Consultant will prepare agendas and action item minutes from the meetings as appropriate.

- Project Kickoff Meeting (1)
- Monthly Project Progress Meetings (6)
- Developer Coordination Meeting (1)
- USACE Pre-Application Meeting (1)
- SSWP Meetings/Presentations (3)

2. SURVEY

2.1 Topographic Survey

Topographic survey limits are defined by the blue shaded area on Figure 1 (approximately 3,400 linear feet of the stream and 100 feet from existing top of bank at each side). The topography will be tied to Douglas/Sarpy LDP for the horizontal datum and the NAVD88 vertical datum. The topography will be affixed to two (2) stable control points and shown on the survey file and have a one-foot contour interval. The survey will denote all visible or otherwise readily identifiable site features such as, but not limited to, buildings, walks, curbs, manholes, drainage structures, water valves, gas valves, trees, shrubs, stairs, signs, utility poles, building doors, etc. The survey will show trees over 9 inches in diameter (identify diameter two (2) feet above grade); locations of individual tree(s) less than 9 inches in diameter if tree(s) are not part of a grouping of trees; and sizes, materials, rim and inverts of below ground utilities with utility identification by method of observed evidence together with evidence from plans obtained from as-builts, utility companies, and field markings by utility companies (Nebraska 811). All manhole information will be observed from the surface. Measurements will be taken via a leveling rod or laser distance meter. No confined space entry will be performed. Research will be carried out through the Sarpy County Offices for recorded survey data. Efforts will include surveying a sufficient number of section and property corner monuments, as deemed appropriate by a Professional Land Surveyor (PLS), to establish right-of-way and property lines within the survey limits. The field data will be processed and a topographic survey drawing prepared. The topographic survey shall be provided in AutoCAD Civil 3D format.

Missing or disturbed property corner monuments will not be reset. A Land Surveyors Certificate will not be generated or recorded. The survey will be limited to the utilities that can be located by observable evidence, provided as-built plans, and Nebraska 811 field locations.



Figure 1-Topographic Survey Limits

3. DESIGN

3.1 Drainage Design

The in-stream grade control design will follow the steps and direction outlined in the Southern Sarpy Watersheds Partnership (SSWP) 2024 Watershed Management Plan Grade Control Guidance Document.

The hydrologic and hydraulic (H&H) stream and structure analysis will use the Army Corps of Engineers' HEC-RAS and HEC-HMS computer modeling programs to determine and compare pre- and post- peak flows at the project site for the 10-year, 25-year, 50-year, and 100-year flood events. Peak flows will be computed at each individual grade control structure for the 24hour, 100-year flood event to calculate rock riprap size and structure dimensions. A water surface profile of the stream and cross sections of existing ground survey data and the proposed surface will be created at a minimum spacing of every 200 feet showing the corresponding water elevations. Drainage basins will be determined using existing topographic survey and LiDAR data as well as quadrangle topographic maps where LiDAR data is not available. Time of concentration values will be calculated for existing and future conditions based on land use maps and delineated flow paths. National Oceanic and Atmospheric Administration (NOAA) Atlas 14 values will be used for the precipitation values for the models.

As part of the H&H stream and structure analysis, the following outputs using HEC-RAS will be determined: water surface elevations, flows, velocities, shear stresses, and duration. Additionally, rock riprap and scour computations will be performed.

A summary of the analysis and results will be documented in a Drainage Report and include the following:

- Methodology Summary
- Pre- and Post- Condition Analysis Summaries
- Model Output Tables
- Model Profiles and Cross Sections
- Riprap Rock Sizing Calculations
- Drainage Area Maps
- Grade Control Structure Layout Map
- Grade Control Structure Design Information Tables
- Design Recommendations

3.2 90% Design

The Consultant will incorporate the Papio-NRD's comments from the grade control selection meeting and review of the preliminary grade control structure location map and grade control structure information tables into the 90% design documents. The Consultant will also advance or otherwise develop additional levels of detail contained in the design, including identifying any constructability or other potential conflicts or concerns. At a 90% level of design, the Consultant will prepare an opinion of construction cost estimate, a set of plans, and

specifications for the Papio-NRD's final review.

