FALLBROOK PUBLIC UTILITY DISTRICT
MEETING OF THE ENGINEERING & OPERATIONS COMMITTEE

AGENDA

PURSUANT TO WAIVERS TO CERTAIN BROWN ACT PROVISIONS UNDER EXECUTIVE ORDERS ISSUED BY GOVERNOR NEWSOM RELATED TO THE COVID-19 STATE OF EMERGENCY THIS MEETING WILL BE CONDUCTED VIA WEB AND TELECONFERENCE USING THE BELOW INFORMATION, AND THERE WILL BE NO PHYSICAL LOCATION FROM WHICH MEMBERS OF THE PUBLIC MAY PARTICIPATE. INSTEAD, MEMBERS OF THE PUBLIC ARE ENCOURAGED TO PARTICIPATE IN THE COMMITTEE MEETING VIA WEB CONFERENCE USING THE BELOW CALL-IN AND WEBLINK INFORMATION.

https://zoom.us/j/96623184477?pwd=QmcyQWdydldlNG5abUl0VXBTZzZrUT09
MEETING ID 966 2318 4477
AUDIO CALL-IN 1-669-900-9128
AUDIO PASSCODE 282231

PUBLIC COMMENTS: Members of the public may submit public comments and comments on agenda items in one of the following ways:

SUBMIT COMMENTS BEFORE THE MEETING:

- By emailing to our Board Secretary at leckert@fpud.com
- By mailing to the District Offices at 990 E. Mission Rd., Fallbrook, CA 92028
- By depositing them in the District's Payment Drop Box located at 990 E. Mission Rd., Fallbrook, CA 92028

All comments submitted before the meeting by whatever means must be received at least 1 hour in advance of the meeting. All comments will be read to the Committee during the appropriate portion of the meeting. Please keep any written comments to 3 minutes.

MAKE COMMENTS DURING THE MEETING: The Committee Chair will inquire prior to Committee discussion if there are any comments from the public on each item.

- Via Zoom Webinar go to the "Participants List," hover over your name and click on "raise hand." This will notify the moderator that you wish to speak during oral communication or during a specific item on the agenda.
- Via phone, you can raise your hand by pressing *9 to notify the moderator that you wish to speak during the current item.

THESE PUBLIC COMMENT PROCEDURES SUPERSEDE THE DISTRICT'S STANDARD PUBLIC COMMENT POLICIES AND PROCEDURES TO THE CONTRARY.

MONDAY, MARCH 15, 2021
2:00 P.M.

FALLBROOK PUBLIC UTILITY DISTRICT
990 E. MISSION RD., FALLBROOK, CA 92028
PHONE: (760) 728-1125

If you have a disability and need an accommodation to participate in the meeting, please call the Secretary at (760) 999-2704 for assistance so the necessary arrangements can be made.

I. PRELIMINARY FUNCTIONS

CALL TO ORDER / ROLL CALL

PUBLIC COMMENT

II. ACTION / DISCUSSION----------(ITEMS A – D)

A. UPDATE ON THE OVERLAND TRAIL LIFT STATION REHABILITATION PROJECT AND SANITARY SEWER OVERFLOW

B. PROFESSIONAL SERVICES CONTRACT FOR SANTA MARGARITA GROUNDWATER TREATMENT PLANT OPERATIONS PLAN

C. REQUEST FOR APPROVAL TO PROCEED WITH SCADA INTEGRATIONS RFP FOR CONVEYER PROJECT

D. AWARD OF GUM TREE PIPELINE REPLACEMENT PROJECT (JOB 3141) *(SUPPLEMENTAL MATERIALS TO BE PROVIDED PRIOR TO MEETING)*

III. ADJOURNMENT OF MEETING

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DECLARATION OF POSTING

I, Lauren Eckert, Executive Assistant/Board Secretary of the Fallbrook Public Utility District, do hereby declare that I posted a copy of the foregoing agenda in the glass case at the entrance of the District Office located at 990 East Mission Road, Fallbrook, California, at least 72 hours prior to the meeting in accordance with Government Code § 54954.2.

