

May 21, 2025

Invitation for SEALED BID:

Please quote price and delivery on the enclosed specified materials by Thursday June 12, 2025 by 2:00 p.m. central time. If additional information is needed please contact Jerry Schrader at the City of Millersville, (615)859-0880.

Competitive quotation may be hand carried or delivered by any authorized letter Carrier service.

All bids must be sealed and should be addressed as follows:

City of Millersville
1246 Louisville Hwy.
Millersville, TN. 37072
Attn: Jerry Schrader

Envelope must be clearly marked on the outside as follows:

SEALED BIDS-GRINDER PUMP

TIME: _____

BID DATE: _____

All prices must be quoted FOB Millersville, TN. 37072, if delivery is not stated, price will not be considered. Provide bid on a per unit including capacitor kit basis for lots of 10. No guarantee on how many units to be purchased in a 12 month period. Bid price must be honored for a period of no less than One year.

Vendor must quote as above, but may also quote alternative unit pricing for different lot Quantities and/or programs that may be considered by the City of Millersville if advantageous.

Warranty will be for (12) twelve months. Warranty Performance Certification must accompany bid. Bid without complete Certification will be considered Non-Responsive.

City of Millersville has the right to accept or decline any bid that is not beneficial for the City.

Contract can be extended if both parties agree.

Myers Pump WGL/20-21
Myers V-Series Pump

SECTION: GRINDER PUMP

1.01 GENERAL DESCRIPTION: The MANUFACTURER shall furnish complete factory-built and tested grinder pump unit(s), each consisting of a grinder pump suitably mounted on an integral stand of stainless steel, electrical quick disconnect (NEMA 6P), pump removal harness, discharge assembly and necessary internal wiring and controls.

1.02 EXPERIENCE CLAUSE: The equipment furnished hereunder shall be the product of a company experienced in the design and manufacture of grinder pumps specifically designed for use in low pressure systems. All manufacturers proposing equipment for this project shall have at least ten (10) years of experience in the design and manufacture of units of identical size(s) and performance to the specified units. All manufacturers proposing equipment for this project must also have not less than five hundred (500) successful installations of low pressure sewer systems utilizing grinder pumps of like type to the grinder pumps specified herein. An installation is defined as a minimum of twenty-five (25) pumps discharging into a common force main which forms a low pressure sewer system.

1.03 OPERATING CONDITIONS: The pumps shall be capable of delivering 15 GPM against a rated total dynamic head of 0 feet (0 PSIG) and 9 GPM against a rated total dynamic head of 138 feet (60 PSIG). The pump(s) must also be capable of operating at negative total dynamic head without overloading the motor(s). Under no conditions shall in-line piping or valving be allowed to create a false apparent head.

1.04 WARRANTY: The grinder pump MANUFACTURER shall provide a part(s) and Labor warranty on the complete station and accessories, including, but not limited to, panel and redundant check valve, for a period of sixty (60) months after installation, but no greater than sixty-five (65) months after receipt of shipment. Any manufacturing defects found during the warranty period will be reported to the MANUFACTURER by the OWNER and will be corrected by the MANUFACTURER at no cost to the OWNER.

1.05 WARRANTY PERFORMANCE CERTIFICATION: As a bid certification requirement, each bidder shall provide with their bid schedule a Warranty Performance Certification statement executed by the most senior executive officer of the grinder pump MANUFACTURER, which certifies a minimum of a twelve (60) month warranty. They must further detail any exclusion from the warranty or additional labor and shipping fees, and certify that the MANUFACTURER will bear all costs to correct any original equipment deficiency for the effective period of the warranty. All preventive maintenance type requirements shall be included in this form as exclusions. These requirements include, but are not limited to, un-jamming of grinder mechanism, unplugging of lines, periodic motor maintenance, and periodic cleaning of liquid level controls. A Warranty Performance Certification form is included with the bid schedule and must be complete and submitted as part of the bid package. Bids with incomplete forms or missing forms will be considered non-responsive.

2.00 PRODUCT:

2.01 PUMP: The pump shall be a custom designed, integral vertical rotor, motor driven, solids handling pump with mechanical seal.

2.02 GRINDER: The grinder shall be placed immediately below the pumping elements and shall be direct driven by a single, one-piece stainless steel motor shaft. The grinder will be of the rotating type with stationary hardened and ground stainless steel shredding ring spaced in accurate close annular alignment, type 400 series stainless steel cutter bars. The grinder shall be capable of reducing all components in normal domestic sewage including a reasonable amount "foreign objects" such as paper, wood, plastic, glass, rubber and like, to finely divided particles will pass freely through the passages of the pump and the 1 ¼ diameter S.S. discharge piping.

2.03 ELECTRIC MOTOR: As a maximum the motor shall not exceed 2 HP, 240 Volt, 60 Hertz, 1 Phase, Capacitor Start, Ball Bearing, Air-cooled induction type with low starting current, not to exceed 30 amperage. Inherent protection against running overloads or locked rotor conditions for the pump motor shall be provided by the use of an automatic-reset, integral thermal overload protector incorporated into the motor.

