

Redoubt Restoration Bid
For
Pack Creek EWP
2024
San Juan Count
Att. Mack McDonald





PO Box 41460
Phoenix, AZ 85080
888-2-SURETY (888-278-7389)
Phone: 623-933-9334
Fax: 623-933-9376
www.performancesuretybonds.com

RE: Redoubt Restoration
Bond Capacity

April 3, 2024

To whom it may concern:

We have been asked by our client Redoubt Restoration to provide a statement of its ability to provide bid, payment and performance bonds.

We currently support Redoubt Restoration with a single bond limit of \$2,500,000.00 and an aggregate bond limit of \$5,000,000.00, through Great American Insurance Company. Great American Insurance Company is rated A+ Superior by AM Best and appears on the Department of the Treasury's List of approved Companies (circular 570).

Naturally, we reserve the right to review all requests for bonds on a case by case basis, and all bonds are subject to our normal underwriting guidelines, including but not limited to, acceptable contract terms, conditions, documentation, bond forms and verification of financing at the time of the request.

Please understand that the purpose of this letter is to advise that Redoubt Restoration qualifies to obtain bonding, but this letter is not acknowledgment or confirmation that any specific request or need for a bond has been reviewed or approved.

Should you have any specific questions regarding the bond program for Redoubt Restoration, please feel free to contact me directly.

Respectfully,

Elliot M. Storch

A Gallagher Company

Elliot M. Storch | Contract & Commercial Surety Bond Producer

Viking Bond Service, a Gallagher Company

PO Box 41460 | Phoenix, AZ 85080

O: 888.278.7389, Ext. 7254 | D: 623.322.7254

**EXHIBIT A
CM/GC PROPOSAL FORM**

CM/GC Redoubt Restoration Name: _____

(Provide the complete legal name for the CM/GC)
Address: 4791 Caddie Lane

City: Highland State: Utah Zip: 84003

List one person who San Juan County may contact concerning CM/GC's proposal.

Name David Meyer/ GM and _____ Title: _____

Telephone 801-358-0472 Number: _____

E-Mail: David@RedoubtRestoration.com

Mailing 4791 Caddie Lane Highland, Ut 84003 Address: _____

Final Proposal Cost/Pricing Structure:

Preconstruction Fee: The CM/GC agrees to perform all services during the pre-construction phase for the lump sum of (\$ See attachment).

Construction Management Fee: The CM/GC agrees to perform all services during the construction phase for the lump sum of (\$ See attachment).

Construction Supervision Cost: The CM/GC agrees to perform all supervision and support team services, not covered in the construction management fee, for the sum of (\$ See attachment).

CM/GC Change Order Markup: The CM/GC agrees not to add more than 5% to subcontractor/supplier costs for all work added to the contract by change order due to scope changes or otherwise.

Self-Performed Work Markup: The CM/GC agrees not to add more than 5% to its labor and material costs to self-performed work by the CM/GC.

Self-Performed Unit Costs (example):

See attachment

- a. Labor to install spread footings (less rebar) \$_____ per cubic yard
- b. Labor to install continuous footings (less rebar) \$_____ per cubic yard
- c. Labor to install slab on grade (less rebar) \$_____ per square foot
- d. Labor to install suspended slabs (less rebar) \$_____ per square foot

General Conditions: *(Attach itemized list with line item and total amounts where applicable)*

The CM/GC guarantees that the Project will be complete, including punch list items, within the negotiated time frame after receipt of the notice to proceed, should the CM/GC be selected to enter into a contract with the County. The CM/GC agrees to pay liquidated damages in the amount of \$1,000.00 per day for each day that the Project is not completed after the expiration of the negotiated time frame as stated in a contract between the County and the selected CM/GC.

I certify that to the best of my knowledge the information contained in this proposal is accurate and complete. I further certify that I am legally authorized by CM/GC to submit this proposal and bind CM/GC.

CM/GC:

Redoubt Restoration

By: _____

Name: _____

Print

David Meyer

Title: GM



Date: 4/8/2024

Addendum 1&2, seed mix acknowledge

Table 1

Description Bid 1	Quantity of Item	Tons of material per structure	Unit Cost	Total
Mob/demob	1		122573	122573
Care of water	1		60000	60000
3- step Grade Control	3	266	59760	179280
4- Step Grade Control	1	416	93600	93600
Low Water Crossing (prep work, rebar, labor, concrete)	1		138147	138147
Irrigation Structure (prep work, rebar, labor, concrete)	1		74550	74550
J-Hook (50 CY of boulders, with concrete grout in-between the boulders)	1	80	25070	25070
Irrigation Outlet Details	10	10	225	2250
Rock Wall	812		155	125860
Water and Power Crossing (prep work, rebar, labor, concrete)	1		49245.6	49245.6
Rock and Roll 1, built to spec, (quantity in LF)	2511		125	313875
Toe Rock Structure & Geo fabric	480		180	86400
Willow Pole Cuttings	1375		10	13750
			Total Bid	1284601
Description Bid Alt 2	Quantity of Item	Tons of material per structure	Unit Cost	Total
Mob/demob	1		122573	122573
Care of water	1		60000	60000
3- step Grade Control	3	266	59760	179280
4- Step Grade Control	1	416	93600	93600
Low Water Crossing (prep work, rebar, labor, concrete)	1		138147	138147
Irrigation Structure (prep work, rebar, labor, concrete)	1		74550	74550
J-Hook (50 CY of boulders, with concrete grout in-between the boulders)	1	80	25070	25070
Irrigation Outlet Details	10	10	225	2250
Rock Wall	812		155	125860
Water and Power Crossing (prep work, rebar, labor, concrete)	1		49245.6	49245.6
Rock and Roll , (Grading Bank with logs placed every 50 feet, similar to Stan Hollands project)	2511		35	87885
Toe Rock Structure & Geo fabric	480		180	86400
Willow Pole Cuttings	1375		10	13750
			Total Bid	1058611
Cost includes Construction consulting and planning, they're will be no addition cost on the project for meetings, emails, and phone calls. We will do whatever we can to make sure the project is a success. Call anyone of our clients and engineers and ask how well we work as a team.				
Rate Schedule for GM/GC	Hourly rate			
David Meyer/ General Manger/Estimator	\$145.00			

Description Bid 1	Quantity of Item	Tons of material per structure	Unit Cost	Total
Steve Meyer/ Project Manager	\$145.00			
Rob Meyer/ Superintendent over Materials	\$100.00			
Justin Yancey/ Superintendent over Operator	\$90.00			
Braxton Meyer/ Labor	\$45.00			
Hunter Meyer/ Labor	\$45.00			
Cost of Material	Unit Cost			
Boulder	\$115/ton			
Cost to install Cross vanes by ton	\$110/ton			
Cost of Rip Rap	\$90/ton			
Cost to install Rip Rap: Includes fabric	\$65/ton			
Cost to install Rock and Roll	\$100/LF			
Concrete Structures include Concrete, Labor, material	Lump sum			
24"irrigation included in irrigation Structure	\$210/ft			
6" pipe included in irrigation structure	\$135/ft			
24" headgate included in irrigation structure	\$3600.00			

REDOUBT RESTORATION RESUME

4791 Caddie Lane, Highland, Utah 84003

Office: (801)358-0472 Email: david@redoubtrestoration.com

David Meyer, the founder of Redoubt Restoration, possesses an extensive and distinguished track record in the management of large-scale construction projects. His formidable experience is rooted in his long-standing commitment to the family business, spanning nearly three decades. In 2001, Mr. Meyer relocated to Utah, where he embarked on a new venture in excavation alongside his brother, subsequently extending his expertise to residential development in the Summit and Wasatch counties.

