

NOTICE TO BIDDERS

February 3, 2015
Bolivar, MO 65613

The City of Bolivar will be accepting bids for the purchase of a Sewer Easement Machine and Tow Trailer for the Bolivar Public Works Sewer Department.

Bids will be received until 2:00 p.m. on February 25, 2014, and then publicly opened and read at City Hall, 345 S. Main, Bolivar MO.

Bid and Specifications can be found on the cities web site www.bolivar.mo.us or by obtaining a copy from City Hall, 345 S. Main, from 8:00 a.m. through 5:00 p.m. Monday thru Friday. Questions can be directed to Jerry Hamby at jhamby@bolivar.mo.us.

The City of Bolivar reserves the right to reject any and all proposals and to waive technicalities.

Jerry Hamby

Public Work Supervisor
City of Bolivar
PO Box 9
Bolivar, MO 65613
jhamby@bolivar.mo.us

SPECIFICATIONS FOR SEWER EASEMENT MACHINE

Equipment Company PROWLER - ET (Extendable Track Unit).

GENERAL: These Specifications describe self propelled expanding track drive, all terrain, hose reel to be used in conjunction with a high pressure sewer cleaner. The purpose of this unit is to extend the capabilities of the sewer cleaner into MODEL: The sewer easement machine shall be similar to the 3T inaccessible areas such as rear easements, wooded areas, walking paths, warehouses, and open fields. Unit shall be capable of driving through standard 36" gates.

DIMENSIONS: Overall Length = 80" without level wind.

Overall Height - 70" (76" with dual flood lights)

Overall Width - 34" width with tracks extended to 49"

DRIVE TRAIN: Unit shall have two track drive. Each track shall be individually driven by it's own extra heavy duty Nachi 2B compact hydraulic planetary drive motor designed to handle up to 5,000 lb of total machine weight. Drive method consists of four (2) hydraulic driven tracks with direct drive. All tracks are to be driven in either forward or reverse. Skid steering shall be utilized for maximum mobility. On proper surfaces unit will counter rotate in either direction, 360 degrees in its own length. Drive system shall be variable speed. Two counter balance valves shall be utilized for braking.

TRACK EXPANSION: Unit shall have the ability to expand the tracks hydraulically from 34" to 49" wide. The expansion shall utilize tube in tube construction with delrin bearing material and use 2-8X2 hydraulic cylinders. The expansion shall be by a valve that is mounted on the operators pane. Rubber track: 9"wide, 60" long, and 13.5" high. Ground clearance shall be a minimum of 6". Each track assembly shall have 4 forged idlers, 1 spring loaded forged tensioning idler and 1 hardened 4140 dive sprocket.

CONTROL PANEL: All gauges, switches and levers necessary for the mobility of the unit, will be located on the control panel located directly in front of the operator and must be labeled. These items will include a key ignition switch, system requirements for each side, plug for optional handheld spotlight and hour meter.

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ENGINE: Engine shall be a 24 horse power, 3600RPM, air cooled, gasoline, 2 cylinder HONDA. It shall include the following: (**SEE NOTE**)

1. 12 volt ignition
2. Electric start with key ignition
3. Cartridge type oil filter
4. Oil pressure gauge
5. Plastic EPA compliant tank shall be a minimum of five gallons.
6. Engine drain hose
7. Muffler shall be single horizontal type with 35" vertical pipe and spark arrestor.
8. Voltmeter
9. Battery, 12 volt, top post, maintenance free shall be located under operator station and will be in a lockable compartment unit. Units that require moving of the hose reel or body plates, will not be acceptable.
10. 12 volt external power source for external work light.

NOTE: 24 HP not available any longer
22 HP, 3600 RPM, air cooled, gas, 2 cylinder HONDA is being supplied and recommended by manufacturer

FRAME: Frame and up rights shall be ¼"X4"X6" tubular steel and 3/8" plate steel, welded construction capable of withstanding the constant use in rough and off-road terrain. 4 mounting sockets for holding optional outriggers shall be located behind the hose reel.

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HYDRAULIC

SYSTEM: The hydraulic system for driving the tracks and hose reel shall consist of pump mounted directly to the motor. The pump shall be directly coupled to the motor. The pump shall be rated at 3,000 PSI at 10.5 GPM at 3,400 RPM. All hydraulic hoses shall be rated at 3,500 PSI. The system shall have a diverter valve to operate hose reel. This valve shall be located at operator station. All control valves shall have built-in pressure relief. The system shall have an in-line spin-on type oil filter, and must be easily accessible. There shall be (1) one Auxiliary hydraulic couplings/quick disconnects to be able to run (1) one hydraulic tool circuit that will run on 8 to 10 GPM.

