

current sources
of funding
and
Outdoor
Heritage Fund
request

| Revised Budget | | | |
|-----------------|-------------|--------------------------------------|--------------------|
| project expense | OHF request | applicant and other project sponsors | total project cost |
| construction | \$115,750 | \$674,050 | \$789,000 |

- ND State Water Commission
 - \$591,750 (75%)
- USFWS
 - \$50,800
- Local Sources
 - \$30,000 Benson County WRB
 - \$1,500 Upper Sheyenne River Joint Water Resource Board

October 30, 2019

North Dakota Industrial Commission
Attn: Outdoor Heritage Fund Program
State Capitol – Fourteenth Floor
600 East Boulevard Avenue, Dept. 405
Bismarck, ND 58505

Subject: North Dakota Outdoor Heritage Fund Grant Application – Sheyenne River Fish Passage at Bouret Dam
Benson County Water Resource Board

Dear Outdoor Heritage Advisory Board,

The Benson County Water Resource Board (Board) is pleased to submit the attached Outdoor Heritage Fund Grant Application Request for re-establishing fish passage at Bouret Dam on the Sheyenne River.

This is a new project that will re-establish upstream fish and aquatic biota passage and improve river connectivity that has been adversely impacted since the dam was constructed in 1939. Approximately 40 miles of the Sheyenne River will be re-connected following completion of the proposed project. Sixteen species of fish and mussels in Conservation Priority Levels 1-3 as identified in the 2015 North Dakota State Wildlife Action Plan will benefit as river connectivity is re-established.

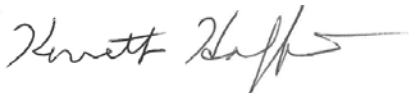
In addition to the benefit of establishing river connectivity, the proposed project will also reduce ongoing erosion that has been occurring at the site on both sides of the river immediately adjacent to the dam. Bank erosion adjacent to the structure has contributed an estimated 200-300 tons of sediment to the Sheyenne River during the period 1990-2014. Reductions to this ongoing sediment yield to the Sheyenne River will benefit water quality, downstream aquatic biota habitat and reduce sediment delivery into Lake Ashtabula.

Removal of the existing dam will also improve safety and liability exposure of the Board by eliminating the existing hydraulic roller conditions now found immediately downstream of the structure.

The project directly addresses the objectives of Directive C of the Outdoor Heritage Fund Program.

We look forward to a successful outcome from your review. Please contact me if you have any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ken Hoffert", with a stylized flourish at the end.

Ken Hoffert
Chairman,
Benson County Water Resource Board

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by mail to North Dakota Industrial Commission, ATTN: Outdoor Heritage Fund Program, State Capitol – Fourteenth Floor, 600 East Boulevard Ave. Dept. 405, Bismarck, ND 58505 or by e-mail to outdoorheritage@nd.gov. It is preferred that both a hard copy and electronic copy are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received or postmarked by the application deadline. You will be sent a confirmation by e-mail of receipt of your application. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name **Sheyenne River Fish Passage at Bouret Dam**

Name of Organization Benson County Water Resource Board

Federal Tax ID# 45-0357263

Contact Person/Title: Ken Hoffert, Chairman

Address: PO Box 347

City: Minnewaukan

State: ND

Zip Code: 58351-0347

E-mail Address: KHoffert62@gmail.com

Web Site Address (Optional)

Phone: (701) 771-2311

Fax # (if available)

List names of co-applicants if this is a joint proposal

MAJOR Directive:

Choose only one response

☐ **Directive A.** Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

☐ **Directive B.** Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

☒ **Directive C.** Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

☐ **Directive D.** Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply

☒ **Directive A.**

☐ **Directive B.**

☐ **Directive C.**

☐ **Directive D.**

Type of organization:

☐ State Agency

☒ Political Subdivision

☐ Tribal Entity

☐ Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words)

Bouret Dam, also known as the Twin Tree Dam (Dam), is a low-head dam located on the Sheyenne River in Township 151N, Range 65W, SW ¼ of Section 27 within Twin Tree Township, Benson County, ND. The Dam is located approximately 160 feet upstream of the 31st Avenue NE Bridge. The existing dam was originally constructed by the Works Progress Administration in 1939 for livestock use. Under the North Dakota Century Code (N.D.C.C.) § 61-16.1-39 and § 61-16.1-40, the Benson County Water Resource Board (Board) is responsible for the Dam.

The Board has investigated repair alternatives and completed a feasibility study of alternatives. The preferred alternative includes removing the existing dam and replacing it with engineered rock ramp

at a reduced dam crest height. The engineered rock ramp will provide fish passage, improve fish and aquatic biota habitat, and re-establish river connectivity. Sixteen species of fish and mussels in Conservation Priority Levels 1-3 of the 2015 North Dakota State Wildlife Action Plan will benefit as river connectivity is re-established. Approximately 40 miles of the Sheyenne River will be re-connected following completion of the project. As part of feasibility study, the Board conducted a public participation process by hosting a public meeting in Sheyenne, ND in May 2018. The meeting was well attended and showed strong local support for advancing the preferred alternative to construction. The Board is currently in the process of securing a public access easement to the project site. A public access easement is anticipated to be in place before beginning of project construction.

The proposed new rock ramp will have a crest elevation 2 feet lower than the existing dam. The eroding river banks adjacent to the rock ramp will be protected to an elevation corresponding to the 5-year flood event to reduce ongoing erosion estimated to have contributed 200-300 tons of sediment to the Sheyenne River during the period 1990-2014.

The project location in and below the ordinary high water mark of the Sheyenne River is included in the navigable waters of the State and part of the Sovereign Lands of North Dakota, N.D. Admin. Code § 89-10-01-03, N.D.C.C. § 61-33-01.

The Board is actively working with adjacent landowners to secure public access easements which are anticipated to be in place prior to the beginning of construction.

Project Duration:

Construction to begin in fall 2020 and will be completed by winter 2020/2021.

Permits required prior to construction are already obtained or in the final stages of review. The USACE 404 permit has been issued, SHPO concurrence obtained and the State Construction Permit and Sovereign Lands permits are in the final stages of review by the State Engineer.

Indicate the intended schedule for drawing down OHF funds.

The Board intends to drawdown OHF funds during construction period of the project during fiscal year 2020.

Amount of Grant request: \$117,250

Total Project Costs: \$789,000

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$ 671,750

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

| Amount of Match | Funding Source | Type of Match |
|-----------------|---------------------------|--|
| \$591,750 | ND State Water Commission | <input checked="" type="checkbox"/> Cash <input type="checkbox"/> In-Kind |

| | | |
|----------|------------------------------------|---|
| | | <input type="checkbox"/> Indirect |
| \$50,000 | US Fish and Wildlife Service | <input checked="" type="checkbox"/> Cash <input type="checkbox"/> In-Kind <input type="checkbox"/> Indirect |
| \$30,000 | Benson County Water Resource Board | <input checked="" type="checkbox"/> Cash <input type="checkbox"/> In-Kind <input type="checkbox"/> Indirect |

Certifications

- I certify that this application has been made with the support of the governing body and chief executive of my organization.
- I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The Benson County Water Resource Board (Board) is a political subdivision of the State. The Board is governed by a three member board of managers and a secretary/treasurer appointed by the Benson County Commission. It has the responsibility within Benson County to manage, conserve, protect, develop and control waters of the state for the benefit of the public. It is the policy of the Board to provide management, conservation, protection, development and control of water resources, to work cooperatively with other resource agencies to strengthen and mutually support related programs, and protect and promote the health, safety and general welfare of the people of North Dakota.

The Board manages a variety of programs including those related to drainage permits, legal drains, maintaining, protecting and controlling streamflow, protection and maintenance of water bodies, managing flooding issues, protection and maintenance of water quality and construction, operation and maintenance of a variety of dams.

Benson County has approximately 6,600 residents with community that relies largely on farming. Approximately 36% of the population were below poverty line based on 2010 census. The Board has limited resources to conduct legislatively mandated duties. The proposed local share of \$30,000 may seem like a small amount compared to total project cost. However, it is a large commitment for the Board with respect to some of the other commitments they have.

Management activities of the Board are supported by a 3.57 mil tax levy which in 2018 generated \$188,367.31. This revenue is spent on: \$13,500 salaries, \$25,000 on special programs and \$51,000 on mandated items as noted above as well as insurance and legal fees.

The Board has minimal staff. To accomplish program goals, the Board retains professional services for legal and engineering needs when necessary.

The fish passage project at Bouret Dam is an important ongoing project for the Board, which has a strong local support and involvement from area residents.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan.

For projects including Section 319 funding: provide in detail the specific best management practices that will be implemented and the specific projects for which you are seeking funding.

For projects including fencing: A minimum cost share of 40% by the recipient is preferred. Include detailed information on the type of fencing to be installed, whether funding is requested for boundary fencing, new or replacement of existing fencing, and/or cross fencing.

The fish passage project at Bouret Dam directly addresses the objectives of the Outdoor Heritage Fund Directive C. Re-establishing fish and aquatic biota passage at the Bouret Dam directly contributes to restoration, enhancement and conservation of aquatic species in North Dakota. Re-connection of approximately 40 miles of the Sheyenne River will benefit all riverine biota and will specifically benefit sixteen species of fish and mussels in Conservation Priority Levels 1-3 of the 2015 ND State Wildlife Action Plan. Reduction in sediment yield to the Sheyenne River contributes to improved fish and wildlife habitat downstream of the proposed project.

| ND State Wildlife Action Plan Conservation Priority | Species common name | Species scientific name |
|---|------------------------|--------------------------------|
| | | |
| Level 1 | Northern Pearl Dace | <i>Margariscus margarita</i> |
| | Creek Heelsplitter | <i>Lasmigona compressa</i> |
| | | |
| Level 2 | Northern Redbelly Dace | <i>Chromas eos</i> |
| | Silver Chub | <i>Maerhybopsis storeriana</i> |
| | Trout-perch | <i>Percopsis omiscomaycus</i> |
| | Threeridge | <i>Potamilu ohiensis</i> |
| | Wabash Pigtoe | <i>Fusconaia flava</i> |
| | Blacksandshell | <i>Liguma recta</i> |
| | Pink Heelsplitter | <i>Potamilu alatus</i> |
| | | |
| | | |

| | | |
|---------|------------------|------------------------------|
| Level 3 | Pugnose Shiner | <i>Notropis anogenus</i> |
| | Blacknose Shiner | <i>Notropis heterolepsis</i> |
| | Carmine Shiner | <i>Notropis percobromus</i> |
| | River Darter | <i>Percina shumardi</i> |
| | Yellow Bullhead | <i>Amelurus natalis</i> |
| | Mapleleaf | <i>Quadrula</i> |
| | Creeper | <i>Strophitus undulatus</i> |

Is this project part of a Comprehensive Conservation Plan? ☐ Yes ☒ No

If yes, provide a copy with the application.

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the "Definitions" section at the back of the form for more details.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

The Board, as project sponsor, has retained Barr Engineering Co. (Barr) to complete engineering, design, and permitting of these projects and to assist the Board with public and stakeholder engagement. Barr has extensive experience in similar projects, with successful design, permitting and construction of similar projects on time and on budget. Barr will provide bid preparation and construction engineering services for the project, including meetings with the contractors QA/QC of construction activities, managing the schedule, and holding the contractor accountable for most efficient use of taxpayer funds for completion of the project on time and on budget.

Evaluation – Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

The Board will develop a formal construction management plan for the project, including records and invoice management framework. A monthly progress report will be submitted to the OHF that would also include copies of the invoices accrued and proposed activities until the next progress report.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under "Budget Information" at the back of this form. Refer to that section and utilize these values in identifying your matching funds.

NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.

| Project Expense | OHF Request | Applicant's Match Share (Cash) | Applicant's Match Share (In-Kind) | Applicant's Match Share (Indirect) | Other Project Sponsor's Share | Total Each Project Expense |
|-----------------|-------------|--------------------------------|-----------------------------------|------------------------------------|-------------------------------|----------------------------|
| Construction | \$ 117,250 | \$ 30,000 | \$ | \$ | \$ 641,750 | \$ 789,000 |
| | \$ | \$ | \$ | \$ | \$ | \$ |
| | \$ | \$ | \$ | \$ | \$ | \$ |
| | \$ | \$ | \$ | \$ | \$ | \$ |
| | \$ | \$ | \$ | \$ | \$ | \$ |
| | \$ | \$ | \$ | \$ | \$ | \$ |
| Total Costs | \$ 117,250 | \$ 30,000 | \$ 0.00 | \$ 0.00 | \$ 641,750 | \$ 789,000 |

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

Budget Narrative – Use the space below to provide additional detail regarding project expenses.

Appendix B shows the Engineers Opinion of Probable Cost for construction and the associated individual bid items. The mid-range cost estimate is being used for purposes of planning and cost-share requests to potential partners. The Board has received 75% cost share assistance under the eligible Dam Safety category from the ND State Water Commission. Cost-share is applied to all project costs rather than to each individual bid item; all bid items are required for completion of the project. The expenses outlined in this request do not include legal and administrative fees, as the Board expects to cover them on its own.

The USFWS funding commitment letter and the minutes of the April 9, 2019 ND State Water Commission meeting when the Karey dam cost-share was approved are included in Appendix. E.

Sustainability – Indicate how the project will be funded or sustained in future years.

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

The preferred alternative of an engineered rock ramp will not require ongoing regular maintenance. The design of the rock ramp allow for flood events to overtop it without damage. If necessary the Board will fund future maintenance of the project through their general fund and through cost share support from partnering agencies. The cost share support and role from partnering agencies will be established post-construction.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

If funding from the Outdoor Heritage Fund is not obtained, the project may be delayed until such time that sufficient funding is secured. It is possible that the Board may not be able to afford the project. Anticipated benefits to aquatic species in Levels 1-3 of the ND State Wildlife Action plan would be delayed or not occur. Reductions in sediment yield to the Sheyenne River could be delayed or not occur.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * *There must be signage at the location of the project acknowledging OHF funding when appropriate.*

The Board will provide signage at the facility identifying the names of all the project sponsors. The signage with the Outdoor Heritage Fund listed as a project sponsor will be viewed and appreciated by all who visit. The District would also orchestrate a media campaign centered on the project and the Outdoor Heritage Fund would be singled out as a critical partner in the project.

Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Can you meet all the provisions of the sample contract? ☒ Yes ☐ No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;
- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);
- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.
- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- | | |
|-----------------------|---|
| • Labor costs | \$15.00 an hour |
| • Land costs | Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office |
| • Permanent Equipment | Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment) |
| • Equipment usage | Actual documentation |

- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as "A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature."

Comprehensive Conservation Plan - Defined as "A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas." This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.


If you have any questions about the application or have trouble submitting the application, please contact Andrea Pfennig at 701-328-3786 or apfennig@nd.gov.

Revised: September 14, 2018

Certification

The information contained in this grant application has been developed under the authority of the Benson County Water Resource District who will meet the financial and other program requirements of the Outdoor Heritage Fund Program. Technical support was provided by Mandar Nangare, of Barr Engineering Co., who is available to answer engineering and other technical related questions. Mr. Nangare can be contacted at (701) 255-5474

Signed:

A handwritten signature in black ink, appearing to read "Ken Hoffert", with a long horizontal flourish extending to the right.

Ken Hoffert,
Chairman, Benson
County Water Resource
Board

Date: October 30, 2019



"VARIETY IN HUNTING AND FISHING"

NORTH DAKOTA GAME AND FISH DEPARTMENT

100 NORTH BISMARCK EXPRESSWAY BISMARCK, NORTH DAKOTA 58501-5095 PHONE 701-328-6300 FAX 701-328-6352

GOVERNOR, *Doug Burgum*

DIRECTOR, *Terry Steinwand*

DEPUTY, *Scott A. Peterson*

Benson County Water Resource District
Mr. Ken Hoffert, Chairman
P.O. Box 347
Minnewaukan, ND 58351

Dear Mr. Hoffert:

Re: Support for Bouret Dam Modification

North Dakota's rivers and streams are vital resources providing sources of drinking water, recreational opportunities as well as important habitat for fish and other aquatic organisms. The meandering nature of streams and their associated riparian vegetation provide important fish and wildlife habitat.

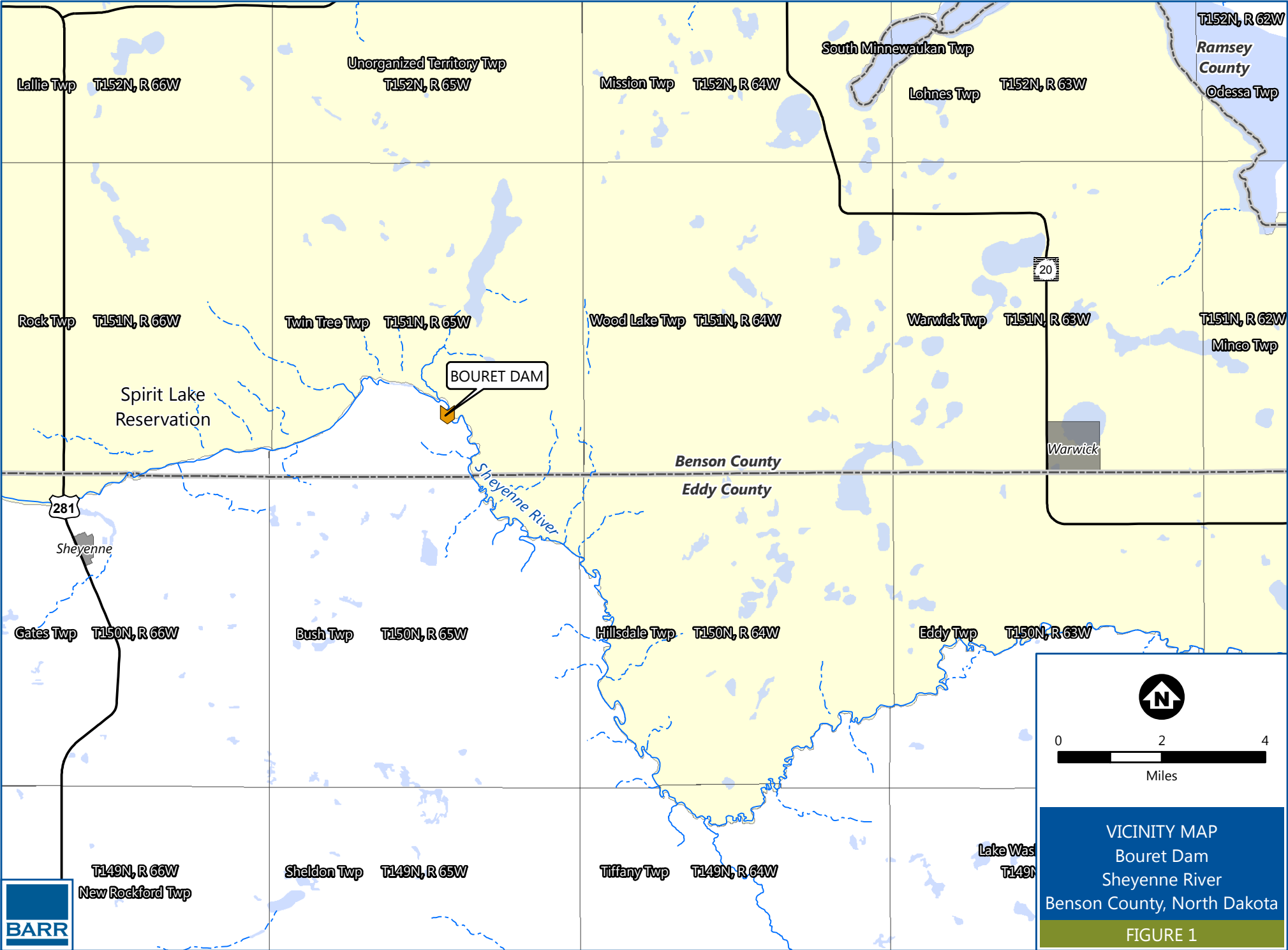
The North Dakota Game and Fish Department supports the reconfiguration of Bouret dam to a rock arch ramp design. This design will increase the connectivity of the Sheyenne River by allowing fish and other aquatic organisms to more freely move within the river system. The ability for movement of organisms up and down the river allows them to better adapt to natural or manmade disturbances that may influence the river.

Sincerely,

Greg Link, Chief
Conservation and Communication Division
North Dakota Game and Fish Department

Appendix A

Vicinity Map



Appendix B
Engineers Opinion of Probable Cost
At 90% Design

90% Design Level**ENGINEER'S OPINION OF PROBABLE COST**

PROJECT: Bouret Dam Rehabilitation

LOCATION: Benson County, North Dakota

PROJECT #: 34031003.01

ESTIMATED COSTS

| Item No: | Item Description | Unit | Estimated Quantity | Unit Cost | Total Cost |
|----------|--|------|--------------------|---------------|------------------|
| 1 | Mobilization & Demobilization | LS | 1 | \$ 64,000.00 | \$ 64,000.00 |
| 2 | Temporary Erosion Control | LS | 1 | \$ 10,000.00 | \$ 10,000.00 |
| 3 | Clearing and Grubbing | LS | 1 | \$ 5,000.00 | \$ 5,000.00 |
| 4 | Strip and Stockpile Topsoil | LS | 1 | \$ 4,000.00 | \$ 4,000.00 |
| 5 | Water Control | LS | 1 | \$ 135,000.00 | \$ 135,000.00 |
| 6 | Remove Existing Dam | LS | 1 | \$ 40,000.00 | \$ 40,000.00 |
| 7 | Sediment Removal | CY | 1200 | \$ 35.00 | \$ 42,000.00 |
| 8 | PS-27.5 Sheetpile | LF | 160 | \$ 200.00 | \$ 32,000.00 |
| 9 | Geotextile Fabric (NDDOT Type RR) | SY | 1690 | \$ 2.50 | \$ 4,225.00 |
| 10 | Granular Filter (12" USACE Type B2) | TON | 750 | \$ 65.00 | \$ 48,750.00 |
| 11 | Base Rock (30" NDDOT Grade I Riprap) | TON | 1875 | \$ 70.00 | \$ 131,250.00 |
| 12 | Boulders (3'-4' Nominal Diameter) | EA | 111 | \$ 600.00 | \$ 66,600.00 |
| 13 | Chinking Rock | TON | 75 | \$ 95.00 | \$ 7,125.00 |
| 14 | Cobbles | TON | 150 | \$ 80.00 | \$ 12,000.00 |
| 15 | Bank Excavation and Removal | CY | 1960 | \$ 12.00 | \$ 23,520.00 |
| 16 | Bank Place and Compact Salvaged Fill | CY | 110 | \$ 7.00 | \$ 770.00 |
| 17 | Bank Grading | SY | 670 | \$ 10.00 | \$ 6,700.00 |
| 18 | Place Salvaged Topsoil | CY | 110 | \$ 5.00 | \$ 550.00 |
| 19 | Place Imported Topsoil | CY | 550 | \$ 20.00 | \$ 11,000.00 |
| 20 | Mulch and Seed | LS | 1 | \$ 7,500.00 | \$ 7,500.00 |
| | | | | | |
| | | | | | |
| | | | | | |
| | Construction Cost Subtotal | | | | \$652,000 |
| | 10% Construction Cost Contingency | | | | \$65,000 |
| | 10% Construction Engineering Support | | | | \$72,000 |
| | TOTAL PROJECT COST (Mid Range Estimate) | | | | \$789,000 |
| | Low Range Estimate (-5%) | | | | \$750,000 |
| | High Range Estimate (+10%) | | | | \$868,000 |

Notes:¹ Design Work Completed to Approximately 90% Design Level.² Quantities Based on Design Work Completed.³ Unit Prices Based on Information Available at This Time.