In 2015, David Meyer established Redoubt Restoration, marking a strategic shift towards larger, more intricate projects. His unwavering dedication to excellence has established a legacy synonymous with dependability, encompassing projects that have left an indelible mark not only across the state of Utah but also beyond. Redoubt Restoration's work has earned commendation as a benchmark for quality in the realm of private, commercial, and municipal clientele.

For over two decades, David, in collaboration with his brothers Rob and Steve, has orchestrated and executed a spectrum of projects throughout the state, with the past 14 years dedicated exclusively to cultivating expertise in water restoration projects. Operating in a diverse range of locations, from urban centers to remote areas, their work often involves confronting challenging terrains. In some instances, projects necessitate work above rivers to install rock structures and fabric, while in others, they meticulously construct ramps down to the water for precise placement, aligning with project specifications.

Redoubt Restoration has consistently demonstrated the ability to foster symbiotic relationships within the engineering and construction industry. To see the tangible results of their exceptional craftsmanship, we invite you to visit our website at redoubtrestoration.com.

Redoubt Restoration has significantly contributed to the state of Utah's landscape, from the placement of tens of thousands of tons of boulders to the creation of extensive soil lifts and numerous rock structures. When it

comes to water and restoration projects, our team consistently strives to deliver the utmost quality in every endeavor.

At Redoubt Restoration, we hold the unwavering belief that customer satisfaction takes precedence above all else. Our commitment to going the extra mile for every project ensures a positive outcome for all. This dedication is further evidenced by our unblemished record, as we have never been embroiled in litigation or faced claims against our company. Regardless of a project's size and scope, we have consistently achieved early completion, safely and efficiently.

Our familiarity with navigating the difficulties of challenging wetland environments exemplifies our capability to fulfill your project requirements. We eagerly anticipate the opportunity to work with you to ensure the success of your project.

Licensure # 10456727-5501

E-100
B-100
S-310

Project Team

Dave Meyer: General manager/Estimator
Steve Meyer: Project Manager/Construction Manager
Rob Meyer: Superintendent over material
Justin Yancey: Superintendent over operators

References:

Engineers:

NRCS, Jason Ropper (801)527-4571 Jaon.Roper@usda.gov
River Restoration, Quinn Donnelly (503)413-0863

quinn.donnelly@riverrestoration.com

Owners:

Helper city: Lenise Peterman 801-712-7622
Town Of Carbondale: Kevin Schorzman (970)618-2545

Sub-Contractors:

Watershed Restoration Group: Brooks Priest (406)531-7186
P&D Trucking: Pedro (970)309-9465

Recent Projects

Pack Creek 2024

Start Date: March 3, 2024

Completing date: April 8, 2024

Owner: State of Utah

Contact: Daniel Luke (435)299-2637

Engineer: River Restoration Quin (970)898-9222

Contract Amount: \$645,000

Project Description:

In an effort to enhance stream crossing safety and stability, Jersey barriers were installed below the stream crossing point. These barriers are crucial for directing water flow and protecting the crossing area from potential erosion or damage caused by strong currents. Further improvements included the installation of riprap and road base materials to construct a robust stream crossing. This combination ensures a solid, stable surface for crossing while also minimizing erosion by dissipating the energy of flowing water. The project also saw the construction of thirteen three-step cross vanes. These structures are designed to control water flow, reduce erosion, and improve aquatic habitat by creating small pools and diversifying flow patterns within the stream. This innovative approach aids in the overall health and sustainability of the aquatic ecosystem. Additionally, riprap was strategically placed along the bank for added protection. This riprap acts as a barrier against erosion, safeguarding the bank from the erosive forces of flowing water and contributing to the long-term stability of the stream environment. A significant ecological enhancement was achieved by excavating a new creek bed to introduce more bends into the river. This modification aims to naturally slow down the water flow, reducing erosion and sediment transport downstream. The increased river bend also creates a variety of aquatic habitats, benefiting the biodiversity of the stream ecosystem. Together, these measures represent a comprehensive approach to stream management and restoration, focusing on enhancing structural stability, ecological health, and water flow dynamics to support both human and wildlife communities.

Jordan River Access:

Start Date: December 4, 2023

Estimated Completion date: December 15, 2023

Owner: City of Riverton

Contact: Cary Necaie (801)208-3169

Engineer: River Restoration Quin (970)898-9222

Contact Amount. \$\$366,213

Description of Project:

The project involved the strategic placement of footing boulders within the river, an essential step aimed at stabilizing the riverbed and surrounding bank areas. This measure not only enhances the structural integrity of the river environment but also serves as a natural method for controlling erosion and providing habitat spaces for aquatic life. A significant architectural feature added to the project was the construction of a large sandstone staircase leading down to the river. This staircase not only provides safe and accessible entry to the river but also integrates beautifully with the natural landscape, blending functionality with aesthetic appeal. To further ensure the stability of the riverbank and promote ecological health, coir matting and willow cuttings were installed along the banks. The coir matting offers immediate erosion control and serves as a biodegradable support structure for the riverbank's soil, while the willow cuttings, known for their rapid growth and extensive root systems, are expected to take root and provide long-term stabilization and habitat enhancement. This comprehensive approach to riverbank restoration combines structural, aesthetic, and ecological elements, contributing to the river's health and accessibility while preserving its natural beauty and function.

2023

Helper Phase 6

Start Date: January 18, 2023

Completion date: Feb. 24, 2023

Owner: City of Helper

Contact: Lenise Peterman 801-712-7622

Engineer: River Restoration Quin (970)898-9222

Contact Amount. \$1,672,042

Description of Project:

The Price River was redirected into a meticulously constructed temporary side channel. Subsequently, the team embarked on the demolition of a 12-foot concrete diversion dam. Following this, nine distinct grade control structures, each anchored with rock footings positioned 8 feet beneath the riverbed, were erected across a span exceeding 1000 feet of the river. To fortify the riverbanks, 4500 tons of rock were procured and strategically placed, complemented by the installation of coir fabric to enhance stabilization.

The primary objective of this ambitious project was to mitigate the existing 12-foot elevation drop in the river. This modification facilitates the passage of fish upstream, while simultaneously ensuring safer navigation for boaters and rafters. This endeavor underscores a commitment to environmental stewardship and recreational safety, reflecting a balanced approach to ecological preservation and human enjoyment of natural resources.

Crystal River

Start Date: Aug 1, 2023

Completion date: Sept 20, 2023/ Planting Spring 2024

Owner: Town of Carbondale

Contact: Kevin Schorzman (970)618-2545

Engineer: River Restoration Quin (970)898-9222

Contact Amount. \$1,972,501

Description of Project:

To adhere to stringent project timelines, operations were conducted amid elevated water flow conditions. This timing constraint arose primarily due to the necessity of avoiding disturbance to nesting birds, precluding project commencement before August 1st. Additionally, project activities within the river were mandated to conclude by September 30th to avoid impacting the spawning period of whitefish.

