



## BOARD OF TRUSTEES PUBLIC MEETING

Meeting date: January 4, 2023  
Time: 6 p.m.  
Location: 533 E. Waterworks Dr., St. George, UT 84770  
Participants: Board members including Ed Bowler, Kress Staheli, Chris Hart, Victor Iverson, and Adam Bowler. Michelle Randall & Kevin Tervort were not present. District staff including Zach Renstrom, general manager; Mindy Mees, secretary; Jodi Richins, general counsel; Brie Thompson, associate general manager; Corey Cram, associate general manager. Other meeting attendees are noted on the attached sign-in sheet.

### Open and Public Meeting Act Training

Mindy Mees secretary to the board presented a PowerPoint on Open and Public Meeting Act. The training reviewed: notices for meetings, emergency meetings, open meetings, closed meetings, electronic meetings, public comments, and enforcement requirements.

### 2023 Board Meeting Schedule

There is a scheduling conflict with the board meetings on September 6, 2023, and December 15, 2023. The dates have been changed to September 11<sup>th</sup> and December 22<sup>nd</sup>, 2023.

### Consider Approval of p-card for new employee, Jeffrey Wood

New district employee Jeffrey Wood is working at the water treatment plant and will need a P-card to make purchases.

*Victor Iverson made a motion to approve a P-card for new employee Jeffrey Wood, the motion was seconded by Kress Staheli, and all voted aye.*

**Discuss funding requests from Leeds Domestic Water Association and Pine Valley Mountain Farms Water Company**

Zach reported he has discussed with the large water districts about funding for small water companies, and none of them give money to other water companies, and they do not give funding to municipalities that do not receive direct water from their organization. Through discussion with the districts, he has learned that the State has a revolving water fund. This fund will help small water companies get funding. This program was made available to help small or private water companies.

Michelle DePrizio, the board president for Pine Valley Mountain Farms Water Company, would like to discuss additional information with the board. They have received \$630,000.00 from the state revolving fund; there are requirements for receiving the money. They also have \$15,000.00 in repairs that need to be done. They are in a crunch situation and seeking all options. They are also looking into a forgivable loan. They are problem-solving as best as they can.

Comment from William Lane: he ran Mountain Springs Water Company until he retired. They just had to increase their rates. Last year their residents paid to WCWCD \$63,435.00 in property tax.

Mayor Hart wants a policy or procedure in place, so there is a better understanding of how to help small water companies.

The board asked that Zach do more research and come back for further discussion.

**Consider Approving Updated Bid for the Leeds Pipeline Replacement Project**

For the pipeline project that goes through Leeds, the vendor Mountainland Supply was awarded the project but was unable to meet the time requirement, so in fairness, we put the bid out again. Mountainland Supply came back again with the lowest bid and will be able to meet time requirements. There was a supply issue they were dealing with. They will be able to have the supplies by the end of June. The district's portion is \$3,878,607.31.

***Adam Bowler made a motion to approve the bid amount of \$ 3,878,607.31 for pipeline replacement, the motion was seconded by Chris Hart, and all voted aye.***

**Consider Dry Wash Engineering Proposal Fee Adjustment for Alpha Engineering**

They did their initial drilling and found that there were some soils that were questionable for liquefaction. Liquefaction takes place when you get saturated soils, and they lose their competency and then lose all structure which can cause catastrophic failures. They need to do some additional geotechnical characterization drilling and some penetrometer testing. The amount of \$162,515.00 is to further characterize the site. We need to modify the contract with Alpha Engineering to increase the contract from \$765,589.00 to \$928,104.00.

***Chris Hart made a motion to approve the increased amount for the dry wash reservoir design to \$928,104.00, the motion was seconded by Victor Iverson, and all voted aye.***

**Consider Approval of an Agreement for Red Cliffs/Warner Valley Land Exchange Permitting Services**

This agreement is for Red Cliffs/Warner Valley Land Exchange Permit, there is a process to facilitate the exchange. There are two scopes of work on this. The first one is the process that includes the need for documents, public processes, biological consultation, and biological assessment. The other scope of work is for the cultural, consultation, and treatment plan. Transcon Environmental has already done some work on the project both through the district and the county. The amount of the contract is \$522,325.50.

***Victor Iverson made a motion to authorize the contract with Transcon Environmental for the work, the motion was seconded by Adam Bowler, and all voted aye.***

**Consider Approval of Contract Amendment for Water Reuse Feasibility Study**

The original contract that went to the board was for developing a water reuse feasibility study under Reclamation Title 16 water reuse program. We have since learned of a new program from the Bureau of Reclamation; it is a large-scale recycling program and offers significantly more funding. We could get up to \$120 million, however with more funding comes a much more expensive feasibility study, and that is what this contract amendment is for. The contract amendment is to add an additional \$340,455.00 to the contract that was originally for \$176,000.00.

*Kress Staheli made a motion to approve the contract amendment for the water reuse feasible study as included in the packet, the motion was seconded by Chris Hart to include the \$340,455.00, and all voted aye.*

**Consider Approval of a Water Transportation Agreement with Virgin**

There are property owners located on the east side of Virgin that are not in the city and they need water because their current water source is contaminated. The district delivers Virgin its water, and Virgin has agreed for the district to use its pipes to transport water to this area. There is no cost to the district. Virgin is in the process of looking at its master plan. They are not quite ready to annex in, that's the reason for the transportation agreement.

*Chris Hart made a motion to approve the Water Transportation Agreement with Virgin, the motion was seconded by Victor Iverson, and all voted aye.*

**Consider Approval of the Memorandum of Understanding for the Pocketville Road**

The town of Virgin is looking to put a cul de sac on Pocketville Road to help control traffic going up Kolob Road. The district owns both sides of the roadway. The memorandum of understanding is saying the district is ok with this. They will have to come back with a road dedication to make this occur.

*Chris Hart made a motion to approve the Memorandum of Understanding for the Pocketville Road, the motion was seconded by Adam Bowler, and all voted aye.*

***Project status reports***

- ***Ash Creek*** WW Clyde has finished their two contracts. We now have Harvard and Rees doing work, they are crossing SR17 right at the Anderson junction under the highway and slip line with the big HP pipeline that's going to carry the water all the way from Ash Creek reservoir or tributaries to the new Toquer reservoir. They will be moving northward along the pipeline alignment and tying in with the work that Clyde did above on the reservoir.
- ***Toquer Reservoir*** Dam design committee will be coming here on January 24<sup>th</sup> to look at the site and review the conditions. We are finalizing and that's moving forward. We are finalizing about 90%

design for looking at the pipeline segment that will go up through the ash creek canyon. We will finalize the redesign and go out for bid in the next month and a half.

- ***Cottam Tank*** all the walls are poured, the scaffolding is inside, and they are putting up all the supports so they can begin pouring the roof. It will be poured in a checkerboard pattern so there are no adjacent pieces.
- ***Quail Creek Water Treatment Plant*** working on the design for the initial 10-million-gallon water tank and that's going to be done and tied together with the plans for the expansion of the water treatment plant. We have received three conceptual designs, written plans, and verbal presentations, and staff will be reviewing them. We will put together our concept for the best design and then go out to the first statement of qualifications.

#### ***Manager's report***

##### ***a. Reminder regarding Conflict-of-Interest Disclosure forms***

Zach notified the board members that if anything has changed on their conflict of interest disclosure form, they need to fill out a new one.

Zach also reported that the Legislation session is going to start soon, and one out of five bills will be dealing with water. Zach will spend some time up there this year to watch those bills and keep the board informed of what's going on. Also, the district has been meeting with the cities to talk about making some amendments to the regional water supply agreement.

The entire state of Utah is doing very well with all the rain and snow we have been receiving. We are 173% of the average for today, and we're only about 60% of the average for the entire year. We are filling up our reservoirs.

Zach also reported Virgin City is growing rapidly, they have their city council meeting tomorrow and believe they will make a formal request to the district to join the Regional Water Supply Agreement.

Consider approval of November 15, 2022, & December 7, 2022, board meeting minutes.

*Kress Staheli made a motion to approve November 15, 2022, and December 7, 2022, minutes, the motion was seconded by Chris Hart, and all voted aye.*



Secretary



# Open and Public Meetings Act

*Utah Code Annotated § 52-4-101 et seq.*

# Notice: In General

- 24 hours
- Agenda, date, time and place of meeting:
  - Agenda must be reasonably specific about topics to be considered
  - May only take final action in an open meeting where topic is listed on agenda and included in the advance public notice
- Principal office of the public body
- Utah Public Notice Website
- Newspaper
  - Fulfilled if newspaper/subscribes to the notices on the Utah Public Notice Website (U.C.A. § 63A-16-601(4)(d))
- Post notice of annual meeting schedule as provided in the notice section (date, time, and place)

Utah Code Ann. § 52-4-202



# Notice: Emergencies

- Emergency Meeting:
  - Best notice practicable: time, place and topics of meeting
- May only be held if:
  - Attempt to notify all members of public body and majority of members approve the meeting

Utah Code Ann. § 52-4-202



# Open Meeting

- Convening of a public body
- Quorum present (simple majority)
- In person or electronically
- To discuss, receive comments from the public, or act upon a matter over which the public body or specific body has jurisdiction or advisory power



# Open Meeting

- Does not mean . . . chance gathering or social gathering.
- Does include work meetings/workshops and executive sessions

Utah Code Ann. §§ 52-4-103(6); 52-4-201(2)



# Open Meeting

## Minutes:

- Date, time, place of meeting;
- Names of members present and absent;
- Substance of all matters proposed, discussed or decided;
- Record of each vote taken by individual;
- Names of persons who provide public comment/testimony and substance thereof;
- Other information that is a record of the proceeding that a member requests entered

U.C.A. § 52-4-203(2)



# OPEN MEETING

## **Updates to Minute Requirements**

- Board must require an individual presenting or providing electronic information in the meeting to provide, at the time of the meeting, a copy to the body for inclusion in the public record.
- Within 3 business days after approving written minutes, either the minutes and any public materials distributed at the meeting, or a link to these items as posted on the district's website, must be posted on the state public notice website. (Continue to make available at public body's primary office as well.)

U.C.A. § 52-4-203(4)(d)&(g)



# Open Meeting

## **Recording: (U.C.A. § 52-4-203(3))**

- complete and unedited from beginning to adjournment
- labeled/identified with date, time, place of meeting



# Closed Meeting

- **Individual:** discussion of the character, professional competence, or physical or mental health of an individual;
- **Collective Bargaining**
- **Litigation:** strategy sessions to discuss pending or reasonably imminent litigation;



# Closed Meeting

- **Procurement:** evaluation committee, protest officer, procurement appeals panel; discussing information that may not be disclosed pursuant to procurement code
- **Real Property Purchase, Exchange, Lease, Sale** if public discussion of the transaction would disclose value or prevent completing the transaction on best possible terms
  - for sale, must also previously post notice of sale and the terms of sale must be disclosed before they are approved
- **Security Deployment:** personnel, devices or systems
- **Criminal Misconduct:** investigative proceedings regarding allegations of criminal misconduct

U.C.A. §52-4-205



# Closed Meeting

## Updates to Closed Meeting Purposes

- **Colorado River Authority of Utah Meeting** (may be closed if):
  - Purposes is to discuss interstate claim to the use of water in Colorado River; and
  - Failing to Close meeting would:
    - Reveal contents of a protected record;
    - Reveal legal strategy relating to state claim in river;
    - Harm ability of the authority or river commissioner to negotiate the best terms regarding to use of water in river; or
    - Give any advantage to another state or the federal government in negotiations regarding use of water in river.

U.C.A. 52-4-205(2)(f)



# Closed Meeting

- Quorum
- Open meeting properly noticed
- Two-thirds of members present vote to close
- Publicly announce in open meeting and include in minutes:
  - Reason(s) for closed meeting
  - Location of closed meeting
  - Vote, by name, of each member either for or against closing the meeting

Utah Code Ann. § 52-4-204(4)



# Closed Meeting

- Each matter discussed in the closed meeting must be a matter for which a meeting may be closed
- An ordinance, resolution, rule, regulation, contract, or appointment may not be approved at a closed meeting.

Utah Code Ann. § 52-4-204(2)–(3)



# Closed Meeting

## **Updates to Closed Meeting Requirements**

- No vote may be taken in a closed meeting (except a vote on motion to end the closed portion of the meeting)
- A motion to end the closed portion may be approved by a majority of the members present.

U.C.A. §52-4-204(3)(b)



# Closed Meeting

- Except in certain specified instances:
  - Closed portion must be recorded
  - Complete and unedited
  - Written minutes may be kept
- Recording and any minutes must include:
  - Date, time, and place of the meeting
  - Names of members present and absent; and
  - Names of all others present except where the disclosure would infringe on the confidentiality necessary to fulfill the original purpose of closing the meeting.

Utah Code Ann. § 52-4-206(1)–(3)



# Closed Meeting

- If exclusively for discussing **security deployment or individual**:
  - Person presiding signs sworn statement affirming sole purpose for closing the meeting was for such, and
  - No recording or minutes are kept

Utah Code Ann. § 52-4-206(6)



# Electronic Meeting

- To hold an electronic meeting, board must adopt a resolution governing electronic meetings (see Admin Policy 7.9.4)
- Post notice as normally required plus provide notice of electronic meeting to board members at least 24 hours before meeting and a description of how board members will connect
- Must provide an anchor location for the public (except under some circumstances) and may provide an electronic means for public to attend
- Except for a unanimous vote, all votes must be taken by roll call

U.C.A. §52-4-207



# Electronic Meeting

## Exception to Anchor Location Requirement

- The electronic meeting may be held without an anchor location if:
  - The board chair determines that conducting the meeting with an anchor location presents a substantial risk to health or safety of those who are/would be present; or
  - The normal meeting location has been ordered closed to the public for health or safety reasons.
  - The public body provides a means for members of the public to attend electronically.
- The determination expires 30 days after the date it is made.

U.C.A. §52-4-207



# Electronic Meeting

## Exception to Anchor Location Requirement (cont'd)

- If the chair determination or closure order is made before the meeting, the public notice must include a statement describing the chair's determination; a summary of the facts upon which the determination is based; and information about how the public may attend electronically;
- If the chair determination is made during the electronic meeting, the chair must announce it during the meeting and state a summary of facts upon which it is made.

U.C.A. §52-4-207



# Public Comment

- Not required or prohibited by OPMA
  - Exception: Required where statute requires a public hearing (limited cases)
- May be limited by the public body
- If a “person willfully disrupts the meeting to the extent that orderly conduct is seriously compromised,” the person may be removed. (U.C.A. § 52-4-301)



# Public Comment

- At the discretion of the presiding member, a topic raised by the public may be discussed during an open meeting, even if not included in the agenda or advance public notice.
- However, a public body may not take final action on a topic in an open meeting unless the topic is:
  - Listed under an agenda item, and
  - Included with the advance public notice

Utah Code Ann. § 52-4-202(6)



# Enforcement

- Actions voidable by court
- Suits to compel compliance, enjoin violations
- Attorney fees awarded to successful plaintiff
- Public disclosure of closed meeting content
- Class B Misdemeanor of knowing or intentional violation of closed meeting provisions

U.C.A. §52-4-301 et seq.





## BOARD OF TRUSTEES 2023 SCHEDULE

### Board Meetings

All board meetings are scheduled on Wednesday at 6 p.m. unless otherwise noted.

|            |   |  |
|------------|---|--|
| January 4  | July 10 (Monday)  | November 1                                       |
| February 1 | August 7 (Monday)   | December 6                                       |
| March 1    | September 6   | December 15***<br>(noon lunch mtg. if<br>needed) |
| April 5    | October 4 ** (field trip<br>3 pm, public hearing 6<br>pm) |  |
| May 3      |   |  |
| June 7     |   |  |

\* Work meeting scheduled to start at 3 p.m. followed by a 6 p.m. meeting

\*\* Board facility tour to start at 3 p.m. followed by public hearing/board meeting at 6 pm

\*\*\* Noon lunch meeting, if needed

| Property Acreage | 2022 Conservancy Tax |
|------------------|----------------------|
| 2.2              | 154.22               |
| 1.25             | 173.62               |
| 2.06             | 231.49               |
| 2.06             | 54.83                |
| 2.073            | 117.11               |
| 2.18             | 113.61               |
| 2                | 119.44               |
| 10               | 174.31               |
| 2.42             | 155                  |
| 2.29             | 136.83               |
| 4.28             | 347.11               |
| 1.26             | 162.82               |
| 41.36            | 136.08               |
| 1                | 72.65                |
| 2.19             | 160.15               |
| 1.43             | 222.27               |

Total: \$2351.54 \*

\*Note: Sample represents 25% of total water users (62)

Average 2022 Total:  $2351.54 \times 4 = \$10126.16$

Average Annual Total (adjusted down by 25% to reflect tax increases over 12 years) = \$7594.62

Average Total WCWCD taxes paid over 12 years:  $7594.62 \times 12 = \$91,135.44$

Good Morning Brie,

I would like to provide some additional information for the Board's consideration as they review Pine Valley Mountain Farms' request for funding. Our efforts made in the past 18 months to bring fiscal accountability and proactive budget and operations management to our water system have been significant and for the most part quite successful. Below is a brief list of those efforts since the new Board of Trustees assumed management of the Company. All of this is being done in an effort to address long-postponed repairs and upgrades to our system and recoup our cooperative members' funds lost due to mismanagement over the past several years.

1. To reduce administration and management costs, all of the Board Trustees and other community members in management positions of the Company (i.e. water operator, billing specialist, cross connection administrator, back up water operator) are working without any form of fiscal compensation.
2. We are currently working to significantly reduce our repair costs by having them done "in-house" by residents in our water community who have long-term experience in main and service line repair work.
3. Since I met with the Conservancy Board earlier this year, the Company received approval for a \$700,000 DDW forgivable loan (i.e. grant) to address a much needed tank refurbish, replace meters installed in 1996 with upgraded digital wi-fi based meters, replace of 1200-foot portion of our water line containing numerous leaky joints, and install a solar-based pump on one of our wells, which we anticipate will significantly reduce our utility bills, thereby increasing our future repair/maintenance and capital improvement funds. The Company was required to pitch in 10% (\$70,000) to obtain the forgivable loan, which has tied up a fair portion of our available cash. But we feel that this was a very worthwhile investment given the amount of the forgivable loan. I recently discussed with DDW's finance department the option of using some of the DDW loan to assist in the repair or smaller line replacements needed to remedy the current serious leaks on other parts of our system. This funding can only be used for larger improvement projects, so it cannot be used for smaller repairs and line replacements.
4. We have initiated action to obtain compensation of a portion of the funds lost during the previous Board's tenure. However, we don't anticipate seeing results in this endeavor for quite some time.

As you can see, PVMF Water Company is not looking for a handout. Rather, we are requesting a much-needed return on investment of our taxes paid to the Conservancy District as part of an overall effort to remedy a conservation-specific leak issue that is urgent enough to warrant immediate attention and funding.

Hopefully this additional information provides further context to our funding request. I am happy to answer any additional questions the Board may have.

Appreciatively,  
Michelle DePrizio, President  
Board of Trustees  
PVMF Water Company

**PINE VALLEY MOUNTAIN FARMS WATER COMPANY**  
**100 E. WELLS FARGO ROAD**  
**BROOKSIDE, UT 84782**  
**(801) 556-6402**

Washington County Water Conservancy District Board  
533 E. Waterworks Drive  
St. George, UT 84770

December 16, 2022

The Board of Trustees for Pine Valley Mountain Farms (PVMF) Water Company is respectfully reapproaching the WCWCD Board Members with a request for funding to repair significant leaks to our aging distribution system.

We are submitting our repeated request for funding on the following grounds:

1. There is precedent for WCWCD providing funding to small water systems for source development and water conservation. Veyo Culinary was provided \$500,000 to help improve a deteriorating and leaky distribution system, and PVMF was provided \$40,000 to build our current pumphouse when we had to drill a new well in 2010.
2. Based on a survey of 25% of our customers, our water community pays on average \$10,126 in annual taxes to the Conservancy District for which we receive no direct benefit from the County's source development (i.e. our source is a private well) or water conservation incentives. Direct assistance in the form of funding to conserve water through the remedy of water leaks, which is commensurate to the amount of taxes our water community has paid over the past 12 years, is reasonable and warranted (see attached document: "Average WCWCD Taxes Paid by PVMF Water Users: 2010 to 2022").
3. WCWSD just introduced a generous rebate offer to some County residents who are willing to replace their grass with low to no water landscaping. Providing funding to our water community to remedy water loss via leaks on an aging water system is equally warranted, as much of our water loss is being taken up by the surrounding natural vegetation rather than returning to the ground source.
4. Our need for immediate relief by means of rapid repair and smaller line replacements to remedy significant water loss is urgent and our current budget cannot adequately address the repairs needed on the system. We are literally hemorrhaging water and money.

