APPLICATION PREPARED BY:

PAPIO MISSOURI RIVER NATURAL RESOURCES DISTRICT

HOUSTON engineering, inc.

Water Sustainability Fund Application

Silver Creek Watershed Site 35A Small Flood Control and Water Quality Structure

March 31, 2025

COVER LETTER

APPLICATION

SUPPLEMENTAL INFORMATION ATTACHMENT

BIBLIOGRAPHY

COVER LETTER

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March 31, 2025

Mr. Jesse Bradley
Director, Nebraska Department of Natural Resources
via Electronic Submission

Re: Silver Creek Watershed Site 35A (SC35A) Small Flood Control and Water Quality Structure Application for Water Sustainability Fund Grant

Director Bradley and Members of Natural Resources Commission:

In accordance with the rules, regulations and guidelines for Nebraska's Water Sustainability Fund Grant Program, please accept this grant application on behalf of the Papio-Missouri River Natural Resources District (P-MRNRD) for the above-referenced project. This project is of a larger project planned for sediment and erosion control as a system. The majority of the structures have already been constructed. Our NRD is continuing to pursue sites that will support the overall project goal.

In addition to the application form posted on the NDNR website, there is also an attachment referenced as the Supplemental Information Attachment (SIA) to this application. The goal of this application structure was to first provide reviewers with the information required to directly answer the questions in the official application form at a concise level, second to provide additional maps, charts and supporting documents to address the required information in the SIA, and then finally to provide the overall documents that any information provided originates from (assuming it is from another document.) We trust that this allows you to quickly review the information you desire and gather additional data as each individual reviewer sees fit.

"Water Sustainability" is defined in Nebraska Title 264 as *when water use is sustainable when current use promotes healthy watersheds, improves water quality, and protects the ability of future generations to meet their needs.*

Recognizably, sustainability has varied meanings across the State, in rural Eastern Nebraska, watershed health and improvements to water quality is the primary need. This structure, working in conjunction with those of the larger projects, will protect the ability of future generations to meet their needs and provides protection for our agricultural contributors that supports the State's economy.

We thank you for your acceptance of this application and stand ready to provide any clarification on any information provided during your review.

Sincerely,

Terry Schumacher

Terry Schumacher
Land and Water Program Coordinator, P-MRNRD

APPLICATION

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NEBRASKA NATURAL RESOURCES COMMISSION

Water Sustainability Fund

Application for Funding

Section A.

ADMINISTRATIVE

PROJECT NAME: Silver Creek Watershed Site 35A (SC35A) Small Flood Control and Water Quality Structure

SPONSOR'S *PRIMARY CONTACT INFORMATION* **(Not Consultant's)**

Sponsor Business Name: Papio-Missouri River Natural Resources District (Papio NRD)

Sponsor Contact's Name: Terry Schumacher, Land and Water Programs Coordinator

Sponsor Contact's Address: 1060 Wilbur St, Blair, NE 68008

Sponsor Contact's Phone: 402.426.4782

Sponsor Contact's Email: tschumacher@papionrd.org

1. **Funding** amount requested from the Water Sustainability Fund:

   Grant amount requested $2,048,570

   - If requesting less than 60% cost share, what %?

   If a loan is requested amount requested. $ No

   - How many years repayment period? N/A
   - Supply a complete year-by-year repayment schedule. N/A

2. **Neb. Rev. Stat. § 2-1507 (2)**

   Are you applying for a **combined sewer overflow project**? YES☐ NO☒

   If yes:

- Do you have a Long Term Control Plan that is currently approved by the Nebraska Department of Environmental Quality? YES☐ NO☐
- Attach a copy to your application. Click here to enter text.
- What is the population served by your project? Click here to enter text.
- Provide a demonstration of need. Click here to enter text.
- **Do not complete the remainder of the application.**

3. **Permits Required/Obtained** Attach a copy of each that has been obtained. For those needed, but not yet obtained (box **"NO"** checked), 1.) State when you will apply for the permit, 2.) When you anticipate receiving the permit, and 3.) Your estimated cost to obtain the permit.

(N/A = Not applicable/not asking for cost share to obtain)
(Yes = See attached)
(No = Might need, don't have & are asking for 60% cost share to obtain)

G&P - T&E consultation (required)	N/A☐	Obtained: YES☐	NO☒
DNR Surface Water Right	N/A☒	Obtained: YES☐	NO☐
USACE (e.g., 404/other Permit)	N/A☐	Obtained: YES☐	NO☒
FEMA (CLOMR)	N/A☒	Obtained: YES☐	NO☐
Local Zoning/Construction	N/A☒	Obtained: YES☐	NO☐
Cultural Resources Evaluation	N/A☐	Obtained: YES☐	NO☒
Other (provide explanation below)	N/A☐	Obtained: YES☐	NO☐

SC35A is currently in the preliminary investigations and design phase. USACE 404 permit and NDEE 401 Water Quality Certification will be obtained for both projects. Coordination required for Threatened and Endangered Species and Cultural Resources will be performed by the US Army Corps of Engineers (USACE) as part of the 404 permitting process. It is anticipated that a Nationwide Permit (NWP) 43 will be issued to ensure compliance with Section 404 of the CWA. An individual water quality certification would not be required as CWA Section 401 compliance is automatically covered with the issuance of NWP 43. The T&E CERT Environmental Review with NGPC and FWS and consultation with NeSHPO for Cultural Resources will be completed. The NPDES from NDEE and the Dam Safety plan approval and Permit to Impound Water

from NDNR will be obtained for SC35A. The documentation required for these is complete and the costs for submitting the application and any coordination required to obtain the permits is approximately $8,000. These permits are marked "NO" above and the costs to obtain these permits is included in the remaining budget line items listed as Engineering, Planning and Permitting in the costs table that is being requested for cost share.

4. Partnerships

List each Partner / Co-sponsor, attach documentation of agreement:

Identify the roles and responsibilities of each Partner / Co-sponsor involved in the proposed project regardless of whether each is an additional funding source.

USDA NRCS: The local office is helping coordinate with the landowners for permission to enter land and communicate the design and land rights requirements for the project.

Burt County (County): The site is located outside nearby city boundaries within Burt County. The County provides input regarding various components of the site and provides information about the surrounding lands. They currently maintain the roadways around site SC35A. The County is not a funding partner. See the SIA for letters of support.

5. Other Sources of Funding

Identify the costs of the entire project, what costs each other source of funding will be applied to, and whether each of these other sources of funding is confirmed. If not, please identify those entities and list the date when confirmation is expected. Explain how you will implement the project if these sources are not obtained.
NA

SC35A	Total Costs	Spent to Date	Eligible WSF Costs	60% Grant Request	Local Cost Share
Engineering, Planning, Permitting	$811,500	$202,216	$609,284	$365,570	$243,714
Professional Services	$100,000	----	$100,000	$60,000	$ 40,000
Capital Improvement Costs	$2,705,000	----	$2,705,000	$1,623,000	$1,082,000
Main Dam					
Stream Mitigation					
Totals	$3,616,500	$202,216	$3,414,284	**$ 2,048,570**	**$1,365,714**

6. **Overview**

In 1,000 words *or less*, provide a brief description of your project including the nature/purpose of the project and its objectives. Do not exceed one page!

The Papio NRD is proposing the construction of a small flood control and water quality structure within the Silver Creek watershed that will become part of the Silver Creek Watershed Special Erosion and Sediment Control Project. The project identified 30 dam sites as well as 50 sediment basins within the Silver Creek Watershed. The plan was developed to address a long history of soil erosion within the watershed, which extends through Burt County and ends East of Tekamah near the confluence of Mud Creek and Tekamah Creek, which feeds into the Missouri River further downstream. The plan focuses on reducing soil loss/sedimentation and the reduction of nutrient load within the 16,218-acre watershed.

The SC35A structure is a new project site that was identified by a willing landowner interested in the project. It will provide flood and sediment control in the Silver Creek sub-watershed, located in Buty County, NE on the tributaries shown on the location map in Section B-1(a) of the SIA. This is a developing watershed in a rural area and the site was selected to provide sediment control and nutrient load, given that roughly 70% of the watershed's land use is agricultural. The site sits near the top of the NRD's current prioritization list due to cooperation from nearby landowners.

The primary purpose of the proposed dam structure is sediment control, with several ecologic benefits, such as stream restoration and nutrient load reduction, also realized with the implementation of the reservoir. The earthen dam will have a principal spillway outlet pipe that controls the permanent pool elevation in the reservoir. The auxiliary spillway is set at the modeled 50-yr storm elevation, which will provide flood storage and reduced discharge for all events up to the 50-yr storm. A breakdown of the data for SC35A project is included in this application is provided in Table 1 below.

Table 1. Site Data

Dam Site	Drainage acres	Permanent Pool (acre)	Flood Storage (AF)
SC35A	646	15.9	103.2

The ecological benefits include large improvements to water quality. The reservoir protects and improves the water quality discharged downstream into Silver Creek. Of the sediment that reaches the reservoir, the majority will settle in the reservoir and will not be transported downstream. This plays a large role in the reduction of nutrients transported to Silver Creek, as upstream farm fields' runoffs will be

collected by the reservoir. The increase in water surface area provided by the project also provides more ultraviolet light exposure that kills harmful bacteria. Collectively the project should provide substantial reductions in sediment transportation and erosion control, improving aquatic life downstream of the structure. Silver Creek is currently listed as having an impaired aquatic community, and the structure will be highly beneficial in helping meet the goals listed in the TMDL Report (NDEE 2022). Additionally, nutrient load reductions will be achieved through settling from increased detention time, as well as biological update from the increased wetland area created by this project.

Aquatic and wildlife habitat improvements will all be experienced as part of this project. The SC35A stream assessment found that the stream channel reaches in the project area are degraded, are becoming deeply incised and are disconnected from the floodplain. They have heavily eroded streambanks and appear to be frequently disturbed. Future conditions provided by the dams will create grade stability and prevent continued erosion. The reservoir creates shallow water habitats as well.

7. Project Tasks and Timeline

Identify what activities will be conducted to complete the project, and the anticipated completion date.
For multiyear projects please list (using the following example):

Tasks	Year 1$	Year 2$	Year 3$	Remaining	Total $ Amt.
Permits	$18,000				$18,000
Engineering		$96,000			$96,000
Construction		$87,000	$96,000		$183,000
Close-out				$8,000	$8,000
				TOTAL	$305,000

- What activities (Tasks) are to be completed.
- An estimate of each Tasks expenditures/cost per year.
- Activities in years 4 through project completion under a single column.

The tasks have been broken down into the following:

Engineering, Planning, Permitting: Includes all the data collection, testing, modeling/analysis, design, engineering, coordination and permitting of the dam and all associated features.

Professional Services: included is administrative and legal services required to handle project coordination.

Land Rights: easement at no cost

Capital Improvement Costs: Includes construction of the dam and all associated features.

Below is the timeline associated with these tasks. The years provided in this table correlate with the years in the cash flow stream located in Table 6 in Section 3.

All capital costs will be spent by Year 3; therefore no remaining cost column was required to reflect to total cost amount.

Table 2. Anticipated Tasks and Schedule

Tasks	Year 0$ (2024)	Year 1$ (2025)	Year 2$ (2026)	Total $ Amt.
Engineering, Planning, Permitting	$25,000	$586,500	$200,000	$811,500
Professional Services	$25,000	$50,000	$25,000	$100,000
Capital Improvement Costs	$0	$450,000	$2,255,000	$2,705,000
Totals	$50,000	$1,086,500	$2,480,000	**$3,616,500**

8. **IMP**

Do you have an **Integrated Management Plan** in place, or have you initiated one? YES☒ NO☐ Sponsor is not an NRD☐

Section B.