Initiating the project, cofferdams were strategically erected within the river's midst, enabling the diversion of water to facilitate construction activities on one side of the river. Following this, a substantial importation of 1500 tons of boulders was undertaken to reinforce the riverbanks.

Furthermore, 150 feet of Jersey shoring was installed within the channel to provide temporary structural support.

A noteworthy addition to the project was the construction of an outdoor classroom, ingeniously crafted from beamstone, which underscores the project's commitment to educational enrichment. The stabilization and restoration efforts continued with the installation of 1,200 linear feet of coir matting along the banks. The ecological aspect of the project was further enhanced by the planting of over 2000 various plants and the introduction of 1800 willow pole cuttings, contributing to the restoration of the natural habitat and promoting biodiversity within the river ecosystem.

Steamboat: Union Headgate

Start Date: Oct. 4, 2024

Completion date: Oct. 14, 2023

Owner: Yampa Water Conservancy District

Contact: Emily Lowell (720)201-9298

Engineer: River Restoration Quin (970)898-9222

Contact Amount. \$195,820

Description of Project:

The Yampa River underwent a significant modification involving the diversion of its flow. A key component of this project was the installation of a substantial concrete headwall, weighing approximately 13,000 pounds, coupled with a 36-inch head gate to manage water flow effectively. To further control the river's grade and stabilize the area, a rock grade control structure was implemented within the Yampa River. The project also embraced bioengineering techniques, incorporating willow pole cuttings for natural bank stabilization and protection. This method not only aids in preventing erosion but also enhances the riverine habitat, promoting ecological balance. The culmination of these efforts resulted in the successful diversion of the Yampa River, reflecting a meticulous approach to river management and environmental conservation. This endeavor demonstrates a commitment to maintaining the river's health and functionality, ensuring it continues to serve its ecological and hydrological roles effectively.

2022

Blackners Bend Phase 2

Start Date: July 14, 2022

Completion date: Aug. 1, 2022

Owner: Northern Trails Foundations

Contact: Geoff Ellis (801)395-4373

Engineer: River Restoration Alex Heller (970)947-9568

Contact Amount. \$407,021

Description of Project:

The project involved the construction of a 1-mile road base walking trail, enhancing accessibility and recreational opportunities for the surrounding community. As part of a comprehensive river management and ecological enhancement strategy, 450 tons of boulders were strategically placed within the Weber River to create a riffle. This feature is instrumental in oxygenating the water, improving habitat for aquatic life, and adding aesthetic and functional value to the river ecosystem. To address concerns of bank stability and prevent erosion, the riverbank was armored. This critical measure protects the bank from erosive forces, thereby preserving the integrity of the riverine environment. Further ecological restoration efforts included the installation of willow cuttings along the bank. These plantings not only contribute to stabilizing the bank but also enhance the natural habitat, supporting biodiversity and ecological resilience. This comprehensive approach underscores a commitment to environmental stewardship, blending infrastructure development with ecological enhancement to create a sustainable and enjoyable natural resource for the community.

Mill Creek Stan Holland Moab

Start Date: Nov. 7, 2023

Completion date: Nov. 11, 2023

Owner: Stan Holland

Contact: Stan Holland (435) 210-0817

Engineer: NRCS Jason Roper (801)-524-4571

Contact Amount. \$6,000

Description of Project:

To mitigate the issue of Mill Creek eroding its bed further, six rock and log structures, colloquially known as "rock and roll" log structures, were installed. These innovative structures are designed to dissipate energy and reduce the velocity of water flow, effectively preventing further deepening of the creek bed. Additionally, two stream crossings were constructed using riprap, a technique involving the use of large, loose stones to stabilize creek banks and beds. To ensure the longevity of these

structures and protect them from being washed away by strong currents, logs were strategically placed alongside the riprap. This not only reinforces the stability of the riprap but also integrates natural materials into the design, maintaining the ecological integrity of the area. In an effort to further enhance the habitat and support local biodiversity, collaboration was sought with Rim to Rim Restoration. This partnership focused on the installation of native plants along the creek, which play a crucial role in stabilizing the bank, filtering pollutants, and providing essential habitat for wildlife. Through these combined efforts, the project aims to preserve the natural character of Mill Creek, promoting a healthy, stable, and biodiverse ecosystem.

2021

Big Bend Pond

Start Date: Feb. 2021

Completion Date: May. 2021

Owner: West Jordan City

Contact: Isaac Astill (385)266-1204

Engineer: River Restoration Quin (970)-989-9222

Contract Amount: \$640,042

Description of Project:

The project initiated with the dewatering of the existing pond, where a substantial volume of water, approximately 4.3 million gallons, was pumped out daily to facilitate the subsequent phases of the renovation. This significant undertaking was essential to achieve the desired modifications and enhancements to the pond's structure and ecological function.

A key component of the project involved the excavation of the pond's bottom. This effort was aimed at deepening the pond, a measure that significantly improves the habitat for fish by providing them with deeper, cooler water, which is essential for their survival and growth. Such modifications not only benefit the fish population directly but also contribute to the overall ecological balance of the pond.

In addition to structural changes, the project incorporated the installation of two beaches, enhancing the recreational value of the pond and providing accessible areas for visitors to enjoy the natural setting. Furthermore, to augment the habitat for fish, log debris was strategically placed at the bottom of the pond. This addition creates complex underwater structures that are vital for fish breeding, feeding, and shelter, thereby enhancing biodiversity within the pond.

The project also focused on the aesthetic and ecological aspects of the pond's periphery by lining the edge with vegetation. This vegetation serves multiple purposes: it stabilizes the banks, reduces erosion, filters runoff water entering the pond, and provides habitat for various species, thus fostering a vibrant and diverse ecosystem.

Overall, the project's multifaceted approach aimed not only at improving the habitat for fish but also at enhancing the recreational and aesthetic value of the pond, making it a more enjoyable and sustainable feature of the local environment.

Kayak Park

Start Date: May 2021

Completion Date: Nov. 2021

Owner: Ogden City

Contact: Phil (801)540-4495

Engineer: River Restoration Quin (970)-989-9222

Contract Amount: \$1,640,042

Description of Project:

The project entailed a significant modification of the Weber River's flow, redirecting it into a side passage to facilitate extensive construction and ecological enhancement activities. Central to this effort was the installation of 4,000 tons of rock and 500 linear feet of Jersey shoring, integral for ensuring structural stability and controlling erosion along the modified riverbanks. A notable innovation within this project was the creation of surfable waves within the river, achieved through the strategic pouring of concrete. This addition not only enhances recreational opportunities but also contributes to the river's aesthetic appeal. Complementing this, a concrete access ramp was constructed to provide easy and safe access to the river, improving the overall user experience for recreational enthusiasts. The installation of an irrigation line and the planting of vegetation were critical components aimed at restoring and

enhancing the river's natural habitat. These efforts were designed to promote biodiversity and stabilize the riverbanks, contributing to the ecological health of the area. The project team navigated several challenges, including managing the implications of flash floods and mitigating risks associated with a hazardous superfund site located adjacent to the river. Despite these obstacles, successful outcomes were achieved through meticulous planning and execution. Further ecological restoration efforts included the installation of vegetation and coir matting along the riverbanks, providing essential erosion control and habitat support. Additionally, the construction of a fish passage featuring multiple drops exemplifies the project's commitment to supporting aquatic life and ensuring the ecological integrity of the river. Overall, this comprehensive project not only addressed recreational and environmental objectives but also demonstrated a resilient and adaptive approach to managing natural water resources and enhancing habitat connectivity within a complex ecological and regulatory context.

