



Legislation Details (With Text)

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Title: Approve a consultant services contract in the amount of \$156,998 with Carollo Engineers, Inc., to design the expansion of a carbon dioxide injection system at the Northeast Surface Water Treatment Facility (Council District 6)
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Attachments: 1. Consultant Agreement.pdf

Date	Ver.	Action By	Action	Result
2/15/2018	1	City Council	approved	

REPORT TO THE CITY COUNCIL

February 15, 2018

FROM: THOMAS C. ESQUEDA, Director
Department of Public Utilities

THROUGH: MICHAEL CARBAJAL, Planning Manager
Department of Public Utilities - Utilities Planning & Engineering

BY: PAUL MARAGONI, Professional Engineer
Department of Public Utilities - Utilities Planning & Engineering

SUBJECT

Approve a consultant services contract in the amount of \$156,998 with Carollo Engineers, Inc., to design the expansion of a carbon dioxide injection system at the Northeast Surface Water Treatment Facility (Council District 6)

RECOMMENDATIONS

Staff recommends that Council approve a consulting services contract in the amount of \$156,998 with Carollo Engineers, Inc., for the expansion of a carbon dioxide injection system at the Northeast Surface Water Treatment Facility (NESWTF), and authorize the Director of Public Utilities, or designee, to sign the contract on behalf of the City.

EXECUTIVE SUMMARY

The Department of Public Utilities (DPU) is seeking to approve a consultant services contract to Carollo Engineers, Inc., of Fresno, California, to expand a carbon dioxide (CO₂) chemical feed system at the NESWTF. DPU staff has determined that CO₂ has beneficial features and characteristics for alkalinity adjustment, pH adjustment, and calcium hydroxide addition for finished water. Staff have completed the consultant services selection process in accordance with City policies and selected Carollo Engineers, Inc., to provide design and services during construction for the CO₂ expansion project.

BACKGROUND

The City is currently using CO₂ injection for alkalinity adjustment, pH adjustment, and calcium addition at the NESWTF. DPU recently conducted water treatment trials to optimize water quality using varied methods. Since calendar year 2016, these methods have proved successful in achieving the desired outcomes but has resulted in increased CO₂ demand exceeding the existing CO₂ chemical feed system capacity. The current NESWTF maximum design production capacity is rated at 30 million gallons per day (MGD). Current CO₂ capacity limits NESWTF production to approximately 22 MGD. DPU proposes to design and construct an expanded CO₂ injection feed system at the NESWTF to provide the required CO₂ storage and injection capability to meet maximum capacity facility demands.

The existing CO₂ injection system consist of a roughly 7,500 gallon, 350 PSIG insulated storage vessel, CO₂ refrigeration unit, vapor heater, plumbing, automated controls, two 50 lb-CO₂ per hour final water injection feeder panel systems and assorted appurtenances. The expanded carbon dioxide chemical injection feed system will require geotechnical engineering, piping, electrical, controls, new CO₂ injectors, and miscellaneous appurtenances. An analysis will be conducted to determine whether the addition of a new CO₂ storage tank is needed.

To complete the design process, DPU desires to obtain the services of an engineering firm that has experience designing new and expanded CO₂ injection systems to augment and blend existing calcium hydroxide, ozone, chlorine, and other water quality treatment methods and systems currently in use at the NESWTF. DPU requires these services to ensure the appropriate level of investigation, analysis, and design experiences are used for the water quality control process.

On November 3, 2017, an advertisement was published inviting Statements of Qualifications for the expansion of the CO₂ chemical feed system. One Statement of Qualification package was received from Carollo Engineers, Inc., of Fresno, CA. The submittal was reviewed by a selection committee and Carollo Engineers was selected. Through the course of the selection process, DPU staff determined that Carollo Engineers experience designing CO₂ systems for water treatment plants as large as the NESWTF for alkalinity adjustment, pH adjustment, and calcium hydroxide addition is unique in the Central Valley of California.

The services required by this contract will be completed by May 30, 2019. The contract is for a lump sum amount of \$142,848 and a contingency amount not to exceed \$14,150 for any additional work.

A standardized Professional Consultant Service Agreement has been used in accordance with Administrative Order 4-4 and the consultant's Certificates of Insurance have been approved by the

City's Risk Management Division. Upon approval by the Council, the Agreement will be executed by the Director of Public Utilities.

ENVIRONMENTAL FINDINGS

By the definition provided in the California Environmental Quality Act (CEQA) Guidelines Section 15378, the approval of a consultant services contract for design services does not qualify as a "project" as defined by CEQA.

LOCAL PREFERENCE

Local preference was implemented; Carollo Engineers, Inc., is a local business.

FISCAL IMPACT

Approval of the consultant services contract will not have any impact to the General Fund. Funds are available within the Water Division's Fiscal Year 2018 Capital Improvement Program budget within Copper River Ranch Water Infrastructure Fund 40168. No additional appropriations are necessary.

Attachment:
Consultant Agreement