



City of Culver City

Staff Report

File #: 18-0474, Version: 1

Item #: C-4.

CC - Approval of Final Plans and Specifications and Authorization to Publish a Notice Inviting Bids for the New Bankfield Sewer Pump Station Project Located at 5722 Bankfield Avenue, PZ-874

Meeting Date: January 22, 2018

Contact Person/Dept: Mate Gaspar/Public Works Department

Phone Number: 310-253-5602

Fiscal Impact: Yes No

General Fund: Yes No

Public Hearing: **Action Item:** **Attachments:**

Commission Action Required: Yes No **Date:**

Public Notification: (E-Mail) Meetings and Agendas - City Council (01/17/2018); Property Owners within 500 feet of project site (01/15/2018)

Department Approval: Charles D. Herbertson, Public Works Director/City Engineer (01/12/18)

RECOMMENDATION

Staff recommends the City Council approve the final plans and specifications and authorize the publication of a notice inviting bids for the new Bankfield Sewer Pump Station project located at 5722 Bankfield Avenue, PZ-874.

BACKGROUND/DISCUSSION

The City of Culver City owns and maintains seven (7) sewage pump stations at the following locations:

1	Braddock Station - 11285 Braddock Drive <i>Reconstructed in 2011</i>
2	Fox Hills Station - 5900 Sepulveda Boulevard <i>Constructed in 1976</i>

3	Bristol Station - 6399 Bristol Parkway <i>Constructed in 1968</i>
4	Jasmine Station - 4496 Jasmine Avenue <i>Reconstructed in 1996</i>
5	Hayden Station - 8620 Hayden Place <i>Constructed in 1976</i>
6	Mesmer Station - 5586 Mesmer Avenue <i>Reconstructed in 1993</i>
7	Overland Station -5300 Overland Avenue <i>Constructed in 1972</i>

These sewage pump stations are necessary in order to pump sewage from low lying areas into gravity systems at higher elevations that ultimately flow to the City of Los Angeles Hyperion Sewage Treatment Plant. These pump stations are maintained by the Culver City Public Works Department Maintenance Operations Division. The electrical components, sewer pumps, wet wells, valve vaults, and force mains, need to be monitored and maintained to assure proper function.

In 2008, as authorized by the City Council, an engineering study was conducted to determine if the seven sewer pump stations could be consolidated to fewer pump stations. It was determined that it is possible to divert flows from four sewer pump stations to a new sewage pump station located immediately southeast of the 405 and 90 freeways. For this project, due to the available budget, only the Mesmer Station and Overland Station will be diverted to the proposed Bankfield Station. The other two stations, Bristol and Fox Hills, will be diverted to the proposed Bankfield Station at a later date when sufficient funding becomes available. Also, the Mesmer Station is proposed to be repurposed to a low flow diversion project. The low flow diversion system will capture dry weather run-off from Centinela Creek into Mesmer Station where the run-off will be pumped into an existing sewer main for conveyance to City of Los Angeles' Hyperion Treatment Plant for treatment. A considerable cost savings results from not having to purchase property and building a new pump station for this stormwater diversion project. This opportunity to repurpose the Mesmer Station is one of several projects required by the Time Scheduled Order from the Regional Water Quality Control Board relating to the Dry Weather Total Maximum Daily Load requirement in the City's NPDES permit.

The consolidation of flows into a single pump station has several benefits, including (1) reducing energy and maintenance costs; (2) reducing the potential of sewer overflows by removing several older pump stations from operation; and (3) possible future connection to the Los Angeles County Sanitation Districts' system. A potential connection point to the Los Angeles County Sanitation District system is located relatively close to this pump station. This may prove cost effective if the Sanitation District sewage treatment rates become considerably less than the rates charged by the City of Los Angeles for treatment of sewage at its Hyperion Sewage Treatment Plant.

In 2012, the City Council approved the purchase of a property at 5718-5722 Bankfield Avenue, immediately southeast of the 405 and 90 freeways, as the location of the new pump station. The property, which is larger than needed for the pump station alone, also provides valuable storage space for public works equipment including empty bin storage for the City's Solid Waste and Recycling operations.

DISCUSSION:

In October 2014, the City Council approved a contract with Psomas for the final design of construction plans and specifications for the new Bankfield Sewer Pump Station.

The final design and preparation of construction plans and specifications consists of the following items:

Primary Pump Station Components

- a. A sewage wet well 10 feet by 20 feet and approximately 35 feet deep.
- b. Two submersible pumps and
- c. A flow meter vault.
- d. A valve vault.
- e. A bypass vault for the two force mains.
- f. Gravity sewers and force mains.
- g. Electrical power service infrastructure through Southern California Edison (SCE).
- h. A building 23 feet by 20 feet to house instrumentation, bathroom, and electrical components.

Emergency Pump Station Provisions

- a. Emergency diesel-fueled back-up electrical generator to provide electrical power to the pump station during SCE power outages.
- b. A permanent automatic diesel-fueled back-up pump station consisting of a trash pump and controls that are completely independent from the main pump station that would operate automatically if the primary pump station malfunctions.
- c. Emergency bypass connections to accommodate portable emergency station bypass pumping in case of primary or back-up pump station malfunction.
- d. Two force mains to accommodate failure or damage to one force main.

General Site Provisions

- a. Perimeter block wall fencing, 8 feet high.
- b. Two automatic vehicle entryways with radio actuated gates.
- c. Drive approaches to accommodate access by sewer maintenance vehicles and sanitation trucks.
- d. Portland cement concrete site paving throughout.
- e. Wet-debris drying bin with drain to sewer.
- f. Landscaped and irrigated strip 12" wide along alley and freeway side of site for vine growth to prevent graffiti.
- g. Six each 90 degree passenger vehicle parking spaces outside the perimeter wall at the south end of the property accessed from the alley as required by property covenant.
- h. Demolition of existing office and service bay building by certified lead and

asbestos subcontractor.

Anticipated Project Schedule

- Project Bid Period February - April 2018
- Construction Award May 2018
- Start of Construction August 2018
- Construction Completion June 2019

Staff will administratively approve a contract with PRP Engineering, Inc., to assist staff during the bidding period by answering contractor’s questions and preparing addendums, if necessary.

During the bidding period staff will release a request for proposal for construction management and construction inspection services for the construction of the Bankfield Sewer Pump Station.

The final plans and specifications for the diversion sewer pipeline project to the new Bankfield Sewer Pump Station, is tentatively scheduled for City Council consideration in March 2018.

FISCAL ANALYSIS

<u>Proposed Project Budget</u>	<u>Funding Source Amount</u>
PZ-874 Sewer Enterprise Funds (Fund 204)	\$4,650,000
<u>Estimated Project Expenses</u>	<u>Amount</u>
Construction	\$4,350,000
<u>Construction Management and Inspection</u>	<u>\$ 300,000</u>
Total Estimated Project Expense	\$4,650,000

Repurposing Mesmer Station to a low flow diversion station to capture dry weather run-off is estimated to save the City about \$6 million.

ATTACHMENTS

1. Plans and Specifications for the project.

MOTION

That the City Council:

1. Approve the final plans and specifications for the new Bankfield Sewer Pump Station project, PZ-874; and
2. Authorize the publication of a notice of inviting bids for construction of the new Bankfield Sewer

Pump Station project, PZ-874.