



# AGENDA

## IDAHO WATER RESOURCE BOARD

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**Joint Aquifer Stabilization and Finance Committee Meeting No. 1-25**

**July 11, 2025**

**2:00 PM (MT) / 1:00 PM (PT) or Upon Adjournment of  
Special Board Meeting No. 8-25**

**Brad Little**  
*Governor*

**Jeff Raybould**  
*Chairman*  
St. Anthony  
At Large

**Jo Ann Cole-Hansen**  
*Vice Chair*  
Lewiston  
At Large

**Dean Stevenson**  
*Secretary*  
Paul  
District 3

**Dale Van Stone**  
Hope  
District 1

**Albert Barker**  
Boise  
District 2

**Brian Olmstead**  
Twin Falls  
At Large

**Marcus Gibbs**  
Grace  
District 4

**Patrick McMahon**  
Sun Valley  
At Large

Water Center  
Conference Rooms 602 C & D  
322 E. Front St.  
BOISE

**Livestream available at <https://www.youtube.com/@iwrbb>**

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1. Introductions and Attendance
2. Flood Management Grant Recommendations \*
3. Surface Water Operational Efficiencies Projects \*
4. ESPA Recharge Conveyance Fees and Structure \*
5. ESPA Recharge Infrastructure Projects \*
6. Other Items
7. Adjourn

Finance Committee Members: Chair Jo Ann Cole-Hansen, Jeff Raybould, Dean Stevenson, Dale Van Stone, and Marc Gibbs.

Aquifer Stabilization Committee Members: Chair Dean Stevenson, Al Barker, Brian Olmstead, and Pat McMahon.

\* Action Item: A vote regarding this item may be made at this meeting. Identifying an item as an action item on the agenda does not require a vote to be taken on the item.

#### **Americans with Disabilities**

The meeting will be held in person and online. If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Department staff by email [jennifer.strange@idwr.idaho.gov](mailto:jennifer.strange@idwr.idaho.gov) or by phone at (208) 287-4800.

# Memorandum



To: Idaho Water Resource Board

From: Neeley Miller, Planning & Projects Bureau

Date: July 9, 2025

Re: Flood Management Grant Applications and Ranking

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**Action: Make a funding recommendation for the IWRB to consider**

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## **FY 2026 Flood Management Grant**

Staff received a total of eight (8) applications. The applications were evaluated, scored, and ranked according to criteria adopted by Board. Staff will discuss the application scores with the Finance Committee.

### **Attachment(s):**

Flood Management Grant score and ranking spreadsheet

<b>2026 Flood Management Grant</b>					
<b>Entity</b>	<b>Project</b>	<b>IWRB District</b>	<b>Score (125 points)</b>	<b>Funds Requested</b>	<b>Total Project Costs</b>
Camas Conservation District	Corral Creek Crossing Repair Project	3	102	\$63,225	\$126,401
FCD # 9 Lake Creek 75 Project	Lake Creek 75 Erosion Reduction Project	3	93	\$200,000	\$427,584
FCD # 10 Bass Lane	High Flow Side Channel Project	2	91	\$33,447	\$66,894
FCD #10 Eagle Island Split	NF Log Jam Project	2	89	\$33,140	\$66,280
FCD #10 Phillips	Bank Stabilization Project	2	87	\$38,662	\$77,324
FCD #10 Stiburek	Dry Creek Bank Repair Project	2	86	\$10,700	\$22,600
Twin Lake Flood Control District	Rathdrum Creek Clean-up Project	1	84	\$9,472	\$23,680
City of Victor	Trail Creek Channel Repair Project	4	81	\$72,000	\$144,000
<b>Total Funds Requested</b>				<b>\$460,646</b>	<b>\$954,763</b>

**Grant Funds By IWRB District:**

<b>District 1</b>	\$9,472	2.06%
<b>District 2</b>	\$115,949	25.17%
<b>District 3</b>	\$263,225	57.14%
<b>District 4</b>	<u>\$72,000</u>	<u>15.63%</u>
	\$460,646	100.00%

# MEMO



**To:** Idaho Water Resource Board  
**From:** Justin Ferguson  
**Date:** July 11, 2025  
**Subject:** Twin Falls Canal Company – Surface Water Efficiencies Program

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**REQUESTED ACTION:** Approve funding request for \$26,340,915

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## 1.0 INTRODUCTION

The Twin Falls Canal Company (TFCC) is requesting funding support to implement water conservation and system efficiency improvement projects. The request is made up of three distinct sub-parts: line approximately 10 miles of the High Line earthen canal with HDPE geomembrane, develop a recharge basin to help mitigate local aquifer concerns and groundwater availability, and enhance their return flow network measurement & telemetry equipment.

## 2.0 PROPOSED PROJECT

The funding proposal comprises three major sub-projects: lining portions of the existing canal system, developing a recharge basin, and improving the return flow monitoring system.

TFCC is working on installing an HDPE liner across several miles of the existing canal. This proposal would focus on the Rock Creek area south of Hansen, ID, as well as the Lateral 1 (4HL) south of Castleford, ID. Both projects would reduce the amount of seepage the canal experiences annually, reducing the amount of water needed for deliveries. The work has been split into 5 phases, with one phase being completed each year during the non-irrigation season. Figures 1, 2, 3 & 4 (*Pages 6 – 9 TFCC Project Proposal*) provide a map of the reach to be lined.

The second sub-project, the construction of an off-canal recharge basin, has been identified by the TFCC to help mitigate local aquifer concerns. The basin would be used at times when the company had an influx of water into the High Line Canal, generally in the early and late periods of the irrigation season. The proposed basin is an existing gravel pit estimated at approximately 30 acres located along the High Line Canal (*Figure 5, Page 11 – TFCC Project Proposal*)

The third portion of the proposal is the installation of replacement or updated telemetry equipment and the construction of new concrete structure to better monitor return flows. The TFCC has identified 28 individual locations to update or improve (*Figure 6, Page 12 – TFCC Project Proposal*).

### **3.0 PROJECT IMPLEMENTATION SCHEDULE & COST ESTIMATE**

The TFCC estimates that this proposal would be split into 8 phases, with one phase completed each year. The company would like to pursue bulk purchasing and on-site storage, which could reduce costs and possibly allow more work to be completed each year.

Detailed cost estimates were provided in the proposal package.

### **4.0 EFFICIENCY RESULTS LIKELY TO BE ACHIEVED & 2024 SWC AGREEMENT IMPACTS**

In lining the existing High Line earthen canal, the TFCC estimates that between 19,000 and 68,000 acre-feet of water would be saved. Details on the estimated agreement impacts were provided by the TFCC, including loss calculations using Acoustic Doppler Current Profiler data beginning on Page 12 of the proposal document.

To address impacts to the local groundwater table, the proposed recharge basin would capture water during periods of high flow, allowing the water to percolate back into the regional aquifer.

The return flow network allows the TFCC to monitor the water leaving the system as it drains from agricultural areas into urban areas. Adding new monitoring stations and updating the existing stations will help the TFCC continue to improve operational conditions.

### **5.0 CONCLUSION AND RECOMMENDATION**

As a Surface Water Coalition member and holder of some of the most senior water rights within the ESPA, the Twin Falls Canal Company is one of the first systems to be impacted by annual modeled shortfalls. Through these efficiency projects, the TFCC can reduce the volume of water needed for the system via reduced seepage and improved flow monitoring into urban areas. Through these projects, the TFCC can also help mitigate impacts to the local aquifer via the proposed recharge basin.

Staff would recommend the approval of this funding request, and would recommend that, as future projects are identified, the TFCC continue to work with the IWRB to further improve the system where possible.

#### **Attachments:**

- TFCC Proposal Document

**BEFORE THE IDAHO WATER RESOURCE BOARD**

IN THE MATTER OF THE TWIN FALLS CANAL  
COMPANY SURFACE WATER EFFICIENCY  
PROGRAM FUNDING REQUEST

RESOLUTION TO AUTHORIZE FUNDING FOR  
COSTS RELATED TO CANAL LINING,  
MONITORING EQUIPMENT INSTALLATION,  
AND SYSTEM IMPROVEMENTS

1           WHEREAS, the Twin Falls Canal Company (Company) submitted a funding proposal to the Idaho  
2 Water Resource Board (IWRB) in the amount of \$26,340,915 to improve surface water operations within  
3 their canal system; and  
4

5           WHEREAS, the Company was established in the 1900s and currently delivers irrigation water  
6 across 202,000 acres, serving shareholders in Murtaugh, Kimberly, Hansen, Filer, Buhl, Castleford, and  
7 Twin Falls; and  
8

9           WHEREAS, the proposal is requesting funds to line existing canals, develop an off-canal recharge  
10 basin, and install updated monitoring equipment to measure return flows; and  
11

12           WHEREAS, the Company estimates that the project will take approximately years to complete;  
13 and  
14

15           WHEREAS, the Company is a member of the Surface Water Coalition and a party to the 2024  
16 SWC agreement; and  
17

18           WHEREAS, the proposed project will increase the efficiency of surface water operations and will  
19 help further the goals of the 2024 SWC agreement.  
20

21           NOW THEREFORE BE IT RESOLVED that the IWRB approves the funding request not to exceed  
22 \$26,340,915 to the Twin Falls Canal Company to improve canal efficiencies and surface water  
23 operations.  
24

25           NOW THEREFORE BE IT FURTHER RESOLVED that the IWRB provides authority to the Chairman  
26 of the Idaho Water Resource Board, or his designee, to enter into contracts with the Company on behalf  
27 of the IWRB.  
28

29           NOW THEREFORE BE IT FURTHER RESOLVED that funding under this resolution may be allocated  
in installments contingent upon legislative appropriations.