Plan sheets to be included in the 90% submittal include the following:

- Cover Sheet
- General Notes Sheet
- Summary of Quantities Sheet
- Horizontal and Vertical Control Sheets
- Typical Grade Control Structure Detail Sheets
- Grade Control Structure Information Table Sheets
- Wetland Impact Sheets
- Construction Sheets
- Grading & Earthwork Sheets
- Stream Profile & Cross Section Sheets
- Phasing Sheet
- Dewatering Plan Sheet
- SWPPP Sheets
- Sediment and Erosion Control Sheets

90% Deliverables:

- 90% Construction Drawings
- Technical Specifications/Special Provisions
- Opinion of Construction Cost Estimate

3.3 Wayfinding & Public Education Features

The Consultant will coordinate with the Papio-NRD and stakeholders to develop a potential strategy for including signage identifying wayfinding and natural or constructed features located within the project area to foster public education of the stream and environmental elements present.

4. ENVIRONMENTAL PERMITTING

4.1 Field Investigation

The Consultant will perform a field investigation in accordance with the USACE Wetland Delineation Manual, Technical Report Y-87-1 and the 2010 Midwest Regional Supplement to the USACE Wetland Delineation Manual at each site. An on-site field investigation will also be conducted as part of this task. The field investigation will determine if wetland areas in question have all three jurisdictional wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology, and if waterways in question have an Ordinary High-Water Mark (OHWM).

Drainage patterns and connections to other waterways will also be documented. The Consultant will delineate the Waters of the United States (WOTUS) boundary according to the above-referenced USACE delineation manual and USACE guidance on waterway boundaries. The Consultant will survey wetland sample points, photograph stations and the WOTUS boundary with a sub-foot accuracy hand-held GPS unit or equivalent device.

4.2 Waters of the U.S. Investigation Report

Findings will be documented in a WOUS Delineation Report for each site that will include the following:

- Discussion of desktop analysis;
- Methods of investigation;
- Documentation of wetland characteristics on USACE Wetland Determination Data Sheets;
- Digital photographs of the investigation area and all delineated WOUS, including wetlands;
- WOTUS delineation map on currently available aerial photography that shows data points, photo points, and WOTUS boundary;
- Discussion of wetland and waterway areas identified and an opinion of their jurisdictional status; and
- Evaluation of the potential project's impacts to WOTUS in accordance with Section 404 permitting procedures.

The Consultant will provide ArcGIS shapefiles or CAD files of the wetland delineation map upon request.

4.3 T&E and Section 106

The Consultant will conduct a preliminary evaluation of the project site for federally regulated threatened and endangered species by using the USFWS IPAC process. Site habitat information will be used to eliminate the presence of protected species at the site as applicable. Cultural and historic resources associated with Section 106 will be evaluated through a desktop review conducted by an archaeologist. This information will be included in Section 404 permit application to the USACE.

4.4 Section 404 Permit

The Consultant will evaluate the proposed project's impacts to WOTUS in accordance with Section 404 permitting procedures. A wetland impact map will be generated that will include the area of wetlands and waters impacted by classification type. The map will have an aerial image as the base map and limits of construction as requested by the USACE. It is anticipated that Nationwide Permit 3(b) can be utilized for each project. The Consultant will determine the amount and types of permanent and temporary impact associated with the project and then prepare a Section 404 Permit application in order to receive a Nationwide Permit.

The permit application effort will include research and collection of information necessary to complete the application, calculation of impacts to WOTUS, and coordination with client staff to discuss design plans and project impacts.

4.5 Mitigation and Revegetation

The Consultant will determine if the wetland impacts exceed 0.1 acre. If they exceed this amount, the Consultant will work with Papio-NRD to identify potential avoidance and minimization strategies to reduce the impacts of the proposed improvements to be below 0.1 acre. If acceptable avoidance and minimization are insufficient, it is assumed wetland bank credits from the existing Papio-NRD bank system will be utilized to mitigate the impacts. If the credits are not available in the Papio-NRD bank, the Consultant will identify potential mitigation strategies including other potential wetland bank credits in the watershed and on or off-site mitigation. The development of a mitigation site is not included in this scope but could be provided as an additional service upon request.

Revegetation of the project area using a native grass seed mix, accompanied by optional deciduous trees, will be presented to the Papio-NRD in a vegetation planting plan. The Consultant will assume two (2) options, one with trees and the other without.

4.6 Grading and Stormwater Permits

a. PERMIX Permits

The Consultant will prepare and submit permits through the PERMIX website by submitting the applications and relevant documentation and addressing comments as received by the permitting agency.

- Grading Permit
- Post Construction Stormwater Management Plan waiver
- b. NDEE Permits

The Consultant will prepare and submit permits through the Nebraska Department of Environment and Energy (NDEE) (including future combined agency with the Nebraska Department of Natural Resources (DNR)) by submitting the applications and relevant documentation and addressing comments as received by the permitting agency.

