LAKE AGASSIZ WATER AUTHORITY
Board of Directors Meeting

Fargo City Commission Chambers
Fargo, North Dakota
January 16, 2024

DRAFT AGENDA

10:00 a.m. I. Call to Order & Roll Call – Chair Mahoney

10:01 a.m. II. Introductions – Chair Mahoney

10:02 a.m. III. >**Approval of Agenda** – Chair Mahoney

10:03 a.m. IV. Reading and Consideration of the Minutes – Chair Mahoney

A. **>October 11, 2023, Special Meeting *(Tab A)***

B. **>October 11, 2023, Board meeting *(Tab B)***

C. **>October 26, 2023 Special Meeting *(Tab C)***

10:05 a.m. V. Officer Report – Ken Vein

10:07 a.m. VI. Committee Reports

A. Technical Advisory Committee – Kip Kovar

1. Program Cost Update – Paul Boersma
2. ENDAWS Task Orders – Kip Kovar/Paul Boersma
   a. **>*2250 – McClusky Canal Intake Preliminary Design Services *(Tab D)***
   b. **>*3210 – BWT Plant & Main Pumping Station Preliminary Design *(Tab E)***
   c. **>*4250 – Hydraulic Break Tanks Preliminary Design *(Tab F)***
3. RRVWSP Task Orders – Kip Kovar/Paul Boersma
   a. **>*1520 – Operational Planning, Phase 3 *(Tab G)***
   b. **>*1530 – Project Management Information System Procurement *(Tab H)***
   c. **>*5340 – Trans. Pipeline East, Contract 4, Final Design Serv. *(Tab I)***

B. Financial Advisory Committee – Maureen Storstad

1. **>*2024 LAWA Proposed Budget (Tab J)**
2. ***Proposed 2-Tier Cost Allocation**

11:15 a.m. VII. Red River Valley Water Supply Project Update

A. Construction Update – Kip Kovar

B. >2023-2025 Biennium Work Plan/Budget – Kip Kovar ***(Tab K)***

C. >Work Plan Status Update – Kip Kovar ***(Tab L)***

D. Land Acquisition Update – Kip Kovar

E. >Program Schedule – Merri Mooridian ***(Tab M)***

F. **>*RRVWSP 2024 Work Plan** – Kip Kovar ***(Tab O)***

G. User Outreach Meetings – Steve Burian

11:45 a.m. VIII. Financial Report – Merri Mooridian

A. **>*2023 Budget Analysis Statement *(Tab P)***

1. >Bills Paid ***(Tab Q)***

B. **>*2024 LAWA Membership Dues *(Tab R)***

C. >Summary of Dues and Cost Share Paid ***(Tab S)***

12:00 p.m. IX. Unfinished Business – Chair Mahoney

A. City of Washburn/Rainbow Energy Update

12:05 p.m. X. New Business – Chair Mahoney

A. Associate Members

B. New Websites – Kimberly Cook

12:20 p.m. XI. Adjourn

Bold = Action Item *** = Roll Call Vote**

The following minutes are in draft form subject to review and approval by the LAWA Board of Directors at its next meeting.

23-65

LAKE AGASSIZ WATER AUTHORITY

SPECIAL MEETING
BOARD OF DIRECTORS

City Commission Chambers
Fargo, North Dakota
October 11, 2023

A special meeting of the Lake Agassiz Water Authority (LAWA) board of directors was held at the City Commission Chambers, Fargo, ND, on October 11, 2023. The meeting was called to order by Chair Mahoney at 9:44 a.m.

BOARD MEMBERS PRESENT

Chair Timothy Mahoney
Vice Chair Ken Vein (by video conference)
Director LaVonne Althoff
Director Bill Bohnsack
Director Dave Carlsrud
Director Tom Erdmann
Director Mark Johnson
Director Keith Nilson
Director Jim Schmaltz
Director Travis Schmidt
Alternate Jeremy Schuler for Director Rick Bigwood
Associate Member Bernie Dardis
Secretary Duane DeKrey

Garrison Diversion staff and others attended. A copy of the registration sheet is attached to these minutes as Annex I.

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

WELCOME

Timothy Mahoney, Fargo Mayor and LAWA Chair, welcomed everyone to the meeting and called on John Hoeven, United States Senator, for comments.

REMARKS FROM SENATOR HOEVEN

Senator Hoeven commented on the various water supply projects in North Dakota, including the Red River Valley Water Supply Project (RRVWSP), Eastern North Dakota Alternate Water Supply (ENDAWS), Northwest Area Water Supply (NAWS), etc. and their importance.

Senator Hoeven said it is important to make sure ENDAWS is fully utilized because it saves a quarter of a billion dollars in terms of building out the RRVWSP upfront in addition to saving on annual operating costs.

Senator Hoeven stated the Dakota Water Resources Act (DWRA) will also need to be reauthorized in order to increase the MR&I cost ceiling, which is nearly exhausted. This will provide an additional funding option for the federal cost share.

The federal portion of the $1.16 billion RRVWSP is $454 million. The challenge is to get this in a timely way. The local users and the state are stepping up and paying their share of the project so the federal government needs to get their portion done as well.

INTRODUCTIONS

Board members and special guests around the table were introduced.

Camille Touton, Commissioner, Bureau of Reclamation, provided remarks on behalf of the Bureau of Reclamation (Reclamation), stating the heart of Reclamation is about people, and it is important for her to be here today to learn more about the RRVWSP and the communities the project will serve. Reclamation will continue to work with Senator Hoeven and congress to make sure they have the resources to move these important projects forward.

PRESENTATION ON RRVWSP/ENDAWS

Mayor Mahoney and Kip Kovar, District Engineer, Garrison Diversion, provided a PowerPoint presentation on the RRVWSP. Mayor Mahoney led the history and need for the project. He also provided a project overview and financial overview, concentrating on the benefits and cost savings to the RRVWSP using ENDAWS. Mr. Kovar gave a construction progress report, reviewing the ongoing and completed project segments and explained upcoming segments and contract designs.

Brandon Bochenski, Grand Forks Mayor, stated Grand Forks is concerned about industrial water use. The Grand Forks area is a large producer of value added agriculture. Water is a big piece of that. Grand Forks supports the RRVWSP 100%, and ENDAWS will allow them to deliver water at a much lower cost to the users and constituents.

Bernie Dardis, West Fargo Mayor and LAWA Associate Member, said West Fargo buys water from the City of Fargo. His biggest concern is the affordability of the RRVWSP and the costs that will be incurred by Grand Forks and Fargo, along with their other partners throughout the system. He expressed how grateful we are for the investment made by the state during the legislative session, which is critically important for the RRVWSP. The support of Senator Hoeven also speaks volumes.

Tom Erdmann, Carrington Mayor and LAWA Director, shared his history of the McClusky Canal growing up in that area and the frustration of the local citizens whose land was taken out of production due to construction of the canal. The McClusky Canal and Lonetree Reservoir were supposed to be tremendous assets to the community.

Mayor Erdmann said the option to use ENDAWS is the best news he has ever heard and good news to the people in Sheridan and Wells Counties. They will finally see a benefit come out of the canal system.

Brent Esplin, Missouri Basin Regional Director, Bureau of Reclamation, asked about the prospect of state funding for the RRVWSP.

Andrea Travnicek, Director, Department of Water Resources, answered $180 million was approved by the state legislature in SB 2020, which is the Department of Water Resources funding bill, and $60 million was allocated from the Water Infrastructure Revolving Loan Fund for the local cost share in the 2023-2025 biennium. There is also over $900 million of legislative intent.

Mayor Mahoney added there has also been discussion by the legislative team to bond out like was done by the Fargo/Moorhead (FM) Area Diversion Project, and that would change the time sequence of the bill.

Senator Hoeven said if federal funding would get approved, this would allow the state to bond out and build the project as expeditiously as possible because it would save a lot of money.

Ms. Travnicek added the Department of Water Resources will be working closely with the mayors, Garrison Diversion and the governor going into the next legislative session to determine what the funding package could look like for the RRVWSP. Getting water to the eastern part of the state is a high priority.

Mayor Mahoney summarized the request to the federal government is $454 million for the federal portion of ENDAWS, $90 million of shovel ready ENDAWS construction and an increase in the DWRA MR&I authorization would be needed.

Mayor Mahoney called on all mayors at the table for their comments.

Mayor Erdmann reiterated the impact to the McClusky community when the McClusky Canal was constructed. The area was looking forward to the recreation and irrigation benefits from the Garrison Diversion Unit Project, which did not happen. McClusky and nearby towns have since decreased in size. Carrington has been able to maintain its population base and is a thriving community. The smaller communities with populations under 2,000 are struggling to maintain the population and employment base due to the economy.

Shelly Carlson, Moorhead Mayor, commented Moorhead is a very fast growing community, and Moorhead and several cities on the western side of Minnesota are very interested in the RRVWSP for water resiliency. Even though Moorhead has access to an aquifer, because of water resiliency and the way climate change is happening, it is always beneficial to have an additional second backup. Moorhead is also trying to determine the affordability of the RRVWSP, but they are very supportive of the project.

Travis Schmidt, General Manager, Moorhead Public Service and LAWA Director, said the RRVWSP is a great project, and Moorhead is very interested in it. They, too, are trying to figure out the funding mechanisms. That is the key piece to the growth in Clay County, Moorhead and Dilworth.

Dave Carlsrud, Valley City Mayor and LAWA Director, said the Sheyenne River Valley is the largest basin in the state, and all the water comes through Valley City. Like Fargo, they have drought meetings in the morning and permanent flood protection meetings in the afternoon. When you have flooding in the spring and drought by July, you need something with a fluid operation to keep the water flowing. From a small town, Valley City is very concerned about costs because they do not have the cash flow to handle much. At what point is it an expense for the community, and at what point is it an investment for our city? If the cost to participate in the RRVWSP does not come down, Valley City will not be able to afford it, and they will be

watching the water flow through Valley City when they don't have enough. Federal funding assistance is critical to them.

Mayor Bochenski added, similar to Moorhead, East Grand Forks is on the Minnesota side and they have, for the most part, committed to part of Grand Forks' nomination and funding that as well. They see the need for the RRVWSP from south to north along the valley.

Mayor Dardis said looking at the $454 million eligible for the federal share of ENDAWS, he cannot emphasize enough how critically important that was when meeting with the North Dakota House and Senate leadership in regard to funding the RRVWSP. The question as to how much funding the federal government might provide was asked continuously. If you take a list of the users that have signed up for the project, there are some gaps that need to filled, and it all comes down to affordability. It is crucial we have the federal partner contributing at a level that can bring the Carringtons and the Valley Citys into the project, as well the community he represents. LAWA is very dependent upon the success of the RRVWSP and being a 10-year build. There must be federal funding for the ENDAWS portion of the project.

Mayor Carlsrud also called attention to the cost savings of operation and maintenance costs using ENDAWS, which is a huge factor. If the users have to invest in the project itself, they cannot afford the operating costs.

Senator Hoeven asked if anyone else would like to comment.

Tami Norgard, Vogel Law, commented water that is sold from the McClusky Canal benefits Reclamation due the Repayment Contract, which is a huge federal benefit.

Duane DeKrey, General Manager, Garrison Diversion and LAWA Secretary, stated the groundwater in the state is nearly all appropriated. The Missouri River is the only answer for central and eastern North Dakota. Eastern and central North Dakota are the only parts of the state not covered by a regional water project.

Keith Nilson, LAWA Director, said he is from a rural water system, and their concern is affordability. His area is struggling to keep their population. If the cost to participate in the RRVWSP comes in too high, they will have less people to pay for it. All of the other rural systems are in the same boat.

Jay Anderson, Garrison Diversion Vice Chairman, stated North Dakota will not know the total impact of the RRVWSP until it is up and running. The overall economic impact to the state will be huge.

Senator Hoeven said the DWRA needs to be reauthorized so they have the room. That is important for the state and for the tribes. Given that, they need to work ahead on the funding. This needs to be similar to what was done with the FM Area Diversion Project. The federal funding needs to be obtained and put into place. Then the state and local users can work off that and build the RRVWSP in a way that can be done most cost effectively.

Senator Hoeven added how do you get the users to sign up for the project when the cost is not known, and how can you nail down the cost until the federal funding is put into place. The users need to know this stuff. He asked Reclamation how to move forward with the federal funding.

Mr. Esplin said he has worked for Reclamation for 26 years. The last few years have been rewarding due to funding received through the Bipartisan Infrastructure Law (BIL), addressing rural water projects that have been long, drawn out projects. It takes persistence, and Reclamation has worked hard to make sure that projects in our region and projects in North Dakota and South Dakota competed well. Good progress has been made in getting these projects near completion. His region's budget is around $200 million spread amongst nine western states. There are two parts: getting authorization and appropriations. The challenge is finding a bill that is going to come through.

REMARKS FROM COMMISSIONER TOUTON

Commissioner Touton stated Reclamation is planning for FY2026 at this time. When looking to start the fiscal year for a federal agency, you are planning two years ahead. Knowing the $454 million immediately and also the $90 million shovel ready is helpful because not only are they looking at discretionary funding, they are also looking at BIL funding, which this project competes well for. This is why Reclamation dedicated $77 million to North Dakota alone. That is something they can plan for and have on hand to be able to work towards.

Commissioner Touton said Reclamation needs to look at the $454 million request and work their way backwards so they can see how it competes within all of Reclamation. These projects are important. She recalls projects that were not seeing completion for decades upon decades. With the BIL funding, they are seeing project completions within a decade. Reclamation is committed because they understand what it means to these communities. She thanked everyone for the continued cooperation and reiterated Reclamation's commitment to working with Senator Hoeven and the state on a path moving forward.

Senator Hoeven commented he would like to get RRVWSP leadership back to Washington to meet with the Office of Management and Budget. He would also like to determine a way to obtain BIL funding because it is in the five-year window, and we need to start working on that now.

Mr. Esplin stated as Reclamation is funding these projects, there have been three pots of money. There are regular appropriations, BIL funding and whether congress continues to add funding to your budget for water projects.

Commissioner Touton added it is helpful when projects are shovel ready.

Senator Hoeven said they need to nail down the game plan and coordinate with Reclamation.

Mr. Esplin commented this is an exciting time for him in his career because Reclamation is making progress and getting water to the rural communities. He recognizes the importance of these projects to their communities. He is an advocate for these projects, and he will continue to advocate for them.

CLOSING REMARKS FROM SENATOR HOEVEN

Senator Hoeven thanked everyone for working together and all the work that has been done on the RRVWSP. The assets that are sitting idle waiting to be utilized make for a good story to tell in terms of what can be brought to fruition and capitalized upon.

Mayor Mahoney concluded saying today is, in a sense, a kickoff for the federal part of the RRVWSP. He is excited there were three different options discussed instead of one and

various ways to make this work. In a community with all the climate things going on, resiliency is paramount. If you do not have water, you cannot do it. The RRVWSP is a project we truly need in the state of North Dakota.

The meeting adjourned at 10:47 a.m.

Timothy Mahoney, Chair

Duane DeKrey, Secretary

REGISTRATION

LAWA Special Board Meeting
Fargo Commission Chambers
October 11, 2023

NAME	ADDRESS
Steve Knechle	St. Louis Construction
Emily Groth	The City of Fargo Comms + GA
Michael Kotsch	Senator Cramer's Office
Collin Poolman	Vogel Law Firm
Ben Lien	Sen. Klobuchar
Carson Ouellette	Sen. Smith
KP Kovar	GDCD
Meni Monika	GDCD
Dave Piepkorn	Fargo
Greg Bischof	GDCD
Jay Paul Anderson	GDCD
Michael Nehlinger	City of Fargo
Archie Ingersoll	City of Fargo
DAN PORTLOCK	CITY OF FARGO
Troy Hall	City of Fargo
BRENT ERICKSON	AE2S
Steve Hansen	SEWUD
Jerry Blomeke	Cass RWD.
Brett Brinkman	CRWD
Steve Burian	Burian + Assoc.
Kimberly Cook	GDCD

The following minutes are in draft form subject to review and approval by the LAWA Board of Directors at its next meeting.

23-72

LAKE AGASSIZ WATER AUTHORITY

BOARD OF DIRECTORS

City Commission Chambers
Fargo, North Dakota
October 11, 2023

A meeting of the Lake Agassiz Water Authority (LAWA) board of directors was held at the City Commission Chambers, Fargo, ND, on October 11, 2023. The meeting was called to order by Chair Mahoney at 11:00 a.m.

MEMBERS PARTICIPATING

Chair Timothy Mahoney
Director LaVonne Althoff
Director Rick Bigwood
Director Bill Bohnsack
Director Dave Carlsrud
Director Tom Erdmann (by video conference)
Director Mark Johnson
Director Keith Nilson
Director Jim Schmaltz
Director Travis Schmidt
Associate Member Bernie Dardis
Secretary Duane DeKrey

MEMBERS ABSENT

Vice Chair Ken Vein
Associate Member Jim Moe
Associate Member Brett Lambrecht
Associate Member Carol Siegert

Garrison Diversion staff and others attended. A copy of the registration sheet is attached to these minutes as Annex I.

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

APPROVAL OF AGENDA

Motion by Director Nilson to approve the board meeting agenda. Second by Director Johnson. Upon voice vote, motion carried.

CONSIDERATION OF MINUTES

Motion by Director Althoff to approve the July 13, 2023, LAWA Board minutes as distributed. Second by Director Bohnsack. Upon voice vote, motion carried.

OFFICER REPORT

None

COMMITTEE REPORTS

Technical Advisory Committee Operational Planning Subcommittee

Dan Portlock, Chair, LAWA Technical Advisory Committee Operational Planning Subcommittee (TAC OPS) reported the subcommittee met on September 18. Mr. Portlock reported the subcommittee has been working on the operational plan for each biennium of the Red River Valley Water Supply Project (RRVWSP). The operational planning has been categorized into five main headings: 1) operations and assumptions, 2) project governance, 3) water supplies, 4) pipeline and reservoir operations and 5) water accounting. Examples of items the subcommittee will be working on are different drought phases, green-to-red monitoring dashboard, supporting Lake Ashtabula water control manual updates and creating water accounting software.

Mr. Portlock said the subcommittee also discussed asset management and framework for the asset management system. The framework asset management system has been developed, and the subcommittee plans to start working on the details with several expected outcomes. As a part of this, there will be an operational plan phase three task order for 2023-2025 to be presented to the LAWA board in January.

Overviews were also provided to the subcommittee on construction activities and the preliminary pumping and treatment system design efforts.

RED RIVER VALLEY WATER SUPPLY PROJECT UPDATE

Work Plan and Construction Update

Kip Kovar, Deputy Program Manager, RRVWSP Engineering, shared construction photos from Transmission Pipeline, Contract 5B, the completed Missouri River Intake and Discharge Structures.

Mr. Kovar said approximately four and a half miles of the nine-mile pipeline has been installed on Contract 5B.

Missouri River Intake, Screen and Tunnel – Contract 2

Change Order No. 6

Mr. Kovar referred to Change Order No. 6 included with the meeting materials, which is for closing out the Missouri River Intake project. The change order shows adjustment for the final completion date, as well as adjustment of unit price item quantities to correspond with actual work completed, which results in a $1,466,450 reduction in the total contract price. He asked for the committee's approval on Change Order No. 6.

Mr. Kovar added the original contract price was $18,896,900. There have been six change orders approved over the last two years, ending with a contract price of $19,444,165.

Motion by Director Carlsrud to approve RRVWSP Missouri River Intake Screen Structure and Tunnel, Contract 2, Change Order No. 6, resulting in a decrease of $1,466,450 to the contract price. Second by Director Schmaltz. Upon roll call vote, the following directors voted aye: Althoff, Bohnsack, Carlsrud, Erdmann, Johnson, Mahoney, Nilson, Schmaltz and Schmidt. Alternates voting aye: Schuler. Those voting nay: none. Absent and not voting: Vein. Motion carried.

Transmission Pipeline East, Contract 5D

Bid Tabulation Summary - - Mr. Kovar informed the board the bid opening for RRVWSP Transmission Pipeline East, Contract 5D, took place on September 7, 2023. A total of four bids were received: 1) Carstensen Contracting, Inc., 2) Oscar Renda Contracting, Inc., 3) Harper Brothers Construction, LLC and 4) Thalle Construction, Co., Inc.

Mr. Kovar stated the engineer's estimate was $68,986,800. Carstensen Contracting, Inc. was the apparent low bidder at $61,677,275. A copy of the bid tabulation summary is attached to these minutes as Annex II.

Engineer's Recommendation - - Mr. Kovar referred to the engineer's recommendation letter. Given Black & Veatch's review of the bids and prequalification of Carstensen Contracting, Inc., they are recommending Garrison Diversion award the project to Carstensen Contracting, Inc. A copy of the recommendation letter is attached to these minutes as Annex III.

Notice of Award

Motion by Director Johnson to issue the notice of award and proceed on RRVWSP Transmission Pipeline East, Contract 5D, to Carstensen Contracting, Inc. in the amount of $61,677,275, pending submittal of the contractor's documentation. Second by Director Schmidt. Upon roll call vote, the following directors voted aye: Althoff, Bohnsack, Carlsrud, Erdmann, Johnson, Mahoney, Nilson, Schmaltz and Schmidt. Alternates voting aye: Schuler. Those voting nay: none. Absent and not voting: Vein. Motion carried.

Contractor's Agreement - - Mr. Kovar referred to the contractor's agreement, provided for the board's information. This agreement verifies the contractor will adhere to the items of the bid as well as verifying the plans and specifications. It also certifies and acknowledges the required documentation.

Transmission Pipeline East, Contract 5C

Bid Tabulation Summary - - Mr. Kovar reported bids were opened on September 21, 2023, for Contract 5C, with four bids being received. The base bid was for 72-inch pipe, and an alternate bid was requested for 78-inch pipe. He reviewed the base bids with SJ Louis having the low base bid at $69,135,254. The second lowest base bid was Oscar Renda at $76,663,355, then Thalle Construction at $78,308,327 followed by Harper Brothers at $79,086,646. A copy of the bid tab summary is attached to these minutes as Annex IV.

Mr. Kovar said increasing to a 78-inch pipe size (Alternate No. 1) would cost an additional $2 million to $3.7 million.

Mr. Kovar informed the board SJ Louis chose not to complete the prequalification process so all their qualifications were submitted with the bid documents; whereas, the other three bidders

were already prequalified. This includes minimum requirements, which are things the contractor needed to demonstrate, such as technical competence, project experience, license and security, etc. Other considerations consist of legal, environmental compliance, and safety.

Mr. Kovar said because SJ Louis did not prequalify, it is taking more time to go through the qualifications to assure they are a qualified and responsible bidder. Black & Veatch and Vogel Law Firm are currently in the process of reviewing the minimum requirements. Because of this, a recommendation to award is not being made for the board to approve today.

Mr. Kovar suggested once Black & Veatch and Vogel Law Firm have completed the review of SJ Louis' qualifications, a special LAWA Board meeting by video conference can be held regarding the contract award.

Chairman Mahoney asked if the board could formulate a motion that would approve the contract award to SJ Louis contingent upon a satisfactory evaluation of their qualifications.

Tami Norgard, Vogel Law Firm, stated there is a question as to whether the lowest bidder will qualify. If the LAWA board would like to avoid a special meeting, it could defer the decision to the Garrison Diversion board. The usual process is to bring the information to both boards for approval. Garrison Diversion's board meets next week, and the results of SJ Louis' evaluation should be complete at that time. The LAWA Board could have a virtual meeting or defer to whatever the Garrison Diversion board chooses to do.

John Shockley, Ohnstad/Twichell, suggested a motion authorizing the Garrison Diversion board to approve the bid consistent with the recommendation from Black & Veatch and Vogel Law Firm.

Director Erdmann asked for clarification regarding pipe size.

Mr. Kovar replied it was decided the larger pipe size is not needed at this time. The recommendation will be to award the base bid only.

Motion by Director Carlsrud authorizing Garrison Diversion's board of directors to approve the award of RRVWSP Transmission Pipeline East, Contract 5C, contingent upon the recommendation of the engineering firm and legal counsel and giving deference to the Garrison Diversion board should there be any concerns regarding the contractor's qualifications. Second by Director Nilson. Upon roll call vote, the following directors voted aye: Althoff, Bohnsack, Carlsrud, Erdmann, Johnson, Mahoney, Nilson, Schmaltz and Schmidt. Alternates voting aye: Schuler. Those voting nay: none. Absent and not voting: Vein. Motion carried.

Land Acquisition Update - - Mr. Kovar reported letters were mailed the second week of August to landowners located in the Eastern North Dakota Alternate Water Supply (ENDAWS) section of the RRVWSP. Currently, 50 percent of the right-of-way has been obtained in the Sheridan County area.

Work Plan Update - - Mr. Kovar referred to a copy of the RRVWSP Work Plan Update dated September 8, 2023, which summarizes engineering and construction activities. A copy of the work plan update is attached to these minutes as Annex V.

Mr. Kovar stated design and operations are continuing on the RRVWSP. This evening the Corps of Engineers is holding a public meeting on the water control manual for Lake Ashtabula. He and Steve Burian, Burian & Associates, will attend and plan to express concerns regarding operations of Lake Ashtabula during a drought situation.

Mr. Kovar added the five rural water systems in the northeast part of the state submitted a letter to LAWA and Garrison Diversion asking for assistance in determining their future water supply needs. Meetings have been held with these system managers, as well as a meeting with representatives from the Department of Water Resources (DWR) in an attempt to quantify the amount of water remaining in their aquifer which, in turn, helps these northeast systems determine how much water they will need from the RRVWSP. The hope is to have preliminary answers on aquifer volumes in the northeast area in the next couple of weeks.

Program Schedule - - Merri Mooridian, Deputy Program Manager, RRVWSP Administration, reviewed the 2020-2027 RRVWSP Program Schedule dated September 29, 2023. The schedule focuses on the ongoing construction projects, including substantial and final completion dates.

Planning Level Budget - - Ms. Mooridian referred to the RRVWSP Planning Level Budget dated September 30, 2023. The total combined program budget is estimated at $138.7 million. Actual program expenses are $93.9 million with total outstanding expenses of $44.8 million. Total program efforts are 68 percent complete. A copy of the budget is attached to these minutes as Annex VI.

Ms. Mooridian pointed out the program schedule does not contain items for the 2023-2025 $244 million biennium budget since the contracts have not yet been signed. These will be added once funding is approved and documents are signed.

User Meetings Update - - Mr. Burian commented on the water control manual update for Baldhill Dam. As we work through the update, it is very critical to engage with the Corps of Engineers. They have a solid operating procedure for flood control, but their current operating procedure for drought management does not address some of the things LAWA and Garrison Diversion would like to have included. In addition to the public meeting, we will again be a cooperating agency as part of the water control manual update. This is done by collaborating between Garrison Diversion, Fargo, Grand Forks, Moorhead and Valley City to make sure all these entities are kept up to speed on the update. Regular updates will be made on this topic moving forward.

Mr. Burian provided an update on user engagement. The plan is to obtain local users funding support for the $60 million local cost share through the Interim Finance Agreement Series D. There is also a Project Participation Agreement (PPA), which will ultimately commit users to the project. The goal is to have as many users signed up by the end of 2024 as possible. This will provide the user base when entering the 2025 legislative session.

With that in mind, the Garrison Diversion staff team and the technical team have put together a strategy for re-engaging the local users. This will start with a series of letters. From those letters, there will be a series of phone calls and virtual meetings. Then there will be a series of in-person meetings. The idea is to re-educate the user and work with them on any changes they might like to see, answer any questions the users may have and guide them toward a commitment to Series D and signing the participation agreement by the end of the year.

User Meeting Packet

Mr. Burian referred to the Sample RRVWSP 2023 User Engagement Packet distributed to the board members and reviewed the contents included in the packet.

Mr. Burian said there are five proposed letters, each to different groups of users, to be signed by Chairman Mahoney. He explained who the recipients will be and reasons for each of the letters. Each of the local systems should expect to receive one of these letters along with a user engagement packet with information specific to their individual system.

Ms. Norgard reviewed the Draft RRVWSP Memorandum of Commitment (MOC) included in the packet. The purpose of the MOC is twofold. One is for the user to commit to the RRVWSP and sign Series D, which will accompany the MOC, agreeing to pay for their percentage of the work plan budget for the next two years. The second is for the user to agree to sign the PPA once it is completed. The MOC will be between LAWA, Garrison Diversion and the individual user system. The user will need to indicate how much cubic feet per second (cfs) they will nominate for the purpose of the PPA. It is important to know this information now in order to fine tune the numbers for the actual PPA. There is also a contingency included stating the MOC is only enforceable if 100 cfs is committed in the aggregate.

Shawn Gaddie, Advanced Engineering and Environmental Services Nexus, reviewed Interim Finance Agreement Series D, which will be split into two components; Series D-1 and D-2. Series D-1 is for the $60 million 25 percent local cost share of the $240 million work plan for the 2023-2025 biennium. Series D-1 has been routed to Fargo and Grand Forks and essentially covers just short of $49 million. Series D-2 covers the remaining $11 plus million for the small users.

Mr. Gaddie said the breakout table shown in the user engagement packet is based on the development agreement nominations for the users who previously had water volume nominations in the development agreement. From that, a preliminary allocation calculation percentage was determined showing how the $11 million would breakdown for those users. There could be some movement in those nominations, but the allocation model has the ability to make those adjustments as they occur. There will also be an annual cost outlay specific to the individual user's system showing what the repayment obligations will look like with the Bank of North Dakota.

Operation, maintenance and replacement costs still need to be updated and included in the project costs. At this time, there is a placeholder in the user engagement packet for that information, but it will be included in the final user packet and will attempt to provide a full illustration of the project.

Mr. Burian stated the letters should go out in the next couple of weeks. The user engagement packets, which are more comprehensive to put together and are planned to be done in segments, will probably start going out in mid to late November.

FINANCIAL REPORT

2023 Budget Analysis Statement - - Ms. Mooridian reviewed the Budget Analysis Statement for the period of January 1, 2023, to September 30, 2023, a copy which is attached to these minutes as Annex VII.

Ms. Mooridian stated total income through September is $305,236. Expenses are $354,849.

The total bank balance at the end of March was $448,778.

Motion by Director Schmaltz to approve the Budget Analysis Statement for the period of January 1, 2023, through September 30, 2023. Second by Director Althoff. Upon roll call vote, the following directors voted aye: Althoff, Bohnsack, Carlsrud, Erdmann, Johnson, Mahoney, Nilson, Schmaltz and Schmidt. Alternates voting aye: Schuler. Those voting nay: none. Absent and not voting: Vein. Motion carried.

Bills Paid - - Ms. Mooridian also reviewed the bills paid since the last board meeting to cover insurance, legal fees and the local cost share.

Summary of Membership Dues - - Ms. Mooridian referred to the table illustrating membership dues received. The amount of dues income received for 2023 to date is $30,650.

UNFINISHED BUSINESS

City of Washburn - - Chair Mahoney reported a meeting was held with the Lieutenant Governor regarding the possibility for the City of Washburn to use the Missouri River Intake. The cost would be approximately $7 million. It is presumed a FEMA grant would be approved, but they will not be notified about this until June or July. In the meantime, the mayor of Washburn would like to move forward with design.

The meeting adjourned at 12:41 p.m.

Timothy Mahoney, Chair

Duane DeKrey, Secretary

Annex I
23-79

REGISTRATION

LAWA Board Meeting
Fargo Commission Chambers
October 11, 2023

NAME	ADDRESS
Kimberly Cook	GDCD
Steve Hansen	SEWUD
Brent Erickson	AE2S
Troy Hall	Fargo
Dan Portlock	City of Fargo
Shaw Gaddie	AE2S
Steve Burian	B+A
Dave Piepkorn	Fargo
Greg Bischoff	GDCD
Jay Paul Anderson	GDCD
Collin Poolman	Vogel Law Firm
Kip Kovar	GDCD
Steve Bruechle	St Louis Construction
Merri Mooridian	GDCD

BID TABULATION SUMMARY

Red River Valley Water Supply Project
Transmisson Pipeline East
Sykeston to Carrington, Wells and Foster Counties, ND
Contract 5D, Task Order 5534

Bid Opening 2:00 p.m. CST, Thursday, September 7, 2023

No.	Bidder	Attended Pre-bid Conference	Env 1							Env 2					Bid Total
			Bid Bond Included in the Amount of 5 percent of Bid	Contractor's License or Certificate of Renewal Included	Non-Collusion Affidavit Included and Completed	EJCDC C-451 Qualifications Statement Completed	Meets General Contractor Qualification Requirements	Meets Tunneling Contracor Qualification Requirements	Proposed Subcontractors, Suppliers, and Manufacturers Questionnaire Included and Completed	Acknowledged Addendum No. 1	Acknowledged Addendum No. 2	Acknowledged Addendum No. 3	Acknowledged Addendum No. 4	Acknowledged Addendum No. 5	
1	Thalle Construction	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$82,977,440.00
2	Oscar Renda	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$79,893,740.00
3	Carstensen Contracting	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$61,677,275.00
4	Harper Brothers Construction	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$88,095,345.00*
5															*read as $88,286,505.00
6															
7															
8															
9															
	Engineer's Estimate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	$68,986,800.00

Garrison Diversion Conservancy District
PO Box 140
Carrington, ND 58421
701-652-3194

Kip Kovar, PE
District Engineer / Deputy Director of RRVWSP for Engineering
September 7, 2023

BLACK & VEATCH

Black & Veatch Corporation
8400 Ward Parkway, Kansas City, MO 64114
P +1 913-458-3571 E RonnekampKA@bv.com

September 13, 2023

Garrison Diversion Conservancy District
Red River Valley Water Supply Project
Transmission Pipeline East
Task Order 5534, Contract 5D

BV Project 188972/409653
BV File 55.5534.3

Mr. Duane DeKrey
General Manager
PO Box 140
Carrington, ND 58421

Dear Mr. DeKrey:

This letter provides the bid results and a recommendation of award for the Transmission Pipeline East, Contract 5D project (the Project) to Carstensen Contracting, Inc. (Carstensen). Garrison Diversion Conservancy District held a bid opening at its Carrington Office on September 7, 2023, at 2 p.m. local time. A total of four bids were received; all bids were opened and read aloud. The bid results are as follows:

Table 1 – Bid Tabulation Summary

Contractor	Address	Bid Price (~10 miles of 72" pipe)	Delta Between Bidder and Apparent Low Bidder
Carstensen Contracting, Inc.	Dell Rapids, SD	$61,677,275	--
Oscar Renda Contracting, Inc.	Grapevine, TX	$79,893,740	$18,216,465 or 29.5%
Harper Brothers Construction, LLC	Houston, TX	$88,095,345	$26,418,070 or 42.8%
Thalle Construction Co., Inc.	Hillsborough, NC	$82,977,440	21,300,165 or 34.5%
Engineer's Estimate	Kansas City, MO	$68,986,800	$7,309,525 or 11.9%

Carstensen of Dell Rapids, South Dakota submitted the apparent low bid. Oscar Renda Contracting, Inc. of Grapevine, Texas submitted the apparent second low bid.

EVALUATION OF THE APPARENT LOW BIDDER'S BID

The engineer's opinion of probable construction cost (cost opinion) for the Project prepared by Black & Veatch (the Engineer) was $68,986,800. One bidder had a lower Bid and three bidders had higher Bids than the Engineer's cost opinion. There was a $7,309,525 or 11.9 percent difference between the apparent low bid and the Engineer's cost opinion. The Engineer's cost opinion was $9,174,150 or 14.9 percent lower than the average of the four bids received.

A comparison of the Bids shows a difference of $18,216,456 or 29.5 percent between the low Bid and the second low Bid. Because of this significant difference, the Engineer contacted the apparent low bidder to verify there were no errors made in preparation of Carstensen's bid. Carstensen, the apparent low bidder, confirmed it did not have any errors in its bid and it is standing by its bid of $61,677,275. Bidders were given 24 hours to withdrawal a bid due to a substantiated error, with return of the bid security. Garrison Diversion nor the Engineer received such notice.

Based on discussions with the apparent low bidder following the bid opening, it is the Engineer's opinion that Carstensen has a good understanding of the Project and the key elements thereof. A review of their unit prices indicates a distribution like other bidders. The spread between the low

and second low came down to Carstensen's estimated efficiency and rate of pipe installation. The approximate $18 million difference between the low and the second low is captured entirely in the installed price of the 72-inch transmission pipeline, Bid Item No. 2.

EVALUATION OF THE APPARENT LOW BIDDER'S QUALIFICATIONS

Garrison Diversion undertook a general contractor Prequalification Process earlier this year, which concluded on July 24, 2023. Through this process, seven general contractors were prequalified for the Owner's pipeline projects. Carstensen was among those firms prequalified having successfully demonstrated their qualifications and experience. Hence, a general contractor qualification submittal was not required of Carstensen for the Bid.

As you know, a critical part of the Project is the tunneling work, including installation of two 96-inch casing pipes under wetlands. Due to this fact, a Tunneling Contractor Qualifications Form was included in the specifications requiring the tunneling contractor or subcontractor to have minimum qualifications. Carstensen listed Minger Construction Companies, Inc. (Minger) as its tunneling subcontractor. Minger demonstrated through completion of the required Tunneling Contractor Qualifications Form that it meets minimum specified requirements. This is consistent with past determinations of Minger's qualifications; they were approved as a qualified tunneling contractor on both the Transmission Pipeline East Contract 5A and 5B projects. Minger has successfully completed the 5A tunnel for Garrison Diversion. Minger is currently constructing the 5B tunnel under the Canadian Pacific Railway a mile south and three miles east of Carrington. That work is progressing satisfactorily.

SUMMARY AND RECOMMENDATION

Given the Engineer's review of the bids, the prequalification of Carstensen as a pipeline general contractor for the Red River Valley Water Supply Project, and the Engineer's review of Minger's qualifications as a tunneling subcontractor, Black & Veatch recommends Garrison Diversion award the Project to the low bidder, Carstensen Contracting, Inc. for its Bid of $61,677,275. The Bid is within the Project's biennium budget allocation and below the Engineer's cost opinion. Should you concur with Black & Veatch's recommendation, a Notice of Award will be prepared and forwarded to Garrison Diversion for signature. In addition, conformed copies of the Contract Documents, including the Agreement and required bonds, will be prepared and forwarded to Carstensen for execution.

If you have any questions concerning this Recommendation of Award for the subject project, please contact us.

Sincerely,

BLACK & VEATCH CORPORATION

Paul Boersma
Associate Vice President

BLACK & VEATCH CORPORATION

Kurt A. Ronnekamp
Sr. Project Manager

Enclosures

cc: Ms. Merri Mooridian, GDCD
Mr. Kip Kovar, GDCD
File

BID TABULATION SUMMARY

Red River Valley Water Supply Project
Transmisson Pipeline East
Bordulac to James River, Foster County, ND
Contract 5C, Task Order 5533

Bid Opening 2:00 p.m. CST, Thursday, September 21, 2023

No.	Bidder	Attended Pre-bid Conference	Env 1							Env 2			Base Bid	Additive Bid Alternate No. 1	Total of Base Bid and Alternate No. 1
			Bid Bond Included in the Amount of 5 percent of Bid	Contractor's License or Certificate of Renewal Included	Non-Collusion Affidavit Included and Completed	EJCDC C-451 Qualifications Statement Completed	Meets General Contractor Qualification Requirements	Meets Tunneling Contracor Qualification Requirements	Proposed Subcontractors, Suppliers, and Manufacturers Questionnaire Included and Completed	Acknowledged Addendum No. 1	Acknowledged Addendum No. 2	Acknowledged Addendum No. 3			
1	Thalle Construction	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$78,308,327.00	$3,740,043.00	$82,048,370.00
2	Oscar Renda	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$76,663,355.00	$3,009,230.00	$79,672,585.00
3	Harper Brothers	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$79,086,646.00	$3,310,153.00	$82,396,799.00
4	SJ Louis	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$69,135,254.00	$2,020,483.00	$71,155,737.00
5															
6															
7															
	Engineer's Estimate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	$80,002,065.00	$4,298,900.00	$84,300,965.00

Garrison Diversion Conservancy District
PO Box 140
Carrington, ND 58421
701-652-3194

Kip Kovar, PE
District Engineer / Deputy Director of RRVWSP for Engineering
September 21, 2023

RRVWSP Work Plan Update
September 8, 2023

CONSTRUCTION

Wet Well Construction Contract 1

The project is closed, original contract price $4,989,405.88 with change order 1 and 2 making the final contract price $4,721,446.47.

Pipeline Construction

Contract 5A

The project is closed, original contract price $8,366,201.00, with change order 1 and 2 making the final contract price of $8,393,395.44.

Reclaimed Property

Typical Air Release Manhole

Contract 5B

The original pipe delivery of June 15, 2021, was delayed due to a surface blemish in the steel coil. To date, 6,741 feet have been installed out of the nine miles. High groundwater slowed the pipe installation progress.

For year 2023, contractor has been mobilizing, stripping topsoil, performing a significant amount of dewatering and prepping site for tunneling crew. The first pipe is expected to be installed on June 9.

To date, $14,972,231.08 has been paid on the original contract amount of $45,961,700.00. Change Order No. 1, 2 and 3 has been approved, leaving the current contract price at $44,932,678.24.

Discharge Structure Construction

Final payment has been made. Original contract amount was $1,516,955 plus Change Order No. 1 for $4,929 for a final contract price of $1,521,884.

Missouri River Intake Tunnel and Screen Final Design Contract 2

As the apparent low bidder at $18,896,900, Michels was issued notice of award on June 9, 2021. A subcontractor is currently restoring the property, with seeding occurring this week. To date, $18,198,634.82 has been paid on the original contract amount of $18,896,000.00. Five change orders have been approved for a current contract price $20,910,615.60.

Site Under Construction

Completed Missouri River Intake

DESIGN

The design team is also working with Reclamation and USFWS routing the ENDAWS pipeline through wetland and other various existing easements.

Contract 5D bid opening was held September 7, Contract 5C bid opening September 21 and Contract 6A will be scheduled for 2024.

Red River Valley Water Supply Project
Planning Level Budget

September 30, 2023	Percent Complete	Current Estimate	Actual Expenses	Outstanding Expenses
Conceptual Design Subtotal		**$ 5,302,130**	**$ 5,302,130**	**$ -**
Preliminary Design Subtotal		**$ 10,217,606**	**$ 10,217,606**	**$ -**
Final Design Completed Subtotal		**$ 10,198,949**	**$ 10,198,949**	**$ -**
Financial, Administration, Legal, Completed		**$ 1,397,474**	**$ 1,397,474**	**$ -**
Land Acquistion Completed		**$ 1,593,004**	**$ 1,593,004**	**$ -**
Subtotal Completed		**$ 28,709,162**	**$ 28,709,162**	**$ -**
Financial Modeling/Cost Allocation	90%	$ 1,521,047	$ 1,372,466	$ 148,581
Program Management Information System	93%	$ 113,100	$ 105,434	$ 7,666
Stakeholder Support	99%	$ 398,830	$ 392,874	$ 5,956
Subtotal	**92%**	**$ 2,032,977**	**$ 1,870,774**	**$ 162,203**
Engineering/Land Acquistions				
Missouri River Intake - Screen Structure Design	99%	$ 1,444,000	$ 1,436,627	$ 7,373
Land Acquisition 2019/2021	180%	$ 650,000	$ 1,168,092	$ (518,092)
2019 to 2021 Biennium Program Management Services	100%	$ 166,191	$ 166,191	$ (0)
Project Planning, Finance, Admin, etc.	63%	$ 433,809	$ 273,484	$ 160,325
Final Design Transmission Pipeline - 5b	100%	$ 545,000	$ 545,000	$ (0)
Final Design Transmission Pipeline - 5c & 5d	86%	$ 970,000	$ 831,093	$ 138,907
Final Design Tranmission Pipeline - 6	82%	$ 4,000,000	$ 3,268,825	$ 731,175
Geotech Transmission Pipeline - 7	55%	$ 397,000	$ 219,401	$ 177,599
Acquire Easements	17%	$ 2,919,000	$ 483,906	$ 2,435,094
Admin/Finance/Legal	61%	$ 2,739,677	$ 1,665,508	$ 1,074,169
Financial Modeling/Cost Allocation	97%	$ 528,000	$ 514,216	$ 13,784
Pipeline Extensions	76%	$ 436,000	$ 331,730	$ 104,270
Financial/Legal/Stakeholder	0%	$ 583,093		$ 583,093
Operational Plan Phase 1	100%	$ 106,000	$ 106,000	$ -
Operational Plan Phase 2	77%	$ 430,584	$ 332,267	$ 98,317
PMIS Procurement & Implementation	59%	$ 498,000	$ 295,452	$ 202,548
Contractor Qualifications	54%	$ 158,000	$ 85,843	$ 72,157
ENDAWS Land Services	44%	$ 181,750	$ 80,155	$ 101,595
ENDAWS-Local Portion	64%	$ 309,750	$ 199,532	$ 110,218
Engineering & Land Acquisition Subtotal		**$ 14,756,177**	**$ 10,337,815**	**$ 4,418,362**
Construction				
Pipeline 5A & Trenchless	**93%**	**$ 10,155,978**	**$ 9,418,636**	***$ 737,342***
Construction Contract	100%	$ 8,393,396	$ 8,393,396	*$ (0)*
Bidding Services	100%	$ 75,621	$ 75,621	$ 0
Construction Phase Services	109%	$ 868,145	$ 949,618	$ (81,473)
Contingency	*if needed*	*$ 818,816*	$ -	*$ 818,816*
Discharge Structure	**72%**	**$ 2,436,800**	**$ 1,750,168**	**$ 686,632**
Construction Contract	100%	$ 1,521,884	$ 1,521,884	$ 0
Bidding Services	100%	$ 40,736	$ 40,736	$ 0
Construction Phase Services	97%	$ 193,000	$ 187,549	$ 5,451
Contingency	*if needed*	$ 681,180	$ -	$ 681,180
Missouri River Intake Wetwell	**94%**	**$ 5,690,495**	**$ 5,370,109**	**$ 320,386**
Construction Contract	95%	$ 4,950,907	$ 4,721,446	$ 229,461
Bidding Services	100%	$ 36,662	$ 36,662	$ (0)
Construction Phase Services	100%	$ 612,000	$ 612,000	$ (0)
Contingency	*If needed*	*$ 90,926*	$ -	*$ 90,926*
Missouri River Intake Screen Structure & Tunnel	**89%**	**$ 23,495,616**	**$ 20,957,938**	**$ 2,537,678**
Construction Contract	88%	$ 20,910,616	$ 18,398,635	$ 2,511,981
Construction Phase Services	99%	$ 2,585,000	$ 2,559,303	$ 25,697
Contingency	*If needed*	$ -	$ -	$ -
Pipeline 5B	34%	***$ 51,600,000***	***$ 17,427,494***	***$ 34,172,506***
Construction Contract	34%	$ 44,644,077	*$ 14,972,231*	$ 29,671,846
Construction Phase Services	55%	$ 4,486,000	*$ 2,455,263*	$ 2,030,737
Contingency	*If needed*	$ 2,469,923	$ -	$ 2,469,923
Pipeline 5C				
Pre-Construction Services		**$ 26,825**	**$ 26,825**	$ -
Construction Subtotal	**59%**	**$ 93,405,714**	**$ 54,951,170**	**$ 38,454,544**
Total Program Budget	**69%**	**$ 138,904,030**	**$ 95,868,922**	**$ 43,035,108**

Lake Agassiz Water Authority

2023

For the period of January 1, 2023- September 30, 2023

Income	2023	Actual as 09/30/2023	Balance of Budget
Dues Income	$ 30,000.00	$ 30,650.00	$ (650.00)
Miscellaneous	$ -	$ -	$ -
Cost Share-Interim Finance	$ 580,000.00	$ 274,586.78	$ 305,413.22
Total Income	$ 610,000.00	$ 305,236.78	$ 304,763.22
Expenses			
Dues Expenses	$ 6,500.00	$ 6,310.00	$ 190.00
Accounting	$ 1,000.00	$ -	$ 1,000.00
Directors Expense	$ 500.00	$ -	$ 500.00
Insurance	$ 550.00	$ 461.00	$ 89.00
Construction	$ 60,000.00	$ 200,476.13	$ (140,476.13)
Engineering	$ 320,000.00	$ 31,271.30	$ 288,728.70
Property Acquisition/Easements	$ 150,000.00	$ 56,202.09	$ 93,797.91
Adm/Legal/Financial	$ 141,500.00	$ 60,129.06	$ 81,370.94
Total Expenses	$ 680,050.00	$ 354,849.58	$ 325,200.42
Net Income (Loss)	$ (70,050.00)	$ (49,612.80)	$ (20,437.20)

Account Activity		
Beg. Bank Balance 1-1-2023		$ 498,391.24
Income Received		$ 305,236.78
Total Funds Available		**$ 803,628.02**
Ck#1225 Ohnstad Twichell	$ 2,550.00	
Ck#1226 Garrison Diversion	$ 211,963.04	
Ck#1227 ND Water Coalition	$ 1,000.00	
Ck#1228 ND Water Users Assoc	$ 5,000.00	
Ck#1229 Garrison Diversion	$ 15,375.00	
Ck#1230 Garrison Diversion	$ 32,105.31	
Ck#1231 ND Rural Water System	$ 310.00	
Ck#1232 Garrison Diversion	$ 28,238.74	
Ck#1233 Insure Forward	$ 461.00	
Ck#1234 Garrison Diversion	$ 20,500.00	
Ck#1235 Garrison Diversion	$ 37,346.49	
Total Expenses	**$ 354,849.58**	
Ending Bank Balance		**$ 448,778.44**

The following minutes are in draft form subject to review and approval by the LAWA Board of Directors at its next meeting.

23-88

LAKE AGASSIZ WATER AUTHORITY

SPECIAL MEETING
BOARD OF DIRECTORS

Video Conference
October 26, 2023

A special meeting of the Lake Agassiz Water Authority (LAWA) board of directors was held by video conference on October 26, 2023. The meeting was called to order by Chair Mahoney at 1:00 p.m.

BOARD MEMBERS PRESENT

Chair Timothy Mahoney
Vice Chair Ken Vein
Director LaVonne Althoff
Director Rick Bigwood
Director Bill Bohnsack
Director Dave Carlsrud
Director Tom Erdmann
Director Mark Johnson
Director Keith Nilson
Director Jim Schmaltz
Director Travis Schmidt
Associate Member Bernie Dardis
Secretary Duane DeKrey

Garrison Diversion staff and others attended. A copy of the registration sheet is attached to these minutes as Annex I.

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

RED RIVER VALLEY WATER SUPPLY PROJECT TRANSMISSION PIPELINE EAST

Contract 5C

Paul Boersma, Black & Veatch, addressed the LAWA board members, stating the award for Red River Valley Water Supply Project (RRVWSP) Transmission Pipeline East, Contract 5C, has become complicated. He stated the basic underlying principals and reasoning for making the award recommendation are not that difficult, adding Black & Veatch's recommendation remains unchanged from the recommendation made to the Garrison Diversion board on October 19.

Mr. Boersma added since October 19, there have been a number of letters received from attorneys with a number of points raised. These points will be reviewed today to help LAWA make the best decision in awarding Contract 5C.

Mr. Boersma said LAWA is free to approve or not approve the recommendation made by Black & Veatch.

Tami Norgard, Vogel Law Firm, reminded the board members of their motion at the October 11, 2023, LAWA board meeting deferring the decision to award Contract 5C to the Garrison Diversion board. Under the cooperation agreement between LAWA and Garrison Diversion, generally, Garrison Diversion has the decision making power to award and enter into contracts with input from LAWA. In this case, Garrison Diversion would like LAWA to receive the information in its entirety regarding the award of this contract since some of the information was still under review on October 11 and was not discussed at that meeting.

Ms. Norgard reviewed the underlying principles of the law according to Noth Dakota statute (N.D.C.C. § 48-01.2.07) when awarding public contracts.

Mr. Boersma reviewed the prequalification process that took place over the summer. Eight companies submitted prequalifications for general contracting. Seven of the eight were selected as being prequalified. Prequalifying is not a requirement.

Bid Tab Summary

Mr. Boersma reviewed the bid tabulation summary for Contract 5C, stating SJ Louis had the lowest base bid at $69,135,254, and Oscar Renda was the second lowest at $76,663,355. A copy of the bid tab summary is attached to these minutes as Annex II.

Mr. Boersma reported SJ Louis chose not to complete the prequalification process so all their qualifications were submitted with the bid documents. This includes minimum requirements, which are things the contractor needed to demonstrate, such as technical competence, project experience, license and security, etc. Other considerations consist of legal, environmental compliance, and safety.

Mr. Boersma stated SJ Louis met the minimum technical requirements. Other considerations were:

- In the past five years, has an owner filed a claim against your company in court or in arbitration (amounts greater than $500,000)?
- In the past five years, has your company made a claim against any owner concerning work on a project or payment for a contract filed in court or arbitration (amounts greater than $500,000)?

Black & Veatch and Vogel Law Firm found three significant claims/lawsuits made either by or against SJ Louis for three owners, which qualified under these considerations and should have been disclosed.

Mr. Boersma commented that the existence of claims/lawsuits are not a disqualifier. The concern with SJ Louis is inaccurate representation of their company in the qualifications submitted based upon the responses to the two bulleted questions above.

Mr. Boersma said based on SJ Louis not accurately representing their legal history in their qualifications document, Black & Veatch recommends SJ Louis' qualification be considered nonresponsive, and SJ Louis is not the lowest responsible bidder. Therefore, Black & Veatch recommends against awarding Contract 5C to SJ Louis and instead awarding the contract to Oscar Renda.

Mr. Boersma informed the LAWA board that the Garrison Diversion board met October 19 and approved awarding Contract 5C to Oscar Renda contingent upon approval by the LAWA board.

Chair Mahoney asked for comments from John Shockley, Ohnstad/Twichell, legal counsel for LAWA.

Mr. Shockley said he has spoken with Ms. Norgard and reviewed the case law. Garrison Diversion would be the owner under the contract. Under the cooperation agreement, LAWA's role is either to approve or not approve the action taken by Garrison Diversion or recommend some other course of action.

Mr. Shockley said he concurs with what was represented in the bid specifications. Under the bid specifications, it did require SJ Louis submit the information. It also provided the bidders an opportunity to ask the owner's representative questions regarding any ambiguities in the bid specifications; therefore, if the bidder did have questions regarding how to answer questions, there was ample opportunity provided to the bidder. One of the defining cases in North Dakota law in determining the lowest responsible bidder is a case out of Grand Forks, which was cited in a memo prepared by Vogel Law Firm. Essentially, it allows these sorts of issues to be considered in determining whether or not a bidder is responsible and truthful in their representations.

