



**TOWN OF ABINGDON
DEPARTMENT OF PUBLIC WORKS
P. O. Box 789
133 West Main Street
Abingdon, Virginia 24212/24210**

Bid Documents for

TRUCK-MOUNTED COMBINATION VACUUM/JETTER SEWER CLEANING UNIT

January 2012

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ADVERTISEMENT FOR BIDS

In accordance with the Virginia Public Procurement Act in the Code of Virginia Section 11-35 et seq., and the Town of Abingdon Code of Ordinances Section 2-176 et seq., sealed Proposals for one new TRUCK-MOUNTED COMBINATION VACUUM/JETTER SEWER CLEANING UNIT for the TOWN OF ABINGDON, VIRGINIA will be received by the Town until 2:00 P. M., Wednesday, February 15, 2012 at which time they will be opened and publicly read aloud.

The BIDDING DOCUMENTS may be obtained at the following location:
Town of Abingdon Municipal Building, Second Floor, 133 West Main Street, Abingdon, Virginia 24210.

The attention of each bidder is particularly called to the following:

1. Submit bids only on the bid proposal form. Do not submit bids in duplicate. Faxed proposals are not acceptable.
2. The sealed proposals shall indicate on the outside of the envelope the company's name, "BID PROPOSAL—TRUCK-MOUNTED COMBINATION VACUUM/JETTER SEWER CLEANING UNIT" and addressed to the attention of J. C. Smith, Director of Wastewater Operations, 133 W. Main Street, Abingdon, Virginia 24210 **OR** P. O. Box 789, Abingdon, VA 24212.
3. The procedure for withdrawal of a bid shall be as follows: The bidder shall give notice in writing of his claim of right to withdraw his bid within two business days after the conclusion of the bid opening procedure.

The Owner reserves the right to reject any or all bids, to waive any irregularities or informalities in the bidding, and to accept the proposal, which, in its opinion, will be in the best interest of the Town.

By: /s/ Gregory W. Kelly
Town Manager
January 19, 2012

BID PROPOSAL

TRUCK-MOUNTED COMBINATION VACUUM/JETTER SEWER CLEANING UNIT

Proposal of _____ (hereinafter called "Bidder"), organized and existing under the laws of the State of _____ doing business as _____ * to the TOWN OF ABINGDON, VIRGINIA (Hereinafter called "Owner").

(*Insert "a corporation", "a partnership". or "an individual" as applicable)

In compliance with your ADVERTISEMENT FOR BIDS, Bidder hereby agrees to furnish the product bid in accordance with the MINIMUM GENERAL SPECIFICATIONS/CHECKLIST and SPECIAL PROVISIONS:

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>
1	TRUCK-MOUNTED COMBINATION VACUUM/JETTER SEWER CLEANING UNIT	1	Each	\$ _____

TOTAL PRICE (including delivery) \$ _____

_____ Dollars (in words)

The Town of Abingdon will be financing this equipment over a period of time and under conditions that are best suited for the Town's needs and resources. The bidder is encouraged to provide lease-purchase type of financing options for this equipment on the third sheet of this bid proposal.

Additional Equipment Information:

a) Make: _____ Model: _____

b) Descriptive Literature Attached? _____ (yes or no)

c) Exceptions to Minimum General Specifications? (Use additional sheets as needed)

d) Warranty (see Special Provisions for requirements): _____

- e) Approximate time required for delivery after receipt of order _____ calendar days.
- f) This quotation shall be valid and remain open for **90 days** after the closing date.