HYDRAULIC RESERVOIR: Capacity of 17 gallons, with gauge.

REEL CONTROL: The hydraulic reel control shall be located at front of unit convenient to the operator when positioned over a manhole. The reel shall be driven by a hydraulic motor with variable speed control. Motor shall be driven by #60 chain and shall be adjustable speeds.

HOSE REEL: The hose reel shall be designed to withstand maximum working pressure without distortion and prevent hose damage under full operating pressure. The reel shall be 19½" wide, 44" diameter and a 14" center hub. Reel shall be constructed of ¼" steel with a 1½" steel rim(edge). Reel shaft shall be 1½" diameter with ¼" wall tubing and have two(2)1½" pillow block bearings for support. The reel shall swivel on an 8 inch bearing. The reel flanges shall be designed to prevent damage to the hose from contact during all working conditions and shall be internally reinforced. The sewer hose connection shall be external. Internal hose connections shall not be acceptable. A splash shield shall be located behind the reel and shall extend from the bottom of the reel to 28" above the frame. This shield shall prevent water and sewage from entering the engine area.

Unit shall have power level wind. A digital footage counter to track location of the nozzle shall be included. A three way water control valve shall be located at hose reel operator station. This valve shall divert the high pressure water in case of emergency.

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Hose reel shall pivot a minimum of 90 degrees to the right or 90 degrees to the left side of the reel with a spring assisted locking pin to hold it in the position for use. This enables the operator to position the machine for the safest operation. Capacity of reel shall be a minimum of 65 feet of 1" hose, and maximum of 600 feet.

There shall be two work lights mounted and centered over the front of the hose reel to be directed down towards the manhole area.

There shall be a hose clamp adaptor to secure the 1-inch sewer hose from the jetter truck to the side of the sewer easement machine to assist with dragging/pulling off the sewer hose and to prevent damaged to the coupling on the sewer easement machine.

All plumbing on the sewer easement machine shall be piped to eliminate any hard 90 degree piping. All valves shall be full ported to allow maximum flow. A 1-inch diameter, 3000 psi, leader hose shall be used from the output side of the shut off valve to 90 degree swivel on the reel; the length shall be long enough to allow easy replacement of the swivel. A 1-inch diameter, 3000 psi, leader hose shall be used on the intake side of the shut off valve, this will allow daily usage for connecting sewer hose from the jetter unit to this leader hose.

There shall be a pressure gauge installed near the shut off valve.

600 feet of sewer hose required on this unit.

No pressure regulator required on this unit.

The unit shall be painted a safety orange powder coat finish on all metal surfaces to prevent rust.

MANUALS: Two complete set of operation and maintenance manuals shall be furnished with the unit.

WARRANTY: One year on complete unit

SEWER MACHINE TOW TRAILER

TANDEM AXLE WITH TUBE RAIL, DOVETAIL WITH LIFT GATE FOR TRANSPORTING SELF-PROPELLED SEWER EASEMENT MACHINE

GENERAL

If there are exceptions to the trailer specifications below, submit detailed description with bid.

- Bed/Decking shall be a maximum of 10 foot long and 5 foot wide. The Decking shall dovetail to lower the height at the end of the trailer.
- Frame will be constructed of 3" x 4" x ¼" angle iron.
- Top Rail and Uprights to be constructed of 2" x 2" Square Tubing railing and shall be 13" high.
- Ramp shall be 5-foot wide and the height kept to a minimum to be able to fold down to allow a smooth transition to match the angle of the dovetail. Ramps shall have spring assist for easy lifting.
- Ramp shall be heavy duty construction with expanded metal grating.
- Spring loaded gate latches.
- Tongue will be constructed of 4" Channel, Wrapped.
- It shall include safety chains, 2" ball coupler, jack and swivel wheel, 2K A-Frame Jack.
- Trailer shall have 2 axles, Dexter 3500 # EZ Lube Axles. (7000# GVWR)
- Heavy duty checker plate with fenders w/steps
- Tires shall be a minimum of 205/75 x 15" over the road type.
- The flooring shall consist of 2" x 10" pressure treated pine decking. Four(4) heavy duty tie down D-Rings shall be included to insure the machine can be hauled in a safe manner.
- Running lights and reflectors to meet State D.O.T. standards will be furnished. Enclosed light boxes. A four(4) prong female connector shall be provided at the towing end. (SEE NOTE)
- A toolbox Frame Trailer Tongue Box constructed of a minimum of heavy duty checker plate and having a hinged lid with a locking device. The box shall be as tall as the height of the frame rail. (SEE NOTE)
- The trailer shall be primed and painted with industrial coating enamel Black.

NOTE: 7 pin plug

NOTE: Tongue Box 16" height & 2' below rail

