



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources
1313 Sherman Street, Room 718
Denver, CO 80203

WSRF – Metro – Chambers Reservoir Rehab Project
POGG1 2020-2221

September 12, 2019

Arapahoe County Water & Waste Water Authority
Attn: Steve Witter, General Manager
13031 E. Caley Ave.
Centennial, CO 80111

Dear Grantee:

We are pleased to inform you that the Colorado Department of Natural Resources, Colorado Water Conservation Board (CWCB) has approved your grant request for your project pursuant to the WSRF Grant Program (“Program”). This letter authorizes you to proceed with the Chambers Reservoir Rehab. Project (“Project”) in accordance with the terms of this Grant Award Letter.

Attached to this letter are the terms and conditions of your Grant. Please review these terms and conditions, as they are requirements of this Grant to which you, Arapahoe County Water & Waste Water Authority, agree by accepting the Grant Funds.

If you have any questions or concerns regarding the project, please contact Megan Holcomb, Project Manager at 303-866-3441 or at Megan.Holcomb@state.co.us. Please send all grant correspondence directly to Megan and please, cc me on your invoice billing requests.

Thank you.

Sincerely,

//s//

Doriann Vigil

Program Assistant II

O 303-866-3441 ext. 3250

1313 Sherman Street, Rm. 719, Denver, CO 80203

Dori.vigil@state.co.us / cwcb.state.co.us





STATE OF COLORADO
Department of Natural Resources

Page 1 of 1

ORDER		*****IMPORTANT*****				
Number:	POGG1,PDAA,202000002221	The order number and line number must appear on all invoices, packing slips, cartons, and correspondence.				
Date:	9/12/19	BILL TO				
Description:	PDAA 2500 WSRF- CHAMBERS REHAB-PHASE 1	COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
Effective Date:	09/11/19	SHIP TO				
Expiration Date:	07/31/20	COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
BUYER		SHIPPING INSTRUCTIONS				
Buyer:		Delivery/Install Date: -				
Email:		FOB: FOB Dest, Freight Allowed				
VENDOR						
ARAPAHOE COUNTY WATER & 13031 E CALEY AVE CENTENNIAL, CO 80111						
Contact:	.					
Phone:	.					
VENDOR INSTRUCTIONS						
EXTENDED DESCRIPTION						
Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	0.00	\$85,000.00	<input type="checkbox"/>
Description: PDAA 2500 WSRF- CHAMBERS REHAB-PHASE 1						
Service From: 09/11/19		Service To: 07/31/20				
TERMS AND CONDITIONS						
https://www.colorado.gov/pacific/osc/small-dollar-grant-award-terms-conditions						
DOCUMENT TOTAL = \$85,000.00						



Last Update: January 9, 2018

Colorado Water Conservation Board	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	May 17, 2019
Water Activity Name:	Chambers Reservoir Rehabilitation Project – Phase 1
Grant Recipient:	Arapahoe County Water and Wastewater Authority
Funding Source:	Metro Basin Roundtable
Water Activity Overview: (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for.	
<p>Chambers Reservoir is currently unable to serve ACWWA's customers due to construction defects in the reservoir's clay liner. Therefore, the Chambers Reservoir Rehabilitation Project is a two-phase project to make the reservoir a viable, effective component of ACWWA's comprehensive water supply system. As part of the ACWWA Flow Project, Chambers Reservoir is critical to ACWWA's non-potable irrigation system. The reservoir is fed with raw Cherry Creek alluvial water and is meant to act as both a buffer to meet peak-day demands in the summer months, and as a settling zone for the high concentrations of iron and manganese that are prevalent in the Cherry Creek alluvium. ACWWA currently provides enough raw water to irrigate 50 acres of land. At buildout, with Chambers Reservoir operating properly, ACWWA will be able to provide enough raw water to irrigate 185 acres of land. Phase 1 of the project is dedicated to the earthwork necessary to repair the failed side slopes of the reservoir in preparation for it to be outfitted with a synthetic liner during Phase 2. WSRF grant funding will be used specifically for the earthwork of Phase 1.</p>	
Objectives: (List the objectives of the project)	
<p>Overall project objective: Bring Chambers Reservoir to an operational standard to store and deliver water as originally proposed.</p> <p>Phase 1 earthwork objectives: Prepare the Reservoir to be outfitted with a synthetic liner which includes the mechanical scraping and regrading of slopes and the importing of materials to raise the bottom of the Reservoir to provide more separation from underlying groundwater.</p>	



