

INVITATION TO BID INSTRUCTIONS

The City of Millersville is accepting bids for a new 750 Gallon trailer mounted sewer cleaner with pivoting reel. For additional information and bid package visit our website at cityofmillersville.com or by calling 615-859-0880. Bids will be accepted at City Hall 1246 Louisville Hwy, Millersville TN 37072 until Friday January 20 2017 at 10 am. Bid opening shall take place at the same time and date. The City of Millersville reserves the right to reject any or all bids and to waive any informality in the bids received.

1. All bids must be sealed and addressed to:

City Recorder
City of Millersville
1246 Louisville Hwy
Millersville, TN 37072

2. The Specification Sheet must be completed in FULL
3. Bidders must provide references
4. The signed proposal form must be filled out and signed
5. Manufacturer's warranty shall be not less than one (1) year basic unit manufacturer's warranty.
Standard 10 year non pro-rated water tank manufacturers warranty.
Standard 5 year water pump manufacturers warranty with lifetime head corrosion coverage.
Standard 2 year/2000 hour diesel engine manufacturers warranty.
6. Bidders submitting literature stating warranties which do not fully comply with warranty requirements of this specification must submit a letter from the manufacturer certifying warranty compliance as an integral part of their proposal. Failure to comply may cause the proposal to be deemed "non-responsive" and rejected without further review.
7. Vendors shall have a full parts and service facility within a reasonable distance from the City Garage. State location & distance.
8. A qualified technician shall provide complete training to City personnel at the City Garage. Training shall include safety, operation, maintenance and service.

DELIVERY

1. Equipment shall be delivered F.O.B. City of Millersville in new operating condition.
2. Acceptance shall be subject to the inspection and approval of the City.
3. Bidder shall state delivery time after receipt of order:

PROPOSAL FORM

The undersigned hereby declares that they have carefully examined the requirements of the specifications contained herein, and propose to furnish and deliver to the City of Millersville the apparatus listed below.

ONE (1) 750 Gallon Trailer Mounted Sewer Cleaner With Pivoting Reel

MAKE: _____ MODEL: _____

PURCHASE PRICE: @ \$ _____ Total: \$ _____

(In Words) _____

Signed: _____

Bidder: _____

Title: _____

Address: _____

Date: _____

CITY OF MILLERSVILLE

GENERAL SPECIFICATIONS

750 GALLON TRAILER MOUNTED SEWER CLEANER WITH PIVOTING REEL

1.0 GENERAL INFORMATION

1.1 It is the intent of these specifications to describe the minimum requirements of one new trailer mounted sewer-cleaning machine. The sewer jetter shall be capable of high pressure sewer flushing and removal of debris from storm and sanitary sewer lines. Standard equipment and accessories will be those stated in the manufacturers published except when modified to meet these specifications

1.2 Controls for all functions shall be operable at the operator's station on the sewer cleaner.

1.3 Complete compliance to each section must be clearly noted by checking either **Yes** or **No**. Any **No** response must be fully explained in detail. Failure to do so will be reason for rejection of the bid. The attachment of a product brochure by itself will not be acceptable and will be grounds for rejection of the bid. It is not our intention to prohibit any potential bidder from bidding by virtue of these specifications, but to describe the equipment actually required. Attach additional sheets if necessary.

2.0 WATER TANKS

2.1 The unit shall be equipped with tandem interconnected naturally baffled water tanks with a total liquid capacity of 750 U.S. gallons. The tanks shall be constructed of 3/8" thick, low-density polyethylene specifically designed for sewer cleaner applications. The tanks shall incorporate UV stabilizers to prevent brittleness due to prolonged exposure to the sun. The tanks shall have full-length sediment chambers. To inhibit algae growth, the tanks shall be black in color.

Yes ___ No ___ Exceptions _____

2.2 To allow for routine inspection and maintenance, the water tanks shall each have a 12 inch diameter threaded inspection hatchway on top. For added water pump protection, each tank opening shall include a removable strainer as standard equipment. **Round agricultural type tanks are not acceptable.**

Yes ___ No ___ Exceptions _____

2.3 The water tanks shall have a standard 10-year manufacturers warranty and be guaranteed for life against corrosion.

Yes ___ No ___ Exceptions _____

State tank warranty being offered.

2.4 A water fill system, accessible from the rear curb side with a 2-1/2" hydrant hose connection shall be provided. The fill system shall be an approved air gap, anti-siphon design to protect the potable water supply.