⁴ This 90% Design Level (Class 1 per ASTM E 2516-06) cost estimate is based on designs, quantities and unit prices. Costs will change with further design. Time value-of-money escalation costs are not included. Contingency is an allowance for the net sum of costs that will be in the Final Total Project Cost at the time of the completion of design, but are not included at this level of project definition. The estimated accuracy range for the Total Project Cost as the project is defined is -5% to +10%. The accuracy range is based on professional judgement considering the level of design completed, the complexity of the project and the uncertainties in the project as scoped. The contingency and the accuracy range are not intended to include costs for future scope changes that are not part of the project as currently scoped or costs for risk contingency. Operation and Maintenance costs are not included.

Appendix C

Site Photos



Photo 1: Bouret Dam 06-07-2016 Eroding river right abutment



Photo 2: Bouret Dam 06-07-2016 Eroded river left abutment



Photo 3: Bouret Dam 01-11-2016 Fish passage barrier at spillway



Photo 4: Bouret Dam 01-11-2016 Side view of fish passage barrier at the spillway

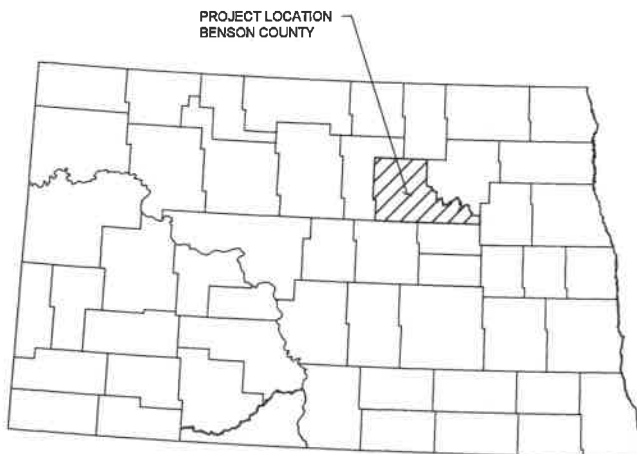
Appendix D
Issued for Permitting Plans

TAMM DAM REHABILITATION PROJECT

ON COUNTY WATER RESOURCE BOARD

SHEYENNE RIVER

MINNEWAUKAN, NORTH DAKOTA



VICINITY MAP

NOT TO SCALE



TABLE G-01

| ABBREVIATIONS | |
|---------------|-------------------------------|
| ABBREVIATION | DESCRIPTION |
| APPROX. | APPROXIMATE |
| CF | CUBIC FEET |
| CFS | CUBIC FEET PER SECOND |
| ELEV. | ELEVATION |
| FT | FEET |
| H | HORIZONTAL |
| LW.L | LOW WATER LEVEL |
| NAVD | NORTH AMERICAN VERTICAL DATUM |
| NAD | NORTH AMERICAN DATUM |
| ND | NORTH DAKOTA |
| NE | NORTH EAST |
| SE | SOUTH EAST |
| SF | SQUARE FEET |
| SQ.MI | SQUARE MILES |
| STA | STATION |
| TBD | TO BE DETERMINED |
| T.O. | TOP OF |
| TYP | TYPICAL |
| USGS | U.S. GEOLOGICAL SURVEY |
| V | VERTICAL |
| WSE | WATER SURFACE ELEVATION |
| YR | YEAR |



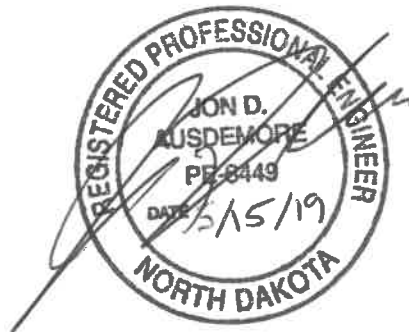
LOCATION MAP

NOT TO SCALE



GENERAL NOTE:

1. LEFT BANK AND RIGHT BANK NOMENCLATURE IN THIS DRAWING SET REFERS TO THE LEFT AND RIGHT BANKS WHEN LOOKING DOWNSTREAM.



**NORTH DAKOTA ONE CALL:
CALL BEFORE YOU DIG.
1-800-795-0555 or 811**

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CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD-LOCATING ALL SITE UTILITIES, PRIVATE AND PUBLIC, PRIOR TO STARTING THE WORK. ALL UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. ANY UTILITIES DAMAGED BY CONTRACTOR SHALL BE REPAIRED BY CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER.

Project Office:
BARR ENGINEERING CO.
234 WEST CENTURY AVENUE
BISMARCK, ND 58503

BARR
Corporate Headquarters:
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Project Office:
BARR ENGINEERING
234 WEST CENTRAL
BISMARCK, ND
Ph: 1-800-632-2277
Fax: (701) 222-6371
www.barr.com

| | |
|----------|------------|
| Scale | AS SHOWN |
| Date | 10/25/2017 |
| Drawn | RRR2 |
| Checked | JDA |
| Designed | JKH2 |
| Approved | JDA |

**BENSON COUNTY WATER
RESOURCE BOARD
MINNEWAUKAN, ND**

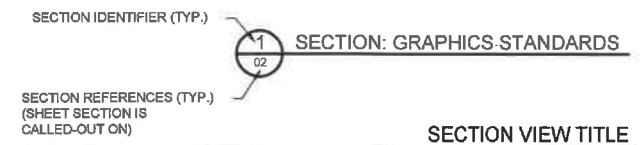
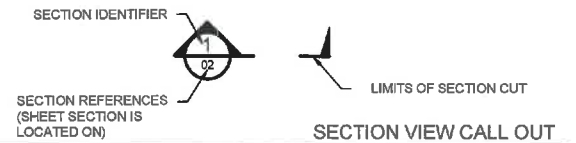
BOURET DAM REHABILITATION
TWIN TREE TOWNSHIP

INDEX, LOCATION MAP AND VICINITY MAP

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| | |
|--------------------|-------------|
| BARR PROJECT No. | 34031003.00 |
| CLIENT PROJECT No. | |

| | |
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| DWG. No. | REV. No. |
| G-01 | 0 |



DRAWING INDEX

| <u>DWG NO.</u> | <u>TITLE</u> |
|----------------|--|
| G-01 | INDEX, LOCATION MAP, AND VICINITY MAP |
| G-02 | HYDRAULICS AND HYDROLOGY |
| G-03 | HYDRAULICS AND HYDROLOGY |
| C-01 | EXISTING CONDITIONS - PLAN |
| C-02 | PROJECT LAYOUT - PLAN |
| C-03 | SITE ACCESS AND STAGING - PLAN |
| C-04 | WATER CONTROL - PLAN |
| C-05 | DAM DEMOLITION - PLAN AND SECTION |
| C-06 | SEDIMENT REMOVAL - PLAN, SECTION AND PROFILE |
| C-07 | ROCK RIFFLES - PLAN, PROFILE AND SECTION |
| C-08 | ROCK RIFFLES CONSTRUCTION - PLAN AND TABLE |
| C-09 | ROCK RIFFLES - DETAILS |
| C-10 | SITE RESTORATION - PLAN |
| C-11 | TEMPORARY EROSION CONTROL - PLAN |
| C-12 | TEMPORARY EROSION CONTROL - DETAILS |

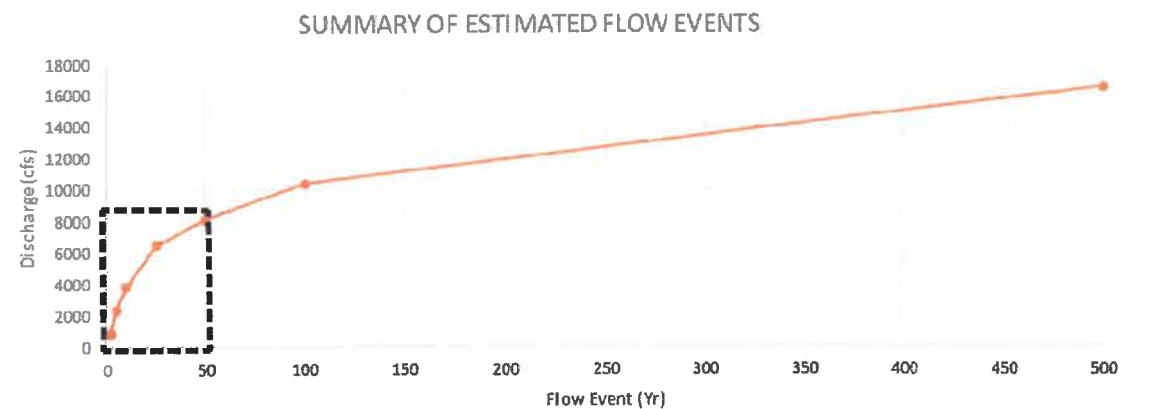
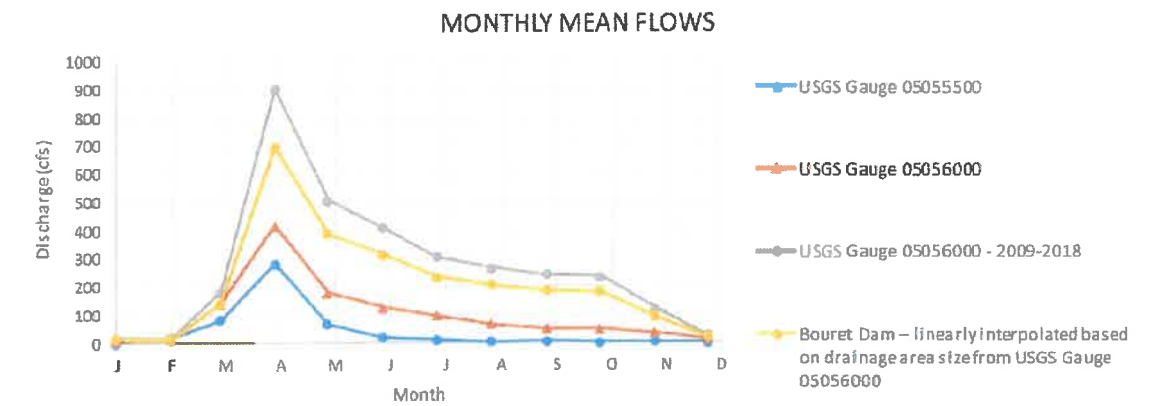
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GENERAL NOTES:

