

RESOLUTION NO. 5329-17

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN AMENDMENT OF A PROFESSIONAL SERVICES CONTRACT WITH CH2M HILL ENGINEERS, INC. FOR ADDITIONAL SERVICES.

WHEREAS, the City signed an agreement with CH2M Hill Engineers, Inc. for engineering design services for the C2/C1 Water Reservoir projects in March of 2014; and

WHEREAS, during preparation to begin work on C1 Reservoir, significant damage to the roof was discovered and work was suspended; and

WHEREAS, the Parties wish to enter into an amendment to the agreement to expand the scope of work to account for additional work needed to repair the roof and complete the coating project of C1; and

WHEREAS, funds are available for this project in the Water Operating Fund;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TUALATIN, OREGON, that:

Section 1. The City Manager is authorized to execute an amendment to the existing agreement with CH2M Hill Engineers, Inc. in the amount of \$158,824.

Section 2. The City Manager or designee is authorized to execute Change Orders totaling up to 10% of the amended agreement price.

Section 3. This resolution is effective upon adoption.

Adopted by the City Council this 26th Day of June, 2017.

CITY OF TUALATIN OREGON

BY 
Mayor Pro Tem

APPROVED AS TO FORM

BY 
City Attorney

ATTEST

BY 
City Recorder



CH2M HILL
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Portland, OR
97201
Tel 503.235.5000
Fax 503.736.2000

June 1, 2017

City of Tualatin
Mr. Jeff Fuchs, City Engineer
18880 SW Martinazzi Avenue
Tualatin, OR 97062

Subject: City of Tualatin C-2 Reservoir, Engineering Services Contract Amendment #1

Per your request, as the result of additional costs resulting from the delayed completion of the C-2 Reservoir, and for the changes necessary on the C-1 Reservoir once interior inspection was conducted, CH2M Hill Engineers, Inc. formally requests an adjustment to the contract fee for the Tualatin C-2 Reservoir, Engineering Services amount by adding on a billing rate basis with a Not-to-Exceed amount of \$158,824, resulting in a revised total contract amount of \$550,418. \$391,594 is original fee. This request is Amendment No. 1 to the existing Steel Tank C-2 Reservoir: Permitting Assistance, Design and Construction Services for the City of Tualatin Personal Services Agreement dated March 20, 2014.


This request for additional funds relates to the additional professional services to support the City; associated with the construction oversight of the C-2 project and the contractor's late completion of the project. In addition, following the interior inspection of the C-1 reservoir relating to the corrosion and safety concerns, more extensive corrosion of the steel roof framing system requires additional engineering to be conducted for the design and construction solicitation for a new roof for the C-1 Reservoir.

In addition to the requested fee adjustment, we ask that the contract end date be extended from August 31, 2015 to June 30, 2018. This revision in contract end date allows us to assist the City through reconstruction of the roof on the C-1 reservoir.

Details concerning the work activities and fee request are included in the following pages. This detail provides identification of the work to be accomplished under this amendment, and the resulting fee limitation for these services.

We look forward toward your approval of the proposed Amendment No. 1 and should you have any questions concerning the information provided herein, please contact me at your earliest convenience.

Sincerely,
CH2M HILL Engineers, Inc.


Patrick Van Duser, P.E. Project Manager


Dave Simmons, Project Delivery Manager

Attachments - Amendment No. 1 Details

AMENDMENT NO. 1

Details

Requested Funding Activities Conducted Under Task 1 through Task 4

- None

Requested funding for Task 5 - Services During Construction

- Part Time Construction Manager
The construction schedule for the C-2 Reservoir project has extended beyond the duration anticipated. The City has requested CH2M to continue and maintain the part time Construction Manager services that have been provided. To continue these services through the end of the existing construction phase of the project (December 2016), additional funding is needed as identified in the table below. No changes to the original scope at this time, only additional funds to cover the extended construction schedule. The budget to perform Task 5 activities is \$37,949.

