

**City of Culver City, California
Agenda Item Report**

Meeting Date: 04/21/2014		Item Number: <u>C-5</u>							
CITY COUNCIL AGENDA ITEM: Authorize Solicitation of Proposals for (1) Final Design of the New Bankfield Sewer Pump Station Located at 5722 Bankfield Avenue; (2) Final Design of Diversion Sewer Pipes to Abandon the Bristol, Fox Hills, Mesmer, and Overland Sewer Pump Stations; and (3) a Feasibility Study Regarding the Conversion of the Mesmer Sewer Pump Station to Storm Water Quality Purposes.									
Contact Person/Dept.: Mate Gaspar/PW		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) Agenda and Meetings – City Council (04/16/14)									
Department Approval: Charles D. Herbertson (04/09/14)		City Attorney Approval: Carol Schwab (by H. Baker) (04/15/14)							
Chief Financial Officer Approval: Jeff Muir (by M. Noller) (04/15/14)		City Manager Approval:							
<u>RECOMMENDATION:</u> Staff recommends the City Council authorize the solicitation of proposals for (1) final design of the new Bankfield Sewer Pump Station located at 5722 Bankfield Avenue; (2) final design of Diversion Sewer Pipes to abandon the Bristol, Fox Hills, Mesmer, and Overland Sewer Pump Stations; and (3) a feasibility study regarding the conversion of the Mesmer Sewer Pump Station to storm water quality purposes. <u>BACKGROUND:</u> The Public Works Department is responsible for the maintenance of the City owned sewer pump stations. There are currently seven (7) sewer pump stations at the following locations: <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"><tr><td style="text-align: center; width: 10%;">1</td><td style="padding: 5px;">Braddock Station 11285 Braddock Drive <i>Reconstructed in 2011</i></td></tr><tr><td style="text-align: center;">2</td><td style="padding: 5px;">Fox Hills Station 5900 Sepulveda Boulevard <i>Constructed in 1976</i></td></tr><tr><td style="text-align: center;">3</td><td style="padding: 5px;">Bristol Station 6399 Bristol Parkway <i>Constructed in 1968</i></td></tr></table>				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>
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4	Jasmine Station 4496 Jasmine Avenue <i>Reconstructed in 1996</i>
5	Businessman Park Station 8620 Hayden Place
6	Mesmer Station 5586 Mesmer Avenue <i>Reconstructed in 1993</i>
7	Overland Station 5300 Overland Avenue <i>Constructed in 1972</i>

These sewer pump stations are necessary in order to properly pump the City's sewage flow to the City of Los Angeles' transmission lines which, in turn, carry the sewage to the Hyperion Sewage Treatment Plant. These pump stations are maintained by the Public Works Department Maintenance Operations Division. The electrical components, sewer pumps, wet wells, and dry wells need to be monitored and maintained in order for them to properly function.

In 2008, the City Council authorized a study to be undertaken to determine if the seven sewer pump stations could be consolidated to fewer pump stations. It was determined that it is possible to close four sewer pump stations and divert them to a new sewer pump station to be located within the area that is southeast and immediately adjacent to the 405 and 90 freeways.

The proposed new pump station, in conjunction with new pipelines to divert sewage from the Bristol, Fox Hills, Mesmer, and Overland pump stations, will allow the City to consolidate the flow of the four pump stations into one new, modern, and more energy efficient station resulting in pumping cost savings and decreased need for maintenance. The existing stations proposed to be consolidated are older and, if not replaced, will require major reconstruction in the future including installation of a second (redundant) force main. The proposed Bankfield Pump Station will be state of the art and will eliminate many of the problems maintenance staff has experienced in operating the existing stations. The consolidation of the flow also has other benefits including making a future connection to the Los Angeles County Sanitation District for a portion of Culver City's sewage flow feasible. 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 at its Hyperion Sewage Treatment Plant.

In October 2012, the City Council approved the purchase of a property at 5718-5722 Bankfield Avenue as the location of the new pump station. In addition, the property, which is larger than needed for the pump station only, will provide valuable and

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much needed space for storage of public works equipment including empty container storage for the Sanitation Division.

This year's approved work plan includes the preparation of request for proposals for the final designs of a new sewer pump station and the diversion pipes.

DISCUSSION:

Staff has prepared a request for proposal for the new Bankfield Pump Station. This proposed station will be designed to pump about 1.3 million gallons of flow a day. It will contain three submersible energy efficient pumps in a large underground well. Two force mains will be designed (one redundant) to convey the flow to the City of Los Angeles. The proposed pump station will include a building that will house the control panels and instruments to run the station. An emergency bypass system will be designed as part of the project in case of catastrophic failure of the station. The request for proposal requires that the consultant review the feasibility of including solar panels to supplement the electricity required for the new station. Also the station will include an emergency SCADA and flow monitoring systems. This station will be designed similarly to the recently reconstructed Braddock Pump Station.

