

Memorandum

To: Programs, Projects and Operations Subcommittee

Subject: Elkhorn River Erosion – Graham/Gilmore Area

Date: January 10, 2011

From: Gerry Bowen

In July, the Board authorized Management to proceed with a cooperative agreement with the Natural Resources Conservation Service (NRCS) on an Emergency Watershed Protection Project (EWP) on the Elkhorn River near the Douglas-Sarpy County line, the Graham-Gilmore area. The action also authorized Management provide the necessary professional engineering services for such an EWP project should one develop.

As you may recall, an NRCS EWP project was installed in the same vicinity in 1993. The District was the sponsor of the project that extended approximately one mile along the Elkhorn River left bank at this location. The project performed as designed until the flood in 2010. The design drawings are attached for your reference. The District acquired the necessary rights-of-way for the project and received cost sharing from Sarpy County since the project's main purpose was to protect a county road. The 2010 flood overwhelmed and flanked approximately 1000 feet of the 1993 project and damage to private property resulted. The photographic documentation provided in July is also attached for your reference.

NRCS reviewed the damage area and prepared a Damage Survey Report (attached) indicating eligibility for an EWP Project at a projected cost of \$502,200, plus engineering. The cost share rate for this NRCS program is 75%. The District received word in December that EWP funding is indefinitely delayed. So, the attached letter was sent to the landowners to keep them informed of funding progress. Staff will continue to work with NRCS to provide EWP funding for this project.

Recent discussions with the US Army Corps of Engineers' Regulatory Office were conducted regarding obtaining a 404 permit for Elkhorn River bank stabilization in this area. Several scenarios were discussed. The first was to fill in the channel and restore the river to its location prior to the flood events this past summer and repair the 1993 EWP stabilization project. This could possibly be completed as maintenance on the original project and in that instance no permit would be necessary. A second alternative would be to perform a new bank stabilization project in the river's current location. This new project would be over 500 linear feet, requiring a new time-consuming individual 404 permit and would require that the project sponsor complete an alternatives analysis. Finally it was discussed that there was a possibility of receiving a readily available nationwide 404 permit for the bank stabilization if natural channel stabilization could be utilized (e.g. root wads instead of rock jetties and riprap).

If the Board desires to proceed with haste on this project without NRCS EWP assistance, Management's recommendation for a first step would be to hire a consultant to investigate

potential solutions and prepare a design and cost estimate to stabilize the Elkhorn river bank at the Graham/Gilmore site. It is anticipated that the cost of these services would exceed \$20,000 so "District Policy 15.2 – Purchasing Professional Services" would be waived. Management also recommends that since protection of a county road has been the basis of the District's involvement in this area, cost sharing by Sarpy County on the engineering and construction of this project should be required. Cost sharing by the immediately benefitted landowners (Graham and Gilmore) should also be considered. The responsible parties for operation and maintenance will also need to be defined prior to commencing construction.

- **It is recommended that the Subcommittee recommend to the Board that the General Manager be authorized to select and negotiate with a consultant to provide professional engineering services for a bank stabilization project at the Graham/Gilmore site along the Elkhorn River, and that the General Manager seek a cost sharing agreement with Sarpy County for engineering and construction of such a project; both such contract and agreement to be brought to the Board for approval prior to execution.**

LEGEND AND SYMBOLS

BOUNDARIES	
RIGHT-OF-WAY	
CLEARING AND GRABBING AREA	
FIELD, NO FENCE	
RIGHT-OF-WAY	
SEEDING AND MACHING AREA	
SEEDING, SOREL HIE	
BUILDINGS AND STRUCTURES	
BRIDGE	
CHURN	
CLVERT	
DRAINAGE AND WATER COURSES	
STREAMS, PERENNIAL	
DRAINAGE DITCH	
IRRIGATION DITCH	
TERRACES	
WATERWAY, GRASED	
FENCE	
EXISTING	
TO BE CONSTRUCTED	
TO BE REMOVED	
UTILITIES	
PIPELINE	
POWER LINE	
TELEPHONE LINE	
OTHER	
RAILROAD	
RAILROAD	
RAILROAD	

○ CIRCLED SYMBOL INDICATES ITEMS TO BE REMOVED.

CONSTRUCTION NOTES

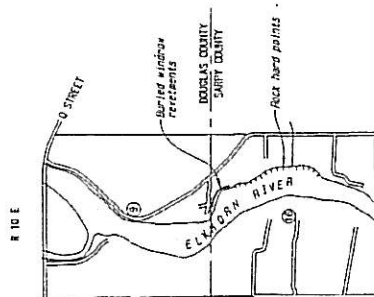
1. THE CONTRACTOR WILL INTEREST THE CONSTRUCTION AREA FOR THE PRESERVE OF UTILITY FACILITIES BOTH SURFACE AND SUBSURFACE, AND WILL NOTIFY THE ENGINEER OF THOSE THAT ARE IN HIS WORKING AREA. THE CONTRACTOR WILL USE EXTRA SAFETY PRECAUTIONS WHEN WORKING NEAR OR AROUND PIPELINES, POWER LINES, POWER POLES, UNDERGROUND CABLES OR OTHER UTILITY INSTALLATIONS.
2. CLEARING AND GRABBING AREAS SHOWN ON THE DRAWINGS INDICATE THE GENERAL AREAS. ACTUAL AREAS ARE AS STAKED AND MARKED ON THE SITE.
3. FENCE REMOVAL SHOWN ON THE DRAWINGS INDICATED THE GENERAL REMOVAL. ACTUAL REMOVAL IS AS STAKED AND MARKED ON THE SITE.
4. DISPOSAL AREAS FOR THE REMAINS FROM CLEARING AND GRABBING SHALL BE AS STAKED AND MARKED ON THE SITE.
5. EXCAVATED MATERIAL SHALL BE WASTED ON PAUL ROADS OR IN AREAS WITHIN 300 FT. NORMAL TO THE STREAM BANK AS DESIGNATED BY THE ENGINEER.
6. CONCRETE RIBBLE WINDROW LOCATED AT STA. 10+00 TO STA. 13+50 WILL BE DISPOSED OF BY LINING THE STREAM BANK FROM STA. 5+00 TO STA. 8+50 AS SHOWN ON SHEET 4.

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
ROCK RIPRAP REVENEMENT	LIN. FT.	1500
ROCK RIPRAP WARD POINT	EACH	15
ROCK STILL	LUMP	SUM

LOCATION MAP

Location:
Sully County, approx. 3 1/4 miles north
and 2 miles west of Ord, Nebraska.