DNR DIRECTOR'S FINDINGS

Prove Engineering & Technical Feasibility

(Applicant must demonstrate compliance with Title 261, CH 2 - 004)

1. Does your project include physical construction (defined as moving dirt, directing water, physically constructing something, or installing equipment)?
YES☒ NO☐

If you answered "YES" you must answer all questions in section 1.A.
If you answer "NO" you must answer all questions in section 1.B.

If "YES", it is considered mostly structural, so answer the following:

1.A.1 Insert a feasibility report to comply with Title 261, Chapter 2, including engineering and technical data;

This project will include the structural components (dam) at site SC35A. A preliminary design of this site was completed for the Papio NRD in February 2025. The plans, preliminary design reports and accompanying geotechnical report are included as attachments in the SIA (Houston, 2025)

1.A.2 Describe the plan of development (004.01 A);

SC35A was identified by the PMRNRD as an addition to the Silver Creek Watershed Plan to provide sediment control, detention of storm water during flood events, and water quality improvements in the watershed. The SCWP was developed to address a long history of flooding, sediment transport, and erosion within the watershed, which extends across Burt County and ends at the confluence with the Silver Creek. The original plan includes 30 dam sites and 50 sediment basins.

The Silver Creek Watershed, where SC35A is located, is a developing watershed in a rural area. The SC35A structure was selected to provide sediment control and nutrient load, given that roughly 70% of the watershed's land use is agricultural. The site sits near the top of the NRD's current prioritization list due to cooperation from nearby landowners.

1.A.3 Include a description of all field investigations made to substantiate the feasibility report (004.01 B);

On-site investigations at SC35A were conducted by the owner and design engineers to collect visual observations and gain an understanding of the proposed dam location. Coordination with NDNR Dam Safety personnel will be performed as needed to discuss all safety-related aspects of the dam design, including

auxiliary spillway design related to the existing and proposed adjacent roadways, and project hydrology. A Site survey was performed to collect locations of any visible utility markers, drainage structures, and topographical data and future ones will be performed as needed. Legal boundary surveys were performed to develop land purchase documents.

A preliminary wetland delineation was completed in November 2024 to identify the location of jurisdictional water bodies located on the project sites. This information will be used to determine project impacts and develop design alternatives and/or modifications to reduce potential impacts. Preliminary stream assessments were also completed for each site to document current and future channel conditions potentially impacted by the project. Once final investigations have been completed, the findings from the assessments will be documented in the following reports:

- *Wetland Delineation Report – Silver Creek Watershed Site SC35A Project, Tekamah, NE* (Houston 2025a)
- *Stream Assessment for Silver Creek Watershed Site SC35A Project, Tekamah, NE* (Houston 2025b,)

Sub-surface geotechnical investigations are required for design and analysis of SC35A. Soil borings and Cone Penetrometer Tests (CPTs) will be taken for the dam and borrow areas in 2025. Soil samples will be obtained at selected intervals and the necessary laboratory tests will be performed for the geotechnical analysis and design of the dam embankments. The target soil boring locations are included in the SIA in Figures B-1(a).1.

1.A.4 Provide maps, drawings, charts, tables, etc., used as a basis for the feasibility report (004.01 C);

A location map has been inserted into the SIA as Figure B-1(a).2. There are numerous maps, charts, tables, etc. that help to define the project, show design intent and label site features. They are included throughout this application, in the SIA, and within the documents listed in the Bibliography.

1.A.5 Describe any necessary water and/or land rights including pertinent water supply and water quality information (004.01 D);

As per State statute, a Permit to Impound Water application will be submitted for SC35A. Said water right is to permanently store water in the dam's reservoir.

Land Rights will be required for the construction, operation and maintenance of these sites. The Papio NRD has obtained the necessary easements and does not anticipate any resistance.

1.A.6 Discuss each component of the final plan (004.01 E);

- Sediment Control – The primary function is to trap sediment within the reservoir and prevent transport of this material into Silver Creek. This will prevent reduction of stream volume in the Creek and reduce dissolved pollutant loads downstream. The reservoir also provides additional die-off time for bacteria. Any increase in surface area provided by the reservoir provides more ultraviolet light exposure that kills bacteria

- Stream Mitigation –SC35A will also assist with erosion mitigation downstream within Silver Creek. A more controlled outflow from the reservoir lowers the chance of gullys, undercutting, and other erosion activities along the banks.

- Flood control - The reservoir will attenuate flood flows through a 36” diameter principal spillway pipe. SC35A will create a 15.9-acre permanent pool with a storage volume 103.2 AF.

1.A.7 When applicable include the geologic investigation required for the project (004.01 E 1);

Data collected in the sub-surface investigation described above will be analyzed and used to perform a complete geotechnical analysis required for the dam design. A series of models are being developed to assess settlement/stability and determine the specific embankment/foundation design requirements, design the downstream seepage berm, identify viable borrow site locations, and develop a construction instrumentation and monitoring plan. This completed analysis will be included in the geotechnical report.

1.A.8 When applicable include the hydrologic data investigation required for the project (004.01 E 2);

A hydrologic analysis of the contributing area to SC35A was completed during the preliminary design TM (Houston 2025) and is under review by NDNR Dam Safety. Table 3 below summarizes the design storms that were modeled for SC35A and are used to hydraulically size the sites in accordance with NDNR dam design criteria.

Table 3. SC35A Design Storm Information

Design Storm	Duration	Frequency	Rainfall (in)
(PSH)	24 hours	2.0% (50-year)	9.03
(PSH)	10 days	2.0% (50-year)	9.03
(ASH)	6 hours	P_{100}+0.12(PMP–P_{100})	7.48
(FBH)	6 hours	P_{100}+0.40(PMP–P_{100})	11.53
(FBH)	24 hours	P_{100}+0.40(PMP–P_{100})	13.48

Hydrographs for each design storm event were exported in five-minute increments from HEC-RAS and imported into SITES to perform the hydraulic routings for the proposed dam and spillway.

1.A.9 When applicable include the criteria for final design including, but not limited to, soil mechanics, hydraulic, hydrologic, structural, embankments and foundation criteria (004.01 E 3).

As reported in the Technical Memorandum (TM) prepared during preliminary design (Houston 2025), different precipitation models were used for the design storms. For the hydraulic analysis during preliminary design, the most conservative result from the different precipitation models was applied to set the auxiliary spillway and top of dam elevations. The dam design will adhere, as a minimum, to the requirements in the NRCS TR-60 Earth Dam and Reservoirs guidance.

The permanent pool, riser, and auxiliary spillway elevations were selected as a function of a reservoir sustainability analysis and are described in detail in the Preliminary Design Study. SC35A has a relatively small pool area/storage capacity, with an emphasis placed on selecting a pool elevation that would not impact the nearby SC34 structure but would still provide a 50-year sediment storage capacity.

If “NO”, it is considered mostly non-structural, so answer the following:

1.B.1 Insert data necessary to establish technical feasibility (004.02); Click here to enter text.

1.B.2 Discuss the plan of development (004.02 A); Click here to enter text.

1.B.3 Describe field or research investigations utilized to substantiate the project conception (004.02 B); Click here to enter text.

1.B.4 Describe any necessary water and/or land rights (004.02 C); Click here to enter text.

1.B.5 Discuss the anticipated effects, if any, of the project upon the development and/or operation of existing or envisioned structural measures including a brief description of any such measure (004.02 D). Click here to enter text.

Prove Economic Feasibility

(Applicant must demonstrate compliance with Title 261, CH 2 - 005)

2. Provide evidence that there are no known means of accomplishing the same purpose or purposes more economically, by describing the next best alternative. Sediment load reduction has been a major focus in the Silver Creek watershed due to the proximity of nearby agricultural plots. The Silver Creek Watershed Special Erosion and Sediment Control Project was developed an integrated approach to address erosion, sediment control, and flooding problems using a combination of best management practices, dam sites, and sediment control basins in the watershed. Due to close proximity to nearby farm fields and pastures, placement of these dams hinges on landowner support and cooperation, reducing the number of available sites for new construction. Originally not selected as one of the 30 original dam sites 20 years ago due to lack of landowner cooperation, SC35A now has support from the nearby landowners and can be fully implemented. This project will provide sediment, erosion, and flood control benefits to Silver Creek and the downstream areas.

3. Document all sources and report all **costs** and **benefit data** using current data, (commodity prices, recreation benefit prices, and wildlife prices as prescribed by the Director) using both dollar values and other units of measurement when appropriate (environmental, social, cultural, data improvement, etc.). The period of analysis for economic feasibility studies is the project life. (Title 261, CH 2 - 005).

   See questions below for numerous tables detailing project costs and benefits, data, sources, and methodologies. Additional details and supporting documentation are included in section B-3 of the SIA, and within the documents listed in the Bibliography.

3.A Describe any relevant cost information including, but not limited to the engineering and inspection costs, capital construction costs, annual operation and maintenance costs, and replacement costs. Cost information shall also include the estimated construction period as well as the estimated project life (005.01).

Costs

A summary of all initial capital costs related to the project area presented in the tables below, and a more detailed breakdown of the land purchase and construction costs are provided in the SIA. They include all of the items listed above. Detailed cost estimates are included in the SIA.

Table 4. Capital Cost Summary

Summary of Costs	SC35A
Engineering, Planning and Permitting	$811,500
Professional Services (Administrative, Legal, Fiscal)	$100,000
Capital Improvement Costs	$2,705,000
Total	**$3,616,500**

3.B Only primary tangible benefits may be counted in providing the monetary benefit information and shall be displayed by year for the project life. In a multi-purpose project, estimate benefits for each purpose, by year, for the life of the project. Describe intangible or secondary benefits (if any) separately. In a case where there is no generally accepted method for calculation of primary tangible benefits describe how the project will increase water sustainability, in a way that justifies economic feasibility of the project such that the finding can be approved by the Director and the Commission (005.02).

Benefits

The costs are weighed against the primary tangible benefits as described in the *Title 264 – Rules Governing the Administration of the Water Sustainability Fund* (NDNR 2015a). For this project, those benefits include flood reduction benefits, sediment trapping benefits, and environmental benefits. A detailed discussion of the quantified benefits and the computation tables are located in SIA Tables B-3.2 through B-3.8 with supporting Figure B-3.3.

Benefit:Cost

The benefit:cost ratio computed from the total annual costs and benefits reported above for the project is 1.81:1 for the 50-year project life.

Table 5. Benefit to Cost Calculation Table

Project Item	Occurrence	Total	Summary of Costs	35A
Flood Reduction	Annual	$4,500	Engineering, Permitting, and Construction Observation	$811,500
Sediment Trapping	Annual	$50,700	Construction	$2,705,000
Environmental Benefits	Annual	$223,000	Total	$3,516,500

Benefit:Cost Ratio	1.81

The period of analysis shown for this project is 51 years to account for construction in year 1. Three primary factors were considered regarding the life of the project and therefore, its ability to provide project benefits:

1. The reservoir volume was designed to trap incoming sediments as efficiently as possible. This means maximizing the pool volume, given the land rights available at the site. The watershed is agricultural and has relatively high sediment loading rates comparable to urban areas. Sediment loading rates from the watershed were calculated and the reservoir was sized for a 50-yr lifetime.

2. The materials used in the dam design are of the highest quality. The principal spillway is a lined steel cylinder concrete pressure pipe. All other non-native materials are reinforced concrete designed to convey a probable maximum flood (PMF) and therefore have extremely conservative design requirements. Dams designed 100 years ago that were not designed anywhere near this level of conservatism are still around today and functioning as intended.

3. The combination of watershed planning goals, NRD input, and the proximity to roadways and downstream structures resulted in SC35A being designed as a significant hazard dam. This requires that all engineering design of the embankment uses factors of safety in the design that are conservative. This, and the monitored maintenance inspections conducted through the life of the project required by State law, contributes to the above factors in ensuring that this project will function as intended into the future for years to come.