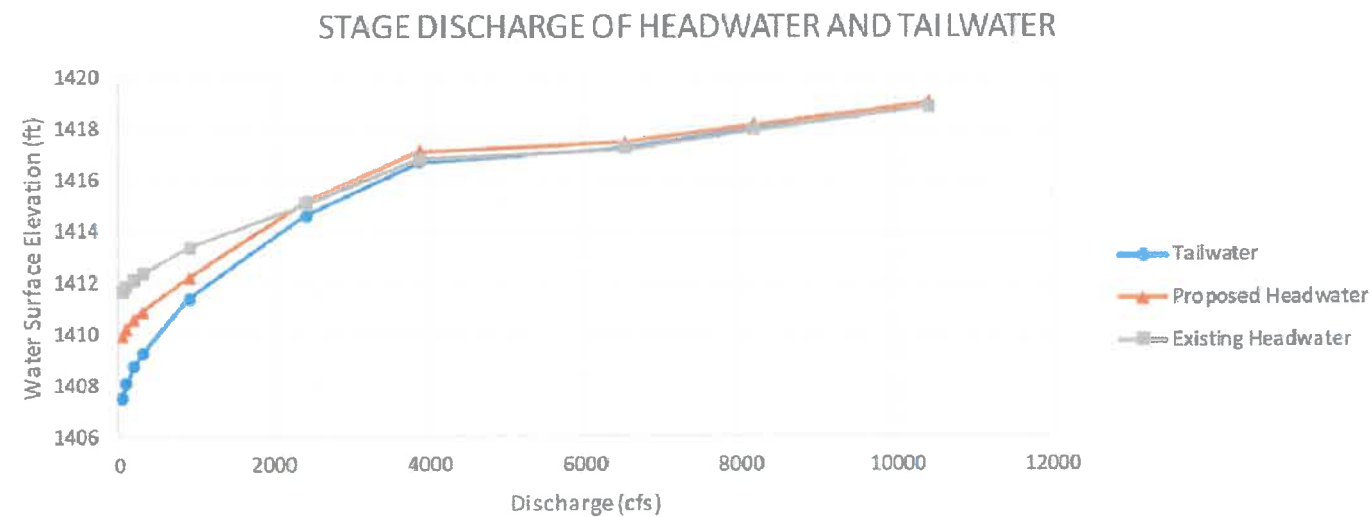
1. NO GAUGE EXISTS AT BOURET DAM. GAUGES UPSTREAM AND DOWNSTREAM OF THE OUTLET ARE USED TO ESTIMATE THE FLOWS AT BOURET DAM. RELEVANT GAUGING STATIONS ON THE SHEYENNE RIVER ARE SHOWN ON THE MAP ABOVE.
2. FLOW DATA SHOWN IS BASED ON MONTHLY AVERAGES OVER THE LIFE OF EACH OF THE GAUGES. FLOW DATA IS PRESENTED FOR INFORMATION ONLY AND ACTUAL FLOWS AT THE DAM CAN VARY GREATLY FROM THE AVERAGE VALUES PRESENTED HERE.
3. THE STATE OF NORTH DAKOTA PUMPS OUT OF DEVILS LAKE AND INTO THE SHEYENNE RIVER FROM MAY THROUGH NOVEMBER. THE WEST DEVILS LAKE OUTLET ADDS UP TO 250 CFS ABOVE NATURAL WATER FLOWS. THIS DATA IS INCLUDED IN THE MONTHLY MEAN FLOWS GRAPH FOR USGS GAUGE 05058000. 2009-2018.

| | | | |
|---------------------------|----------------------|----------------------|--------------|
| | USGS GAUGE 0505500 | USGS GAUGE 0505600 | BOURET DAM |
| LOCATION | SHEYENNE, ND | WARWICK, ND | SHEYENNE, ND |
| PERIOD OF RECORD | 1929-1951 (22 YEARS) | 1949-2019 (70 YEARS) | -- |
| CONTRIBUTING AREA (SQ MI) | 1510 | 2070 | 1590 |

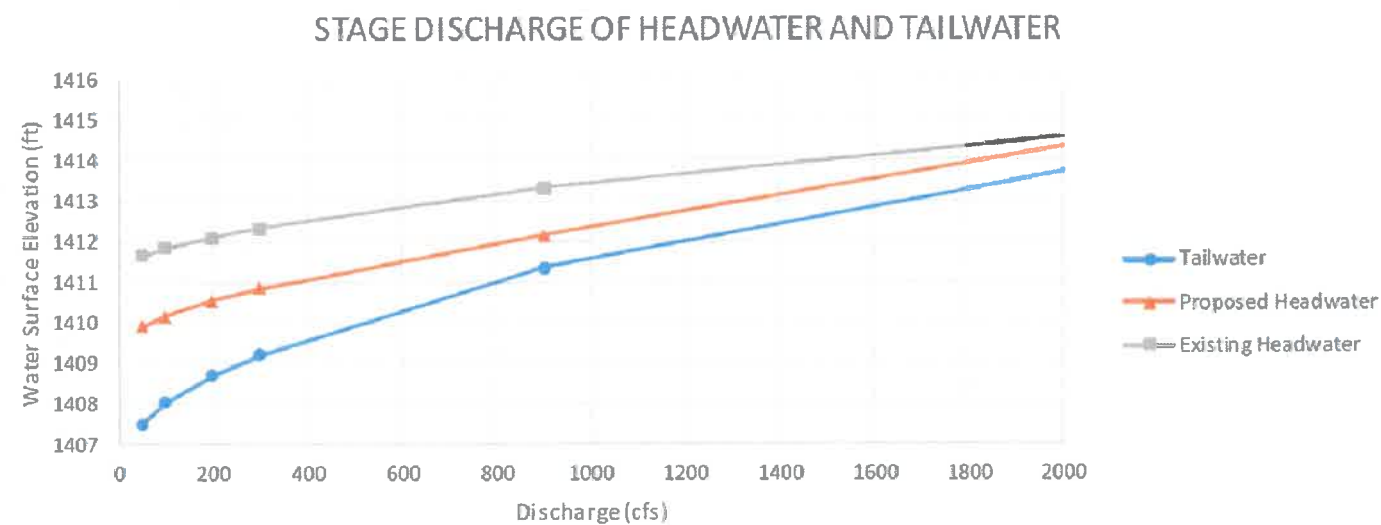


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| CLIENT PROJECT No. | |
| DWG. No. G-02 | REV. No. 0 |



1 GRAPH: HEADWATER AND TAILWATER RATING CURVE



2 GRAPH: HEADWATER AND TAILWATER RATING CURVE



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Corporate Headquarters.
Minneapolis, Minnesota
Ph: 1-800-632-2277

Project Office:
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BISMARCK, ND 58503
Ph: 1-800-632-2277
Fax: (701) 222-6371
www.barr.com

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| Scale | AS SHOWN |
| Date | 01/04/2019 |
| Drawn | JKH2 |
| Checked | JDA |
| Designed | JKH2 |
| Approved | JDA |

**BENSON COUNTY WATER
RESOURCE BOARD
MINNEWAUKAN, ND**

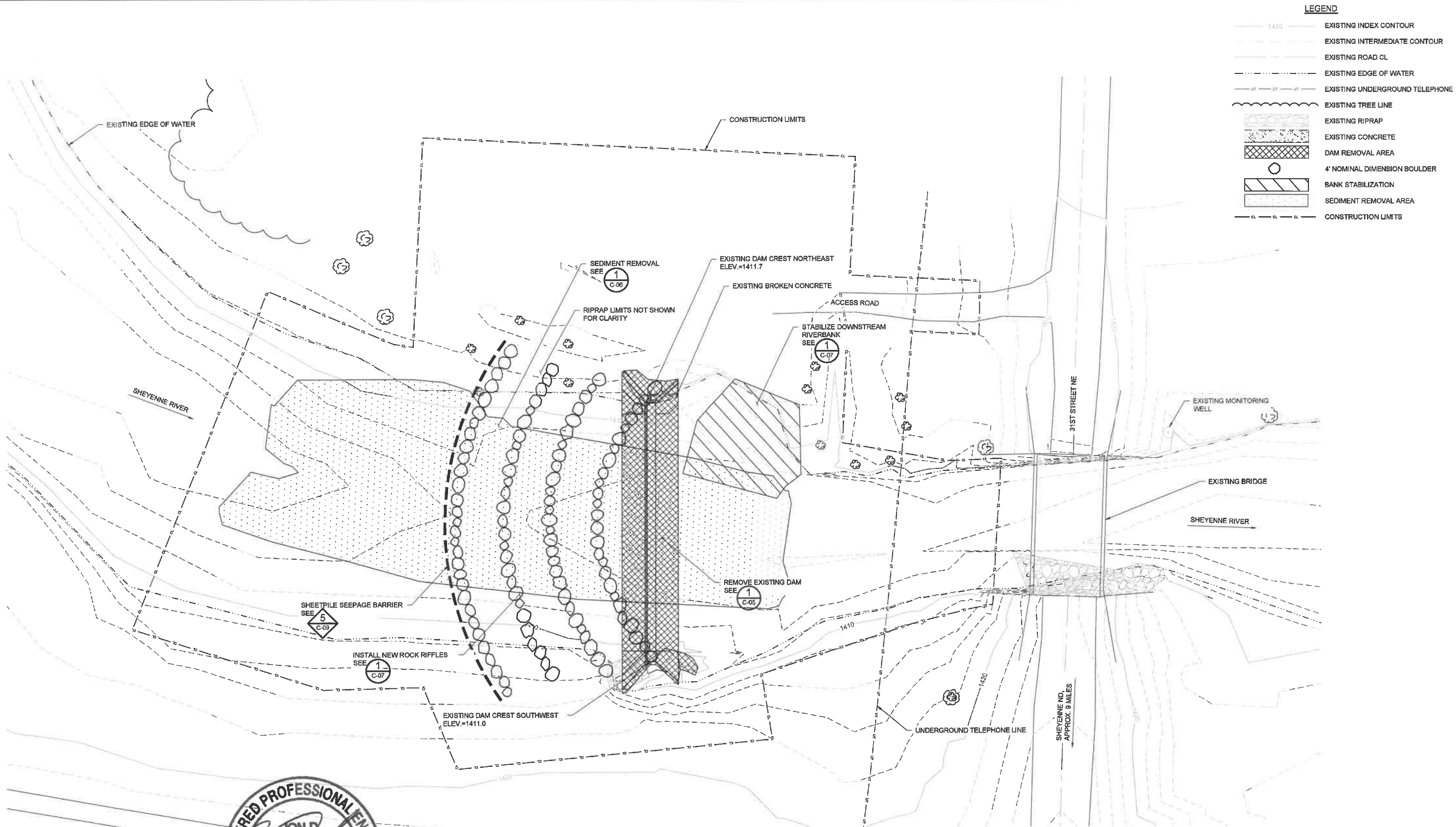
**BOURET DAM REHABILITATION
TWIN TREE TOWNSHIP
HYDRAULICS AND HYDROLOGY**

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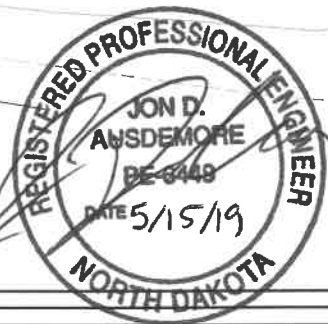
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| BARR PROJECT No. | |
| 34031003.00 | |
| CLIENT PROJECT No. | |
| DWG. No. | REV. N |
| G-03 | 0 |

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- LEGEND**
- 1410 EXISTING INDEX CONTOUR
 - EXISTING INTERMEDIATE CONTOUR
 - EXISTING ROAD CL
 - EXISTING EDGE OF WATER
 - EXISTING UNDERGROUND TELEPHONE
 - EXISTING TREE LINE
 - EXISTING RIPRAP
 - EXISTING CONCRETE
 - DAM REMOVAL AREA
 - 4' NOMINAL DIMENSION BOULDER
 - BANK STABILIZATION
 - SEDIMENT REMOVAL AREA
 - CONSTRUCTION LIMITS

