



# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

**BOARD OF PUBLIC UTILITIES**

**DATE:** FEBRUARY 13, 2017

**ITEM NO:** 11

**SUBJECT:** CONSTRUCTION OF THE FY16/17 GROUNDWATER WELL REHABILITATION PROJECT – AWARD OF BID NO. RPU-7454 TO GENERAL PUMP COMPANY, INC. OF SAN DIMAS, CALIFORNIA, IN THE AMOUNT OF \$906,020 – APPROVE WORK ORDER NO. 1712389 FOR THE RAUB 7 WELL IN THE AMOUNT OF \$267,288, WORK ORDER NO. 1712675 FOR THE RAUB 6 WELL IN THE AMOUNT OF \$297,582, WORK ORDER NO. 1712676 FOR THE TIPPECANOE WELL IN THE AMOUNT OF \$301,454, WORK ORDER NO. 1712677 FOR THE GAGE 92-3 WELL IN THE AMOUNT OF \$264,626 AND WORK ORDER NO. 1712678 FOR THE FLUME 3 WELL IN THE AMOUNT OF \$255,672 FOR A TOTAL PROJECT COST OF \$1,386,622

**ISSUES:**

Award Bid No. RPU-7454 to General Pump Company, Inc. of San Dimas, California, for the construction of the FY16/17 Groundwater Well Rehabilitation Project, in the amount of \$906,020, and approve the capital expenditures for Work Order No. 1712389 for the Raub 7 Well in the amount of \$267,288, Work Order No. 1712675 for the Raub 6 Well in the amount of \$297,582, Work Order No. 1712676 for the Tippecanoe Well in the amount of \$301,454, Work Order No. 1712677 for the Gage 92-3 Well in the amount of \$264,626 and Work Order No. 1712678 for the Flume 3 Well in the amount of \$255,672 – for a total project cost of \$1,386,622.

**RECOMMENDATIONS:**

That the Board of Public Utilities:

1. Award a contract for the construction of the FY16/17 Groundwater Well Rehabilitation Project – Bid No. RPU-7454 to the lowest responsive and responsible bidder, General Pump Company, Inc. of San Dimas, California, in the amount of \$906,020;
2. Approve five work orders for capital expenditures, including all design, construction, contract administration, inspection and construction contingency costs, for the FY16/17 Groundwater Well Rehabilitation Project, for a total project not to exceed \$1,386,622;
  - a. Work Order No. 1712389 for the Raub 7 Well in the amount of \$267,288;
  - b. Work Order No. 1712675 for the Raub 6 Well in the amount of \$297,582;
  - c. Work Order No. 1712676 for the Tippecanoe Well in the amount of \$301,454;
  - d. Work Order No. 1712677 for the Gage 92-3 Well in the amount of \$264,626; and
  - e. Work Order No. 1712678 for the Flume 3 Well in the amount of \$255,672;
3. Authorize the City Manager, or his designee, to increase or decrease the five individual work order amounts included in the FY16/17 Groundwater Well Rehabilitation Project, for a total project cost not to exceed \$1,386,622.

**BACKGROUND:**

The Riverside Public Utilities Department (RPU) operates and maintains 52 active groundwater wells located throughout Riverside, Colton and San Bernardino to supply drinking water to the City of Riverside. Over time, wells lose efficiency. Most often this drop is due to mechanical problems such as the well's gravel pack and screens becoming plugged or pumps losing efficiency due to wear and tear. Other times

wells become less efficient due to large changes in groundwater levels. As a result, groundwater wells and pump assemblies require periodic maintenance and rehabilitation work.

**DISCUSSION:**

Staff identified five wells to undergo rehabilitation work during the 2016-17 fiscal year: Raub 7, Raub 6, Tippecanoe, Gage 92-3 and Flume 3.

The work will be conducted in two phases in order to minimize disruptions to the water system. The first phase will include the rehabilitation of three of the five wells: Raub 7, Tippecanoe and Flume 3. The second phase will include rehabilitation of the remaining two wells: Raub 6 and Gage 92-3. Four wells are located in the City of San Bernardino; Flume 3 Well is located in the City of Colton.

The scope of work for rehabilitating each well includes removal and inspection of the pumping equipment, repair or replacement of pumping components, as needed, adjustment of the pump depth, video surveys, mechanical and chemical cleaning, and well redevelopment work and testing.