Collectively, the three justifications explained above detail why, if any project would last for 50 years, these projects are built to last like very few others would.

In addition to flood reduction benefits, there are multiple intangible ways in which the project enhances water and environmental sustainability. The sediment trapping benefits are a reflection of the money saved from avoiding future dredging projects on downstream areas, as the reservoir will collect upstream material from stormwater runoff. Environmental benefits include the creation of 9.2 acres of new wetlands and an additional 13.9 acres of rural green open space. The cost benefits for these values are based on FEMA BCA annual values per acre.

3.C Present all cost and benefit data in a table to indicate the annual cash flow for the life of the project (005.03).

The costs and benefits have been assessed over a 50-year lifetime as shown in the cash flow stream below.

Table 6. Cash Flow Stream

Project Year(s)	Calendar Year(s)	Cash Flow Categories	Costs	Benefits	Details
0	2024				
		Engineering, Planning, Permitting	$25,000		Preliminary design
		Professional Services	$25,000		Legal Services
		Capital Improvement Costs	$0		
		Total Costs:	**$50,000**		
		Flood Reduction		$0	
		Sediment Trapping		$0	
		Enviormental Benefits		$0	
		Total Benefits:		**$0**	
1	2025				
		Engineering, Planning, Permitting	$586,500		Final design
		Professional Services	$50,000		Legal Services
		Capital Improvement Costs	$450,000		Construction begins (Fall)
		Total Costs:	**$1,086,500**		
		Flood Reduction		$0	
		Sediment Trapping		$0	
		Enviormental Benefits		$0	
		Total Benefits:		**$ -**	
2	2026				
		Engineering, Planning, Permitting	$0		
		Professional Services	$0		
		Capital Improvement Costs	$2,255,000		Construction ends (Spring)
		OM&R	$20,593		
		Total Costs:	**$2,275,593**		
		Flood Reduction		$4,500	Benefits begin
		Sediment Trapping		$50,700	Benefits begin
		Enviormental Benefits		$223,000	Benefits begin
		Total Benefits:		**$278,200**	
3-49	2027-2073				
		Engineering, Planning, Permitting	$0		
		Professional Services	$0		
		Capital Improvement Costs	$0		
		OM&R	$18,800		
		Total Costs:	**$18,800**		
		Flood Reduction		$111,261	
		Sediment Trapping		$1,253,542	
		Enviormental Benefits		$5,513,608	
		Total Benefits:		**$6,878,411**	

3.D In the case of projects for which there is no generally accepted method for calculation of primary tangible benefits and if the project will increase water sustainability, demonstrate the economic feasibility of such proposal by such method as the Director and the Commission deem appropriate (005.04). (For example, show costs of and describe the next best alternative.)

Not applicable. Primary tangible benefits have been calculated and presented above.

Prove Financial Feasibility

(Applicant must demonstrate compliance with Title 261, CH 2 - 006)

4. Provide evidence that sufficient funds are available to complete the proposal.

The Papio NRD has planned for and budgeted the cost of the initial design for this site in their current (FY25) budget, as report in their Papio NRD FY 2025 Tax Levy and Adoption Budget Memorandum (P-MRNRD 2025b). The costs for the final design and construction will be added to the FY 2026 budget. They have a proven record of planning their budgets on an annual basis to account for the costs required for their upcoming projects.

5. Provide evidence that sufficient annual revenue is available to repay the reimbursable costs and to cover OM&R (operate, maintain, and replace).

The Papio NRD includes maintenance costs in their annual budget every year for the maintenance of the dams that they operate. The budgeted amount is reviewed in detail every year by assessing annual maintenance costs and any special project needs. A budget statement from the NRD on funds available for this project is provided in the SIA (P-MRNRD 2025b). For fiscal year 2025 and beyond, the operating budget levy will be adjusted to increase funding available.

6. If a loan is involved, provide sufficient documentation to prove that the loan can be repaid during the repayment life of the proposal. N/A

7. Describe how the plan of development minimizes impacts on the natural environment (i.e. timing vs nesting/migration, etc.).

The permitting process is underway and on-going and the impacts are considered relatively small. A preliminary stream assessment of waterways within the project area was made to get a better understanding of the area for preliminary design. A final stream assessment will be conducted according to the methodologies and procedures outlined in the U.S. Army Corps of Engineers Nebraska Stream Condition Assessment Procedure (NeSCAP). The procedure will involve the review of available published resources combined with field assessments to

evaluate the physical and biological attributes of a stream reach. Preliminary assessments found that stream channel reaches degrade moving downstream as they become deeply incised, disconnected from the floodplain, heavily eroded streambanks and appear to be frequently disturbed.

The same assessment methodology will be applied to future (post project) conditions to determine stream health and function impacts related to the project. This analysis will determine if the project increases stream function within the project area. Specifically, the target is an overall increase in habitat stability, improvements to riparian buffer communities and decreases in erosion which in turn will increase aquatic functions. The reservoir will create shallow open water habitats, inundated wetlands, and emergent wetland/mesic tallgrass prairie transition zones. Tree and shrub dominated areas may also develop with the buffer zone by natural colonization or promoted with plantings in designated areas.

8. Explain how you are qualified, responsible and legally capable of carrying out the project for which you are seeking funds.

The Papio NRD is a regional government agency that focuses on protecting ground and surface water, reducing flood threats, slowing the effect of soil erosion, creating and enhancing wildlife habitat and more. This flood control site directly aligns with the types of projects they have a history of successful implementation, operation and maintenance. Papio NRD is in the process of acquiring all the necessary easements so that the project will not take place on private property, and all permits will be acquired to ensure all legal facets of the project have been covered.

9. Explain how your project considers plans and programs of the state and resources development plans of the political subdivisions of the state.

In the NDNR's *Annual Report and Plan of Work for the Nebraska State Water Planning and Review Process* (hereafter referred to as the *Annual Report)* (NDNR 2024), the Statewide activities describe Water Sustainability Fund goals. This project fits multiple goals stated in the document:

d.) Contribute to multiple water supply management goals including flood control, reducing threats to property damage, agricultural uses, municipal and industrial uses, recreational benefits, wildlife habitat, conservation and preservation of water resources

The benefits of this project and how it achieves these goals are described in detail below:

Sediment Control/Water Quality

The primary purpose of the proposed dam structure is sediment control, with several ecologic benefits, such as stream restoration and nutrient load reduction, also realized with the implementation of the reservoir. Nearby farm fields contribute a significant nutrient load during storm events that can cause damage to streams and other downstream waterbodies. Being able to capture some of this runoff will greatly reduce the amount of sediment transported downstream. Pollutant load reductions can be expected, specifically those such as phosphorus with the affinity to adhere to sediment particles that will settle out. The reservoir can also reduce the dissolved pollutant loads through biological uptake of wetland vegetation. Any increase in surface area provided by the reservoir provides more ultraviolet light exposure that kills bacteria.

The configuration of the riser structure will also increase the drawdown time for smaller events that often have the greatest impact on water quality (generally the first 0.5 inches of runoff). Earthwork grading that increases storage capacity, the creation of wetlands, and increasing the surface area will all improve the basin's performance in relation to sediment capture.

Flood Control

The reservoir will attenuate flood flows through a 36" diameter principal spillway pipe, storing flood flows in the reservoir. Though not its primary purpose, SC35A is designed to provide flood reduction benefits in a developing rural watershed. The dam will provide flood reduction within the sub-watershed and contribute to a reduction in the Silver Creek.

Wildlife Habitat

The reservoir itself will create shallow water habitats for a variety of aquatic organisms and birds. The reservoirs also impact water quality in a positive way by further reducing sediment, nutrient and bacteria transport downstream. In addition, downstream habitat is improved and protected. As the watershed develops, land is covered with impervious surfaces such as roads, parking lots, roofs, driveways and sidewalks that prevent rainfall from infiltrating into the ground. The reservoir causes a decrease in stormwater runoff flow rate, volume and velocity, which decreases erosion and sediment deposition. Altering the magnitude, frequency and duration of stormwater runoff and sediment loads to streams reduces impacts to water quality and loss of aquatic life and habitat through a variety of geomorphic mechanisms. These mechanisms include less changes in channel bed material, decreased suspended sediment loads, gains of riparian habitat due to decreases in streambank erosion and decreases in the variability of flow and sediment transport characteristics relative to aquatic life cycles.

10. Are land rights necessary to complete your project? YES☒ NO☐

If yes:

10.A Provide a complete listing of all lands involved in the project

Site SC35A will encompass an estimated XXX acres. See Section B-3 of the SIA for maps associated with table below. The Papio NRD will have easements for all the ground. All landowners are willing participants of the project.

Table 7. SC35A Land Rights

Tract Number	Parcel ID	Total Project Area (AC)
1	432802200	4.66
2	432800600	4.17
3	432802300	6.37
4	432801000	49.56
Total Project Area		**64.75**

10.B Attach proof of ownership for each easements, rights-of-way and fee title currently held.

The Papio NRD is currently coordinating easement agreements.

10.C Provide assurance that you can hold or can acquire title to all lands not currently held.

The Papio NRD is currently undergoing negotiations with the landowner for the acquisition of the easement required for construction. All landowners have been involved in project planning are willing participants in providing easements. The Papio NRD has the power of eminent domain that could be applied if necessary.

11. Identify how you possess all necessary authority to undertake or participate in the project.

This project falls directly in line with the roles and responsibilities of the Papio NRD. The Papio NRD will obtain all necessary permits and land rights to complete the project to obtain the authority needed to perform work on their own property.

12. Identify the probable consequences (environmental and ecological) that may result if the project is or is not completed.

The water quality and aquatic habitat benefits from this project are substantial. Nearby farm fields contribute a significant nutrient load during storm events that can cause damage to streams and other downstream waterbodies. Being able to capture some of this runoff will greatly reduce the amount of sediment transported downstream. Pollutant load reductions can be expected, specifically those such as phosphorus with the affinity to adhere to sediment particles that will settle out. The reservoir can also reduce the dissolved pollutant loads through biological uptake of wetland vegetation. Any increase in surface area provided by the reservoir provides more ultraviolet light exposure that kills bacteria.

The configuration of the riser structure will also increase the drawdown time for smaller events that often have the greatest impact on water quality (generally the first 0.5 inches of runoff). Earthwork grading that increases storage capacity, the creation of wetlands, and increasing the surface area will all improve the basin's performance in relation to sediment capture.

The reservoir itself will create shallow water habitats for a variety of aquatic organisms and birds. The reservoirs also impact water quality in a positive way by further reducing sediment, nutrient and bacteria transport downstream. In addition, downstream habitat is improved and protected. As the watershed develops, land is covered with impervious surfaces such as roads, parking lots, roofs, driveways and sidewalks that prevent rainfall from infiltrating into the ground. The reservoir causes a decrease in stormwater runoff flow rate, volume and velocity, which decreases erosion and sediment deposition. Altering the magnitude, frequency and duration of stormwater runoff and sediment loads to streams reduces impacts to water quality and loss of aquatic life and habitat through a variety of geomorphic mechanisms. These mechanisms include less changes in channel bed material, decreased suspended sediment loads, gains of riparian habitat due to decreases in streambank erosion and decreases in

the variability of flow and sediment transport characteristics relative to aquatic life cycles.

The permitting process is underway and ongoing. Though the impacts are considered relatively small, the project will require Section 404 permits and will result in some unavoidable impacts that will be documented in Houston (2025a,b). A summary of these impacts include:

- Construction of the SC35A dam and spillway would require fill in an estimated 0.10 acres of PEMA/PEMC wetlands and 475 linear ft of channel. An estimated .04 acres of PEMA/PEMC wetlands would be inundated greater than 3 feet within the permanent pool. An estimated 5,420 linear feet of intermittent stream would be inundated within the permanent pool.