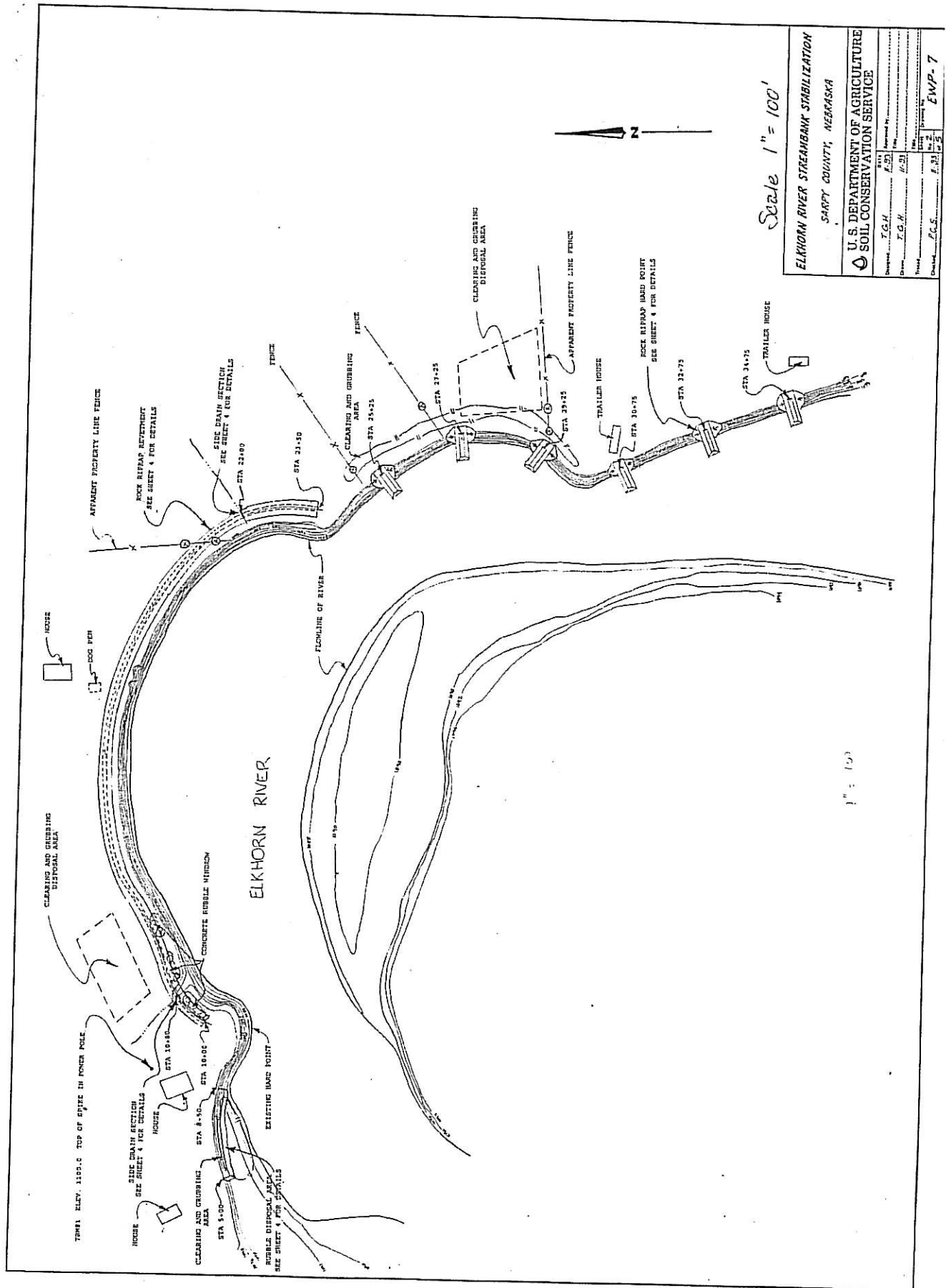
DRAWING INDEX

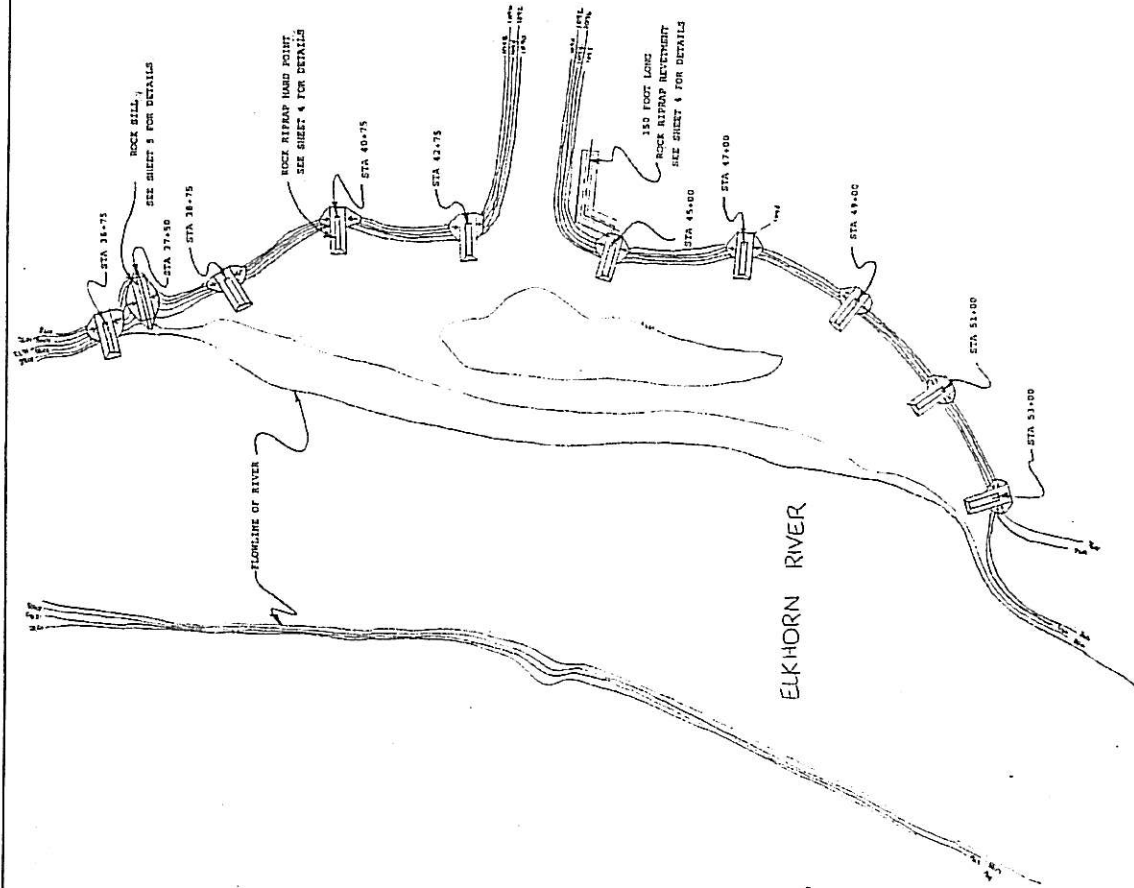
SHEET NO.	CONTENTS
1	COVER AND DATA
2,3	PLAN VIEW OF PROPOSED SITE
4	TYPICAL CROSS SECTIONS
5	ROCK STILL

ELKHORN RIVER STEAMBANK STABILIZATION
SULLY COUNTY, NEBRASKA

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

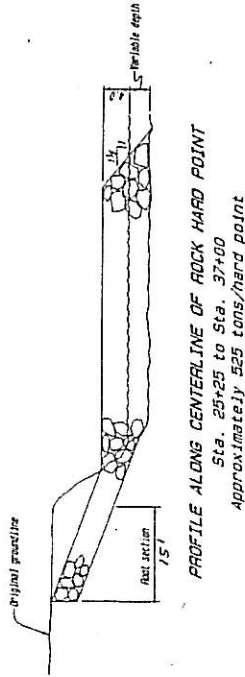
Designed by: J.E.M.	Date: 11-52
Drawn by: J.E.M.	Date: 11-52
Checked by: J.E.M.	Date: 11-52
Approved by: J.E.M.	Date: 11-52
Project No. 1	Sheet No. 3
Drawn by: J.E.M.	Date: 11-52
Checked by: J.E.M.	Date: 11-52
Approved by: J.E.M.	Date: 11-52



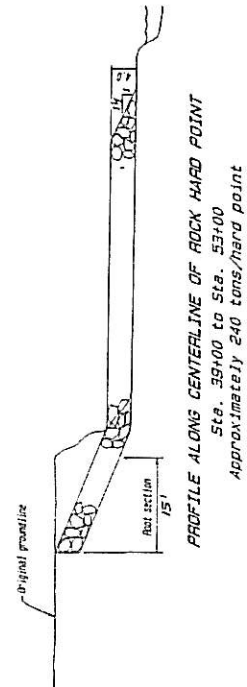


Scale 1" = 100'

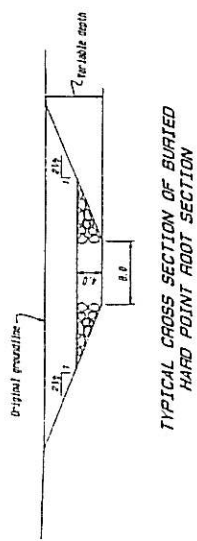
ELKHORN RIVER STREAMBANK STABILIZATION	
SARPY COUNTY, NEBRASKA	
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	
Designed by T.G.H.	Approved by R.S.
Drawn by T.G.H.	Checked by R.S.
Project No. H-23	Sheet No. 3
EWP-7	



