



CITY OF HOUSTON - CITY COUNCIL

Meeting Date:

District E

Item Creation Date: 8/10/2018

20DWO16 Additional Approp/Carollo Engineers, Inc.

Agenda Item#:

Background:

SUBJECT: Sixth Additional Appropriation to Professional Engineering Services Contract between the City and Carollo Engineers, Inc. for Project Advisor/Technical Consultant Services for Northeast Water Purification Plant (NEWPP) Expansion Project.

RECOMMENDATION: (SUMMARY) Approve an ordinance appropriating additional funds to the Professional Engineering Services Contract with Carollo Engineers, Inc.

PROJECT NOTICE/JUSTIFICATION: This project is part of the City's future expansion of the Northeast Water Purification Plant program. These services are to provide advisory and technical consulting assistance to the Department on the existing NEWPP that will guide the City's on-going expansion of the NEWPP. This expansion program is required to meet the future demands, requirements of Texas Commission on Environmental Quality regulations and Harris-Galveston Subsidence District Surface Water Conversion Plan.

DESCRIPTION/SCOPE: This project consists of the Project Advisor/Technical Consultant to support and augment the department by performing follow on activities that includes a risk based assessment of assets at the existing NEWPP to project the remaining useful life and ultimately optimize CIP expenditures over the next 5 to 50 years. The final report will provide a cost projection of future asset replacement or rehabilitation projects versus replacing existing capacity with more efficient and reliable technology to maximize water production capacity from the given plant site. The work will support the department with the overall purpose of the contract, as authorized by the Director.

- Data Collection & Assessment Framework Planning Review
- Asset Inventory Assessment and Development
- On-site Condition Assessment
- Consequence of Failure Analysis
- Remaining Useful Life Analysis
- Risk Analysis & Risk-based CIP Prioritization
- Financial Evaluation – Existing Plant vs. Expansion Capacity
- Project Report
- Project Management

LOCATION: This project is located at 12550 Water Works Way, in Humble. Key map Grids 376 Z & 377 W.

PREVIOUS HISTORY AND SCOPE: City Council approved the original Contract on February 8, 2012 under Ordinance No. 2012-0121. The scope of services under the Original contract were to support and augment the department in planning, coordination, execution and delivery of the Northeast Water Purification Plant expansion project. On February 20, 2013 under Ordinance No. 2013-0155, City Council approved an amendment and additional appropriation. Under this First Amendment, the Consultant was authorized additional services to perform a process evaluation, facility audit, facility re-rating evaluation, ultraviolet disinfection audit & validation, and interim expansion planning. On February 26, 2014 under Ordinance 2014-0160, City Council approved an amendment and additional appropriation. This Second Amendment authorized the Consultant legal and contracting support and development of project staffing and controls plans. On October 22, 2014 under Ordinance No. 2014-0962, City Council approved an additional appropriation. Under this Third Additional Appropriation, the Consultant performed a treatment process for a pilot investigation, raw water planning and permitting, and development of Request for Qualification (RFQ) and Request for Proposal (RFP) for Design-Build procurement. On April 27, 2016 under Ordinance No. 2016-0342, City Council approved an additional appropriation. Under this Fourth Additional Appropriation, the Consultant was authorized services to support management and quality assurance of the Preliminary Services Component – 1 to develop the basis of design. On June 21, 2017 under Ordinance No. 2017-0459, City Council approved an additional appropriation. Under this Fifth Additional Appropriation, the Consultant was authorized services to support management and quality assurance of the Preliminary Services Component – 2, final design services and to provide field engineering and other associated services for acceptance of the construction facilities for Early Work Packages, which was awarded to Houston Waterworks Team.

Under this contract the Project Advisor/Technical Consultant has accomplished the primary objectives of Work Orders 1 through 9 that consisted of: project framework development, treatment concept development, delivery alternative development, project approach alternative assessment, conceptual project schedule; technical support to the City to maintain operations at the Northeast Water Purification Plant following storm events in February and July of 2012; process evaluation, facility audit, facility re-rating evaluation, ultraviolet disinfection audit and validation, interim expansion planning; authority engagement; raw water cleaning and restoration

evaluation; archaeological study project delivery fact finding; project delivery approach evaluation and development of project staffing and controls plans, and Advisory/Technical Services required to progress the conceptual Design to Basis of design developed by the Houston Waterworks Team and final design services.