However, the project overall will significantly improve stream health and function. Specifically, there will be an overall increase in habitat stability, as improvements to riparian buffer communities and decreases in erosion will increase aquatic functions. Tree and shrub dominated areas may also develop with the buffer zone by natural colonization or promoted with plantings in designated areas.

Section C.

NRC SCORING

In the NRC's scoring process, points will be given to each project in ranking the projects, with the total number of points determining the final project ranking list.

The following 15 criteria constitute the items for which points will be assigned. Point assignments will be 0 to 6 for items (1) - (9); and 0 to 3 for items (10) - (15). Two additional points will be awarded to projects which address issues determined by the NRC to be the result of a federal mandate.

Notes:

- The responses to one criterion *will not* be considered in the scoring of other criteria. Repeat references as needed to support documentation in each criterion as appropriate. The 15 categories are specified by statute and will be used to create scoring matrixes which will ultimately determine which projects receive funding.

- There is a total of 72 possible points, plus two bonus points. The potential number of points awarded for each criteria are noted above. Once points are assigned, they will be added to determine a final score. The scores will determine ranking.

- The Commission recommends providing the requested information and the requests are not intended to limit the information an applicant may provide. An applicant should include additional information that is believed will assist the Commission in understanding a proposal so that it can be awarded the points to which it is entitled.

Complete any of the following (15) criteria which apply to your project. Your response will be reviewed and scored by the NRC. Place an N/A (not applicable) in any that do not apply, an N/A will automatically be placed in any response fields left blank.

1. Remediates or mitigates threats to drinking water;

    - Describe the specific threats to drinking water the project will address.
    - Identify whose drinking water, how many people are affected, how will project remediate or mitigate.
    - Provide a history of issues and tried solutions.
    - Provide detail regarding long-range impacts if issues are not resolved.

    SC35A is not intended to have the direct effect of protecting drinking water. However, by virtue of trapping sediments, nutrients and bacteria in a rural area, the reservoir will improve downstream water quality of raw water drawn for use.

2. Meets the goals and objectives of an approved integrated management plan or ground water management plan;

   - Identify the specific plan that is being referenced including date, who issued it and whether it is an IMP or GW management plan.
   - Provide the history of work completed to achieve the goals of this plan.
   - List which goals and objectives of the management plan the project provides benefits for and how the project provides those benefits.

   The Papio NRD and Nebraska Department of Natural Resources (NDNR) jointly adopted a voluntary Integrated Management Plan (IMP) in August of 2014. Actions to meet the goals and objectives of this IMP are underway. Goal 1 is to develop and implement water use policies and practices which better protect existing surface and groundwater uses while allowing for future development. The Papio NRD and NDNR have adopted rules and regulations restricting the amount of groundwater and surface water development each year. Much like Groundwater Management Plans can have direct ties to IMP goals and objectives, Watershed Management Plans can be considered existing policies and authorities used to address water quality and quantity issues of an IMP. The project proposed under this application is part of the Silver Creek Watershed Special Erosion and Sediment Control Project (SCWP) and does help achieve Goal 1, Objective 1.1 of the Papio NRD IMP. Dam sites along with other components of the SCWP plan strive to maintain or restore natural watershed hydrology, reduce sediment loads, and reduce peak discharge. The effects of dam sites not only help curb flooding but help restore more natural base flows to receiving streams or rivers by increasing groundwater infiltration and subsequent seepage, store and slowly release surface water runoff, and remove some pollutants and contaminants not naturally found in the surface or ground water.

3. Contributes to water sustainability goals by increasing aquifer recharge, reducing aquifer depletion, or increasing streamflow;

   List the following information that is applicable:

   - The location, area and amount of recharge;
   - The location, area and amount that aquifer depletion will be reduced;
   - The reach, amount and timing of increased streamflow. Describe how the project will meet these objectives and what the source of the water is;
   - Provide a detailed listing of cross basin benefits, if any.

   The Papio NRD and Nebraska Department of Natural Resources (NDNR) jointly adopted a voluntary Integrated Management Plan (IMP) in August of 2014. Actions to meet the goals and objectives of this IMP are underway. Goal 1 is to

develop and implement water use policies and practices which better protect existing surface and groundwater uses while allowing for future development. The Papio NRD and NDNR have adopted rules and regulations restricting the amount of groundwater and surface water development each year and the Papio NRD has updated their existing Groundwater Management Plan (circa March 1994) and adopted changes in February 2018 to be more consistent with the IMP. Much like Groundwater Management Plans can have direct ties to IMP goals and objectives, Watershed Management Plans can be considered existing policies and authorities used to address water quantity issues of an IMP. The project proposed under this application is part of the Silver Creek Watershed Special Erosion and Sediment Control Project (SCWP) and does help achieve Goal 1, Objective 1.1 of the Papio NRD IMP. This dam will help provide some recharge for draws on the Dakota aquifer from nearby wells. Low level drawdown conduits will be installed on the reservoir as well, as required by NDNR Dam Safety Regulations. This drawdown can be operated to provide increased streamflow downstream for any senior water rights or future demands on the stream.

With regards to contributing to sustainability goals, "Water Sustainability" is defined in Nebraska Title 264 as when water use is sustainable when current use promotes healthy watersheds, improves water quality, and protects the ability of future generations to meet their needs. The reservoir causes a decrease in stormwater runoff flow rate, volume and velocity, which decreases erosion and sediment deposition. Altering the magnitude, frequency, and duration of stormwater runoff to streams helps mitigate erosion to downstream areas. These mechanisms include less changes in channel bed material, gains of riparian habitat due to decreases in streambank erosion and decreases in the variability of flow and sediment transport characteristics relative to aquatic life cycles.

Dam sites along with other components of the SCWP plan strive to maintain or restore natural watershed hydrology and reduce peak discharge. The effects of this system not only help curb flooding but help restore more natural base flows to receiving streams or rivers by increasing groundwater infiltration and subsequent seepage, store and slowly release surface water runoff, and remove some pollutants and contaminants not naturally found in the surface or ground water.

4. Contributes to multiple water supply goals, including, but not limited to, flood control, agricultural use, municipal and industrial uses, recreational benefits, wildlife habitat, conservation of water resources, and preservation of water resources;

   - List the goals the project provides benefits.
   - Describe how the project will provide these benefits

- Provide a long range forecast of the expected benefits this project could have versus continuing on current path.

Sediment Control/Water Quality

The primary purpose of the proposed dam structure is sediment control, with several ecologic benefits, such as stream restoration and nutrient load reduction, also realized with the implementation of the reservoir. Nearby farm fields contribute a significant nutrient load during storm events that can cause damage to streams and other downstream waterbodies. Being able to capture some of this runoff will greatly reduce the amount of sediment transported downstream. Pollutant load reductions can be expected, specifically those such as phosphorus with the affinity to adhere to sediment particles that will settle out. The reservoir can also reduce the dissolved pollutant loads through biological uptake of wetland vegetation. Any increase in surface area provided by the reservoir provides more ultraviolet light exposure that kills bacteria.

The configuration of the riser structure will also increase the drawdown time for smaller events that often have the greatest impact on water quality (generally the first 0.5 inches of runoff). Earthwork grading that increases storage capacity, the creation of wetlands, and increasing the surface area will all improve the basin's performance in relation to sediment capture.

Flood Control

The reservoir will attenuate flood flows through a 36" diameter principal spillway pipe, storing flood flows in the reservoir. Though not its primary purpose, SC35A is designed to provide flood reduction benefits in a developing rural watershed. The dam will provide flood reduction within the sub-watershed and contribute to a reduction in the Silver Creek, which currently inundates downstream structures during the 100-yr flood event.

Wildlife Habitat

The reservoir itself will create shallow water habitats for a variety of aquatic organisms and birds. The reservoirs also impact water quality in a positive way by further reducing sediment, nutrient and bacteria transport downstream. In addition, downstream habitat is improved and protected. As the watershed develops, land is covered with impervious surfaces such as roads, parking lots, roofs, driveways and sidewalks that prevent rainfall from infiltrating into the ground. The reservoir causes a decrease in stormwater runoff flow rate, volume and velocity, which decreases erosion and sediment deposition. Altering the magnitude, frequency and duration of stormwater runoff and sediment loads to streams reduces impacts to water quality and loss of aquatic life and habitat through a variety of geomorphic mechanisms. These mechanisms include less changes in channel bed material, decreased suspended sediment loads, gains of riparian habitat due to decreases

in streambank erosion and decreases in the variability of flow and sediment transport characteristics relative to aquatic life cycles.

5. Maximizes the beneficial use of Nebraska's water resources for the benefit of the state's residents;

- Describe how the project will maximize the increased beneficial use of Nebraska's water resources.
- Describe the beneficial uses that will be reduced, if any.
- Describe how the project provides a beneficial impact to the state's residents.

In rural areas, sediment control is a top focus for Nebraskans. This project addresses that need directly as part of a well-developed plan. While providing sediment control benefits, this project offers secondary beneficial uses to Nebraskans including habitat/erosion improvement, water quality improvements and flood control. There will be no reduced beneficial uses. Impacts to existing resources are detailed throughout the environmental permitting process and mitigation measures are planned to more than offset the impacts. This project provides a beneficial impact by reducing both the sediment loading and the threat of flooding, enhancing the opportunity for Nebraskans to make a living in rural area.

6. Is cost-effective;

- List the estimated construction costs, O/M costs, land and water acquisition costs, alternative options, value of benefits gained.
- Compare these costs to other methods of achieving the same benefits.
- List the costs of the project.
- Describe how it is a cost effective project or alternative.

A cost summary table detailing all the costs for the proposed project is provided in a summary table in SIA Section A-1. All detailed costs are shown in the SIA Section B-3 along with the benefits, cash flow stream and economic comparison. The comparison shows the cost effectiveness of the plan with an overall B:C ratio of 1.81:1

Site SC35A was originally identified in the SCWP Plan to provide sediment control, detention of storm water during flood events, and water quality improvements in the watershed, but was ultimately put on hold due to lack of

landowner cooperation. The reservoir will attenuate flood flows through a 36" diameter principal spillway pipe, storing flood flows in the reservoir. SC35A was designed to address the large amount of sediment runoff from farm land within the watershed, which extends through Burt County and ends East of Tekamah near the confluence of Mud Creek and Tekamah Creek. The SCWP includes 30 storm water detention basins and 50 water quality basins.

Sediment load reduction in the Silver Creek watershed has been studied extensively through efforts undertaken by the SCWP. The SCWP developed an approach to address sediment load and erosion control using a combination of best management practices, such as terraces, and dams and sediment control structres in the watershed.

7. Helps the state meet its obligations under interstate compacts, decrees, or other state contracts or agreements or federal law;

- Identify the interstate compact, decree, state contract or agreement or federal law.
- Describe how the project will help the state meet its obligations under compacts, decrees, state contracts or agreements or federal law.
- Describe current deficiencies and document how the project will reduce deficiencies.

N/A

8. Reduces threats to property damage or protects critical infrastructure that consists of the physical assets, systems, and networks vital to the state or the United States such that their incapacitation would have a debilitating effect on public security or public health and safety;

- Identify the property that the project is intended to reduce threats to.
- Describe and quantify reductions in threats to critical infrastructure provided by the project and how the infrastructure is vital to Nebraska or the United States.
- Identify the potential value of cost savings resulting from completion of the project.
- Describe the benefits for public security, public health and safety.

This project reduces the threat to the lands between the dam and Silver Creek. Many of these lands are farm fields, providing safety to both farmers' livelihoods, but also to food sources for other Nebraskans. That land is shown in the SIA Section B-3 and includes the existing facilities labeled on the figure that will be protected by this project. The project contributes flood reduction within the Silver Creek system and the roads, utilities and other infrastructure that runs along or through the Silver Creek system. Flood reduction benefits are shown in tabular

formats in the SIA Section B-3. Flood damage reductions are computed in the economic analysis, so the reduction in threats to critical infrastructure including roadways, etc. are detailed there. The elimination of the threat is the benefit provided to Nebraskans.

