BUSINESS OF THE CITY COUNCIL
CITY OF MERCER ISLAND

AB 6659
April 1, 2025
Consent Agenda

AGENDA BILL INFORMATION

TITLE:	AB 6659: Reservoir Improvement Project Change Order and Appropriation Request	☐ Discussion Only ☒ Action Needed: ☒ Motion ☐ Ordinance ☐ Resolution
RECOMMENDED ACTION:	Appropriate $514,505 to complete construction of the Reservoir Improvement Project.	

DEPARTMENT:	Public Works
STAFF:	Jason Kintner, Chief of Operations Patrick Yamashita, City Engineer
COUNCIL LIAISON:	n/a
EXHIBITS:	1. Project Vicinity Map
CITY COUNCIL PRIORITY:	3. Make once-in-a-generation investments to update and modernize aging infrastructure, capital facilities, and parks.

AMOUNT OF EXPENDITURE	$ 514,505
AMOUNT BUDGETED	$ 7,119,602
APPROPRIATION REQUIRED	$ 7,634,107

EXECUTIVE SUMMARY

The purpose of this agenda bill is to provide an update on the Reservoir Improvement Project and request an appropriation from the Water Fund to complete the project. The City has two four-million-gallon water reservoir tanks that provide storage for daily operation of the water system.

- The north reservoir tank improvements were completed in 2024 including extensive unplanned surface preparation of the exterior of the tank through sandblasting to ensure proper adhesion of the paint. The painting could not proceed without this preparation. This work was performed by change orders covered by the construction contingency.
- The south reservoir exterior has similar adhesion issues and change orders are required to complete the work. The remaining contingency is insufficient to cover the cost of this work.
- An appropriation of $514,505 from the Water Fund is needed to cover the cost of the change order and to complete the Reservoir Improvement project (90.40.0033).
- Construction is anticipated to be substantially complete by Q3 2025 with one-year warranty inspections of the reservoir interiors to follow.

BACKGROUND

The City's water reservoir facility includes two 4-million-gallon welded steel reservoirs, a booster pump station, an emergency generator, a booster chlorination system, and a SCADA (Supervisory Control and Data Acquisition) system. The reservoirs are approximately 150 feet in diameter and 32 feet tall, with the booster pump station located between them. This facility is the heart of the water system. Ongoing investment in this infrastructure is critical to ensuring the long-term storage and cost-effective delivery of safe drinking water to the community.

The recently completed booster chlorination system improvements provide greater control over the chlorine levels in the water system. The new emergency generator will provide reliable backup power for the facility and the emergency well into the future. Replacement of the booster pumps this year will support reliable operation for many years to come, and the SCADA system enables operations staff to monitor and control the reservoir and booster pump station remotely, especially after hours.

The north reservoir was constructed in 1962, followed by the south reservoir in 1975. The reservoir coatings were last replaced during the seismic upgrade of the tanks in 2001. The typical life expectancy of reservoir coatings is approximately 20 years. A third-party condition assessment conducted in 2021 determined that the reservoirs are in overall good condition, but the coatings have reached the end of their useful life and due for replacement.

The Reservoir Improvement Project focuses on protecting the structural integrity of the north and south reservoir tanks, primarily through the replacement of interior and exterior protective coatings and welding roof plates to rafters. Other improvements address worker safety, including replacing exterior ladders with spiral staircases and adding guardrails around the tank roof perimeters. The project budget of $7,119,602, including a ten percent construction contingency, was approved by the City Council at the time of bid award (AB 6211). Construction began in August 2023 and will continue into the summer 2025. The extended project duration is necessary due to operational constraints - only one reservoir can be taken out of service at a time for interior painting and only outside of the May-October peak water demand season.

ISSUE/DISCUSSION

The north reservoir tank improvements were completed in 2024. The contractor performed extensive cleaning of the exterior north reservoir walls and roof in preparation for spot grinding before repainting. During the cleaning, it became apparent that spot repair (grinding to bare metal) would be required across most of the painted surface, far more extensive than anticipated during the design. The new paint would not properly adhere without this additional surface preparation. The cost of the additional grinding would be nearly as much as sandblasting the entire surface. Sandblasting was determined to provide a more uniform surface for the paint adhesion, nearly doubling the paint's life expectancy, and it would remove all remaining lead-based paint. Sandblasting was clearly a better long-term choice and value. Change orders were executed to sandblast and prime the surface. The construction contingency was used to pay for these unanticipated costs.

The contractor is nearing completion of the interior paint work on the south reservoir and is preparing to shift work to the exterior. Upon investigation, the exterior was found to be in similar condition of the north reservoir. Staff is preparing change orders to sandblast and prime the exterior in a similar manner as the north reservoir. However, the remaining construction contingency is nearly depleted and an appropriation of

$514,505 is needed to cover the cost of the change orders and remaining project construction. This is a 7.2 percent increase to the project budget and will be funded within the Water Fund.

The updated total estimated project cost is shown in the table below.

Reservoir Improvement Project Updated Total Estimated Project Cost	
Project Elements	**Estimate**
Project Design (RH2)	$359,048
Construction - Paso Robles Tank, Inc.	$5,791,413
Change Orders to Date	$454,392
Proposed Change Orders for South Exterior roof and walls	$518,206
In-House Construction Support	$70,000
Construction Support & Inspection (RH2)	$394,048
Contract Administration/Project Management	$47,000
Total Estimated Project Cost	**$7,634,107**
Project Budget Set at Bid Award (2-7-23, AB 6211)	$7,119,602
Additional Appropriation Request	***$514,505***

NEXT STEPS

Upon approval of the appropriation, staff will process the change orders to proceed with the work on the south reservoir exterior. Construction is anticipated to be substantially complete by Q3 2025 with one-year warranty inspections of the reservoir interiors to follow.

RECOMMENDED ACTION

Appropriate $514,505 from the available balance within the Water Fund to complete construction of the Reservoir Improvement Project (90.40.0033).