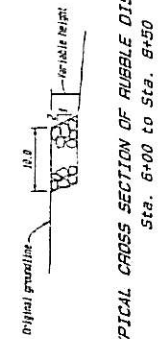
PROFILE ALONG CENTERLINE OF ROCK HARD POINT
Sta. 25+25 to Sta. 37+00
Approximately 525 tons/hard point



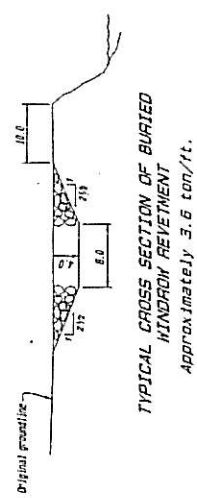
PROFILE ALONG CENTERLINE OF ROCK HARD POINT
Sta. 39+00 to Sta. 53+00
Approximately 240 tons/hard point



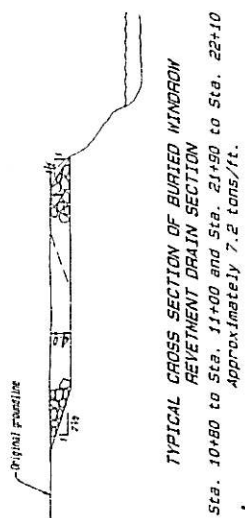
TYPICAL CROSS SECTION OF BURIED
HARD POINT ROOT SECTION



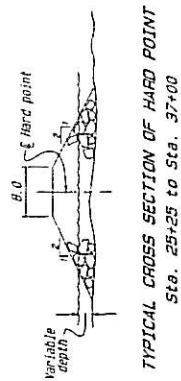
TYPICAL CROSS SECTION OF RUBBLE DISPOSAL AREA
Sta. 6+00 to Sta. 8+50



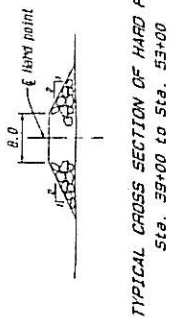
TYPICAL CROSS SECTION OF BURIED
WINDROW REVEGETATION DRAIN SECTION
Sta. 10+80 to Sta. 11+00 and Sta. 21+50 to Sta. 22+10
Approximately 3.6 tons/ft.



TYPICAL CROSS SECTION OF BURIED WINDROW
REVEGETATION DRAIN SECTION
Sta. 10+80 to Sta. 11+00 and Sta. 21+50 to Sta. 22+10
Approximately 7.2 tons/ft.



TYPICAL CROSS SECTION OF HARD POINT
Sta. 25+25 to Sta. 37+00



TYPICAL CROSS SECTION OF HARD POINT
Sta. 39+00 to Sta. 53+00

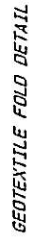
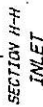
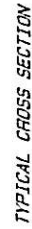
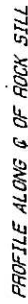
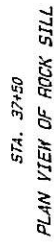
ELKHORN RIVER STREAMBANK STABILIZATION	
SARPY COUNTY, NEBRASKA	
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	
Designed by: J. H. J. H.	Reviewed by: J. H. J. H.
Drawn by: J. H. J. H.	Checked by: J. H. J. H.
Field notes: J. H. J. H.	Station: 4
Contract No.: J. H. J. H.	Sheet: 5
EIR-7	

DEPARTMENT OF ROADS
"TYPE C" GRADATION

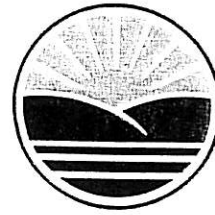
CRUSHED ROCK TO BE REASONABLY WELL-GRADED, TOUGH, HARD,
DURABLE MATERIAL MEETING THE FOLLOWING GRADATION:
MAXIMUM SIZE 3" NOT MORE THAN 10% PASSING NO. 4 SIEVE

ITEM	UNIT	QUANTITY
ROCK RIPRAP IN ROCK SILL INCLUDING 55 TONS OF CRUSHED ROCK BEDDING AND APPROXIMATELY 2400 SQ. FT. OF GEOTEXTILE FILTER CLOTH.	TONS	250

1. THE ROCK RIPRAP SHALL BE A MINIMUM OF 2.5' IN DEPTH PLACED ON 6" OF CRUSHED ROCK BEDDING.
2. THE COMMON EROSION AND GULLY FILL NECESSARY TO FORM THE ROCK SILL IS SUFFICIENT TO THE ROCK RIPRAP BED TIME.
3. GEOTEXTILE FILTER CLOTH SHALL BE PLACED AT BOTTOM ELEVATION OF ROCK SILL AS SHOWN.
4. THE GEOTEXTILE FILTER CLOTH SHALL BE EQUAL OR EQUIVALENT TO MIRAFT 7052.
5. ONLY THE AREA OF THE ROCK SILL LENGTH (APPROX. 95') WILL BE EXCAVATED AS REQUIRED TO INSTALL THE ROCK DAMMED INSIDE THE ROCK SILL SHALL BE SHAPED TO A 3:1-1 SLOPE. THE TOP OF THIS EXCAVATION WILL BE BLEND TO THE EXISTING GROUND SURFACE AS APPLIED BY THE LANDSCAPE ARCHITECT.



PAPIO-MISSOURI RIVER
NATURAL
RESOURCES
DISTRICT



8901 S. 154TH ST.
OMAHA, NE 68138-3621
(402) 444-6222
FAX (402) 895-6543
www.papionrd.org

December 20, 2010

Mr. Aaron Graham
7502 S. 240th Street
Gretna NE 68028

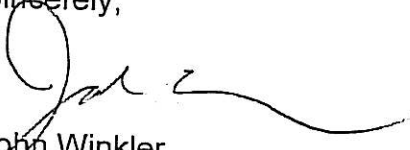
Dear Mr. Graham:

As you are aware, the Papio-Missouri River NRD Board of Directors took action at their July 8, 2010 meeting to request funding assistance through the Emergency Watershed Protection program, which is administered by Natural Resources Conservation Service (NRCS), to address the erosion damage along the Elkhorn River in your area resulting from the June 2010 high waters. NRCS engineers did visit the site, prepared a Damage Survey Report in the amount of approximately half a million dollars and submitted it to USDA Headquarters in Washington, DC. We have recently been informed that this request is on a "wait list" with about fifteen other EWP projects totaling about \$35 million in funding. We have no idea if and when that will change.

The NRD staff has noted that you and your neighbors, whose homes are threatened by Elkhorn River bank erosion, do not appear to have commenced a project to resolve such threat. As demonstrated in the past, the NRD continues to be highly concerned about the threat that looms over your property, and desires to offer encouragement and other assistance as practical to you with regard to any project that you ultimately determine to undertake. Having obtained considerable experience with regard to the Elkhorn River, the NRD'S staff also would be happy to offer such engineering counsel as we can provide to you and any professionals you may retain to assist you to resolve the problem.

We would particularly like to mention at this time that, the NRD also has had considerable experience over the years with regard to the Corps of Engineers Section 404 Permit program. Our message is that, if you intend to attempt to undertake a remedial project that involves a deposit of materials into the Elkhorn River, you should not delay in seeking the Section 404 permit that may be required. The time necessarily consumed in the 404 application process can seem interminable and, waiting too long to begin that application process might prove to be an impediment to such a project.

Sincerely,



John Winkler
General Manager

CC: Marlin J. Petermann, Gerry Bowen, NRD
Paul Peters, Legal Counsel

DAMAGE SURVEY REPORT (DSR)
Emergency Watershed Protection Program – Recovery

Section 1A

Date of Report: 07/02/2010

DSR Number: Papio001 Project Number: 001

NRCS Entry Only

Eligible: YES ☒ NO ☐

Approved: YES ☒ NO ☐

Funding Priority Number (from Section 4)

Limited Resource Area: YES ☐ NO ☒

Section 1B Sponsor Information

Sponsor Name: Papio-Missouri River Natural Resources District

Address: 8901 South 154th Street

City/State/Zip: Omaha, NE 68138-6543

Telephone Number: (402) 444-6222

Fax: (402) 895-6543

Section 1C Site Location Information

County: Sarpy

State: NE

Congressional District:

Latitude: 41.18769

Longitude: -96.29591

Section: 16 Township: 14 Range: 10E

UTM Coordinates:

Drainage Name: Elkhorn River Reach: 1

Damage Description: Channel Bank erosion near homes and business

Section 1D Site Evaluation

All answers in this Section must be YES in order to be eligible for EWP assistance.