9. Improves water quality;

- Describe what quality issue(s) is/are to be improved.
- Describe and quantify how the project improves water quality, what is the target area, what is the population or acreage receiving benefits, what is the usage of the water: residential, industrial, agriculture or recreational.
- Describe other possible solutions to remedy this issue.
- Describe the history of the water quality issue including previous attempts to remedy the problem and the results obtained.

The water quality improvements from this project are substantial.

The primary purpose of the proposed dam structure is sediment control, with several ecologic benefits, such as stream restoration and nutrient load reduction, also realized with the implementation of the reservoir. Nearby farm fields contribute a significant nutrient load during storm events that can cause damage to streams and other downstream waterbodies. Being able to capture some of this runoff will greatly reduce the amount of sediment transported downstream. Pollutant load reductions can be expected, specifically those such as phosphorus with the affinity to adhere to sediment particles that will settle out. The reservoir can also reduce the dissolved pollutant loads through biological uptake of wetland vegetation. Any increase in surface area provided by the reservoir provides more ultraviolet light exposure that kills bacteria.

The configuration of the riser structure will also increase the drawdown time for smaller events that often have the greatest impact on water quality (generally the first 0.5 inches of runoff). Earthwork grading that increases storage capacity, the creation of wetlands, and increasing the surface area will all improve the basin's performance in relation to sediment capture.

In addition, downstream water quality is improved and protected. The reservoir causes a decrease in stormwater runoff flow rate, volume and velocity, which decreases erosion, sediment deposition and pollutant loading. Altering the magnitude, frequency and duration of stormwater runoff and sediment loads to streams reduces impacts to water quality and loss of aquatic life and habitat through a variety of geomorphic mechanisms. These mechanisms include less changes in channel bed material, decreased suspended sediment loads, gains of riparian habitat due to decreases in streambank erosion and decreases in the variability of flow and sediment transport characteristics relative to aquatic life cycles.

10. Has utilized all available funding resources of the local jurisdiction to support the program, project, or activity;

- Identify the local jurisdiction that supports the project.
- List current property tax levy, valuations, or other sources of revenue for the sponsoring entity.
- List other funding sources for the project.

The Papio NRD has been a supporter of this project and participated in numerous costs for SC35A. They have been an active participant in the planning process of SC35A to date and are significant contributors to costs. There is no other outside funding for this project.

All anticipated funding sources for the project are shown in the cost summary in the SIA Table A-1.1. The Papio NRD currently taxes at a levy rate of $0. 029568 per $100 of valuation to obtain a property tax income of nearly $31.49 million.

11. Has a local jurisdiction with plans in place that support sustainable water use;

- List the local jurisdiction and identify specific plans being referenced that are in place to support sustainable water use.
- Provide the history of work completed to achieve the goals of these plans.
- List which goals and objectives this project will provide benefits for and how this project supports or contributes to those plans.
- Describe and quantify how the project supports sustainable water use, what is the target area, what is the population or acreage receiving benefits, what is the usage of the water: residential, industrial, agriculture or recreational.
- List all stakeholders involved in project.
- Identify who benefits from this project.

“Water Sustainability” is defined in Nebraska Title 264 as when water use is sustainable when current use promotes healthy watersheds, improves water quality, and protects the ability of future generations to meet their needs. Recognizably, sustainability has varied meanings across the State. In rural Eastern Nebraska, watershed health is related to reducing both the threat of flood damage and protecting against erosion/sedimentation. The watershed plan in this region addresses both erosion control and flood protection. The primary sustainable practices for this project are erosion control, flood control, water quality improvements, and habitat improvement which all contribute to healthy watersheds. The value of the land in this area rest in its ability to produce food for the rest of the state. Not only are those that are protected downstream of these sites benefiting from the project, but all Nebraskans, as the area continues to grow sustainably and help fuel Nebraska’s economy.

The Papio NRD and Nebraska Department of Natural Resources (NDNR) jointly adopted a voluntary Integrated Management Plan (IMP) in August of 2014. Actions to meet the goals and objectives of this IMP are underway. Goal 1 is to develop and implement water use policies and practices which better protect existing surface and groundwater uses while allowing for future development. The Papio NRD and NDNR have adopted rules and regulations restricting the amount of groundwater and surface water development each year and the Papio NRD has updated their Groundwater Management Plan (circa March 1994) and adopted changes in February 2018 to be more consistent with the IMP. Much like Groundwater Management Plans can have direct ties to IMP goals and objectives, Watershed Management Plans can be considered existing policies and authorities used to address water quantity issues of an IMP. The project proposed under this application is part of the PCWM Plan and does help achieve Goal 1, Objective 1.1 of the Papio NRD IMP.

12. Addresses a statewide problem or issue;

- List the issues or problems addressed by the project and why they should be considered statewide.
- Describe how the project will address each issue and/or problem.
- Describe the total number of people and/or total number of acres that would receive benefits.
- Identify the benefit, to the state, this project would provide.

Erosion and sedimentation are the number one threat to Nebraskans in rural areas. The threat of erosion along farm fields and the nutrients this sediment carries into nearby surface waters in the Silver Creek Watershed is well documented in the SCWP. This project will address that issue by providing erosion and sediment control upstream in a tributary of Silver Creek and reduce the amount of sediment downstream throughout the system. The total number of acres, structures, etc. protected is based on the prorated values listed in Section B-3 of the SIA. The benefits have also been quantified and are detailed in Section B-3 of the SIA.

13. Contributes to the state's ability to leverage state dollars with local or federal government partners or other partners to maximize the use of its resources;

- List other funding sources or other partners, and the amount each will contribute, in a funding matrix.
- Describe how each source of funding is made available if the project is funded.
- Provide a copy or evidence of each commitment, for each separate source, of match dollars and funding partners.
- Describe how you will proceed if other funding sources do not come through.

The Papio NRD is the sole partner for this project and all outside funding would come from this grant. The Papio NRD has made the initial investment in this project, allowing SC35A to stay on track for 2025 construction. Cooperation from nearby landowners makes this project attractive, saving the time and money usually associated with obtaining multiple land rights. Having buy-in from the nearby landowners is also valuable to the long-term health of the project, reducing the chance that the dam will be damaged or destroyed by landowner activities. The Papio NRD is requesting $2,048,570 from WSF to help fund the dam rehabilitation project.

Table 8. Funding Breakdown

SC35A	Total Costs	Spent to Date	Eligible WSF Costs	60% Grant Request	Local Cost Share
Engineering, Planning, Permitting	$811,500	$202,216	$609,284	$365,570	$243,714
Professional Services	$100,000	----	$100,000	$60,000	$ 40,000
Capital Improvement Costs					
Main Dam	$2,705,000	----	$2,705,000	$1,623,000	$1,082,000
Stream Mitigation					
Totals	$3,616,500	$202,216	$3,414,284	**$ 2,048,570**	**$1,365,714**

14. Contributes to watershed health and function;

- Describe how the project will contribute to watershed health and function in detail and list all of the watersheds affected.

A preliminary stream assessment of waterways within the project area was made to get a better understanding of the area for preliminary design. A final stream assessment will be conducted according to the methodologies and procedures outlined in the U.S. Army Corps of Engineers Nebraska Stream Condition Assessment Procedure (NeSCAP). The procedure will involve the review of available published resources combined with field assessments to evaluate the physical and biological attributes of a stream reach. Preliminary assessments found that stream channel reaches degrade moving downstream as they become deeply incised, disconnected from the floodplain, heavily eroded streambanks and appear to be frequently disturbed.

The same assessment methodology will be applied to future (post project) conditions to determine stream health and function impacts related to the project. This analysis will determine if the project increases stream function within the project area. Specifically, the target is an overall increase in habitat stability,

improvements to riparian buffer communities and decreases in erosion which in turn will increase aquatic functions. The reservoir will create shallow open water habitats, inundated wetlands, and emergent wetland/mesic tallgrass prairie transition zones. Tree and shrub dominated areas may also develop with the buffer zone by natural colonization or promoted with plantings in designated areas.

15. Uses objectives described in the annual report and plan of work for the state water planning and review process issued by the department.

- Identify the date of the Annual Report utilized.
- List any and all objectives of the Annual Report intended to be met by the project
- Explain how the project meets each objective.

The *Annual Report* (NDNR 2024), lists the following objectives as related to the Water Sustainability Fund;

- Provide financial assistance to programs, projects, or activities that increase aquifer recharge, reduce aquifer depletion, and increase streamflow;
- Remediate or mitigate threats to drinking water;
- Promote the goals and objectives of approved integrated management plans or groundwater management plans;
- Contribute to multiple water supply management goals including flood control, reducing threats to property damage, agricultural uses, municipal and industrial uses, recreational benefits, wildlife habitat, conservation, and preservation of water resources;
- Assist municipalities with the cost of constructing, upgrading, developing, and replacing sewer infrastructure facilities as part of a combined sewer overflow project;
- Provide increased water productivity and enhance water quality;
- Use the most cost-effective solutions available; and
- Comply with interstate compacts, decrees, other state contracts and agreements and federal law.

The objectives of the fourth, sixth, and seventh goals are met as follows;

<u>Sediment Control/Water Quality</u>

The primary purpose of the proposed dam structure is sediment control, with several ecologic benefits, such as stream restoration and nutrient load reduction, also realized with the implementation of the reservoir. Nearby farm fields contribute a significant nutrient load during storm events that can cause damage to streams and other downstream waterbodies. Being able to capture some of this runoff will greatly reduce the amount of sediment transported downstream. Pollutant load reductions can be expected, specifically those such as phosphorus with the affinity

to adhere to sediment particles that will settle out. The reservoir can also reduce the dissolved pollutant loads through biological uptake of wetland vegetation. Any increase in surface area provided by the reservoir provides more ultraviolet light exposure that kills bacteria.

The configuration of the riser structure will also increase the drawdown time for smaller events that often have the greatest impact on water quality (generally the first 0.5 inches of runoff). Earthwork grading that increases storage capacity, the creation of wetlands, and increasing the surface area will all improve the basin's performance in relation to sediment capture.

Flood Control

The reservoir will attenuate flood flows through a 36" diameter principal spillway pipe, storing flood flows in the reservoir. Though not its primary purpose, SC35A is designed to provide flood reduction benefits in a developing rural watershed. The dam will provide flood reduction within the sub-watershed and contribute to a reduction in the Silver Creek, which currently inundates downstream structures during the 100-yr flood event.

Wildlife Habitat

The reservoir itself will create shallow water habitats for a variety of aquatic organisms and birds. The reservoirs also impact water quality in a positive way by further reducing sediment, nutrient and bacteria transport downstream. In addition, downstream habitat is improved and protected. As the watershed develops, land is covered with impervious surfaces such as roads, parking lots, roofs, driveways and sidewalks that prevent rainfall from infiltrating into the ground. The reservoir causes a decrease in stormwater runoff flow rate, volume and velocity, which decreases erosion and sediment deposition. Altering the magnitude, frequency and duration of stormwater runoff and sediment loads to streams reduces impacts to water quality and loss of aquatic life and habitat through a variety of geomorphic mechanisms. These mechanisms include less changes in channel bed material, decreased suspended sediment loads, gains of riparian habitat due to decreases in streambank erosion and decreases in the variability of flow and sediment transport characteristics relative to aquatic life cycles.

16. Federal Mandate Bonus. If you believe that your project is designed to meet the requirements of a federal mandate which furthers the goals of the WSF, then:

- Describe the federal mandate.
- Provide documentary evidence of the federal mandate.
- Describe how the project meets the requirements of the federal mandate.

- Describe the relationship between the federal mandate and how the project furthers the goals of water sustainability.

