



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

**AB 6014  
February 15, 2022  
Consent Agenda**

**AGENDA BILL INFORMATION**

<b>TITLE:</b>	AB 6014: ARPA Fund Utility Update & Appropriation Request	<input type="checkbox"/> Discussion Only
<b>RECOMMENDED ACTION:</b>	<ol style="list-style-type: none"> <li>1. Appropriate \$799,000 in ARPA Funds to accelerate three utility infrastructure projects through design.</li> <li>2. Authorize the City Manager to enter into Professional Service Agreements for the three design projects.</li> </ol>	<input checked="" type="checkbox"/> Action Needed: <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution

<b>DEPARTMENT:</b>	Public Works
<b>STAFF:</b>	Jason Kintner, Chief of Operations Patrick Yamashita, Deputy Public Works Director Maya Giddings, CIP Project Manager
<b>COUNCIL LIAISON:</b>	n/a
<b>EXHIBITS:</b>	1. Utility Projects Location Map
<b>CITY COUNCIL PRIORITY:</b>	n/a

<b>AMOUNT OF EXPENDITURE</b>	\$ 799,000
<b>AMOUNT BUDGETED</b>	\$ n/a
<b>APPROPRIATION REQUIRED</b>	\$ 799,000

**SUMMARY**

The purpose of this agenda bill is to provide an update on five utility capital projects identified last fall that are eligible for funding through the American Rescue Plan Act (“ARPA”) ([AB 5961](#)) and to appropriate funding to complete project design. Specifically, this agenda item will:

- Provide an update on project status and next steps related to the utility projects identified for ARPA funding.
- Appropriate \$799,000 in ARPA funding to enter into consultant contracts to finalize the design of these utility projects.

**BACKGROUND**

The American Rescue Plan Act is a Federal economic stimulus package signed into law on March 11, 2021, in response to the economic and public safety impacts of the COVID-19 Pandemic. The \$1.9 trillion legislation includes \$19.53 billion to cities and towns with less than 50,000 residents to aid in their response and recovery from the Pandemic. A separate pool of \$45.6 billion was set aside for metropolitan cities with populations over 50,000.

On June 8, Washington’s Office of Financial Management (OFM) announced ARPA allocation amounts for Non-entitlement Unit Cities (communities with under 50,000 residents), along with specific instructions to acknowledge the desire for and facilitate the transfer of ARPA funds. The OFM confirmed the City of Mercer Island will receive \$7.23 million in Coronavirus State and Local Fiscal Recovery Funds (SLFRF). The first tranche of \$3,616,084 arrived in late June of 2021. The second half of the City’s allocation is scheduled to be provided June of 2022. ARPA funds can be used to invest in water, sewer, stormwater, and broadband utility infrastructure projects. Of the \$3.61 million received to date, the City Council has committed \$2.17 million.

At the October 19, 2021 City Council meeting (see [AB 5961](#)), staff included a list of potential water and sewer capital projects that could have design and construction accelerated by utilizing ARPA funds. These projects included:

- Reservoir Pump Replacements
- Reservoir Improvements
- First Hill Booster Station Generator Replacement
- Sewer Pipe Replacements and Upsizing
- Pressure Reducing Valve Station Replacements

The City Council directed staff to continue moving these projects forward thru design and become “construction ready.” The following section provides an update on these utility projects, with locations identified in Exhibit 1.

## **UTILITY CAPITAL PROJECT UPDATES**

### Reservoir Pump Replacements

After learning that the reservoir pumps contained mercury seals, City staff quickly procured an engineering firm to evaluate the pumps and design the replacement. Due to the age of the pumps, a holistic review of system demands was completed to determine if the current motor and pump assembly sizes are adequate for future operations. The consultant presented three alternative pump configurations in December and the five submersible pumps will be replaced with five vertical turbines. Two smaller pumps may also be included to handle low demand flows, but further investigation is needed. The final assessment is expected to wrap up in March, with design following and expected completion by end of 2022. Staff anticipates construction in 2023-2024.

### Reservoir Improvements

The preliminary findings and recommendations from last summer’s site assessment reflect that the tanks are in overall good condition; however, the interior and exterior coating systems are nearing the time for replacement, which was expected. The consultant also provided other recommendations to protect the structural integrity and improve safety, such as replacing the grout around the base of the tanks and installing a staircase in lieu of the existing ladders. Design on the selected tank improvements will start soon and construction for the south tank is anticipated to begin later in the fall of 2022, with funding budgeted in the 2021-2022 biennium.