Mr. Shockley stated from a legal perspective, an owner could certainly make the decision to award to SJ Louis or to omit SJ Louis from consideration. It comes down to a policy decision as to how the boards would like to proceed.

Correspondence Regarding SJ Louis Construction

Mr. Boersma referred to the letter submitted to the LAWA board members from SJ Louis' attorney dated October 23, 2023. A copy of the letter was also included with the board meeting materials.

Mr. Boersma reviewed and addressed each of the questions/challenges posed by SJ Louis.

Engineer's Recommendation

Mr. Boersma stated Black & Veatch stands by its recommendation to award Contract 5C to Oscar Renda. Oscar Renda has been prequalified as a general contractor and has provided valid references. They did not show one successfully completed tunnel in glacial geology with their bid submittal. Oscar Renda was afforded the opportunity to amend that, which they have done.

A copy of Black & Veatch's letter of recommendation dated October 18, 2023, is attached to these minutes as Annex III.

Comments from SJ Louis

Jaime Woods, Chief Financial Officer, SJ Louis, clarified SJ Louis had no issue disclosing legal matters, and there was no intentional deceit.

Steve Kuechle, SJ Louis, stated essentially, SJ Louis is looking for a fair shake on Contract 5C, and he believes they are the right contractor for the job. SJ Louis did not intentionally

leave anything out of their bid. He hopes the board looked through the letter from SJ Louis' attorney and weighed out the contents.

Approval to Award

Chair Mahoney asked what is the recommendation from Garrison Diversion on awarding Contract 5C and how much was budgeted for this project.

Kip Kovar, Deputy Program Manager for RRVWSP Engineering, reported the Garrison Diversion board passed two motions. One to award the RRVWSP Transmission Pipeline East, Contract 5C, in the amount of $76,663,355 to Oscar Renda contingent upon Series D funding approval. The second motion authorized the general manager to move forward with the notice to proceed on Contract 5C pending the submittal of the contractor's documentation and contingent upon LAWA approval.

Mr. Kovar stated he stands by the motions passed by the Garrison Diversion board. He added the RRVWSP program budget for construction on Contract 5C was $59 million.

Mr. Shockley stated if the LAWA board agrees, a motion can be made to concur with the award.

Motion by Director Nilson to concur with the Garrison Diversion Board of Directors on the award of RRVWSP Transmission Pipeline East, Contract 5C, in the amount of $76,663,355 to Oscar Renda. Second by Vice Chair Vein. Upon roll call vote, the following directors voted aye: Vein, Schmidt, Schmaltz, Nilson, Mahoney, Johnson, Erdmann, Carlsrud, Bohnsack, Bigwood and Althoff. Those voting nay: none. Motion carried.

Chair Mahoney stated a lot of lessons were learned on this contract and suggested the program budget be discussed at the next LAWA board meeting.

Director Carlsrud thanked everyone who provided the research on this contract award on behalf of LAWA.

The meeting adjourned at 1:38 p.m.

Timothy Mahoney, Chair

Duane DeKrey, Secretary

Annex I
23-92

REGISTRATION

LAWA Special Board Meeting
Video Conference
October 26, 2023

NAME	ADDRESS
Duane DeKrey	Garrison Diversion
Kip Kovar	Garrison Diversion
Lisa Schafer	Garrison Diversion
Merri Mooridian	Garrison Diversion
Kimberly Cook	Garrison Diversion
Marc Pritchard	Moorhead Public Service
Paul Boersma	Black & Veatch
Bruc Grubb	City of Fargo
Tami Norgard	Vogel Law Firm
Jeremy Schuler	Northeast Regional Water Dist
Steve Burian	Burian & Associates
Nick Suma	Vogel Law Firm
Mike Tweed	Garrison Diversion
Shawn Gaddie	Advanced Engineering
Neal Kelemen	Northwest Pipe
Zoe Zauner	American Pipe
Greg Bischoff	Garrison Diversion
Brent Erickson	Advanced Engineering
John Pennekamp	SJ Louis
Steve Kuechle	SJ Louis
Jaime Woods	SJ Louis
Kurt Ronnekamp	Black & Veatch
Steve Hansen	Southeast Water Users Dist
Jerry Blomeke	Cass Rural Water Users Dist
Todd Feland	City of Grand Forks
Dan Portlock	City of Fargo
Bernie Dardis	Lake Agassiz Water Authority
Troy Hall	City of Fargo
Terry Effertz	Effertz Law Firm

BID TABULATION SUMMARY

Red River Valley Water Supply Project
Transmisson Pipeline East
Bordulac to James River, Foster County, ND
Contract 5C, Task Order 5533

Bid Opening 2:00 p.m. CST, Thursday, September 21, 2023

No.	Bidder	Attended Pre-bid Conference	Env 1: Bid Bond Included in the Amount of 5 percent of Bid	Env 1: Contractor's License or Certificate of Renewal Included	Env 1: Non-Collusion Affidavit Included and Completed	Env 1: EJCDC C-451 Qualifications Statement Completed	Env 1: Meets General Contractor Qualification Requirements	Env 1: Meets Tunneling Contracor Qualification Requirements	Env 1: Proposed Subcontractors, Suppliers, and Manufacturers Questionnaire Included and Completed	Env 2: Acknowledged Addendum No. 1	Env 2: Acknowledged Addendum No. 2	Env 2: Acknowledged Addendum No. 3	Base Bid	Additive Bid Alternate No. 1	Total of Base Bid and Alternate No. 1
1	Thalle Construction	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$78,308,327.00	$3,740,043.00	$82,048,370.00
2	Oscar Renda	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$76,663,355.00	$3,009,230.00	$79,672,585.00
3	Harper Brothers	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$79,086,646.00	$3,310,153.00	$82,396,799.00
4	SJ Louis	X	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	$69,135,254.00	$2,020,483.00	$71,155,737.00
5															
6															
7															
	Engineer's Estimate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	$80,002,065.00	$4,298,900.00	$84,300,965.00

Garrison Diversion Conservancy District
PO Box 140
Carrington, ND 58421
701-652-3194

Kip Kovar, PE
District Engineer / Deputy Director of RRVWSP for Engineering
September 21, 2023

BLACK & VEATCH

BLACK & VEATCH CORPORATION
11401 LAMAR AVE, OVERLAND PARK, KANSAS
913-458-2000 | BOERSMAPM@BV.COM

October 18, 2023

Garrison Diversion Conservancy District
Red River Valley Water Supply Project
Transmission Pipeline East
Bordulac to James River, Foster County, ND
Task Order 5533, Contract 5C

BV Project 188972/415094
BV File 55.5533.3

Mr. Duane DeKrey, General Manager
PO Box 140
Carrington, ND 58421

Dear Mr. DeKrey:

This letter provides the bid results of the bid opening held at Garrison Diversion Conservancy District's Carrington Office on September 21, 2023, at 2 p.m. local time. A total of four bids were received for the Transmission Pipeline East, Contract 5D project (the Project): all four bids were opened and read aloud. The bid results are as follows:

Table 1 – Bid Tabulation Summary

No.	Bidder	Base Bid	Differences Between Low Base Bid	Additive Bid Alternate No. 1	Total of Base Bid and Alternate No. 1	Differences Between Low Base Bid Plus Alternate No. 1
1	SJ Louis	$69,135,254	$0	$2,020,483	$71,155,737	$0
2	Oscar Renda	$76,663,355	$7,528,101	$3,009,230	$79,672,585	$8,516,848
3	Thalle	$78,308,327	$9,173,073	$3,740,043	$82,048,370	$10,892,633
4	Harper Brothers	$79,086,646	$9,951,392	$3,310,153	$82,396,799	$11,241,062
Engineer's Estimate		$80,002,065	$10,866,811	$4,298,900	$84,300,965	$13,145,228

SJ Louis Construction, Inc. of Rockville, Minnesota (SJ Louis) submitted both the apparent low Base Bid and the apparent low Base Bid plus Additive Bid Alternates No. 1. Oscar Renda Contracting, Inc. of Grapevine, Texas (Oscar Renda) submitted the second low bid in both cases. Thalle Construction Company, Inc. of Hillsborough, North Carolina (Thalle) submitted the third low bid in both cases.

Before providing a recommendation, this letter addresses the following considerations:

- Evaluation of the bids,
- Required qualifications for general contracting,
- Required qualifications for tunnel subcontracting, and
- Prequalification process for pipeline general contractors.

EVALUATION OF THE BIDS

A comparison of the Base Bid of the apparent low bidder and second low bidder shows a difference of $7,528,101 or approximately ten percent. In general, the bids fell into two categories – the low bid of SJ Louis and the other three bidders and the Engineer's estimate. While ten percent lower is notable, it is within the range of common bidding variability. The Engineer's opinion of probable construction cost prepared by Black & Veatch was $80,002,065, which was slightly higher than the four bidders. There were no other irregularities found in the apparent low bidder's Bid Form and its bidding documents.

REQUIRED QUALIFICATIONS FOR GENERAL CONTRACTING

To demonstrate a general contractor's qualifications to perform the work contemplated in the plans and specifications, Specification Section 00 45 20 – General Contractor Qualifications Submittal Package required general contractors to have the following minimum qualifications:

- A minimum of 10 years of experience installing large diameter steel pipe.
- At least three successfully completed projects within the last 10 years with these characteristics:
  - Projects must each have been at least 10,000 feet in length.
  - They must each have included installation of 42-inch or larger diameter pipe.
  - Projects must each have included steel pipe handling and installation.

The requirements of the General Contractor Qualifications Submittal Package included in the bidding documents were the same as those developed and required of the pipeline general contractor prequalification process undertaken earlier this year by Garrison Diversion.

REQUIRED QUALIFICATIONS FOR TUNNEL SUBCONTRACTING

In addition, a critical part of the Work is the trenchless crossings. Due to this fact, Specification Section 00 45 21 – Tunneling Contractor Qualifications Form was included in the specifications requiring the tunneling contractor/ subcontractor to have the following minimum qualifications:

1. At least 10 years of experience tunneling using similar equipment to that specified for this Project.
2. Two successfully completed projects within the last 10 years with these characteristics:
   - Must have each been at least 300 feet long,
   - Must have each included installation of 72-inch or larger diameter casing pipe, and
   - Must have each used similar machines to what is required for this project.
3. One successfully completed project in glacial geology within the last 10 years with these characteristics:
   - Must have been at least 300 feet long,
   - Must have included installation of 72-inch or larger diameter casing pipe, and
   - Must have used a similar machine to what is required for this project.

PREQUALIFICATION PROCESS FOR PIPELINE GENERAL CONTRACTORS

Garrison Diversion undertook a general contractor Prequalification Process earlier this year, which concluded on July 24, 2023. Through this process, seven general contractors were prequalified for the Owner's pipeline projects. Three bidders for this project (Oscar Renda Contracting, Thalle Construction, and Harper Brothers Construction) were prequalified having successfully demonstrated their qualifications and experience. Hence, a general contractor qualification submittal was not required of those three bidders.

SJ Louis did not participate in the Prequalification Process, so they were required to submit the same information with their bid that was required of the other general contractors. An evaluation of the qualifications SJ Louis submitted with its bid is provided below.

Evaluation of the Apparent Low Bidder, SJ Louis Construction, Inc.

The required general contractor qualifications had two levels of criteria. The first is minimum required criteria that must be met. These criteria included:

1. Does the Contractor have a minimum of 10 years of experience on steel pipeline projects using similar types of equipment?
2. Has the Contractor completed three projects of at least 10,000 linear feet on 42-inch diameter pipeline in the past 10 years?
3. Has the Contractor's license been revoked in the past five years?
4. Has a surety company completed a project for the Contractor in the past five years because the Contractor was in default?
5. At the time of bid, was the Contractor ineligible to bid on a public works contract in any State?
6. At the time of the bid, has any of the company's officers been convicted of a crime regarding the award or performance of a government contract?

Upon review of the information submitted with the bid, it was determined that SJ Louis met the required 10 years of experience for general contracting (Item No. 1 above). SJ Louis responded "No" to Item Nos. 3, 4, 5 and 6; BV has no available information indicating otherwise.

The apparent low bidder, SJ Louis, provided with its bid a list of four projects to demonstrate it met requirement No. 2. BV subsequently determined, through contact interviews and review of letters from project contacts provided by SJ Louis, that three of the referenced projects met the qualification requirements and one did not. See Table 2 for the evaluation of projects submitted. Three qualifying projects were required by the specifications, so SJ Louis does meet the specified minimum required general contractor qualification requirements.

In addition to the required minimum requirements, the qualifications requested information that would be considered in making an award. Table 3 provides a summary of the additional information that would be considered and BV's evaluation of the submitted materials:

Table 2 – SJ Louis' Referenced Projects for Demonstration of Qualifications

Summary of Qualifications Required	Referenced Project	Engineer's Evaluation of Acceptability
General Contractor Qualifications At least three successfully completed projects within the last 10 years with these characteristics: • Each project must have been at least 10,000 feet in length. • They must have included installation of 42-inch or larger diameter pipe. • Projects must have included steel carrier pipe handling and installation.	1. City of Columbus, OH, Upground Reservoir Project: Engineer was able to verify project information and successful completion with contact provided. 2. City of Gillette, WY; Madison Pipeline Project: Engineer verified technical project information through contact provided. 3. Canadian River Municipal Water Authority, Sanford, TX; Aqueduct Pipe Repairs: Engineer was able to verify project information and successful completion with contact provided. 4. East Kern Water Agency, Palmdale, CA; Antelope Valley Steel Underground Utility Project; Reference was not contacted as project did not meet time requirements.	1. Valid project reference. Project met time, material, size, and length requirements. 2. Valid project reference. Project met time, material, size, and length requirements per a letter previously provided by the City of Gillette City dated February 25, 2022. The Gillette City Attorney's letter of February 25, 2022, indicated the referenced project was completed, work performed by SJ Louis was of high quality, and the project was completed within budget. In a subsequent October 10, 2023, discussion between Attorney Norgard and the Gillette City Attorney, the City Attorney noted the project was not completed on time. However, we do not believe this factor by itself is sufficient to disqualify the project as a reference. 3. Valid project reference. Project met time, material, size, and length requirements. 4. Not a valid project reference. Information submitted by SJ Louis indicates project met size, length, and material requirements; however, the project is outside the 10-year window of September 21, 2013, to September 21, 2023, having been completed in April 2011 per SJ Louis' information.

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Table 3 – Evaluation of SJ Louis' Other Responses in Its Qualifications Package

Evaluation Criteria	SJ Louis Response	BV Evaluation
Was your company in bankruptcy at any time in the past five years?	No	BV has no information to indicate otherwise.
In the past five years, has a stop work order been issued against your company on a construction project?	Yes	BV concurs with the answer provided by SJ Louis, and BV is aware of at least one stop work order that occurred in Waukesha, Wisconsin.
In the past five years, has a claim against your company been filed in court or in arbitration (amounts greater than $500,000).	No	The answer is erroneous based upon a review of public records: 1. Water District No. 1 of Johnson County, Kansas v. S.J. Louis Construction, Inc., Case No. 2:21-CV-02070, Filed 2/9/21, US District Court, District of Kansas. Contracts - STIPULATION OF DISMISSAL 4/8/22. 2. Water District No. 1 of Johnson County, Kansas v. S.J. Louis Construction, Inc., Case No. 21CV00176, Filed 1/13/21, Kansas District Court. Contracts – TERMINATED. 3. Plaintiff North Texas Municipal Water District, Defendants SJ Louis Construction of Texas, Ltd. et. al., Filed 11/25/2019, Collin County District Courts, Collin, Texas.
In the past five years, has your company made a claim against any owner concerning work on a project or payment for a contract filed in court or arbitration?	No	This answer is erroneous based upon a review of public records: 1. Lewis & Clark Rural Water System, Filed 1/7/2020, Plaintiff SJ Louis Construction, Inc., $1.7 million in dispute. 2. Water District No. 1 of Johnson County, Decided 4/30/2021, Court of Appeals of Kansas, Appellant SJ Louis Construction, Inc.
In the past five years, has any insurance carrier, for any form of insurance, refused to renew the insurance for your company?	No	BV has no information to indicate otherwise.
Has a State OSHA cited and assessed penalties against your company for any serious, willful, or repeat violations of its health or safety regulations in the past five years?	No	BV has no information to indicate otherwise.

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Evaluation Criteria	SJ Louis Response	BV Evaluation
Has the federal OSHA cited and assessed penalties against your company for any serious, willful, or repeat violations of its health or safety regulations in the past five years?	Yes – the response identifies one incident.	Information obtained from the OSHA website indicates a more extensive record of OSHA actions than SJ Louis' information and answer suggests: 1. Yankton, SD, 10/12/2018, serious violation with $12,935 penalty assessed by OSHA. 2. Waukesha, WI, 4/6/2021, marked as open, current penalty of $28,131 for two serious violations and two other violations as per OSHA, formal settlement. 3. Mansfield, TX, 6/16/2021, violations removed, and no penalty assessed, formal settlement. 4. New Berlin, WI, 7/30/2021, violations removed, and no penalty assessed, formal settlement. 5. Franklin, WI, 10/22/2021, marked as open, current penalty of $25,918 for two serious violations and one other violations as per OSHA, formal settlement. 6. Franklin, WI, 10/22/2021, marked as open, current penalty of $25,918 for two serious violations and one other violations as per OSHA, formal settlement. 7. Muskego, WI, 10/22/2021, marked as open, current penalty of $23,378 for one serious violation, one repeat violation, and one other violation as per OSHA, formal settlement. 8. Franklin, WI, 4/4/2022, marked as open, current penalty of $3,170 for one other violation as per OSHA, formal settlement.
Has the North Dakota Department of Environmental Quality, EPA or any Air Quality Management Owner or any Regional Water Quality Control Board cited and assessed penalties against either your company or the Owner of a project on which your company was the Contractor in the past 5 years?	No	BV has no information to indicate otherwise.
List your company's experience rating for each of the past five years.	2018 – 0.80 2019 – 0.76 2020 – 0.87 2021 – 0.73 2022 – 0.83	
Within the past five years, was there ever a time when your employees were without workers compensation or state approved self-insurance?	No	BV has no information to indicate otherwise.

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The following observations are made regarding the other information provided by SJ Louis:

- The first general category of other considerations is safety. A review of OSHA violations by SJ Louis in the public record suggests there are more violations than they have reported. However, at the same time, their Experience Modification Rate (EMR) is reasonable by industry standards. Of these two criteria, the EMR is a better representative of their actual safety record. BV considers their safety record, based on the EMR, to be acceptable.

- The second category of other considerations is SJ Louis's record of either having claims being made against it by a project owner or making claims against the project owner. They answered "No" to these questions. In reality, there are claims being made both by project owners against SJ Louis and by SJ Louis against project owners. BV finds this a significant misrepresentation by SJ Louis. Underground construction is inherently risky and recent claims, by or against a construction company, should not by itself be a reason for disqualification. However, misrepresenting the claims speaks to the trustworthiness of a construction company.

In addition to the pipeline general contractor qualifications, bidders were also required to demonstrate tunneling qualifications. SJ Louis is subcontracting the tunneling work to Minger Construction (Minger) per the information shown on Specification Section 00 43 36 - Proposed Subcontractors, Suppliers, and Manufacturers Questionnaire and Section 00 45 21 Tunneling Contractor Qualifications Form each submitted with the bid. Minger has been previously qualified for the tunneling work and has performed all tunneling work to date on RRVWSP transmission pipeline projects.

Article 3 – Qualifications of Bidders of Section 00 21 13 – Instructions to Bidders of the project specifications address the qualifications of Bidders and the required accuracy of information provided on the qualification forms. Specifically, Articles 3.04 and 3.05 state the following:

> "3.04. Bidder shall attest that all information supplied on the qualification forms by the Bidder is true and correct under penalty of perjury.
>
> 3.05. Project references provided by the apparent low Bidder will be contacted to verify information supplied by Bidder is accurate and correct. Any false statements or inaccurate information included in the qualification's forms may deem the Bidder to be non-responsive. Furthermore, false statements on any of the qualification forms will be considered by Owner in the award of this bid and future bids."

Recommended Action. Based on the misrepresentations included in SJ Louis's qualifications submittal discussed above and Article 3 – Qualifications of Bidders, which have been partially excerpted above, SJ Louis is deemed non-responsive, and SJ Louis is not considered the lowest, **responsible** bidder. Therefore, BV recommends against making the award to SJ Louis.

Evaluation of the Apparent Second Low Bidder, Oscar Renda Contracting, Inc.

As noted previously, Garrison Diversion undertook a general contractor Prequalification Process earlier this year. Through this process, general contractors were prequalified for the Owner's pipeline projects. Oscar Renda was among those firms prequalified having successfully demonstrated their qualifications and experience. Hence, a general contractor qualification submittal was not required of Oscar Renda for this bid.

Oscar Renda intends to subcontract the tunneling work to Southland Contracting, Inc. (Southland) per the information shown on Specification Section 00 43 36 - Proposed Subcontractors, Suppliers, and Manufacturers Questionnaire and Section 00 45 21 Tunneling Contractor Qualifications Form each

submitted with the bid. Southland provided a list of five tunneling projects to demonstrate their tunneling qualifications, which are shown in Table 4 below. References for the five Southland projects were contacted: two provided positive responses and one response was troublesome, as it included a tunnel collapse. BV was unable to reach two of the references after multiple attempts. BV subsequently determined two projects met the specification requirements; two qualifying projects were required so Southland met this portion of the qualification requirements.

In addition to the two representative tunneling projects, one additional project reference demonstrating tunneling in glacial geology was required. Criteria and projects submitted by Southland are shown in Table 4. Two project references were located in Texas, one project was in Nevada, one project was in Hawaii, and one project was in Colorado. Glacial geology is not present in any of these states, so none of the five projects submitted by Oscar Renda, as representative projects, met this requirement. Southland does not, therefore, meet the specified tunneling subcontractor qualifications requirements by information submitted with its bid.

Upon advice of Garrison Diversion legal counsel, Vogel Law, and direction from Garrison Diversion management staff, BV reached out to Oscar Renda after the bid to determine if they could provide a tunneling project reference meeting the glacial geology requirements of the Specifications. Oscar Renda subsequently provided information about a project in Mississauga, Ontario, Canada. The name of the project provided is the Hanlan Feedermain and Mississauga City Centre Watermain (Contract 3) project, which was tunneled in shale and soft ground. Upon review of the information provided, including a geotechnical baseline report, BV determined the project met technical requirements of the Tunneling Subcontractor Qualifications Form. In addition, the Owner reference (Region of Peel) contacted by BV provided a positive response of the work completed by Southland. Therefore, the sixth project reference (received after the bid opening) demonstrates Oscar Renda, in conjunction with its tunneling subcontractor, Southland, meets the tunneling qualification requirements.

Recommended Action. Award the Bid to the second low bidder, Oscar Renda Contracting, Inc., as they are a prequalified pipeline general contractor. Their tunneling subcontractor, Southland, has demonstrated its tunneling qualifications meet requirements, and Oscar Renda has no other irregularities with their bidding documents or bid.

Table 4 – Southland Contracting, Inc. Projects for Demonstration of Tunneling Qualifications

Summary of Qualifications Required	Referenced Project	Engineer's Evaluation of Acceptability
Tunneling Qualifications Two successfully completed projects within the last 10 years with these characteristics: 1. Must have been at least 300-ft long, 2. Must have included installation of 72-inch diameter or larger casing pipe, and 3. Must have used similar machines to what is required for this Project. One successfully completed project in glacial geology within the last 10 years with these characteristics: 1. Must have been at least 300-ft long, 2. Must have included installation of 72-inch diameter or larger casing pipe, and 3. Must have used similar machines to what is required for this Project.	1. North Texas Municipal Water District, Wylie, TX; CMAR Garney Companies, Inc.; Segment E – Bois d'Arc East Fork Trinity River. 2. Tarrant Regional Water District, Fort Worth, TX; IPL Section 17 Trinity River Tunnel. 3. City and County of Honolulu, HI; Kaneohe-Kailua Sewer Tunnel Project. 4. Clark County Water Reclamation District, Las Vegas, NV; Paradise Whitney Interceptor Phase 3. 5. City of Greeley, CO; Bellevue Transmission Pipeline North Segment. *6. Region of Peel, Mississauga, Ontario, Canada; Hanlan Feedermain & Mississauga City Centre Watermain (Contract 3).*	1. Valid project reference. The project met length, diameter, and time criteria. Tunneling was not in glacial geology. 2. Invalid project reference. The project met length, diameter, and time criteria. However, initial tunnel collapsed, and work had to be restarted. Tunneling was not in glacial geology. 3. Invalid project reference. The project met length, diameter, and time criteria. Tunneling was not in glacial geology. BV was unable to reach this project reference after multiple attempts, so this referenced project is not accepted. 4. Valid project reference. The project met length, diameter, and time criteria. Tunneling was not in glacial geology. 5. Invalid project reference. The project met length, diameter, and time criteria. Tunneling was not in glacial geology. BV was unable to reach this project reference after multiple attempts, so this referenced project is not accepted. *6. Valid project reference. The project met length, diameter, and time criteria. Tunneling was in glacial geology.* Notes: • None of the five referenced projects the Bidder originally submitted with its Bid were completed in glacial geology, which was a tunneling qualification criterion as identified in column 1 to the left. • *The sixth project listed above and to the left was completed in glacial geology, but the information was submitted after the bid upon the request of Garrison Diversion and BV.*

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BLACK & VEATCH

That concludes our bid evaluation and recommendation of award. If you have any questions concerning this recommendation for the subject project, please contact us,

Sincerely,

BLACK & VEATCH CORPORATION

Paul Boersma
Associate Vice President

BLACK & VEATCH CORPORATION

Kurt A. Ronnekamp
Sr. Project Manager

KAR/la

Enclosure(s):

cc: Mr. Kip Kovar, GDCD
Ms. Tami Norgard, Vogel Law
File

BLACK & VEATCH
Building a world of difference.

ENDAWS Task Order 2250 – Eastern North Dakota Alternate Water Supply
Preliminary Design Services

Task Order Effective Date: February 1, 2024

TASK ORDER EXECUTIVE SUMMARY

REQUEST

Consideration and approval of a preliminary design task order in the amount of $751,031 for preliminary design associated with the McClusky Canal Intake and Pumping Station as part of the Eastern North Dakota Alternate Water Supply (ENDAWS) project. The Task Order advances the appraisal-level design completed under the Bureau of Reclamation's ENDAWS Environmental Impact Statement and Record of Decision. Services will begin in February 2024 and finish by October 2025. These professional services are provided on an hourly basis; the fee is an estimate based on the scope and nature of the work and the 20-month schedule.

TASK ORDER SUMMARY

The services to be provided by the engineering team are fully described in the attached Task Order. The following summarizes each of the major tasks.

Basic Services: The estimated hourly fee and expenses for standard and customary preliminary design, surveying, and environmental services are as follows for a future construction project with an estimated cost of $36 million:

	Fee	% of Const
1) Task Order Management and Administration	$93,294	0.26%
2) Special Project and Third-Party Meetings	$31,710	0.09%
3) Final Site Selection, Site Reconnaissance and Landowner Communication Support Services	$20,523	0.06%
4) Coordination of Land Acquisition, Geotechnical Investigation, and Environmental/Cultural Surveys	$12,213	0.03%
5) Preliminary Design Services	$592,432	01.65%
Totals	$751,031	2.08%

Special Services: There are no unique or specialized services required under this task order.

PROJECT OVERVIEW

A map showing the location of the project is included in the background information of the attached Task Order. This project will be located adjacent to the McClusky Canal, and adjacent to the Biota Water Treatment Plant site near McClusky, North Dakota. Elements of this preliminary design Task Order are:

- Development of a Project Management Plan specific to the Work to keep the Task Order on schedule and on budget,
- Leading Special Project and Third-Party meetings to keep stakeholders apprised of Task Order status and to provide a forum for stakeholder input,
- Review the final site location for the intake and pumping station, including development of a final site selection technical memorandum,
- Coordination between this task order and the Task Order 3210 – Biota Water Treatment Plant & Main Pumping Station Task Order, including
    - Property acquisition and preliminary geotechnical investigation support
    - Environmental/cultural/threatened and endangered species surveys and reports
    - Topographic site plans, and routing necessary utilities to the site

ENDAWS Task Order 2250 – Eastern North Dakota Alternate Water Supply
Preliminary Design Services

Task Order Effective Date: February 1, 2024

TASK ORDER EXECUTIVE SUMMARY

- Preliminary Design to complete permitting, a refinement of system hydraulics, utility coordination, a geotechnical investigation, and modeling such that the spatial location and size of the intake, pumping station size, and necessary utilities are fully defined, and
- Development of an ENDAWS preliminary design report, associated preliminary design drawings, and preliminary Opinion of Probable Construction Cost as the key deliverables.

Black & Veatch Corporation
Professional Services for the Red River Valley Water Supply Project
Under General Agreement dated January 17, 2008

ENDAWS Task Order 2250 – McClusky Canal Intake and Pumping Station Preliminary Design

Effective Date – February 1, 2024

Content of this Task Order is as follows:

I. PROJECT BACKGROUND

1. The Red River Valley Water Supply Project (RRVWSP, the Project) will provide a supplemental water supply to eastern and central North Dakota (ND) in the event of drought conditions in the Red River watershed. The Project as envisioned by the Garrison Diversion Conservancy District (Garrison Diversion, the Owner) will also supply additional water to support industrial development as well as provide an environmental benefit to local rivers during drought conditions by augmenting natural stream flows. The source water will be withdrawn from the Missouri River or the McClusky Canal and conveyed to a new water plant. A multi-county pipeline will then convey flows from the plant to the Sheyenne River. Lake Ashtabula located downstream will provide storage for controlled releases to the Red River Valley. The current focus of the project is to construct the intake at the McClusky Canal and the completion of the pipeline from the McClusky Canal to the Sheyenne River.

2. Professional services for design of the Project will be accomplished through the execution of multiple task orders for design and associated activities as well as for engineering services during construction. This Task Order will be executed under two foundation documents:

A. A Preliminary Design Report (PDR) prepared by Engineer and authorized by Owner under previously executed Task Order.
B. The Eastern North Dakota Alternate Water Supply (ENDAWS) Environmental Impact Statement (EIS).

II. TASK ORDER OBJECTIVES

1. The objective of this task order is to complete a preliminary design for the McClusky Canal Intake and Pumping Station, which will be an approximately 2,400 HP pump station designed to convey 165 cfs of flow. **Figure 1** shows the approximate location and layout of the McClusky Canal Intake and Pumping Station and its relation to the Biota Water Treatment Plant. **Figure 2** shows a conceptual layout drawing of the intake and pump station from the ENDAWS EIS.

2. The U.S. Department of the Interior, Bureau of Reclamation (Reclamation) completed the Eastern North Dakota Alternate Water Supply EIS which resulted in the Record of Decision being signed for the ENDAWS portion of this project. As such, Reclamation is a stakeholder for this project and coordination with them is presumed throughout the effort.

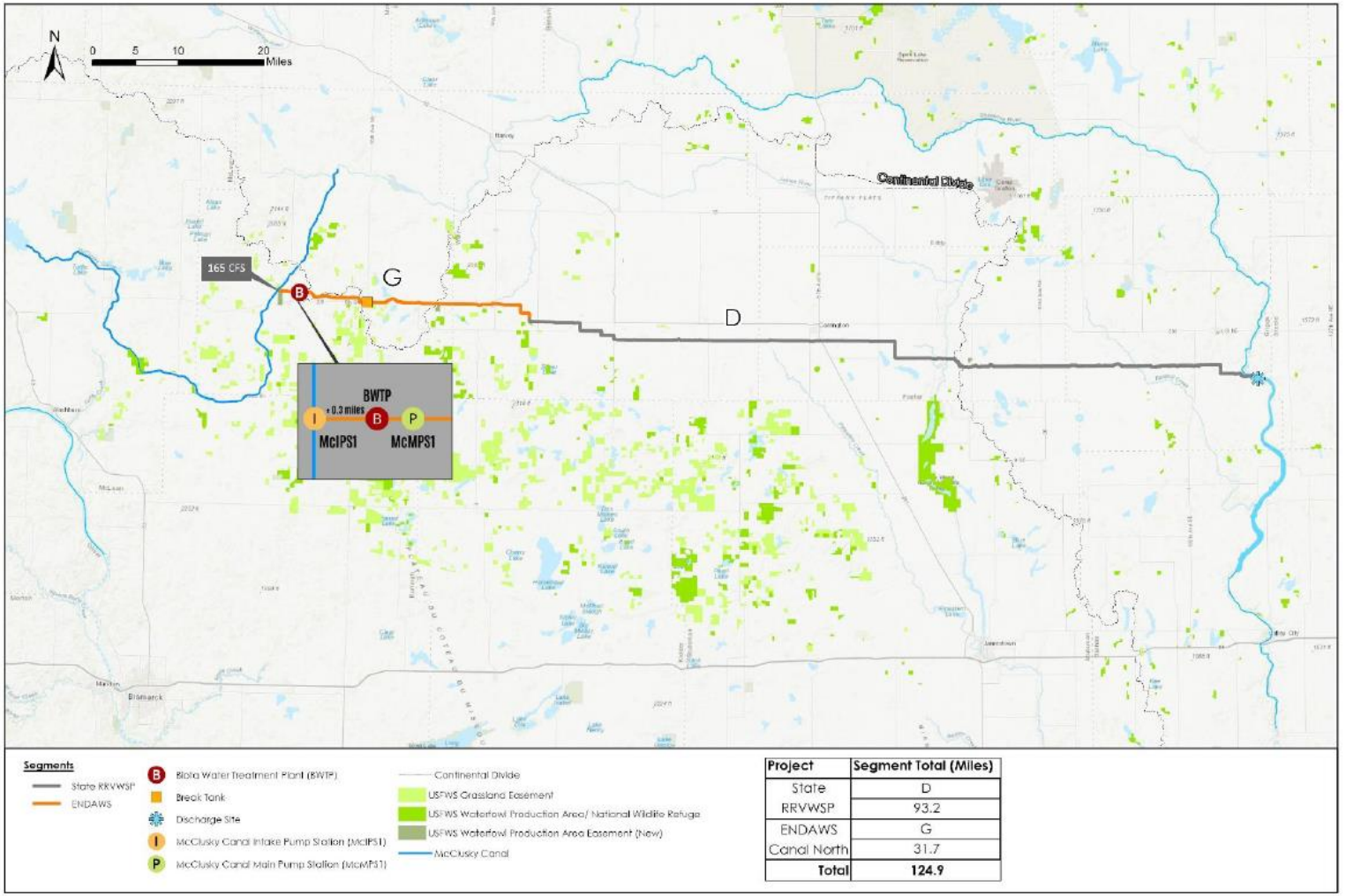
3. Specific objectives for this Task Order are to:
   A. Finalize a site location for the facility. A preliminary evaluation of sites was completed as part of the Reclamation EIS and under Task Order 5280. The presumed site has been identified but the final site selection needs to be determined with Garrison Diversion and the U.S. Bureau of Reclamation. While the EIS shows the McClusky Canal Intake Pumping Station as a standalone facility, a design goal is to integrate the pumping station into the overall site plan of the Biota Water Treatment Plant.
   B. Support Garrison Diversion with the required survey and easements so it can complete land acquisition of the required property.
   C. Complete a preliminary geotechnical investigation to support the preliminary design.
   D. Complete environmental, cultural, threatened and endangered species, and raptor surveys of the property.
   E. Develop topographic site plans from currently available LIDAR information.
   F. Develop a plan for bringing required utilities to the selected property locations.
   G. Develop a Basis of Design Report and the preliminary design drawings outlined in **Attachment A.**
   H. Provide an updated Opinion of Probable Construction Cost (OPCC).

4. Items B, C, D, E, and F listed above will be performed under the ENDAWS TO 3210 Biota WTP & Main Pumping Station Preliminary Design but will be coordinated with this task. Specifically,
   A. Land acquisition assistance to Garrison Diversion through property appraisals, property boundary surveys, landowner contacts, offer/counteroffer(s), and landowner negotiations. Normal property acquisition activities are assumed.

B. A preliminary geotechnical investigation and reporting of the in-situ soil conditions for land-side borings and borings in the McClusky Canal and pump station wet well site.

C. A detailed assessment of the land expected to be acquired for environmental and cultural features as well as the potential for contamination.

D. A site map showing topography that will form the basis for the site layout.



Project	Segment Total (Miles)
State	D
RRVWSP	93.2
ENDAWS	G
Canal North	31.7
Total	**124.9**

Figure 1 - McClusky Canal Intake and Pumping Station Location

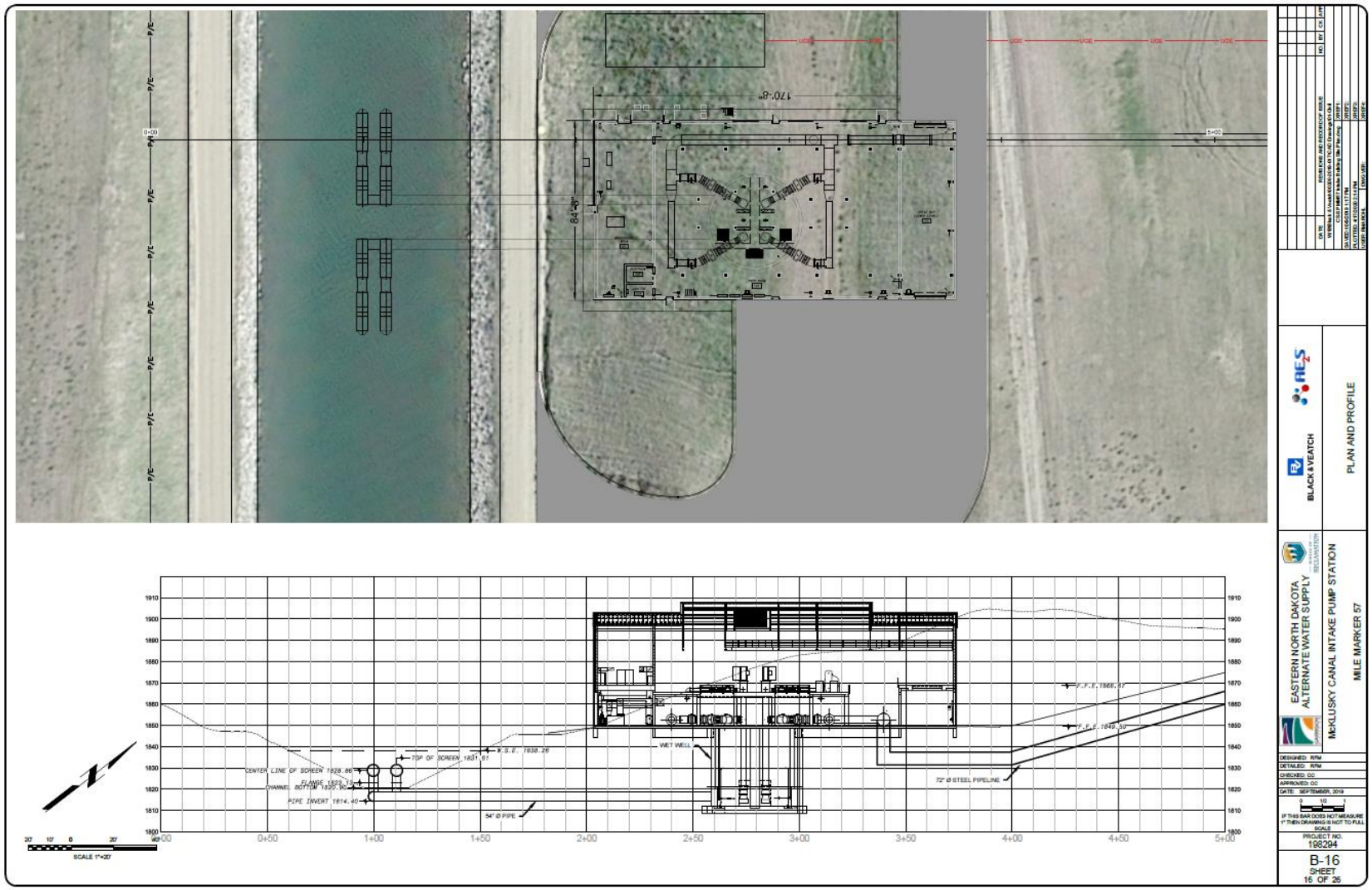


Figure 2 – McClusky Canal Intake and Pumping Station Conceptual Layout

III. GENERAL REQUIREMENTS

1. Under this Task Order, Engineer will provide services in accordance with the Standard Form of Agreement between Owner and Engineer for Professional Services dated January 17, 2008 (Agreement).

2. General Description of Activities. The Basic Services to be performed by Engineer consist of professional design services associated with development of CDs for construction of a conventional intake wetwell adjacent to the McClusky Canal and associated site improvements and access road(s).

3. Work outside Basic and Special Services. Engineer agrees to provide the Basic Services and Special Services identified herein. Work not specifically discussed herein as part of Basic Services or Special Services is considered Additional Services. Additional Services will only be performed with proper separate authorization such as an amendment to this Task Order or a new separate Task Order.

4. Capital Cost Opinions. All opinions of probable construction cost developed will generally follow the recommendations of the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinions' level of accuracy presented by Engineer for the various deliverables will be as noted in subsequent paragraphs of this Task Order under Basic Services.

IV. BASIC SERVICES

Basic Services of this Task Order are organized into major tasks as follows:

- Task 1 – Task Order Management and Administration
- Task 2 – Special Project and Third-Party Meetings
- Task 3 – Final Site Selection and Landowner Communication Support
- Task 4 – Coordination of the Land Acquisition, Geotechnical Investigation, Environmental/Cultural Reports, and Site Survey
- Task 5 – Preliminary Design and OPCC

1. Task 1 – Task Order Management and Administration

This task includes overall management and development of a Project Management Plan specific to the Work. The overall objective of this task is to keep the Task Order on schedule and on budget.

A. Project Management. Engineer will provide management services necessary for execution of the Task Order, including efforts required for proper resource allocation, schedule development and monitoring, budget review and control, Owner coordination, and other standard and customary activities required for timely completion of the Work. Owner coordination will occur through regular project meetings as described in Task 5A.

B. Administration. Perform general administrative duties associated with the Task Order, including general correspondence, day-to-day contact and coordination, administration, and monthly invoicing in a form that is acceptable to the Owner.

C. Management of Subconsultants. Engineer will monitor subcontractor progress, review and approve invoices, oversee adherence to the approved quality assurance/quality control (QA/QC) plan, monitor adherence to document preparation standards, and generally oversee Subconsultants' performance.

2. Task 2 – Special Project and Third-Party Meetings

The overall objective of this task is to keep stakeholders apprised of Task Order status and to provide a forum for stakeholder input. Engineer will prepare an agenda and provide meeting notes documenting discussions and action items. The following meetings are anticipated:

A. Special Project Meetings

i. Task Order Initiation Meeting. Engineer will conduct a Task Order Initiation Meeting with the Owner and Subconsultants to review the overall approach to the Work, the schedule by which the work will be prosecuted, and other relevant coordination and management items necessary for a successful outcome. Another objective of this meeting will be to finalize the approach to right(s) of entry and to reach an agreement on an approach to obtaining the necessary right(s) of entry.

B. Third-Party Meetings

i. Stakeholder Meetings. Engineer will attend and present Project information for one meeting with the Lake Agassiz Water Authority (LAWA) Technical Advisory Committee (TAC).

ii. Design Coordination Meetings. Engineer will schedule and meet with the following agencies. Engineer will provide summary notes of meetings.

(a) Two meetings with the Reclamation in regard to final pump station location.

(b) Two meetings with the local electric utility regarding providing power service.

(c) Meetings with landowners, the Township and the County will be completed under Task Order 3210.

3. Task 3 – Final Site Selection, Site Reconnaissance and Landowner Communication Support

As shown in Figure 1, a general location on the McClusky Canal has been selected for the McClusky Canal Intake and Pump Station. This task includes a site walk with Garrison Diversion and Reclamation to review the final site location for the intake. The site walk will include an environmental professional to identify potential environmental (wetlands, critical habitat) cultural features or pollution liability features that may impact site acquisition. (Note that the

formal environmental and cultural analysis will be completed under a separate task). The site walk will also include identification of potential utilities. A final site selection technical memorandum will be developed on conjunction with Reclamation to supplement the existing EIS. It is presumed the Biota Water Treatment Plant site will be adjacent or nearby the intake so both sites will be reviewed during this trip.

4. Task 4 – Coordination of the Land Acquisition, Geotechnical Investigation, Environmental/Cultural Reports, and Site Survey

As noted above, the actual land acquisition, geotechnical investigation, environmental/cultural reports and site survey will be completed under a separate task order. The purpose of Task Order 4 is to provide coordination between this task order and the task leader of the Biota Water Treatment Plant Task Order. The following products will be provided to this Task Order from work completed under the Biota Water Treatment Plant Task Order:

- All property acquisition support. The intent of this task order is to finalize the site location and the required parcel size. After a parcel is identified, all acquisition work will be done under the Biota Water Treatment Plant Task Order.
- A geotechnical data report with preliminary recommendations for the intake and pump station design. It is expected that additional geotechnical borings will be completed during the final design. At a minimum, it is expected that two soil borings will be completed in the McClusky Canal and one soil boring at the expected location of the pump station wet well.
- Environmental/Cultural Reports. Final environmental (wetlands, threatened/engaged species, raptor surveys, etc.) and cultural reports will be provided to this Task Order documenting any environmental or cultural site constraints.
- Also, a Phase I Environmental Site Assessment Report will be provided to this Task Order. It is assumed there are no pollution liabilities that will need to be addressed on the site.
- Existing topography is available from previous LIDAR surveys. Additional state LIDAR data is available if needed. A CAD file with a site survey with 1-foot contours will be provided for this site.

5. Task 5 – Preliminary Design Phase

The purpose of Preliminary Design is to complete permitting, a refinement of system hydraulics, utility coordination, a geotechnical investigation, and modeling such that the spatial location and size of the intake, pumping station, and necessary utilities are fully defined. Note that the hydraulic efforts described in this task order are related to the sizing of the pump station. The overall hydraulics of the system are being completed under Task Order 5340.

A. Design Team Conference Calls. Engineer will schedule and lead conference calls with the Owner and its team. Calls will be scheduled, and content organized to coincide with other Task Orders for efficient utilization of staff time.

i. Owner Conference Calls (up to 40 calls assuming a 20-month preliminary design phase duration). Engineer will conduct bi-weekly conference calls with the Owner to review overall progress, exchange ideas and information, and coordinate activities.

ii. Task Order Coordination Calls (up to 20 calls). Engineer will plan and take part in monthly coordination conference calls with tasks leaders of other Task Orders to share progress and conclusions such that efforts are well coordinated and not duplicated or unnecessary.

B. Permitting. It is assumed that no permits will be required as this is a preliminary design task order. Any re-zoning that is required will be completed under the Biota Water Treatment Plant Task Order. It is expected that landowner permissions will be required the geotechnical borings and for site access.

C. Hydraulic Modeling Refinement and Wetwell Configuration

i. Engineer will update the intake system hydraulic design developed under previous phases of the Project based on field investigations and more detailed analysis completed during this Preliminary Design. In addition, Engineer will determine requirements, formulate options, and provide a recommended preliminary design for the intake and pumping station wetwell.

ii. Engineer will determine the configuration of the McClusky Canal Intake wetwell. It is expected that the wetwell will follow the design developed for the Missouri River Intake wetwell. Assuming the two wetwells are very similar, no physical modeling is planned for the wetwell. A Technical Memorandum will be completed describing the design basis for the wetwell.

D. Basis of Design Memorandum

i. Draft Basis of Design Memorandum (BDM). A draft BDM will be prepared for the design of the McClusky Canal Intake and Pump Station. Engineer will review the Draft BDM for accuracy and completeness prior to submitting to the Owner for review and comment. The BDM will build upon the work of the previously prepared Preliminary Design Report and ENDAWS EIS. An initial outline of the BDM is included in Attachment A.

ii. Review and Finalize BDM. Engineer will confer with Owner's staff to review the Draft BDM and obtain Owner's comments. Engineer will address Owner comments and develop a Final BDM. The Final BDM will be the document followed by the design team for the immediate wetwell design and in follow-up Task Orders for the intake system final design.

E. Engineer will prepare Preliminary Deliverables. Preliminary drawing development will be completed in parallel with the draft BDM. A preliminary drawing list is included in Attachment A.

i. Document Development. The content of preliminary deliverables in addition to the BDM is as follows:

- General drawings
- Access road drawings
- Site layout drawings
- Intake drawings
- Pipeline drawings
- Wetwell drawings
- Pumping station drawings
- Outline of technical specifications
- Internal quality control review and refinement
- QA/QC plan and log update
- Task Order schedule update

ii. Preliminary Design Review. Attend a virtual meeting or conference call with the Owner to receive and discuss review comments. Document comments received in a log and distributed to stakeholders.

iii. Revise documents as necessary to reflect decisions taken at this level incorporating design modifications into subsequent deliverables.

F. Preliminary Opinion of Probable Construction Cost (OPCC). Engineer will update the OPCC (aka Cost Opinion or Cost Estimate) at the preliminary design submittal after transmittal of the Level 1 deliverable. The cost opinion will be updated commensurate with an AACE Class 3 estimate. The expected accuracy will be -10 to -20 percent on the low end and the expected accuracy on the high end will be from +10 to +30 percent.

V. DELIVERABLES

The following deliverables will be furnished under this Task Order. Documents or deliverables not included in the list below will be provided as Additional Services as authorized by the Owner.

1. Task 1 – Project Management

   A. Monthly invoices

   B. Baseline Schedule

2. Task 2 – Special Project and Third-Party Meetings. Meeting agenda (included with MS Outlook meeting invitations) and minutes (electronic pdf files)

3. Task 3 - Final Site Selection, Site Reconnaissance and Landowner Communication Support

   A. Final Site Selection Technical Memorandum.

4. Task 4 - Coordination of the Land Acquisition, Geotechnical Investigation, Environmental/Cultural Reports, and Site Survey
   A. Land Acquisition Site Plan
   B. Geotechnical Investigation Data Report
   C. Site Environmental and Cultural Report
   D. Site Topographic Map
   E. Phase I ESA

2. Task 5 – Preliminary Design

   A. Meeting/conference call agendas and minutes (electronic pdf files)
   B. Modeling update technical memorandum (electronic pdf file)
   C. Basis of Design Memorandum (draft and final electronic pdf files)
   D. Preliminary Drawings (single hard copy and electronic pdf files, draft and final)
   E. Preliminary Design Owner review comments log (electronic pdf file)
   F. Preliminary cost opinion (electronic pdf file)

3. Special Services

   A. None.

VI. ADDITIONAL SERVICES

The professional services listed below are not included in the scope of this Task Order nor does the fee shown in Article IX include any labor and direct expenses for items identified as Additional Services. Should Owner want to include services listed under Additional Services in Engineer's scope, an amendment to this Task Order, or execution of a separate Task Order with the new scope, will be necessary.

1. The scope assumes any fees required as part of permits will be paid by the Owner.

VII. SPECIAL RESPONSIBILITIES OF OWNER

1. Interim Deliverable Review Requirements. Owner commits to review periods for interim deliverables of no more than 30 calendar days after receipt of deliverables from Engineer. A review meeting will be scheduled and conducted by Engineer no more than 14 calendar days after receipt of Owner review comments, unless a mutually agreed upon date outside this schedule window is selected.

2. Land Acquisition Costs. Fees paid to all property owners necessary to purchase property, easements, or ROEs are the responsibility of the Owner.

VIII. FEE

The total fee for Basic Services provided under this Task Order is $751,031.

A worksheet showing the fee estimate and level of effort by task is included in Attachment B.

IX. PERFORMANCE SCHEDULE

Services of this Task Order will be completed by October 2025.

X. DOCUMENTS INCORPORATED BY REFERENCE AND ATTACHMENTS

1. Standard Form of Agreement between Owner and Engineer for Professional Services dated January 17, 2008 is incorporated by reference.
2. Attachment A – Proposed Outline for the Basis of Design Report and Preliminary Drawing List
3. Attachment B – Engineering Fee Worksheets

XI. ACCEPTANCE

If this satisfactorily sets forth your understanding of our Agreement, please print and sign this document. You should retain one copy for your files and return an electronic copy via email to Paul Boersma (BoersmaPM@BV.com) with Black & Veatch Corporation.