The Papio NRD has a responsibility to meet Total Maximum Daily Loads (TMDLs) in the Silver Creek Watershed for various pollutants in the streams. This reservoir help to reduce pollutants from agricultural areas by allowing sediment to settle within the reservoir and allowing any bacteria to die off longer.

““Water Sustainability” is defined in Nebraska Title 264 as when water use is sustainable when current use promotes healthy watersheds, improves water quality, and protects the ability of future generations to meet their needs. Recognizably, sustainability has varied meanings across the State. In rural Eastern Nebraska, watershed health is related to reducing both the threat of flood damage and protecting against erosion/sedimentation. The watershed plan in this region addresses both erosion control and flood protection. The primary sustainable practices for this project are erosion control, flood control, water quality improvements, and habitat improvement which all contribute to healthy watersheds. The value of the land in this area rest in its ability to produce food for the rest of the state. Not only are those that are protected downstream of these sites benefiting from the project, but all Nebraskans, as the area continues to grow sustainably and help fuel Nebraska’s economy.

SUPPLEMENTAL INFORMATION ATTACHMENT

COVER LETTER

APPLICATION

SUPPLEMENTAL INFORMATION ATTACHMENT

BIBLIOGRAPHY

PAPIO MISSOURI RIVER NATURAL RESOURCES DISTRICT

HOUSTON engineering, inc.

SECTION A

A-1 Project Cost and Funding Breakdown

Table A-1.1 – Project Cost and Funding Breakdown

SC35A	Total Costs	Spent to Date	Eligible WSF Costs	60% Grant Request	Local Cost Share
Engineering, Planning, Permitting	$811,500	$202,216	$609,284	$365,570	$243,714
Professional Services	$100,000	----	$100,000	$60,000	$ 40,000
Capital Improvement Costs	$2,705,000	----	$2,705,000	$1,623,000	$1,082,000
Main Dam					
Stream Mitigation					
Totals	$3,616,500	$202,216	$3,414,284	**$ 2,048,570**	**$1,365,714**

SECTION B

B-1(a) Field Investigations

Figure B-1(a).1 – SC35A Proposed Soil Boring Locations

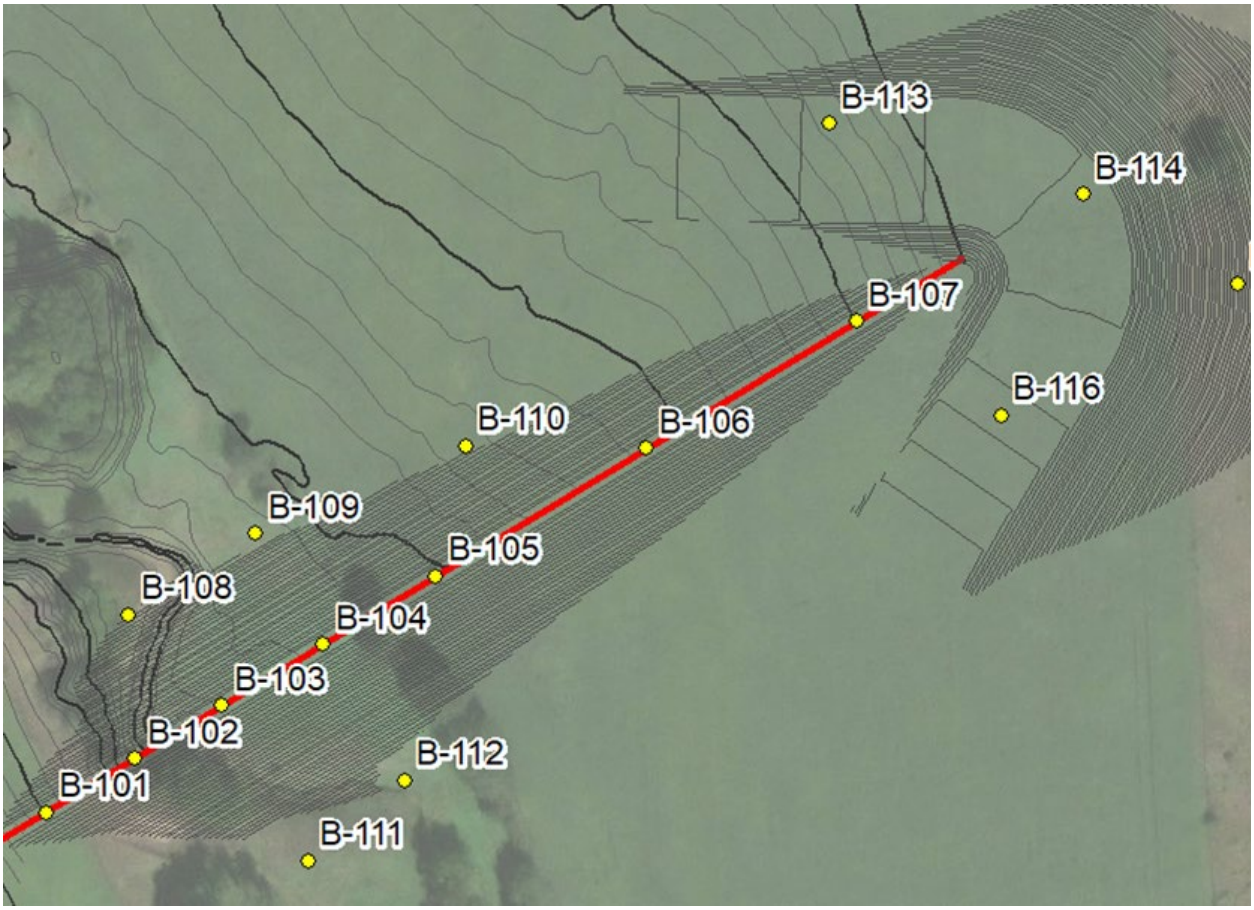


Figure B-1(a).2 – SC35A Site Map

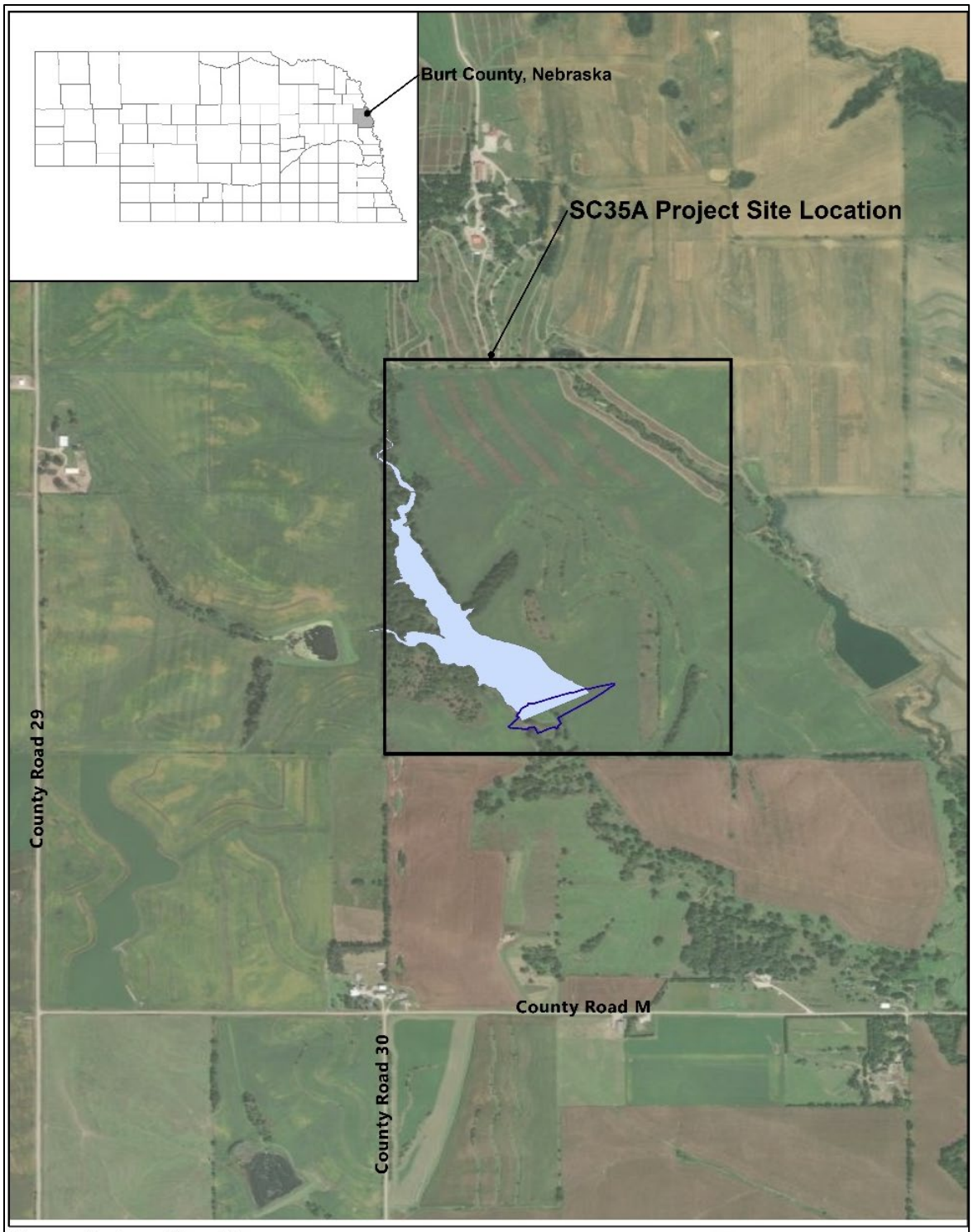
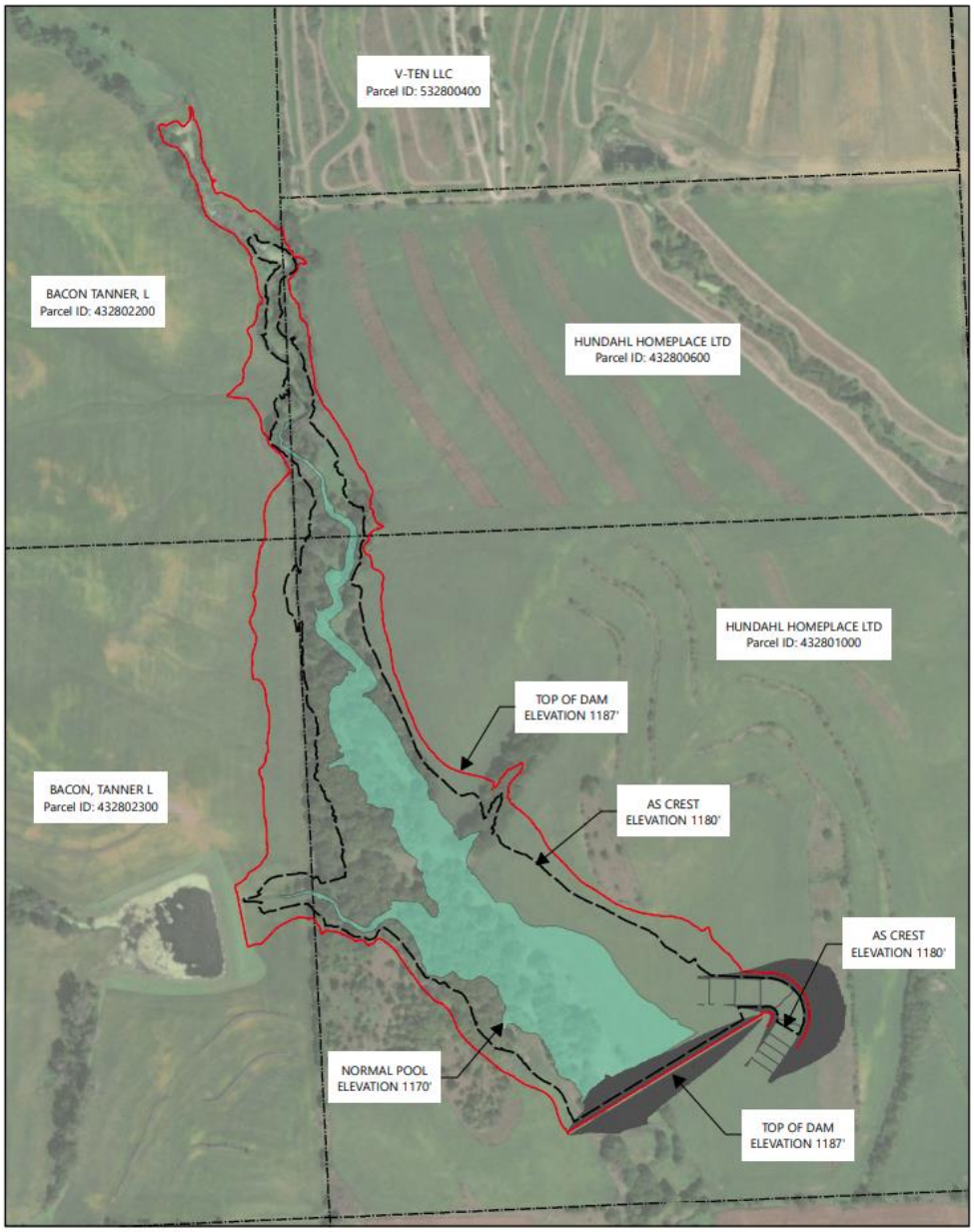