As an example, our November 2021 water audit indicated 723,758 gallons of metered water use, and 489,364 gallons of unaccounted for water. This represents a 28% loss of pumped water. Our November 2022 water audit showed 597,945 gallons of metered water use and a whopping 706,780 gallons of unaccounted for water (58% water loss). On a 62-user water system, this is a phenomenal amount of water to be losing to water leaks. It is also costing the Company in unnecessary utility expenses (i.e., our pumping costs have increased year-round and have more than doubled during the winter months).

Additionally, while the Water Company is doing its best to repair the most pressing leaks as they arise, our small budget is unable to keep up with the inflation-increased cost of the additional urgent repairs/replacements to our distribution system.

Based on reasons listed above, we are hoping that the Conservancy Board will strongly consider providing up front funding for the urgent repairs/improvements to our water lines. We are prepared to provide a detailed inventory of the known leaks on our system and the estimated cost to repair them upon request from the Conservancy District.

We appreciate the Board's consideration of our renewed request for funding directly related to water conservation measures.

Respectfully,

Board of Trustees

PVMF Water Company



## Procurement Memo

**To** Zachary Renstrom, General Manager

**From** Whit Bundy, Staff Engineer

**Date** January 3, 2023

**Subject** Procurement of Materials for the Leeds Pipeline Replacement Project

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**Type of Procurement:** Invitation for Bids for Product

**Item Description:** Roughly 22,000 feet of 24" Class 350 Ductile Iron Pipe with accompanying valves, air vac assemblies and other fittings. In addition, 6,500 feet of 10" Ductile Iron pipe was bid in the same bid schedule for Leeds Domestic Water Users Association for a total of \$488,755.15.

**Reason for Procurement:** The Operations Department of the Washington County Water Conservancy District (district) needs to procure this product because the existing HDPE pipeline through Leeds has failed and is not able to be used. This new pipe will be used to replace the existing pipe. This project was rebid because Mountainland Supply Company was not able to meet the requirements of the bid they submitted.

**Review of Bidders:** Mountainland Supply Company submitted the lowest responsive bid of \$4,367,382.15. Other bids received are described in the attached bid tabulation.

**Purchase Amount:** \$3,878,607.31 (Total Bid-LDWA portion)

**Contract Type(s):** fixed price;

**Accounting Code:** 20-5410-742

Approved:

A handwritten signature in black ink, appearing to read "Zachary Renstrom".

Zachary Renstrom, General Manager

WCWCD

Leeds Waterline Replacement - Waterline Materials

Bid Opening Date:

January 3rd, 2023 @ 10:00 am



## BID TABULATION

| ITEM NO.              | ITEM DESCRIPTION                         | QTY   | UNIT  | MOUNTAINLAND         |                     | FERGUSON             |                     |
|-----------------------|--|-------|-------|----------------------|---------------------|----------------------|---------------------|
|                       |  |       |       | UNIT COST            | AMOUNT              | UNIT COST            | AMOUNT              |
| <b>BID SCHEDULE A</b> |  |       |       |                      |                     |                      |                     |
| 1                     | 24" DIP PRESSURE CLASS 350               | 16170 | LF \$ | 145.48 \$            | 2,352,411.60 \$     | 147.17 \$            | 2,379,738.90        |
| 2                     | 24" DIP PRESSURE CLASS 350 RESTRAINED    | 6490  | LF \$ | 180.69 \$            | 1,172,678.10 \$     | 208.21 \$            | 1,351,282.90        |
| 3                     | 6" DIP PRESSURE CLASS 350 RESTRAINED     | 330   | LF \$ | 38.73 \$             | 12,780.90 \$        | 27.79 \$             | 9,170.70            |
| 4                     | 8" PVC C-900 DR 18                       | 100   | LF \$ | 23.85 \$             | 2,385.00 \$         | 24.00 \$             | 2,400.00            |
| 5                     | 24" FL BUTTERFLY VALVE                   | 11    | EA \$ | 12,141.23 \$         | 133,553.53 \$       | 24,288.00 \$         | 267,168.00          |
| 6                     | 8" FLXMJ GATE VALVE                      | 4     | EA \$ | 1,752.37 \$          | 7,009.48 \$         | 1,762.09 \$          | 7,048.36            |
| 7                     | 6" FL GATE VALVE                         | 1     | EA \$ | 1,126.47 \$          | 1,126.47 \$         | 1,127.83 \$          | 1,127.83            |
| 8                     | 6" MJ GATE VALVE                         | 3     | EA \$ | 1,165.15 \$          | 3,495.45 \$         | 1,170.97 \$          | 3,512.91            |
| 9                     | 6" FL BUTTERFLY VALVE                    | 5     | EA \$ | 2,429.36 \$          | 12,146.80 \$        | 3,058.85 \$          | 15,294.25           |
| 10                    | 6" COMBINATION AIR VALVE                 | 5     | EA \$ | 2,588.24 \$          | 12,941.20 \$        | 17,658.85 \$         | 88,294.25           |
| 11                    | 2" COMBINATION AIR VALVE                 | 8     | EA \$ | 1,035.29 \$          | 8,282.32 \$         | 990.00 \$            | 7,920.00            |
| 12                    | FIRE HYDRANT ASSEMBLY                    | 3     | EA \$ | 4,692.06 \$          | 14,076.18 \$        | 8,408.56 \$          | 25,225.68           |
| 13                    | 24" MJ 90° BEND                          | 2     | EA \$ | 3,522.20 \$          | 7,044.40 \$         | 4,160.82 \$          | 8,321.64            |
| 14                    | 24" MJ 45° BEND                          | 4     | EA \$ | 2,508.43 \$          | 10,033.72 \$        | 3,309.97 \$          | 13,239.88           |
| 15                    | 24" MJ 22.5° BEND                        | 2     | EA \$ | 2,402.44 \$          | 4,804.88 \$         | 3,181.27 \$          | 6,362.54            |
| 16                    | 6" MJ 90° BEND                           | 2     | EA \$ | 223.47 \$            | 446.94 \$           | 265.09 \$            | 532.18              |
| 17                    | 24" FL TEE                               | 2     | EA \$ | 4,251.67 \$          | 8,503.34 \$         | 15,200.00 \$         | 30,400.00           |
| 18                    | 24" MJ X 6" FL TEE                       | 17    | EA \$ | 2,747.70 \$          | 46,710.90 \$        | 6,199.77 \$          | 105,396.09          |
| 19                    | 24" X 8" FL TEE                          | 4     | EA \$ | 3,314.78 \$          | 13,259.12 \$        | 12,500.00 \$         | 50,000.00           |
| 20                    | 24" MJ X 8" FL TEE                       | 1     | EA \$ | 3,011.61 \$          | 3,011.61 \$         | 7,152.12 \$          | 7,152.12            |
| 21                    | 24" X 14" MJ REDUCER                     | 1     | EA \$ | 2,020.61 \$          | 2,020.61 \$         | 2,435.46 \$          | 2,435.46            |
| 22                    | 14" FLXMJ ADAPTER                        | 1     | EA \$ | 757.08 \$            | 757.08 \$           | 966.50 \$            | 966.50              |
| 23                    | 24" FLXMJ ADAPTER                        | 19    | EA \$ | 1,994.52 \$          | 37,895.88 \$        | 5,804.16 \$          | 110,279.04          |
| 24                    | 24" MJ TO 6" FL REDUCER                  | 2     | EA \$ | 4,418.96 \$          | 8,837.92 \$         | 5,303.89 \$          | 10,607.78           |
| 25                    | 24" BLIND FLANGE                         | 2     | EA \$ | 833.34 \$            | 1,666.68 \$         | 5,788.00 \$          | 11,576.00           |
| 26                    | 6" BLIND FLANGE W/ 2" THREADED TAP       | 8     | EA \$ | 90.90 \$             | 727.20 \$           | 187.31 \$            | 1,498.48            |
|                       |  |       |       | <b>SUBTOTAL A \$</b> | <b>3,878,607.31</b> | <b>SUBTOTAL A \$</b> | <b>4,516,851.49</b> |
| <b>BID SCHEDULE B</b> |  |       |       |                      |                     |                      |                     |
| 1                     | 10" PVC C-900 DR 18                      | 6500  | LF \$ | 34.47 \$             | 224,055.00 \$       | 33.50 \$             | 217,750.00          |
| 2                     | 10" DIP PRESSURE CLASS 250               | 85    | LF \$ | 47.78 \$             | 4,061.30 \$         | 49.46 \$             | 4,204.10            |
| 3                     | 8" DIP PRESSURE CLASS 250                | 40    | LF \$ | 33.15 \$             | 1,326.00 \$         | 35.87 \$             | 1,434.80            |
| 4                     | 6" DIP PRESSURE CLASS 250                | 170   | LF \$ | 23.90 \$             | 4,063.00 \$         | 25.00 \$             | 4,250.00            |
| 5                     | 6" PVC C-900 DR 18                       | 240   | LF \$ | 14.11 \$             | 3,386.40 \$         | 14.00 \$             | 3,360.00            |
| 6                     | 10" FLANGE GATE VALVE (RATED AT 250 PSI) | 10    | EA \$ | 2,853.17 \$          | 28,531.70 \$        | 4,030.76 \$          | 40,307.60           |
| 7                     | 6" FLANGE TEE                            | 3     | EA \$ | 548.44 \$            | 1,645.32 \$         | 641.25 \$            | 1,923.75            |
| 8                     | 10" FLANGE TEE                           | 9     | EA \$ | 1,683.31 \$          | 16,769.79 \$        | 1,848.60 \$          | 16,637.40           |
| 9                     | 8" FLANGE 90° BEND                       | 4     | EA \$ | 550.06 \$            | 2,200.24 \$         | 697.30 \$            | 2,789.20            |
| 10                    | 10" FLANGE 45 BEND                       | 9     | EA \$ | 828.75 \$            | 7,458.75 \$         | 1,098.00 \$          | 9,882.00            |
| 11                    | 10" TO 6" FLANGE REDUCER                 | 7     | EA \$ | 592.31 \$            | 4,146.17 \$         | 836.10 \$            | 5,852.70            |
| 12                    | 10" TO 8" FLANGE REDUCER                 | 4     | EA \$ | 730.44 \$            | 2,921.76 \$         | 989.10 \$            | 3,956.40            |
| 13                    | 10" FLANGE CROSS                         | 2     | EA \$ | 2,094.63 \$          | 4,189.26 \$         | 2,449.10 \$          | 4,898.20            |
| 14                    | 6" MJ TEE                                | 4     | EA \$ | 450.23 \$            | 1,800.92 \$         | 504.59 \$            | 2,018.36            |
| 15                    | 10" MJ TEE                               | 2     | EA \$ | 998.55 \$            | 1,997.10 \$         | 1,163.81 \$          | 2,327.62            |
| 16                    | 6" MJ 90° BEND                           | 5     | EA \$ | 273.23 \$            | 1,366.15 \$         | 343.89 \$            | 1,719.45            |
| 17                    | 6" MJ 45° BEND                           | 27    | EA \$ | 243.79 \$            | 6,582.33 \$         | 312.39 \$            | 8,434.53            |
| 18                    | 10" MJ 45° BEND                          | 2     | EA \$ | 534.20 \$            | 1,068.40 \$         | 635.18 \$            | 1,270.36            |
| 19                    | 10" TO 6" MJ REDUCER                     | 2     | EA \$ | 381.00 \$            | 762.00 \$           | 465.23 \$            | 930.46              |
| 20                    | 6" FLXMJ GATE VALVE (RATED AT 350 PSI)   | 18    | EA \$ | 1,153.29 \$          | 20,759.22 \$        | 1,665.46 \$          | 29,978.28           |
| 21                    | 8" FLXMJ GATE VALVE (RATED AT 250 PSI)   | 8     | EA \$ | 1,763.68 \$          | 14,109.44 \$        | 2,535.14 \$          | 20,281.12           |
| 22                    | 10" FLXMJ GATE VALVE (RATED AT 350 PSI)  | 13    | EA \$ | 2,817.15 \$          | 36,622.95 \$        | 4,058.64 \$          | 52,762.32           |
| 23                    | 6" CAP                                   | 8     | EA \$ | 155.68 \$            | 1,245.44 \$         | 174.20 \$            | 1,393.60            |
| 24                    | 6" PLUG                                  | 8     | EA \$ | 130.38 \$            | 1,043.04 \$         | 229.62 \$            | 1,836.96            |
| 25                    | 10" CAP                                  | 5     | EA \$ | 279.29 \$            | 1,390.45 \$         | 372.94 \$            | 1,864.70            |
| 26                    | 10" PLUG                                 | 2     | EA \$ | 230.32 \$            | 460.64 \$           | 430.70 \$            | 861.40              |
| 27                    | 10" X 8" FLANGE TEE                      | 7     | EA \$ | 1,469.00 \$          | 10,283.00 \$        | 1,627.20 \$          | 11,390.40           |
| 28                    | 10" X 6" MJ TEE                          | 8     | EA \$ | 768.30 \$            | 6,306.40 \$         | 914.67 \$            | 7,317.36            |
| 29                    | 10" FL TO 6" MJ REDUCER                  | 2     | EA \$ | 849.28 \$            | 1,698.56 \$         | 1,034.60 \$          | 2,069.20            |
| 30                    | 8" FL TO 6" MJ REDUCER                   | 4     | EA \$ | 808.65 \$            | 3,234.60 \$         | 878.90 \$            | 2,715.60            |
| 31                    | 10" FL TO 8" MJ REDUCER                  | 2     | EA \$ | 816.34 \$            | 1,632.68 \$         | 1,077.60 \$          | 2,155.20            |
| 32                    | 6" COUPLING                              | 11    | EA \$ | 286.97 \$            | 3,156.67 \$         | 322.29 \$            | 3,545.19            |
| 33                    | 8" COUPLING                              | 4     | EA \$ | 358.53 \$            | 1,434.12 \$         | 427.20 \$            | 1,708.80            |
| 34                    | 10" COUPLING                             | 1     | EA \$ | 537.56 \$            | 537.56 \$           | 638.77 \$            | 638.77              |
| 35                    | 6" FLANGED COUPLING ADAPTER              | 18    | EA \$ | 796.60 \$            | 14,338.80 \$        | 339.60 \$            | 6,112.80            |
| 36                    | 8" FLANGED COUPLING ADAPTER              | 4     | EA \$ | 922.65 \$            | 3,690.60 \$         | 444.70 \$            | 1,778.80            |
| 37                    | 10" FLANGED COUPLING ADAPTER             | 15    | EA \$ | 1,554.41 \$          | 23,316.15 \$        | 783.34 \$            | 11,750.10           |
| 38                    | 10" JOINT RESTRAINTS                     | 140   | EA \$ | 161.66 \$            | 22,632.40 \$        | 175.00 \$            | 24,500.00           |
| 39                    | 6" MJ RESTRAINT                          | 10    | EA \$ | 86.90 \$             | 869.00 \$           | 84.00 \$             | 840.00              |
| 40                    | 8" MJ RESTRAINT                          | 4     | EA \$ | 104.30 \$            | 417.20 \$           | 113.00 \$            | 452.00              |
| 41                    | 10" MJ RESTRAINT                         | 8     | EA \$ | 157.33 \$            | 1,258.64 \$         | 170.00 \$            | 1,360.00            |
|                       |  |       |       | <b>SUBTOTAL B \$</b> | <b>488,775.15</b>   | <b>SUBTOTAL B \$</b> | <b>521,259.53</b>   |
|                       |  |       |       | <b>TOTAL \$</b>      | <b>4,367,382.46</b> | <b>TOTAL \$</b>      | <b>5,038,211.02</b> |

Amounts in **RED** were corrected based on calculation errors. Note all unit prices are assumed to be correct as described in the bid schedule instructions.



## Memo

**To** WCWCD Board

**From** Randy Johnson, Project Manager

**Date** January 3<sup>rd</sup>, 2022

**SUBJECT** Dry Wash Reservoir Engineering Fee Increase Approval

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Alpha Engineering is requesting that the Design fee for the Dry Wash Reservoir and Dam be increased by \$162,515.00 from \$765,589.00 to \$928,104.00 to accommodate additional investigations, testing, and drilling that were performed by their subcontractor RB&G during their geotechnical investigation of the dam site. These additional borings and sub-surface investigations were necessary to acquire adequate field data for the dam design.

**Recommendation:**

It is recommended that the board approve the request to increase the engineering fee as proposed.

December 21, 2022

Washington County Water Conservancy District  
 c/o Mr. Randy Johnson  
 533 East Waterworks Drive  
 St. George, Utah 84770

**Re: Dry Wash Reservoir Additional Services**

Dear Randy:

As our geotechnical investigation has proceeded on the Dry Wash Reservoir site, it has become necessary for RB&G to complete additional subsurface investigations based on the soil conditions encountered as they proceeded with the planned investigations. The original contract estimated 9 borings for a total depth of 450 feet. To date they have completed 13 additional borings totaling 1,021 feet in depth. RB&G Engineering has provided the following summary of subsurface investigations completed since June 2022 and the additional borings that were required with an explanation as to why they are necessary:

| Boring  | Depth (ft) | Description  |
|---------|------------|--|
| 22-02   | 68         | These borings were within the planned investigation scope  |
| 22-02A  | 25         |  |
| 22-03   | 52         |  |
| 22-03A  | 30         |  |
| 22-04   | 63         |  |
| 22-04A  | 25.5       |  |
| 22-05   | 103.5      |  |
| 22-05A  | 15.5       |  |
| 22-06   | 64         |  |
| 22-09   | 92.5       | Drilled deeper than planned to investigate potential for reservoir seepage in the soft mudstone formation  |
| 22-10   | 93         |  |
| 22-10A  | 30         | Borings added to verify foundation conditions at left abutment since characteristics in 22-09 were significantly different than characteristics in Boring 03-3. Boring 10 was an angled cored boring drilled to investigate bedrock properties. Boring 10A was drilled vertically to investigate overburden soil properties. |
| 22-301  | 20         | Within planned investigation scope   |
| 22-301A | 24.5       | Added to determine suitable location for the outlet because bedrock in 22-301 was deeper than assumed  |
| 22-302  | 25.5       | Within planned investigation scope   |
| 22-303  | 21.5       |  |
| 22-303A | 21         | Added to determine suitable location for the outlet because bedrock in 22-303 was deeper than assumed  |
| 22-601  | 90         |  |
| 22-602  | 80         |  |
| 22-603  | 25         |  |
| 22-604  | 25         |  |
| 22-605  | 26.5       |  |

1,021 ft

In addition to the borings which have been completed since June, eight Cone Penetrometer Test (CPT) holes have been completed. These CPTs were performed to investigate the liquefaction potential of the existing alluvial deposits within Dry Wash. The alluvial deposits were dense at the location of Boring 03-1, which was drilled during the 2003 feasibility study. Loose overburden soils were encountered in Borings 22-02 and 22-03 which required further investigation of liquefaction potential.

To date, the cost of the foundation investigation work performed is \$240,323.00, which is \$141,672 greater than the amount estimated in the project proposal. Additional borings are planned along the alignments of the reservoir shoreline dikes which have been planned in coordination with WCWCD and the current property owner. We estimate that the additional planned investigations will cost about \$20,000.

We currently estimate that the total cost for final design subsurface investigations will exceed the amount estimated during preparation of the original contract proposal by \$162,515.00.

We have added a line item for this additional work as Supplemental Foundation Investigation to our billing. The additional scope of work outlined above would increase the design fee from \$765,589.00 to \$928,104.00

We appreciate the opportunity to work with you and look forward to our continued relationship during this project. If this contract amendment proposal is acceptable, please incorporate it into the contract for this project. Attached is our current billing for this project incorporating the additional costs outlined above for your review and approval. Please let us know if you have any questions regarding any of the additional scope and associated costs.

