

CIP EXPENSE DETAIL

DATE OF COUNCIL CONSIDERATION:
CONTACT DEPARTMENT(S):

4/21/11
Austin Water Utility

SUBJECT: Authorize execution of change order #9 to the construction contract with T. MORALES COMPANY ELECTRIC AND CONTROLS, LTD, (MBE/FH - 49.33%), Florence, Texas, for Walnut Creek Wastewater Treatment Plant Electrical Distribution Improvements, Phase 2 in the amount of \$905,000 for a total contract amount not to exceed \$21,858,932.

CURRENT YEAR IMPACT:

Department:	Austin Water Utility
Project Name:	Wc Plant Elect Distr Impvs
Fund/Department/Unit:	4480 2307 8100
Funding Source:	AWU CIP Cash
Current Appropriation:	5,099,000.00
Unencumbered Balance:	1,824,762.55
Amount of This Action:	(905,000.00)
Remaining Balance:	<u>919,762.55</u>

Total Amount of this Action	<u><u>905,000.00</u></u>
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ANALYSIS / ADDITIONAL INFORMATION: The City of Austin's Walnut Creek Wastewater Treatment Facility located at 7113 FM 969 (78724) was placed in service in 1977 and has since undergone numerous expansions. The plant is currently permitted to treat an average daily flow of 75 million gallons per day (MGD). The primary electrical power system upgrade project is needed to provide reliable power to the plant. Phase I of the project was successfully completed in 2002 and provided the facility with a new electrical substation and 15,000 volt switchgear.

Phase 2, which is currently under construction, includes a new 8,000 square foot electrical substation building, 15,000 volt switchgear, distribution transformers, feeder cables, and approximately 6550 feet of electrical duct bank for power distribution to the south and west areas of the facility. The project also includes replacement of the 480 volt settled wastewater pump motors with 4160 volt high efficiency motors and new 4160 and 480 volt motor control centers for the process air blower and settled wastewater pumping systems. The project will provide significant energy savings by automating the process air system utilizing dissolved oxygen for blower control and revamping two of the existing blowers to improve their efficiency. Estimated annual energy and greenhouse gas savings are approximately 5 million kWh and 2500 metric tons of CO2-equivalent, or an estimated 10-15% reduction to the plant's baseline operations. Construction started in June 2009 and is expected to be complete in November 2011.

This requested change order will provide authorization for replacement of heat exchangers used to cool oil for the process air blowers. These heat exchangers have experienced failures during construction and should be replaced. Rehabilitation of the process air blowers was included in the original construction contract.