Yes ___ No ___ Exceptions _____

2.5 For ease of viewing, a water level sight indicator shall be located at the rear operator's station. In addition, a low water warning light shall be mounted on the aluminum control panel face.

Yes ___ No ___ Exceptions _____

2.6 The water tanks shall be mounted and anchored directly to the trailer frame. **Water tanks that are anchored by straps made of metallic or fabric materials will not be deemed acceptable.**

Yes ___ No ___ Exceptions _____

2.7 A 2" drain valve shall be supplied on the curb side of the unit to drain and purge the water tanks for routine maintenance or winterization.

Yes ___ No ___ Exceptions _____

3.0 WATER PUMP SYSTEM

3.1 The system will include a heavy-duty, positive displacement, triplex plunger reciprocating water pump. The design capacity of the pump shall be 40 GPM. It shall be powered to produce 40 GPM at 2000 PSI. The suction side of the water pump shall have a flooded inlet to eliminate water pump cavitation. The suction line shall incorporate a stainless steel 20 mesh in-line strainer assembly.

State water pump manufacturer and model number. _____

Yes ___ No ___ Exceptions _____

3.2 The water pump shall be driven and controlled through a power take-off with an 8" over center clutch mounted on the auxiliary engine. An air valve for purging the water from the pump system for cold weather storage shall be provided.

Yes ___ No ___ Exceptions _____

3.3 A single three-way water flow control valve shall be provided and operated by a manual lever at the operator's station.

3.4 The entire pressure piping system shall be designed utilizing 3/4 inch ID high pressure rubber hose with double wire re-enforcement and schedule 80 pipe. Pump suction and low pressure lines shall be standard PVC fittings. The entire piping system shall include drain plugs to allow adequate draining for winterization.

Yes ___ No ___ Exceptions _____

3.5 A pressure relief valve with stainless steel internal parts shall be set at a maximum operating pressure of 2,000 PSI and sealed at the factory.

Yes ___ No ___ Exceptions _____

3.6 The water pump shall be capable of being operated independently or simultaneously with the hydraulic system to allow operation of the hose reel without running the water pump.

Yes ___ No ___ Exceptions _____

3.7 The water pump shall be mounted in a fashion as to allow easy access for routine inspections and maintenance without the need to remove the pump from the unit.

Yes ___ No ___ Exceptions _____

3.8 For added protection, the pump compartment shall be enclosed within a lockable metal shroud. The shrouding system shall include two (2) lockable doors for access to the compartment.

Yes ___ No ___ Exceptions _____

3.9 System shall have a low water automatic shutdown system.

Yes ___ No ___ Exceptions _____

4.0 POWER SOURCE AND PTO DRIVE SYSTEM

4.1 The water pump shall be powered by an engine mounted power take-off (PTO) via a power band type drive belt. The engine shall be a water-cooled direct injected, 4-cylinder industrial diesel engine with a minimum rating of 65 horsepower @ 2600 RPM. The engine shall be certified to meet Tier 4 interim EPA requirements.

Yes ___ No ___ Exceptions _____

4.2 A heavy-duty 550 CCA batteries and minimum 60 ampere alternator shall be provided.

Yes ___ No ___ Exceptions _____

4.3 The engine shall be covered by a standard 2-year or 2000-hour manufacturers' warranty. **State engine manufacturer, model and warranty being offered and enclose a copy of engine manufacturers warranty policy.**

Yes ___ No ___ Exceptions _____

4.4 A heavy duty, lever actuated PTO with 8" over center clutch will allow operation of the engine and hydraulic hose reel without engaging the water pump.

Yes ___ No ___ Exceptions _____

4.5 The engine compartment shall be enclosed within an 11 and 14 gauge steel shroud for protection and to insure overall quietness. Access to the engine, water pump, piping and hydraulic motor will be through side doors with lockable latches. The enclosure shall allow sufficient air flow for proper engine cooling in 90+ degree weather.

Yes ___ No ___ Exceptions _____

4.6 A storage tray shall be located within the engine compartment for tools and accessories.

Yes ___ No ___ Exceptions _____

4.7 If not standard equipment, the following shall be included. High temperature and low oil pressure shut down gauges, hour meter, tachometer, ammeter and fuel gauge.

Yes ___ No ___ Exceptions _____

4.8 The engine fuel tank shall have a minimum capacity of 17 gallons and for safety, be located inside of the engine compartment. A fuel gauge shall be supplied.

