Valley Water District

14515 Pioneer Way East, Puyallup, WA 98372
Telephone: 253-841-9698 / Fax: 253-770-8959
Email: service@valleywaterdistrict.com

REQUEST FOR PROPOSALS

Buttes Water System – Telemetry and SCADA

Closing Date & Time:
Proposals due by 4:00 p.m. Thursday September 26, 2019

***Site visit will take place on Tuesday September 10, 2019 9:00 a.m. and will begin at the District office.**

NOTICE is hereby given that Valley Water District will receive sealed Proposals at the District's Offices, 14515 Pioneer Way E., Puyallup WA 98372 ("District Office"), for the project described below pursuant to RCW 39.04.270 Competitive Negotiation.

The District desires a new Comprehensive Telemetry and SCADA System at our Buttes location. The District is requesting Proposals for design, build and install for scope of work as described below:

General Scope:

- The Buttes system has (3) separate sites which must be integrated via SCADA to ensure a complete operational system. The existing SCADA system will communicate with the Buttes system via a cellular modem connection. SCADA system programming will be provided by the District's integrator. All programming for the Buttes system PLCs and operator interface terminals will be provided by the proposer.

- The SCADA system should be able to call the (2) well pumps on as needed based on demand from the existing storage tank at the booster station. The wells will need to modulate their combined flow during backwash cycles to achieve a given flow rate.

- The SCADA system will need to monitor and regulate the existing ATEC filtration system and be programmable to allow for onsite operator changes. The new PLC system will replace the existing ATEC hard-wired controls.

- Tank levels, well levels, various pressures throughout the system must be monitored and controlled.

- 2 booster pumps at the booster/treatment station that must be controlled and monitored.

- Ensure that all new electric circuits are properly labeled for ease of operation by system operator.

- Ensure all new flow meters/display heads, pressure transducer/transmitter readouts are and other like displays are adequately identified via label (preferably phenolic).

- The storage tank site will need power installed onsite and level monitoring. Provide MillBank Power Center CP3B11115A22 or equal. PSE utility connection fees will be paid directly by the District. All permits and coordination will be provided by the Proposer. Provide all concrete mounting pads as required.

- Both well and booster/treatment sites will need their generators to be monitored, intrusion alarms, smoke detectors and flood switches.

- Exterior lighting and circuit on all 4 exterior walls to be installed at the booster/treatment station and additional lighting added inside the building (District has already replaced 1 faulty light and added an additional light. Proposer will need to replace (3) existing lights and add (3) more lights of matching kind as the new LED lights that were added) Provide additional lighting panel circuit breakers as required. Install a light pole with light and circuit at the reservoir site, location to be determined.

- Two additional GFCI receptacles to be installed in the well building. Provide additional lighting panel circuit breakers as required

- Will need at least (3) GFCI receptacles added inside the booster storage building (currently only (1) outlet exists for the entire building.

- Will need to abandon the existing plywood panel mounted in the center of the pump station building and move any necessary electrical equipment to a central location where all flow meter and monitoring data can be accessed by the operator.

- Proposer will need to provide all the required devices listed below, with the exception of the backwash discharge flowmeter, which we previously purchased but did not install. Mechanical installation of the flowmeters, electric valve, and analyzers will be provided by the District. All other devices are to be installed by the Proposer. All electrical installation and wiring is to be provided by the Proposer.

  Buttes Well Site
  - Well System Flowmeter, 6” with Grounding Rings, Siemens 5100W or equal
  - Well Discharge Pressure Transmitter, Foxboro IGP with LCD display or equal
  - Well Level Transmitter, Druck PTX1830 or equal
  - Building Flood Switch
  - Building Smoke Detector
  - Intrusion alarm for well building.
  - Generator status/alarms

