## **STAFF REPORT**

Date: 9/11/2019

To: Mayor and City Council

Thru: Sabra Newby, City Manager

Subject: Staff Report (For Possible Action): Approval of Change Order #1 to

the Truckee Meadows Water Reclamation Facility (TMWRF)
Digester 2 Cover Rehabilitation Project construction contract with
Farr Construction Corporation dba Resource Development Company
for an amount not to exceed \$170,000 with the City of Reno's share

being \$116,671. (Sewer Fund)

From: Kerri Lanza, Engineering Manager

**Summary:** Staff recommends Council approve Change Order #1 to the Truckee Meadows Water Reclamation Facility (TMWRF) Digester 2 Cover Rehabilitation Project construction contract with Farr Construction Corporation dba Resource Development Company for an amount not to exceed \$170,000 with the City of Reno's portion being \$116,671 (Sewer Fund), and authorize the Mayor to sign the change order.

## **Previous Council Action:**

**July 24, 2019** - Council approved a Consultant Agreement between Brown and Caldwell and the Cities of Reno and Sparks for construction management services for the Truckee Meadows Water Reclamation Facility (TMWRF) Digester 2 Cover Rehabilitation Project in an amount not to exceed \$205,300 with the City of Reno's portion being \$140,897.39 (Sewer Fund).

**June 5, 2019** - Council approved award of contract to Farr Construction Corporation dba Resource Development Company for construction of the Truckee Meadows Water Reclamation Facility (TMWRF) Digester 2 Cover Rehabilitation Project in an amount not to exceed \$1,155,300 with the City of Reno's portion being \$792,882.39 (Sewer Fund).

**June 13, 2018** - Council approved a Consultant Agreement between Brown and Caldwell and the Cities of Reno and Sparks for professional services associated with design of the Truckee Meadows Water Reclamation Facility (TMWRF) Digester #2 and #5 Cover Rehabilitation Project in an amount not to exceed \$266,732 with the City of Reno's portion being \$183,058.17 (Sewer Fund).

March 14, 2018 - Council approved a contract with Olcese Construction Co., Inc. in the amount of \$233,000 with the City of Reno's share being \$159,907.90 (Sewer Fund) for

the removal and disposal of all liquids and solids in the TMWRF Digester 2, and provide interior lighting and scaffolding to allow for structural condition assessment and inspection of the digester roof.

**Background:** The Truckee Meadows Water Reclamation Facility (TMWRF) is jointly owned by the Cities of Reno and Sparks. The City of Reno oversees the Capital Improvement Program for TMWRF, while the City of Sparks manages operations. The digesters at TMWRF help to stabilize the solids generated at the facility which helps with dewatering and disposal of the material. This process also produces methane gas that is used to heat the digestion process, heat the facility, and generate up to one-third of the electrical power to operate the facility.

Three of the digesters were constructed in the mid 1960's and require rehabilitation to maintain reliable service. Two of the digesters built in the 1960's have already gone through a rehabilitation process with Digester 2 being the oldest digester requiring rehabilitation maintenance.

**Discussion:** Under the contract with Olcese mentioned previously, Digester 2 was removed from service for cleaning and inspection. The inspection resulted in a number of recommendations for rehabilitation of the digester interior and seals.

The contract with Farr Construction Corporation dba Resource Development Company provides for the rehabilitation / construction work of the digester. This contract consists of removal and replacement of sludge sample pipes, cleaning and coating of the interior of the digester cover, removal and reinstallation/replacement of the concrete ballast blocks, lead abatement, removal and replacement of the polyurethane foam insulation on the exterior of the cover, and installation of a new elastomeric digester seal.

The Digester 2 Cover Rehabilitation Project was awarded to Farr Construction Corporation dba Resource Development Company in the amount of \$1,155,300 on June 5, 2019. As construction progressed and the interior tank was blast clean, the exposed structural steel members were inspected by a Structural Engineer who noted several items of concern that need to be addressed in order to fully restore and rehabilitate the digester. These items include:

- Adding new steel columns to abandon the existing steel tube columns that are corroding on the inside;
- Repair of steel beams that show significant loss of width of the flange or severe pitting;
- Replacing beam bolts and clip angles that corroded to the extent that the anchor nut no longer is in contact;
- Offsite coating of the new fabricated steel structural members.

A force account provision in the amount of \$155,000 was included. However, a portion of the force account has been utilized, and the remaining force account is not sufficient to

cover costs associated with the identified work cited above plus other potential unknowns that may still be encountered to complete the project.

**Financial Implications:** The City of Reno is administering the agreement and will be reimbursed for a portion of the costs by the City of Sparks through the current cost sharing agreement for TMWRF operation and maintenance. The City of Reno and the City of Sparks share the cost of this project as follows: 68.63% for Reno and 31.37% for Sparks, as shown in Table 1. Costs for the City of Reno are budgeted in the Sewer Fund. This project is included in the Capital Improvement Plan that was approved by the Joint Coordinating Committee.

Table 1 - Cost Sharing Between Reno and Sparks

Total Cost of Change Order #1	Reno Share	Sparks Share
\$170,000.00	\$116,671.00	\$53,329.00
Percentages	68.63%	31.37%

**Legal Implications:** The change order is in compliance with the laws of the State of Nevada.

**Recommendation:** Staff recommends Council approve Change Order #1 to the Truckee Meadows Water Reclamation Facility (TMWRF) Digester 2 Cover Rehabilitation Project with Farr Construction Corporation dba Resource Development Company in an amount not to exceed \$170,000 with the City of Reno's portion being \$116,671 (Sewer Fund), and authorize the Mayor to sign the change order.

**Proposed Motion:** I move to approve staff recommendation.

## **Attachments:**

• I100103-2721 Digester 2 Cover Rehabilitation CO 1 (PDF)