

City of
SHELBYVILLE
Tennessee

DATE: October 11, 2022

NOTICE TO BIDDERS

Notice is hereby given that the CITY OF SHELBYVILLE, TENNESSEE is advertising for sealed bids on:

**NEW 85 CUBIC YARD TRANSFER TRAILER
FOR SOLID WASTE DEPARTMENT**

Bids will be accepted by the City of Shelbyville Purchasing Office, 201 N. Spring Street, Shelbyville, TN 37160 or may be mailed to P.O. Box 185, Shelbyville, TN 37162 **until 2:00 P.M. on Thursday, October 27, 2022** Any bids received after the scheduled closing time for receipt of bids will be returned to the bidder unopened.

The bids shall be opened and read aloud during a public meeting of the City Council appointed BID COMMITTEE on Thursday, October 27, 2022 at 2:00 P.M. at Shelbyville City Hall, Conference Room, 201 N. Spring Street, Shelbyville, TN. Award of the bid is scheduled to be on the agenda at the next City Council business meeting at the Shelbyville Recreation Center. (November 10, 2022)

GENERAL INFORMATION

It will be the sole responsibility of the Bidder to deliver personally or by mail the bid or bids to the City of Shelbyville Purchasing Office, 201 N. Spring Street, Shelbyville, TN 37160 on or before the closing hour and date announced for the receipt of the bids. **The envelope must be sealed and marked on the outside “Sealed Bid for New 85 Cubic Yard Transfer Trailer for Solid Waste Department”.**

The City is exempt from taxes imposed by State and/or Federal Government. Exemption certificate, if required, will be furnished by the successful bidder and will be completed by the City.

Each variance to these specifications must be specifically stated by the bidder in the bidding proposal. The City Council reserves the right to reject any or all proposals, to waive informalities and to accept all or any part of any proposal as described therein, as they deem necessary to be in the best interest of the City.

City of Shelbyville

Bidders guarantee that the prices quoted in the bid will remain firm from the date of the bid opening until the completion of delivery.

All proposals shall be made on forms furnished by the CITY. Supporting information shall be on the bidder's stationery.

All proposals must indicate the firm's name and address and be signed in ink by an officer or employee having authority to bind the company or firm.

The intent of these specifications is to ensure delivery of a new complete unit for operation. Omission of any essential detail from these specifications does not relieve the supplier from furnishing such unit. All bids must be on new models. This provision excludes surplus, used or demonstrators.

The bidder, by executing a contract or bid proposal on the terms of the invitation to bid, warrants the product that is supplied to be buyer shall remain fully in accord with the specifications and to be of the highest quality. In the event the product, as supplied to the buyer, is found to be defective or does not conform to the specifications, the buyer reserves the right to cancel the order upon written notice to the supplier and return such product to the supplier at the supplier's expense.

Payment will commence or be made in full after delivery and acceptance of product. All documents, invoice, title and exemption certificate shall be presented to the City of Shelbyville Purchasing Office.

All Bidders must comply with A.D.A. guidelines if required.

All Bidders must be in compliance with Title VI, Civil Rights Act of 1964, which specifies that: No person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under a program or activity receiving federal financial assistance from the Department of Transportation or the U.S. Department of Justice.

The City of Shelbyville is subject to the Open Records Act, TCA 10-7-501, et. Seq. Bidders are advised that all documents submitted on behalf of this invitation to bid shall be open to the public for viewing and inspection.

The City of Shelbyville will fulfill Public Record Requests in compliance with Tennessee Open Records Act.

Failure on the part of the bidder to comply with all instructions herein may result in bid rejection.

BID FORM

TO: City of Shelbyville
201 N. Spring Street
Shelbyville, TN 37160

Date: _____

IN ACCORDANCE WITH YOUR INVITATION TO BID ON:

NEW 85 CUBIC YARD TRANSFER TRAILER FOR SOLID WASTE DEPARTMENT

WE HEREBY SUBMIT THE FOLLOWING BID:

MINIMUM SPECIFICATIONS

MEETS EXCEEDS DOESN'T MEET

New 85 cubic yard self-contained
power unit transfer trailer

Shall be deemed a semi-trailer as
commonly described in the trade

To be top fed from a transfer hopper

Capacity

85 cubic yards, net exclusive
of ejector assembly

General dimensions

- Overall outside length – 45'
- Overall outside width – 8'
- Overall outside height – 12' 8"
- Inside length – 44'
- Inside width – 7' 5"
- Inside height – 7' 3"

Construction

- Unit shall be constructed of all steel
and within acceptable standards of

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A.S.A.E. criteria with adequate bracing to withstand all forces generated by the compaction of materials.

