



**BUSINESS OF THE CITY COUNCIL
CITY OF MERCER ISLAND**

**AB 6300
July 18, 2023
Consent Agenda**

AGENDA BILL INFORMATION

TITLE:	AB 6300: 2023 Water System Improvements Project Bid Award	<input type="checkbox"/> Discussion Only <input checked="" type="checkbox"/> Action Needed: <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution
RECOMMENDED ACTION:	Award the 2023 Water System Improvements construction contract to Kar-Vel Construction.	

DEPARTMENT:	Public Works
STAFF:	Patrick Yamashita, Deputy Public Works Director Clint Morris, Capital Division Manager George Fletcher, Senior CIP Project Manager
COUNCIL LIAISON:	n/a
EXHIBITS:	1. Project Locations Map
CITY COUNCIL PRIORITY:	3. Make once-in-a-generation investments to update and modernize aging infrastructure, capital facilities, and parks.

AMOUNT OF EXPENDITURE	\$ 4,657,092
AMOUNT BUDGETED	\$ 4,684,000
APPROPRIATION REQUIRED	\$ n/a

EXECUTIVE SUMMARY

The purpose of this agenda bill is to award a public works construction contract to upgrade aging and undersized water system infrastructure at six locations on the northern portion of Mercer Island.

- This project replaces over 6,600 feet of watermain, along with water services, fire hydrants, and other critical water distribution system components.
- This project (WU0130) is included in the 2023-2024 Biennial Budget and Capital Improvement Program (CIP) with a total project budget of \$4,684,000, funded by the Water Fund.
- Five bids were received. The low construction bid is \$3,584,335.
- Design work was funded from the 2021-2022 CIP (WU0109) and a \$489,400 appropriation from the Water Fund ([AB6151](#)).
- Construction is scheduled to occur from August 2023 through April 2024.

BACKGROUND

One of the City’s top priorities is to provide safe and reliable drinking water to the community. A major component of achieving that goal is on-going, planned replacement of portions of the water system that have reached the end of their service life.

Each biennium, the City constructs at least one watermain replacement project, as well as performing other capital water system upgrades. The City owns and maintains over 115 miles of water mains, ranging in size from 4-inches to 30-inches in diameter. During each Capital Improvement Program (CIP) budget planning process, City staff evaluate and prioritize water mains for replacement using a scoring matrix that applies rating factors to attributes such as pipe material, age, diameter, condition, water quality, and fire flow.

Six high priority locations were identified for water main replacement for 2023. These sites have water mains that were installed in the late 1950's and early 1960's, making them some of the oldest components of the City's water system. The mains are a combination of 4, 6, and 8-inch cast iron. Some are undersized. Most have a history of breaks and there are numerous undersized fire hydrants.

The replacement locations as outlined in Exhibit 1 include:

- 60th Avenue SE, from SE 27th to SE 32nd Streets, in the East Seattle neighborhood
- The 2400 Block of 62nd Avenue SE, also in East Seattle
- The 7400 Block of North Mercer Way
- 74th Avenue SE from north of SE 24th Street to SE 27th Street
- The 7600 Block of SE 37th Place in Mercerdale
- The 7600 Block of SE 41st Street.

This project will provide timely water system upgrades within these neighborhoods by strengthening the distribution system, increasing fire flow, and improving water quality.

During the 2023-2028 CIP development process, the 2023 Water System Improvements project was increased to almost double the historical size of the City's annual water main replacement effort. While the 2021-2022 CIP included funding for design of the 2023 project, the \$229,000 project budget for WU0109 was inadequate for the larger project size. In September 2022, Council approved an appropriation from the Water Fund of \$260,400 for additional design work, which increased the total design project funding to \$489,400 ([AB 6151](#)).

Design work began in October 2022 and was completed in mid-May 2023. The project was advertised for bids immediately after design work was finalized. At completion of design, the engineer's estimated construction cost of the project was \$3,672,374.