2020

Kelly Mitchell

Start Date: Oct. 23, 2020

Completion Date: Nov.3, 2020

Engineer: NRCS Jason Ropper (801)527-4571

Owner: Kelly Mitchell (801)471-6455

Contract Amount: \$100,000

Description of project:

In an innovative approach to stream restoration and water management, the project involved the installation of 40-foot cottonwood root wads, complemented by strategically placed boulders, to anchor the trees and create a natural dam structure. This technique not only leverages the inherent stability of the cottonwood's extensive root system but also promotes the establishment of a more diverse and stable aquatic habitat, enhancing the ecological integrity of the area.

Furthermore, the project saw the installation of eight cross vanes along a two-mile stretch of the creek. These structures are designed to direct water flow effectively into an irrigation ditch, ensuring efficient water transfer for agricultural and land management purposes. The cross vanes also play a crucial role in mitigating erosion, improving water quality, and

supporting the ecological balance of the creek by creating varied flow patterns that benefit aquatic life.

This project exemplifies a harmonious integration of natural materials and engineering principles to achieve sustainable water management and ecological restoration objectives, demonstrating a commitment to enhancing both the functionality and the environmental value of the creek ecosystem.

Wallsburg- Main Creek River

Start Date: May 20, 2020

Completion Date: May 28, 2020

Owner: Ashton

Contact: Jordan Armstrong (760)801-7435

Engineer: NRCS Jason Roper (801)-524-4571

Contract amount: \$55,000

Description of project:

The restoration initiative on Main Creek saw the extensive planting of over a mile of 5-gallon riparian and upland plants. This significant effort aimed to enhance the ecological diversity and stability of the creek's surrounding environment. Riparian plants, positioned along the water's edge, play a crucial role in stabilizing banks, filtering pollutants, and providing habitat for wildlife. Upland plants, situated further from the water, contribute to the overall ecological health and biodiversity of the area.

Complementing the planting of riparian and upland plants, 5,000 willow pole cuttings were strategically placed along the creek. Willow poles are known for their rapid growth and extensive root systems, making them highly effective in preventing soil erosion, enhancing bank stability, and creating a lush, natural environment along the watercourse.

This comprehensive planting strategy not only aims to restore the natural landscape but also to create a more resilient ecosystem capable of supporting a wide range of plant and animal species. The effort underscores a commitment to environmental stewardship and the restoration of Main Creek's natural beauty and ecological function.

Big Bend River

Start Date: Dec.1, 2020

Completion Date: Feb. 1,2020

Owner: West Jordan City

Contact: Isaac Astill (385)266-1204

Engineer: Eric McCulley (801)520-2505

Contract Amount: \$580,000

Description:

In a significant restoration and enhancement project along the Jordan River, 20,000 cubic yards of dirt were excavated and removed. This large-scale earthmoving operation was crucial for reshaping the riverbanks, increasing flood capacity, or preparing the land for further ecological restoration efforts. Following the excavation, 600 tons of boulders were strategically placed within the river. These boulders serve multiple purposes: they help to stabilize the riverbank, create habitats for aquatic life, and aesthetically enhance the river's natural beauty. The introduction of boulders into the river environment is a critical step towards restoring natural flow patterns and improving the river's ecological health. To further support the stabilization and revitalization of the area, 11,100 square yards of biodegradable fabric were laid down. This fabric not only prevents erosion but also encourages vegetation growth by retaining moisture and providing a stable medium for seed germination. It gradually decomposes, leaving behind a strengthened soil structure with established plant roots. The project also included the hydroseeding of 10 acres, a process that involves spraying a mixture of seeds, mulch, fertilizers, and stabilizing agents over the land. Hydroseeding is an efficient way to establish vegetation quickly over a large area, crucial for controlling erosion, improving water quality, and enhancing the aesthetic and ecological value of the landscape. This comprehensive effort along the Jordan River underscores a commitment to environmental stewardship, focusing on riverbank stabilization, habitat creation, and the overall improvement of the river's ecological function and scenic beauty.

Virgin River

Start Date: Nov.7, 2018

Completion Date: Feb. 2, 2019

Owner: Washington City

Contact: Lester Dalton (435)668-8294

Engineer: Cody Multree (801)703-8898

Contract Amount: \$406,000

Description of project:

In a significant ecological restoration effort, 68,000 cubic yards of material were excavated from the floodplain to forge a new channel. This extensive excavation was aimed at enhancing flood management, restoring natural river dynamics, and improving habitat conditions within the ecosystem. The project also tackled the removal of invasive species over a 20-acre area, specifically targeting tamarisk and Russian Olive trees. These species are known for their aggressive growth patterns, which can outcompete native vegetation, alter soil chemistry, and disrupt local water cycles. Removing these invasive trees is crucial for restoring native biodiversity and the overall health of the ecosystem. Accessing the sediment removal site posed a considerable challenge due to the steep terrain leading down to the river. This obstacle was ingeniously overcome by constructing an access ramp, which facilitated the movement of machinery and materials to and from the site. The ramp not only ensured the efficiency and safety of the operation but also minimized potential environmental disturbance during the project. Overall, these efforts reflect a comprehensive approach to riverine ecosystem restoration, focusing on enhancing flood resilience, combating invasive species, and restoring natural habitats. Such initiatives are vital for maintaining the ecological integrity and sustainability of river landscapes.

Canyonlands Field institute Moab**Start Date. Feb. 15,2019****Completion Date. Feb. 16, 2019****Owner: Karla Vander Zanden****Contact: Karla (435)259-7750****Engineer: NRCS Jason Roper (801)527-4571****Description of project:**

In a commendable act of community support and environmental stewardship, time and equipment were generously donated to repair six cross vanes that had been washed out due to spring runoff. This crucial work was performed for the benefit of the Canyonlands Field Institute, a respected organization based in Moab, dedicated to environmental education and conservation. Cross vanes are essential structures designed to control stream flow, reduce erosion, and improve aquatic habitat. Their repair is critical in maintaining the health and stability of river ecosystems, ensuring that they continue to provide valuable habitats for wildlife and recreational opportunities for the community. This donation of resources

and expertise underscores a deep commitment to supporting local environmental initiatives and the broader goal of preserving natural landscapes for future generations. It also highlights the importance of collaborative efforts in achieving conservation objectives, demonstrating how individual contributions can make a significant impact on community projects and environmental health.