DATED this 11<sup>th</sup> day of July, 2025.

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JEFF RAYBOULD, Chairman  
Idaho Water Resource Board

ATTEST \_\_\_\_\_  
DEAN STEVENSON, Secretary

# **Grant Funding Request**

for inclusion in the

## **Regional Water Sustainability List Projects**

**July 24, 2025**

### **Project:**

**Twin Falls Canal Company  
Lining, Recharge Basin, and Return Flow Monitoring  
Sustainability Projects**

**Twin Falls Canal Company Inc.  
357 6<sup>th</sup> Avenue West  
PO Box 326  
Twin Falls, Idaho 83301**

Application for:  
Idaho Water Resources Board  
Regional Water Sustainability List Project Funding Program

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# 1.0 Project Background

The Twin Falls Canal Company (TFCC) is located in southcentral Idaho along the south side of the Snake River. TFCC is requesting funding support for an overall water sustainability project with three distinct subparts located within its irrigation service area. First, TFCC proposes to line approximately ten (10) miles of an earthen canal within the TFCC system (High Line Canal) with a High-Density Polyethylene (HDPE) geomembrane liner. Second, TFCC seeks to establish a strategic recharge basin to help mitigate for local aquifer concerns and maintain local groundwater availability. Third, TFCC seeks to enhance its existing return flow network measurement and telemetry equipment. In total, TFCC is requesting **\$26,340,915.00** in Idaho Water Resource Board Grant Funding. The requested funds will provide TFCC with the necessary financial assistance to implement the proposed water conservation and system efficiency improvement projects.

## **Canal Lining**

It is expected that the 10 miles of liner will help TFCC conserve between 19,000 and 68,000 acre-feet (AF) on an annual basis, depending upon operations and system conditions. The section of the High Line Canal runs along gravels pits and fractured basalt which allows for seepage loss throughout the irrigation season. This liner project will help conserve water, which enables better water reliability for TFCC farmers that receive delivery downstream of this location, which leads to better crop production and economic viability. Moreover, this project would provide the water user community time to address the sustainability and reliability of Snake River flows in the Blackfoot -Milner reach which relies directly on Eastern Snake Plain Aquifer (ESPA) discharges during critical periods of the irrigation season. Water savings are not intended to replace required mitigation actions upstream on the Snake River and ESPA.

## **Recharge Basin**

Next, the proposed local recharge basin is located along the High Line Canal and will be used to help reregulate water in higher flow timeframes. This recharge basin is intended to help reduce any local impacts to the adjacent area and local aquifer.

## **Return Flow Network Enhancement**

Finally, the proposed return flow network enhancements will allow TFCC to modernize its current network of water measurement and data collection. This return flow network will allow TFCC to monitor return flows during the irrigation season, and also seep water during the non-irrigation season, which helps account for water outside of TFCC's control.

## 2.0 Project Sponsor(S)

a. *Type of Organization:*

Canal Company

Twin Falls Canal Company Inc. (TFCC)  
357 6<sup>th</sup> Ave. E  
Twin Falls, ID 83301

b. *History of the Sponsoring Entity:*

The Carey Act of 1894 allowed states to reclaim desert lands through irrigation and agricultural settlement. This act allowed Ira B. Perrine, along with a group of investors, the opportunity to establish the rights to irrigate the arid ground on the southside of the Snake River canyon. The Twin Falls Land and Water Company was established in 1900 and, by 1905, started to deliver water to the arid ground on the southside of the Snake River Canyon. The Twin Falls Canal Company (TFCC) was later established in 1909 and is located in Twin Falls, Idaho. TFCC diverts water out of the Snake River at Milner Dam under an October 11, 1900, natural flow water right for 3,000 cubic feet per second (cfs). TFCC also has two other natural flow water rights of 600 cfs and 180 cfs with later priority dates for an additional 780 cfs. TFCC also holds storage rights in American Falls Reservoir and Jackson Lake for a total of 248,368 acre-feet. TFCC controls the water delivery to an area of approximately 202,000 acres in Twin Falls County. TFCC serves shareholders in the cities of Murtaugh, Kimberly, Hansen, Filer, Buhl, Castleford, and Twin Falls, and also the area of Twin Falls County.

c. *Identification of Revenue Sources*

TFCC levies an annual assessment on each share of water for operations and maintenance of the system. This assessment rate is discussed during the budget cycle, and the TFCC Board ratifies the assessment amount each year. Annual assessment notices are billed at the beginning of the budget cycle every November.

d. *A Description of the Current Operations.*

TFCC's primary source of water supply is natural flow from the Snake River diverted at Milner Dam. Once diverted from Milner Dam, water flows to Murtaugh Lake approximately eight (8) miles downstream of Milner Dam. Downstream of Murtaugh Lake is the Forks Diversion. The Forks diversion splits the canal system into the High Line Canal and Low Line Canal. TFCC has over 110 miles of major canals and approximately 1,000 miles of smaller laterals. TFCC controls approximately 5,300 service gates (turnout gates) for water delivery. TFCC has 4,782 shareholders. Currently, TFCC has sixty-five (65) full-time employees and two part-time

seasonal employees. TFCC operates two divisions within the organizations: the East-end division based out of Twin Falls, and the West-end division based in Buhl.

## 3.0 Project Description

### a. Project Description

#### **High Line Canal and Lateral 1 (4HL) Liner**

The Twin Falls Canal Company (TFCC) is working on the installation of several miles of High-Density Polyethylene (HDPE) liner. This request focuses on two major areas of canal lining; both located in the High Line Canal. The first is located near Rock Creek south of Hansen, ID and the second location is on Lateral 1 (4HL) south of Castleford, ID. Each of these lining projects aim to minimize the seepage loss of the canal system.

TFCC has been lining its canals since the canal company was formed. Lining projects were developed to not only increase efficiency, but also to address land use issues on neighboring fields. Certain portions of the High Line Canal along this 10-mile stretch have conditions of high bank concerns. These high banks present safety issues for adjacent property owners should the banks fail during the irrigation season. Failure of banks during irrigation season create a potential for property damage and crop loss. TFCC has had a bank failure and seepage through these banks historically, and they have areas of constant observation. Over the years, TFCC has used a variety of liners and materials to help reduce canal seepage in areas that are more prone to seeping. TFCC has used concrete, clay, and other impervious materials over the years. Due to advancement in material sciences, TFCC has recently turned to using HDPE liners. These liners have proven to provide the necessary advantages to help control seepage loss.

Starting in 2019, TFCC installed the first mile of HPDE liner about two miles up the High Line Canal to the east of the proposed area. This was considered the first phase of a multi-phase project. In 2021 TFCC installed HDPE liner on the Low Line Canal in an area of historical seepage. TFCC returned to the High Line Canal in 2023 and lined approximately another mile of the canal with HDPE liner (phase two). Over the past several decades, TFCC has spent millions of dollars to help extent the water supply for our shareholders. In more recent years, TFCC has installed liners and other equipment to help protect this water supply.

The High Line Canal liner portion of this Sustainability Project starts at the end of phase two described above and continues approximately nine (9) miles to the west. This remaining nine (9) mile section is broken up into five additional phases. These phases are represented on Figure 1. The color differences show the general phasing. TFCC anticipates the total project will take approximately five years to complete given limited work time during the non-irrigation season. This timeframe is based upon the previous projects that TFCC has performed.