Sincerely,



Glen E. Carnahan, P.E.  
ALPHA ENGINEERING COMPANY



43 South 100 East, Suite 100 • St George, Utah 84770  
T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

December 21, 2022  
Project No: 019-206  
Invoice No: 35976

Randy Johnson  
Washington Co. Water Conservancy Dist.  
533 E. Waterworks Drive  
St. George, UT 84770

Project 019-206 WCWCD - Dry Wash Reservoir

**Professional Services from November 1, 2022 to November 30, 2022**

| Billing Phase                         | Fee               | Percent Complete | Earned                    | Previous Fee Billing | Current Fee Billing |
|---------------------------------------|-------------------|------------------|---------------------------|----------------------|---------------------|
| Alternate Site Analysis &             | 0.00              | 0.00             | 0.00                      | 0.00                 | 0.00                |
| ...Property Negotiations              | 51,298.00         | 100.00           | 51,298.00                 | 51,298.00            | 0.00                |
| Biological Assessment                 | 24,650.00         | 100.00           | 24,650.00                 | 24,650.00            | 0.00                |
| Topographic & Right of Way Survey     | 17,112.00         | 90.00            | 15,400.80                 | 15,400.80            | 0.00                |
| Legal Descriptions for Easements &    | 0.00              | 0.00             | 0.00                      | 0.00                 | 0.00                |
| ...Rights-of-Way                      | 10,438.00         | 85.00            | 8,872.30                  | 8,872.30             | 0.00                |
| Hydrology & Hydraulic Design          | 37,776.00         | 40.00            | 15,110.40                 | 15,110.40            | 0.00                |
| Preliminary Design                    | 76,243.00         | 70.00            | 53,370.10                 | 53,370.10            | 0.00                |
| 404 Permit                            | 7,626.00          | 0.00             | 0.00                      | 0.00                 | 0.00                |
| Outlet Work & Spillway Design         | 55,846.00         | 40.00            | 22,338.40                 | 22,338.40            | 0.00                |
| Additional Foundation Investigation   | 98,651.00         | 85.00            | 83,853.35                 | 83,853.35            | 0.00                |
| Supplemental Foundation Investigation | 162,515.00        | 87.1747          | 141,672.00                | 0.00                 | 141,672.00          |
| Borrow Investigation                  | 49,232.00         | 80.00            | 39,385.60                 | 39,385.60            | 0.00                |
| Final Stability, Seepage &            | 0.00              | 0.00             | 0.00                      | 0.00                 | 0.00                |
| ...Sediment Analysis                  | 47,225.00         | 20.00            | 9,445.00                  | 9,445.00             | 0.00                |
| Final Embankment Design               | 39,556.00         | 20.00            | 7,911.20                  | 7,911.20             | 0.00                |
| Final Design Report                   | 46,026.00         | 0.00             | 0.00                      | 0.00                 | 0.00                |
| Construction Plans & Specifications   | 138,512.00        | 0.00             | 0.00                      | 0.00                 | 0.00                |
| Agency Review                         | 17,336.00         | 0.00             | 0.00                      | 0.00                 | 0.00                |
| Make Revisions/Additions              | 14,616.00         | 0.00             | 0.00                      | 0.00                 | 0.00                |
| Assemble Bid Package                  | 33,446.00         | 0.00             | 0.00                      | 0.00                 | 0.00                |
| <b>Total Fee</b>                      | <b>928,104.00</b> |                  | <b>473,307.15</b>         | <b>331,635.15</b>    | <b>141,672.00</b>   |
|                                       |                   | <b>Total Fee</b> |                           |                      | <b>141,672.00</b>   |
|                                       |                   |                  | <b>Total this Invoice</b> |                      | <b>\$141,672.00</b> |

**AGREEMENT**  
*(Red Cliffs/Warner Valley Land Exchange Permitting Services)*

This Agreement is made and entered into effective on the \_\_\_\_ day of January, 2023, by and between the Washington County Water Conservancy District, a political subdivision of the state of Utah (the "District"), and Transcon Environmental, Inc., a Corporation ("Contractor").

**RECITALS**

WHEREAS, the District desires to engage a consultant to perform permitting services for the Red Cliffs/Warner Valley Land Exchange project;

WHEREAS, the Contractor has submitted a proposal and has been selected to perform consulting services to the District as more fully set forth in its Proposal, a copy of which is attached hereto and incorporated herein as Exhibit A.

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, the parties agree as follows:

**SPECIFIC TERMS**

**1. Scope of Work.**

The Contractor will perform the services described on Exhibit A in consultation with the District and others whom the District may identify from time to time.

**2. Payment.**

The District shall pay the Contractor in accordance with the Cost Estimate, included in Exhibit A, pursuant to monthly invoices submitted by the Contractor. The Contractor will only invoice actual accrued costs. The District will remit payment to the Contractor within 30 days of invoice receipt, subject to the following:

**a. Retainage.**

From the total amount ascertainable as payable, the District may retain an amount equal to ten per cent (10%) until final completion of the work. However, after 50% of the work has been completed, the District may make any remaining payments in full if the District determines that the work is progressing satisfactorily. Also, when the work is substantially complete, the District may release any or all of the amounts retained.

**b. Limits of payment.**

Under no circumstances shall the District make a payment to the Contractor that exceeds the amounts specified in the cost estimate, for any specified line item or cumulatively, without an approved addendum to the scope of work and cost estimate.

**c. Withholding payment.**

The District may, at its option, withhold final payment under this Agreement until receipt of all final reports and deliverables. All retained payments shall become due and payable upon satisfactory completion of the work under this Agreement and any subcontracts hereto.

## **GENERAL TERMS**

1. **Form of Deliverables.** All deliverables shall be produced in both hard copy and electronic formats, including portable document format (.pdf) copies and, where applicable to the nature of the deliverable, AutoCad (.dwg) and ArcGIS shapefiles or geodatabase in the projected coordinate system of NAD 1983 State Plane Utah South FIPS 4303 Feet.

2. **Compliance with other contracts.** Contractor shall comply with all applicable terms and conditions of contracts, cooperative agreements, grants or other funding agreements entered into by the District with other agencies which provide funding for payment for services rendered under this Agreement.

3. **Availability of Funds.** Implementation of this Agreement shall be subject to the availability of appropriated funds. The District may cancel or suspend this Agreement without penalty if adequate funds are not appropriated or received.

4. **Independent Contractor.** Both parties hereto agree that the Contractor shall be deemed an independent contractor in the performance of this Agreement, and shall obtain and maintain all licenses, permits, and authority necessary to do business and render services under this Agreement and shall comply with all laws regarding unemployment insurance, disability insurance, and workmen's compensation. As such, the Contractor shall have no authorization, express or implied, to bind the District to any agreement, settlement, liability, or understanding whatsoever, and agrees not to perform any acts as agent for the District, except as expressly set forth herein. Compensation stated herein shall be the total amount payable to the Contractor by the District. The Contractor shall be responsible for the payment of all income tax and social security amounts due as a result of payments received for the District for these contract services. Persons employed by the District and acting under the direction of the District shall not be deemed to be employees or agents of the Contractor.

5. **Subcontracts.** Unless otherwise provided by the terms of this Agreement, Contractor shall not subcontract with any other party for the furnishing of any of the work or services contracted for herein without the prior written approval of the District. When authority to subcontract is granted, Contractor agrees to use written subcontracts drawn in conformity with Federal and State laws which are appropriate to the activity covered by the subcontract, which shall include all of the general provisions set forth herein and which shall apply with equal force to the subcontract as if the Subcontractor were the Contractor referred to herein. Contractor is responsible for contract performance whether or not subcontractors are used. Contractor shall submit the name of each subcontractor which Contractor intends to hire and, if requested, a copy of each subcontract to the District for approval at least twenty (20) days prior to its effective date.

6. **Ownership of Information.** Title to all reports, information, data, computer data elements, and software prepared by the Contractor in performance of this Agreement shall vest in the District unless otherwise provided for in this Agreement. The Contractor may publish and/or use the reports, information, data, computer data elements and software prepared in the performance of the agreement for its non-commercial, educational and research purposes only, provided, however, that no such information shall be disclosed without the prior consent of the District, which shall not be unreasonably withheld. Subject to applicable State and Federal laws, regulations, and

contract requirements, the District shall have full and complete rights to reproduce, duplicate, disclose, and otherwise use all such information.

7. Confidentiality of Records. The Contractor shall establish, maintain, and practice procedures and controls that are acceptable to the District for the purpose of assuring that no information contained in the Contractor's records or obtained from the District or others in the course of carrying out its functions under this Agreement shall be used or disclosed by it, its agents, officers, or employees, except as is essential to the performance of duties under this Agreement. Persons requesting such information from the Contractor shall be referred to the District for access to records in compliance with the Utah Government Records and Management Act. If the performance of duties under this Agreement requires the Contractor to disclose information other than as is set forth in this section, prior to doing so, Contractor shall apply to the District for written permission to make such disclosure.

8. Record Keeping, Audits, and Inspections. The Contractor and any Subcontractors shall maintain financial and operation records in sufficient detail to document all transactions relating to the disbursement of contract funds and shall make available for audit and inspection all such records relating to contract services, requirements, and expenditures until all audits initiated by State and Federal auditors are completed, for a period of five (5) years from the date of termination of this Agreement or for such period as is required by any other paragraph of this Agreement, whichever is longer. Records which relate to disputes, litigation, or the settlement of claims arising out of the performance of this Agreement, or to cost and expenses of this Agreement as to which exception has been taken by the District, shall be retained by the Contractor until disposition has been made of such disputes, litigation, claims, or exceptions.

9. Sales Tax Exemption. The District's sales and use tax exemption number is 12562246-002-STC. The tangible personal property or services being purchased are being paid from public funds and used in the exercise of the District's essential functions. If the items being purchased are construction materials, they will be converted into real property by employees of this or another government entity, unless otherwise expressly stated in the Agreement.

10. Payment. Under no circumstances shall the District authorize payment to the Contractor that exceeds an amount specified in this Agreement without an approved amendment to the Agreement. The District may, at its option, withhold final payment under the Agreement until receipt of all final reports and deliverables.

11. Recitals. The Recitals contained in this Agreement are incorporated into the Agreement.

12. Paragraph Headings. The paragraph and subparagraph headings used herein are for convenience only and shall not be considered in the interpretation of this Agreement.

13. Number and Gender. The singular shall be interpreted as the plural, and vice versa, if such treatment is necessary to interpret this Agreement in accord with the manifest intention of the parties hereto. Likewise, if either the feminine, masculine or neuter gender should be one of the other genders, it shall be so treated.

14. Authorization. Each individual executing this Agreement does represent and warrant to each other so signing (and each other entity for which another person may be signing) that he or she has been duly authorized to sign this Agreement in the capacity and for the entities set forth where he or she so signs.

15. Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

16. Utah Law to Govern. This Agreement has been drawn and executed in the State of Utah. All questions concerning the meaning, intention and enforcement of any of its terms or its validity shall be determined in accordance with the laws of the State of Utah. In any dispute jurisdiction and venue shall be in Utah.

17. Inducement. The making and execution of this Agreement has not been induced by any representation, statement, warranty, or agreement other than those herein expressed.

18. Integration. All agreements heretofore made in the negotiation and preparation of this Agreement between the parties hereto are superseded by and merged into this Agreement, no statement or representation not embodied herein shall have any binding effect upon the parties hereto and there shall be no amendments hereto except those in writing signed by the parties hereto.

19. Time is of the Essence. Time is of the essence with regard to this Agreement as to each covenant, term, condition, representation, warranty and provision hereof.

20. Necessary Acts and Cooperation. The parties hereby agree to do any act or thing and to execute any and all instruments required by this Agreement and which are necessary and proper to make effective the provisions of this Agreement.

21. Partial validity. If any portion of this Agreement shall be held invalid or inoperative by a court of competent jurisdiction, then insofar as is reasonable and possible:

- a. The remainder of this Agreement shall be considered valid and operative, and,
- b. Effect shall be given to the intent manifested by the portion held invalid or inoperative.

22. Ambiguities. This Agreement has been negotiated and drafted by all parties hereto and the general rule of contract construction that 'ambiguities shall be construed against the draftsman' shall have no application to this Agreement.

23. No Third-Party Beneficiaries. This Agreement is not intended to be a third-party beneficiary contract for the benefit of any third parties, including but not limited to any customer of any party, and no third party shall have any right of subrogation or cause of action against any party for any breach or default by any party hereunder. In addition, no third parties shall have any rights hereunder that would, in any way, restrict the parties' right to modify or renew this Agreement at any time or in any manner. Nothing in this Agreement is intended to relieve or discharge the obligation or liability of any third persons to any party to this Agreement.

24. Laws and Regulations. Any and all actions performed pursuant to this Agreement will comply fully with all applicable Federal and State laws and regulations.

25. Equal Opportunity Clause. The Contractor agrees to abide by applicable provisions of state and federal law, including executive orders, that prohibit discrimination against any employee or applicant for employment or any applicant or recipient of services, on the basis of race, religion, color, national origin, sex, age or disabilities. Also, the Contractor agrees to abide by any law or executive order that prohibits sexual harassment in the work place.

26. Binding on successors in interest. This Agreement shall bind the parties hereto and their successors, heirs, assigns and representatives, and the obligations of the parties shall not merge with any document of title.

27. Assignment. No rights or obligations of the Contractor under this Agreement shall be assigned without the prior written consent of the District. This Agreement is voidable and subject to immediate cancellation by the District upon the Contractor's becoming insolvent, or filing proceedings in bankruptcy or reorganization under Title XI, United States Code.

28. Indemnity Clause. Contractor agrees to unconditionally and absolutely defend, indemnify, save harmless, and release the District and all its officers, agents, volunteers, and employees from and against any and all loss, injury, damages, debts, obligations, claims, demands, encumbrances, deficiencies, costs, penalties, suits, proceedings, expenses whether accrued, absolute, contingent or otherwise, including, without limitation, attorney's fees and costs (whether or not suit is brought) and other liabilities of every kind, nature and description arising out of the performance of this Agreement but not for claims arising from the District's sole negligence. This indemnification obligation shall survive any termination of this Agreement. The right of indemnification provided herein shall be in addition to any rights to which the District may otherwise be entitled.

29. Notice. Any notice to be given or payment to be made hereunder shall have been properly given or made when received by the District or the Contractor, as the case may be, when deposited in the United States mail, certified or registered, postage prepaid, addressed as follows:

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT  
ATTN. GENERAL MANAGER  
533 EAST WATERWORKS DRIVE  
ST. GEORGE, UTAH 84770

TRANSCON ENVIRONMENTAL, INC.  
ATTN. CHRISTY HOLMES  
1745 S ALMA SCHOOL ROAD, SUITE 220  
MESA, AZ 85210

30. **Term.** The term of this Agreement shall be two (2) years, commencing on the date the Agreement is made, as set forth above, and terminating two (2) years from that date or at such time as all work set forth above is completed, whichever is earlier.

31. **Termination.** Unless expressly stated otherwise herein, this Agreement may be terminated with cause by either party, in advance of the specified termination date, upon written notice being given to the other party. The party in violation will be given ten (10) working days after notification to correct and cease the violations, after which the Agreement may be terminated for cause. Such termination to be without prejudice to any claim for damages or other remedy for such breach. On termination of this Agreement, all accounts and payments will be processed according to the financial arrangements set forth herein for approved services rendered to date of termination.

32. **Default.** Except as specifically provided for herein, a default by any party in an obligation set forth herein shall not result in, or be the basis for, the termination or rescission of this Agreement.

33. **Waiver.** The waiver by any party to this Agreement of a breach of any provision of this Agreement shall not be deemed to be a continuing waiver or a waiver of any subsequent breach, whether of the same or any other provision of this Agreement. Any waiver shall be in writing and signed by the waiving party.

34. **Rights and Remedies.** The parties shall have all rights and remedies provided under applicable Federal or State law for a breach or threatened breach of this Agreement. These rights and remedies shall not be mutually exclusive, and the exercise of one or more of these rights and remedies shall not preclude the exercise of any other rights and remedies. Each party confirms that damages at law may be an inadequate remedy for a breach or threatened breach of any provision hereof and the respective rights and obligations of the parties hereunder shall be enforceable by specific performance, injunction, or other equitable remedy.

35. **Sovereign Immunity.** Nothing in this Agreement shall be construed to waive the sovereign immunity of the District.

36. **Exhibits.** The following exhibits attached hereto are incorporated herein by this reference.

Exhibit A: Proposal and Cost Estimate

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement on the date first above written.

**WASHINGTON COUNTY WATER  
CONSERVANCY DISTRICT**

By:   
Zachary Renstrom, General Manager

**TRANSCON ENVIRONMENTAL, INC.**

By: \_\_\_\_\_  
Christy Holmes, President

# EXHIBIT A

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December 30, 2022

Morgan Drake, Attorney  
Washington County Water Conservancy District  
[Morgan@wcwcd.org](mailto:Morgan@wcwcd.org)  
435-673-3617

**RE: Statement of Work and Cost Estimate for the Preparation of an Environmental Assessment and Resource Studies for the Warner Valley/Red Cliffs National Conservation Area Land Exchange Project**

Dear Morgan:

Pursuant to your request, Transcon Environmental, Inc. (Transcon) is pleased to submit this updated Statement of Work (SOW) and Cost Estimate for environmental compliance activities associated with Warner Valley/Red Cliffs National Conservation Area (NCA) Land Exchange Project.

Transcon understands that the purpose of this Project is to analyze the potential impacts to sensitive resources associated with the land exchange between the Bureau of Land Management (BLM) and privately held land in Washington County, Utah. The land exchange would consist of exchanging an approximately 1,050-acre BLM-managed plot with an approximately 89.7-acre of privately owned land within the Red Cliffs NCA. The current BLM land would be transferred to the Washington County Water Conservancy District (WCWCD) and in exchange, the private land would be purchased by WCWCD and turned over to the reserve.

This SOW is based on information in the Scope of Work provided to us by the BLM and additional guidance from WCWCD's recent meeting with the BLM Saint George Field Office (SGFO) (email dated December 8, 2022). Should additional information be provided by WCWCD or the BLM indicating that additional biological or other resource studies described in this SOW are not required of Transcon, or that existing data for those resources are sufficient for use in the analysis for the Environmental Assessment (EA), a commensurate reduction in overall cost associated with those tasks would be expected. Details regarding the tasks associated with the Project are provided below.

Based on our understanding of this Project, we have identified seven primary tasks:

- Task 1: Kick-off meeting and Project management
- Task 2: Public Scoping
- Task 3: Resource Studies
  - Task 3a: Biological Resources
  - Task 3b: Paleontological Resources
- Task 4: Environmental Assessment
- Task 5: Notice of Environmental Assessment Availability Mailing
- Task 6: Public Comments on the Environmental Assessment
- Task 7: Administrative Record

These costs are provided on a not-to-exceed basis. If the work tasks and costs are acceptable to you, we are available to begin work on this Project immediately. If you have any questions or require additional information, please contact me at 385-242-5040 or by email at [bparker@transcon.com](mailto:bparker@transcon.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Parker".

Brian Parker  
Assistant Regional Manager, Southwest Region  
Transcon Environmental, Inc.

## SCOPE OF WORK

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### Task 1: Kick-off Meeting and Project Management

Within 30 days of contract award, Transcon's project manager will organize and participate in a Project kick-off meeting in St. George, Utah, with staff and management from BLM and representatives from the WCWCD and Washington County. Transcon's project manager, the BLM's NEPA specialist and Lands and Realty project manager, and Washington County's identified representative will attend the kick-off meeting. During this meeting, Transcon will identify all key personnel that will be involved in the preparation of the contract deliverables and their roles and responsibilities. The BLM, WCWCD, and Washington County will provide Transcon with contact information for all key personnel that will be involved in this Project. During this meeting, the parties will agree upon a Project schedule, Project coordination protocols, and methods to ensure quality control for all contract tasks and deliverables.

Transcon's project coordinator will prepare minutes for the kick-off meeting that identify the proposed Project schedule, coordination methods, and quality assurance protocols. The minutes will be electronically submitted to the BLM project manager, WCWCD, and Washington County's representative for review and comment within 7 days of the kick-off meeting. The BLM and Washington County will electronically submit any comments or revisions to Transcon within 7 days of receipt of the minutes. Transcon will make necessary revisions and resubmit the minutes to the BLM, WCWCD, and Washington County. The approved minutes will be entered by Transcon's project coordinator into the Administrative Record database.

Transcon understands the importance of schedule and will be responsible for timely submission of deliverables identified in this SOW. A schedule for due dates for deliverables will be agreed to by BLM, WCWCD, Washington County, and Transcon during the development of the Project Management Plan. If a deliverable is dependent on materials or data to be supplied by BLM, due dates for BLM provision of these materials will be developed by Transcon as well. If the BLM does not meet agreed upon due dates, Transcon's due dates will be adjusted accordingly. Transcon will ensure that all products are turned in to meet the agreed-upon timeframe and that they fulfill the content requirements (and needs) of the task or document. Completion dates for deliverables from Transcon may be adjusted during the NEPA process due to delays caused by various factors beyond the control of the BLM and Washington County's representative.

Transcon's staff is experienced in coordinating and facilitating the NEPA process, and we are flexible in dealing with unplanned delays in the schedule due to several factors. These factors may include but are not limited to public concern/controversy, scheduling delays created by review and approval from higher levels within the BLM organizational structure, and federal government shutdown periods. It is understood that when lengthy delays are anticipated, Washington County's representative will issue a Stop Work order to Transcon, and Washington County will not incur additional contract costs until Transcon is authorized to resume work under this contract.

In addition to the kick-off meetings, Transcon will coordinate regularly scheduled Project update meetings to be attended by project management and appropriate support staff from Transcon, the BLM, Washington County, the WCWCD, and any other team members to discuss the status of all deliverables, assign tasks, and discuss any issues that may arise during the development of the EA. We anticipate that these meetings would occur on a weekly or biweekly basis but could occur more or less often as needed. All approved minutes from all Project meetings would be entered by Transcon into the Administrative Record database.