Company	Signature			
Street Address	Title			
<table border="0" style="width: 100%;"> <tr> <td style="width: 33%; text-align: center;">City</td> <td style="width: 33%; text-align: center;">State</td> <td style="width: 33%; text-align: center;">Zip</td> </tr> </table>	City	State	Zip	Date
City	State	Zip		

Phone: () _____

E-mail: _____

Receipt of Addendum acknowledged:

No. _____ Received on: _____ date

No. _____ Received on: _____ date

NOTE: Complete bid submittal will include:

1. BID PROPOSAL (sheets 3, 4, and 5) and
2. MINIMUM GENERAL SPECIFICATIONS/CHECKLIST and
3. Literature Requested and
4. Additional sheets necessary for warranty information, if needed and
5. Additional sheets necessary for financing information, if needed

Financing Options Available

State "NONE" in the "Structure" blank below if you do not offer financing options. Attach additional sheets if needed –

Option 1 –

Structure - _____

Conditions - _____

Term (months) - _____

Interest rate - _____

Beginning of Term Payment (if any) - \$ _____

Monthly Payment - \$ _____

End of Term Payment (if any) - \$ _____

Total Equipment Cost - \$ _____

Option 2 –

Structure - _____

Conditions - _____

Term (months) - _____

Interest rate - _____

Beginning of Term Payment (if any) - \$ _____

Monthly Payment - \$ _____

End of Term Payment (if any) - \$ _____

Total Equipment Cost - \$ _____

MINIMUM GENERAL SPECIFICATIONS/CHECKLIST

TRUCK-MOUNTED COMBINATION VACUUM/JETTER SEWER CLEANING UNIT JANUARY, 2012

General: It is the intent of this specification/checklist to describe a TRUCK-MOUNTED COMBINATION VACUUM/JETTER SEWER CLEANING UNIT designed for the purpose of simultaneous high pressure flushing of sewer pipes and removal of liquids and solids from manholes. All standard equipment advertised by manufacturer shall be included with unit. The unit shall be delivered completely assembled, serviced and ready to operate. The bidder shall have a qualified service representative in attendance with the unit during start up operation to make any adjustments needed and give instructions to assure proper operation of the unit.

The bidder will indicate his compliance with a yes (Y) or no (N) answer in the blanks at each item. Any deviations from the specifications must be clearly noted, on attached sheets if needed.

1. MANUALS/TRAINING

- _____ An operation manual shall be provided (two copies)
- _____ A service and parts manual shall be provided (two copies and digital copy if available)
- _____ Bidder must provide Operator instruction, safety and maintenance training

2. PAINT/COLOR

- _____ The entire unit must be painted with the manufactures standard white paint applied over a suitable primer.

3. WARRANTY

- _____ Engine will have a minimum warranty of 60 months or 100,000 miles or Manufacturer's standard warranty – whichever is greater
- _____ Transmission will have a minimum warranty of 60 months or 100,000 miles or Manufacturer's standard warranty – whichever is greater
- _____ Drive train components will have a minimum warranty of 60 months or 100,000 miles or Manufacturer's standard warranty – whichever is greater
- _____ Cab and chassis will have a minimum total coverage warranty of 36 month or 36,000 miles or Manufacturer's standard warranty – whichever is greater
- _____ Minimum one year on sewer/catch cleaner against defect in material and workmanship.
- _____ Minimum ten (10) year parts and labor warranty on water tanks and debris body against defects in material workmanship.
- _____ Exceptions: Considered

4. DEBRIS BODY

- _____ Minimum usable liquid capacity of 12 cubic yards.

