

**J-U-B ENGINEERS, Inc.**

**AGREEMENT FOR PROFESSIONAL SERVICES**

**Attachment 1 – Scope of Services, Basis of Fee, and Schedule**

**PROJECT NAME:** Big Wood River Diversion Dam Rehabilitation Engineering Services

**CLIENT:** Board of Control for Triangle Irrigation District and Wood River Irrigation District #45 (BOC)

**J-U-B PROJECT NUMBER:** 60-23-011

**TYPE OF SERVICE:** Water/Wastewater

**ATTACHMENT TO:**

[x]  **AUTHORIZATION FOR ADDITIONAL SERVICES #1; DATED: 8/3/2023**

The referenced Agreement for Professional Services executed between J-U-B ENGINEERS, Inc. (J-U-B) and the CLIENT is amended and supplemented to include the following provisions regarding the Scope of Services, Basis of Fee, and/or Schedule:

**PART 1 - PROJECT UNDERSTANDING**

The Diversion 45 Stabilization and Fish Passage Remediation Project is located on the Big Wood River in Bellevue, Idaho. This project is being performed by the Board of Control, representing the Triangle Irrigation District and District 45, in conjunction with Trout Unlimited.

This Diversion Dam has reached the end of its serviceable life. The primary objective of this project is to restore its diversion functionality into the future. This will require engineering, inspection, repairs, and reinforcement to the dam structure to maintain its stability. An additional objective is to add an accommodation for fish passage.

Several years ago, this project was initially considered to better provide habitat and fish accommodation while also providing the critical need of consistent irrigation water. In 2020, it became apparent that the integrity of the diversion dam across the Big Wood River had been greatly compromised and the focus on this problem became a critical concern.

The purpose of the dam is to provide water for the water rights in the south valley lands belonging to the Triangle Irrigation District (86%) and District 45 (14%). However, even without a water right, Silver Creek is the largest beneficiary of these Big Wood diversions from which it receives over 50% of its water. This diversion is vital for the Silver Creek fish.

Prior to this project, the BOC had an initial concept and design prepared by Biota Research and Consulting (Biota) that provided on a roughened rock ramp on the downstream side of the dam to allow for fish reaching and crossing the dam. This design included sloping the dam top 1% on each side towards a cut out in the dam top 15 feet wide and 1.3 feet deep with a width of ten feet at the bottom. This Biota design includes installation of multiple large woody material structures, establishing a right bank floodplain bench, and implementing revegetation treatments.

The dam has continued to stay in place protected by its bridge-like structure as the gravel beneath the walls has washed away in places. But the integrity of the dam must be restored and maintained. Any change to the water supply at the diversion gates needs to be understood and found acceptable, as the purpose of the dam must not be impaired.

The BOC requested J-U-B to evaluate the dam condition, review the Biota design, and to help procure funding to address the diversion dam to achieve the objectives described above. J-U-B was able to work to procure this additional funding for this project.

This project is intended to review several questions about the initial Biota design including the dam foundation and overall system integrity, sloping of the dam, the notch cutout, flow, and water head provided to the BOC, and other items as noted in the following scope. This scope is not intended to provide a completely new design, but to review and verify the consideration of these questions and other critical items and to provide an updated design (as necessary) that addresses these items and meets the needs of the BOC. This updated design will provide a new set of drawings for construction purposes.

**PART 2 - SCOPE OF SERVICES BY J-U-B**

J-U-B’s Services under this Agreement are identified in ***Standard Exhibit A - Construction Phase Services,* and as delineated below for the following tasks / sub-tasks.** Any other items necessary to plan and implement the project, including but not limited to those specifically listed in PART 3, are the responsibility of CLIENT.

1. **Task 001 Site Analysis**
	1. **Subtask-001: Project Review:**

Perform a project review of the design documents including the following:

* + 1. **Conceptual Restoration Design Report, Big Wood River Restoration, Bellevue Project Area**, Blaine County, Idaho; Prepared for the Wood River Land Trust; Prepared by Biota Research and Consulting, Inc., June 2019
		2. Construction Plans and Technical Specifications for Big Wood River Diversion Dam Remediation Project, Blaine County, Idaho; Prepared by Biota Research and Consulting, Inc., March 2021
		3. This will consider things such as the applicability and functionality of the notch with regard to the integrity of the overall diversion system acting as a whole.
		4. The foundation of the dam acting in regard to the overall interaction of the whole system.
		5. The riprap and rock placement and scour protection.
		6. Any proposed sloping of the existing dam.
		7. Final design presentation and quantity verification
		8. Other items.
		9. **Design Report Memo**, Big Wood River Diversion Dam Remediation Project 60% Design, Prepared by Biota Research and Consulting, Inc., February 2021
		10. Develop a revised construction cost estimate.
	1. **Subtask-002: Pre-Construction Survey**

Perform a pre-construction survey of the site to locate the site of the proposed dam and any other connected features.

