MEMORANDUM

TO: Programs, Projects, and Operations Subcommittee FROM: Lori Ann Laster, Stormwater Management Engineer

SUBJECT: Review and Recommendation on Southern Sarpy Watershed Partnership

Professional Services Contract Amendment 2 with FYRA Engineering

DATE: February 5, 2021

In October 2016 the Board of Directors approved an Interlocal Agreement for the creation of the Southern Sarpy Watershed Partnership (SSWP) and an updated Interlocal Agreement was approved in 2019. See attached map of area.

This Partnership was created between Bellevue, Gretna, Papillion, Springfield, Sarpy County, and the District to form initial policies for development Southern Sarpy County and to determine what the planning needs are for this watershed. Unlike the Papillion Creek Watershed, the Southern Sarpy Watershed has very little data with regards to hydrology, hydraulics, and water quality. The need to develop a comprehensive watershed management plan is the top priority of the new SSWP.

FYRA Engineering was selected in 2016 to begin the development of the watershed management plan. Phase I of the plan was completed in early 2019. Phase II of the plan was recently completed and the SSWP is ready to move on to the third and final phase of plan development.

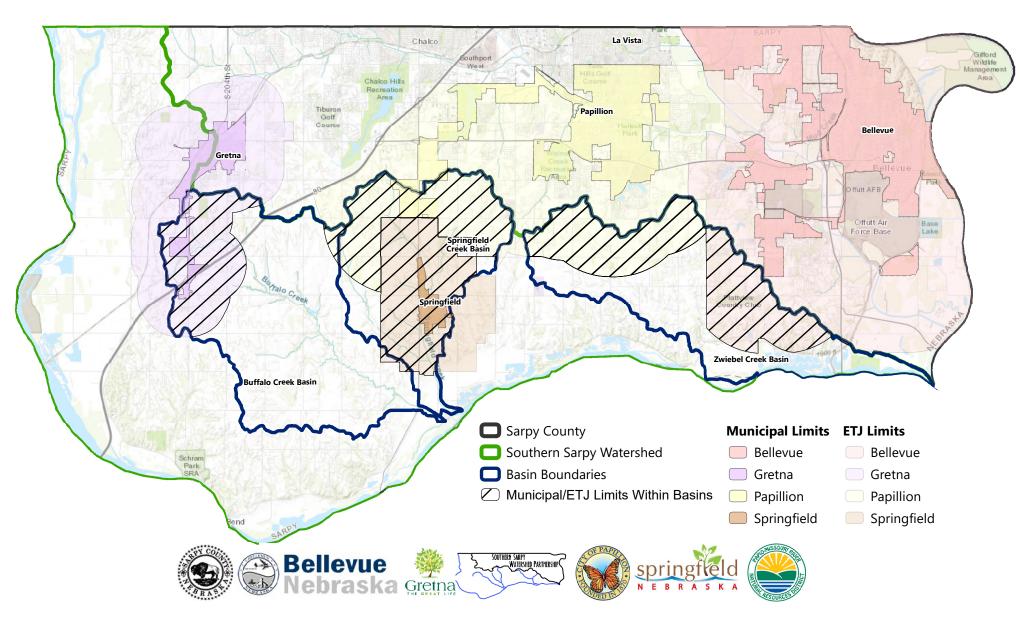
Staff and the SSWP members worked with FYRA to develop the attached scope of work, fee, and schedule for Phase III of the plan. The tasks included in the scope of work are:

- Project Management
- Stakeholder Engagement
- Alternatives Analysis Completion
- Plan Completion
- Plan Financing
- Agency Engagement

Phases I and II of the Watershed Plan were contracted with FYRA Engineering at a cost of \$801,748 and were completed over a three-year period. Phase III is expected to be completed in one year with a fee not-to-exceed \$411,810, bringing the total contract to \$1,213,558. The costs for this planning effort are covered by the Southern Sarpy Watershed Partnership fund. The members of the SSWP voted at their January 21, 2021 meeting to approve the proposed scope and fee for the contract Amendment #2 (see attached minutes).