By: _____	By: _____
Duane DeKrey, General Manager Garrison Diversion Conservancy District	Paul Boersma, Associate Vice President Black & Veatch Corporation
Dated: _____	Dated: _____

ATTACHMENT A

PROPOSED OUTLINE FOR THE BASIS OF DESIGN REPORT
AND
PRELIMINARY DRAWING LIST

Proposed Outline for Basis of Design Report

ENDAWS Task Order 2250 – McClusky Canal Intake and Pumping Station Preliminary Design

Garrison Diversion Conservancy District

1. General
    a. Project (or Task Order) Description
    b. Background
    c. Project Scope
    d. Schedule
    e. Site Description
        i. Location
        ii. Datum
        iii. Flood Protection
    f. Documents
        i. Preliminary Drawing List
        ii. Preliminary Specification List
        iii. Supporting Reports and Documentation
        iv. Drafting Standards
        v. Report Organization
    g. Applicable Codes and Standards
2. Facility Requirements
    a. General (Scope)
    b. Site Selection
    c. Land Acquisition
    d. Permitting and Approvals
        i. Federal Permitting Requirements
        ii. State Permitting Requirements
        iii. Local Regulations
    e. Utility Investigations
    f. Field Investigations
        i. Geotechnical
        ii. Phase I Environmental Site Assessment
        iii. Environmental/Cultural
3. Sitework
    a. General
    b. Applicable Codes and Standards
    c. McClusky Canal
        i. General
        ii. Floodplain Elevations
    d. Design Criteria
        i. Roadway and Parking Surfaces
        ii. Preliminary Site Plan
        iii. Site Drainage and Stormwater Management

iv. Site Piping

4. Geotechnical Design Criteria
    a. General
    b. Preliminary Geotechnical Data
        i. Regional Geology
        ii. Site Geology
        iii. Hydrogeology
        iv. Seismicity
        v. Topography
    c. Design Procedures and Assumptions
        i. Soil Conditions
        ii. Bedrock Conditions
    d. Geotechnical Investigation
    e. References
5. Shaft and Tunnel Design Criteria
    a. General
    b. Applicable Codes and Standards
    c. Design Assumptions
        i. Project Layout
        ii. Construction Methods and Construction Sequencing
    d. Design Criteria
        i. Shaft Excavation and Support Methodology
        ii. Tunnel Excavation and Support Methodology
    e. Jacking Pipe for Microtunneling
        i. Steel Pipe
        ii. Reinforced Concrete Pipe (RCP)
        iii. Fiberglass Reinforced Polymer Mortar Pipe (FRP)
        iv. Grouting
    f. Construction Considerations
        i. Construction Sequencing
    g. Risk Evaluation
6. Intake Design Criteria
    a. General
    b. Design Criteria
        i. Intake
        ii. Intake Screens
        iii. Maintenance
    c. Intake Screen Structure
    d. Construction Considerations
7. Process Mechanical Design Criteria
    a. Background
    b. Design Basis
        i. Low Flow Pumping Analysis
        ii. High Flow Pumping Analysis
        iii. Air Compressors
        iv. Transient Analysis

v. Transient Analysis
vi. Pipe Sizing
vii. Pump Selection

8. Facility Descriptions
    a. Wet Well
    b. Lower Level
        i. Drive Bay
        ii. Mechanical Room
        iii. Restroom and Janitor Closet
        iv. High Flow Pumping Discharge
    c. Operating Level
        i. Low Flow Pumping Discharge
        ii. Ari Compressors Receivers
        iii. Traveling Bridge Crane
    d. Upper Level of Drive Bay and Electrical and I&C Room
        i. Drive Bay
        ii. Electrical Room
9. Architectural Design Criteria
    a. General
    b. Applicable codes and standards
        i. Building Codes
    c. Design Criteria
        i. Building Code Analysis
        ii. Architectural Program
        iii. Building Energy Code Analysis
        iv. Methods of Construction
10. Structural Design Criteria
    a. General
    b. Applicable Codes and Standards
    c. Specified Material Parameters
        i. Concrete
        ii. Concrete and Masonry Reinforcement
        iii. Masonry
        iv. Structural Steel
        v. Aluminum
        vi. Fiberglass Reinforced Grating and Structural Shapes
        vii. Structural Coatings
    d. Loading Criteria
        i. Dead Loads
        ii. Live Loads (Floor and Roof)
        iii. Snow Loads
        iv. Wind Loads
        v. Seismic Loads
        vi. Soil, Backfill, and Groundwater
        vii. Equipment and Piping Loads
        viii. Impact Loads

ix. Bridge Crane and Monorail Loads
x. Load Combinations

e. Design Procedures and Assumptions
i. Reinforced Concrete Design
ii. Reinforced Masonry Design
iii. Structural Steel Design
iv. Aluminum Design
v. Geotechnical Design
vi. Flotation
vii. Impact and Vibration Design
viii. Bridge Crane and Monorail Runway Beam Design
ix. Non-Structural Component Design
x. Guardrail, Handrail, Ladder, and Stair Designs
xi. Environmental and Liquid Containing Structures
xii. Building Structure Design
xiii. Structural Analysis

f. Special Inspections

11. Building Mechanical Design Criteria
a. General
b. Applicable Codes and Standards
c. Location & Meteorological Design Criteria
d. Materials
e. Seismic
f. Building Design Requirements
g. Plumbing design
i. Storm Drainage Systems
ii. Sanitary Drainage Systems
iii. Water Piping Systems
iv. Plumbing Fixtures
h. Heating, Ventilation, and Air Conditioning
i. Indoor Design Conditions
ii. HVAC General Requirements
iii. Heating Systems
iv. Ventilation Systems

12. Electrical Design Criteria
a. General
b. Codes and Standards
c. Power Distribution
i. Electrical Distribution System
ii. Distribution and Utilization Voltages
iii. Standby Power
d. Electrical equipment design criteria
i. Switchboards
ii. Motor Control Starters
iii. Motors and Adjustable Frequency Drives
iv. Power Transformers

v. Panelboards
vi. Receptacles
vii. Raceways and Cable
viii. Grounding and Lightning Protection

e. Lighting Requirements
f. Fire Alarm System
g. Telephone and Communication
h. Security System
i. Calculations and analysis requirements
    i. Load Analysis
    ii. Short Circuit Analysis and Coordination Study
    iii. Arc Flash Analysis

13. Instrumentation Design Criteria
    a. General
    b. Applicable Codes and Standards
    c. P&ID Drawings
    d. Instrumentation and Control Devices
    e. Equipment Controls
    f. Project Equipment and Instrumentation Control Concepts
    g. Instrumentation and Control Design Requirements
    h. Instrumentation and I/O Signal Standards
    i. Pump Station Process Control System
    j. Control Modes and Control Philosophy
    k. Security and Resiliency
14. Opinion of Probable Cost

Proposed Drawing List

ENDAWS Task Order 2250 – McClusky Canal Intake and Pumping Station Preliminary Design

Garrison Diversion Conservancy District

DISCIPLINE	TITLE
GENERAL	COVER SHEET
GENERAL	INDEX OF DRAWINGS
GENERAL	ABBREVIATIONS & LEGENDS
GENERAL	PROCESS FLOW DIAGRAM
GENERAL	HYDRAULIC PROFILE
CIVIL	OVERALL SITE PLAN
CIVIL	DEMOLITION
CIVIL	GRADING AND PAVING PLAN
CIVIL	YARD PIPING PLAN
CIVIL	ROADWAY - PLANS, SECTIONS
ELECTRICAL	OVERALL SITE PLAN
CIVIL	OVERALL SITE PLAN AND PROFILE
CIVIL	PLAN AND PROFILE
CIVIL	PLAN AND PROFILE
CIVIL	SECTIONS AND TUNNEL DETAILS
ARCHITECTURAL	LOWER LEVEL FLOOR PLAN
ARCHITECTURAL	OPERATING FLOOR PLAN
ARCHITECTURAL	ROOF PLAN
ARCHITECTURAL	BUILDING ELEVATIONS
ARCHITECTURAL	BUILDING ELEVATIONS
ARCHITECTURAL	PERSPECTIVES
STRUCTURAL	INTAKE CRIB FOUNDATION / LOWER LEVEL PLAN
STRUCTURAL	RIVER BED LEVEL - PLAN
STRUCTURAL	DEFLECTOR FRAMING - PLAN
STRUCTURAL	INTAKE SECTION
STRUCTURAL	WET WELL / FOUNDATION PLAN
STRUCTURAL	LOWER LEVEL FRAMING PLAN
STRUCTURAL	OPERATING FLOOR FRAMING PLAN
STRUCTURAL	ROOF FRAMING PLAN
STRUCTURAL	BUILDING SECTIONS
PROCESS MECHANICAL	INTAKE PLAN
PROCESS MECHANICAL	WET WELL PLAN AND SECTION
PROCESS MECHANICAL	PS LOWER LEVEL PLAN
PROCESS MECHANICAL	PS OPERATING FLOOR PLAN
PROCESS MECHANICAL	PS SECTIONS
HVAC	LOWER LEVEL HVAC PLAN
HVAC	OPERATING FLOOR HVAC PLAN
PLUMBING	LOWER LEVEL PLUMBING PLAN
PLUMBING	OPERATING FLOOR PLUMBING PLAN

ELECTRICAL	POWER DISTRIBUTION FUNCTIONAL DIAGRAM
ELECTRICAL	MEDIUM VOLTAGE - ONE LINE DIAGRAMS
INSTRUMENTATION	CONTROL SYSTEM BLOCK DIAGRAM
INSTRUMENTATION	P&ID - INTAKE
INSTRUMENTATION	P&ID - WETWELL AND DISCHARGE
INSTRUMENTATION	LEGENDS & ABBREVIATIONS

ATTACHMENT B

ENGINEERING FEE WORKSHEETS

Price/Fee Summary							
Task	**Description**	**Hours**	**Labor**	**Travel Expenses**	**Field/Misc Expenses**	**Subcontracts**	**Total Price/Fee**
	TOTALS:	**3071.00**	**$714,314.92**	**$9,385.00**	**$27,331.90**	**$0.00**	**$751,031.82**
Task 1	**Task 1 Project Management**						
1/.01	Project Management	220	$64,074.72	$3,940.00	$1,958.00		$69,972.72
1/.02	Administration	120	$20,176.20		$1,068.00		$21,244.20
1/.03	Management of Subconsultants	8	$2,103.22		$71.20		$2,174.42
	Task 1 Subtotals	***348***	***$86,354.14***	***$3,940.00***	***$3,097.20***		***$93,391.34***
Task 2	**Task 2 Special Project and Third-Party Meetings**						
2/.01	Special Project Meetings	48	$12,480.71	$1,970.00	$427.20		$14,877.91
2/.02	Third-Party Meetings	60	$16,328.46		$534.00		$16,862.46
2/.03	Reclamation Meetings						
	Task 2 Subtotals	***108***	***$28,809.17***	***$1,970.00***	***$961.20***		***$31,740.37***
Task 3	**Task 3 Site Selection, Recon and Landowner Communi**						
3/.01	Final Site Selection	36	$9,806.86	$3,475.00	$320.40		$13,602.26
3/.02	Right of Entry Agreements	5	$1,343.04		$44.50		$1,387.54
3/.03	Landowner Contacts	5	$1,343.04		$44.50		$1,387.54
3/.04	Title Research	5	$1,343.04		$44.50		$1,387.54
3/.05	Land Appraisal	5	$1,343.04		$44.50		$1,387.54
3/.06	Survey and Platting	5	$1,343.04		$44.50		$1,387.54
	Task 3 Subtotals	***61***	***$16,522.07***	***$3,475.00***	***$542.90***		***$20,539.97***
Task 4	**Task 4 Land Acquisition and Field Services**						
4/.01	Survey	5	$1,343.04		$44.50		$1,387.54
4/.02	Phase I Environmental Site Assessment	5	$1,343.04		$44.50		$1,387.54
4/.03	Wetland Delineation	5	$1,343.04		$44.50		$1,387.54
4/.04	Cultural Resources Inventory	5	$1,343.04		$44.50		$1,387.54
4/.05	Preliminary Geotechnical Field Investigation	21	$5,101.11		$186.90		$5,288.01
4/.06	Subsurface Utility Engineering	5	$1,343.04		$44.50		$1,387.54
	Task 4 Subtotals	***46***	***$11,816.32***		***$409.40***		***$12,225.72***
Task 5	**Task 5 Preliminary Design**						
5/.01	Design Team Conference Calls	354	$89,566.02		$3,150.60		$92,716.62
5/.02	Permitting	124	$29,510.24		$1,103.60		$30,613.84
5/.03	Hydraulic Model Refinement, Wetwell Configuration, P	252	$54,671.39		$2,242.80		$56,914.19
5/.04	Basis of Design Memorandum - Schematic Phase	196	$43,668.23		$1,744.40		$45,412.63
5/.05	Basis of Design Memorandum - Spatial Phase	248	$56,981.46		$2,207.20		$59,188.66
5/.06	Prepare Basis of Design Memorandum	1220	$267,148.17		$10,858.00		$278,006.17
5/.07	OPCC (AACE Class 3)	114	$29,267.72		$1,014.60		$30,282.32
	Task 5 Subtotals	***2508***	***$570,813.23***		***$22,321.20***		***$593,134.43***
Task 6	**Task 6**						
	Task 6 Subtotals						

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ENDAWS Task Order 3210 – Eastern North Dakota Alternate Water Supply
Preliminary Design Services

Task Order Effective Date: February 1, 2024

TASK ORDER EXECUTIVE SUMMARY

REQUEST

Consideration and approval of a preliminary design task order in the amount of $2,872,752 for preliminary design associated with the Biota Water Treatment Plant and McClusky Main Pumping Station as part of the Eastern North Dakota Alternate Water Supply (ENDAWS) project. The Task Order (TO) advances the appraisal-level design completed under the Bureau of Reclamation's ENDAWS Environmental Impact Statement and Record of Decision. Services will begin in February 2024 and finish by October 2025. These professional services are provided on an hourly basis; the fee is an estimate based on the scope and nature of the work and the 20-month schedule.

TASK ORDER SUMMARY

The services to be provided by the engineering team are fully described in the attached Task Order. The following summarizes each of the major tasks.

Basic Services: The estimated hourly fee and expenses for standard and customary preliminary design, surveying, and environmental services are as follows for a future construction project with an estimated cost of $142 million:

	Fee	% of Const
1) Task Order Management and Administration	$172,472	0.12%
2) Special Project and Third-Party Meetings	$111,005	0.08%
3) Land Acquisition Services	$177,122	0.12%
4) Field Services	$394,775	0.28%
5) Preliminary Design Services and OPCC	$1,852,104	1.30%
6) NDPDES Permitting Support	$165,274	0.12%
Totals	$2,872,752	2.02%

Special Services: There are no unique or specialized services required under this task order.

PROJECT OVERVIEW

A map showing the location of the project is included in the background information of the attached Task Order. This project will be located adjacent to the McClusky Canal Intake Pumping Station site near McClusky, North Dakota. Elements of this preliminary design Task Order are:

- Development of a Project Management Plan specific to the Work to keep the Task Order on schedule and on budget,
- Leading Special Project and Third-Party meetings to keep stakeholders apprised of Task Order status and to provide a forum for stakeholder input,
- Provide land acquisition services for up to four parcels of property to acquire the sites for the McClusky Canal Intake Pumping Station (TO 2250), the Biota Water Treatment Plant and McClusky Main Pumping Station, as well as the Hydraulic Break Tanks (TO 4250),
- Additional Field Services to utilize and build upon the initial field reconnaissance, topographic mapping and field surveying work completed under previous task orders, as well as wetland delineation, to identify various constraints that may impact either the purchase price or the use of the land associated with the four facilities,
- Preliminary Design to provide:
    - Preliminary site layout, access plan, and Utility Extension Plan,
    - Preliminary building layout, process mechanical layout and P&IDs for the facilities,

  - Hydraulic Analysis and Process Engineering including basis of design level treatment requirements, water quality sampling and analysis, bench-scale testing, Process Design technical memorandum,
- Development of an ENDAWS preliminary design report, associated preliminary design drawings, and preliminary Opinion of Probable Construction Cost as the key deliverables, and
- North Dakota Pollutant Discharge Elimination System (NDPDES) Permitting Services

Black & Veatch Corporation
Professional Services for the Red River Valley Water Supply Project
Under General Agreement dated January 17, 2008

ENDAWS Task Order 3210 – Biota Water Treatment Plant and McClusky Main Pumping Station Preliminary Design

Effective Date – February 1, 2024

Content of this Task Order is as follows:

I. PROJECT BACKGROUND

1. The Red River Valley Water Supply Project (RRVWSP, the Project) will provide a supplemental water supply to eastern and central North Dakota (ND) in the event of drought conditions in the Red River watershed. The Project as envisioned by the Garrison Diversion Conservancy District (Garrison Diversion, the Owner) will also supply additional water to support industrial development as well as provide an environmental benefit to local rivers during drought conditions by augmenting natural stream flows. The source water will be withdrawn from the Missouri River or the McClusky Canal and conveyed to a new water plant. A multi-county pipeline will then convey flows from the plant to the Sheyenne River. Lake Ashtabula located downstream will provide storage for controlled releases to the Red River Valley. The current focus of the project is to construct the intake at the McClusky Canal and the completion of the pipeline from the McClusky Canal to the Sheyenne River.

2. Professional services for design of the Project will be accomplished through the execution of multiple task orders for design and associated activities as well as for engineering services during construction.

3. The U.S. Department of the Interior, Bureau of Reclamation (Reclamation) completed the Eastern North Dakota Alternate Water Supply EIS which resulted in the Record of Decision being signed for the ENDAWS portion of this project. As such, Reclamation is a stakeholder for this project and coordination with them is presumed throughout the effort.

II. TASK ORDER OBJECTIVES

1. The objective for this task order is to complete a preliminary design for the Biota Water Treatment Plant (BWTP) and the McClusky Main Pumping Station (McMPS). The BWTP generally consists of sediment/sand removal, ultraviolet (UV) disinfection and chlorine disinfection. **Figure 1** shows the approximate location and layout of the Biota Water Treatment Plant. A final site has not been selected but it is assumed that the BWTP will be very close to the McClusky Canal Intake Pumping Station. **Figure 2** was prepared as part of the EIS and shows a conceptual BWTP layout drawing of the UV portion of the BWTP. The McMPS will be very similar to the Missouri River Main Pumping Station. **Figure 3** shows a conceptual layout of the Missouri River Main Pumping Station for reference of size. It is expected that the McClusky Canal Intake Pumping Station, the BWTP and McMPS will all be in close proximity to each other as described below.

2. The primary treatment goal for the BWTP is to limit the likelihood that Aquatic Invasive Species (AIS) would be transferred from the Missouri River watershed to the Hudson Bay watershed. The current conceptual design of the BWTP evolved under three phases.

   A. A Preliminary Design Report (PDR) was submitted in April 2018 for the RRVWSP. This effort focused on a BWTP location near Washburn, ND as part of the original RRVWSP alignment. The PDR presented an analysis with how Missouri River sediment/sand would be removed and the approximate chlorine disinfection system to remove AIS.
   B. Following that, a more detailed treatment analysis was completed as part of obtaining a North Dakota Pollution Discharge Elimination System (NDPDES) Permit. The permit still assumed a BWTP location near Washburn, ND. Various drafts of permit applications were developed in 2018-2019 and the final application was submitted on August 19, 2019. The permit application presented significant more detail than the Preliminary Design Report on the likely types of AIS, the C-T times required to eliminate the AIS, how the C-T times would be addressed through a combination of disinfection in chlorine contact tanks and the pipeline, how the effectiveness of disinfection would be monitored, and contingency measures regarding disposal of water that did not meet required disinfection criteria. The NDPDES permit is still in effect.
   C. The third water treatment analysis was the Biota Water Treatment Plant Appraisal-Level Design Engineering Report (April 15, 2020) done under the guidance of Reclamation as part of the ENDAWS phase of the project, which switched the BWTP to near the McClusky Canal Intake. The conclusion of this report expanded the proposed BWTP treatment processes to include UV as a second disinfection process. The Report assessed background water quality

conditions from the McClusky Canal, evaluated types of chlorine disinfection and required C-T times and evaluated the sizing of an UV system.

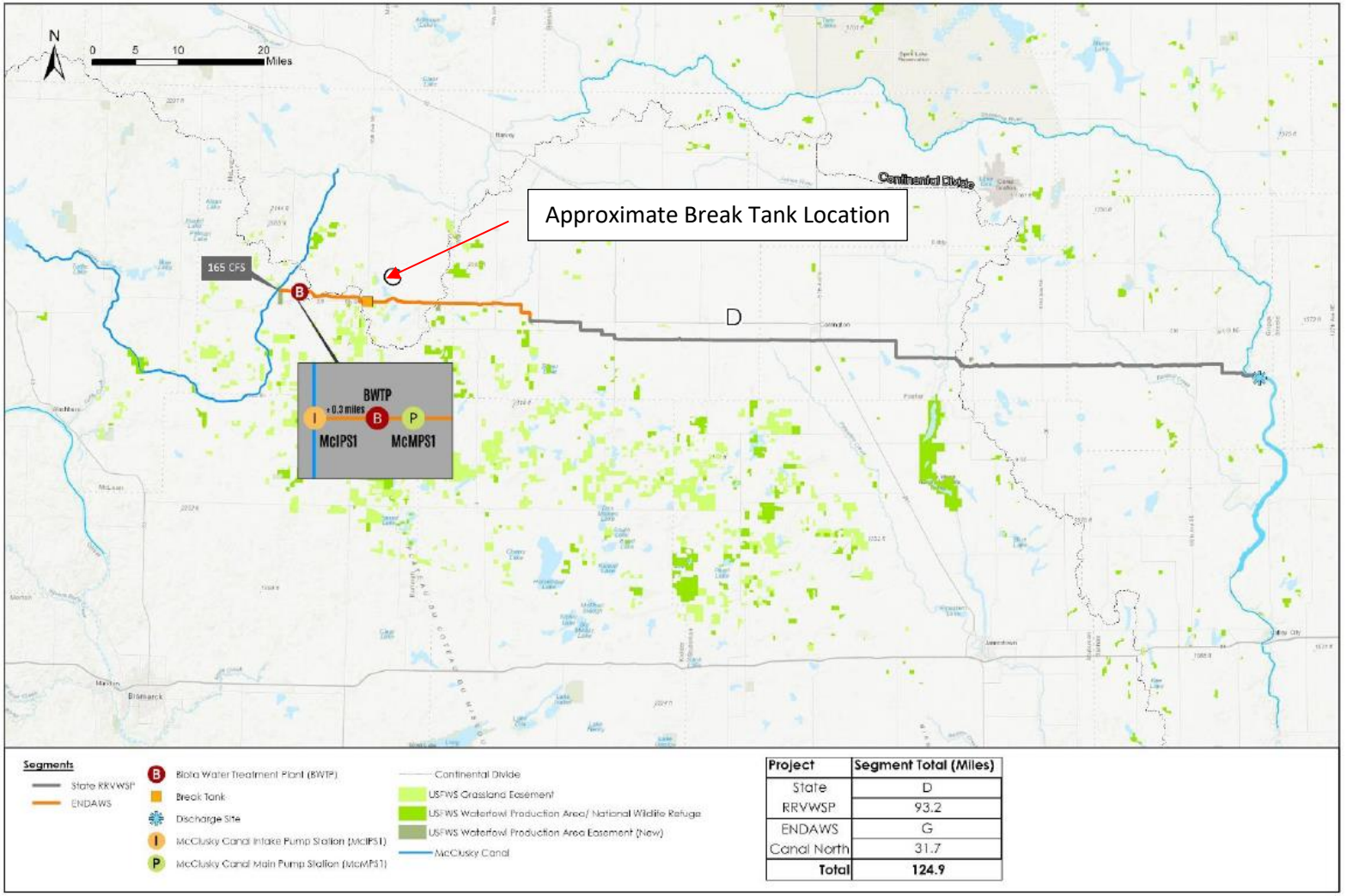
It is expected that the preliminary design will be based on the BWTP designed developed in the EIS. However, the preliminary design will draw on elements developed during the PDR and the NPDES permit application. Also, as part of the preliminary design, a revised NDPDES permit will be sought from the State that incorporates the revised BWTP locations and added UV disinfection process.

3. The objective of the McMPS will be to pump the treated water from the BWTP to the break tanks. The McMPS was conceptually estimated to be a 20,000 HP pumping station and is expected to contain surge control features similar to the Missouri River Main Pumping Station. While the EIS shows the McMPS as a standalone facility, a design goal is to integrate the pumping station into the overall site plan of the Biota Water Treatment Plant.

4. As noted above, the McClusky Canal Intake Pumping Station, the BWTP and the McMPS will be in close proximity to each other. The task order will include an evaluation of how to best serve the entire complex with power. Features such as site access, fire protection, and potable water will be shared across the site. It is further expected that the BWTP will be the central operations center for the entire project, including both pump stations.

5. Specific activities for this Task Order are to:
   A. Finalize a site location for the BWTP and McMPS.
   B. Support Garrison Diversion with the required survey and land acquisition of the property for the two facilities.
   C. Complete a preliminary geotechnical investigation to support the preliminary design.
   D. Complete environmental, cultural, threatened and endangered species, and raptor surveys of the property.
   E. Develop topographic site plans from currently available LIDAR information.
   F. Develop a plan for bringing required utilities to the selected property locations.
   G. Develop a Basis of Design Report including preliminary drawings. A proposed outline for the Basis of Design Report and a preliminary drawing list is included in **Attachment A.**
   H. Provide an updated Opinion of Probable Construction Cost (OPCC).

6. This Task Order includes supporting Task Order 2250, McClusky Canal Intake Pump Station and Task Order 4250, Hydraulic Break Tanks by providing the required geotechnical information, environmental and cultural assessments, and property acquisition support for those facilities.



Project	Segment Total (Miles)
State	D
RRVWSP	93.2
ENDAWS	G
Canal North	31.7
Total	**124.9**

Figure1 - Biota Water Treatment Plan Location

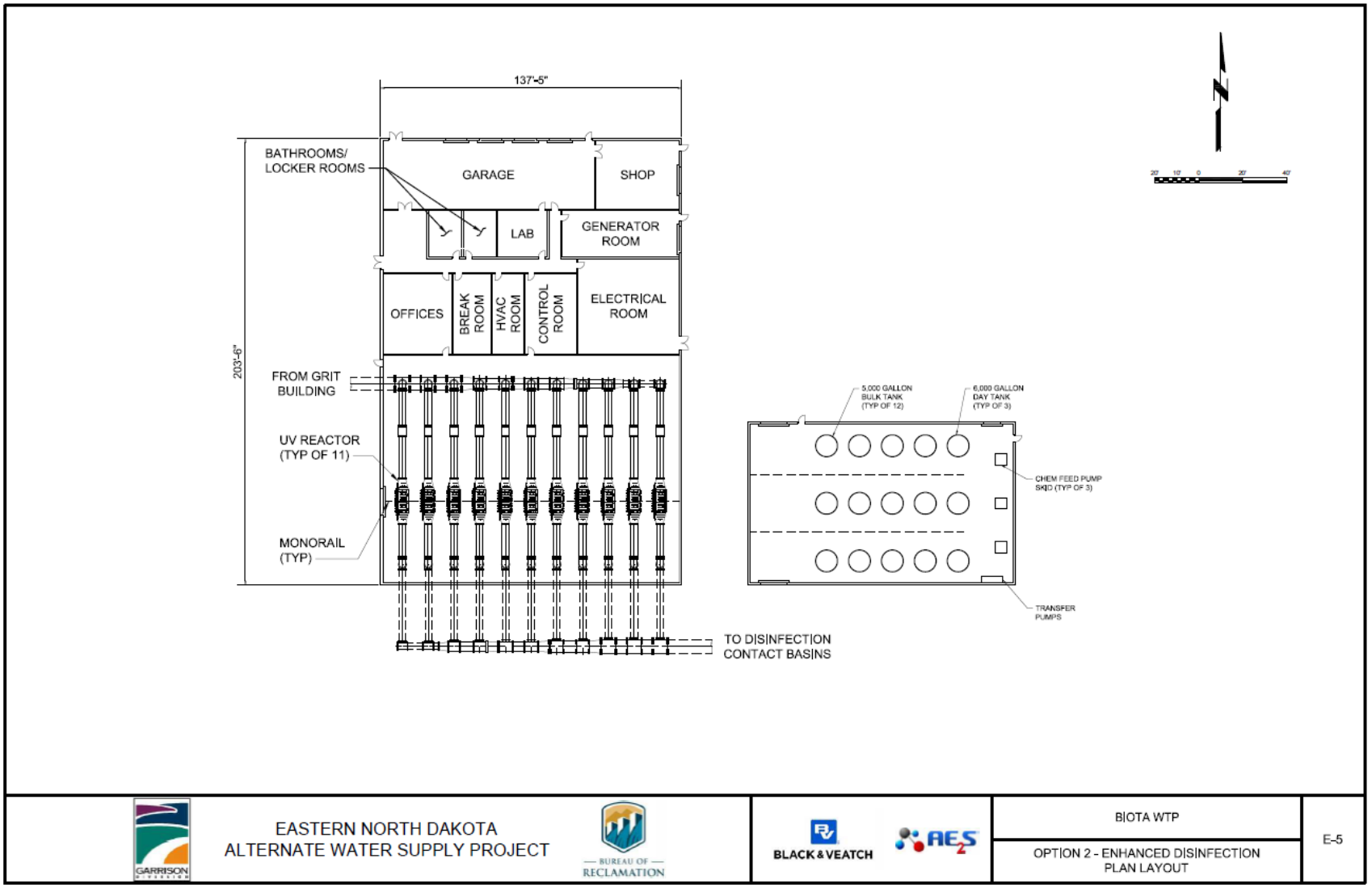


Figure 2 – Biota Water Treatment Plant Conceptual Design (UV portion)

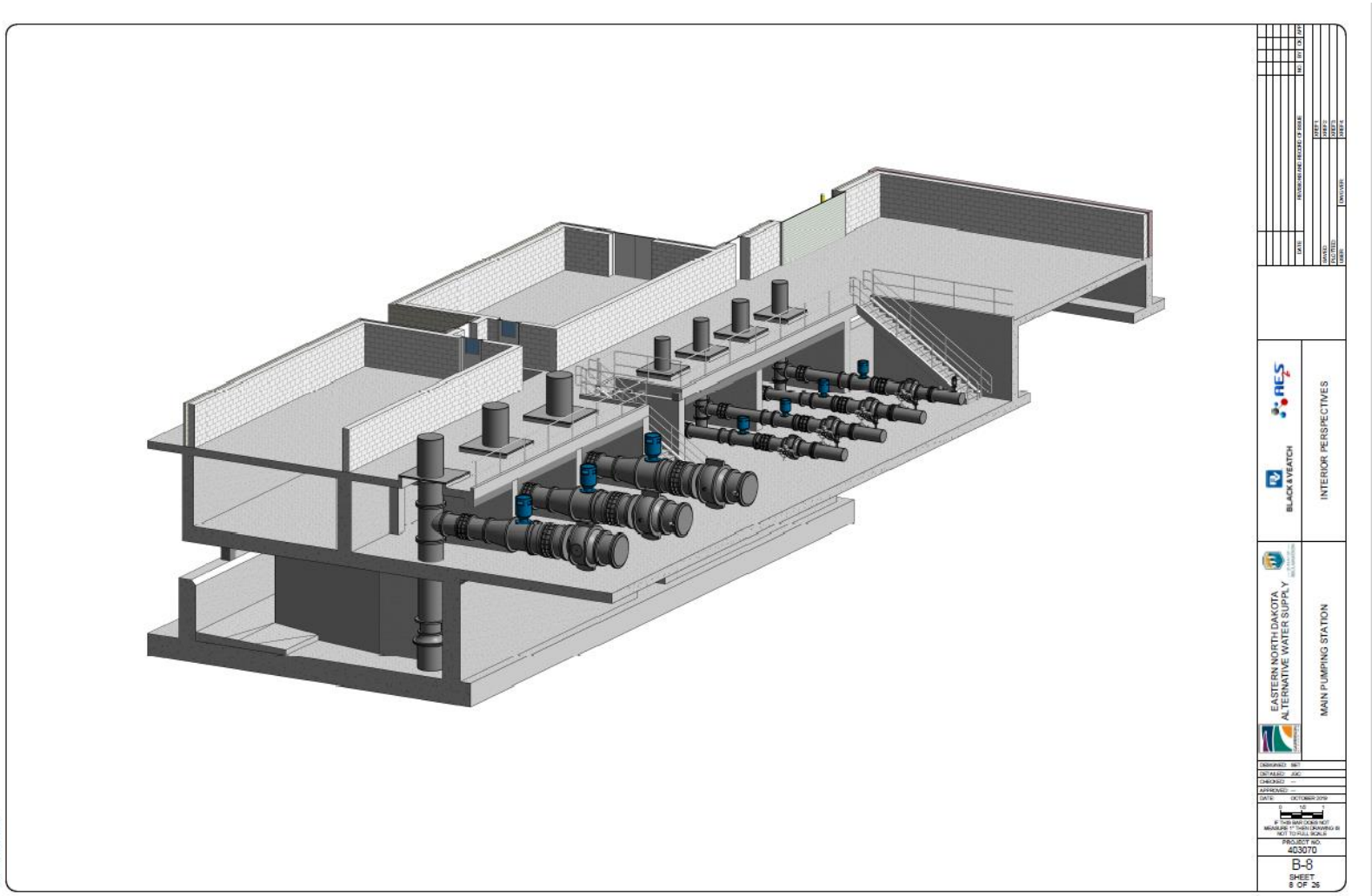


Figure 3 - Conceptual Layout of the Missouri River Main Pumping Station

III. GENERAL REQUIREMENTS

1. Under this Task Order, Engineer will provide services in accordance with the Standard Form of Agreement between Owner and Engineer for Professional Services dated January 17, 2008 (Agreement).

2. General Description of Activities. The Basic Services to be performed by Engineer consist of professional design services associated with development of preliminary design for construction of a Biota Water Treatment Plant and McClusky Main Pumping Station and associated site improvements and access road(s).

3. Work outside Basic and Special Services. Engineer agrees to provide the Basic Services and Special Services identified herein. Work not specifically discussed herein as part of Basic Services or Special Services is considered Additional Services. Additional Services will only be performed with proper separate authorization such as an amendment to this Task Order or a new separate Task Order.

4. Capital Cost Opinions. All opinions of probable construction cost developed will generally follow the recommendations of the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinions' level of accuracy presented by Engineer for the various deliverables will be as noted in subsequent paragraphs of this Task Order under Basic Services.

IV. BASIC SERVICES

Basic Services of this Task Order are organized into major tasks as follows:

- Task 1 – Task Order Management and Administration
- Task 2 – Special Project and Third-Party Meetings
- Task 3 – Land Acquisition Services
- Task 4 – Field Services
- Task 5 – Preliminary Design Services and OPCC
- Task 6 – North Dakota Pollutant Discharge Elimination System (NDPDES) Permitting Services

1. Task 1 – Task Order Management and Administration

This task includes overall management and development of a Project Management Plan specific to the Work. The overall objective of this task is to keep the Task Order on schedule and on budget.

A. Project Management. Engineer will provide management services necessary for execution of the Task Order, including efforts required for proper resource allocation, schedule development and monitoring, budget review and control, Owner coordination, and other standard and customary activities required for timely completion of the Work. Owner coordination will occur through regular project meetings as described in Task 5A.

B. Administration. Perform general administrative duties associated with the Task Order, including general correspondence, day-to-day contact and coordination, administration, and monthly invoicing in a form that is acceptable to the Owner.

C. Management of Subconsultants. Engineer will monitor subcontractor progress, review and approve invoices, oversee adherence to the approved quality assurance/quality control (QA/QC) plan, monitor adherence to document preparation standards, and generally oversee Subconsultants' performance.

2. Task 2 – Special Project and Third-Party Meetings

The overall objective of this task is to keep stakeholders apprised of Task Order status and to provide a forum for stakeholder input. Engineer will prepare an agenda and provide meeting notes documenting discussions and action items. The following meetings are anticipated:

A. Special Project Meetings

i. Task Order Initiation Meeting. Engineer will conduct a Task Order Initiation Meeting with the Owner and Subconsultants to review the overall approach to the Work, the schedule by which the work will be prosecuted, and other relevant coordination and management items necessary for a successful outcome. Another objective of this meeting will be to finalize the approach to right(s) of entry and to reach an agreement on an approach to obtaining the necessary right(s) of entry. It is assumed Reclamation will participate in this meeting.

B. Third-Party Meetings

i. Stakeholder Meetings. Engineer will attend and present Project information for one meeting with the Lake Agassiz Water Authority (LAWA) Technical Advisory Committee (TAC).

ii. Design Coordination Meetings. Engineer will schedule and meet with the following agencies. Engineer will provide summary notes of meetings.

(a) Two meetings with Reclamation in regard to the BWTP.

(b) Two meetings with the local electric utility regarding providing power service.

(c) Three meetings with the State to review for and plan the revised NDPDES permit application

(d) Six meetings to support Garrison Diversion in its landowner negotiations.

C. Bureau of Reclamation Meetings

Reclamation will be engaged throughout the design process and meetings are assumed for every other month (ten meetings total) to coordinate the progress of the BTWP design.

3. Task 3 – Land Acquisition Services

The purpose of the Land Services task is to provide Garrison Diversion with the support it needs to acquire the sites for the McClusky Canal Intake Pumping Station, BWTP, the McMPS and the Hydraulic Break Tanks. Engineer will provide land acquisition services for up to four parcels of property. Land acquisition for the hydraulic break tanks was already included in Task Order 7410. The scope and fee will be transferred to this task order so all land acquisition can be completed under one task order.

A. Final Site Selection. As shown in Figure 1, a general area for the BWTP has been selected. Specific parcels have not been identified. This task includes a review of likely parcels and a site walk with Garrison Diversion and Reclamation to review the possible site locations for the BWTP. The site walk will include an environmental professional to identify potential environmental conditions (wetlands, critical habitat) cultural features or pollution liability features that may impact site acquisition. The site walk will also include identification of potential utilities. A final site selection technical memorandum will be developed on conjunction with Reclamation to supplement the existing EIS.

B. Right of Entry Agreements. Engineer will obtain right of entry (ROE) agreement(s) from the property owner(s). These ROEs are necessary to complete supplemental topographic surveys and to complete geotechnical borings during Preliminary Design.

C. Landowner Contacts. Engineer will support GDCD in making the initial landowner contacts to initiate discussions on purchase of the property. Initial contacts will be followed up with up to three landowner meetings for each parcel to finalize the purchase.

D. Title Research. Title work will be completed by a title company and or the Engineer's right-of-way agents.

E. Land Appraisal. Engineer will assist GDCD in the selection of an independent third-party land appraiser to obtain estimates on the purchase value of potential sites.

F. Survey and Platting. Survey support for each site will require the following subtasks:

   i. Research
   ii. Preparation of a preliminary plat
   iii. Preparation of a plat application
   iv. Boundary survey
   v. Agency coordination
   vi. Jurisdictional review meetings
   vii. Preparation of the final plat
   viii. Placement of corner monuments
   ix. Providing the final plat to Garrison Diversion to file in respective County Recorder's Office in compliance with North Dakota Century Code

G. Additional negotiations or services above those stated are Additional Services.

4. Task 4 – Field Services

Appraisal-level engineering tasks completed under ENDAWS, conceptual-level engineering services provided under Task Order 5360, and ENDAWS pipeline preliminary design under Task Order 5280 all included initial field services efforts. This Task Order builds upon the initial field reconnaissance work completed thereunder and utilizes the topographic mapping and field surveying work completed under the previous authorization. Follow-on field services, including wetland delineation, are included in this task.

The purpose of this task is to identify various constraints that may impact either the purchase price or the use of the land associated with the four facilities.

A. Survey

i. Prepare an existing conditions topographic site plan for each of the four facilities. This site plan will be created utilizing the previously collected LiDAR topographic data and field collected PLSS section lines.

ii. Identify areas on each of the four facility sites where additional field ground topographic data will need to be collected. Specifically obstructed areas, road crossing, culverts, and other features that are not included in the LiDAR dataset. For the purposes of this Task Order it is assumed that each facility will require one day of supplemental field survey data collection.

iii. Bathymetric Survey of McClusky Canal. A Bathymetric survey of the Canal in the area of the intake will be completed to support the preliminary design.

B. Phase 1 Environmental Site Assessments (ESA)

i. Engineer will perform work in accordance with ASTM E1527-21 and will issue a final report in accordance with ASTM guidance. It is understood by all parties that Phase I ESAs are not intended to be exhaustive. The scope of the Phase I ESA may require revisions based on field conditions and findings. Findings of the Phase I ESA cannot eliminate all uncertainty. Results of the site visit might vary depending on the weather conditions at the time of the site visit. Professional judgment and interpretation are inherent in the process and exercised in accordance with objective scientific principles; however, uncertainty is inevitable.

ii. The purpose of the Phase I ESA is to evaluate the potential for on-site contamination from on- and off-site sources. The Phase I ESA will evaluate current and historical conditions at the subject property and surrounding areas that could present potential environmental concerns on the subject property, in accordance with guidelines described in ASTM E1527-21. Engineer will coordinate with a third-party contractor, Environmental Data Resources, Inc. (EDR), to obtain the premium EDR package, which includes reports and information necessary for compliance with ASTM Standard

E1527-21. Engineer will also perform a site visit to the properties to document potential sources or incidences of Recognized Environmental Conditions (RECs).

iii. One site visit will be conducted on each of the four parcels. Engineer's Subconsultant will prepare four Phase I ESA reports. The Phase I ESA reports will include identified RECs and associated recommendations of a Phase II ESA (sampling of the area[s] of concern). The reports will conclude with findings regarding the potential for contamination. Electronic copies of the final report will be provided.

C. Wetland Delineation. Complete field wetland delineations within the four facility sites.

i. Data Collection. Provide National Wetland Inventory (NWI) Maps, aerial photography, soil survey data, and topographic maps for use during field surveys.

ii. Field Wetland Delineation. Field wetland delineation will be completed in accordance with the USACE 1987 Wetland Delineation Manual and the Great Plains Regional Supplement. A wetland delineation report will be submitted to the USACE with a request for a jurisdictional determination.

iii. USFWS Wetland Easements. Coordinate with the USFWS with regard to the locations of wetland basins that fall under USFWS easement. Accompany the USFWS into the field to map the boundaries based on the USFWS identification of the boundary. Data will be incorporated into a GIS database for avoidance purposes.

D. Threatened and Endangered Species and Eagle Field Surveys. Perform threatened and endangered species field surveys within the four facility sites.

i. Desktop Review. As a follow-up to the previously completed desktop study Memorandum "Threatened and Endangered Species, Critical Habitat and Eagle Concerns Memorandum", Engineer will evaluate slope, aspect, soils, topography, historical imagery, and known disturbance to further define the potential for suitable habitat for those areas identified as potential in the memorandum.

ii. Field Surveys. A field survey will be completed to identify threatened and endangered species presence and potential habitat within and near the proposed facility sites.

(a) Raptor Survey. In addition, raptor nests will be documented from a line of sight survey from within the facility sites. Should potential nests be identified, further analysis will be completed from public right of ways, if access permission is not granted from landowners, to evaluate nest activity and species occupying the nest.

(b) Dakota Skipper Survey. A habitat survey will be performed for the Dakota Skipper. Should a determination be made that the project may potentially impact the Dakota Skipper, a specialist will be required to determine species presence. This determination is not included in this Task Order.

(c) Tree Survey. Trees greater than three-inch diameter at breast height within the four facility sites, which are suitable for northern long eared bat nesting and roosting, will be counted and recorded for consideration of impacts during construction.

iii. Prepare a Threatened and Endangered Species and Eagle Nest Report documenting findings of the field surveys for each of the four facility sites. A determination of potential impacts to the species will be included in the report as well as any further coordination recommendations with the US Fish and Wildlife Service and/or documentation of avoidance/minimization measures for construction.

E. Cultural Resources Inventory. Perform a cultural resource inventory to Class III standards within the Area of Potential Effect (APE) for each of the four facility sites. The inventory will be conducted utilizing a series of pedestrian transects spaced not more than 50 feet apart. This scope assumes the identification/revisiting of up to 10 cultural resources. Coordination with Tribal Historical Preservations Office (THPO) is not anticipated to be an aspect of the Cultural Resource Inventory. All cultural resources encountered will be recorded and site forms submitted to the ND State Historic Preservation Office (SHPO) for assignment of a Smithsonian Institution Trinomial System (SITS) number. Data collected during these field surveys will be incorporated into a final report and submitted to the BOR for coordination with SHPO.

F. Preliminary Geotechnical Field Investigation. The objective of this task is to provide preliminary geotechnical information to support for each of the four selected sites to support preliminary design. Additional borings will be required in the final design phase after the building locations and sizes and been finalized. The scope of work for the preliminary geotechnical investigation will include approximately one boring in the McClusky Canal, 3 deep soil borings for the intake pump station, 3 deep soil borings for the main pump station, two deep soil borings for the hydraulic break tanks, and ten soil borings for the BWTP.

i. Exploratory work, field testing, and laboratory testing services will be completed by Engineer's Subconsultant. Field services include planned geotechnical exploratory work, such as soil borings, standard penetration tests, soundings, laboratory tests of soils and rock samples. The field work will provide information for design, and other field and laboratory tests and analyses that are required.

ii. Geotechnical Data Reports. A standard Geotechnical Data Report will be prepared for each of the facilities listed above based on findings from land-side borings and associated site civil work. The Geotechnical Data Report will be completed by the sub-consultant geotechnical engineer and reviewed by the Engineer.

G. Subsurface Utility Engineering. Provide subsurface utility engineering services performed to ASCE 38.02 Quality Level D. Utility owners will be identified and contacted to confirm utilities in the area, and to obtain any available utility maps and drawings which will support the field work.

5. Task 5 – Preliminary Design

The purpose of Preliminary Design is to provide a preliminary site layout and access plan, a preliminary building layout and associated architectural and structural drawings, a preliminary process mechanical layout, a preliminary P&IDs for the facilities, and a preliminary description of how the facilities will be served by utilities.

A. Design Team Conference Calls. Engineer will schedule and lead conference calls with the Owner and its team. Calls will be scheduled, and content organized to coincide with other Task Orders for efficient utilization of staff time.

   i. Owner Conference Calls (up to 40 calls assuming a 20-month preliminary design phase duration). Engineer will conduct bi-weekly conference calls with the Owner to review overall progress, exchange ideas and information, and coordinate activities.

   ii. Task Order Coordination Calls (up to 20 calls). Engineer will plan and take part in monthly coordination conference calls with tasks leaders of other Task Orders to share progress and conclusions such that efforts are well coordinated and not duplicated or unnecessary.

B. Permitting. It is assumed that no permits will be required as this is a preliminary design task order. It is expected that landowner permissions will be required for the geotechnical borings and for site access.

C. Utility Extension Plan. Given the remote nature of the sites, it is expected that significant efforts will be needed to extend power utilities to the site. It is also expected that plans will be needed for a potable water supply, heating, water storage for fire protection and sewerage disposal. The scope includes identifying the type of utility extension, the estimated cost of the utility extension, and the need for any property easements associated with the extension. The actual design of the utility extension will be completed under the Final Design Task Order.

D. Transportation Access Plan. An overall transportation access plan will be established to provide definition of the local road extensions required to have access to the facilities.

E. Hydraulic Analysis

   i. Note that the hydraulic efforts described in this task order are relate to the sizing of the pump station and establishing the hydraulics within the BWTP and McMPS. The overall hydraulics of the system are being completed under Task Order 5340.

   ii. It has not been determined if a physical model is needed for the pump station. A $200,000 allowance has been included to provide for contracting with a laboratory and the oversight of a physical model if one is needed.

F. BWTP Process Engineering. The objective of this sub-task is to develop a more rigorous process design that builds on the conceptual work by Reclamation. Process work is expected to include:

i. Perform a Regulatory Review and Define Treatment Requirements
   (a) Determine basis of design for level of treatment require. This will include verifying with Reclamation and the State final treatment objectives, including determining if a chlorine residual needs to be carried for the full extent of the pipe. An assessment of McClusky Canal turbidity and recommended pre-treatment technologies to keep turbidity less than 10 NTU prior to disinfection will also be completed.
   (b) Confirm required chemical capacity needed for treatment between wet, semi-drought and drought years.

ii. Water Quality Sampling and Analysis
   (a) Create and perform sampling program consistent with the 2020 report that recommended more water sampling prior to preliminary design. The sampling will include testing for water quality parameters such as UVT, TOC, SUVA and others not previously tested. The scope is to develop a separate water quality sampling plan will be developed. Garrison Diversion will collect the water quality samples and send them to the laboratory for analysis.

iii. Bench-scale Testing (Black & Veatch Kansas City Lab)
   (a) Establish treatment requirements to meet inactivation
      (i) UV contact time, chlorine dose and residual
   (b) Determine disinfection byproduct formation
      (i) Send samples for 3rd party analysis
      (ii) Establish dose with least impactful DBP formation

iv. Process Design Tech Memo
   (a) Summarize Regulatory Review, Water Characterization, Blending Analysis, Bench-scale Testing Results
   (b) Establish selected treatment train with a detailed PFD, and a flow balance diagram. Establish expected chemical use under varying flow conditions.

G. Basis of Design Memorandum

i. Draft Basis of Design Memorandum (BDM). A draft BDM will be prepared for the design and construction of the BWTP and McMPS. Engineer will review the Draft BDM for accuracy and completeness prior to submitting to the Owner for review and comment. The BDM will build upon the work of the previously prepared Preliminary Design Report and EIS.

ii. Review and Finalize BDM. Engineer will confer with Owner's staff to review the Draft BDM and obtain Owner's comments. Engineer will address Owner comments and develop a Final BDM. The Final BDM will be the document followed by the design team during the final design.

H. Engineer will prepare Preliminary Deliverables. Preliminary drawing development will be completed in parallel with the draft BDM.

i. Document Development. The content of preliminary deliverables is as follows:

- General project scope and background references.
- Flow rates - present and anticipated.
- Raw water quality - physical, chemical, and biological.
- Design objectives and treated water quality.
- Sludge quantities and types.
- Applicable codes and standards, including fire and safety codes including code review and approval process.
- Site considerations, including subsurface conditions, flood elevations, drainage requirements, etc.
- Process Flow Diagrams
- Site plan, building layouts, and architecture.
- Hydraulic profile of treatment facilities.
- Condensed hydraulic profile of pipelines.
- Process and hydraulic systems.
- Sludge processing systems and handling.
- Sludge disposal method.
- Chemical feed and storage.
- Operational monitoring and control systems.
- HVAC systems.
- Electrical systems.
- Structural design criteria.
- Communications systems.
- Miscellaneous support systems.
- Security systems.
- Utility requirements.

ii. Preliminary Design Review. Attend a meeting or conference call with the Owner to receive and discuss review comments. Document comments received in a log and distributed to stakeholders.

iii. Revise documents as necessary to reflect decisions taken at this level incorporating design modifications into subsequent deliverables.

I. Preliminary Opinion of Probable Construction Cost (OPCC). Engineer will update the OPCC (aka Cost Opinion or Cost Estimate) at the preliminary design submittal after transmittal of the Level 1 deliverable. The cost opinion will be updated commensurate with an AACE Class 3 estimate. The expected accuracy will be -10 to -20 percent on the low end and the expected accuracy on the high end will be from +10 to +30 percent.

9. Task 6 – NDPDES Permitting Support

A. The existing NDPDES permit will need to be updated to incorporate the new BWTP location and new water source. Based on the last NDPDES application, it is assumed two draft permit applications will be submitted and then a final permit application. Meetings are assumed with the State before and after each draft. The permit application will include the required NDPDES forms and a technical memorandum demonstrating the treatment adequacy of the chlorine and UV systems. The analysis will also include development of a monitoring plan and a contingency plan to manage water that is not fully treated.

V. DELIVERABLES

The following deliverables will be furnished under this Task Order. Documents or deliverables not included in the list below will be provided as Additional Services as authorized by the Owner.

1. Task 1 – Project Management

   A. Monthly invoices

   B. Baseline Schedule

2. Task 2 – Special Project and Third-Party Meetings. Meeting agenda (included with MS Outlook meeting invitations) and minutes (electronic pdf files)

3. Task 3 - Final Site Selection, Site Reconnaissance and Landowner Communication Support

   A. Final Site Selection Technical Memorandum.

4. Task 4 - Coordination of the Land Acquisition, Geotechnical Investigation, Environmental/Cultural Reports, and Site Survey.
   A. Land Acquisition Site Plan
   B. Geotechnical Investigation Data Report
   C. Site Environmental and Cultural Report
   D. Site Topographic Map
   E. Phase I ESA

2. Task 5 – Preliminary Design

   A. Meeting/conference call agenda and minutes (electronic pdf files)
   B. Reports for Utility Extension, Transportation, Hydraulic Analysis, and BWTP Process Engineering (electronic pdf file)
   C. Basis of Design Memorandum (draft and final electronic pdf files)
   D. Preliminary Drawings (single hard copy and electronic pdf files)
   E. Preliminary cost opinion (electronic pdf file)
   F. Preliminary Design Owner review comments log (electronic pdf file)

3. Special Services

   A. None.

VI. ADDITIONAL SERVICES

The professional services listed below are not included in the scope of this Task Order nor does the fee shown in Article IX include any labor and direct expenses for items identified as Additional Services. Should Owner want to include services listed under Additional Services in Engineer's scope, an amendment to this Task Order, or execution of a separate Task Order with the new scope, will be necessary.

1. The fee specifically excludes and fees associated with permits and the actual property acquisition costs.

VII. SPECIAL RESPONSIBILITIES OF OWNER

1. Interim Deliverable Review Requirements. Owner commits to review periods for interim deliverables of no more than 30 calendar days after receipt of deliverables from Engineer. A review meeting will be scheduled and conducted by Engineer no more than 14 calendar days after receipt of Owner review comments, unless a mutually agreed upon date outside this schedule window is selected.

2. Land Acquisition Costs. Fees paid to all property owners necessary to purchase property, easements, or ROEs are the responsibility of the Owner.

VIII. FEE

The total fee for Basic Services provided under this Task Order is 2,872,752.

A worksheet showing the fee estimate and level of effort by task is included in Attachment B.

IX. PERFORMANCE SCHEDULE

Basic and Special Services of this Task Order will be completed by October 2025.

X. DOCUMENTS INCORPORATED BY REFERENCE AND ATTACHMENTS

1. Standard Form of Agreement between Owner and Engineer for Professional Services dated January 17, 2008 is incorporated by reference.

2. Attachment A – Proposed Outline for the Basis Of Design Report and Preliminary Drawing List

3. Attachment B – Engineering Fee Worksheets

XI. ACCEPTANCE

If this satisfactorily sets forth your understanding of our Agreement, please print and sign this document. You should retain one copy for your files and return an electronic copy via email to Paul Boersma (BoersmaPM@BV.com) with Black & Veatch Corporation.