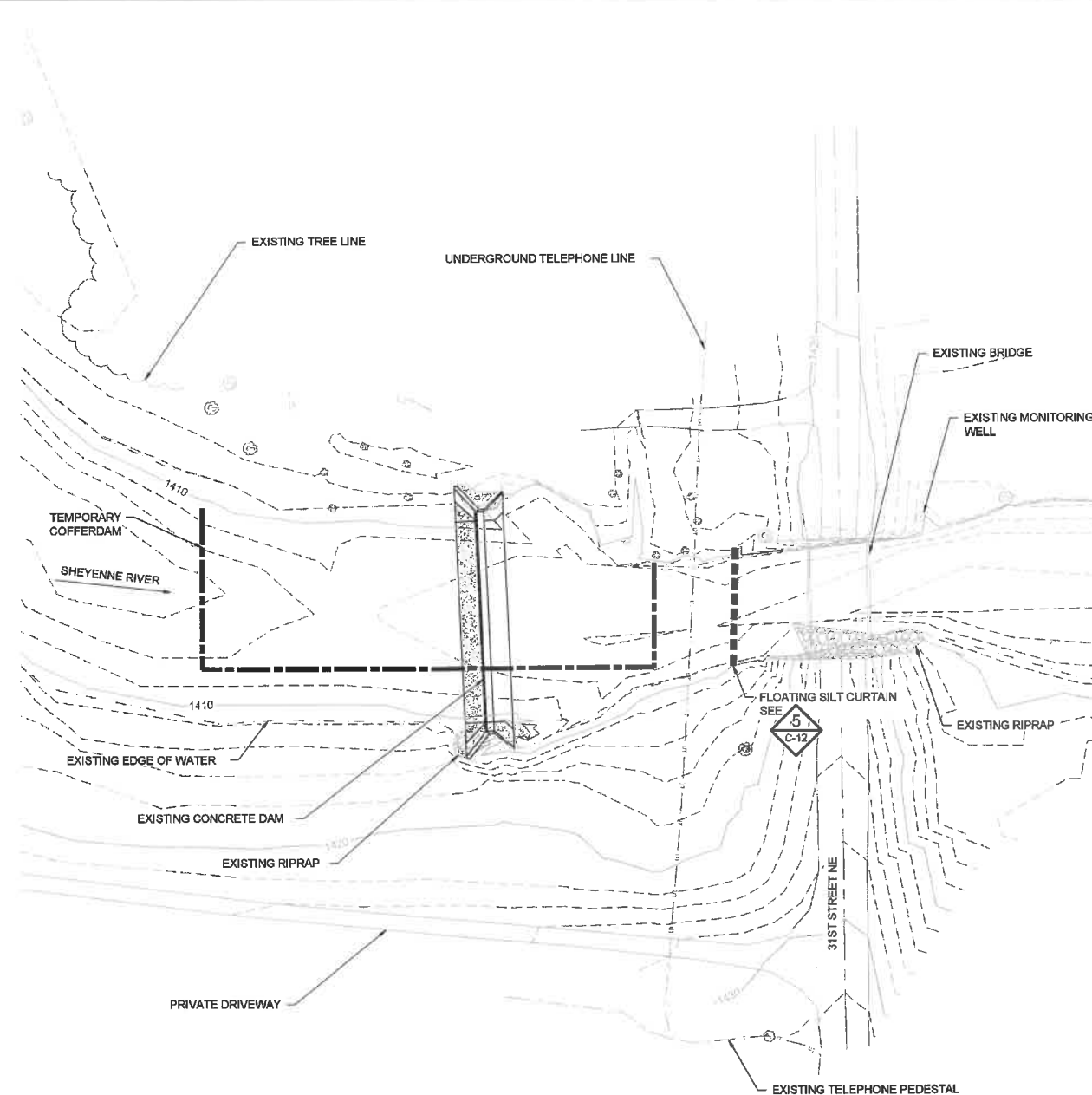


1 PLAN: PROJECT LAYOUT
0 20 40
SCALE IN FEET

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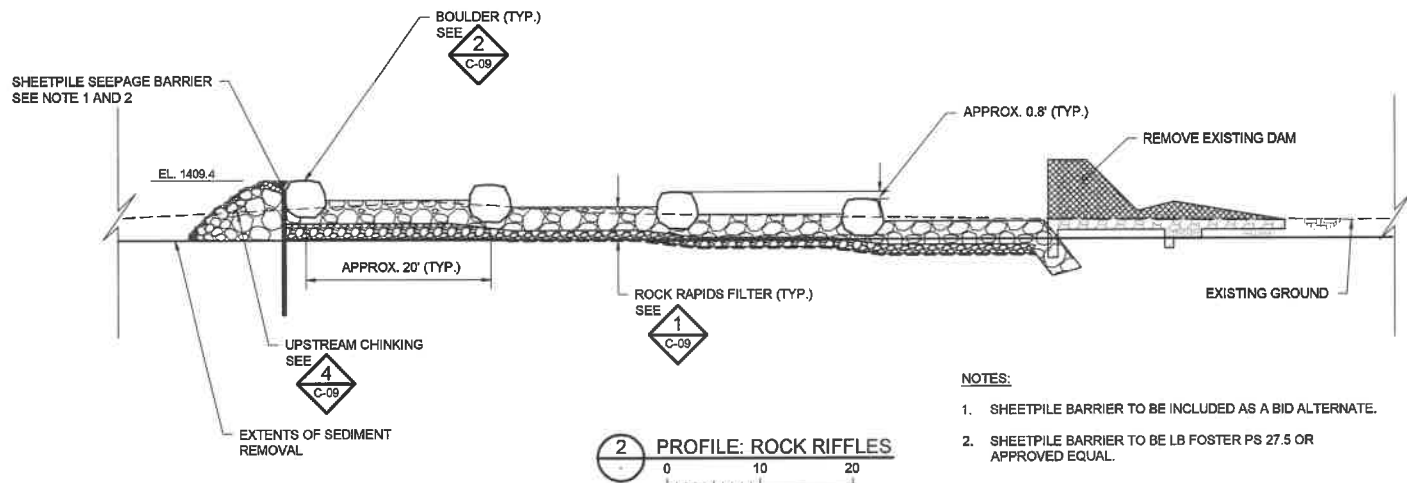


CADD USER: Jee K. Hejpe FILE: M:\DESIGN\104031003\1003\00_C-07_ROCK_RIFPLES_P&P.DWG PLOT SCALE: 1:12 PLOT DATE: 5/14/2019 10:08 AM
BARR M:\AutoCAD 2011\AutoCAD 2011 Support\dwg\Templates\Barr_2011_Template.dwg Plot at: 1:10062010 140830



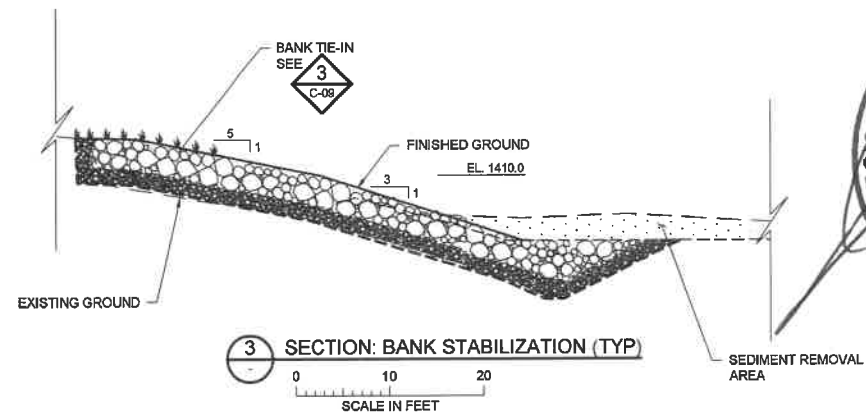
1 PLAN: ROCK RIFPLES
C-02
0 20 40
SCALE IN FEET

NOTE:
1. CONTOURS SHOWN REPRESENT TOP OF BASE ROCK BELOW EL. 1414 AND TOP OF TOPSOIL ABOVE EL. 1414.



2 PROFILE: ROCK RIFPLES
0 10 20
SCALE IN FEET

NOTES:
1. SHEETPILE BARRIER TO BE INCLUDED AS A BID ALTERNATE.
2. SHEETPILE BARRIER TO BE LB FOSTER PS 27.5 OR APPROVED EQUAL.



3 SECTION: BANK STABILIZATION (TYP.)
0 10 20
SCALE IN FEET



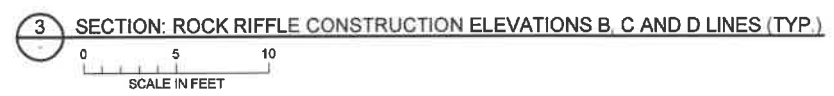
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ISSUE FOR PERMIT
NOT FOR CONSTRUCTION

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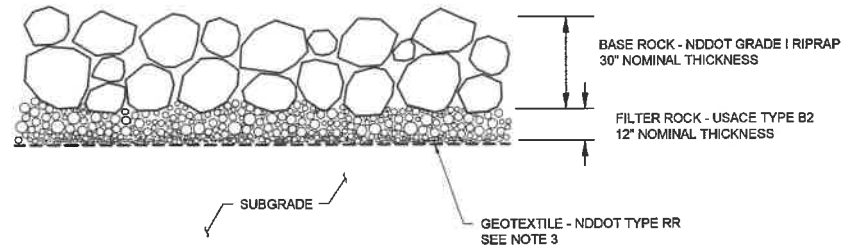
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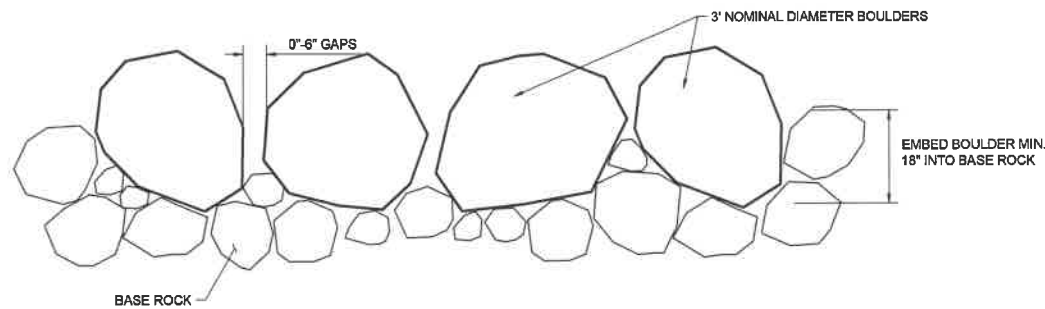
BARR M:\AutoCAD 2011\AutoCAD 2011 Support\enu\Template\Barr_2011_Template.dwt Plotted 1 10/05/2010 14:03:50



1
C-07
DETAIL: ROCK RAPIDS FILTER (TYP.)
0 3 6
SCALE IN FEET

NOTES:

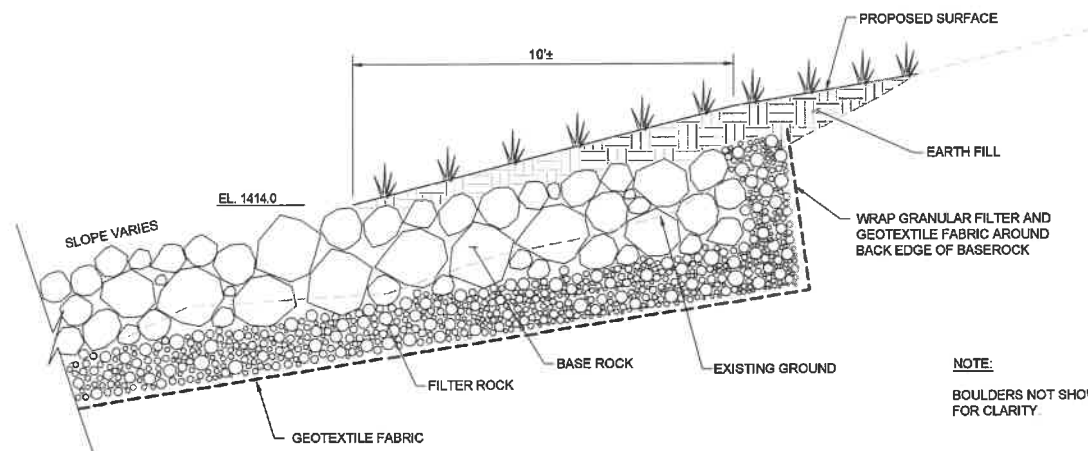
1. BOULDERS NOT SHOWN FOR CLARITY.
2. ENGINEER SHALL INSPECT THE SUBGRADE FOR APPROVAL BEFORE PLACEMENT OF GEOTEXTILE FABRIC OR GRANULAR FILTER.
3. GEOTEXTILE TO BE INCLUDED AS BID ALTERNATE.



