

ADDENDUM #1 RFB #23-0058 2 EA. SLIP-IN PUMP & TANK UNITS

September 8, 2023

The following is to ensure that vendors have complete information prior to submitting a bid. Here are some clarifications regarding the bid for two (2) Slip-In Pump & Tank Units.

Questions and/or statements of clarification are in **bold** font, and answers to specific questions are *italicized*.

1. The information for the Foam System (pages 5 & 6) in the original RFB was incorrect. Please find the correct information below.

The skid unit shall be equipped with a Waterous Aquis 1.5M fully electronic, variable speed direct injection, and discharge side foam proportioning system. The system shall be capable of handling Class A foam concentrate. The foam system shall be based on direct measurement of water flows and remain consistent within the specified flows and pressures. System must be capable of delivering accuracy to within 3% of calibrated settings over the advertised operation range when installed to factory standards. The system shall be equipped with a control module suitable for installation on the pump panel. Incorporated within the motor driver shall be a microprocessor that receives input from the system flow-meter, while also monitoring foam concentrate pump output, comparing values to ensure that the operator preset proportional amount of foam is injected into the discharge side of the pump. A paddlewheel type flow-meter shall be installed in the dis-charge system specified to be foam capable.

Foam Pump Consists of an electric motor, positive displacement triplex plunger pump and control box mounted on a bracket. Electric Motor: 1/3 HP (.25 kW) 12 or 24 volt. Protected with an electrical load circuit breaker of 80 amps for 12 VDC and 50 amps for 24 VDC. Pump Rating: 1.5 GPM @ 150 psi (5.68 L/min @ 10 bar) with intermittent operating pressures up to 450 psi (31 bar). Pump Construction: Equipped with an anodized aluminum crankcase, oversized ball bearings, forged brass pump body and manifold, solid ceramic plungers, stainless steel inlet and delivery valves and piston guides. Buna packing and preset pressure regulating valve. Control Box: Microprocessor Controller: A 16-bit mixed signal microcontroller with a 60 kB flash memory, 2kB RAM and 12-bit analog to digital convertor. Receives flowmeter flow rate and operator specifications through the OIT and provides the necessary voltage to the pump motor driver. Pump Motor Driver: Receives signals from the microprocessor controller and powers the electric motor in a variable speed duty cycle to ensure the correct amount of foam concentrate set by the operator is injected into the water stream.

Operator Interface Terminal (OIT) Manual Operation Installed on the pump operator's panel and provides the following functions: Rotary dial control of foam proportioning rates: Class A concentrate: .1% to 1% in infinite increments. Class B concentrate: Not available Calibration of water flow rate. Warning of low foam concentrate supply: Flashes and the displays a steady "low concentrate" warning when the concentrate tank runs low. Note that system will shut down after two minutes. Flashes a "no concentrate" warning when the concentrate tank is empty. Warning of an electronic malfunction, flashes an error warning. OIT Panel includes operation instructions. Remote Activation Allows Foam Pump to be activated from an external 12 or 24 volt electrical source such as pump-in gear circuit or engine ignition power which eliminates a step in the foam system operation sequence. Flowmeter and Tee Installed in the water line from the fire pump. Consists of a paddlewheel type flowmeter installed a brass tee which communicates water flow rate to the microprocessor in the foam pump control box. The brass tees have an external Victaulic groove connection and internal female NPT connection on each end and are available in the following sizes: 1.50 in. Inside Diameter (300 GPM / 1135 L/min) 2.00 in. Inside Diameter (500 GPM / 1893 L/min) 2.50 in. Inside Diameter (750 GPM / 2800 L/min) 3.00 in. Inside Diameter (1250 GPM / 4700 L/min) Cables and Wires Separate industry standard M12 connectors for connection of OIT and flowmeter to foam pump control box. Consists of shielded cables to prevent radio frequency or electro-mechanical interference. Furnished as follows: OIT connection to control box: 6 meters long Flowmeter connection to control box: 3 meters long Foam concentrate tank level switch to foam pump control box: 4 meters long Note that foam tank level switches are optional from Waterous Foam Concentrate Supply Line Strainer Installed in the foam concentrate supply line and screens out any concentrate contamination which may harm the foam pump. Consists of a 3/4 in. inline wye type brass strainer with a removable screen. Foam Concentrate Inject Line Check Valve Installed in the foam concentrate inject line and prevents water from flowing back into the foam pump. Consists of a 3/8 in. inline brass and stainless steel check valve. Warranty All systems have a one-year limited manufacturer's warranty. Foam System Support AQUIS is equipped with a USB interface for PC-connectivity which allows a qualified technician to perform upgrades, diagnostics and monitor system functions in real time. The system can also be remotely monitored through the USB interface using any PC with internet access, allowing technicians to easily connect to the Waterous dedicated website to assure proper operation and to update the foam system hardware by uploading new features and functions as they become available.

Firms interested in submitting a bid, must respond with complete information and **deliver on or before 1:45 pm**, **September 26, 2023.** Late bids will not be accepted and will not receive consideration for final award.

"PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE BID RESPONSE PAGE."

Sincerely,

Sitt Route

Britt Rosencutter Purchasing Agent

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