Site Eligibility	YES	NO	Remarks
Damage was a result of a natural disaster?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Recovery measures would be for runoff retardation or soil erosion prevention?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Threat to life and/or property?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event caused a sudden impairment in the watershed?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Imminent threat was created by this event?***	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
For structural repairs, not repaired twice within ten years?***	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Site Defensibility			
Economic, environmental, and social documentation adequate to warrant action (Go to pages 3, 4, 5 and 6 ***)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Proposed action technically viable? (Go to Page 9 ***)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Have all the appropriate steps been taken to ensure that all segments of the affected population have been informed of the EWP program and its possible effects? YES ☒ NO ☐

Comments:

* Statutory

** Regulation

*** DSR Pages 3 through 5 are required to support the decisions recorded on this summary page. If additional space is needed on this or any other page in this form, add appropriate pages.

DSR NO: Papio001

Section 1E Proposed Action

Describe the preferred alternative from Findings: Section 5 A:

Rock Riprap jetties and bank protection

Total installation cost identified in this DSR: Section 3: \$ 502,200.00

Section 1F NRCS State Office Review and Approval

Reviewed By: _____ Date Reviewed: _____
State EWP Program Manager

Approved By: _____ Date Approved: _____
State Conservationist

PRIVACY ACT AND PUBLIC BURDEN STATEMENT

NOTE: The following statement is made in accordance with the Privacy Act of 1974, (5 U.S.C. 552a) and the Paperwork Reduction Act of 1995, as amended. The authority for requesting the following information is 7 CFR 624 (EWP) and Section 216 of the Flood Control Act of 1950, Public Law 81-516, 33 U.S.C. 701b-1; and Section 403 of the Agricultural Credit Act of 1978, Public Law 95334, as amended by Section 382, of the Federal Agriculture Improvement and Reform Act of 1996, Public Law 104-127, 16 U.S.C. 2203. EWP, through local sponsors, provides emergency measures for runoff retardation and erosion control to areas where a sudden impairment of a watershed threatens life or property. The Secretary of Agriculture has delegated the administration of EWP to the Chief or NRCS on state, tribal and private lands.

Signing this form indicates the sponsor concurs and agrees to provide the regional cost-share to implement the EWP recovery measure(s) determined eligible by NRCS under the terms and conditions of the program authority. Failure to provide a signature will result in the applicant being unable to apply for or receive a grant the applicable program authorities. Once signed by the sponsor, this information may not be provided to other agencies. IRS, Department of Justice, or other State or Federal Law Enforcement agencies, and in response to a court or administrative tribunal.

The provisions of criminal and civil fraud statutes, including 18 U.S.C. 286, 287, 371, 641, 651, 1001; 15 U.S.C. 714m; and 31 U.S.C. 3729 may also be applicable to the information provided. According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0578-0030. The time required to complete this information collection is estimated to average 117/1.96 minutes/hours per response, including the time for reviewing instructions, searching existing data sources, field reviews, gathering, designing, and maintaining the data needed, and completing and reviewing the collection information.

USDA NONDISCRIMINATION STATEMENT

"The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202)720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW., Washington, DC 20250-9410, or call (800)795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Civil Rights Statement of Assurance

The program or activities conducted under this agreement will be in compliance with the nondiscrimination provisions contained in the Titles VI and VII of the Civil Rights Act of 1964, as amended; the Civil Rights Restoration Act of 1987 (Public Law 100-259); and other nondiscrimination statutes: namely, Section 504 of the Rehabilitation Act of 1973, Title IX of the Amendments of 1972, the Age Discrimination Act of 1975, and the Americans with Disabilities Act of 1990. They will also be in accordance with regulations of the Secretary of Agriculture (7 CFR 15, 15a, and 15b), which provide that no person in the United States shall on the grounds of race, color, national origin, gender, religion, age or disability, be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination under any program or activity receiving Federal financial assistance from the U.S. Department of Agriculture or any agency thereof.

Section 2 Environmental Evaluation

2A Resource Concerns	2B Existing Condition	2C Alternative Designation		
		Proposed Action	No Action	Alternative
		Rock Jetties and Bank Protection, seed and mulch		
		2D Effects of Alternatives		
Soil				
Bank Erosion	Soil removed during large storm flows	Rock to prevent further erosion & reseed disturbed areas	Will continue to erode and threaten homes and business	
Water				
Continued bank erosion puts silt & debris in river	Raw banks will erode & drop more trees, bldgs, etc in river	Rock to prevent further erosion & reseed disturbed areas	Silt, trees & bldgs will continue to drop into river	
Air				
Change in dust in airshed		Construction activity could temporarily increase dust	No Effect	
Plant				
Continued erosion will wash out more plants	Continued erosion will drop more trees, grasses, etc in river	Construction will disturb add'l plant life but will be reseeded	Plants will continue to be washed out during events	
Animal				
Loss of habitat	Continued erosion will drop more trees, grasses, etc in river	Construction will temporarily disturb wildlife	Minimal Effect	
Other				

DSR NO: Papio001

Section 2E Special Environmental Concerns

Resource Consideration	Existing Condition	Alternatives and Effects		
		Proposed Action	No Action	Alternative
Clean Water Act Waters of the U.S.	The sponsor will need to contact the U.S. Army Corps of Engineers to determine jurisdiction on this site.	The sponsor will need to contact the U.S. Army Corps of Engineers to determine jurisdiction on this site.	No Action would be required.	
Coastal Zone Management Areas	N/A	N/A	N/A	
Coral Reefs	N/A	N/A	N/A	
Cultural Resources	No Archaeological sites or other cultural resources present.	No Archaeological sites or other cultural resources present.		
Endangered and Threatened Species	See attached documentation.	See attached documentation.	See attached documentation.	
Environmental Justice	No low-income populations, minority populations, are/will be adversely impacted.	No low-income populations, minority populations, are/will be adversely impacted.	No low-income populations, minority populations, are/will be adversely impacted.	
Essential Fish Habitat	No suitable habitat is present in this area.	No suitable habitat is present in this area.	No suitable habitat is present in this area.	
Fish and Wildlife Coordination	N/A	N/A	N/A	
Floodplain Management	N/A	N/A	N/A	
Invasive Species	Does not cause or promote the introduction and spread of invasive species.	Does not cause or promote the introduction and spread of invasive species.	Does not cause or promote the introduction and spread of invasive species.	
Migratory Birds	See attached documentation.	See attached documentation.	See attached documentation.	
Natural Areas	No designated natural areas present.	No designated natural areas present.	No designated natural areas present.	
Prime and Unique Farmlands	Does not convert farmland to a nonagricultural use	Does not convert farmland to a nonagricultural use	Potential loss of farmland to erosion	
Riparian Areas	Decreases conservation values/functions of the riparian area.	Maintains conservation values/functions of the riparian area.	Decreases conservation values/functions of the riparian area.	
Scenic Beauty	Continued erosion will drop more tress, grasses, etc in river	Temporary increase in loss of vegetation. Area will be reseeded.	Continued erosion will drop more tress, grasses, etc in river	
Wetlands	No wetlands exist within the immediate area.	No wetlands exist within the immediate area.	No wetlands exist within the immediate area.	
Wild and Scenic Rivers	N/A	N/A	N/A	

Completed By: Arlis Plummer/Jessi Umberger

Date: 07/05/2010

Endangered and Threatened Species:

Federally listed species considered: interior least tern, pallid sturgeon, piping plover, western prairie fringed orchid.

State listed species considered: American ginseng, lake sturgeon, river otter, sturgeon chub.

This site does not contain any suitable habitat for the federal or state listed wildlife/plant species. Therefore, there is "no effect" resulting from the proposed action.

Migratory Birds:

Existing Condition – Any trees or shrubs (living or dead) within the immediate project area may be occupied by nesting migratory birds (active nests, eggs, young, etc.).