Throughout the NEPA process, other meetings Transcon is prepared to coordinate include various agency and tribal kickoff and consultation meetings. It is anticipated that Transcon will be responsible to schedule

and attend an initial consultation meeting with the BLM, State Historic Preservation Officer (SHPO), and SITLA and a kickoff meeting with the federal agencies and Tribes.

#### Deliverables

- Meeting agendas and minutes
- Project schedule

#### Schedule

- The kick-off meeting will be coordinated immediately upon receipt of the Notice to Proceed (NTP) and scheduled to occur within 30 days of the Project award, depending on availabilities of the participants
- Initial Project status update meeting approximately 2 weeks following the Project kick-off meeting
- These meetings would be scheduled to occur weekly or biweekly
- Meeting minutes to be submitted for team approval within 7 days of the kick-off meeting
- Initial consultation meeting with BLM, SHPO, and SITLA and the kick-off meeting with the federal agencies and Tribes will occur within one month of the NEPA kick-off meeting

#### Assumptions

- The project kick-off meeting and subsequent meetings could be attended virtually

### Task 2: Public Scoping

We understand that public scoping will be required, and Transcon is prepared to assist the WCWCD, Washington County, and the BLM in conducting a 30-day public scoping process for this exchange Project. Transcon will arrange for a suitable venue in which to hold one public scoping workshop, in coordination with the BLM, WCWCD, and Washington County. Transcon's project manager and at least one other staff member will assist with the one scoping meeting. Directed by Transcon's public scoping lead, we will prepare and mail out an informational newsletter (estimated 300 copies) that describes the proposed exchange, NEPA processes, and public involvement opportunities. The format and content of this newsletter will be reviewed by the BLM, WCWCD, and Washington County, and all changes or revisions requested will be made by Transcon within 7 days of receipt of all comments. It is assumed that an initial Project mailing list will be provided by the BLM. Transcon will provide this same newsletter in 508-compliant web format for posting on the BLM SGFO website. The newsletters will be mailed by the established deadline identified on the Project schedule and include accurate information about the proposed action, the NEPA process, and the scoping meeting dates, time, and location.

Transcon's Project team will prepare public scoping materials for this Project, including graphic display boards, sign-in sheets, and scoping comment forms, and provide the necessary staff to assist with the public scoping workshop. The format and content of the display boards will be reviewed and approved by the BLM, WCWCD, and Washington County prior to use and/or public distribution. Maps of the proposed exchange tracts for use on graphic boards will be provided by the BLM. Once approved, these scoping materials would be assembled into a Public Outreach Plan and included as an appendix in the EA.

At the end of the public scoping period, Transcon's public scoping lead will compile and categorize all scoping comments that are received electronically, by fax, or mailed/delivered to the BLM; provide a brief Project Scoping Summary Report to the BLM, WCWCD, and Washington County; and include all scoping comments in the Administrative Record database (see *Task 6: Public Comments on the Environmental Assessment*). Throughout the NEPA process, Transcon's public scoping lead and project coordinator will

compile and maintain an updated mailing list for the proposed exchange based on the responses from scoping and include it in the Administrative Record.

To ensure that a timely schedule is met, Transcon would begin coordination for development, review, and approval of public scoping materials immediately following award of the contract and the NTP. While coordinating the Project kick-off meeting (*Task 1*), Transcon's project manager and public scoping lead would also coordinate the initial details of the public scoping meeting with the WCWCD, Washington County and the BLM project manager to begin development of meeting materials.

### Deliverables

- Public Outreach Plan
- Informational newsletter, draft and final (300 copies)
- Public scoping display boards, sign-in sheets, comment forms, and mailing list,
- Public Comment Response Table
- Project mailing list
- Public Scoping Summary Report

### Schedule

- A scoping venue would be determined at the kick-off meeting and secured within 30 days of the NTP
- Coordination of Public Scoping Workshop immediately following the NTP
- Initial submittal of public scoping materials for BLM review within 2 weeks following the kick-off meeting
- Public scoping workshop to be held within 30 days of WCWCD, Washington County, and BLM approval of all scoping material
- Public Comment Response Table provided within 2 weeks following the end of the public scoping period
- Public Scoping Summary Report provided within 1 month following end of all public scoping

### Assumptions

- An initial mailing list will be provided to Transcon by the BLM
- One in-person public scoping workshop would be attended by up to two Transcon staff members
- Up to 8 graphic display boards would be required for the public workshop
- Transcon would prepare and mail up to 300 newsletters, including postage

## **Task 3: Resource Studies**

### *Task 3a: Biological Resources Surveys and Reporting*

The biological resources activities involve the examination and documentation of the existing common and sensitive wildlife and vegetation resources found within the land exchange area. Upon award, Transcon would commence biological resources work by performing background research and compiling species lists using resources such as the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation species list, the USFWS Environmental Conservation Online System, and the Utah Natural Heritage Program database. As necessary, Transcon biologists would also contact BLM resource specialists to collect information as well as to understand the species they determine should be focused upon.

Following background research, Transcon biologists would perform a reconnaissance-level field review of the land exchange area to document habitat conditions as they currently exist.

Following desktop research, Transcon would develop a detailed field survey plan to conduct pre-construction clearance surveys for Mojave desert tortoise following the guidelines set forth in the 2019 USFWS guidance outlined in *Preparing for Any Action That May Occur within the Range of the Mojave Desert Tortoise* and for USFWS-listed threatened and endangered (T&E) plant species following the protocols outlined in USFWS Utah Field Office's 2011 *Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed, and Candidate Plants*. Transcon would then coordinate directly with the BLM and USFWS biologists to review and to obtain approval for the proposed survey plan prior to conducting field surveys.

Because most of the survey area contains overlapping suitable habitat for both tortoise and sensitive plant species, Transcon biologists who are qualified and experienced in implementing both protocols would be utilized to conduct these surveys concurrently. Where suitable plant habitat exists within the proposed Project footprint and 300-foot buffer, Transcon's biologists would walk 3- to 6-foot transects and record the presence of all sensitive plants as well as all sign of tortoises including live or dead individuals, burrows, scat, tracks, etc. Where only suitable desert tortoise habitat exists, transects would be spaced approximately 30 feet apart, as per protocol, and surveyors would focus on identifying presence or sign of desert tortoise only. GPS locations of all sensitive plants, tortoises, burrows, and sign will be recorded in the field. All potentially occupied desert tortoise burrows observed will be assessed for occupancy.

Transcon's biologists would gather enough data and analyses to develop a Biological Assessment (BA) for the BLM, WCWCD, and Washington County to use in their anticipated USFWS Section 7 consultation for T&E species found within the land exchange area. Transcon previously conducted surveys for T&E plants and wildlife with suitable habitat found within the Warner Valley site in spring 2021, specifically for Shiwiks milkvetch, dwarf bear-poppy, Siler pincushion cactus, and Mojave desert tortoise. However, as these surveys have since expired, surveys for these species will be required again at the Warner Valley Parcel. No surveys will be required at the privately owned parcel. It is understood that Transcon will be responsible to conduct surveys for both Mojave desert tortoise and the above-mentioned species of T&E plants. It is anticipated that no more than 60 miles would need to be walked on foot to complete all transects within the land exchange area and the 300-foot buffer.

### Deliverables

- BA
- All relevant photographs, maps, and shapefiles

### Schedule

- Desktop review would be initiated within 2 weeks of receipt of a final Project boundary
- Field surveys for Mojave desert tortoise and T&E plants would be conducted concurrently during the overlapping flowering season for each respective plant species, generally April/May
- All survey results would be incorporate into the BA within 6 weeks following the completion of field surveys
- Formal consultation with the USFWS would be completed within 135 days after the BLM submits relevant section of the EA to USFWS

### Assumptions

- Formal Section 7 consultation will be required and coordinated by the BLM

- Transcon would attend up to three virtual Section 7 consultation meetings with the BLM and USFWS, as needed
- The Project is located in the Chinle and Moenkopi geological formations, and dwarf bear-poppy, siler pincushion, and Shivwits milkvetch could be found in the formations; therefore, only approximately 850 acres of the 1,050 acres on the BLM-managed parcel will need to be surveyed
- It is assumed that the 300-foot survey buffer will not be applied to the 1,050 acres because there will be no construction activities occurring at this time
- Consultation with the USFWS might increase the belt transect width for Siler pincushion from 3 to 6 feet to 10 to 20 feet. Our costs provided include conducting 3- to 6-foot-wide transects for Siler pincushion cactus. If the USFWS approves the wider transect, cost can be reduced by conducting the wider transects
- Surveys for tortoise will follow the *quantitative survey* methodology and will include the approximately 180 miles of transects within the 1,050 acres of BLM-managed land. If additional transects are needed, a change of scope would be submitted
- The entire 1,050 acres will not need to be surveyed

### *Task 3b: Paleontological Resource Inventory and Reporting*

A paleontological resources inventory is needed for paleontologically sensitive areas within the Warner Valley parcel that will be leaving federal landownership if the land transfer is authorized. This parcel and adjacent areas are a very significant area for paleontology. The area has exposed outcrops of Triassic-Jurassic sedimentary rocks preserving vertebrate fossils, including a lung fish holotype (a new species), as well as trackways, and plant fossils. Transcon will begin this paleontological mitigation work by conducting a pre-field review and museum records search, followed by a field survey and drafting of a paleontological survey report. Prior to field activities, Transcon will coordinate with BLM paleontologists and other relevant paleontological experts. It is assumed that all areas of Potential Fossil Yield Classification (PFYC) 3 to 5 will require field survey. Based on preliminary research, the Project area is underlain by the Kayenta Formation (PFYC 4), Navajo Sandstone (PFYC 4), Moenave Formation (PFYC 4), Chinle Formation (PFYC 3), along with quaternary aeolian and alluvial deposits (PFYC 2 and unknown). Preliminary coordination shows that there are several existing localities in the area (Ws0476, Ws0477, Ws0475, Ws0019, Ws0329, Ws0324) consisting of fish material and dinosaur trackways. Additionally, there is high potential for new fossil localities to be discovered within the area.

Transcon paleontologists will conduct a field survey of all areas with moderate to very high potential for significant fossils within the Project area. Existing localities will be revisited, and their criteria of significance for collection will be assessed. Fossil trackways may require mapping using photogrammetry, and fish and other vertebrate fossils may require excavation using plaster, burlap, and archival consolidants. Surface fossil collections can be done during the initial field visit if encountered. If more extensive localities are discovered such as large concentrations of subsurface fossils, excavations, preparation, and curation costs will require additional efforts beyond the current scope. Both significant and non-significant fossils will be documented using standard procedures, including GPS coordinates, stratigraphy, identification to taxon and element (if possible), site description, photographs, and other field notes. Only scientifically significant fossils will be collected.

A paleontological resources survey report will be prepared following the field survey. This report will include a review of the geology and paleontology in the Project area, describe any fossils encountered and their significance, and include an evaluation of previously known localities in the Project area. If significant fossils are collected, they will be prepared in house—or using a contract fossil preparator—and will be reposed at the designed repository. Following survey results, Transcon will discuss the need for a Paleontological Resources Treatment Plan with the BLM, and this would be a separate out of scope effort.

### Deliverables

- Draft and Final Paleontological Resources Survey Report
- Associated photographs, maps, ArcGIS shapefiles, and locality forms

### Schedule

- The pre-field literature review will be initiated and permits requested within 2 weeks of NTP
- Fieldwork will be conducted in early spring 2023, following permit approvals and coinciding with favorable weather and a snow-free Project area
- The Draft Paleontological Resources Survey Report will be prepared within 6 weeks of the completion of fieldwork
- The Final Paleontological Resources Survey Report will be submitted within 2 weeks of draft approval and are anticipated to be completed no later than fall 2023
- A Paleontological Resources Treatment Plan will be written if needed following the survey report, and would be a separate out of scope effort

### Assumptions

- Two field visits are planned, to coincide with favorable weather and a snow-free Project area
- Up to 24 person-days of fieldwork are anticipated (12 days for 2 paleontologists)
- If extensive fossil localities requiring excavation are identified such as large concentrations of subsurface fossils, a scope adjustment will be needed to cover excavation, preparation, and curation costs
- Surface collects and simple fossil collection can be done within the current scope
- The paleontological evaluation will occur only on BLM-managed lands

## Task 4: Environmental Assessment

Transcon's NEPA specialist, supported by our technical staff, will prepare an EA that can also serve as a BA for consultations under Section 7 of the Endangered Species Act (ESA). The EA will conduct an analysis of the impacts to the human environment that could result from the transfer of the Warner Valley tract of public lands from federal ownership and the acquisition of an undetermined amount of private land into federal ownership. It is anticipated that the BLM would provide Transcon with the ID Team checklist shortly after the kick-off meeting, which would identify resource values to be addressed and determine which of those resource values and land uses are to be carried forward for detailed analysis in the EA.

Transcon would analyze all resources identified by the ID Team checklist as well as those identified through the scoping process. The analysis will largely rely on existing inventory data compiled by BLM or other sources. However, Transcon understands that, based off recent feedback from the BLM, additional biological and paleontological resource field studies and reporting will be required (see *Task 3*). In addition to these studies, Transcon will obtain relevant data from online websites and readily available published sources where these data are not provided by BLM. The characterization of impacts will include descriptions of impact duration, intensity, and context. Findings resulting from consultations between the BLM and USFWS will be included in the EA. Findings based on consultations under Section 106 of the National Historic Preservation Act among the BLM, the Utah SHPO, federally recognized Tribes, and other interested parties will be summarized in the EA. The EA will follow the format shown in the BLM Utah NEPA Guidebook (2010), except where additional sections may be required so that the EA also serves as the BA for this Project.

Prior to the Preliminary EA, Transcon will electronically submit an Internal Review EA, including all maps and graphics, to the BLM, WCWCD, and Washington County for a review and comment period. The Internal Review EA will be prepared and include accurate and complete data and analyses. The BLM, WCWCD, and Washington County will review this document within 30 days of receipt, unless otherwise specified in the Project schedule, and provide written comments back to Transcon. Based upon the number or complexity of revisions needed, we understand that the BLM, WCWCD, and Washington County will retain the option to require Transcon to submit multiple internal review drafts until the parties are satisfied that the EA is technically accurate and legally sufficient to meet its NEPA and ESA requirements.

Upon receipt of the BLM, WCWCD, and Washington County's comments, Transcon will respond (unless otherwise specified) with the necessary written revisions within 30 days and provide a Preliminary EA. The approved Preliminary EA would be posted to the BLM's ePlanning website for public review. After the public review period is complete, Transcon would then incorporate any public comments and address all necessary revisions based on public review. A Final EA would then be submitted to the BLM for comment and review to meet BLM's expectations for quality. Following final approval, the approved Final EA would subsequently be posted online at the ePlanning website. If requested, Transcon would also be available to assist in the preparation of the draft Finding of No Significant Impact (FONSI).

Transcon will perform GIS work and prepare cartographic products for this NEPA process, including the production of maps for the scoping meeting and the EA. The completion of this work, and the needed interaction between BLM GIS specialist and Transcon, will be coordinated by the BLM project manager and will be determined at the Project kick-off meeting.

All EA drafts would be primarily written by our qualified NEPA specialist, with support from our resource staff, and would go through Transcon's internal quality assurance/quality control (QA/QC) process prior to submittal to the BLM. This QA/QC process includes rounds of review by senior-level planning staff to ensure accurate and complete data and analyses and is followed by review by our technical editing team to ensure the document is formatted to 2010 BLM Utah NEPA Guide Book requirements. Content and analyses presented in the EA would be legally defensible and would satisfy requirements of NEPA, the Council on Environmental Quality Guidance (40 CFR 1500-1508), and the most recent version of the Utah NEPA Guidebook (2010). All drafts, including maps, graphics, and photographs, would be provided in Microsoft Word. Additionally, Transcon would provide a 508-compliant PDF of the approved Final Draft EA and Final EA documents for online posting at the ePlanning website. Transcon understands that the BLM will have sole authority to determine if the EA meets technical adequacy and legal sufficiency requirements.

### Deliverables

- Internal Review EA (electronic copy)
- Preliminary EA (electronic copy)
- Final EA
- FONSI (if required)

### Schedule

- The Internal Review EA will be completed within six months of the NTP
- Transcon will produce the Preliminary EA within 30 days of receipt of the Internal Review EA comments

- Comments will be addressed and the Final EA prepared within 4 weeks of the close of any comment period. With no unanticipated delays, the Final EA and FONSI will be completed in early 2024.

#### Assumptions

- The BLM will be the lead agency for this Project
- No Environmental Impact Statement is required
- Transcon may be required to collect, compile, and/or analyze some new data and information (e.g., web information on socioeconomics) but would not be required to conduct on-the-ground field inventories for resources other than those identified in Task 3
- Up to three rounds of comments would be addressed for each the Internal Review EA and Preliminary Review EA

### **Task 5: Notice of Environmental Assessment Availability Mailing**

Transcon will prepare a draft mailing that provides the public with notice of the availability of the Preliminary EA for public review and submit it electronically to the BLM, WCWCD, and Washington County for review. This mailing will identify the length of the public comment period and the methods by which the public can submit comments. The BLM, WCWCD, and Washington County will review the draft mailing and provide comments to Transcon within 7 days of receipt. Transcon will make any changes required and submit the revised version to the BLM, WCWCD, and Washington County for approval. Transcon will duplicate the approved mailing and distribute it to all entities on the mailing list.

#### Deliverables

- Notice of Availability, Draft and Final

#### Schedule

- Draft Notice of Availability submitted within 30 days of the anticipated posting of Preliminary EA to ePlanning website
- Final Notice of Availability submitted within 7 days following receipt of comments of Draft Notice of Availability
- Print and mail Notice of Availability concurrently with submittal of Preliminary EA to ePlanning website

#### Assumptions

- Only one round of comments would be required for the Notice of Availability
- Transcon would provide and mail up to 300 Notices of Availability, as needed

### **Task 6: Public Comments on the Environmental Assessment**

At the end of the public comment period, Transcon will compile and categorize all comments that are received electronically, by fax, or mailed/delivered to the BLM into a Draft Comment Response Table and assist with the preparation of comment responses and any required revisions to the EA, including the incorporation of new information, analyses, and consultations with applicable federal and/or state and local governmental agencies with legal or regulatory oversight. The Draft Comment Response Table will be submitted to the WCWCD, Washington County, and the BLM for review and will clearly indicate which comments are to be addressed by the WCWCD and/or Washington County and which are to be addressed by the BLM. Transcon's project manager will consult with the WCWCD, Washington County, and the

BLM, as appropriate, for direction on how they would prefer to address each comment within the EA. Transcon will include all public comments received in the Administrative Record database.