Figure 1. Location Map

Silver Creek Watershed Site 35A Project
Papio-Missouri River Natural Resources District

Figure B-1(a).3 – SC35A Preliminary Design and Project Area



Silver Creek 35-A Proposed Site Plan
Silver Creek Watershed Site 35A Project
Papio-Missouri River Natural Resources District

0 500 Feet

HOUSTON engineering, inc.

B-3 Project Costs & Benefits

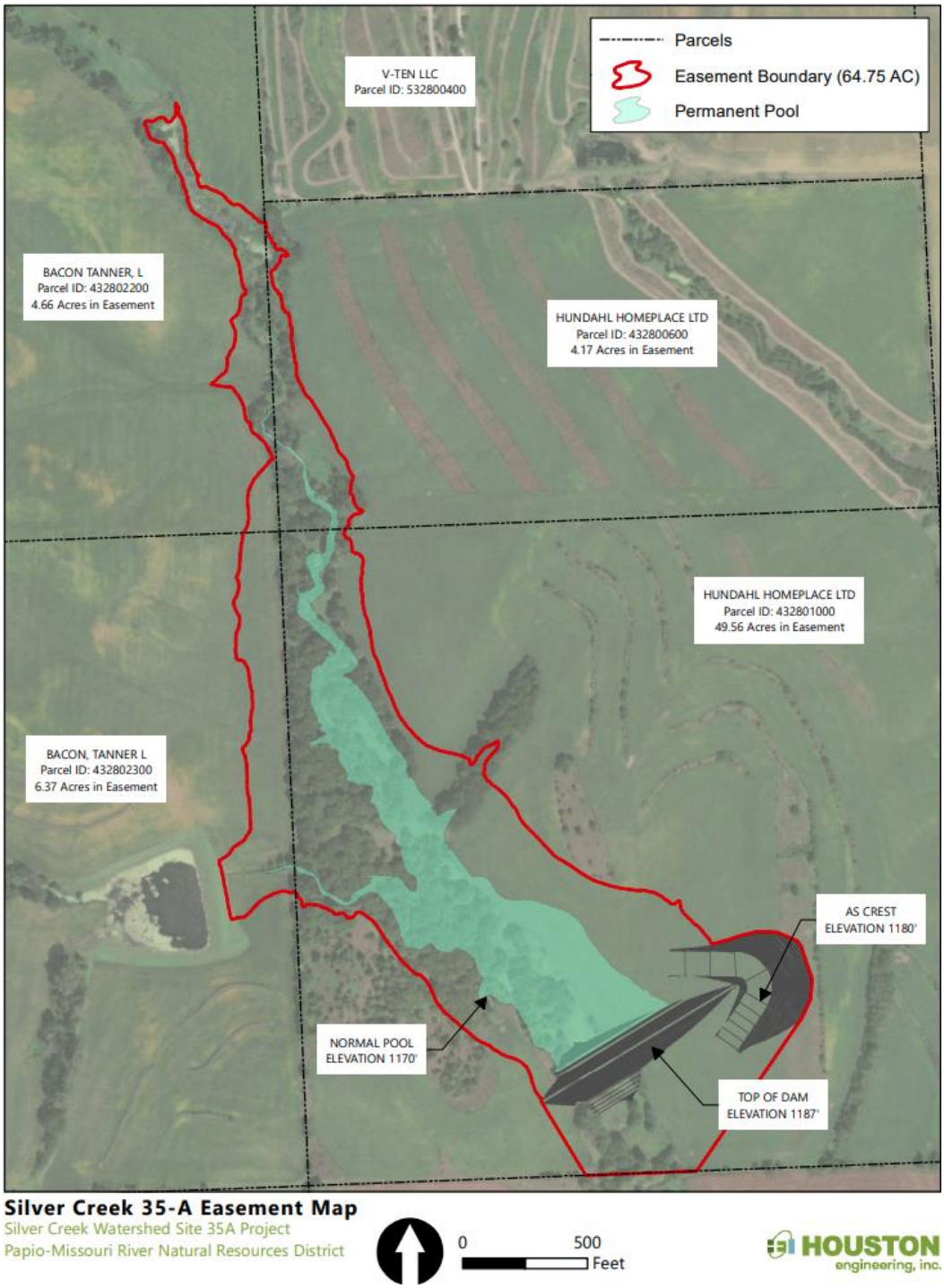
Land Purchase

The Papio NRD is currently undergoing negotiations with the landowner for the acquisition of the easement required for construction. All landowners have been involved in project planning are willing participants in providing easements. The Papio NRD has the power of eminent domain that could be applied if necessary.

Table B-3.1 – SC35A Project Area

Tract Number	Parcel ID	Total Project Area (AC)
1	432802200	4.66
2	432800600	4.17
3	432802300	6.37
4	432801000	49.56
Total Project Area		**64.75**

Figure B-3.1 – SC35A Land Rights Map



Construction

Detailed breakdowns of the engineer's estimates of the construction for SC35A have been provided below as justification for costs used in this analysis.

Table B-3.2 – SC35A Cost Estimate

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	Estimated Unit Price	Estimated Opinion of Costs
GENERAL					
1	MOBILIZATION	LS	1	$222,900.00	$222,900.00
2	CLEARING AND GRUBBING	LS	1	$40,000.00	$40,000.00
3	HANDLING OF WATER	LS	1	$20,000.00	$20,000.00
4	EROSION CONTROL (SWPPP)	LS	1	$20,000.00	$20,000.00
5	EROSION CONTROL MATTING	SY	24,275	$1.50	$36,412.50
7	INSTALL SEEDING - UPLAND SEED MIX	AC	8.2	$1,800.00	$14,706.00
8	INSTALL SEEDING - CONSERVATION BUFFER SEED MIX	AC	1.0	$2,000.00	$2,000.00
9	SURVEY AND STAKING	LS	1	$15,000.00	$15,000.00
MAIN DAM					
10	INSTRUMENTATION	LS	1	$80,000.00	$80,000.00
11	EARTHEN EMBANKMENT	CY	86,941	$5.00	$434,705.00
12	COMMON EXCAVATION	CY	7,372	$3.00	$22,116.00
13	STRIP, STOCKPILE, REPLACE/WASTE TOPSOIL	CY	14,974	$6.00	$89,844.00
14	PRINCIPAL SPILLWAY PIPE- 36"	LF	300	$1,200.00	$360,000.00
15	24" PVC - DRAWDOWN PIPE	LF	140	$200.00	$28,000.00
16	FORMED CONCRETE	CY	111.0	$1,670.00	$185,370.00
17	STEEL REINFORCEMENT - FORMED CONCRETE	LBS	21,558.0	$2.00	$43,116.00
18	METAL FABRICATION - IMPACT BASIN	LS	1	$23,000.00	$23,000.00
19	METAL FABRICATION - RISER STRUCTURE	LS	1	$20,000.00	$20,000.00
20	KNIFE GATE AND APPURTENANCES - RISER STRUCTURE	EA	1	$42,000.00	$42,000.00
21	SLIDE GATE AND APPURTENANCES - RISER STRUCTURE	EA	1	$31,000.00	$31,000.00
22	UNFORMED CONCRETE - PRINCIPAL SPILLWAY BEDDING	CY	42	$400.00	$16,800.00
23	FINE SAND	CY	97	$45.00	$4,355.00
24	ROCK RIPRAP TYPE "C"	TN	1,821	$90.00	$163,890.00
25	GEOTEXTILE FILTER FABRIC	SY	12,771	$2.50	$31,927.50
26	AGGREGATE EMBANKMENT	CY	6,687	$50.00	$334,350.00
27	AGGREGATE SURFACING	TN	131	$65.00	$8,515.00
28	INTERNAL DRAINAGE PIPE - 8" PVC SOLID WALL	LF	393	$42.00	$16,506.00
29	INTERNAL DRAINAGE PIPE - 8" PVC SLOTTED WALL	LF	474	$42.00	$19,908.00
30	INTERNAL DRAINAGE PIPE - 12" PVC SLOTTED WALL	LF	680	$72.00	$48,960.00
31	COBBLES	TN	12	$160.00	$1,920.00
STREAM MITIGATION					
32	COMMON EXCAVATION	CY	10,065	$3.00	$30,195.00
33	ROOT WADS	EA	17	$600.00	$10,200.00
34	TYPE B ROCK RIPRAP	TN	377	$90.00	$33,885.00
35	EROSION CONTROL MATTING	SY	5,000	$1.50	$7,500.00
TOTAL OF ALL UNIT PRICE BID ITEMS					**$2,459,081.00**
TOTAL WITH 10% CONTINGENCY					**$2,705,000.00**

Benefits

Table B-3.3 – Benefits Summary Table

Project Item	Occurrence	Total
Flood Reduction	Annual	$4,500
Environmental Benefits	Annual	$50,700
Sediment Trapping	Annual	$223,000

Flood Damage Reduction

Flood damage reduction benefits for SC35A were calculated based on flood frequency and average damage from said storms. Both Pre and Post project calculation were performed using information shown below.

Table B-3.4 – SC35A Pre-Project Flood Damages

Pre-Project Damages					
Storm Event (Return Interval)	*Frequency (% chance of occurrence)*	*Damages ($)*	*Change in frequency (probability)*	*Average Damage ($)*	*Contribution to average annual damage ($)*
1	100	$ 1,697.25			
			0.5	2,149	1,075
2	50	$ 2,601.26			
			0.3	3,545	1,064
5	20	$ 4,489.60			
			0.1	5,704	570
10	10	$ 6,917.80			
			0.06	10,290	617
25	4	$ 13,661.77			
			0.02	18,198	364
50	2	$ 22,733.24			
			0.01	28,819	288
100	1	$ 34,904.24			
			0.005	41,148	206
200	0.5	$ 47,391.53			
			0.003	57,492	172
500	0.2	$ 67,592.78			
			0.002	67,593	135
0	0	$ 67,592.78			
				Total Average Annual Damage	$4,492

Table B-3.5 – SC35A Post-Project Flood Damages

Post-Project Damages					
Storm Event (Return Interval)	*Frequency (% chance of occurrence)*	*Damages ($)*	*Change in frequency (probability)*	*Average Damage ($)*	*Contribution to average annual damage ($)*
1	100	$ 1,405.62			
			0.5	1,813	907
2	50	$ 2,220.65			
			0.3	3,070	921
5	20	$ 3,919.04			
			0.1	4,831	483
10	10	$ 5,742.09			
			0.06	6,864	412
25	4	$ 7,985.38			
			0.02	8,428	169
50	2	$ 8,870.15			
			0.01	9,282	93
100	1	$ 9,694.13			
			0.005	11,758	59
200	0.5	$ 13,822.70			
			0.003	20,727	62
500	0.2	$ 27,632.28			
			0.002	27,632	55
0	0	$ 27,632.28			
				Total Average Annual Damage	$3,160

Environmental Benefits

SC35A will provide ecosystem service benefits by preserving a significant amount of land above the normal pool of the dam and providing a place for sediment to settle out prior to heading downstream. This preserved riparian area provides the ecosystem benefits. This area will benefit the environment as well as the surrounding human population by providing habitat protection, increased air quality, water filtration, and erosion control.