Proposed Action – Impacts of the proposed actions on migratory birds needs to be considered. Most notable is the possible removal of trees or shrubs during the primary nesting period (April 1 – July 15). However, some migratory birds are known to nest outside of that primary nesting season period. If the proposed construction project is planned to occur during the primary nesting season (April 1 – July 15) or at any other time which may result in the take of nesting or migratory birds, then the project sponsor must arrange for a field survey of the affected habitats and structures to determine the absence or presence of nesting migratory birds.

DSR NO: Papio001

Section 2F Economic

This section must be completed by each alternative considered (attach additional sheets as necessary).

	Future Damages (\$)	Damage Factor (%)	Near Term Damage Reduction
Properties Protected (Private)			
3 homes - 1 \$544,257	\$400,000.00	100%	\$400,000.00
2 \$623,716	500,000.00	100%	500,000.00
3 \$869,908	700,000.00	100%	700,000.00
		0%	
Properties Protected (Public)			
		0%	
		0%	
		0%	
		0%	
Business Losses			
1 office & business equipment storage bldg included home 1		0%	
		0%	
		0%	
		0%	
Other			
		0%	
		0%	
		0%	
		0%	
		0%	
Total Near Term Damage Reduction \$			1,600,000.00
Net Benefit (Total Near Term Damage Reduction minus Cost from Section 3)			\$1,097,800.00

Completed By: Arlis Plummer Date: 07/02/2010

Notes:

Business property included with home 1 property by assessor.
 Property values for home 1 and 2 from Sarpy County Assessor Web Site
 Property value for home 3 land value from Sarpy County Assessor Web Site, building value estimated as it new and is not yet logged on Sarpy County Assessor Web Site.

Section 2G Social Consideration This section must be completed by each alternative considered

(attach additional sheets as necessary).

	YES	NO	Remarks
Has there been a loss of life as a result of the watershed impairment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there the potential for loss of life due to damages from the watershed impairment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has access to a hospital or medical facility been impaired by watershed impairment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Has the community as a whole been adversely impacted by the watershed impairment (life and property ceases to operate in a normal capacity)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there a lack or has there been a reduction of public safety due to watershed impairment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Completed By: Arlis Plummer Date: 07/02/2010

DSR NO: Papio001

Section 2H Group Representation and Disability Information

This section is completed only for the preferred alternative selected.

Group Representation	Number
American Indian/Alaska Native Female Hispanic	
American Indian/Alaska Native Female Non-Hispanic	
American Indian/Alaska Native Male Hispanic	
American Indian/Alaska Native Male Non-Hispanic	
Asian Female Hispanic	
Asian Female Non-Hispanic	
Asian Male Hispanic	
Asian Male Non-Hispanic	
Black or African American Female Hispanic	
Black or African American Female Non-Hispanic	1
Black or African American Male Hispanic	
Black or African American Male Non-Hispanic	1
Hawaiian Native/Pacific Islander Female Hispanic	
Hawaiian Native/Pacific Islander Female Non-Hispanic	
Hawaiian Native/Pacific Islander Male Hispanic	
Hawaiian Native/Pacific Islander Male Non-Hispanic	
White Female Hispanic	
White Female Non-Hispanic	5
White Male Hispanic	
White Male Non-Hispanic	5
Total Group	12

Census tract(s) Sarpy County, Nebraska; 2009 estimate

Completed By: Arlis Plummer/Julie Breuer Date: 07/05/2010

DSR NO: Papio001

Section 2I. Required consultation or coordination between the lead agency and/or the RFO and another governmental unit including tribes:

Easements, permissions, or permits:

NRD currently has easement varying from 225 foot from channel bank to channel bank to road for this reach of the Elkhorn River for work, inspection & repair. This should cover the majority of the area needed for EWP work. They would acquire any additional easements if needed. The NRD will acquire any other permits needed, i.e. 404

Mitigation Description:

Rock riprap windrow and jetties to be installed or repaired. Windrow and jetties would be 8 foot tall, 10 wide; jetties would be 30 foot long and approximately 100 foot apart. Extent and location noted on map

Agencies, persons, and references consulted, or to be consulted:

Gerry Bowen, Papio-Missouri River NRD

Brian Henkel, Papio-Missouri River NRD

Army Corps of Engineers

DSR NO: Papio001

Section 3 Engineering Cost Estimate

Completed By: AFP Date: 07/02/2010

This section must be completed by each alternative considered (attach additional sheets as necessary).

Proposed Recovery Measure (including mitigation)	Quantity	Units	Unit Cost (\$)	Amount (\$)
Mobilization	1	LS	\$1,000.00	\$1,000.00
Rock Riprap	10,000	CY	\$50.00	\$500,000.00
Seeding and Mulching	1	AC	\$1,200.00	\$1,200.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
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				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
Total Installation Cost (Enter in Section 1F)\$				502,200.00

Unit Abbreviations:

AC	Acre	LS	Lump Sum
CY	Cubic Yard	SF	Square Feet
EA	Each	SY	Square Yard
HR	Hour	TN	Ton
LF	Linear Feet	Other	(Specify)

DSR NO: Papio001

Section 4 NRCS EWP Funding Priority

Complete the following section to compute the funding priority for the recovery measures in this application (see instructions on page 10).

Priority Ranking Criteria	Yes	No		Ranking Number Plus Modifier
1. Is this an exigency situation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
2. Is this a site where there is serious, but not immediate threat to human life?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
3. Is this a site where buildings, utilities, or other important infrastructure components are threatened?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. Is this site a funding priority established by the NRCS Chief?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
The following are modifiers for the above criteria			Modifier	
a. Will the proposed action or alternatives protect or conserve federally-listed threatened and endangered species or critical habitat?			N/A	
b. Will the proposed action or alternatives protect or conserve cultural sites listed on the National Register of Historic Places?			N/A	
c. Will the proposed action or alternatives protect or conserve prime or important farmland?			N/A	
d. Will the proposed action or alternatives protect or conserve existing wetlands?			N/A	
e. Will the proposed action or alternatives maintain or improve current water quality conditions?			Yes	
f. Will the proposed action or alternatives protect or conserve unique habitat, including but not limited to, areas inhabited by State-listed species, fish and wildlife management area, or State identified sensitive habitats?			N/A	

Enter priority computation in Section 1A, NRCS Entry, Funding priority number.

Remarks:

Exigency measures taken by current landowners to protect for short term.

DSR NO: Papio001

Section 5A Findings

Finding: Indicate the preferred alternative from Section 2 (Enter to Section 1E):

I have considered the effects of the action and the alternatives on the Environmental Economic, Social; the Special Environmental Concerns; and the extraordinary circumstances (40 CFR 1508.27). I find for the reasons stated below, that the preferred alternative:

☒ Has been sufficiently analyzed in the EWP PEIS (reference all that apply)
Chapter _____
Chapter _____
Chapter _____
Chapter _____
Chapter _____

☐ May require the preparation of an environmental assessment or environmental impact statement.
The action will be referred to the NRCS State Office on this date:

NRCS representative of the DSR team:

Name/Title: Arlis Plummer/Jessi Umberger Date: 07/05/2010

Section 5B Comments:

Section 5C Sponsor Concurrence:

Sponsor Representative

Title: _____ Date: _____

Section 6 Attachments:

- A. Location Map
- B. Site Plan or Sketches
- C. Other (explain)

INSTRUCTIONS FOR COMPLETING THE NRCS-PDM-20, DSR

	Explanation of Requested Item	Who Completes
Section 1	Enter Site Sponsor, Location, Evaluation, Selected Alternative, and Reviewed and Approval Signatures.	NRCS completes with voluntary assistance from Sponsor except for NRCS only portion of Section 1A.
1A	Enter the Date, DSR Number, Project Number. For NRCS only enter Eligible Yes/No, Approved Yes/No, Funding Priority Number, and Limited Resource Area Yes/No.	
1B	Enter Sponsor Name, Address, Telephone, Fax	
1C	Enter site location County, State, Congressional District, Latitude, Longitude, Section, Township, Range, UTM Coordinates, Drainage Name, Reach within drainage, and Damage Description.	
1D	Enter Yes/No and any Remarks for the Site Evaluation information. Any No response means the site is not eligible for EWP assistance and no further information is necessary to complete the DSR. (See NEWPPM 390-502.03 and 390-502-04) Enter Yes/No regarding whether the affected public has been informed of the EWP program.	
1E	Enter the proposed treatment and the cost of installation.	NRCS only.
1F	NRCS Review and Approval.	