Big Bend Habitat Pond

Start Date: June 12, 2019

Completion Date: Sept. 14, 2019

Owner: West Jordan City

Contact: Chuck Tarver (801)569-5062

Engineer: Eric McCulley (801)520-2505

Contract Amount: \$883,000

Description of project:

The construction of a 5-acre pond, particularly in a location where the water table was merely 2 feet below the ground surface, presented a unique set of challenges and opportunities. The project team undertook the significant task of pumping out water to manage the high water table while excavating 60,000 cubic yards of material. This extensive excavation was essential to achieve the desired depth and size of the pond, ensuring it met both aesthetic and functional requirements. Achieving a depth of 12 feet for the pond, especially while navigating the complexities presented by natural springs and the proximity of the Jordan River, is a testament to the team's expertise in water management and civil engineering. The presence of natural springs required careful consideration to maintain water quality and ecological balance within the new pond. Similarly, the proximity to the Jordan River necessitated stringent measures to prevent any negative impact on the river's flow or ecosystem. This project not only enhanced the landscape by adding a significant water feature but also demonstrated innovative solutions to groundwater and water management challenges. The new pond likely serves multiple purposes, including recreational activities, wildlife habitat, and potentially aiding in local water management strategies by acting as a natural reservoir or flood mitigation tool. Overall, the successful completion of this pond amidst environmental and logistical challenges underscores the importance of thorough planning, environmental stewardship, and engineering ingenuity in large-scale landscaping projects.

Spanish Fork

Start Date: Oct. 1, 2019

Completion Date: Oct. 29, 2019

Owner: Joe Edman ((801)885-2425

Engineer: NRCS Jason Roper (801)-524-4571

Description of project:

In a concerted effort to enhance river health and functionality, three J-hooks and two cattle crossings were installed in the Spanish Fork River. Additionally, sediment was meticulously removed from the river to improve water flow and quality. J-hooks, a form of in-stream structure designed to direct water flow and reduce erosion, play a crucial role in river management by creating deeper channels and habitats for aquatic life without significantly altering the river's course. Their strategic placement is essential for maintaining the integrity of riverbanks and enhancing aquatic ecosystems. The installation of cattle crossings represents a commitment to sustainable land and water use, allowing for the safe passage of livestock across the river while minimizing environmental impact. These crossings prevent damage to the riverbank and bed, reducing sedimentation and water pollution that can result from uncontrolled livestock access to water bodies. The removal of sediment from the Spanish Fork River addresses issues of accumulation that can affect water quality, habitat conditions, and flood risk. By extracting sediment, the project not only restores the river's natural flow but also improves its ecological health, benefiting both aquatic species and the surrounding environment. Together, these measures reflect a comprehensive approach to river management, prioritizing ecological integrity, water quality, and the mutual benefits of agricultural practices and natural resource conservation.

Spanish Fork

Start Date: Oct.1, 2019

Completion Date: Oct. 29, 2019

Owner Rex Larsen (801)360-7734

Engineer: NRCS Jason Roper (801)-524-4571

Description of project:

The project undertaken in the Spanish Fork River incorporated several key elements aimed at enhancing river health and functionality. The placement of three J-hooks was strategic, designed to improve water flow and mitigate erosion effectively. These structures are crucial in guiding the river's current in a manner that supports aquatic habitat while preserving

the riverbank. Additionally, two stream crossings were installed, facilitating safe and sustainable passage across the river. This addition not only aids in minimizing the environmental impact of foot or vehicular traffic but also ensures the longevity and stability of the crossing points. To further combat erosion and stabilize the riverbank, 25 cubic yards of rip-rap were placed within the Spanish Fork River. Rip-rap, consisting of large stones or broken concrete, acts as a durable barrier against the erosive forces of flowing water, protecting the river's edges and enhancing its structural integrity. The project also addressed the surrounding area by removing 80 trees around a drain ditch. This clearance was necessary to prevent obstruction of water flow and reduce the risk of flooding, ensuring the drain ditch could function effectively. Following the tree removal, 1600 feet of the drain ditch were cleared of sediment. This extensive cleaning effort restored proper drainage, significantly improving water management and mitigating potential flood hazards. Through these comprehensive measures, the project not only contributed to the ecological health and navigability of the Spanish Fork River but also improved the overall management and functionality of the adjacent land and water systems.

Spanish Fork

Start Date: Oct. 1, 2019

Completion Date: Oct. 29, 2019 Owner: Bill Beck

Engineer: NRCS Jason Roper (801)-524-4571

Description of project:

In a concerted effort to enhance the ecological and structural integrity of the Spanish Fork River, a comprehensive project was undertaken involving several key initiatives. A total of 500 tons of rip-rap was strategically placed along vulnerable sections of the riverbank. This substantial addition serves to fortify the banks against erosion, protect against the undercutting of the river's edges, and provide a more stable habitat for aquatic and riparian species. Furthermore, three stream crossings were installed, designed to facilitate safe and sustainable passage across the river. These crossings are crucial for minimizing the environmental footprint of traversing the river, ensuring that both wildlife and humans can navigate the area without disturbing the river's natural flow and habitat. A significant cleanup operation also saw the removal of 200 tons of concrete debris from the river. This debris, likely remnants of old structures or illegal dumping, posed a serious threat to the river's health, obstructing flow, altering habitats, and potentially causing harm to aquatic life. Its removal marks a significant step towards restoring the

river's natural state and enhancing its ecological vitality. Additionally, sediment was cleared from 1400 feet of a drain ditch adjacent to the river. This sediment removal is vital for improving water flow, reducing flood risk, and ensuring the efficient operation of the drainage system, thereby protecting both the natural and built environments from water damage. These actions combined represent a holistic approach to river restoration and management, emphasizing not only the protection of the riverbank from physical erosion but also the removal of pollutants and obstructions that degrade water quality and habitat. The project underscores a commitment to enhancing the health and functionality of the Spanish Fork River for the benefit of the ecosystem and the community it serves.

Wallsburg- Main Creek River

Start Date: Oct 1, 2019

Completion Date: Oct 29, 2020

Owner: Ashton

Contact: Jordan Armstrong (760)801-7435

Engineer: Jason Roper (801)-524-4571

Description of project:

The enhancement and restoration project on Main Creek in Wallsburg represents a significant undertaking aimed at improving water flow, habitat quality, and bank stability over a mile of the creek. The installation of six cross vanes and four J-hooks is a testament to the commitment to employing nature-based solutions for river management. Cross vanes are engineered to direct water flow towards the center of the creek, reducing bank erosion and creating diverse aquatic habitats. Similarly, J-hooks serve to redirect erosive forces away from vulnerable bank sections while also enhancing habitat complexity and stability. The ambitious creation of a new quarter-mile river channel by removing 100,000 cubic yards of material represents a major modification with the dual goals of habitat restoration and flood management. This effort not only redefined the creek's pathway but also introduced a more meandering flow, which is beneficial for sediment distribution and the creation of varied aquatic environments. Achieving this while maintaining water flow in the creek was crucial to ensure the continuous support of the creek's ecological functions and aquatic life during construction. These interventions combined reflect a comprehensive approach to stream restoration that integrates hydrological engineering with ecological enhancement. By reshaping the creek's physical structure and flow

dynamics, the project aims to foster a more resilient and biodiverse ecosystem within Main Creek. This endeavor not only benefits the local environment but also the community of Wallsburg by enhancing natural beauty, recreational opportunities, and ecological health.