#### Deliverables

- Comment Response Table

#### Schedule

- Draft Comment Response Table would be submitted to the WCWCD, Washington County, and the BLM for comment and review within 2 weeks following the end of the public comment period of the Preliminary EA
- Final Comment Response Table would be incorporated and submitted concurrently with the Final EA

#### Assumptions

- Only one round of WCWCD, Washington County, and BLM responses would be required for the Comment Response Table
- WCWCD, Washington County, and the BLM would provide the necessary responses to public comments and concerns, as appropriate

### **Task 7: Administrative Record**

Transcon will be responsible for creating and maintaining a searchable database that includes all documents that are part of the Administrative Record. Transcon will ensure that all hard copies are scanned, and all documents are in PDF format for inclusion in this database. An index of these documents will also be provided in the Administrative Record

#### Deliverables

- Administrative Record

#### Schedule

- Throughout the entirety of the Project

#### Assumptions

- None

## TENTATIVE PROJECT NEPA TIMELINE

| PROJECT MILESTONES  |  |                                |
|---|--|--------------------------------|
| Tasks   | Timeframe  | Approximate Date of Completion |
| NEPA Kick-off Meeting   | Within 30 days of contract award   | February 9, 2023               |
| Biweekly Project Update Meetings  | Occurs every two weeks following kick-off  | February 23, 2023 (initial)    |
| Kick-off Meeting with Federal Agencies and Tribes                           | Within one month of NEPA kick-off  | March 3, 2023                  |
| Initiate Public Scoping Period  | 30 days; approximately 2 weeks prior to Public Scoping Workshop  | March 8, 2023                  |
| Public Scoping Workshop   | Approximately 60 days following NTP  | March 22, 2023                 |
| End of 30-day Public Comment Period   | 30 days  | April 7, 2023                  |
| Biological field surveys (Tortoise and Plants)                              | Flowering period (plants; April/May); year-round (tortoise)  | April 14, 2023                 |
| Complete Public Scoping Report  | 30 days following end of 30-day Public Comment Period  | May 8, 2023                    |
| Internal Review EA (with BA included)                                       | Within 4 months of the NTP   | May 19, 2023                   |
| Preliminary EA  | Within 30 days of receipt of the Internal Review EA comments   | July 19, 2023                  |
| Initiate USFWS Section 7 Consultation                                       | 135 days (formal consultation)   | July 20, 2023                  |
| Initial Consultation Meeting with BLM, SHPO, and SITLA                      | Within 1 month of completion of Preliminary EA   | August 4, 2023                 |
| Conclude Section 106 process  | Approximately 9 months from NTP  | September 2023                 |
| Revise Preliminary EA Following Agency and Tribal Consultations (as needed) | Within 30 days of receipt of all comments  | October 14, 2023               |
| Draft Notice of Availability Mailing  | 30 days prior to anticipated posting of Preliminary EA   | November 1, 2023               |
| USFWS Section 7 Consultation Complete                                       | 135 days   | November 30, 2023              |
| Print and mail Notice of Availability Mailing                               | Concurrently with posting of Preliminary EA  | December 1, 2023               |
| Post-Preliminary EA on BLM ePlanning  | Immediately following approval of Preliminary EA by the BLM, Washington County, and WCWCD; 30-day comment period | December 1, 2023               |
| End of Comment Period for Preliminary EA                                    | 30 days  | January 2, 2024                |
| Revise EA (as needed)   | 30 days  | February 1, 2024               |
| Final EA / Sign FONSI   | Within 4 weeks of the submittal of final revisions   | March 1, 2024                  |
| Approximate Date of Project Completion:                                     |  | March 1, 2024                  |

## COST SUMMARY

| Tasks   | Labor/Expenses      |
|---|---------------------|
| Task 1: Kick-off Meeting and Project Management         | \$37,101.38         |
| Task 2: Public Scoping                                  | \$22,123.00         |
| Task 3a: Biological Resources Surveys and Reporting     | \$88,069.63         |
| Task 3b: Paleontological Resources Survey and Reporting | \$ 85,759.75        |
| Task 4: Environmental Assessment                        | \$78,257.75         |
| Task 5: Notice of EA Availability Mailing               | \$6,065.00          |
| Task 6: Public Comments on the EA                       | \$10,278.00         |
| Task 7: Administrative Record                           | \$7,222.00          |
| <b>GRAND TOTAL</b>                                      | <b>\$334,876.50</b> |

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December 27, 2022

Morgan Drake, Attorney  
Washington County Water Conservancy District  
[Morgan@wcwcd.org](mailto:Morgan@wcwcd.org)  
435-673-3617

**RE: Historic Properties Treatment Plan for the Warner Valley Project**

Dear Ms. Drake:

Pursuant to your request, Transcon Environmental, Inc. (Transcon) is pleased to submit this Scope of Work (SOW) and Cost Estimate for the cultural resources analysis in support of Washington County Water Conservancy District's (WCWCD) Warner Valley Project in Washington County, Utah.

The Bureau of Land Management (BLM) St. George Field Office proposes to complete a land exchange with WCWCD involving two parcels in Washington County, Utah. The exchange would be between the BLM and WCWCD, with Washington County acting as facilitator. The purpose of the exchange is for the United States (through the BLM) to acquire critical habitat for federally threatened Mojave desert tortoise. The lands to be acquired by the United States are located within the Red Cliffs Desert Reserve and Red Cliffs National Conservation Area, just north of St. George; the federal lands to be exchanged are located in Warner Valley within the Sand Mountain Special Recreation Management Area, just east of the City of Washington.

In support of the BLM St. George Field Office, the WCWCD is seeking the creation of a Historic Properties Treatment Plan (HPTP), a Memorandum of Agreement (MOA), and assistance with facilitation of consultation and reviews. The HPTP will comprehensively address 16 National Register of Historic Places (NRHP)-eligible archaeological sites (Historic Properties) that will be adversely affected by the proposed Red Cliffs Warner Valley Land Exchange in Washington County, Utah. The HPTP will include an historic context of the Project area as well as mitigation methods and strategies to resolve the adverse effects, assisting the BLM St. George Field Office in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (Section 106), with the option to assist the Utah School and Institutional Trust Lands Administration (SITLA) in compliance with Utah State Code 9-8-404 (similar to Section 106).

The full Warner Valley Project Area of Potential Effect (APE)/Project area is located in Warner Valley, east of the City of Washington and south of the Virgin River and the Southern Parkway/Highway 7, in Washington County, Utah. The APE is located within portions of Township 42 South; Range 14 West; Sections 28, 29, 30, 31, and 32 and Township 43 South; Range 14 West; Sections 5 and 6 of the Salt Lake Baseline and Meridian and crosses the Washington Dome, Utah 7.5-minute topographic quadrangle map. The APE totals 1851 acres and includes 1050 acres of BLM St. George Field Office-managed lands (which are proposed to leave federal ownership through the exchange), 794 acres of private lands owned by the WCWCD (formerly owned by SITLA), and 7 acres owned by SITLA as conservation zones around Historic Properties.

The 1851-acre APE has been previously surveyed for cultural resources, including a 2021 Class III (intensive pedestrian) cultural resources inventory completed by Transcon (U21TN0284) for the transfer of lands from SITLA to WCWCD for the purpose of the Warner Valley Project, and consultation with the

Utah State Historic Preservation Office (SHPO) began in 2022. As a result of this consultation, there are 16 Historic Properties that are subject to the needed HPTP and MOA, all prehistoric archaeological sites. Eight of these 16 Historic Properties fall on lands managed by the BLM or a combination of BLM with SITLA or BLM with Utah Department of Transportation (UDOT) and Private/Tribal ownership. The remaining eight Historic Properties are located solely on SITLA lands. Due to the purpose of the Project being the land exchange, the Historic Properties on SITLA lands are not considered a BLM connected action, and will be considered an *optional* cost in this SOW.

Based on our understanding of this Project, Transcon has identified the following primary tasks:

- Task 1: Kickoff meeting and Project management
  - Optional: SITLA Kickoff Meeting
- Task 2: Public Meetings
- Task 3: Historic Properties Treatment Plan
  - Optional: SITLA Historic Properties
- Task 4: Memorandum of Agreement

A detailed SOW, key personnel qualifications, proposed Project schedule, and cost summary are provided below. The anticipated period of performance is 12 months: January through December 2023.

These costs are provided on a not-to-exceed basis. If the work tasks and costs are acceptable to you, we are available to begin work on this Project immediately upon approved contract. I appreciate the opportunity to present this proposal for your review. Please contact me directly if you have any questions about this information at 801-649-5141 ext. 310 or at [levenson@transcon.com](mailto:levenson@transcon.com).

Sincerely,



Lindsey M. Evenson  
Assistant Regional Manager, Great Basin  
Transcon Environmental, Inc.

## SCOPE OF WORK

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### Task 1: Kickoff Meeting and Project Management

Within 30 days of contract award, Transcon's project manager will organize and participate in a pre-work Project kickoff meeting in St. George, Utah, with staff and management from the BLM and WCWCD. Transcon's project manager and Principal Investigator, the BLM's cultural resources specialist and project manager, and the WCWCD's identified representative will attend the kickoff meeting. During this meeting, Transcon will identify all key personnel that will be involved in the preparation of the contract deliverables and their roles and responsibilities. The BLM and WCWCD will provide Transcon with contact information for all of their key personnel that will be involved in this Project. The parties will agree upon a Project schedule, coordination protocols, and methods to ensure quality control for all contract tasks and deliverables. Transcon's project coordinator will prepare minutes that identify the proposed Project schedule, project coordination methods, and quality assurance protocols.

Transcon understands the importance of schedule and will be responsible for timely submission of deliverables identified in this SOW. A schedule for due dates for deliverables will be agreed to by the BLM, WCWCD, and Transcon during the kickoff meeting. If a deliverable is dependent on materials or data to be supplied by the BLM, due dates for BLM provision of these materials will be developed by Transcon as well. If the BLM does not meet the agreed-upon due dates, Transcon's due dates will be adjusted accordingly. Transcon will ensure that all products are turned in to meet the agreed-upon time frame and that they fulfill the content requirements (and needs) of the task or document.

Transcon's cultural resources staff are experienced in developing and implementing HPTPs, and we are flexible in dealing with unanticipated consulting party input or delays. It is understood that when lengthy delays are anticipated, the BLM and/or WCWCD will issue a Stop Work order to Transcon, and the WCWCD will not incur additional contract costs until Transcon is authorized to resume work under this contract.

In addition, Transcon may support an optional, supplemental SITLA Project, running simultaneously with the primary (BLM) Project. The SITLA/supplemental project would be less involved, and not require the same level of consultation and coordination as the BLM/primary Project and would follow the standards set by the primary Project. A separate, virtual kickoff meeting would be held to discuss the SITLA project, as a follow-up to the primary BLM meeting.

#### Deliverables

- Meeting agenda and minutes
- Project schedule
- Agency support, as needed

#### Schedule

- The pre-work kickoff meeting will be scheduled to occur within 30 days of Notice to Proceed (NTP), depending on availabilities of the participants
- Meeting minutes to be submitted for team approval within 7 days of the kickoff meeting
- The optional SITLA kickoff meeting would be held virtually within 15 days of the pre-work kickoff meeting for the primary/BLM project

### Assumptions

- The pre-work kickoff meeting will be held in person at the BLM office in St. George, Utah
- Only one in-person kickoff meeting will be held
- Subsequent meetings and support will occur virtually
- Additional agency support will be provided as needed
- An optional, separate kickoff meeting will be held for the supplemental SITLA project, as needed

### **Task 2: Public Meetings**

In addition to the pre-work kickoff meeting, Transcon will facilitate the organization of meetings with involved agencies and parties, including an initial public meeting inviting all involved agencies (Utah SHPO, SITLA, UDOT, and BLM), affiliated Tribes, and consulting parties. These meetings will discuss the Historic Properties within the Warner Valley Project area, and will help define the HPTP approach. These meetings will discuss the eight Historic Properties managed by the BLM.

An initial public meeting is anticipated to be held in person at the BLM office in February 2023 and will include a virtual option for parties unable to travel. This initial meeting will cover the HPTP approach and provide an opportunity for agencies and consulting parties to provide preliminary comments on the plan. During this initial public meeting, follow-up meetings will be scheduled, as needed, to be held virtually.

Additionally, two in-person field visits will be scheduled. The in-person field visits will be led by Transcon and the BLM, including the use of a company-provided UTV for remote site visits. Transcon's Principal Investigator and lead archaeologist will participate in these in-person field visits to ensure that all agency and consulting party comments are being taken into consideration during the development of the HPTP. Follow-up meetings will be held virtually to discuss the progress of the HPTP development, as well as the incorporation of agency and consulting party comments.

Additional agency coordination and consultation support will be provided, as needed, throughout the public meetings process. The optional, supplemental SITLA project will not require formal Tribal or other consulting party consultation, and will not require any public meetings.

### Deliverables

- Meeting agenda and minutes
- Mailings, as needed
- Agency support, as needed

### Schedule

- The initial public meeting will be scheduled within 60 days of NTP
- Follow-up meetings will be scheduled during the initial public meeting and may occur as frequently as bi-weekly (TBD)
- Two in-person field visits will be scheduled during the initial public meeting, one to occur in Spring 2023, the second to occur during the draft HPTP review period

### Assumptions

- Only one in-person public meeting is anticipated
- Up to two (2) in-person field visits are anticipated

- Up to ten (10) virtual meetings are anticipated
- If additional in-person or virtual meetings are necessary, it will be at additional cost
- Additional agency support will be provided, as needed
- No public meetings will be held for the optional, supplemental SITLA project

### Task 3: Historic Properties Treatment Plan

In support of the Section 106 (and Utah State Code 9-8-404) process, Transcon archaeologists will develop an HPTP to comprehensively address the 16 cultural resource sites that are considered to be Eligible for listing on the NRHP (Historic Properties) and that will be adversely affected by the proposed Red Cliffs Warner Valley Land Exchange. The HPTP will provide an informed historic context of the Project area, along with mitigation methods and strategies to resolve the adverse effects, assisting the BLM St. George Field Office in compliance with their legal requirements of Section 106.

No field inventory is anticipated to support the development of the HPTP. The 1851-acre Warner Valley Project APE has been previously surveyed for cultural resources, including a 2021 Class III (intensive pedestrian) cultural resources inventory completed by Transcon (U21TN0284) for the transfer of lands from SITLA to WCWCD for the purpose of the Warner Valley Project (consultation with the Utah SHPO began in 2022). As a result of this consultation, there are 16 Historic Properties within the project area, all prehistoric archaeological sites (*Table 1, Historic Properties within the Warner Valley Project APE*). Of these, 8 Historic Properties located on BLM lands are subject to the needed HPTP and MOA to comply with Section 106; the 8 sites located on SITLA lands are also subject to and HPTP (per Utah Code 9-8-404) but will not require an MOA

TABLE 1  
HISTORIC PROPERTIES WITHIN THE WARNER VALLEY PROJECT APE

| Site No. | Land Status               | Site Description                             | Eligibility |
|----------|---------------------------|--|-------------|
| 42WS3886 | BLM, UDOT, Private/Tribal | Prehistoric habitation                       | Eligible—D  |
| 42WS4126 | BLM                       | Prehistoric habitation                       | Eligible—D  |
| 42WS5064 | SITLA                     | Prehistoric rockshelters                     | Eligible—D  |
| 42WS5065 | SITLA                     | Prehistoric campsite                         | Eligible—D  |
| 42WS5068 | SITLA                     | Prehistoric lithic source/quarry             | Eligible—D  |
| 42WS5069 | BLM, SITLA                | Prehistoric rockshelters                     | Eligible—D  |
| 42WS5070 | SITLA                     | Prehistoric campsite                         | Eligible—D  |
| 42WS5071 | SITLA                     | Prehistoric campsites                        | Eligible—D  |
| 42WS5073 | BLM                       | Prehistoric lithic source                    | Eligible—D  |
| 42WS5074 | BLM                       | Prehistoric rockshelter and petroglyph panel | Eligible—D  |
| 42WS5075 | BLM                       | Prehistoric rockshelter                      | Eligible—D  |
| 42WS5197 | BLM                       | Prehistoric campsite                         | Eligible—D  |
| 42WS5198 | BLM                       | Prehistoric campsite                         | Eligible—D  |
| 42WS5199 | SITLA                     | Prehistoric campsite                         | Eligible—D  |
| 42WS6310 | SITLA                     | Prehistoric campsite                         | Eligible—D  |
| 42WS6311 | SITLA                     | Prehistoric lithic scatter                   | Eligible—D  |

Eight of these 16 Historic Properties fall on lands managed by the BLM or a combination of BLM with SITLA or BLM with UDOT and Private/Tribal ownership. The remaining eight Historic Properties are located solely on SITLA lands. Due to the purpose of the Project being the land exchange, the eight Historic Properties on SITLA lands are not considered a BLM connected action and will not be addressed in the primary (BLM) HPTP. A separate HPTP for the SITLA sites may be prepared for an additional, optional cost.

The HPTP will provide a detailed historic context of the APE, along with methods of investigation and range of treatment options to obtain the data that contributes to the site's eligibility from the eight Historic Properties on BLM lands.

The HPTP will be outlined in the following sections:

- **Introduction**—Includes project description, background history, purpose and need
- **Project Environmental Setting**—Includes a summary of the natural features and topography of the project area to further assist in the development of research questions and data recovery methods and techniques
- **Cultural Context**—Serving as a model and a context for research objectives and questions. The *Historic Context* will include a summary of the cultural history of the St. George Basin as well as a detailed history of the Project area, incorporating previous projects and findings
- **Research Questions**—Will discuss research problems or questions to be addressed with an explanation of their relevance and importance; the questions will address the Project area and individual properties, showing how they contribute to an understanding of regional research questions; the question will be realistic to the data recovery
- **Relevant Data Needs**—Will fully describe the laboratory analysis methods to be used and how they apply to the research needs. This will discuss how the materials obtained and the recommended analysis techniques contribute to providing answers to the proposed research questions.
- **Data Recovery**—Will be dedicated to data recovery methods and techniques. A combination of data recovery techniques will be considered; various methods to investigate a cultural property may be utilized to increase the effectiveness and efficiency of the data recovery operations. Non-destructive and destructive methods will be equally considered. This section will also provide general excavation standards and practices (mapping, geomorphic analysis, testing, and excavation), including methods for the exploratory phase, the rational for the selection and placement of excavation units, methods of excavation and processing of different site types, and collection strategies for materials that can be analyzed to answer research questions.
- **Site-Specific Recommendations**—Will provide site-specific data recovery recommendations. The data for each site will include the site number, site description, site interpretation, proposed treatment strategy, research objectives, and planned data recovery; locations will be delineated on a site map
- **Curation**—Will identify the minimal requirements for curation facilities and provide professional recommendations for what types of materials should be kept and prepared for curation, along with estimations of curation costs
- **Discovery/Native American Graves Protection and Repatriation Act Plan of Action (POA)**—Will include a well-formulated POA; the POA will be reviewed and consulted by the affiliated Tribes during the HPTP and MOA process and will be Project-specific (especially since burials have been recovered close to the Project area). The POA will identify that, due to the land leaving federal ownership, burials would not be able to stay in-situ

- **Public Products**—Will provide recommendations for creating public products. As the Project impacts public lands, it is appropriate that the public receives a direct and tangible benefit from the undertaking. Proposed public products (signage, exhibits, lectures, etc.) may be reviewed by consulting parties as part of the HPTP and MOA process

The HPTP will be professionally formatted with a cover sheet, title page, table of contents, bibliography, and appendices, as needed. The draft HPTP will be submitted to the BLM for initial review and comment, prior to draft distribution to the other agencies and consulting parties. All agency and consulting party comments will be addressed in the final HPTP, which will be incorporated into the MOA. The final HPTP will be formatted to SHPO standards (PDF/A package) and will include applicable GIS data.

Additional agency support will be provided, as needed, throughout the HPTP draft and finalization process, including support during the SHPO and tribal consultation phases. An in-person support meeting may be held at the BLM office in St. George, Utah, if needed.

A supplemental HPTP may be prepared to address the eight Historic Properties on SITLA lands. The supplemental HPTP would be developed at the same time as the primary (BLM) HPTP and would include consistent information (or reference the primary document), reducing the need for additional or separate consultation, public meetings, field visits, and agency support. The key difference in the supplemental HPTP would be the site-specific recommendations for the eight Historic Properties on SITLA lands.

### Deliverables

- HPTP, draft and final
- Mailings, as needed
- Agency support, as needed
- Supplemental HPTP, draft and final (optional)

### Schedule

- The draft HPTP will be prepared by May 31, 2023
- Agency comments will be addressed within 2 weeks of receipt
- The final HPTP will be prepared by August 31, 2023
- The supplemental HPTP would follow the same schedule as the primary document, if necessary

### Assumptions

- The HPTP will address collective techniques as well as individual site-specific measures
- Agency and consulting party comments are anticipated
- Up to two (2) rounds of draft document revisions are anticipated; additional revisions or draft deliverables may be at additional cost
- Up to one (1) in-person meeting may be held at the BLM office in St. George, Utah
- Additional agency support will be provided, as needed
- Up to eight (8) Historic Properties managed by the BLM (some with SITLA or with UDOT and Private/Tribal ownership) will be addressed in the HPTP  
A supplemental HPTP may be prepared to address the eight (8) Historic Properties managed by SITLA at an additional, optional cost
- If the supplemental HPTP cannot be prepared at the same time as the primary HPTP, additional consultation, public meetings, and field visits may be required, and would be at additional cost

## Task 4: Memorandum of Agreement

As this is an adverse effect undertaking, it is required according to Section 106 regulation (36 CFR § 800.6) for the BLM to consult with the SHPO and/or Tribal Historic Preservation Officer and other parties to negotiate and execute a Section 106 agreement document. Transcon will assist in the preparation of a MOA to serve as that agreement document.

On behalf of the BLM, Transcon will draft the MOA. The content of the MOA will specify the measures the BLM will implement to resolve the adverse effects to eight Historic Properties (managed by the BLM with SITLA or with UDOT and Private/Tribal ownership) through avoidance, minimization, or mitigation. The MOA will be supplemented by the detailed HPTP and will follow the guidance and templates provided by the Advisory Council on Historic Preservation (ACHP).

The MOA will follow a standard format (as defined by the ACHP), including the division of the document into the following sections:

- **Title**—Identifies the undertaking and signatories to the agreement
- **Preamble**—Notes the statutory authority for the undertaking; introduces the signatories; provides relevant background facts about the Project, activity, or program; briefly describes the Section 106 consultation process; identifies the consulting parties; and includes any additional contextual information that may be necessary for a reader to understand the intent and purpose of the agreement
- **Stipulations**—Forms the heart of the MOA by detailing each of the avoidance, minimization, or mitigation measures the BLM has agreed to ensure are implemented. Following these substantive stipulations, agreement documents contain several administrative stipulations to cover what happens when the undertaking changes or is modified, when disputes arise, when new Historic Properties are discovered, and how long the BLM will take to ensure the stipulations are carried out
- **Signatures**—The MOA will end with an affirmation clause and signature block that formalizes the commitment of the BLM, agencies, and other parties to the terms of the agreement

The draft MOA will be submitted to the BLM for initial review and comment, prior to finalization and distribution to the other agencies and consulting parties for signature. Additional agency support will be provided as needed, including support throughout the SHPO and tribal consultation process. An in-person support meeting may be held at the BLM office in St. George, Utah as needed.