By: _____	By: _____
Duane DeKrey, General Manager Garrison Diversion Conservancy District	Paul Boersma, Associate Vice President Black & Veatch Corporation
Dated: _____	Dated: _____

ATTACHMENT A

PROPOSED OUTLINE FOR THE BASIS OF DESIGN REPORT
AND
PRELIMINARY DRAWING LIST

PROPOSED OUTLINE FOR THE BASIS OF DESIGN REPORT

1. General
    a. Project Description
    b. Background
    c. Project Scope
    d. Schedule
    e. Site Description
        i. Location
        ii. Datum
    f. Flood Protection
2. Process Design Criteria
    a. Source Water Quality
    b. Finished Water Quality
    c. Design Flows
    d. NPDES Permit Limits
3. Facility Requirements
    a. Site Selection
    b. Land Acquisition
    c. Environmental/Cultural
4. Water Treatment Plant
    a. Coagulation/Flocculation
    b. High-Rate Sedimentation
    c. Media Filtration
    d. UV and Chlorine Disinfection
    e. Residuals
5. Main Pumping Station
    a. Pumps
6. Sitework
    a. Applicable Codes and Standards
    b. Roadways
    c. Site Drainage and Stormwater Management
    d. Site Piping
7. Architectural Design Criteria
    a. General
    b. Applicable codes and standards
    c. Operations Building
        i. Architectural Study and Assessment
        ii. Architectural Program
        iii. Building Code Analysis
        iv. Building Energy Code Analysis
        v. Methods of Construction
    d. Main Pumping Station
        i. Building Code Analysis
        ii. Architectural Program
        iii. Building Energy Code Analysis

iv. Methods of Construction

8. Structural Design Criteria
    a. General
    b. Codes and Standards
    c. Specified Material Parameters
        i. Concrete
        ii. Concrete and Masonry Reinforcement
        iii. Masonry
        iv. Structural Steel
        v. Aluminum
    d. Loading Criteria
        i. Dead Loads
        ii. Live Loads (Floor and Roof)
        iii. Snow Loads
        iv. Wind Loads
        v. Seismic Loads
        vi. Soil, Backfill, and Groundwater
        vii. Equipment and Piping Loads
        viii. Impact Loads
        ix. Bridge Crane and Monorail Loads
        x. Load Combinations
    e. Design Procedures and Assumptions
        i. Reinforced Concrete Design
        ii. Reinforced Masonry Design
        iii. Structural Steel Design
        iv. Aluminum Design
        v. Geotechnical Design
        vi. Flotation
        vii. Impact and Vibration Design
        viii. Bridge Crane and Monorail Runway Beam Design
        ix. Non-Structural Component Design
        x. Guardrail, Handrail, Ladder, and Stair Designs
    f. Special Inspections
9. Building Mechanical Design Criteria
    a. General
    b. Applicable Codes and Standards
    c. Location & Meteorological Design Criteria
    d. Materials
    e. Seismic
    f. Building Design Requirements
    g. Plumbing design
        i. Storm Drainage Systems
        ii. Sanitary Drainage Systems
        iii. Water Piping Systems
        iv. Plumbing Fixtures

h. Heating, Ventilation, and Air Conditioning
    i. Indoor Design Conditions
    ii. HVAC General Requirements
    iii. Heating Systems
    iv. Ventilation Systems

10. Electrical Design Criteria
    a. General Design Criteria
    b. Codes and Standards
    c. Power Distribution
        i. Electrical Distribution System
        ii. Distribution and Utilization Voltages
        iii. Standby Power
    d. Electrical equipment design criteria
        i. Switchboards
        ii. Motor Control Starters
        iii. Motors and Adjustable Frequency Drives
        iv. Power Transformers
        v. Panelboards
        vi. Receptacles
        vii. Raceways and Cable
        viii. Grounding and Lightning Protection
    e. Lighting Requirements
    f. Fire Alarm System
    g. Telephone and Communication
    h. Security System
    i. Calculations and analysis requirements
        i. Load Analysis
        ii. Short Circuit Analysis and Coordination Study
        iii. Arc Flash Analysis
11. Instrumentation Design Criteria
    a. General
    b. Applicable Codes and Standards
    c. WTP and Main Pumping Station Control System
    d. Instrumentation and Control Devices
    e. Equipment Controls
    f. Equipment Control Modes

Opinion of Probable Cost

Proposed Drawing List

ENDAWS Task Order 3210 – Biota Water Treatment Plant and McClusky Main Pumping Station Preliminary Design
Garrison Diversion Conservancy District

Sheet Title				
AREA DESCRIPTION	DISCIPLINE	DRAWING NAME	SCALE	# of Dwg
GENERAL	GENERAL	COVER SHEET		1
GENERAL	GENERAL	INDEX OF DRAWINGS		2
GENERAL	GENERAL	ABBREVIATIONS & LEGENDS		1
GENERAL	GENERAL	PROCESS FLOW DIAGRAM		3
GENERAL	GENERAL	HYDRAULIC PROFILE		1
SITE	CIVIL	OVERALL SITE PLAN		1
SITE	CIVIL	DEMOLITION		2
SITE	CIVIL	GRADING AND PAVING PLAN		4
SITE	CIVIL	SITE PIPING PLAN		4
SITE	CIVIL	SITE STRUCTURES - PLANS, SECTIONS		2
SITE	ELECTRICAL	OVERALL SITE PLAN		1
OPERATIONS BUILDING	ARCHITECTURAL	OVERALL OPERATING LEVEL FLOOR PLAN	1/32" = 1'-0"	1
OPERATIONS BUILDING	ARCHITECTURAL	OPERATING LEVEL FLOOR PLAN	1/16" = 1'-0"	1
OPERATIONS BUILDING	ARCHITECTURAL	OPERATING LEVEL FLOOR PLAN	1/16" = 1'-0"	1
OPERATIONS BUILDING	ARCHITECTURAL	OVERALL ROOF PLAN	1/32" = 1'-0"	1
OPERATIONS BUILDING	ARCHITECTURAL	BUILDING ELEVATIONS	1/16" = 1'-0"	1
OPERATIONS BUILDING	ARCHITECTURAL	BUILDING ELEVATIONS	1/16" = 1'-0"	1
OPERATIONS BUILDING	ARCHITECTURAL	PERSPECTIVES	No Scale	1
OPERATIONS BUILDING	STRUCTURAL	BASEMENT PLAN	1/16" = 1'-0"	4
OPERATIONS BUILDING	STRUCTURAL	FIRST FLOOR PLAN	1/16" = 1'-0"	4
OPERATIONS BUILDING	PROCESS MECHANICAL	BASEMENT FLOOR - 3D PERSPECTIVE		1
OPERATIONS BUILDING	PROCESS MECHANICAL	FIRST FLOOR - 3D PERSPECTIVE		1
OPERATIONS BUILDING	PROCESS MECHANICAL	BASEMENT PLAN	1/16" = 1'-0"	4
OPERATIONS BUILDING	PROCESS MECHANICAL	FIRST FLOOR PLAN	1/16" = 1'-0"	4
OPERATIONS BUILDING	PROCESS MECHANICAL	SECTIONS	1/4" = 1'-0"	4
OPERATIONS BUILDING	HVAC	BASEMENT PLAN	1/16" = 1'-0"	4
OPERATIONS BUILDING	HVAC	FIRST FLOOR PLAN	1/16" = 1'-0"	4
OPERATIONS BUILDING	PLUMBING	BASEMENT PLAN	1/16" = 1'-0"	4
OPERATIONS BUILDING	PLUMBING	FIRST FLOOR PLAN	1/16" = 1'-0"	4
OPERATIONS BUILDING	ELECTRICAL	POWER DISTRIBUTION FUNCTIONAL DIAGRAM		2
OPERATIONS BUILDING	ELECTRICAL	MEDIUM VOLTAGE - ONE LINE DIAGRAMS		4
OPERATIONS BUILDING	INSTRUMENTATION	CONTROL SYSTEM BLOCK DIAGRAM		1
OPERATIONS BUILDING	INSTRUMENTATION	LEGENDS & ABBREVIATIONS		2
MCCLUSKY MAIN PUMPING STATION	ARCHITECTURAL	OPERATING LEVEL FLOOR PLAN	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	ARCHITECTURAL	ROOF PLAN	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	ARCHITECTURAL	BUILDING ELEVATIONS	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	ARCHITECTURAL	BUILDING ELEVATIONS	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	ARCHITECTURAL	PERSPECTIVES	No Scale	1
MCCLUSKY MAIN PUMPING STATION	STRUCTURAL	BASEMENT PLAN	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	STRUCTURAL	FIRST FLOOR PLAN	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	PROCESS MECHANICAL	3D PERSPECTIVE		1
MCCLUSKY MAIN PUMPING STATION	PROCESS MECHANICAL	BASEMENT PLAN	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	PROCESS MECHANICAL	FIRST FLOOR PLAN	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	PROCESS MECHANICAL	SECTIONS	1/4" = 1'-0"	2
MCCLUSKY MAIN PUMPING STATION	HVAC	BASEMENT PLAN	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	HVAC	FIRST FLOOR PLAN	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	PLUMBING	BASEMENT PLAN	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	PLUMBING	FIRST FLOOR PLAN	1/8" = 1'-0"	1
MCCLUSKY MAIN PUMPING STATION	ELECTRICAL	POWER DISTRIBUTION FUNCTIONAL DIAGRAM		1
MCCLUSKY MAIN PUMPING STATION	ELECTRICAL	MEDIUM VOLTAGE - ONE LINE DIAGRAMS		2
MCCLUSKY MAIN PUMPING STATION	INSTRUMENTATION	CONTROL SYSTEM BLOCK DIAGRAM		1
MCCLUSKY MAIN PUMPING STATION	INSTRUMENTATION	P&ID - MCCLUSKY MAIN PUMPING STATION - SHEET 1 OF 2		1
MCCLUSKY MAIN PUMPING STATION	INSTRUMENTATION	P&ID - MCCLUSKY MAIN PUMPING STATION - SHEET 2 OF 2		1
MCCLUSKY MAIN PUMPING STATION	INSTRUMENTATION	P&ID - BIOTA WTP SEDIMENTATION - SHEET 1 OF 2		1
MCCLUSKY MAIN PUMPING STATION	INSTRUMENTATION	P&ID - BIOTA WTP SEDIMENTATION - SHEET 2 OF 2		1
MCCLUSKY MAIN PUMPING STATION	INSTRUMENTATION	P&ID - BIOTA WTP UV DISINFECTION - SHEET 1 OF 2		1
MCCLUSKY MAIN PUMPING STATION	INSTRUMENTATION	P&ID - BIOTA WTP UV DISINFECTION - SHEET 2 OF 2		1
MCCLUSKY MAIN PUMPING STATION	INSTRUMENTATION	P&ID - BIOTA WTP CHLORINE SYSTEM - SHEET 1 OF 2		1
MCCLUSKY MAIN PUMPING STATION	INSTRUMENTATION	P&ID - BIOTA WTP CHLORINE SYSTEM - SHEET 2 OF 2		1
	TOTAL SHEET COUNT			104

ATTACHMENT B

ENGINEERING FEE WORKSHEETS

Price/Fee Summary

Task	Description	Hours	Labor	Travel Expenses	Field/Misc Expenses	Subcontracts	Total Price/Fee
	TOTALS:	**9417.00**	**$1,964,313.05**	**$13,405.00**	**$83,811.30**	**$811,222.65**	**$2,872,752.00**
Task 1	**Task 1 Project Management**						
1/.01	Project Management	240	$71,003.92	$1,105.00	$2,136.00	$23,265.90	$97,510.82
1/.02	Administration	160	$19,972.40		$1,424.00	$9,261.00	$30,657.40
1/.03	Management of Subconsultants	160	$42,879.52		$1,424.00		$44,303.52
	Task 1 Subtotals	***560***	***$133,855.84***	***$1,105.00***	***$4,984.00***	***$32,526.90***	***$172,471.74***
Task 2	**Task 2 Special Project and Third-Party Meetings**						
2/.01	Special Project Meetings	40	$10,141.09		$356.00	$2,935.80	$13,432.89
2/.02	Third-Party Meetings	200	$55,943.10		$1,780.00		$57,723.10
2/.03	Reclamation Meetings	80	$22,377.24		$712.00	$16,760.10	$39,849.34
	Task 2 Subtotals	***320***	***$88,461.43***		***$2,848.00***	***$19,695.90***	***$111,005.33***
Task 3	**Task 3 Land Acquistition Services**						
3/.01	Final Site Selection	36	$9,929.14		$320.40	$3,652.95	$13,902.49
3/.02	Right of Entry Agreements	6	$1,654.86		$53.40	$6,313.65	$8,021.91
3/.03	Landowner Contacts	6	$1,654.86		$53.40	$25,200.00	$26,908.26
3/.04	Title Research	6	$1,654.86		$53.40	$12,600.00	$14,308.26
3/.05	Land Appraisal	6	$1,654.86		$53.40	$4,200.00	$5,908.26
3/.06	Survey and Platting	6	$1,654.86		$53.40	$106,365.00	$108,073.26
	Task 3 Subtotals	***66***	***$18,203.42***		***$587.40***	***$158,331.60***	***$177,122.42***
Task 4	**Task 4 Field Services**						
4/.01	Survey	6	$1,654.86		$53.40	$43,838.55	$45,546.81
4/.02	Phase I Environmental Site Assessment	6	$1,654.86		$53.40	$21,598.50	$23,306.76
4/.03	Wetland Delineation	6	$1,654.86		$53.40	$17,851.05	$19,559.31
4/.04	Threatened & Endangered Species	6	$1,654.86		$53.40	$9,345.00	$11,053.26
4/.05	Cultural Resources Inventory	6	$1,654.86	$1,105.00	$53.40	$23,419.20	$26,232.46
4/.06	Preliminary Geotechnical Field Investigation	102	$25,964.12	$3,940.00	$907.80	$218,048.25	$248,860.17
4/.07	Subsurface Utility Engineering	6	$1,654.86	$3,940.00	$53.40	$14,567.70	$20,215.96
	Task 4 Subtotals	***138***	***$35,893.26***	***$8,985.00***	***$1,228.20***	***$348,668.25***	***$394,774.71***
Task 5	**Task 5 Preliminary Design**						
5/.01	Design Team Conference Calls	495	$127,176.30		$4,405.50		$131,581.80
5/.02	Permitting						
5/.03	Utility Extension Plan	112	$24,716.86		$996.80		$25,713.66
5/.04	Transportation Access Plan	136	$24,341.87		$1,210.40		$25,552.27
5/.05	Hydraulic Analysis	180	$37,279.10		$1,602.00	$210,000.00	$248,881.10
5/.06	BWTP Process Engineering	616	$121,106.11		$5,482.40		$126,588.51
5/.07	Biota WTP - Basis of Design Memorandum - Schematic Phase	1388	$256,995.88		$12,353.20		$269,349.08
5/.08	Biota WTP - Basis of Design Memorandum - Spatial Phase	1596	$292,479.49		$14,204.40		$306,683.89
5/.09	Biota WTP - Prepare Basis of Design Memorandum	1641	$350,675.60		$14,604.90		$365,280.50
5/.10	McClusky Main PS - Basis of Design Memorandum - Schematic Phase	431	$81,539.36		$3,835.90		$85,375.26
5/.11	McClusky Main PS - Basis of Design Memorandum - Spatial Phase	456	$87,951.93	$1,105.00	$4,058.40		$93,115.33
5/.12	McClusky Main PS - Prepare Basis of Design Memorandum	766	$166,060.32	$1,105.00	$6,817.40		$173,982.72
	Task 5 Subtotals	***7817***	***$1,570,322.82***	***$2,210.00***	***$69,571.30***	***$210,000.00***	***$1,852,104.12***
Task 6	**Task 6 NDPDES Permitting Support**						
6/.01	Permitting Support	516	$117,576.30	$1,105.00	$4,592.40	$42,000.00	$165,273.70
	Task 6 Subtotals	***516***	***$117,576.30***	***$1,105.00***	***$4,592.40***	***$42,000.00***	***$165,273.70***

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ENDAWS Task Order 4250 – Eastern North Dakota Alternate Water Supply
Preliminary Design Services

Task Order Effective Date: February 1, 2024

TASK ORDER EXECUTIVE SUMMARY

REQUEST

Consideration and approval of a preliminary design task order in the amount of $370,443 for preliminary design of two Hydraulic Break Tanks, as part of the Eastern North Dakota Alternate Water Supply (ENDAWS) project. The Task Order advances the appraisal-level design completed under the Bureau of Reclamation's ENDAWS Environmental Impact Statement and Record of Decision. Services will begin in February 2024 and finish by October 2025. These professional services are provided on an hourly basis; the fee is an estimate based on the scope and nature of the work and the 20-month schedule.

TASK ORDER SUMMARY

The services to be provided by the engineering team are fully described in the attached Task Order. The following summarizes each of the major tasks.

Basic Services: The estimated hourly fee and expenses for standard and customary preliminary design, surveying, and environmental services are as follows for a future construction project with an estimated cost of $23 million:

	Fee	% of Const
1) Task Order Management and Administration	$61,157	0.27%
2) Special Project and Third-Party Meetings	$34,011	0.15%
3) Final Site Selection, Site Reconnaissance and Landowner Communication Support Services	$19,355	0.08%
4) Coordination of Land Acquisition, Geotechnical Investigation, and Environmental/Cultural Surveys	$8,917	0.04%
5) Preliminary Design Services	$246,596	1.07%
Totals	$370,443	1.61%

Special Services: There are no unique or specialized services required under this task order.

PROJECT OVERVIEW

A map showing the location of the project is included in the background information of the attached Task Order. This project will be located nearby the Biota Water Treatment Plant site near McClusky, North Dakota. Elements of this preliminary design Task Order are:

- Development of a Project Management Plan specific to the Work to keep the Task Order on schedule and on budget,
- Leading Special Project and Third-Party meetings to keep stakeholders apprised of Task Order status and to provide a forum for stakeholder input,
- Review the final site location for the Hydraulic Break Tanks, including development of a final site selection technical memorandum,
- Coordination between this task order and the Task Order 3210 – Biota Water Treatment Plant & Main Pumping Station Task Order, including
    - Property acquisition and preliminary geotechnical investigation support
    - Environmental/cultural/threatened and endangered species surveys and reports
    - Topographic site plans, and routing necessary utilities to the site
- Preliminary Design to complete permitting, a refinement of system hydraulics within the Hydraulic Break Tanks, utility coordination, a geotechnical investigation, and modeling such that the spatial location and size of the tanks and necessary utilities are fully defined, and

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ENDAWS Task Order 4250 – Eastern North Dakota Alternate Water Supply
Preliminary Design Services

Task Order Effective Date: February 1, 2024

TASK ORDER EXECUTIVE SUMMARY

- Development of an ENDAWS preliminary design report, associated preliminary design drawings, and preliminary Opinion of Probable Construction Cost as the key deliverables.

Black & Veatch Corporation
Professional Services for the Red River Valley Water Supply Project
Under General Agreement dated January 17, 2008

ENDAWS Task Order 4250 – Hydraulic Break Tank Preliminary Design

Effective Date – February 1, 2024

Content of this Task Order is as follows:

I. PROJECT BACKGROUND

1. The Red River Valley Water Supply Project (RRVWSP, the Project) will provide a supplemental water supply to eastern and central North Dakota (ND) in the event of drought conditions in the Red River watershed. The Project as envisioned by the Garrison Diversion Conservancy District (Garrison Diversion, the Owner) will also supply additional water to support industrial development as well as provide an environmental benefit to local rivers during drought conditions by augmenting natural stream flows. The source water will be withdrawn from the Missouri River or the McClusky Canal and conveyed to a new water plant. A multi-county pipeline will then convey flows from the plant to the Sheyenne River. Lake Ashtabula located downstream will provide storage for controlled releases to the Red River Valley. The current focus of the project is to construct the intake at the McClusky Canal and the completion of the pipeline from the McClusky Canal to the Sheyenne River.

2. Professional services for design of the Project will be accomplished through the execution of multiple task orders for design and associated activities as well as for engineering services during construction. This Task Order will be executed under two foundation documents:

A. A Preliminary Design Report (PDR) prepared by Engineer and authorized by Owner under previously executed Task Order.
B. The Eastern North Dakota Alternate Water Supply EIS.

II. TASK ORDER OBJECTIVES

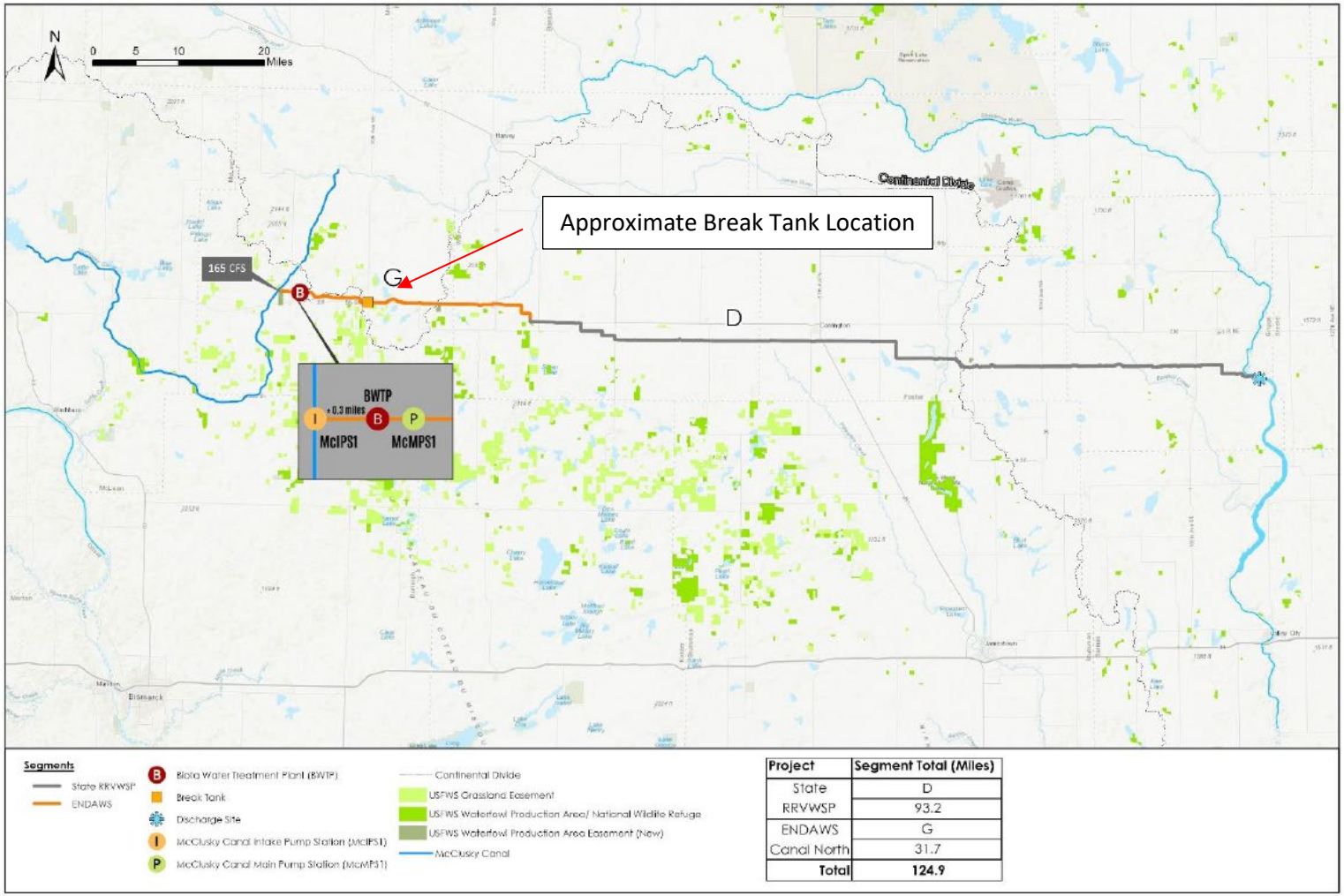
1. The objective of this task order is to complete a preliminary design for the Hydraulic Break Tanks, which will be two approximately 5-million-gallon break tanks at the point where the pipeline transitions from pressure flow to gravity flow. **Figure 1** shows the approximate location and layout of the Hydraulic Break Tanks. **Figures 2A and 2B** show a conceptual layout drawing. Drawings 2A and 2B are based on the original Red River Valley Water Supply Project alignment and in the analysis completed as part of the Red River Valley Water Supply Project Preliminary Design Report which presumed a Missouri River intake.

2. The U.S. Department of the Interior, Bureau of Reclamation (Reclamation) completed the Eastern North Dakota Alternate Water Supply EIS which resulted in the Record of Decision being signed for the ENDAWS portion of this project. As such, Reclamation is a stakeholder for this project and coordination with them is presumed throughout the effort.

3. The Reclamation EIS allowed for the construction of the pipeline from the McClusky Canal to the Sheyenne River as shown on Figure 1. Because of this change, the Hydraulic Break Tanks will need to be relocated and the overall hydraulic analysis of the ENDAWS alignment will need to be finalized. This work will be done under another Task Order. The approximate size and function of the break tanks will remain as described in the Preliminary Design Report. However, the specific water operating levels will be updated. These hydraulic criteria will serve as inputs to the work completed under this task order.

4. Specific objectives for this Task Order are to:
   A. Finalize a site location for the break tanks. A preliminary evaluation of sites was completed as part of the Reclamation EIS and under Task Order 5280. Available land will also in part determine the final location for the break tanks. It is expected that a 5 to 10 acre parcel will be required for the break tanks.
   B. Support Garrison Diversion with the required survey and easements so it can complete land acquisition of the required property.
   C. Complete a preliminary geotechnical investigation to support the preliminary design.
   D. Complete environmental, cultural, threatened and endangered species, and raptor surveys of the property.
   E. Develop topographic site plans from currently available LIDAR information.
   F. Develop a plan for bringing required utilities to the selected property location.
   G. Develop a Basis of Design Report and the approximate drawings shown in **Attachment A .**
   H. Provide an updated Opinion of Probable Construction Cost (OPCC).

5. Items B, C, D and E listed above will be performed under the ENDAWS TO 3210 Biota WTP & Main Pumping Station Preliminary Design but will need to be coordinated with this task. Specifically,
   A. Land acquisition assistance to Garrison Diversion through property appraisals, property boundary surveys, landowner contacts, offer/counteroffer(s), and landowner negotiations. Normal property acquisition activities are assumed.
   B. A preliminary geotechnical investigation and reporting of the in-situ soil conditions for land-side borings and borings.
   C. A detailed assessment of the land expected to be acquired for environmental and cultural features as well as the potential for contamination.
   D. A site map showing topography that will form the basis for the site layout.



Project	Segment Total (Miles)
State RRVWSP	D 93.2
ENDAWS	G 31.7
Canal North	
Total	**124.9**

Figure 1 - Hydraulic Break Tank Location

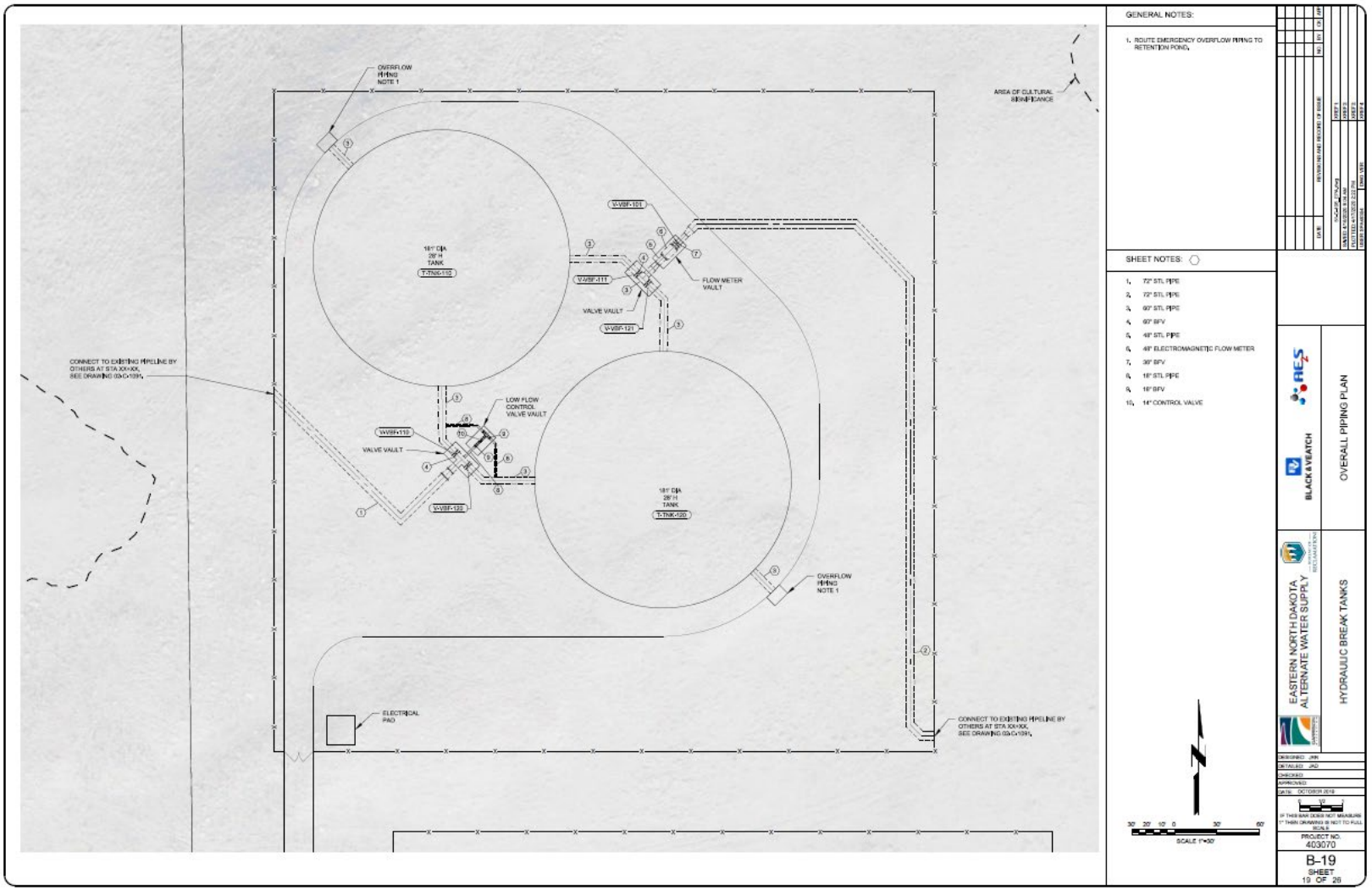


Figure 2A – Hydraulic Break Tank Site Layout

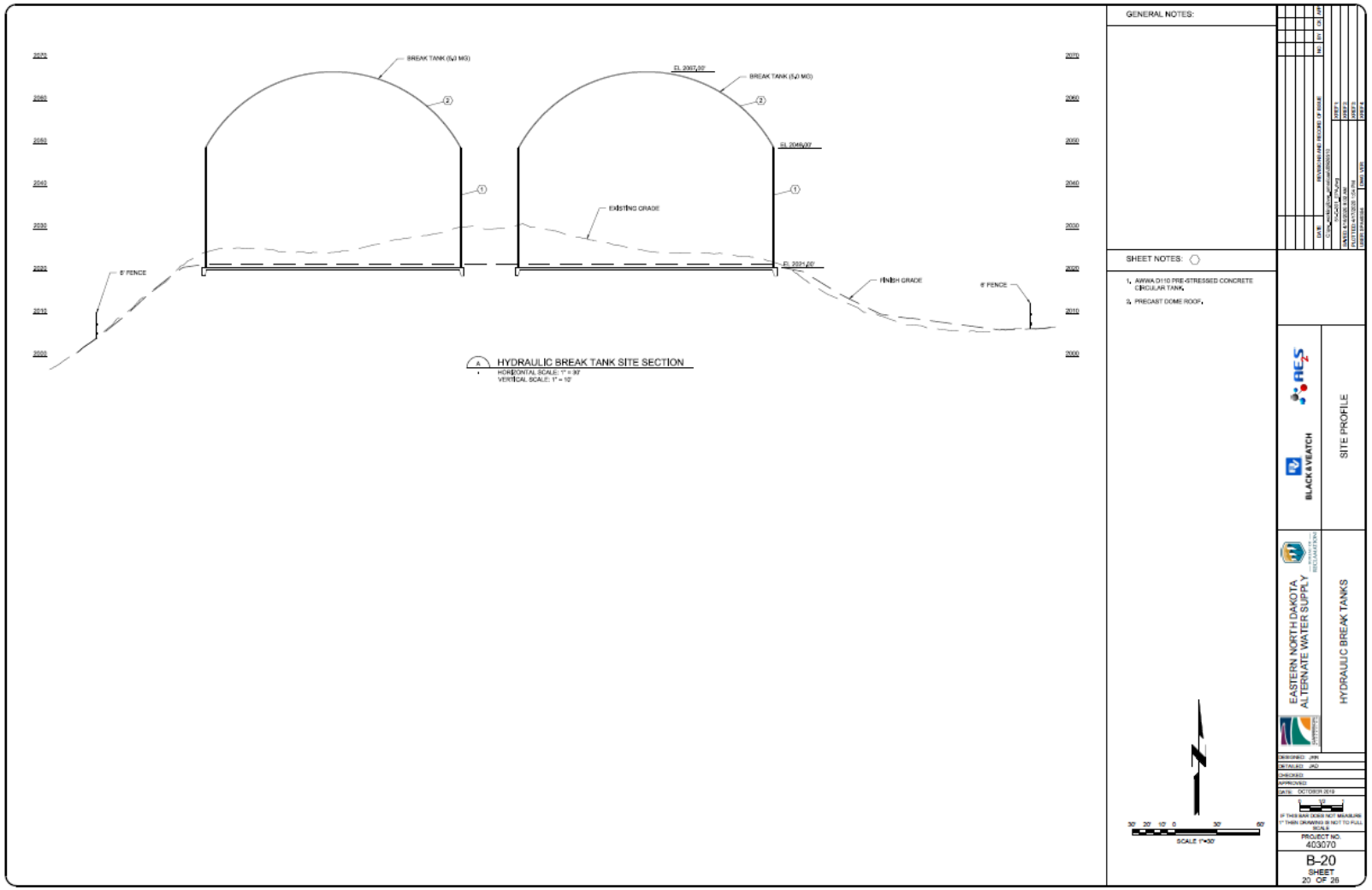


Figure 2B – Hydraulic Break Tank Cross Section

III. GENERAL REQUIREMENTS

1. Under this Task Order, Engineer will provide services in accordance with the Standard Form of Agreement between Owner and Engineer for Professional Services dated January 17, 2008 (Agreement).

2. General Description of Activities. The Basic Services to be performed by Engineer consist of professional design services associated with development of preliminary design for construction of hydraulic break tanks and associated site improvements and access road(s).

3. Work outside Basic and Special Services. Engineer agrees to provide the Basic Services and Special Services identified herein. Work not specifically discussed herein as part of Basic Services or Special Services is considered Additional Services. Additional Services will only be performed with proper separate authorization such as an amendment to this Task Order or a new separate Task Order.

4. Capital Cost Opinions. All opinions of probable construction cost developed will generally follow the recommendations of the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinions' level of accuracy presented by Engineer for the various deliverables will be as noted in subsequent paragraphs of this Task Order under Basic Services.

IV. BASIC SERVICES

Basic Services of this Task Order are organized into major tasks as follows:

- Task 1 – Task Order Management and Administration
- Task 2 – Special Project and Third-Party Meetings
- Task 3 – Final Site Selection and Landowner Communication Support
- Task 4 – Coordination of the Land Acquisition, Geotechnical Investigation, Environmental/Cultural Reports, and Site Survey
- Task 5 – Preliminary Design and OPCC

1. Task 1 – Task Order Management and Administration

This task includes overall management and development of a Project Management Plan specific to the Work. The overall objective of this task is to keep the Task Order on schedule and on budget.

A. Project Management. Engineer will provide management services necessary for execution of the Task Order, including efforts required for proper resource allocation, schedule development and monitoring, budget review and control, Owner coordination, and other standard and customary activities required for timely completion of the Work. Owner coordination will occur through regular project meetings as described in Task 5A.

B. Administration. Perform general administrative duties associated with the Task Order, including general correspondence, day-to-day contact and coordination, administration, and monthly invoicing in a form that is acceptable to the Owner.

C. Management of Subconsultants. Engineer will monitor subcontractor progress, review and approve invoices, oversee adherence to the approved quality assurance/quality control (QA/QC) plan, monitor adherence to document preparation standards, and generally oversee Subconsultants' performance.

2. Task 2 – Special Project and Third-Party Meetings

The overall objective of this task is to keep stakeholders apprised of Task Order status and to provide a forum for stakeholder input. Engineer will prepare an agenda and provide meeting notes documenting discussions and action items. The following meetings are anticipated:

A. Special Project Meetings

i. Task Order Initiation Meeting. Engineer will conduct a Task Order Initiation Meeting with the Owner and Subconsultants to review the overall approach to the Work, the schedule by which the work will be prosecuted, and other relevant coordination and management items necessary for a successful outcome. Another objective of this meeting will be to finalize the approach to right(s) of entry and to reach an agreement on an approach to obtaining the necessary right(s) of entry.

B. Third-Party Meetings

i. Stakeholder Meetings. Engineer will attend and present Project information for one meeting with the Lake Agassiz Water Authority (LAWA) Technical Advisory Committee (TAC).

ii. Design Coordination Meetings. Engineer will schedule and meet with the following agencies. Engineer will provide summary notes of meetings.

(a) Two meetings with the Reclamation in regard to final pump station location.

(b) Two meetings with the local electric utility regarding providing power service.

(c) Meetings with landowners, the Township and the County will be completed under Task Order 3210.

3. Task 3 – Final Site Selection, Site Reconnaissance and Landowner Communication Support

As shown in Figure 1, a general area for the Hydraulic Break Tanks has been selected. Specific parcels have not been identified. This task includes a site walk with Garrison Diversion and Reclamation to review the final site locations for the Hydraulic Break Tanks. The site walk will include an environmental professional to identify potential environmental (wetlands, critical habitat) cultural features or pollution liability features that may impact site acquisition. The site

walk will also include identification of potential utilities. A final site selection technical memorandum will be developed on conjunction with Reclamation to supplement the existing EIS.

4. Task 4 – Coordination of the Land Acquisition, Geotechnical Investigation, Environmental/Cultural Reports, and Site Survey

As noted above, the actual land acquisition, geotechnical investigation, environmental/cultural reports and site survey will be completed under a separate task order. The purpose of Task 4 is to provide coordination between this task order and the task leader of the biota water treatment plant task order. The following products will be provided to this Task Order from work under the Biota Water Treatment Plant Task Order 3210:

- All property acquisition support. The intent of this task order is to finalize the site location, the required parcel size, and to initiate acquisition of the property. While this task order will be to finalize the site location and site, all acquisition work will be done under a separate task order.
- A geotechnical data report with preliminary recommendations for the hydraulic break tanks. It is expected that additional geotechnical borings will be completed during the final design. At a minimum, it is expected that two soil borings will be completed – one under each tank.
- Environmental/Cultural Reports. Final environmental (wetlands, threatened/engaged species, raptor surveys, etc.) and cultural reports will be provided to this Task Order documenting any environmental or cultural site constraints.
- Also, a Phase I Environmental Site Assessment Report will be provided to this Task Order. It is assumed there are no pollution liabilities that will need to be addressed on the site.
- Existing topography is available from previous LIDAR surveys. Additional state LIDAR data is available if needed. A CAD file with a site survey with 1-foot contours will be provided for this site.

5. Task 5 – Preliminary Design Phase

The purpose of Preliminary Design is to complete a refinement of system hydraulics within the Hydraulic Break Tanks, utility coordination, a geotechnical investigation, and modeling such that the spatial location and size of the tanks and necessary utilities are fully defined. Note that the hydraulic efforts described in this task order are relate to the sizing of the break tanks. The overall hydraulics of the system are being completed under Task Order 5340.

A. Design Team Conference Calls. Engineer will schedule and lead conference calls with the Owner and its team. Calls will be scheduled, and content organized to coincide with other Task Orders for efficient utilization of staff time.

i. Owner Conference Calls (up to 20 calls assuming a 20-month preliminary design phase duration). Engineer will conduct bi-weekly conference calls with the Owner to review overall progress, exchange ideas and information, and coordinate activities.

ii. Task Order Coordination Calls (up to 10 calls). Engineer will plan and take part in monthly coordination conference calls with tasks leaders of other Task Orders to share progress and conclusions such that efforts are well coordinated and not duplicated or unnecessary.

B. Permitting. It is assumed that no permits will be required as this is a preliminary design task order. Any re-zoning that is required will be completed under the Biota Water Treatment Plant Task Order. It is expected that landowner permissions will be required for the geotechnical borings and for site access.

C. Hydraulic Analysis

i. The overall system hydraulics are being finalized as part of another Task Order and will set the basis of design for the Break Tank Hydraulics. The hydraulics included under this Task Order are more specifically for assigning pipe flow and valves within Break Tank limits.

D. Basis of Design Memorandum

i. Draft Basis of Design Memorandum (BDM). A draft BDM will be prepared for the design and construction of the Hydraulic Break Tanks. Engineer will review the Draft BDM for accuracy and completeness prior to submitting to the Owner for review and comment. The BDM will build upon the work of the previously prepared Preliminary Design Report and EIS.

ii. Review and Finalize BDM. Engineer will confer with Owner's staff to review the Draft BDM and obtain Owner's comments. Engineer will address Owner comments and develop a Final BDM. The Final BDM will be the document followed by the design team for the break tank design.

E. Engineer will prepare Preliminary Deliverables. Preliminary drawing development will be completed in parallel with the draft BDM.

i. Document Development. The content of preliminary deliverables is as follows:

- General drawings
- Access road drawings
- Site layout drawings
- Hydraulic break tank drawings
- Pipeline drawings
- Outline of technical specifications
- Internal quality control review and refinement
- QA/QC plan and log update
- Task Order schedule update

ii. Preliminary Design Review. Attend a virtual meeting or conference call with the Owner to receive and discuss review comments. Document comments received in a log and distributed to stakeholders.

iii. Revise documents as necessary to reflect decisions taken at this level incorporating design modifications into subsequent deliverables.

F. Preliminary Opinion of Probable Construction Cost (OPCC). Engineer will update the OPCC (aka Cost Opinion or Cost Estimate) at the preliminary design submittal after transmittal of the Level 1 deliverable. The cost opinion will be updated commensurate with an AACE Class 3 estimate. The expected accuracy will be -10 to -20 percent on the low end and the expected accuracy on the high end will be from +10 to +30 percent.

V. DELIVERABLES

The following deliverables will be furnished under this Task Order. Documents or deliverables not included in the list below will be provided as Additional Services as authorized by the Owner.

1. Task 1 – Project Management

   A. Monthly invoices

   B. Baseline Schedule

2. Task 2 – Special Project and Third-Party Meetings. Meeting agenda (included with MS Outlook meeting invitations) and minutes (electronic pdf files)

3. Task 3 - Final Site Selection, Site Reconnaissance and Landowner Communication Support

   A. Final Site Selection Technical Memorandum.

4. Task 4 - Coordination of the Land Acquisition, Geotechnical Investigation, Environmental/Cultural Reports, and Site Survey
   A. Land Acquisition Site Plan
   B. Geotechnical Investigation Data Report
   C. Site Environmental and Cultural Report
   D. Site Topographic Map
   E. Phase I ESA

2. Task 5 – Preliminary Design

   A. Meeting/conference call agenda and minutes (electronic pdf files)
   B. Modeling update technical memorandum (electronic pdf file)
   C. Basis of Design Memorandum (draft and final electronic pdf files)
   D. Preliminary Drawings (single hard copy and electronic pdf files)
   E. Preliminary Design Owner review comments log (electronic pdf file)
   F. Preliminary cost opinion

3. Special Services

   A. None.

VI. ADDITIONAL SERVICES

The professional services listed below are not included in the scope of this Task Order nor does the fee shown in Article IX include any labor and direct expenses for items identified as Additional Services. Should Owner want to include services listed under Additional Services in Engineer's scope, an amendment to this Task Order, or execution of a separate Task Order with the new scope, will be necessary.

1. The scope assumed that any permit fees will be paid by the Owner.

VII. SPECIAL RESPONSIBILITIES OF OWNER

1. Interim Deliverable Review Requirements. Owner commits to review periods for interim deliverables of no more than 30 calendar days after receipt of deliverables from Engineer. A review meeting will be scheduled and conducted by Engineer no more than 14 calendar days after receipt of Owner review comments, unless a mutually agreed upon date outside this schedule window is selected.

2. Land Acquisition Costs. Fees paid to all property owners necessary to purchase property, easements, or ROEs are the responsibility of the Owner.

VIII. FEE

The total fee for Basic Services provided under this Task Order is $370,443.

A worksheet showing the fee estimate and level of effort by task is included in Attachment B.

IX. PERFORMANCE SCHEDULE

Basic and Special Services of this Task Order will be completed by October 2025.

X. DOCUMENTS INCORPORATED BY REFERENCE AND ATTACHMENTS

1. Standard Form of Agreement between Owner and Engineer for Professional Services dated January 17, 2008 is incorporated by reference.

2. Attachment A – Proposed Outline for the Basis of Design Report and Preliminary Drawing List

3. Attachment B – Engineering Fee Worksheets

XI. ACCEPTANCE

If this satisfactorily sets forth your understanding of our Agreement, please print and sign this document. You should retain one copy for your files and return an electronic copy via email to Paul Boersma (BoersmaPM@BV.com) with Black & Veatch Corporation.

By: _____
Duane DeKrey, General Manager
Garrison Diversion Conservancy District

Dated: _____

By: _____
Paul Boersma, Associate Vice President
Black & Veatch Corporation

Dated: _____

ATTACHMENT A

PROPOSED OUTLINE FOR THE BASIS OF DESIGN REPORT
AND
PRELIMINARY DRAWING LIST

PROPOSED OUTLINE FOR THE BASIS OF DESIGN REPORT

1. General
    a. Project Description
    b. Background
    c. Project Scope
    d. Schedule
    e. Site Description
        i. Location
        ii. Datum
2. Process Design Criteria
    a. Hydraulics
3. Facility Requirements
    a. Site Selection
    b. Land Acquisition
    c. Environmental/Cultural
4. Sitework
    a. Applicable Codes and Standards
    b. Roadways
    c. Site Drainage and Stormwater Management
    d. Site Piping
    e. Site Structures
5. Geotechnical Design Criteria
    a. Scope
    b. Preliminary Geotechnical Data
    c. Design Procedures and Assumptions
    d. Geotechnical Investigation
6. Structural Design Criteria
    a. General
    b. Codes and Standards
    c. Specified Material Parameters
    d. Loading Criteria
    e. Design Procedures and Assumptions
    f. Special Inspections
7. Electrical Design Criteria
    a. General Design Criteria
    b. Codes and Standards
    c. Power Distribution
    d. Electrical equipment design criteria
    e. Lighting Requirements
    f. Fire Alarm System
    g. Telephone and Communication
    h. Security System
    i. Calculations and analysis requirements

    Instrumentation Design Criteria
    j. General

k. Applicable Codes and Standards
l. Hydraulic Break Tanks Control System
m. P&ID Drawings
n. Instrumentation and Control Devices
o. Equipment Controls
p. Equipment Control Modes
q. Project Equipment and Instrumentation Control Concepts

8. Opinion of Probable Cost

Proposed Drawing List

ENDAWS Task Order 4250 –
Hydraulic Break Tanks
Preliminary Design
Garrison Diversion
Conservancy District

AREA DESCRIPTION	DISCIPLINE	DRAWING NAME
GENERAL		COVER SHEET
GENERAL		GENERAL - INDEX OF DRAWINGS
SITE PLANNING		CIVIL - OVERALL SITE PLAN
SITE PLANNING		CIVIL - ENLARGED SITE PLAN
SITE PLANNING		CIVIL - GRADING AND PAVING PLAN
SITE PLANNING		CIVIL - OVERALL PIPING PLAY
SITE PLANNING		CIVIL - SITE PLAN SECTION
HYDRAULIC BREAK TANK		STRUCTURAL - FOUNDATION AND GROUND FLOOR PLANS
HYDRAULIC BREAK TANK		STRUCTURAL - SECTIONS AND DETAILS
HYDRAULIC BREAK TANK		ELECTRICAL - DEMOLITION ONE LINE DIAGRAM
HYDRAULIC BREAK TANK		P&ID - HYDRAULIC BREAK TANK
HYDRAULIC BREAK TANK		P&ID - CONTROL SYSTEM BLOCK DIAGRAM

ATTACHMENT B

ENGINEERING FEE WORKSHEETS

Price/Fee Summary							
Task	**Description**	**Hours**	**Labor**	**Travel Expenses**	**Field/Misc Expenses**	**Subcontracts**	**Total Price/Fee**
	TOTALS:	**1460.00**	**$348,704.86**	**$8,745.00**	**$12,994.00**	**$0.00**	**$370,443.86**
Task 1	**Task 1 Task Order Management and Administration**						
1/.01	Project Management	120	$34,972.08	$3,940.00	$1,068.00		$39,980.08
1/.02	Administration	120	$20,176.20		$1,068.00		$21,244.20
1/.03	Management of Subconsultants						
	Task 1 Subtotals	***240***	***$55,148.28***	***$3,940.00***	***$2,136.00***		***$61,224.28***
Task 2	**Task 2 Special Project and Third-Party Meetings**						
2/.01	Special Project Meetings	48	$13,116.57	$1,970.00	$427.20		$15,513.77
2/.02	Third-Party Meetings	64	$17,958.86		$569.60		$18,528.46
	Task 2 Subtotals	***112***	***$31,075.42***	***$1,970.00***	***$996.80***		***$34,042.22***
Task 3	**Task 3 Land Acquistition Services**						
3/.01	Final Site Selection	60	$16,002.38	$2,835.00	$534.00		$19,371.38
	Task 3 Subtotals	***60***	***$16,002.38***	***$2,835.00***	***$534.00***		***$19,371.38***
Task 4	**Task 4 Field Services**						
4/.01	Coordination Activities	32	$8,641.12		$284.80		$8,925.92
	Task 4 Subtotals	***32***	***$8,641.12***		***$284.80***		***$8,925.92***
Task 5	**Task 5 Preliminary Design**						
5/.01	Design Team Conference Calls	264	$69,027.06		$2,349.60		$71,376.66
5/.02	Permitting						
5/.03	Hydraulic Analysis	140	$33,374.29		$1,246.00		$34,620.29
5/.04	Basis of Design Memorandum	572	$124,691.97		$5,090.80		$129,782.77
5/.05	OPCC	40	$10,744.34		$356.00		$11,100.34
	Task 5 Subtotals	***1016***	***$237,837.66***		***$9,042.40***		***$246,880.06***
	Task 6 Subtotals						

BLACK & VEATCH
Building a world of difference.

RRVWSP Task Order 1520 – Operational Planning Phase 3

Task Order Effective Date: February 1, 2024

TASK ORDER EXECUTIVE SUMMARY

REQUEST

Consideration and approval of a task order in the amount of $462,030 for ongoing analysis of the RRVWSP operations. The Phase 1 and Phase 2 Operations Task Orders made significant progress in evaluating how drought data will be collected, the Lake Audubon and McClusky Canal operating strategies, the governance of the RRVWSP, water accounting tools, and management protocols. The progress has been reported through technical memorandums and with ongoing meetings with the Operations Subcommittee. Ongoing meetings with USACE and the State have also been had.

The purpose of this task order is to continue to formalize these plans through discussions with the Users, Garrison Diversion, USACE and the State. Technical memorandums will be developed for Tasks 2 - 8 described below. The task order include scope and fee for the Wilson Water Group. These professional services are provided on an hourly basis; the fee is an estimate based on the scope and nature of the work and the 20-month schedule.

TASK ORDER SUMMARY

The services to be provided by the engineering team are fully described in the attached Task Order. The following summarizes each of the major tasks.

Basic Services: The estimated hourly fee and expenses for standard and customary engineering evaluations:

	Fee
TASK ORDER	
Task 1 – Task Order Management and Administration	$28,301
Task 2 – RRVWSP Planning, Review, and Direction	$82,507
Task 3 – Technical Report	$56,227
Task 4 – Operational Description and Assumptions	$52,504
Task 5 – Project Governance	$30,177
Task 6 – Water Supplies	$52,983
Task 7 – Pipeline and Reservoir Operations (with WWG)	$137,744
Task 8 – Water Accounting	$21,357
Total	$462,030

Special Services: There are no unique or specialized services required under this task order.

Black & Veatch Corporation
Professional Services for the Red River Valley Water Supply Project
Under General Agreement dated January 17, 2008

RRVWSP Task Order 1520 – Operational Planning, Phase 3

Effective Date – February 1, 2024

Content of this Task Order (TO) is as follows:

I. PROJECT AND TASK ORDER BACKGROUND

1. The Red River Valley Water Supply Project (RRVWSP, the Program) being undertaken by the State of North Dakota (ND) will provide a supplemental water supply to eastern and central ND in the event of drought conditions in the Red River watershed and for industrial development. The Program as envisioned by the Garrison Diversion Conservancy District (Garrison Diversion, the Owner) will withdraw water from the Missouri River and/or the McClusky Canal through the Eastern North Dakota Alternative Water Supply (ENDAWS) and convey it eastward through a multi-county pipeline to the Sheyenne River, a tributary of the Red River, for direct pipeline usage and flow augmentation.

2. A Draft Operational Plan was developed in 2009 and 2010 for the Federal RRVWSP under Task Order RR-4, in conjunction with preliminary engineering, easement acquisition, and land acquisition efforts for the federal project. The Draft Operational Plan in its entirety consisted of the plan itself, an executive summary to the plan, as well as several accompanying technical memoranda, including the following:

   A. TM1 - Data Collection
   B. TM2 - FEIS Operational Description

C. TM 3 - Lake Audubon and McClusky Canal Freshening Strategy
D. TM 4 - Infrastructure Operational Strategies
E. TM 5 - Baldhill Dam Operational Strategies
F. TM 6 - Water Accounting
G. TM 7 - Management Protocol

3. The complexity and magnitude of the RRVWSP required a phased approach to operational and asset management planning. Phase 1 of operational and asset management planning focused on the development of frameworks to support the effective and efficient development of Operational and Asset Management Plans. During Phase 1, a review of the previous Federal Draft Operational Plan was conducted to identify the key features that should be included in the current Project. Project governance was discussed, and committee structures were established. Project Governance will consist of three committees: the Working Committee, the Management Committee, and the Steering Committee. Garrison Diversion and the Lake Agassiz Water Authority (LAWA) also determined that ENDAWS would be considered as an alternate water source. Additionally, the features and impacts of the 2021 drought were studied, such as flow rates, reservoir levels, water quality concerns, and water loss information, to learn more about significant drought and anticipate Project operations. A technical memorandum was drafted to document Phase 1.

4. Phase 2 of operational planning focused on the development of Protocols for governance structure, drought monitoring, and water requests for Direct Pipeline Users (DPU) and Direct River Users (DRU). Source water stability and quality were evaluated, and water management strategies were developed for utilizing ENDAWS as a secondary water source. Initial water accounting tools were created and a predictive management system roadmap was established following the completion of in-depth analysis of monitoring triggers.

5. Phase 3 operational planning will review project goals and assumptions to outline remaining Project phases. All necessary updates and changes to Project components and infrastructure will be incorporated following the finalization of User participation agreements. Draft operational agreements and protocols for engagement with regulatory stakeholders will be finalized for endorsement. Lake Audubon and McClusky Canal refreshening strategies will be revised, James River alternative usage options developed, and ENDAWS water management strategies updated. Support will be provided to the USACE for their WCM update and the 2020 NDG&F bathymetric survey will be reviewed and incorporated into all future Project operational planning. NDDWR responses to Lake Ashtabula operational questions will be reviewed along with the implications for water appropriations and documented accordingly. Finally, the Water Accounting Model will be updated based on the USACE WCM update outcomes and the 2020 NDG&F bathymetric survey.

II. TASK ORDER OBJECTIVES

1. There are five overall objectives of this Task Order.

    1. The first objective is to update Project Operations Description and Assumptions documenting all new Project components and Branch Pipeline options based on final User participation.

    2. The second objective is to update Project Governance by creating draft Operational Agreements and Protocols for endorsement by all regulatory stakeholders as part of Project Governance.

    3. The third objective is to draft an update to Project Water Supplies that incorporates updated source water refreshening and water management strategies for ENDAWS and identifies the James River alternative usage options.

