



Agenda Report

MEETING DATE: Tuesday, December 12, 2023

TO: City Council

FROM: PUBLIC WORKS & UTILITIES DIRECTOR LINDBERG
WASTEWATER DIVISION MANAGER SMITH

THROUGH: CITY MANAGER MENDEZ

SUBJECT: CONTRACT WITH CAROLLO ENGINEERS, INC. FOR THE
HEADWORKS AND INFLUENT PUMP STATION DESIGN PROJECT

RECOMMENDED ACTION:

Adopt a resolution that (1) awards a contract to Carollo Engineers, Inc. for the Headworks and Influent Pump Station Design Project in the amount of \$1,709,629; and (2) authorizes the City Manager to execute said contract; and (3) authorizes an appropriation of \$1,158,700 from the Wastewater Enterprise fund balance to budget account code 0710-911-7855-14410.

BACKGROUND:

The City's Wastewater Treatment Facility (WWTF) comprises multiple stages of treatment processes. The area known as the headworks is where the first stage occurs: influent pumping and preliminary treatment (screening and grit removal). The headworks structure was originally constructed in the 1950's, is operating beyond its expected useful life, and now must be replaced. In September 2022, the City Council approved a contract with Carollo Engineers, Inc. ("Carollo") to assist with an evaluation of the headworks and influent pump station to inform the design of a future capital improvement project.

DISCUSSION:

The headworks area at the City's WWTF consists of an influent pump station and preliminary wastewater treatment facilities. The influent pump station lifts water up from the underground sewer lines that convey sewage to the WWTF, and into the concrete headworks structure that contains preliminary treatment processes. The preliminary treatment systems are screening for rags/wipes and other debris removal, followed by a grit removal system to remove rocks and sand. As a whole, the influent pump station and headworks are a single point of failure at the WWTF.

Unfortunately, the influent pump station and headworks structures are significantly aged and in need of replacement. Decades of corrosive sewer gasses have severely corroded

the concrete, exposing aggregate and rebar, and making the structure unsafe to walk on in certain areas. Additionally, the structure was designed and constructed prior to modern day seismic codes. To highlight the importance of the headworks, a significant failure of the structure that could not be fixed immediately would result in needing to mobilize emergency pump-around equipment and staffing the facility 24/7 until repaired. It could also result in violations of environmental regulations due to improper operation of the treatment plant. Replacing the headworks with a new structure and screening/grit removal technologies will reduce these types of risks and additional costs to the City, by improving the WWTF's reliability and performance.

Additionally, upon evaluation of the severity of the corrosion by a structural engineer more recently, it was determined that an immediate near-term solution is needed while the long-term replacement project is designed and constructed. Thus, a separate contract with another engineering firm will be brought before the City Council for approval simultaneously with this contract.

Carollo was selected from the City's list of On-Call Water and Wastewater Design consultants for their knowledge and experience in wastewater facilities and their specific experience working with the City's WWTF. The on-call consultants list was selected from the publicly advertised Request for Qualification Statements from Consulting Engineering Firms for Periodic and On-Call Water and Wastewater Professional Design Services in July 2023 that is valid for three years.

Staff therefore recommends a professional services agreement be executed with Carollo Engineers, Inc. in the amount of \$1,709,629 for the Headworks and Influent Pump Station Design Project.

STRATEGIC PLAN:

This project supports Strategic Plan Priority:

2 – Infrastructure & Environment

FINANCIAL IMPACT:

Some funds for this project are budgeted in account code 0710-911-7855-14410, but an appropriation from the Wastewater Enterprise fund balance will be required to cover the cost of this contract. \$708,173 has been budgeted in this account code for FY 23/24, and \$157,244 will be spent on the original contract with Carollo for the headworks evaluation project. Therefore, an appropriation of \$1,158,700 from the fund balance is needed to cover the \$1,709,629 contract.

ALTERNATIVE ACTION:

Council could elect not to award the contract to Carollo Engineers, Inc.

ATTACHMENTS AND/OR REFERENCES (If any):

None.