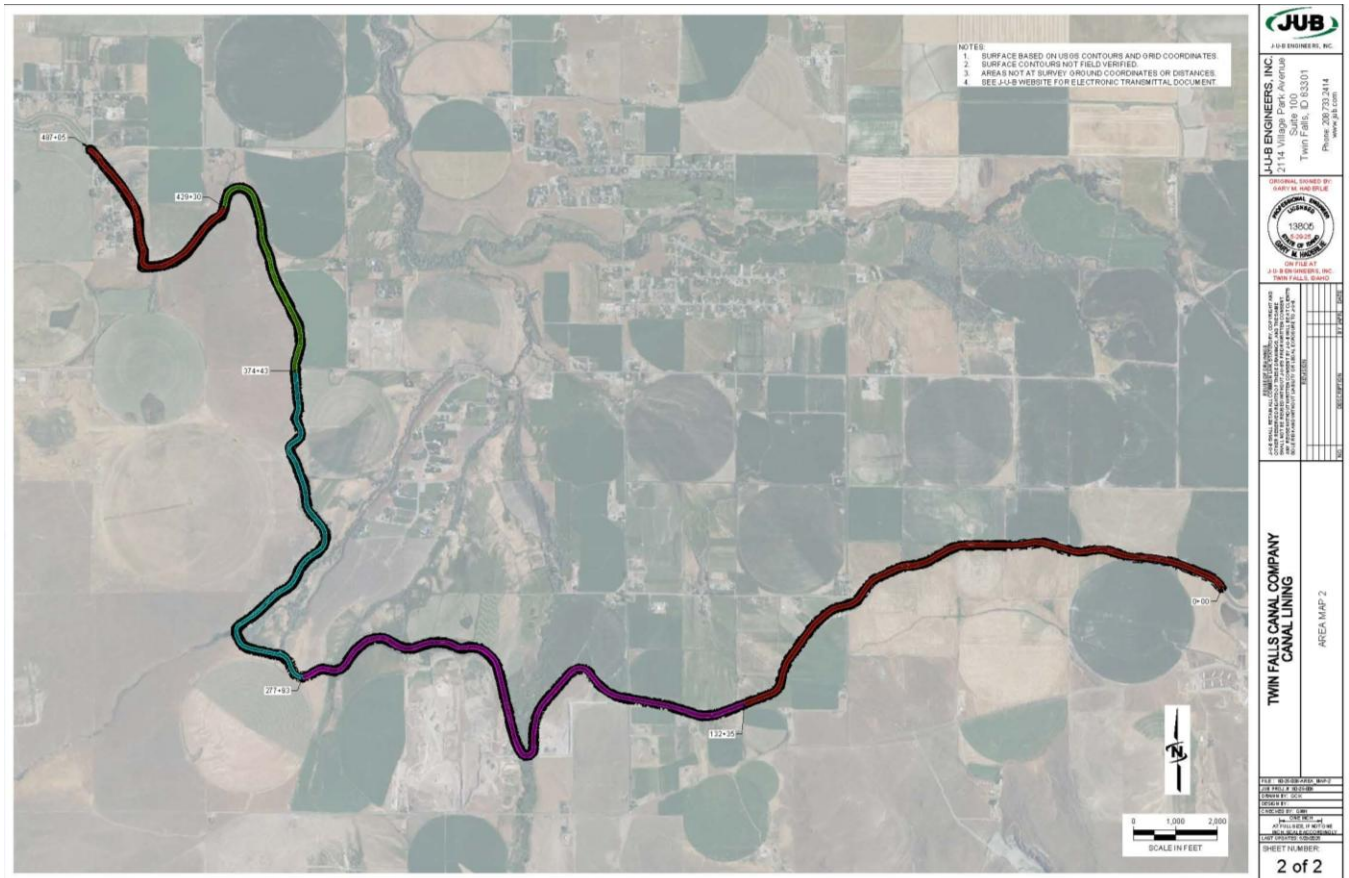


Figure 1: Rock Creek Phase of the High Line Canal Liner and Sustainability Project.

The Rock Creek High Line Canal Liner Sustainability Project is located in Twin Falls County, Idaho. It is approximately seven (7) miles south of the intersection of Idaho State Highway 30 and Hansen, Idaho. Figure 2. shows the general location of the starting point of phase three.

The project starts at latitude 42°25'59.19"N and longitude 114°18'40.05"W. TFCC plans to install nine (9) miles of prefabricated geomembrane HDPE liner in the High Line Canal as shown in Figure 1. This canal lining project requires nine (9) miles of geomembrane liner with an approximate width of 120-feet.

Excavation will consist of removing existing canal material from the bottom and side slopes. 2-foot by 2-foot keyways will be excavated along the top of the canal banks to anchor the liner. The liner will be unrolled along the canal bottom and then unfolded to allow for placement of the liner panel across the entire width of the canal. The liner will be temporarily held in place using sand bags. The edges of the liner will be placed in the keyway and backfill material placed in the keyway to anchor the liner. Keyways will also be excavated at the upstream and downstream ends of the liner project extents. Back fill material will be placed on top of the liner along the bottom and sides. The material initially excavated will be used as backfill. The canal bottom and sides will be re-established to pre-project widths and slopes. Once the liner joint seams are

welded, the backfilling process will advance, and the final grad of the canal bottom will be re-established.



Figure 2: Location of Rock Creek High Line Liner and Sustainability Project.

The second area on the High Line is Lateral 1 (4HL) near Castleford. Figure 3 below shows the general project alignment of Lateral 1 (4HL). This project is proposing to line a portion of the lateral, but also use HDPE pipe for another section. The purpose of piping a portion of this section is due to the basalt rock that the lateral runs through. HDPE pipe is more suitable to lay on the basalt rock sublayer with minimal bedding beneath it.

The Lateral 1 (4HL) portion of the project will line about 1.35 miles and pipe 0.75 mile in the initial phase of this request. TFCC would propose additional phases to pipe or line an additional 3.0 miles to help conserve additional water in the future. This would also require some additional funding to help plan for future projects not only along Lateral 1 (4HL) but other areas within the TFCC service boundaries.

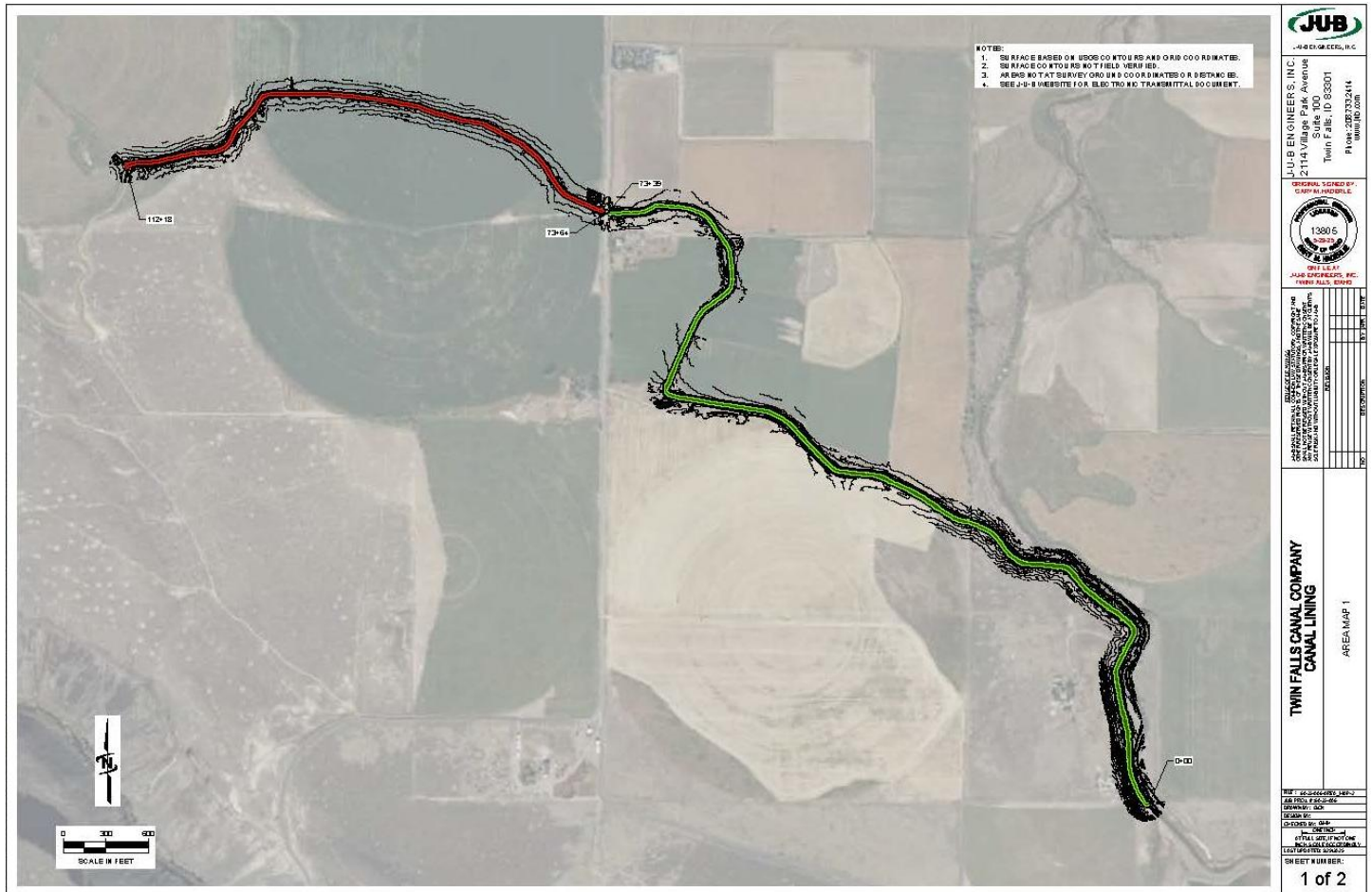


Figure 3: Lateral 1 (4HL) Phase of the High Line Canal Liner and Sustainability Project

The Lateral 1 (4HL) High Line Canal Liner Sustainability Project is located in Twin Falls County, Idaho. It is approximately four (4) miles south of Castleford, Idaho. Figure 4. shows the general location of the starting point of this phase of the project.

