Agenda Item: 7.

Memo to the Programs, Projects and Operations Subcommittee

Subject:

240th Street (Sarpy County) Elkhorn River

Date:

November 7, 2013

From:

Gerry Bowen

The June 2010 Elkhorn River flood resulted in streambank erosion that threatened 240th Street immediately south of Harrison Street in Sarpy County. In response to this, the District, in cooperation with Sarpy County, undertook an interim project to stabilize the streambank at its current location through the use of windrowed revetment (riprap). This interim project was completed in January, 2012 at a cost of \$178,638. The engineering costs totaled \$149,852 covering both the identification of alternatives and the design and construction of the interim project. Sarpy County and the District equally shared in these costs.

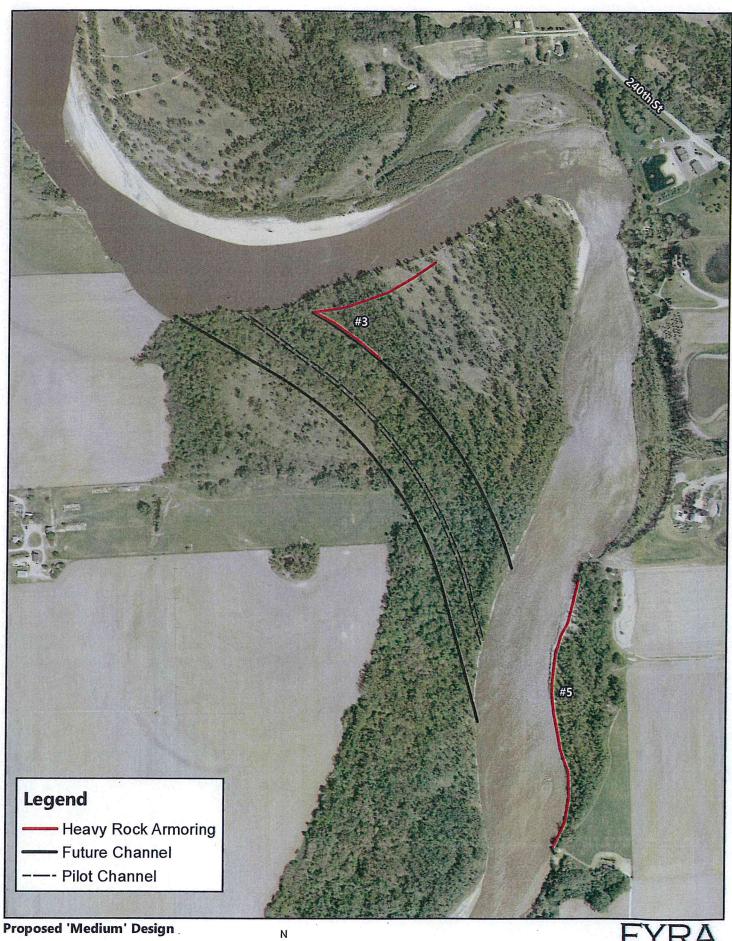
The interim solution, while effective in the short term, was deemed inadequate to protect 240th Street over a longer period of time. The District hired FYRA Engineering (FYRA), in consultation with Tetra Tech, to identify a long term solution. The selected solution was to relocate the channel of the Elkhorn River back to a former, more stable alignment at this location (see attached), with necessary windrowed revetments to ensure the new channel functions properly. An agreement with Sarpy County (Agreement III attached) was approved by the Board (August, 2012) to cover the design costs of this more permanent solution. District staff closely consulted with Sarpy County Public Works Staff and FYRA to evaluate alternatives.

Construction was to be delayed until a Corps of Engineers 404 Permit could be obtained and until a more detailed cost estimate could be prepared. However, it has been determined that the selected construction technique will not require a permit. Therefore, final plans and specifications are being prepared by FYRA. The District's FY 14 Budget includes funds to complete design of the project, but no funds for land rights acquisition or construction.

It is proposed that the District be the lead agency, acquire all needed land rights, contract with the engineers, and contract with the construction contractor. It is also proposed that Sarpy County will equally share in all costs associated with the project. Due to the tenable nature of this major river channel realignment project, it is proposed that the two parties also equally share in the operation maintenance and repair of the project. The District upon consultation with the County will also retain the right to abandon the project in the event of a major failure.

The current estimated cost of the project, including engineering, land rights, and construction is currently estimated at \$1.1 million. With contingencies, each party's share would not exceed \$650,000. A draft interlocal agreement is attached outlining these duties. Construction is anticipated for FY 15, if the parties approve the agreement.