Work done for Canyonland Institute, Moab, Ut



Ogden Kayak Park



Pack Creek 2024



Work on Mill Creek, Moab, Ut



Qualification of Proposed Teams and Key Personnel

General Manger/Estimator: David Meyer, the visionary founder of Redoubt Restoration in 2015, has significantly contributed to environmental restoration efforts across Utah and Colorado. His extensive collaboration with the Natural Resource Conservation Service (NRCS) has involved the implementation of cross vanes, hook structures, and soil lifts, techniques pivotal in stream restoration and erosion control throughout Utah. These efforts not only exemplify his technical expertise but also his dedication to ecological conservation.

Beyond his work with the NRCS, David has engaged with various agencies to spearhead multiple restoration projects across Utah and Colorado. His role transcends mere oversight; he actively engages with communities to develop comprehensive plans that address both environmental and developmental needs, ensuring projects align with local objectives and sustainability goals.

David's responsibilities also extend into the financial aspects of project management. He personally undertakes the estimation and bidding processes for projects, emphasizing the importance of offering competitive yet fair pricing. This approach not only demonstrates his commitment to integrity in business practices but also ensures that Redoubt Restoration remains a formidable entity in the environmental restoration industry.

Under David Meyer's leadership, Redoubt Restoration has become synonymous with quality, efficiency, and community-focused environmental stewardship. His multifaceted role in project oversight, community engagement, and financial management underscores his comprehensive approach to restoration work and his unwavering commitment to rejuvenating and preserving natural landscapes.

Project Manger:

Steve Meyer's extensive career spans three decades, marked by his adept handling of heavy equipment and a notable entrepreneurial spirit. His journey in the construction and environmental restoration industries began at a young age when, at 18, he launched a concrete company in Utah. This early venture into the business world not only showcased his ambition but also provided him with valuable experience in managing operations and navigating the challenges of the construction industry.

After dedicating four years to his concrete company, Steve returned to Alaska to contribute to his father's excavation business, which specialized in building roads and subdivisions. This phase of his career allowed him to hone his skills in heavy machinery operation and gain deeper insights into the complexities of large-scale construction projects in challenging environments.

Steve's path then led him to North Dakota, where he spent three years assisting in the reclamation of land disturbed by oilfield activities. This work, critical for mitigating the environmental impact of the oil industry, involved restoring the natural landscape and ecosystem functions of areas affected by extraction processes.

For the past 13 years, Steve has been based in Utah, engaging in various construction projects. Notably, during four of these years, he played a supervisory role in restoration projects across Utah and Colorado. This position required a blend of leadership, technical knowledge, and a commitment to environmental stewardship, as he oversaw efforts to rehabilitate natural habitats and waterways, contributing significantly to the ecological health and sustainability of these regions.

Throughout his diverse career, Steve Meyer has demonstrated a profound capability in both the technical and managerial aspects of construction and restoration projects. His experiences reflect a dedication to excellence and a deep respect for the environment, underscoring his significant contributions to the fields he's worked in.

Superintendent Over Materials:

Rob Meyer's career trajectory showcases a lifelong commitment to hands-on work in challenging environments, starting from his formative years in Alaska. Growing up, Rob was introduced to the rigors of construction and land development from a young age of 12, working alongside his father in building logging roads and subdivisions. This early exposure not only imbued him with a strong work ethic but also equipped him with valuable skills in operating heavy machinery and understanding the intricacies of road construction in rugged terrains.

Embarking on an entrepreneurial journey at the age of 28, Rob ventured into the oilfield sector by starting a company that specialized in monitoring oilfield equipment. This endeavor likely leveraged his background in machinery and construction, allowing him to apply his expertise in a different but related field. Through his company, Rob contributed to the oil industry by providing essential services that ensured the efficient and safe operation of oilfield equipment.

At 55, Rob shifted his focus towards environmental restoration, specifically in Utah, where he has dedicated the last 8 years to restoring wetlands. Bringing his hard-earned skills and work ethics to this new domain, Rob has contributed significantly to the conservation efforts in Utah. His work in

wetland restoration involves a variety of tasks, including water management, vegetation planting, and habitat creation, all aimed at revitalizing these critical ecosystems.

Rob Meyer's varied career, from constructing roads in the rugged landscapes of Alaska to enhancing the ecological integrity of wetlands in Utah, highlights his adaptability and dedication to making a positive impact on the environment through his work.

Superintendent Over Operator:

Justin Yancey boasts a comprehensive career dedicated to environmental restoration, spanning various regions in the United States, with a total of 18 years of experience. His journey in this field began with a significant tenure in North Dakota, where he spent 14 years focusing on land restoration efforts specifically targeting areas affected by pipeline installations. This work likely involved extensive soil rehabilitation, vegetation replanting, and water management strategies to mitigate the environmental impact of such infrastructures.

After his impactful contributions in North Dakota, Justin transitioned into a project management role in Arizona. Over two years, he would have overseen a diverse range of environmental projects, leveraging his extensive experience to navigate the unique challenges presented by Arizona's varied landscapes, from its arid deserts to riparian zones.

Most recently, for the past two years, Justin has been involved in wetland and river restoration projects in Utah. This role signifies a return to hands-on ecological restoration, focusing on revitalizing aquatic ecosystems, improving water quality, enhancing habitat connectivity, and increasing biodiversity within these critical habitats. Throughout his career, Justin Yancey has demonstrated a dedicated commitment to restoring and preserving natural landscapes across the United States. His diverse experience across different states and ecosystems highlights his adaptability and deep understanding of environmental restoration practices.

Management Plan Project Schedule & Risk Mitigation

Management Plan:

Understanding and Approach to the Pack Creek Project
Introduction
The Pack Creek project, a comprehensive environmental restoration and infrastructure development initiative, requires meticulous planning, a deep understanding of environmental impact, and a collaborative approach with local stakeholders. Our team has thoroughly reviewed the bid documents and plan sets, and after a detailed site walk, we have affirmed our comprehensive understanding of the work scope required.

1. Project Expertise; Our company brings a wealth of experience in executing similar environmental and infrastructure projects. We have successfully completed numerous installations involving Cross Vanes, J-Hooks, RipRap, Stream Crossings, and irrigation boxes. This diverse project portfolio demonstrates our capability and technical proficiency in handling the specific needs of the Pack Creek environment.

2. Environmental Sensitivity: Understanding the Pack Creek environment's unique characteristics and requirements is crucial for the project's success. Our team is committed to employing sustainable practices and solutions that minimize environmental impact. We recognize the importance of working harmoniously with home owners and Homeowners Associations (HOAs) to ensure that our work not only meets but exceeds environmental stewardship standards.

3. Budget Considerations and Flexibility: The project's financial constraints are acknowledged and respected. Our approach is rooted in flexibility and innovation to ensure that the project stays within the set budget. We are open to discussing and suggesting cost-saving measures without compromising the quality and integrity of the project. Our aim is to deliver value through efficient resource management and strategic planning.

Conclusion; In summary, our team's detailed project review, combined with our extensive experience in similar projects, positions us ideally to undertake the Pack Creek project. We are fully committed to working collaboratively with all stakeholders to achieve the project's

objectives while staying within budgetary limits. Our dedication to environmental sensitivity, combined with our technical expertise and budget-conscious approach, ensures that we are well-equipped to contribute positively to the Pack Creek environment and community.