- It shall be constructed of all new materials of United States manufacture.
- The manufacturer shall certify that the unit as supplied under this bid submission shall be of the latest model and shall incorporate all the latest changes and modifications.

Side wall construction:

- Minimum 1/8" Hardox 450 steel or equal
- Side pots and roof braces to be 12 gauge formed high tensile steel on 32" centers for the front 1/3 of the body; 25" centers on the middle 1/3 of the body; and 18" centers on the rear 1/3 of the body. Shall have curb side access door.

Roof:

- Minimum 1/8" Hardox 450 steel or equal with 120" long x 87" wide hydraulic opening door with 1/8" Hardox 450 steel or equal plate.
- Fold-down ladder on the curb side behind the top door opening shall be furnished.

Floor:

Minimum 3/16" Hardox 450 steel or equal smooth floor

Fifth wheel:

Minimum 3/8" plate high tensile steel

Cross members shall be formed of 12-gauge high tensile steel with 3/4" radius for extra

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strength. The roof box braces, vertical side braces and cross members will be in alignment to provide continuous wrap around reinforcement.

Horizontal box braces shall be 12-gauge high tensile steel, 3 rows each side and 3 rolls in roof between the 8 rear-most vertical and top braces.

The ejector assembly will be constructed of minimum 1/8" Hardox 45 steel or equal face plate and backed by rigid brace members of 4" x 4" wall tubing and horizontal and vertical formed box members to withstand the discharge thrust. The ejector shall be guided on eight (8) steel shelves.

Guide channel shall be at floor level, 6", 12.0 pounds per foot ship channel.

Cylinder support carriage – travels on beveled steel shoes.

Tailgate sheets – 10-gauge high tensile steel door

Tailgate frame – 3" x 3" x 3/16" tubular steel frame

Trailer tailgate framing – 1/4" Hi-Ten box channel

The transfer trailer shall be free of internal obstructions aft of the ejector/packer panel.

Ejector/Packer Assembly

- 1) This assembly shall be capable of traveling the full length of the body in one continuous uninterrupted

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motion for clean ejection of compacted loads.

- 2) Ejector/packer assembly shall be constructed of minimum 1/8" Hardox 450 steel or equal face plate and backed by rigid brace members of 4" x 4" wall tubing and horizontal and vertical formed box members to withstand forces greater than the capability of the hydraulic system and designed to withstand repeated application of maximum working hydraulic pressures. Working pressure shall be defined as 85,000 pounds of total direct force.
- 3) Ejector/packer assembly shall travel full length of the body on replaceable steel shoes riding in guide channels located on the floor at each side wall.
- 4) The ejector/packer assembly shall travel full length with the capability of reverse action at any intermediate point of travel of the assembly. Assembly, fit to body cross-section, shall be to tolerances adequate to ensure a minimum bypass of material during travel and to ensure against binding or assembly.
- 5) The ejector/packer assembly shall be capable of full extension and retraction cycle time of approximately 150 seconds.

Rear door assembly

- 1) The rear door shall be barn door style, hinged curbside, with full piano hinge and shall be strong enough to allow for compaction.
- 2) The door shall remain closed except for discharge of load and

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shall be retained in the closed position by minimum of four (4) latches located on the door. Latches shall be operated by a single lever.

- 3) The rear door shall have a neoprene, watertight seal extending across the bottom and 18" up each side wall.

Ejector / Packer cylinder

- 1) The ejector/packer panel shall be powered by one double acting, five-stage, telescopic cylinder whose largest active stage shall be a minimum of 9" in diameter. This cylinder shall develop 85,000 pounds of force with a delivered hydraulic pressure of 1500 PSI. This telescopic cylinder shall stroke no less than the full length of the body for clean discharge of the load.
- 2) The ejector/packer assembly cylinder shall be mounted on a horizontal plane parallel to the floor surface. This mounting will allow maximum utilization of generated force.
- 3) A cylinder support carriage member shall be provided for the middle cylinder stage to prevent sag of the cylinder in its full extended position.
- 4) The cylinder support carriage member shall travel automatically with the cylinder during extended or retract cycle. The carriage member shall move in the ejector/packer assembly rails on its own steel guide shoes.