	Explanation of Requested Item	Who Completes
Section 2	Use available natural resource, economic, and social, information, including the EWP Programmatic Environmental Impact Statement (PEIS), to <u>briefly</u> describe the effects of the alternatives to the proposed action including the "no action" alternative. Typically, the proposed action and no action are the alternatives considered for EWP recovery measures due to the focus on repairing or preventing damages within a watershed. However, in cases where additional alternatives are considered, include all pertinent information to adequately address the additional alternatives (e.g., proposed action would be bio-engineering for bank stabilization, no action alternative, and an additional alternative may be riprap for bank stabilization). Do not leave blanks where a consideration is not applicable, use NA to indicate the factor was considered but not applicable for the alternative.	NRCS completes with voluntary assistance from Sponsor.
2A	List all resource concerns which are relevant to the area of the proposed action and alternatives. Refer to National Bulletin 450-5-8 TCH-COMPLETING AND FILING MEASUREMENT UNITS FOR RESOURCE CONCERNS IN THE FIELD OFFICE TECHNICAL GUIDE (FOTG). Note: the affected area may extend beyond the construction foot print (ex. where water quality or water rights are affected downstream of the site).	
2B	Provide a brief description of the present condition of each resource concern listed in 2A. Quantify conditions where possible. Reference accompanying photo documentation.	
2C	Briefly summarize the practice/system of practices being proposed, as well as the "no action" alternative, and any other alternatives being considered. The "no action" alternative is the predicted future condition if no action is taken.	
2D	Document the efforts of the proposed action and alternatives for the considerations listed in 2A. Reference applicable quality criteria, information in the CPPE, and quantify effects whenever possible. Consider both long-term and short-term effects. Consider any effects which may be individually minor but cumulatively significant at a larger scale or over an extended time period. Clearly define the differences between proposed action, no action, and the other alternatives.	

2E	<p>Enter Special Environmental Concerns for Clean Water Act Waters of the U.S., Coastal Zone Management Areas, Coral Reefs, Cultural Resources, Endangered and Threatened Species, Environmental Justice, Essential Fish Habitat, Fish and Wildlife Coordination, Floodplain Management, Invasive Species, Migratory Birds, Natural Areas, Prime and Unique Farmlands, Riparian Areas, Scenic Beauty, Wetlands, and Wild and Scenic Rivers for each alternative considered. In the case where the selected alternative from Section 5A impacts a Special Environmental Concern, additional information, coordination, permitting or mitigation may be required and adequate documentation should be prepared and attached to the DSR to identify how NRCS or the Sponsor addressed the concern</p>	
2F	<p>Identify Property Protected both private and public, business losses and other economic impacts considered for each alternative. Enter the dollar value of the potential future damages if no action is taken in the Future Damage (5) column. This would be the estimate of the value lost if the EWP recovery measure is not installed. Use the repair cost or damage dollar method to determine the estimate of future damages. The repair cost method uses the costs to return the impaired property, good, or services based on their original pre-event condition or value. The damage dollar method uses an estimate of the future damage to value (e.g. if the structure is condemned, then enter the value of the structure). Enter the estimated amount based upon existing information or information furnished by the sponsor, contractors or others with specific knowledge for recovery from natural disasters for each alternative considered. Often market values for properties or services can be obtained from personnel at the local county/parish tax assessment office. The DSI team needs to determine the Damage Factor (%) which is a coefficient that indicates the degree of damage reduction to a property that is attributed to the effect of the proposed EWP recovery measures. Use an appropriate estimate of how much of the damage the EWP recovery measure will avoid for the alternative being considered. If the recovery measures from a single site will prevent 100 percent of the damage use 100 percent. The Near Term Damage Reduction is the Future Damage (\$) times the Damage Factor (%). Sum the Near Term Damage Reduction values to calculate the Total Near Term Damage Reduction. Enter the Net Benefit which is computed by subtracting the Cost from section 3 from the total near term damage reduction. The economic section must be completed for each alternative considered. Attach additional sheets as necessary.</p>	
2G	<p>Enter information to describe the potential social impacts and considerations for each alternative. Answer Yes or No and any remarks necessary to adequately address each question. The information may be obtained through interviews with community leaders, government officials or sponsors. Factors such as road closures, loss of water, electricity, access to emergency services are used when answering whether the community as a whole has been impaired. This information is part of the environmental evaluation portion of the DSR but may be pertinent in Section 4 regarding priorities. The Social Considerations Section must be completed for each alternative considered. Attach additional sheets as necessary.</p>	
2H	<p>Enter the Group Representation Information for the preferred alternative. Use the most recent census tract information based upon where the EWP recovery measures are located.</p>	Sponsor completes.

2I	Enter whether easement, permissions, or permits, and mitigation will require consultation or coordination for the selected alternative (e.g., Clean Water Act section 404 permit, Endangered Species Act section 10 permits, and any State or county permits or requirements). Describe mitigation to be applied that will offset any adverse impacts and attach any documentation from other agencies regarding mitigation requirements.	NRCS completes with voluntary assistance from Sponsor.
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	Explanation of Requested Item	Who Completes
Section 3	Enter Proposed Recovery Measure(s) including Quantity, Units, Unit Cost, and Total Amount Cost. Enter sum of all Proposed Recovery Measure Costs to calculate Total Costs. Enter Total Installation Costs in Section 1F. The Engineering Cost Estimate must be completed for each alternative considered. Attach additional sheets as necessary.	NRCS completes with voluntary assistance from Sponsor.

	Explanation of Requested Item	Who Completes
Section 4	This section is used to determine the Funding Priority for the preferred alternative and sequence for initiating recovery measures. Enter Yes/No for questions 1 through 4 and enter the number (exigency 1, serious threat to human life 2, etc.) in the right column, Ranking Number Plus Modifier. Complete the Modifier portion by placing the alphabetic indicator a. through f. in the Modifier column. Complete the Ranking Number Plus Modifier column by entering the alphabetic indicator(s) that exists within the site. The number of the site designates the priority (e.g., a site with a designation of 2 is a higher priority than a site with a designation of 3). The modifiers increase the priority for the same numeric site (e.g., a site with a designation of 1a, would be a higher priority than a site with a designation of 1, a site with a designation of 2bc would be a higher priority than a site designated as 2b). Enter the Funding Priority in Section 1A.	NRCS completes with voluntary assistance from Sponsor.

	Explanation of Requested Item	Who Completes
Section 5	Enter the Findings, Rationale Supporting Findings, NRCS Representative signature and Comments, and Concurrence signature by the Sponsor(s).	NRCS completes.
5A	Indicate the preferred alternative and check the applicable finding being made. The NRCS Representative signs indicating the Finding selected. If the proposed action was adequately addressed in the PEIS, check all appropriate chapter paragraphs.	
5B	Enter any additional Comments.	
5C	Sponsor(s) review and concurrence.	Sponsor(s) signature.

Section 6	Include attachments for location map, site sketch or plan and other information as needed.	NRCS completes with voluntary assistance from Sponsor.
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Memo to the Programs, Projects and Operations Subcommittee

Subject: Elkhorn River Emergency Watershed Protection Project

Date: July 6, 2010

From: Gerry Bowen

Recent flooding along the Elkhorn River (see attached) has resulted in severe bank erosion in Sarpy County near the Douglas County line. The streambank has moved upwards of 300 feet in places and threatened three residences in the area (Dave Gilmore, Aaron Graham, and Chris Kelsay).

The Natural Resources Conservation Service (NRCS) has reviewed the area and the possibility exists that the project may be eligible for Emergency Watershed Protection (EWP) funding through NRCS. EWP requires a local sponsor and pays up to 75% of project costs, including engineering. The local sponsor may need to provide the engineering services through a consultant. Although, a detailed cost estimate is not yet available, it is anticipated that repairs would cost about \$500,000, with the local match approximately \$125,000, some of which could be in-kind services.

