

**CHANGE ORDER
NO. 2**

PROJECT TITLE: Aquifer Storage and Recovery (ASR) Assistance – Phase II Fatal Flaw

SERVICE PROVIDER: CH2M HILL Engineers, Inc.

WORK ORDER NUMBER: CH-2017-ASR-II

PO NUMBER: **9177482**

DESCRIPTION:

1. Reason for Change: **Findings from CH2M study incur follow-up requirements that exceed original scope of work. Additional information in attached memo.**
2. Description of Change: **See attached memo.**
3. Change in Work Order Price: **\$9,407.51**
4. Change in Work Order Time: **None**

ORIGINAL WORK ORDER PRICE	\$ 45,778.00
TOTAL APPROVED CHANGE ORDER	0.00
TOTAL PENDING CHANGE ORDER	0.00
TOTAL THIS CHANGE ORDER	9,407.51
TOTAL % OF THIS CHANGE ORDER	21%
TOTAL C.O.% OF ORIGINAL WORK ORDER	21%
ADJUSTED WORK ORDER COST	\$55,185.51

SERVICE PROVIDER: DocuSigned by:
Albert Paquet _____ Date: 5/29/2018
 Albert Paquet, Principal Project Manager

ACCEPTANCE: DocuSigned by:
Adam Jokerst _____ Date: 5/29/2018
 Adam Jokerst, Project Manager

REVIEWED: DocuSigned by:
Pat Johnson _____ Date: 5/16/2018
 Pat Johnson, Senior Buyer

ACCEPTANCE: _____ Date: _____
 Gerry Paul, Purchasing Director
 (if greater than \$60,000)

MEMORANDUM

**Project Status Report
2014 Water Treatment Facility Consulting Engineering Services
PO Number 9177482
Work Order – Task 28 CH-2017-ASR II
Aquifer Storage and Recovery (ASR) Assessment Report Review
February 24, 2018 through March 30, 2018**

PREPARED FOR: Adam Jokerst/FCU, Eileen Dornfest/FCU
COPY TO: Kevin Heffernan/CH2M
PREPARED BY: Al Paquet/CH2M
DATE: April 26, 2018
PROJECT NUMBER: 486493.28

The following report summarizes CH2M's activities during the above period.

Task 1 ASR Phase II Assistance

CH2M issued the revised final report titled *Fort Collins Aquifer Storage and Recovery Assistance – Phase II Fatal Flaw Analysis* on March 12, 2018. The revised report addressed Additional comments were received subsequent to the February 16, 2018 version.

Task 2 Project Management

CH2M addressed the City's and CSU's comments to the draft report and issued the final report on February 16. The CSU invoice is included with this invoice.

A change order request in the amount of \$ 9,407.51 is requested with this invoice.

The additional charges are due to the following efforts that exceed the original scope level of effort.

- Preparation of detailed responses to the City's and CSU's comments following the workshop and final report.
- Questions regarding the Typical ASR well injection pressures required additional investigation and contact with Highland Ranch to confirm injection pressures.
- Modification of figure 5-1 and 5-2.
- Reformatting of the Report from Print version with page left blank to PDF versions, including table of Content updates.
- Revisions to the recommendations and conclusions.
- Refinement of induced seismicity concerns.
- Estimates for ASR well testing program.

These efforts were required to adequately address issues raised and complete the final report. We respectfully request that a Change Order be issued for this budget overrun.