ISSUE/DISCUSSION

PROJECT DESCRIPTION

The 2023 Water System Improvements project (WU0130) consists of installing over 6,000 feet of new 8-inch ductile iron water main, 235 feet of new 6-inch ductile iron water main, 395 feet of new 4-inch ductile iron water main, 14 fire hydrants, 145 water services, 24 connections to existing water mains, and construction of a new pressure reducing valve station.

Work also includes the abandonment of over 1,200 feet of 4- and 6-inch asbestos cement water main pipe (also known as "AC" pipe or "Transite" pipe). On North Mercer Way, over 700 feet of redundant 6- and 8-inch cast iron water main will be abandoned and water services from those mains switched to a parallel existing 16-inch ductile iron water main. This will improve water quality and saves the cost of replacing those old mains.

BID RESULTS

Five construction bids were received and opened on June 29, 2023. The lowest bid was received from Kar-Vel Construction with a bid of \$3,584,335, which is approximately 2.4% below the engineer's construction cost estimate. The following table shows the bid results.

COMPANY NAME	TOTAL BID AMOUNT INCLUDING 10.1% WASHINGTON SALES TAX
Kar-Vel Construction	\$3,584,335
Fury Siteworks Inc	\$3,594,211
SCI Infrastructure, LLC	\$3,780,933
Strickland & Sons Excavation	\$3,790,855
Pacific Civil & Infrastructure, Inc	\$4,425,194
Engineer's Estimate:	\$3,672,374

The apparent low bidder, Kar-Vel Construction (Kar-Vel), based in Renton, Washington was established in 1990. They have completed several water main and other utility infrastructure construction projects for public agencies and private developments in Western Washington. Currently, Kar-Vel is finishing two asbestos cement water main replacement projects with the City of Bellevue that have a combined contract value of over \$6 M. Kar-Vel also successfully completed a pressure reducing valve station project for the Alderwood Water and Wastewater District on-time and on-budget in 2021.

A review of the Labor and Industries (L&I) website confirms Kar-Vel Construction is a contractor in good standing with no license violations, outstanding lawsuits, or L&I tax debt. Based on review of Kar-Vel's bid submittal and reference checks, staff has determined that Kar-Vel is the lowest responsive bidder for this project and staff recommends awarding the 2023 Water System Improvements project to Kar-Vel Construction.

PROJECT BUDGET

Adding amounts for construction, contingency, inspection, and project management brings the total estimated 2023 project cost to \$4,657,092, which is \$26,908 underbudget. This and any savings at the project's completion will return to the Water Fund. Note, project design expenses are not included in this estimate since those costs were funded from the 2021-2022 CIP.

Historically, staff applies a 20% contingency for utility construction due to the unknowns associated with underground work; however, with this larger project a 15% contingency is recommended. Project costs are summarized in the following table.

2023 WATER SYSTEM IMPROVEMENTS WU0130 PROJECT BUDGET	
Description	TOTAL
Construction (Schedules A, B and C)	\$3,255,527
Washington State Sales Tax @ 10.1%	\$328,808
Total Construction Contract Award to Kar-Vel	\$3,584,335
Construction Contingency @ 15%	\$537,650
Construction Support Services - Consultant	\$33,300
Project Management/In-House Staff Support	\$286,747
Construction Inspection	\$215,060
Total Estimated Project Cost	\$4,657,092
Total 2023-2024 Budget Available for Project WU0130	\$4,684,000
Budget Appropriation Needed	\$0

NEXT STEPS

Staff recommends authorizing the City Manager to execute a contract with Kar-Vel Construction, a Washington-based company, for the construction of the 2023 Water System Improvements project and set the total project budget at \$4,657,092.

Public agencies, contractors, and suppliers are still experiencing shortages of materials and long lead times on critical items, such as ductile iron pipe, brass pipe fittings, and other water system accessories. Staff anticipates construction work to begin in August of 2023. Completion of the entire project is not expected until April 2024. Staff will work closely with the Kar-Vel team to manage the project timeline and work schedule.

RECOMMENDED ACTION

Award the 2023 Water System Improvements project to Kar-Vel Construction, authorize the City Manager to execute a contract with Kar-Vel Construction in an amount of \$3,584,335 and set the total project budget at \$4,657,092.