* 1. **Subtask-003: Dam and Irrigation Interaction Analysis**

Perform or review an evaluation of the dam and its interaction with the irrigation system to discover and address any issues delivering water to their users, especially during low flows and future flows. Coordinate design updates.

* 1. **Subtask-004: FEMA Analysis**

Perform a FEMA floodplain permit and CLOMR/LOMR analysis that may be required based on the BOR environmental review. This will be done using hydraulic modeling software. Limited to one iteration of a FEMA CLOMR/LOMR analysis. Additional analysis, public reporting, communication, required FEMA fees if a submittal is required, and report preparation for the CLOMR and LOMR are included in Task 002.

1. **Task-002: Environmental Support**

Provide environmental support to BOR. As part of BOR’s development of the environmental document’s, J-U-B will assist and provide engineering and environmental support on an as-needed basis. This may include items such as providing maps, calculations, etc. It is assumed that BOR will complete the Endangered Species Act compliance as part of the environmental support that can be used for the CLOMR documentation, if needed. It is also assumed that the BOR fisheries biologist will verify that fish can pass upstream over the material placed within the project (otherwise J-U-B biologist will verify fish passage).

* + 1. Additional FEMA support which includes FEMA fees, public outreach, survey for LOMR documentation, and publication of FEMA required mapping. This will also be used for additional iterations, as needed, and to prepare required CLOMR/LOMR reports. Calculation of the critical duration storm, if needed, and debris/sediment yield analysis and may include an Operation and Maintenance Plan as needed for FEMA. Alternatives analysis will be completed as needed under this task for FEMA compliance.
		2. Additional surveys including "as-built" cross-sections and longitudinal profile surveys after construction to have a baseline to measure fish passage and material movement.
		3. Additional design changes to meet environmental compliance requirements.
		4. Following the initial post-construction survey, it is understood that the CLIENT will be providing updated yearly assessments of the channel through their own efforts or in coordination with others. These assessments include visual assessments that will need to be performed every year, and surveys and photo points which will be repeated after years 1, 3, and 5, and two other times as needed depending on spring flows or photo point differences. Annual reporting on fish salvage frequency after project completion for 5 years will also be completed.
1. **Task-003: Construction Engineering Design/Project Management Support**
	1. **Subtask-001: Project Administration**

Oversee project tasks and coordinate with CLIENT representatives to manage the scope, schedule, budget, and work plan. Invoices will be prepared and submitted to the CLIENT monthly and will reflect work accomplished during the billing period.

* 1. **Subtask-002: Bidding, Award, and Construction Agreement**
		1. Prepare a bid advertisement for the BOC to publish.
		2. Prepare electronic Bidding Documents for distribution to potential bidders through Quest CDN (or similar on-line bidding service). Hard copies of the Bidding Documents will only be prepared for the BOC, Trout Unlimited (TU) and Funding Agencies. Email potential bidders to notify them of the project advertisement. The on-line bidding service will maintain a bidder’s list throughout the bidding period.
		3. Receive and answer questions from bidders arising during the bidding period. A 5-week bidding period is assumed for this project.
		4. Prepare and issue addenda as necessary to clarify or amend provisions in the Bidding Documents. A total of two addenda are assumed for budgeting purposes.
		5. Conduct a pre-bid conference in Bellevue (location to be provided by BOC). Questions arising from the pre-bid conference will be addressed through an addendum as necessary.
		6. Assist the CLIENT at a bid opening in Bellevue. Review the bids received for general conformance with the bid requirements and summarize bid results for review by CLIENT and CLIENT’s legal counsel.
		7. Prepare a summary letter of the bids to the CLIENT. Discuss the bids and available budget with CLIENT. Based on direction received from CLIENT, prepare draft award documents for CLIENT’s use in making a formal award to the successful bidder. Submit copies of the bids to funding agencies for concurrence to award. In the event all bids are rejected and CLIENT decides to rebid the project in whole or in part, the work associated with redesigning, repackaging, and / or rebidding shall be considered an Additional Service.
		8. Coordinate with CLIENT and the successful bidder as both parties execute the construction Agreement.
		9. Issue a Notice to Proceed in accordance with the Contract Documents as approved by CLIENT and funding agencies.
	2. **Subtask-004: Construction Administration**
		1. Provide Construction Phase support as listed in *Standard Exhibit A - Construction Phase Services*. For this project, the contract is assumed to include 180 calendar days to achieve Substantial Completion and an additional 30 calendar days to achieve Final Completion.
		2. Monthly construction requests for payment.
		3. Receive, review, and coordinate with the Contractor as required to present a monthly recommendation for payment to the CLIENT.
		4. It is expected that CLIENT will submit requests for reimbursement from funding agencies.
		5. Prepare for and complete weekly progress meetings on-site during periods of site activity to facilitate project communication. While the Contractor is off-site, conduct bi-weekly meetings via conference call to review progress and disseminate information and questions. Prepare and distribute meeting notes to all attendees and interested parties.
		6. Punchlist and Close-Out: Conduct site reviews with CLIENT and contractor to identify work that is incomplete or requires correction prior to achieving Substantial Completion. Prepare project punch lists as necessary and review correction of deficient work.
		7. Provide a recommendation regarding achievement of Substantial Completion.
		8. Provide a recommendation of Final Completion upon completion of all incomplete or deficient work.
		9. Review project submittals presented by the Contractor for general conformance with the Contract Documents.
		10. Review contractor-submitted O&M manuals.
		11. This scope does NOT include material testing and assumes that will be a requirement of the Contractor.
		12. Performance testing, if required by the project specifications, will be completed by Contractor’s and CLIENT’s staff with general review by ENGINEER.
		13. Develop Record Drawings
		14. Review record drawing information provided by contractor and request additional information from contractor as necessary.
		15. Integrate contractor’s record drawings information and ENGINEER’s observations while on-site into a Record Drawing set.

