

# Water & Wastewater Commission Review and Recommendation

Commission Meeting	December 1, 2021	COA Strategic	Health and Environment, Safety			
Date:		Direction:				
Council	December 9, 2021					
Meeting						
Date:						
Department:	Capital Contracting Office					
Client:	Shay Ralls Roalson					

### Agenda Item

Recommend approval to negotiate and execute an amendment to the professional services agreement with CH2M Hill Engineers, Inc./CH2M Hill Engineers for professional engineering services for the Walnut Creek Wastewater Treatment Plant Secondary Process Improvements Project in the amount of \$548,758.37 for a total contract amount not to exceed \$4,279,460.87. (District 1)

# **Amount and Source of Funding**

Funding is available in the Fiscal Year 2021-2022 Capital Budget of Austin Water.

Purchasing Language:	Original contract was awarded through a qualifications-based selection process.		
	September 19, 2019 – Council authorized negotiation and execution of amendment for construction phase services in the amount of \$2,071,616.30.		
Prior Council Action:	May 18, 2017 – Council authorized negotiation and execution of amendment for additional design services in the amount of \$104,086.20.		
	September 27, 2012 – Council approved a professional services agreement with CH2M Hill, Inc. for the Walnut Creek Wastewater Treatment Plant Secondary Treatment Process Improvements Project.		
Boards and Commission Action:	December 1, 2021 — To be reviewed by the Water and Wastewater Commission.		
MBE/WBE:	This amendment will be awarded in compliance with City Code Chapter 2-9B (Minority Owned and Women Owned Business Enterprise Procurement Program) by meeting the goals with 15.80% MBE and 15.80% WBE participation.		

Walnut Creek Wastewater Treatment Plant is permitted to treat and discharge an average daily flow of 75 million gallons per day (MGD) and a 2-hour peak flow of 165 MGD. Treated plant effluent is discharged into the Colorado River. A portion of the treated effluent is used for non-potable water on the plant site and supplies much of the City's growing Reclaimed Water Program.

The Secondary Process Improvements Project consists of process improvements including aeration basin and flocculation basin diffused air system improvements, junction box improvements, buried air piping leak repair, storm drains, and improvements identified by condition assessments. Additional improvements identified include numerous valve and gate replacements, scum and sludge pumps, clarifier mechanisms, electrical and control components, basin crack and joint repairs, and other miscellaneous improvements.

An amendment to the professional services agreement is required to complete the construction phase. Additional construction services identified were: 1) Additional coordination between the contractor, engineering team, and plant staff required to manage the project, 2) Additional construction cost related to unknown conditions including areas below the water surface that could not be visually inspected prior to construction. Several areas required specialty inspections to develop repairs or solutions., 3) The number of Request for Information and shop drawings requiring review has been substantially greater than anticipated in the original scope of work. These items are initiated by the contractor and could not be anticipated or controlled prior to the bidding or construction phases., 4) Additionally, more submittals than anticipated had to be revised and re-submitted, and unforeseen conditions were encountered, including unanticipated conflicts with buried utilities, existing secondary clarifier floors, unforeseen structural repairs in the clarifiers, and aeration basins.

Due to the complexity of the project and numerous challenges, the number of meetings and discussions required was greater than anticipated. Teams met daily during shutdown periods during critical times in the project. Additional process modeling and recommendations were required including leading multiple workshops to recommend improvements to the operations of the existing secondary process. This successfully reduced the quantity of supplemental alkalinity required for effective nitrification, resulting in reduced operational cost. This was a changed condition related to the plant's discharge permit revision issued after construction notice to proceed and was not included in the original scope of work. The City also requested to add scope to update the plant's electronic operations and maintenance manuals.

This project required execution of several complex shutdowns as well as the installation of critical process equipment. As a result, a higher level of coordination and review was required throughout the construction phase than was anticipated. It is important for this amendment to move forward so that the completion of the project is not delayed.

No public impact is anticipated as all improvements will be within the Walnut Creek Wastewater Treatment Plant site.

This project is located within zip code 78724 (District 1)

CH2M Hill Engineers, Inc., is located in Austin, Texas.

### M/WBE Summary

Participation goals stated in the original approved compliance plan for the agreement were 1.90% African American; 9.00% Hispanic; 4.90% Native/Asian; and 15.80% WBE. Participation for this amendment:

M/WBE TOTAL – PRIME	\$548,758.37	100%
CH2M Hill Engineers, Inc., Austin, Texas	\$548,758.37	100%

Overall participation based on expenditure for the entire project as of October 24, 2021, (not including this amendment):

### PRIME:

69.19% Non M/WBE

### **SUBCONSULTANTS:**

1.17% African American; 1.19% Hispanic; 6.72% Native/Asian; 21.74% WBE;

## **TOTAL:**

1.17% African American; 1.19% Hispanic; 6.72% Native/Asian; 21.74% WBE; and 69.19% Non M/WBE

# **AUTHORIZATION HISTORY**

OUNT	DATE	DESCRIPTION
500,000.00	09/27/12	(Council) – Professional Engineering Services
\$55,000.00	09/27/12	(Administrative Authority) – Administrative Authority
104,086.20	05/18/17	(Council) – Amendment for Additional Design Services and Bid Phase Services
071,616.30	09/19/19	(Council) – Amendment for Construction Phase Services
548,758.37	12/09/21	Proposed (Council) – Additional Construction Phase Services
\$4,279,460.87 Total Contract Authorization		
	OUNT 500,000.00 \$55,000.00 104,086.20 071,616.30 548,758.37 279,460.87	500,000.00 09/27/12   \$55,000.00 09/27/12   104,086.20 05/18/17   071,616.30 09/19/19   548,758.37 12/09/21

# **CONTRACT HISTORY**

AMOUNT	DATE	DESCRIPTION
 \$599,847.00	05/07/13	Original Professional Services Agreement for Preliminary Design Services
\$896,865.00	05/11/15	SA #1 – (Additional Authority) Additional Preliminary Engineering Services
\$25,080.00	03/30/17	SA #2 – (Additional Authority) Final Design Services and Bid Phase
\$20,212.00	04/11/17	SA #3 – (Additional Authority) Final Design Services and Bid Phase
\$117,082.20	05/18/17	SA #4 – (Additional Authority) Final Design and Bid Phase Services
\$2,071,616.30	01/06/20	SA #5 – (Additional Authority) Construction Phase Services
\$548,758.37	Proposed	SA #6 – (Additional Authority) Construction Phase Services
 64.070.460.07 Table Control 1/24 to		

\$4,279,460.87 Total Contract History