Yes ___ No ___ Exceptions _____

4.9 In the interest of environmental surrounding combined with the location and hours that this unit will be required to operate at full capacity the max DBA shall not exceed 90 DBA within a 15 foot perimeter. Each bidder shall supply a manufacturers DBA chart with the bid.

Yes ___ No ___ Exceptions _____

4.10 To insure full visibility in the interest of operator safety the engine muffler and air cleaner shall be mounted inside the enclosure. The maximum over all height of the unit shall not exceed 68" to the top of shroud.

Yes ___ No ___ Exceptions _____

5.0 CONTROLS, GAUGES AND INSTRUMENTS

5.1 The unit shall be operable from one position located at the rear operator station. The controls must be positioned in a way as to allow cleaning to be done by one person. Reel speed control and hose reel

Payout / retrieve lever must be positioned to allow operator to control both functions separately or simultaneously.

Yes ___ No ___ Exceptions _____

5.2 A control panel incorporating the following gauges and controls will be mounted at the hose reel assembly for ease of viewing and operation.

Tachometer with Hour Meter	PTO engage/disengage lever
Electronic engine throttle	Keyed ignition system
Water pressure gauge	Murphy bypass switch
On/off water control valve	Wash-down gun connection
Water level sight tube	Dual 12 volt accessory plugs
Hose reel speed control	Volt meter
Temperature gauge w/ shutdown	Oil pressure gauge w/ shutdown
Low water warning light	

Yes ___ No ___ Exceptions _____

5.3 For corrosion protection, the control panel must be constructed out of aluminum or stainless steel.

Yes ___ No ___ Exceptions _____

5.4 The PTO clutch control lever shall be located on the operating end of the machine within easy reach of the operator while standing at the control panel.

Yes ___ No ___ Exceptions _____

6.0 PIVOTING HOSE REEL ASSEMBLY

6.1 The hose reel shall be mounted at the rear of the unit and manually pivot a minimum of 190 degrees. It shall lock into place at various positions within its arc via a spring loaded quick locking mechanism. The reel shall be a minimum of 12 inches from its lowest point to the ground, insuring adequate ground clearance.

Yes ___ No ___ Exceptions _____

6.2 The pivoting hose reel shall have a mounting base of at least 10" in diameter and be constructed of at least 3/8" steel plate. A 5/8" spring latch will allow the reel to pivot 95 degrees in each direction. The reel must pivot on an industrial type, heavy duty steel bearing that is sealed to eliminate contamination from dirt.

Yes ___ No ___ Exceptions _____

6.3 The reel shall have a minimum useable capacity of 750 feet of 3/4-inch ID thermo-plastic sewer hose.

Yes ___ No ___ Exceptions _____

6.4 The unit shall be delivered with a minimum of 500 feet of 3/4 inch ID thermo-plastic sewer hose with 2500 PSI working and 6250 PSI burst pressure rating.

Yes ___ No ___ Exceptions _____

6.5 The hose reel shall be hydraulically powered in both directions and payout and retrieve via a hydraulic motor with chain reduction drive. It must have sufficient power to retrieve 750' of sewer hose under full pressure. Hose reels with direct-coupled hydraulic drives are unacceptable.

Yes ___ No ___ Exceptions _____

6.6 Water delivery to the pivoting hose reel shall be through a heavy-duty cast iron 90 degree swivel rotary coupling. This swivel shall be fully adjustable and repairable.

Yes ___ No ___ Exceptions _____

6.7 A hose reel pendant control with 20' of cable with quick-disconnect shall be furnished that will allow the operator to payout and retrieve the sewer hose from remote locations.

Yes ___ No ___ Exceptions _____

6.8 A heavy duty hand operated roller hose guide/level wind shall be provided to facilitate uniform alignment of the hose onto the reel.

Yes ___ No ___ Exceptions _____

7.0 WASH DOWN SYSTEM

7.1 Quick connection must be provided at working end of trailer for wash down hose connection.

Yes ___ No ___ Exceptions _____

8.0 HYDRAULIC SYSTEM

8.1 The hydraulic pump shall be driven directly from the engine. A built-in overload relief valve and hydraulic hoses rated for 2000 PSI maximum pressure shall be incorporated into the system.

Yes ___ No ___ Exceptions _____

8.2 The hydraulic oil reservoir tank shall have a minimum capacity of 17 U.S. gallons and be located in the power deck compartment. A fluid level sight gauge shall be provided on the hydraulic tank for quick fluid level inspection.

