

# OLYMPIC VALLEY PUBLIC SERVICE DISTRICT



# **Well 3 Rehabilitation Project**

**DATE**: March 26, 2024

**TO:** District Board Members

FROM: Dave Hunt, District Engineer

Alexa Kinsinger, Assistant Engineer

**SUBJECT:** Construction Contract Award to Carson Pump

**BACKGROUND:** Well 3 is one of four domestic water supply wells typically in operation by the District. It was drilled in 1958 and has had several rehabilitation efforts completed. The most recent rehabilitation efforts were in 2014 and 2020. In both instances the pump and motor was replaced, and the well casing thoroughly cleaned through brushing and high pressure jetting. Both rehabilitation efforts were the result of emergency pump failures.

In recent years, the District has pursued a more preventative maintenance approach that budgets for routine well rehabilitation projects rather than emergency responses to pump failures. This approach improves our level of service by extending the useful life of our well equipment through routine maintenance, reducing service outages that result from emergencies, and by proactively budgeting for equipment replacements so we have sufficient funds when needed.

Implementation of the project is part of the Districts preventative maintenance program. Similar rehabilitation efforts have occurred at Wells 1R and 2R in the recent past.

Well rehabilitation is beneficial for several reasons including:

- Improvement of water quality: Over time water supply wells can become clogged, leading to a decrease in water quality. By completing rehabilitation projects, the well is cleaned, resulting in improved water quality.
- Increased well efficiency: Water supply wells that have not been properly
  maintained can experience a decrease in efficiency that can lead to lower
  water production rates and higher operating costs. Rehabilitation projects
  can help to restore well efficiency, resulting in increased water production
  and lower operating costs.
- Extended well life: By completing rehabilitation projects on water supply wells, any damaged or worn-out components can be repaired or replaced,

- thus extending the useful life of the well. Additionally, by completing a planned rehabilitation project that is budgeted for in advance, the District can reduce the likelihood of a more costly emergency well maintenance or replacement project in the future.
- Improved public health and safety: Municipal water supply wells provide drinking water to our customers, and it is essential that the water is free of contaminants. Rehabilitation projects reduce the risk of contamination, thus helping to protect the public health and safety of our customers.

With Well 3 being an older well, the proposed rehabilitation effort is more aggressive. The Well 3 rehabilitation project will include:

- Pump assembly removal and inspection.
- Well pre-rehabilitation video inspection to evaluate existing condition of the well.
- Well rehabilitation and cleaning including chemical treatment and brushing of the well casing to remove fine sediment, any biofilm buildup, and scaling. The Well 3 rehabilitation will include two chemical treatments to help reduce or eliminate discoloration issues.
- Well post-rehabilitation video inspection to document cleaned conditions and ensure successful well rehabilitation prior to reinstallation of the pump.
- Re-installation of existing pump assembly.
- Well disinfection to ensure adequate water quality prior to the well being placed back in service.

**DISCUSSION:** The District's hydrogeologist, UES, prepared detailed project specifications for the project, and staff requested a proposal from Carson Pump, LLC to complete the rehabilitation work. Carson Pump is highly qualified and well revered in the well drilling and rehabilitation business. Additionally, Carson Pump has successfully completed all the District's well rehabilitation and repair efforts over the past 20years and has an excellent relationship with the Operations staff and a comprehensive knowledge of our water system. The District received a proposal from Carson Pump on March 12, 2024 for \$38,600.

> A Notice of Award is expected to be issued on March 26, 2024, with the Notice to Proceed issued after the signed Agreement and insurance are submitted to the District. The Contract Documents specify that the Project shall be completed by June 1, 2024.

Staff is recommending awarding the contract to Carson Pump for the base bid amount of \$38,600. Staff is also recommending approving an additional contingency amount of 15%, or approximately \$6,000, to cover costs which may be incurred due to unforeseen circumstances during construction (e.g. additional onsite storage facilities for discharge water, etc.).

