MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2025-199
Item to be Scouted	BABA Compliant Submersible Well Pump Components
Days to be scouted	21
Response Due By	07/09/2025
Description	United States manufacturers of BABAA-compliant Submersible Well Pump System Components (i.e. submersible well pump, stainless steel check valve, pitless adapter, submersible pump cable, bladder type hydro-pneumatic tank

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	Re-shore
Describe the manufacturing processes (elaborate to provide as much detail as possible)	Electronic / Electric / Mechanical Assembly
Provide dimensions / size / tolerances / performance specifications for the item	See attached project specification.
List required materials needed to make the product, including materials of product components	Stainless Steel, and additional components as indicated in the attached specification document
Are there applicable certification requirements?	No
Are there applicable regulations?	Yes
Details	Needs to comply with Build America, Buy America Act, ASME, ANSI, AWWA, NEC, NEMA, and ASTM.
Are there any other stndards, requirements, etc.?	No
Additional Technical Comments	Domestic components in each of the BABAA compliant manufactured products must exceed 55% of the total component cost and be assembled in the United States. See attached project specification. Manufacturers shall specialize and have experience in the manufacturing of the designated component. Basis of Design for the submersible well pump is J-Class Tri-Seal. Basis of Design for Stainless Steel Check Valve is Flomatic. Basis of Design for Hydro-Pneumatic Tank is Amtrol-WX-350. Basis of Design for the pitless adapter is Baker Manufacturing. Basis of Design for Air Conditioning for Panel Enclosure is Ice Qube. Basis of Design for Panel is Franklin Sub Monitor. Basis of Design for Well Pump Pressure switch is Square D 9013GH. Pump shall connect to 2-inch HDPE drop pipe that has a 2-inch Stainless Steel check valve above the pump and capable of being connected to a 4-inch pitless adapter.

Section 4: Business Information

Estimated potential business volume	One submersible well pump system for Wastewater Treatment plant project.
Estimated target price / unit cost information (if unavailable explain)	Best available, as this is related to BABA, acceptable pricing is to be determined in negotiation.
When is it needed by?	Delivery in 2025
Describe packaging requirements	Pallet
Where will this item be shipped?	Loysville PA

Additional Comments

Is there other information you would like to include?	Agency providing the funda U.S. Department of Agriculture. For all BABA related questions please contact: Theodore Kozak theodore.kozak@chickasaw.com

SECTION 110312 – WELL WATER PUMPING SYSTEM

2. PRODUCTS

2.1 WELL PUMP (WP-1)

A. Manufacturers:

1. Basis of Design: J-Class Tri-Seal 3 HP

2. Or Engineer Approved Equal

2.2 GENERAL

A. Pump shall be rated for 36 GPM @ 175 TDH, 3 HP, 460-3-60.

B. Provide 2" Stainless Steel check valve above the pump as manufactured by Flomatic, or Engineer Approved Equal.

C. Provide 2" HDPE drop piping.

D. Provide **4"** pitless adapter as manufactured by Baker Manufacturing Co. or Engineer Approved Equal.

2.3 SUBMERSIBLE PUMP CABLE

A. The power cable shall be sized such that the voltage drop will not exceed 5% from the power source to the motor's terminals, at the motor full load current and voltage.

B. Cable shall be three (3) power conductors and one (1) ground jacketed, and all four (4) included in a single, flat outer jacket. The conductor insulation shall be water and oil resistant, suitable for continuous immersion.

C. The cable shall be securely strapped to the column pipe by corrosion-resistant bands every 10 Ft. of pipe.

D. A continuous length of cable, without splicers from the motor leads to the surface shall be provided.

E. The splice of the motor leads shall be watertight at the pressure encountered in the application.

F. The minimum cable size shall be 10-3 with ground.

G. Provide 75 ft. of cable to WPCP.

2.4 BLADDER TYPE HYDRO-PNEUMATIC TANK

A. Manufacturers:

1. Basis of Design: Amtrol WX-350

2. Engineer approved equal

2.5 GENERAL

A. Furnish and install, as shown on plans, a 119 gallon 26” diameter X 62” (high) pre-charged steel hydro-pneumatic tank with replaceable heavy-duty butyl bladder suitable for a pump flow (10-80 gpm) with 60 psig cut-in and 80 psig cut-out pressure. The tank shall have 1-1/4” NPTM bottom mounted stainless steel system connection and a 0.302”-32 charging valve connection (standard tire valve) to facilitate the on-site charging of the tank to meet system requirements. The tank must be coated with a gray exterior primer finish.

2.6 WELL PUMP CONTROL PANEL (WPCP)

A. Nema 4/12 combination starter control panel with single point 460-3-60 power input for simplex pump operation of a submersible potable well water pump with a FVNR starter with pressure switch control.

B. Control panel shall be single door for wall mounting with a minimum depth of 12-inches sized to adequate house all the components including, but not limited to the following:

1. Nema 4/12 painted steel plain enclosure.
2. Lever type disconnect.
3. Nema 4X face panel devices
4. 30 mm HOA switch and LED push to test red, yellow, and green lights.
5. Backplane panel – 12-gauge steel with one primer coat and two white enamel coats.
6. DIN rail-mounted hardware.
7. Power distribution block
8. Ground bar
9. TVSS / SPD arrestor
10. 3-pole pump circuit breaker with adjustable O. L’s
11. Nema rated FVNR starter contactor with auxiliary relays.
12. Multitap transformer for 120 VAC loads

13. 120-volt circuit breakers

14. Pump motor protection DIN rail mounted system for 3-phase motors monitoring and records overloads, underloads, overvoltage, undervoltage, unbalanced currents, phase loss, chattering contacts, and phase reversal with door panel LCD display. Franklin Sub Monitor or engineer approved equal.