Due to the lack of Tribal or other consulting party consultation needs for the optional, supplemental SITLA project, a separate MOA will not be required to address the eight Historic Properties on SITLA lands. The SITLA project would be complete upon SHPO concurrence of the final HPTP.

### Deliverables

- MOA, draft and final
- Mailings, as needed
- Agency support, as needed

### Schedule

- The draft MOA will be prepared in tandem with the HPTP
- The final MOA will be prepared in October 2023 and routed for signatures

- The final MOA will be executed in December 2023, prior to Project close-out
- The supplemental MOA will follow the same schedule as the primary document, if necessary

Assumptions

- The MOA will follow the standard format defined by the ACHP
- Up to one (1) in-person meeting may be held at the BLM office in St. George, Utah
- Additional agency support will be provided as needed
- Up to eight (8) Historic Properties managed by the BLM (some with SITLA or with UDOT and Private/Tribal ownership) will be addressed in the MOA
- An MOA will not be required to address the eight (8) Historic Properties managed by SITLA; should a separate document be required for the supplemental SITLA project, it will be at additional cost

## QUALIFICATIONS

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Transcon maintains permitted Secretary of the Interior (SOI)-qualified archaeologists and cultural resource specialists with extensive experience in Great Basin Region cultural and historic resources and is well prepared to perform the professional cultural resource services outlined in the provided Request for Proposal's SOW. Our cultural resource services include Class I (desktop) literature reviews, Class II reconnaissance surveys, Class III intensive pedestrian surveys, HPTP and MOA development and support, Phase II testing, and Phase III data recovery excavations. We also perform archival and oral history research, historic building inventories, and evaluations for listing on the NRHP. Additionally, Transcon conducts direct and indirect impact assessments and prepares corresponding mitigation, management, and treatment plans as well as protection strategies. We have prepared detailed GIS mapping for cultural studies, conducted post-fieldwork artifact analyses, established curation agreements, and written technical reports in compliance with Section 106.

### Key Project Personnel

Our success as a firm depends on maintaining a staff with a broad range of experience, including a knowledgeable and well-versed group of cultural archaeologists. Some of our staff are former agency archaeologists or acted as private consultants before joining Transcon; they add a wealth of knowledge and experience to an already diverse team of cultural resource specialists. Transcon holds a valid and current Utah BLM Cultural Resource Use Permit (BLM permit no. 21UT81313) listing eight permitted Field Directors, five of whom are also permitted as Principal Investigators. Additionally, we have three staff who hold valid and current Utah Public Lands Policy Coordination Office Principal Investigator permits for the state of Utah. Transcon also maintains a plethora of support staff, including experienced crew members who are available to support projects, as needed.

The team that has been assembled for this Project is uniquely qualified to perform the requested tasks and has applicable and specialized skills to provide the technical expertise required for the SOW as provided in the Request for Proposals. Brief key personnel summaries for each Project staff member are listed below, and resumes for all personnel are found in **Appendix A** and include education and work history.

#### Lindsey M. Evenson, Project Manager / Project Director / Principal Investigator

Ms. Evenson is a senior archaeologist, Principal Investigator, project manager, and the Great Basin and Southwest Region cultural resources program manager. Located in our Draper, Utah office, Ms. Evenson has been with Transcon for over 4 years and has over 10 years of research, fieldwork, and management experience in archaeology, history, and cultural resource management in the Colorado Plateau, Columbia Plateau, Great Basin, Pacific, Plains, and Mountain West regions. She is currently permitted throughout the states of Arizona, Colorado, Oregon, Nevada, Utah, and Washington and is permittable throughout Idaho, Montana, and Wyoming among other states in the Pacific Northwest and Intermountain Region. Ms. Evenson is experienced in the region's prehistoric, ethnohistoric, and historic cultures as well as geology, biology, and human osteology. Her professional experience includes historical and archaeological assessments (including NRHP requirements) for Section 106, Section 110, and Section 404 compliance; tribal consultation; development of cultural resources mitigation plans; historic preservation; compliance inspection contracting; and extensive coordination with federal agencies such as the Bureau of Indian Affairs, the BLM, the National Park Service, the U.S. Army Corps of Engineers, the U.S. Forest Service, and the U.S. Department of Agriculture, as well as various local state and tribal agencies.

While employed with Transcon, Ms. Evenson has provided cultural resource surveys, compliance, and consultation on innumerable projects and has conducted hundreds of technical studies directed at helping clients comply with federal and state historic preservation regulations, including various field investigations

and reports for development, transmission, transportation, utility, telecommunications, recreation, and archaeological projects. She has worked in positions of responsibility throughout the western United States, including Arizona, Colorado, Idaho, Nevada, Utah, Washington, and Wyoming.

Jennifer Bannick, Field Director / Crew Chief / Project Archaeologist / Data Manager

Ms. Bannick is a program coordinator, Field Director, data manager, and archaeologist located in our Draper, Utah office. Mrs. Bannick has over 8 years of research, fieldwork, and reporting experience in archaeology, history, and cultural resource management, including Class I literature reviews, Class II reconnaissance surveys, Class III intensive pedestrian surveys, Phase II testing, and Phase III data recovery. She is currently permitted by the BLM throughout Utah, has worked in nearly every county throughout the state, and is permittable in other areas throughout the Intermountain Region. Ms. Bannick is proficient at recording sites, test excavation, block excavation, debitage analysis, historic and prehistoric artifact analysis, artifact curation, and report preparation. She has worked as a wilderness survival guide and has interned with the Utah Museum of Natural History. Ms. Bannick has collaborated on many cultural resource surveys and compliance/consultation on a variety of projects since she began her employment with Transcon. She is knowledgeable in prehistoric, ethnohistoric, and historic cultures, has extensive experience in the mining industry, and is practiced at assisting clients comply with federal and state preservation regulations for a number of projects including transportation, development, and cultural resource studies.

Brent Larsen, Field Director / Crew Chief

Mr. Larsen graduated from the University of Utah with a Master of Arts in anthropology in 2012. He has over 15 years of experience in Utah archaeology. Mr. Larsen has surveyed hundreds of miles while performing linear surveys and hundreds of thousands of acres across Utah. Mr. Larsen has recorded over a thousand historic and prehistoric sites. He specializes in prehistoric sites and artifacts but has also recorded hundreds of historic sites including roads, ditches, canals, domestic dwellings, artifact scatters, and mining sites. His expertise includes survey, site recordation, excavation, crew management, data management, and monitoring. He is BLM permitted for the Great Basin and Colorado Plateau/Anasazi areas and specializes in historic and prehistoric archaeology for these areas. Presently, Mr. Larsen lives in the Salt Lake Valley and has been employed as a Field Director on numerous projects across Utah.

Everett Bassett, Senior Archaeologist / QA/QC Specialist

Mr. Bassett has 36 years of research and management experience in history, archaeology, and cultural resource management, mostly in Utah and particularly in Washington County. He has provided services for cultural resource surveys, compliance, and consultation on pipelines, electrical transmission, telecommunications, and mine reclamation projects. Over the years, Mr. Bassett has conducted several hundred technical studies directed at helping clients comply with federal and state historic preservation regulations. He has extensive experience in prehistoric, ethnohistoric, and historic archaeology as well as archival and oral historical research and historic architecture. In 1997 he was awarded the SOI's Annual Award for Historic Preservation for his work at the Silver Reef Mining District in Washington County.

Mr. Bassett has extensive experience in managing, authoring, and/or reviewing a large number of Project contract deliverables as well as consulting with state and federal agencies and with Native American tribes. This experience has made him eminently qualified to provide Project guidance and Quality Assurance/Quality Control overview for cultural resource analyses.

## PRELIMINARY DELIVERABLES SCHEDULE

| Task* | Description              | Timeline                                 | Deadline          |
|-------|--------------------------|--|-------------------|
| 1     | Pre-work kickoff meeting | Within 30 days of NTP                    | February 15, 2023 |
| 2     | Initial public meeting   | Within 45 days of kickoff                | March 31, 2023    |
|       | In-person field visit #1 | Within 30 days of initial public meeting | April 30, 2023    |
| 3     | In-person field visit #2 | Within 30 days of draft HPTP submittal   | June 30, 2023     |
|       | Draft HPTP               | Within 90 days of kickoff meeting        | May 31, 2023      |
| 4     | Final HPTP               | Within 15 days of agency comments        | August 31, 2023   |
|       | Draft MOA                | With HPTP                                | May 31, 2023      |
| -     | Final MOA                | With HPTP                                | August 31, 2023   |
|       | Project close out        | Within 12 months of NTP                  | December 31, 2023 |

\*Note: the optional, supplemental/SITLA project HPTP would follow the same schedule as their respective primary documents, as needed.

## COST SUMMARY

| Task  | Description   | Cost                |
|---|---|---------------------|
| <b>Primary Project (BLM)</b>                        |   |                     |
| Task 1  | Kickoff Meeting and Project Management                      | \$13,666.50         |
| Task 2  | Public Meetings   | \$36,276.00         |
| Task 3  | Historic Properties Treatment Plan                          | \$67,162.50         |
| Task 4  | Memorandum of Agreement                                     | \$41,472.00         |
| <i>Primary Project Total</i>                        |   | <b>\$158,577.00</b> |
| <b>Optional: Supplemental Project (SITLA)</b>       |   |                     |
| Task 1  | Supplemental Kickoff Meeting and Project Management (SITLA) | \$5,548.00          |
| Task 3  | Supplemental Historic Properties Treatment (SITLA)          | \$23,324.00         |
| <i>Optional Project Total</i>                       |   | <b>\$28,872.00</b>  |
| <b>GRAND TOTAL (including Primary and Optional)</b> |   | <b>\$187,449.00</b> |

## APPENDIX A

### KEY PERSONNEL RESUMES

#### **SKILLSETS / EXPERTISE**

- Class I research
- Class II reconnaissance
- Class III survey
- Laboratory and excavation management
- Historic and prehistoric artifact analysis
- Historic Context development
- Viewshed analysis
- Section 106 review
- National Environmental Policy Act (NEPA) documentation, including Categorical Exclusions, Environmental Assessments, and Environmental Impact Statements
- State Environmental Study documents
- GIS, GPS, and mapping
- Transmission, telecom, utility, development
- Principal Investigator permitted or permittable across federal, state, and Tribal lands throughout the western United States, including Arizona, Colorado, the Dakotas, Idaho, Nevada, Montana, Oregon, Utah, Washington, and Wyoming

Ms. Evenson has over 10 years of research, fieldwork, and management experience in archaeology, history, and cultural resource management, cultural resource construction monitoring, Phase II testing, and Phase III data recovery. Ms. Evenson has been employed with Transcon Environmental (Transcon) for the past 5 years and has provided cultural resource surveys, compliance, and consultation on innumerable projects. She is experienced in prehistoric, ethnohistoric, and historic cultures, as well as geology and human osteology, and has conducted hundreds of technical studies directed at helping clients comply with federal and state historic preservation regulations for a variety of projects.

Ms. Evenson's professional experience includes historical and archaeological assessments (including National Register of Historic Places [NRHP] requirements) for Section 106, Section 110, and Section 404 compliance; tribal consultation; development of cultural resources mitigation plans; historic preservation; assistance with NEPA documentation; and extensive coordination with federal agencies.

#### **EDUCATION**

M.A., Interdisciplinary Studies—Cultural Resource Management, Eastern Washington University  
Archaeology Field School, Kalispel/Eastern Washington University Archaeological Field School  
B.A., Anthropology, Eastern Washington University  
Archaeology Field School, Huari-Ancash Archaeology Research Project, Peru  
A.A., General Studies, Olympic College

#### **ACTIVE PERMITS**

BLM Arizona, Principal Investigator (Statewide)  
BLM Montana/Dakotas, Principal Investigator (Statewide)  
BLM Nevada, Principal Investigator (Prehistoric: Elko, Ely, Southern Nevada, and Battle Mountain Districts; Historic: Statewide)  
BLM Oregon and Washington, Principal Investigator (Columbia Plateau, Great Basin)  
BLM Utah, Principal Investigator (Prehistoric and Historic Statewide)  
Colorado State Permit, Principal Investigator (Statewide)  
Nevada Antiquities Permit, Principal Investigator (Statewide)  
USFS Region 2, Rocky Mountain Region Permit, Principal Investigator  
Utah Governor's Office, PLPCO, Principal Investigator (Statewide)

#### PROFESSIONAL AFFILIATIONS

Register of Professional Archaeologists (RPA) (ID # 43673048)

Utah Professional Archaeological Council

Archaeological Institute of America

#### SELECT PROJECT EXPERIENCE

- Bureau of Land Management (BLM) St. George Field Office, Washington County Water Conservancy District's (WCWCD) Class III Cultural Resource Inventory and Archaeological Site Revisits for Warner Valley Project Area Cultural Survey—**Project Manager / Principal Investigator / Senior Archaeologist**; Washington County, Utah; 2021–present—Class III inventory and site-revisits/re-documentation to support a land sale. Responsibilities included client and agency coordination, project planning and management, literature and data review, and report preparation.
- BLM St. George Field Office, WCWCD's Ash Creek Project Historic Context for Four Historic Properties—**Project Manager / Principal Investigator / Senior Archaeologist**; Washington County, Utah; 2020–present—Field investigations and development of a Historic Context, and development of public history interpretive kiosk panels to mitigate Adverse Effects to Historic Properties. Responsibilities included client and agency coordination, project planning and management, literature and data review, and report preparation.
- BLM St. George Field Office, Dominion Energy Utah's Feeder Line 135 Replacement Project Cultural Survey and Inspections—**Project Manager / Principal Investigator / Senior Archaeologist**; Washington County, Utah; 2020–present—Class III inventory of 24 miles and site revisits/re-documentation across federal (BLM), state (School and Institutional Trust Lands Administration [SITLA], Utah State Parks, Utah Department of Transportation [UDOT]), and private lands in support of a pipeline replacement. Responsibilities included client and agency coordination, project planning and management, literature and data review, report preparation, cultural resources inspections and monitoring, and annual reports.
- BLM St. George Field Office, WCWCD's Sand Hollow Regional Pipeline Project Cultural Survey, Monitoring, and Excavation—**Senior Archaeologist / Principal Investigator**; Iron and Beaver counties, Utah; 2019–present—Linear survey of approximately 6.25 acres of BLM and private lands to locate, identify, and record archaeological resources; monitoring of approximately 22 acres to locate, identify, and record any previously undetected cultural resources or inadvertent discoveries; development of a cultural resources Treatment Plan to define mitigation of impacts to a cultural feature; and excavation associated with a discovery (as defined in the Treatment Plan). Acted as Principal Investigator, quality assurance /quality control specialist, and Field Director. Responsibilities included GIS/GPS technician and mapping activities, authoring report, providing recommendations for NRHP eligibility, performing agency consultation, and providing training on cultural resources to construction personnel.
- BLM Moab Field Office, Emery Telcom's Castle Valley to Cisco Project Cultural Survey—**Project Manager / Principal Investigator / Senior Archaeologist**; Grand County, Utah; 2022–present—Class III intensive pedestrian survey of 35.5 acres of BLM Moab Field Office, SITLA, UDOT, and Department of Natural Resources (Forestry, Fuels, and State Lands)-managed and privately owned lands to construct, operate, and maintain a fiber optic line and appurtenances to upgrade facilities. Responsibilities included client and agency coordination, project planning and management, literature and data review, field inspections and data verification, and report preparation.

### SKILLSETS / EXPERTISE

- Class I research
- Class II reconnaissance
- Class III pedestrian survey
- Phase II testing
- Phase III data recovery
- Project coordination
- Archaeological field director / crew chief / data manager
- Assistance with National Environmental Policy Act (NEPA) documentation, Environmental Assessments, and Environmental Impact Statements
- Archaeological assessments for Section 106 review
- Prehistoric and historic artifact analysis (emphasis on lithicdebitage analysis)
- GIS and mapping, survey and logistical coordination
- Technical writing
- Bureau of Land Management (BLM) Utah statewide Principal Investigator permitted

Ms. Bannick is an archaeologist with extensive experience in the mining industry and over 10 years of research, fieldwork, and writing experience in archaeology, history, and cultural resource management. Her archaeological skillset includes Class I literature and background research reviews, Class II reconnaissance surveys, Class III intensive pedestrian surveys, Phase II testing, and Phase III data recovery. Ms. Bannick is proficient at recording sites, test excavation, block excavation, lithic debitage analysis, historic and prehistoric artifact analysis, artifact curation, and report preparation. Prior to her employment with Transcon Environmental (Transcon), Ms. Bannick has worked as a wilderness survival guide, interned with the Utah Museum of Natural History, and worked for other private cultural resource firms in the western United States.

Ms. Bannick has been employed with Transcon since 2018. Her professional experience includes historical and archaeological assessments (including National Register of Historic Places [NRHP] requirements) for Section 106 and Section 110 compliance, development of survey and cultural resources mitigation plans, assistance with NEPA documentation, and directing and training crew members as a field director.

Ms. Bannick is knowledgeable in prehistoric, ethnohistoric, and historic cultures, as well as geology and botany. She is practiced at assisting clients in compliance with federal and state preservation regulations on transportation, telecommunications, development, and cultural resource projects and abandoned mine reclamation. She has coordinated with federal and state agencies, including the BLM; U.S. Forest Service (USFS); National Park Service; State Historic Preservation Office; Utah Division of Oil, Gas, and Mining; Department of Natural Resources (DNR); State of Utah School Institutional Trust Lands Administration (SITLA); and Utah Department of Transportation (UDOT).

### EDUCATION

B.A., Anthropology, Emphasis in Archaeology, University of Utah

B.A., Russian, University of Utah

Archaeology Field School, Range Creek Canyon

Completed Graduate Coursework, University of Utah

### ACTIVE PERMITS

BLM Utah, Field Director permitted (Great Basin, Virgin, and San Juan regions)

BLM Utah, Principal Investigator (Statewide)

BLM Nevada, Field Director (Prehistoric: Elko, Ely; Historic: Statewide)

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#### PROFESSIONAL AFFILIATIONS AND TRAINING

Utah Statewide Archaeological Society  
Utah Professional Archaeological Council  
CPR/AED/First Aid, American Red Cross Certification  
Mine Safety Training and Certification, Mine Safety and Health Administration  
Nevada Archaeological Association

#### SELECT PROJECT EXPERIENCE

- BLM St. George Field Office, Washington County Water Conservancy District's (WCWCD) Class III Inventory and Site Revisits for the Warner Valley Project Cultural Survey—**Field Director / Archaeologist / Data Manager**; Washington County, Utah; 2021–present—Performed Class III intensive pedestrian block survey of 219.26 acres of BLM, SITLA, and privately owned lands and conducted targeted site revisits to locate, identify, and record archaeological resources to obtain data for the disposal of the public lands from federal ownership through exchange with the WCWCD in compliance with relevant federal laws. Responsibilities included conducting a Class I literature review, recordation of cultural resource sites, GPS data collection, photograph data collection, coauthoring site forms and report, and providing recommendations for NRHP eligibility.
- BLM St. George Field Office, WCWCD's Ash Creek Project Historic Context for Four Historic Properties Cultural Survey—**Archaeologist**; Washington County Utah; 2021—Class II reconnaissance and Class III intensive pedestrian survey of 67 miles crossing BLM St. George Field Office-managed, SITLA-managed, USFS-managed, and privately owned lands in the Ash Creek drainage to study four historic resources (ca. 1918 Arrowhead Highway/U.S. Route 91, ca. 1868 variations of earlier Salt Lake City to Saint George wagon road corridors with multiple alignments at some locations, and the historic Pintura Ditch) that will be impacted by the proposed Ash Creek Pipeline and Toquer Reservoir Recreation Plan. Responsibilities included conducting a Class I literature review, recordation of cultural resource sites, coauthoring a historic context and site forms, and assisting with the creation of a blog post for Utah State Historic Preservation Office.
- BLM St. George Field Office, Dominion Energy Utah's Utah Feeder Line 135 Replacement Project Cultural Survey—**Archaeologist**; Washington County Utah; 2021–2022—Class III intensive pedestrian survey of 24 miles crossing BLM St. George Field Office managed, SITLA-managed, USFS-managed, DNR-managed, and privately owned lands to locate, identify, and record archaeological resources. Responsibilities included conducting a Class I literature review, co-authoring site forms and report, and providing recommendations for NRHP eligibility. Additional monitoring responsibilities in 2022 including GPS data collection, photograph data collection, reporting on new ground disturbance, and collecting and submitting daily monitoring and safety meeting logs.
- BLM St. George Field Office, UDOT's Interstate 15 (I-15); Milepost 18 to 22 Right-of-Way (ROW) Fence Project Cultural Survey—**Field Director**; Washington County, Utah; 2020—Class III survey of approximately 4.1 miles to locate, identify, and record archaeological resources for the proposed project to replace the existing highway ROW fence with a new one and install a new cattle guard at the end of the northbound I-15 Exit 22 (Leeds) off-ramp. The project crossed BLM-managed and privately owned lands within the existing UDOT highway ROW along I-15. Responsibilities included conducting a Class I literature review, recordation of cultural resource sites, GPS data collection, photograph data collection, co-authoring the report and site forms, and providing recommendations for NRHP eligibility.

