



**Recommendation for
Water & Wastewater Commission**

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| Commission Meeting Date: | May 10, 2017 |
| Council Meeting Date: | May 18, 2017 |
| Department: | Public Works |
| SUBJECT | |
| Authorize negotiation and execution of an amendment to the professional services agreement with CH2M HILL ENGINEERS, INC. , for additional professional engineering services for the Walnut Creek Wastewater Treatment Plant Secondary Process Improvements project in an amount of \$104,086.20 for a total contract amount not to exceed \$1,659,086.20. (District 1) | |
| AMOUNT AND SOURCE OF FUNDING | |
| Funding is available in the Fiscal Year 2016-2017 Capital Budget of Austin Water. | |
| Purchasing Language: | Original contract was awarded to CH2M HILL Engineers, Inc. through the City's qualifications-based selection process. |
| Prior Council Action: | September 27, 2012 – Council approved a professional services agreement with CH2M HILL Engineers, Inc. |
| For More Information: | Rolando Fernandez, 512-974-7749; Sarah Torchin, 512-974-7141; Steve Parks, 974-3576; Charles Celauro, 512-972-0208; Denise Avery, 512-972-0104 |
| Boards and Commission Action: | May 10, 2017- To be reviewed by the Water and Wastewater Commission. |
| MBE/WBE: | This contract was 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 subconsultant participation. |

Walnut Creek Wastewater Treatment Plant (WWTP) is permitted to treat and discharge an average daily flow of 75 MGD (million gallons per day) with a peak flow of 165 MGD. The plant currently averages approximately 60 MGD with peaking flows in excess of 165 MGD during large rain events. The plant effluent is used for NPW (non-potable water) on the plant site, supply for the growing Water Reclamation Initiative program, with the remainder being discharged into the Colorado River. Startup of the reuse water system added new effluent quality requirements, particularly turbidity limits, which the plant has struggled to meet during winter months.

The Walnut Creek WWTP is generally divided into three treatment areas: The primary area which includes screening and settling of raw sewage; the secondary area that includes the activated sludge treatment process, clarification and disinfection; and the tertiary area that includes filtration.

Since 2007, Walnut Creek WWTP has faced increasing difficulty in maintaining a stable, reliable process in the secondary treatment trains due to aging equipment and changing influent characteristics, particularly due to an increasingly significant alkalinity deficit.

In 2012, the engineering firm of CH2M HILL Engineers, Inc. was retained to complete evaluation of the secondary treatment areas (aeration basins, secondary clarifiers, and chlorine contact basins) at the plant. CH2M HILL Engineers, Inc. completed a preliminary phase which evaluated the existing assets and made recommendation regarding process improvements and physical deficiencies in the secondary treatment areas. These recommendations included the repair and replacement of equipment that was determined to be at the end of its useful life, the addition of a chemical feed system to add alkalinity to the treatment process to support stable nitrification, and aeration basin diffuser and air line leak repairs.

Final design of improvements is now nearing completion. Some additional design work has been identified by staff to address issues at the plant including:

- Cooling water piping modifications
- Structural repair to a portion of Final Clarifier No. 5
- Aeration basin drainage improvements
- Valve replacements
- Abandonment of existing backwash supply wet wells

This request allows for completion of final design of the items above. This request also authorizes funds for the bid phase of the project. When bids are obtained, staff will request additional Council authorization to enter into a contract with a general contractor for construction of the project and to authorize funds for CH2M HILL Engineers, Inc. to perform engineering services during construction.

Final design is scheduled to be completed by the end of December 2017 and construction is expected to be underway in the third quarter of 2018.

This project is located within zip code 78724 (District 1). The project is managed by Public Works.

CH2M HILL Engineers, Inc. is located in Austin, TX.

AUTHORIZATION HISTORY

| <u>AMOUNT</u> | <u>DATE -- DESCRIPTION</u> |
|----------------|--|
| \$1,500,000 | 09/27/12 (Council) – Professional Engineering Services |
| \$55,000 | 09/27/2012 (Council) – Administrative Authority, FY 2011-2012 |
| \$104,086.20 | 05/18/2017 Proposed (Council) - Amendment for Additional Design Services and Bid Phase Services-Subject to final negotiation |
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| \$1,659,086.20 | Total Contract Authorization |

CONTRACT HISTORY

| <u>AMOUNT</u> | <u>DATE -- DESCRIPTION</u> |
|----------------|--|
| \$599,847 | 05/07/13 Original Professional Services Agreement for Preliminary Design Services |
| \$896,865 | SA #1 – (Additional Authority) – Additional Preliminary Engineering Services |
| \$25,080 | 03/30/17 SA #2 – (Administrative Authority) - Final Design Services |
| \$20,212 | 04/11/17 SA #3 – (Administrative Authority) - Final Design Services |
| \$117,082.20 | Proposed - SA #4 – (Additional Authority) - Final Design and Solicitation Phase Services |
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| \$1,659,086.20 | Total Contract Expenditures |

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; 15.80% WBE. Participation for this Amendment:

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|--|--------------------|---------------|
| <u>NON M/WBE TOTAL – PRIME</u> | <u>\$89,446.20</u> | <u>76.40%</u> |
| CH2M Hill Engineers, Inc., Austin, TX | \$89,446.20 | 76.40% |
| | | |
| <u>MBE TOTAL – SUBCONSULTANTS</u> | <u>\$3,808</u> | <u>3.25%</u> |
| | | |
| <u>Native/Asian Subtotal</u> | <u>\$3,808</u> | <u>3.25%</u> |
| (MA) Encotech Engineering Consultants, Inc., Austin, TX (structural engineering) | \$3,808 | 3.25% |
| | | |
| <u>WBE TOTAL – SUBCONTRACTORS</u> | <u>\$23,828</u> | <u>20.35%</u> |
| (FW) Harutunian Engineering, Inc., Austin, TX (electrical engineering, instrumentation/engineering) | \$21,060 | 17.99% |
| (FW) K. Friese and Associates, Inc., Austin, TX (CAD Services, transportation consulting, utility re-engineering services, feasibility studies, construction consulting, construction management, design services, water supply, treatment, and distribution engineering, wastewater treatment engineering, traffic and transportation engineering, municipal engineering, land development and planning/engineering, highways, streets, airport pay-parking lot engineering, drainage engineering, civil engineering, engineering consulting) | \$2,768 | 2.36% |

Overall participation based on expenditure for the entire project as of March 7, 2017, (not including this amendment):

PRIME:

64.72% Non M/WBE

SUBCONSULTANTS:

2.46% African American; 1.30% Hispanic; 11.56% Native/Asian; and 19.96% WBE

TOTAL:

2.46% African American; 1.30% Hispanic; 11.56% Native/Asian; 19.96% WBE; and 64.72% Non M/WBE