

O.N. Stevens Water Treatment Plant – Filtration System Hydraulic Improvements



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Background

The City of Corpus Christi (City) owns and operates the O.N. Stevens Water Treatment Plant (ONSWTP). The ONSWTP consists of Water Treatment Plant (WTP) 1 and WTP 2.

- WTP 1 was built in 1955 and has 12 filters
- WTP 2 was built in 1981 and has 10 filters

Completion of this project is critical to the overall reliability and resiliency strategic plan that has been developed for ONSWTP by Corpus Christi Water (CCW).



ONSWTP Strategic Plan Projects

- The strategic plan provides a sequence for ONSWTP capital improvement projects to improve resiliency and capacity
- When complete, these projects will improve the resiliency of water plant operations and increase the reliable treatment capacity of ONSWTP from 105 MGD to 135 MGD

Project	Status	Estimated Project Completion Date
Pre-sedimentation Dredging	Construction	2028
Raw Water and Chemical Improvement Projects	Construction	2027
Filtration System Hydraulic Improvements	Pending Council Approval	2026
Chlorine System Improvements	Advertised for Bid	2028
Flocculator and Basin Improvements	Design	2027
Solids Handling	Design	2029

Project Scope

- Remove and replace filter influent and backwash waste gates and actuators
- Remove and replace filter effluent, filter-to-waste, filter backwash, and air scour valves and actuators
- Remove and replace filter effluent flow meters
- Modify filter-to-waste piping to improve hydraulic efficiency
- Remove existing weirs in junction box vaults
- Install combined filter effluent sample piping to the existing analyzer structure
- Installation of a sampling pump and turbidity meter
- Apply Tnemec Aerolon coating on filter effluent, filter-to-waste, and filter backwash piping in the filter galleries



Fiscal Impact

The fiscal impact for Corpus Christi Water in FY25 is an amount of \$55,767.00 for the professional services contract amendment and \$20,991,575.94 for the construction contract with funding available from the Water Capital Fund.

- Currently the project has \$18,750,000 budgeted for construction
- The \$2,241,575.94 difference between the budgeted amount and the contract amount will be coming from \$12,000,000 in savings from the Mary Rhodes Pipeline I Assessment and Improvements project

Project Timeline

2022 - 2025	2024 - 2025	2025 - 2026
September - January	Sep - May	May - October
Design	Bid/Award	Construction

Project schedule reflects City Council award in May 2025 with anticipated construction completion by October 2026.

Staff Recommendation

Staff recommends awarding the construction contract to Reytec Construction Resources, Inc. of Houston, Texas for the ONSWTP Filtration System Hydraulic Improvements project in the amount of \$20,991,575.94 for Total Base Bid plus selected Alternate 1, and authorize a professional services contract amendment No. 3 to Plummer Associates, Inc., of Corpus Christi, Texas, to provide construction phase services in an amount of \$55,767.00 for a total contract value not to exceed \$1,274,626.00.

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Thank you!