New Task 6 – C-1 Reservoir Preliminary Assessment

- C-1 Reservoir Preliminary Assessment
Task 6 is a new task related to corrosion concerns identified upon removal of the center roof vent of the C-1 Reservoir following commissioning of the C-2 Reservoir; allowing for the first full observation of the C-1 reservoir interior. The work to be performed includes a site visit to inspect the rafter connection to the center column and photo document the condition, development of a memo to document the findings of the site visit and outline options for a path forward for the repair of the C-1 Reservoir. This budget includes one meeting with the City to present the findings and discuss the possible options. The budget to perform Task 6 activities is \$6,300.

New Task 7 – Budgetary Cost Estimate for the repairs associated with the C-1 Reservoir

- C-1 Reservoir Repair Costs Estimate
Task 7 is a new task for the development of a preliminary construction cost estimate for the replacement of the roof system of the C-1 reservoir. The construction costs estimate will be a

Class 4 (AACE) Feasibility level cost estimate. In addition to the replacement of the roof, the replacement of the top ring of the reservoir will be included in the repairs to provide the City with a worst case budgetary number. The accuracy of a Class 4 estimate at this level is -30% to +50%. The budget to perform Task 7 is \$6,005.

New Task 8 – C-1 Reservoir Roof Replacement

- C-1 Reservoir Roof Replacement Design

Task 8 is a new task for the development of Contract Documents suitable for advertising the C-1 Reservoir Roof Replacement project for bid and services during construction. The contract documents will include demolition and replacement of the roof system on the C-1 reservoir, including the replacement of the rafters. An overall schedule of 10 months is assumed from condition assessment through construction final completion.

The first phase of this project is the development of the condition assessment memorandum. As part of this assessment, CH2M will utilize an ultrasonic thickness device to confirm the wall and roof thickness as well as the column and interior piping. Measurements will be taken in areas that are safely accessible, floor, roof and interior and exterior ladders. A recommendation on repairs will be included in the memorandum.

The second phase of this project is the development of plans and specs. The roof replacement design will be performance specified, allowing for contractors to develop their specific design for construction. All other repairs and improvements identified as part of the condition assessment will be designed by CH2M. The other repairs and improvements designed are the original improvements planned as part of the initial project: mixer installation, sample lines, and roof hand rail installation. In addition to these elements, a revision to the ladder security door will be included to make the exterior ladder access security cover match what was included on the C-2 reservoir. This revision will allow the existing concrete ring wall to function as the platform for the ladder.

Our formal but flexible phased design process will include a single deliverable document considered pre-final (90%). Due to the nature of the work, we believe a single deliverable will allow the City the opportunity to provide input and allow our quality assurance review input to the design and final bid documents. We propose to meet with City to obtain your review comments. We will provide updated construction cost estimates with our design deliverable.

CH2M will prepare construction documents suitable for public bidding. Construction documents will include design plans, City of Tualatin front ends, standard specifications, City of Tualatin Technical Specifications and special provisions, and CH2M specialty technical specifications. CH2M will also prepare specifications for the entire code-required "Statement of Special Inspection, Testing and Observation Plan" specific to steel tanks.

CH2M will assist the City of Tualatin in bidding the project. This will include preparation of bid documents in electronic form to allow the City to advertise and distribute the documents to bidders, facilitate a pre-bid meeting, and responding to questions, preparing up to one addenda and making recommendation for award. The City will be responsible for bid

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advertisement, document distribution, obtaining a venue for the pre-bid meeting, notice of award, and contracting with the successful construction contractor.

CH2M will provide a construction manager to coordinate construction activities at a 25% full time equivalent allocation for the duration of active construction, which is expected to take 24 weeks, including repairs and recoating.

Per the International Building Code (IBC) a Structural engineer will be required to make observations at key elements of the project, ensure the project is constructed in accordance with the design intent. This is included in the scope of services.

Our office engineering will include reviewing and approving shop drawings, responding to contractor information requests (RFIs), preparing record drawings from contractor redlines, and assisting with project closeout.

The City will review, approve, and pay the construction contractor's monthly invoices. Special or materials inspection services required by the IBC will be contracted directly by the City of Tualatin.

The budget to perform Task 8 activities is: \$108,570.