2
C-07
DETAIL: BOULDERS
0 3 6
SCALE IN FEET

NOTES:

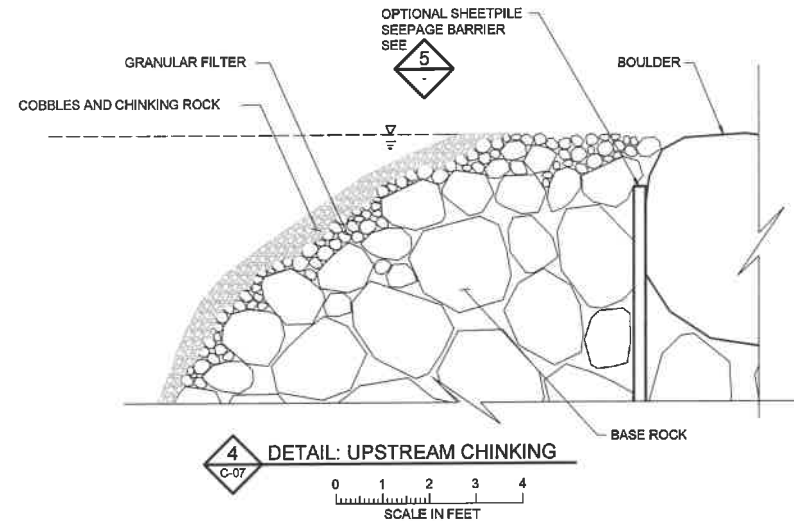
1. BOULDER GAPS WILL BE ADJUSTED UNDER FLOW CONDITIONS AFTER ORIGINAL PLACEMENT UNDER THE DIRECTION OF THE ENGINEER.
2. BOULDERS SHALL BE 3' NOMINAL DIAMETER FOR MOST UPSTREAM RIFFLES.



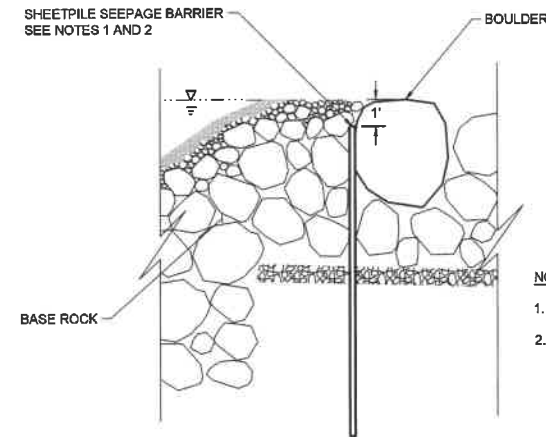
3
C-07
DETAIL: BANK TIE-IN (TYP.)
0 3 6
SCALE IN FEET

NOTE:

BOULDERS NOT SHOWN FOR CLARITY.



4
C-07
DETAIL: UPSTREAM CHINKING
0 1 2 3 4
SCALE IN FEET



5
C-02, C-08
DETAIL: SHEETPILE BARRIER
0 1 2 3 4
SCALE IN FEET

NOTES:

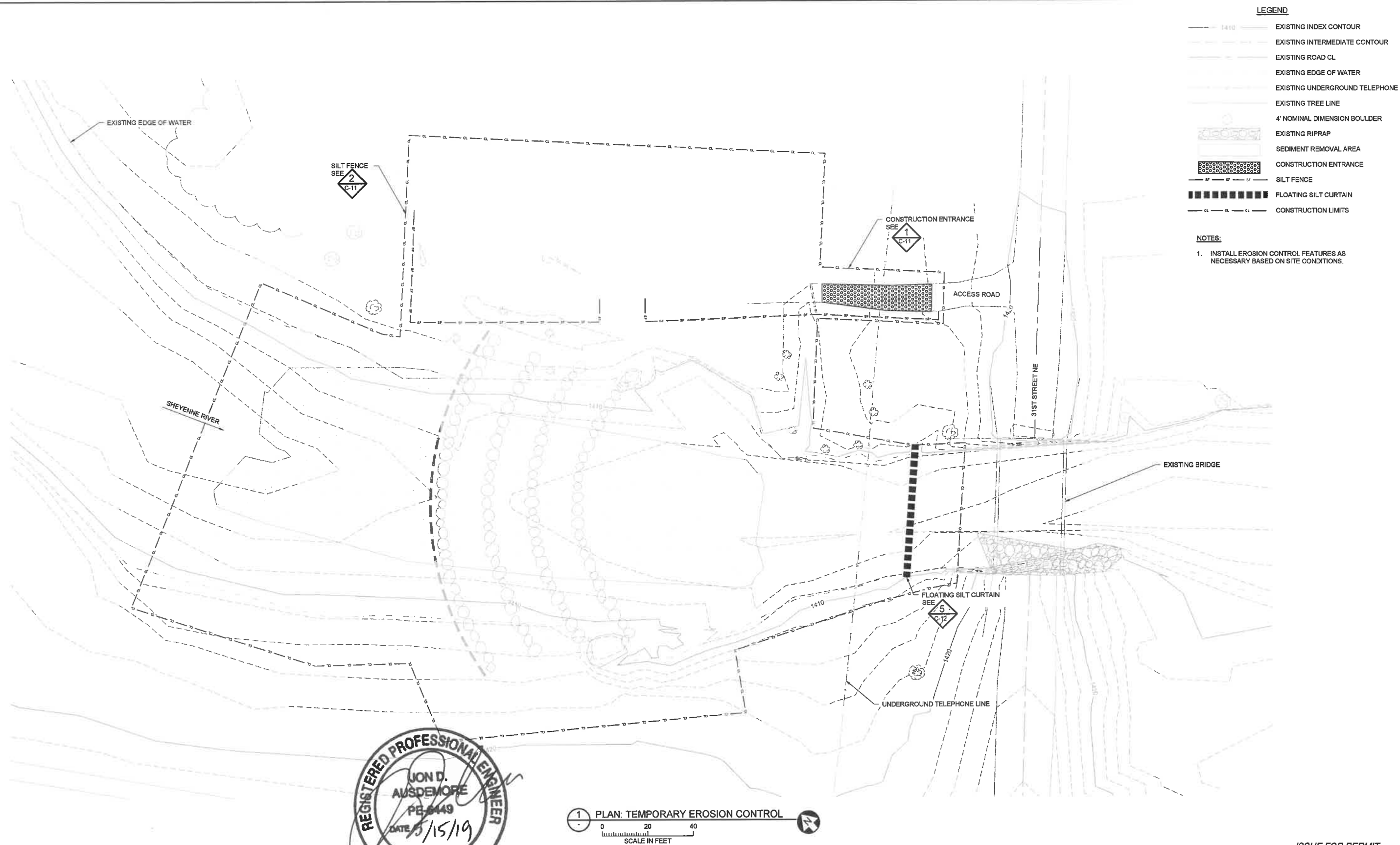
1. SHEETPILE BARRIER TO BE INCLUDED AS A BID ALTERNATE.
2. SHEETPILE BARRIER TO BE LB FOSTER PS 27.5 OR APPROVED EQUAL.



THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY JON D. AUSDEMORE, REGISTRATION NUMBER PE-6449 ON 05/15/2019 AND THE ORIGINAL DOCUMENT IS STORED AT BARR ENGINEERING COMPANY, 4300 MARKETPOINTE DR. SUITE 200, MINNEAPOLIS, MN 55435

ISSUE FOR PERMIT
NOT FOR CONSTRUCTION

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | <div><div>CLIENT</div><div>15281010510</div><div>PERMIT</div><div>201515</div><div>BID</div><div>CONSTRUCTION</div></div> | | | | | | | | | | <div><div>Project Office:</div><div>BARR ENGINEERING CO.</div><div>234 WEST CENTURY AVENUE</div><div>BISMARCK, ND 58503</div></div> <div><div>BARR</div><div>Corporate Headquarters:</div><div>Minneapolis, Minnesota</div><div>Ph: 1-800-632-2277</div></div> <div><div>Scale</div><div>AS SHOWN</div><div>Date</div><div>04/27/2018</div><div>Drawn</div><div>JKH2</div><div>Checked</div><div>JDA</div><div>Designed</div><div>JKH2</div><div>Approved</div><div>JDA</div></div> | | | | | | | | | | <div><div>BENSON COUNTY WATER</div><div>RESOURCE BOARD</div><div>MINNEWAUKAN, ND</div></div> | | | | | | | | | | <div><div>BOURET DAM REHABILITATION</div><div>TWIN TREE TOWNSHIP</div></div> <div><div>BARR PROJECT No.</div><div>34031003.00</div><div>CLIENT PROJECT No.</div></div> <div><div>ROCK RIFFLES</div><div>DETAILS</div></div> <div><div>DWG. No.</div><div>C-09</div><div>REV. No.</div><div>0</div></div> | | | | | | | | | | | | | | | | | | | |
| NO. | | | | | | | | | | BY | | | | | | | | | | CHK | | | | | | | | | | APP | | | | | | | | | | DATE | | | | | | | | | | REVISION DESCRIPTION | | | | | | | | | |

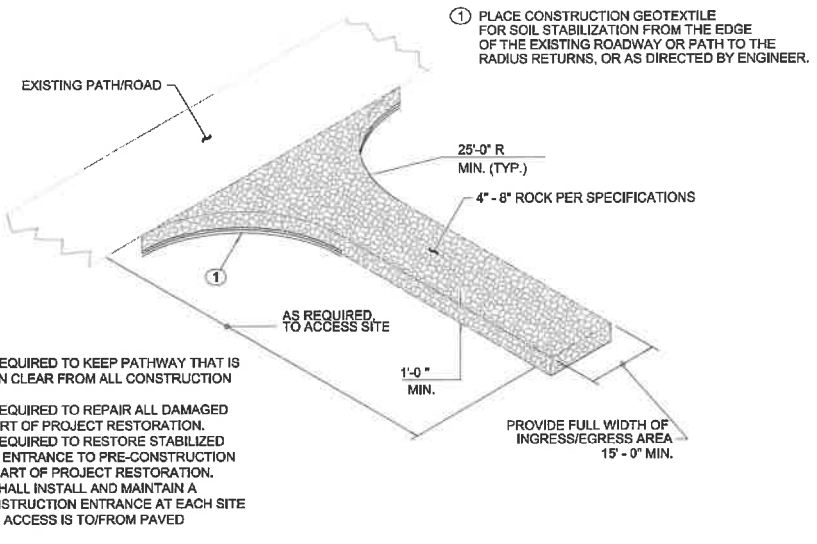


NOTES:

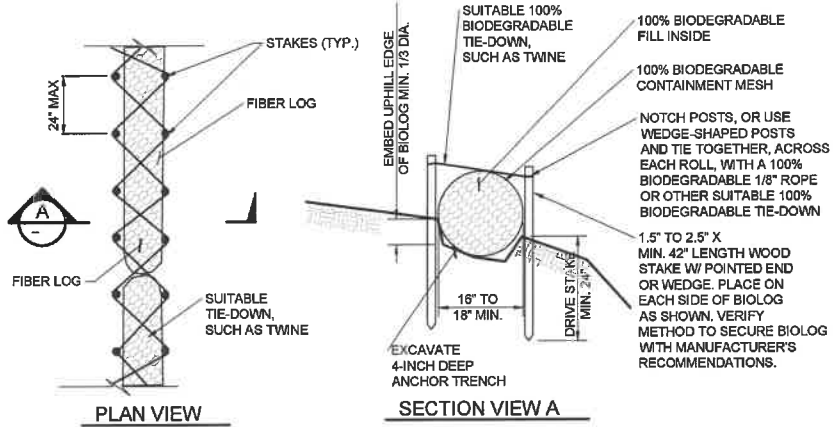
1. INSTALL EROSION CONTROL FEATURES AS NECESSARY BASED ON SITE CONDITIONS.

