



## **AGENDA MEMORANDUM**

Action Item for the City Council Meeting of March 24, 2020

**DATE:** March 17, 2020

**TO:** Peter Zaroni, City Manager

**THRU:** Steve Viera, Assistant City Manager  
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**FROM:** Jeff H. Edmonds, P.E., Director of Engineering Services  
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### **Construction Change Order**

Oso Water Reclamation Plant Headworks and Lift Station

#### **CAPTION:**

Motion authorizing execution of Change Order No. 6 to the Oso Water Reclamation Plant (WRP) Headworks and Lift Station project with CSA Construction, Inc. of Houston, Texas, to repair two clarifier systems that remove solids from wastewater, in the amount of \$1,477,067.05 for a total contract value of \$25,227,127.30, located in City Council District 4, effective upon issuance of notice to proceed, with funding available from the FY 2018 Wastewater Capital Improvement Program Budget.

#### **SUMMARY:**

The change order repairs two clarifiers on the west treatment train of the Oso WRP. The scope of work includes refurbishment of the traveling bridges, rake blades, and squeegees suspended from the bridges as well as the refurbishment of the rail system, scum removal system, and associated electrical work.

#### **BACKGROUND AND FINDINGS:**

Oso WRP was constructed in 1941 and is the largest of the City's six wastewater treatment plants. It serves approximately 50% of the City's population. A complete rehabilitation and upgrade of Oso WRP is currently in progress to increase capacity, improve treatment efficiency, reduce chemical requirements, and reduce maintenance costs. The rehabilitation project is being completed in two phases. The first phase replaces the lift station and headworks. That phase is currently under construction. The second phase is under design and includes rehabilitation of the eight clarifiers at Oso WRP. The second phase is projected for completion in Fall 2024.

The two treatment trains at Oso WRP each have four clarifiers that remove suspended solids

from wastewater during the treatment process. The clarifiers are equipped with traveling bridges that have suspended rakes and squeegees suspended for sludge collection. The traveling bridges are 12 to 21 years old. The clarifiers also have scum removal systems to remove floating matter. The scum removal systems are approximately 40 years old. Plant operators have recently struggled with frequent breakdowns of the traveling bridges and scum removal system.

In December 2019, two of the four clarifiers on the west train completely failed. Achieving the required treatment performance requires 2-3 functioning clarifiers. Staff concluded that the repair work was beyond the capability of the Utilities Department's in-house maintenance team. After making that determination, the City worked with the engineer of record for the Oso WRP Headworks and Lift Station project to prepare scope of work documents for the needed repairs. It was determined that the most expeditious way to implement the required repairs was to negotiate a change order with the Lift Station and Headworks project's contractor, CSA Construction, Inc., who is still on site completing that work.

This change order authorizes CSA Construction, Inc. to repair two clarifier systems on the west treatment train. The construction covered under this change order is anticipated to be completed in Fall 2020.

#### **PROJECT TIMELINE:**

2020								
M	A	M	J	J	A	S	O	N
Construction								

The projected schedule reflects City Council approval in March 2020. Equipment manufacturing and delivery is estimated at five months, with installation and operational testing period of three to four months. Construction is anticipated to complete Fall 2020.

#### **ALTERNATIVES:**

An alternative is to pursue a stand-alone construction contract, which will likely be more expensive and longer to complete due to competitive acquisition process, mobilization costs, and contractor unfamiliarity with the Oso WRP operational requirements.

#### **FINANCIAL IMPACT:**

This Change Order to repair two clarifier systems at Oso WRP will result in the expenditure of a total amount not to exceed \$1,477,067.05, which is available in the project contingency for the Oso WRP Headworks and Lift Station CIP project that is currently in construction.

#### **Funding Detail:**

**Fund:** Wastewater 2018 CIP Fund (Fund 4257)

Mission Elem: Treat Wastewater (ME 064)

Project No.: Oso WRP Headworks and Lift Station (Proj E12206)

Account: 550910  
Activity: E12206-01-4257-EXP  
Amount \$1,477,067.05

**RECOMMENDATION:**

Staff recommends approval of this Change Order in the amount of \$1,477,067.05 for CSA Construction, Inc. to repair the two clarifiers on the west treatment train of Oso WRP. Construction is anticipated to complete Fall 2020.

**LIST OF SUPPORTING DOCUMENTS:**

Location & Vicinity Maps  
Change Order No. 6