    4. The fourth objective is to update Pipeline and Reservoir Operations by supporting the U.S. Army Corps of Engineers' (USACE) water control manual (WCM) update, incorporating the 2020 Lake Ashtabula bathymetric survey conducted by the North Dakota Game and Fish Department (NDG&F) into Project operations, and updating Lake Ashtabula operations and water appropriations implications (based on North Dakota Department of Water Resources (NDDWR) responses to Project operational assumptions, Bureau of Reclamation (Reclamation) guidance, and USACE seasonal drawdown strategies.

    5. The fifth objective is to update the preliminary Water Accounting Model to incorporate all water supply and User participation adjustments.

    6. Future task orders will include the scope for more detailed operations tools based on the final protocols and draft tools developed in this task order.

III. GENERAL REQUIREMENTS

1. Under this Task Order, Engineer will provide services in accordance with the Standard Form of Agreement between Owner and Engineer for Professional Services dated January 17, 2008 (Agreement).

2. General Description of Activities. The Basic Services to be performed by Engineer consist of professional services associated with the development of the Draft Operational Plan for the RRVWSP.

3. Work outside Basic and Special Services. Engineer agrees to provide the Basic Services and Special Services identified herein. Work not specifically discussed herein as part of Basic Services or Special Services is considered Additional Services. Additional Services will only be performed with proper separate authorization such as an amendment to this Task Order or a new separate Task Order.

4. Explicit Responsibilities. Basic Services and Special Services explicitly set forth the Work Engineer will perform and do not implicitly put any additional responsibilities or duties upon Engineer. Deliverables to be provided are explicitly identified in this Task Order.

5. Explicitly Identified Quantities. Engineer in development of this Task Order estimates the level of effort required to provide the services discussed. Where specific information is listed as to the quantity of service to be provided by Engineer, those quantities listed are considered Basic Services or Special Services and are, therefore, included in this Task Order scope of service and associated fee estimate. Services exceeding the written quantities shown below in Basic Services or Special Services are considered Additional Services.

IV. BASIC SERVICES

The Basic Services of this Task Order are provided below in the following tasks:

- Task 1 – Task Order Management and Administration
- Task 2 – RRVWSP Planning, Review, and Direction
- Task 3 – Technical Report
- Task 4 – Operational Description and Assumptions
- Task 5 – Project Governance
- Task 6 – Water Supplies
- Task 7 – Pipeline and Reservoir Operations
- Task 8 – Water Accounting

1. **Task 1 – Task Order Management and Administration**
   The overall objective of this task is to set up the project and keep the Task Order on schedule for its estimated 17-month duration (January 01, 2024 – June 30, 2025). Engineer will provide the following services to the Owner:

   A. Provide general project management and administration tasks including communications with the Owner, coordination, and supervision of the Engineer's project team, monitoring the project schedule, monitoring the project budget, and invoicing for 17 months.

2. **Task 2 – RRVWSP Planning, Review, and Direction**
   Given the complexity of the RRVWSP, the Engineer's team will expand client and Project team knowledge by conducting a detailed review of Project objectives, goals, and assumptions. The team will then draw upon their expertise to provide a clear, organized and goal-oriented way forward for all Project tasks. Engineer will provide the following services to the Owner in support of this Task:

   A. Review past project operational plans, assumptions, and technical memoranda to ensure clear guidance and future direction for all new team members.

   B. Review/Update project direction for each task and define future operation phases.

C. Develop Placemat showing history and future for Operational Planning action items.

D. Develop PowerPoint showing history and future for Operational Planning action items.

i. Review of Placemat and PowerPoint
ii. Incorporate edits/changes into placemat and PowerPoint
iii. Complete Placemat and PowerPoint drafts
iv. Facilitate virtual presentation of draft Placemat and PowerPoint to Owner

E. Present PowerPoint to LAWA Technical Advisory Committee (TAC) and Operational Planning Subcommittee.

F. Present PowerPoint to LAWA/Red River Valley (RRV) Committee.

G. Present PowerPoint to Garrison Diversion Board.

3. **Task 3 – Final Technical Report**

The Final Technical Report is intended to summarize Phase 3 progress and detail how each task built upon, or revised, previous Project plans, assumptions, and objectives. Engineer will provide the following services to the Owner in support of this Task:

A. Develop a Technical Report that summarizes Phase 3 work for Tasks 4-8.

i. Review draft Technical Report.

ii. Incorporate Owner's comments into the final Technical Report.

iii. Facilitate a virtual progress meeting to review the final Technical Report with Owner.

B. Develop a draft PowerPoint of the Technical Report.

i. Review the draft PowerPoint with the Owner and finalize based on review.

C. Present PowerPoint to LAWA Technical Advisory Committee (TAC) and Operational Planning Subcommittee.

D. Present PowerPoint to LAWA/Red River Valley (RRV) Committee.

E. Present PowerPoint to Garrison Diversion Board.

4. **Task 4 – Operational Description and Assumptions**

Task 4 will revise operational descriptions and assumptions based on anticipated changes to Project participation and infrastructure needs. Engineer will provide the following services to the Owner is support of this Task:

A. Review and document all new Project components or changes to RRVWSP and ENDAWS infrastructure.

B. Incorporate branch pipeline infrastructure options based on finalized user participation agreements.

C. Incorporate updates into Operational Planning-Phase 3: Final Technical Report.

5. **Task 5 – Project Governance**
Task 5 is intended to provide draft operational team agreements and protocols for endorsement by all regulatory stakeholders as part of Project Governance. Engineer will provide the following services to the Owner in support of this Task:

A. Propose draft operational agreements and protocol with regulatory stakeholders (Bureau of Reclamation, NDDWR & USACE).

B. Incorporate updates into Operational Planning-Phase 3: Final Technical Report.

6. **Task 6 – Water Supplies**
This task is intended to provide updates to Lake Audubon and McClusky canal refresh strategies, James River alternative usage options, and water management strategies for the ENDAWS as a secondary water source. Engineer will provide the following services to the Owner in support of this Task:

A. Incorporate Lake Audubon and McClusky Canal refresh strategies.

B. Develop James River alternative usage options.

C. Incorporate water management strategies utilizing the ENDAWS as a secondary water source for RRVWSP.

D. Draft a Technical Memorandum to incorporate analysis and findings.

i. Develop a draft Technical Memorandum.

ii. Facilitate a virtual progress meeting to review the draft Technical Memorandum with Owner.

iii. Incorporate Owner's comments into the final Technical Memorandum.

iv. Facilitate a virtual progress meeting to review the final Technical Memorandum with Owner.

7. **Task 7 – Pipeline and Reservoir Operations**
The USACE is updating the Lake Ashtabula/Baldhill Dam WCM to incorporate necessary

changes, including Project operations. This update is projected to take two years and is set for completion in 2025. Additionally, a new Bathymetric survey of Lake Ashtabula was completed in 2020 by NDG&F. This task intends to actively support the WCM update process. Utilization strategies for Lake Ashtabula will be updated following receipt of the 2020 bathymetric survey results and Water Control Manual (WCM) update. Engineer will provide the following services to the Owner in support of this Task:

A. Support to USACE on the WCM update for Lake Ashtabula with review and comment.

B. Participate in quarterly meetings to discuss WCM updates.

C. Review 2020 Lake Ashtabula bathymetric survey and update Project operations accordingly.

D. Review and update water supply protocols based on NDDWR responses regarding Lake Ashtabula operations.

E. Update Lake Ashtabula utilization strategies (Reclamation & USACE).

F. Facilitate three, one-hour discussions on Lake Ashtabula drawdown strategies with Stakeholders.

G. Draft Pipeline and Reservoir Operations Technical Memorandum

   i. Review Draft Pipeline and Reservoir Operations Technical Memorandum.

   ii. Facilitate virtual progress meeting to review draft Technical Memorandum with Owner.

   iii. Incorporate edits/comments into final Technical Memorandum.

H. Prepare and present a PowerPoint of findings in Task 6 and Task 7 to LAWA TAC and Operational Planning Subcommittee.

8. **Task 8 – Water Accounting:**

The Water Accounting Model developed in Phase 2 will be updated based on finalized User participation and using the 2020 USACE Bathymetric survey results. Engineer will provide the following services to the Owner in support of this Task:

A. Incorporate Lake Ashtabula WCM and 2020 bathymetric survey updates.

B. Adjust Accounting Model to incorporate new Users.

C. Incorporate updates into Operational Planning-Phase 3: Final Technical Report.

V. SPECIAL SERVICES

There are no Special Services anticipated within this Task Order.

VI. DELIVERABLES

The following deliverables will be furnished under this Task Order. Documents or deliverables not included in the list below will be provided as Additional Services as authorized by the Owner. Unless noted otherwise, deliverables will be in the form of electronic pdf files.

1. **Task 1 – Task Order Management and Administration**
   - A. **Monthly invoices and project reports.**

2. Task 2 - RRVWSP Planning, Review, and Direction
   - A. Operational Planning Placemat
   - B. Operational Planning PowerPoint Presentation
   - C. Virtual Presentation to Owner
   - D. Present PowerPoint to LAWA TAC
   - E. Present PowerPoint to LAWA/RRV Committee
   - F. Present PowerPoint to Garrison Diversion Board

3. Task 3 – Technical Report
   - A. Two Progress Meetings
     - i. PowerPoint Presentation
     - ii. Meeting Agenda
     - iii. Meeting Notes
   - B. Technical Report documenting updates from Tasks 4-8
   - C. Technical Report PowerPoint

4. Task 4 – Operational Description and Assumptions
   - A. All updates incorporated into the Phase 3 Final Technical Report

5. Task 5 – Project Governance
   - A. All updates incorporated into the Phase 3 Final Technical Report

6. Task 6 – Water Supplies
   - A. Two Virtual Progress Meetings
     - i. PowerPoint Presentation
     - ii. Meeting Agenda
     - iii. Meeting Notes
   - B. A Technical Memorandum that documents Water Supplies of the RRVWSP

7. Task 7 – Reservoir Operations
   - A. One Virtual Progress Meeting

i. PowerPoint Presentation
ii. Meeting Agenda
iii. Meeting Notes

B. Three Stakeholder Discussions
i. PowerPoint Presentation
ii. Discussion Agenda
iii. Discussion Notes

C. Quarterly (six) USACE WCM Update Meetings
i. PowerPoint Presentation
ii. Meeting Agenda
iii. Meeting Notes

D. A Technical Memorandum that documents updates to Pipeline and Reservoir Operations

E. A PowerPoint that document the findings in Task 6 and Task 7

8. Task 8 – Water Accounting
A. All updates incorporated into the Phase 3 Final Technical Report

VII. ADDITIONAL SERVICES

1. The professional services listed below are not included in the scope of this Task Order nor does the fee shown in Article IX include any labor and direct expenses for items identified as Additional Services. Should Owner want to include services listed under Additional Services in Engineer's scope of work, an amendment to this Task Order or execution of a separate Task Order with the new work will be necessary. The following items are specifically excluded from Basic and Special Services:

A. All Drought Monitoring Dashboard Development is intended for Phase 4.

B. Support for NDPDES permit amendment to incorporate ENDAWS.

C. All Predictive Model Scenario Development is intended for Phase 4.

D. Water Accounting Model Testing is intended for Phase 4.

E. Meeting support for Project stakeholders beyond what is identified in this Task Order.

F. Asset Management nomenclature and hierarchy development are intended for Phase 4.

VIII. SPECIAL RESPONSIBILITIES OF OWNER

1. Interim Deliverable Review Requirements. The Owner commits to review periods for interim deliverables of no more than 30 calendar days after receipt of deliverables from Engineer.

2. Review comments will be provided by the Owner either electronically in the native Word file in Track Changes Mode or they will be summarized in an MS Excel worksheet or MS Word document.

IX. FEE

The total fee for Basic Services and Special Services provided under this Task Order is estimated to be $462,030. A worksheet showing the fee estimate and level of effort by task is included in Attachment A.

X. PERFORMANCE SCHEDULE

Basic and Special Services of this Task Order will be completed by June 30, 2025.

XI. DOCUMENTS INCORPORATED BY REFERENCE AND ATTACHMENTS

1. Standard Form of Agreement between Garrison Diversion and Engineer for Professional Services dated January 17, 2008 is incorporated by reference.
2. Attachment A- Fee Estimate Worksheets

XII. ACCEPTANCE

If this satisfactorily sets forth your understanding of our Task Order agreement, please print and sign this document. You should retain one copy for your files and return an electronic copy via email to Paul Boersma (BoersmaPM@BV.com) with Black & Veatch Corporation.

By: _____ By: _____

Duane DeKrey, General Manager
Garrison Diversion Conservancy District

Paul Boersma, Associate Vice President
Black & Veatch Corporation

Dated: _____ Dated: _____

Attachment A - Fee

Attachment C
Fee Estimate and Level of Effort Worksheet
Phase 3 (Nov 2023 - Jun 2025)

		LOE														Subtotal	Total	
Task	Description	Burian	$ 285	Sesselman	$ 225	Prelip	$ 195	Seaver/Mowat	$ 135	Stauss	$ 195	Kelly	$ 135	Cost	Cost	
1	**Task Order Management and Administration**	**40**	**$ 11,400**	**0**	**$ -**	**40**	**$ 7,800**	**0**	**$ -**	**20**	**$ 3,900**	**30**	**$ 4,050**		**$ 27,150**	TRUE
A	General Project Management	40	$ 11,400	0	$ -	40	$ 7,800	0	$ -	20	$ 3,900	30	$ 4,050	$ 27,150		
2	**RRVWSP Planning, Review, and Direction**	**42**	**$ 11,970**	**4**	**$ 900**	**144**	**$ 28,080**	**100**	**$ 13,500**	**116**	**$ 22,620**	**8**	**$ 1,080**		**$ 78,150**	TRUE
A	Review of Past Project Operational Plans/Assumptions/Technical Memoranda	12	$ 3,420	0	$ -	40	$ 7,800	16	$ 2,160	40	$ 7,800	0	$ -	$ 21,180		
B	Review/update project direction by task and for each future operational phases	8	$ 2,280	0	$ -	40	$ 7,800	16	$ 2,160	40	$ 7,800	0	$ -	$ 20,040		
C	Develop Placemat showing history and future for Operational Planning action items	0	$ -	0	$ -	16	$ 3,120	24	$ 3,240	8	$ 1,560	0	$ -	$ 7,920		
D	Develop PowerPoint showing history and future for Operational Planning action items	0	$ -	0	$ -	0	$ -	24	$ 3,240	8	$ 1,560	0	$ -	$ 4,800		
E	Review of Placemat and PowerPoint	8	$ 2,280	0	$ -	20	$ 3,900	0	$ -	4	$ 780	0	$ -	$ 6,960		
F	Incorporate edits/changes into placemat and PowerPoint	0	$ -	0	$ -	16	$ 3,120	8	$ 1,080	4	$ 780	0	$ -	$ 4,980		
G	Finalize Placemat and PowerPoint	10	$ 2,850	0	$ -	8	$ 1,560	8	$ 1,080	8	$ 1,560	0	$ -	$ 7,050		
H	Facilitate virtual presentation of draft Placemat and PowerPoint to Owner	1	$ 285	1	$ 225	1	$ 195	1	$ 135	1	$ 195	8	$ 1,080	$ 2,115		
I	Present PowerPoint to LAWA TAC	1	$ 285	1	$ 225	1	$ 195	1	$ 135	1	$ 195	0	$ -	$ 1,035		
J	Present PowerPoint to LAWA/RRV Committee	1	$ 285	1	$ 225	1	$ 195	1	$ 135	1	$ 195	0	$ -	$ 1,035		
K	Present PowerPoint to Garrison Diversion Board	1	$ 285	1	$ 225	1	$ 195	1	$ 135	1	$ 195	0	$ -	$ 1,035		
3	**Technical Report**	**35**	**$ 9,975**	**20**	**$ 4,500**	**90**	**$ 17,550**	**138**	**$ 18,630**	**1**	**$ 195**	**20**	**$ 2,700**		**$ 53,550**	TRUE
A	Develop draft Technical Report summarizing work completed in Tasks 4-8	0	$ -	0	$ -	40	$ 7,800	40	$ 5,400	0	$ -	0	$ -	$ 13,200		
B	Review Draft Technical Report	8	$ 2,280	8	$ 1,800	0	$ -	0	$ -	0	$ -	0	$ -	$ 4,080		
C	Incorporate edits/comments into final Technical Report	0	$ -	0	$ -	16	$ 3,120	40	$ 5,400	0	$ -	0	$ -	$ 8,520		
D	Facilitate virtual progress meeting to review final Technical Report with Owner	1	$ 285	1	$ 225	4	$ 780	8	$ 1,080	1	$ 195	2	$ 270	$ 2,835		
E	Develop draft PowerPoint of Technical Report	0	$ -	0	$ -	20	$ 3,900	40	$ 5,400	0	$ -	0	$ -	$ 9,300		
F	Review draft PowerPoint with Owner, revise, and finalize	8	$ 2,280	4	$ 900	0	$ -	0	$ -	0	$ -	16	$ 2,160	$ 5,340		
G	Present PowerPoint to LAWA TAC	8	$ 2,280	1	$ 225	4	$ 780	4	$ 540	0	$ -	2	$ 270	$ 4,095		
H	Present PowerPoint to LAWA/RRV Committee	4	$ 1,140	4	$ 900	4	$ 780	4	$ 540	0	$ -	0	$ -	$ 3,360		
I	Present PowerPoint to Garrison Diversion Board	6	$ 1,710	2	$ 450	2	$ 390	2	$ 270	0	$ -	0	$ -	$ 2,820		
4	**Operational Description and Assumptions**	**48**	**$ 13,680**	**4**	**$ 900**	**60**	**$ 11,700**	**176**	**$ 23,760**	**0**	**$ -**	**0**	**$ -**		**$ 50,040**	TRUE
A	Document all new components or changes in RRVWSP and ENDAWS infrastructure	24	$ 6,840	0	$ -	24	$ 4,680	60	$ 8,100	0	$ -	0	$ -	$ 19,620		
B	Incorporate Branch Pipeline Infrastructure options based on user participation changes	24	$ 6,840	4	$ 900	24	$ 4,680	100	$ 13,500	0	$ -	0	$ -	$ 25,920		
C	Incorporate updates into Operational Planning-Phase 3: Final Technical Report	0	$ -	0	$ -	12	$ 2,340	16	$ 2,160	0	$ -	0	$ -	$ 4,500		
5	**Project Governance**	**40**	**$ 11,400**	**0**	**$ -**	**64**	**$ 12,480**	**36**	**$ 4,860**	**0**	**$ -**	**0**	**$ -**		**$ 28,740**	TRUE
A	Propose draft operational agreements and protocols for regulatory Stakeholder endorsement (Bureau of Reclamation, NDDWR & USACE)	40	$ 11,400	0	$ -	48	$ 9,360	20	$ 2,700	0	$ -	0	$ -	$ 23,460		
B	Incorporate updates into Operational Planning-Phase 3: Final Technical Report	0	$ -	0	$ -	16	$ 3,120	16	$ 2,160	0	$ -	0	$ -	$ 5,280		
6	**Water Supplies**	**32**	**$ 9,120**	**1**	**$ 225**	**80**	**$ 15,600**	**140**	**$ 18,900**	**27**	**$ 5,265**	**10**	**$ 1,350**		**$ 50,460**	TRUE
A	Update Lake Audubon and McClusky Canal refresh strategies	8	$ 2,280	0	$ -	8	$ 1,560	24	$ 3,240	8	$ 1,560	0	$ -	$ 8,640		
B	Develop James River alternative usage options	8	$ 2,280	0	$ -	8	$ 1,560	24	$ 3,240	8	$ 1,560	0	$ -	$ 8,640		
C	Update water management strategies utilizing ENDAWS as secondary water source for RRVWSP	8	$ 2,280	0	$ -	16	$ 3,120	16	$ 2,160	8	$ 1,560	0	$ -	$ 9,120		
D	Develop a draft Technical Memorandum	0	$ -	0	$ -	24	$ 4,680	24	$ 3,240	0	$ -	0	$ -	$ 7,920		
E	Review of draft Technical Memorandum	6	$ 1,710	0	$ -	0	$ -	0	$ -	1	$ 195	8	$ 1,080	$ 2,985		

F	Facilitate virtual progress meeting to review draft Technical Memorandum with Owner	1	$ 285	0	$ -	4	$ 780	12	$ 1,620	1	$ 195	1	$ 135	$ 3,015		
G	Incorporate edits/comments into final Technical Memorandum	0	$ -	0	$ -	8	$ 1,560	16	$ 2,160	0	$ -	0	$ -	$ 3,720		
H	Facilitate virtual presentation of final Technical Memorandum to Owner	1	$ 285	1	$ 225	12	$ 2,340	24	$ 3,240	1	$ 195	1	$ 135	$ 6,420		
7	**Pipeline and Reservoir Operations**	**60**	**$ 17,100**	**11**	**$ 2,475**	**202**	**$ 39,390**	**186**	**$ 25,110**	**33**	**$ 6,435**	**5**	**$ 675**		**$ 91,185**	FALSE
A	Support USACE Lake Ashtabula WCM Update: Review & Comment	16	$ 4,560	0	$ -	64	$ 12,480	24	$ 3,240	16	$ 3,120	0	$ -	$ 23,400		
B	Quarterly Meetings to discuss WCM updates	8	$ 2,280	0	$ -	16	$ 3,120	16	$ 2,160	0	$ -	0	$ -	$ 7,560		
C	Review 2020 Lake Ashtabula bathymetric survey and update Project operations accordingly	8	$ 2,280	0	$ -	16	$ 3,120	20	$ 2,700	0	$ -	0	$ -	$ 8,100		
D	Review/Update Lake Ashtabula operations water appropriations implications (NDDWR Reponses)	12	$ 3,420	0	$ -	24	$ 4,680	16	$ 2,160	0	$ -	0	$ -	$ 10,260		
E	Update Lake Ashtabula utilization strategies (Reclamation & USACE)	4	$ 1,140	0	$ -	10	$ 1,950	16	$ 2,160	8	$ 1,560	0	$ -	$ 6,810		
F	Facilitate three, one-hour discussions on Lake Ashtabula drawdown strategies with stakeholders	3	$ 855	3	$ 675	4	$ 780	6	$ 810	0	$ -	3	$ 405	$ 3,525		
G	Develop draft Technical Memorandum	0	$ -	0	$ -	36	$ 7,020	24	$ 3,240	0	$ -	0	$ -	$ 10,260		
H	Review draft Technical Memorandum	4	$ 1,140	4	$ 900	0	$ -	16	$ 2,160	8	$ 1,560	0	$ -	$ 5,760		
I	Facilitate virtual progress meeting to review draft Technical Memorandum with Owner	1	$ 285	1	$ 225	8	$ 1,560	8	$ 1,080	0	$ -	1	$ 135	$ 3,285		
J	Incorporate edits/comments into final Technical Memorandum	0	$ -	2	$ 450	16	$ 3,120	16	$ 2,160	0	$ -	0	$ -	$ 5,730		
K	Prepare and present PowerPoint of findings in Task 6 and Task 7 to LAWA TAC and Operational Planning Subcommittee	4	$ 1,140	1	$ 225	8	$ 1,560	24	$ 3,240	1	$ 195	1	$ 135	$ 6,495		
8	**Water Accounting**	**8**	**$ 2,280**	**0**	**$ -**	**76**	**$ 14,820**	**24**	**$ 3,240**	**0**	**$ -**	**0**	**$ -**		**$ 20,340**	TRUE
A	Incorporate Lake Ashtabula WCM and 2020 bathymetric survey updates	0	$ -	0	$ -	24	$ 4,680	8	$ 1,080	0	$ -	0	$ -	$ 5,760		
B	Adjust Model to incorporate new Users	8	$ 2,280	0	$ -	40	$ 7,800	0	$ -	0	$ -	0	$ -	$ 10,080		
C	Incorporate updates into Operational Planning-Phase 3: Final Technical Report	0	$ -	0	$ -	12	$ 2,340	16	$ 2,160	0	$ -	0	$ -	$ 4,500		
													Total Operational Planning		$ 399,615	TRUE
													Total With WWG - $439,615			
													Total With BV Markeup - $462,030			

BLACK & VEATCH
Building a world of difference.

RRVWSP Task Order 1530 – Project Management Information System
Procurement and Implementation Services Phase 2

Task Order Effective Date: November 1, 2023

TASK ORDER EXECUTIVE SUMMARY

REQUEST

Consideration and approval of a consultant task order in the amount of $498,000 to administer and support the Project Management Information System (PMIS). Black & Veatch (BV) will administer the PMIS to support daily operations, deliver user training, and implement system enhancements based on Garrison Diversion's needs. Additionally, BV will renew software licenses and subscriptions in support of the current implementation. These professional services are provided on an hourly basis; the fee is estimated based on the scope and nature of the work for the 2023-2025 biennium.

TASK ORDER OBJECTIVES

The first objective of this Task Order is to provide administrative services for the e-Builder PMIS. This includes maintaining system level configuration and support of users. System Administrative Support Services will be provided by BV to support the ongoing maintenance activities.

The second objective is to renew the e-Builder PMIS subscription and maintenance for the duration of this Task Order.

The third objective is to provide Garrison Diversion Change Management Support, including training of both internal and external users, process owners, and stakeholders as well as maintenance/updating user documentation.

The fourth objective is to identify and configure new processes and make system enhancements as the Task Order funding allows. Continuous Improvement Support Services will be provided by BV in collaboration with Garrison Diversion.

TASK ORDER SUMMARY

The services to be provided by the consulting team are fully described in the attached Task Order. The estimated hourly fee and expenses for the PMIS software solution and implementation services of Basic Services, including extensive training opportunities for staff, are as follows for 2023-2025 Biennium:

Task Description	Two-Year Fee
Task Order Management and Administration (BV and Sub)	$25,199
Special and Third-Party Meetings (BV and Sub)	$12,764
e-Builder Licenses and Implementation Services (e-Builder)	$163,852
PMIS System Administration (BV and Subs)	$239,803
Continuous Improvement Support (BV and Subs)	$56,382
Total	$498,000

Black & Veatch Corporation
Professional Services for the Red River Valley Water Supply Project
Under General Agreement dated January 17, 2008

RRVWSP Task Order 1530 – Project Management Information System
Procurement and Implementation Services Phase 2

Effective Date – November 1, 2023

Content of this Task Order (TO) is as follows:

I. PROJECT AND TASK ORDER BACKGROUND

1. The Red River Valley Water Supply Project (RRVWSP, the Program) being undertaken by the State of North Dakota (ND) provides a supplemental water supply to eastern and central ND in the event of drought conditions in the Red River watershed and for industrial development. The Program as envisioned by the Garrison Diversion Conservancy District (Garrison Diversion, the Owner) will withdraw water from the Missouri River and/or the McClusky Canal through the Eastern North Dakota Alternative Water Supply (ENDAWS) and convey it eastward through a multi-county pipeline to the Sheyenne River, a tributary of the Red River, for direct pipeline usage and flow augmentation.

2. The engineering, construction, and other contracts necessary for project development and construction generate tens of thousands of documents such as engineering deliverables, construction submittals, requests for information (RFIs), change order requests, change orders, applications for payment, certificates of inspection, construction daily reports, and other related documents. Thousands of approvals are provided and documented of technical and financial/invoice documents.

3. A comprehensive Program Management Information System (PMIS) has been implemented and configured to allow for effective document transfer, storage, and approval of documents. The PMIS system allows contractors, Owner, Engineer, and consultants to have the same platform for document transfer and approval. The system automatically routes documents to the next level of approval, keeps track of what entities/individuals need to approve documents, and provides overall storage and organization of Program documents.

4. Garrison Diversion selected a PMIS by e-Builder, which is used by entities around the country undertaking large capital projects. e-Builder is a proprietary, cloud-based software that is used through a licensing agreement. The software has been customized for Garrison Diversion's needs. This Task Order includes the subscription cost of e-Builder for the software licenses and administrative support. It is expected that the e-Builder software solution will be fully integrated into processes starting with the projects that are advertised and bid in the 2023-25 biennium.

5. The use of a PMIS such as e-Builder also allows the easy collection and presentation of project Key Performance Indicators (KPIs). KPIs may include such items as number of change orders, total cost of change orders versus project bid price, average time for submittal approvals, number of safety incidents, length of pipe installed, percentage of pipe installed compared to the contract amount, etc. This Task Order also includes provisions for using Power BI, a standard Microsoft product, to automatically gather and graphically present KPIs. The KPIs will be presented as part of monthly project reports.

II. TASK ORDER OBJECTIVES

The objectives of this Task Order are as follows:

1. The first objective is to provide administrative services for the e-Builder PMIS. This includes maintaining system level configuration and support of users.

2. The second objective is to renew the e-Builder PMIS subscription for the duration of this task order.

3. The third objective is to provide change management, including training of users and process owners as well as maintenance/updating system documentation.

4. The fourth objective is to identify new processes and configure those process as Task Order funding allows.

III. GENERAL REQUIREMENTS

1. Under this Task Order, Engineer will provide services in accordance with the Standard Form of Agreement between Owner and Engineer for Professional Services dated January 17, 2008 (Agreement).

2. General Description of Activities. The Basic Services to be performed by Engineer consist of professional services associated with the implementation of a PMIS system.

3. Work outside Basic and Special Services. Engineer agrees to provide the Basic Services and Special Services identified herein. Work not specifically discussed herein as part of Basic Services or Special Services is considered Additional Services. Additional Services will only be performed with proper separate authorization such as an amendment to this Task Order or a new separate Task Order.

4. Explicit Responsibilities. Basic Services and Special Services explicitly set forth the Work Engineer will perform and do not implicitly put any additional responsibilities or duties upon Engineer. Deliverables to be provided are explicitly identified in this Task Order.

5. Explicitly Identified Quantities. Engineer in development of this Task Order estimates the level of effort required to provide the services discussed. Where specific information is listed as to the quantity of service to be provided by Engineer, those quantities listed are considered Basic Services or Special Services and are, therefore, included in this Task Order scope of service and associated fee estimate. Services exceeding the written quantities shown below in Basic Services or Special Services are considered Additional Services.

6. Any assignment of a license agreement between e-Builder and Engineer is transferable from Black & Veatch to Garrison Diversion per Engineer's Partner Agreement with e-Builder.

7. Garrison Diversion and Engineer maintain ownership of underlying data and files stored and organized within the e-Builder PMIS per Engineer's Partner Agreement with e-Builder.

IV. BASIC SERVICES

The Basic Services of this Task Order are provided below in the following tasks:

- Task 1 – Task Order Management and Administration
- Task 2 – Special and Third-Party Meetings
- Task 3 – e-Builder Subscription Renewal
- Task 4 - Administration of e-Builder, a Project Management Information System
- Task 5 – Continuous Improvement Support

1. Task 1 – Task Order Management and Administration

Engineer will provide the following services to the Owner:

A. Manage and Administer Task Order. Provide general project management and administration tasks including communications with the Owner, coordination, and supervision of the Engineer's project team, monitoring the project schedule, monitoring the project budget, and invoicing.

B. Conduct Progress Meetings. Facilitate and attend monthly virtual team meetings with the task order execution team.

2. **Task 2 – Special and Third-Party Meetings**

Engineer will provide the following services to the Owner:

A. Conduct Monthly Performance Reviews. Engineer will organize and attend monthly reviews to discuss PMIS performance measures and map out continuous improvement opportunities.

3. **Task 3 – eBuilder Subscription Renewal**

Engineer will provide the following services to the Owner:

A. Procurement of the e-Builder PMIS subscription renewal licenses and support services. Details of the Annual Subscription for eBuilder and Data Warehouse are included in Attachment B.

i. Annual Subscription
ii. Integration Support and Maintenance
iii. Customized Workflow Code Steps Maintenance
iv. DocuSign Integration Maintenance
v. Data Warehouse Access and Maintenance

B. General Owner IT Vendor coordination for network coordination, service account configuration, and other subsequent tasks requiring IT support.

4. **Task 4 – Administration of e-Builder, a Project Management Information System**

Engineer will provide the following services to the Owner:

A. Prioritization of administrative activities. Provide a means to log system issues and prioritize tasks to manage users, processes, workflows, templates, reports, and forms. Administrator Role services are defined in Attachment C.

B. Develop Administrative Workflows. Provide New Project and User Request workflows to support system operations.

C. Coordination of administrative activities. Collaborate and facilitate conversations with key stakeholders and users to define and plan system modifications.

D. Provide a resource to support a 3-month adoption period at 16-hours per week.

E. Provide system administrative services for the remaining portion of the 2023-2025 Biennium consisting of 8 hours weekly to support system administration.

F. Provide quarterly (8) end-user training sessions that include content preparation and delivery of training sessions.

5. **Task 5 – Continuous Improvement Support**

Engineer will provide the following services to the Owner:

A. Change Board: Formalize a Change Board to ensure compliance with methods and standards for efficient and prompt handling of system enhancements and management.

B. System Enhancements: Monthly system review to identify any potential improvements in workflow and reporting.

C. e-Builder Code Step to Bundle Proposed Change Orders within the Change Order process.

D. e-Builder Submittal Module Implementation and Training – BV will provide implementation and training services to support the construction submittal process. The scope of services includes the following items:

i. Implementation Roadmap Workshop (Virtual) and Development
ii. Discovery Workshop (Virtual) and System Configuration
iii. Quick Guide Document Development
iv. Garrison Diversion User Training (3, 2-hour training sessions)
v. Project Auditing/Submittal Module Setup
vi. e-Builder Report and Dashboard Development

V. SPECIAL SERVICES

None this task order.

VI. DELIVERABLES

The following deliverables will be furnished under this Task Order. Documents or deliverables not included in the list below will be provided as Additional Services as authorized by the Owner. Unless noted otherwise, deliverables will be in the form of electronic pdf files.

1. **Task 1 – Task Order Management and Administration**

A. Project initiation meeting agenda and minutes

B. Progress meeting agenda

2. **Task 2 – Special and Third-Party Meetings**

A. Meeting agenda, attendance, and minutes

3. **Task 3 - e-Builder Subscription Renewal**

A. e-Builder cloud based PMIS software solution renewal

4. **Task 4 – Administration of the e-Builder system**

   A. Administrator task logs available via e-Builder Report.

   B. Training and adoption

      i. Training scope and gap analysis

      ii. Virtual calls with trainers (those trained in the "train the trainer program")

      iii. Eight quarterly trainings with relevant content.

5. **Task 5 – Continuous Improvement Support**

   A. Process improvement scope and implementation roadmap documentation

   B. Change Order Code Step Implementation

   C. Submittal Module Implementation

VII. ADDITIONAL SERVICES

The professional services listed below are *not* included in the scope of this Task Order nor does the fee shown in Article IX include any labor and direct expenses for items identified as Additional Services. Should Owner want to include services listed under Additional Services in Engineer's scope of work, an amendment to this Task Order or execution of a separate Task Order with the new work will be necessary. The following items are specifically excluded from Basic and Special Services:

1. Additional system enhancements, including new workflows, integrations, forms or code steps except those identified in Basic Services, which may be included in separate task orders.

2. Additional Power BI reports were not included as part of this task order. Additional reporting and dashboards can be included in a separate scope.

VIII. SPECIAL RESPONSIBILITIES OF OWNER

1. Services of an IT consultant as it relates to the Microsoft Dynamics GP integration with e-Builder. Owner will contract directly for these services, which will be necessary to provide a full integration. Engineer and its consultant will consult and coordinate with the Owner's IT consultant for configuration and implementation of the PMIS.

2. Interim Deliverable Review Requirements. The Owner commits to review periods for interim deliverables of no more than 14 calendar days after receipt of deliverables from Engineer.

3. Review comments will be provided by the Owner either electronically in the native Word file in Track Changes Mode or they will be summarized in an MS Excel worksheet or MS Word document.

IX. FEE

The total fee for Basic Services and Special Services provided under this Task Order is estimated to be Four Hundred Ninety-Eight Thousand Dollars ($498,000). A worksheet showing the fee estimate and level of effort by task is included in Attachment A.

X. PERFORMANCE SCHEDULE

Basic and Special Services of this Task Order will be completed by December 31, 2025.

XI. DOCUMENTS INCORPORATED BY REFERENCE AND ATTACHMENTS

1. Standard Form of Agreement between Garrison Diversion and Engineer for Professional Services dated January 17, 2008, is incorporated by reference.
2. Attachment A – Fee Estimate Worksheet
3. Attachment B – e-Builder Subscription Summary
4. Attachment C – Administrator Roles

XII. ACCEPTANCE

If this satisfactorily sets forth your understanding of our Task Order agreement, please print and sign this document. You should retain one copy for your files and return an electronic copy via email to Paul Boersma (BoersmaPM@BV.com) with Black & Veatch Corporation.

By: _____	By: _____
Duane DeKrey, General Manager Garrison Diversion Conservancy District	Paul Boersma, Associate Vice President Black & Veatch Corporation
Dated: _____	Dated: _____

ATTACHMENT A

Fee Estimate Worksheet

Garrison Diversion Conservancy District
Red River Valley Water Supply Project
RRVWSP TO 1530 - PMIS Procurement and Implementation Services Phase 2
BV Project No. TBD
Black & Veatch and Subconsultants

Task	Lead Firm	Position	PMS	DES	PJC2	PA1	ADM1	Labor Detail	Labor Detail	Expense Detail	Expense Detail	Consultant	Expense Detail	Consultant	Expense Detail		TOTAL	TOTAL	TOTAL	TOTAL
		Task Description	Project Manager Senior	Design Engineer Senior	Project Controls Analyst 2	Project Accountant 1	Administrator 1	BV Level of Effort (hrs)	BV Labor Cost	Hobacca	Travel Expense	Sub 2 Costs	Sub 2 Markup	Sub 3 Costs	Sub 3 Markup	Total Direct Expense	BV Level of Effort (hrs)	BV Labor Cost	Direct Expense	Fee
IV. BASIC SERVICES																				
1	**BV**	**Task Order Management and Administration**	**40**	**0**	**24**	**24**	**24**	**112**	**$21,600**	**$965**	**$9**	**$0**	**$0**	**$2,500**	**$125**	**$3,599**	**112**	**$21,600**	**$3,599**	**$25,199**
A	BV	Manage and Administer Task Order	40		24	24	24	112	$21,600	$965	$9	$0	$0	$2,500	$125	$3,599	112	$21,600	$3,599	$25,199
2		**Special and Third-Party Meetings**	**4**	**16**	**16**	**0**	**0**	**36**	**$7,804**	**$310**	**$3,600**	**$0**	**$0**	**$1,000**	**$50**	**$4,960**	**36**	**$7,804**	**$4,960**	**$12,764**
A	BV	Conduct Workflow Definition Workshop	4	16	16			36	$7,804	$310	$3,600	$0	$0	$1,000	$50	$4,960	36	$7,804	$4,960	$12,764
3	**BV**	**e-Builder Licenses and Implementation Services**	**8**	**0**	**0**	**0**	**0**	**8**	**$2,424**	**$69**	**$0**	**$153,675**	**$7,684**	**$0**	**$0**	**$161,428**	**8**	**$2,424**	**$161,428**	**$163,852**
A	BV	e-Builder Subscription Renewal (25 Licenses)	8					8	$2,424	$69		$95,275	$4,764	$0	$0	$100,108	8	$2,424	$100,108	$102,532
B	BV	One-time Additional Implementation Costs						0	$0	$0		$8,400	$420	$0	$0	$8,820	0	$0	$8,820	$8,820
B	BV	Data Warehouse Maintenance						0	$0	$0		$20,000	$1,000	$0	$0	$21,000	0	$0	$21,000	$21,000
C	BV	e-Builder App Exchange (8 Integration Points)						0	$0	$0		$26,000	$1,300	$0	$0	$27,300	0	$0	$27,300	$27,300
D	BV	Annual Code Step Maintenance (1 Code Step)						0	$0	$0		$4,000	$200	$0	$0	$4,200	0	$0	$4,200	$4,200
4	**BV**	**PMIS System Administration**	**80**	**200**	**936**	**0**	**0**	**1,216**	**$214,096**	**$10,482**	**$0**	**$0**	**$0**	**$14,500**	**$725**	**$25,707**	**1,216**	**$214,096**	**$25,707**	**$239,803**
A	BV	Meetings and Workshops						0	$0	$0		$0	$0	$0	$0	$0	0	$0	$0	$0
i	BV	Monthly Calls (24 Meetings Total + 1 hour prep/meeting)	8	24	48			80	$15,816	$690		$0	$0	$4,000	$200	$4,890	80	$15,816	$4,890	$20,706
ii	BV	Quarterly Trainings (8 Trianings and Prep)		16	24			40	$7,760	$345		$0	$0	$2,000	$100	$2,445	40	$7,760	$2,445	$10,205
B	BV	Year 1 - General System Administration (0.20 FTE + Adoption Suppor	40	80	484			604	$104,064	$5,206		$0	$0	$5,000	$250	$10,456	604	$104,064	$10,456	$114,520
C	BV	Year 2 - General System Administration (0.20 FTE)	32	80	380			492	$86,456	$4,241		$0	$0	$3,500	$175	$7,916	492	$86,456	$7,916	$94,372
5	**BV**	**Continuous Improvement Support**	**8**	**80**	**0**	**0**	**0**	**88**	**$23,704**	**$758**	**$0**	**$23,400**	**$1,170**	**$7,000**	**$350**	**$32,678**	**88**	**$23,704**	**$32,678**	**$56,382**
A	BV	System Enhancements						0	$0	$0		$0	$0	$0	$0	$0	0	$0	$0	$0
i	BV	e-Builder Code Step Implementation	4	40				44	$11,852	$379		$7,400	$370	$1,000	$50	$9,199	44	$11,852	$9,199	$21,051
ii	BV	e-Builder Submittal Module Implementation	4	40				44	$11,852	$379		$16,000	$800	$6,000	$300	$23,479	44	$11,852	$23,479	$35,331
		Totals For Basic Services	**140**	**296**	**976**	**24**	**24**	**1,460**	**$269,628**	**$12,584**	**$3,609**	**$177,075**	**$8,854**	**$25,000**	**$1,250**	**$228,372**	**1,460**	**$269,628**	**$228,372**	**$498,000**
V. SPECIAL SERVICES																				
		Totals for Special Services	**0**	**0**	**0**	**0**	**0**	**0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**0**	**$0**	**$0**	**$0**
		PROJECT TOTALS	**140**	**296**	**976**	**24**	**24**	**1,460**	**$269,628**	**$12,584**	**$3,609**	**$177,075**	**$8,854**	**$25,000**	**$1,250**	**$228,372**	**1,460**	**$269,628**	**$228,372**	**$498,000**

ATTACHMENT B

e-Builder Cost Summary

The following details the investment summary for the **Annual Software Subscription** for the e-Builder Enterprise™ system.

Annual Software Subscription for Two Years

Item Description	Scope Variable	Year 1 Cost (12/19/2023 to 12/18/2024)	Year 2 Cost (12/19/2024 to 12/18/2025)
e-Builder Enterprise	25 Users	$46,250	$49,025
e-Builder AppXchange Platform Subscription	*See e-Builder Enterprise AppXchange Integration Scope* section below in reference to the number of objects. 8 integration points.	$13,000	$13,000
Data Warehouse	*Subscription*	$10,000	$10,000
Code Step Maintenance	*Change Order Bundling*	$2,000	$2,000
	Total Annual Software Subscription	**$71,250**	**$74,025**
	Total Subscription Cost		**$145,275**

Annual Subscription Includes

- Unlimited Projects
- Unlimited Document Storage
- 24x7 Technical Support
- Quarterly Enhancement/Upgrades
- Maintenance Releases
- AppXchange (8 Integration Points)
- Data Warehouse

The following details the investment summary for one-time implementation costs for the e-Builder Enterprise™ system not included in the original agreement.

Item Description	Cost
Code Step Implementation	$5,400
DocuSign Integration	$3,000
Total One-Time Cost	**$8,400**

e-Builder®

ORDER FORM

Order Date:	Date of the last signature below
Trimble Entity Name ("Trimble") and Address:	e-Builder Inc. a Trimble company 13450 West Sunrise Blvd Suite 600, Sunrise, FL
Customer Entity Name ("Customer") and Address:	Black and Veatch - Garrison Diversion Conservancy District 11401 Lamar Street, Overland Park, KS 66211
Billing Contact Name and e-mail Address:	
Is a Purchase Order Required?	Yes or No *Purchase orders issued by Customer are issued for administrative purposes only; terms and conditions contained in any such purchase order shall be null and void.*
Is Customer Tax Exempt?	Yes or No
Initial Term:	8/19/2023 – 12/18/2023
Validity	This Order Form shall expire on 8/15/2023 (the "Validity Date"). If this Order Form is not executed by the Customer by the Validity Date, Trimble reserves the right to not offer the pricing found in the Order Form.

Additional Annual Software Subscription:

Item Name	Unit of Measure	Description	Annual Amount
Code Step Maintenance	N/A	Subscription associated with the Code Step described in the SOW	$2,000.00

Professional Services:

Description	Price
Total One-Time Implementation Services	**$5,400.00**

Addendums:

1. Statement of Work

TERMS AND CONDITIONS

1. Terms and Conditions. This Quotation is subject to the Order Form between Trimble and the Customer, dated 12/19/2022 ("**Agreement**").

2. Payment Terms. All fees are due NET 30 from the date of the Trimble invoice.

- **Additional Annual Software Subscription:** The Initial Fee for the Additional Annual Software Subscription in the amount of $2,000.00 will be pro-rated for the Initial Term of this Order Form in the amount of $666.67 to coincide with the Customer's Annual Software Subscription anniversary date and is due and payable with the execution of this Order Form. Next year's Additional Annual Software Subscription will be invoiced with the Customer's existing Annual Software Subscription upon the next renewal date of 12/19/2023.
- **One-Time Implementation Services:** 100% due upon execution of this Order Form.
- **Travel:** Travel is not expected for the scope of work described in the SOW. Thus, all work will be done by Trimble remotely. If Customer requires that Trimble travel, a separate Order Form will be executed to reflect the updated scope and pricing.

3. ***AUTOMATIC RENEWALS. This Order will automatically renew for subsequent 12 month term(s) at then-current pricing, unless either party provides the other with notice of cancellation at least 30 days prior to the expiration of the then-current term.***

4. Annual Price Increase. At each renewal, Trimble has a right to increase the annual fees by the greater of (a) CPI plus two percent (2%) or (b) five percent (5%). "CPI" shall mean for all Urban Consumers, the U.S. City Average, for all items, 1982-84=100 (the "CPI-U"), as published by the Bureau of Labor Statistics, U.S. Department of Labor, and shall be for the prior twelve months as of the date the calculation is made.

5. Electronic Invoices. Customer hereby consents to the receipt of invoices electronically at the indicated e-mail address(es) and accepts such invoices as if received by mail. Customer's e-mail address may be changed by written notice given by Customer to Trimble at: customer_master@trimble.com. Customer is responsible for maintaining a current e-mail address and shall under no circumstances be excused from payment of applicable charges by its failure to access its designated e-mail address.

6. Due Authority. By signing below, the signatory represents that he/she (i) is an authorized representative of Customer and (ii) has the authority to legally and functionally commit the Customer.

ACCEPTANCE

Accepted and agreed:

CUSTOMER:	**TRIMBLE:**
Signature: ____	Signature: ____
Print Name: ____	Print Name: ____
Title: ____	Title: ____
Date: ____	Date: ____

Addendum #1

Statement of Work

This Statement of Work ("SOW") describes the professional services that Customer has engaged Trimble (collectively "Parties'') to perform on behalf of Customer. This SOW is integrated into a quote that incorporates the terms and conditions governed by the Parties (the "Agreement"). In the event of any inconsistency or conflict between the terms and conditions of this SOW and the Agreement, the terms and conditions of the Agreement shall govern, unless the SOW expressly identifies the term of the Agreement to be modified. This SOW may not be modified or amended except in writing signed by a duly authorized representative of each Party.

1 One-Time Implementation Services

Trimble to provide the following firm fixed price services under this SOW:

Phase & Deliverables	Scope	Comments
Project Kickoff & Discovery		
Kickoff Discussion	Included	1-2 weeks after Order Form execution
Deliverable Schedule	Included	Defined during Kickoff Discussion The Parties agree at the time of this execution, the Project Configuration & Testing and Training (if applicable) below will be completed within ninety (90) days from the date of execution of the Order Form.
Project Configuration & Testing		
Code Step	1 – Code Step	• Add and Configure PCO Bundling Code Step to Customer's existing Change Order Process

2 Assumptions

The following responsibilities and assumptions are necessary for the successful completion of the scope of work found in this SOW. In the event that an item below does not occur in the manner or time-frame defined, Trimble may request to meet with the Customer and mutually agree upon an adjustment to the schedule, work activities and fees.

- The Customer will make best efforts to ensure the committed participation of all appropriate technical and user personnel throughout the project, including but not limited to periodic status reviews. Customer resources provided during the technical and functional sessions must be empowered to make decisions on project direction.
- The Trimble Professional Services team will work jointly with the Customer team to resolve all issues including those impacting the scope and timeline. Issues that may impact the progress and the schedule will be documented. If the issue is critical, Trimble will present the issue to the Customer in writing as quickly as possible. Once the issue is presented in writing the Customer is expected to respond within two (2) business days. If the issue cannot be resolved within two days, they will notify Trimble and arrange a meeting with all relevant personnel to resolve this issue. Failure to do so could impact the cost and schedule of the Trimble implementation project. Trimble may suspend the SaaS Services or terminate this SOW unless

Customer signs a SOW providing for additional funding. For purposes of clarity, the delays covered by this Paragraph include only those for which Customer has discretion and control, and specifically excludes matters that are beyond Customer's discretion and control.

- All necessary content (data, text and graphics) will be provided to Trimble prior to the creative processes (if applicable).
- Unless specifically identified as deliverables within this document, Customer will enter any historical data from past projects to enable historical analysis.
- Unless specifically identified as deliverables within this document, data migration, system integrations or custom development of any kind is not included within the scope of the Trimble implementation project. These items can be included through the change management process if identified as required items.
- All change requests received and approved will be listed on a separate SOW. Each additional SOW must be signed and accepted prior to initiating additional work by Trimble.

e-Builder®

ORDER FORM

Order Date:	Date of the last signature below
Trimble Entity Name ("Trimble") and Address:	e-Builder Inc. a Trimble company 13450 West Sunrise Blvd Suite 600, Sunrise, FL
Customer Entity Name ("Customer") and Address:	Black and Veatch -on behalf of the Garrison Diversion Conservancy District 11401 Lamar Street, Overland Park, KS 66211
Billing Contact Name and e-mail Address:	
Is a Purchase Order Required?	Yes or No *Purchase orders issued by Customer are issued for administrative purposes only; terms and conditions contained in any such purchase order shall be null and void.]*
Is Customer Tax Exempt?	Yes or No
Initial Term:	12/19/2023 – 12/18/2025
Validity	This Order Form shall expire on 10/31/2023 (the "Validity Date"). If this Order Form is not executed by the Customer by the Validity Date, Trimble reserves the right to not offer the pricing found in the Order Form.

Annual Software Subscription:

Item Name	Year 1: 12/19/2023 – 12/18/2024	Year 2: 12/19/2024 – 12/18/2025
e-Builder Enterprise – 25 User Licenses	$46,250.00	$49,025.00
e-Builder AppXchange – Integration 8 Points	$13,000.00	$13,000.00
Data Warehouse	$10,000.00	$10,000.00
Total Annual Software Subscription	**$69,250.00**	**$72,025.00**

TERMS AND CONDITIONS

1. Terms and Conditions. This Quotation is subject to the Order Form between Trimble and the Customer, dated 12/19/2022 ("**Agreement**").

2. ***AUTOMATIC RENEWALS. This Order will automatically renew for subsequent 12 month term(s) at then-current pricing, unless either party provides the other with notice of cancellation at least 30 days prior to the expiration of the then-current term.***

3. Payment Terms. All fees are due NET 30 from the date of the Trimble invoice.

- **Annual Software Subscription:** Trimble will invoice the amount of $69,250.00 thirty days before the start date of the Initial Term. The Year 2 amount of $72,025.00 is due on 12/19/2024.

4. Annual Price Increase. At each renewal, Trimble has a right to increase the annual fees by the greater of (a) CPI plus two percent (2%) or (b) five percent (5%). "CPI" shall mean for all Urban Consumers, the U.S. City Average, for all items, 1982-84=100 (the “CPI-U”), as published by the Bureau of Labor Statistics, U.S. Department of Labor, and shall be for the prior twelve months as of the date the calculation is made.

5. Data Usage and Ownership.

Customer hereby grants to Trimble and its Affiliates the non-exclusive, worldwide, irrevocable, royalty-free right: (i) to use Customer Data during the Initial Term to provide the Annual Software Subscription to the Customer; (ii) to use and disclose Customer Data as otherwise permitted pursuant to this Order Form or any written consent or instructions of Customer; and, (iii) on a perpetual basis: (A) to create, use, and disclose Anonymized Data for any purpose and (B) subject to the confidentiality obligations in the Agreement, to use Customer Data to develop, maintain, and improve the Annual Software Subscription and any other products, software, and services of Trimble or its Affiliates. Except for Trimble’s use rights set forth in this Order Form, as between the parties, Customer retains all intellectual property and other rights in Customer Data. Trimble owns all rights, title, and interest in Anonymized Data (including, without limitation, any and all intellectual property rights).

For the purposes of this clause:

- “**Affiliate**” means an entity that, directly or indirectly, owns or controls, is owned or controlled by, or is under common ownership or control with a party, where “ownership” means the beneficial ownership of 50% or more of an entity’s voting equity securities or other equivalent voting interests, and “control” means the power to direct the management or affairs of an entity.
- “**Anonymized Data**” means any data collected in connection with the Annual Software Subscription (including Customer Data) that has been aggregated and/or de-identified in such a manner that neither the Customer nor any other individual can be identified from the data when it is shared outside of Trimble or its Affiliates.
- “**Customer Data**” means any information, documents, materials, or other data of any type that is input by or on behalf of Customer into the Annual Software Subscription or any other Trimble products (“Products”) or that is created or generated by Customer through Customer’s use of the Products.

6. Electronic Invoices. Customer hereby consents to the receipt of invoices electronically at the indicated e-mail address(es) and accepts such invoices as if received by mail. Customer's e-mail address may be changed by written notice given by Customer to Trimble at: customer_master@trimble.com. Customer is responsible for maintaining a current e-mail address and shall under no circumstances be excused from payment of applicable charges by its failure to access its designated e-mail address.

7. Due Authority. By signing below, the signatory represents that he/she (i) is an authorized representative of Customer and (ii) has the authority to legally and functionally commit the Customer.