**ALTERNATIVES**: 1. Approve the bid proposal from Carson Pump, LLC and authorize the General Manager to execute all contractual documents.

- 2. Do not approve the proposal from Carson Pump, LLC.
- FISCAL/RESOURCE IMPACTS: The Well 3 Rehabilitation Project will be funded through the Water Operations budget. The FY2024 budget for this project is \$45,000. The base bid of \$38,600, along with the 15% contingency, is within budget.
- **RECOMMENDATIONS**: Approve the bid proposal from Carson Pump, LLC and authorize the General Manager to execute a contract with Carson Pump, LLC. in an amount not to exceed \$38,600, and approve an additional contingency amount not to exceed \$6,000 to cover costs which may be incurred due to unforeseen circumstances during the project.

#### **ATTACHMENTS:**

Bid Proposal – Carson Pump, LLC (March 12, 2024)

DATE PREPARED: March 12, 2024



- Turbine and Submersible Sales & Service
- Complete Well Rehabilitations
- Aquifer Testing Turbine or Submersible

P.O. BOX 20159 CARSON CITY, NV 89721 (775) 888-9926 FAX (775) 888-9928

Alexa Kinsinger, PE Assistant Engineer Olympic Valley Public Service Dist.

March 12th, 2024

Alexa.

We are submitting the completed bid schedule for the 2024 Well 3 Rehabilitation Project. I have included 2 frack tanks in the total cost for item #4. Item #6 includes the use of Cotey Liquid Acid Descaler for 2 complete chemical treatments to the well. This rehabilitation will be pretty much the same as we conducted on Well 2R last year. If any of the equipment that is removed looks like it will need replaced, we will notify you.

Thank you for giving us the opportunity to submit this bid and look forward working with you if we are awarded this bid.

Sincerely,

Dan Trampe

### **BID SCHEDULE**

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Item No.	Description	Estimated Quantity*	Unit	Unit Price	Total Amount
1	Move on and off well sites including all labor, equipment, tools, and materials, including initial mobilization of equipment to Olympic Valley and movement of equipment and materials between well sites	1	LS	S <b>3,800.00</b>	\$ 3,800.00
2	Remove existing pump assembly from well	1	LS	S <b>2,100.00</b>	\$ 2,100.00
3	Pre-rehabilitation video logging of well	1	LS	\$ 1,000.00	\$ 1,000.00
4	Discharge management, collection, and conveyance including frac tank(s) and piping	1	LS	S <b>7,000.00</b>	\$ 7,000.00
<sub>.</sub> 5	Rehabilitation brushing, bailing, swabbing, jetting and descaling prior to chemical treatments	12	HR	S <b>300.00</b>	\$ 3,6000.00
· 6	Chemical treatment including injection, swabbing, reaction time, purging, and post-treatment mechanical development up to 6 hours		LS	S <b>6</b> ,000.00	\$ 12,000.00
7	Post-rehabilitation video logging	1	LS	\$ 1,000.00	\$ 1,000.00
8	Reinstall pump, sanitize well, submit samples to laboratory for coliform bacterial testing	7	ĹS	S <b>4,200.00</b>	\$ 4,200.00
9	Additional development by pumping and surging, including discharge management, and 2-hr constant-rate pumping test	8	HR	\$ 300.00	\$ 2,400.00
10	Connect well back into municipal system and site clean-up.	1	LS	S <b>1,500.00</b>	\$ 1,500.00

TOTAL BASE BID (Items 1-10) PRICE - \$ 38,600.00 (without alternates)

# \$ Thirty eight thousand six hundred dollars and no/100

In Words

## NOTES:

\* Quantities are estimated. Payment will be based on actual quantities furnished, installed, or constructed.

<sup>\*\*</sup> Items described include all labor, equipment, tools, materials, and tasks of work needed to complete the bore hole drilling, well construction, well development, and test pumping as described in these Specifications.

<sup>\*\*\*</sup> Above prices include any amount payable by the Owner for taxes by reason of this Contract.