COUNCIL AGENDA: 12/18/18
FILE: 18-1686
ITEM: 2.11

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: **SEE BELOW**

DATE: December 3, 2018

Approved Date 12-4-18

SUBJECT: MASTER SERVICE AGREEMENT WITH TRUSSELL TECHNOLOGIES FOR ENGINEERING AND REGULATORY SUPPORT FOR THE SOUTH BAY WATER RECYCLING PROGRAM

RECOMMENDATION

Approve a Master Agreement with Trussell Technologies through January 31, 2021 and up to two one-year options to extend, for a maximum compensation of $650,000 to provide conceptual engineering for sequential chlorination, and regulatory support for Title 22 compliance at the San Jose-Santa Clara Regional Wastewater Facility.

OUTCOME

Approval of the Agreement will allow City staff to review conceptual engineering design for sequential chlorination that demonstrates the ability to meet Title 22 water quality standards; and confirm Title 22 compliance with the California Division of Drinking Water, as the Filter and Chlorination CIP projects are implemented at the San Jose-Santa Clara Regional Wastewater Facility.

BACKGROUND

On April 9, 2015, Council approved the South Bay Water Recycling Strategic Master Plan, which included recommendations for the highest priority projects that would improve system reliability, maintenance redundancy, and operational flexibility. Among the highest ranked projects were the Re-Rating of the Title 22 filters and the Contact Time Study for Chlorination.

Trussell Technologies' engineering services were procured through a competitive bid process in 2008 to complete the original Filter Re-rating study that allowed a higher flow rate through the existing filter infrastructure. They returned in 2015 under a unique services agreement, to finish

the work, by demonstrating ongoing compliance and negotiating final approval of the increased filter loading rate with the California Division of Drinking Water.

The Request for Proposal for the Chlorine Contact Time Study was released in September 2015. Trussell Technologies was awarded the contract to conduct a pilot-scale study to demonstrate lower Chlorine Contact Time requirements for tertiary treated recycled water produced at the San Jose-Santa Clara Regional Wastewater Facility (Facility). Engineering design for full scale feasibility of the pilot system, was not included in the original scope of work. As a result, the Request for Proposal for Recycled Water Production Reliability was released in July 2018, to confirm that the sequential chlorination concept could be successful at production scale. The findings of the pilot study were provided for all potential proposers, and Trussell Technologies was the only proposer that responded. After committee review of their proposal, it was determined that they had strong experience, and a thorough work plan, so they were awarded the contract to provide conceptual engineering for sequential chlorination, as well as regulatory support for Title 22 compliance in response to changes to the filter media and filtration infrastructure at the Facility.

ANALYSIS

Based on the successful results of the pilot-scale demonstration, it has been determined that Sequential Chlorination could be very beneficial in removing strict recycled water production parameters while providing flexibility for maintenance and operations at the Facility. In addition, support from Trussell on State requirements for Title 22 approval will help align planning efforts between SBWR and Facility CIP teams.

Conceptual engineering designs based on the pilot-scale sequential chlorination demonstration will provide the opportunity to review potential infrastructure and operational changes that would be required to implement pilot study results at full-scale operation. These study results point to benefits including streamlined operation of the contact basins, the potential to minimize complex changes to these basins during scheduled disinfection redesign CIP projects, and the resulting cost savings from these more efficient processes. Preparing the conceptual engineering documents will also provide insight into potential benefits for water quality of the Title 22 and Bay discharge streams. More stringent water quality standards are expected in future Bay discharge permit revisions, and the proposed analysis would allow the City to understand potential water quality improvements ahead of required permit changes.

Expert review of the proposed changes to the filtration infrastructure will be critical for maintaining compliance with our Title 22 requirements, as changes are made through the Facility CIP process. Conceptual Engineering and expert regulatory review will allow staff to consider how proposed changes could optimally be integrated into the ongoing CIP projects at the Facility.

Trussell Technologies was selected through a competitive process based on several key strengths:

- Trussell is a nationally recognized expert in recycled water production.
- Trussell has project focused experience with Filtration and Disinfection operations and infrastructure, both Nationally, and at the Facility.
- Trussell has extensive experience with California Title 22 regulatory compliance, and success securing approval through the California Division of Drinking Water for numerous similar statewide projects.

EVALUATION AND FOLLOW-UP

Staff will return for approval as needed for capital investment or further implementation of the conceptual design, or filter compliance recommendations.

PUBLIC OUTREACH

This memorandum will be posted on the City's Council Agenda website for the December 18, 2018 Council Meeting. The Request for Proposal was advertised on the City's Internet Bid Sync Platform.

COORDINATION

This memorandum has been coordinated with the City Manager's Budget Office and the City Attorney's Office.

COMMISSION RECOMMENDATION/INPUT

Consideration from the December 14, 2018 Treatment Plant Advisory Council meeting will allow ESD to represent stakeholder input to the San Jose City Council on December 18, 2018.

FISCAL/POLICY ALIGNMENT

In addition to complying with the South Bay Water Recycling Strategic Master Plan, this effort supports the City's efficient operation of the Facility and ongoing permit compliance for the production of Recycled Water.

COST SUMMARY IMPLICATIONS

Funding for Service Orders issued under the MSA will be made available from the South Bay Water Recycling Fund (Fund 570). Funds will be encumbered as service orders are developed, not to exceed $650,000 over the term of the Agreement

BUDGET REFERENCE

The table below identifies the fund and appropriations to fund the Master Agreement recommended in this memo, including Basic and Additional Service costs.

Fund #	Appn. #	Appn. Name	Total Appn.	Contract Amount	2018-2019 Adopted Budget	Last Budget Action (Date, Ord. No.)
570	0762	Non-Personal/ Equipment	$4,260,943	$650,000	Page X-84	10/16/2018, 30172

CEQA

Not a Project, File No. PP17-001, Guidelines Section 15262, Feasibility and Planning Studies and Not a Project, File No. PP17-002, Consultant Services.

/s/
KERRIE ROMANOW
Director, Environmental Services

For questions, please contact Jeff Provenzano, Deputy Director, at (408) 277-3288.