[Signature Page to Follow]

ACCEPTANCE

Accepted and agreed:

CUSTOMER:	**TRIMBLE:**
Signature: ____	Signature: ____
Print Name: ____	Print Name: ____
Title: ____	Title: ____
Date: ____	Date: ____

ATTACHMENT C

Administrator Roles

The Administrator role performs administrative activities as represented in the following table:

Manage Users	Enable users to add/edit users for the projects they are a member of. eB Admin can add users, edit users, and remove users at the account level regardless of project membership if "Manage User" is selected in the role permissions.
Manage Memberships	Enable users to add/edit projects and users for the projects they are a member of. If the Add New Project permission is granted, this is at the account level.
Manage Processes	Enable users to add/edit processes and workflows of the projects they are a member of. eB Admin can create new processes and edit existing processes at the account level regardless of project membership if "Manage Processes" is selected in the role permissions even if the process is isolated to a project the user isn't a member of.
Manage Workflows	Enable users to modify process instances on the projects they are a member of, such as overriding a workflow and delegating process instances. eB Admin can create new workflows and edit existing workflows at the account level regardless of project membership if "Manage Workflow" is selected in the role permissions even if the workflow is isolated to project that the user isn't a member of.
Manage Cost Templates	Enable users to add/edit the budget, cash flow, and forecast templates of the projects they are a member of. eB Admin can manage forms at the account level regardless of project membership if "Manage Templates" is selected in the Cost module role permissions.
Manage Schedule Templates	Enable users to add/edit schedule templates of the projects they are a member of. eB Admin can manage schedule templates at the account level regardless of project membership if "Manage Templates" is selected in the Schedule module role permissions.
Manage Forms	Enable users to add/edit forms for the projects they are a member of. eB Admin can manage forms at the account level regardless of project membership if "Manage Form Types" is selected in the role permissions.
Manage Planning Templates	Enable users to add/edit planning templates of the projects they are a member of. eB Admin can planning templates at the account level regardless of project membership if "Manage Templates" is selected in the Planning module role permissions.
Automation	• **Scheduled Tasks** – if the Admin role is identified as a "Run Now" role, anyone in that role can view and choose to run the scheduled tasks now. • **Report Subscriptions** - eB Admin can manage all subscriptions at the account level if Subscribe is selected in the Report module permissions. eB Admin can copy user reports at the account level if "Copy" is selected in the Report module permissions.

BLACK & VEATCH
Building a world of difference.

RRVWSP Task Order 5340 – Transmission Pipeline East, Contract 4
Final Design Services and Bidding Assistance

Task Order Effective Date: February 1, 2024

TASK ORDER EXECUTIVE SUMMARY

REQUEST

Consideration and approval of a final design and bidding assistance task order in the amount of $7,183,000 for the Red River Valley Transmission Pipeline's Contract 4 pipeline. The Task Order takes 30-percent plans and specifications to final documents for public bidding. The bulk of the services included in this Task Order will begin in February 2024 and finish by December 2025. Bidding assistance schedules may extend past that finish date as construction projects move forward to the bid phase funding dependent. These professional services are provided on an hourly basis; the fee is an estimate based on the scope and nature of the work and an approximate 24-month schedule.

TASK ORDER SUMMARY

The services to be provided by the engineering team (Black & Veatch, AE2S, Ulteig, Materials Testing Services, and Prairie Soil Consulting) are fully described in the attached Task Order. The following summarizes each of the major tasks.

Basic Services: The estimated hourly fee and expenses for standard and customary design services and bidding assistance are as follows, for a construction project with a capital cost expected to be north of $200 million (72-inch pipe):

	Fee	% of Const
Task Order Management and Administration	$571,725	0.29%
Special Project and Third-Party Meetings	$297,108	0.15%
Landowner Communication and Easement Modifications	$190,440	0.10%
Field Services	$1,662,972	0.83%
Final Design Services (30-percent documents to final plans and specifications)	$3,992,423	1.99%
Contract 4A Bid Assistance (advertisement, bidding, pre- and post-award services)	$156,111	0.08%
Contract 4B Bid Assistance (advertisement, bidding, pre- and post-award services)	$156,111	0.08%
Contract 4C Bid Assistance (advertisement, bidding, pre- and post-award services)	$156,111	0.08%
Totals	$7,183,000	3.60%

Special Services: There are no unique or specialized services required under this task order.

PROJECT OVERVIEW

A map showing the location of the project is included in the background information of the attached Task Order. Contract 4 begins four miles east of Hurdsfield, ND at 4th Street NE and 33rd Avenue NE and extends 27 miles east to 57th Avenue NE. Elements of the design project are:

- Surveying services for easement changes and topographic delineation as required
- Coordination and consultation with USACE on its reassessment of jurisdictional wetlands considering the recent SCOTUS ruling as it pertains to WOTUS
- Crossings and other permitting assistance
- Updating the hydraulic model for the hybrid ENDAWS/RRVWSP system, distributing demands along the pipeline, and documenting that effort in a system hydraulics report
- Expanded geotechnical and geo-hydraulic investigation with 75 borings, slug testing, laboratory testing of soil samples, and reporting
- Design of 27-miles of 72- to 84-inch pipe, with an impressed current corrosion protection system
- Up to twenty 96- to 108-inch dia trenchless crossings in total (19 wetland, 1 state highway); other crossings will be open cut; buried PVC raceway for future fiber optic cable (in tunnel casings only)
- Strict stripping, stockpiling, and replacement of topsoil/subsoil to facilitate easement restoration

RISK CONSIDERATIONS

Tunneling has a variety of uncertainties and risks beyond those of open-cut pipeline installation. To mitigate Garrison Diversion's exposure to some of these risks, a two-part geotechnical investigation/report – a geotechnical data report and a geotechnical baseline report – are included as Contract Documents outlining the conditions the Contractor should expect when tunneling (i.e., the baseline). All contractors will be bidding the same baseline conditions with similar assumptions.

A high groundwater table and varying soil conditions of glacial geology pose certain risks during both open-cut and trenchless construction. To mitigate Garrison Diversion's exposure to some of those risks, additional field work and geotechnical borings are included to better define soil and groundwater conditions along the 27-mile alignments. Prospective contractors will benefit from this more detailed information with less uncertainty and lower risk when they plan for project execution and ultimately design and install their dewatering systems.

Black & Veatch Corporation
Professional Services for the Red River Valley Water Supply Project
Under General Agreement dated January 17, 2008

RRVWSP Task Order 5340 – Transmission Pipeline East, Contract 4
Final Design Services and Bidding Assistance

Effective Date – February 1, 2024

Content of this Task Order is as follows:

I. PROJECT BACKGROUND

1. The Red River Valley Water Supply Project (RRVWSP, the Project) will provide a supplemental water supply to eastern and central North Dakota (ND) in the event of drought conditions in the Red River watershed. The Project as envisioned by the Garrison Diversion Conservancy District (Garrison Diversion, the Owner) will also supply additional water to support industrial development as well as provide an environmental benefit to local rivers during drought conditions by augmenting natural stream flows. The source water will be withdrawn from the McClusky Canal and conveyed to a new biota water treatment plant (biota WTP). A multi-county pipeline will then convey flows from the WTP roughly 125 east to the Sheyenne River. Lake Ashtabula located downstream will provide storage allowing for controlled releases to the Red River Valley when flow augmentation is needed.

2. Professional services for final design of the Project will be accomplished through the execution of multiple task orders for design and associated activities as well as for engineering services during construction. A Preliminary Design Report (PDR) prepared by Engineer and authorized by

Owner under previously executed Task Orders will be the foundation on which design Project elements will be based.

3. This Task Order is for final design of an approximate 27-mile pipeline segment called Contract 4. The outcome of this Task Order will be a 100-percent complete design organized into up to three bid packages ready for public advertisement and solicitation of bids from pipeline general contractors.

4. The award of a construction contract to Contractor(s) to build the Engineer-designed pipeline will depend on future project funding. If funding is not available to build the entire Contract 4 transmission main, it may be bid in separate and smaller packages. Trenchless crossings will be included with the respective open-cut portion(s) of the contract.

II. TASK ORDER OBJECTIVES

1. The alignment and limits of the pipeline being designed under this Task Order are shown in **Attachment A**. Contract 4 starts approximately 4 miles east of Hurdsfield at 33rd Avenue Northeast and terminates 27 miles east at the intersection of 57th Avenue Northeast and 1st Street Northeast. In addition to the 27 miles of new pipeline, Contract 4 includes an anticipated 20 trenchless crossings shown in Table 1 and on **Attachment A**. The final number of trenchless crossings is subject to change given a new Waters of the United States (WOTUS) rule is being promulgated by the U.S. Army Corp of Engineers (USACE) with respect to jurisdictional wetlands. New jurisdictional determinations will be sought from USACE with the objective of obtaining non-jurisdictional determinations in some instances rather than previous jurisdictional determinations thereby deleting associated tunnels and lessening capital costs. The planned trenchless crossing are as follows:

Approximate Starting Station[1]	Type of Crossing	Approximate Length (ft)[1]	Approximate Depth to Top of Casing (ft)
4740+00	JD Wetland and road	110	14
4911+00	JD wetland	240	16
4930+00	JD Wetland	670	18
4941+00	JD Wetland	120	14
5135+00	JD Wetland	170	15
5150+00	JD Wetland	340	17
5155+00	Paved Road (Hwy 52)	170	16
5173+00	JD Wetland	280	14
5204+00	JD Wetland	80	16
5253+00	JD wetland	130	14
5288+00	JD Wetland	70	14
5335+00	JD Wetland	150	14
5355+00	JD Wetland	330	14
5393+00	JD & FWS Wetland	290	13
5416+00	JD Wetland	210	14
5475+00	JD Wetland and road (49th Ave NE)	210	14
5527+00	JD Wetland	120	14
5575+00	JD wetland	410	15
5728+00	JD Wetland	80	13

Approximate Starting Station[1]	Type of Crossing	Approximate Length (ft)[1]	Approximate Depth to Top of Casing (ft)
5860+00	JD Wetland	150	14
Totals			

Notes:

1. The starting stationing and length of tunnels will likely change as design is finalized. Data shown is approximate and based on the PDR. Any alignment change (horizontal and/or vertical) would affect locations and lengths of tunnels.
2. Design of additional tunnels not shown above will be Additional Services. Some tunnels may be eliminated based on the outcome of negotiations with county and township officials; or newly jurisdictional determination by the USACE.

Table 1 – Locations and Length of Trenchless Crossings

2. Routing of the pipeline from the McClusky Canal to the Sheyenne River was developed during preliminary design of the RRVWSP and subsequent efforts associated with the Eastern North Dakota Alternate Water Supply (ENDAWS) project. The final design of Contract 4 will follow this route, but some minor changes to the route are anticipated as part of the final design process.

3. Preparation of easement agreements and associated exhibits along with easement negotiations and acquisition are included in other task orders (i.e., Task Orders 7310 and 7410, which are the applicable land services authorizations from previous biennia).

4. This Task Order includes the scope of geotechnical investigations required to support the final design. Where possible, soil borings conducted as part of the 2010 design efforts were incorporated in the geotechnical analysis where the borings were sufficiently close to the current pipeline alignment. Geotechnical reports will be prepared under this Task Order. These reports include a Geotechnical Report for the open-cut pipeline, including guidance for handling and discharging groundwater, and a Geotechnical Data Report (GDR) and a Geotechnical Baseline Report (GBR) for the trenchless crossings being designed hereunder. The GDR and GBR will be Contract Documents (CDs). The GDR will include facts gathered during the project investigation and will be prepared to summarize the subsurface information collected under this Task Order as well as summarize the information gathered under the 2010 geotechnical investigation. The GBR establishes a single-source document where contractual statements describing the geotechnical conditions anticipated to be encountered during construction can be found. The GBR will be prepared in this Task Order during the design document preparation since it depends on the design being significantly advanced. The GDR will be prepared by Engineer's consultant, Materials Testing Services, LLC, of Minot, North Dakota, and the GBR will be prepared by Engineer.

5. A preliminary sheet list identifying the drawings to be produced under this task order is included as **Attachment B**.

6. A preliminary specification list, including front-end or Division 0 specifications, identifying specifications to be produced under this task order is included as **Attachment C**.

7. The pipeline will be an approximate 72-inch diameter steel pipeline primarily installed with cut-and-cover methods; however, final diameter of pipeline may change depending upon results of an updated hydraulic analysis considering flow variations and specific demand allocations.

III. GENERAL REQUIREMENTS

1. Under this Task Order, Engineer will provide services in accordance with the Standard Form of Agreement between Owner and Engineer for Professional Services dated January 17, 2008 (Agreement).

2. General Description of Activities. The Basic Services to be performed by Engineer consist of professional design services associated with development of CDs for installation of a multi-county water supply pipeline in east central ND.

3. Construction Procurement. CDs developed by Engineer will be of sufficient detail for the Owner to obtain bids through a conventional bidding process (design-bid-build). CDs will be prepared assuming no more than three construction packages – Contracts 4A, 4B, and 4C – with length of each segment dependent upon funding and contractor's ability to complete the work within the desired number of construction seasons.

4. Work outside Basic and Special Services. Engineer agrees to provide the Basic Services and Special Services identified herein. Work not specifically discussed herein as part of Basic Services or Special Services is considered Additional Services. Additional Services will only be performed with proper separate authorization such as an amendment to this Task Order or a new separate Task Order.

5. Explicitly Identified Quantities. Engineer in development of this Task Order estimates the level of effort required to provide the services discussed. Where specific information is listed as to the quantity of service to be provided by Engineer, those quantities listed are considered Basic Services or Special Services and are, therefore, included in this Task Order scope of service and associated fee estimate. Services exceeding the written quantities shown below in Basic Services or Special Services are considered Additional Services.

6. Capital Cost Opinions. All opinions of probable construction cost developed will generally follow the recommendations of the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinions' level of accuracy presented by Engineer for the various deliverables will be as noted in subsequent paragraphs of this Task Order.

7. Document Production Standards and Procedures. Engineer will prepare CDs using the 50-division, three-part Construction Specifications Institute (CSI) format for technical specifications; Engineer's drawing standards; and Engineer's design procedures and criteria, AutoCAD drafting standards, and standard construction details.

IV. BASIC SERVICES

Basic Services of this Task Order are organized into major tasks as follows:

- Task 1 – Task Order Management and Administration
- Task 2 – Special Project and Third-Party Meetings
- Task 3 – Landowner Communication and Easement Modifications

- Task 4 – Field Services
- Task 5 – Final Design Services
- Task 6 – Bidding Assistance

1. **Task 1 – Task Order Management and Administration**

This task includes overall management and development of a Project Management Plan specific to the Work. The overall objective of this task is to keep the Task Order on schedule and on budget.

A. Project Management. Engineer will provide management services necessary for execution of the Task Order, including efforts required for proper resource allocation, schedule development and monitoring, budget review and control, Owner coordination, and other standard and customary activities required for timely completion of the Work.

B. Administration. Perform general administrative duties associated with the Task Order, including general correspondence, day-to-day contact and coordination, administration, and monthly invoicing in a form that is acceptable to the Owner.

C. Progress Reports. Prepare for the Owner progress reports that identify the Work that has been performed, work activities anticipated, and action items required of the Owner. Identify variances or potential variances from the Task Order's Basic and Special Services. The reports will be in the Engineer's standard format unless the Owner requires otherwise.

D. Schedule Updates. Engineer will prepare a baseline Gantt chart schedule. The schedule will be updated comparing actual progress by task/subtask to the baseline schedule.

E. Management of Subconsultants. Engineer will monitor subcontractor progress, review and approve invoices, oversee adherence to the approved quality assurance/quality control (QA/QC) plan, monitor adherence to document preparation standards, and generally oversee subconsultants' performance.

2. **Task 2 – Special Project and Third-Party Meetings**

The overall objective of this task is to keep stakeholders apprised of Task Order status and to provide a forum for stakeholder input. Engineer will prepare an agenda and provide meeting notes as appropriate documenting discussions and action items. The following meetings are anticipated:

A. Special Project Meetings

i. Task Order Initiation Meeting. Engineer will conduct a Task Order Initiation Meeting with the Owner and subconsultants to review the overall approach for final design and bidding assistance. Another objective of this meeting will be to finalize the approach to gaining entry to landowner parcels for investigatory purposes, which are going through eminent domain proceedings. Additionally, coordinate with Owner regarding landowner notifications for parcels with signed easements. Landowner notifications will be for the purpose of obtaining either survey, geotechnical, or other design data.

ii. Post Field Investigation Alignment Update and Virtual Workshop. A virtual workshop will be held with the Owner after supplemental field work has been completed and after initial discussions have been undertaken with local officials and landowners. The impact of field findings and/or negotiations with landowners on the pipeline alignment and appurtenance locations will be discussed. The outcome of the meeting will be to identify any potential alignment changes to the previously completed 30-percent design. An updated set of alignment drawings will be prepared before the meeting and finalized during the workshop.

B. Third-Party Meetings

i. Stakeholder Meetings. Engineer will attend and present Project information for meetings with the LAWA Technical Advisory Committee (TAC). One meeting is expected to present the final design.

ii. Design Meetings for Utility Coordination. Engineer will schedule and meet with ND Department of Transportation (NDDOT) area office and/or the local county, railroads, and utilities that own parallel easements or easements that the pipeline will cross. Engineer will provide summary notes of meetings. The following utility coordination meetings are anticipated.

(a) One meeting with NDDOT

(b) One meeting each will be held with the county commission or designated representative(s) of Wells County.

(c) One meeting for each impacted township with the elected officials if desired by that township.

(d) One meeting will be held with each of the electric/communications utilities impacted. This scope item assumes there will be three electric/communications crossings.

(e) One meeting will be held each of the pipeline companies impacted. There are expected to be:

(i) Rural Water Providers

(ii) One other Utility

3. **Task 3 – Landowner Communication and Easement Modifications**

A. Landowner Notifications. This segment of pipeline covers 56 separate tracts with 36 individual property owners. 36 tracts with 19 individual landowners do not have an easement. Engineer will support Garrison Diversion's communications with individual landowners for the purposes of gaining access for the soil borings by developing geographic information system (GIS) graphics and other supporting documentation.

B. Landowner Coordination. Provide engineering team support to Owner to meet with landowners as required for the purposes of establishing the final pipeline alignment and for establishing fixed locations of appurtenances for incorporation into the CDs developed during the final design phase.

C. Modifications to Signed Easements. Easements have been, or will be, obtained under a separate land services Task Order. The purpose of this subtask to account for revisions to these executed easements due to rerouting of the pipeline for design or other reasons. Engineer will:

i. Revised Certificates of Survey. Prepare revised Certificates of Survey to include:

(a) Legal description of the new easement,

(b) Bearings and distances of the new easement tied to the Public Land Survey System (PLSS), and

(c) Resigning and resealing revised Certificates of Survey by a licensed surveyor.

ii. Revised Easement Documentation. Provide revised easement document for Garrison Diversion to file in respective County Recorder's office in compliance with North Dakota Century Code.

iii. GIS Updates. Provide GIS updates to the GDCD data for the revised easements.

This scope of work assumes a total of up to six revised Certificates of Survey for this segment.

4. **Task 4 – Field Services**

A. Soil Borings. A geotechnical investigation will be completed by Engineer's consultant will consist of approximately 75 soil borings at an average depth of 34 feet. The soil borings will support the final design of the open-cut and tunneled portions of Contract 4. In addition, various soil resistivity and corrosivity tests will be completed to support the design. **Attachment D** presents a table showing the proposed soil borings, soil boring depths, and the tests associated with each boring. Ground surveys will be completed to locate the boring and to confirm that actual location of drilling so that they can accurately be placed on drawings and documented in geotechnical reports.

B. Limited Topographic Surveying. Where necessary to reduce change order risk by more precisely locating utilities crossing or paralleling the proposed pipeline alignment, provide limited field surveys to establish horizontal coordinates and vertical elevations of utilities and other topographic features impacting pipeline design. For the purpose of fee development, this task assumes four surveys.

C. Stray Current Field Investigations. Where necessary to mitigate DC stray currents from foreign systems or induced AC voltages at proposed high-voltage power lines crossings, provide field investigations to support detailed modeling of soil and crossing

appurtenances. Model will be used to simulate induced alternating current (AC) potentials and current densities in support of the final design of the Project's pipeline corrosion protection system. Develop and submit a report documenting the findings and conclusions of the field investigation and simulations. For the purpose of fee development, this task assumes one stray current analysis will be completed.

D. Alignment Site Visits. The design engineers will visit the 27-mile alignment before beginning work on the 60-percent deliverable. The purpose of the site visit is to verify and document existing facilities along the alignment, evaluate potential constructability issues, and document potential construction access locations along the alignment. This task will be done current with the Post Field Investigation Alignment Workshop discussed above.

E. Jurisdictional Wetlands Review and Consultation. Jurisdictional determinations were completed by USACE for previously delineated wetlands along the RRVWSP transmission main alignment. As part of this task order, Consultant will work with the USACE to gain reauthorization of the previously completed Jurisdictional determinations. Reauthorization will consist of coordination with the USACE on previously prepared documents. This work will be completed on time and materials basis at a cost of up to $75,000. Level of effort that exceeds this amount will be completed as Additional Services.

5. **Task 5 – Final Design Services**

The purpose of final design is to develop CDs by which the Owner will select Contractor(s) to build the desired facilities. Engineer will provide final design services and CDs for the recommended pipeline alignment shown in **Attachment A**. The CDs will be prepared for the purposes of obtaining competitive bids, selection of the lowest and best bid, and construction of the Work. Intermediate deliverables will be prepared and submitted to the Owner upon development of the 60-, 90-, and 100-percent design completion stages. Final CDs will be prepared for bidding purposes.

A. Design Team Conference Calls. Engineer will schedule and lead conference calls with the Owner to review overall progress, exchange ideas and information, and coordinate activities with other task orders. Calls will be scheduled, and content organized, to coincide with other Task Orders for efficient utilization of staff time. Assuming an 18-month schedule, up to 12 calls will be held with the Owner.

B. Design Guidance Manual Minor Update. A Design Guidance Manual was previously developed under Task Order 5330; it will be used to guide this design. It will be updated to capture changes to the design approach made by the Owner and its engineering team and re-issued.

C. Geotechnical Baseline Report. Engineer will develop a GBR for the trenchless crossings of this pipeline segment. A draft report will be furnished for review and comment. Upon disposition of Owner comments concerning the draft report, a final report will be furnished. The GBR will be a CD.

D. Geotechnical Design Memorandum/Geotechnical Data Report. Engineer will develop a memorandum for internal use by Engineer that contains design requirements and geotechnical recommendations for open-cut design and the geotechnical data for the trenchless crossings. The geotechnical design memorandum will not be made available to bidders. A Geotechnical Data Report (GDR) developed by Engineer's geotechnical consultant will be developed for the trenchless crossings of this segment. The GDR will be furnished to bidders, and it will be considered a CD. Engineer will prepare s separate GDR encompassing the information of its Consultant's GDR and information obtained from previous geotechnical investigations completed by Engineer and Owner along the alignment going back as far as 2010

E. Soils Classifications and Quantities. Engineer using a ND-licensed professional soil classifier will characterize topsoil and subsoil along the alignment. The professional soil classifier will review applicable excavation and trenching, easement restoration, and vegetative technical specifications providing comments to Engineer to incorporate into the CDs. Soil layer thickness will be estimated from ND soil surveys and augmented by Consultant with limited field investigations. Thicknesses will be used to compute stripping and stockpiling Bid Form quantities. Provide a technical memorandum documenting the soil classification work completed and the findings of that effort.

F. Utility Coordination. Engineer will perform utility coordination services, including identifying utility conflicts and facilitating the resolution of utility conflicts. It is expected that the pipeline will be below existing utilities so that the Utility Coordination will consist of identification and coordination but not relocation. Engineer will perform the following activities:

i. Provide initial notification letters for Owner to send to affected utility companies, owners, and other concerned parties, as applicable.

ii. Engineer will develop a utility contact list with information such as: (a) owner's name; (b) contact person; (c) telephone numbers; (d) emergency contact number; (e) e-mail addresses; and (f) other pertinent information concerning affected utilities and facilities.

iii. Advise utility companies and owners of the general characteristics of the Work and provide an illustration of the Project footprint for delineation of the utilities/facilities that are located in the Project area.

iv. Maintain a utility layout in AutoCAD. This layout will include existing utilities that are to remain in place or be abandoned and adjusted/relocated utilities.

v. Review utilities adjustment proposals in the event that the pipeline cannot be installed under the existing utilities.

G. Subsurface Utility Engineering

i. Provide subsurface utility engineering (SUE), utility designating, and locating surveys along the proposed pipeline alignment in areas where utility marking services are available. The subsurface utility surveys will be a combination of Utility Quality Level A, B, and C, depending on the specific utility, as defined in CI/ASCE 38. Vertical elevations of sewers and drains, as applicable, will be taken at manholes and inlets.

ii. Up to five vacuum excavations or potholes no deeper than 10 feet will be excavated at proposed utility crossings and other locations to better define locations of utilities or other potential conflicts where field-discovered conflicts will adversely impact pipeline installation. Potholes/vacuum excavations will mostly be needed in the event of open cutting across roads instead of tunneling. The cost of the potholes/vacuum excavations will be paid to the utility locating contractor directly by the Owner.

H. Utility Relocations Coordination. Few conflicts between the pipeline and water and sewer lines, as well as minor drainage structures and irrigation facilities, are anticipated due to the depth of the pipeline. The scope assumes that the utility owners will design relocations and will then be paid by directly by the Owner. Relocations will be scheduled for completion in advance of pipeline excavation and installation.

i. If relocation designs are prepared by the utility owners, they will be coordinated with the RRVWSP and reviewed by Engineer for compatibility with the work proposed.

ii. If drain tiles need to be relocated or field modified as part of pipeline construction, engineering services will be addressed as Additional Services.

I. Permitting. This subtask encompasses applicable governmental approvals, including NDDOT, counties, townships, railroad (BNSF – property, no existing tracks), and utility permits and approvals necessary to construct the pipeline. The Task Order assumes that the pipeline will be constructed under a Nationwide No. 12 Permit using the non-notification approach. Thus, the pipeline will comply with overall federal permit requirements, but an actual federal permit will not be required.

i. Engineer will obtain in conjunction with the Owner necessary approvals from the appropriate utilities, city, county and state agencies having jurisdiction over the Work.

ii. Engineer will prepare a permitting schedule identifying action items, decision points, milestones, reviews, and approvals required to complete permitting. Engineer will communicate status of permits to Owner.

iii. Contractor-Provided Permits. Engineer will provide in the CDs a list of the permits that must be obtained by the Contractor. Based upon preliminary design, it is understood that the following permits, at a minimum, will be the responsibility of the Contractor:

- Erosion and sediment control; land disturbance; stormwater permits
- Dewatering operations discharge

iv. Owner-Provided Permits

(a) Engineer will provide assistance to the Owner in obtaining the following permits from government agencies, utilities, pipeline companies, and other entities as noted below:

- NDDOT highway crossing (HWY 200)
- BNSF property crossing
- County road closing/detours
- Local electric and telecommunications crossings. Scope assumes up to three separate utilities.
- County road crossings
- Township road crossings

(b) Assistance provided by Engineer for the above listed permits will include:

(i) Preparation of applications, exhibits, drawings, and specifications ready for the Owner's execution and transmittal.

(ii) Furnishing additional information about the Project's design, as required by the permitting authority.

J. Pipeline Corrosion Protection System Services. RRVWSP, Technical Memorandum No. 12, Task Order 5 – Pipeline Preliminary Design dated February 12, 2010, summarized field data collected from geotechnical investigations conducted during pipeline preliminary design. Evaluation of soil corrosivity and corrosion risks posed to the pipeline from buried pipelines crossing the proposed alignment and overhead high voltage power lines crossing or paralleling the pipeline proposed alignment were completed. The memorandum recommended a multi-pronged approach to pipeline corrosion protection, including pipe coatings and an impressed- current corrosion protection system.

i. Supplemental soil resistivity data will be collected in conjunction with geotechnical investigation described above. Additional soil resistivity data will be gathered at reduced intervals to support the detailed design of the pipeline corrosion protection system. Deep soil resistivity data will be collected at proposed deep well anode system locations.

ii. Stray current field investigations for the Project element will be completed as indicated in the Field Services article of this Task Order. Prepare report as indicated in the Field Services article of this Task Order documenting field investigations and simulations at the crossing. A mitigation design will be developed and incorporated into the corrosion protection system drawings based on the simulations.

iii. Engineer will formulate an approach and develop in detail the Project's corrosion protection system in accordance with the Corrosion Protection Design Guide (CPDG) prepared under Task Order 5310. The corrosion protection system will be based on an impressed current design. Engineer will also develop drawings and specifications for

the corrosion protection system incorporating them into the Project's CDs for the element covered by this Task Order. Drawings and specifications will be developed for 60-, 90, and 100-percent design deliverables. The 60-percent deliverable consists of design of the essential components of the corrosion protection system and identification of field investigation locations indicated in the Field Services article of this Task Order. Stray current mitigation design and impacts of detailed pipeline design will be incorporated into the 90-percent deliverable. Final client comments will be incorporated into the 100-percent deliverable. In addition, the Project element's corrosion protection system design will provide stand-alone corrosion protection for idle Project elements while subsequent pipeline segments are constructed.

K. System Hydraulic Model Update and Refinement. The Project's hydraulic and surge-transient models were primarily generated during development of the PDR. Several refinements and scenario analyses have been completed since then. Garrison Diversion is now considering relocating the hydraulic break tanks west into the ENDAWS segments of the transmission pipeline, which are higher in elevation allowing gravity flow in a longer segment of the pipeline. There is also consideration of delivering more flow to Lake Ashtabula due to changes in the lake's geomorphology. Finally, the location for withdrawals by direct pipeline users can now be refined from previous broad assumptions used in the PDR. In the previous PDR analyses, 25 cubic feet per second (cfs) was diverted from the main transmission main just east of the James River for central North Dakota users. The remaining flow of 140 cfs was conveyed from the James River to the Sheyenne River Outfall through a 72-inch pipe. The Owner now wants to examine options for conveying the peak Project capacity from the James River to the Sheyenne River Outfall – 165 cfs or greater. As the final pipeline alignment (both horizontal and vertical) is established for Contract 4 as well as Contracts 6 and 7, it will be necessary to update models and evaluate the impact of changes made to the alignment on hydraulic capacity. Owner seeks to optimize the alignment and pipeline diameter to convey the highest possible flow, which Engineer's hydraulic analyses will seek to achieve.

i. Hydraulic Modeling and Scenario Analyses. Engineer will update the Project's hydraulic model with the final design alignment of Contracts 5 and the current alignments for Contracts 4, 6, and 7 that are at various completion states along with various flow and demand scenarios. Verify through modeling that flows delivered to the Sheyenne River Outfall meet design criteria. Operating pressures for pipeline wall design will also be confirmed to verify compatibility with pipe already installed and its pressure class rating. The hydraulic analysis will consider flows, size and pressure class of installed transmission main pipe, the proposed height of the hydraulic break tanks and their expected operation, minimization of system operating costs, system reliability, and other pertinent factors to arrive at a size and pressure class rating for respective pipeline segments.

ii. A hydraulics report documenting updates to assumptions, the model itself, and results will be developed and submitted.

L. Pipeline Basis of Design Memorandum Update

i. Draft Basis of Design Memorandum (BDM). BDM were prepared for the Contract 5 and 6 pipelines. This BDM will be updated for the design and construction of the Contract 4 pipeline, including pipeline design parameters, a preliminary route map indicating the proposed alignment, pipeline material selection, pipeline design working pressure and test pressure, joint restraint, accessories, and appurtenances. Engineer will review the Draft BDM for accuracy and completeness prior to submitting to the Owner for review and comment.

ii. Review and Finalize BDM. Engineer will confer with Owner's staff to review the Draft Updated BDM and obtain Owner's comments. Engineer will address Owner comments and develop a Final Updated BDM. The Final Updated BDM will be the document followed by the design team to develop CDs for solicitation of bids from general contractors.

M. Front-End Documents Customization

i. Prepare and deliver draft front-end documents using standard documents of the Engineers Joint Contract Document Committee (EJCDC) and Engineer's standard supplements, including general conditions and supplementary conditions. The documents will be based on the Contract Documents for Segment 5 and will assume that the Contract 4 pipeline will be split into up to three construction contracts.

ii. Conduct a review with the Owner to discuss and receive comments on the draft front-end documents.

iii. Revise front-end documents addressing Owner's comments and incorporate modifications, if any, into subsequent CD deliverables.

N. 60-percent CDs (Level 2 Design)

i. Level 2 design will commence after the Owner accepts the preliminary design as modified from the Post Field Investigation Workshop.

ii. The content of Level 2 deliverables is as follows:

- General drawings
- Plan and profile drawings
- A majority of technical specifications
- Underground utility drawings
- Constructability review results
- Opinion of probable construction cost update
- Internal quality control review and refinement
- QA/QC plan and log update
- Task Order schedule update

iii. Provide technical specifications and drawings for Owner review.

iv. Attend a meeting with the Owner to receive and discuss the Owner's review comments. Document comments received in a log and distribute to meeting attendees.

v. Revise documents as necessary to reflect decisions taken at this level incorporating design modifications into subsequent deliverables.

O. 90-percent CDs (Level 3 Design)

i. Level 3 design will commence after the Owner has accepted Level 2 deliverables. The content of the Level 3 deliverables is as follows:

- Drawings review set
- Technical specifications review set
- Front-end documents review set
- Opinion of probable construction cost update
- Constructability review results
- Internal quality control review and refinement
- QA/QC plan and log update
- Task Order schedule update

ii. Provide specifications and drawings for Owner review.

iii. Meet with the Owner to receive and discuss the Owner's review comments. Document comments received in a log and distribute to meeting attendees.

iv. Revise documents according to mutual agreement reflecting decisions taken at this level incorporating design modifications into subsequent deliverables.

P. 100-Percent CDs. Prepare CDs starting from the pipeline Level 3 design. These documents will include comments received from the Owner. Deliverables include the following:

- Drawings
- Technical specifications
- Front-end documents
- GDR for trenchless crossings
- GBR for trenchless crossings
- Updated opinion of probable construction cost

Q. Final Sealed and Signed CDs

i. Preparation of the final CDs will commence after the Owner has accepted 100-percent deliverables.

ii. Provide the Owner a record copy of Final CDs that are sealed, signed, and dated by the Engineer of Record.

R. Opinions of Probable Construction Cost (aka Cost Opinions or Cost Estimates). Engineer will update the cost opinion presented in the PDR at the various stages of final design submitting updates for the Owners information and use as follows:

i. After transmittal of the 60-percent deliverable, update cost opinion commensurate with an AACE Class 3 estimate with standard accuracy.

ii. After transmittal of the 90-percent deliverable, update cost opinion commensurate with an AACE Class 2 estimate with standard accuracy.

iii. After transmittal of the 100-percent deliverable, update cost opinion commensurate with an AACE Class 2 estimate with standard accuracy.

iv. After transmittal of final deliverable, update cost opinion commensurate with an AACE Class 1 estimate with standard accuracy.

S. Quality Assurance/Quality Control. Engineer will provide QA/QC services necessary for execution of the Task Order. QA/QC reviews will be provided for each deliverable furnished. Reviews will be completed by Engineer's or Engineer's Subcontractor's independent senior staff. Engineer will log QA/QC reviews and maintain records of said reviews in its files. In addition, Engineer will log comments received from the Owner and provide a log of comments and Engineer responses for the following events:

- 60-percent CDs
- Draft front-end documents
- 90-percent CDs
- 100-percent CDs

Engineer's services under the Final Design Phase will be considered complete on the date when the final design submittals identified in Deliverables are provided.

6. **Task 6 – Bidding Assistance**

A. Advertisement and Bid Letting

i. Finalize Front-End Documents. Finalize front-end documents incorporating information as it relates to the bid letting date, location, time, and other necessary information.

ii. Invitation to Bid. Provide to the Owner the Invitation to Bid, which Owner will have published in Owner-selected publications. Identify potential contractors and suppliers, review with the Owner, and distribute copies of the Invitation to Bid electronically.

iii. Production of Contract Documents. Produce digital copies of CDs, addenda, and geotechnical reports for Owner's use and distribution.

iv. Pre-bid Conference. Conduct, at a date and time selected and a place provided by the Owner, a pre-bid conference to:

(a) Confirm the types of information required by the CDs and the format in which bids must be presented.

(b) Review special Task Order requirements and CDs in general.

(c) Receive requests for interpretations for which responses will be issued to plan holders via addendum.

(d) Prepare agenda for pre-bid conference; issue to plan holders and pre-bid conference attendees along with the pre-bid meeting sign-in sheet.

v. Interpretation of Bidding Documents. Interpret bidding documents; prepare and issue up to two addenda to the CDs, as required. More addenda will be provided as Additional Services.

vi. Update cost opinion and furnish Engineer's Opinion of Probable Construction Cost (OPCC) to the Owner for its use at the bid opening.

vii. Bid Opening. Conduct bid opening on behalf of the Owner after bids are received. Make a preliminary tabulation of bids, and review questionnaires, qualifications information, and bids for completeness.

B. Pre-award Services. The level of effort for pre-award services involving a well-qualified bidder and suppliers will be of a limited nature with the level of effort as stipulated in **Attachment E – Engineering Fee Estimate Worksheet(s)**.

i. Questionnaire(s). Examine questionnaire(s) to identify any supplier whose equipment or material may not conform to the CDs. This examination will be based on the knowledge and experience of the Engineer.

ii. Qualifications of Apparent Successful Bidder. Review and evaluate the qualifications of the apparent successful bidder and the proposed major or specialty subcontractors. The review and evaluation will include financial resources, and a check of up to five references from completed projects similar in size and character.

iii. Bid Tabulations. Prepare and distribute formal bid tabulation sheets, evaluate bids, and make a written recommendation to the Owner concerning contract award.

iv. Services include a review of the Contractor's bonds and forwarding to the Owner for approval; furnishing the Contractor unsigned CDs; and transmitting the CDs to the Owner for signature and distribution. Engineer's review is only for the purpose of determining if the Contractor provided the required bonds; it is not a legal review to determine if Contractor is compliant with CD requirements.

C. Post-award Services. Engineer will provide the following services after the Notice of Award has been issued by the Owner.

i. Prepare Issued-for-Construction Contract Documents. Engineer will incorporate drawing, specification, and geotechnical data and baseline report items made by addendum during the bidding phase, as applicable, into the native files (i.e., AutoCAD, Revit, Word, or Excel files, as applicable) before construction begins. Once addenda items have been incorporated, Engineer will produce and transmit Issued-for-Construction CDs electronically and in hardcopy format to Owner and Contractor for use during construction. Electronic Issued-for-Construction CD files will be provided by Engineer in bookmarked pdf format.

ii. Schedule and Moderate Preconstruction Conference. Conduct a preconstruction conference at a date and time selected by and at a facility provided by Owner. Engineer will prepare an agenda to include, but not limited to, meeting topics such as:

- Discussion of Contractor's tentative schedule
- Procedures for transmittal and review of Contractor's submittals
- Special inspections program, as applicable
- Processing of payment requests and Owner payments
- Critical work sequencing
- Change order requests and change orders
- Field orders / work change directives
- Record drawings
- Contractor's responsibilities for safety and first aid

Engineer will prepare and distribute minutes.

iii. Obtain Drone-Based Video. Prior to issuance of the Contractor's notice to proceed Engineer will video record an aerial view of the alignment document existing pre-construction conditions. Produce aerial drone-based videos of the construction job site using a 12-megapixel minimum resolution camera. Provide a drone and operator with proper certifications and licenses for both federal and local jurisdictions. Drone video will be collected as follows:

(a) Pre-Construction conditions immediately prior to start of construction

(b) Construction documentation will be completed via flights under a future construction phase services task order.

Bidding Assistance will be considered complete upon issuance of a construction notice to proceed, commencement of construction, or upon cessation of negotiations with prospective Contractors.

V. SPECIAL SERVICES

Not used

VI. DELIVERABLES

The following deliverables will be furnished under this Task Order. Documents or deliverables not included in the list below will be provided as Additional Services as authorized by the Owner.

1. **Task 1 – Task Order Management and Administration**

   - Progress reports (electronic pdf files)
   - Baseline schedule and updates (electronic pdf files)

2. **Task 2 – Special Project and Third-Party Meetings**.

   - Meeting agenda (typically included with MS Outlook meeting invitations)
   - Meeting notes (electronic pdf files)

3. **Task 3 – Landowner Communication and Easement Modifications**

   - Landowner GIS exhibits (electronic pdf file for each affected parcel)
   - Certificates of survey for modified easements (electronic pdf files and hard copies, as required)

4. **Task 4 – Field Services**

   - Geotechnical Report for the open-cut pipeline (electronic pdf files)
   - Geotechnical Data Report for the trenchless crossings (electronic pdf files)
   - Updated drawings for supplemental surveys (electronic pdf file)
   - Alignment site visit notes (electronic pdf files for Contract 4)
   - Stray current field report (electronic pdf file)
   - Correspondence and re-examination of wetlands' jurisdictional determinations (electronic pdf files)

5. **Task 5 – Final Design Services**

   - Meeting/conference call agendas (generally attached to MS Outlook meeting invitations) and notes (electronic pdf files)
   - Updated Design Guidance Manual (draft and final single hard copy and electronic pdf files)
   - Geotechnical baseline report (electronic pdf file)
   - Soils classification and quantities memorandum (electronic pdf files)
   - Utility notification letters (electronic pdf file)
   - Utility contact list (electronic pdf file)
   - SUE drawings (single hard copy and electronic pdf file)
   - Permit applications (electronic pdf files for applications identified in the Permitting paragraph)
   - Corrosion protection system basis of design memorandum update (electronic pdf file)
   - System hydraulic model update and refinement report (electronic pdf file)
   - Pipeline Basis of Design Memorandum update (electronic pdf file)
   - Draft front-end documents (electronic pdf files)

- 60-percent CDs (hard copies and electronic pdf files)
- 60-percent cost opinion (electronic pdf file)
- 60-percent Owner review comments log (electronic pdf file)
- 90-percent CDs (hard copies and electronic pdf files)
- 90-percent cost opinion (electronic pdf file)
- 90-percent Owner review comments log (electronic pdf file)
- 100-percent CDs (hard copies and electronic pdf files)
- 100-percent cost opinion (electronic pdf file)
- 100-percent Owner review comments log (electronic pdf file)
- Final Sealed and Signed CDs (hard copies and electronic pdf files)
- Final cost opinion (electronic pdf file)

6. **Task 6 – Bidding Assistance (up to three contracts)**

- Invitation to Bid (electronic Word and pdf files)
- Issued-for-Bid CDs, including associated geotechnical reports (electronic pdf files)
- Pre-bid Conference Agenda (electronic pdf file)
- Opinion of Probable Construction Cost (electronic pdf file)
- Bid Tab – Summary and Detail (electronic pdf file)
- Recommendation of Award (electronic pdf file)
- Notice of Award form (electronic Word file)
- Agreement, Performance Bond, and Payment Bond forms (electronic Word files)
- Issued-for-Construction CDs (hard copies and electronic pdf files)
- Pre-construction Conference Agenda/Minutes (electronic pdf files)
- Drone video (electronic files)
- Notice to Proceed form (electronic Word file)

VII. ADDITIONAL SERVICES

The professional services listed below are not included in the scope of this Task Order nor does the fee shown in Article IX include any labor and direct expenses for items identified as Additional Services. Should Owner want to include services listed under Additional Services in Engineer's scope an amendment to this Task Order or execution of a separate Task Order with the new scope of services will be necessary.

1. The pipeline alignment was finalized previously under the preliminary design task orders, and survey certificates were prepared for each parcel of Contract 4 under Task Order 7310 – Land Services where options or easements are in place. Limited additional certificates of survey will be necessary over the 27-mile length in order to prepare CDs for bidding. These certificates will be prepared under Task Order 7410 – 2021-23 Biennium Land Services. If the alignment is changed during these Final Design Services, new survey certificates will likely be necessary and those would be considered Additional Services if the effort falls beyond the allowance amount set forth in this Task Order.

2. Addenda. Engineer will prepare up to two addenda under Basic Services. Should additional addenda be required beyond the Engineer's control, they will be prepared by Engineer as Additional Services.

3. Pre-award Services to be Provided as Additional Services. If the apparent successful bidder is not well qualified or if substantive changes to the design are proposed by the Bidder or the Contractor after award, substantial and unpredictable levels of effort by Engineer may be required to resolve issues and answer questions. These services will be provided according to the Owner's request as Additional Services.

4. Design of the relocation of utilities in conflict with the proposed location of RRVWS pipeline as presented in the PDR, except as explicitly identified herein. Relocation design for the following utilities and facilities is considered Additional Services:

    - Overhead and buried telephone lines
    - Fiber optic cable and other communication lines
    - Natural gas pipelines
    - Petroleum pipelines

6. Preparation of traffic control plans, excluding haul routes and detour plans that are included with Basic Services.

VIII. SPECIAL RESPONSIBILITIES OF OWNER

1. Pot Holing and Vacuum Excavation Contractor. Engineer will coordinate with and manage the services provided by a pot holing or vacuum excavation contractor hired by the Owner to uncover potentially conflicting utilities. Owner will contract with and pay directly for the services of the pot holing or vacuum excavation contractor.

2. Advertising Fees. Owner agrees to pay directly to publication(s) the fees of all public advertisements, including those costs assessed by plan rooms, bidding exchanges, and online bid management services.

3. Permit and License Fees. Owner agrees to pay directly to affected utilities, railroads, or other public entities fees assessed to secure crossing permits, licenses, or easements.

4. Easements. Pay directly to landowners real estate costs for all required easements. In addition, retain and pay for legal services necessary to secure easements through negotiation or other means. Several landowners in this 24-mile section have declined to sign voluntary easements so legal intervention will likely be necessary to get the necessary right-of-way. The Owner will manage and oversee legal services provided by others to support easement acquisition.

5. Issued-for-Bid CDs Distribution. Owner agrees to handle all aspects of bid document distribution, including collection of fees for CDs; distributing CDs, geotechnical reports, and addenda to prospective bidders and suppliers; and developing, maintaining, and distributing a plan holders list to recipients of CDs prior to the bid opening.

5. Bid Tabulations. Distribute the formal bid tabulation sheet(s) to plan holders of record or to the online bid management service(s) for distribution to plan holders and/or its membership, as applicable.

6. Meeting Facilities. Provide facilities or lease appropriate space for conducting the pre-bid meeting, if not held virtually, and similarly for the pre-construction conference.

IX. FEE

The total fee for the Basic Services under this Task Order is Seven Million One Hundred Eighty-Three Thousand Dollars ($7,183,000). Worksheet(s) showing the fee estimate and level of effort by task are included as **Attachment E**.

X. PERFORMANCE SCHEDULE

This Task Order will be completed by December 31, 2025. It is assumed that the final contract documents will be ready for bidding by June 30, 2025. Bidding will take place during July thru September 2025. A contractor Notice to Proceed is expected to be issued by October 2025 for at least one project. If funding becomes available for earlier construction, construction documents will be completed earlier for the portion of the project that has funding. **Attachment F** shows the anticipated execution schedule.

XI. DOCUMENTS INCORPORATED BY REFERENCE AND ATTACHMENTS

1. Standard Form of Agreement between Owner and Engineer for Professional Services dated January 17, 2008, is incorporated by reference.
2. Attachment A - Contract 4 Alignment and Trenchless Crossing Locations
3. Attachment B – Preliminary Sheet List
4. Attachment C – Preliminary Specification List
5. Attachment D – Proposed Soil Borings
6. Attachment E – Fee Estimate Worksheets
7. Attachment F – Final Design and Bidding Assistance Schedule

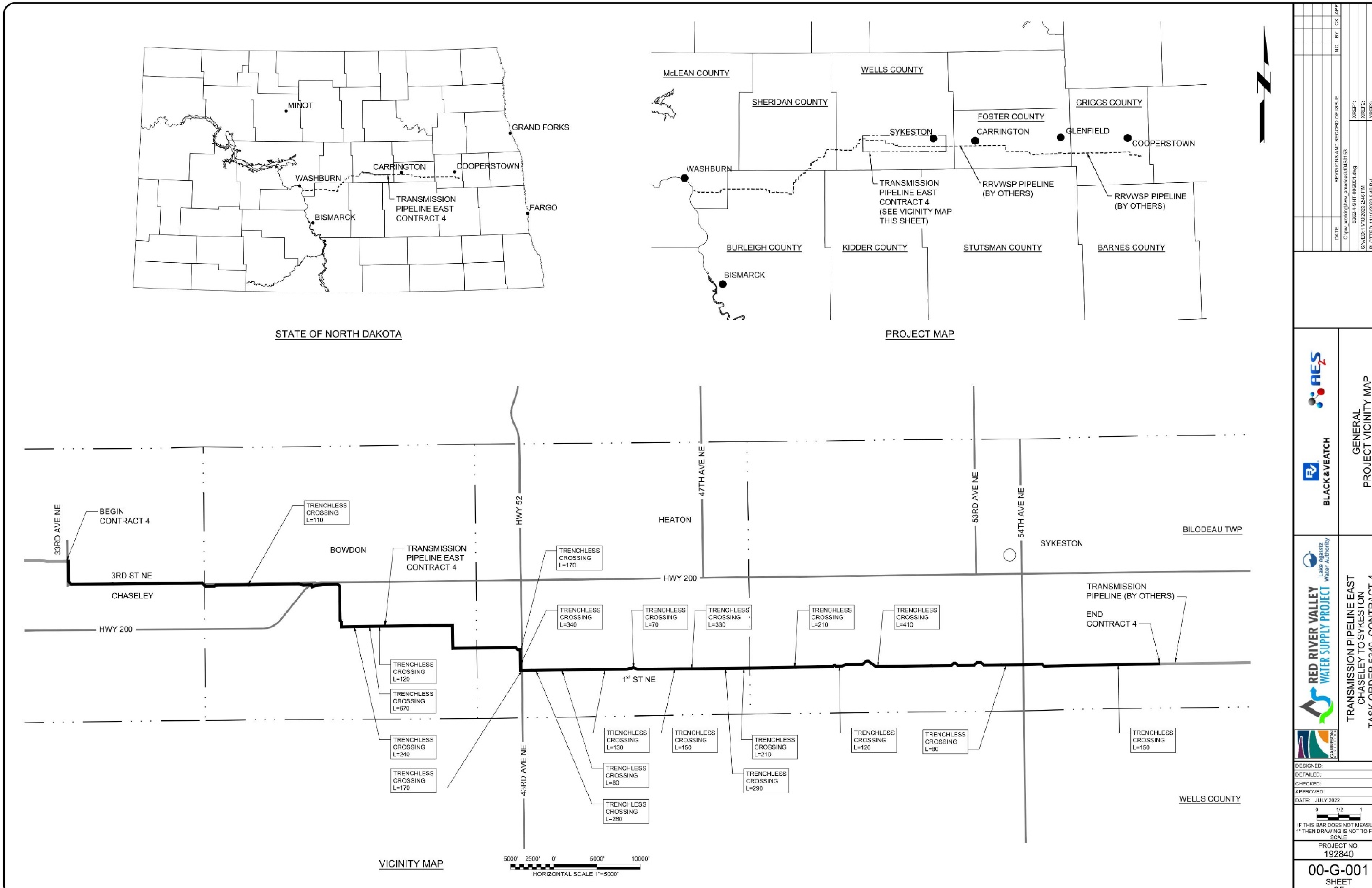
XII. ACCEPTANCE

If this satisfactorily sets forth your understanding of our Task Order, please print and sign this document. You should retain one copy for your files and return an electronic copy via email to Paul Boersma (BoersmaPM@BV.com) with Black & Veatch Corporation.

