

CIP EXPENSE DETAIL

DATE OF COUNCIL CONSIDERATION:
CONTACT DEPARTMENT(S):

Austin Water Utility

SUBJECT. Authorize negotiation and execution of an amendment to the professional services agreement with AECOM TECHNICAL SERVICES, INC. (AECOM), for design and bidding engineering services for the Davis & Ullrich Water Treatment Plant Raw Water Hydraulic and Energy Efficiency Improvements in the amount of \$1,100,000.00, for a total contract amount not to exceed \$1,550,000.

CURRENT YEAR IMPACT:

Department:	Austin Water Utility
Project Name:	Davis/Ullrich Lsps Intake, Wetwell Hydraulics Rehab
Fund/Department/Unit:	3960 2207 7098
Funding Source:	Commercial Paper
Current Appropriation:	1,085,571.00
Unencumbered Balance:	650,110.51
Amount of This Action:	(500,000.00)
Remaining Balance:	<u>150,110.51</u>
Department:	Austin Water Utility
Project Name:	Ullrich Hydraulic & Energy Efficiency Improv.
Fund/Department/Unit:	3960 2207 6418
Funding Source:	Commercial Paper
Current Appropriation:	625,363.00
Unencumbered Balance:	625,363.00
Amount of This Action:	(600,000.00)
Remaining Balance:	<u>25,363.00</u>
Total Amount of this Action	<u><u>1,100,000.00</u></u>

ANALYSIS / ADDITIONAL INFORMATION: The Albert R. Davis and Albert H. Ullrich Water Treatment Plants (WTP) have low service pump stations that pump water from Lake Austin to the treatment plants via raw water pipelines. Treated water pump stations then convey treated water to the distribution system. These pump stations account for the majority of energy consumption at the City's water treatment facilities.

The Davis WTP low service pump station exhibits hydraulic anomalies in the intake wells that cause excessive pump vibrations. These conditions prevent simultaneous operation of two of the station's largest low service pumps, which lessens the hydraulic capacity of the station and limits pumping efficiencies. An out of service 48" raw water pipe between the low service pump station and the plant will be repaired to minimize low service system head losses and restore system redundancy. Modifications will be made to the rapid mix chambers to enhance efficient mixing of treatment chemicals for a wider range of process flows. A flow study to identify additional opportunities to increase efficiency of the high service finished water pump station will be performed, and the station control system will be upgraded to current standards.

The Ullrich WTP low service pump station will have several improvements made to increase energy efficiency: refurbishing two low service pumps; replacing motor control centers with modern units; fixing leaking control valves; and adding a surge protection system to protect the facility. The Ullrich high service pump station will have two obsolete pumps replaced, and modern pump control equipment added. This will bring all of Ullrich's pump stations in line with AWU standards for control and facility protection, and will increase the efficiency of the facility.

The City anticipates services for this supplemental professional services agreement to include design and construction and procurement phase services. AECOM will continue to build on their preliminary engineering recommendations, as approved by the City, to design modifications and improvements that will meet the long-term, operation efficiency needs of Davis & Ullrich WTP. If specifically requested by the City, additional services of AECOM may include construction and warranty phase services for the designed improvements. If so, Staff will return to Council to request additional authorization.

This amendment will provide for design phase services that were not included in the preliminary engineering phase services previously authorized. A future amendment for construction phase engineering services will be submitted once design phase services are complete.

This project is managed by the Austin Water Utility.

AECOM Technical Services Inc. (AECOM) is located in Austin, TX.