Management recommends that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute the proposed contract Amendment #2 with FYRA Engineering to provide professional services for Phase III of the Southern Sarpy Watershed Management Plan in the amount of \$411,810, making the total maximum not to exceed agreement amount \$1,213,558, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.

Exhibit A



Southern Sarpy WatershedSouthern Sarpy Watershed Partnership
Interlocal Agreement 2019





SUGGESTED FORMAT (for use with E-500, 2002 Edition)

This is **EXHIBIT K**, consisting of 2 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated 10 February, 2017.

AMENDMENT (2) TO OWNER-ENGINEER AGREEMENT

1.	Back	ground Data:											
	a.	Effective Date of Owner-Engineer Agreement: 10 February 2017											
	b.	Owner: Papio-Missouri River Natural Resources District											
	c.	Engineer FYRA Engineering											
	d.	Project: Southern Sarpy Watershed Partnership – Southern Sarpy Watershed Management Plan											
2.	Natu	re of Amendment											
		X Modifications to Services of Engineer											
		X Modifications to Payment to Engineer											
		X Modifications to Time(s) for rendering Services											
		X Modifications to other terms and conditions of the Agreement											
3.	Desc	ription of Modifications											
Watershed Midentified in t	Ianago the Pla	1 ("Exhibit A") to Exhibit K includes services required for Phase III of the ement Plan related to the formulation, development and screening of alternatives in. Attachment 1, attached hereto, shall supplement and in no way replace, Exhibit scope of Service" of this Agreement.											
Exhibit B- Task List and Fee Estimate, attached hereto, shall supplement Exhibit C1, Appendix 2 of this Agreement.													

Page 1 of 2 Pages (Exhibit K – Amendment to Owner-Engineer Agreement)

remain in effect. The Effective Date of this Amendment is 11 Feb 2021.

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

OWNER: Papio-Missouri River NRD	ENGINEER: FYRA Engineering								
	MMASI								
By: John Winkler	By: Michael K. Sotak, P.E.								
Title: General Manager	Title: Owner/Principal Engineer								
Date Signed:	Date Signed: 11 Feb 2021								

Modifications

1. Engineer shall perform the following Additional Services:

N/A

2. The Scope of Services currently authorized to be performed by Engineer in accordance with the Agreement and previous amendments, if any, is modified as follows:

Exhibit A to Attachment 1, attached hereto and incorporated herein, entitled "Task Descriptions – Southern Sarpy Watershed Management Plan Phase III," details the Services to be performed by Engineer.

Exhibit B to Attachment 1, attached hereto and incorporated herein, entitled "Task List and Fee Estimate," details the Services to be performed by Engineer and the estimated fees associated with those Services.

3. The responsibilities of Owner are modified as follows:

n/a

4. For the Additional Services or the modifications to services set forth above, Owner shall pay Engineer the following additional compensation:

A maximum not to exceed total fee of \$1.213.558 representing time actually expended and invoiced by Engineer and Consultants based on the following assumed distribution of compensation and as detailed in Attachment 1 to Exhibit C, Exhibit Bs of Amendment 1, Amendment 2:

a.	Original Contract (February 2017)	\$400,640
b.	Amendment 1 (May 2019)	\$401,108
c.	Amendment 2 (February 2021)	\$ <u>411,810</u>
d.	Total	\$1,213,558

5. The schedule for rendering services is modified as follows:

Project end date changed from November 2020 per Amendment 1 to January 2022: Complete Phase III Services and scope Phase III – Final Plan Development. See Exhibit C to Attachment 1.



Exhibit A to Attachment 1

1.0 PROJECT MANAGEMENT

1.01 Partnership Coordination Meetings

Preparation for and attendance at 6 monthly project coordination meetings to review project status, work completed, upcoming tasks, and gather stakeholder input from Partnership on the development of the Southern Sarpy Watershed Management Plan (Plan). Agenda will be reviewed a week ahead of coordination meetings with NRD staff.