Staff prepared a request for proposal for the design of new diversion pipes from the Bristol, Fox Hills, Mesmer, and Overland sewer pump stations. The following is a brief summary of the diversion from each pump station:

The Bristol Pump Station is located at 6399 Bristol Parkway immediately adjacent to the County of Los Angeles maintained Centinela storm drain channel. This pump station serves the Courtyard Marriot and Four Points Sheraton hotels. The diversion pipe will be aligned either on or adjacent to the Centinela Channel and then along the westerly sidewalk of Sepulveda Boulevard to Bankfield Avenue and then to the new Bankfield Pump Station site. The diversion pipe may require obtaining private property easements or permits from the County of Los Angeles. Also, a permit will be required from the City of Los Angeles because portions of Sepulveda Boulevard and Bankfield Avenue are within the City of Los Angeles.

The Fox Hills Pump Station is located in Westfield Culver City's parking lot near the Macy's Department Store building. The diversion pipes will be constructed along the new Center's entrance and then be directionally bored under Sepulveda Boulevard and then through private property. Private property easements will be required from the property owners in order to construct the diversion pipes.

The Mesmer Pump Station is located to the west of the 405 freeway and Centinela Channel and to the south of the 90 freeway. The pipelines that flow to Mesmer

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Pump Station are underneath the freeway decks and become siphons under the Centinela Channel. The closure of this station will be a tremendous benefit as having pipelines cross under these major freeways and storm drain channel is not desirable. The proposed diversion pipes will intercept the flows before the freeways and be aligned along Slauson Avenue, then across Jefferson Boulevard, then along Selmarine Drive, and then to the new Bankfield Pump Station site. A small portion of the sewer flow to the Mesmer Pump Station comes from the west side of the 405 freeway including flow from two Culver City residences, the Double Tree Hotel, an office complex, and a large City of Los Angeles business property. These flows will have to be diverted to an existing City of Los Angeles sewer pump station located at the corner of Inglewood Avenue and Juniette Street. The City of Los Angeles has been contacted and is agreeable to this.

The Mesmer Pump Station will be decommissioned upon completion of the new Bankfield Pump Station and sewer main diversions. The Mesmer Pump Station and associated land will then be available for other purposes. The City is participating with all other agencies in the Ballona Creek Watershed to develop plans to meet Total Maximum Daily Load (TMDL) regulations. Due to bacteria exceedances in Ballona Creek during dry weather, all agencies in the watershed were required to submit Time Schedule Order (TSO) requests to the Los Angeles Regional Water Quality Control Board (LARWQCB) in April 2013. The TSO indicates the cities' commitment to complete certain efforts to meet dry-weather bacteria water quality standards. Centinela Creek has been identified as a significant contributor of bacteria to Ballona Creek. As part of the TSO, Culver City committed to complete a feasibility study regarding the conversion of the Mesmer Pump Station to pump dry-weather flows from Centinela Creek to the sanitary sewer for treatment. The feasibility study is included in the scope of work along with the Bankfield Pump Station design.

The Overland Pump Station is located adjacent to Overland Avenue and south of Jefferson Boulevard. The diversion pipes will be constructed mostly beneath Overland Avenue with a small portion constructed beneath Jefferson Boulevard. There are also abandoned pipes in Overland Avenue, Jefferson Boulevard, and Cota Street that have been video inspected, are still in good condition, and can be reused as diversion pipelines. The abandoned sewer pipes once served the former MGM lots which are the present day Raintree, Tara Hills, Lakeside Villas, and Lakeside Village communities.

If the City Council approves the release of the request for proposals, staff will send them to consultant engineering firms that are known to have the qualifications to design new sewer pump stations and sewer pipelines. The ranking of the proposals will be based on qualifications and the amount of the fee. It is expected that the

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consideration for approval of professional services agreements with the engineering firms for these design projects will occur in June or July 2014.

FISCAL ANALYSIS:

There are sufficient funds available in the Mesmer/Overland Sewer Pump Diversion Project and Fox Hills Sewer Pump Station Project, PZ-946 and PZ-874 capital improvement project budgets to fund the consultant costs and potential construction costs for the work proposed.

ATTACHMENT (Available Online or in the Public Works Department):

The RFP's are available at the following link:

<http://www.culvercity.org/en/Government/PublicWorks/CouncilItems.aspx>

MOTIONS:

That the City Council:

Authorize the solicitation of proposals for (a) final design of the new Bankfield Sewer Pump Station located at 5722 Bankfield Avenue; (b) final design of Diversion Sewer Pipes to abandon the Bristol, Fox Hills, Mesmer, and Overland Sewer Pump Stations; and (c) a feasibility study regarding the conversion of the Mesmer Sewer Pump Station to storm water quality purposes.