STAFF REPORT

Meeting Date:	May 7, 2025
Author:	Sharon Darroux, Engineering Manager
Department:	Public Works
Division:	Engineering
Subject:	Reservoir Siting Study
Type of Item:	Project Award
CC:	Mouhamad Zaher, Public Works Director
	John Walsh, City Administrator

Introduction:
This project will complete a comprehensive study for the siting of a new water storage reservoir in St. Helens. Work for this project includes assessing potential reservoir locations based on system hydraulics, subsurface and soil conditions, environmental impacts and regulations, site constraints and constructability, site adjacencies and aesthetics, and construction costs.

Background:
The St. Helens water system is supplied by two Ranney collector wells located to the north of St. Helens in Columbia City. The wells collect water from induced infiltration through shallow alluvial sand and gravel adjacent to the Columbia River. Water is then pumped to the Water Filtration Facility (WFF), which filters and pumps water into the distribution system. Water is currently stored in one of three active reservoirs – a 2.5 MG reservoir, the 0.2 MG Green Tank and the 0.5 MG Elk Ridge Reservoir. The City's oldest reservoir, a 2.0 MG Reservoir, located on the same site as the 2.5 MG reservoir, is no longer in use due to significant and unresolved leaks.

Plans to rehabilitate the existing 2.0 MG reservoir were abandoned in favor of potentially replacing it in its current location with a new reservoir in 2023. However, this project was ultimately abandoned because estimated project costs derived from the 30% design cost estimate were over 200% higher than originally planned. In addition to the significant cost factor, site constraints will not allow for the construction of a larger reservoir which could address the City's future water storage deficiencies identified in the current Water Master Plan.

With the existing 2.0 MG Reservoir out of service, the City is operating on a surplus deficiency of 0.8 MG. In 20 years, the storage deficit is estimated to be 2.8 MG. To meet current and future demands, a new reservoir with a storage capacity of at least 5.0 MG is required.

Project Goals:
- ✓ Identify optimal site locations for a new reservoir
- ✓ Ensure selected site will comply with federal, state, and local drinking water regulations
- ✓ Evaluate environmental and community impacts and minimize negative environmental and social impacts

- ✓ Optimize hydraulic performance by ensuring selected site will take into account improved system pressure, reduced pumping costs, and reliable water delivery.
- ✓ Enhance system redundancy and emergency response capacity by considering tank location relative to seismic risks, flood zones, and redundancy in water supply routes
- ✓ Ensure selected site is cost-effective to develop and maintain by considering land acquisition, grading, utilities access, and long-term O&M.

Consultant Selection:
On February 26, 2025, the City issued an RFP for Professional Services to Perform the St. Helens Reservoir Siting Study.

On March 25th, the City received three (3) proposals from the following firms, Black & Veatch, Consor, and Keller Associates.

The Proposal Selection Committee, comprised of City staff of various divisions, reviewed each of the proposals individually and met on Monday, March 31, 2025, to evaluate and discuss the proposals. The Proposal Selection Committee shortlisted two of the firms, Consor and Keller Associates, and invited them for interviews.

Staff Analysis:
After interviews and careful a review of both firms, the Proposal Selection Committee recommends the City Council award the contract to Keller Associates as the most qualified and highest-ranking proposer for the project.

Budget Impact:
The project will be funded by SDC funds and City water fund.

Requested Action:
City Council is requested to award the project Keller Associates and authorize the Engineering Manager to negotiate a final Scope of Work and cost based on the consultant's proposal. The final contract will be added to the Council Agenda for final signature and approval at a future meeting.