The District was also the sponsor of a similar project at this location in 1993. The recent streambank erosion has flanked some of those protection measures. Easements acquired in 1993 still apply, although some of the easement areas will need to be expanded due to the erosion.

It is proposed that the District sponsor this emergency project and provide the local matching funds. It is further proposed that the General Manager be authorized to retain a consultant for this emergency work, if necessary.

- **It is recommended that the Subcommittee recommend to the Board that the General Manager be authorized to provide necessary professional engineering services and execute a local sponsorship agreement with the Natural Resources Conservation Service for an Emergency Watershed Protection Project on the Elkhorn River near the Douglas-Sarpy County line, subject to changes deemed necessary by the General Manager, and approved as to form by District Legal Counsel.**



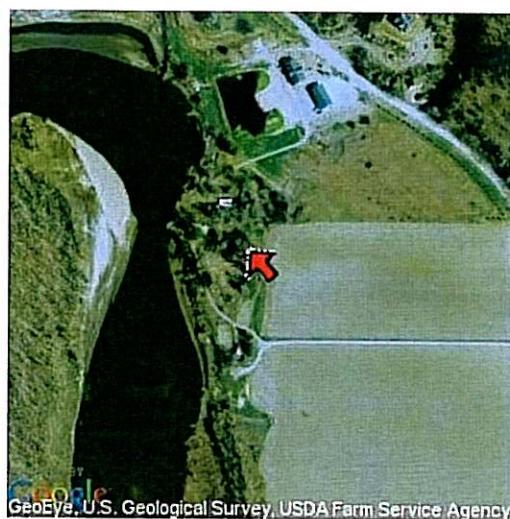
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GPS-Photo Link: 02 Graham -



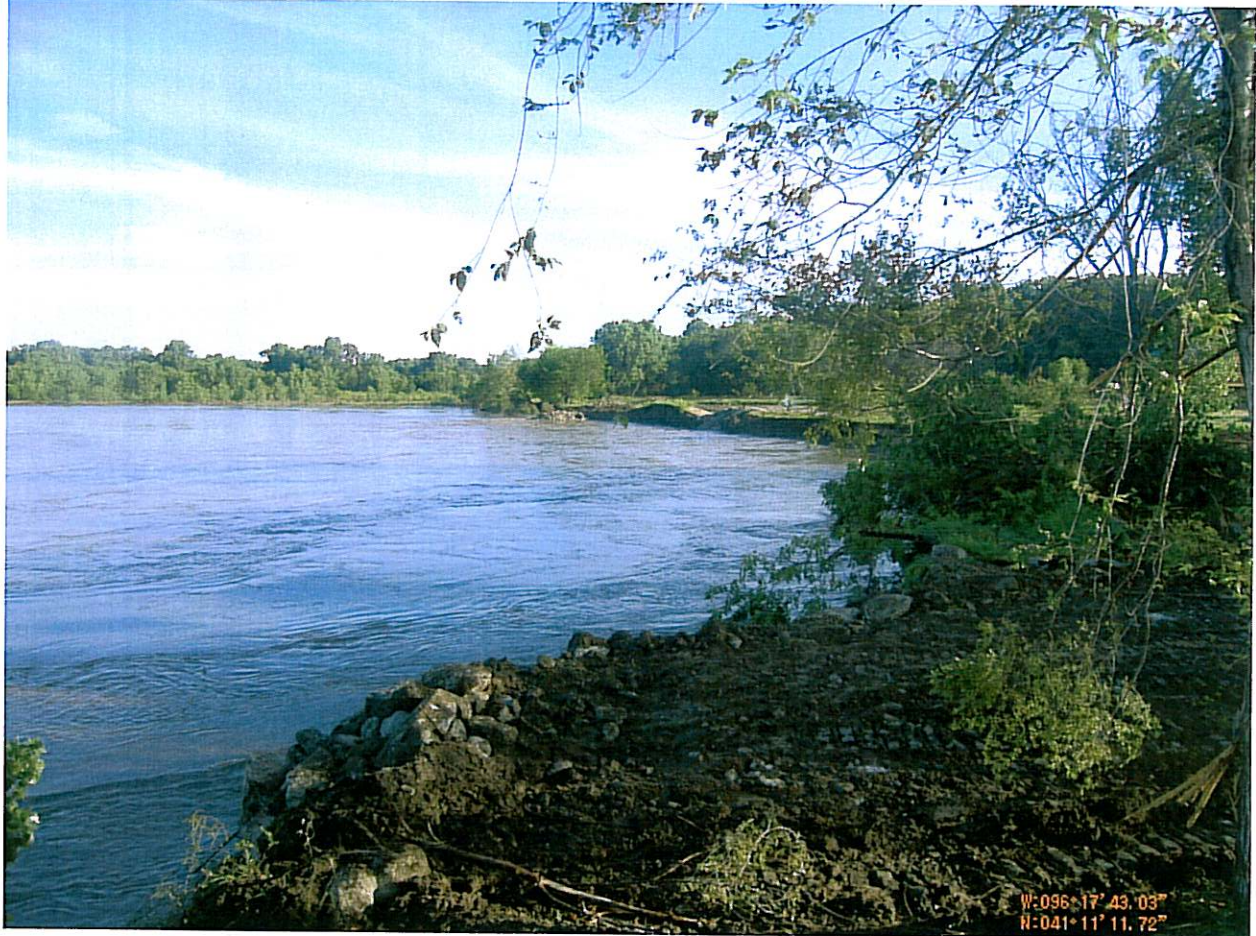
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GPS-Photo Link: 04 Graham -



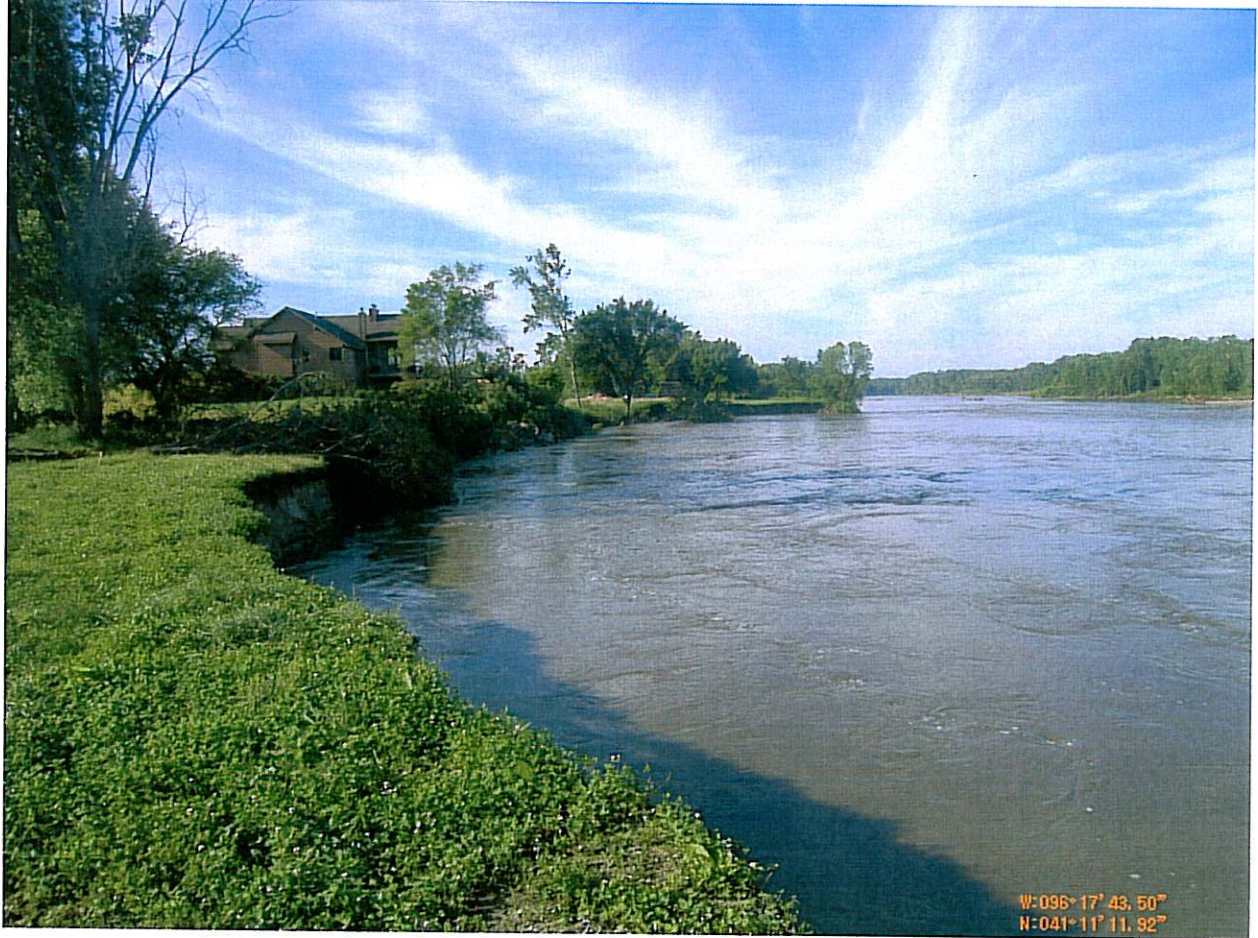
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GPS-Photo Link: 08 Graham -