The contract documents allow the contractor to work during extended hours if needed to complete the work by the required deadline. As such, the inspection budget for this project has been enhanced to allow for extended inspection hours.

The work will not affect service to RPU water customers.

The project was advertised for construction bids on December 13, 2016, and bids were opened on January 11, 2017. The lowest responsive and responsible bid was submitted by General Pump Company, Inc. Staff has reviewed all provided documentation and has determined that General Pump Company, Inc. has met all of the requirements of the specifications.

The three bids received are summarized in the table below:

	<b><u>COMPANY</u></b>	<b><u>CITY LOCATION</u></b>	<b><u>BID TOTAL</u></b>
1.	<b>General Pump Company, Inc.</b>	<b>San Dimas, CA</b>	<b>\$906,020.00</b>
2.	Best Drilling and Pump, Inc.	Colton, CA	\$1,080,448.00
3.	Layne Christensen	Redlands, CA	\$1,211,361.80

► *Engineer's Construction Cost Estimate \$1,244,000*

The bids received were less than the engineer's estimate largely due to more favorable than expected pricing for the well rehabilitation work overall, likely due to favorable economies of scale.

The Purchasing Services Manager concurs that the recommended actions comply with the City of Riverside's Purchasing Resolution No. 22576.

The project breakdown is as follows:

<b>Project Breakdown:</b>	
Engineering Performed By:	RPU Engineering staff
Construction Performed By:	General Pump Company, Inc.
Anticipated Start Date:	March 2017
Anticipated Duration:	4 months
Coordination Required With:	▪ RPU Field Forces
Reimbursements:	None

Each well will be assigned a separate work order in order to properly account for the costs attributed to rehabilitating each well. The total capital expenditure for Work Order Nos. 1712389 (Raub 7 Well), 1712675 (Raub 6 Well), 1712676 (Tippecanoe Well), 1712677 (Gage 92-3 Well) and 1712678 (Flume 3 Well) is estimated to be \$1,386,622 as summarized in the following table:

Description	Work Order No.					Total	Percent of Total
	1712389 (Raub 7)	1712675 (Raub 6)	1712676 (Tippecanoe)	1712677 (Gage 92-3)	172678 (Flume 3)		
Design	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$40,000	2.9%
Construction (General Pump Company, Inc.)	\$172,080	\$199,620	\$203,140	\$169,660	\$161,520	\$906,020	65.3%
Construction Contingencies	\$17,208	\$19,962	\$20,314	\$16,966	\$16,152	\$90,602	6.5%
Field Forces Construction Support	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000	3.6%
Hydrogeologist Services	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	1.8%
Construction Management and Engineering Support	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000	5.4%
Inspection	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$200,000	14.5%
<b>Work Order Totals</b>	<b>\$267,288</b>	<b>\$297,582</b>	<b>\$301,454</b>	<b>\$264,626</b>	<b>\$255,672</b>	<b>\$1,386,622</b>	<b>100.0%</b>

RPU’s asset management system allows staff to track the maintenance and operation costs of each asset according to individual work orders. City Charter Section 1202(b) requires the RPU Board to “Authorize, and let public works contracts in compliance with Section 1109, within the limits of the budget of the Department of Public Utilities...any acquisition, construction, improvement, extension, enlargement, diminution, or curtailment of all or any part of any public utility system when the amount exceeds \$50,000 ...” Typically, such approval is reflected by the approval of one work order for the project.

The approval of the FY16/17 Groundwater Well Rehabilitation Project in a total project cost of \$1,386,622 includes individual work orders for each asset for tracking purposes and authorization for the City Manager, or his designee, to approve adjustments to each individual work order within this project to reflect actual costs, with a cumulative amount to not exceed the total project cost of \$1,386,622.

**FISCAL IMPACT:**

Sufficient funds are available in the Public Utilities’ Facility Rehabilitation Account No. 6230000-470803.

Prepared by: Todd L. Jorgenson, Utilities Assistant General Manager/Water  
 Approved by: Girish Balachandran, Utilities General Manager  
 Approved by: John A. Russo, City Manager  
 Approved as to form: Gary G. Geuss, City Attorney

Certifies availability of funds: Laura Chavez-Nomura, Utilities Assistant General Manager/Finance

- Attachments:
1. Bid Recommendation
  2. Presentation

