



## **VENTURA RIVER WATER DISTRICT REQUEST FOR PROPOSALS (RFP) FOR SCADA Integrator**

### **PROJECT DESCRIPTION**

The Ventura River Water District (VRWD) is soliciting a Request for Proposal (RFP) for services of a SCADA Integrator. The District has 4 wells, two pump stations, one chlorination station and three water reservoirs managed by the SCADA system. The facilities are located at three different sites connected by radios.

The current SCADA system uses ClearSCADA with SCADAPack 350 E and 334 controllers by Schneider Electric. For alarms the District uses Win911 to place phone calls to the water operators. Communication between the three separate sites is accomplished via Trio ER45e spread spectrum radios by Schneider Electric. LogMeln is used to modify the SCADA system remotely.

The District typically spends about \$20,000 to \$30,000 per year for maintenance and upgrades to the SCADA system.

### **SCOPE OF WORK**

The selected firm shall provide various professional services, including, but not limited to, system integration, consulting, design, preparing reports, investigations and recommendations, providing after-hours, on-site, and remote service and installation for the maintenance and necessary upgrades of the SCADA and related systems. In general, the work shall include, but not be limited to, the following:

- Under general supervision, perform rehabilitation, modifications, and any necessary upgrades to the District's SCADA System. The existing SCADA System consists of SCADAPack PLC's equipment. The control software used by the District is ClearSCADA. The communications media is via Trio ER45e spread spectrum radios by Schneider Electric.
- Maintain records and prepare reports on modifications and necessary upgrades. Promptly provide user names and passwords to the District when ever they are established for SCADA system activities.
- Rehabilitation, modifications, panel build, material and upgrades of RTU's and PLC's; will include replacing power supplies, radios, CPU's, I/O systems, and alarms. Maintenance, installation, modifications, maintenance and repair of radio systems.
- Be available 24-7-365 for emergency support when there are SCADA system malfunctions.

## **SPECIAL PROJECTS FOR 2020 & 2021**

### Well #1 Water Level Sounding Device

The District has purchased and installed an EnoScientific Well Watch 700-710 Controller with 730 Probe. Wires have been pulled from Well #1 to the Baldwin Booster Station SCADA cabinet to serve the Well Watch and the existing water meter on Well #1. The SCADA integrator needs to:

- a. Connect the wires at Well #1 to the Well Watch for communication and power for the Well Watch.
- b. Connect the wires to the SCADA panel in the Baldwin Booster Station.
- c. Incorporate the Well Watch data into the SCADA system and provide a new chart showing the Well #1 groundwater levels. The window for the Chart should show about a 3-month period of water levels and enable the user to scroll back in time to review older water level data.

### Programing to Optimize Battery Operations

By the end of 2020 the District will have Tesla batteries installed at the Baldwin and Parker pump stations. The batteries will be capable of operating two pumps simultaneously for up to 4 hours at each pump station. The batteries will be charged at night on the lowest cost electricity and used at other times when electricity is more expensive and especially during the peak afternoon hours if pumping is needed.

- a. Describe how you would modify pumping schedules and SCADA programing to maximize the cost savings and full utilization of the batteries.
- b. Provide the cost to implement your proposed programing.

### Programing to Spread Pumping Over 24 Hours Per Day

The District is considering changing one of the three fixed booster pumps at each pump station to a VFD so that the rate of pumping can be slowed and pumping spread throughout the day during most days of the year. Reducing the pumping rate reduces the head pressure and lowers the demand charge from Edison. Describe how you would modify pumping schedules and SCADA programing to enable pumping 24 hours per day.

- a. Provide the cost to implement programing to spread pumping over 24 hours per day.

### Anticipated Future Projects for 2021/22

1. In late 2021 the District is planning to install new electrical panels, VFD's and pumps at Well #2, #3 and #4. The existing safety measures for these wells need to be reestablished with the new installations. Each well will have a water level

sounding device (no level sounding is included at present) and the output needs to be incorporated into the SCADA system.

When this work is performed the District will request the integrator to provide a cost proposal to implement this work.

2. When the existing SCADA hardware ages out in 5 to 10 years the District is anticipating moving to cloud service on-line.

## **PROPOSAL REQUIREMENTS**

The Proposal shall include:

1. A statement of qualifications for the staff proposed to work on this project.
2. A description of the Integrator's experience working with ClearSCADA and Win911
3. A current reference list with contact names and phone numbers.
4. A description of how you would modify the SCADA programming to maximize the use of the batteries to lower the District's energy cost.
5. A description of how you would modify the SCADA programming to enable pumping 24 hours per day.
6. A description of the company's ability to transition a SCADA system to a cloud based SCADA system

## **SCHEDULE**

Cost Proposals Due to VRWD	November 25, 2020
Interviews of short listed firms	Week of December 7 <sup>th</sup>
Award of Professional Services Contract	December 16, 2020

### **COST PROPOSAL**

Minor day to day activities will be paid at the rates proposed in the proposal and as adjusted annually. These activities will typically cost less than \$2,000 to implement.

Special tasks typically greater than \$2,000 will be guided by a written request for proposal from the District and a written proposal provided by the SCADA integrator. Larger projects may require approval by the Board of Directors.

<b>PROPOSAL SCADA RFP - 2020</b>		
<b>ITEM No.</b>	<b>DESCRIPTION</b>	<b>COST</b>
1	Well #1 Water Level Sounding Device Activation	
2	Programing to Optimize Battery Operations	
3	Programing to spread pumping over 24 hours per day	
4	SCADA Integrator Regular Hourly Rate	
5	SCADA Integrator After Hour Hourly Rate	
6	Travel cost per mile	

COMPLETED Cost Proposals must be in the VRWD Office at 409 Old Baldwin Road Ojai, California by 4 p.m. on Wednesday November 25, 2020 to be considered.

E-mail submittals preferred to: [Bert@VenturaRiverWD.com](mailto:Bert@VenturaRiverWD.com)

### **DISTRICT CONTACT INFORMATION**

Ventura River Water District      Phone: (805) 646-3403  
409 Old Baldwin Rd                      Website: [www.VenturaRiverWD.com](http://www.VenturaRiverWD.com)  
Ojai, CA 93023

Office Hours: 7:30 am – 4:30 pm Monday thru Friday

#### Primary Contact

Bert Rapp, General Manager,

Cell Phone: (805) 340-7263,

E-mail: [Bert@VenturaRiverWD.com](mailto:Bert@VenturaRiverWD.com)

### FACILITY DESCRIPTION

The Ventura River Water District serves 2,100 customers in the Ojai Valley from Casitas Springs to west end of the City of Ojai.

### VENTURA RIVER WATER DISTRICT FACILITIES