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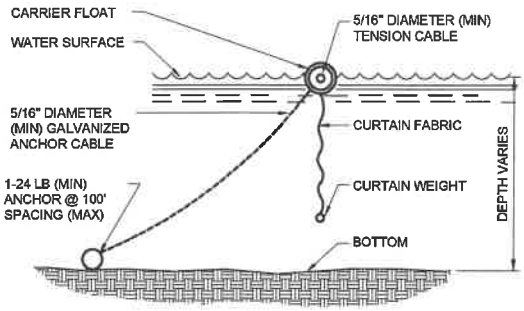
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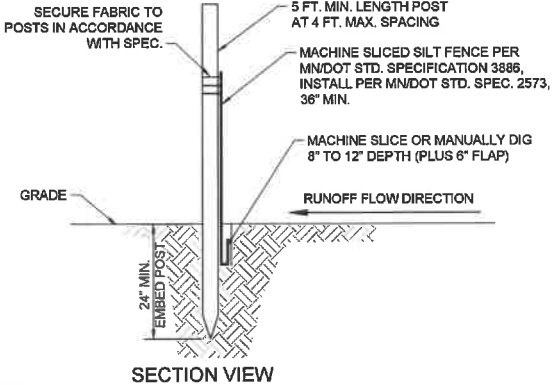
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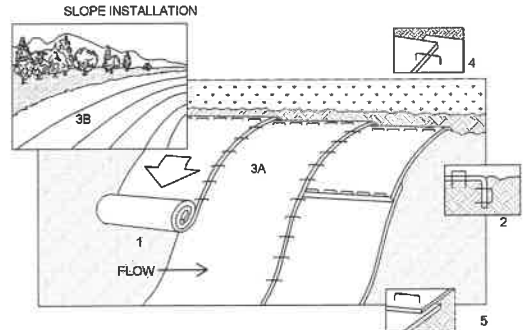
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Appendix E

Partner Commitments

Placeholder Page for USFWS Letter of Funding Commitment

MINUTES

North Dakota State Water Commission Bismarck, North Dakota

April 9, 2019

The North Dakota State Water Commission (State Water Commission or Commission) held a meeting at the State Office Building, Bismarck, North Dakota, on April 9, 2019. Governor Burgum called the meeting to order at 1:01 p.m., and requested Garland Erbele, State Engineer, and Chief Engineer-Secretary to the State Water Commission, call the roll. Governor Burgum announced a quorum was present.

STATE WATER COMMISSION MEMBERS PRESENT:

Governor Burgum, Chairman
Doug Goehring, Commissioner, ND Department of Agriculture, Bismarck
Katie Andersen, Jamestown
Michael Anderson, Hillsboro
Richard Johnson, Devils Lake
Leander McDonald, Bismarck
Mark Owan, Williston
Matthew Pedersen, Valley City
Jason Zimmerman, Minot

OTHERS PRESENT:

Garland Erbele, State Engineer, and Chief Engineer-Secretary, State Water Commission
State Water Commission Staff
Jennifer Verleger, General Counsel, Attorney General's Office
Approximately 50 people interested in agenda items.

The meeting was recorded to assist in compilation of the minutes.

CONSIDERATION OF AGENDA:

The agenda for the April 9, 2019, State Water Commission meeting was presented; there were no modifications.

CONSIDERATION OF DRAFT MINUTES FOR FEBRUARY 14, 2019, and MARCH 14, 2019, SUBCOMMITTEE MEETING MINUTES:

The draft minutes for the February 14, 2019, State Water Commission meeting and March 14, 2019, subcommittee meetings were reviewed. There were no modifications.

It was moved by Governor Burgum, seconded by Commissioner Anderson, and unanimously carried, that the minutes for February 14, 2019, and March 14, 2019, subcommittee meetings be approved as presented.

STATE WATER COMMISSION FINANCIAL REPORTS:

The allocated program expenditures for the period ending February 28, 2019, were presented and discussed by David Laschkewitsch, Director of Administrative Services. The total expenditures were within the authorized budget amounts.

The Project Summary for the 2017-2019 Biennium, **APPENDIX A**, provided information on the committed and uncommitted funds from the Resources Trust Fund and the Water Development Trust Fund. The final summary for projects showed approved projects totaling \$660,585,359 with expenditures of \$285,064,246. A balance of \$20,893,968 remains available to commit to projects in the 2017-2019 biennium.

The oil extraction tax deposits into the Resources Trust Fund total \$287,050,417 through March 2019 and are currently \$64,439,905 or 28.9 percent above budgeted revenues.

Deposits received for the Water Development Trust Fund total \$23,874,965 through March 2019 and are currently \$14,874,965 above the budget revenues of \$9,000,000. The large increase was due to a settlement agreement between the state and the major tobacco companies over enforcement of the 1998 Tobacco Master Settlement agreement. The next scheduled deposit is April 2019 and anticipated to be \$9,000,000.

David introduced Heide Delorme. Heide will join the State Water Commission April 22 as Director of Administrative Services. David retires from this position April 30 after 35 years of service to the State of North Dakota.

LEGISLATIVE UPDATE

Garland Erbele provided a brief update on House Bills 1085, 1320, and Senate Bills 2139, 2090, 2362, and 2020.

VALLEY CITY - \$480,283 **(SWC Project No. 1504-08)**

Valley City requested cost-share assistance for the Permanent Flood Protection Erosion Sites project. In 2009 Valley City encountered a record flood and a near record flood in the 2011. Repeated flooding eroded the natural vegetation that supported the river banks at the erosion sites. Without the natural vegetation, the erosion has accelerated during non-flooding years.

The proposed project would armor two erosion sites by utilizing riprap within the channel and seeding. The projects would consist of earthwork, fabric, riprap, and erosion control items. Permanent flood protection is not planned in these areas for several years; however, the erosion control is needed to ensure emergency measures are implemented in the interim. The estimated construction cost is \$600,354. The funding request included construction, construction engineering, and permitting of the project areas. Valley City requested 80 percent cost-share, or \$480,283, for construction and construction engineering costs of the project. The cost-share request is attached as **APPENDIX B**.

Secretary Erbele recommended the State Water Commission approve the request of Valley City for state cost-share at 80 percent at an amount not to exceed \$480,283. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

It was moved by Commissioner Goehring and seconded by Commissioner Johnson that the State Water Commission approve state cost-share at 80 percent at an amount not to exceed \$480,283. The approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Zimmerman, Goehring, and Governor Burgum voted aye. Commissioner Pedersen abstained. There were no nay votes. Governor Burgum announced the motion carried.

MINOT SYSTEM WIDE IMPROVEMENT FRAMEWORK (SWIF) - \$214,279 **(SWC Project No. 2107-02)**

On June 22, 2017, the State Water Commission originally approved funding for Minot's 2017 levee repair, bank stabilization, and snagging and clearing project which included improvements necessitated as part of the SWIF process for the existing flood control system. Bids for the construction of the project came in under the engineer's original estimate, and Minot requested the unused funds of \$368,778 be reallocated to additional SWIF-related efforts which was approved on June 14, 2018. On October 11, 2018, the State Water Commission approved an additional \$387,433 for the project, totaling \$756,211 in cost-share funds. The cost-share for the project is 50 percent for eligible bank stabilization portions and 60 percent for eligible flood control portions.

Minot requested an additional \$214,279 for cost-share funding to complete the project. The new cost-share total would be \$970,490 in state funds. The cost-share request is attached as **APPENDIX C**.

Secretary Erbele recommended the State Water Commission approve the request of Minot for additional state cost-share at an amount not to exceed \$214,279. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman that the State Water Commission approve the request of Minot for additional state cost-share at an amount not to exceed \$214,279. The approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

DEVILS LAKE OUTLET OPERATIONS FUNDING APPROPRIATION - \$2,500,000
(SWC Project No. 416-10)

For the 2017-2019 biennium, \$5,000,000 was budgeted in the State Water Commission's General Water Management Bucket, included in HB 1020, for Devils Lake Outlet Operations. The project has operated on carryover funding from the 2015 - 2017 biennium, and none of the 2017-2019 funds have yet been approved for the project.

The carryover funds are sufficient to cover operation costs for the remainder of this biennium, but they will not be adequate to cover the recently mediated settlements with landowners adjoining the Devils Lake West End Outlet. State Water Commission staff requested obligation of \$2,500,000 of the \$5,000,000 to cover these associated costs.

Secretary Erbele recommended the State Water Commission approve the amount of \$2,500,000 for Devils Lake Outlet Operations, from the funds appropriated by HB 1020 to the State Water Commission for the 2017-2019 biennium.

It was moved by Commissioner Owan and seconded by Commissioner Goehring that the State Water Commission approve the amount of \$2,500,000 for Devils Lake Outlet Operations, from the funds appropriated by HB 1020 to the State Water Commission for the 2017-2019 biennium.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye.

There were no nay votes. Governor Burgum announced the motion unanimously carried.

**BOURET DAM REHABILITATION PROJECT - \$591,750
(SWC Project No. 0531)**

Benson County Water Resource District (District) requested cost-share assistance for the Bouret Dam rehabilitation project. Bouret Dam is located near Minnewaukan. Bouret Dam was originally built by the Works Progress Administration (WPA) on the Sheyenne River in 1939. According to NDCC § 61-16.1-39 and 61-16.1-40, the District is responsible for maintenance of the dam.

Bouret Dam is currently experiencing downstream and structural erosion along with severe cracks at the abutments and separated wing walls. In May 2018, the District completed a feasibility study to determine alternatives for the dam. The District's preferred alternative is removing the existing failing dam and replacing it with an engineered rock ramp. The sponsor indicated the engineered rock ramp would eliminate the existing risk posed by the hydraulic roller, improve river connectivity, enhance recreational opportunities, and reduce the long-term maintenance requirements. The District advanced the project to 90 percent design with cost-share assistance from the State Water Commission.

Construction will begin in fall 2019 or spring 2020. The District owns the land needed for construction. Design is expected to be complete in spring 2019 and construction by fall 2019. The total cost of the Bouret Dam rehabilitation project is \$789,000. The District requested 75 percent cost-share, or \$591,750, for the project. Current State Water Commission policy is to provide 75 percent cost-share assistance to remedy dam safety issues and 40 percent cost-share for recreation projects. In this instance, simply removing the dam would eliminate the threat to public safety, and the rock ramp will provide a recreational benefit. The recommendation was for 75 percent cost-share on the dam removal costs (\$174,000) and 40 percent cost-share on the rock ramp construction (\$223,000). The total cost-share recommendation was \$397,000. The cost-share request is attached as **APPENDIX D**.

Secretary Erbele recommended the State Water Commission approve the request for state cost-share participation in the Bouret Dam rehabilitation project at an amount not to exceed \$397,000. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

It was moved by Commissioner Johnson and seconded by Commissioner Andersen that the State Water Commission approve 75 percent cost-share on the dam removal costs (\$174,000) and 75 percent cost-share on the rock ramp construction (\$417,750) for total

state cost-share in an amount not to exceed \$591,750. The approval is subject to the entire contents of the recommendation, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

After further discussion, Governor Burgum requested State Water Commission staff to provide Commissioners with updated low-head dam numbers.

KAREY DAM REHABILITATION PROJECT - \$971,325 **(SWC Project No. 1453)**

Hettinger County Water Resource District (District) requested cost-share assistance for the Karey Dam rehabilitation project. Karey Dam is located near New England. Karey Dam was originally built by the Civilian Conservation Corps in 1930 for the primary purpose of irrigation. According to NDCC § 61-16.1-39 and 61-16.1-40, the Hettinger County Water Resource Board (Board) has responsibility for maintenance of the dam.