- _____ Cylindrical shape body shell with domed tank
- _____ Body shell, tank head and tailgate shall be a minimum one-quarter inch thick corrosion and abrasion resistant Ex-Ten steel.
- _____ The debris storage body shall have a minimum yield point of 50,000 PSI and a minimum tensile strength of 70,000 PSI
- _____ Body shall have a rear door that is hinged at the top and is equipped with a replaceable neoprene type seal. Adjustable for periodic compensation of door wear.
- _____ Hydraulic tailgate latches shall be provided to prevent operator from going behind unit.
- _____ Minimum of five mechanical tailgate latches, which are hydraulically operated, shall be supplied for securing rear debris tank door.
- _____ Hydraulic latching shall be accomplished by a single hydraulic cylinder with mechanical linkage. Cylinder and linkage must be accessible from outside of body and not require the tailgate to be opened to gain access.
- _____ Hydraulic controls for tailgate and dump functions shall be provided at a central curbside location directly behind the cab of the truck.
- _____ Body shall be dumped by raising the body to a 50 degree angle utilizing a forward mounted, double acting hydraulic dump cylinder.
- _____ For stability and safety, dumping must be accomplished while the pivot of the hopper remains fixed to the frame.
- _____ Debris body shall have a body flushed out system with eight (8) tungsten-carbide tipped nozzle mounted on a manifold located in the front wall of the debris body to aid in the flushing of heavy debris.
- _____ The debris body shall be equipped with a rear door drain to drain off excess liquid while retaining solids and shall include a manually operated 6" knife valve with cam-lock coupler and 10' of lay flat hose having camlock quick connects.
- _____ Industrial style rear debris body door shall be flat, and shall open and close hydraulically by cylinders mounted at the top of the body. Door shall open 50 degrees from the fully closed position. Door shall be unlocked, opened, closed, and locked by a failsafe hydraulically activated sequential positive locking system, cam operated by a single hydraulic cylinder, with all controls located behind truck cab, forward of the debris body so operator is not subject to sewage when dumping.

5. WATER TANKS

- _____ Water tanks must be capable of utilizing complete capacity of 1500 gallons via suction sump below at lowest point of tanks. All units to be verified prior to acceptance for weight distribution on front and rear (tandem) axle with full and depleted water tank scenarios upon delivery.
- _____ Modular self-baffling water storage tanks.
- _____ Rotational molded repairable non-cross linked polyethylene construction with ultraviolet stabilizer or minimum 1/4" thick stainless steel construction.
- _____ Bottom of water tanks must be above top of truck frame.
- _____ Bottom of water tanks must be above suction port of water pump to avoid cavitations.
- _____ Tank suction shut-off valve with 3" cast iron "Y" type strainer with #6 mesh screen to protect water pump.
- _____ Tanks must be equipped with sight tube visible from front of truck.
- _____ Ten (10) year warranty, parts and labor against defects in material and workmanship plus lifetime "no rust-through or corrosion warranty" provided.

6. VACUUM SYSTEM

- _____ Vacuum shall be provided by a positive displacement rotary lobe pump using two figure eight impellers rotating in opposite directions to move entrapped air around the case to the outlet port.
- _____ Vacuum Pump Dresser 824 or equivalent shall produce inlet volume from 0-4600 cfm @ 2250 rpm and 3650 cfm @ 16 hg @ 2250-rpm vacuum
- _____ Vacuum pump shall not require daily greasing.
- _____ Vacuum pump shall be equipped with a high efficiency exhaust silencer mounted directly on top of the pump.
- _____ Vacuum pump shall be protected by a cartridge filter cable of containing particles size 10 micron or larger. Cartridge filter housing shall be constructed of 1/4 "steel, and have one single door hinge on the left for ease of access.
- _____ A minimum of two 3" mechanical vacuum relief valves capable of handling the full airflow of the vacuum pump mounted on the inlet vacuum chamber.
- _____ An air operated vacuum relief vent door shall be installed between the body and the vacuum pump. Vent door opening shall be a minimum of 28 sq. inches. A toggle switch shall be located at the front control panel for operating the 6" vent door. The vent door shall be capable of opening under full vacuum without shutting the vacuum pump off.
- _____ Vacuum pump PTO on/off controlled by toggle switch at front control panel.