The project starts at latitude 42°27'33.38"N and longitude 114°51'16.62"W. TFCC plans to install 1.35 miles of prefabricated geomembrane HDPE liner in the lateral as shown in Figure 3. This canal lining project requires 1.35 miles of geomembrane liner with an approximate width of 50-feet. Resulting in approximately 519,280 square feet of total geomembrane liner required. This project also proposes to use 0.75 miles of HDPE pipe.

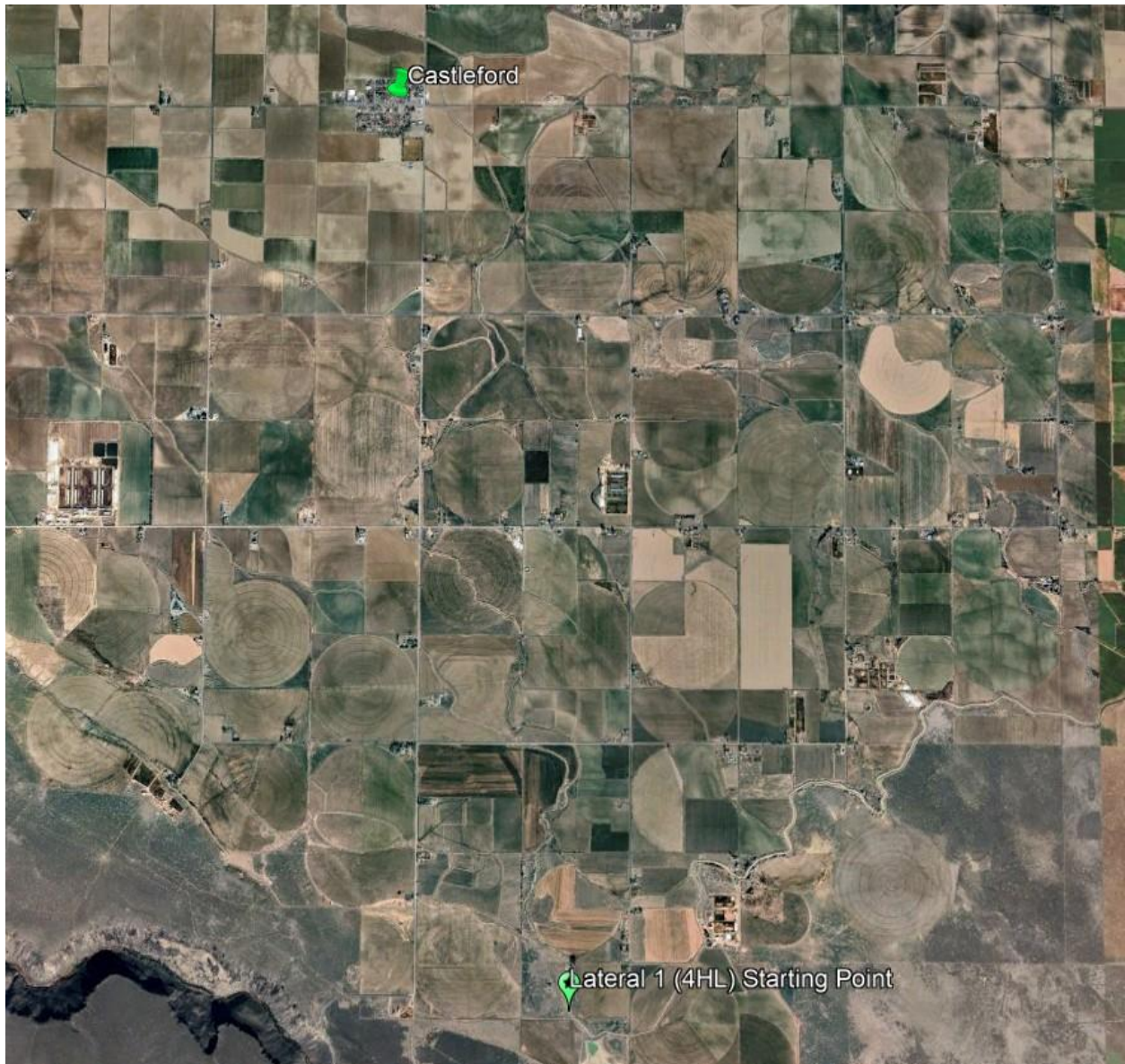


Figure 4: Location of Lateral 1 (4HL) High Line Liner and Sustainability Project.

TFCC has started preliminary conversations with adjacent landowners in the area to talk about construction staging and desired outcomes of the lining project. Since the work happens within the alignment of the canal, TFCC will be working within the easement of the canal. Should work need to go beyond the canal easements, TFCC will work with the adjacent landowners on any ingress/egress issues. Since TFCC has received certain funding in the past from both the Idaho Water Resources Board (IWRB) and the U.S. Bureau of Reclamation's WATERSmart program, TFCC does not anticipate or expect any environmental issues to arise during the installation of the liner.

TFCC estimates that between 19,000 and 68,000 acre-feet of water will be saved following completion of the High Line Canal Liner Projects through the identified sections of the canal

system. This estimated range is based upon previous lining projects, and the use of equipment to measure canal flow and the difference between two points of measurement. Current water losses within this reach of the High Line Canal are attributable to seepage into the ground through the canal sides and bottom during the irrigation season. This canal reach was constructed through coarse alluvium. Numerous large gravels and paving companies operate pits adjacent to the canal. These adjacent gravel pits fill with water each year when irrigation water starts flowing through the High Line Canal. Figure 2 shows the proposed project near these gravel pits.

### **Recharge Basin**

As TFCC has been working on the High Line Liner project and how this might impact the local groundwater table TFCC identified a location for an off-canal basin to help mitigate some of the local aquifer concerns. This basin would be utilized at times of the year when there is an influx of water in the High Line Canal. In periods of high flow through the High Line Canal this basin would be filled with water to then percolate into the ground and support the local aquifer. This would typically be in the early and late periods of the irrigation season when weather patterns and flow conditions are fluctuating. The surface area of the basin would be approximately 30 acres and slope towards to High Line Canal. This location is along the High Line Canal in an old gravel pit area and would be a good location based upon the locations in the system. Figure 5 shows the locations of the recharge basin in relation to the starting point and ending point of phase 4 of the High Line Liner project.



Figure 5: Location of Lateral 1 (4HL) High Line Liner and Sustainability Project.

### **Return Flow Measurement Network**

Over the years, TFCC has installed monitoring equipment on several flow returns to help TFCC operate the system more effectively. This return flow network has allowed TFCC to monitor the water that is leaving the system as it drains from agricultural areas (e.g. fields, seepage drains, etc.) and urban areas. TFCC is proposing to replace and update; or install new concrete structures with updated telemetry equipment to better monitor and measure these return flows. The following figure shows the twenty-eight (28) identified sites that TFCC is requesting be part of the overall water sustainability project. There are additional sites such as Rock Creek returns and Cedar on the Low Line Canal that can be added as TFCC continues to work on better operational conditions.



Figure 6: Return Flow Measurement Network.

b. **Conceptual Plan and Design Features**

The liner installation project will be performed in three main steps: (1) excavation, (2) liner placement, and (3) backfill. Each of these construction steps will be performed in succession for each liner panel section and construction will advance incrementally through the canal reach. Excavation will consist of removing existing canal material from the bottom and side slopes. 2-foot by 2-foot keyways will be excavated along the top of the canal banks to anchor the liner. The liner will be unrolled along the canal bottom and then unfolded to allow for placement of the liner panel across the entire width of the canal. The liner will be temporarily held in place using sand bags. The edges of the liner will be placed in the keyway and backfill material placed in the keyway to anchor the liner. Keyways will also be excavated at the upstream and downstream ends of the liner project. Back fill material will be placed on top of the liner along the bottom and sides. The material initially excavated will be used as backfill. The canal bottom and sides will be re-established to pre-project widths and slopes. Approximately 10 feet will be left exposed at the end of each panel section to allow welding of the adjoining section seams. Once the liner joint seams are welded, the backfilling process will advance, and the final grad of the canal bottom will be re-established.

The High Line Canal operates at 1,400 cubic feet per second (cfs). Throughout the irrigation season, the flow through the High Line Canal can range from 1,050 cfs to 1,450 cfs depending

on demand. The overall loss of water due to seepage can change throughout the season depending on the flow through the High Line Canal.