Management recommends that the Subcommittee recommend to the Board that the General Manager be authorized to execute an amendment to the interlocal agreement with Sarpy County for 50/50 cost share on the construction, operation, and maintenance of the 240th Street Erosion Protection Project along the Elkhorn River up to a maximum construction contribution of \$650,000 for each party, subject to approval by Sarpy County and subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.



Elkhorn River at 240th St Bank Stablilzation Papio-Missouri River NRD





240th Street Chute and Backwater Creation Alternatives

Cost Estimates

Minimum Design

Item	Quantity	Units	Unit Cost*	Subtotal
Rock Riprap	5,075	Z.	\$54.00	\$274,050
Excavation	19,259	Շ	\$3.60	\$69,333
Clearing & Grubbing	10	ACRES	\$6,000.00	\$60,000
Land Purchase	74	ACRES	\$4,800.00	\$355,200
			Total	\$758,583

~Existing channel likely to convert to oxbow/won't maintain flow without #3 ~Only stabilize downstream (#5) to prevent damage resulting from project

~Longevity likely reduced without stabilization (#1-#4)

~Only clear trees within pilot channel

~Excavate 25' wide channel above OHWM, no 404 permit required

Minimum Design

Design Notes

~Longer time for channel to develop

Proposed 'Medium' Design

Item	Quantity	Units	Unit Cost*	Subtotal	
Rock Riprap	10,275	Z.	\$54.00	\$554,850	special
Excavation	19,259	Ն	\$3.60	\$69,333	
Clearing & Grubbing	20	ACRES	\$6,000.00	\$120,000	A
Land Purchase	74	ACRES	\$4,800.00	\$355,200	
			Tatal	Tatal	

Proposed 'Medium' Design

~Excavate 25'-50' wide channel above OHWM, no 404 permit required

~Longer time for channel to develop

~Stabilize downstream (#5) to prevent damage resulting from project

~Existing channel likely to maintain flow (#3)

~Longevity likely reduced without stabilization (#1, #2, #4)

~Clear trees within pilot channel plus 100 ft each side

Optimal Design

Item	Quantity	Units	Unit Cost*	Subtotal
Rock Riprap	20,025	ΝĻ	\$54.00	\$1,081,350
Excavation	58,741	Շ	\$3.60	\$211,467
Clearing & Grubbing	30	ACRES	\$6,000.00	\$180,000
Land Purchase	74	ACRES	\$4,800.00	\$355,200
			Total	Total \$1,828,017

*20% contingency added into unit prices to cover lump sum/general construction costs

Optimal Design

~Excavate 50' wide channel at base flow elevation, 404 permit required

~Faster time for channel to develop

~Stabilization needed (#3) to maintain flow in existing channel (404 requirement)

~Longevity increased with stabilization (#1-#4)

~Stabilize downstream (#5) to prevent damage resulting from project

~Clear all trees within anticipated future alignment

"Draft"

INTERLOCAL COOPERATION ACT AGREEMENT IV COUNTY OF SARPY, NEBRASKA, And

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT For

240th STREET EROSION PROTECTION

.....

THIS AGREEMENT ("THIS AGREEMENT") is entered into by and between the COUNTY OF SARPY, NEBRASKA ("the COUNTY") and the PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT ("the DISTRICT").

The COUNTY and the DISTRICT are referred to collectively hereinafter as "the **PARTIES**" and individually as a "**PARTY**".

RECITALS:

WHEREAS, the NE ¼ and the N ½ of the SE ¼ of Section 16, Township 14

North, Range 10 East of the 6th P.M., Sarpy County, Nebraska ("the STUDY AREA"), was studied by consulting engineers retained by the DISTRICT for the PARTIES ("the ENGINEERS") for the purpose of determining the most feasible method of preventing a portion of 240th Street in the STUDY AREA from being lost to foreseeable and continued Elkhorn River bank erosion; and,

WHEREAS, pursuant to authority provided in the Nebraska Interlocal Cooperation Act (§§13-801, R.R.S., 1943, et seq.), the PARTIES now desire to cooperatively (a) commission and compensate the ENGINEERS to perform final design work and construction supervision (collectively "the FINAL DESIGN") on a project ("the PROJECT"), to relocate and rip-rap a portion of the channel in the reach of the Elkhorn River in the STUDY AREA; as studied by the ENGINEERS; and (2) commission and

compensate one or more contractors ("the **PROJECT CONTRACTORS**") to construct such PROJECT ("the **PROJECT CONSTRUCTION**").