1.02 NRD Coordination Meetings

Preparation for and attendance at 6 project technical coordination meetings to review project status, work completed, and general project direction. Meeting subjects and timing dependent on needs of project progress and as per availability of NRD management/staff.

1.03 Monthly Invoicing & Project/Schedule Updates

Preparation of monthly project invoices, incorporation of sub-consultant invoices, and a summary of work completed during the invoicing period. Invoices will be sent to the NRD prior to the first of the month. Updates will include budget and schedule tracking.

2.0 STAKEHOLDER ENGAGEMENT

2.01 Outreach Development and Coordination

Organization and development of both Technical and Watershed Advisory Groups (TAG/WAG) and direction on their roles and responsibilities in the overall Plan development.

2.02 Public Outreach Meeting

Prepare for, conduct and document one public meeting after feedback received in workshops and address comments received in the Plan.

2.03 Agency Workshops

Planning, organization, facilitation, and documentation of 3 TAG workshops to define roles of TAG, gather input on potential PPAs and provide feedback on the plan recommendations. The three main areas of focus would be to head off concerns with permitting, identify funding opportunities and get buy-in on the process to try and identify opportunities for any programmatic permitting direction/strategies.

2.04 Stakeholder (Development Community) Workshops



Planning, organization, facilitation, and documentation of 3 Stakeholder workshop to define roles of watershed stakeholders, gather input on potential PPAs and provide feedback on the plan recommendations.

2.05 Summarize Results into Plan

Add text to the Plan (Appendix) summarizing and documenting all public outreach (including Agency/Stakeholder) efforts.

3.0 ALTERNATIVES ANALYSIS COMPLETION

3.01 Finalize Partnership Projects for S/B/Z Watersheds

Complete an alternatives analysis to identify projects to be implemented by the Partnership (that supplement those selected in Phase II for peak flow management) that are needed to meet the stream stability goals. Additional project components may be identified to address water quality and aesthetics/recreation/habitat goals for the Partnership.

3.02 Develop Land Rights and Cost Estimates for Partnership Projects

Perform sufficient preliminary modeling and design for all Partnership Projects identified in the Plan to estimate land requirements, provide a conservative buffer for the project areas required via a GIS shapefile that would be provided to Partnership members for use in identifying conflicts with planned development, and develop quantities to estimate construction costs.

3.03 Complete Plan Technical Appendices

Update draft versions of Hydrology, Hydraulics, Environmental, Stream Stability and Peak Flow Management Alternative Assessment appendices that were developed in Phases I and II. Develop Stream Stability Alternatives Assessment that reports how any resulting Partnership Projects were selected.

3.04 Complete Plan Descriptions of Alternatives

Incorporate detailed descriptions of the alternatives considered and the Partnership Projects selected into the Plan.

3.05 Prepare Temporary Floodplain Maps

Prepare "Zone A-Type" flood map for use as "best available information" in any floodplain management activities conducted by Partnership planning departments, etc. The existing 1-D HEC RAS models will be updated as necessary after comparison with the newest LiDAR information and any newly provided structure information. Hydraulic structures will receive additional scrutiny as part of a QA/QC check to ensure that the models were constructed correctly from the baseline desktop



modeling effort. Hydraulic structures will receive baseline documentation including photographs and modeling assumptions for future use if a submission to FEMA through LOMR/PMR in necessary. Documentation updates will be made in the Plan Appendix. Detailed mapping will be performed to provide shapefile output for the existing and future 100-yr floodplains. Floodway routings are not planned at this time.

4.0 PLAN COMPLETION

4.01 Finalize Watershed Policies and Ordinances

Revisit the interim policies in coordination with the Partnership. Develop and analyze any data or design information pertinent to aiding in the decisions for modifying and finalizing policy language. Incorporate information in the Plan document. Develop DRAFT ordinances/resolutions to be approved by each Partnership member concerning the final policies along with (outside) legal assistance with the language.

