

ITEM#: 18
DATE: 10-10-23
DEPT: W&PC

COUNCIL ACTION FORM

**SUBJECT: CHANGE ORDER NO. 3 FOR OLD WATER TREATMENT PLANT
DEMOLITION**

BACKGROUND:

During design of the new water treatment plant, City staff made a commitment that the old treatment facility would be demolished as soon as practical after being shut down to not become an abandoned eyesore for the neighborhood.

Council awarded a demolition contract on June 28, 2022, that included removal of the filter building, chemical feed building, exterior clarifiers, administrative offices, ¾ million-gallon ground reservoir, and small outbuildings. Improvements to the site distribution and raw water piping were included in this project as well. The high service pump station, two-million-gallon storage reservoir, five-million-gallon storage reservoir, and Technical Services Complex (TSC) all remain in use.

Two change orders have been approved for this contract to-date. Change Order #1, in the amount of \$401.36 was approved to address vermiculite removal and alter quantities of water main work. Change Order #2, a deduct in the amount of \$17,401.90, was approved to cap a 12” raw water main and address contract allowances.

Change Order No. 3 is a significant change to the original contract. An old storage building located near the existing high service pump station and two-million-gallon storage reservoir was removed as a part of the project. The building was believed to be a slab-on-grade structure, but when the concrete floor was removed there was an additional subgrade structure under the building with two large diameter pipes. Upon investigation, it was determined that this is the remnant of an old temporary pump station constructed in the 1950s during construction of the permanent pump station.

The pipes, one 20” in diameter and the other 30”, were found to still be actively connected to the two-million-gallon reservoir at a depth of approximately 20’. **To eliminate the potential for contamination of the fully treated water in the storage reservoir, the lines need to be properly disconnected and abandoned. This will require the use of intensive construction means and methods, including: excavation of the pipes to confirm the material and diameter at the connection to the reservoir; installation of a line stop on each pipe; cut and remove a two-foot length of each pipe; install a mechanical cap and thrust block on each pipe at the connection to the reservoir; plug the now inactive ends of each line; and provide backfill and topsoil to match the existing grade.** Because of the depth and proximity

to the critical two-million-gallon storage reservoir, sheet piling or other stabilization methods will be required to protect the structural integrity of the reservoir.



Photo (8-26-2022) of the old Water Treatment Plant at the start of demolition. The storage building with the unknown remnants of a pump station below is marked with an arrow.

The consultant has prepared Change Order No. 3 to the demolition contract in an amount of \$157,692.60, and the Change Order has been executed by the contractor, LinnCo, Inc. The Change Order additionally allows for an extension of the contract until November 8, 2023, to allow time for the pipe abandonment work.

Project Expenses

Construction Contract	
Original Contract	\$2,398,000.00
Change Order #1	401.36
(Vermiculite removal and quantities of water main work altered)	
Change Order #2	(17,401.90)
(Capping 12" raw water main and contract allowances)	
Change Order #3 – This Action	157,692.60
(2-million-gallon GSR pipework)	
Engineering	277,200.00
Legal, Admin, Misc.	16,450.93
<hr/> Total Project Expenses	<hr/> 2,832,342.99

The adopted project budget is shown below. Because demolition projects frequently include unexpected changes, the Drinking Water State Revolving Loan received was in the amount of \$3,500,000. Funding for this change order is available in the contingency included in the loan agreement.

Authorized Project Funds

FY 2018 - FY2020/21	\$141,916
FY 2021/22 CIP	\$ 1,288,560
FY 2022/23 CIP	\$ 1,233,000
<hr/> Total Project Funds	<hr/> \$ 2,663,476
 Drinking Water State Revolving Loan	 \$3,500,000

ALTERNATIVES:

1. Approve Change Order No. 3 to the contract with LinnCo, Inc., Sartell, Minnesota for the Old Water Treatment Plant Demolition, thereby adding \$157,692.60 and extending the contract completion date to November 8, 2023.
2. Do not take any action at this time and provide direction to staff on the future of the project.

CITY MANAGER’S RECOMMENDED ACTION:

The demolition of the old water treatment plant has come with very few surprises, and the first two change orders executed resulted in a net decrease in the contract of \$17,000.54. Near the close of the work, the remnants of an old, buried pump station were discovered with piping that was still actively connected to a finished water reservoir. To protect against possible leaks or contamination of the drinking water, the pipes need to be properly abandoned.

Due to the depth and proximity of the excavation to the reservoir, the repair is considerably more expensive than repairing a typical water main. Staff has worked with the consultant and contractor to identify the most appropriate means of disconnecting the pipes. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.