#### SKILLSETS / EXPERTISE

- Class I research
- Class II reconnaissance
- Class III survey
- Laboratory and excavation management
- Historic and prehistoric artifact analysis (emphasis on prehistoric artifacts and faunal remains)
- GIS and mapping
- Technical writing
- Bureau of Land Management (BLM)-permitted for the Great Basin and Anasazi/Colorado Plateau Regions

Mr. Larsen has over 14 years of research and fieldwork experience in archaeology, history, and cultural resource management. Over the last 7 years, he has participated in positions of responsibility on over 80 Class III surveys across Utah. His professional experience includes Class III archaeological survey, report and site form writing, and monitoring for Section 106 and Section 110 projects; development of cultural resource mitigation plans; National Register of Historic Places (NRHP) recommendations; and coordination with state and federal agencies, such as State Historic Preservation Offices (SHPOs) and the BLM, as well as state/county/city governments. Mr. Larsen has worked with land-managing agencies and SHPOs throughout Utah.

#### EDUCATION

M.S., Anthropology, University of Utah

B.S., Anthropology, University of Utah

A.S., General Studies, Salt Lake Community College

#### SELECT PROJECT EXPERIENCE

- **Emery Telcom's Salt Lake City to Colorado Border Fiber Optic Project, Phase II: Price to Green River and Supplemental—Field Director / Archaeologist / Data Manager;** Utah; 2019–present—Class III intensive pedestrian survey of 58.6 miles crossing lands administered by the BLM, Department of Defense (White Sands Launch Complex), Department of Natural Resources (DNR), Utah School and Institutional Trust Lands Administration (SITLA), Utah Department of Transportation (UDOT) and privately owned lands to locate, identify, and record archaeological resources.
- **Utah DNR, Utah Division of Oil, Gas, and Mining's (UDOGM) Dividend Inventory AMRP Project—Archaeologist / Field Director;** Utah; 2019–present—Class III survey of approximately 21 square miles to locate, identify, and record archaeological resources within the Tintic Mining District. The project APE is approximately 50 meters around each open mine and/or mine-related feature. Recordation of cultural resource sites, GPS data collection, photograph data collection, site form co-author, agency consultation, and NRHP evaluation assistance.
- **BLM Vernal Field Office/SITLA, Moon Lake Electric Association's Lapoint to Jensen to Dinosaur 69 Kilovolt Transmission Line Project—Archaeologist / Field Director;** Utah; 2019—Linear survey of 12.14 miles covering a total of 143.76 acres of SITLA properties to locate, identify, and record new and existing archaeological resources in preparation for the rebuild/upgrade of an existing aerial transmission line. Acted as field director/crew chief/site form author. Provided GIS/GPS technician work and mapping, as well as recommendations for NRHP eligibility.
- **UDOT's State Route (SR)-21 Surveys: Material Pits and Shoulder Flattening Project—Field Director / Archaeologist / Data Manager;** Utah; 2019—Class III intensive pedestrian block survey of two material pits (25 acres) and a linear survey of the SR-21 highway right-of-way (ROW) (14 miles) to locate, identify, and record archaeological resources. Recordation of cultural resource sites, GPS data collection, photograph data collection, report and site form co-author, and NRHP evaluation assistance.

- UDOT's SR-9; Interstate 15 to Southern Parkway Environmental Study Project—Field Director / Archaeologist; Utah; 2019—Class III linear survey of approximately 6.55 miles (465.15 acres) of the SR-9 highway ROW to revisit, locate, identify, and record archaeological resources adjacent to the SR-9 highway ROW on both sides of the highway. Recordation of cultural resource sites, GPS data collection, photograph data collection, site form co-author, agency consultation, and NRHP evaluation assistance.
- BLM, Garkane Energy's Hatch to Spry 69 Kilovolt Transmission Line Project—Field Director / Archaeologist / Data Manager; Utah; 2019—Site form co-author and survey for a Class III intensive pedestrian survey of 9.5 miles of survey crossing 9.4 miles of BLM-managed and 0.1 mile of privately owned land.
- Natural Resource Conservation Service, Alpha Engineering's Cove Reservoir Project Cultural Survey—Field Director / Archaeologist / Data Manager; Utah; 2018–present—Performed block survey of nearly 650 acres of SITLA, BLM, and privately owned lands to locate, identify, and record archaeological resources; provided GIS/GPS technician work and mapping; acted as report and site form author; made recommendations for NRHP eligibility and agency consultation. Conducted supplemental background research search; supplemental survey of Borrow Pits; site form and report edits co-author.
- South Central Communications' Hogback to Boulder Fiber Optic Project Cultural Survey—Field Director / Archaeologist / Data Manager; Utah; 2018–2019—Class I research for a Class III intensive pedestrian survey of 7.9 miles of USFS Dixie National Forest (DNF)-managed lands, BLM Grand Staircase-Escalante National Monument-managed lands, UDOT-maintained lands, and privately owned lands to locate, identify, and record archaeological resources. Site form co-author; provided NRHP evaluation assistance.
- South Central Communications' Boulder to Torrey Fiber Optic Project Cultural Survey—Field Director / Archaeologist / Data Manager; Utah; 2018–2019—Class III intensive pedestrian survey of 31.3 miles of USFS, DNF, and Fish Lake National Forest-managed lands, BLM Richfield Field Office-managed lands, UDOT-maintained lands, and privately owned lands to locate, identify, and record archaeological resources. Recordation of cultural resource sites, GPS data collection, photograph data collection, site form co-author, and NRHP evaluation assistance.
- BLM Monticello Field Office, Emery Telecom's Blanding to Bluff and Montezuma Creek Telecommunications Project Cultural Survey—Field Director / Archaeologist; Utah; 2018–2019—Cultural resources survey of 36.3 linear miles for telecommunications project; recordation of cultural resource sites; GPS data collection; photograph data collection; site form co-author and NRHP evaluation assistance.
- BLM Vernal Field Office, Moon Lake Electric Association's Bonanza to Book Cliff's 138 Kilovolt Transmission Line Project—Archaeologist/Field Director; Utah; 2018—Linear survey of 38.2 miles covering a total of 695 acres of BLM and the SITLA properties to locate, identify, and record new and existing archaeological resources in preparation for the installation of a proposed aerial transmission line. Acted as field director/crew chief/site form author. Provided GIS/GPS technician work and mapping, as well as recommendations for NRHP eligibility.
- BLM Monticello Field Office, Emery Telcom's Blanding to Bluff and Montezuma Creek Telecommunications Project—Archaeologist/Field Director; Utah; 2018—Linear survey of 43.55 miles covering a total of 314 acres of BLM, SITLA, White Mesa Ute Tribal lands, Navajo Tribal lands, and privately owned properties to locate, identify, and record new and existing archaeological resources in preparation for the installation fiber optic telecommunication cable and facilities.

**SKILLSETS / EXPERTISE**

- Historical and archaeological assessments for Section 106, 4(f), and 404 compliance
- Tribal consultation
- U.S. Army Corps of Engineers (USACE) consultation (individual and nationwide)
- Third-party National Environmental Policy Act (NEPA) and California Environmental Quality Act preparation
- Development of cultural resource mitigation plans
- Historic preservation
- Architectural history
- Archival and oral history
- Human osteological analysis
- Extensive coordination with agencies such as State Historic Preservation Offices (SHPOs); Bureau of Land Management (BLM); U.S. Forest Service (USFS) and Bureau of Reclamation (BOR), in addition to state, county, and city governments

Mr. Bassett has 36 years of research and management experience in archaeology and cultural resource management. He has provided services for cultural resource surveys; compliance; and consultation on telecommunications, electrical transmission, and mining reclamation projects. Over the years, Mr. Bassett has conducted several hundred technical studies directed at helping clients comply with federal and state historic preservation regulations. He regularly works with SHPOs in California, Utah, Arizona, Nevada, Idaho, Colorado, and Wyoming.

Mr. Bassett's professional experience includes historical and archaeological assessments for Section 106, 4(f), and 404 compliance; Tribal consultation; third-party NEPA preparation; USACE consultation (individual and nationwide); development of cultural resource mitigation plans; historic preservation; and extensive coordination with such agencies as SHPOs, BLM, USFS, and BOR, in addition to state, county, and city governments. Mr. Bassett has extensive experience identifying, recording, analyzing, and evaluating a wide range of cultural resources. These include prehistoric, ethnohistoric, and historic sites, as well as historic structures and traditional cultural properties. He is also an experienced in the recovery and disposition of human remains as well as ethnographic and archival research. In 1998, Mr. Bassett was awarded the Secretary of the Interior's annual award for historic preservation for his work on the Silver Reef Historic Mining District Reclamation Project.

**EDUCATION**

Ph.D., Anthropology (ABD), University of Utah

Honorary Fellow, University of Bradford, United Kingdom

B.A., Biology, Western Maryland College

B.A., History, James Madison University

**PROFESSIONAL AFFILIATIONS**

Society for American Archaeology

Society of Historic Archaeology

Society for California Archaeology

Utah Professional Archaeology Council

Society for Environmental Archaeology (Great Britain)

**SELECT PROJECT EXPERIENCE**

- California Public Utilities Commission, Digital 299 Broadband Project—Agency and Tribal Consultation Coordinator; California; 2018–present—Coordinated all agency consultation and AB-52

and Section 106 consultation for 27 tribes as well as assisting the principal investigator with historic and tribal context development.

- **Western Area Power Administration (WAPA), Sierra Nevada Region On-Call Cultural Resources Program—Director; California and Nevada; 2014–present**—Tasks include managing all on-call archaeology projects, including scoping and budgeting tasks, managing field efforts, reviewing contract deliverables, and providing recommendations to the agency.
- **Garkane Energy, Tropic to Hatch 138 kV Transmission Line Project Cultural Survey and EIS—Principal Investigator; Utah; 2009–present**—Coordinated the cultural resources portion of the EIS, acted as principal investigator and field director of all inventory efforts, authored the Historic Properties Treatment Plan, and managed data recovery activities.
- **All West Communications, Kemmerer, Wyoming to Interstate 80 Fiber Optic Project—Principal Investigator; Wyoming; 2017–2018**—Tasks included the survey of 40 miles of alignment and the recording and evaluation of 32 archaeological sites.
- **Exchequer 70 Kilovolt (kV) Transmission Line Project—Principal Investigator; California; 2016**—Conducted survey of ca 1922 transmission line providing power to Yosemite National Park.
- **Pacific Gas and Electric Company (PG&E), Holdover Permits Project—Principal Investigator; California; 2015–2017**—Conducted inventories of all PG&E facilities on Los Padres and Sierra national forests, including several hundred miles of transmission and distribution lines and over 70 archaeological sites.
- **Whiskeytown 60 kV and 115 kV EA—Principal Investigator; California; 2015**—Conducted survey and prepared report for transmission line and access roads crossing the National Recreation Area.
- **Dixie Power, Stateline Transmission Project—Principal Investigator; Utah and Arizona; 2014**—Tasks included acting as field director, recording identified historic and prehistoric sites, evaluating sites for significance, and report preparation.
- **Dixie Power, Arizona-Utah 138 kV Transmission Line Project—Principal Investigator; Arizona; 2014**—Class III survey for transmission line right-of-way (ROW) project located on land under the jurisdiction of the Arizona State Land Department.
- **Rocky Mountain Power (RMP), Sigurd to Red Butte Transmission Line Project, Third-Party Compliance Inspection—Lead Archaeologist; Utah; 2013–2016**—Acted as the liaison for the project proponent and federal agencies. All cultural resources documents were reviewed and edited, consultation letters were drafted, and coordination and implementation of all compliance activities carried out.
- **Murdoch Mountain Exploration Project—Principal Investigator; Nevada; 2014**—Tasks included the survey of 1,818 acres and the recording and evaluation of 13 archaeological sites.
- **Utah Division of Oil, Gas, and Mining (UDOGM), Topache Peak Abandoned Mine Reclamation Project—Principal Investigator; Utah; 2013–2014**—Tasks included acting as field director for the recordation of 200+ historic mine sites, site eligibility evaluation, report production, and mine closure design participation.
- **Table Top Telecommunications Company, Talking Rock to Seligman Telecommunications Project—Principal Investigator; Arizona; 2012–2013**—Survey and construction monitoring of prehistoric and historic sites located on land under the jurisdiction of the Prescott National Forest.

## **Second Amendment to Agreement**

This Amendment is entered into this 4 day of January, 2023, to amend the Water Reuse Feasibility Study Agreement (“Agreement”) dated November 1, 2021 by and between Washington County Water Conservancy District (“District”), and Stantec (“Contractor”).

WHEREAS, the parties desire to amend the services to be completed by the Contractor as described in the Scope of Work and Fee Proposal attached as Exhibit A to this Amendment;

NOW THEREFORE, the Agreement is amended as follows:

1. The Scope of Work referenced in the Agreement shall be amended as described in Exhibit A to this Amendment.

All the remaining provisions of said Agreement shall remain in full force and effect.

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT



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Zachary Renstrom, General Manager

STANTEC

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Clint Rogers, Vice President

# EXHIBIT A



**Stantec Consulting Services Inc.**  
2890 East Cottonwood Parkway  
Suite 300  
Salt Lake City UT 84121-7283

December 29, 2022

**Mr. Zachary Renstrom Esq., P.E.**  
General Manager  
Washington County Water Conservancy District  
533 E Waterworks Dr  
St. George, UT 84770

Dear Zach Renstrom,

**Reference: Washington County Regional Reuse Feasibility Study - Contract Amendment**

As a result of your recent conversations with US Bureau of Reclamation (USBR) leadership and direction we have received from you to pivot the reuse feasibility project to pursue the USBR Large Scale grant opportunity expected in March 2023, the Stantec/Bowen Collins & Associates team presents the following scope of work and fee proposal to modify our existing task related to development of the Washington County Regional Reuse Plan.

The proposed amendment expands our feasibility study task to include alternatives development and cost estimating for the full list of regional reuse projects (~\$600M in capital improvements) and incorporates direct or indirect potable reuse as well as an option further extending your current water resources.

Please review the scope of work and fee proposal attached for approval in your January 4, 2023 board meeting. Let us know if you have any questions or concerns.

Sincerely,

**STANTEC CONSULTING SERVICES INC.**

A handwritten signature in black ink, appearing to read 'Joshua Cowden'.

**J. Clinton Rogers, PE**  
Vice President, Project Development  
Phone: (801) 617-3204  
clint.rogers@stantec.com

**Joshua Cowden, PhD, PE**  
Senior Associate, Water Resources Engineer  
Phone: (907) 212-2776  
joshua.cowden@stantec.com

[stantec.com](http://stantec.com)

Attachment: Washington County Regional Reuse Project - Amendment for Large Scale USBR Funding Opportunity



Washington County Regional Reuse Project  
Amendment for Large Scale USBR Funding Opportunity  
Scope of Work

#### Background

The Stantec/Bowen Collins and Associates (BC&A) team was originally hired by Washington County Water Conservancy District (WCWCD) in November 2021 to prepare a feasibility study to be submitted to the US Bureau of Reclamation (USBR) for funding consideration under the Title 16 WaterSmart grant program for reuse projects. The contract was amended in May 2022 to prepare a separate feasibility study for the Ash Creek Project for the USBR's Small Storage Program funding opportunity. The purpose of this scope of work is to amend the reuse feasibility task for the purpose of applying for feasibility study funding (study grant) and design/construction funding (design/construction grant) under the USBR Large-Scale Water Recycling Program. The amendment expands the reuse feasibility study to include alternatives development and cost estimating for the full list of regional reuse projects (~\$600M in capital improvements) and evaluates and incorporates indirect or direct potable reuse as well as reuse for irrigation.

#### Introduction

Building upon the Reuse Feasibility task given in November 2021, this study adds alternative development and cost estimating for the elements of the regional reuse plan that were identified but not developed. The original feasibility study included only the green highlighted elements, as shown in the table below. This scope of work adds alternative development and cost estimating for the elements highlighted in yellow.

| Project Sponsor                       | Component Description  | Project Cost Estimate |
|---------------------------------------|--|-----------------------|
| City of St George                     | SGRF Upgrades (14 MGD)   | \$7,496,000.00        |
|                                       | SGRWRF Onsite Reuse Effluent Storage                                   | \$8,385,000.00        |
|                                       | Graveyard Wash Reservoir   | \$22,340,000.00       |
|                                       | Pumping Reuse to Ledges  | \$6,074,000.00        |
|                                       | SGRF Capacity Expansion (24 MGD)                                       | \$79,834,000.00       |
| Ash Creek<br>Special Service District | Ash Creek SSD Sewer Lagoons Conversion to Mechanical Treatment/Reuse   | \$112,331,000.00      |
|                                       | Reuse Components/Distribution of Confluence Park WRF                   | \$5,573,000.00        |
| WCWCD                                 | Dry Wash Reservoir   | \$19,352,000.00       |
|                                       | Pipeline Connecting Confluence Park WRF to Toquer Reservoir            | \$13,042,000.00       |
|                                       | Pipeline Connecting Ash Creek Reuse to Future Storage Reservoir(s)     | \$14,597,000.00       |
|                                       | Future Storage Reservoir(s)  | \$116,424,000.00      |
|                                       | Pipeline Connecting SGRF/Gunlock System to Future Storage Reservoir(s) | \$87,320,000.00       |
|                                       | Conveyance Upgrades Between SGRF and Ivins Reservoir                   | \$49,398,000.00       |



Additionally, this scope of work includes the evaluation of alternatives for direct potable reuse (DPR) or indirect potable reuse (IPR) by way of surface water augmentation of an open reservoir with advance treated wastewater effluent. Two water reclamation plant sites are being considered: (1) St George Regional Wastewater Treatment Facility upgrade to a 21 mgd conventional activated sludge facility producing Type 1 effluent, and (2) Ash Creek lagoon treatment system (5.5 mgd) upgrade to produce Type 1 effluent. The upgrades for both of these facilities to expand or meet Type 1 Reuse standards were considered in previous analyses, and will now be evaluated for DPR or IPR.

The scope includes the analysis of four alternatives:

- Retain the existing treatment and effluent management strategies
- Implement advanced treatment on Type 1 effluent including ultrafiltration, reverse osmosis, and UV-advanced oxidation. This option reduces salinity levels, but requires brine disposal facilities.
- Implement advanced treatment on Type 1 effluent including ozonation, biofiltration, ultrafiltration, granular activated carbon, UV advanced oxidation, and a partial salinity reduction process. This option reduces salinity levels to a lesser degree, but reduces the quantity of brine that must be disposed.
- Implement advanced treatment on Type 1 effluent including ozonation, biofiltration, ultrafiltration, granular activated carbon, and UV advanced oxidation. No brine disposal is required, but the process does not reduce salinity.

The final configuration of the DPR or IPR alternatives will be guided by the regulatory framework and potable reuse concepts developed in the below tasks.

#### **Task Description**

The scope of work for amending the current Regional Reuse Feasibility Study includes the following tasks and deliverables:

##### **Task 1 - Define Issues and Needs**

- Review existing feasibility study, outline needed changes to meet large-scale recycling program requirements, and map out the work needed.

##### **Task 2 - Overview of Other State's Reuse Regulations**

- Summarize DPR and IPR regulations that have been developed in neighboring Western states (Arizona, California, Colorado, Nevada, and Texas) and describe how these might be applied to Utah.
- Develop a regulatory framework to be used to aid in estimating the cost of required treatment.
- Have project introduction and regulatory meeting with the Division of Water Quality and Division of Drinking Water (in-person if possible). This task assumes one meeting, up to 4 hours in length attended by two Stantec employees.