NOW, THEREFORE, for and in consideration of the foregoing recitals and the mutual covenants of the parties hereinafter expressed, the PARTIES agree as follows:

- 1. **BENEFITS.** The PARTIES hereby jointly and severally find, determine and agree that the FINAL DESIGN and the PROJECT CONSTRUCTION will be of general benefit to the DISTRICT and the COUNTY, with only incidental special benefits.
- 2. PARTICIPANTS. The FINAL DESIGN shall be undertaken by a consulting engineering firm, and the PROJECT CONSTRUCTION shall be undertaken by the PROJECT CONTRACTORS, all being retained by the DISTRICT on behalf of the PARTIES as provided herein, without any separate entity being created, and the duties and responsibilities of the PARTIES with respect to the FINAL DESIGN and the PROJECT CONSTRUCTION shall be as defined by THIS AGREEMENT. For purposes of the Interlocal Cooperation Act, this AGREEMENT shall be administered jointly by the parties. This AGREEMENT does not contemplate acquiring, holding or disposing of joint property nor does it contemplate the levying or collecting of any tax.
- 3. THE ENGINEERS. The DISTRICT, with approval by the COUNTY, shall retain ENGINEERS to determine and engineer the FINAL DESIGN.
- 4. **DESIGN CRITERIA**. Written criteria for the FINAL DESIGN shall be specified by the DISTRICT in accordance with the DISTRICT'S usual engineering practices, subject to the written approval by the COUNTY, which approval shall not be withheld or delayed unreasonably.

- 5. RIGHTS-OF-ENTRY. Lands, easements and rights-of-way that the ENGINEERS and the DISTRICT determine are necessary for performance of the PROJECT CONSTRUCTION shall be obtained and permanently held by the DISTRICT.
- 6. PERMITS. The DISTRICT shall obtain and hold such state and federal permits as the ENGINEERS and the DISTRICT determine are necessary for PROJECT CONSTRUCTION.
- 7. **COMPLETION AND ACCEPTANCE**. The FINAL DESIGN and PROJECT CONSTRUCTION provided for in THIS AGREEMENT shall be subject to approvals and acceptance by both the DISTRICT and the COUNTY prior to implementation thereof, and such approvals and acceptances shall not be withheld or delayed unreasonably.
- **8. COST-SHARING**. The PARTIES shall share the costs of the PROJECT as follows:
 - a) INITIAL PROJECT CONSTRUCTION. Each Party shall be responsible for one-half of the contract fees due from the DISTRICT to the ENGINEERS for the FINAL DESIGN, for one-half of the contract fees due from the DISTRICT to the PROJECT CONTRACTORS for PROJECT CONSTRUCTION and for one-half of the DISTRICT'S costs and expenses for the acquisitions of PROJECT lands, easements and rights-of-way; provided, however, the COUNTY'S share of the total of the ENGINEERS' and PROJECT CONTRACTOR'S fees and the DISTRICT'S costs and expenses for the acquisition of PROJECT lands, easements and rights-of-way, shall not exceed SIX HUNDRED FIFTY THOUSAND DOLLARS (\$650,000) without the approval by the Sarpy County Board of Commissioners; and, provided further that, in the event the sum of the estimates and bids received by the

DISTRICT for the ENGINEERS' and PROJECT CONTRACTOR'S fees, together with the DISTRICT'S estimates of the costs and expenses for the acquisition of PROJECT lands, easements and rights-of-way, exceeds the total of \$1,300,000, the DISTRICT, after consultation with the COUNTY, may in its sole discretion determine and declare that the PROJECT is infeasible and thereupon may abandon PROJECT CONSTRUCTION. In the absence of such DISTRICT determination and declaration the DISTRICT shall proceed with FINAL DESIGN and PROJECT CONSTRUCTION and shall pay such fees, costs and expenses as they become due.

- **b)** PROJECT MAINTENANCE. After completion and acceptance of PROJECT CONSTRUCTION, the DISTRICT, shall provide ordinary maintenance of the PROJECT in such manner and, at such times as the DISTRICT in its sole discretion determines reasonable; and from time to time shall invoice the County for a one-half share of the costs and expenses for ordinary maintenance of the PROJECT accrued as of such invoice date.
- c) PROJECT REPAIR. Notwithstanding any other provision of THIS AGREEMENT, in the event the PROJECT is flanked or otherwise becomes catastrophically damaged by erosion from a flooding event that causes or results in re-direction of the major part of the ordinary and principal flow of the Elkhorn River outside the PROJECT channel; or, in the event the PROJECT is otherwise catastrophically damaged by flooding to an extent beyond what the DISTRICT in its sole discretion determines is reasonable or feasible to repair, the DISTRICT, after consultation with the COUNTY, may determine and declare that repair and further maintenance of the PROJECT, or such damaged part thereof, is not reasonable and

feasible, and thereupon may abandon further maintenance of the PROJECT or such damaged portion.