Last Update: January 9, 2018

Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 – Earthwork & Overall Construction Administration</u>
Description of Task: <ol style="list-style-type: none">1) Scrap existing clay liner from the side slopes and compact this material in the bottom of the reservoir.2) Regrade side slopes to prevent future slope failure.3) Import roughly 107,000 cu. yd. of clay material to raise the bottom of the Reservoir above the groundwater level.4) Install toe drain infrastructure to help manage perched groundwater.5) Additional site grading to address new layout including proper drainage and access road modification.
Method/Procedure: <ol style="list-style-type: none">1) ACWWA has brought on AECOM to design the Rehabilitation Project and oversee construction, with Fiore & Sons acting as the general construction contractor.2) ACWWA will perform our due diligence and attend weekly construction meetings and have staff on-site regularly verifying that construction is being administered successfully and in accordance with any and all applicable standards and regulations.3) Thorough inspection and certification of construction by AECOM and ACWWA.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task) <ol style="list-style-type: none">1) Final Record Drawings2) Notice of Final Completion and Project Punch-list
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task) <ol style="list-style-type: none">1) Final Record Drawings2) Notice of Final Completion and Project Punch-list3) Necessary Progress Reports during Project4) Final Report as outlined below



Last Update: January 9, 2018

Budget and Schedule

Exhibit B - Budget and Schedule: This Statement of Work shall be accompanied by a combined [Budget and Schedule](#) that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format. A separate excel formatted Budget is required for engineering costs to include rate and unit costs.

Reporting Requirements

Progress Reports: The grantee shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.

Final Report: At completion of the project, the grantee shall provide the CWCB a Final Report on the grantee's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

Payments

Payment will be made based on actual expenditures, must include invoices for all work completed and must be on grantee's letterhead. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or contract may be denied consideration for future funding of any type from CWCB.

Performance Requirements

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the final deliverable is completed to the satisfaction of CWCB staff. Once the final deliverable has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per the Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per the Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.

Last Update: July 31, 2018



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

Colorado Water Conservation Board

Water Supply Reserve Fund

EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs

Date: May 13, 2019

Water Activity Name: Chambers Reservoir Rehabilitation Project - Phase 1

Grantee Name: Arapahoe County Water and Wastewater Authority

<u>Task No.</u> ⁽¹⁾	<u>Description</u>	<u>Start Date</u> ⁽²⁾	<u>End Date</u>	<u>Matching Funds</u> (cash & in-kind) ⁽³⁾	<u>WSRF Funds</u> (Basin & Statewide combined) ⁽³⁾	<u>Total</u>
<u>1</u>	<u>Reservoir Rehab. Earthwork</u>	<u>Sep-19</u>	<u>7/31/2020</u>	\$ 3,280,512	\$ 85,000	\$3,365,512
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
Total				\$3,280,512	\$85,000	\$3,365,512

CHAMBERS RESERVOIR REMEDIATION DESIGN (PHASE I)

PREPARED FOR:
ARAPAHOE COUNTY WATER WASTEWATER ASSOCIATION (ACWWA)
ISSUED FOR CONSTRUCTION
JANUARY, 2019

AECOM
PROJECT
CHAMBERS RESERVOIR
REMEDIATION DESIGN
(PHASE I)

CLIENT

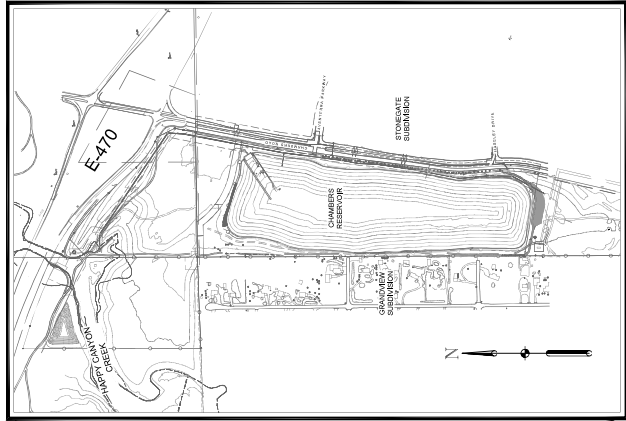
ARAPAHOE COUNTY
13031 E Caley Ave
CENTENNIAL, COLORADO 80111
PH: (303) 751-1000
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CONSULTANT