4.02 Develop Plan Checklist

Research approaches to enforcing all the different policies identified in the plan and develop clear enforcement guidance for the Plan. This may consist of development checklists to provide consistency across the Partnership in how Plan goals are considered.

4.03 Project Design Checklist/Guidance

Prepare general design requirements, details/drawings as needed to relay intent for any structural projects that could be implemented as a function of a policy or Partnership Project.

4.04 Synergies with Parallel Planning Documents

Coordinate with partner members and other local agencies (or representative consultant) on concurrent planning projects to avoid conflicts and ensure the most current information is being incorporated into the Plan. Confluence will conduct individual meetings with project partners/agencies and the creation of a summary list of the primary concerns and opportunities for each partner/agency. This includes the creation of a map for each structure and a listing of human use/ recreation items recommended for each of the structures within the plan. Some structures may not include any human use/recreational items and those will also be identified.

4.05 Final Plan Drafting

Update the Phase 1 Draft Plan with modified and new information, figures and tables based on the coordination with the Partnership and findings of the above tasks. Illustrations will be provided to demonstrate the advantages of this Planning effort. Six illustrations are included. (One site model with 2 high quality views, 3 character illustrations of recreational/human use components and an



illustrated master plan of a linear corridor structure.) Provide draft electronic copies to the Partnership and incorporate revisions.

4.06 Prepare 10 Hard Copies

Print, bind and deliver 10 hard copies of the final Plan.

5.0 PLAN FINANCING

5.01 Forecast Public Costs and Revenue Streams

Develop financing forecasts based on watershed fees, Partnership Project costs and estimated implementation schedules.

5.02 Identify Potential Outside Funding Avenues

Research and identify additional funding sources to pursue that would support Partnership Projects and specify constraints or project requirements for eligibility.

6.0 AGENCY ENGAGEMENT

6.01 NGPC/USACE/USFWS Coordination

Throughout Phase III of the study, engage with the regulatory agencies that may be required outside of TAG coordination.





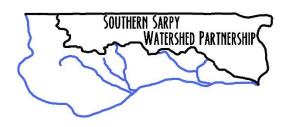
Exhibit B to Attachment 1 - Task List and Fee Estimate
Southern Sarpy Watershed Management Plan - Phase III
Southern Sarpy Watershed Partnership
Sarpy County, NE
FYRA Project No. 001-16-03