The project canal reach has an existing seepage rate of 5 – 25 cfs per mile. To be conservative with the loss calculation, TFCC will use 18 cfs as the basis of the seepage loss. TFCC contracts with a local firm to measure seepage loss at various locations in the canal system using Acoustic Doppler Current Profiler (ADCP) technology. The measurement of 18 cfs loss correlates to a flow through the High Line Canal of 1,054 cfs. It is not uncommon for the High Line Canal to reach flows of 1,400 cfs during the irrigation season, which would result in greater seepage losses. TFCC conveys irrigation water through this canal reach for 190 days on average. The resultant annual water loss using the 18 cfs would be 6,800 AF per year. Should the reach only lose 10 cfs per mile, that would equate to 3,770 AF per year. The seepage loss at 25 cfs would be 9,400 AF per year. The supporting calculation is demonstrated below:

$$\frac{18 \text{ ft}^3}{1 \text{ sec}} * \frac{1 \text{ acre}}{43,506 \text{ ft}^2} * \frac{60 \text{ sec}}{1 \text{ minute}} * \frac{60 \text{ minutes}}{1 \text{ hour}} * \frac{24 \text{ hours}}{1 \text{ day}} * \frac{190 \text{ days}}{1 \text{ Irrigation Season}}$$

Losses along various stretches of TFCC’s system are verified each year using the ADCP technology. TFCC also visually monitors the system each week by driving the canal banks to look for seepage through the canal banks. The seepage loss is based upon historical data per mile of canal. This seepage loss can and will vary per mile of canal. The range of seepage loss for the canal system could be between 1,900 AF to 6,800 AF per mile, or 19,000 AF to 68,000 AF for the ten miles of proposed liner annually. If you compare this against TFCC historical annual average diversion of 1,100,000 AF. This proposed project is to help assist in the sustainability of TFCC’s water supply and not intended to replace required mitigation actions intended to help maintain TFCC’s water supply through conjunctive administration. These projects are intended to allow time for the water user community to address other sustainability and reliability issues throughout the Eastern Snake Plan Aquifer (ESPA).

The preliminary concept for the recharge basin is based upon other projects and actions taken by the Idaho Water Resource Board in other areas of the State. This project will continue to need some refinement and planning to better understand the dynamics of the basin.

The return flow measurement and telemetry network will be based upon the historical structures and designs TFCC has implemented in the past. Using general engineering practice along with other hydraulic measurements principles (e.g. weirs, flumes, etc.). TFCC has engaged the vendor for the data loggers and has received preliminary information on the cost associated with the telemetry devices.

#### 4.0 Cost Estimate and Budget

TFCC has been working with our supplier of HDPE liner and the supplier’s excavation company to provide a foundation for the budget. The estimate that TFCC has received for this phase of the Rock Creek Liner and Lateral 1 (4HL) liner and pipe project will cost **\$19,626,286.00**. See

Attachment A for a cost breakdown of each section an option associated with the liner. TFCC has estimated the recharge basin portion of the project would cost **\$2,500,000.00** based upon other recharge basins recently funded by the IWRB. This estimate allows TFCC to continue to work with individuals in the local area on issues, and could change based upon future demands. It should be noted, that the current property owner would prefer to enter into a long-term lease with TFCC rather than sale the property. This would reduce the cost of this portion of the project. The return flow measurement network estimates are based upon equipment suppliers and TFCC historical construction practices for concrete structures. It is estimated that the return flow network cost would be **\$1,820,000.00**. Please see Attachment B for the cost estimates for each of the sites. TFCC has also included some contingency to allow for other unforeseen items that arise during construction projects. The proposed projects are anticipated to cost **\$26,340,915.00**. As TFCC continues to identify other projects that fall within this proposal, TFCC would also like to return to the IWRB to request additional funds for additional sustainability lining projects and system planning studies.

## 5.0 Implementation Schedule

TFCC anticipates the above referenced subparts to be completed as a multi-year project. TFCC estimates that this project can be completed within eight (8) phases over an eight (8) year timespan. However, if TFCC was able to purchase and store the liner at the initial phases, the HDPE lining material could potentially be purchased at reduced cost due to bulk purchasing. TFCC would be able to store and house all the product should TFCC be allowed to purchase bulk liner. The excavation company and liner supplier are ready to start in the winter of 2025-2026. This would then proceed during the following winters months until the project is completed. Again, this is anticipated to be an eight (8) phase project. The contractor has indicated; that they would like to install as much liner each season as possible.

## 6.0 Financial Feasibility Analysis

TFCC is requesting the assistance of the IWRB in the amount of **\$26,340,915.00**. This funding would allow TFCC to hire a private contractor to help excavate and install the liner. This is important to TFCC since our crews will be performing other necessary maintenance activities during the installation of the liner.

Attachment A – Liner Budgetary Estimates



Wednesday, May 14, 2025

Michael Brady  
 Earth Work Solutions  
 2506 Little Powder River Road  
 Gillette, WY 82716

Dear Michael:

Thank you for inviting us to quote you for the Canal lining project Twin Falls, ID . The products to be installed will vary depending on the section of canal in question and are delineated below. The prices quoted below are estimated based upon data available at the time of the quote and may change as additional factors/conditions are explored prior to final bid. Prices are for turnkey excavation and lining of the canal. See terms and conditions below. We look forward to working with you on this project.

CONTRACT PRICE

<u>Material Quoted*</u>	<u>Qty Estimate***</u>	<u>Materials &amp; Installation</u>	<u>Prices</u>
			<u>Total</u>
<b>Stafford's Bend</b>			
<b>Geomembrane Portion:</b>			
60 mil HDPE Liner Single Sided Textured (8oz Nonwoven Textile, Geocomposite or GCL for cushioning where needed)	856,091 ft <sup>2</sup>		\$970,689.00
<b>Civil Portion:</b>			
Excavation Dirt Work (SEE ATTACHED DETAIL OF SCOPE OF WORK)	4673 Ln. Ft.		<u>\$537,031.00</u>

**TOTALCOST OF STAFFORD'S BEND SECTION**

**\$1,507,720.00**

**TOTAL PRICE PER SQUARE FOOT 856,091 ft<sup>2</sup>**

**\$1.76/ft<sup>2</sup>**

-Continued-

## Williams Siphon

### Geomembrane Portion:

60 mil HDPE Liner	807,744 ft2	\$888,518.00
Single Sided Textured		
(8oz Nonwoven Textile, Geocomposite or GCL for cushioning where needed)		

### Civil Portion:

Excavation Dirt Work	5,487 Ln. Ft.	<u>\$647,344.00</u>
(SEE ATTACHED DETAIL OF SCOPE OF WORK)		

TOTAL COST OF WILLIAM'S SIPHON SECTION

\$1,535,862.00

TOTAL PRICE PER SQUARE FOOT 856,091 ft2

\$1.90/ft2

## Cottonwood Canyon HL

### Geomembrane Portion:

#### Non-rock sections

60 mil HDPE Liner	1,229,410 ft2	\$1,352,351.00
Single Sided Textured		
(8oz Nonwoven Textile, Geocomposite or GCL for cushioning where needed)		

#### Blasted Rock Section

60 mil HDPE Liner	<u>149,089 ft2</u>	<u>\$163,998.00</u>
Single Sided Textured		
(8oz Nonwoven Textile, Geocomposite or GCL for cushioning where needed)		

TOTAL FOR LINING SECTION 1,378,499 \$1,516,349.00

### Civil Portion:

#### Non-rock sections

Excavation Dirt Work	9647 Ln. Ft.	\$1,138,132.00
(SEE ATTACHED DETAIL OF SCOPE OF WORK)		

#### Blasted Rock Section

Blasting and widening Canal	1,100 ln. ft.	\$ 321,890.00
(SEE ATTACHED DETAIL OF SCOPE OF WORK)		
(To allow for a proper slope and subgrade for lining)		

TOTAL FOR THE CIVIL SECTION

\$1,460,022.00

TOTAL COST OF COTTONWOOD SECTION  
TOTAL PRICE PER SQUARE FOOT 1,378,499 ft2

\$2,976,371.00  
\$2.16/ft2

## KINSEY SECTION

### Geomembrane Portion:

60 mil HDPE Liner                      2,097,884 ft2                      \$2,307,672.00  
Single Sided Textured  
(8oz Nonwoven Textile, Geocomposite or GCL for cushioning where needed)

### Civil Portion:

Excavation Dirt Work                      14,554 Ln. Ft.                      \$1,672,578.00  
(SEE ATTACHED DETAIL OF SCOPE OF WORK)

TOTAL COST OF KINSEY SECTION  
TOTAL PRICE PER SQUARE FOOT 2,097,884 ft2

\$3,980,250.00  
\$1.90/ft2

## GRAVEL PIT SECTION

### Geomembrane Portion:

60 mil HDPE Liner                      1,961,404 ft2                      \$2,157,544.00  
Single Sided Textured  
(8oz Nonwoven Textile, Geocomposite or GCL for cushioning where needed)