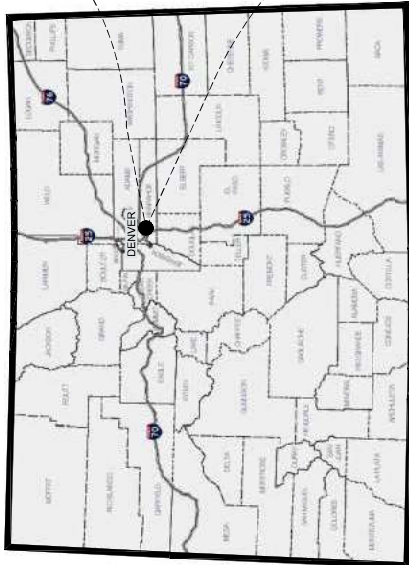
AECOM
894 COLORADO AVE
Suite 207
CLEVEDALE SPRINGS, CO. 81601
www.aecom.com

CONSULTANTS

SHEET NO.	SHEET INDEX	
	SHEET TITLE	
	PHASE I: CIVIL	
C-01	COVER	
C-02	EXISTING CONDITIONS	
C-03	EXISTING SOILS MAP	
C-04	DEMO PLAN	
C-05	LAYDOWN PLAN	
C-06	SITE PLAN	
C-07	EMBANKMENT GRADING PLAN	
C-08	REALIGNED PERIMETER ROAD PROFILES (EAST AND WEST BENCHES)	
C-09	EAST EMBANKMENT SECTION POINTS	
C-10	WEST EMBANKMENT SECTION POINTS AND ADDITIONAL EMBANKMENT POINTS	
C-11	TYPICAL EMBANKMENT GRADING SECTIONS	
C-12	FINISHED GRADING PLAN	
C-13	DETAILED GRADING SECTIONS	
C-14	FINISHED GRADE POINTS TABLES	
C-15	STORM DRAIN PLAN AND PROFILE	
C-16	DOUGLAS COUNTY STORM DRAIN DETAILS SHEET 1 OF 3	
C-17	DOUGLAS COUNTY STORM DRAIN DETAILS SHEET 2 OF 3	
C-18	DOUGLAS COUNTY STORM DRAIN DETAILS SHEET 3 OF 3	
C-19	DRAINAGE LAYOUT	
C-20	DRAINAGE DETAILS	
C-21	SECTIONS REFERENCE PLAN	
C-22	SECTIONS STA 1+00 TO 4+00 SHEET 1 OF 7	
C-23	SECTIONS STA 5+00 TO 7+00 SHEET 2 OF 7	
C-24	SECTIONS STA 8+00 TO 10+00 SHEET 3 OF 7	
C-25	SECTIONS STA 11+00 TO 13+00 SHEET 4 OF 7	
C-26	SECTIONS STA 14+00 TO 16+00 SHEET 5 OF 7	
C-27	SECTIONS STA 17+00 TO 19+00 SHEET 6 OF 7	
C-28	SECTIONS STA 20+00 TO 22+00 SHEET 7 OF 7	
C-29	STORM WATER MANAGEMENT PLAN STAGE I	
C-30	STORM WATER MANAGEMENT PLAN STAGE II	
C-31	STORM WATER MANAGEMENT PLAN STAGE III	
DESC	SHEETS 1 TO 14 OF COUNTY GESC PLANS	
PHASE I: STRUCTURAL		
S-01	PUMP STATION GENERAL NOTES	
S-02	PUMP STATION DETAILS	



VICINITY MAP
0 500 1000
SCALE IN FEET



COLORADO
STATE MAP
NOT TO SCALE

