### **RESOLUTION 2024-03**

# ST. VRAIN WATER AUTHORITY

## BOULDER, LARIMER, AND WELD COUNTIES, COLORADO

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE ST. VRAIN WATER AUTHORITY APPROVING AN AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN THE ST. VRAIN WATER AUTHORITY AND AUTOMATION & ELECTRONICS, INC.

**WHEREAS**, the Board of Directors ("Board") of the St. Vrain Water Authority ("Authority") has the power and authority pursuant to its Establishing Agreement and C.R.S. 29-1-204.2 *et. seq.*, to enter into contracts and agreements effecting the affairs of the Authority; and

WHEREAS, the Authority will be operating a reverse osmosis water treatment plant, deep injection well, and related facilities ("Water Treatment Facilities"); and

WHEREAS, the Authority has requested and received a Work Order from Automation & Electronics, Inc., a Wyoming corporation ("A&E") to perform Injection Well Annulus Pressure Gage, Trend Logging and Pump Train Queuing work ("Services") in the Water Treatment Facilities; and

WHEREAS, the Authority has been presented with the Work Order for the Services ("Work Order") whereby A&E will provide the Services which is acceptable to the Authority; and

WHEREAS, the Authority's Board, after reviewing A&E Work Order, desires to authorize the Services with A&E in the Water Treatment Facilities.

**NOW, THEREFORE, BE IT RESOLVED BY** the Board of Directors of the St. Vrain Water Authority that:

1. <u>Approval of Agreement</u>. The Work Order between the Authority and A&E in substantially the form attached hereto as Exhibit 1 is hereby approved. The Authority's President and Secretary, or if one or both of them are unavailable, any other appropriate officer of the Authority is hereby authorized to approve the Services by and on behalf of the Authority.

PASSED, APPROVED AND ADOPTED this 8<sup>th</sup> day of January, 2024 by the Board of Directors of the St. Vrain Water Authority by a vote of \_3\_\_\_ FOR and \_\_\_\_ AGAINST.

ST. VRAIN WATER AUTHORITY

By: on one

Don Conyac, Treasurer

Attest:

Dave Lindsay, Secretary





## **Injection Well Annulus Pressure Gage**

• There is a Rosemount digital pressure gage on the well head that measures Annulus pressure. It shows up on the PLC Pannel as PIT-2000, but it does not ever show any pressure other than 0.0 psig. I can read it manually at the well head and the digital display shows a pressure (Usually ranges from 0-8 psig). We need the PLC Pannel to read the actual pressure. Also, we would like the panel to display this as "Annulus".

Cost = \$432.00 labor + travel expenses

#### Trend Logging

- Related to the log discussed above, we would like the system to maintain a trend log for all of those pressure gages.
- We think the system is already maintaining a trend log of the totalizing meter volumes on each train but we would also like it to maintain a trend of the flow rates on both pump trains.

Cost = \$432.00 labor + travel expenses

#### **Pump Train Queuing**

- We use minimum and maximum brine tank levels to automate the pumps activating.
  Right now, the system is set up so that only one pump train is set to respond to the level
  sensors and the operator changes that manually on the PLC monthly so we exercise
  both trains. I would like to enhance the programming so that:
  - High Level is reached and starts Lead Train
  - After 30 minutes, if the tanks are not drawn to the Low Level, Lag Train starts.
  - When Low Level is reached, both Trains stop.
  - When High Level is reached, I want the Lead Train to automatically alternate between Train 1 and Train 2 each cycle.
  - If either Train is inoperative or fails to start, the operable train becomes and remains Lead Train until operator re-sets the fault or "down for maintenance" conditions.

Cost = \$720.00 labor + travel expenses

Total estimated cost of WO 2024-01 = \$1,584.00 labor + travel expenses to/from Casper, WY