SCOPE OF THIS ADDITIONAL APPROPRIATION AND FEE: The requested additional appropriation will be utilized to perform Basic and Additional Services as defined by individual work order for a total amount of \$299,925.00. With the supplemental funding, the Project Advisor/Technical Consultant will perform as follow-on activities to ongoing activities under Work Order No. 10A. The objectives are to perform a risk-based assessment of assets at the existing NEWPP facilities and develop prioritized recommendations for upgrading the facilities. Also, to perform financial modeling of upgrades to the existing facilities versus replacing the capacity in the NEWPP Expansion to help the City make decisions on where to focus future investments.

This project will be funded by the City of Houston 100%. The total appropriation is \$344,913.75 to be appropriated as follows: \$299,925.00 for contract services and \$44,988.75 for CIP Cost Recovery.

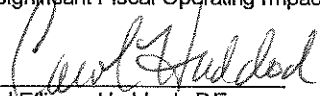
PAY OR PLAY PROGRAM: The proposed contract requires compliance with the City's 'Pay or Play' ordinance regarding health benefits for employees of City contractors. In this case, the Contractor provides health benefits to eligible employees in compliance with City policy.

M/WBE INFORMATION: The M/WBE goal for the project is set at 24%. The original contract amount totals \$31,160,231.00. The Consultant has been paid \$20,879,663.00 (67%), of that \$5,360,392.00 (25.7%) has been paid to M/WBE subcontractors to date. Consultant has proposed the following firms to achieve this goal. Assuming approval of the requested additional appropriation, the contract amount will increase to \$31,460,156.00.

<u>Name of Firms</u>	<u>Work Description</u>	<u>Amount</u>	<u>% of Contract</u>
Paid Prior Commitment	Various	\$5,360,392.00	17.04%
Unpaid Prior Commitment	Various	\$4,260,689.38	13.54%
1. Gupta and Associates, Inc.	Engineering Services	\$25,000.00	.08%
2. Gunda Corporation, Inc.	Engineering Services	\$25,000.00	.08%
3. Hunt & Hunt Engineering Corporation	Engineering Services	<u>\$25,000.00</u>	<u>.08%</u>
TOTAL		\$9,696,081.38	30.82%

FISCAL NOTE:

No significant Fiscal Operating Impact is anticipated as a result of this project.


Carol Ellinger Haddock, P.E.
Director
Houston Public Works

WBS No. S-000019-0096-3 – Additional Appropriation
WBS No. S-000066-0011-3 – Original Contract

Prior Council Action:

Ordinance No. 2012-0121, February 8, 2012
Ordinance No. 2013-0155, February 20, 2013
Ordinance No. 2014-0160, February 26, 2014
Ordinance No. 2014-0962, October 22, 2014
Ordinance No. 2016-0342, April 27, 2016
Ordinance No. 2017-0459 June 21, 2017

Amount of Funding:

\$344,913.75 from Water and Sewer System Consolidated Construction Fund No. 8500.

Original (previous) appropriation of \$977,500.00 from Water and Sewer System Consolidated Construction Fund No. 8500. First amendment and additional appropriation of \$2,541,000.00 from Water and Sewer System Consolidated Construction Fund No. 8500. Second amendment and additional appropriation of \$1,100,000.00 from Water and Sewer System Consolidated Construction Fund No. 8500. Third additional appropriation of \$5,500,000.00 from Water and Sewer System Consolidated Construction Fund No. 8500. Fourth additional appropriation of \$824,000.00 from Water and Sewer System Consolidated Construction Fund No. 8500 and appropriating \$4,326,000.00 out of the Water Authorities Capital Contribution-NEWPP fund 8505. Fifth additional appropriation of \$2,983,707.84 transfer from Fund 8434 – NEWPP Expansion-SWIFT into Fund 8506 - PWE-NEWPP Construction Fund and appropriate from Fund 8506 – PWE-NEWPP Construction Fund. \$15,664,466.16; Appropriate from Fund No. 8505 – Water Authorities Capital Contrib-NEWPP Fund (Fund 8505).

Contact Information:

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