##### **Task 3 - Elements of a Potable Reuse Program**

- Outline, as part of the feasibility study, the required elements of a potable reuse program that will need to be included in the overall Washington County Regional Reuse Plan. These elements include:
  - Public outreach
  - Pilot/Demonstration study

- Enhanced source control
- WRF improvements
- WW sampling
- Finished water blending
- Potential effects on water treatment facility

**Task 4 - Concepts for Advanced Water Treatment for Potable Reuse**

- Develop concepts for advanced water treatment based on regulatory framework and high-level review of water quality of both wastewater effluent and surface water reservoirs. Included in this evaluation will be provisions for:
  - Pathogen control
  - Chemical control
  - Multi-barrier (critical control point) approach
  - Salinity management
- Meeting – Half day workshop with Washington County clients to discuss findings of Tasks 1-4

**Task 5 – Treatment Alternatives Descriptions**

- Potable reuse process alternatives for each existing wastewater treatment facilities will include the following:
  - Status quo
  - Full RO-based treatment with brine disposal
  - Carbon- based treatment
  - Carbon – based treatment with partial salinity reduction
  - Brine management and disposal strategies
- Alternative descriptions will include a write-up, process flow diagrams, and site layout figures to be included in Feasibility Study

**Task 6 - Regional Conveyance and Storage Needs**

- Develop the regional storage and conveyance projects that have been identified in concept to meet USBR feasibility-level requirements

**Task 7 - Environmental Impacts.**

- Consider potential environmental impacts, both benefits and concerns, and provide environmental analysis that meets USBR feasibility-level requirements. This analysis assumes to be a desktop exercise using existing studies, and does not include new field work.
- Develop write-up to be included in Feasibility Study

**Task 8 - Legal and Institutional Requirements**

- Consider potential legal and institutional requirements and provide analysis that meets USBR feasibility-level requirements. Analysis will include:
  - Interagency coordination and agreements
  - Water rights
  - Permitting requirements
- Develop write-up to be included in Feasibility Study



#### Task 9 - Economic Analysis

- Evaluate the advantages and disadvantages of proposed alternatives for regional reuse projects (treatment, storage, conveyance, and DPR/IPR vs irrigation) using monetary and non-monetary criteria and in accordance with USBR feasibility-level requirements.
- Develop write-up to be included in Feasibility Study

#### Task 10 - Cost Analysis

- Develop cost estimates for the remaining elements of the Regional Reuse Plan. Cost estimates will be developed to meet USBR feasibility-level requirements and include the following:
  - CAPEX
    - Methodology (parametric model, AACE Class 4)
    - Cost summary for alternatives
  - OPEX
    - Methodology (power, chemicals, consumables, labor, repair and Replacement)
    - OPEX summary for alternatives
  - Cost of water for each alternative (dollars per acre-foot) for comparison purposes.
- Conduct half-day workshop with Washington County Clients to review progress on Tasks 5-10

#### Task 11 - Feasibility Study/Applications

- Support WCWCD staff with development of study grant application for USBR Large Scale Projects
- Compile and write Feasibility Study based on above tasks, and add this information to the Regional Reuse Plan that has been developed
- Evaluate Feasibility Study for compliance with USBR Large Scale Project Requirements
- Support WCWCD staff with development of design/construction grant application for USBR Large Scale Projects

#### Task 12 - Project Management and Administration

- Project management activities including:
  - Weekly progress meetings
  - Project administration
  - Monthly invoices and tracking

#### *Task Deliverables*

- Meeting/workshop minutes
- Draft study grant application sections
- Draft feasibility study review (electronic pdf)
- Feasibility study review meeting minutes
- Final feasibility study (electronic pdf)
- Draft design/construction grant application sections



#### **Schedule**

The USBR is expected to release a Notice of Funding Opportunity (NOFO) for Large-Scale Reuse Project Funding on March 31, 2023, with Feasibility Studies due 30 days thereafter. The schedule for this project was developed to fast track the work needed to complete the feasibility study ahead of the submission deadline at the end of April 2023 but may need to be adjusted if the NOFO release date changes. See proposed project schedule on the following page.

#### **Fee**

Attached to this scope of work is a proposed fee to complete the work. Work will be billed monthly on a time and materials basis and not to exceed the total listed without approved contract amendment.

Washington County Regional Reuse Plan - Large-Scale Feasibility Study Amendment  
Fee Table

| Tasks  | Principal<br>USBR<br>Lead | USBR<br>PM | Reuse<br>Lead | Brine<br>Lead | Project<br>Engineer | Reuse<br>Engineer | Reuse<br>EIT | Docu-<br>ment Pro-<br>cessing | Graphics  | QA/QC     | PM Assist | Subs + 5%<br>markup | Expenses  | Totals                               |
|--|---------------------------|------------|---------------|---------------|---------------------|-------------------|--------------|-------------------------------|-----------|-----------|-----------|---------------------|-----------|--------------------------------------|
| 1) Define Issues and Needs                                       | 8                         | 8          | 4             | 12            | 2                   | 2                 | 8            |                               |           |           | 4         |                     |           | \$ 11,604                            |
| 2) Overview of Other State's<br>Reuse Regulations                | 12                        | 2          | 2             | 4             | 2                   | 4                 | 8            |                               | 16        | 4         | 3         | 1                   |           | \$ 2,000 \$ 15,771                   |
| 3) Elements of a Portable Reuse<br>Program                       | 2                         | 2          | 2             | 8             | 2                   | 24                | 16           |                               |           | 8         | 4         | 1                   |           | \$ 14,341                            |
| 4) Concepts for Advanced<br>Water Treatment for Potable<br>Reuse | 8                         | 2          | 8             | 8             | 40                  | 24                |              |                               |           | 4         | 4         |                     |           | \$ 3,000 \$ 27,190                   |
| 5) Treatment Alternatives;<br>Description                        | 2                         | 4          | 2             | 8             | 4                   | 4                 | 32           | 32                            | 40        | 12        | 16        | 2                   |           | \$ 37,606                            |
| 6) Regional Conveyance and<br>Storage Needs                      | 4                         | 8          | 4             | 2             | 2                   | 8                 | 4            |                               |           | 2         | 8         | 2                   |           | \$ 57,771 \$ 1,000 \$ 68,421         |
| 7) Environmental Impacts   | 10                        | 3          | 2             | 8             | 2                   | 4                 | 8            |                               |           | 2         | 2         | 1                   |           | \$ 9,937                             |
| 8) Legal and Institutional<br>Requirements                       | 2                         | 12         | 3             | 2             | 2                   | 4                 | 8            |                               |           | 2         | 1         |                     |           | \$ 9,221                             |
| 9) Economic Analysis   | 2                         | 16         | 4             | 2             | 2                   | 16                | 8            |                               |           | 2         |           |                     |           | \$ 11,648                            |
| 10) Cost Analysis  | 8                         | 8          | 4             | 4             | 2                   | 32                | 32           | 32                            | 40        | 2         | 4         |                     |           | \$ 50,836                            |
| 11) Feasibility Study/<br>Applications                           | 10                        | 80         | 14            | 8             | 4                   | 24                | 20           |                               |           | 18        | 12        | 4                   |           | \$ 58,172                            |
| 12) Project Management and<br>Administration                     | 12                        | 12         | 32            |               |                     |                   |              |                               |           |           | 40        | \$ 7,485            |           | \$ 25,697                            |
| <b>Totals</b>  | <b>70</b>                 | <b>170</b> | <b>78</b>     | <b>64</b>     | <b>42</b>           | <b>32</b>         | <b>196</b>   | <b>160</b>                    | <b>64</b> | <b>52</b> | <b>54</b> | <b>26</b>           | <b>40</b> | <b>\$ 93,429 \$ 9,000 \$ 340,445</b> |

### Washington County Regional Reuse Plan - Large-Scale Feasibility Study Amendment

| Tasks Schedule   | January |   |   | February |   |   | March |   |   | April |   |   |   |   |   |
|--|---------|---|---|----------|---|---|-------|---|---|-------|---|---|---|---|---|
|  | 2       | 3 | 4 | 1        | 2 | 3 | 4     | 1 | 2 | 3     | 4 | 1 | 2 | 3 | 4 |
| 1) Define Issues and Needs                                 |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 2) Overview of Other State's Reuse Regulations             |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 3) Elements of a Potable Reuse Program                     |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 4) Concepts for Advanced Water Treatment for Potable Reuse |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 5) Treatment Alternatives Description                      |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 6) Regional Conveyance and Storage Needs                   |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 7) Environmental Impacts                                   |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 8) Legal and Institutional Requirements                    |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 9) Economic Analysis                                       |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 10) Cost Analysis  |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 11) Feasibility Study/Applications                         |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |
| 12) Project Management and Administration                  |         |   |   |          |   |   |       |   |   |       |   |   |   |   |   |

#### Project Meetings

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Weekly Phone Check-in (Morgan, Josh, Aaron, and Clint)                     | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Meetings with Utah DWQ and DDW for project intro and regulatory discussion |   |   |   |   |   |   | x |   |   |   |   |   |   |   |
| Early Concept Review Workshop (In-person, half day review meeting)         |   |   |   |   |   |   |   | x |   |   |   |   |   |   |
| Final Concept Review Workshop (In-person, half day review meeting)         |   |   |   |   |   |   |   |   |   |   | x |   |   |   |
| Report Review (Teams meeting to receive comments and edits on report)      |   |   |   |   |   |   |   |   |   |   |   | x |   |   |

#### Assumptions

- Notice to Proceed by Jan 6, 2023
- USBR Large Project Design/Construction NOFO on March 31, 2023 with report due 30 days thereafter
- Draft report to be ready for submittal no later than April 7, 2023
- Final report to be ready for submittal no later than April 21, 2023

**WATER TRANSPORTATION AGREEMENT**  
(Between Virgin Town and WCWCD)

THIS WATER TRANSPORTATION AGREEMENT (“Agreement”) is made and entered into effective January 4, 2023, by and between Virgin Town, a municipal corporation and political subdivision of the State of Utah (“the Town”), and Washington County Water Conservancy District, a water conservancy district and political subdivision of the State of Utah (“the District”). Throughout this Agreement the Town and the District may be referred to individually as a “Party” and collectively as “the Parties”.

**RECITALS**

WHEREAS, the District provides wholesale culinary water through its wholesale system to the Town, and the Town is the retail culinary water provider for areas within its municipal boundaries;

WHEREAS, the District owns and maintains the wholesale water system that delivers water to the Town and the Town owns and maintains the retail culinary water system that delivers water to its residents;

WHEREAS, due to contamination in a private well, several individuals located in the unincorporated areas of Washington County north of the Town (“Service Requesters”) have approached the Town and the District and requested culinary water service to their property and have offered to pay for the costs of constructing a water pipeline (“Proposed Pipeline”) connecting the Town’s retail culinary water system to their property which is described on the records of the Washington County Recorder as those parcels identified in *Exhibit “A”* which is attached hereto and incorporated herein by this reference (“Subject Property”);

WHEREAS, the Town and the District desire to help provide the Service Requesters access to culinary water that meets applicable standards for public culinary water systems;

WHEREAS, as the Town expands, the Proposed Pipeline would likely provide a benefit to the Town as well as adjacent District property;

WHEREAS, the Service Requesters do not reside within the service area of the Town and the Town and the District have determined that presently, the most effective manner of providing culinary water service to the Service Requesters, is for the Town to allow the District to transport water through the Town’s retail culinary water system to the Proposed Pipeline and for the District to provide retail culinary water service to the Service Requesters;

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained, the Town and the District agree as follows:

**SPECIFIC TERMS**

1. Term of Agreement. This Agreement shall continue until the later of: (i) the date the pipeline or its equivalent replacement is removed from service; or (ii) the date the Town annexes

the Subject Property, in which case, the Town shall become the retail service provider of the Subject Property.

2. Connection of Proposed Pipeline. The Town shall allow the Proposed Pipeline to be connected to the Town's retail culinary water system infrastructure at the Town's pipeline located at the intersection of the Pocketville Road and the Kolob Terrace Road ("Connection Location"). The District shall oversee and inspect the connection of the Proposed Pipeline to the Town's retail culinary water system infrastructure and ensure that it meets applicable standards and specifications. The District shall ensure that a meter is installed at the Connection Location to meter the amount of water transported through and out of the Town's retail culinary water system and into the Proposed Pipeline.

3. Construction of Proposed Pipeline. The District shall ensure that a water pipeline that meets the requirements of the Utah Division of Drinking Water and is a minimum of 8 inches in diameter is installed along the Kolob Terrace Road from the Connection Location to the Subject Property. The District shall oversee and inspect the construction of the Proposed Pipeline and ensure that it meets applicable standards and specifications. The District shall ensure that all necessary easements or rights-of-way for the construction of the Proposed Pipeline are acquired.

4. Water Transportation. The Town shall allow the District to transport water through the Town's retail culinary water system to the Connection Location. The District shall meter the water transported through the Town's retail culinary water system into the Proposed Pipeline. Prior to the District invoicing the Town for water provided under the Water Supply Agreement between the Town and the District dated June 24, 1997 ("Water Supply Agreement"), the District shall deduct the amount of water metered at the Connection Location from the amount of water metered at the point of delivery from the District's wholesale culinary system to the Town's retail culinary water system as defined in paragraph 7 and Exhibit 2 of the Water Supply Agreement.

5. Reserved Town Capacity in the Proposed Pipeline. The District shall secure an agreement with the Service Requesters that reserves twenty five percent (25%) of the excess capacity of the Proposed Pipeline for the Town for a period of twenty (20) years from the effective date of such agreement.

6. Ownership of the Proposed Pipeline. Upon installation, the Proposed Pipeline shall become the Property of the District. In the event that the Town annexes the Subject Property and thereby becomes the retail service provider of the Subject Property, the District and the Town will work in good faith to execute an agreement whereby the Proposed Pipeline is conveyed to the Town at no cost except for upgrade and replacement costs incurred by the District, if any (pro-rated by the Proposed Pipeline's remaining useful life).

7. Effectiveness of Terms Conditions. The terms and conditions contained herein are conditioned on the following:

a. The Service Requesters agreeing to pay for all costs of constructing the Proposed Pipeline in accordance with applicable standards and specifications, reserving the excess capacity for the Town as described herein, and agreeing to the terms and conditions required by the District.

b. Approval from the Utah Division of Drinking Water that the capacity of the Town system meets all Division requirements, and that the connection and design of the system meet all requirements of the Division.

## GENERAL TERMS

8. Recitals. The Recitals contained in this Agreement are incorporated into the Agreement.

9. Paragraph Headings. The paragraph and subparagraph headings used herein are for convenience only and shall not be considered in the interpretation of this Agreement.

10. Number and Gender. The singular shall be interpreted as the plural, and vice versa, if such treatment is necessary to interpret this Agreement in accord with the manifest intention of the Parties. Likewise, if either the feminine, masculine or neuter gender should be one of the other genders, it shall be so treated.

11. Authorization. Each individual executing this Agreement does represent and warrant to each other so signing (and each other entity for which another person may be signing) that he or she has been duly authorized to sign this Agreement in the capacity and for the entities set forth where he or she so signs.

12. Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

13. Utah Law to Govern. This Agreement has been drawn and executed in the State of Utah. All questions concerning the meaning, intention and enforcement of any of its terms or its validity shall be determined in accordance with the laws of the State of Utah. In any dispute jurisdiction and venue shall be in the Fifth District Court of the State of Utah.

14. Inducement. The making and execution of this Agreement has not been induced by any representation, statement, warranty, or agreement other than those herein expressed.

15. Integration. All agreements heretofore made in the negotiation and preparation of this Agreement between the Parties are superseded by and merged into this Agreement, no statement or representation not embodied herein shall have any binding effect upon the Parties and there shall be no amendments hereto except those in writing signed by the Parties.

16. Time is of the Essence. Time is of the essence with regard to this Agreement as to each covenant, term, condition, representation, warranty and provision hereof.

17. Necessary Acts and Cooperation. The Parties hereby agree to do any act or thing and to execute any and all instruments required by this Agreement and which are necessary and proper to make effective the provisions of this Agreement.

18. Partial validity. If any portion of this Agreement shall be held invalid or inoperative, then insofar as is reasonable and possible:

- a. The remainder of this Agreement shall be considered valid and operative, and,
- b. Effect shall be given to the intent manifested by the portion held invalid or inoperative.

19. Ambiguities. This Agreement has been negotiated and drafted by both of the Parties and the general rule of contract construction that 'ambiguities shall be construed against the draftsman' shall have no application to this Agreement.

20. No Third-Party Beneficiaries. This Agreement is not intended to be a third-party beneficiary contract for the benefit of any third parties, including but not limited to any customer of either Party, and no such persons shall have any right of subrogation or cause of action against either Party for any breach or default by any Party hereunder. In addition, no third parties shall have any rights hereunder that would, in any way, restrict the Party's right to modify or renew this Agreement at any time or in any manner. Nothing in this Agreement is intended to relieve or discharge the obligation or liability of any third persons to any Party to this Agreement.

21. Laws and Regulations. Any and all actions performed pursuant to this Agreement will comply fully with all applicable Federal, State and local laws and regulations.

22. Equal Opportunity Clause. The Parties shall abide by applicable provisions of state and federal law, including executive orders, that prohibit discrimination against any employee or applicant for employment or any applicant or recipient of services, on the basis of race, religion, color, national origin, sex, age or disabilities and that prohibit sexual harassment in the workplace.

23. Availability of Funds. Implementation of this Agreement shall be subject to the availability of appropriated funds. The District may cancel or suspend this Agreement without penalty if adequate funds are not appropriated or received.

24. Binding on successors in interest. This Agreement shall bind the Parties and their successors, heirs, assigns and representatives.

25. Assignment. No rights or obligations of either Party under this Agreement shall be assigned without the prior written consent of the other Party. This Agreement is voidable and subject to immediate cancellation by the either Party upon the other Party's becoming insolvent, or filing proceedings in bankruptcy or reorganization under Title XI, United States Code.

26. Notice. Any notice to be given or payment to be made hereunder shall have been properly given or made when received by the District or the Town, as the case may be, or when deposited in the United States mail, certified or registered, postage prepaid, addressed as follows:

*If to the District:*

WASHINGTON COUNTY WATER  
CONSERVANCY DISTRICT  
Attn. General Manager  
533 East Waterworks Drive  
St. George, Utah 84770

*If to the Town:*

VIRGIN TOWN  
Attn. Mayor  
114 South Mill Street  
Virgin, Utah 84779

27. Default. Except as specifically provided for herein, a default by any Party in an obligation set forth herein shall not result in, or be the basis for, the termination or rescission of this Agreement.

28. Waiver. The waiver by any Party to this Agreement of a breach of any provision of this Agreement shall not be deemed to be a continuing waiver or a waiver of any subsequent breach, whether of the same or any other provision of this Agreement. Any waiver shall be in writing and signed by the waiving Party.

29. Rights and Remedies. The Parties shall have all rights and remedies provided under applicable Federal or State law for a breach or threatened breach of this Agreement. These rights and remedies shall not be mutually exclusive, and the exercise of one or more of these rights and remedies shall not preclude the exercise of any other rights and remedies. Each Party confirms that damages at law may be an inadequate remedy for a breach or threatened breach of any provision hereof and the respective rights and obligations of the Parties hereunder shall be enforceable by specific performance, injunction, or other equitable remedy.

30. Sovereign Immunity. Nothing in this Agreement shall be construed to waive the sovereign immunity of the District or the Town.

31. Subordination to Regional Water Supply Agreement. Any water service to be provided by the District hereunder shall be subject and subordinate to the terms and conditions of the Revised Regional Water Supply Agreement dated January 1, 2019, by and between the District and various municipal customers.

IN WITNESS WHEREOF, the Parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement on the date first above written.

WASHINGTON COUNTY WATER  
CONSERVANCY DISTRICT

By: Zachary Renstrom  
Zachary Renstrom, General Manager  
Attest: Minny M

VIRGIN TOWN

By: Jean Krause  
Jean Krause, Mayor  
Attest: D. S. D. P. D.

**EXHIBIT “A”**  
To Water Transportation Agreement  
(Parcel Numbers of Subject Property)

**MEMORANDUM OF UNDERSTANDING**  
*Cooperation Regarding Pocketville Road*

This Memorandum of Understanding (“MOU”) is made and entered into effective November 9, 2022, by and between Virgin Town, a municipal corporation and political subdivision of the State of Utah (“the Town”), and Washington County Water Conservancy District, a water conservancy district and political subdivision of the State of Utah (“the District”). Throughout this MOU the Town and the District may be referred to individually as a “Party” and collectively as “the Parties”.

The Parties acknowledge that the Town at some point in the future may consider the feasibility and impacts of terminating Pocketville Road in a dead end turn around prior to its intersection with Kolob Terrace Road. In the event the Town, working in conjunction with the Hurricane Valley Fire District, determines that the dead ending of Pocketville Road is in the best interest of the health, safety and general welfare of the Town and its residents, the District agrees to cooperate with Town in working out all necessary details of such a road closure including the reservation of utility easements and possible easements on District property consisting of parcels V-2139-K, V-2139-G, and V2139-1-2 (“the Property”) for appropriate turning radius of vehicles and continued emergency response access thru Pocketville Road to Kolob Terrace Road.

The Parties agree that any arrangements agreed upon pursuant to this MOU must not interfere with the District’s use of the Property, including but not limited to the District’s divestment of the Property or construction or operation of District facilities on the Property.

**WASHINGTON COUNTY WATER  
CONSERVANCY DISTRICT**

By: Zachary Renstrom  
Zachary Renstrom, General Manager

Attest: Uminus M

**VIRGIN TOWN**

By: Jean M. Krause  
Jean Krause, Mayor

Attest: Dwight D. Dill