- Construction Stormwater Permit (CSW-NOI and SWPPP)
 - CSW-NOI will require submission of Nebraska Game and Parks Commission Conservation and Environmental Review Tool (CERT)

5. BIDDING ASSISTANCE

5.1 Bid Documents

Following comments received by the Papio-NRD to the 90% plan set and specifications, the Consultant will prepare and submit the final bid package to the Papio-NRD for bidding. For the final submittal, permits and application approvals will be received and included in the Contract Documents.

5.2 Pre-Bid Meeting

The Papio-NRD will schedule this meeting and invite necessary NRD staff. The Consultant will prepare the agenda, attend, and conduct the meeting with Papio-NRD assistance. The

Consultant will prepare meeting minutes.

5.3 Prepare Addenda

The Consultant will prepare an addendum as required to address questions raised at the prebid meeting, written questions from bidders, or other Contract Document plan and specification clarifications. A draft addendum will be provided to the Papio-NRD for review. The Consultant will address any comments from the Papio-NRD and provide a final addendum document to Papio-NRD for posting through the NRD's bidding platform. Up to two (2) addenda are anticipated: one for distribution of pre-bid meeting minutes and Q&A answers, and one to address other contractor questions or feedback.

5.4 Bid Evaluation

The Consultant will perform an initial evaluation of bid responsiveness and prepare a bid tabulation, which will be provided to the Papio-NRD, along with bid documentation received.

After the bids are evaluated for responsiveness and an apparent low bidder has been established, the Consultant will review the bid materials to evaluate compliance with bid requirements, whether the submitted materials meet requirements, and if necessary, make reasonable inquiries into the bidder's previous work quality, experience, or other areas as noted in the Contract Documents.

The Consultant's review of the apparent low bid will be summarized in a Bid Award Recommendation letter. The Consultant will work closely with the Papio-NRD while evaluating bid(s). The Bid Award Recommendation letter will be provided to the Papio-NRD.

Attachment A

Oakleaf Grade Stabilization Papio Missouri River Natural Resources District Fee Estimate For Professional Engineering Services

Project Summary																	
						Perso	onnel	Servi	ces				Rei	mbursa	bles		
Task	Principal Professional Engineer	Project Manager	Senior Professional Engineer, Senior Project Scientist	Professional Engineer III/Sr. Landscape Architect	Professional Engineer II, Project Scientist III	Project Engineer I, Project Scientist II, Public Outreach Coordinator	Project Scientist I, Senior Technician, Surveyor	Designer II , Scientist II, Party Chief	Quality Contol Reviewer	Project Analyst/Project Administrative Support	Total Hours	Subtotal*	Printing, Communication, Misc. Suppies/Expenses	Other Vehicle Mileage @ \$0.700/mi	R.W. Engineering & Surveying, Inc. (Subconsultant)	Subtotal*	Estimated Fee*
Task 1 Project Management	2	68	16	0	0	0	0	0	0	6	92	\$ 19,384.00	\$ 200	\$ 146	\$ -	\$ 346	\$ 19,730.00
Fask 2 Survey	0	0	0	0	0	0	24	16	1	0	41	\$ 5,562.00	\$ 100	\$ 214	\$ 9,060	\$ 9,374	\$ 14,936.00
ask 3 Design	0	0	0	0	64	0	0	564	7	0	635	\$ 83,002.00	\$ 800	\$ -	\$ -	\$ 800	\$ 83,802.00
Task 4 Environmental Permitting	0	0	34	0	16	0	0	152	5	0	207	\$ 30,282.00	\$ 300	\$ 112	\$ -	\$ 412	\$ 30,694.00
Task 5 Bidding Assistance	0	0	6	60	0	0	0	90	2	1	159	\$ 24,618.00	\$ 200	\$ 57	\$ -	\$ 257	\$ 24,875.00
Subtotal	2	68	56	60	80	0	24	822	15	7	1134		\$ 1,600	\$ 529	\$ 9,060		
Project Total*												\$ 162,848.00				\$11,189	\$ 174,037.00

* Estimated labor and expense totals are based on an estimated average rate for the labor classifications and expense categories for the purposes of establishing a total estimated fee and not a total estimated fee per task. Variations in actual task amounts are anticipated. Labor rates billed will be based on current audited overhead rates plus 12 % profit (fee). Expenses shall be reimbursed at cost without markup.

