



TO: Board of Contracts and Awards
FROM: Michael P. Slevin III, P.E., Director, Environmental Services
John Burk, P.E., Division Manager, Science and Engineering
COPY: City Council, City Manager, City Clerk, SBE Coordinator, LEAP Coordinator,
Max Drathman, P.E., Project Manager, and Samol Hefley, Finance/Purchasing
SUBJECT: Contract Amendment No. 1 for the CTP Electrical Distribution System
Replacement Project, Contract No. 4600013402, Engineering Services –
Architectural and Engineering (A&E) Roster – November 19, 2019
DATE: November 4, 2019

RECOMMENDATION SUMMARY:

The Environmental Services Department requests approval to increase Contract No. 4600013402 with Carollo Engineers, Inc., Seattle, WA, by \$3,529,242, plus any applicable taxes, for a cumulative total of \$5,483,592, plus any applicable taxes, budgeted from the ES Wastewater Fund 4300, for engineering support services during construction and final engineering design development for the Central Wastewater Treatment Plant Electrical Distribution System Replacement project.

STRATEGIC POLICY PRIORITY:

- Strengthen and support a safe city with healthy residents.
- Assure outstanding stewardship of the natural and built environment.

This project will help protect the water quality of Commencement Bay and the Puget Sound through replacement of the Central Wastewater Treatment Plant's (CTP) internal electrical distribution system. Replacing this infrastructure will improve the reliability and redundancy of the CTP's electrical system. This will reduce the risk of wastewater treatment interruption, which could result in millions of gallons of untreated wastewater discharging into the Puyallup River, Foss Waterway, and Commencement Bay.

BACKGROUND:

The Environmental Services Department contracted with Carollo Engineers, Inc. in May of 2018 to provide specialized engineering design services for the CTP Electrical Distribution System Replacement project. Due to the complexity of the project, the contract's original scope of work excluded engineering services necessary during the project's construction phase. These services could not be accurately defined until the later stages of design. The intent for a future recommended contract amendment was described in the April 26, 2018 Contract and Award Letter. The City Council authorized the original contract by the adoption of Resolution No. 40008 on May 15, 2018. The construction contract for this project is scheduled to publicly advertise in 2020, and construction is estimated to last two and a half years and exceeds \$20 million in cost.

Engineering services during construction will include specialized field expertise to inspect and oversee: electrical, instrumentation, geotechnical, structural, mechanical, and architectural components of the construction work and the required archeological monitoring and reporting.



Engineering services in this amendment will also include the review and response to technical engineering submittals, requests for information, design clarifications, and change orders.

Approximately 10 percent of this contract amendment also provides for an increase to the scope of services and budget for the final design phase of the project. The scope increases are necessary to provide: permitting assistance to support federal and state low-interest loan applications, additional civil site investigations and improvements, investigations into above ground distribution alternatives, and independent power feeds to the CTP's Influent Pumping and Gas Utilization Facility.

Future Council actions related to this project are anticipated in early 2020 for the construction contract and an easement acquisition adjacent to the CTP site.

ISSUE: The CTP's existing medium voltage electrical distribution system is beyond its anticipated service life, does not provide independent redundancy, and in certain system failure scenarios presents a risk to worker safety. Electrical system failures are unpredictable and can seriously impact the wastewater treatment process. Failures at certain locations within the system would blackout power to the entire facility. This scenario could lead to untreated wastewater overflows reaching Commencement Bay and the Puget Sound for an extended period of time, costly emergency repairs, worker safety issues, and potential regulatory fines.

ALTERNATIVES: The objective of the scope of work is to retain the engineering support services of Carollo Engineers, Inc. during the project's design and construction. They have demonstrated a high level of competence during the planning and design work completed to date. Their technical expertise of medium voltage electrical systems and historical knowledge of the existing facility will help efficiently complete the final detailed design and provide engineering assistance during construction.

Other evaluated alternatives included the City choosing not to have professional services assist the City during the remainder of this project, or the City choosing to pursue a new contract with a different engineering consultant. Due to the highly complex nature of this project, and technical experience needed to complete this project, Environmental Services determined that it would be in best interest for the City to request an increase to the original consultant services contract to assist the City with completing this project.

CONTRACT HISTORY: This contract was originally awarded to Carollo Engineers, Inc. in May 2018 after evaluating Statements of Qualifications that had been solicited by the City of Tacoma Citywide Architectural and Engineering (A&E) Roster. The original contract was in the amount of \$1,954,350, plus applicable sales tax. City Council Resolution No. 40008 authorized this contract on May 15, 2018.

SUSTAINABILITY: Replacing the aging electrical system to significantly reduce risks, minimize and prevent electrical power failures at the CTP represents the best solution with respect to potential impacts on human health and the environment.

SBE/LEAP COMPLIANCE: Not applicable.



FISCAL IMPACT:

EXPENDITURES:

FUND NUMBER & FUND NAME	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT
4300-ES Wastewater Fund	ENV-04015-13	5330100	\$3,529,242
TOTAL			Up to \$3,529,242

REVENUES:

FUNDING SOURCE	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT
4300-ES Wastewater Fund	523900	Rate	\$3,529,242
TOTAL			\$3,529,242

FISCAL IMPACT TO CURRENT BIENNIAL BUDGET: Not to exceed \$1,058,772.

ARE THE EXPENDITURES AND REVENUES PLANNED AND BUDGETED? Yes

IF EXPENSE IS NOT BUDGETED, PLEASE EXPLAIN HOW THEY ARE TO BE COVERED. N/A.