- 9. INVOICES. As of the 15th day of each month after the effective date of THIS AGREEMENT, the DISTRICT shall invoice the COUNTY for the COUNTY'S share of the fees, costs and expenses accrued by the DISTRICT pursuant to THIS AGREEMENT as of such invoice date, all of which invoiced amounts shall be paid by the COUNTY to the DISTRICT, without interest, within 45 days after invoice date. Invoices referred to herein shall set out the following information with respect to each PROJECT cost being invoiced to the COUNTY for partial reimbursement, to-wit:
 - a) amount of such cost,
 - b) date such cost was incurred,
 - c) person or firm to whom such amount was or is being paid, and,
 - d) purpose(s) for such cost.

10. AUTHORITY FOR APPROVALS.

- a) Approvals by the COUNTY, and other COUNTY discretionary actions contemplated by THIS AGREEMENT, are authorized to be provided by the County Administrator of the COUNTY; and,
- b) Approvals by the DISTRICT, and other DISTRICT discretionary actions contemplated by THIS AGREEMENT, are authorized to be provided by the General Manager of the DISTRICT.
- 11. **EFFECTIVE DATE AND DURATION.** This AGREEMENT shall be in force and effect from and after its execution by the PARTIES and shall automatically renew each year following the date of execution. This AGREEMENT may be terminated upon mutual written consent of the parties.

- 12. NON-DISCRIMINATION. The PARTIES shall not, in the performance of THIS AGREEMENT, discriminate or permit discrimination in violation of federal or state laws or local ordinances because of race, disability, color, sex, age, political or religious opinions, affiliations or national origin.
- 13. APPLICABLE LAW. The PARTIES shall follow all applicable federal and state statutes and regulations in carrying out the faithful performance and terms of THIS AGREEMENT.
- 14. SEVERABILITY. In the event any portion of THIS AGREEMENT is held to be invalid or unenforceable for any reason, it is agreed that any such invalidity or unenforceability shall not affect the remainder of THIS AGREEMENT and the remaining provisions shall remain in full force and effect, and any court of competent jurisdiction may so modify any objectionable provision of THIS AGREEMENT so as to render it valid, reasonable, and enforceable.
- 15. **CAPTIONS**. Captions used in THIS AGREEMENT are for convenience and not for use in the construction of THIS AGREEMENT.

IN WITNESS WHEREOF

The COUNTY has execu	ated THIS AGREEMENT on, 20,
pursuant to resolution duly add	opted by its Board of Commissioners.
	THE COUNTY OF SARPY, NEBRASKA
	By
	Chairperson, Board of County
	Commissioners
Attest:	
County Clerk	

"Draft"

The DISTRICT has executed THIS A	AGREEMENT on, 20,
pursuant to resolution duly adopted by its	Board of Directors.
	PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT
I	By General Manager

INTERLOCAL COOPERATION ACT AGREEMENT III COUNTY OF SARPY, NEBRASKA,

And

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT

For

240th STREET EROSION PROTECTION

THIS AGREEMENT ("THIS AGREEMENT") is entered into by and between the COUNTY OF SARPY, NEBRASKA ("the COUNTY") and the PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT ("the DISTRICT").

The COUNTY and the DISTRICT are referred to collectively hereinafter as "the **PARTIES**" and individually as a "**PARTY**".

RECITAL:

WHEREAS, pursuant to authority provided in the Nebraska Interlocal Cooperation Act (§§13-801, R.R.S., 1943, et seq.), the PARTIES desire to cooperatively commission engineers to perform design work ("the DESIGN WORK") necessary to determine the most cost-effective design for a long term project ("the PROJECT") to prevent 240th Street in Sarpy County from being lost to foreseeable and continued Elkhorn River bank erosion.