Figure B-3.3 shows the ecosystem benefit area of the site. Ecosystem benefits were calculated using the FEMA BCA Toolkit V6.0, which values green open space at $8,308 per acre per year (FEMA 2022). This open green space excludes the existing riparian corridor. Total annual ecosystem benefits are shown in Table B-3.9 below.

Table B-3.6 – SC35A Environmental Benefits

	SC35A
Wetlands Created (AC)	9.2
Rural Green Open Space Created (AC)	13.9
Benefit	$223,000

Figure B-3.3 – WP-2 Ecosystem Benefit Area

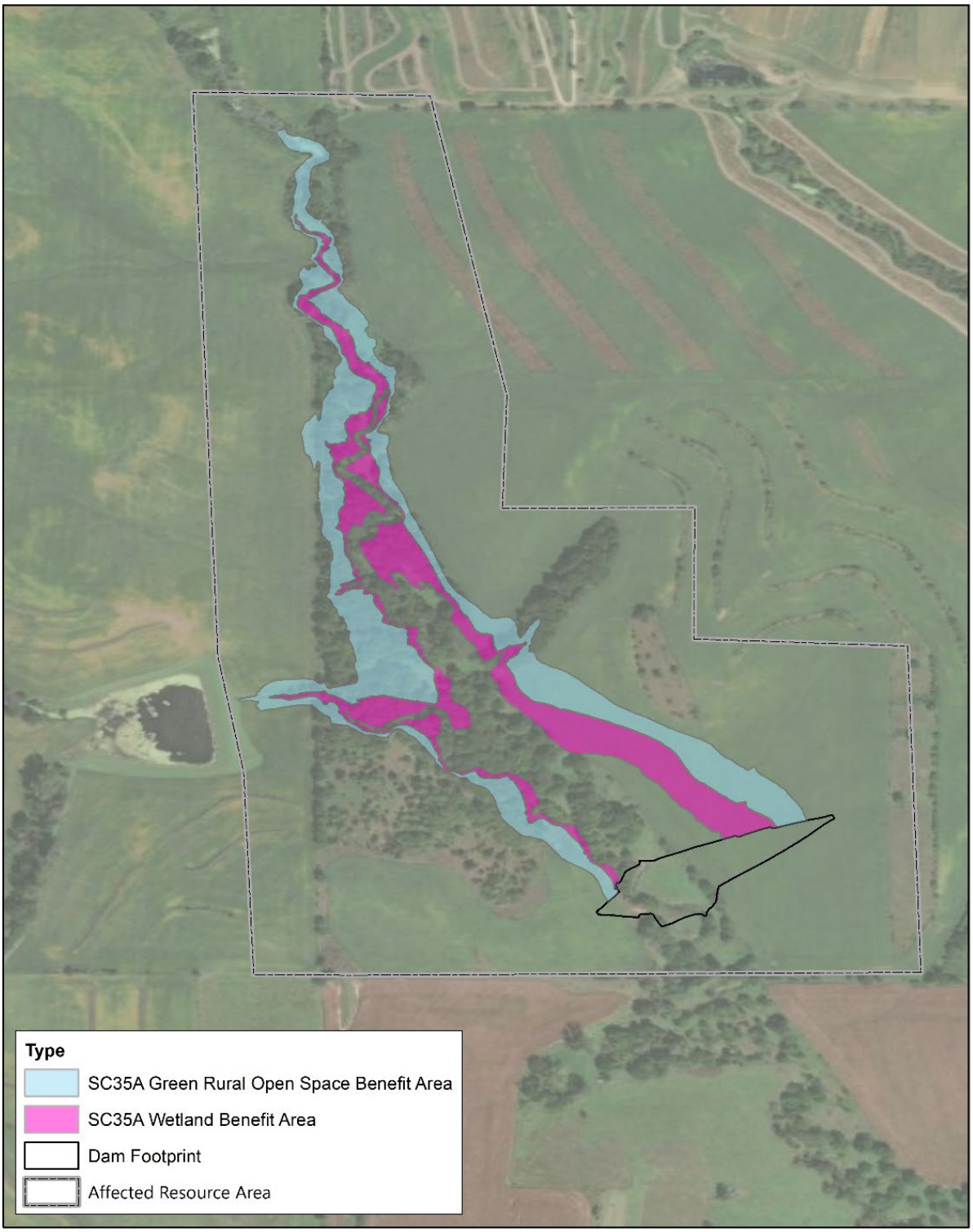


Figure 1. Benefit Area Map
Silver Creek Watershed Site 35A Project
Papio-Missouri River Natural Resources District

Table B-3.7 – Cash Flow Stream

Project Year(s)	Calendar Year(s)	Cash Flow Categories	Costs	Benefits	Details
0	2024				
		Engineering, Planning, Permitting	$25,000		Preliminary design
		Professional Services	$25,000		Legal Services
		Capital Improvement Costs	$0		
		Total Costs:	**$50,000**		
		Flood Reduction		$0	
		Sediment Trapping		$0	
		Enviormental Benefits		$0	
		Total Benefits:		**$0**	
1	2025				
		Engineering, Planning, Permitting	$586,500		Final design
		Professional Services	$50,000		Legal Services
		Capital Improvement Costs	$450,000		Construction begins (Fall)
		Total Costs:	**$1,086,500**		
		Flood Reduction		$0	
		Sediment Trapping		$0	
		Enviormental Benefits		$0	
		Total Benefits:		**$ -**	
2	2026				
		Engineering, Planning, Permitting	$0		
		Professional Services	$0		
		Capital Improvement Costs	$2,255,000		Construction ends (Spring)
		OM&R	$20,593		
		Total Costs:	**$2,275,593**		
		Flood Reduction		$4,500	Benefits begin
		Sediment Trapping		$50,700	Benefits begin
		Enviormental Benefits		$223,000	Benefits begin
		Total Benefits:		**$278,200**	
3-49	2027-2073				
		Engineering, Planning, Permitting	$0		
		Professional Services	$0		
		Capital Improvement Costs	$0		
		OM&R	$18,800		
		Total Costs:	**$18,800**		
		Flood Reduction		$111,261	
		Sediment Trapping		$1,253,542	
		Enviormental Benefits		$5,513,608	
		Total Benefits:		**$6,878,411**	

Table B-3.8 – Benefit:Cost Ratio

Benefit Category	Calculated Benefit	# of Occurances Over Lifetime	Lifttime Benefits	Cost Category	Calculated Costs	# of Occurances Over Lifetime	Lifttime Costs
Flood Reduction	$ 2,362	49	$ 115,761	Engineering, Permitting, and Construction Observation	$811,500	1	$811,500
Sediment Trapping	$ 26,617	49	$ 1,304,242	Construction	$2,705,000	1	$2,705,000
Environmental Benefits	$ 117,073.63	49	$ 5,736,608	OM&R	$ 20,593	49	$1,009,075
Total Benefits:			$ 7,156,611	**Total Costs:**			$3,944,264
				Benefit:Cost Ratio = 1.81 : 1			

SECTION D

Letters of Support

Burt County

Burt County Office

of
Highway Superintendent, Planning & Zoning Administrator,
and Floodplain Administrator
111 N 13th Street, Suite 3 Tekamah NE 68061
Email- roads@burtcountyne.gov Phone 402-374-2944

March 28, 2025

Nebraska Natural Resources Commission
301 Centennial Mall South
P.O. Box 94676
Lincoln, NE 68509-4676

RE: Silver Creek Site 35A Small Water Quality and Flood Control Structure

Dear Commissioners and Scoring Committee Members,

The Papio-Missouri River Natural Resources District (Papio NRD) has been working on implementing structures from the Silver Creek Watershed Special Erosion and Sediment Control Project as identified in the plan, or alternate sites with landowners interested in participation. Silver Creek Site 35A (SC35A) has recently been identified as preferred structure location and the Papio NRD is pursuing the design, permitting, and construction of this structure.

Burt County Highway Superintendent and Floodplain Administrator is in support of this project. This structure will provide much needed sediment control that helps maintain the capacity and functionality of the local drainage ditches. Flood control and local ecosystem improvements will also benefit the community. We encourage you to approve the Water Sustainability Fund application for this project.

Sincerely,

Ann Chytka
Highway Superintendent
Planning &Zoning Administrator
Floodplain Administrator
Burt County

Burt/Washington County Drainage District

BURT-WASHINGTON DRAINAGE DISTRICT
P.O. Box 232
Tekamah, NE. 68061.

March 28, 2025

Nebraska Natural Resources Commission
301 Centennial Mall South
JP.O. Box 94676
Lincon, NE. 68509-4676

Re: Silver Creek Site 35A Small Water Quality and Flood Control Structure

Dear Commissioners and Scoring Committee Members:

The Papio-Missouri River Natural Resources District (Papio NRD) has been working on implementing structures from the Silver Creek Watershed Special Erosion and Sediment Control Project as identified in the plan, or alternate sites with landowners interested in participation. Silver Creek Site 35A (SC35A) has recently been identified as preferred structure location and the Papio NRD is pursuing the design, permitting, and construction of this structure.

The Burt-Washington Drainage District is in support of this project. This structure will provide much needed sediment control that helps maintain the capacity and functionality of the local drainage ditches. Flood control and local ecosystem improvements will also benefit the community. We encourage you to approve the Water Sustainability Fund application for this project.

Sincerely

Randy L. Olson

Randy L. Olson
President
Burt-Washington Drainage District
402-870-1145

USDA NRCS

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

Nebraska State Office
1121 Lincoln Mall
Room 360
Lincoln, NE 68508

March 28, 2025

Papio Missouri River Natural Resources District
Attn: John Winkler
8901 S 154th St.
Omaha, NE 68138

RE: Silver Creek Site 35A Small Water Quality and Flood Control Structure

Dear John Winkler,

The USDA Natural Resources Conservation Service (NRCS) is interested in collaborating with the Papio-Missouri River Natural Resources District (PMRNRD) on the Silver Creek Site 35A, Small Water Quality and Flood Control Structure, that the PMRNRD is planning to construct as part of the Silver Creek Watershed Plan.

The watershed plan was developed by NRCS and the NRD around 25 years ago. Over the past 25 years, with NRCS assistance, the NRD has been able to work with landowners to construct 23 of the planned structures in the Watershed. Site 35A would most likely be the last piece of this ongoing project.

Nebraska NRCS is interested in continuing to collaborate with your District on this project if successfully funded through your application to the Water and Sustainability Fund, and we look forward to the continued partnership with the PMRNRD.

Please work with Kristin Schlueter, the District Conservationist for your NRD, to review prioritization of local resource concerns.

Sincerely,

Robert D. Lawson

Digitally signed by ROBERT LAWSON
Date: 2025.03.28 13:39:36 -05'00'

ROBERT D. LAWSON
State Conservationist

cc:
Melissa Baier, ASTC-Water Resources & Easements, NRCS – Lincoln State Office
Doug Wagner, ASTC-East, NRCS – Lincoln Area Office
Kristin Schlueter, District Conservationist, NRCS – Blair Field Office

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