Yes ___ No ___ Exceptions _____

8.3 A 10-micron replaceable spin-on cartridge filter shall be provided.

Yes ___ No ___ Exceptions _____

9.0 STORAGE

9.1 A tool and accessory storage tray shall be located in the lockable engine compartment.

Yes ___ No ___ Exceptions _____

10.0 TRAILER CONSTRUCTION

10.1 The trailer shall have tandem leaf spring axles with a 6,000 lb. rating per axle for a GVWR of 12,000 lbs. The trailer shall also be equipped with electric brakes.

Yes ___ No ___ Exceptions _____

10.2 The wheels are to be at least 6 lug bolt style with load range "E", 16 ply trailer tires and wheels. RV and mobile home axles, wheels and tires are not acceptable.

Yes ___ No ___ Exceptions _____

10.3 For added strength, the trailer frame shall be constructed of 6" heavy - duty channel iron with heavy-duty intermediate cross members with Uni-frame "A" type hitch frame for stability. **Trailers constructed of any type of tubing are deemed unacceptable.**

Yes ___ No ___ Exceptions _____

10.4 Heavy-duty, 300 lb minimum capacity trailer fenders shall be supplied and include non-skid surface treatment. The fenders shall extend a maximum of 12" beyond the sides of the unit.

Yes ___ No ___ Exceptions _____

10.5 The trailer shall include an adjustable lunette style hitch, electric brakes, break away switch, adjustable steel stabilizer tongue jack and two safety chains with hooks.

Yes ___ No ___ Exceptions _____

10.6 The unit will include two stop and turn taillights with license plate light at the rear, as well as all required ICC lighting and reflectors.

Yes ___ No ___ Exceptions _____

10.7 For overall operator safety, the entire unit must be of a low profile design as to allow the operator a full and unobstructed view of oncoming traffic and his surroundings. This design will also allow oncoming motorists a better view of personnel and will greatly reduce the likelihood of tipping on uneven terrain due to its lower center of gravity. The units' approximate dimensions shall be 84" wide, 245" long and the water tanks shall not exceed 68" in height when fully loaded.

Yes ___ No ___ Exceptions _____

10.8 The trailers' design must allow towing of the jetter at highway speeds while fully loaded with water.

Yes ___ No ___ Exceptions _____

11.0 PAINT

11.1 All exposed steel surfaces shall be professionally prepared for painting and protected with the following 4-step paint process.

- (1) Sand blasting
- (2) Phosphoric metal washing
- (3) One coat of high build epoxy primer
- (4) Reseal with primer then top coat with acrylic urethane. Finish of 5 – 7 mil minimum.

Yes ___ No ___ Exceptions _____

12.0 ITEMS TO BE INCLUDED WITHIN BID

- 15 degree radial nozzle
- 35 degree radial nozzle
- 1 touch up paint
- 1 Operator part and service manual (unit only)
- 1 Auxiliary engine manual
- 1 Pump manual
- 20' x 3/4" HD rubber wire braided leader hose
- Murphy high temp/low oil pressure shutdown system
- 2 – 3" x 36" tiger tail
- 25' fill hose
- Nozzle extension
- Fixed mounted strobe light
- Hydrant wrench

Yes ___ No ___ Exceptions _____

13.0 WARRANTY

- 13.1 The bidder must indicate warranty being offered, which shall be no less than...
- One-year basic unit manufacturer's warranty.
 - Standard 10 year non pro-rated water tank manufacturers warranty.
 - Standard 5 year water pump manufacturers warranty with lifetime head corrosion coverage.
 - Standard 2 year/2000 hour diesel engine manufacturers' warranty.

Yes ___ No ___ Exceptions _____

- 13.2 Any special extended warranty coverage on specific items must be clearly indicated.

13.3 Unit shall be delivered in new condition and successful bidder shall provide onsite training on both operation and maintenance of the equipment.

Yes ____ No ____ Exceptions _____

14.0 LIST OF EXCEPTIONS

15.0 FOLLOWING NOZZLES TO BE PRICED SEPARTLY

- KEG 3/4" Rambo Nozzle
- KEG 3/4" Cleaning Nozzle
- KEG 3/4" Traction Nozzle
- KEG 3/4" Torpedo Nozzle
- KEG 3/4" Rotor Nozzle
- KEG 3/4" Nozzle Carrying Case