Buttes Booster/Treatment Site

- Influent Flowmeter, 6" with Grounding Rings, Siemens 5100W or equal
- Effluent Flowmeter, 6" with Grounding Rings, Siemens 5100W or equal
- Backwash Discharge Flowmeter, 3" with Grounding Rings (Supplied by District)
- Filter Inlet Pressure Transmitter, Foxboro IGP with LCD display or equal
- Filter Outlet Pressure Transmitter, Foxboro IGP with LCD display or equal
- Tank Level Transmitter, Druck PTX1830 or equal
- Tank Level Float Switches (Quantity-2)
- Water Quality Analyzer, Chlorine & pH, Swan Analytical AMI Trides Compact
- Turbidity Analyzer, Swan Analytical AMI Turbiwell 7027
- Building Flood Switch (Quantity-2)
- Building Smoke Detector (Quantity-2)
- Building Door Intrusion Switch (Quantity-3)Tank Hatch Intrusion Switch
- 6" Electric Valve, Valworx 56726A (or similiar) Automated 6" butterfly actuator valve on ATEC effluent. AUMA brand has been used in the past as well as ROTORK.
- District may need to install cathodic protection on the storage tank at this site. (will need input from Lance at G&O)
- Will need to provide flow pacing circuit to existing chlorine chemical pumps to enable them to regulate themselves based on inputs received from water quality analyzers.
- Include monitoring alarm for existing fire sprinkler system. System currently has a bell on the exterior of the pump house.
- Remove and abandon existing emergency light and alarm horn mounted on exterior of building (currently configured to notify nearby residents of emergency visually and audibly)

Buttes Storage Tank Site

- Pressure transmitter installed at the bottom of the tank with heat trace tape. There is currently a hose bib installed which could be converted for this application.
- Tank Hatch Intrusion Switch

<u>PLC Control Panels</u>

- All control panels will be UL-508A listed. Panels in indoor locations will be NEMA-12 rated. Storage Tank PLC panel will be NEMA-4X rated for outdoor location with internal heater.
- PLC will be Allen-Bradley CompactLogix 5370-L3 series at the Booster/Treatment site and CompactLogix 5370-L2 series at the Well and Storage Tank sites. Provide a minimum of 10% spare I-O of each type wired to field terminal blocks.
- PLC control panels will include DC-UPS systems to provide a minimum of 1-hour backup runtime at Well and Booster/Treatment sites and a minimum of 4-hours backup runtime at the Storage Tank site. (generator at storage tank may need longer run time, to be determined with District and contractor)

- Provide PanelView Plus 7 operator interface terminal (OIT) with 7" touchscreen at the Booster/Treatment site. Provide programming for status and alarm information and control and alarm setpoints for all 3 Buttes sites from this OIT.
- Provide cellular modem and antenna at the Booster/Treatment site for communication to the District SCADA system. Provide radios, antennas and antenna masts for communication and control between the 3 Buttes system locations.

Technical questions will only be accepted via email at service@valleywaterdistrict.com and must be submitted no later than 10 days prior to the deadline for RFP responses. Changes and updates to the RFP with all questions and answers will be posted on the webpage above by September 16, 2019 at 4:00 p.m.

Proposal Must Include:

- Describe how the project will be approached. Key components.
- Demonstrate clear understanding of the project elements to include special ideas, technologies or suggestions to the planning process
- Submit estimated work schedule and anticipated completion date (given anticipated contract award date of October 1. 2019.)
- Provide list of qualifications of project lead and list of anticipated sub-contractors.
- Demonstrate company's qualifications and ability to successfully complete this project.
- Provide at minimum 3 references from similar projects
- Submit Estimated project cost (include hourly rate schedule for anticipated job categories associated with this project)

Selection Criteria:
This is a competitive negotiation process in accordance with RCW 39.04.270. The District will consider all the evaluation information obtained during the competitive negotiation process, and the District will consider the following significant evaluation factors (Each evaluation criteria will be rated on a scale of 1-10):

- The Proposer's ability to comply with the project specifications and scope of work.
- Familiarity with the Districts existing telemetry systems and software.
- Demonstrated proof that the Proposer, using its own employees or qualified subcontractors, is registered and certified in the design and installation of the product with sufficient training to adequately complete the project to the District's specifications.
- The Proposer's time frame and schedule for completing the project.
- The Proposer's Qualification Statement, specifically including, without limitation, prior experience on the same or similar projects, and references obtained from other project owners.
- Total proposal cost.

Although these are significant evaluation factors, the District reserves its unqualified right, without limitation, to consider any and all other factors that may significantly impact the project.

The District's technical evaluation team will review all submitted proposals based on the above criteria. The District's technical evaluation team will evaluate the proposals, and in the event of no clear selection, may elect to hold interviews of the two or three leading candidates regarding the candidates' ability to successfully complete the project. After receiving and reviewing the information provided during the evaluation process, the District will select the proposal that is most advantageous to the District with price and other pertinent factors considered.

The District reserves the right to reject any proposal that does not, in the District's opinion, meet the District's project requirements. Further, the District reserves the right to reject all proposals.

No proposer may withdraw its proposal for a period of ninety (90) days after the date of the proposal submittal.

Thank you
Valley Water District

Sean Vance
General Manager