By:	_____	By:	_____
	Duane DeKrey, General Manager Garrison Diversion Conservancy District		Paul Boersma, Associate Vice President Black & Veatch Corporation
Dated:	_____	Dated:	_____

ATTACHMENT A

CONTRACT 4 ALIGNMENT AND TRENCHLESS CROSSING LOCATIONS



STATE OF NORTH DAKOTA
MINOT
GRAND FORKS
WASHBURN
CARRINGTON
COOPERSTOWN
BISMARCK
FARGO
TRANSMISSION PIPELINE EAST CONTRACT 4
PROJECT MAP
McLEAN COUNTY
WELLS COUNTY
SHERIDAN COUNTY
FOSTER COUNTY
GRIGGS COUNTY
SYKESTON
GLENFIELD
TRANSMISSION PIPELINE EAST CONTRACT 4 (SEE VICINITY MAP THIS SHEET)
RRVWSP PIPELINE (BY OTHERS)
BURLEIGH COUNTY
KIDDER COUNTY
STUTSMAN COUNTY
BARNES COUNTY
VICINITY MAP
33RD AVE NE
BEGIN CONTRACT 4
3RD ST NE
CHASELEY
HWY 200
BOWDON
HWY 52
43RD AVE NE
47TH AVE NE
HEATON
53RD AVE NE
54TH AVE NE
1st ST NE
BILODEAU TWP
WELLS COUNTY
TRANSMISSION PIPELINE (BY OTHERS)
END CONTRACT 4
TRENCHLESS CROSSING L=110
TRENCHLESS CROSSING L=170
TRENCHLESS CROSSING L=340
TRENCHLESS CROSSING L=70
TRENCHLESS CROSSING L=330
TRENCHLESS CROSSING L=210
TRENCHLESS CROSSING L=410
TRENCHLESS CROSSING L=120
TRENCHLESS CROSSING L=670
TRENCHLESS CROSSING L=240
TRENCHLESS CROSSING L=170
TRENCHLESS CROSSING L=130
TRENCHLESS CROSSING L=80
TRENCHLESS CROSSING L=280
TRENCHLESS CROSSING L=150
TRENCHLESS CROSSING L=210
TRENCHLESS CROSSING L=290
TRENCHLESS CROSSING L=120
TRENCHLESS CROSSING L=80
TRENCHLESS CROSSING L=150
HORIZONTAL SCALE 1"=5000'
BLACK & VEATCH
RED RIVER VALLEY WATER SUPPLY PROJECT
GENERAL PROJECT VICINITY MAP
TRANSMISSION PIPELINE EAST CHASELEY TO SYKESTON TASK ORDER 5340, CONTRACT 4
DATE: JULY 2022
PROJECT NO. 192840
00-G-001

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ATTACHMENT B

PRELIMINARY SHEET LIST

Type of Drawing	**138 Sheets Total**
Contract 4A (9 miles)	
Cover	1
General	9
Plan & Profile	20
Details	9
Specialty	4
Traffic Control	3
Subtotal	46
Contract 4B (9 miles)	
Cover	1
General	9
Plan & Profile	20
Details	9
Specialty	4
Traffic Control	3
Subtotal	46
Contract 4C (9 miles)	
Cover	1
General	9
Plan & Profile	20
Details	9
Specialty	4
Traffic Control	3
Subtotal	46

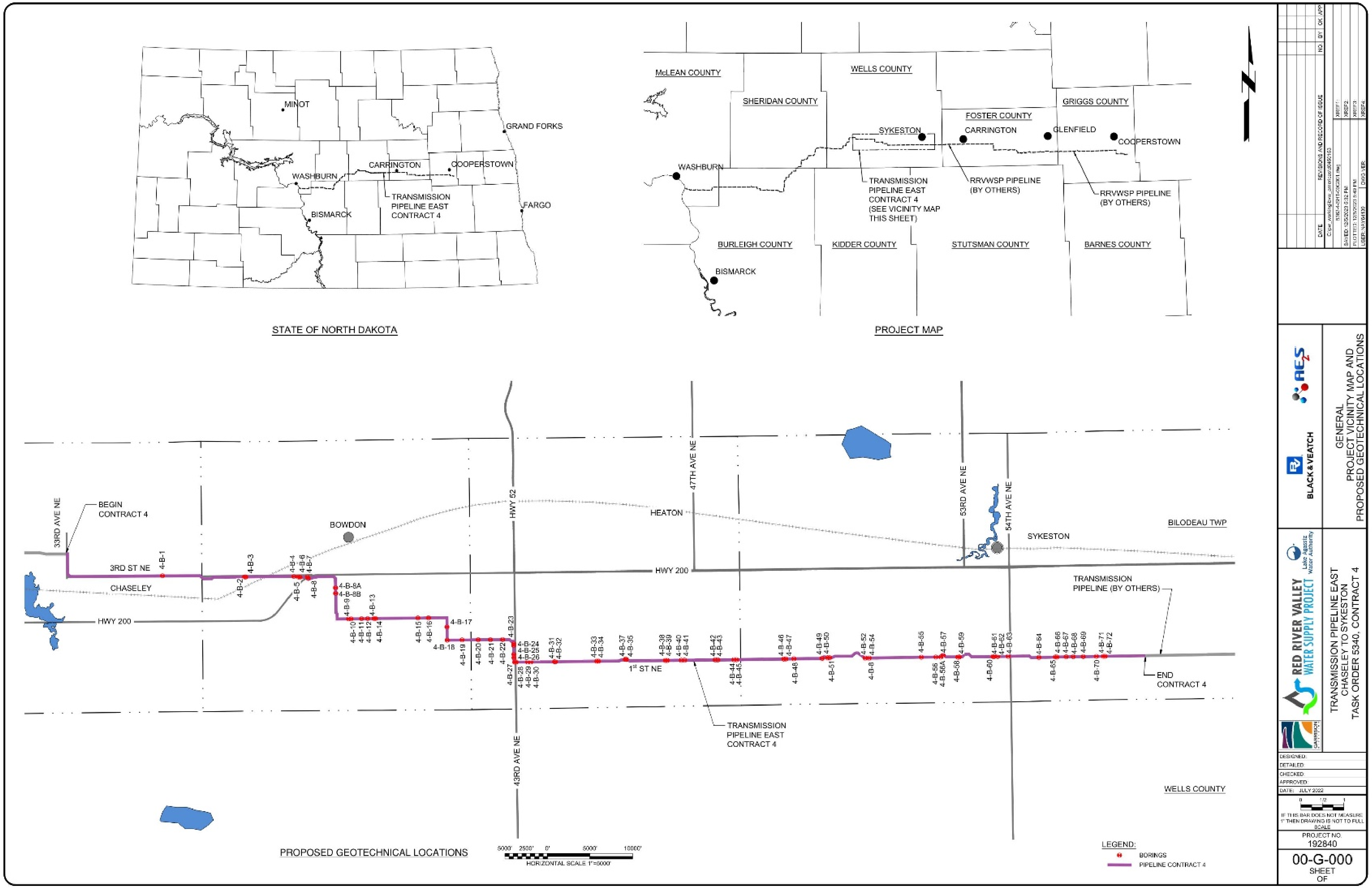
ATTACHMENT C

PRELIMINARY SPECIFICATION LIST

Specification Topic	67 Sections for Up to Three Contracts
Division 00 – Procurement and Contracting Requirements	23
Division 01 – General Requirements	15
Division 03 – Concrete	1
Division 05 – Metals	1
Division 09 – Finishes	2
Division 13 – Special Construction	1
Division 26 – Electrical	1
Division 31 – Earthwork	7
Division 32 – Exterior Improvements	2
Division 33 – Utilities	7
Division 40 – Process Interconnections	7

ATTACHMENT D

PROPOSED SOIL BORINGS DRAWING


STATE OF NORTH DAKOTA
MINOT
GRAND FORKS
WASHBURN
CARRINGTON
COOPERSTOWN
BISMARCK
FARGO
TRANSMISSION PIPELINE EAST CONTRACT 4
PROJECT MAP
McLEAN COUNTY
SHERIDAN COUNTY
WELLS COUNTY
FOSTER COUNTY
GRIGGS COUNTY
SYKESTON
GLENFIELD
BURLEIGH COUNTY
KIDDER COUNTY
STUTSMAN COUNTY
BARNES COUNTY
TRANSMISSION PIPELINE EAST CONTRACT 4 (SEE VICINITY MAP THIS SHEET)
RRVWSP PIPELINE (BY OTHERS)
PROPOSED GEOTECHNICAL LOCATIONS
BEGIN CONTRACT 4
33RD AVE NE
3RD ST NE
CHASELEY
HWY 200
BOWDON
HWY 52
HEATON
47TH AVE NE
53RD AVE NE
54TH AVE NE
BILODEAU TWP
1st ST NE
43RD AVE NE
TRANSMISSION PIPELINE (BY OTHERS)
END CONTRACT 4
WELLS COUNTY
HORIZONTAL SCALE 1"=5000'
LEGEND:
BORINGS
PIPELINE CONTRACT 4
BLACK & VEATCH
RED RIVER VALLEY WATER SUPPLY PROJECT
GENERAL PROJECT VICINITY MAP AND PROPOSED GEOTECHNICAL LOCATIONS
TRANSMISSION PIPELINE EAST CHASELEY TO SYKESTON TASK ORDER 5340, CONTRACT 4
PROJECT NO. 192840
00-G-000

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ATTACHMENT E

FEE ESTIMATE WORKSHEETS

Garrison Diversion Conservancy District
Task Order 5340 - Transmission Pipeline East Ct 4 Final Design Services & Bidding Assistance
BV Project No. 417351
Black & Veatch & Subcontractors

Task	Lead Firm	Task Description	Position	P	PMS	PM	TE	EM	EM	DE2	SE1	TE	DES	DE3	DES	DES	SE1	SE2	EE	EE	EE	EM1	HE1	BIM1	TBD	CADS	CAD1	CAD2	EST1	EST2	GISM	PJC2	PA1	PA1	ADM1	ADM2	QC2	Labor Detail
				Principal	Project Manager Senior	Project Manager	Technical Expert	Engineering Manager (Overall)	Engineering Manager (Team 1)	Design Engineer 2 (Pipeline Team 1)	Staff Engineer 1 (Pipeline Team 1)	Technical Expert	Design Engineer Senior (Pipeline 1)	Design Engineer 3	Design Engineer Senior (Geotech)	Design Engineer Senior (Geotech/Trenchless)	Staff Engineer 1 (Geotech/Trenchless)	Staff Engineer 2 (Trenchless)'	Electrical Engineer (Corrosion)	Electrical Engineer (Corrosion)	Electrical Engineer (Corrosion)	Elec/Mech Engineer 1	Hydraulics Engineer 1	BIM-3D Technician 1	BIM-3D Technician 2	CAD Technician Senior	CAD Technician 1	CAD Technician 2 (Pipeline Team 1)	Estimator 1	Estimator 2	GIS Technical Manager	Project Controls Analyst 2	Project Accountant Senior	Project Accountant 1	Administrator 1	Administrator 2	QA/QC Manager 2	BV Level of Effort (hrs)
IV. BASIC SERVICES																																						
1	**BV**	**Task Order Management and Administration**		**136**	**320**	**100**	**8**	**176**	**72**	**0**	**0**	**0**	**0**	**440**	**4**	**24**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**144**	**200**	**200**	**96**	**0**	**0**	**1,920**
A	BV	Project Mgmt (2 3-d trp; x2)		40	80	40	8	40	16					40																							264
B	BV	Administration		40	80	40		40	40					120		16															104	104	104				688
C	BV	Progress Reports		8	80			40						80																							208
D	BV	Schedule Updates		8	40			16						80																	40			96			280
E	BV	Management of Subconsultants		40	40	20		40	16					120	4	8																96	96				480
2	**BV**	**Special Project and Third-Party Meetings**		**24**	**48**	**0**	**0**	**48**	**120**	**40**	**80**	**0**	**0**	**0**	**40**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**80**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**584**
A	BV	Special Project Meetings																																			0
i	BV	TO Initiation Mtg		2	4			8	16						8	8																			8			54
ii	BV	Post Fld Invest Align Update Mtg (1 4-d trp; x2)		2	4			8	40	40	40																	80									214
B	AE2S	Third Party Meetings																																			0
i	AE2S	Stakeholder Meetings (1 2-d trp; x2)		16	16			8	24						16	16											40								16			152
ii	AE2S	Design Meetings for Utility Coordination		4	24			24	40		40				16	16																						164
3	**AE2S**	**Landowner Comm & Easement Modifications**		**6**	**12**	**0**	**0**	**88**	**8**	**0**	**64**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**178**
A	AE2S	Landowner Notification		2	4			32			32																											70
B	AE2S	Landowner Coordination		2	4			16			32																											54
C	AE2S	Modifications to Signed Easements		2	4			40	8																													54
4	**BV**	**Field Services**		**7**	**112**	**0**	**48**	**80**	**40**	**40**	**0**	**160**	**160**	**0**	**128**	**8**	**800**	**80**	**40**	**60**	**0**	**80**	**0**	**48**	**0**	**16**	**96**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,003**
A	MTS	Soil Borings			80		48					160	160		80		800	80				80		48		16	16											1,568
B	AE2S	Limited Topographic Surveying		2	8			8							8	8																					34
C	BV	Stray Current Fld Investigation (1 3-dy trp; x1)		2	8			16											40	60																	126
D	BV	Alignment Site Visits (1 5-d trp; x2)		2	8			16	40						40												40										146
E	Ulteig	Jurisdictional Wetland Review and Consultation		1	8			40		40																	40										129
5	**BV**	**Final Design Services**		**131**	**486**	**0**	**46**	**1,206**	**2,368**	**1,936**	**192**	**128**	**0**	**400**	**0**	**262**	**518**	**608**	**0**	**300**	**60**	**0**	**80**	**0**	**1,110**	**0**	**0**	**5,820**	**80**	**160**	**40**	**0**	**0**	**0**	**0**	**264**	**500**	**16,695**
A	BV	Design Team Conference Calls (12)		1	12		6	12	12							6	12	12																			73
B	BV	Design Guidance Manual Minor Update		1	2			8	8	24						12	12																		16		83
C	BV	Geotechnical Baseline Report		1	12		16				16	70				40	250	300									200								16		921
D	BV	Geotechnical Design Memorandum/GDR		1	8		16		4			58				8	40	80									40								8		263
E	PSC	Soils Classifications and Quantities			4			8	8	16																				40							76
F	AE2S	Utility Coodination		1	2			4	8	8																											23
G	AE2S	Subsurface Utility Engineering																																			0
i	AE2S	SUE Surveys			4				8	16																											28
ii	AE2S	Vacuum Excavations (5)			4				8	16																											28
H	AE2S	Utility Relocations Coordination			4				8	16																											28
I	AE2S	Permitting		2	16			16	40	40																											114
J	BV	Pipeline Corrosion Protection System Services			8				24											300	60							120									512
K	BV	System Hydraulic Model Update and Refinement		4	40			40		120	160												80														444
L	BV	Pipeline Basis of Design Memorandum Update		2	4			8	16	40						8	4	4																	24		110
M	BV	Front-End Documents Customization		2	40		8	4	4							8	4																				70
N	BV	60-Percent CDs (Level 2 Design) (1 2-dy trp; x2)		40	120			430	870	670				120		40	60	80							440			2,180							40		5,090
O	BV	90-Percent CDs (Level 3 Design) (1 2-dy trp; x2)		40	120			430	870	670				120		20	40	60							440			2,180							40		5,030
P	BV	100-Percent CDs (1 2-dy trp; x1)		20	50			170	330	210				120		80	40	40							170			820							80		2,130
Q	BV	Final Sealed and Signed CDs		12	20			60	110	90				40		40	16	16							60			280							40		784
R	BV	Opinions of Probable Construction Cost		4	16			16	40		16						40	16											80	160							388
S	BV	Quality Assurance/Quality Control																																		500	500

Garrison Diversion Conservancy District
Task Order 5340 - Transmission Pipeline East Ct 4 Final Design Services & Bidding Assistance
BV Project No. 417351
Black & Veatch & Subcontractors

Task	Lead Firm	Task Description	Position	P	PMS	PM	TE	EM	EM	DE2	SE1	TE	DES	DE3	DES	DES	SE1	SE2	EE	EE	EE	EM1	HE1	BIM1	TBD	CADS	CAD1	CAD2	EST1	EST2	GISM	PJC2	PA1	PA1	ADM1	ADM2	QC2	Labor Detail
				Principal	Project Manager Senior	Project Manager	Technical Expert	Engineering Manager (Overall)	Engineering Manager (Team 1)	Design Engineer 2 (Pipeline Team 1)	Staff Engineer 1 (Pipeline Team 1)	Technical Expert	Design Engineer Senior (Pipeline 1)	Design Engineer 3	Design Engineer Senior (Geotech)	Design Engineer Senior (Geotech/Trenchless)	Staff Engineer 1 (Geotech/Trenchless)	Staff Engineer 2 (Trenchless)'	Electrical Engineer (Corrosion)	Electrical Engineer (Corrosion)	Electrical Engineer (Corrosion)	Elec/Mech Engineer 1	Hydraulics Engineer 1	BIM-3D Technician 1	BIM-3D Technician 2	CAD Technician Senior	CAD Technician 1	CAD Technician 2 (Pipeline Team 1)	Estimator 1	Estimator 2	GIS Technical Manager	Project Controls Analyst 2	Project Accountant Senior	Project Accountant 1	Administrator 1	Administrator 2	QA/QC Manager 2	BV Level of Effort (hrs)
6	BV	**Bidding Assistance (Contract 4A)**		10	57	0	0	113	0	16	110	28	0	0	16	16	0	0	8	0	0	0	0	0	0	0	0	0	32	32	0	0	0	0	0	0	30	0	468
A	BV	Advertisment and Bid Letting																																					0
i	BV	Finalize Front-End Documents		2	4			8																												2		16
ii	BV	Invitation to Bid						2																														2
iii	BV	Production of Contract Documents						2			8					16																					16		42
iv	BV	Pre-bid Conference (virtual)		1	2			4		4	2																											13
v	BV	Interpretation of Bidding Documents		2	8			24			40	28							8								8											118
vii	BV	Update Cost Opinion and Furnish OPCC		1	2			4			4				16													16										43
viii	AE2S	Bid Opening			1			2																														3
B	BV	Pre-award Services																																				0
i	BV	Questionairres			1			4			2																											7
ii	BV	Qualifications of Apparent Successful Bidder		2	8			16		12	16																											54
iii	BV	Bid Tabulations			1			1			4																											6
iv	BV	Review of Contractor's Bonds, Insurance, etc.			1			2			2																											5
C	BV	Post-award Services																																				0
i	BV	Prepare Issued-for-Construction CDs		1	4			16			16																	24	16							8		85
ii	BV	Sched & Mod Preconst Conf (1 3-dy trp; x2)		1	24			24			16																									4		69
iii	AE2S	Obtain Drone-Based Video			1			4																														5
7	BV	**Bidding Assistance (Contract 4B)**		10	57	0	0	113	0	16	110	28	0	0	16	16	0	0	8	0	0	0	0	0	0	0	0	0	32	32	0	0	0	0	0	0	30	0	468
A	BV	Advertisment and Bid Letting																																				0
i	BV	Finalize Front-End Documents		2	4			8																												2		16
ii	BV	Invitation to Bid						2																														2
iii	BV	Production of Contract Documents						2			8					16																					16		42
iv	BV	Pre-bid Conference (virtual)		1	2			4		4	2																											13
v	BV	Interpretation of Bidding Documents		2	8			24			40	28							8								8											118
vii	BV	Update Cost Opinion and Furnish OPCC		1	2			4			4				16													16										43
viii	AE2S	Bid Opening			1			2																														3
B	BV	Pre-award Services																																				0
i	BV	Questionairres			1			4			2																											7
ii	BV	Qualifications of Apparent Successful Bidder		2	8			16		12	16																											54
iii	BV	Bid Tabulations			1			1			4																											6
iv	BV	Review of Contractor's Bonds, Insurance, etc.			1			2			2																											5
C	BV	Post-award Services																																				0
i	BV	Prepare Issued-for-Construction CDs		1	4			16			16																	24	16							8		85
ii	BV	Sched & Mod Preconst Conf (1 3-dy trp; x2)		1	24			24			16																									4		69
iii	AE2S	Obtain Drone-Based Video			1			4																														5
8	BV	**Bidding Assistance (Contract 4C)**		10	57	0	0	113	0	16	110	28	0	0	16	16	0	0	8	0	0	0	0	0	0	0	0	0	32	32	0	0	0	0	0	0	30	0	468
A	BV	Advertisment and Bid Letting																																				0
i	BV	Finalize Front-End Documents		2	4			8																												2		16
ii	BV	Invitation to Bid						2																														2
iii	BV	Production of Contract Documents						2			8					16																					16		42
iv	BV	Pre-bid Conference (virtual)		1	2			4		4	2																											13
v	BV	Interpretation of Bidding Documents		2	8			24			40	28							8								8											118
vii	BV	Update Cost Opinion and Furnish OPCC		1	2			4			4				16													16										43
viii	AE2S	Bid Opening			1			2																														3
B	BV	Pre-award Services																																				0
i	BV	Questionairres			1			4			2																											7

Garrison Diversion Conservancy District
Task Order 5340 - Transmission Pipeline East Ct 4 Final Design Services & Bidding Assistance
BV Project No. 417351
Black & Veatch & Subcontractors

		Position	P	PMS	PM	TE	EM	EM	DE2	SE1	TE	DES	DE3	DES	DES	SE1	SE2	EE	EE	EE	EM1	HE1	BIM1	TBD	CADS	CAD1	CAD2	EST1	EST2	GISM	PJC2	PA1	PA1	ADM1	ADM2	QC2	Labor Detail
Task	Lead Firm	Task Description	Principal	Project Manager Senior	Project Manager	Technical Expert	Engineering Manager (Overall)	Engineering Manager (Team 1)	Design Engineer 2 (Pipeline Team 1)	Staff Engineer 1 (Pipeline Team 1)	Technical Expert	Design Engineer Senior (Pipeline 1)	Design Engineer 3	Design Engineer Senior (Geotech)	Design Engineer Senior (Geotech/Trenchless)	Staff Engineer 1 (Geotech/Trenchless)	Staff Engineer 2 (Trenchless)'	Electrical Engineer (Corrosion)	Electrical Engineer (Corrosion)	Electrical Engineer (Corrosion)	Elec/Mech Engineer 1	Hydraulics Engineer 1	BIM-3D Technician 1	BIM-3D Technician 2	CAD Technician Senior	CAD Technician 1	CAD Technician 2 (Pipeline Team 1)	Estimator 1	Estimator 2	GIS Technical Manager	Project Controls Analyst 2	Project Accountant Senior	Project Accountant 1	Administrator 1	Administrator 2	QA/QC Manager 2	BV Level of Effort (hrs)
ii	BV	Qualifications of Apparent Successful Bidder	2	8			16		12	16																									8		54
iii	BV	Bid Tabulations		1			1			4																											6
iv	BV	Review of Contractor's Bonds, Insurance, etc.		1			2			2																											5
C	BV	Post-award Services																																			0
i	BV	Prepare Issued-for-Construction CDs	1	4			16			16																	24	16							8		85
ii	BV	Sched & Mod Preconst Conf (1 3-dy trp; x2)	1	24			24			16																									4		69
iii	AE2S	Obtain Drone-Based Video		1			4																														5
PROJECT TOTALS			334	1,149	100	102	1,937	2,608	2,064	666	372	160	840	220	382	1,318	688	64	360	60	80	80	48	1,110	16	136	5,996	176	160	40	144	200	200	120	354	500	22,784

Garrison Diversion Conservancy District
Task Order 5340 - Transmission Pipeline Eas
BV Project No. 417351
Black & Veatch & Subcontractors

Task	Lead Firm	Task Description	Labor Detail BV Labor Cost	Expense Detail HOBACCA	Expense Detail Misc	Sub Consult AE2S Hrs	Sub Consultant AE2S Fee	Expense Detail AE2S Sub Markup	Sub Consult Subs Hrs	Sub Consultant Subs Fee (MTS,KLJ, PSC, ETC.)	Expense Detail Sub Markup	Expense Detail Travel Expense		TOTAL BV Level of Effort (hrs)	TOTAL BV Labor Cost	TOTAL Direct Expense	TOTAL Fee
Position													Total Direct Expense				
IV. BASIC SERVICES																	
1	**BV**	**Task Order Management and Administration**	**$399,984**	**$17,088**	**$199**	**512**	**$127,260**	**$6,364**	**72**	**$12,600**	**$630**	**$7,600**	**$171,741**	**1,920**	**$399,984**	**$171,741**	**$571,725**
A	BV	Project Mgmt (2 3-d trp; x2)	$71,248	$2,350	$199	232	$51,811	$2,591	24	$4,200	$210	$7,600	$68,961	264	$71,248	$68,961	$140,209
B	BV	Administration	$134,592	$6,123		152	$40,303	$2,015	24	$4,200	$210		$52,851	688	$134,592	$52,851	$187,443
C	BV	Progress Reports	$50,752	$1,851		64	$17,573	$879	24	$4,200	$210		$24,713	208	$50,752	$24,713	$75,465
D	BV	Schedule Updates	$50,856	$2,492		64	$17,573	$879	-		$0		$20,944	280	$50,856	$20,944	$71,800
E	BV	Management of Subconsultants	$92,536	$4,272		-	$0	$0	-		$0		$4,272	480	$92,536	$4,272	$96,808
2	**BV**	**Special Project and Third-Party Meetings**	**$125,520**	**$5,199**	**$0**	**620**	**$149,275**	**$7,464**	**29**	**$5,000**	**$250**	**$4,400**	**$171,588**	**584**	**$125,520**	**$171,588**	**$297,108**
A	BV	Special Project Meetings	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	BV	TO Initiation Mtg	$13,258	$481		28	$7,397	$370	-		$0		$8,248	54	$13,258	$8,248	$21,506
ii	BV	Post Fld Invest Align Update Mtg (1 4-d trp; x2)	$38,426	$1,905		112	$27,835	$1,392	-		$0	$4,400	$35,532	214	$38,426	$35,532	$73,958
B	AE2S	Third Party Meetings	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	AE2S	Stakeholder Meetings (1 2-d trp; x2)	$34,552	$1,353		176	$39,734	$1,987	29	$5,000	$250		$48,324	152	$34,552	$48,324	$82,876
ii	AE2S	Design Meetings for Utility Coordination	$39,284	$1,460		304	$74,310	$3,715	-		$0		$79,485	164	$39,284	$79,485	$118,769
3	**AE2S**	**Landowner Comm & Easement Modifications**	**$39,718**	**$1,585**	**$0**	**694**	**$142,036**	**$7,101**	**-**	**$0**	**$0**	**$0**	**$150,722**	**178**	**$39,718**	**$150,722**	**$190,440**
A	AE2S	Landowner Notification	$14,818	$623		152	$27,787	$1,389	-		$0		$29,799	70	$14,818	$29,799	$44,617
B	AE2S	Landowner Coordination	$10,674	$481		182	$40,929	$2,046	-		$0		$43,456	54	$10,674	$43,456	$54,130
C	AE2S	Modifications to Signed Easements	$14,226	$481		360	$73,320	$3,666	-		$0		$77,467	54	$14,226	$77,467	$91,693
4	**BV**	**Field Services**	**$410,065**	**$17,826**	**$1,000**	**970**	**$229,982**	**$11,499**	**5,201**	**$910,000**	**$45,500**	**$37,100**	**$1,252,907**	**2,003**	**$410,065**	**$1,252,907**	**$1,662,972**
A	MTS	Soil Borings	$310,096	$13,955		260	$75,825	$3,791	4,629	$810,000	$40,500	$30,000	$974,071	1,568	$310,096	$974,071	$1,284,167
B	AE2S	Limited Topographic Surveying	$9,270	$303		300	$63,811	$3,191	-		$0		$67,305	34	$9,270	$67,305	$76,575
C	BV	Stray Current Fld Investigation (1 3-dy trp; x1)	$29,274	$1,121	$1,000	-	$0	$0	-		$0	$1,900	$4,021	126	$29,274	$4,021	$33,295
D	BV	Alignment Site Visits (1 5-d trp; x2)	$34,214	$1,299		105	$24,400	$1,220	143	$25,000	$1,250	$5,200	$58,369	146	$34,214	$58,369	$92,583
E	Ulteig	Jurisdictional Wetland Review and Consultation	$27,211	$1,148		305	$65,946	$3,297	429	$75,000	$3,750		$149,141	129	$27,211	$149,141	$176,352
5	**BV**	**Final Design Services**	**$3,099,571**	**$148,587**	**$4,000**	**2,748**	**$620,779**	**$31,036**	**429**	**$75,000**	**$3,750**	**$9,700**	**$892,852**	**16,695**	**$3,099,571**	**$892,852**	**$3,992,423**
A	BV	Design Team Conference Calls (12)	$16,715	$650		132	$31,261	$1,563	-		$0		$33,474	73	$16,715	$33,474	$50,189
B	BV	Design Guidance Manual Minor Update	$16,349	$739		20	$4,784	$239	-		$0		$5,762	83	$16,349	$5,762	$22,111
C	BV	Geotechnical Baseline Report	$143,873	$8,197		20	$4,784	$239	-		$0		$13,220	921	$143,873	$13,220	$157,093
D	BV	Geotechnical Design Memorandum/GDR	$49,393	$2,341		20	$4,784	$239	-		$0		$7,364	263	$49,393	$7,364	$56,757
E	PSC	Soils Classifications and Quantities	$17,844	$676		140	$29,194	$1,460	286	$50,000	$2,500		$83,830	76	$17,844	$83,830	$101,674
F	AE2S	Utility Coodination	$5,597	$205		384	$81,320	$4,066	-		$0		$85,591	23	$5,597	$85,591	$91,188
G	AE2S	Subsurface Utility Engineering	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	AE2S	SUE Surveys	$6,452	$249		278	$68,145	$3,407	-		$0		$71,801	28	$6,452	$71,801	$78,253
ii	AE2S	Vacuum Excavations (5)	$6,452	$249		110	$37,166	$1,858	143	$25,000	$1,250		$65,523	28	$6,452	$65,523	$71,975
H	AE2S	Utility Relocations Coordination	$6,452	$249		362	$79,267	$3,963	-		$0		$83,479	28	$6,452	$83,479	$89,931
I	AE2S	Permitting	$27,846	$1,015		318	$65,560	$3,278	-		$0		$69,853	114	$27,846	$69,853	$97,699
J	BV	Pipeline Corrosion Protection System Services	$102,868	$4,557		-	$0	$0	-		$0	$2,200	$6,757	512	$102,868	$6,757	$109,625
K	BV	System Hydraulic Model Update and Refinement	$92,276	$3,952		76	$17,829	$891	-		$0		$22,672	444	$92,276	$22,672	$114,948
L	BV	Pipeline Basis of Design Memorandum Update	$21,566	$979		76	$17,829	$891	-		$0		$19,699	110	$21,566	$19,699	$41,265
M	BV	Front-End Documents Customization	$19,670	$623		52	$12,537	$627	-		$0		$13,787	70	$19,670	$13,787	$33,457
N	BV	60-Percent CDs (Level 2 Design) (1 2-dy trp; x2)	$928,850	$45,301	$1,000	180	$38,787	$1,939	-		$0	$3,000	$90,027	5,090	$928,850	$90,027	$1,018,877
O	BV	90-Percent CDs (Level 3 Design) (1 2-dy trp; x2)	$918,130	$44,767	$1,000	240	$50,820	$2,541	-		$0	$3,000	$102,128	5,030	$918,130	$102,128	$1,020,258
P	BV	100-Percent CDs (1 2-dy trp; x1)	$388,150	$18,957	$1,000	148	$31,966	$1,598	-		$0	$1,500	$55,021	2,130	$388,150	$55,021	$443,171
Q	BV	Final Sealed and Signed CDs	$143,816	$6,978	$1,000	92	$20,063	$1,003	-		$0		$29,044	784	$143,816	$29,044	$172,860
R	BV	Opinions of Probable Construction Cost	$74,772	$3,453		52	$12,025	$601	-		$0		$16,079	388	$74,772	$16,079	$90,851
S	BV	Quality Assurance/Quality Control	$112,500	$4,450		48	$12,659	$633	-		$0		$17,742	500	$112,500	$17,742	$130,242

Garrison Diversion Conservancy District
Task Order 5340 - Transmission Pipeline Eas
BV Project No. 417351
Black & Veatch & Subcontractors

		Position	Labor Detail	Expense Detail	Expense Detail	Sub Consult	Sub Consultant	Expense Detail	Sub Consult	Sub Consultant	Expense Detail	Expense Detail		TOTAL	TOTAL	TOTAL	TOTAL
Task	Lead Firm	Task Description	BV Labor Cost	HOBACCA	Misc	AE2S Hrs	AE2S Fee	AE2S Sub Markup	Subs Hrs	Subs Fee (MTS,KLJ, PSC, ETC.)	Sub Markup	Travel Expense	Total Direct Expense	BV Level of Effort (hrs)	BV Labor Cost	Direct Expense	Fee
6	**BV**	**Bidding Assistance (Contract 4A)**	**$101,248**	**$4,167**	**$2,000**	**186**	**$42,757**	**$2,139**	**-**	**$0**	**$0**	**$3,800**	**$54,863**	**468**	**$101,248**	**$54,863**	**$156,111**
A	BV	Advertisment and Bid Letting	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	BV	Finalize Front-End Documents	$4,066	$142		-	$0	$0	-		$0		$142	16	$4,066	$142	$4,208
ii	BV	Invitation to Bid	$518	$18		-	$0	$0	-		$0		$18	2	$518	$18	$536
iii	BV	Production of Contract Documents	$7,510	$374	$1,000	-	$0	$0	-		$0		$1,374	42	$7,510	$1,374	$8,884
iv	BV	Pre-bid Conference (virtual)	$3,025	$116		8	$2,066	$103	-		$0		$2,285	13	$3,025	$2,285	$5,310
v	BV	Interpretation of Bidding Documents	$26,186	$1,050		48	$10,861	$543	-		$0		$12,454	118	$26,186	$12,454	$38,640
vii	BV	Update Cost Opinion and Furnish OPCC	$10,189	$383		-	$0	$0	-		$0		$383	43	$10,189	$383	$10,572
viii	AE2S	Bid Opening	$817	$27		14	$4,181	$209	-		$0		$4,417	3	$817	$4,417	$5,234
B	BV	Pre-award Services	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	BV	Questionairres	$1,631	$62		6	$1,294	$65	-		$0		$1,421	7	$1,631	$1,421	$3,052
ii	BV	Qualifications of Apparent Successful Bidder	$11,890	$481		10	$2,392	$120	-		$0		$2,993	54	$11,890	$2,993	$14,883
iii	BV	Bid Tabulations	$1,150	$53		6	$1,294	$65	-		$0		$1,412	6	$1,150	$1,412	$2,562
iv	BV	Review of Contractor's Bonds, Insurance, etc.	$1,113	$45		8	$1,875	$94	-		$0		$2,014	5	$1,113	$2,014	$3,127
C	BV	Post-award Services	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	BV	Prepare Issued-for-Construction CDs	$15,359	$757	$1,000	8	$1,810	$91	-		$0		$3,658	85	$15,359	$3,658	$19,017
ii	BV	Sched & Mod Preconst Conf (1 3-dy trp; x2)	$16,459	$614		50	$11,565	$578	-		$0	$3,800	$16,557	69	$16,459	$16,557	$33,016
iii	AE2S	Obtain Drone-Based Video	$1,335	$45		28	$5,418	$271	-		$0		$5,734	5	$1,335	$5,734	$7,069
7	**BV**	**Bidding Assistance (Contract 4B)**	**$101,248**	**$4,167**	**$2,000**	**186**	**$42,757**	**$2,139**	**-**	**$0**	**$0**	**$3,800**	**$54,863**	**468**	**$101,248**	**$54,863**	**$156,111**
A	BV	Advertisment and Bid Letting	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	BV	Finalize Front-End Documents	$4,066	$142		-	$0	$0	-		$0		$142	16	$4,066	$142	$4,208
ii	BV	Invitation to Bid	$518	$18		-	$0	$0	-		$0		$18	2	$518	$18	$536
iii	BV	Production of Contract Documents	$7,510	$374	$1,000	-	$0	$0	-		$0		$1,374	42	$7,510	$1,374	$8,884
iv	BV	Pre-bid Conference (virtual)	$3,025	$116		8	$2,066	$103	-		$0		$2,285	13	$3,025	$2,285	$5,310
v	BV	Interpretation of Bidding Documents	$26,186	$1,050		48	$10,861	$543	-		$0		$12,454	118	$26,186	$12,454	$38,640
vii	BV	Update Cost Opinion and Furnish OPCC	$10,189	$383		-	$0	$0	-		$0		$383	43	$10,189	$383	$10,572
viii	AE2S	Bid Opening	$817	$27		14	$4,181	$209	-		$0		$4,417	3	$817	$4,417	$5,234
B	BV	Pre-award Services	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	BV	Questionairres	$1,631	$62		6	$1,294	$65	-		$0		$1,421	7	$1,631	$1,421	$3,052
ii	BV	Qualifications of Apparent Successful Bidder	$11,890	$481		10	$2,392	$120	-		$0		$2,993	54	$11,890	$2,993	$14,883
iii	BV	Bid Tabulations	$1,150	$53		6	$1,294	$65	-		$0		$1,412	6	$1,150	$1,412	$2,562
iv	BV	Review of Contractor's Bonds, Insurance, etc.	$1,113	$45		8	$1,875	$94	-		$0		$2,014	5	$1,113	$2,014	$3,127
C	BV	Post-award Services	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	BV	Prepare Issued-for-Construction CDs	$15,359	$757	$1,000	8	$1,810	$91	-		$0	$3,800	$7,458	85	$15,359	$7,458	$22,817
ii	BV	Sched & Mod Preconst Conf (1 3-dy trp; x2)	$16,459	$614		50	$11,565	$578	-		$0		$12,757	69	$16,459	$12,757	$29,216
iii	AE2S	Obtain Drone-Based Video	$1,335	$45		28	$5,418	$271	-		$0		$5,734	5	$1,335	$5,734	$7,069
8	**BV**	**Bidding Assistance (Contract 4C)**	**$101,248**	**$4,167**	**$2,000**	**186**	**$42,757**	**$2,139**	**-**	**$0**	**$0**	**$3,800**	**$54,863**	**468**	**$101,248**	**$54,863**	**$156,111**
A	BV	Advertisment and Bid Letting	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	BV	Finalize Front-End Documents	$4,066	$142		-	$0	$0	-		$0		$142	16	$4,066	$142	$4,208
ii	BV	Invitation to Bid	$518	$18		-	$0	$0	-		$0		$18	2	$518	$18	$536
iii	BV	Production of Contract Documents	$7,510	$374	$1,000	-	$0	$0	-		$0		$1,374	42	$7,510	$1,374	$8,884
iv	BV	Pre-bid Conference (virtual)	$3,025	$116		8	$2,066	$103	-		$0		$2,285	13	$3,025	$2,285	$5,310
v	BV	Interpretation of Bidding Documents	$26,186	$1,050		48	$10,861	$543	-		$0		$12,454	118	$26,186	$12,454	$38,640
vii	BV	Update Cost Opinion and Furnish OPCC	$10,189	$383		-	$0	$0	-		$0		$383	43	$10,189	$383	$10,572
viii	AE2S	Bid Opening	$817	$27		14	$4,181	$209	-		$0		$4,417	3	$817	$4,417	$5,234
B	BV	Pre-award Services	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	BV	Questionairres	$1,631	$62		6	$1,294	$65	-		$0		$1,421	7	$1,631	$1,421	$3,052

Garrison Diversion Conservancy District
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Black & Veatch & Subcontractors

		Position	Labor Detail	Expense Detail	Expense Detail	Sub Consult	Sub Consultant	Expense Detail	Sub Consult	Sub Consultant	Expense Detail	Expense Detail		TOTAL	TOTAL	TOTAL	TOTAL
Task	Lead Firm	Task Description	BV Labor Cost	HOBACCA	Misc	AE2S Hrs	AE2S Fee	AE2S Sub Markup	Subs Hrs	Subs Fee (MTS,KLJ, PSC, ETC.)	Sub Markup	Travel Expense	Total Direct Expense	BV Level of Effort (hrs)	BV Labor Cost	Direct Expense	Fee
ii	BV	Qualifications of Apparent Successful Bidder	$11,890	$481		10	$2,392	$120	-		$0		$2,993	54	$11,890	$2,993	$14,883
iii	BV	Bid Tabulations	$1,150	$53		6	$1,294	$65	-		$0		$1,412	6	$1,150	$1,412	$2,562
iv	BV	Review of Contractor's Bonds, Insurance, etc.	$1,113	$45		8	$1,875	$94	-		$0		$2,014	5	$1,113	$2,014	$3,127
C	BV	Post-award Services	$0	$0		-	$0	$0	-		$0		$0	0	$0	$0	$0
i	BV	Prepare Issued-for-Construction CDs	$15,359	$757	$1,000	8	$1,810	$91	-		$0	$3,800	$7,458	85	$15,359	$7,458	$22,817
ii	BV	Sched & Mod Preconst Conf (1 3-dy trp; x2)	$16,459	$614		50	$11,565	$578	-		$0		$12,757	69	$16,459	$12,757	$29,216
iii	AE2S	Obtain Drone-Based Video	$1,335	$45		28	$5,418	$271	-		$0		$5,734	5	$1,335	$5,734	$7,069
PROJECT TOTALS			**$4,378,602**	**$202,786**	**$11,199**	**6,102**	**$1,397,602**	**$69,881**	**5,731**	**$1,002,600**	**$50,130**	**$70,200**	**$2,804,398**	**22,784**	**$4,378,602**	**$2,804,398**	**$7,183,000**

Garrison Diversion Conservancy District

Task Order 5340 - Transmission Pipeline East Ct 4 Final Design Services & Bidding Assistance

BV Project No. 417351

AE2S

		Position	PMVI	PMIV	ENGIII	SRDsn3	PMIII	LSIV	LSI	GISV	COMIII	ADM III	Labor Detail	Labor Detail	Expense Detail	Expense Detail	Expense Detail		TOTAL	TOTAL	TOTAL	TOTAL
Task	Lead Firm	Task Description	Principal	Project Manager	Staff Engineer	CAD Tech	Surveyor Manager	Land Surveyor	Land Surveyor	GIS	Communications	Admin	AE2S Level of Effort (hrs)	Labor Cost	Travel	Misc	Survey Equip	Total Expense	AE2S Level of Effort (hrs)	AE2S Labor Cost	Direct Expense	Fee
IV. BASIC SERVICES																						
1		**Task Order Management and Administration**	**128**	**304**	**0**	**0**	**0**	**0**	**0**	**0**	**80**	**0**	**512**	**$127,260**	**$0**	**$0**	**$0**	**$0**	**512**	**$127,260**	**$0**	**$127,260**
A	BV	Project Mgmt (2 3-d trp; x2)	32	120							80		232	$51,811				$0	232	$51,811	$0	$51,811
B	BV	Administration	32	120									152	$40,303				$0	152	$40,303	$0	$40,303
C	BV	Progress Reports	32	32									64	$17,573				$0	64	$17,573	$0	$17,573
D	BV	Schedule Updates	32	32									64	$17,573				$0	64	$17,573	$0	$17,573
E	BV	Management of Subconsultants											0	$0				$0	0	$0	$0	$0
2	**BV**	**Special Project and Third-Party Meetings**	**64**	**144**	**144**	**0**	**12**	**0**	**0**	**180**	**40**	**36**	**620**	**$132,275**	**$17,000**	**$0**	**$0**	**$17,000**	**620**	**$132,275**	**$17,000**	**$149,275**
A	BV	Special Project Meetings											0	$0				$0	0	$0	$0	$0
i	BV	TO Initiation Mtg	4	8	8					8			28	$6,397	$1,000			$1,000	28	$6,397	$1,000	$7,397
ii	BV	Post Fld Invest Align Update Mtg (1 4-d trp; x2)	4	40	40		4			12		12	112	$23,835	$4,000			$4,000	112	$23,835	$4,000	$27,835
B	AE2S	Third Party Meetings											0	$0				$0	0	$0	$0	$0
i	AE2S	Stakeholder Meetings (1 2-d trp; x2)	16	16	16		8			80	40		176	$35,734	$4,000			$4,000	176	$35,734	$4,000	$39,734
ii	AE2S	Design Meetings for Utility Coordination	40	80	80	0				80		24	304	$66,310	$8,000			$8,000	304	$66,310	$8,000	$74,310
3		**Landowner Comm & Easement Modifications**	**0**	**116**	**96**	**0**	**112**	**80**	**0**	**160**	**10**	**120**	**694**	**$135,536**	**$6,500**	**$0**	**$0**	**$6,500**	**694**	**$135,536**	**$6,500**	**$142,036**
A	AE2S	Landowner Notification		16	40		16			40		40	152	$27,787				$0	152	$27,787	$0	$27,787
B	AE2S	Landowner Coordination		60	16		16			40	10	40	182	$35,929	$5,000			$5,000	182	$35,929	$5,000	$40,929
C	AE2S	Modifications to Signed Easements		40	40		80	80		80		40	360	$71,820	$1,500		$0	$1,500	360	$71,820	$1,500	$73,320
4		**Field Services**	**2**	**132**	**64**	**24**	**100**	**240**	**200**	**176**	**0**	**32**	**970**	**$185,982**	**$18,000**	**$0**	**$26,000**	**$44,000**	**970**	**$185,982**	**$44,000**	**$229,982**
A	MTS	Soil Borings		8	24	0	36	120	40	32			260	$48,825	$9,000		$18,000	$27,000	260	$48,825	$27,000	$75,825
B	AE2S	Limited Topographic Surveying		4		24	24	120	120	8			300	$51,811	$6,000		$6,000	$12,000	300	$51,811	$12,000	$63,811
C	BV	Stray Current Fld Investigation (1 3-dy trp; x1)											0	$0				$0	0	$0	$0	$0
D	BV	Alignment Site Visits (1 5-d trp; x2)	1	40	40					16		8	105	$22,400	$2,000			$2,000	105	$22,400	$2,000	$24,400
E	Ulteig	Jurisdictional Wetland Review and Consultation	1	80			40		40	120		24	305	$62,946	$1,000		$2,000	$3,000	305	$62,946	$3,000	$65,946
5		**Final Design Services**	**80**	**628**	**1,080**	**300**	**68**	**144**	**0**	**372**	**24**	**52**	**2,748**	**$584,779**	**$14,000**	**$0**	**$22,000**	**$36,000**	**2,748**	**$584,779**	**$36,000**	**$620,779**
A	BV	Design Team Conference Calls (12)	12	48	24		24			24			132	$31,261				$0	132	$31,261	$0	$31,261
B	BV	Design Guidance Manual Minor Update	4	8	8								20	$4,784				$0	20	$4,784	$0	$4,784
C	BV	Geotechnical Baseline Report	4	8	8								20	$4,784				$0	20	$4,784	$0	$4,784
D	BV	Geotechnical Design Memorandum/GDR	4	8	8								20	$4,784				$0	20	$4,784	$0	$4,784
E	PSC	Soils Classifications and Quantities	4	16	40					80			140	$29,194				$0	140	$29,194	$0	$29,194
F	AE2S	Utility Coodination	4	120	160					80		20	384	$81,320				$0	384	$81,320	$0	$81,320
G	AE2S	Subsurface Utility Engineering											0	$0				$0	0	$0	$0	$0
i	AE2S	SUE Surveys	2	12	120	16	24	80		4		20	278	$53,145	$6,000		$9,000	$15,000	278	$53,145	$15,000	$68,145
ii	AE2S	Vacuum Excavations (5)	2	12	40	0	20	24		4		8	110	$22,166	$6,000		$9,000	$15,000	110	$22,166	$15,000	$37,166
H	AE2S	Utility Relocations Coordination	2	16	160	120		40		24			362	$73,267	$2,000		$4,000	$6,000	362	$73,267	$6,000	$79,267
I	AE2S	Permitting	2	60	120	48				60	24	4	318	$65,560				$0	318	$65,560	$0	$65,560
J	BV	Pipeline Corrosion Protection System Services											0	$0				$0	0	$0	$0	$0

Garrison Diversion Conservancy District

Task Order 5340 - Transmission Pipeline East Ct 4 Final Design Services & Bidding Assistance

BV Project No. 417351

AE2S

		Position	PMVI	PMIV	ENGIII	SRDsn3	PMIII	LSIV	LSI	GISV	COMIII	ADM III	Labor Detail	Labor Detail	Expense Detail	Expense Detail	Expense Detail		TOTAL	TOTAL	TOTAL	TOTAL
Task	Lead Firm	Task Description	Principal	Project Manager	Staff Engineer	CAD Tech	Surveyor Manager	Land Surveyor	Land Surveyor	GIS	Communications	Admin	AE2S Level of Effort (hrs)	Labor Cost	Travel	Misc	Survey Equip	Total Expense	AE2S Level of Effort (hrs)	AE2S Labor Cost	Direct Expense	Fee
K	BV	System Hydraulic Model Update and Refinement	4	40	16					16			76	$17,829				$0	76	$17,829	$0	$17,829
L	BV	Pipeline Basis of Design Memorandum Update	4	40	16					16			76	$17,829				$0	76	$17,829	$0	$17,829
M	BV	Front-End Documents Customization	4	32	16								52	$12,537				$0	52	$12,537	$0	$12,537
N	BV	60-Percent CDs (Level 2 Design) (1 2-dy trp; x2)	4	40	80	40				16			180	$38,787				$0	180	$38,787	$0	$38,787
O	BV	90-Percent CDs (Level 3 Design) (1 2-dy trp; x2)	4	40	120	60				16			240	$50,820				$0	240	$50,820	$0	$50,820
P	BV	100-Percent CDs (1 2-dy trp; x1)	4	40	80	8				16			148	$31,966				$0	148	$31,966	$0	$31,966
Q	BV	Final Sealed and Signed CDs	4	24	40	8				16			92	$20,063				$0	92	$20,063	$0	$20,063
R	BV	Opinions of Probable Construction Cost	4	24	24								52	$12,025				$0	52	$12,025	$0	$12,025
S	BV	Quality Assurance/Quality Control	8	40									48	$12,659				$0	48	$12,659	$0	$12,659
6		**Bidding Assistance (Contract 4A)**	**8**	**70**	**56**	**0**	**12**	**24**	**0**	**0**	**16**	**0**	**186**	**$40,757**	**$1,500**	**$500**	**$0**	**$2,000**	**186**	**$40,757**	**$2,000**	**$42,757**
A	BV	Advertisment and Bid Letting											0	$0				$0	0	$0	$0	$0
i	BV	Finalize Front-End Documents											0	$0				$0	0	$0	$0	$0
ii	BV	Invitation to Bid											0	$0				$0	0	$0	$0	$0
iii	BV	Production of Contract Documents											0	$0				$0	0	$0	$0	$0
iv	BV	Pre-bid Conference (virtual)		8									8	$2,066				$0	8	$2,066	$0	$2,066
v	BV	Interpretation of Bidding Documents		24	24								48	$10,861				$0	48	$10,861	$0	$10,861
vii	BV	Update Cost Opinion and Furnish OPCC											0	$0				$0	0	$0	$0	$0
viii	AE2S	Bid Opening	2	12									14	$3,681	$500			$500	14	$3,681	$500	$4,181
B	BV	Pre-award Services											0	$0				$0	0	$0	$0	$0
i	BV	Questionairres		2	4								6	$1,294				$0	6	$1,294	$0	$1,294
ii	BV	Qualifications of Apparent Successful Bidder	2	4	4								10	$2,392				$0	10	$2,392	$0	$2,392
iii	BV	Bid Tabulations		2	4								6	$1,294				$0	6	$1,294	$0	$1,294
iv	BV	Review of Contractor's Bonds, Insurance, etc.	2	2	4								8	$1,875				$0	8	$1,875	$0	$1,875
C	BV	Post-award Services											0	$0				$0	0	$0	$0	$0
i	BV	Prepare Issued-for-Construction CDs		4	4								8	$1,810				$0	8	$1,810	$0	$1,810
ii	BV	Sched & Mod Preconst Conf (1 3-dy trp; x2)	2	12	12		12	12					50	$11,065	$500			$500	50	$11,065	$500	$11,565
iii	AE2S	Obtain Drone-Based Video						12			16		28	$4,418	$500	$500		$1,000	28	$4,418	$1,000	$5,418
7		**Bidding Assistance (Contract 4B)**	**8**	**70**	**56**	**0**	**12**	**24**	**0**	**0**	**16**	**0**	**186**	**$40,757**	**$1,500**	**$500**	**$0**	**$2,000**	**186**	**$40,757**	**$2,000**	**$42,757**
A	BV	Advertisment and Bid Letting											0	$0				$0	0	$0	$0	$0
i	BV	Finalize Front-End Documents											0	$0				$0	0	$0	$0	$0
ii	BV	Invitation to Bid											0	$0				$0	0	$0	$0	$0
iii	BV	Production of Contract Documents											0	$0				$0	0	$0	$0	$0
iv	BV	Pre-bid Conference (virtual)		8									8	$2,066				$0	8	$2,066	$0	$2,066
v	BV	Interpretation of Bidding Documents		24	24								48	$10,861				$0	48	$10,861	$0	$10,861
vii	BV	Update Cost Opinion and Furnish OPCC											0	$0				$0	0	$0	$0	$0
viii	AE2S	Bid Opening	2	12									14	$3,681	$500			$500	14	$3,681	$500	$4,181
B	BV	Pre-award Services											0	$0				$0	0	$0	$0	$0

Garrison Diversion Conservancy District

Task Order 5340 - Transmission Pipeline East Ct 4 Final Design Services & Bidding Assistance

BV Project No. 417351

AE2S

		Position	PMVI	PMIV	ENGIII	SRDsn3	PMIII	LSIV	LSI	GISV	COMIII	ADM III	Labor Detail	Labor Detail	Expense Detail	Expense Detail	Expense Detail		TOTAL	TOTAL	TOTAL	TOTAL
Task	Lead Firm	Task Description	Principal	Project Manager	Staff Engineer	CAD Tech	Surveyor Manager	Land Surveyor	Land Surveyor	GIS	Communications	Admin	AE2S Level of Effort (hrs)	Labor Cost	Travel	Misc	Survey Equip	Total Expense	AE2S Level of Effort (hrs)	AE2S Labor Cost	Direct Expense	Fee
i	BV	Questionairres		2	4								6	$1,294				$0	6	$1,294	$0	$1,294
ii	BV	Qualifications of Apparent Successful Bidder	2	4	4								10	$2,392				$0	10	$2,392	$0	$2,392
iii	BV	Bid Tabulations		2	4								6	$1,294				$0	6	$1,294	$0	$1,294
iv	BV	Review of Contractor's Bonds, Insurance, etc.	2	2	4								8	$1,875				$0	8	$1,875	$0	$1,875
C	BV	Post-award Services											0	$0				$0	0	$0	$0	$0
i	BV	Prepare Issued-for-Construction CDs		4	4								8	$1,810				$0	8	$1,810	$0	$1,810
ii	BV	Sched & Mod Preconst Conf (1 3-dy trp; x2)	2	12	12		12	12					50	$11,065	$500			$500	50	$11,065	$500	$11,565
iii	AE2S	Obtain Drone-Based Video						12			16		28	$4,418	$500	$500		$1,000	28	$4,418	$1,000	$5,418
8		**Bidding Assistance (Contract 4C)**	**8**	**70**	**56**	**0**	**12**	**24**			**16**	**0**	**186**	**$40,757**	**$1,500**	**$500**	**$0**	**$2,000**	**186**	**$40,757**	**$2,000**	**$42,757**
A	BV	Advertisment and Bid Letting											0	$0				$0	0	$0	$0	$0
i	BV	Finalize Front-End Documents											0	$0				$0	0	$0	$0	$0
ii	BV	Invitation to Bid											0	$0				$0	0	$0	$0	$0
iii	BV	Production of Contract Documents											0	$0				$0	0	$0	$0	$0
iv	BV	Pre-bid Conference (virtual)		8									8	$2,066				$0	8	$2,066	$0	$2,066
v	BV	Interpretation of Bidding Documents		24	24								48	$10,861				$0	48	$10,861	$0	$10,861
vii	BV	Update Cost Opinion and Furnish OPCC											0	$0				$0	0	$0	$0	$0
viii	AE2S	Bid Opening	2	12									14	$3,681	$500			$500	14	$3,681	$500	$4,181
B	BV	Pre-award Services											0	$0				$0	0	$0	$0	$0
i	BV	Questionairres		2	4								6	$1,294				$0	6	$1,294	$0	$1,294
ii	BV	Qualifications of Apparent Successful Bidder	2	4	4								10	$2,392				$0	10	$2,392	$0	$2,392
iii	BV	Bid Tabulations		2	4								6	$1,294				$0	6	$1,294	$0	$1,294
iv	BV	Review of Contractor's Bonds, Insurance, etc.	2	2	4								8	$1,875				$0	8	$1,875	$0	$1,875
C	BV	Post-award Services											0	$0				$0	0	$0	$0	$0
i	BV	Prepare Issued-for-Construction CDs		4	4								8	$1,810				$0	8	$1,810	$0	$1,810
ii	BV	Sched & Mod Preconst Conf (1 3-dy trp; x2)	2	12	12		12	12					50	$11,065	$500			$500	50	$11,065	$500	$11,565
iii	AE2S	Obtain Drone-Based Video						12			16		28	$4,418	$500	$500		$1,000	28	$4,418	$1,000	$5,418
PROJECT TOTALS			**298**	**1,534**	**1,552**	**324**	**328**	**536**	**200**	**888**	**202**	**240**	**6,102**	**$1,288,102**	**$60,000**	**$1,500**	**$48,000**	**$109,500**	**6,102**	**$1,288,102**	**$109,500**	**$1,397,602**