**PART 3 – CLIENT-PROVIDED WORK AND ADDITIONAL SERVICES**

1. CLIENT-Provided Work - CLIENT is responsible for completing, or authorizing others to complete, all tasks not specifically included above in PART 2 that may be required for the project including, but not limited to:
	1. As listed above, in Standard Exhibit A – Construction Phase Services, and in prior amendments.

**PART 4 – BASIS OF FEE AND SCHEDULE OF SERVICES**

**It is understood that payments will be made upon project funding from BOR to BOC. If the project is not funded by BOR, J-U-B will not submit invoices for work performed.**

1. CLIENT shall pay J-U-B for the identified Services in PART 2 as follows:
	1. For Time and Materials fees:
		1. For all services performed on the project, Client shall pay J-U-B an amount equal to the cumulative hours charged to the Project by each class of J-U-B’s personnel times J-U-B's standard billing rates.
		2. Client shall pay J-U-B for Reimbursable Expenses times a multiplier of 1.0.
2. CLIENT acknowledges that the J-U-B will not be responsible for impacts to the schedule by actions of others over which J-U-B has no control. Further, extension of the construction schedule(s) (e.g. due to delays caused by the contractor and/or additional work elements incorporated into the project) beyond this assumed time will require Additional Services by Engineer.
3. The following table summarizes the fees and anticipated schedule for the services identified in PART 2.

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| **Task Number** | **Task Name** | **Fee Type** | **Amount** | **Anticipated Schedule** |
| 001 | Site Analysis |
| 001-001 | Project Review | Lump Sum | $23,000 | 1 Month after Contract Award |
| 001-002 | Pre-Construction Survey | Lump Sum | $8,625 | Upon review and approval of Final Construction Design Documents. |
| 001-002 | Interaction Analysis | Lump Sum | $23,000 | 2 Months after Contract Award and Environmental Approval |
| 001-003 | FEMA Analysis | Lump Sum | $57,500 | 2 Months after approval of Final Construction Design Documents. |
| 002 | Environmental Support | Lump Sum | $65,000 | October 2022 – December 2029 |
| 003 | Construction Engineering Design/PM Reporting |
| 003-001 | Project Administration | Lump Sum | $60,778 | Ongoing throughout project. |
| 003-002 | Bidding, Award, and Construction Phase Services | Lump Sum | $16,000 | January 2024 – December 2024 |
| 003-003 | Construction Administration | Lump Sum | $85,722 | January 2024 – December 2024 |
| 003-004 | Construction OversightSubcontract | Lump Sum | $30,567 | August 2024 – December 2024 |
| 003-005 | Record Drawings | Lump Sum | $10,000 | 2 Months after construction completion |
| 004 | Management Reserve | Time and Materials (Estimated Amount Shown) | $66,112 | TBD |
| **TOTAL** | **$446,304** |  |

**Exhibits Attached:**

Standard Exhibit A – Construction Phase Services