### Civil Portion:

Excavation Dirt Work                      13,962 Ln. Ft.                      \$1,604,544.00  
(SEE ATTACHED DETAIL OF SCOPE OF WORK)

TOTAL COST OF GRAVEL PIT SECTION  
TOTAL PRICE PER SQUARE FOOT 1,961,404 ft2

\$3,762,088.00  
\$1.92/ft2

## LATERAL 1 SECTION 1

### Geomembrane Portion:

60 mil HDPE Liner                      160,916 ft2                      \$ 177,008.00  
Single Sided Textured  
(8oz Nonwoven Textile, Geocomposite or GCL for cushioning where needed)

**Civil Portion:**

Excavation Dirt 3837, Ln. Ft. \$ 167,549.00  
(SEE ATTACHED DETAIL OF SCOPE OF WORK)

**TOTAL COST OF LATERAL 1 SECTION 1** \$ 344,557.00  
**TOTAL PRICE PER SQUARE FOOT 160,916 ft2** \$2.14/ft2

**LATERAL 1 SECTION 2**

**Geomembrane Portion:**

60 mil HDPE Liner 358,364 ft2 \$ 394,201.00  
Single Sided Textured  
(8oz Nonwoven Textile, Geocomposite or GCL for cushioning where needed)

**Civil Portion:**

Excavation Dirt Work 7,338, Ln. Ft. \$ 384,315.00  
(SEE ATTACHED DETAIL OF SCOPE OF WORK)

**(Includes 100' of concrete Pipe)**

**TOTAL COST OF LATERAL 1 SECTION 2** \$ 778,516.00  
**TOTAL PRICE PER SQUARE FOOT 358,364 ft2** \$2.17/ft2

**TOTAL LATERAL 1 BOTH SECTIONS** \$1,123,073.00  
**TOTAL PRICE PER SQUARE FOOT 519,280 ft2** \$2.16/ft2

**MULLIN CREEK BYPASS DITCH**

**Civil Portion:**

Excavation Dirt Work 2,913 ln. ft. \$ 60,687.00  
(SEE ATTACHED DETAIL OF SCOPE OF WORK)

**HIGH LINE NORTH COVER IMPORT**

**OPTION ONE: Excavate Nearby Hillside**

Excavation Dirt Work estimated 72,000 tons. \$ 630,400.00  
(SEE ATTACHED DETAIL OF SCOPE OF WORK)

**OPTION Two: Purchase from Nearby Gravel Pit**

Excavation Dirt Work estimated 72,000 tons. \$ 940,800.00  
(SEE ATTACHED DETAIL OF SCOPE OF WORK)

**PIPING OF LATERAL ONE EXTENSION**

**Civil Portion:**

**36" PIPE OPTION**

36" HDPE SUPPLIED AND INSTALLED 13,500 ln. ft. \$2,529,885.00  
(SEE ATTACHED DETAIL OF SCOPE OF WORK)

**42" PIPE OPTION**

42" HDPE SUPPLIED AND INSTALLED 13,500 ln. ft. \$3,190,035.00  
(SEE ATTACHED DETAIL OF SCOPE OF WORK)

**HIGH LINE NORTHROCK BLASTED STRETCH**

**Civil Portion:**

Blasting and widening Canal 1,100 ln. ft. \$ 321,890.00  
(SEE ATTACHED DETAIL OF SCOPE OF WORK)  
(To allow for a proper slope and subgrade for lining)

**MISCELLANOUS ITEMS**

**Civil Portion:**

- |   |             |
|---|-------------|
| 1. Mobilization/Demobilization Per Year<br>(SEE ATTACHED DETAIL OF SCOPE OF WORK) | \$78,390.00 |
| 2. Construction & Removal of Temporary Diversion Dams                             | \$23,000.00 |
| 3. Fencing  | \$57,480.00 |
| 4. First Year Deposit   | \$68,640.00 |

Miscellaneous items are per year for the first two years and are due as deposits prior to mobilization. Item number 4 will be credited off the first mile invoiced each year.

**Liner will be invoice upon shipment and balance is due upon arrival on site. The liner will be invoiced at 85% of installation price/ft2 upon receipt on site and the remaining balance will be invoiced upon completion of installation or in progress payments per each mobilization.**

Please call with any questions or concerns. Thank you for your business.

**GEOSYNTHETIC TERMS AND CONDITIONS:**

- Material is due upon delivery at 85% of sq. ft price. on liner and installation costs of the balance is due 15 days from completion or progress to date weekly. Credit cards are not accepted. A late charge of 1.5% per month will be accessed on delinquent invoices. A notice of the right to lien property will accompany all invoices.
- No retainage will be allowed on the invoices.

- Prices are contingent upon the customer supplied estimated quantity sq. footage to be a minimum of 7,647,255 ft<sup>2</sup> in not to exceed Three Year Period. If the square footage varies more than +/- 5% we reserve the right to re-quote the price. If the size of the job reduces after the liner is ordered by Geosynthetic Advisors, LLC Construction, Inc, Contractor, or Owner, signing below is responsible for purchasing any left-over liner □
- Price does not include bonding costs, if any.
- In the event of non-payment, the customer agrees to pay reasonable fees incurred by Geosynthetic Advisors, LLC in collection of the amount owing. Note: Special orders and liners that are pre-cut are not subject to cancellation. All material is guaranteed by the manufacturer to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from the above specifications involving extra costs will be executed only upon written orders and will become an extra charge over and above the estimate.
- Project Rescheduling: Geosynthetic Advisors, LLC will attempt to accommodate any scheduling by the Owner or General Contractor. However, there may be occasions where we cannot meet the schedule due to other previous commitments. This is especially possible in the months of November through April when the majority of our geosynthetic material installations are scheduled. Under these circumstances, Geosynthetic Advisors, LLC will mobilize as close as possible to the scheduled start date but will not be responsible for any potential costs associated with the delay.
- The Canal company shall describe the real property, and ownership thereof upon which the goods and materials shall be installed. Such a description shall be furnished before any goods and materials shall be delivered hereunder.
- A late payment nullifies any manufacturer or installer warranty.
- This price quote does not reflect “prevailing wages” (union wages). If prevailing wages and certified payrolls apply to the project, Geosynthetic Advisors, LLC reserves the right to re-quote the project to reflect the appropriate costs or if project lining as commenced prior to notification, customer/contractor will be billed for the difference in costs.

## CIVIL CONSTRUCTION TERMS AND CONDITIONS:

### Scope and terms of work:

#### High line North, Safford's Bend ,RED

Remove and replace fencing in areas where needed .Install temp fence if required to keep livestock in .  
 Remove all lava boulders from canal section and stockpile along canal bank.  
 Over excavate the entire canal where possible and stockpile for liner cover .  
 Slope correction on slopes grading to a 2to1 slope where possible .  
 Excavate the top bench ,and anchor trench.  
 Fine grade and compact needed areas in preparation for liner.  
 Support Geosynthetic Advisors in the lining proses with equipment and operators.  
 Backfill anchor trench and place over ex /imported material to cover liner area.  
 Clean up finished work area by regrading canal access roads and blending surrounding property .

#### High Line North , William's siphon, LIME GREEN

Remove and replace fencing in areas where needed .Install temp fence if required to keep livestock in .  
 Remove all lava boulders from canal section and stockpile along canal bank.  
 Over excavate the entire canal where possible and stockpile for liner cover .  
 Slope correction on slopes grading to a 2to1 slope where possible .  
 Excavate the top bench ,and anchor trench.  
 Fine grade and compact needed areas in preparation for liner.  
 Support Geosynthetic Advisors in the lining proses with equipment and operators.  
 Backfill anchor trench and place over ex /imported material to cover liner area.  
 Clean up finished work area by regrading canal access roads and blending surrounding property .

#### High Line North ,Cottonwood Canyon-Rock section, Aqua Blue

Remove and replace fencing in areas where needed .Install temp fence if required to keep livestock in .  
Over excavate the entire canal where possible and stockpile for liner cover .  
Slope correction on slopes grading to a 2to1 slope where possible .  
Excavate the top bench ,and anchor trench.  
Fine grade and compact needed areas in preparation for liner.  
Support Geosynthetic Advisors in the lining prosses with equipment and operators.  
Backfill anchor trench and place over ex /imported material to cover liner area.  
Clean up finished work area by regrading canal access roads and blending surrounding property .

#### High Line North , Kinsey Section , Pink

Remove and replace fencing in areas where needed .Install temp fence if required to keep livestock in .  
Water pumping included if needed.  
Over excavate the entire canal where possible and stockpile for liner cover .  
Slope correction on slopes grading to a 2to1 slope where possible .  
Excavate the top bench ,and anchor trench.  
Fine grade and compact needed areas in preparation for liner.  
Support Geosynthetic Advisors in the lining prosses with equipment and operators.  
Backfill anchor trench and place over ex /imported material to cover liner area.  
Clean up finished work area by regrading canal access roads and blending surrounding property .

