

Capital Improvement Plan
City of Corpus Christi, Texas

2022 *thru* 2024

Project # 20084
Project Name Oso WRP Process Upgrade & BPC Facility Decom



Type Reconditioning-Asset Longevit **Department** Wastewater
Useful Life 25 years **Contact** Director of Water Utilities
Category Wastewater **Priority** 2 Critical- Asset Condition

Status Active

Description

Construction of new headworks and lift station at Oso Water Reclamation Plant (WRP) started in FY18. The next phase of work involves secondary treatment improvements and a process conversion to Biological Nutrient Removal (BNR). This will allow the City to decommission current breakpoint chlorination (BPC) system which is currently achieving ammonia removal by chemical addition and will allow plant to maintain permit compliance by removing ammonia more efficiently and safely through biological processes. In addition, equipment associated with secondary treatment units have exceeded original design life and have become maintenance intensive and a hindrance to operations. Scope of improvements include retrofitting existing aeration basins with fine bubble aeration equipment, raising aeration basin walls for increased depth, construction of new blower building, replacement or rehabilitation of existing scum and sludge removal components on secondary clarifiers, improvements to chlorine contact chambers to address short circuiting, demolition/decommissioning of breakpoint chlorination system and other miscellaneous enhancements associated with administrative building, digesters and access roads. These improvements will increase the plants capacity from 16MGD to 18 MGD.

Justification

Consistency with the Comprehensive Plan: Policy Statements pg. 48: 1,3 & 6; pp. 55-58; Wastewater Master Plan

Expenditures	Prior Years	2022	2023	2024	Total
Construction/Rehab		3,600,000	7,700,000	17,800,000	29,100,000
Testing		50,000	50,000		100,000
Inspection		230,000	280,000	400,000	910,000
Design	29,885			200,000	229,885
Contingency		320,000	870,000	1,750,000	2,940,000
Eng, Admin Reimbursements	1,783	300,000	100,000	50,000	451,783
Total	31,668	4,500,000	9,000,000	20,200,000	33,731,668

Funding Sources	Prior Years	2022	2023	2024	Total
Revenue Bonds	31,668	4,500,000	9,000,000	20,200,000	33,731,668
Total	31,668	4,500,000	9,000,000	20,200,000	33,731,668

Budget Impact/Other

This project will enable the Oso WRP to run in a more economical and efficient manner. Operational impact is adversely affected when plant is not working at optimal levels.