Due to system demand requirements, the second tank interior and exterior coating systems will be scheduled for construction in the 2023-2024 biennium and will be included in the upcoming Capital Improvement Plan.

### First Hill Booster Station Generator Replacement

This project will replace the 30-year old generator at the First Hill Booster Pump Station, as well as its exhaust system and associated transfer switches. Based on an existing underground generator replacement project at

two sewer pump station sites, staff are aware that given current codes, the new generator may need to be installed in a larger underground vault, significantly increasing estimated construction costs. This sizing requirement will be determined during the design process.

In December 2021, the City solicited a Request for Qualifications for engineering services and received six submittals. The City selected David Evans and Associates (DEA). Not only has DEA worked on a number of generator replacements, but their proposed design team has led five of the most recent generator replacements on Mercer Island: an above ground generator at sewer pump station (PS) 11 and underground generators at PS 13, 17, 18, and 24.

DEA conducted an initial site visit at the beginning of January to scope the project. The scope of work and estimated design costs have been established. Staff recommends appropriating \$254,000 for engineering services to proceed with a replacement generator design for the First Hill Booster Pump Station.

#### Sewer Pipe Replacements & Upsizing

In the 2003 and 2018 General Sewer Plans, three segments of pipe (in front of West Mercer Elementary School, through Mercerdale Park and down SE 77<sup>th</sup> Street, and on SE 32<sup>nd</sup> Street in front of the park) were shown to have capacity issues during storm events, contributing to excessive flows in the system. These specific pipes were installed in the 1950s and 1960s and vary in size from 8- to 10-inches.

The City solicited a Request for Qualifications for engineering services to combine, design, and bid the three segments as a single construction project. Three submittals were received, and staff selected Staheli Trenchless Consultants (STC). STC has extensive municipal experience working with utilities and is one of the leaders in the industry, having completed hundreds of sewer main designs.

The scope of work and estimated design costs have been established. Staff recommends appropriating \$150,000 for engineering services to proceed with the design. Design will be completed in 2022 with construction scheduled for the 2023-2024 biennium.

#### Pressure Reducing Valve Station (PRV) Replacements

The Condition Assessment of 20 PRV stations was completed in December. PRV stations are an integral component of the water system. Similar to water main breaks, potential damage caused by PRV failures can be detrimental to our water system and surrounding neighborhoods. Most of the 20 stations evaluated are below the City's current standards, with many in deteriorating states. Budget constraints allowed for only 20 out of the City's 85 PRV stations to be assessed and evaluated under the 2021 Risk and Resilience Assessment (RRA) project. Staff will continue utilizing the procedures and tools established from the RRA to inspect and assess the remaining 65 PRV stations as part of the City's ongoing Capital Improvement Plan.

Staff propose a systematic approach to upgrade the aging PRV stations, by replacing them in small "packages", with the goal to replace five per biennium. A planning level estimate for the design of five PRVs is \$395,000. Staff recommends a \$395,000 appropriation to begin design for the first five PRV stations. It is anticipated that a high percentage of the remaining PRV stations will need to be replaced, with recurring replacements proposed in the coming years.

#### Summary of Requested Funding

The following table provides a breakdown of the three utility projects staff recommend Council approve to move forward with design.

<b>Utility Capital Projects Recommended for Acceleration</b>	
	<b>Cost Estimate</b>
First Hill Booster Station Generator Replacement	\$254,000
Sewer Pipe Replacements & Upsizing	\$150,000
Pressure Reducing Valve Station Replacements	\$395,000
<b>Total</b>	<b>\$799,000</b>

**NEXT STEPS**

If the First Hill generator, sewer pipe upsize, and PRV station replacement projects proceed, staff will initiate design contracts to have bid-ready documents completed by end of 2022. These projects will then be added to the 6-year CIP for construction.

**RECOMMENDED ACTION**

1. Appropriate \$799,000 in ARPA funding to commence design work for the three utility infrastructure projects.
2. Authorize the City Manager to enter into Professional Service Agreements for the design of the First Hill Booster Pump Station Generator Replacement, Sewer Pipe Replacements and Upsizing, and Pressure Reducing Valve Station Replacement projects.