City of Fort Worth, Texas Mayor and Council Communication

DATE: 09/22/20

M&C FILE NUMBER: M&C 20-0701

LOG NAME: 60VCWRF DIGESTER MIXING-FLARE-DOME IMPROVEMENTS - HAZENS

SUBJECT

(CD 5) Authorize Execution of an Engineering Agreement with Hazen and Sawyer, Inc. in the Amount of \$920,150.00 for the Evaluation and Design of Improvements to the Digesters at the Village Creek Water Reclamation Facility, Provide for Additional Project Costs for a Total of \$1,020,150.00, Adopt a Resolution Expressing Official Intent to Reimburse Expenditures with Proceeds of Future Debt, and Adopt Appropriation Ordinance

RECOMMENDATION:

It is recommended that the City Council:

- 1. Authorize execution of an Engineering Agreement with Hazen and Sawyer, Inc. in the amount of \$920,150.00 for the evaluation and design of improvements to the digesters at the Village Creek Water Reclamation Facility;
- 2. Adopt the attached Resolution expressing official intent to reimburse expenditures with proceeds of future debt for Village Creek Water Reclamation Facility Mixing, Flare, and Dome Improvements Project; and
- Adopt the attached Appropriation Ordinance adjusting receipts and appropriations in the Water and Sewer Commercial Paper Fund by decreasing appropriations in the Unspecified project (City Project No. UNSPEC) in the amount of \$1,020,150.00 and increasing appropriations in the Village Creek Water Reclamation Facility Digester Improvements project by the same amount (City Project No. 102652).

DISCUSSION:

Biosolids produced at Village Creek Water Reclamation Facility (VCWRF) are thickened and anaerobically digested prior to being pumped to the City's Biosolids Management and Beneficial Reuse Facility. Anaerobic digestion is used by VCWRF to meet regulatory requirements for sludge stabilization. This project will address evaluations and necessary improvements identified by plant staff and recommended in previous studies.

Hazen and Sawyer, Inc. will provide the following services on the project: Evaluation of mixing technologies for eight digesters that will minimize solids settling and improve digester gas product; options for expanding digester gas flare capacity; condition assessment of the digester domes, seals, and brick facades; compliance with occupational and electric safety codes and design for identified improvements. Evaluation of the cause of Digester 2 heat loss; possible reduction of hydrogen sulfide concentrations in digester gas and replacement of the existing digester gas dryers for future projects. Design for the replacement of deteriorated foam insulation and corroded gas draw off piping on all of the digesters; installation of digester mixing systems and modifications/repairs to digester dome covers, expansion of digester gas flare system, and digester area safety improvements.

In addition to the contract amount, \$100,000.00 is required for project management.

This project is anticipated to be included in a future revenue bond issue for the Water & Sewer Fund. Available cash within the Water and Sewer portfolio and the City's portfolio along with the appropriation authority authorized under the Callable Commercial Paper Program (CP) will be used to provide interim financing for this project until debt is issued. To the extent resources other than the Water and Sewer portfolio are used to provide interim financing, the Water & Sewer Fund will be charged interest that is equivalent to the overall rate of return being earned by the City portfolio (currently approximately 2.3 percent annually). Should the City's portfolio not support the liquidity needed to provide an interim short-term financing source, another funding source will be required, which could mean issuance of securities under the CP Program or earlier issuance of Water and Sewer revenue bonds than is currently planned. Once debt associated with this project is sold, bond proceeds will be used to reimburse the Water and Sewer portfolio and the City's portfolio in accordance with the attached reimbursement resolution.

The City Council approved the Water Department's Fiscal Year 2020-2024 Five-Year Capital Improvement Plan on September 17, 2019. This City Council approved plan includes this specific project, with funding identified through the CP Program to be reimbursed with future revenue bonds. In accordance with the provisions of the Financial Management Policy Statements, staff anticipates presenting revenue-supported debt issuances to the City Council for consideration within the next three years. This debt must be issued within approximately three years to provide reimbursement for these expenses. If that does not occur, the costs will no longer be reimbursable by issuing tax-exempt debt and the funding source will have to be made whole through other budgetary methods. Adoption of this resolution does not obligate the City to sell bonds, but preserves the ability to reimburse the City from tax-exempt bond proceeds.

Appropriations for Digester Mixing, Flare, and Dome Improvements project, are as depicted below:

Fund	Existing Appropriations	Additional Appropriations	Project Total*
W&S Commercial Paper - Fund 56019	\$0.00	\$1,020,150.00	\$1,020,150.00

Project Total

*Numbers rounded for presentation.

M/WBE OFFICE: Hazen and Sawyer, Inc. is in compliance with the City's BDE Ordinance by committing to 32 percent SBE participation on this project. The City's SBE goal on this project is 10 percent.

The project is located in COUNCIL DISTRICT 5.

FISCAL INFORMATION / CERTIFICATION:

The Director of Finance certifies upon approval of the above recommendations and adoption of the attached appropriation ordinance, funds will be available in the W&S Commercial Paper Fund for the Digester Improvements project to support the approval of the above recommendation and execution of the engineering agreement. Prior to an expenditure being incurred, the Water Department has the responsibility of verifying the availability of funds.

Submitted for City Manager's Office by:Dana Burghdoff8018Originating Business Unit Head:Chris Harder5020

Additional Information Contact: Suzanne Abbe 8209