Pre-construction Services:

Collaboration and CoordinationIntroductionA critical phase in the successful execution of the Pack Creek project involves conducting a thorough pre-construction meeting. This meeting serves as a foundational step for open communication and collaboration between our team, San Juan County, the Natural Resources Conservation Service (NRCS), and the Pack Creek Homeowners Association (HOA). It is a strategic move to ensure all parties are aligned with the project's scope, timeline, and objectives.

1. Meeting Participants: The pre-construction meeting will bring together key stakeholders, including representatives from San Juan County, NRCS, and the Pack Creek HOA. Our team will lead the discussion, ensuring that every participant is given the opportunity to voice their concerns, suggestions, and expectations. This inclusive approach is designed to foster a cooperative environment from the outset.

2. Agenda and Objectives:The primary agenda for the meeting includes going over the detailed work schedule, which outlines every phase of the project from initiation to completion. Understanding the timeline is crucial for all stakeholders to prepare for the impact and logistics of the construction activities. Additionally, the meeting will serve as a platform to review and address any concerns from San Juan County, NRCS, and the Pack Creek HOA. This proactive discussion aims to mitigate potential issues that could arise during the project's execution.

3. Importance of Collaboration: The significance of this pre-construction meeting cannot be overstated. It embodies our commitment to transparency, collaboration, and community involvement. By engaging with the local authorities and the community early in the process, we aim to build trust and ensure that the project benefits from collective insights and expertise. This collaborative effort is crucial for addressing environmental sensitivities, budget constraints, and community expectations effectively.

Conclusion; The upcoming pre-construction meeting is a pivotal step towards laying a solid foundation for the Pack Creek project. It symbolizes our dedication to working in harmony with San Juan County, NRCS, and the Pack Creek HOA. Through this meeting, we aim to

establish clear communication channels, align on project goals, and address any preliminary concerns. This collaborative approach is essential for the smooth execution of the project, ensuring that it is completed on schedule, within budget, and to the satisfaction of all stakeholders involved.

Project Communication Plan:

Enhancing Communication and Stakeholder Involvement in the Pack Creek Project Introduction Effective communication is paramount in the successful execution of construction projects, particularly in remote areas with limited cell phone service. Recognizing this challenge, our team has adopted Starlink Internet as a cutting-edge solution to ensure uninterrupted communication while working on the Pack Creek project site. This essay details our comprehensive communication strategy and emphasizes the crucial role of stakeholder involvement, particularly from the Natural Resources Conservation Service (NRCS), during critical phases of construction.

1. Overcoming Communication Barriers with Starlink Internet: In response to the limited cell phone service in the Pack Creek area, our team has chosen to implement Starlink Internet technology. This innovative solution provides high-speed, satellite-based internet connectivity, enabling our team to maintain effective communication with project stakeholders, regardless of the remote location. Through this technology, we will ensure that all project updates, concerns, and adjustments are promptly communicated, thereby minimizing delays and enhancing decision-making processes.

2. Proactive Communication Plan: Recognizing the importance of keeping all stakeholders informed, our communication plan includes regular updates via calls and emails. Should any concerns arise during the construction process, we are committed to promptly notifying relevant parties to discuss and resolve issues efficiently. This open line of communication is essential for maintaining transparency and fostering a collaborative project environment.

3. Engaging NRCS in Critical Project Phases: The involvement of NRCS representatives is particularly vital in certain stages of the construction process. For instance, we recommend NRCS's onsite presence during the installation of the first Cross Vane. This allows them to review and approve the method and execution, ensuring it meets all environmental and technical standards. Similarly, for any concrete structures being installed, such as inspection of rebar and pre-grade

conditions, the presence of NRCS personnel is crucial. Their expertise and oversight will guarantee that all construction activities comply with the highest standards of quality and safety.

Conclusion; Adopting Starlink Internet for communication on the Pack Creek project site represents a strategic approach to overcoming the challenges of limited cellular service, ensuring that project communication remains fluid and efficient. By establishing a proactive communication plan and involving key stakeholders like the NRCS at critical construction phases, we are committed to executing the project with the utmost efficiency, transparency, and adherence to quality standards. This strategy not only facilitates smooth project progression but also strengthens stakeholder trust and collaboration, key ingredients for the project's success.

Cost Control Plan:

Commitment to Transparency and Cost Management in the Pack Creek Project: Successful project execution hinges not only on technical expertise and thorough planning but also on transparent and effective cost management. Our team's extensive review of the plan set and familiarity with the onsite conditions of the Pack Creek project have equipped us with the confidence to maintain our cost estimates throughout the project's duration. This essay outlines our commitment to upholding project costs and the procedures we will follow should any plan modifications necessitate cost adjustments.

1. In-depth Plan Review and Cost Estimation: Through multiple reviews of the plan set and a comprehensive understanding of the work required and the onsite conditions, our team is well-prepared to execute the Pack Creek project efficiently. Our familiarity with the project's scope and environmental challenges ensures that our cost estimates are both accurate and realistic. This thorough preparation underscores our confidence in managing the project within the initially agreed-upon budget.

2. Commitment to Fixed Costs: We understand the importance of budget predictability for our partners, including San Juan County, the NRCS, and the HOA. As such, we are committed to maintaining our cost estimates throughout the project, barring any changes to the project plans.

3. Transparent Change Order Process: Despite our thorough planning, we acknowledge the possibility of unforeseen plan changes that could impact project costs. In such instances, our policy is to maintain absolute transparency with all stakeholders involved. San Juan County, the NRCS, and the HOA will be promptly notified of any cost adjustments.

Importantly, no additional work will commence until we have received written communication approving the change order. This protocol ensures that all parties are informed and in agreement with any modifications, thereby maintaining trust and avoiding any unexpected financial implications.

Conclusion: Our meticulous preparation and deep understanding of the Pack Creek project have fortified our confidence in providing a precise cost estimate that we are committed to maintaining. Our dedication to transparency, especially concerning cost management and change orders, is paramount in fostering a collaborative and trustworthy relationship with San Juan County, the NRCS, and the HOA. We believe that clear, open communication is the cornerstone of successful project execution, and we are dedicated to upholding these principles throughout the Pack Creek project.

Safety Plan:

A Daily Commitment to Teamwork and Vigilance
Introduction
At the heart of our operational philosophy for the Pack Creek project lies an unwavering commitment to safety. Recognizing that the well-being of our team and the public is paramount, we have instituted rigorous safety protocols that are reviewed and reinforced daily. This essay outlines our proactive approach to safety management, highlighting our daily meetings, equipment operation policies, and culture of teamwork.

1. Daily Safety Meetings: Each day begins with a safety meeting, a critical component of our safety management strategy. These gatherings are not mere formalities but essential forums for discussing the day's work schedule and addressing any safety concerns. By setting a tone of safety each morning, we ensure that every team member is prepared, aware of their responsibilities, and cognizant of the day's specific hazards and protocols.