NOW, THEREFORE, for and in consideration of the foregoing recital and the mutual covenants of the parties hereinafter expressed, the PARTIES agree as follows:

- 1. BENEFITS. The PARTIES do hereby find, determine and agree that the DESIGN WORK will be of general benefit to the DISTRICT, with only incidental special benefits.
- 2. PARTICIPANTS. The DESIGN WORK shall be undertaken by a consulting engineering firm retained on behalf of the PARTIES, as provided herein, without any separate entity being created, and the duties and responsibilities of the PARTIES with respect to the DESIGN WORK shall be as defined by THIS AGREEMENT.
- 3. THE ENGINEERS. The DISTRICT, with prior approval by the COUNTY, shall retain the ENGINEERS to perform the DESIGN WORK.
- 4. **DESIGN CRITERIA.** Written criteria for the DESIGN WORK shall be specified by the DISTRICT in accordance with the DISTRICT'S usual engineering practices, subject to the written approval by the COUNTY, which approval shall not be withheld or delayed unreasonably.
- 5. STUDY AREA. The area studied in the DESIGN WORK shall consist of the NE ¼ and the N ½ of the SE ¼ of Section 16, Township 14 North, Range 10 East of the 6th P.M., Sarpy County, Nebraska, unless, on the recommendation of the ENGINEERS and the approval of the PARTIES, the study area is expanded.
- 6. RIGHTS-OF-ENTRY. Rights-of-entry that the ENGINEERS and the DISTRICT determine are necessary for performance of the DESIGN WORK shall be obtained by the DISTRICT at its sole cost or expense, to which rights-of-entry the DISTRICT shall hold title.

- 7. **PERMITS**. The DESIGN WORK shall include preparation of applications for state and federal permits that the ENGINEERS and the DISTRICT determine are necessary for performance of the PROJECT.
- 8. DEADLINE FOR COMPLETION. The DESIGN WORK provided for in THIS AGREEMENT shall be completed prior to December 31, 2013, and shall be subject to acceptance by both the NRD and the COUNTY.
- 9. COST-SHARING. Each PARTY shall pay one-half of the contract fees due to the ENGINEERS for the DESIGN WORK; provided, however, the COUNTY'S share shall not exceed one-half of the ENGINEERS' original fee estimate of \$259,642 without prior approval by the Sarpy County Board. The NRD shall pay such fees when they are due and shall invoice the COUNTY for the COUNTY'S share, which shall be paid to the NRD by July 15, 2013 and within 45 days after invoice date thereafter.
- 10. INVOICES. Invoices referred to herein shall set out the following information with respect to each cost being invoiced for partial reimbursement, to-wit:
 - a) amount of such cost,
 - b) date such cost was incurred,
 - c) person to whom such amount was paid, and,
 - **d)** purpose(s) for such cost.

11. AUTHORITY FOR APPROVALS.

a) Approvals by the COUNTY, and other COUNTY discretionary actions contemplated by THIS AGREEMENT, are authorized to be provided by the Public Works Director of the COUNTY Board of Commissioners; and,

- **b)** Approvals by the DISTRICT, and other DISTRICT discretionary actions contemplated by THIS AGREEMENT, are authorized to be provided by the General Manager of the DISTRICT.
- 12. EFFECTIVE DATE AND DURATION. THIS AGREEMENT shall be in force and effect from and after its execution by the PARTIES and shall have permanent duration.
- 13. NON-DISCRIMINATION. The PARTIES shall not, in the performance of THIS AGREEMENT, discriminate or permit discrimination in violation of federal or state laws or local ordinances because of race, disability, color, sex, age, political or religious opinions, affiliations or national origin.
- 14. APPLICABLE LAW. The PARTIES shall follow all applicable federal and state statutes and regulations in carrying out the faithful performance and terms of THIS AGREEMENT.
- 15. SEVERABILITY. In the event any portion of THIS AGREEMENT is held invalid or unenforceable for any reason, it is agreed that any such invalidity or unenforceability shall not affect the remainder of THIS AGREEMENT and the remaining provisions shall remain in full force and effect, and any court of competent jurisdiction may so modify any objectionable provision of THIS AGREEMENT so as to render it valid, reasonable, and enforceable.
- **16. CAPTIONS**. Captions used in THIS AGREEMENT are for convenience and not for use in the construction of THIS AGREEMENT.

IN WITNESS WHEREOF

The COU	JNTY has executed	THIS A	GREEMENT on _	8-21	_, 2011
pursuant to reso	lution duly adopted by	y its Boar	d of Commissioners	3.	
	EAL DOWN. HERE	THE	COUNTY OF SA Chairperson, B Commissioners	8 a oard of Coun	1112
	TRICT has executed ution duly adopted by			8-31	_, 201 <i>1</i> ,
			O-MISSOURI RI OURCES DISTRI General Manage	CT /	AL)
Approved as 2 Approved as County After	W				