7. HIGH PRESSURE WATER SYSTEM

- _____ The high-pressure water pump shall be rated to deliver smooth continuous pressure and flow through the entire flow range of the pump.
- _____ A continuous duty flow of 50 gpm @ 3000 psi or 80 gpm @2500 psi shall be provided. Accumulator(s) shall be supplied for both handgun and high-pressure systems for continuous smooth flow, if needed for smooth water pressure at all times. High-pressure relief valves shall be provided for both the high-pressure system and handgun system.
- _____ The water pump shall operate independently of the vacuum and be powered by the auxiliary engine via clutches, direct dual system or truck chassis via PTO.
- _____ The high pressure water pump drive system shall carry a five-year replacement warranty. Warranty excludes the drive engine, i.e. auxiliary engine.
- _____ The water pump shall be capable of running dry. Water pump mounted curbside, above lower tank for convenience or rear with aluminum cover. A stainless strainer provided before water enters water tank.
- _____ Controls for starting and stopping the water pump and to vary the flow and pressure shall be at the front hose operation's station.
- _____ The high-pressure water pump will be equipped with a cold weather drain valve. The valve will allow operator to completely drain the high-pressure pump.

8. POWER BOOM SYSTEM

- _____ Vacuum power boom system hose shall be designed for front operation with hose mounted and stored at front mounted workstation.
- _____ All connections between debris body and vacuum system will be of the self-adjusting pressure fitting type.

- _____ Vacuum hose will main stationary and not rise with debris body.
- _____ The power boom shall have a minimum of 210-degree hydraulic rotation and be lockable in any position.
- _____ Boom to be supported on 14” turning table bearing.
- _____ Boom elbow to be bolted to end of boom arm.
- _____ Boom vertical lift shall be a minimum of 16’0”
- _____ Lift capacity at the boom end with boom fully extended shall be 1,000 pounds minimum.
- _____ A joystick shall be permanently mounted to the operator control station for boom functions: up, down, left and right.
- _____ Boom system shall be remote controlled from a removable wired pendent controller.
- _____ Boom pendent shall control all boom functions: up, down, in, out, right, left throttle control, and vac vent door relief.
- _____ Boom shall reach a minimum of 225” from centerline of unit with an 8” hydraulic telescoping boom extension. The boom must be true telescoping with a tube sliding within a tube.
- _____ Boom rotation shall be accomplished with a worm gear that automatically locks in any position.
- _____ A boom rest for transport shall be directly mounted to sub frame.
- _____ Boom elbow to be reinforced with a gusseted channel that provides double walled steel on the outside sweep. Boom elbow shall have a 3-year replacement warranty.
- _____ All boom grease fittings shall be located at ground level on grease manifold for ease of maintenance.

9. FRONT MOUNTED ARTICULATING HOSE REEL

- _____ Hydraulically operated, Front- mounted hose reel.
- _____ Hose reel shall be mounted on an independent frame that can be removed from bracket attached permanently to front of truck frame.
- _____ 600 feet of 1” diameter thermo plastic sewer cleaning hose provided.
- _____ Hose rewind guide.
- _____ Reel driven by a dual chain, hydraulic drive providing a minimum 14,600 lbs in torque and a variable speed from 0 to 50 RPM utilizing an open center directional control valve with adjustable priority flow divider and adjustable relief.
- _____ A digital hose footage counter shall be supplied to indicate the amount of hose travel within pipe.
- _____ A worker safety containment system enclosing the area between the operator and the hose reel provided, consisting of a guard constructed entirely of extruded transparent UV stabilized LEXAN plastic with a minimum impact strength of 60ft/per inch per ASTM D256A. The transparent containment system permits viewing of hose reel and sewer hose, while allowing protection to the operator against hose burst or coupling failure.
- _____ An interlock system, which does not allow the water to be turned on unless the containment guard is in the fully lowered position.

10. UNIT ACCESSORIES

- _____ Operator control panel located in front of vehicle.
- _____ Vacuum pump “Hot Shift” PTO engagement control located on the control panel.