2. Equipment Operation and Pedestrian Safety: A cornerstone of our safety policy is the practice of halting equipment operation whenever pedestrians are present on the project site. This rule underscores our commitment to protecting not just our team, but also any visitors or bystanders. Work does not resume until we are fully confident that the area is secure and safe to proceed. This vigilant approach to equipment operation significantly mitigates the risk of accidents and reinforces a culture of safety-first.

3. Teamwork and Safety Vigilance: The ethos of teamwork permeates every aspect of our project execution, particularly in

maintaining a safe work environment. We encourage an atmosphere where team members are proactive in identifying and addressing safety issues. This collective vigilance ensures that safety concerns are not only quickly identified but also addressed before they escalate into more serious incidents. Our belief is that safety is a collective responsibility, and by working as a team, we can achieve our goal of ensuring everyone returns home safely each day.

Conclusion: The comprehensive safety measures we have implemented for the Pack Creek project reflect our deep commitment to the well-being of our team and the public. Through daily safety meetings, strict equipment operation policies, and a culture of teamwork, we aim to maintain a project site that prioritizes safety above all. Our ultimate goal is clear: to ensure that every individual associated with the project, from team members to local community members, is protected and safe. This dedication to safety not only fosters a positive work environment but also exemplifies our commitment to operational excellence and responsibility

Quality Control:

Our approach to the Pack Creek project incorporates daily photographic evidence of work progress and a detailed material approval process. This essay outlines the importance of these practices and how they contribute to the project's success, ensuring work is performed correctly and materials meet both our standards and those of relevant authorities.

1. Daily Photographic Documentation Taking daily photographs of the construction site serves multiple critical functions. First, it provides a visual record of the project's progress, offering a clear, day-by-day account of the construction activities. This documentation is invaluable for verifying that work is being conducted according to the project plans and specifications. Furthermore, it acts as a protective measure against claims of work defaults, offering tangible evidence to support the quality and accuracy of the construction efforts.

2. Material Approval Process Before any material is delivered to the site, we compile and send out a list for approval to relevant stakeholders, including the County and the project engineer. This step ensures that every component used in the construction process is not only of high quality but also suitable for the specific requirements of the Pack Creek project. It reflects our commitment to transparency and collaboration with all project partners, ensuring that everyone is satisfied on the project.

Change Control Plan:

Change orders will be written and approved before any work is started.

Self- Performing Plan:

We plan on performing all the work in-house. We will have Geneva Pipe build the irrigation box to help on cost.

Project Closeout Plan :

Final Walkthrough and Warranty Policy:

Ensuring Quality and Accountability in the Pack Creek

Project Introduction: The culmination of the Pack Creek project involves not just the completion of construction activities but also a comprehensive strategy to ensure the work's longevity and quality. A crucial aspect of this strategy includes conducting a final walkthrough with all stakeholders and providing a warranty for the work performed. This essay delineates the importance of these steps in the project's completion phase, illustrating our commitment to excellence and responsiveness to any potential concerns.

1. The Final Walkthrough: As part of our completion protocol, we mandate a final walkthrough of the project with all stakeholders. This collaborative review serves multiple purposes: it allows stakeholders to assess the work firsthand, ensures that the project meets or exceeds the agreed-upon standards, and identifies any lingering issues that need resolution. By engaging all stakeholders in this process, we foster transparency and collective satisfaction with the project outcomes. Should any aspects of the work require attention, our team commits to addressing these promptly, demonstrating our dedication to delivering a project that all parties can be proud of.

2. Warranty and Post-Completion Support: We stand behind our work with a one-year warranty against defects, signifying our confidence in the quality of our construction practices and materials. This warranty covers any issues arising under normal conditions and use, underscoring our commitment to rectify any defects that may surface post-completion. It is important to note, however, that if the work performed adheres to the designed plan but fails due to a natural disaster or unforeseen extreme conditions, this scenario necessitates a collaborative discussion with stakeholders. The aim is to determine the most feasible and equitable approach to repairs, ensuring that decisions are made with transparency, understanding the unique circumstances that caused the failure.

Conclusion: Implementing a final walkthrough with stakeholders and establishing a warranty policy are integral to our project management approach for the Pack Creek project. These practices embody our commitment to quality, accountability, and stakeholder satisfaction. By ensuring that all work is thoroughly reviewed and backed by a guarantee, we not only affirm the integrity of our construction but also reinforce the trust placed in us by all project participants. Moving forward, our focus remains on delivering projects that are not only successful in their immediate outcomes but also sustainable and resilient over time

Project Schedule:

Project Schedule and Plan to Complete Work

1. **April 8, 2024:** Bids Due
2. **April 16, 2024:** Notice of Award
3. **April 16-Oct 1, 2023:** Submit material list, Performance and Payment bond, Permits from county, SWPP paperwork, Review Plans with NRCS and County, HOA meeting to review construction plan and schedule, Personal introduce company to home owners that are directly effect from construction and Call in Blue Stakes
4. **Sept 1-Oct 2, 2024:** Mobilize equipment, office trailer, work trailers to site, Materials start to be delivered. Harvest trees for Rock and Roll.
5. **Sept 15-30:** Install Rock and roll Timbers
6. **Oct. 2, 2024:** Install culvert for temporary access for homeowners on the west side of low water crossing. This will be located next to the Water and Power structure.
7. **Sept.30- Oct 11, 2024:**Build a coffer dam by the Irrigation structure and Low water crossing. Install 6" pump for dewatering work site. Prep Low water crossing and install road Base. Place rebar on slops of Low Crossing and pour concrete. Place rebar on low crossing main path. Pour concrete on Low crossing.
8. **Oct. 7-30, 2024:** Install 4 step Cross vane, Install J-Hook by Irrigation Structure, Install Diversion Box and 24" Line. Install 3 Step rock vane,
9. **Nov. 4-27,2024:** Install Rock berm by diversion, pull out temporary Crossing, pour concrete over Water and Power. Clean up, final walk through. Demobilize out.

Risk Mitigation:

Understanding the critical timing and environmental challenges of this project, we recognize the urgency imposed by the upcoming monsoon season, which typically brings the risk of flash flooding starting in mid-June. This natural phenomenon heightens the importance of completing the irrigation system in a timely manner, ensuring that farmers have the necessary water supply for their crucial growing season. Additionally, the project takes into account the need to protect existing utilities from potential damage and to implement measures that prevent further erosion of the creek, particularly in anticipation of the intensified water flow during monsoons.

Recognizing the importance of water management for the success of this endeavor, we are committed to implementing strategies that safeguard the construction process—especially during the pouring of concrete—against water-related disruptions. This aspect is critical to maintaining the integrity and timeline of the project.

We also acknowledge the Homeowners Association's (HOA) concerns regarding the quality and appropriateness of the work being conducted. With years of experience in managing and executing similar projects, we are confident in our ability to meet and exceed the expectations for quality, adhering to best practices and the highest standards of construction and environmental management.

Lastly, we are acutely aware of the budgetary constraints and the imperative to deliver the project within the agreed financial parameters. Our experience equips us with the expertise to navigate the complexities of project management, ensuring cost-effectiveness without compromising on quality or environmental safety.

In summary, our approach is holistic, taking into consideration the timing, environmental sensitivities, water management, quality assurance, and budgetary discipline, all of which are paramount for the successful completion of this project.