I, Lauren Eckert, further declare under penalty of perjury and under the laws of the State of California that the foregoing is true and correct.

March 10, 2021
Dated / Fallbrook, CA

/s/ Lauren Eckert
Executive Assistant/Board Secretary

M E M O

TO: Engineering & Operations Committee
FROM: Aaron Cook, Engineering Manager
DATE: March 15, 2021
SUBJECT: Update on the Overland Trail Lift Station Rehabilitation Project and Sanitary Sewer Overflow

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Description

Report on the Sanitary Sewer Overflow (SSO) that occurred at the Overland Trail Lift Station Rehabilitation Project.

Purpose

Construction of the Overland Trail Lift Station Rehabilitation Project was awarded to Pacific Hydrotech in December of 2019. The project is part of the District's capital improvement program, and consists of the replacement of existing pumps, electrical and controls equipment, and backup generator, all of which are over 20 years old, and expansion of the existing wet well, and modifications to the existing controls building, which date back to the 1960's. The project also increases the capacity of the lift station, facilitating the consolidation of existing infrastructure and removal of Anthony's Corner Lift Station.

Site work began in the Spring of 2020 and was originally scheduled to be completed by February 2021. However, during startup efforts in January, mechanical failures were discovered in two of the four new pumps despite having passed standard factory testing inspections. Ultimately they had to be returned to the factory for repairs, causing a delay of approximately two months.

To facilitate the lift station rehabilitation while maintaining service, the scope of the work included a contractor installed and operated bypass pumping system. The specification required the contractor provide a bypass plan with a primary and a secondary pump, 24-hour monitoring capabilities, and an emergency response plan. The system was set up with a level sensor tied to an electrical alarm system which auto-dials the contractor and District emergency response personnel. The set up was tested prior to switching to bypass mode in August of 2020 and routinely maintained since then.

On Friday, February 26, Pacific Hydrotech was working with District staff at the site overseeing the work. The bypass pumps were functioning properly at that time, including a check of the secondary pump. The contractor's crew was not scheduled for any site work on Monday, March 1. That morning, at approximately 8:00 am, a District collections staff member was performing a routine check of the site and discovered that the bypass pumps were not working and sewage was overflowing from the containment reservoirs. He immediately informed his supervisor of the situation. The Collections Supervisor then notified Pacific Hydrotech of the situation and told them they needed to respond to the spill immediately. The Collections Supervisor also notified the District Environmental Compliance Technician. Meanwhile, staff from the Collections Department attempted to stop the flow using a vactor truck. About 20 minutes later, Pacific Hydrotech arrived and immediately dammed the flow. They were able to get the pumps operating again by approximately 10:00 am. Pacific Hydrotech immediately began site clean-up

and other mitigation and remedial measures. Samples were taken at three locations downstream of the site. Signs were also installed along the creek down Mission Road to inform the public. Once the site was secure, the appropriate agencies were notified of the spill (CalOES, SDEH, SDRWQCB).

Investigation into what caused the failure found:

- A mechanical failure with the floats on the primary bypass pump.
- The secondary pump had automatically entered “regen mode” – an exhaust system cleaning process which requires the pump to be disconnected from the system for a period of a few hours before returning to regular operation. This regen process occurs approximately once every 3 months with this particular pump and operating conditions.
- The contractor’s credit card information linked to the sim card on the emergency alert auto-dialer system had changed and was not properly updated so the auto-dialer service was not active.

In the future, as an additional precaution to prevent this type of failure, the bypass pump specification will require contractors to conduct a weekly physical test of the emergency alert system to be observed/verified by District staff. District on-call staff will also perform a physical check of any temporary bypass systems at least once per day, including weekends and holidays.

Budgetary Impact

There is no budgetary impact. The contractor is responsible for all costs associated with containment, clean-up, recovery and legal disposal of spilled sewage, as well as paying any fines, incurring and handling any penalties, claims, or liability as a result of the spill.

Recommended Action

No action recommended. For information only.