- _____ Hose reel direction and speed control located on the control panel.
- _____ Hose reel direction and speed control located at operator's station
- _____ Water pressure gauge.
- _____ Vacuum pump hour meter.
- _____ Electric throttle control for truck chassis engine.
- _____ Receptacle for boom control pendent.
- _____ Engine fuel consumption.
- _____ Engine oil pressure.
- _____ Engine water temperature.
- _____ Engine tachometer.
- _____ Emergency kill switch at the operator's panel that disengages water and vacuum pump before shutting down the engine.
- _____ Sewer hose footage counter shall be electronic with digital readout.
- _____ 8" diameter aluminum tubes with male/female fittings.
- _____ One (1) 7', two (2) 5', three (3) 8' and one (1) 3' aluminum vacuum tubes with clamps and gaskets. Not tools require with clamps.
- _____ One (1) three-tube storage rack mounted on tailgate supplied.
- _____ One (1) three-tube vertical storage rack mounted passenger side.
- _____ Tube racks must be supplied on the passenger side of rear only. Racks mounted on the driver side potentially placing workers in the roadway are unacceptable.
- _____ One (1), 1" diamond harden stainless steel, with replaceable inserts, general cleaning nozzle.
- _____ One (1), 1" diamond harden stainless steel, with replaceable inserts, chisel type penetrating nozzle.
- _____ One (1), 1" diamond nozzle extension.
- _____ Triplex sewer cleaning pump will supply water with means of regulating pressure from zero to 2000-PSI available handgun.
- _____ Quick disconnects located at front operator station and driver's side mid-ship of unit for handgun.
- _____ One (1) handgun rated at 2500 PSI with minimum of 35' of 1/2" hose.
- _____ Retractable hose reel with live center complete with 50' x1/2" hose provided with quick disconnect
- _____ Self-contain system for purging water from jetting hose, handgun lines and pump to prevent freeze-up supplied. Air supplied by truck air compressor with appropriate safety check valves for brakes.
- _____ One tiger tail.
- _____ One (1) 2 1/2 "x25' fill hose fitting for water tanks.
- _____ One leader hose
- _____ One (1) front mounted warning LED strobe light.
- _____ One (1) rear mounted warning LED strobe light.
- _____ Rear mounted LED arrow board supplied with controls in cab.
- _____ LED stop turn and running lights, including a three light bar.

11. ENGINE

- _____ Engine shall be 2012 Emission compliant Diesel with 350 HP @ 2000 RPM, 1150lb-ft torque @ 1200 RPM governed speed.
- _____ Air cleaner shall be a two stage, heavy-duty dual element dry type air cleaner with a restriction indicator

- _____ Automatic glow plug with indicator light shall be supplied
- _____ Engine should have automatic shutdowns for low oil pressure or high coolant temperature.

12. CHASSIS

- _____ Chassis should be of conventional design with a minimum of 60,000 GVW
- _____ Wheelbase should be the minimum required for the attached body.
- _____ Should have heat-treated alloy steel outer C, frame reinforcement.

13. TRANSMISSION

- _____ Shall be an Allison 3000 RDS P, close ratio 6 speed with 4th generation controls and double overdrive. Must include oil level sensor, with PTO provision less retarder and 80,000-lb GVW rating. (Or approved equal)

14. AXLES

- _____ Front axle shall be a wide track, I beam style rated for 20,000-lb with Oil lubricated bearings and seals. Should have an equivalent suspension system.
- _____ Tandem rear axle, single reduction, 46,000-lb minimum capacity with lube pump and 200 wheel ends. Gear ratio should be a minimum of 6.14 to 6.83. The suspension should a Hendrickson style or equivalent rated for a GVWR of 66,000 lb

15. CAB

- _____ Must have complete gauge package with a minimum of oil pressure, temperature, and voltage, tach, and transmission temperature gauges.
- _____ Must have manufactures air conditioning along with fresh air heater/ventilator/defroster
- _____ Must have all of the manufactures standard features.
- _____ Must have a high back adjustable air ride seat on the driver's side.