Attachment A

Oakleaf Grade Stabilization Papio Missouri River Natural Resources District

Fee Estimate For Professional Engineering Services

		Rate	Est.	Estimated	
Personnel Classification	<u>\$</u>	<u>Hours</u>	Cost*		
Principal Professional Engineer	\$	284.00	2	\$ 568.00	
Project Manager	\$	216.00	68	\$ 14,688.00	
Senior Professional Engineer, Senior Project Scientist	\$	216.00	56	\$ 12,096.00	
Professional Engineer III/Sr. Landscape Architect	\$	191.00	60	\$ 11,460.00	
Professional Engineer II, Project Scientist III	\$	168.00	80	\$ 13,440.00	
Project Scientist I, Senior Technician, Surveyor	\$	138.00	24	\$ 3,312.00	
Designer II, Scientist II, Party Chief	\$	125.00	822	\$ 102,750.00	
Quality Contol Reviewer	\$	250.00	15	\$ 3,750.00	
Project Analyst/Project Administrative Support	\$	112.00	7	\$ 784.00	
	Sub	\$ 162,848.00			
Direct Nonsalary Costs					
Printing, Communication, Misc. Supples/Expenses				\$ 1,600.00	
Other Vehicle Mileage @ \$0.700/mi				\$ 529.00	
R.W. Engineering & Surveying, Inc. (Subconsultant)				\$ 9,060.00	
	Subtota	l Direct Non	-Labor Costs	\$ 11,189.00	

Total Estimated Not to Exceed Fee* \$ 174,037.00

* Estimated labor and expense totals are based on an estimated average rate for the labor classifications and expense categories for the purposes of establishing a total estimated fee and not a total estimated fee per task. Variations in actual task amounts are anticipated. Labor rates billed will be based on current audited overhead rates plus 12 % profit (fee). Expenses shall be reimbursed at cost without markup.

Attachment A

	Pers	onne	el Services	Re	eimbursables		
	Total Hours		Subtotal		Subtotal		Estimated Fee
Task 1 Project Management				. .			
1.1 Project Management	42	Ş	9,208.00	<u>Ş</u>	100	\$	9,308.00
1.2 Coordination with Others	8	Ş	1,728.00	<u>Ş</u>	-	\$	1,728.00
1.3 Meetings	42	Ş	8,448.00	Ş	246	Ş	8,694.00
	0	Ş	-	Ş	-	Ş	-
Subtotal	92	Ş	19,384.00	Ş	346.00	Ş	19,730.00
Task 2 Survey		-			1	—	
2.1 Topographic Survey	41	Ş	5,562.00	Ş	9,374	Ş	14,936.00
	0	Ş	-	Ş	-	Ş	-
Subtotal	41	Ş	5,562.00	Ş	9,374.00	Ş	14,936.00
Task 3 Design	1=0	-					
3.1 Drainage Design	178	Ş	23,188.00	Ş	200	Ş	23,388.00
3.2 90% Design	424	Ş	55,220.00	Ş	600	Ş	55,820.00
3.3 Wayfinding & Public Features	33	Ş	4,594.00	Ş		Ş	4,594.00
	0	Ş	-	\$	-	\$	-
Subtotal	635	Ş	83,002.00	Ş	800.00	Ş	83,802.00
Task 4 Environmental Permitting	22	ć	2 0 2 2 0 0		442		2.044.00
4.1 Field Investigation	22	Ş	2,932.00	\$	112	2	3,044.00
4.2 Waters of the U.S. Investigation Report	38	Ş	5,364.00	\$	100	>	5,464.00
4.3 T&E and Section 106	24	Ş	3,516.00	\$	-	>	3,516.00
4.4 Section 404 Permit	46	Ş	6,364.00	\$	100	>	6,464.00
4.5 Willigation and Revegetation	56	Ş	9,184.00	\$	100	2	9,284.00
4.6 Grading and Stormwater Permits	21	Ş	2,922.00	\$		2	2,922.00
Subtotol	207	ې د	-	\$ 6	-	2	-
Subtotal	207	Ş	30,282.00	Ş	412.00	Ş	30,694.00
Task 5 Bloding Assistance		4	15.040.00				
5.1 Bid Documents	110	Ş	15,948.00	\$	200	\$	16,148.00
5.2 Pre-Bid Meeting	7	Ş	1,308.00	\$	57	\$	1,365.00
5.3 Prepare Addenda	18	Ş	3,306.00	Ş	-	<u>Ş</u>	3,306.00
5.4 Bid Evaluation	24	Ş	4,056.00	\$	-	\$	4,056.00
	0	\$	-	\$	-	\$	-
Subtotal	159	\$	24,618.00	\$	257.00	\$	24,875.00