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Via Email: Jacob.bornstein@state.co.us

Jacob Bornstein
Intrastate Water Management and Development Section
Colorado Water Conservation Board
1580 Logan St., Suite 600
Denver, CO 80203

Re: City of Ouray: Development of Augmentation Water Supplies – Scope of Services

Dear Jacob:

The scope of services for the City of Ouray: Development of Augmentation Water Supplies is provided below. The proposed budgets for the Tasks are provided in Table 1 (attached) and the schedule is provided in Table 2 (attached).

Water Activity Task 1: Engineering Opinion of Value – Red Mountain Ditch.

Purpose

To quantify the historical use of the Red Mountain Ditch, estimate costs to repair the ditch, and provide a preliminary engineering opinion of value to purchase the water rights in the ditch.

Approach

Task 1.1. Quantification of Historical Use: The historical use of the Red Mountain Ditch will be quantified using accepted engineering methods including a review of diversion records, historical irrigated lands, and return flow patterns.

Task 1.2. Preliminary Cost Opinion to Repair Ditch: Opinions of cost to repair the ditch will be based on field visits, material estimates, and preliminary opinions of cost. This subtask does not include the development of design plans or specifications.

Task 1.3. Assess US Forest Service Permitting Requirements: The ditch is currently operating under and application to the U.S. Forest Service (USFS) under a ditch bill easement. Assessing further permitting requirements from the USFS will require land use mapping, discussion with the USFS, and reviewing select USFS written authorization requirements. This subtask does not include work that may be required to obtain a USFS permit or surveying.

Task 1.4. Preparing Preliminary Engineering Opinions of Value: The engineering opinion of value for the water right will be performed by engineers with knowledge and experience performing valuations of water rights using accepted engineering methods. This task would include gathering information of comparable sales if available and annualized lease cost for Ridgway Reservoir water.

Deliverable

Task 1.5. Technical Memorandum: This task involves preparing a technical memorandum based on the findings of the subtasks 1.1 through 1.4. The technical memorandum will include text, tables and figures of the findings with historical use quantified, a preliminary opinion of value of the water right and associated structure, USFS permitting, and preliminary costs to repair the ditch.

Water Activity Task 2: Uncompahgre Water Rights Quantification and Structure Interruptible Supply Contract

Purpose

To provide augmentation water with minimal disturbance to historically irrigated land. Provide framework for interruptible water supply contract with irrigators in the upper Uncompahgre River Basin. Based on current interest from irrigators, this Task will likely focus on lands served by the Hosner Brownyard Ditch.

Approach

Task 2.1. Quantification of Historical Use. This subtask involves the quantification of historical diversions, consumptive use, and return flow patterns for lands targeted in the upper Uncompahgre River Basin for interruptible supply contracts.

Task 2.2. Review Ditch Systems for Interruptible Supply Contracts. Under this subtask ditch conveyance systems will be reviewed to assess potential problems for the implementation of interruptible supply contracts.

Task 2.3. Draft Preliminary Interruptible Supply Contracts. An attorney specializing in water rights will draft a model interruptible water supply contract with potential water providers. This task does not include negotiations or finalizing contracts with potential irrigators. This task includes one onsite meeting with potential water rights owners to solicit comments on the model contract.

Task 2.4. Preliminary Engineering Opinions of Value: The engineering opinion of value for the water right will be performed by engineers with knowledge and experience performing valuations of water rights using accepted engineering methods. This task would include gathering information of comparable sales if available and annualized lease cost for Ridgway Reservoir water.

Deliverable

Task 2.5. Technical Memorandum: This task involves preparing a technical memorandum based on the findings of the subtasks 2.1 through 2.4. The technical memorandum will include text, tables and figures of the findings with preliminary quantification of select upper Uncompahgre River Basin water rights, a preliminary opinion of value of the water rights, ditch suitability for interruptible supply contracts and a model interruptible water supply contract with comments solicited from water right owners.

Water Activity Task 3: Engineering Opinion of Value and Enlargement Feasibility – Ouray Hydropower Plant Reservoir and Power Facility.

Purpose

Initial evaluation of the Ouray Hydropower Reservoir as an augmentation storage reservoir.

Approach

Task 3.1 Preliminary Engineering Opinions of Value: Perform a site visit to inventory and assess the hydropower plant including turbines, generators, penstock and associated controls and the dam facility. The preliminary engineering opinion of value for the hydropower facility will be performed by engineers with knowledge and experience performing valuations using accepted

engineering methods. This task would include gathering information of comparable sales similar sized hydropower facilities.

Task 3.2 Preliminary Feasibility of Enlargement – Provide Items for Further Study. The dam and associated storage facility will be reviewed to assess enlargement feasibility. Review inspection reports and available design documents. Conduct meetings with Colorado Division of Water Resources Dam Safety Engineer, Federal Energy Regulatory Commission, Colorado Department of Health and Environment, and the USFS regarding enlargement concepts, permitting, and easements respectively. Provide items needed for further study. This is a feasibility assessment only, does not include geotechnical analysis including but not limited to drilling or coring or preparation of design plans or specifications.

Subtask 3.2 is not funded by WSRA funding. If CRWCD funding is not available, this task may be dropped from project.

Deliverable

Task 3.3. Technical Memorandum. This task involves preparing a technical memorandum based on the findings of the subtasks 3.1 and 3.2. The technical memorandum will include text, tables and figures of the findings with a preliminary engineering opinion of value of the hydropower facility and preliminary assessment of enlargement feasibility including a list of items for further study.

WSRA Funding only used for Technical Memorandum write-up associated with subtask 3.1. If CRWCD funding is not available, Technical Memorandum will only cover subtask 3.1.

CWCB Scope of Services Requirements

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

Very truly yours,

WRIGHT WATER ENGINEERS, INC.

By 
Peter R. Foster, P.E.
Project Manager

Attachments

Table 1: Task Cost Breakdown

Table 2: Project Schedule

cc: Patrick Rondinelli, City Administrator, City of Ouray
Greg Johnson, Colorado Water Conservation Board