2.04 TANK: Fiberglass Construction. The tank shall consist of a single wall, laminated fiberglass construction. The resin used shall be of a commercial grade suitable for the environment. The reinforcing material shall be a commercial grade of glass fiber capable of bonding with the selected resin. The inner surface shall have a smooth finish and be free of cracks and crazing. The exterior tank surface shall be relatively smooth with no exposed fiber or sharp projections present. The tank wall and bottom shall be of sufficient thickness and construction to withstand the imposed loading due to saturated soil at the specified burial depth for each available tank height. All station components must function normally when exposed to the external soil and hydrostatic pressures developed at the specified burial depth. The tank bottom shall be reinforced with a fiberglass plate extending beyond the tank walls to support concrete anchoring, as required, to prevent flotation. The tank shall include a solid fiberglass cover, secured with threaded stainless steel fasteners, providing low profile mounting. Tank dimensions are 24" x 60", 1 ¼ stainless steel discharge coupling to be located at 24" deep and electrical coupling will be located at 18" deep from the top. Guide rails of any sort will not be accepted.

2.05 CONTROLS: Non-fouling wastewater level controls for controlling pump operation shall be accomplished by monitoring the pressure changes in an integral air column connected to a pressure switch. The level detection device shall have no moving parts in direct contact with the wastewater. High-level sensing will be accomplished in the manner detailed above by a separate air-bell sensor and pressure switch or the same type. Closure of the high-level sensing device will energize an alarm circuit as well as a redundant pump-on circuit. For increased reliability, pump ON/OFF and high-level alarm functions shall not be controlled by

the same switch. Float switches of any kind, including float trees, will not be accepted due to the periodic need to maintain (rinsing, cleaning) such devices. The grinder pump will be furnished with a 6 conductor, 14 gauge, type SJOW cable, pre-wired and watertight to meet UL requirements with a FACOTRY-INSTALLED NEMA 6P EQD half attached to it. The grinder pump will also be supplied with 32' feet of cable with 6P EQD half to connect from pump EQD to control panel. No junction boxes will be accepted, due to problems associated with flooding and corrosion.

2.06 ALARM PANEL: Each grinder pump station shall include a NEMA 4X, UL-listed ALARM PANEL suitable for wall mounting. The NEMA 4X enclosure shall be manufactured of thermoplastic to assure corrosion resistance. The enclosure shall include a hinged, lockable cover, pad lock, and secured dead front. The alarm panel shall include the following features: audio & visual alarm, push to run switch, and high level (redundant) pump starting control. The alarm sequence is to be as follows:

1. When liquid level in the sewage wet-well rises above the alarm level, visual and audio alarms will be activated. The contacts on the alarm pressure switch will close. The redundant pump starting system will be energized.
2. The audio alarm may be silenced by means of the externally mounted, push-to-Silence button.
3. Visual alarm remains illuminated until the sewage level in the wet-well drops below the "off" setting of the alarm pressure switch.

The visual alarm lamp shall be inside a red fluted lens at least 2 5/8" in diameter and 1 11/16" in height. Visual alarm shall be mounted to the top of the enclosure in such a manner as to maintain NEMA 4X rating.

2.07 OSHA CONFINED SPACE: All maintenance tasks for the grinder pump station must be possible without entry into the grinder pump station (as per OSHA 1910.146 permit-required confined spaces). "Entry means the action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space."

2.08 SAFETY: The grinder pump shall be free from electrical and fire hazards as required in a residential environment. As evidence of compliance with this requirement, the completely assembled and wired grinder pump station in its tank shall be listed by Underwriters Laboratories, Inc. to be safe and appropriate for the intended use. UL listing of components of the station or third-party to UL standard will not be accepted. The grinder pump shall meet accepted standards for plumbing equipment for use in or near residences, shall be free from objectionable noise,

odor, or health hazards, and shall have been tested by an independent laboratory to certify its capability to perform as specified in either individual or low pressure sewer system applications. As evidence of compliance with this requirement, the grinder pump shall bear the National Sanitation Foundation seal. Third-party testing to NSF standards will not be accepted.

3.00 EXECUTION:

3.01 FACTORY TEST: Each grinder pump shall be submerged and operated for 5 minutes (minimum). Included in this procedure will be the testing of all ancillary components such as, the anti-siphon valve, check valve, discharge line and each unit's dedicated level and motor controls. All factory tests shall incorporate each of the above listed items. Actual appurtenances and controls which will be installed in the field shall be particular to the tested pump only. A common set of appurtenances and controls for all pumps will not be acceptable. Certified test results shall be available upon request showing the operation of each grinder pump at two (2) different points on its curve, with the maximum pressure no less than 60 psi. The ENGINEER reserves the right to inspect such testing procedures with representatives of the OWNER, at the GRINDER PUMP MANUFACTURER'S facility.

3.02 DELIVER: All grinder pump units will be delivered to the jobsite, 100% completely assembled including testing, ready for installation. Manufacturer must ship desired number of units within two weeks of order.

3.03 SUBMITALS: Successful bidder will be required to submit drawings and material scope after bid opening for bid approval.

3.04 PAYMENT: Payment for grinder station will be made 30 days after invoice is received by The City of Millersville.

Any exceptions to the above stated specifications should be listed on a separated page titled "Exceptions". Having exceptions to the above stated specifications does not disqualify a bid, but should be accompanied by a description of the exceptions.