16. ELECTRICAL

- _____ Must have all standard lighting and required taillights.
- _____ Must have a battery disconnect switch

17. TIRES AND WHEELS

- _____ Front tires should be a 425/65R22.5, load range L, 20ply
- _____ Rear tires should be 11R22.5, load range G, 14 ply
- _____ Front and rear wheels should be steel

18. BRAKES

- _____ Front and rear axles should be fitted with the largest S-cam brakes available from the manufacture

- _____ Should have automatic slack adjusters
- _____ Service brakes should be full air with a minimum of 13.2 CFM air compressor
- _____ An air dryer is required equivalent of a Bendix AD9
- _____ All tanks should have an accessible manual drain
- _____ Four channel anti-lock braking system should be provided

19. SERVICE

- _____ Bidders shall have a full parts and service facility within reasonable distance from 21410 Vances Mill Road, Abingdon, VA 24211. **State location and distance from Abingdon VA:** _____

20. DELIVERY

- _____ The equipment is to be delivered to the Wolf Creek Water Reclamation Facility Administration Building at 21410 Vances Mill Road, Abingdon, VA 24211.
- _____ Acceptance shall be subject to the inspection and approval of the Town of Abingdon

SPECIAL PROVISIONS

TRUCK-MOUNTED COMBINATION VACUUM/JETTER SEWER CLEANING UNIT

1. Bidders shall submit with their proposal, the manufacturers descriptive literature or specifications/data sheets for the products bid for the purpose of review and comparison.
2. Equipment to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards, and all equipment shall conform to the Code of Virginia.
3. The vendor must perform equipment service preparation prior to delivery and the delivered unit must be fully assembled and ready to operate. The equipment shall be delivered with all necessary documents for titling or transfer of ownership to the Town. The Vendor shall provide the Town with complete copies of the following Manuals at the time of delivery of the first unit:

Two (2) copies of the operation manual

Two (2) copies of the maintenance and parts manual, written and in digital format if available.

4. Warranty: The unit shall be warranted by the manufacturer, which shall be briefly stated in the Bid Proposal. Specifically the bidder shall furnish a clear and concise statement of all terms and conditions pertaining to all proposed warranties. All warranties shall commence upon acceptance by the Town of Abingdon, VA of completed truck assembly.

In the event that any portion of the vehicle should become disabled in an area covered by warranty and vendor does not affect repairs within a seventy-two (72) hour period, excluding weekends and holidays, the warranty period shall be extended equal to the time the vehicle is disabled.

5. Factory Recall: Nationwide factory recall or product update repairs or replacements are the responsibility of the vendor and/or manufacturer. In such cases, factory recall and modification work will be handled in the same manner as warranty work.
6. Technical Service Bulletins: Successful bidder shall provide technical service bulletins (TSBs) for all equipment delivered to the Town of Abingdon as they are published regardless of the date of delivery. TSBs may be furnished in paper format, on CD-ROM updated regularly. Town of Abingdon personnel will monitor receipt of TSBs and may contact the successful bidder if no TSBs are received. The successful bidder specifically agrees that such material may be copied or reproduced in any manner for use by the Town of Abingdon.
7. Items not specified are to be the manufacturer's standard for the latest current production model bid and shall include all standard equipment as advertised.
8. Delivery of the unit shall include post-delivery inspection by a manufacturer or dealer representative. The representative shall also give a complete on-site review of all of the equipment's operating, maintenance and functional requirements, and all of the safety features including safe operating practices to all Town personnel expected to operate the equipment. This instruction shall be provided within 7 days of the date of delivery.

9. No advertising stickers, decals or plates displaying vendor or distributor name or logo, shall be affixed on the unit.
10. The equipment is to be delivered to the Wolf Creek Water Reclamation Facility Administration Building at 21410 Vances Mill Road, Abingdon, VA 24211.
11. Prices quoted shall be F.O.B. Abingdon.