#### High Line North ,Gravel Pit HL ,Blue

Remove and replace fencing in areas where needed .Install temp fence if required to keep livestock in .  
Over excavate the entire canal where possible and stockpile for liner cover .  
Slope correction on slopes grading to a 2to1 slope where possible .  
Excavate the top bench ,and anchor trench.  
Fine grade and compact needed areas in preparation for liner.  
Support Geosynthetic Advisors in the lining prosses with equipment and operators.  
Backfill anchor trench and place over ex /imported material to cover liner area.  
Clean up finished work area by regrading canal access roads and blending surrounding property .

#### McMullen Creek bypass ditch

Over excavate existing lateral/bypass ditch.  
Grade and dig anchor trench.  
Support the lining process with equipment and operators.  
Backfill anchor trench and liner.

#### High line North , Rock section blasting option

1000 ft of canal in the Cottonwood canyon section will be drilled and blasted to the West approximately 20 ft to allow for imported material to be added to the banks to get a line able slope and anchor trench for liner.  
All rock will be stockpiled near the canal bank.

#### High Line North , Material import details

Fill/ liner cover is expected to be used in sections where the excavated material is not suitable for cover ,Sections where rock prevents excavation of backfill material, and where material import is required for slope correction.  
Estimated 72,000 tons needed ,and included  
Option #1 excavated from nearby hill/area.  
Option #2 purchase from nearby gravel pit.  
Prices include transport to needed locations for placement.

#### High Line Lateral, section 1 RED

Remove and replace fencing in areas where needed .Install temp fence if required to keep livestock in .  
Over excavate the entire canal where possible and stockpile for liner cover .  
Slope correction on slopes grading to a 2to1 slope where possible .  
Excavate the top bench ,and anchor trench.

Fine grade and compact needed areas in preparation for liner.  
Support Geosynthetic Advisors in the lining processes with equipment and operators.  
Backfill anchor trench and place over ex /imported material to cover liner area.  
All fill extra fill needed will be transported from deep creek reservoir ex out stockpile.  
Clean up finished work area by regrading canal access roads and blending surrounding property .

#### High line Lateral, section 2 GREEN

Remove and replace fencing in areas where needed .Install temp fence if required to keep livestock in .  
Over excavate the entire canal where possible and stockpile for liner cover .  
Slope correction on slopes grading to a 2to1 slope where possible .  
Excavate the top bench ,and anchor trench.  
Fine grade and compact needed areas in preparation for liner.  
Support Geosynthetic Advisors in the lining processes with equipment and operators.  
Backfill anchor trench and place over ex /imported material to cover liner area.  
All fill extra fill needed will be transported from deep creek reservoir ex out stockpile.  
Install 100 ft of 56in reinforced concrete pipe, RCP, with “poured in place” concrete wing walls at the headwater of lateral just downstream from diversion dam.  
Clean up finished work area by regrading canal access roads and blending surrounding property .

#### Pipe section

Install 13,500 Ln Ft of HDPE pipe

Excavating existing ditch as low as rock will allow us to maintain as consistent a flowline as possible .

Pipe will be installed in as straight a section as possible to reduce fittings.

If angle fittings are needed, then we will place concrete box in said location .

Concrete boxes will be a 5ft-by-5ft square that is 6 ft tall with rubber boots to create a perfect seal. Also, all pipes will be grouted into the box to prolong the longevity of seal. All boxes will be completed with a expanded metal lid anchored to the top.

Included in the pipe install price is pipe backfill material transported from the deep creek reservoir stockpile.

There is a budget of \$120,000 included for 15,000 yards of dirt to be transported placed and compacted ,for pipe spanning if required to detour BLM property. Material will come from deep creek reservoir excavation stockpile.

#### **36 in HDPE**

**Fusion equipment and Technicians**

**Pipe handling equipment and installation including imported fill**

**Purchase and installation including rubber boots grouting and lids**

**15,000 yards of imported dirt**

#### **42 in HDPE**

**Fusion equipment and Technicians**

**Pipe handling equipment and installation including imported fill**

**Purchase and installation including rubber boots grouting and lids**

**15,000 yards of imported dirt**

#### **Notes**

All work to be completed in a workmanlike manner according to standard practice ,and work conditions

Two temporary diversion Dams are included in pricing.

All work completion timeline is weather contingent.

#### **Proposal does not include:**

No permitting required for construction is included.

No hammering or blasting if rock is encountered not mentioned specifically in the quote.

No concrete work is included.

No compaction testing included

No installation and/or maintenance of silt fence, rock socks, straw tubes, or any other SWPPP requirements are included in the proposal.

Payment schedule as follows . All invoices need to be paid within 15 days .

Mobilization/down payment invoice to be sent 15 days before mobilization date .

Invoicing will happen every 15 days after the project start date.

Civil Construction items will be invoiced by LF of canal or pipe finished or partially finished . Geomembrane items will be billed on a square foot supplied or installed. The initial cut can be invoiced 25% of LF total price .Grading and slope correction will equal 25% of LF total price. Liner install support will invoice 25% of total LF price. Liner cover and cleanup will reflect the final 25%.

Sincerely,

*Robert Annalora*

Robert Annalora

Member

Acceptance Of Proposal: The above prices, specifications and conditions are satisfactory and are hereby accepted. Geosynthetic Advisors, LLC is authorized to do the work as specified. Payment will be made as outlined.

Signature: \_\_\_\_\_

Jay Barlogi : Authorized Representative

Title: General Manager

Date: \_\_\_\_\_

Attachment B – Return Flow Network Budgetary Estimates

Return Flow Network					
28 Rubicon/ Campbell Return Flow Network	28 X \$35,000 Meters & \$30,000 Structures	28			
Totals					



Campbell Scientific Inc.  
 815 W 1800 N  
 Logan, UT 84321-1784  
 (435) 227-9000  
 www.campbellsci.com  
 FED I.D.#87-0305157

Quotation No.	CUS-Q1004126
Revision	0
Quotation Date	Jul 29, 2024
Expiry Date	Sep 27, 2024
Customer Reference	
Salesperson	Tyler Laudenklos
Page	1 of 2

## Sales Quotation

Quote To	Ship To
Twin Falls Canal Company	Twin Falls Canal Company 357 6th Ave W Twin Falls, ID 83301 United States

Contact	Louis Zamora	Payment Terms	PPD
Phone	208-733-6851	Delivery Terms	FOB-OR-NC
Email	lzamora@tfcanal.com	Delivery Mode	BESTWAY

### Notes

Line	Item	Description	Unit	Qty	Unit Price	Discount	Line Total
1	41859	Aspen10-US-ST Aspen10 Edge (IoT) Device for a Single Sensor US Aspen10-US-ST	EA	30	\$790.00	\$2,370.00	\$21,330.00
2	40636	12-Month, Prepaid, Single-Channel IoT Subscription	EA	30	\$225.00	\$0.00	\$6,750.00
3	42660	RangeVue15 Radar Water Level Sensor, Range 49.2ft (15m) w/o Cable	EA	30	\$1,975.00	\$5,925.00	\$53,325.00
4	39874	VUECBL2-L3 Aspen Conversion Cable (For SoilVUE10, HygroVUE10, ClimaVUE50, SnowVUE10, and RainVUE20) -3 w/3ft Cable per Sensor	EA	15	\$40.00	\$0.00	\$600.00
5	39875	VUECBL2-L10 Aspen Conversion Cable (For SoilVUE10, HygroVUE10, ClimaVUE50, SnowVUE10, and RainVUE20) -10 w/10ft per Sensor	EA	15	\$70.00	\$0.00	\$1,050.00
6	42460	Mounting Bracket Assembly for RangeVue	EA	30	\$65.00	\$0.00	\$1,950.00

Terms and conditions with Campbell Scientific Inc. are governed by the terms found at <https://www.campbellsci.com/terms>  
 Any alternate terms and/or conditions are declined unless agreed to, in writing, by Campbell Scientific, Inc.  
 A 3.5% Convenience Fee may be assessed to invoices paid via credit or charge card  
 \*\* GSA catalog item | Contract # GS-07F-9255S



Campbell Scientific Inc.  
815 W 1800 N  
Logan, UT 84321-1784  
(435) 227-9000  
www.campbellsci.com  
FED I.D.#87-0305157

Quotation No.	CUS-Q1004126
Revision	0
Quotation Date	Jul 29, 2024
Expiry Date	Sep 27, 2024
Customer Reference	
Salesperson	Tyler Laudenklos
Page	2 of 2

Subtotal	\$85,005.00
Taxes	\$5,100.30
Total	\$90,105.30

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Any alternate terms and/or conditions are declined unless agreed to, in writing, by Campbell Scientific, Inc.  
A 3.5% Convenience Fee may be assessed to invoices paid via credit or charge card  
\*\* GSA catalog item | Contract # GS-07F-9255S



Campbell Scientific Inc.  
 815 W 1800 N  
 Logan, UT 84321-1784  
 (435) 227-9000  
 www.campbellsci.com  
 FED I.D.#87-0305157