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ATTACHMENT F

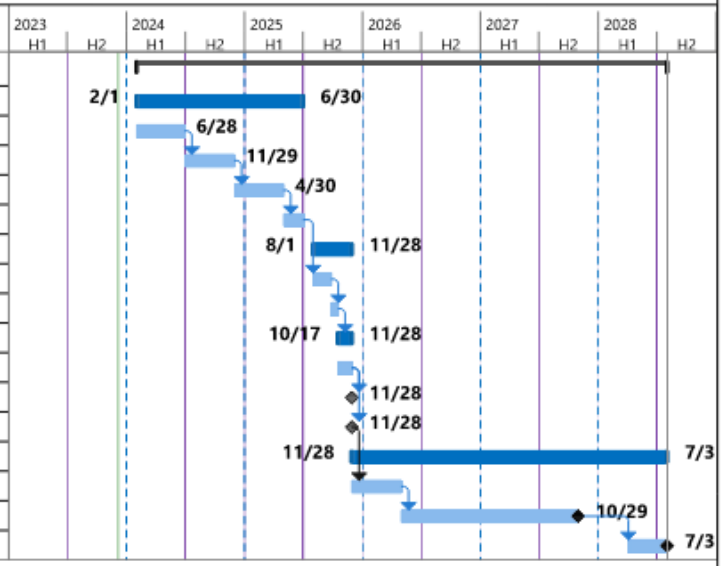
FINAL DESIGN AND BIDDING ASSISTANCE SCHEDULE

RRVWSP TO 5340 TPE Ct 4 Dn & BA Prelim Schedule

Final Design and Bidding Assistance Schedule
Transmisson Pipeline East Contract 4
River Valley Water Supply Project

Wed 12/6/23

ID	Task Name	Duration	Start	Finish
1	**TRANSMISSION PIPELINE EAST, CONTRACT 4**	**1173 days**	**Thu 2/1/24**	**Mon 7/31/28**
2	**Final Design**	**368 days**	**Thu 2/1/24**	**Mon 6/30/25**
3	Prepare & Deliver 60% Docs	107 days	Thu 2/1/24	Fri 6/28/24
4	Prepare & Deliver 90% Docs	110 days	Mon 7/1/24	Fri 11/29/24
5	Prepare & Deliver 100% Docs	108 days	Mon 12/2/24	Wed 4/30/25
6	Prepare & Deliver Final Docs	43 days	Thu 5/1/25	Mon 6/30/25
7	**Bidding Assistance & Award**	**86 days**	**Fri 8/1/25**	**Fri 11/28/25**
8	Advertisement & Bid Letting	40 days	Fri 8/1/25	Thu 9/25/25
9	Pre-Award Services	15 days	Fri 9/26/25	Thu 10/16/25
10	**Post-Award Services**	**31 days**	**Fri 10/17/25**	**Fri 11/28/25**
11	Contracting	31 days	Fri 10/17/25	Fri 11/28/25
12	Pre-Construction Conference	0 days	Fri 11/28/25	Fri 11/28/25
13	Construction Notice to Proceed	0 days	Fri 11/28/25	Fri 11/28/25
14	**Construction**	**697 days**	**Fri 11/28/25**	**Mon 7/31/28**
15	Initial Pipe Submittals, Fab, & Delivery	110 days	Fri 11/28/25	Thu 4/30/26
16	Pipe Installation	391 days	Fri 5/1/26	Fri 10/29/27
17	Testing, Final Restoration, & Cleanup	86 days	Mon 4/3/28	Mon 7/31/28



Lake Agassiz Water Authority

Budget
2024

Income		
Dues Income	$	30,000.00
Miscellaneous	$	-
Cost Share-Interim Finance	$	50,000.00
Total Income	$	80,000.00

Expenses		
Dues Expenses	$	6,500.00
Accounting	$	6,500.00
Directors Expense	$	500.00
Insurance	$	550.00
Construction	$	-
Engineering	$	50,000.00
Property Acquisiton/Easements	$	-
Adm/Legal/Financial	$	141,500.00
Total Expenses	$	205,550.00

Anticipated Bank Activity		
Beginning Bank Balance 1-1-24	**$**	**380,851.56**
Income Budget	$	80,000.00
Expense Budget	$	205,550.00
Anticipated Bank Balance 12-31-23	**$**	**255,301.56**

RED RIVER VALLEY WATER SUPPLY PROJECT

2023 to 2025 Biennium Work Plan

($244.0 mil Total Funding: $180 mil State; $61 mil Local Users; $3.0 mil MR&I)

December 19, 2023

No.	Scope of Work	Feature	Date Task Orders Auth	Note	2023-25 Bien ENDAWS Project Development Budget (mil $)			2023-25 Biennium RRVWSP Project Development Budget (mil $)			2023-25 Biennium RRVWSP Project Constr Budget (mil $)[1,2,3]		
					Total	Federal 75%	Local 25%	Total	State 75%	Local 25%	Total	State 75%	Local 25%
1.	**Garrison Diversion Conservancy District Budget** Scope: Account for all costs for which Garrison Diversion is responsible not included in other Task Orders listed here. Need: Budget allocation for GDCD direct costs associated with the Red River Valley Water Supply Project.	Garrison Diversion's costs for the RRVWSP, including internal mgmt, admin, legal, communication, insurance advisory, misc., etc.		GDCD				$ 2.50	$ 1.87	$ 0.63			
2.	**Property, Easements, and Crop Damage Payments[4]** Scope: Costs to obtain easements and acquire property for associated facilities. Crop damage payments to landowners. Need: Secure land for installing future pipeline segments staying years ahead of pipeline design/construction needs. Purchase property on which to build all remaining facilities so property will be in hand before final design begins.	Acquire easements in Sheridan and Wells County for 32-mi pipeline. Pay bonus payment to all easement holders. Acquire property for Biota WTP, Hydraulic Break Tanks, McClusky Canal Intake, and James River sites. Pay for crop damage.		RRVWSP ENDAWS ENDAWS Facilities Crp Dmg	$ 0.49 $ 2.00	$ 0.37 $ 1.50	$ 0.12 $ 0.50	$ 2.21 $ 0.78	$ 1.66 $ 0.58	$ 0.55 $ 0.20			
3.	**Transmission Pipeline East Contract 5C** **Scope: Pipeline installation, including construction phase engineering services by Engineer.** **Need: Continue progress of transmission pipeline installation for completion of RRVWSP by the target end date.**	**8± mi of 72" pl, including two 96" tunnels. Pipeline extends eastward from Contract 5B NE of Bordulac to a termination point just east of the James River.**	**Jul-23** **Nov-23**	**Prof Srvs** **Const, 2026 Fin**							**$ 5.64** **$ 76.67**	**$ 4.23** **$ 57.50**	**$ 1.41** **$ 19.17**
4.	**Transmission Pipeline East Contract 5D** **Scope: Pipeline installation, including construction phase engineering services by Engineer.** **Need: Continue progress of transmission pipeline installation for completion of RRVWSP by the target end date.**	**10± miles of 72" pl, including several 96" tunnels. Pipeline section extends westward from Contract 5A south of Carrington to a termination point south of Sykeston.**	**Jul-23** **Oct-23**	**Prof Srvs** **Const, 2026 Fin**							**$ 5.47** **$ 61.68**	**$ 4.10** **$ 46.26**	**$ 1.37** **$ 15.42**
5.	RRV Transmission Pipeline Contract 6A Scope: Pipeline installation, including construction phase engineering services by Engineer. Need: Continue progress of transmission pipeline installation for completion of RRVWSP by the target end date.	*6± mi of 72" pl, including several 96" tunnels. Pipeline section extends eastward from Contract 5C just east of the James River to a termination point southwest of Glenfield.*	**Jul-23** Oct-24	**Prof Srvs** Const, 2027 Fin							**$ 5.47** $ 45.00	**$ 4.10** $ 33.75	**$ 1.37** $ 11.25
6.	**ENDAWS Transmission Pipeline Contract 3** **Scope: Final design (30% docs to biddable plans and specs) and bidding assistance.** **Need: Continue progress of transmission pipeline installation for completion of RRVWSP/ENDAWS by the target end date.**	**11± mi of 72" pipeline, including 96" tunnels. Pipeline section extends west from the west end of Contract 4 to the Sheridan Wells County line.**	**Aug-23**	**ENDAWS**	**$ 3.06**	**$ 2.30**	**$ 0.76**						

RED RIVER VALLEY WATER SUPPLY PROJECT

2023 to 2025 Biennium Work Plan

($244.0 mil Total Funding: $180 mil State; $61 mil Local Users; $3.0 mil MR&I)

December 19, 2023

No.	Scope of Work	Feature	Date Task Orders Auth	Note	2023-25 Bien ENDAWS Project Development Budget (mil $)			2023-25 Biennium RRVWSP Project Development Budget (mil $)			2023-25 Biennium RRVWSP Project Constr Budget (mil $)[1,2,3]		
					Total	Federal 75%	Local 25%	Total	State 75%	Local 25%	Total	State 75%	Local 25%
7.	Transmission Pipeline East Contracts 4A and 4B Scope: Final design (30% docs to biddable plans and specs) and bidding assistance. Need: Have the next pipeline section bid-ready when State funding becomes available (likely the 2025-27 biennium).	27± mi of 72" pl, including several 96" tunnels. Pipeline extends from the west end of Contract 5D south of Sykeston west to a termination point NE of Hurdsfield at HBTs.	Feb-24	Prof Srvs				$ 7.19	$ 5.39	$ 1.80			
8.	RRV Transmission Pipeline Contract 7 Scope: Final design (30% docs to biddable plans and specs) and bidding assistance. Need: Have the next pipeline section bid-ready when State funding becomes available (likely the 2025-27 biennium).	14± mi of 72" pipeline, including several 96" tunnels. Pipeline extends from the east end of Contract 6B to the outfall on the Sheyenne River southeast of Cooperstown.	Aug-23	Prof Srvs				$ 2.93	$ 2.20	$ 0.73			
9.	McClusky Canal Intake and Pumping Station Scope: Conceptual and preliminary design of an intake and pumping station at the McClusky Canal. Need: Preliminary designs are necessary so site acquisition can begin and final design can commence when land is secured.	Siting; passive intake screens, pumping station similar to MRI, and utility extension design can begin for new facility to be located near McClusky, ND.	Feb-24	Prof Srvs	$ 0.76	$ 0.57	$ 0.19						
10.	Biota Water Treatment Plant and Main Pumping Station Scope: Conceptual and preliminary designs for a Biota WTP and Main Pumping Station, including hydraulic surge facility. Need: Complete design to a point where land acquisition can begin and project can move into final design next biennium.	165-cfs biota WTP, with chlorine and UV disinfection to meet NDPDES permit and FEIS requirements per Reclamation. Chloramines for residual disinfectant in pipeline.	Feb-24	Prof Srvs	$ 2.88	$ 2.16	$ 0.72						
11.	Hydraulic Break Tanks Scope: Preliminary design of above-ground tanks and associated facilities at or near the continental divide. Need: Complete design to a point where land acquisition can begin and project can move into final design next biennium.	Two 5 MG above-ground storage tanks and accessories, site piping and valves, monitoring, and utility extensions necessary for a new greenfield site.	Feb-24	Prof Srvs	$ 0.38	$ 0.28	$ 0.10						
12.	PMIS Annual Licenses & Continued Maint/Upgrades Scope: Annual software license renewal for expanded team and consulting support for training and configuration services. Need: Create greater efficiency and documentation for voluminous amount of construction related documents.	Vendor fees (e-Builder & DocuSign) for licenses of expanded team and consulting support for training of contractors/ subcontractors and workflow/report additions and modifications.	Feb-24	Vend & Prof Srvs				$ 0.49	$ 0.37	$ 0.12			
13.	Prg Mgmt to Support Larger Spend and Expanded Team Scope: Overall program management, planning, budgeting, scheduling, and other support for Garrison Diversion. Need: Consulting services of a broad programmatic nature not included under project-specific design or construction TOs.	Overall planning, management, administration, scheduling, budgeting, coordination, meeting preparation/attendance, regulatory interface, reporting, etc.	Aug-23	Prof Srvs				$ 0.66	$ 0.50	$ 0.16			

RED RIVER VALLEY WATER SUPPLY PROJECT

2023 to 2025 Biennium Work Plan

($244.0 mil Total Funding: $180 mil State; $61 mil Local Users; $3.0 mil MR&I)

December 19, 2023

No.	Scope of Work	Feature	Date Task Orders Auth	Note	2023-25 Bien ENDAWS Project Development Budget (mil $)			2023-25 Biennium RRVWSP Project Development Budget (mil $)			2023-25 Biennium RRVWSP Project Constr Budget (mil $)[1,2,3]		
					Total	Federal 75%	Local 25%	Total	State 75%	Local 25%	Total	State 75%	Local 25%
14.	**Outreach, Plng, and Design to Secure User Commitments** **Scope: User briefings and necessary support, including conceptual designs, to secure project commitments.** **Need: Define pipeline extensions to identify for users how and a what cost water will be delivered to their communities.**	**Size pipelines, pumping stations, channels, storage, etc. and other necessary infrastructure to deliver raw water to end users. Update capex to reflect current market.**	**Aug-23**	**Prof Srvs**				**$ 1.70**	**$ 1.28**	**$ 0.42**			
15.	**Operational Planning and Asset Management Phase 3** **Scope: System modeling, evaluation, planning, and report development documenting results/findings/outcomes.** **Need: Finalize Garrison Diversion, State Water Commission, and USACE roles for system operation.**	**Refine details of diversions to/from Lake Ashtabula. Finalize stakeholder roles and responsibilities as it relates to system operation.**	**Feb-24**	**Prof Srvs**				**$ 0.47**	**$ 0.35**	**$ 0.12**			
16.	**Financial Planning Support** **Scope: Continue to refine the financial model and provide scenarios as required to support users and the program.** **Need: Accurate water bill estimates and affordability for customers are necessary to gain approval from users.**	**Update financial models; address state loan and financing program changes; end user funding, financing, and cost-share analyses; continued funding and finance outreach.**	**Aug-23**	**Prof Srvs**				**$ 0.59**	**$ 0.44**	**$ 0.15**			
17.	*Contingency* *Scope: A budget reserve for task order additions to professional services, construction, legal, real estate, etc. TOs.* *Need: Address and pay for changes that are sure to occur.*	*Budget flexibility to adapt to work plan changes and to pay for construction change orders typically running from 3 to 5% of original construction costs at bid time.*	*N/A*	*GDCD*	*$ 1.08*	*$ 0.81*	*$ 0.27*	*$ 2.18*	*$ 1.64*	*$ 0.54*	*$ 11.72*	*$ 8.79*	*$ 2.93*
TOTAL PROGRAM BUDGET					**$ 10.65**	**$ 7.99**	**$ 2.66**	**$ 21.70**	**$ 16.28**	**$ 5.42**	**$ 211.65**	**$ 158.73**	**$ 52.92**

Notes:

1. Construction costs include management, engineering services during construction, inspection, field quality control, and construction.
2. Projects indicated for construction funding in a given biennium will be shovel ready for construction at the start of the biennium.
3. Future capital costs are escalated to an anticipated midpoint of construction per Finance Team rates of 7, 6, 5, 5, and 3.5 percent per annum thereafter starting in 2022 with an anticipated 2032 finish. All future RRVWSP construction projects and costs are not shown.
4. Land services costs are the amount likely to be paid for real estate, easements, including bonus payments, crop damage, and field obstructions. Estimates include pipeline easements required for the ENDAWS east/west pipeline (none are secured at this point) and remaining easements from the Hydraulic Break Tanks to the Sheyenne River Outfall (25% remain mostly in Wells County).
5. Items appearing in blue bold are progressing with task orders and contracts issued to the engineering team and contractors, respectively. Items appearing in blue italics have been updated to reflect adjustments made for actual amounts contracted. Items shown in black text are pending.

RRVWSP Work Plan Update
December 5, 2023

CONSTRUCTION

Wet Well Construction Contract 1

The project is closed, original contract price $4,989,405.88 with change order 1 and 2 making the final contract price $4,721,446.47.

Pipeline Construction

Contract 5A

The project is closed, original contract price $8,366,201.00, with change order 1 and 2 making the final contract price of $8,393,395.44.

Reclaimed Property

Typical Air Release Manhole

Contract 5B

The original pipe delivery of June 15, 2021, was delayed due to a surface blemish in the steel coil. Year one 2022, 7,761 feet were installed out of the nine miles. High groundwater slowed the pipe installation progress.

For the second year 2023, 21,120 feet were installed for a total contract 5B pipe install to date 28,881 feet (5.5 miles).

To date, $18,939,066.56 has been paid on the original contract amount of $45,961,700.00. Change Order No. 1, 2 and 3 has been approved, leaving the current contract price at $44,932,678.24.

Discharge Structure Construction

Final payment has been made. Original contract amount was $1,516,955 plus Change Order No. 1 for $4,929 for a final contract price of $1,521,884.

Missouri River Intake Tunnel and Screen Final Design Contract 2

The project is closed, original contract price $18,896,900 with change 5 change orders making the final contract price $19,444,165.60.

Site Under Construction

Completed Missouri River Intake

DESIGN

The design team is also working with Reclamation and USFWS routing the ENDAWS pipeline through wetland and other various existing easements.

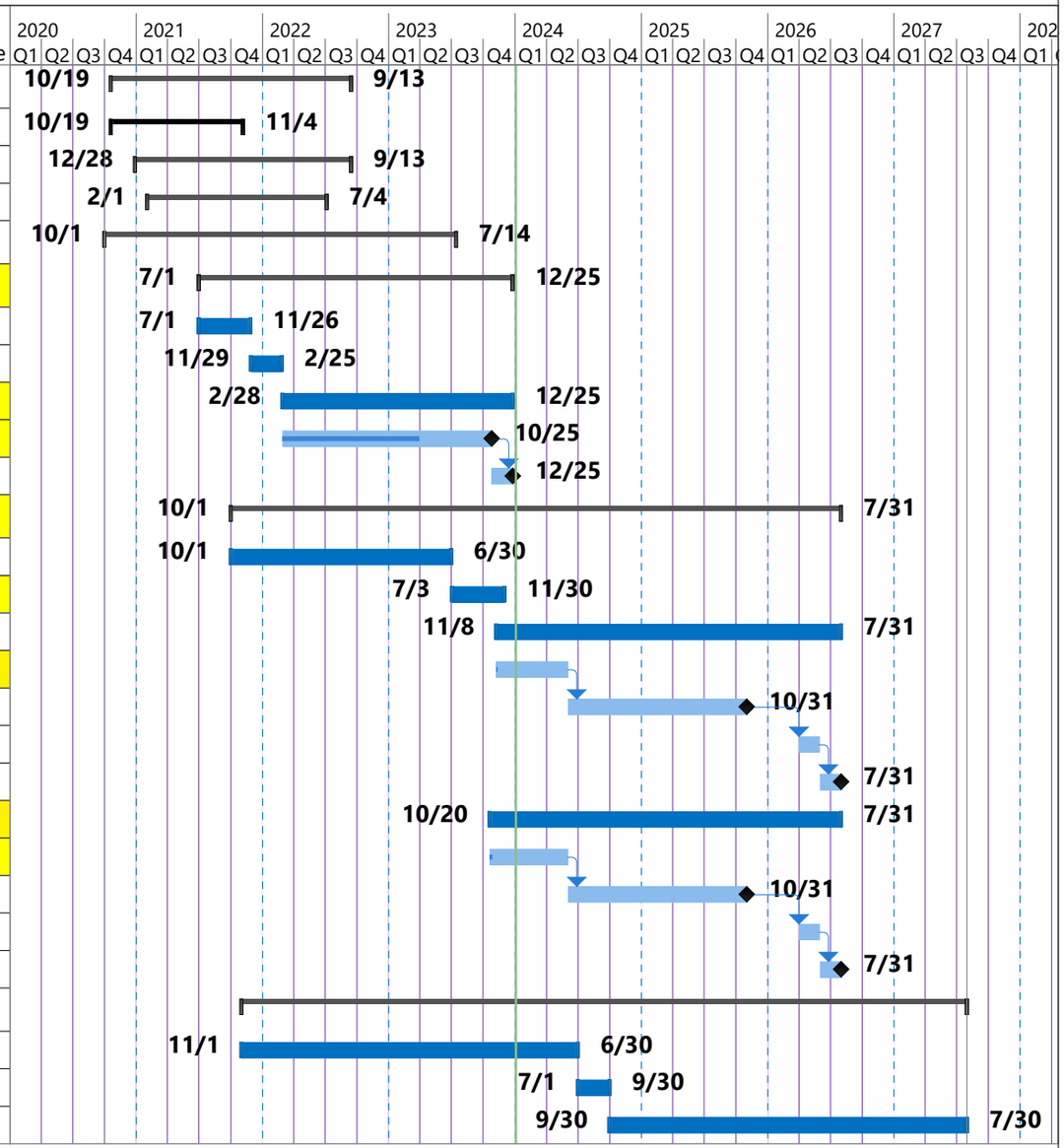
Contract 5D bid opening was held September 7 awarded to Carstensen Contracting, Contract 5C bid opening September 21 awarded to Oscar Renda. Contract 6A will be scheduled for bid in 2024.

2020-2027 Schedule
Red River Valley Water Supply Project

24-1 GDCD RRVWSP 2020-27 Schedule

Thu 1/4/24

ID	Task Name	Duration	Start	Finish	% Complete
1	**EARLY-OUT PROJECTS**	**497 days**	**Mon 10/19/20**	**Tue 9/13/22**	**100%**
2	**MRI, WET WELL & SITE DEV, CT 1**	**274 days**	**Mon 10/19/20**	**Thu 11/4/21**	**100%**
12	**TRANSMISSION PIPELINE EAST, CT 5A**	**447 days**	**Mon 12/28/20**	**Tue 9/13/22**	**100%**
22	**SHEYENNE RIVER OUTFALL, DISCH STR, CT 1**	**371 days**	**Mon 2/1/21**	**Mon 7/4/22**	**100%**
32	**MRI, SCREEN STRUCTURE & TUNNEL, CT 2**	**727 days**	**Thu 10/1/20**	**Fri 7/14/23**	**100%**
48	**TRANSMISSION PIPELINE EAST, CT 5B**	**648 days**	**Thu 7/1/21**	**Mon 12/25/23**	**70%**
49	**Final Design Wrap-up**	**107 days**	**Thu 7/1/21**	**Fri 11/26/21**	**100%**
52	**Bidding Assistance & Award**	**65 days**	**Mon 11/29/21**	**Fri 2/25/22**	**100%**
59	**Construction 5B - Garney (9 miles)**	**476 days**	**Mon 2/28/22**	**Mon 12/25/23**	**59%**
60	Substantial Completion	433 days	Mon 2/28/22	Wed 10/25/23	65%
61	Final Completion	43 days	Thu 10/26/23	Mon 12/25/23	0%
62	**TRANSMISSION PIPELINE EAST, CTS 5C&D**	**1261 days**	**Fri 10/1/21**	**Fri 7/31/26**	**28%**
63	**Final Design Wrap-up**	**456 days**	**Fri 10/1/21**	**Fri 6/30/23**	**100%**
67	**Bidding Assistance & Award**	**109 days**	**Mon 7/3/23**	**Thu 11/30/23**	**100%**
74	**Construction 5C - Oscar Renda (8 miles)**	**713 days**	**Wed 11/8/23**	**Fri 7/31/26**	**0%**
75	Initial Pipe Submittals, Fab, & Delivery	148 days	Wed 11/8/23	Fri 5/31/24	1%
76	Pipe Installation	370 days	Mon 6/3/24	Fri 10/31/25	0%
77	Testing and Substantial Completion	43 days	Wed 4/1/26	Fri 5/29/26	0%
78	Final Completion	45 days	Mon 6/1/26	Fri 7/31/26	0%
79	**Construction 5D - Carstensen (10 miles)**	**726 days**	**Fri 10/20/23**	**Fri 7/31/26**	**1%**
80	Pipe Submittals, Fab, & Delivery	161 days	Fri 10/20/23	Fri 5/31/24	2%
81	Pipe Installattion	370 days	Mon 6/3/24	Fri 10/31/25	0%
82	Testing and Substantial Completion	43 days	Wed 4/1/26	Fri 5/29/26	0%
83	Restoration and Final Completion	45 days	Mon 6/1/26	Fri 7/31/26	0%
84	**RRV TRANSMISSION PIPELINE, CTS 6A&B**	**1500 days**	**Mon 11/1/21**	**Fri 7/30/27**	**35%**
85	**Final Design**	**695 days**	**Mon 11/1/21**	**Sun 6/30/24**	**94%**
90	**Bidding Assistance & Award for 6A**	**66 days**	**Mon 7/1/24**	**Mon 9/30/24**	**0%**
97	**Construction of 6A**	**740 days**	**Mon 9/30/24**	**Fri 7/30/27**	**0%**



RRVWSP 2024 Work Plan

1. Complete construction for Transmission Pipeline Contract 5B, start construction on Contracts 5C and D, and Construction Phased Services with each contract.

2. Complete final design on Transmission Pipeline Contracts 4,7 and ENDAWS 3.

3. Complete preliminary design for McClusky Canal intake, biota water treatment plant and main pump station.

4. Bid and secure contract for Transmission Pipeline Contract 6A.

5. Continue securing ROW and acquisition of properties from the McClusky Canal to discharge.

6. Begin Phase 3 of RRVWSP Operational Planning.

7. Complete Pipeline Extension Conceptual Design.

8. Execute Project Participation Agreement with LAWA.

9. Implement approved Program Management Implementation System software (E-Builder) to support financial and budget tracking, mitigate project risks and monitor schedule performance.

10. Present financial models to stakeholders and policymakers.

11. Work with water systems to sign a Memorandum of Commitment.

12. Continue communications with stakeholders, legislators, and key decision makers.

13. Pursue federal funding for ENDAWS.

14. Continue supporting USACE on Water Control Manual Update.

15. Explore James River water for MR&I water delivery.

16. Further research user nominations, pipe size and hydraulics.

Lake Agassiz Water Authority

2023

For the period of January 1, 2023- December 31, 2023

Income	2023	Actual as 11/30/2023	Balance of Budget
Dues Income	$ 30,000.00	$ 30,650.00	$ (650.00)
Miscellaneous	$ -	$ -	$ -
Cost Share-Interim Finance	$ 580,000.00	$ 598,188.10	$ (18,188.10)
Total Income	$ 610,000.00	$ 628,838.10	$ (18,838.10)
Expenses			
Dues Expenses	$ 6,500.00	$ 6,310.00	$ 190.00
Accounting	$ 1,000.00	$ -	$ 1,000.00
Directors Expense	$ 500.00	$ -	$ 500.00
Insurance	$ 550.00	$ 461.00	$ 89.00
Construction	$ 60,000.00	$ 200,476.13	$ (140,476.13)
Engineering	$ 320,000.00	$ 35,403.80	$ 284,596.20
Property Acquisition/Easements	$ 150,000.00	$ 365,422.73	$ (215,422.73)
Adm/Legal/Financial	$ 141,500.00	$ 138,304.12	$ 3,195.88
Total Expenses	$ 680,050.00	$ 746,377.78	$ (66,327.78)
Net Income (Loss)	$ (70,050.00)	$ (117,539.68)	$ 47,489.68

Account Activity

Beg. Bank Balance 1-1-2023		$ 498,391.24
Income Received		$ 628,838.10
Total Funds Available		**$ 1,127,229.34**
Ck#1225 Ohnstad Twichell	$ 2,550.00	
Ck#1226 Garrison Diversion	$ 211,963.04	
Ck#1227 ND Water Coalition	$ 1,000.00	
Ck#1228 ND Water Users Assoc	$ 5,000.00	
Ck#1229 Garrison Diversion	$ 15,375.00	
Ck#1230 Garrison Diversion	$ 32,105.31	
Ck#1231 ND Rural Water System	$ 310.00	
Ck#1232 Garrison Diversion	$ 28,238.74	
Ck#1233 Insure Forward	$ 461.00	
Ck#1234 Garrison Diversion	$ 20,500.00	
Ck#1235 Garrison Diversion	$ 37,346.49	
Ck#1236 Ohnstad Twitchell	$ 42,693.76	
Ck#1237 Garrison Diversion	$ 161,357.22	
Ck#1238 Ohnstad Twitchell	$ 7,070.50	
Ck#1239 Garrison Diversion	$ 15,375.00	
Ck#1240 Garrison Diversion	$ 75,661.17	
Ck#1241 Ohnstad Twichell	$ 2,787.62	
Ck#1242 Garrison Diversion	$ 86,582.93	
Total Expenses	**$ 746,377.78**	
Ending Bank Balance		**$ 380,851.56**

OHNSTAD TWICHELL, P.C.
Attorneys at Law

P.O Box 458
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701-282-3249

18-0014 **JTS** **Invoice # 187040**

Date: February 13, 2023

To: Lake Agassiz Water Authority
Email to: BGrubb@FargoND.gov

LAWA PPA & Legal Support

PROFESSIONAL SERVICES RENDERED			
	Hours	**Rate**	**Totals**
JTS	1.2	$375.00	$450.00
KJS	26.5	$375.00	$9,937.50
Total Fees:	**27.7**		**$10,387.50**
Total Expenses:			**$0.00**
Grand Total			**$10,387.50** BG

		Rates
JTS	John T. Shockley, Partner, Supervising Attorney	$375.00
KJS	Katie J. Schmidt, Partner	$375.00
AJR	Andrea J. Roman, Paralegal	$205.00

Paid check #1236 10.4.23 split

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P.O Box 458
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18-0014 **JTS** **Invoice # 191084**

Date: September 12, 2023

To: Lake Agassiz Water Authority
Email to: BGrubb@FargoND.gov

LAWA PPA & Legal Support

PROFESSIONAL SERVICES RENDERED			
	Hours	**Rate**	**Totals**
JTS	52.4	$400.00	$20,960.00
KJS	25.1	$400.00	$10,040.00
AJR	1.4	$215.00	$301.00
Total Fees:	**78.9**		**$31,301.00**
Westlaw			$14.76
Total Expenses:			**$14.76**
Plus Net Balance Forward:			**$10,387.50**
Grand Total			**$41,703.26**

		Rates
JTS	John T. Shockley, Partner, Supervising Attorney	$400.00
KJS	Katie J. Schmidt, Partner	$400.00
AJR	Andrea J. Roman, Paralegal	$215.00

check #1236 split 10.4.23

OHNSTAD TWICHELL, P.C.
Attorneys at Law

P.O Box 458
West Fargo, ND 58078-0458
701-282-3249

18-0014 **JTS** **Invoice # 191331**

Date: September 26, 2023

To: Lake Agassiz Water Authority
Email to: BGrubb@FargoND.gov

LAWA PPA & Legal Support

PROFESSIONAL SERVICES RENDERED			
	Hours	**Rate**	**Totals**
JTS	2.1	$400.00	$840.00
AJR	0.7	$215.00	$150.50
Total Fees:	**2.8**		**$990.50**
Grand Total			**$990.50** BG

		Rates
JTS	John T. Shockley, Partner, Supervising Attorney	$400.00
KJS	Katie J. Schmidt, Partner	$400.00
AJR	Andrea J. Roman, Paralegal	$215.00

check 1236 split 10.4.23

GARRISON DIVERSION CONSERVANCY DISTRICT

Cost Share Invoice for LAWA
RED RIVER VALLEY PROJECT

Invoice RRVWSP 29

Vendor	Invoice #	Invoice Amount	Expenditures Paid from State of ND Funds 90%	Expenditures Reimbursement from LAWA-Fargo 7.7215%	Expenditures Reimbursement from LAWA-Grand Forks 2.2785%	Total Expenditures
Construction-MRIPS Wet Well						
Construction-Pipeline East Contract 5A						
MRI Intake Pumping Station Wet Well & Bidding						
MRI Pumping Station Wet Well & Site Development CPS-2620						
Black & Veatch	1404043	$2,579.48	$ 2,321.53	$ 199.17	$58.78	$ 2,579.48
MRI Screen Structure & Tunnel Design & Bidding-2330						$ -

			Expenditures Paid from State of ND Funds 75%	Expenditures Reimbursement from LAWA-Fargo 19.304%	Expenditures Reimbursement from LAWA-Grand Forks 5.696%	Total Expenditures
Construction-Pipeline East Contract 5A						
Transmission Pipeline East Contract 5A Bidding Services						
Transmission Pipeline Construction Phase-5630						$ -
						$ -
Sheyenne River Outfall Discharge Structure-Bidding						
Sheyenne River Outfall Discharge Structure-Construction						
Sheyenne River Outfall Discharge Structure-CPS 6610						$ -
Project Planning/Admin						
Property Acquistions & Easements						
Vogel	306988	$10,593.50	$ 7,945.13	$ 2,044.95	$603.42	$ 10,593.50
Vogel	306989	$6,116.34	$ 4,587.26	$ 1,180.69	$348.39	$ 6,116.34
Vogel	308735	$5,220.02	$ 3,915.02	$ 1,007.66	$297.34	$ 5,220.02
Vogel	308734	$7,996.00	$ 5,997.00	$ 1,543.53	$455.47	$ 7,996.00
August Easements	Various	$11,320.50	$ 8,490.38	$ 2,185.29	$644.83	$ 11,320.50
					$0.00	$ -
					$0.00	$ -
					$0.00	$ -
					$0.00	$ -
					$0.00	$ -
					$ -	$ -
GRAND TOTALS		$43,825.84	$ 33,256.32	$ 8,161.29	$ 2,408.23	$ 43,825.84
Total Due from LAWA				$ 8,161.29	$ 2,408.23	$ 10,569.52

SUMMARY:	State of North Dakota Funding	LAWA Fargo	LAWA Grand Forks	Totals
Total Cost	$ 33,256.32	$ 8,161.29	$ 2,408.23	$43,825.84
Cost Share Percentage				
Total Cost Share	$33,256.32	$8,161.29	$2,408.23	$43,825.84
Reimbursement to LAWA		$8,161.29	$2,408.23	$10,569.52

LAWA paid Check # 1237 to GDCD - split CS 29 & 30

GARRISON DIVERSION CONSERVANCY DISTRICT

Cost Share Invoice for LAWA
RED RIVER VALLEY PROJECT

Invoice RRVWSP 30

Vendor	Invoice #	Invoice Amount	Expenditures Paid from State of ND Funds 90%	Expenditures Reimbursement from LAWA-Fargo 7.7215%	Expenditures Reimbursement from LAWA-Grand Forks 2.2785%	Total Expenditures
Construction-MRIPS Wet Well						
Construction-Pipeline East Contract 5A						
MRI Intake Pumping Station Wet Well & Bidding						
MRI Pumping Station Wet Well & Site Development CPS-2620						
Black & Veatch	1406763	$38,745.35	$ 34,870.82	$ 2,991.72	$882.81	$ 38,745.35
MRI Screen Structure & Tunnel Design & Bidding-2330						$ -

			Expenditures Paid from State of ND Funds 75%	Expenditures Reimbursement from LAWA-Fargo 19.304%	Expenditures Reimbursement from LAWA-Grand Forks 5.696%	Total Expenditures
Construction-Pipeline East Contract 5A						
Transmission Pipeline East Contract 5A Bidding Services						
Transmission Pipeline Construction Phase-5630						$ -
						$ -
Sheyenne River Outfall Discharge Structure-Bidding						
Sheyenne River Outfall Discharge Structure-Construction						
Sheyenne River Outfall Discharge Structure-CPS 6610						$ -
Project Planning/Admin						
Property Acquistions & Easements						
Vogel	309870	$4,323.00	$ 3,242.25	$ 834.50	$246.25	$ 4,323.00
Vogel	309868	$6,744.00	$ 5,058.00	$ 1,301.85	$384.15	$ 6,744.00
Foster Co Independent	22501	$596.16	$ 447.12	$ 115.08	$33.96	$ 596.16
Harvey Herald	Aug Stmnt	$308.88	$ 231.66	$ 59.63	$17.59	$ 308.88
September Easements	Various	$558,680.65	$ 419,010.49	$ 107,846.60	$31,823.56	$ 558,680.65
Appraisal Services Inc	22A390	$6,000.00	$ 4,500.00	$ 1,158.23	$341.77	$ 6,000.00
Appraisal Services Inc	22A361A	$6,000.00	$ 4,500.00	$ 1,158.23	$341.77	$ 6,000.00
Appraisal Services Inc	22A388	$5,000.00	$ 3,750.00	$ 965.19	$284.81	$ 5,000.00
					$0.00	$ -
					$0.00	$ -
					$ -	$ -
GRAND TOTALS		$626,398.04	$ 475,610.34	$ 116,431.03	$ 34,356.67	$ 626,398.04
Total Due from LAWA				$ 116,431.03	$ 34,356.67	$ 150,787.70

SUMMARY:	State of North Dakota Funding	LAWA Fargo	LAWA Grand Forks	Totals
Total Cost	$ 475,610.34	$ 116,431.03	$ 34,356.67	$626,398.04
Cost Share Percentage				
Total Cost Share	$475,610.34	$116,431.03	$34,356.67	$626,398.04
Reimbursement to LAWA		$116,431.03	$34,356.67	$150,787.70

Paid Check # 1237 split CS 29 & 30

OHNSTAD TWICHELL, P.C.
Attorneys at Law

P.O Box 458
West Fargo, ND 58078-0458
701-282-3249

18-0014 **JTS** **Invoice # 192258**

Date: November 9, 2023

To: Lake Agassiz Water Authority
Email to: BGrubb@FargoND.gov

LAWA PPA & Legal Support

PROFESSIONAL SERVICES RENDERED			
	Hours	**Rate**	**Totals**
JTS	17.3	$400.00	$6,920.00
AJR	0.7	$215.00	$150.50
Total Fees:	**18**		$7,070.50
Grand Total			**$7,070.50**

BG

		Rates
JTS	John T. Shockley, Partner, Supervising Attorney	$400.00
KJS	Katie J. Schmidt, Partner	$400.00
AJR	Andrea J. Roman, Paralegal	$215.00

check 1238 11.20.24

COST ADVANCES BY US FOR YOUR ACCOUNT, FOR WHICH WE HAVE NOT BEEN BILLED, WILL APPEAR ON YOUR NEXT STATEMENT.

GARRISON DIVERSION
CONSERVANCY DISTRICT
P.O. BOX 140
CARRINGTON, N.D. 58421
(701) 652-3194
gdcd@gdcd.org
www.garrisondiversion.org

Invoice

November 20, 2023

From:
Garrison Diversion Conservancy District
P.O. Box 140
Carrington, ND 58421

To:
Lake Agassiz Water Authority
P.O. Box 140
Carrington, ND 58421

Brownstein, Hyatt Farber-Schreck-Strategic Counseling

50% Cost Share July 2023	$ 5,125.00
50% Cost Share August 2023	$ 5,125.00
50% Cost Share Sept 2023	$ 5,125.00
Total Due	$ 15,375.00

Please make check payable to:

Garrison Diversion Conservancy District
P.O. Box 140
Carrington, ND 58421

check 1239 11.20.23

GARRISON DIVERSION CONSERVANCY DISTRICT

Cost Share Invoice for LAWA
RED RIVER VALLEY PROJECT

Invoice RRVWSP 31

Vendor	Invoice #	Invoice Amount	Expenditures Paid from State of ND Funds 90%	Expenditures Reimbursement from LAWA-Fargo 7.7215%	Expenditures Reimbursement from LAWA-Grand Forks 2.2785%	Total Expenditures
Construction-MRIPS Wet Well						
Construction-Pipeline East Contract 5A						
MRI Intake Pumping Station Wet Well & Bidding						
MRI Pumping Station Wet Well & Site Development CPS-2620					$0.00	$ -
MRI Screen Structure & Tunnel Design & Bidding-2330						$ -

Vendor	Invoice #	Invoice Amount	Expenditures Paid from State of ND Funds 75%	Expenditures Reimbursement from LAWA-Fargo 19.304%	Expenditures Reimbursement from LAWA-Grand Forks 5.696%	Total Expenditures
Construction-Pipeline East Contract 5A						
Transmission Pipeline East Contract 5A Bidding Services						$ -
Transmission Pipeline Construction Phase-5630						$ -
Sheyenne River Outfall Discharge Structure-Bidding						
Sheyenne River Outfall Discharge Structure-Construction						
Sheyenne River Outfall Discharge Structure-CPS 6610						$ -
Project Planning/Admin						
Property Acquistions & Easements						
October 2023 Easements	Various	$286,114.67	$ 214,586.00	$ 55,231.00	$16,297.67	$ 286,114.67
ESRI	26162225	$8,250.00	$ 6,187.50	$ 1,592.56	$469.94	$ 8,250.00
Vogel	311280	$3,154.00	$ 2,365.50	$ 608.84	$179.66	$ 3,154.00
Vogel	311279	$5,126.00	$ 3,844.50	$ 989.51	$291.99	$ 5,126.00
					$0.00	$ -
					$0.00	$ -
					$ -	$ -
GRAND TOTALS		$302,644.67	$ 226,983.50	$ 58,421.91	$ 17,239.26	$ 302,644.67
Total Due from LAWA				$ 58,421.91	$ 17,239.26	$ 75,661.17

SUMMARY:	State of North Dakota Funding	LAWA Fargo	LAWA Grand Forks	Totals
Total Cost	$ 226,983.50	$ 58,421.91	$ 17,239.26	$302,644.67
Cost Share Percentage				
Total Cost Share	$226,983.50	$58,421.91	$17,239.26	$302,644.67
Reimbursement to LAWA		$58,421.91	$17,239.26	$75,661.17

LAWA paid check #1240 11.29.23

OHNSTAD TWICHELL, P.C.
Attorneys at Law

P.O Box 458
West Fargo, ND 58078-0458
701-282-3249

18-0014 JTS Invoice # 192529

Date: November 28, 2023

To: Lake Agassiz Water Authority
Email to: BGrubb@FargoND.gov

LAWA PPA & Legal Support

PROFESSIONAL SERVICES RENDERED			
	Hours	**Rate**	**Totals**
JTS	5.7	$400.00	$2,280.00
KJS	0.4	$400.00	$160.00
AJR	1.3	$215.00	$279.50
Total Fees:	**7.4**		**$2,719.50**
Travel			$68.12
Total Expenses:			**$68.12**
Plus Net Balance Forward:			**$7,070.50**
Grand Total			**$9,858.12**

BG

		Rates
JTS	John T. Shockley, Partner, Supervising Attorney	$400.00
KJS	Katie J. Schmidt, Partner	$400.00
AJR	Andrea J. Roman, Paralegal	$215.00

check 1241 $2,787.62 12.14.23

GARRISON DIVERSION CONSERVANCY DISTRICT
Cost Share Invoice for LAWA
RED RIVER VALLEY PROJECT

Invoice RRVWSP 32

Vendor	Invoice #	Invoice Amount	Expenditures Paid from State of ND Funds 90%	Expenditures Reimbursement from LAWA-Fargo 7.7215%	Expenditures Reimbursement from LAWA-Grand Forks 2.2785%	Total Expenditures
Construction-MRIPS Wet Well						
Construction-Pipeline East Contract 5A						
MRI Intake Pumping Station Wet Well & Bidding						
MRI Pumping Station Wet Well & Site Development CPS-2620					$0.00	$ -
MRI Screen Structure & Tunnel Design & Bidding-2330						$ -
			Expenditures Paid from State of ND Funds 75%	Expenditures Reimbursement from LAWA-Fargo 19.304%	Expenditures Reimbursement from LAWA-Grand Forks 5.696%	Total Expenditures
Construction-Pipeline East Contract 5A						
Transmission Pipeline East Contract 5A Bidding Services						
Transmission Pipeline Construction Phase-5630					$0.00	$ -
						$ -
Sheyenne River Outfall Discharge Structure-Bidding						
Sheyenne River Outfall Discharge Structure-Construction						
Sheyenne River Outfall Discharge Structure-CPS 6610						$ -
Project Planning/Admin						
Property Acquistions & Easements						
November 2023 Easements	Various	$274,900.00	$ 206,175.00	$ 53,066.15	$15,658.85	$ 274,900.00
Crop Damage Nov 23	Crop Dmg Nov 23	$12,423.02	$ 9,317.27	$ 2,398.11	$707.64	$ 12,423.02
John Kugler	INV0071	$19,012.80	$ 14,259.60	$ 3,670.19	$1,083.01	$ 19,012.80
Haulk Sales	INTAKE WELL	$2,598.75	$ 1,949.06	$ 501.66	$148.03	$ 2,598.75
Arnston (credit on invoice 33)	23113	$9,576.38	$ 7,182.29	$ 1,848.61	$545.48	$ 9,576.38
Vogel	313947	$1,998.00	$ 1,498.50	$ 385.69	$113.81	$ 1,998.00
Vogel	313946	$21,430.80	$ 16,073.10	$ 4,136.96	$1,220.74	$ 21,430.80
Vogel	312276	$2,572.00	$ 1,929.00	$ 496.49	$146.51	$ 2,572.00
Vogel	312275	$1,820.00	$ 1,365.00	$ 351.33	$103.67	$ 1,820.00
					$ -	$ -
					$ -	$ -
					$ -	$ -
GRAND TOTALS		$346,331.75	$ 259,748.82	$ 66,855.19	$ 19,727.74	$ 346,331.75
Total Due from LAWA				$ 66,855.19	$ 19,727.74	$ 86,582.93

SUMMARY:	State of North Dakota Funding	LAWA Fargo	LAWA Grand Forks	Totals
Total Cost	$ 259,748.82	$ 66,855.19	$ 19,727.74	$346,331.75
Cost Share Percentage				
Total Cost Share	$259,748.82	$66,855.19	$19,727.74	$346,331.75
Reimbursement to LAWA		$66,855.19	$19,727.74	$86,582.93

check 1242 $86,582.93 12.18.23

Lake Agassiz Water Authority

www.lakeagassiz.org | 701-652-3194
PO Box 140, Carrington, ND 58421

January 5, 2024

«AddressBlock»

«GreetingLine»

The Lake Agassiz Water Authority (LAWA) serves as the collective voice of water systems in central and eastern North Dakota, actively representing water users in their work on the Red River Valley Water Supply Project (RRVWSP). The RRVWSP is essential to ensuring a reliable water supply for our future and for multiple generations to come; therefore, it is important to move forward in a timely manner.

Co-sponsors of the RRVWSP, LAWA and the Garrison Diversion Conservancy District (Garrison Diversion), are happy to report an active and successful 2023.

North Dakota lawmakers approved legislative intent for the RRVWSP totaling $953 million in future funding, including $180 million in the Department of Water Resources Budget, SB 2020, for the 2023-2025 biennium.

Additionally, project construction continued. Contract 2 for the Missouri River Intake Screen Structure and Tunnel was completed. Pipeline installation progressed southeast of Carrington as crews continued on the Transmission Pipeline Contract 5B, which is a total nine-mile pipe install. Two new contracts (5C and 5D) were awarded for 18 miles of pipeline installation beginning in 2024.

The RRVWSP team is working towards finalizing user agreements and an operations plan for the project.

While LAWA progresses on the RRVWSP, your support is important to us. Your membership dues fund the active involvement of the LAWA in the RRVWSP. Enclosed is your 2024 dues statement. Please send your membership check in the enclosed envelope today.

For additional information about the LAWA or for current updates on the RRVWSP, visit www.lakeagassiz.org or www.rrvwsp.com.

Sincerely,

Duane DeKrey
Secretary/Treasurer

DD/kac
Enclosures

Lake Agassiz Water Authority

www.lakeagassiz.org | 701-652-3194
PO Box 140, Carrington, ND 58421

2024 Membership Dues

Organization or City's Name: **«CompanyName»**

Mailing Address: «Address»
«City», «StateOrProvince» «PostalCode»

Contact Person: «FirstName» «LastName»

Please make changes to the above information where necessary.

Membership Category

Domestic Water Members	Annual Rate
25 to 100 meters	$ 100.00
101 to 1,000 meters	$ 250.00
1,001 to 5000 meters	$ 500.00
Over 5,000 meters	$ 1,000.00
Associate Member	$ 1,000.00

Please return bottom portion with your remittance.

Enter Total Amount Enclosed _____

«CompanyName»

«FirstName» «LastName»

Lake Agassiz Water Authority

www.lakeagassiz.org | 701-652-3194
PO Box 140, Carrington, ND 58421

2024 Membership Dues

Organization or City's Name: **«CompanyName»**

Mailing Address: «Address»
«City», «StateOrProvince» «PostalCode»

Contact Person: «FirstName» «LastName»

Please make changes to the above information where necessary.

Membership Category

Domestic Water Members	Annual Rate
25 to 100 meters	$ 400.00
101 to 1,000 meters	$ 1,000.00
1,001 to 5000 meters	$ 2,000.00
Over 5,000 meters	$ 4,000.00
Associate Member	$ 1,000.00

Please return bottom portion with your remittance.

Enter Total Amount Enclosed _____

«CompanyName»

«FirstName» «LastName»

Lake Agassiz Water Authority

Name	2016 Cost Share	2017 Dues	2017 Cost Share	2018 Cost Share	2018 Dues	2019 Dues	2020 Dues	2021 Dues	2022 Dues	2023 Dues
City of Aneta										
City of Argusville										
City of Binford					$ 100.00	$ 100.00	$ 100.00	$ 100.00	$ 100.00	100.00
City of Briarwood		$100.00			$ 100.00	$ 100.00	$ 100.00	$ 100.00	$ 100.00	100.00
City of Buffalo		$250.00			$ 250.00	$ 250.00	$ 250.00		$ 250.00	250.00
City of Buxton										
City of Carrington	$21,982.50				$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of Casselton		$250.00								
City of Clifford		$100.00			$ 100.00	$ 100.00	$ 100.00	$ 100.00		100.00
City of Colfax		$100.00			$ 100.00		$ 100.00	$ 100.00	$ 100.00	
City of Cooperstown		$250.00	$1,758.60		$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of Davenport		$100.00			$ 100.00	$ 250.00		$ 250.00	$ 250.00	250.00
City of Devils Lake			$8,793.00		$ 500.00	$ 2,000.00				
City of Drayton										
City of East Grand Forks		$2,000.00	$18,465.30		$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	2,000.00
City of Emerado							$ 100.00			
City of Enderlin		$250.00			$ 250.00					
City of Fairmount									$ 250.00	250.00
City of Fargo		$4,000.00	$648,044.10	$87,930.00	$ 4,000.00	$ 4,000.00	$ 4,000.00	$ 4,000.00	$ 4,000.00	4,000.00
City of Forman	$89.73	$250.00			$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of Galesburg		$100.00						$ 100.00	$ 100.00	100.00
City of Gilby										
City of Grafton		$2,000.00	$17,586.00		$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	2,000.00
City of Grand Forks		$4,000.00	$228,618.00		$ 4,000.00	$ 4,000.00	$ 4,000.00	$ 4,000.00		4,000.00
City of Grandin		$100.00			$ 250.00		$ 100.00		$ 100.00	
City of Gwinner					$ 250.00	$ 100.00		$ 100.00	$ 250.00	100.00
City of Hannaford			$439.65							
City of Havana							$ 100.00	$ 100.00	$ 100.00	100.00
City of Hillsboro	$4,396.20	$250.00			$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of Hope		$250.00			$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of Horace					$ 250.00	$ 250.00				250.00
City of Hunter		$250.00			$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of Kindred		$250.00			$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of Langdon	$1,758.60				$ 500.00	$ 500.00				
City of Larimore			$2,637.90		$ 250.00	$ 250.00	$ 250.00	$ 250.00		
City of Lisbon	$2,901.69	$250.00			$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of Mantador										
City of Manvel		$100.00			$ 100.00	$ 100.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of Mapleton		$250.00			$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of Mayville	$4,396.50	$250.00			$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 250.00	250.00
City of McVille	$879.30				$ 250.00	$ 250.00		$ 250.00	$ 250.00	250.00
City of Minto		$100.00				$ 100.00	$ 100.00			
City of Mooreton		$100.00			$ 100.00	$ 100.00	$ 100.00	$ 100.00	$ 100.00	100.00
City of Mountain		$100.00			$ 100.00	$ 100.00	$ 100.00	$ 100.00	$ 100.00	100.00

Name	2016 Cost Share	2017 Dues	2017 Cost Share	2018 Cost Share	2018 Dues	2019 Dues	2020 Dues	2021 Dues	2022 Dues	2023 Dues
City of Munich										
City of Neche										
City of Nekoma										
City of Oxbow		$100.00			$ 100.00	$ 100.00	$ 100.00			
City of Park River		$250.00	$3,517.20		$ 250.00	$ 250.00	$ 250.00	$ 250.00		250.00
City of Pillsbury										
City of Sibley		$100.00			$ 100.00	$ 100.00	$ 100.00	$ 100.00	$ 100.00	100.00
City of Tuttle		$100.00	$175.86							
City of Valley City		$2,000.00	$13,189.50		$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	2,000.00
City of Wahpeton	$39,568.50	$2,000.00			$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00		
City of West Fargo		$4,000.00			$ 4,000.00		$ 4,000.00	$ 4,000.00	$ 4,000.00	4,000.00
Richland County JDA	$17,586.00									
Agassiz Water Users District		$500.00	$8,793.00		$ 500.00	$ 500.00		$ 500.00	$ 500.00	500.00
Barnes Rural Water District		$500.00	$4,396.50		$ 500.00		$ 500.00	$ 500.00		
Dakota Rural Water District	$6,155.10	$250.00			$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 500.00	500.00
Cass Rural Water Users District		$4,000.00			$ 4,000.00	$ 4,000.00	$ 4,000.00	$ 4,000.00	$ 4,000.00	4,000.00
Central Plains Water District		$500.00	$5,275.80							
Grand Forks Traill Water District			$26,379.00							
Greater Ramsey Water District		$500.00	$8,793.00		$ 500.00	$ 500.00				
Langdon Rural Water District										
McLean Sheridan Rural Water			$3,693.06			$ 250.00	$ 250.00	$ 500.00	$ 500.00	500.00
Moorhead Public Service										
Northeast Reg. Water District	$26,379.00	$500.00			$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	500.00
North Valley Water District										
Ransom-Sargent Water Users										
South Central Reg. Water Dist			$4,396.50							
Southeast Water Users District		$500.00	$21,982.50		$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	500.00
Stutsman Rural Water District		$500.00	$131,895.00		$ 500.00	$ 500.00		$ 500.00	$ 500.00	500.00
Traill Rural Water District			$9,672.30		$ 250.00					
Tri-County Rural Water District		$250.00	$8,793.00		$ 250.00					
Walsh Rural Water District	$8,793.00	$500.00				$ 1,000.00		$ 1,000.00	$ 500.00	500.00
TOTAL	**$134,886.12**	**$33,050.00**	**$1,177,294.77**	**$87,930.00**	**$34,250.00**	**$31,500.00**	**$ 30,700.00**	**$ 33,000.00**	**$ 26,400.00**	**30,650.00**