Under its current condition, the dam poses a risk to public safety as a drowning hazard due to the hydraulic roller. The dam currently faces significant downstream and structural erosion along with severe cracks at the abutments and separated wing walls. The right abutment was washed out during spring 2018 runoff events. In May 2018, the Board completed a feasibility study (30 percent design) to determine alternatives for the dam.

The District's preferred alternative involves removing the existing failing dam and replacing it with an engineered rock ramp. The District indicated the engineered rock ramp will eliminate the risk associated with the existing hydraulic roller, improve river connectivity, enhance recreational opportunities, and reduce the long-term maintenance requirements. The Board has advanced the project to 90 percent design level with cost-share assistance from the State Water Commission. Construction will begin late fall 2019 or spring 2020.

The total cost of the Karey Dam rehabilitation project is \$1,295,100. The District requested 75 percent cost-share, or \$971,325, in state funds for the project. Current State Water Commission policy is to provide 75 percent cost-share assistance to remedy dam safety issues and 40 percent cost-share for recreation projects. In this instance, simply removing the dam eliminates the threat to public safety, and the rock ramp would provide a recreational benefit. The recommendation was for 75 percent cost-share on the dam removal costs (\$211,000) and 40 percent cost-share on the rock ramp construction (\$406,000). The total cost-share recommendation was \$617,000. The cost-share request is attached as **APPENDIX E**.

Secretary Erbele recommended the State Water Commission approve the request by the District for state cost-share participation in the Karey Dam rehabilitation project at an amount not to exceed \$617,000. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits and the availability of funds.

It was moved by Commissioner McDonald and seconded by Commissioner Pedersen that the State Water Commission approve 75 percent cost-share on the dam removal costs (\$211,000) and 75 percent cost-share on the rock ramp construction (\$760,325) for total state cost-share in an amount not to exceed \$971,325. The approval is subject to the entire contents of the recommendation, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

GOSCHKE DAM - \$44,010
(SWC Project No. 0849-01)

Pembina County Water Resource District (District) requested cost-share assistance for the Goschke Dam Spillway Gate Retrofit project. Goschke Dam is located near Cavalier. The Dam is in need of a new gate/operator, as well as platform and trash rack. The District requested the gate portion of the requested cost-share be expedited due to the importance of the gate being replaced before this spring's runoff. The State Engineer approved the gate replacement cost-share of \$75,000 on March 11, 2019. This pending request is for the replacement of the platform and trash rack. The updated total cost of the project after bid was \$158,680 which is eligible for 75 percent cost-share as a dam safety project with a cost-share of \$119,010. The request is for the remaining costs of the project which include the replacement of the platform and trash rack for \$58,680 resulting in additional cost share of \$44,010. The cost-share request is attached as **APPENDIX F**.

Secretary Erbele recommended the State Water Commission approve the request for state cost-share participation in the Goschke Dam at an amount not to exceed \$44,010. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

It was moved by Commissioner Goehring and seconded by Commissioner Johnson that the State Water Commission approve state cost-share at 75 percent, not to exceed \$44,010. The approval

is subject to the entire contents of the recommendation, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

UPPER MAPLE RIVER DAM - \$82,320
(SWC Project No. 1878-02)

Maple-Steele Joint Water Resource District (District) requested cost-share assistance for Upper Maple River Dam outlet channel improvements. Upper Maple Dam is located near Hope. A preliminary design for the project was completed. The channel downstream of the principal spillway structure has experienced significant erosion during recent high-flow events. The project would include reconstruction of the failed side slopes, remove unsuitable material, and reinforce the channel with rip rap to protect the dam from future erosion from high-flow events. The District owns the land needed for construction. Design will be completed in spring 2019 and construction completed in fall 2019. The estimated cost of \$147,000 includes construction, engineering, and other related project costs.

The total cost of the Upper Maple River Dam outlet channel improvements project is \$147,000. The District requested 75 percent cost-share as a dam safety project. However, when the dam was originally constructed approximately three to four years ago, the cost-share percentage for the project was 60 percent as a flood control project. The State Water Commission's initial inspection of the dam, shortly after construction was finished, noted the lack of adequate rip-rap at the outlet of the principal spillway. Therefore, the recommendation is to approve cost-share of 60 percent, the same as would have been provided had sufficient rock been placed at the time of the original construction. With contingencies at 10 percent of construction costs and administrative costs ineligible, the cost-share would be \$82,320. The cost-share request is attached as **APPENDIX G**.

Secretary Erbele recommended the State Water Commission approve the request for state cost-share participation in the Upper Maple River Dam outlet channel improvements at an amount not to exceed \$82,320. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

It was moved by Commissioner Zimmerman and seconded by Commissioner Goehring that the State Water Commission approve state cost-share at 60 percent, not to exceed \$82,320. The approval

is subject to the entire contents of the recommendation, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

SOUTHWEST PIPELINE PROJECT (SWPP) – AWARD OF CONTRACT FOR TRANSFER OF OWNERSHIP STUDY
(SWC Project No. 1736-99)

Based on the direction provided during the February 14, 2019, State Water Commission meeting, State Water Commission staff met with Apex Engineering Group and the project team to negotiate a cost for the SWPP transfer of ownership study. Multiple meetings were held to discuss the scope of the various tasks identified in the Request for Proposal. The project team was also requested to provide a cost for the study divided into two phases.

Phase 1 included the scope of services required to determine the merits and demerits of the state divesting the ownership of the SWPP and the resulting impact to the state, Southwest Water Authority (SWA), and SWPP users. Completing a comparative analysis of the different funding models used by other regional water systems in North Dakota was included as an optional item in Phase 1. Phase 2 included the scope of services required to define the processes and estimate the costs required to transfer ownership of SWPP from State Water Commission to SWA.

The total cost for Phase 1 which included the comparative analysis of different funding models task is \$176,579. The cost for Phase 1 without the comparative analysis is \$127,143. The cost for Phase 2 is \$141,495. Work on Phase 2 would wait until it is determined if ownership of SWPP should be transferred.

The total cost to complete all the tasks together is \$308,344, and the study would be completed by December 2019. The total cost to complete the tasks with Phase 1 first, followed by Phase 2 is \$318,074. The schedule showed the final report for Phase 1 and Phase 2 completed by December 2019 and June 2020 respectively. State Water Commission staff reviewed the proposed budget along with rate sheets provided by the project team, and believe the costs are appropriate given the scope of work.

Included as **APPENDIX H** are tables with the different tasks, scope, and costs for Phases 1 and 2 discussed above, the draft scope of services, and schedule to complete the study with all tasks awarded together and schedule to complete Phase 1 of the study followed by Phase 2.

Two options for the Commission included 1) award the contract for all tasks for a total of \$308,344, and 2) award the contract for Phase 1 with or without the comparative analysis. The award of Phase 1 would include an option to add Phase 2 at a later date based on results of Phase 1.

There was additional discussion regarding the importance of the comparative analysis, and staff were directed to include a comparison of the various governance models as part of the scope for this task.

After discussion, the following motion was made:

It was moved by Commissioner Pedersen and seconded by Commissioner Owan that the State Water Commission award the contract to Apex Engineering Group to complete the transfer of ownership study proposed in Phase 1 with comparative analysis in the amount of \$176,579.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

RED RIVER VALLEY WATER SUPPLY PROJECT (RRVWSP) PERMIT #1416A:

In 1967, State Engineer and Secretary to the State Water Conservation Commission, Milo Hoisveen, granted the U.S. Bureau of Reclamation Water Permit #1416 that allocated 3,145,000 acre-feet annually from the Missouri River for the Garrison Diversion Unit. At the time, it was the single largest water right ever issued in the United States.

In 1986, as a result of the Garrison Diversion Reformulation Act, State Engineer Vern Fahy split Permit #1416 into two parts: #1416, and #1416A and assigned Permit #1416A to the State Water Commission. Permit #1416 kept 1,212,348 million acre-feet annually and 1,932,652 million acre-feet annually went to Permit #1416A.

In 1999, Permit #1416A was split again and assigned 15,000 acre-feet annually to Permit #1416A-01 in the name of the State Water Commission – Northwest Area Water Supply (NAWS) project.

Garrison Diversion Conservancy District (GD CD) is moving forward with planning and construction of the RRVWSP. GD CD requested 120,000 acre-feet of water from the Missouri River using State Water Permit #1416A. The original request is attached as **APPENDIX I.**

If the request is approved, the State Engineer would follow standard operating procedures found in NDCC 61-04 and NDAC 89-03 to split and assign the requested quantity of water into the name of GDCD. A statutory procedure would then be followed whereby the approved point of diversion would be moved to a location south of Washburn identified by GDCD as the intake location on the Missouri River.

Secretary Erbele recommended the State Water Commission approve 120,000 acre-feet per year at a rate of 165 cubic feet per second from State Water Commission Water Permit #1416A be assigned to the GDCD for the purpose of supplying water to the RRVWSP from the Missouri River.

After discussion, the following motion was made:

It was moved by Commissioner Zimmerman and seconded by Commissioner Pedersen that the State Water Commission approve 120,000 acre-feet per year at a rate of 165 cubic feet per second from State Water Commission Water Permit #1416A be assigned to the GDCD for the purpose of supplying water to the RRVWSP from the Missouri River.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

ECONOMIC ANALYSIS (EA) AND LIFE CYCLE COST ANALYSIS (LCCA) POLICY DEVELOPMENT

Pat Fridgen, Director of Planning and Education, discussed legislation passed by the North Dakota Legislature in 2017, that created NDCC 61-03-21.4 requiring the State Engineer to: *“develop an economic analysis process for water conveyance projects and flood-related projects expected to cost more than one million dollars, and a life cycle analysis process for municipal water supply projects. When the State Water Commission is considering whether to fund a water conveyance project, flood-related project, or water supply project, the State Engineer shall review the economic analysis or life cycle analysis, and inform the State Water Commission of the findings from the analysis and review.”*

Guidance documents and fillable models for EA and LCCA are completed and were approved by the Commission last summer. It is the expectation of the Legislature that those analysis requirements be implemented by the agency starting with the 2019-2021 biennium beginning July 1, 2019.

Existing Legislation provides little direction in terms of how the results of the EA and LCCA are to be used by the Commission. In addition, it does not appear at this stage of the current Legislative session that the requirements to conduct EA and LCCA are going to be removed. Therefore, language will likely need to be added to the agency's cost-share policy to provide necessary guidance.

At the recommendation of the Finance, Planning, and Budget Subcommittee, State Water Commission staff was directed to discuss before the full Commission. There was discussion of whether or not staff should begin drafting policy language related to EA and LCCA requirements and implementation.

After discussion, it was determined that State Water Commission staff would draft language to place in the cost-share policy based on the statute.

PROJECT UPDATES:

Commission staff provided brief updates on the following projects with the summary updates attached as **APPENDIX J**:

Jon Kelsch, Construction Section Chief, Devils Lake Outlet; Laura Ackerman, Investigations Section Chief, Missouri River and Mouse River; Tim Freije, NAWS Project Manager; and, Sindhuja S.Pillai-Grinolds, SWPP Project Manager.

LEGAL UPDATES:

Jennifer Verleger, General Counsel, Attorney General's Office, provided brief legal updates on State Water Commission and Office of the State Engineer litigation, attached as **APPENDIX K**. Legal updates will continue as a standing agenda item.

ROUNDTABLE UPDATES WITH COMMISSIONERS:

Commissioner Pedersen indicated the permanent flood protection erosion sites project is coming together well with the flood protection project.

Commissioner Johnson indicated the Devils Lake Advisory Board will meet May 9 with Canada and Minnesota. The flood levels in Devils Lake are looking positive.

There being no further business to come before the State Water Commission,
Governor Burgum adjourned the April 9, 2019, meeting at 3:45 p.m.



Doug Burgum, Governor
Chairman, State Water Commission

Garland Erbele, P.E.
North Dakota State Engineer,
and Chief Engineer-Secretary
to the State Water Commission