Quotation No.	CUS-Q1004498
Revision	0
Quotation Date	Aug 1, 2024
Expiry Date	Sep 30, 2024
Customer Reference	
Salesperson	Tyler Laudenklos
Page	1 of 1

## Sales Quotation

Quote To	Ship To
Twin Falls Canal Company	Twin Falls Canal Company 357 6th Ave W Twin Falls, ID 83301 United States

Contact	Louis Zamora	Payment Terms	PPD
Phone	208-733-6851	Delivery Terms	FOB-OR-NC
Email	lzamora@tfcanal.com	Delivery Mode	BESTWAY

### Notes

Line	Item	Description	Unit	Qty	Unit Price	Discount	Line Total
1	31932	CR1000X-ST-CC Measurement & Control Module (Operating Range -40 to +70C) ** -ST -40 to +70C -CC Campbell Calibration	EA	1	\$2,100.00	\$0.00	\$2,100.00

Subtotal	\$2,100.00
Taxes	\$126.00
<b>Total</b>	<b>\$2,226.00</b>

Terms and conditions with Campbell Scientific Inc. are governed by the terms found at <https://www.campbellsci.com/terms>  
 Any alternate terms and/or conditions are declined unless agreed to, in writing, by Campbell Scientific, Inc.  
 A 3.5% Convenience Fee may be assessed to invoices paid via credit or charge card  
 \*\* GSA catalog item | Contract # GS-07F-9255S

# Example Quote - Budgetary Estimate

**Pricing:**

Qty	Product	Product Model	Description	FY25 Unit Price (US\$)	Total (US\$)
1	SlipMeter	SMB-1200-2400-C	Rubicon SlipMeter, equipped with a 48" x 48" meter box/gate and a maximum wall mounting height of 8'. 11.25° sensor pattern. Minimum flow of 4.3 CFS, maximum flow of 101 CFS. Equipped with partial-full level sensor. Fully integrated solution.	\$33,260	\$33,260
1	Software	SiteConnect Live	SiteConnect Live Starter Kit (includes a cellular modem, antenna, cabling), as well as account and site configuration on Rubicon's cloud-based SCADA system. One-time fee.	\$1,000	\$1,000
1	Software	SiteConnect Live	SiteConnect Live, Control Site - Annual subscription fee, per site. Includes cloud hosting and cellular service.	\$500	\$500
1	Service	Supervision & Commissioning	Supervision & Commissioning Per Gate (1 gate)	\$3,300	\$3,300
<b>Total (Excluding Taxes)</b>					<b>\$38,060</b>

**SlipMeter Description:**

Each SlipMeter includes the following items:

- The SlipMeter is a combination automated undershot control gate and precision flow meter that measures fully submerged flows (and partial-full flow in partial-full models) and mounts directly to a headwall with no straight pipe requirements. It is provided as a complete turnkey installation.
- Each SlipMeter comes equipped with a separate standalone control pedestal which includes a display and keypad, solar panel power system and a 16 ft mast for mounting of communication antenna; RTUs, radio and antenna by others.
- The SlipMeter comes complete with an integrated power supply comprising a solar panel, a solar regulator, and a 12-volt deep cycling battery pack. Note, the batteries must be removed from the meter and charged if the gates are not installed within four weeks of delivery.
- The SlipMeter comes equipped with an internal and external frame c/w stainless steel anchors, epoxy capsules and polyurethane sealant.
- Standard Rubicon local controller software, including automatic local/remote flow control mode, local/remote gate position mode and local manual mode.

**SiteConnect Description:**

Rubicon's SiteConnect is a cloud-based SCADA system that gives users full remote control of their sites. Data is transmitted through cellular networks to both send commands to the sites as well as gather all data, including flows, levels, alarms etc. Included in SiteConnect:

- Full remote monitoring and control of sites. Note access can be varied depending on password for different officers of the irrigation district (full control versus monitoring only).
- Alarming functions can be sent through email or text.
- All data pertinent to each site can be viewed on the site's historian, or downloaded in .CSV format for storage or reporting.

**Note regarding SCADA / Remote Connectivity:**

Automated devices are designed to provide continuous operation without human intervention. However, remote connectivity is a feature available on all Rubicon gates and meters that enhances the manageability of the device, giving operations team 24/7 live access in order to better manage the system. As is the case in any automated system, electro-mechanical systems can be subject to upsets beyond their control that

# Example Quote - Budgetary Estimate

**Pricing:**

Qty	Product	Product Model	Description	FY25 Unit Price (US\$)	Total (US\$)
1	SlipMeter	SMB-450-450-3900-4300-C ( <b>Special-Non-Standard</b> )	Rubicon SlipMeter, equipped with an 18" x 18" meter box/gate and a maximum wall mounting height of 14'. 11.25° sensor pattern. Minimum flow of 0.6 CFS, maximum flow of 14 CFS. Equipped with partial-full level sensor. Fully integrated solution.	\$21,488	\$21,488
1	Software	SiteConnect Live	SiteConnect Live Starter Kit (includes a cellular modem, antenna, cabling), as well as account and site configuration on Rubicon's cloud-based SCADA system. One-time fee.	\$1,000	\$1,000
1	Software	SiteConnect Live	SiteConnect Live, Control Site - Annual subscription fee, per site. Includes cloud hosting and cellular service.	\$500	\$500
1	Service	Supervision & Commissioning	Supervision & Commissioning Per Gate (1 gate)	\$3,300	\$3,300
<b>Total (Excluding Taxes)</b>					<b>\$26,288</b>

**SlipMeter Description:**

Each SlipMeter includes the following items:

- The SlipMeter is a combination automated undershot control gate and precision flow meter that measures fully submerged flows (and partial-full flow in partial-full models) and mounts directly to a headwall with no straight pipe requirements. It is provided as a complete turnkey installation.
- Each SlipMeter comes equipped with a separate standalone control pedestal which includes a display and keypad, solar panel power system and a 16 ft mast for mounting of communication antenna; RTUs, radio and antenna by others.
- The SlipMeter comes complete with an integrated power supply comprising an 85W solar panel, a solar regulator, and a 12-volt deep cycling battery pack. Note, the batteries must be removed from the meter and charged if the gates are not installed within four weeks of delivery.
- The SlipMeter comes equipped with an internal and external frame c/w stainless steel anchors, epoxy capsules and polyurethane sealant.
- Standard Rubicon local controller software, including automatic local/remote flow control mode, local/remote gate position mode and local manual mode.

**SiteConnect Description:**

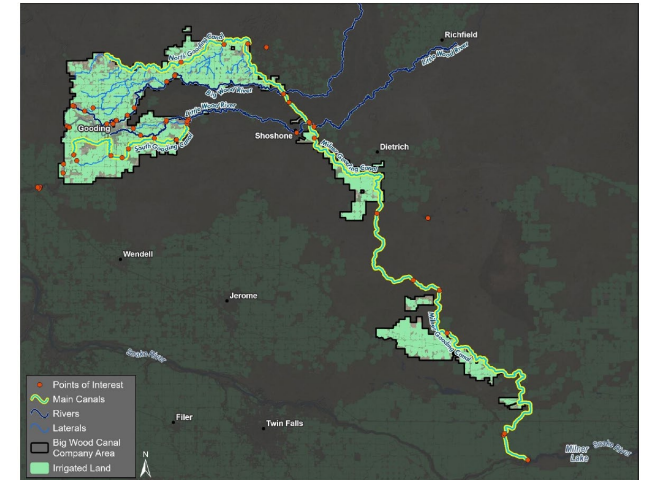
Rubicon's SiteConnect is a cloud-based SCADA system that gives users full remote control of their sites. Data is transmitted through cellular networks to both send commands to the sites as well as gather all data, including flows, levels, alarms etc. Included in SiteConnect:

- Full remote monitoring and control of sites. Note access can be varied depending on password for different officers of the irrigation district (full control versus monitoring only).
- Alarming functions can be sent through email or text.
- All data pertinent to each site can be viewed on the site's historian, or downloaded in .CSV format for storage or reporting.

**Note regarding SCADA / Remote Connectivity:**

Automated devices are designed to provide continuous operation without human intervention. However, remote connectivity is a feature available on all Rubicon gates and meters that enhances the manageability of the device, giving operations team 24/7 live access in order to better manage the system. As is the case

**American Falls Reservoir District 2 Proposal  
for an  
Engineering Efficiency Study of the Canal System  
submitted under:  
Surface Waters Efficiency Program**



**Goal:** AFRD2 proposes to study the canal system to determine possible design and operational efficiency improvements that would result in less surface water diversion demand and less water spilled back to the Snake River.

**Action:** AFRD2 would contract with an engineering firm to study the entire AFRD2 system for operational efficiency improvements that would result in water savings.

**Cost:** \$991,600

**Request:** Board Subcommittee Review, Comment and Consideration for Submission to the Water Board.