15. Well pump pressure switch 60/80 field set for 50# cut-in and 70# cut-out. Square D 9013GH or Engineer approved equal.

16. Mechanical elapse run timer meter.

17. AC and DC auxiliary contacts

18. Interposing isolation relays

19. Auxiliary SCADA dry contacts – Pump running, Subtrol common alarm, and HOA switch in Auto.

20. ID tags – white with black letters

21. Fuses and holders

22. White Panduit-type wireways

23. UL 508 A construction, label, and approval

C. Environmental Sustainability:
1. All indoor and outdoor panels and instrument enclosures shall be suitable for operation in the ambient conditions associated with the locations designated in the Contract Documents.
2. Unless specified otherwise, heating, cooling and dehumidifying devices shall be provided in order to maintain all instrumentation components to within a range equal to 20 percent above the minimum and 20 percent below the maximum of the rated environmental operating ranges. All required power wiring and temperature controls shall be provided for these devices.
3. Enclosures suitable for the designated environment shall be furnished.
4. All control panels and instrumentation enclosures in hazardous areas shall be suitable for use in the particular hazardous or classified location in which it is to be installed.
D. Enclosure Heating and Ventilation
1. Space heaters shall be provided to prevent condensation. Space heaters shall operate on 120 V, 60 Hz power. Adjustable line voltage thermostats shall be provided for controlling the space heaters.
2. Non-forced air and forced air ventilation cooling shall be provided as required to maintain the required temperature of the housed equipment. Forced air ventilation shall be provided with supply fans mounted at the bottom of each enclosure section. The bottom door fans shall force fresh air into the enclosure to create a positive internal air pressure; and thereby, forcing out dirt and contaminants, and moving warm air out through ventilation louvers mounted at

the top of the doors. A line voltage thermostat shall control the fans based on the panel internal temperature. Door interlock switches shall be provided to turn the fans off when the door is opened.
3. Supply fans shall be provided with air intake openings equipped with fixed louvers and washable aluminum mesh filters. Ventilation air shall be exhausted through fixed, louvered openings equipped with washable aluminum mesh filters. Air supply and exhaust openings shall be sized by the control panel Manufacturer for the air flow required to maintain the proper inside temperature. All air filters shall be provided with interior door-mounted frames allowing easy removal for cleaning.
4. Where necessary or where specified elsewhere, control panels shall be provided with air conditioning to maintain the required temperature for the housed equipment. Control panel air conditioning units shall be provided in accordance with the following requirements:
a. The air conditioning system shall provide closed-loop cooling and shall be sized by the control panel manufacturer based on: heat generated from all panel equipment and auxiliary components operating at full rated capacity, and said equipment operating under maximum ambient temperature conditions.
b. Unless specified otherwise, air conditioning unit shall operate on 115 V or 230 V, single phase, 60 hertz power supplied by the control panel.
c. Air conditioning unit shall be provided with 16-gauge (minimum) welded steel framework, an efficient and quiet rotary compressor, built-in condensate evaporator, HFC environment friendly refrigerant, and additional corrosion protection for all aluminum, copper, and ferrous metal surfaces.

2.7 WELL PUMP CONTROL PANEL (WPCP) SEQUENCE OF OPERATION

d. Air conditioning units for indoor control panels shall be furnished with built-in digital temperature controllers. Air conditioning units for outdoor control panels shall be furnished with remote temperature controllers mounted inside the control panel enclosure in an accessible and visible location.

e. Unless indicated otherwise on the Drawings, the air conditioning unit shall be designed to mount on the side of the control panel enclosure, will not impact the panel's NEMA rating, and shall be furnished with a gasket kit at the interface between the enclosure and air conditioner. Air conditioning units mounted to NEMA Type 4X stainless steel enclosures shall be constructed of stainless steel.

f. Air conditioning unit shall be constructed to allow easy access for maintenance, including easy pull-out air filters. A minimum of three (3) spare replacement air filters shall be provided with each air conditioning unit.

g. Air conditioner units shall be UL listed, and shall be as manufactured by Ice Qube, Inc., or Engineer Approved equal.

h. Control power transformers with primary and secondary fuse protection shall be provided as required for proper operation of the enclosure heating and ventilating equipment, unless Drawings show otherwise. Supply voltage shall be 120 VAC and 60 Hz. Separate line voltage thermostats shall be provided for heating and cooling.

A. Operator shall be able to control the Well Pump (WP-1) operation by using the physical H-O-A switch on the WPCP.

1. With an H-O-A switch in the “OFF” position, the pump shall be shut down and locked out from WPCP control.

2. With an H-O-A switch in the “HAND” position, the pump shall be started to run constantly.

3. With an H-O-A switch in the “AUTO” position, the pump shall be controlled via WPCP, and the pressure switch PS-501.

a. The pump shall start to run when the pressure in the tank falls below the Pressure Setpoint.

b. The pump shall stop running when the pressure in the tank reaches the Pressure Setpoint.

4. Pump status and alarms, pressure setpoint condition, and position of the HOA switch shall be transferred to PCP-101.

5. Pump shall restart automatically as follows:

a. After a normal power failure and a 10-second time delay when the generator run signal is received.

b. After normal power is restored.