M E M O

TO: Engineering & Operations Committee
FROM: Aaron Cook, Engineering Manager
DATE: March 15, 2021
SUBJECT: Professional Services Contract for Santa Margarita Groundwater Treatment Plant Operations Plan

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Description

Request for Board approval to award a professional services contract for the Santa Margarita Groundwater Treatment Plant Operations Plan.

Purpose

Construction of the Santa Margarita River Conjunctive Use Project (SMRCUP) will be nearing completion and ready to begin startup in August of this year. One of the last steps required to operate the treatment facility is to obtain approval of an operations plan from the State Water Resources Control Board Division of Drinking Water (DDW). District staff issued a request for professional services to develop the operations plan and assist with approval from DDW. Engineering consulting firm Arcadis U.S. Inc.'s proposal for an amount not to exceed $72,320 provides a local team including Brent Alspach, who has extensive experience working with DDW on RO and GAC treatment, and Christine Cotton, who has developed operations plans for the District in the past.

Budgetary Impact

The cost of the services is included in the SMRCUP State Revolving Fund Loan for the project.

Recommended Action

That the Committee recommend to the Board authorization of a Professional Services Agreement with Arcadis U.S. Inc. for an amount not to exceed $72,320.

M E M O

TO: Engineering & Operations Committee
FROM: Owni Toma, Chief Plant Operator
DATE: March 15, 2021
SUBJECT: Request for Approval to Proceed with SCADA Integrations RFP for Conveyer Project

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Description

This request is for the Engineering & Operations Committee to recommend approval to the Board to proceed with the RFP from SCADA Integrations for the Conveyer Project in two phases.

Purpose

The existing conveyer control system located at the District's Water Reclamation Plant is only able to run manually in local mode at the panel itself, using relays and timers, and requires constant inspection throughout the day to ensure its continued operation. Having the ability to run the machine from an operator workstation, both during a regular shift and also afterhours using SCADA would allow the automatic and programmed operation of the conveyer. The automatic operation would continuously convey processed solids from the centrifuge into the sludge trailer or back into the digesters on SCADA, minimizing the need for an operator to be present to inspect and confirm if the various controls of the system are working, or from manually adjusting them until they are working. The system is currently checked each hour while it is running to ensure that the sludge is still being processed, conveyed to the correct gate, and that the gate is not plugged up. Still though, three to four times per year the current system trips, resulting in a solids spillover, requiring two staff members to spend several hours cleaning and redirecting solids into the digester. The conveyer is typically run 9 hours per shift, and each inspection takes 7 minutes on average, resulting in a total time of 63 minutes per day shift.

After reviewing available options, staff determined upgrading the conveyer system to PLC based programming would be the most efficient option. By upgrading from relays and timers to a PLC system, the conveyer will not need to be physically inspected every hour, but only during plant-wide rounds and readings which take place in the morning and afternoon. The automatic operation of the conveyer would free up to an hour of operator time, and aid the plant by creating headroom in the digester tanks for influent solids and significantly cutting down prep time for annual maintenance. The new system would also alarm the operator when a plug is detected and include the ability to close/open gates and change the direction of the augers and screws in order to push the solids through the plug or redirect them to a different gate.

Time saved from upgrading the conveyer operation would allow operators to focus on performing better housekeeping of digesters, specifically:

- Increase wash down frequency of basin
- Pull out rags and debris
- Assisting maintenance with line flushing and vactoring solids handling lines

On 1/5/21 an RFP was issued to 5 SCADA integrators - of those, 2 declined to bid, and 2 did not respond. The one response received, SCADA Integrations, came in as a turnkey packaged proposal with two phases.

Budgetary Impact

The conveyer project was specified in the FY 20-21 Adopted Annual Budget; a total of $60,000 was budgeted out of the Water Reclamation Plant's Capital Budget. Phase 1 of the Conveyer Project would cost $51,800 and would be completed before the end of the current fiscal year. Phase 2 of the project will be completed during FY21-22 at a cost of $76,670. The funds for the 2nd Phase will be included in the FY21-22 budget.

Recommended Action

That the Committee recommend to the Board authorization of a services agreement with SCADA Integrations for the Conveyer Upgrade Project at a total value of $128,470, to be completed in two phases.