Diesel engine hydraulic system and power source

- 1) Power unit to be self-contained which will supply hydraulic power

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for ejection of the load at disposal area. The power unit will be factory installed at the front of the trailer. Auxiliary engine to be heavy duty industrial diesel engine. Diesel engine make is to be Deutz air cooled, Model #F3L913, or equal, with all listed standard equipment and alternator. Supply steel type isolator mounting feet and a dip stick obtainable from alternator side of engine. Engine controls to be mounted on the left side of trailer on either side of ejector/packer cylinder operating valve. Engine controls to include weatherproof electrical oil pressure gauge, amp gauge, engine throttle, engine stop push/pull cables and push button start switch or key switch with key chained. Kysor shutdown system, or equal, for engine is high cylinder temperature and low oil pressure. Heavy duty battery with negative disconnect switch Echlin SW16 or equal.

- 2) Fuel tank of 35 gallon to be mounted on left side of trailer by landing gear. Tank to have a loss-proof filler cap. Label tank for "DIESEL".
- 3) Engine to be equipped with metal engine oil drain hose 3/8" ID and approximately 14" long with an accessible Parker 8010-4, or equal, quick disconnect coupling on outer end.
- 4) Trailer shall be plumbed to use either the PTO and pump on the truck or an auxiliary power unit mounted on the trailer. Valves shall be provided and identified to switch between truck or trailer hydraulic power.
- 5) A service platform one foot wide made of Open-Grip or equal grating is to extend the full width of the trailer at upper level of the ejector/packer

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- cylinder base attachment to the trailer.
- 6) The hydraulic pump capacity shall be tandem pump with flow to allow for fast/slow operation on pushout.
 - 7) Hydraulic pump shall draw oil from a reservoir with a minimum capacity of 100 US gallons. Reservoir shall be filled to proper level with FACTO POR39 or equal hydraulic oil.
 - 8) Hydraulic tank must be constructed of heavy-duty metal with baffles reinforced and braced to prevent cracking of tank. Tank to rest within an angle iron support with steel bands to hold down tank.
 - 9) Reservoir shall be equipped with:
 - a) filler port center of trailer
 - b) filtered breather cap
 - c) a 50 GPM in line filter with twin Fram PH47 or equal filters
 - d) a gate valve on all inlet and outlet lines
 - e) a four-section magnet at the inlet end of the tank, a Keeby Tank-Trapper HD-7 or equal, with 2 1/2" pipe plug
 - f) a 3/4" tank drain with gate valve and 3/4" hose to the front of the engine area
 - 10) A manually operated 2-spool valve assembly shall be provided, (1) to operate ejector and (2) to operate top door. Valve assembly shall be ported and relieved for flow 25% greater than rated pump capacity.
 - 11) A factory wired and sealed pressure relief valve shall be provided. Relieved valve setting shall be 1500 PSI.
 - 12) Operating control for valve assembly shall be provided curb side on the

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front end of the trailer. Control shall be a push-pull rod with a ball-end which is attached to valve lever. Lever shall be designed so that it may not be blocked open. Unit also shall be equipped with wired pendant control with 30' of cable to operate ejector, engine start/stop, top door and throttle advance.

- 13) Oil shall be carried to the hydraulic cylinders on the trailer through double wire braided hydraulic hose.
- 14) A fast return valve shall be incorporated in the hydraulic system for rapid cylinder retraction.
- 15) A cylinder protection valve (unloading valve) shall be provided to protect the cylinder in case the cylinder is inadvertently left partially extended.
- 16) Hoses and tubing to be well braced using rubber lined clamps. Hoses and tubing to have 4 to 1 safety factors on working pressure ratings. 37 degrees JIC type fittings shall be used.

Landing gear and kingpin

- 1) Landing gear shall be Holland MK-V, or equal, two speed capable of supporting 200,000 pounds of static load with a lift capacity of 62,500 pounds with 100" pounds of input torque. Landing gear shall have sand shoes and curb side crank controls.
- 2) Kingpin shall be Holland T-880 or equal with 15" setting.

