

Gross Reservoir Expansion Project Information Meeting for Design Assist Contractor Denver Water Gross Reservoir Operations – August 9, 2018

Meeting Purpose

The purpose of this meeting is to present information for the Gross Reservoir Expansion (GRE) Project to potential respondents for the Design Assist Contractor (DAC) contract; including: scale of the project, the anticipated project delivery schedule, and general scope of services. **This meeting is for Prime Contractors and Major Subcontractors only.** Additional meetings will be held, at later dates, for other potential project participants such as material and equipment suppliers and smaller subcontractors.

Project Mission

The GRE Project is crucial to providing a secure water future to Denver Water's customers and to protect against potential catastrophic events such as fires, landslides, drought, and infrastructure failures which could impact the ability for Denver Water to deliver water from the Front Range. With demand expected to increase in coming years, expanding Gross Reservoir will add a new element of sustainability to Denver Water's multi-pronged approach to meeting our customers' future needs which include, recycled water, and developing additional supply.

Project Background

Denver Water began efforts to expand Gross Reservoir more than a decade ago. Since that time, Denver Water has completed many of the permitting milestones necessary to move the project forward and is preparing for the delivery phase of the project. The U.S. Army Corps of Engineers (USACE) granted Denver Water the 404 permit and Record of Decision in July 2017 and Denver Water expects the Federal Energy Regulatory Commission (FERC) to issue a License Amendment for the project in 2018.

The existing Gross Dam is an on-stream facility located on South Boulder Creek in Boulder County, Colorado, and in the Arapahoe-Roosevelt National Forest. The dam and reservoir, owned and operated by Denver Water, provide raw water storage for municipal use and hydroelectric power to Colorado's electric grid. The dam structure is a 340-foot-tall curved concrete gravity dam with a crest length of 1,050 feet (including spillway section) and is formed to a radius of 1,740 feet. The dam impounds Gross Reservoir and is capable of storing 41,811 acre-feet of water with the reservoir at the spillway crest, elevation 7,282 feet.

Denver Water proposes to raise Gross Dam by 131 feet to a final height of 471 feet, increasing storage volume from 41,811 acre feet to about 119,000 acre-feet. A downstream roller compacted concrete (RCC) buttress raise matching the existing curvature of the dam is planned and will require approximately 900,000 cubic yards of RCC. The raise will involve the following major work: aggregate development from an on-site borrow area, foundation preparation, and RCC and conventional concrete construction of the dam and spillway. Minor modifications to the outlet works and mechanical/electrical/operations enhancements are also planned.

The entire GRE Project including permitting, mitigation, engineering, and management is currently estimated at \$464 million¹. The new raised dam is scheduled for completion in 2025 with the first filling occurring in 2026.

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¹ In 2025 Dollars

Project Objectives

The primary project objectives are:

- Responsibly develop new water supply and storage while clearly addressing project impacts through appropriate mitigation and enhancement measures.
- Provide an additional 18,000 acre-feet of water per year into Denver Water's Moffat (North) Collection System.
- Raise Gross Dam by 131 feet to create an additional 77,000 acre-feet of new storage volume, of which, 5,000 acre-feet is dedicated as an "environmental pool" to enhance flows in South Boulder Creek.

Delivery Approach

Denver Water is in the process of developing an Integrated Project Team (IPT) to deliver the GRE. Currently, the IPT is comprised of Denver Water's Program Manager, the Owner's Representative (OR), and Design Engineer. The DAC will round out the IPT. The general intent of the DAC is for early Contractor involvement to provide positive influence on design and facilitate efficient construction. Denver Water has executed or will execute separate contracts directly with the OR, Design Engineer, and DAC.

The DAC procurement process will be a value based, competitive process involving submission of qualifications, executive plan, a fee estimate for professional services during the design phase and indicative construction prices. During progression of the GRE, the DAC will be contracted under at least two separate sets of terms and conditions. While providing consulting services during the design process, the DAC will operate under a professional services contract (e.g. Agreement). When executing construction related services, the DAC will comply with provisions of a construction contract (e.g. Contract). Samples of these contract vehicles will be provided during the DAC selection process for review and comment.

Roles and Responsibility of the Design Assist Contractor

The DAC will bring resources and expertise specific to RCC dam construction to the IPT. Specifically, the DAC will provide early contractor expertise related to:

- Site Layout and Development
- Quarry Development and Aggregate Processing
- RCC Mix Design
- RCC and Conventional Concrete Cooling, Mixing, Delivery and Placement
- Construction Methods, Sequencing, Schedule and Cost
- Safety
- Interaction with Involved Agencies / Key Stakeholders

It is Denver Water's expectation that interested respondents be qualified in large and complex RCC dam construction with a proven track record of professional execution utilizing teamwork and innovative methods.

Procurement Schedule

The following procurement schedule is provided for planning proposes for interested DAC firms and may change. The final procurement documents will include any updates to the procurement schedule.

Activity	Date
Informational Meeting	August 9, 2018
Qualification Process	September – October 2018
Proposal Process	January - February 2019
Selection and Negotiation	March - April 2019
Contract Award – Notice to Proceed	May 2019

Logistics

The informational meeting is open to Prime Contractors and Major Subcontractors interested in providing the DAC Services. The informational meeting will be hosted August 9, 2018, at 9:00 a.m. local time, at the Denver Water Gross Reservoir Operations Garage located at 3817 Gross Dam Road, Boulder, Colorado. The meeting will be followed by a brief site visit to Gross Dam (right abutment parking lot). The informational meeting is not a mandatory requirement to submit qualifications. It is intended to provide background information on the project and the DAC scope of services to allow interested firms to make an informed decision as to whether to pursue the DAC contract.

All firms interested in proposing on the project must not be in a conflict-of-interest position regarding the ongoing work related to permitting, design and management of the project. It is the responsibility of the proposers to determine their conflict-of-interest position.

In consideration of space planning, Denver water request interested parties to RSVP by email to Courtney Anstaett, Courtney.Anstaett@denverwater.org by August 2, 2018. Please contact Greg Zamensky (720-834-4299 or Greg.Zamensky@denverwater.org) with questions regarding this information meeting, conflict-of-interest position, scope of services, or the proposal process.