



AGENDA MEMORANDUM

Action Item for the City Council Meeting of December 14, 2021

DATE: December 14, 2021

TO: Peter Zaroni, City Manager

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Construction Contract Award
**Oso Water Reclamation Plant Process Upgrades and Breakpoint Chlorination
Decommissioning: Aeration Coarse Bubble Improvements**

CAPTION:

Motion awarding a construction contract to CSA Construction, Inc., of Houston, Texas, for Aeration Coarse Bubble Improvements under the Oso Water Reclamation Plant Process Upgrades and Breakpoint Chlorination Decommissioning project in an amount of \$4,107,000.00, located in Council District 4, with FY 2022 funding available from the Wastewater Capital Fund.

SUMMARY:

This motion approves a construction contract with CSA Construction, Inc. to replace ineffective aeration diffusers at Oso Water Reclamation Plant (WRP). Completion of this work improves treatment efficiency and allows the plant to remain operational during future construction of the Oso WRP Process Upgrades and Breakpoint Chlorination Decommissioning capital improvement project that is expected to be awarded in late-2022.

BACKGROUND AND FINDINGS:

The Oso Water Reclamation Plant is the largest of six wastewater treatment plants operated by the City of Corpus Christi. The facility continuously receives wastewater from the City's collection system and treats the wastewater prior to discharge into the Oso Bay.

The proposed improvements will replace ineffective aeration diffusers to improve the treatment process reliability and efficiency. Major improvements are planned under the ongoing Oso Process Upgrades and Breakpoint Chlorination (BPC) Decommissioning project, which is

currently at 75% Design completion. This Aeration Coarse Bubble Improvements project was expedited as a separate standalone construction package because the coarse bubble system has many diffusers that are either broken or missing, which negatively affects the treatment process.

The project scope includes the listed items and all associated construction work.

- Dewatering of East and West Trains.
- Grit removal and cleaning of Mixed Liquid Suspended Solids (MLSS), Return Activated Sludge/Waste Activated Sludge (RAS/WAS), and Clarifiers 1-8 Effluent channels.
- Partial demolition of existing MLSS, RAS/WAS, Clarifiers 1-8 Effluent channels coarse bubble aeration system (air drops, piping, and valves), and miscellaneous equipment, including removal and disposal of existing equipment.
- Demolition of existing butterfly valves in outer MLSS channels, existing chlorinators at various locations, divider wall connecting inner and outer MLSS channel, channel grating/walkways, Chlorine Contact Chamber influent slide gates.
- Installation of MLSS, RAS/WAS, and Clarifiers 1-8 Effluent coarse bubble aeration system channel diffusers and associated valves, air piping and supports.
- Abandoning, filling, and capping of outer MLSS channels.
- Plugging ports in outer MLSS channel wall.
- Installation of two chlorine mixers, four mixer support structures, and modification of a chlorine diffuser.
- Installation of new grating and supports along channels.
- Installation of Chlorine Contact Chambers 1-4 influent slide gates.
- Installation of guide frames for stop logs in the MLSS and RAS/WAS channels.
- Modification of existing 48-in Influent Line at Aeration tank No. 1 and No. 3.
- All electrical, instrumentation and controls work associated with ECR-5 automatic switchover to emergency generator operations and back to site utility power.
- All other civil, yard piping, mechanical and electrical work included.
- Training of City personnel.
- Commissioning.

PROJECT TIMELINE:

2021				2022	
May - September	O	N	D	January - September	
Design	Bid/ Award			Construction	

Project schedule reflects City Council award in December 2021 with anticipated completion in September 2022.

COMPETITIVE SOLICITATION PROCESS

The Contracts and Procurement Department issued a Request for Bids. On November 11, 2021, the City received bids from one bidder. The City analyzed the bid in accordance with the contract documents and determined CSA Construction, Inc., is the lowest responsive and responsible bidder. A summary of the bids is provided below:

BID SUMMARY	
CONTRACTOR	BASE BID
CSA Construction, Inc.	\$4,107,000.00
<i>Engineer's Opinion of Probable Construction Cost</i>	<i>\$4,392,000.00</i>

CSA Construction, Inc., has successfully completed numerous City utility projects since 2013 including Oso WRP Clarifier #5, Oso WRP Nutrient Removal Phase 1, and Oso WRP Belt Press Facility. CSA Construction, Inc., is currently working on Nueces River Raw Water Pump Station Improvements and OSO WRP Headworks and Lift Station with construction ending soon.

The current construction market is very competitive. Bids advertised for projects are receiving limited responses. Re-advertising the projects for bids is not likely to generate significantly more interest. The lowest bidder has had good experience, and the price is consistent with the engineer's estimate.

ALTERNATIVES:

The alternative is to not award the construction contract to the low-bidder, CSA Construction, Inc. This would delay improvements to the wastewater treatment plant and create more costly maintenance in the future. Not awarding the construction contract would also cause TCEQ permit violations and fees.

FISCAL IMPACT:

The fiscal impact in FY 2022 is an amount of \$4,107,000.00 with funding available from the Wastewater Capital Fund.

FUNDING DETAIL:

Fund: WW 2021 CIP (Fund 4258)
Mission Elem: Wastewater Treatment (064)
Project: Oso WRP Process Upgrades and BPC Decommissioning: Aeration Coarse
Bubble Improvements (Project No. 20084B)
Account: Construction (550910)
Activity: 20084-B-4258-EXP
Amount: \$4,107,000.00

RECOMMENDATION:

Staff recommends awarding the construction contract for the Oso WRP Process Upgrades and BPC Decommissioning: Aeration Coarse Bubble Improvements to CSA Construction, Inc., in the amount of \$4,107,000.00. The construction duration is planned for 8 months from issuance of the

Notice to Proceed to begin construction in January 2022.

LIST OF SUPPORTING DOCUMENTS:

Location and Vicinity Map

Bid Tab

CIP Page