Axles and suspension

- 1) The transport trailer shall be provided with a tandem axle arrangement, which shall consist of Reyco 21B or equal four-spring suspension, 52,000-pound tandem

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spring suspension and two (2) Dana D22 or equal 25,000-pound axles. They shall meet all State and DOT requirements.

- 2) Heavy duty air brakes shall be directly mounted to each axle. They shall be trailer type 16-1/2" x 7" and shall be complete with slack adjusters, service and emergency connections.
- 3) Four (4) wheels per axle shall be provided. They shall be 22" hub piloted type, with 8.25 x 22.5" rims.
- 4) Each rim (8) shall be provided with 11R22.5, 14 ply tire.
- 5) Mud flaps shall be provided.

Lights and reflectors

- 1) The transfer trailer shall be provided with LED lights and reflectors which shall conform to Federal Motor Vehicle Safety Standard Number 108.
- 2) The lights shall be sealed type Lexan, grommet mounted.

Painting procedure

- 1) The trailer shall be cleaned thoroughly to remove all grease, dirt, weld slag, corrosion spots or foreign matter.
- 2) Primer shall be zinc chromate type and after adequate drying, a finish coat of high gloss transport enamel of chosen color shall be applied.

Warranty

Bidder shall state warranty supplied with the trailer. Minimum warranty shall be one (1) year 100% parts and labor.

Delivery

- 1) Bidder shall state days required to expect delivery after receipt of purchase order. Unit shall be delivered to:

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Shelbyville Public Works
714 Industrial Parkway
Shelbyville, TN 37160
(931)684-2644

- 2) Bidder shall include the cost of furnishing and installing a 5# ABC fire extinguisher, first aid kit, and a highway safety triangle kit.

Liability insurance

Bidder shall attach a certificate of insurance from the body manufacturer which indicates that a minimum of \$1,000,000 of product liability insurance applies to the equipment supplied in the bid. Bidders shall provide a contact name and phone number for verification of coverage.

Agent's name: _____

Phone number: _____

References

Bidder shall attach a list of three references. (Middle Tennessee references if possible)

The Bidder shall represent by bid that all equipment to be furnished is new and unused. It is required that the unit, as specified herein, shall be completely assembled and adjusted and that all equipment, including standard and option equipment, be installed and the unit made ready for continuous operation.

When factory-printed literature, submitted to support the bid, does not indicate compliance with the specifications and your company can meet these specifications by modifications, you must so state in writing that you can meet the specifications and the necessary modifications to be listed. Such writing must be submitted at bid opening time as a part of your bid. Bidders must state make and model number of the unit they are offering. Bids submitted shall be on the latest current model of equipment meeting specifications.

Any variations to these specifications should be listed in bid submission. Vendor selection will be based upon the best offer deemed acceptable by the City of Shelbyville's council appointed Bid Committee and City Council.

Any reference to name brands in this Invitation for Bids is for example only. An approved equal will be accepted. The purchaser reserves the right to determine whether a substitute offer is equivalent to and meets the standard of quality indicated by the brand name referenced, and the purchaser may require a bidder offering a substitute to supply additional descriptive material.

- Vendors are welcome to submit more than one bid if options are available.
- A current business license must be furnished upon request.
- Any questions may be directed to Public Works Director, Buck Vallad, at 931-684-2644 or Lori Saddler, Purchasing / IT Director, at 931-684-2691.

We hereby submit the following price(s) for your consideration:

Year, make and model _____

\$ _____ total for trailer, complete, FOB City of

Shelbyville, TN, as described in specifications.

Delivery date _____

Does the equipment meet the following requirements?:

	Yes	No	Explain
85 cubic yd			
Overall height of 12'8"			
Full eject Barn-door style tailgate			
Self-contained power unit			

Ability to switch
between

Power unit and
wet kit

Fuel tank capacity &
location

Hydraulic tank
specs

Top door specs

Pendant control &
cable

Landing gear

Tires & wheels

Warranty

Delivery

Insurance

Signed: _____

Printed name: _____

Title: _____

Date: _____

Email: _____

Phone #: _____

Company Name and Address:

Bid quote good for _____ days.