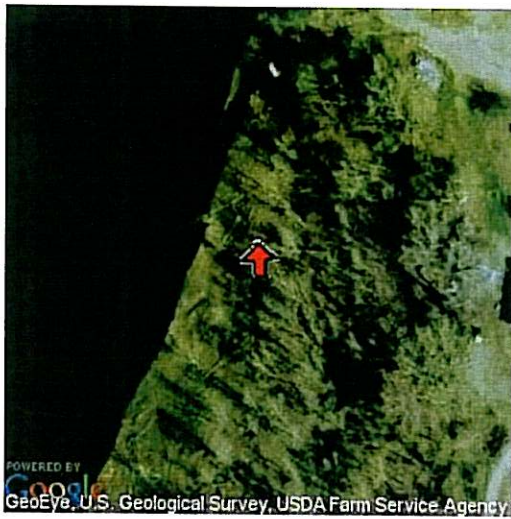


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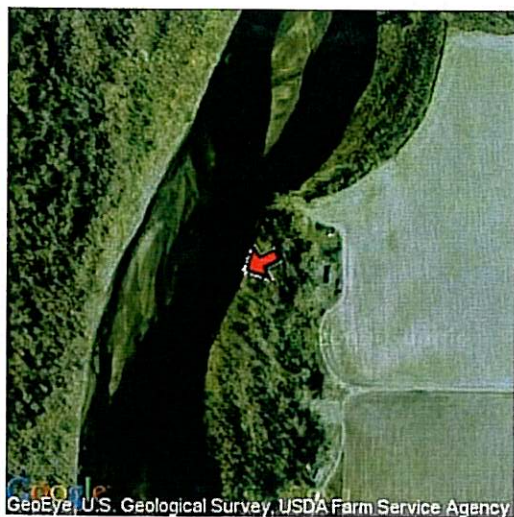




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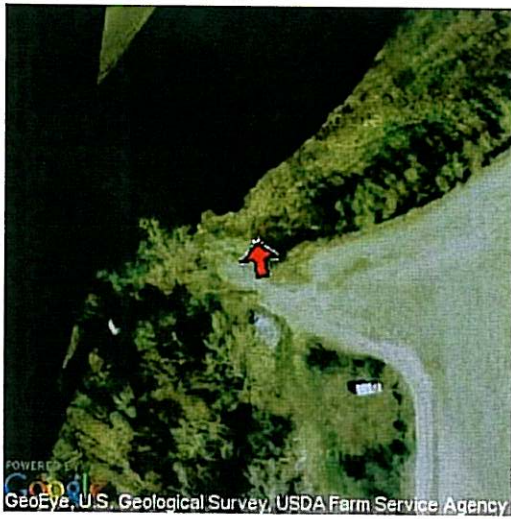
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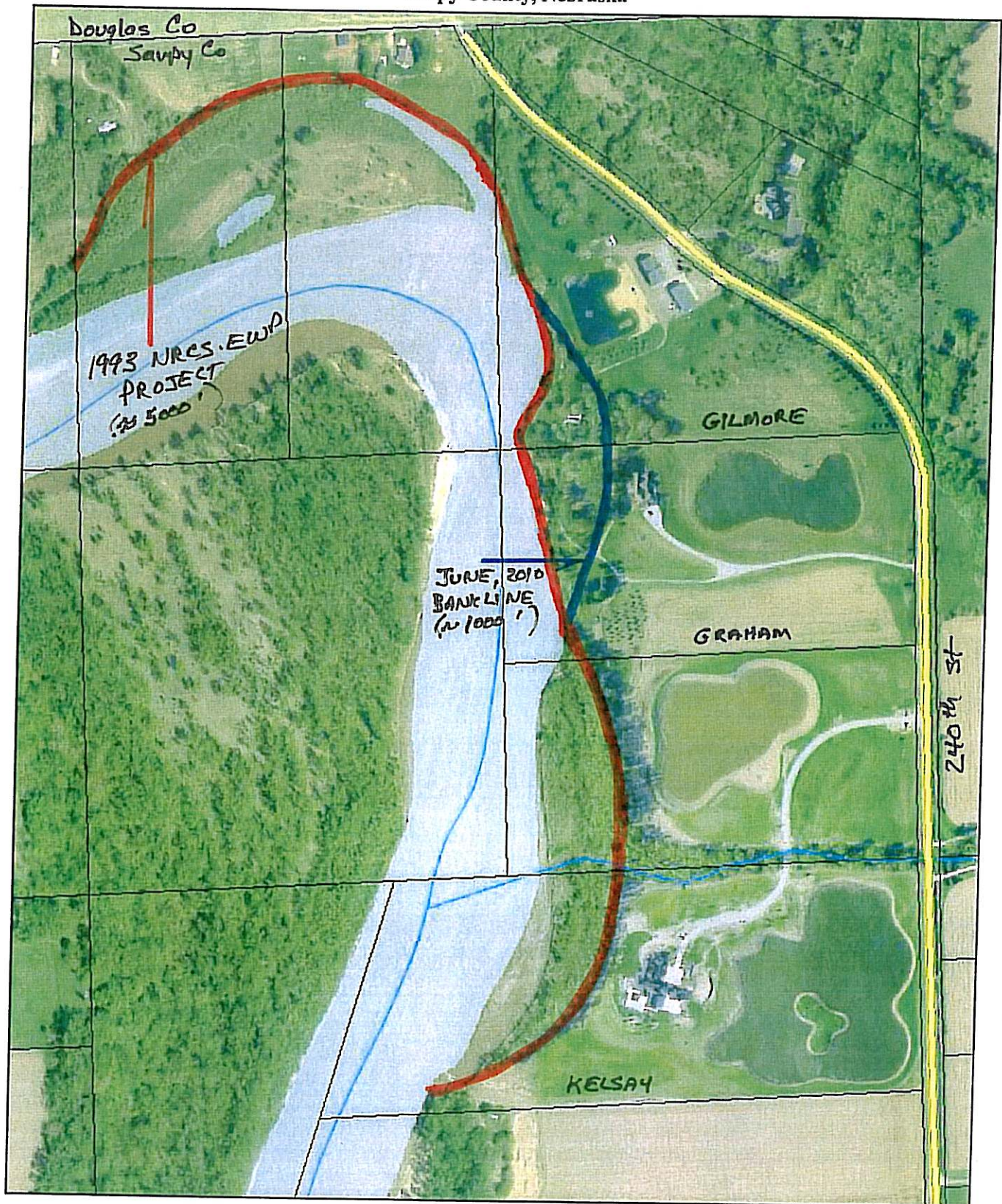
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GPS-Photo Link: 05 Elkhorn -



Sarpy County, Nebraska



Disclaimer: This data is for informational purposes only, and should not be substituted for a true titles search, property appraisal, survey, or for zoning district verification. Sarpy County and the Sarpy County GIS Coalition assume no legal responsibility for the information contained in this data.

Map Scale
1 inch = 402 feet

1/11/2011

