



Staff Report

File #: 21-138

Version: 1

Date: 4/12/2021

Item #: 3.3 d.

TO: Mayor and City Council

THROUGH: Steve Powers, City Manager

FROM: Peter Fernandez, PE Public Works Director

SUBJECT:

Project Request to Begin Design Activities on Filter No. 2 Reconstruction at the Geren Island Water Treatment Facility

Ward(s): All Wards

Councilor(s): All Councilors

Neighborhood(s): All Neighborhoods

Result Area(s): Safe, Reliable, and Efficient Infrastructure

ISSUE:

Shall City Council authorize the creation of a new water project - "Geren Island Filter No. 2 Reconstruction" in the FY 2020-21 Water Non-Assessed Construction Fund 255, funded with State of Oregon grant funds and utility rates?

RECOMMENDATION:

Authorize the creation of a new water project - "Geren Island Filter No. 2 Reconstruction" in the FY 2020-21 Water Non-Assessed Construction Fund 255, funded with State of Oregon grant funds and utility rates.

SUMMARY:

Filter No. 2 at the Geren Island Water Treatment Facility (Attachment No. 1) was constructed in 1970 and it is at the end of its useful life. The filter is used when surface water quality from the Santiam River requires a two-stage filtration process to achieve desired finish water quality. The State of Oregon is providing \$20 million toward reconstructing Filter No. 2 and Council approved the funding agreement on March 8, 2021. Council approval to create a project in the FY 2020-21 construction budget will allow design activities to begin immediately.

FACTS AND FINDINGS:

- The total estimated project cost for planning, design, and construction of the Filter No. 2 Reconstruction project is \$25 million. The project will be funded with \$20 million of State grant funds and \$5 million of City utility rate funds.
- Upon Council approval, the project will be funded with \$150,000 of utility rate funds and the remaining funding will be allocated in the FY 2021-22 Adopted Capital Construction Budget. There is sufficient budget and expenditure authority in the Water Non-Assessed fund for this project.
- The recommended filter upgrade will rebuild the existing single-cell filter into a two-cell slow sand filter, similar to the other existing slow sand filters at the Geren Island Treatment Facility. This will provide additional treatment capacity as well as additional options for removing turbidity and filter clogging algae.
- Design and construction of Filter No.2 will be complete by December of 2023, in compliance with the State funding agreement.

BACKGROUND:

The Geren Island Water Treatment Facility located near Stayton, Oregon, has been providing the City of Salem with a clean, safe, and reliable potable water supply since 1937. Salem provides drinking water to more than 195,000 residents in the cities of Salem and Turner, and portions of unincorporated Marion and Polk counties. Salem also provides backup/emergency water supplies to another 45,000 residents in the cities of Keizer and Stayton.

Recent raw water quality changes in the North Santiam Watershed have created challenges in the treatment process. Those water quality challenges are being addressed by adding an ozone facility and expanding the groundwater well capacity. Reconstruction of Filter No. 2 will provide another critical component to the City's water treatment system.

Brian D. Martin, PE
City Engineer

Attachments:

1. Project Location Map