			FYR	A Engineerin	ng						Conflu	uence				
	Prj Mngr	Prj Engr	Prj Engr	Prj Engr	EI	Acctg		Principal	Assoc Principal	Project	Landscape	Planner	Intern	Clerical		
								'	•	Manager	Architect				_	
	Sotak	Gregalunas	Kaufman	Mechtenberg		Stratton	Expenses	Silkworth	Aldrich/Nelson	Bolte	Kucker	Reasoner	(Varies)	(Varies)	Expenses	
Tasks	\$225	\$205	\$160	\$160	\$115	\$80		\$155	\$130	\$130	\$130	\$75	\$70	\$70		Total
No. Project Management																
1.01 Partnership Coordination Meetings (6)	24			48				12		24						
1.02 NRD Coordination Meetings (6)	24			48				12		24						
1.03 Monthly Invoicing & Project/Schedule Updates (12)	12					12		6								
Project Management Task Total	\$13,500	\$0	\$0	\$15,360	\$0	\$960	\$0	\$4,650	\$0	\$6,240	\$0	\$0	\$0	\$0	\$0	\$40,710
No. Stakeholder Engagement																
2.01 Outreach Development and Coordination	12			24				4		4						
2.02 Public Outreach Meeting	8							4		32						
2.03 Agency Workshops (3)	15			24	15		\$100	9								
2.04 Stakeholder (Development Community) Workshops (3)	15			24	15		\$100	15		15						
2.05 Summarize Results Into Plan	24			60	40			6		12						
Stakeholder Engagement Task Total	\$16,650	\$0	\$0	\$21,120	\$8,050	\$0	\$200	\$5,890	\$0	\$8,190	\$0	\$0	\$0	\$0	\$0	\$60,100
No. Alternatives Analysis Completion																
3.01 Finalize Partnership Projects for S/B/Z Watersheds	40			80	120											
3.02 Develop Land Requirements and Cost Estimates for Partnership Projects	8			12	20			2		6	2					
3.03 Complete Plan Technical Appendices	60	30	16	80	160											
3.04 Complete Plan Description of Alternatives	20	8	8	60	40											
3.05 Prepare Temporary Floodplain Maps	8	60		80	80											
Alternative Analysis Completion Task Total	\$30,600	\$20,090	\$3,840	\$49,920	\$48,300	\$0	\$0	\$310	\$0	\$780	\$260	\$0	\$0	\$0	\$0	\$154,100
No. Plan Completion																
4.01 Finalize Watershed Policies and Ordinances	80			40												
4.02 Define Plan Checklist	50			20												
4.03 Project Design Checklist/Guidance	40			40				12	12	40	4					
4.04 Synergies With Parallel	12			6				16		36		36	24			
4.05 Final Plan Drafting	80	12	12	80				28		36			80			
4.06 Prepare 10 Hard Copies					8		\$1,000									
Plan Completion Task Total	\$58,950	\$2,460	\$1,920	\$29,760	\$920	\$0	\$1,000	\$8,680	\$1,560	\$14,560	\$520	\$2,700	\$7,280	\$0	\$0	\$130,310
No. Plan Financing																
5.01 Forecast Public Costs and Revenue Streams	30			40												
5.02 Identify Potential Outside Funding Avenues	20			20												
Plan Financing Task Total	\$11,250	\$0	\$0	\$9,600	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,850
No. Agency Engagement																
6.01 NGPC/USACE/USFWS Coordination	4		12	12												
Agency Engagement Task Total		\$0	\$1,920	\$1,920	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,740
Subtotal Hours	586	110	48	798	498	12		126	12	229	6	36	104	0		
Subtotal Costs	\$131,850	\$22,550	\$7,680	\$127,680	\$57,270	\$960	\$2,200	\$19,530	\$1,560	\$29,770	\$780	\$2,700	\$7,280	\$0	\$0	\$411,810

Project Schedule - Phase III - Exhibit C to Attachment 1

Southern Sarpy Watershed Management Plan - Milestone Chart

		2021										2022
	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Jan
Project Management												
Partnership Coordination Meetings (6)				*				*		*		*
NRD Coordination Meetings (6)			*		*		*		*		*	
Monthly Invoicing & Project/Schedule Updates (12)												
Stakeholder Engagement												
Outreach Development and Coordination												
Public Outreach Meeting												
Agency Workshops (3)							-					
Stakeholder (Development Community) Workshops (3)									→			
Summarize Results Into Plan		—										>
Alternatives Analysis Completion												
Finalize Partnership Projects for S/B/Z Watersheds												
Develop Land Requirements and Cost Estimates for Partnership Projects												
Determine Contingency Plan(s) for Partnership Projects								\rightarrow				
Complete Plan Technical Appendices										\rightarrow		
Complete Plan Description of Alternatives												>
Prepare Temporary Floodplain Maps										,		
Plan Completion												
Finalize Watershed Policies and Ordinances	—											
Define Plan Checklist						$\qquad \Rightarrow \qquad$						
Project Design Checklist/Guidance												
Synergies With Parallel Planning Documents	—				_							>
Final Plan Drafting												•
Prepare 10 Hard Copies												*
Plan Financing												
Forecast Public Costs and Revenue Streams												
Identify Potential Outside Funding Avenues												
Agency Engagement												
NGPC/USACE/USFWS Coordination												



Minutes

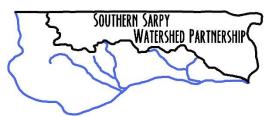
Partnership Coordination Meeting January 21, 2021 - 10 am Zoom

Attendees: Dan Giittinger (Gretna), Matt Knight (Bellevue), Kathleen Gottsch (Springfield), Mark Stursma (Papillion), Alex Evans (Papillion) Marlin Petermann (P-MRNRD), Amanda Grint (P-MRNRD), Lori Laster (P-MRNRD), Eric Williams, (P-MRNRD), Bob Gregalunas (FYRA), Sara Mechtenberg (FYRA), Dave Lampe (FHU), Aaron Hirsh (FHU)

1. Introductions

- a. The meeting began at 10:04 am. Marlin Petermman facilitated introductions.
- VOTE- Phase III Watershed Management Plan Development Contract with FYRA
 - a. Lori Laster gave an overview of the proposed contract amendment with FYRA Engineering. Phase II of the Watershed Management Plan has been substantially completed. The only outstanding item from that phase is incorporating comments into the technical appendix for Peak Flow Management. The total not-to-exceed amount of the amendment is \$411,810, bringing FYRA's contract total to \$1,213,558.
 - b. Alex Evans raised some questions on the necessity of the Floodplain Mapping Task. Bob Gregalunas explained that the hydraulic modeling done to date was focused on comparing pre-development and post-development conditions. If the Partnership wishes to use this data as "Best Available Data" to manage development in areas of higher flood risk, there needs to be some additional analysis on structures such as bridges and culverts to ensure the data is consistent with FEMA requirements. However, FYRA has not included preparation of a FEMA submission or floodway modeling in their scope. This

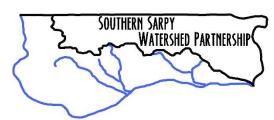




would require an additional contract amendment in the future if the Partnership chooses to submit for a map revision.

- c. Mark Stursma asked if using best available data in this way has legal precedent. Lori Laster stated she had talked with NeDNR and there have been communities in Nebraska that have adopted data not yet printed on FEMA maps and regulate it in the same manner as FEMA requirements. Lori will follow up with NeDNR and NRD legal counsel to prepare proper language to allow these areas to be managed as floodplains.
- d. Marlin Petermann inquired about the Partnership budget. Lori stated that fund has approximately \$1.4 million. The FY 2021 projected expense for professional services is \$350,000, which covers until June 30, 2021. An updated budget will be presented at the next meeting.
- e. Mark Stursma motioned to approve the FYRA Contract amendment. Kathleen Gottsch seconded the motion. Motion carried 5 yea-0 nay.
 - Yeas: Dan Gittinger, Mark Stursma, Matt Knight, Kathleen Gottsch, Marlin
 Petermann
 - ii. Nays: none
 - iii. Members absent: Sarpy County
- 3. Papillion Creek Watershed Partnership Stream Setback Policy Update
 - a. Lori Laster gave a brief overview of the proposed changes to the stream setback policy for the Papillion Creek Watershed Partnership. The proposed policy includes adding an anticipated degradation depth to the starting point of calculating the stream setback. This depth is variable based on current stream slopes and distance from grade control points. This allows development projects to choose between a wider setback or installing additional grade control points along the stream. It is anticipated that the same policy would be adopted by the Southern Sarpy Watershed Partnership. FYRA, the NRD, and FHU (the consultant





for the Papillion Creek Watershed Partnership) met to discuss the policy and potential adjustments that could be made to that it's appropriate for both watersheds. It's anticipated that the PCWP will adopt the policy in Spring 2021. The SSWP would likely adopt any new policies upon completion of the Watershed Management Plan.

4. Other Items of Interest

a. The Peak Flow Alternative Analysis appendix for the Watershed Management Plan was emailed to all Partners. Please provide any comments to Lori Laster as soon as possible. Alex Evans had some concerns about formal adoption of the appendix and whether the proposed alternatives were appropriate. Marlin Petermann stated that the appendix will remain draft until the plan is completed. The Plan will include a financial analysis of the feasible alternatives and the Partnership will then vote to adopt the plan or policy that is acceptable to the communities.

5. Adjourn

- a. The meeting adjourned at 11:16 am.
- b. The next meeting is scheduled for February 18, 2021 at 10 am.

